Sierra Leone

Demographic and Health Survey

2019

MINISTRY OF HEALTH
AND SANITATION
THE REPUBLIC OF SIERRA LEONE

STATISTICS SIERRA LEONE
(Stats SL)
Credible Data for National Development

Sierra Leone

Demographic and Health Survey 2019

Statistics Sierra Leone
Freetown, Sierra Leone

The DHS Program
ICF
Rockville, Maryland, USA

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The 2019 Sierra Leone Demographic and Health Survey (2019 SLDHS) was implemented by Statistics Sierra Leone on behalf of the Sierra Leone Ministry of Health and Sanitation. Funding for the 2019 SLDHS was provided by the United States Agency for International Development (USAID), the Global Fund, the Department for International Development (DFID), the United Nations Population Fund (UNFPA), the World Health Organization (WHO), and the World Bank. ICF provided technical assistance through The DHS Program, a USAID-funded project that provides support and technical assistance in the implementation of population and health surveys in countries worldwide.

Additional information about the 2019 SLDHS may be obtained from the headquarters of Statistics Sierra Leone (Stats SL), Tower Hill, Freetown, Sierra Leone (telephone: +232 79 212761; email: info@statistics.sl; internet: www.statistics.sl).

Information about The DHS Program may be obtained from ICF, 530 Gaither Road, Suite 500, Rockville, MD 20850, USA (telephone: +1-301-407-6500; fax: +1-301-407-6501; email: info@DHSprogram.com; internet: www.DHSprogram.com).

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FOREWORD

The timely conduct of Demographic and Health Surveys has been the desire of the Ministry of Health and Sanitation to assist policymakers and programme managers in designing and evaluating programmes and strategies for improving the health of the country's population. The 2019 Sierra Leone Demographic and Health Survey (2019 SLDHS) is the third survey of its kind to be implemented by Statistics Sierra Leone (Stats SL) whose key function is collect, collate, analyse, and disseminate population census and survey data at all levels that contribute to policy formulation and coordination of population activities in the country.

The 2019 SLDHS is a national sample survey that provides up-to-date information on demographic and health indicators. The sample was selected using a stratified, two-stage cluster design, with enumeration areas (EAs) as the sampling units for the first stage. The second stage was a complete listing of households carried out in each of the 578 selected EAs. The target groups were women age 15-49 and men age 15-59 in randomly selected households across the country. A representative sample of approximately 13,872 households was selected for the survey. Half of the households (6,936) were selected for biomarker and men's interview. The men's survey was conducted in half (50%) of the sample households, and all men age 15-59 in these households were included. In this subsample, one eligible woman in each household was randomly selected to be asked additional questions about domestic violence.

Equally, biomarker information was collected only in those households selected for the men's survey. The biomarkers included in this survey were height and weight for women age 15-49, men 15-59, and children age 0-59 months, haemoglobin testing for women age 15-49, men 15-59, and children age 6-59 months, and testing for HIV for women 15-49 and men 15-59.

Specifically, information was collected on fertility levels, marriage, fertility preferences, awareness and use of family planning methods, child feeding practices, nutritional status of women and children, adult and childhood mortality, awareness and attitudes regarding HIV/AIDS, and female genital mutilation. The survey also assessed the nutritional status (according to weight and height measurements) of women and children in these households. In addition to presenting national estimates, the report provides estimates of key indicators for both rural and urban areas and regional or provincial levels.

The 2019 SLDHS is unique in a number of ways. The Sierra Leone 2019 DHS was implemented using computer-assisted personal interviewing (CAPI), allowing more swift provision of data than in previous surveys and RDT was done in the field for HIV infections for those participants who wish to know their HIV status. However, blood samples were also collected anonymously using Dried Blood Spot (DBS) for laboratory analyses to determine the national HIV prevalence.

In addition, the sample size was larger than that in the two previous SLDHS surveys, covering a total of 1,400 clusters across the country. Data on malaria, minimum dietary diversity among women, female genital mutilation, fistula, and disability were included as requested by various stakeholders.

As Minister of Health and Sanitation, I offer my candid appreciation to the Statistician General of Statistics Sierra Leone (Stats SL) Prof Osman A. Sankoh for leadership and commitment to the success of the survey as chairman of the Survey Steering and Technical Committees. I also thank members of the Survey Steering and Technical Committees for their commitment and dedication to the survey's successful implementation.

On behalf of the Ministry of Health and Sanitation, I wish to express appreciation to the previous Chief Medical Officers, Dr Amara Jambai and Dr Donald Bash-Taqi and the current Chief Medical Officer, Dr T. T. Samba; and Director of Policy, Planning and Information - Dr Francis Smart for their strong leadership in coordination and fund mobilization efforts with development partners. I wish to extend my gratitude to

the 2019 SLDHS survey management team, management of Statistics Sierra Leone (Stats SL) and technical committee monitors for their efficient management of all technical, administrative, and logistical activities of the survey.

In addition, I would like to extend my sincere appreciation to the field staff (regional and district coordinators, biomarker monitors, supervisors, data collectors, mappers, listers, drivers, etc.), and data processing team for their commitment and hard work during the survey. Similarly, I wish to express appreciation to ICF for its technical assistance in all stages of the survey.

My special thanks go to the Government and people of Sierra Leone, the World Bank, the UK's Department of Foreign International Development (DFID), the Global Fund, and United States Agency for International Development (USAID), World Health Organization (WHO), United Nations Population Fund (UNFPA) and the National AIDS Secretariat (NAS) for supporting the implementation of the survey. In addition, I therefore wish to thank the staff of Central Public Health Reference Laboratory (CPHRL) of the Ministry of Health and Sanitation who under difficult circumstances sacrificed their time to provide the required analyses on time. Finally, our deep appreciation in particular goes to the survey respondents, provincial administrations, city and district council authorities, and traditional authorities for their immense support and hospitality during the implementation of the survey.

Let me take this opportunity to urge all health stakeholders, including donors and partners to accept and use the new data set, which reflects the progress made so far in the health sector; whilst we recognise more needs to be done.

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Hon. Dr Alpha Tejan Wurie, (Associate Professor)

Minister of Health and Sanitation

PREFACE

The Government of Sierra Leone, through the Ministry of Health and Sanitation and Statistics Sierra Leone (Stats SL), together with its development partners, conducted the 2019 Sierra Leone Demographic and Health Survey (2019 SLDHS).

The SLDHS provides an opportunity to inform policy and provide data for planning, implementation, monitoring and evaluation of national health programmes. It is designed to provide up-to-date information on health indicators, including nutritional status of children, early childhood and maternal mortality, maternal and child health, fertility levels, nuptiality, sexual activity, fertility preferences, awareness and use of family planning methods, breastfeeding practices, awareness and behaviours regarding HIV/AIDS and other sexually transmitted infections and prevalence of HIV.

The SLDHS is conducted every five years in Sierra Leone. The first survey was conducted in 2008 and the second in 2013. Although the next one was planned for 2018, actual data collection took place in early 2019; hence, the survey is appropriately named the 2019 SLDHS.

This report presents the final results of survey. Key findings include a decline in fertility rates and improvement in nutrition indicators, such as stunting, wasting and underweight. Details of maternal and child health care indicators also suggest improvement. Details of other indicators including maternal and child can be found in the Key Indicator Report (KIR).

On behalf of the Government of Sierra Leone, Stats SL wishes to express appreciation to all those involved in the implementation of the 2019 SLDHS in various ways, including financial and technical support, and in the preparation of this DHS report. Special thanks go to the following:

- The Government and the people of Sierra Leone for providing the funding and the environment to support the survey;
- The World Bank, Department for International Development (DFID), and the local U.S. Agency for International Development (USAID) in Sierra Leone, for contributing funds to organise and conduct the 2019 SLDHS;
- World Health Organisation (WHO), Global Fund, and United Nations Population Fund (UNFPA), for providing additional funds;
- National Aids Secretariat (NAS) and the Central Public Health Reference Laboratory (CPHRL) of the Ministry of Health and Sanitation for providing funds and technical support, respectively, in the implementation of biomarker collection and HIV testing, storage and analyses; and
- ICF, for providing technical support, training of fieldwork staff, consultations, recommendations and analyses of the data collected.

The DHS would not have been possible without the good work and dedication of the project staff at various levels of expertise. In particular, we wish to express our appreciation to the supervising director, national coordinator, regional and district coordinators, biomarker monitors and data managers, supervisors, interviewers, nurses, HIV counsellors and support staff for their active participation in and contribution to this work. Above all, we appreciate the cooperation of all of the survey respondents countrywide who have made the 2019 SLDHS a success.

Prof. Osman A. Sankoh, DSc.
Statistician General/CEO

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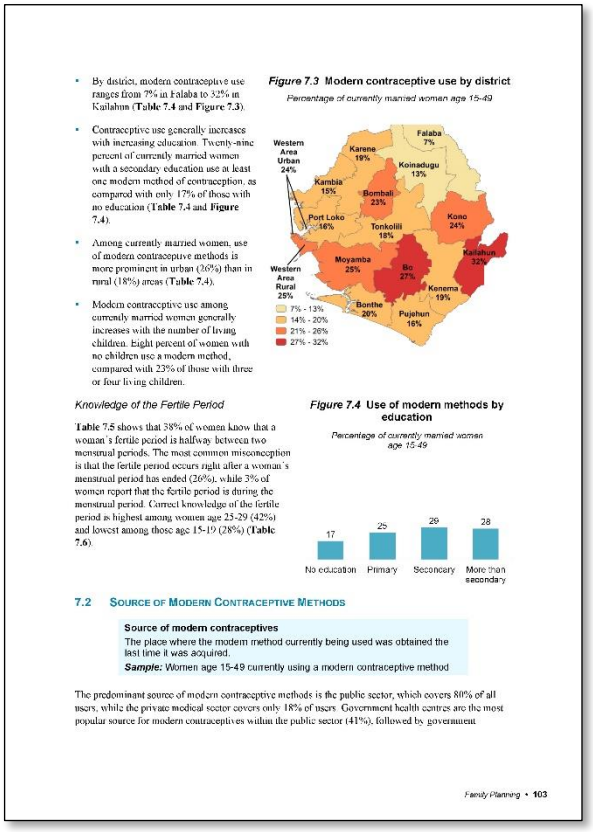
READING AND UNDERSTANDING TABLES FROM THE 2019 SIERRA LEONE DEMOGRAPHIC AND HEALTH SURVEY (SLDHS)

The 2019 Sierra Leone DHS final report is based on approximately 200 tables of data. For quick reference, they are located at the end of each chapter and can be accessed through links in the pertinent text (electronic version). Additionally, this more reader-friendly version features about 90 figures that clearly highlight trends, subnational patterns, and background characteristics. Large, colourful maps display breakdowns for districts in Sierra Leone. The text has been simplified to highlight key points in bullets and to clearly identify indicator definitions in boxes.

While the text and figures featured in each chapter highlight some of the most important findings from the tables, not every finding can be discussed or displayed graphically. For this reason, SLDHS data users should be comfortable reading and interpreting tables.

The following pages provide an introduction to the organisation of SLDHS tables, the presentation of background characteristics, and a brief summary of sampling and understanding denominators. In addition, this section provides some exercises for users as they practice their new skills in interpreting SLDHS tables.



- By district, modern contraceptive use ranges from 7% in Falaba to 32% in Kailahun (**Table 7.4** and **Figure 7.3**).
- Contraceptive use generally increases with increasing education. Twenty-nine percent of currently married women with a secondary education use at least one modern method of contraception, as compared with only 17% of those with no education (**Table 7.4** and **Figure 7.4**).
- Among currently married women, use of modern contraceptive methods is more prominent in urban (36%) than in rural (18%) areas (**Table 7.4**).
- Modern contraceptive use among currently married women generally increases with the number of living children. Eight percent of women with no children use a modern method, compared with 23% of those with three or four living children.

Figure 7.3 **Modern contraceptive use by district**

Percentage of currently married women age 15-49

Knowledge of the Fertile Period

Table 7.5 shows that 38% of women know that a woman's fertile period is halfway between two menstrual periods. The most common misconception is that the fertile period occurs right after a woman's menstrual period has ended (26%), while 3% of women report that the fertile period is during the menstrual period. Correct knowledge of the fertile period is highest among women age 25-29 (42%) and lowest among those age 15-19 (28%) (**Table 7.6**).

Figure 7.4 **Use of modern methods by education**

Percentage of currently married women age 15-49

7.2 SOURCE OF MODERN CONTRACEPTIVE METHODS

Source of modern contraceptives
The place where the modern method currently being used was obtained the last time it was acquired.
Sample: Women age 15-49 currently using a modern contraceptive method

The predominant source of modern contraceptive methods is the public sector, which covers 80% of all users, while the private medical sector covers only 18% of users. Government health centres are the most popular source for modern contraceptives within the public sector (41%), followed by government

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Example 1: Exposure to Mass Media: Women
A Question Asked of All Survey Respondents

Table 3.4.1 Exposure to mass media: Women 1

Percentage of women age 15-49 who are exposed to specific media on a weekly basis, according to background characteristics, Sierra Leone DHS 2019

3 Background characteristic	2 Reads a newspaper at least once a week	Watches television at least once a week	Listens to the radio at least once a week	Accesses all three media at least once a week	Accesses none of the three media at least once a week	Number of women
Age						
15-19	2.1	15.9	19.9	1.0	71.7	3,427
20-24	3.0	17.7	25.5	1.3	66.1	2,629
25-29	3.4	18.4	26.8	1.9	65.3	2,728
30-34	2.4	16.1	26.5	1.5	67.1	1,942
35-39	2.1	11.2	23.7	1.3	72.1	2,224
40-44	2.6	10.0	24.2	2.0	73.2	1,337
45-49	1.3	8.7	22.5	0.7	74.5	1,288
Residence						
Urban	4.5	28.2	29.5	2.8	57.9	7,163
Rural	0.8	3.6	19.4	0.2	79.4	8,411
Province						
Eastern	0.5	6.0	17.8	0.1	78.9	3,069
Northern	1.8	12.3	30.6	0.7	64.9	3,317
North West	1.2	4.1	19.5	0.4	78.6	2,508
Southern	1.6	6.6	16.5	0.4	80.4	2,900
Western Area	6.4	37.9	32.0	4.4	51.4	3,780
Education						
No education	0.1	6.5	17.6	0.0	79.3	7,081
Primary	0.4	10.4	23.5	0.1	71.9	2,103
Secondary	3.9	22.9	28.5	1.9	61.0	5,724
More than secondary	23.1	50.0	55.2	15.6	30.3	666
Wealth quintile						
Lowest	0.3	1.7	15.4	0.0	83.9	2,738
Second	0.4	2.4	18.2	0.0	80.9	2,831
Middle	1.0	4.1	19.9	0.2	78.1	2,954
Fourth	2.3	12.3	26.3	0.7	67.7	3,385
Highest	7.3	45.6	36.1	5.2	44.6	3,666
Total	4 2.5	14.9	24.0	1.4	69.5	15,574

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Step 1: Read the title and subtitle, highlighted in orange in the table above. They tell you the topic and the specific population group being described. In this case, the table is about women age 15-49 and their exposure to different types of media. All eligible female respondents age 15-49 were asked these questions.

Step 2: Scan the column headings—highlighted in green in Example 1. They describe how the information is categorised. In this table, the first three columns of data show different types of media that women access at least once a week. The fourth column shows women who access all three types of media, while the fifth column shows women who do not access any of the three types of media on a weekly basis. The last column lists the number of women age 15-49 interviewed in the survey.

Step 3: Scan the row headings—the first vertical column highlighted in blue in Example 1. These show the different ways the data are divided into categories based on population characteristics. In this case, the table presents women's exposure to media by age, urban-rural residence, province, level of education, and wealth quintile. Most of the tables in the SLDHS report will be divided into these same categories.

Step 4: Look at the row at the bottom of the table highlighted in pink. These percentages represent the totals of all women age 15-49 and their weekly access to different types of media. In this case, 2.5%* of women age 15-49 read a newspaper at least once a week, 14.9% watch television at least weekly, and 24.0% listen to the radio on a weekly basis.

Step 5: To find out what percentage of women with more than a secondary education access all three types of media, draw two imaginary lines, as shown on the table. This shows that 15.6% of women with more than a secondary education access all three types of media at least once a week.

By looking at patterns by background characteristics, we can see how exposure to mass media varies across Sierra Leone. Mass media are often used to communicate health messages. Knowing how mass media exposure varies among different groups can help programme planners and policymakers determine how to most effectively reach their target populations.

*For the purpose of this document data are presented exactly as they appear in the table, including decimal places. However, the text in the remainder of this report rounds data to the nearest whole percentage point.

Practice: Use the table in Example 1 to answer the following questions:

a) What percentage of women do not access any of the three types of media once a week?
b) Is weekly radio listening higher among women in urban or rural areas?
c) Is there a clear pattern in weekly newspaper reading by educational level?
d) Is there a clear pattern in weekly television watching by household wealth?
e) What are the lowest and highest percentages (range) of women who do not access any media by province?

Answers:

a) 69.5%

b) Urban – 29.5% of women listen in urban areas, as compared with 19.4% in rural areas.

c) Yes, weekly newspaper access increases with increasing education, from 0.1% of women with no education who read a newspaper weekly to 23.1% of women with more than a secondary education.

d) Yes, weekly television watching increases with increasing household wealth, from 1.7% among women in the poorest households to 45.6% among women in the wealthiest households.

e) The percentage of women with no access to any of the media ranges from 51.4% among those in the Western Area province to 80.4% among those in the Southern province.

Example 2: Prevalence and Treatment of ARI
A Question Asked of a Subgroup of Survey Respondents

Table 10.5 Prevalence and treatment of symptoms of ARI 1

Among children under age 5, percentage who had symptoms of acute respiratory infection (ARI) in the 2 weeks preceding the survey, and among children with symptoms of ARI in the 2 weeks preceding the survey, percentage for whom advice or treatment was sought, according to background characteristics, Sierra Leone DHS 2019

	Among children under age 5:		Among children under age 5 with symptoms of ARI:		
Background characteristic	Percentage with symptoms of ARI[1]	Number of children	Percentage for whom advice or treatment was sought[2]	Percentage for whom treatment was sought same or next day	Number of children
Age in months					
<6	2.2	1,012	(76.1)	(47.3)	22
6-11	2.8	945	(90.7)	(49.1)	27
12-23	2.5	1,838	93.8	39.0	46
24-35	1.6	1,666	(76.1)	(52.1)	26
36-47	2.6	1,738	(87.1)	(27.5)	44
48-59	0.9	1,694	*	*	16
Sex					
Male	2.2	4,479	84.5	44.7	100
Female	1.9	4,414	87.1	34.9	82
Mother's smoking status					
Smokes cigarettes/tobacco	5.3	250	*	*	13
Does not smoke	1.9	8,644	85.7	42.3	168
Cooking fuel					
Electricity or gas	*	19	nc	nc	0
Coal/lignite	*	20	nc	nc	0
Charcoal	2.3	2,476	85.2	46.3	57
Wood/straw[3]	2.0	6,378	85.9	37.6	125
Residence					
Urban	2.2	3,137	84.6	41.9	70
Rural	1.9	5,757	86.4	39.3	112
Province					
Eastern	1.5	1,891	(83.8)	(52.6)	29
Northern	2.8	1,776	(83.1)	(25.3)	50
North West	2.2	1,687	(97.4)	(28.0)	38
Southern	1.2	1,914	(78.7)	(57.0)	23
Western Area	2.7	1,626	(83.4)	(51.4)	43
District					
Kailahun	0.4	428	*	*	2
Kenema	2.6	923	*	*	24
Kono	0.6	540	*	*	3
Bombali	3.8	594	*	*	22
Falaba	3.2	224	*	*	7
Koinadugu	2.1	274	*	*	6
Tonkolili	2.1	684	*	*	14
Kambia	0.6	577	*	*	3
Karene	0.4	335	*	*	1
Port Loko	4.3	775	(100.0)	(25.1)	33
Bo	*	701	nc	nc	0
Bonthe	1.5	365	*	*	6
Moyamba	1.5	513	*	*	8
Pujehun	2.8	335	*	*	9
Western Area Rural	4.9	700	(79.0)	(52.3)	34
Western Area Urban	1.0	926	*	*	9
Mother's education					
No education	1.6	4,819	77.5	35.5	77
Primary	2.9	1,297	(91.8)	(39.4)	38
Secondary	2.5	2,530	92.2	43.5	62
More than secondary	1.8	247	*	*	4
Wealth quintile					
Lowest	2.2	2,066	(83.8)	(36.7)	45
Second	1.6	1,987	(82.6)	(36.2)	31
Middle	1.8	1,818	(90.7)	(41.0)	32
Fourth	3.2	1,646	(84.1)	(42.1)	52
Highest	1.6	1,376	*	*	22
Total	2.0	8,893	85.7	40.3	182

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
nc = No cases

Step 1: Read the title and subtitle. In this case, the table is about two separate groups of children: all children under age 5 (a) and all children under age 5 with symptoms of acute respiratory infection (ARI) (b).

Step 2: Identify the two panels. First, identify the columns that refer to all children under age 5 (a), and then isolate the columns that refer only to those children with symptoms of ARI (b).

Step 3: Look at the first panel. What percentage of children under age 5 had symptoms of ARI? It's 2.0%. Now look at the second panel. How many children under age 5 had symptoms of ARI in the 2 weeks before the survey? It's 182 children or 2% of the 8,893 children under age 5 (with rounding). The second panel is a subset of the first panel.

Step 4: Only 2.0% of children under age 5 had ARI symptoms. Once these 182 children are further divided into the background characteristic categories, there may be too few cases for the percentages to be reliable.

- What percentage of children age 36-47 months with ARI symptoms had advice or treatment sought? 87.1%. This percentage is in parentheses because there are between 25 and 49 children (unweighted) in this category. Readers should use this number with caution—it may not be reliable. (For more information on weighted and unweighted numbers, see Example 3.)
- What percentage of children age 48-59 months with ARI symptoms had advice or treatment sought? There is no number in this cell—only an asterisk. This is because there are fewer than 25 children (unweighted) in this group. Results for this group are not reported. The subgroup is too small, and therefore the data are not reliable.
- Can we assess treatment seeking by district? Only two districts have more than 25 (unweighted) cases; most of the districts have too few cases to even show results for this indicator. No comparison by district can be made, as there are too few children with ARI symptoms in each district to provide meaningful data.

Note: When parentheses or asterisks are used in a table, the explanation will be noted under the table. If there are no parentheses or asterisks in a table, you can proceed with confidence that enough cases were included in all categories that the data are reliable.

Example 3: Understanding Sampling Weights in SLDHS Tables

A sample is a group of people who have been selected for a survey. In the SLDHS, the sample is designed to represent the national population age 15-49. In addition to national data, most countries want to collect and report data on smaller geographical or administrative areas. However, doing so requires a large enough sample size in each area. For the 2019 SLDHS, the survey sample is representative at the national and province levels and for urban and rural areas.

To generate statistics that are representative of Sierra Leone as a whole and the five provinces, the number of women surveyed in each province should contribute to the size of the total (national) sample in proportion to the size of the province. However, if some provinces have small populations, then a sample allocated in proportion to each province's population may not include sufficient women from each province for analysis. To solve this problem, provinces with small populations are oversampled. For example, let's say that you have enough money to interview 15,574 women and want to produce results that are representative of Sierra Leone as a whole and its provinces (as in Table 3.1). However, the total population of Sierra Leone is not evenly distributed among the provinces: some provinces, such as Western Area, are heavily populated while others, such as Southern, are not. Thus, Southern must be oversampled.

Table 3.1 Background characteristics of respondents

Percent distribution of women age 15-49 by selected background characteristics, Sierra Leone DHS 2019

Background characteristic	Weighted percent	Weighted number	Unweighted number
Province			
Eastern	19.7	3,069	2,978
Northern	21.3	3,317	3,971
North West	16.1	2,508	2,498
Southern	18.6	2,900	3,513
Western Area	24.3	3,780	2,614
Total 15-49	100.0	15,574	15,574

3 2 1

A sampling statistician determines how many women should be interviewed in each province in order to get reliable statistics. The **blue column (1)** in the table above shows the actual number of women interviewed in each province. Within the provinces, the number of women interviewed ranges from 2,498 in North West to 3,971 in Northern. The number of interviews is sufficient to get reliable results in each province.

With this distribution of interviews, some provinces are overrepresented and some provinces are underrepresented. For example, the population in the Western Area province is about 24% of the population in Sierra Leone, while Southern's population contributes only 19% of the population in Sierra Leone. But as the blue column shows, the number of women interviewed in Western Area accounts for only about 18% of the total sample of women interviewed (2,614/15,574) and the number of women interviewed in Southern accounts for 23% of the women interviewed (3,513/15,574). This unweighted distribution of women does not accurately represent the population.

In order to get statistics that are representative of Sierra Leone, the distribution of the women in the sample needs to be weighted (or mathematically adjusted) such that it resembles the true distribution in the country. Women from a smaller province, like Southern, should contribute only a small amount to the national total. Women from a large province, like Western Area, should contribute much more. Therefore, DHS statisticians mathematically calculate a "weight" that is used to adjust the number of women from each province so that each province's contribution to the total is proportional to the actual population of the province. The numbers in the **purple column (2)** represent the "weighted" values. The weighted values can be smaller or larger than the unweighted values at the province level. The total national sample size of 15,574 women has not changed after weighting, but the distribution of the women in the provinces has been changed to represent their contribution to the total population size.

How do statisticians weight each category? They take into account the probability that a woman was selected in the sample. If you were to compare the **green column (3)** to the actual population distribution of Sierra Leone, you would see that women in each province are contributing to the total sample with the same weight that they contribute to the population of the country. The weighted number of women in the survey now accurately represents the proportion of women who live in the Southern province and the proportion of women who live in the Western Area province.

With sampling and weighting, it is possible to interview enough women to provide reliable statistics at national and province levels. In general, only the weighted numbers are shown in each of the SLDHS tables, so don't be surprised if these numbers seem low: they may actually represent a larger number of women interviewed.

ACRONYMS AND ABBREVIATIONS

ACT	artemisinin-based combination therapy
AIDS	acquired immunodeficiency syndrome
AL	artemether/lumefantrine
ANC	antenatal care
ARI	acute respiratory infection
ART	antiretroviral therapy
ASAQ	artesunate/amodiaquine
ASFR	age-specific fertility rate
BCG	bacille Calmette-Guérin vaccine against tuberculosis
BMI	body mass index
CAPI	computer-assisted personal interviewing
CBR	crude birth rate
CHW	community health worker
CI	confidence interval
CPR	contraceptive prevalence rate
CSPro	Census and Survey Processing
DBS	dried blood spot
DFID	Department for International Development
DHS	Demographic and Health Survey
DPT	diphtheria, pertussis, and tetanus vaccine
EA	enumeration area
FGC	female genital cutting
GAR	gross attendance ratio
GFR	general fertility rate
GoSL	Government of Sierra Leone
GPI	gender parity index
HepB	hepatitis B
Hib	*Haemophilus influenzae* type B
HIV	human immunodeficiency virus
ICCMCI	integrated community case management of childhood illness
IFSS	internet file streaming system
IMCI	integrated management of childhood illness
IMNCI	integrated management of neonatal and childhood illness
IPTp	intermittent preventive treatment during pregnancy
IPV	inactivated polio vaccine
ITN	insecticide-treated net
IUD	intrauterine device
IYCF	infant and young child feeding

LAM	lactational amenorrhoea method
LLIN	long-lasting insecticide-treated net
LPG	liquid petroleum gas
MOHS	Ministry of Health and Sanitation
MTCT	mother-to-child transmission
NAC	National AIDS Committee
NAR	net attendance ratio
NAS	National AIDS Secretariat
NGO	nongovernmental organisation
NN	neonatal mortality
OPV	oral polio vaccine
ORS	oral rehydration salts
ORT	oral rehydration therapy
PNN	postneonatal mortality
PRMR	pregnancy-related mortality rate
PSU	primary sampling unit
RDT	rapid diagnostic test
RHF	recommended homemade fluids
SD	standard deviation
SDGs	Sustainable Development Goals
SDM	standard days method
SLDHS	Sierra Leone Demographic and Health Survey
SLMIS	Sierra Leone Malaria Indicator Survey
SP	sulfadoxine-pyrimethamine
Stats SL	Statistics Sierra Leone
STI	sexually transmitted infection
TFR	total fertility rate
UNAIDS	Joint United Nations Programme on HIV/AIDS
UNFPA	United Nations Population Fund
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development
VAD	vitamin A deficiency
VIP	ventilated improved pit
WHO	World Health Organization

2019 SIERRA LEONE DEMOGRAPHIC AND HEALTH SURVEY TECHNICAL COMMITTEE

Statistics Sierra Leone	Chair
Ministry of Health and Sanitation	Co-Chair
National Malaria Control Programme (NMEP)	Member
National AIDS Secretariat (NAS)	Member
Ministry of Basic and Senior Secondary School Education	Member
Ministry of Social Welfare, Gender and Children's Affairs	Member
Ministry of Water Resources	Member
Ministry of Agriculture, Forestry and Food Security	Member
Ministry of Planning and Economic Development	Member
ICF, Maryland, USA – Survey Manager	Member
United Nations Population Fund (UNFPA)	Member
United Nations Children's Fund (UNICEF)	Member
World Health Organization (WHO)	Member
United Nations Development Programme (UNDP)	Member
European Union	Member
Irish Aid	Member
Joint United Nations Programme on HIV and AIDS (UNAIDS)	Member
United Nations Entity for Gender Equality and the Empowerment of Women (UN Women)	Member
World Bank (WB)	Member
United States Agency for International Development (USAID)	Member
Centers for Disease Control and Prevention (CDC)	Member
Sierra Leone Teachers Union	Member
Sierra Leone Association of Journalists	Member
Health for All Coalition	Member
Health Alert	Member
Institute for Population Studies, University of Sierra Leone	Member
University of Sierra Leone	Member
Njala University	Member
Ernest Bai Koroma University of Science and Technology	Member
Statistics Sierra Leone 2019 National Coordinator	Secretary

SUSTAINABLE DEVELOPMENT GOAL INDICATORS

Sustainable Development Goal Indicators—Sierra Leone DHS 2019

Indicator	Sex			DHS table number
	Male	Female	Total	
2. Zero hunger				
2.2.1 Prevalence of stunting among children under 5 years of age	32.1	26.8	29.5	11.1
2.2.2 Prevalence of malnutrition among children under 5 years of age	10.5	9.4	9.9[a]	-
a) Prevalence of wasting among children under 5 years of age	5.5	5.3	5.4[a]	11.1
b) Prevalence of overweight among children under 5 years of age	5.0	4.1	4.5[a]	11.1
3. Good health and well-being				
3.1.1 Maternal mortality ratio[1]	na	na	717	14.4
3.1.2 Proportion of births attended by skilled health personnel	na	na	86.9	9.6
3.2.1 Under-five mortality rate[2]	134	110	122	8.2
3.2.2 Neonatal mortality rate[2]	35	26	31	8.2
3.7.1 Proportion of women of reproductive age (aged 15-49 years) who have their need for family planning satisfied with modern methods	na	53.1	na	7.1
3.7.2 Adolescent birth rates per 1,000 women[3]	-	-	-	5.1
a) Girls aged 10-14 years[4]	na	4	na	5.1
b) Women aged 15-19 years[5]	na	102	na	5.1
3.a.1 Age-standardized prevalence of current tobacco use among persons aged 15 years and older[6]	18.7	3.3	11.0[a]	3.1
3.b.1 Proportion of the target population covered by all vaccines included in their national programme				
a) Coverage of DPT containing vaccine (3rd dose)[7]	76.5	79.7	78.1	10.3
b) Coverage of measles containing vaccine (2nd dose)[8]	57.6	51.2	54.4	10.3
c) Coverage of pneumococcal conjugate vaccine (last dose in schedule)[9]	77.1	81.5	79.4	10.3
5. Gender equality				
5.2.1 Proportion of ever-partnered women and girls aged 15 years and older subjected to physical, sexual or psychological violence by a current or former intimate partner in the previous 12 months[10,11]	na	49.8	na	16.1
a) Physical violence	na	38.4	na	16.1
b) Sexual violence	na	6.2	na	16.1
c) Psychological violence	na	38.3	na	16.1
5.2.2 Proportion of women and girls aged 15 years and older subjected to sexual violence by persons other than an intimate partner in the previous 12 months[12]	na	0.4	na	-
5.3.1 Proportion of women aged 20-24 years who were married or in a union before age 15 and before age 18	-	-	-	4.3
a) Before age 15	na	8.6	na	4.3
b) Before age 18	na	29.6	na	4.3
5.3.2 Proportion of girls and women aged 15-49 years who have undergone female genital mutilation/cutting	na	83.0	na	17.2
	Residence			
7. Affordable clean energy	Urban	Rural		
7.1.2 Proportion of population with primary reliance on clean fuels and technology[13]	1.1	0.1	0.5	2.4
	Sex			
8. Decent work and economic growth	Male	Female		
8.10.2 Proportion of adults (15 years and older) with an account at a bank or other financial institution or with a mobile-money-service provider[14]	13.0	5.8	9.4	15.7
16. Peace, justice, and strong institutions				
16.2.3 Proportion of young women aged 18-29 years who experienced sexual violence by age 18[15]	na	3.2	na	-
16.9.1 Proportion of children under 5 years of age whose births have been registered with a civil authority	90.3	90.5	90.4	2.1
17. Partnerships for the goals				
17.8.1 Proportion of individuals using the Internet[16]	27.8	13.1	20.5[a]	3.5

na = Not applicable
[1] Expressed in terms of maternal deaths per 100,000 live births in the 7-year period preceding the survey
[2] Expressed in terms of deaths per 1,000 live births for the 5-year period preceding the survey
[3] Calculated per 100,000 population
[4] Equivalent to the age-specific fertility rate for girls age 10-14 for the 3-year period preceding the survey, expressed in terms of births per 1,000 girls age 10-14
[5] Equivalent to the age-specific fertility rate for women age 15-19 for the 3-year period preceding the survey, expressed in terms of births per 1,000 women age 15-19
[6] Data are not age-standardized and are available for women and men age 15-49 only.
[7] The percentage of children age 12-23 months who received three doses of DPT-HepB-Hib
[8] The percentage of children age 24-35 months who received two doses of measles
[9] The percentage of children age 12-23 months who received three doses of pneumococcal vaccine
[10] Data are available for women age 15-49 who have ever been in union only.
[11] In the DHS, psychological violence is termed emotional violence.
[12] Data are available for women age 15-49 only.
[13] Measured as the percentage of the population using clean fuel for cooking
[14] Data are available for women and men age 15-49 who have and use an account at a bank or other financial institution; information on use of a mobile-money-service provider is not available.
[15] Data are available for women only.
[16] Data are available for women and men age 15-49 who have used the internet in the past 12 months.
[a] The total is calculated as the simple arithmetic mean of the percentages in the columns for males and females.

SIERRA LEONE

INTRODUCTION AND SURVEY METHODOLOGY 1

The 2019 Sierra Leone Demographic and Health Survey (SLDHS) was implemented by Statistics Sierra Leone (Stats SL). Data collection took place from 15 May to 31 August 2019. ICF provided technical assistance through The DHS Program, which is funded by the United States Agency for International Development (USAID) and offers financial support and technical assistance for population and health surveys in countries worldwide. Other agencies and organisations that facilitated the successful implementation of the survey through technical or financial support were the Global Fund, the World Bank, the Department of International Development (DFID), the Government of Sierra Leone (GoSL), the World Health Organization (WHO), the Sierra Leone Ministry of Health and Sanitation (MOHS), the United Nations Population Fund (UNFPA), and the National AIDS Secretariat (NAS).

1.1 SURVEY OBJECTIVES

The primary objective of the 2019 SLDHS is to provide up-to-date estimates of basic demographic and health indicators. Specifically, the survey collected information on fertility, awareness and use of family planning methods, breastfeeding practices, nutritional status of women and children, maternal and child health, adult and childhood mortality, women's empowerment, domestic violence, female genital cutting, prevalence and awareness and behaviour regarding HIV/AIDS and other sexually transmitted infections (STIs), and other health-related issues such as smoking.

The information collected through the 2019 SLDHS is intended to assist policymakers and programme managers in evaluating and designing programmes and strategies for improving the health of the country's population.

1.2 SAMPLE DESIGN

The sampling frame used for the 2019 SLDHS is the Population and Housing Census of the Republic of Sierra Leone, which was conducted in 2015 by Statistics Sierra Leone. Administratively, Sierra Leone is divided into provinces. Each province is subdivided into districts, each district is further divided into chiefdoms/census wards, and each chiefdom/census ward is divided into sections. During the 2015 Population and Housing Census, each locality was subdivided into convenient areas called census enumeration areas (EAs). The primary sampling unit (PSU), referred to as a cluster for the 2019 SLDHS, is defined based on EAs from the 2015 EA census frame. The 2015 Population and Housing Census provided the list of EAs that served as a foundation to estimate the number of households and distinguish EAs as urban or rural for the survey sample frame.

The sample for the 2019 SLDHS was a stratified sample selected in two stages. Stratification was achieved by separating each district into urban and rural areas. In total, 31 sampling strata were created. Samples were selected independently in every stratum via a two-stage selection process. Implicit stratifications were achieved at each of the lower administrative levels by sorting the sampling frame before sample selection according to administrative order and by using probability-proportional-to-size selection during the first sampling stage.

In the first stage, 578 EAs were selected with probability proportional to EA size. EA size was the number of households residing in the EA. A household listing operation was carried out in all selected EAs, and the resulting lists of households served as a sampling frame for the selection of households in the second stage. In the second stage's selection, a fixed number of 24 households were selected in every cluster through equal probability systematic sampling, resulting in a total sample size of approximately 13,872 selected households. The household listing was carried out using tablets, and random selection of

households was carried out through computer programming. The survey interviewers interviewed only the pre-selected households. To prevent bias, no replacements and no changes of the pre-selected households were allowed in the implementing stages.

Due to the non-proportional allocation of the sample to the different districts and the possible differences in response rates, sampling weights were calculated, added to the data file, and applied so that the results would be representative at the national level as well as the domain level. Because the 2019 SLDHS sample was a two-stage stratified cluster sample selected from the sampling frame, sampling weights were calculated based on sampling probabilities separately for each sampling stage and for each cluster.

The 2019 SLDHS included all women age 15-49 in the sample households. Those who were either permanent residents of the selected households or visitors who stayed in the households the night before the survey were eligible to be interviewed. The men's survey was conducted in one-half of the sample households, and all men age 15-59 in these households were included. In this subsample, one eligible woman in each household was randomly selected to be asked additional questions about domestic violence. Similarly, biomarker information was collected only in those households selected for the men's survey. The biomarkers included in this survey were height and weight for women age 15-49, men age 15-59, and children age 0-59 months; haemoglobin testing for women age 15-49, men age 15-59, and children age 6-59 months; and HIV testing for women age 15-49 and men age 15-59.

The survey was successfully carried out in 578 clusters.

1.3 QUESTIONNAIRES

Five questionnaires were used for the 2019 SLDHS: The Household Questionnaire, the Woman's Questionnaire, the Man's Questionnaire, the Biomarker Questionnaire, and the Fieldworker Questionnaire. The questionnaires, based on The DHS Program's standard Demographic and Health Survey (DHS-7) questionnaires, were adapted to reflect the population and health issues relevant to Sierra Leone. Comments were solicited from various stakeholders representing government ministries and agencies, nongovernmental organisations, and international donors. The survey protocol was reviewed and approved by the Sierra Leone Ethics and Scientific Review Committee and the ICF Institutional Review Board. All questionnaires were finalised in English, and the 2019 SLDHS used computer-assisted personal interviewing (CAPI) for data collection.

The Household Questionnaire listed all members of and visitors to selected households. Basic demographic information was collected on each person listed, including age, sex, marital status, education, and relationship to the head of the household. For children under age 18, parents' survival status was determined. Data on age, sex, and marital status of household members were used to identify women and men who were eligible for individual interviews. The Household Questionnaire also collected information on characteristics of the household's dwelling unit, such as source of drinking water; type of toilet facilities; materials used for flooring, external walls, and roofing; ownership of various durable goods; and ownership of mosquito nets. In addition, data were gathered on whether iodised salt was present in households.

The Woman's Questionnaire was used to collect information from all eligible women age 15-49. These women were asked questions on the following topics:

- Background characteristics (including age, education, and media exposure)
- Birth history and child mortality
- Knowledge, use, and source of family planning methods
- Antenatal, delivery, and postnatal care
- Vaccinations and childhood illnesses
- Breastfeeding and infant feeding practices
- Minimum dietary diversity

- Marriage and sexual activity
- Fertility preferences (including desire for more children and ideal number of children)
- Women's work and husbands' background characteristics
- Knowledge, awareness, and behaviour regarding HIV/AIDS and other sexually transmitted infections (STIs)
- Knowledge, attitudes, and behaviour related to other health issues (e.g., smoking)
- Female genital cutting
- Adult and maternal mortality
- Domestic violence

The Man's Questionnaire was administered to all men age 15-59 in the subsample of households selected for the men's survey. The Man's Questionnaire collected much of the same information as the Woman's Questionnaire but was shorter because it did not contain a detailed reproductive history or questions on maternal and child health.

The Biomarker Questionnaire was used to record the results of anthropometry measurements and other biomarkers for men, women, and children. This questionnaire was administered only to a subsample selected for the men's survey. All children age 0-59 months, all men age 15-59, and all women age 15-49 were eligible for height and weight measurements. Men age 15-59 and women age 15-49 were also eligible for haemoglobin and HIV testing, and children age 6-59 months were also eligible for haemoglobin testing.

The Fieldworker Questionnaire recorded background information from the interviewers to serve as a tool in conducting analyses of data quality. Each interviewer completed the self-administered questionnaire after the final selection of interviewers and before the fieldworkers entered the field. No personal identifiers were attached to the 2019 SLDHS fieldworkers' data file.

1.4 ANTHROPOMETRY, ANAEMIA TESTING, AND HIV TESTING

The 2019 SLDHS incorporated three biomarkers: anthropometry (height and weight), anaemia testing, and HIV testing. Biomarkers were collected in 50% of households selected for the male survey. Blood specimens for the tests were collected from eligible men and women who voluntarily consented to be tested and from all children age 6-59 months for whom consent was obtained from their parents or the adult responsible for the children. In contrast with the data collection procedure for the household and individual interviews, data related to biomarkers were initially recorded on a paper Biomarker Questionnaire and subsequently entered into interviewers' tablet computers. As part of quality assurance, a checklist was used to verify that proper procedures were used during collection of biomarker data and to enhance supportive supervision.

Anthropometry: Height and weight measurements were recorded for children age 0-59 months, men age 15-59, and women age 15-49. The 2019 SLDHS included quality assurance procedures to improve anthropometry data quality. These procedures, undertaken in real time during data collection, included re-measurement of all children with data outside of pre-specified flagged values on a subsequent day and re-measurement of the height and weight of a random selection of children (10%) on a subsequent day.

Anaemia testing: Blood samples for anaemia testing were obtained from a drop of blood taken from a finger prick (or a heel prick for children age 6-11 months). A drop of blood from the prick site was drawn into a microcuvette, and a haemoglobin analysis was carried out on-site with a battery-operated portable HemoCue analyser. Results were provided verbally and in writing. Parents of children with a haemoglobin level below 8 g/dl were instructed to take the child to a health facility for follow-up care. Likewise, nonpregnant women (or women who did not know if they were pregnant) and pregnant women were referred for follow-up care if their haemoglobin levels were below 8 g/dl and 7 g/dl, respectively. All households in which anaemia testing was conducted were given a brochure that explained the causes and prevention of anaemia.

HIV testing: HIV testing was carried out among men age 15-59 and women age 15-49. In the 2019 SLDHS, HIV testing took place in the field as well as in the laboratory. For those who were interested in knowing their status, an HIV rapid diagnostic test was done following the serial testing algorithm used by Determine (Abbott Laboratories) and STAT-PAK (Chembio Diagnostics). Individuals who tested HIV negative according to Determine were reported as negative. Those who tested positive according to both Determine and STAT-PAK were reported as positive. Those who tested positive according to Determine and negative according to STAT-PAK were reported as having inconclusive results and were advised to go a health care facility for further testing and possible care. All respondents were provided pre- and post-test counselling by experienced HIV counsellors. Results on paper slips were provided to all persons tested, irrespective of their HIV status.

In view of an anticipated low acceptance rate for rapid diagnostic testing, it was decided that the HIV prevalence for Sierra Leone would be determined at the laboratory in Lakka, Freetown, using anonymous testing of blood samples collected in the field. To do that, the HIV counsellors collected blood from a finger prick onto a filter paper card and prepared dried blood spot (DBS) samples. Once dry, the cards were taken to the reference laboratory in Lakka, where they were checked for quality, logged, and stored frozen until testing. As part of the informed consent process, the HIV counsellors advised individuals who were eligible for blood sample collection (women age 15-49 and men age 15-59) of the purposes for which the blood would be used and assured them of the anonymity of their HIV test results.

1.5 PRETEST

The pretest training was designed to prepare the trainers for the main training as well as to ensure that they were well versed with the SLDHS questionnaires and procedures and able to test the questionnaires in the different languages. The training involved sessions of administering the SLDHS questionnaires and a separate session for biomarker data collection. Twenty-four participants, comprising seven regional and 15 provincial Stats SL coordinators and two data processing staff members, participated in the pretest training and fieldwork. The pretest took place over a 3-week period from 12 to 30 November 2018. Most of the participants had previous experience carrying out SLDHS surveys or the Sierra Leone Malaria Indicator Survey (SLMIS). The idea behind having the data processing staff participate in the pretest was to familiarise them with the CAPI system.

The training was conducted by ICF staff who focused on the technical components of the survey, biomarkers, and the CAPI data collection system. Training topics highlighted key components of the survey, interview techniques and procedures for completing the SLDHS questionnaires, and administration of interviews using the CAPI system. The biomarker training included orientation on collecting height and weight data, testing for anaemia and HIV, and standardisation procedures for anthropometry. The participants worked in groups using various training techniques, including interactive question-and-answer sessions, case studies, and role-plays. Before starting the fieldwork, the participants were given ample opportunities to practice the questionnaires and to practice collection of biomarker data among women and children. The participants administered the questionnaires in the field, provided feedback on the content and language of the questionnaires, tested the CAPI software programme, commented on the biomarker procedure, and learned various training techniques.

The fieldwork for the pretest was carried out in communities that spoke English, Creole, Temne, Mende, and Limba. Each team carried out the pretest in an urban and a rural location, completing six clusters in total. Following the fieldwork, a debriefing session was held with the pretest field staff, and modifications to the questionnaires were made based on lessons drawn from the pretest exercise.

1.6 TRAINING OF FIELD STAFF

During the main training, biomarker training was held for the HIV counsellors and nurses from 24 April to 8 May 2019. The training was facilitated by the ICF team and supported by the trainers who were trained

during the pretest. A total of 24 nurses and 24 HIV counsellors were trained on biomarker data collection and recording. This included training on anthropometry, use of rapid test kits to test for anaemia, and HIV testing and preparation of dried blood spot samples.

The training utilised a variety of different learning tools. Plenary lectures were held on the technical aspects of biomarker collection, and other tools included video and hands-on demonstrations on the process of biomarker collection, instructions on how to fill out the questionnaire and transmittal sheets, and instructions on data quality procedures. In addition, break-out sessions were held daily during which trainees had the opportunity for hands-on practice with both adults and children. A total of four anthropometry standardisation exercises with 90 children (45 under age 2 and 45 over age 2) were undertaken. Following the standardisation exercises, the results were presented. General observations on accuracy (difference between the reference value and the participant's value) and precision (difference between the first and second readings) were discussed.

The field coordinators were trained on the use of the biomarker checklist. Also implemented were random re-measurements for quality assurance and re-visitation of households for re-measurements in flagged cases involving children whose Z-score values were less than -3 or greater than 3. A 2-day field practice was conducted.

The main training for the 2019 SLDHS started on 31 March 2019 and lasted until 8 May 2019. The training included 4 weeks of orientation on data collection instruments and procedures followed by field practice. The 320 participants in the main training were selected through a nationwide strict vetting process; 180 of these 320 participants qualified for the second phase of the main training.

Twenty-four coordinators from Stats SL who had participated in the pretest training and training of trainers facilitated the training. ICF staff provided technical support during the training sessions. The participants were divided into four classrooms of about 45 participants each with at least three facilitators in each room. The training sessions included discussions of concepts, procedures, and methodologies for conducting the survey. Participants were guided through the questionnaires using various training techniques such as role-plays, age probing in pairs, group discussion, in-class exercises, case studies, and presentations. Training also included discussions of the CAPI system and demonstrations of the CAPI DHS menus and how to conduct interviews through the system.

Participants were evaluated through in-class exercises, quizzes, and observations made during field practice. Ultimately, 24 supervisors and 24 field editors were identified based on their performance. Similarly, 24 male interviewers and 48 female interviewers were selected to serve as enumerators, while the rest were kept as reserves. Twenty-four HIV counsellors and 24 nurses were also selected to participate in the survey based on their performance during the biomarker training.

The team supervisors received additional training on providing logistical support, managing the field teams, observing interviews, keeping an inventory of supplies, and collecting biomarker data. They were also trained on implementing the biomarker checklist to carry out data quality assurance.

The field editors received additional training on performing supervisory activities with the CAPI system, data quality control procedures, fieldwork coordination, and management. The field editors were trained on assigning households and receiving completed interviews from the interviewers, recognising and dealing with error messages, receiving system updates and distributing updates to interviewers, entering biomarker questionnaires, re-measuring and revisiting of questionnaires and the biomarker checklist, resolving duplicated cases, and closing clusters. They were also trained on transferring interviews to the central office via the secure internet file streaming system (IFSS) developed by The DHS Program.

Six quality controllers for biomarker data collection were identified from among the trainees who underwent the pretest training and facilitated the main training, and they received additional training on supporting the teams and monitoring fieldwork through the biomarker checklist.

1.7 FIELDWORK

The fieldwork for the 2019 SLDHS was launched under close supervision on 15 May 2019 in clusters in Freetown. Twenty-four teams, each consisting of one supervisor, one field editor, one male interviewer, two female interviewers, one HIV counsellor, and one nurse, were assigned across the different clusters in Freetown. The teams were closely monitored by the coordinators and the biomarker monitors. After completion of the fieldwork in Freetown in the first week, teams were brought back to the Stats SL office in Freetown for a review session in which the teams had an opportunity to clarify issues and ask questions. The teams were then dispatched to their assigned provinces. Data collection lasted until 31 August 2019. The fieldwork in some provinces took longer than expected due to the various perceptions of the Ebola outbreak and its relationship to SLDHS data collection.

Fieldwork monitoring was an integral part of the 2019 SLDHS, and several rounds of monitoring were carried out by the Stats SL and MOHS core team, the coordinators from Stats SL, and ICF staff. The monitors were provided with guidelines for overseeing the fieldwork. Weekly field check tables were generated from the completed interviews sent to the central office to monitor fieldwork progress, and regular feedback was sent to the teams.

1.8 DATA PROCESSING

The processing of the 2019 SLDHS data began almost as soon as the fieldwork started. As data collection was completed in each cluster, all electronic data files were transferred via the IFSS to the Stats SL central office in Freetown. These data files were registered and checked for inconsistencies, incompleteness, and outliers. The field teams received alerts on any inconsistencies and errors. Secondary editing, carried out in the central office, involved resolving inconsistencies and coding open-ended questions. The Stats SL data processor coordinated the exercise at the central office. The biomarker paper questionnaires were compared with electronic data files to check for any inconsistencies in data entry. Data entry and editing were carried out using the CSPro Systems software package. Concurrent processing of the data offered a distinct advantage because it maximised the likelihood of the data being error-free and accurate. Timely generation of field check tables allowed for effective monitoring. The secondary editing of the data was completed in mid-October 2019.

Throughout this report, numbers in the tables reflect weighted numbers. Percentages based on 25 to 49 unweighted cases are shown in parentheses. Percentages based on fewer than 25 unweighted cases are suppressed and replaced with an asterisk to caution readers when interpreting data that a percentage based on fewer than 50 cases may not be statistically reliable.

1.9 RESPONSE RATES

Table 1.1 shows response rates for the 2019 SLDHS. A total of 13,793 households were selected for the sample, of which 13,602 were occupied. Of the occupied households, 13,399 were successfully interviewed, yielding a response rate of 99%. In the interviewed households, 16,099 women age 15-49 were identified for individual interviews; interviews were completed with 15,574 women, yielding a response rate of 97%. In the subsample of households selected for the male survey, 7,429 men age 15-59 were identified, and 7,197 were successfully interviewed, yielding a response rate of 97%.

Table 1.1 Results of the household and individual interviews

Number of households, number of interviews, and response rates, according to residence (unweighted), Sierra Leone DHS 2019

Result	Residence		Total
	Urban	Rural	
Household interviews			
Households selected	5,136	8,657	13,793
Households occupied	5,033	8,569	13,602
Households interviewed	4,976	8,423	13,399
Household response rate[1]	98.9	98.3	98.5
Interviews with women age 15-49			
Number of eligible women	6,560	9,539	16,099
Number of eligible women interviewed	6,399	9,175	15,574
Eligible women response rate[2]	97.5	96.2	96.7
Household interviews in subsample			
Households selected	2,568	4,329	6,897
Households occupied	2,514	4,289	6,803
Households interviewed	2,488	4,224	6,712
Household response rate in subsample[1]	99.0	98.5	98.7
Interviews with men age 15-59			
Number of eligible men	2,964	4,465	7,429
Number of eligible men interviewed	2,854	4,343	7,197
Eligible men response rate[2]	96.3	97.3	96.9

[1] Households interviewed/households occupied
[2] Respondents interviewed/eligible respondents

HOUSING CHARACTERISTICS AND HOUSEHOLD POPULATION 2

Key Findings

- ***Drinking water:*** Overall, 67% of households have access to an improved source of drinking water (92% in urban areas and 49% in rural areas).
- ***Availability of water:*** 58% of households using piped water or water from a tube well or borehole reported having water available to them without an interruption of at least 1 day.
- ***Sanitation:*** 55% of households use an improved sanitation facility.
- ***Electricity:*** 23% of households have electricity (51% of urban households and 2% of rural households).
- ***Orphans:*** 12% of children under age 18 are orphans (i.e., one or both parents are dead). Twenty-eight percent of children do not live with a biological parent.
- ***Birth registration:*** 90% of children under age 5 have their births registered with the civil authorities; among these children, 31% have a birth certificate.
- ***Education:*** Overall, 39% of females and 29% of males in Sierra Leone have no education.
- ***School attendance:*** The net attendance ratio (NAR) is 87% at the primary level and 45% at the secondary level.

Information on the socioeconomic characteristics of the household population in the 2019 SLDHS provides a context to interpret demographic and health indicators and can furnish an approximate indication of the representativeness of the survey. In addition, this information sheds light on the living conditions of the population.

This chapter presents information on sources of drinking water, sanitation, exposure to smoke inside the home, wealth, handwashing, household population and composition, educational attainment, school attendance, birth registration, and family living arrangements.

2.1 Drinking Water Sources and Treatment

Improved sources of drinking water

Include piped water, public taps, standpipes, tube wells, boreholes, protected dug wells and springs, rainwater, water delivered via a tanker truck or a cart with a small tank, and bottled water.

Sample: Households

In Sierra Leone, 67% of households have access to an improved source of drinking water, 92% in urban areas and 49% in rural areas (**Table 2.1.1**). Urban and rural households rely on similar sources of drinking water. The three most common improved sources of drinking water in both urban and rural households are

protected dug wells (30% in urban and 13% in rural households), tube wells or boreholes (11% in urban and 24% in rural households), and public taps/standpipes (21% in urban and 8% in rural households) (**Figure 2.1**).

Unimproved water sources are unprotected dug wells, unprotected springs, and surface water. Overall, 33% of households in Sierra Leone still obtain their drinking water from unimproved sources. Fifty-one percent of households in rural areas depend on water from unimproved sources, as compared with 8% of households in urban areas.

By district, the percentage of households with access to an improved source of drinking water is highest in Western Area Urban (98%) and lowest in Moyamba (33%) (**Figure 2.2**). Access to an improved source of drinking water is most common among residents in the highest wealth quintile and least common among those in the lowest quintile (96% and 30%, respectively).

Figure 2.1 Household drinking water by residence

Percent distribution of households by source of drinking water

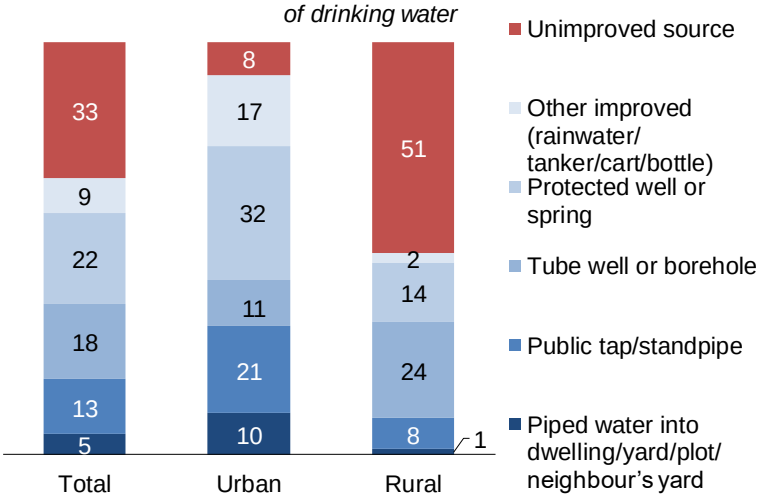
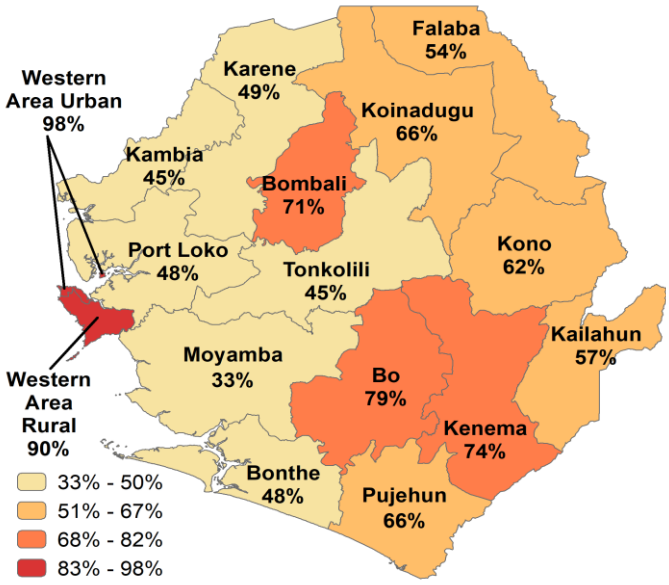


Figure 2.2 Improved water source by district

Percentage of households with improved source of drinking water



Basic drinking water service

Drinking water from an improved source, provided either water is on the premises or round-trip collection time is 30 minutes or less.

Sample: De jure population

Limited drinking water service

Drinking water from an improved source, and round-trip collection time is more than 30 minutes.

Sample: De jure population

Clean water is a basic need for human life; 56% of Sierra Leone's population has basic drinking water service (74% of the urban population and 44% of the rural population) (**Table 2.1.1**). Only 28% of the population in the lowest wealth quintile has basic drinking water service (**Table 2.1.2**).

Fetching drinking water is an additional chore that can be of great cost to household members, depending on the time spent to obtain it. Fifty-three percent of urban households and 75% of rural households report having to travel 30 minutes or less to access a source of drinking water (**Table 2.1.1**). Overall, 9% of households in Sierra Leone have limited drinking water service (17% in urban areas and 4% in rural areas).

Most households in Sierra Leone (74%) report that they do not treat their water prior to drinking. Eighteen percent of households use an appropriate treatment method, 25% in urban areas and 13% in rural areas. Appropriate treatment methods include boiling, adding bleach or chlorine, straining through cloth, solar disinfecting, and filtering through ceramic, sand, or other filters (**Table 2.1.3**).

Table 2.2 shows the percentage of households using piped water or water from a tube well or borehole that reported availability of water in the last 2 weeks. Fifty-eight percent of households in Sierra Leone reported having water with no interruption of at least 1 day in the 2 weeks before the survey. Seventy-four percent of rural households had availability with no interruption of at least 1 day, as compared with 43% of urban households. Urban households were more likely than rural households to report not having water available for at least 1 day (56% and 26%, respectively) (**Table 2.2**).

2.2 SANITATION

Improved toilet facilities

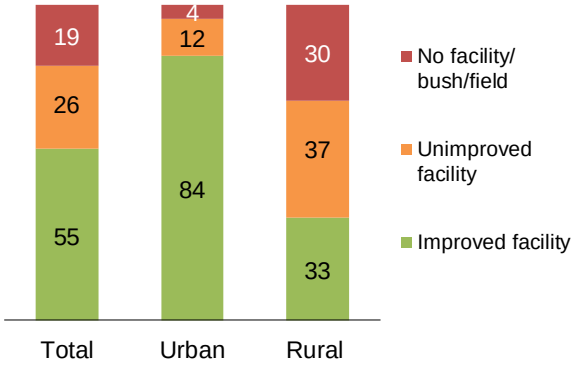
Flush/pour flush toilets that flush water and waste to a piped sewer system, septic tank, pit latrine, or an unknown destination; ventilated improved pit (VIP) latrines; pit latrines with slabs; or composting toilets.

Sample: Households

Table 2.3.1 provides an overview of the types of sanitation facilities available in the surveyed households at the time of data collection. Overall, 55% of Sierra Leone households use improved toilet facilities, 84% in urban areas and 33% in rural areas (**Table 2.3.1** and **Figure 2.3**). A pit latrine with a slab is the most common type of improved sanitation facility, used by 42% of households (60% in urban areas and 29% in rural areas). This is followed by flush/pour flush toilets that flush to a septic tank (6%); 14% of households in urban areas use this type of facility, as compared with only 1% of households in rural areas. Among rural households, 37% use unimproved toilet facilities, most commonly pit latrines without slabs (34%). Open defecation is still widespread in Sierra Leone, with 19% of households (30% of rural households and 4% of urban households) engaging in this practice.

Figure 2.3 **Household toilet facilities by residence**

Percent distribution of households by type of toilet facilities



Basic sanitation service
Use of improved facilities that are not shared with other households.
Sample: De jure population

With respect to location of toilet facility, 8% of households in Sierra Leone have their toilet facility in their own dwelling (15% of urban households and 2% of rural households). Sixteen percent of households have basic sanitation service (28% of urban households and 7% of rural households) (**Table 2.3.1**).

Limited sanitation service
Use of improved facilities shared by two or more households.
Sample: De jure population

Thirty-eight percent of households in Sierra Leone have limited sanitation service. Fifty-five percent of urban households use improved facilities shared by two or more households, as compared with only 25% of rural households.

Overall, 55% of Sierra Leone's population has access to an improved sanitation facility, while 27% has access to an unimproved facility. Eighteen percent of the population engages in open defecation.

Patterns by background characteristics:

- Open defecation is most common in the Southern province (41%) and least common in the Western Area (3%) (**Table 2.3.2**).
- The percentage of households with access to an improved sanitation facility is highest in the Western Area (89%) and lowest in the Northern province (37%).
- By district, access to an improved sanitation facility is highest among households in Western Area Urban (91%) and lowest among households in Tonkolili (30%).
- Twelve percent of households in the Eastern province and 13% in the Northern province have basic sanitation service, the lowest percentages among the provinces.
- Four percent of households in Pujehun have basic sanitation service, the lowest percentage among the districts.
- As expected, access to an improved sanitation facility is most common among households in the highest wealth quintile (94%) and least common among households in the lowest quintile (11%).

2.3 EXPOSURE TO SMOKE INSIDE THE HOME

Exposure to smoke inside the home, from either cooking with solid fuels or smoking tobacco, has potentially harmful health effects. In Sierra Leone, 97% of households use some type of solid fuel for cooking, with 64% using wood (**Table 2.4**). Exposure to cooking smoke is greater when cooking takes place inside the house rather than in a separate building or outdoors. In 3% of households, cooking is done in the house (6% in urban areas and 1% in rural areas). In 26% of households, someone smokes inside the house on a daily basis. Overall, only 1% of households in Sierra Leone use clean fuel for cooking.

Other Housing Characteristics

The 2019 SLDHS also collected data on access to electricity, flooring materials, and the number of rooms used for sleeping. Twenty-three percent of households in Sierra Leone have access to electricity (51% in urban areas and 2% in rural areas) (**Table 2.4)**. Sixty-four percent of urban households and 30% of rural households use cement flooring in their dwellings.

2.4 HOUSEHOLD WEALTH

Household Durable Goods

The survey also collected information on household effects, means of transportation, and ownership of agricultural land and farm animals. In general, urban households are more likely than rural households to possess household effects. The most commonly found item in all households is a mobile phone (73%); 93% of urban and 58% of rural households own a mobile phone. The second most common household possession is a radio (55%). As expected, rural households are more likely than urban households to own agricultural land and farm animals. Seventy-eight percent of rural households own agricultural land, as compared with 20% of urban households (**Table 2.5**). Overall, 52% of households in Sierra Leone own farm animals, 66% of rural households and 34% of urban households.

Wealth Index

Wealth index

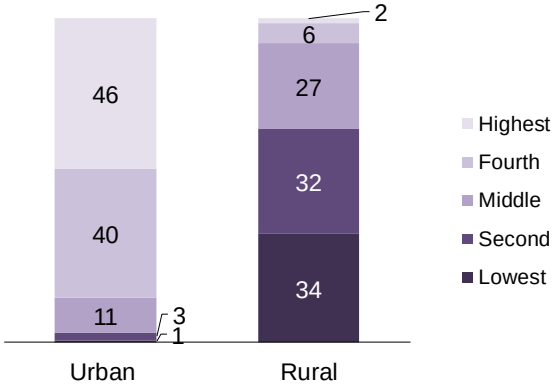
Households are given scores based on the number and kinds of consumer goods they own, ranging from a television to a bicycle or car, and housing characteristics such as source of drinking water, toilet facilities, and flooring materials. These scores are derived using principal component analysis. National wealth quintiles are compiled by assigning the household score to each usual (de jure) household member, ranking each person in the household population by her or his score, and then dividing the distribution into five equal categories, each comprising 20% of the population.

Sample: Households

Table 2.6 shows that the wealthiest households are concentrated in urban areas (46%); only 2% of the wealthiest households are in rural areas (**Figure 2.4**). The Western Area has a much higher percentage of households in the highest wealth quintile (65%) than the North West and Southern provinces (6% and 8%, respectively). By district, Western Area Urban has the highest percentage of households in the wealthiest quintile (84%).

Figure 2.4 **Household wealth by residence**

Percent distribution of de jure population by wealth quintiles



Note: May not add to 100% due to rounding.

2.5 HANDWASHING

To obtain information on handwashing practices, interviewers asked to see the place where members of the household most often wash their hands. Interviewers were able to observe a place for handwashing in 42% of households (42% in urban areas and 43% in rural areas) (**Table 2.7**). Overall, 7% of households have a fixed place for handwashing, while 35% of households have a mobile place for handwashing. Fifty-three percent of households had soap and 75% had water available. Cleansing agents other than soap were available in 4% of households.

The availability of water varies across provinces, from a low of 63% in the Western Area to a high of 89% in the Southern province. Fifty-five percent of households in the highest wealth quintile had soap available for handwashing; however, these households were least likely to have water available (71%).

2.6 HOUSEHOLD POPULATION AND COMPOSITION

Household

A person or group of related or unrelated persons who live together in the same dwelling unit(s), who acknowledge one adult male or female as the head of the household, who share the same housekeeping arrangements, and who are considered a single unit.

De facto population

All persons who stayed in the selected households the night before the interview (whether usual residents or visitors).

De jure population

All persons who are usual residents of the selected households, whether or not they stayed in the household the night before the interview.

How data are calculated

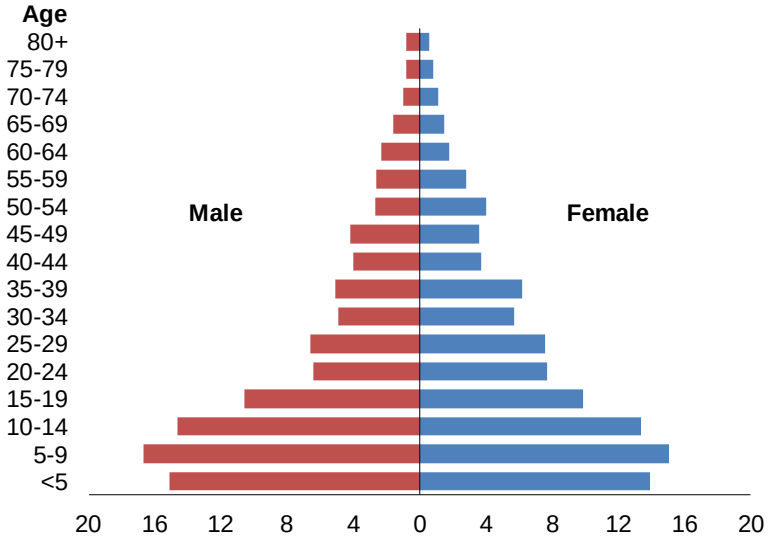
All tables are based on the de facto population unless otherwise specified.

Household composition and population data provide information on the demographic and socioeconomic characteristics of the households and respondents surveyed in terms of age, sex, educational attainment, and place of residence.

Household information was collected for a total of 69,717 individuals in the 13,399 interviewed households; 48% of these individuals were male and 52% were female, yielding a sex ratio (number of males per 100 females) of 94.

Figure 2.5 **Population pyramid**

Percent distribution of the household population



Forty-four percent of individuals are in the 0-14 dependency age group, while 4% are in the 65 and above dependency age group (**Table 2.8**). Fifty-one percent of the population is in the 15-64 age group. Children age 0-17 form the bulk of the population (51%). The broad base of the population pyramid shows that Sierra Leone's population is typical of countries with a high fertility rate and low life expectancy (**Figure 2.5**).

The average household size in Sierra Leone is 5.3 persons. Urban households are slightly smaller than rural households (5.1 persons versus 5.4 persons). A majority of the households in Sierra Leone are headed by men (73%) (**Table 2.9**).

2.7 CHILDREN'S LIVING ARRANGEMENTS AND PARENTAL SURVIVAL

Orphan

A child with one or both parents who are dead.

Sample: Children under age 18

Table 2.10 presents the percent distribution of children under age 18 by living arrangements and survival status of parents. Twenty-eight percent of children under age 18 do not live with a biological parent, while 12% are orphans (i.e., one or both parents are dead).

Among children less than age 2, 4% were not living with their parents at the time of the interview, and 2% had lost one or both parents. The percentage of children who are orphans rises rapidly with age, from 5% among those age 2-4 to 22% among those age 15-17. The Eastern, Western Area, North West and Northern provinces have the highest percentage of children who are orphans (12% each), while the Southern province has the lowest percentage (9%). Thirty percent of females under age 18 are not living with a biological parent, as compared with 26% of males in the same age group. Twelve percent of females and 11% of males under age 18 are orphans.

2.8 BIRTH REGISTRATION

Registered birth

Child has a birth certificate or child does not have a birth certificate, but his/her birth is registered with the civil authorities.

Sample: De jure children under age 5

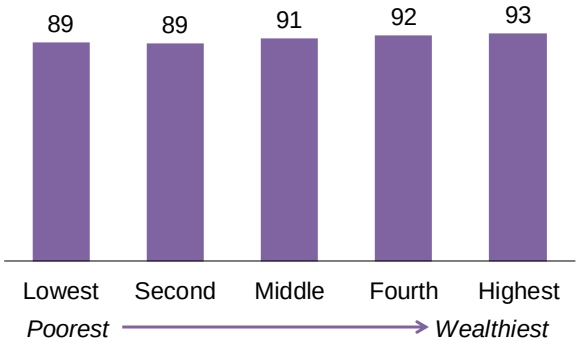
Table 2.11 presents information on birth registration of children under age 5. Birth registration is the documentation of the facts of each birth into an official log book kept at the registrar's office. According to the Births and Deaths Registration Act of 1983, registration of births and deaths is compulsory in all cases in Sierra Leone. The National Office of Births and Deaths of Sierra Leone's Ministry of Health and Sanitation is responsible for registering these important events nationwide. Information was collected in the household interview whereby respondents were asked if children under age 5 residing in the household have been registered. At the time of the survey, 90% of children under age 5 were registered with the civil authorities (93% of children under age 2 and 89% of children between age 2 and 4) and among these children, 31% have a birth certificate. Children in urban areas are more likely than rural children to have their births registered (93% versus 89%). By sex, birth registration is slightly higher among girls (91%) than among boys (90%).

The percentage of children whose births are registered increases with increasing household wealth. Eighty-nine percent of children in the lowest and second wealth quintiles have their births registered, as compared with 93% of children in the highest wealth quintile (**Figure 2.6**).

Trends: The percentage of children who had their births registered increased from 77% in 2013 to 90% in 2019.

Figure 2.6 **Birth registration by household wealth**

Percentage of de jure children under age 5 whose births are registered with the civil authorities



2.9 EDUCATION

2.9.1 Educational Attainment

Median educational attainment

Half of the population has completed less than the median number of years of schooling, and half of the population has completed more than the median number of years of schooling.

Sample: De facto household population age 6 and older

Education is one of the most important aspects of social and economic development. Education improves capabilities and is strongly associated with various socioeconomic variables such as lifestyle, income, and fertility for both individuals and societies. Overall, 39% of females and 29% of males in Sierra Leone have no education (**Table 2.12.1** and **Table 2.12.2**). Thirty-one percent of females and 32% of males age 6 or older have attended some primary school; however, only 4% of females and 3% of males have completed a primary education. The median number of years of schooling is 1.2 for women and 2.8 for men.

Trends: The percentage of females age 6 and over with no education has decreased since 2013, from 51% to 39%. A similar pattern is observed among males, with a reduction from 41% to 29%.

Patterns by background characteristics

- Urban residents are much more likely than rural residents to be educated. Twenty-five percent of females age 6 and older in urban areas have no education, as compared with 50% of females in rural areas. The proportions among males are 16% and 38%, respectively.
- Ten percent of women in the highest wealth quintile have more than a secondary education, while 18% have no education. In the lowest quintile, 57% of women have no education and none have more than a secondary education.

2.9.2 School Attendance

Net attendance ratio (NAR)

Percentage of the school-age population that attends primary or secondary school.

Sample: Children age 6-11 for primary school NAR and children age 12-17 for secondary school NAR

Gross attendance ratio (GAR)

The total number of children attending primary school divided by the official primary school-age population and the total number of children attending secondary school divided by the official secondary school-age population.

Sample: Children age 6-11 for primary school GAR and children age 12-17 for secondary school GAR

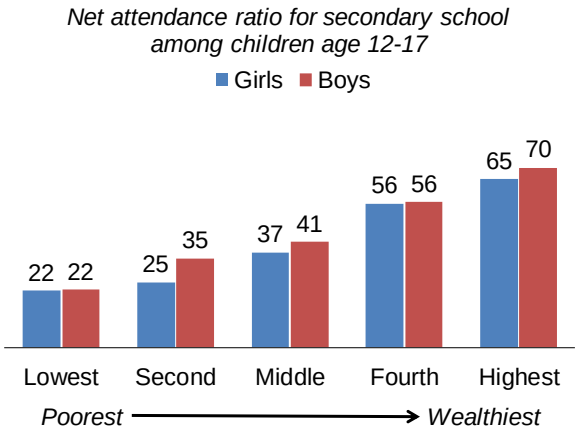
The primary school net attendance ratio (NAR) for children age 6-11 is 87% (89% for girls and 85% for boys). The secondary NAR drops drastically to 44% among girls and 46% among boys (**Table 2.13**).

Patterns by background characteristics

- There is a substantial difference in the primary school NAR between urban and rural areas (90% and 85%, respectively). The difference increases at the secondary school level (61% in urban areas and 31% in rural areas).
- The primary school NAR is highest in the Eastern province (90%) and lowest in the Southern province (85%), while the secondary NAR is highest in the Western Area (62%) and lowest in the Southern province (33%).
- At the district level, the primary school NAR is highest in Kailahun (92%) and lowest in Falaba (75%). The secondary NAR is highest in Western Area Urban (67%) and lowest in Pujehun (27%).

- The NAR increases with increasing household wealth, especially at the secondary school level. The overall secondary NAR rises from 22% in the lowest wealth quintile to 67% in the highest quintile. Among girls, the secondary NAR increases from 22% in the lowest quintile to 65% in the highest quintile (**Table 2.13** and **Figure 2.7**).

Figure 2.7 **Secondary school attendance by household wealth**



Gender parity index (GPI)

The ratio of female to male students attending primary school and the ratio of female to male students attending secondary school. The index reflects the magnitude of the gender gap.

Sample: Primary school students and secondary school students

The gross attendance ratio (GAR) and gender parity index (GPI) are also presented in **Table 2.13**. A primary school GAR value of more than 100% means that a significant number of primary school students are not of the official primary school age. In Sierra Leone, the GAR is 128% at the primary level (131% for females and 125% for males) and 72% at the secondary level (70% for females and 75% for males).

A GPI of 1 indicates parity or equality between male and female school participation ratios. A GPI lower than 1 indicates a gender disparity in favour of males, with a higher proportion of males than females attending the specified level of schooling. A GPI higher than 1 indicates a gender disparity in favour of females. In Sierra Leone, the GPI is 1.05 at the primary school level (indicating that more girls than boys attend primary school) and 0.93 at the secondary school level (indicating the reverse).

List of Tables

For more information on household population and housing characteristics, see the following tables:

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- **Table 2.1.2 Drinking water according to province and wealth**
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- **Table 2.2 Availability of water**
- **Table 2.3.1 Household sanitation facilities**
- **Table 2.3.2 Sanitation facility type according to province and wealth**
- **Table 2.4 Household characteristics**
- **Table 2.5 Household possessions**
- **Table 2.6 Wealth quintiles**
- **Table 2.7 Handwashing**
- **Table 2.8 Household population by age, sex, and residence**
- **Table 2.9 Household composition**
- **Table 2.10 Children's living arrangements and orphanhood**
- **Table 2.11 Birth registration of children under age 5**
- **Table 2.12.1 Educational attainment of the female household population**
- **Table 2.12.2 Educational attainment of the male household population**
- **Table 2.13 School attendance ratios**

Table 2.1.1 Household drinking water

Percent distribution of households and de jure population by source of drinking water and by time to obtain drinking water, percentage of households and de jure population with basic drinking water service, and percentage with limited drinking water service, according to residence, Sierra Leone DHS 2019

	Households			Population		
Characteristic	Urban	Rural	Total	Urban	Rural	Total
Source of drinking water						
Improved source	91.9	48.7	67.0	91.1	48.2	65.9
Piped into dwelling/yard/plot	3.9	0.4	1.9	3.7	0.4	1.7
Piped to neighbour	6.1	0.9	3.1	5.7	0.9	2.9
Public tap/standpipe	21.1	7.5	13.3	21.0	7.7	13.2
Tube well or borehole	11.2	23.5	18.3	12.0	22.6	18.2
Protected dug well	30.1	13.4	20.5	33.1	13.8	21.8
Protected spring	2.3	0.9	1.5	2.4	0.9	1.5
Rainwater	1.3	1.8	1.6	1.4	1.7	1.6
Tanker truck/cart with small tank	0.3	0.1	0.2	0.3	0.1	0.2
Sachet/bottled water	15.5	0.3	6.7	11.6	0.2	4.9
Unimproved source	8.1	51.3	33.0	8.9	51.8	34.1
Unprotected dug well	4.5	9.5	7.4	5.0	9.6	7.7
Unprotected spring	2.1	13.2	8.5	2.3	13.1	8.6
Surface water	1.5	28.6	17.1	1.7	29.0	17.8
Total	100.0	100.0	100.0	100.0	100.0	100.0
Time to obtain drinking water (round trip)						
Water on premises[1]	28.0	8.1	16.5	28.3	8.4	16.6
30 minutes or less	52.5	75.4	65.7	52.3	74.8	65.5
More than 30 minutes	18.9	16.3	17.4	18.8	16.7	17.6
Don't know/missing	0.6	0.2	0.3	0.6	0.2	0.3
Total	100.0	100.0	100.0	100.0	100.0	100.0
Percentage with basic drinking water service[2]	74.5	44.6	57.3	73.9	43.9	56.3
Percentage with limited drinking water service[3]	16.8	4.0	9.4	16.6	4.3	9.3
Number of households/population	5,680	7,719	13,399	29,210	41,642	70,852

[1] Includes water piped to a neighbour and those reporting a round-trip collection time of zero minutes
[2] Defined as drinking water from an improved source, provided either water is on the premises or round-trip collection time is 30 minutes or less. Includes safely managed drinking water, which is not shown separately.
[3] Drinking water from an improved source, and round-trip collection time is more than 30 minutes.

Table 2.1.2 Drinking water according to province, district and wealth

Percent distribution of de jure population by drinking water source, percentage of de jure population with basic drinking water service, and percentage with limited drinking water service, according to province and wealth quintile, Sierra Leone DHS 2019

Background characteristic	Improved source of drinking water[1]	Unimproved source of drinking water[2]	Total	Percentage with basic drinking water service[3]	Percentage with limited drinking water service[4]	Number of persons
Province						
Eastern	66.1	33.9	100.0	56.9	9.2	15,107
Northern	57.9	42.1	100.0	53.6	4.2	14,544
North West	47.0	53.0	100.0	41.2	5.5	12,517
Southern	60.3	39.7	100.0	56.4	3.8	13,974
Western Area	95.0	5.0	100.0	70.9	23.2	14,711
District						
Kailahun	56.8	43.2	100.0	50.7	6.1	3,592
Kenema	73.5	26.5	100.0	66.3	7.3	7,003
Kono	61.9	38.1	100.0	47.4	14.5	4,513
Bombali	71.0	29.0	100.0	65.0	5.7	4,994
Falaba	53.9	46.1	100.0	39.5	14.2	1,773
Koinadugu	65.5	34.5	100.0	63.6	1.9	2,054
Tonkolili	45.0	55.0	100.0	44.5	0.5	5,723
Kambia	45.1	54.9	100.0	39.7	5.1	4,553
Karene	48.5	51.5	100.0	40.4	8.0	2,378
Port Loko	47.9	52.1	100.0	42.7	4.7	5,586
Bo	79.3	20.7	100.0	75.0	4.3	5,857
Bonthe	47.8	52.2	100.0	46.8	0.8	2,289
Moyamba	33.0	67.0	100.0	32.2	0.7	3,486
Pujehun	65.6	34.4	100.0	55.4	10.1	2,342
Western Area Rural	90.4	9.6	100.0	79.2	11.0	5,657
Western Area Urban	97.9	2.1	100.0	65.7	30.8	9,054
Wealth quintile						
Lowest	29.6	70.4	100.0	27.8	1.8	14,142
Second	51.1	48.9	100.0	46.6	4.4	14,197
Middle	64.1	35.9	100.0	56.3	7.6	14,170
Fourth	88.7	11.3	100.0	76.8	11.6	14,173
Highest	95.9	4.1	100.0	73.8	21.3	14,171
Total	65.9	34.1	100.0	56.3	9.3	70,852

[1] See Table 2.1.1 for definition of an improved source.
[2] See Table 2.1.1 for definition of an unimproved source.
[3] Defined as drinking water from an improved source, provided either water is on the premises or round-trip collection time is 30 minutes or less. Includes safely managed drinking water, which is not shown separately.
[4] Drinking water from an improved source, and round-trip collection time is more than 30 minutes.

Table 2.1.3 Treatment of household drinking water

Percentage of households and de jure population using various methods to treat drinking water, and percentage using an appropriate treatment method, according to residence, Sierra Leone DHS 2019

	Households			Population		
Water treatment method	Urban	Rural	Total	Urban	Rural	Total
Boil	2.6	1.6	2.0	2.7	1.7	2.1
Bleach/chlorine added	22.2	12.0	16.3	24.5	11.7	17.0
Strain through cloth	5.0	3.3	4.0	5.4	3.7	4.4
Ceramic, sand, or other filter	0.8	0.5	0.6	0.8	0.5	0.6
Solar disinfection	0.1	0.0	0.1	0.1	0.0	0.1
Let stand and settle	3.3	4.7	4.1	3.7	4.5	4.2
Other	0.7	0.4	0.6	0.8	0.5	0.6
No treatment	64.8	80.6	73.9	62.5	80.8	73.3
Percentage using an appropriate treatment method[1]	25.0	13.4	18.3	27.1	13.1	18.9
Number of households/population	5,680	7,719	13,399	29,210	41,642	70,852

Note: Respondents may report multiple treatment methods, so the sum of treatment may exceed 100%.
[1] Appropriate water treatment methods are boiling, bleaching, filtering, and solar disinfecting.

Table 2.2 Availability of water

Percent distribution of households and de jure population using piped water or water from a tube well or borehole, by availability of water in the last 2 weeks, according to residence, Sierra Leone DHS 2019

	Households			Population		
Availability of water in last 2 weeks	Urban	Rural	Total	Urban	Rural	Total
Not available for at least 1 day	56.4	25.9	42.0	53.9	26.0	40.3
Available with no interruption of at least 1 day	42.8	74.1	57.6	45.4	73.9	59.4
Don't know/missing	0.8	0.0	0.4	0.6	0.1	0.3
Total	100.0	100.0	100.0	100.0	100.0	100.0
Number of households/population using piped water or water from a tube well[1]	2,800	2,502	5,303	13,752	13,166	26,919

[1] Includes households/population reporting piped water or water from a tube well or borehole as their main source of drinking water and households/population reporting bottled water as their main source of drinking water if their main source of water for cooking and handwashing is piped water or water from a tube well or borehole

Table 2.3.1 Household sanitation facilities

Percent distribution of households and de jure population by type of toilet/latrine facilities, percent distribution of households and de jure population with a toilet/latrine facility by location of the facility, percentage of households and de jure population with basic sanitation service, and percentage with limited sanitation service, according to residence, Sierra Leone DHS 2019

	Households			Population		
Type and location of toilet/latrine facility	Urban	Rural	Total	Urban	Rural	Total
Improved sanitation facility	84.1	32.7	54.5	84.2	33.8	54.6
Flush/pour flush to piped sewer system	0.9	0.0	0.4	0.8	0.0	0.3
Flush/pour flush to septic tank	13.7	0.8	6.3	13.5	0.8	6.0
Flush/pour flush to pit latrine	6.4	0.4	2.9	6.2	0.5	2.8
Flush/pour flush, don't know where	0.0	0.0	0.0	0.0	0.0	0.0
Ventilated improved pit (VIP) latrine	2.7	1.3	1.9	3.2	1.4	2.1
Pit latrine with slab	60.1	28.5	41.9	60.2	29.6	42.2
Composting toilet	0.3	1.6	1.0	0.3	1.6	1.1
Unimproved sanitation facility	11.7	37.1	26.4	12.1	38.2	27.4
Flush/pour flush not to sewer/septic tank/pit latrine	0.7	0.0	0.3	0.5	0.0	0.2
Pit latrine without slab/open pit	9.8	33.5	23.4	10.4	34.7	24.7
Bucket	0.4	0.1	0.2	0.4	0.1	0.2
Hanging toilet/hanging latrine	0.9	3.6	2.4	0.8	3.5	2.4
Open defecation (no facility/bush/ field)	4.2	30.2	19.2	3.7	28.0	18.0
Total	100.0	100.0	100.0	100.0	100.0	100.0
Number of households/population	5,680	7,719	13,399	29,210	41,642	70,852
Location of toilet facility						
In own dwelling	14.5	1.7	8.1	14.4	1.6	7.8
In own yard/plot	73.6	70.4	72.0	74.7	73.4	74.1
Elsewhere	11.9	27.9	19.8	10.8	24.9	18.1
Total	100.0	100.0	100.0	100.0	100.0	100.0
Number of households/population with a toilet/latrine facility	5,442	5,387	10,829	28,137	29,984	58,121
Percentage with basic sanitation service[1]	28.3	7.4	16.3	32.8	8.6	18.5
Percentage with limited sanitation service[2]	55.4	24.9	37.8	51.0	24.9	35.6
Number of households/population	5,680	7,719	13,399	29,210	41,642	70,852

[1] Defined as use of improved facilities that are not shared with other households. Includes safely managed sanitation service, which is not shown separately.
[2] Defined as use of improved facilities shared by 2 or more households

Table 2.3.2 Sanitation facility type according to province, district and wealth

Percent distribution of de jure population by type of sanitation, percentage of de jure population with basic sanitation service, and percentage with limited sanitation service, according to province and wealth quintile, Sierra Leone DHS 2019

Background characteristic	Type of sanitation			Total	Percentage with basic sanitation service[3]	Percentage with limited sanitation service[4]	Number of persons
	Improved sanitation facility[1]	Unimproved sanitation facility[2]	Open defecation				
Province							
Eastern	48.6	27.8	23.6	100.0	11.7	36.8	15,107
Northern	36.9	53.0	10.0	100.0	12.6	24.1	14,544
North West	55.4	32.3	12.3	100.0	16.8	38.6	12,517
Southern	42.9	16.0	41.1	100.0	14.0	27.8	13,974
Western Area	88.7	8.5	2.8	100.0	37.2	50.9	14,711
District							
Kailahun	37.4	11.2	51.4	100.0	7.6	29.7	3,592
Kenema	50.8	26.7	22.5	100.0	14.8	35.9	7,003
Kono	54.0	42.7	3.3	100.0	10.3	43.7	4,513
Bombali	45.3	48.6	6.1	100.0	16.0	29.1	4,994
Falaba	41.1	49.0	9.9	100.0	9.4	31.6	1,773
Koinadugu	33.8	63.3	2.8	100.0	12.0	21.8	2,054
Tonkolili	29.5	54.3	16.2	100.0	10.7	18.2	5,723
Kambia	64.9	30.0	5.1	100.0	23.4	41.5	4,553
Karene	44.1	50.2	5.7	100.0	14.3	29.8	2,378
Port Loko	52.4	26.6	20.9	100.0	12.5	39.9	5,586
Bo	49.8	9.1	41.1	100.0	15.7	31.5	5,857
Bonthe	37.3	21.7	41.1	100.0	11.1	25.8	2,289
Moyamba	33.4	15.8	50.7	100.0	19.7	13.8	3,486
Pujehun	45.2	27.8	27.0	100.0	4.1	41.1	2,342
Western Area Rural	84.7	12.5	2.8	100.0	43.8	39.9	5,657
Western Area Urban	91.1	6.1	2.8	100.0	33.1	57.7	9,054
Wealth quintile							
Lowest	10.8	41.5	47.6	100.0	2.2	8.6	14,142
Second	33.0	44.0	23.0	100.0	6.5	26.2	14,197
Middle	53.2	31.9	14.9	100.0	12.1	40.5	14,170
Fourth	82.2	15.0	2.8	100.0	26.7	54.7	14,173
Highest	93.7	4.8	1.5	100.0	45.4	48.0	14,171
Total	54.6	27.4	18.0	100.0	18.5	35.6	70,852

[1] See Table 2.3.1 for definition of an improved facility.
[2] See Table 2.3.1 for definition of an unimproved facility.
[3] Defined as use of improved facilities that are not shared with other households. Includes safely managed sanitation service, which is not shown separately.
[4] Defined as use of improved facilities shared by 2 or more households

Table 2.4 Household characteristics

Percent distribution of households and de jure population by housing characteristics, percentage using solid fuel for cooking, percentage using clean fuel for cooking, and percent distribution by frequency of smoking in the home, according to residence, Sierra Leone DHS 2019

Housing characteristic	Households			Population		
	Urban	Rural	Total	Urban	Rural	Total
Electricity						
Yes	51.4	1.5	22.7	50.2	1.6	21.6
No	48.6	98.5	77.3	49.8	98.4	78.4
Total	100.0	100.0	100.0	100.0	100.0	100.0
Flooring material						
Earth, sand	10.9	67.7	43.7	11.0	65.5	43.0
Dung	0.1	1.1	0.7	0.1	1.2	0.8
Wood/planks	0.2	0.0	0.1	0.1	0.0	0.0
Palm/bamboo	0.0	0.0	0.0	0.0	0.0	0.0
Parquet or polished wood	0.1	0.2	0.2	0.2	0.2	0.2
Vinyl or asphalt strips	3.0	0.0	1.3	2.2	0.0	0.9
Ceramic tiles	18.1	1.1	8.3	19.6	1.2	8.8
Cement	64.3	29.6	44.3	64.2	31.6	45.1
Carpet	3.2	0.2	1.4	2.4	0.2	1.1
Other	0.1	0.0	0.1	0.1	0.0	0.1
Total	100.0	100.0	100.0	100.0	100.0	100.0
Rooms used for sleeping						
One	30.9	19.7	24.4	17.5	11.5	14.0
Two	33.4	28.2	30.4	31.0	24.2	27.0
Three or more	35.7	52.1	45.1	51.5	64.4	59.0
Total	100.0	100.0	100.0	100.0	100.0	100.0
Place for cooking						
In the house	6.3	0.8	3.1	5.9	0.7	2.8
In a separate building	29.8	47.5	40.0	34.7	48.8	43.0
Outdoors	60.4	50.8	54.8	58.6	50.2	53.6
No food cooked in household	3.2	0.8	1.9	0.8	0.2	0.5
Other	0.2	0.1	0.2	0.1	0.1	0.1
Total	100.0	100.0	100.0	100.0	100.0	100.0
Cooking fuel						
Electricity	0.2	0.0	0.1	0.2	0.0	0.1
LPG/natural gas/biogas	1.4	0.1	0.7	0.9	0.1	0.4
Kerosene	0.0	0.0	0.0	0.0	0.0	0.0
Coal/lignite	0.6	0.1	0.3	0.6	0.0	0.3
Charcoal	71.3	4.2	32.6	69.5	3.9	30.9
Wood	23.0	94.8	64.4	28.0	95.8	67.8
Straw/shrubs/grass	0.0	0.0	0.0	0.0	0.0	0.0
Other	0.1	0.0	0.0	0.0	0.0	0.0
No food cooked in household	3.2	0.8	1.9	0.8	0.2	0.5
Total	100.0	100.0	100.0	100.0	100.0	100.0
Percentage using solid fuel for cooking[1]	94.9	99.1	97.3	98.1	99.7	99.0
Percentage using clean fuel for cooking[2]	1.7	0.1	0.8	1.1	0.1	0.5
Frequency of smoking in the home						
Daily	17.3	32.0	25.7	17.7	32.7	26.5
Weekly	4.3	3.8	4.0	3.6	3.7	3.6
Monthly	0.2	0.2	0.2	0.1	0.2	0.2
Less than once a month	0.9	0.6	0.7	0.7	0.4	0.5
Never	77.5	63.4	69.4	77.9	63.0	69.1
Total	100.0	100.0	100.0	100.0	100.0	100.0
Number of households/population	5,680	7,719	13,399	29,210	41,642	70,852

LPG = Liquefied petroleum gas
[1] Includes coal/lignite, charcoal, wood, and straw/shrubs/grass
[2] Includes electricity and LPG/natural gas/biogas

Table 2.5 Household possessions

Percentage of households possessing various household effects, means of transportation, agricultural land, and livestock/farm animals, by residence, Sierra Leone DHS 2019

Possession	Residence		Total
	Urban	Rural	
Household effects			
Radio	70.7	43.8	55.2
Television	45.8	1.8	20.4
Mobile phone	93.1	57.6	72.6
Computer	11.5	0.5	5.2
Non-mobile telephone	1.0	0.2	0.5
Refrigerator	27.7	0.8	12.2
Means of transport			
Bicycle	8.6	4.1	6.0
Animal-drawn cart	0.1	0.2	0.2
Motorcycle/scooter	11.0	9.3	10.0
Car/truck	6.2	0.5	2.9
Boat with a motor	0.6	1.7	1.2
Ownership of agricultural land	19.6	77.5	52.9
Ownership of farm animals[1]	34.0	65.6	52.2
Number	5,680	7,719	13,399

[1] Cows, bulls, other cattle, horses, donkeys, mules, goats, sheep, or chickens/poultry

Table 2.6 Wealth quintiles

Percent distribution of the de jure population by wealth quintiles, and the Gini coefficient, according to residence and province, Sierra Leone DHS 2019

Residence/province	Wealth quintile					Total	Number of persons	Gini coefficient
	Lowest	Second	Middle	Fourth	Highest			
Residence								
Urban	0.5	2.6	10.7	39.8	46.4	100.0	29,210	0.21
Rural	33.6	32.3	26.6	6.1	1.5	100.0	41,642	0.31
Province								
Eastern	22.9	24.7	25.1	18.4	8.9	100.0	15,107	0.36
Northern	26.2	24.9	22.0	17.1	9.7	100.0	14,544	0.33
North West	16.4	30.2	29.9	17.3	6.3	100.0	12,517	0.36
Southern	34.4	21.2	21.1	15.2	8.1	100.0	13,974	0.42
Western Area	0.1	0.6	3.3	31.4	64.6	100.0	14,711	0.17
District								
Kailahun	26.4	30.0	28.8	13.9	0.8	100.0	3,592	0.33
Kenema	23.7	21.9	23.3	17.2	13.9	100.0	7,003	0.39
Kono	18.9	25.0	25.0	23.7	7.4	100.0	4,513	0.35
Bombali	20.4	19.6	16.8	21.7	21.5	100.0	4,994	0.41
Falaba	16.8	36.9	38.4	7.7	0.2	100.0	1,773	0.15
Koinadugu	23.4	24.7	22.4	23.0	6.5	100.0	2,054	0.36
Tonkolili	35.3	25.9	21.4	13.9	3.5	100.0	5,723	0.38
Kambia	10.5	28.2	36.4	22.6	2.4	100.0	4,553	0.36
Karene	26.9	35.6	29.1	6.4	2.0	100.0	2,378	0.32
Port Loko	16.7	29.4	24.9	17.6	11.5	100.0	5,586	0.39
Bo	23.8	18.7	22.0	19.8	15.7	100.0	5,857	0.40
Bonthe	41.6	20.8	20.1	14.5	2.9	100.0	2,289	0.44
Moyamba	45.2	23.8	19.0	9.1	2.8	100.0	3,486	0.44
Pujehun	37.7	24.2	22.9	13.3	1.9	100.0	2,342	0.33
Western Area Rural	0.2	1.6	8.5	56.5	33.2	100.0	5,657	0.18
Western Area Urban	0.0	0.0	0.0	15.8	84.2	100.0	9,054	0.18
Total	20.0	20.0	20.0	20.0	20.0	100.0	70,852	0.37

Table 2.7 Handwashing

Percentage of the de jure population for whom the place most often used for washing hands was observed, by whether the location was fixed or mobile; total percentage of the de jure population for whom the place for handwashing was observed; among the de jure population for whom the place for handwashing was observed, percentage with water available, percentage with soap available, and percentage with a cleansing agent other than soap available; percentage of the de jure population with a basic handwashing facility; and percentage with a limited handwashing facility, according to background characteristics, Sierra Leone DHS 2019

Background characteristic	Percentage of de jure population for whom place for washing hands was observed:			Number of persons	Place for handwashing observed and:			Number of persons for whom place for hand-washing was observed	Percentage of the de jure population with a basic hand-washing facility[3]	Percentage of the de jure population with a limited hand-washing facility[4]	Number of persons for whom a place for hand-washing was observed or with no place for hand-washing in the dwelling, yard, or plot
	Place for hand-washing was a fixed place	Place for hand-washing was mobile	Total		Water available	Soap available[1]	Cleansing agent other than soap available[2]				
Residence											
Urban	13.1	29.0	42.1	29,210	72.2	52.9	2.8	12,289	25.1	27.4	23,407
Rural	3.4	39.2	42.6	41,642	77.3	52.6	4.1	17,744	21.7	24.3	38,597
Province											
Eastern	3.9	24.2	28.1	15,107	65.8	17.4	0.5	4,246	4.6	23.6	15,068
Northern	6.7	39.7	46.4	14,544	77.0	56.8	10.5	6,752	28.1	21.7	13,541
North West	3.8	50.0	53.8	12,517	76.9	72.7	0.3	6,733	30.8	27.6	11,517
Southern	3.8	43.2	46.9	13,974	88.8	58.2	3.3	6,556	30.3	22.6	12,386
Western Area	18.3	20.8	39.1	14,711	62.7	44.3	1.7	5,747	25.6	35.0	9,491
District											
Kailahun	1.2	2.5	3.7	3,592	100.0	75.9	0.0	134	2.8	0.9	3,575
Kenema	4.6	10.8	15.4	7,003	47.7	42.6	1.8	1,078	6.0	9.4	6,980
Kono	4.9	62.3	67.2	4,513	70.7	5.9	0.1	3,034	3.9	63.4	4,513
Bombali	1.5	13.9	15.4	4,994	92.4	92.9	0.0	770	14.9	1.5	4,703
Falaba	3.5	52.7	56.2	1,773	37.3	8.3	5.8	997	7.2	79.7	1,147
Koinadugu	2.2	67.7	69.9	2,054	85.4	49.0	44.6	1,435	34.3	35.6	2,054
Tonkolili	13.8	48.2	62.0	5,723	81.4	65.8	0.3	3,550	41.2	21.8	5,637
Kambia	7.5	91.1	98.5	4,553	66.9	73.3	0.2	4,486	42.7	55.8	4,553
Karene	0.4	0.2	0.6	2,378	*	*	*	14	0.3	0.4	1,939
Port Loko	2.2	37.8	40.0	5,586	97.1	71.8	0.5	2,232	31.9	12.5	5,026
Bo	5.9	59.5	65.4	5,857	93.6	61.6	0.4	3,832	39.9	25.9	5,828
Bonthe	3.5	46.1	49.5	2,289	87.2	67.1	16.0	1,134	57.4	29.0	1,313
Moyamba	1.4	18.3	19.7	3,486	98.7	91.9	2.9	687	21.4	2.2	2,905
Pujehun	2.3	36.3	38.6	2,342	63.1	6.6	0.0	904	2.4	36.2	2,340
Western Area Rural	5.4	19.0	24.4	5,657	71.8	54.1	0.0	1,382	21.7	19.5	3,356
Western Area Urban	26.3	21.9	48.2	9,054	59.8	41.2	2.3	4,364	27.7	43.5	6,135
Wealth quintile											
Lowest	2.4	33.4	35.8	14,142	75.3	51.8	5.7	5,062	18.3	20.0	13,232
Second	3.4	40.7	44.1	14,197	75.2	50.8	3.0	6,254	20.8	26.5	13,216
Middle	3.8	39.6	43.4	14,170	77.6	53.7	4.1	6,149	22.2	25.4	12,938
Fourth	5.9	34.7	40.6	14,173	77.3	52.3	3.5	5,750	22.9	26.9	11,543
Highest	21.7	26.5	48.1	14,171	71.3	54.6	1.9	6,818	32.1	29.4	11,075
Total	7.4	35.0	42.4	70,852	75.2	52.7	3.6	30,034	23.0	25.5	62,004

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
[1] Soap includes soap or detergent in bar, liquid, powder, or paste form.
[2] Cleansing agents other than soap include locally available materials such as ash, mud, or sand.
[3] The availability of a handwashing facility on premises with soap and water
[4] The availability of a handwashing facility on premises without soap and/or water

Table 2.8 Household population by age, sex, and residence

Percent distribution of the de facto household population by age groups, according to sex and residence, Sierra Leone DHS 2019

	Urban			Rural			Total		
Age	Male	Female	Total	Male	Female	Total	Male	Female	Total
<5	13.1	11.4	12.2	16.5	15.7	16.1	15.1	13.9	14.5
5-9	14.4	13.7	14.1	18.3	16.1	17.2	16.7	15.1	15.9
10-14	14.0	15.2	14.6	15.0	12.1	13.5	14.6	13.4	14.0
15-19	12.2	12.4	12.3	9.4	8.1	8.7	10.6	9.9	10.2
20-24	8.3	9.8	9.1	5.2	6.2	5.7	6.4	7.7	7.1
25-29	8.2	8.9	8.6	5.5	6.7	6.1	6.6	7.6	7.1
30-34	6.3	5.7	6.0	4.0	5.6	4.8	4.9	5.7	5.3
35-39	5.2	5.6	5.4	4.9	6.6	5.8	5.1	6.2	5.6
40-44	4.2	3.4	3.8	3.9	4.0	4.0	4.0	3.7	3.9
45-49	4.1	3.0	3.5	4.2	4.1	4.1	4.2	3.6	3.9
50-54	2.8	3.5	3.2	2.7	4.3	3.5	2.7	4.0	3.4
55-59	2.1	2.1	2.1	3.0	3.2	3.1	2.6	2.8	2.7
60-64	1.9	1.5	1.7	2.5	2.0	2.3	2.3	1.8	2.0
65-69	1.3	1.3	1.3	1.8	1.7	1.7	1.6	1.5	1.5
70-74	0.8	1.1	1.0	1.2	1.1	1.2	1.0	1.1	1.1
75-79	0.5	0.5	0.5	1.0	1.1	1.0	0.8	0.8	0.8
80+	0.5	0.9	0.7	1.0	1.3	1.2	0.8	1.1	1.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Dependency age groups									
0-14	41.6	40.4	41.0	49.7	43.9	46.8	46.5	42.4	44.4
15-64	55.4	55.8	55.6	45.3	50.9	48.2	49.4	53.0	51.2
65+	3.0	3.8	3.4	4.9	5.2	5.1	4.2	4.6	4.4
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Child and adult populations									
0-17	49.1	47.7	48.4	56.0	48.6	52.3	53.2	48.3	50.7
18+	50.9	52.3	51.6	44.0	51.4	47.7	46.8	51.7	49.3
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Adolescents 10-19	26.2	27.6	27.0	24.4	20.2	22.3	25.2	23.3	24.2
Number of persons	13,577	15,055	28,632	20,216	20,869	41,085	33,793	35,924	69,717

Table 2.9 Household composition

Percent distribution of households by sex of head of household and by household size, mean size of household, and percentage of households with orphans and foster children under age 18, according to residence, Sierra Leone DHS 2019

Characteristic	Residence		Total
	Urban	Rural	
Household headship			
Male	67.6	76.2	72.6
Female	32.4	23.8	27.4
Total	100.0	100.0	100.0
Number of usual members			
1	9.2	4.3	6.4
2	9.1	6.5	7.6
3	13.6	12.5	12.9
4	16.2	17.2	16.8
5	13.9	18.5	16.5
6	11.9	14.1	13.2
7	8.3	9.3	8.9
8	5.8	6.4	6.1
9+	12.1	11.2	11.6
Total	100.0	100.0	100.0
Mean size of households	5.1	5.4	5.3
Percentage of households with orphans and foster children under age 18			
Double orphans	2.9	2.4	2.6
Single orphans[1]	18.6	17.0	17.6
Foster children[2]	40.4	37.8	38.9
Foster and/or orphan children	44.5	42.8	43.6
Number of households	5,680	7,719	13,399

Note: Table is based on de jure household members, i.e., usual residents.
[1] Includes children with one dead parent and an unknown survival status of the other parent
[2] Foster children are those under age 18 living in households with neither their mother nor their father present, and the mother and/or the father are alive.

Table 2.10 Children's living arrangements and orphanhood

Percent distribution of de jure children under age 18 by living arrangements and survival status of parents, percentage of children not living with a biological parent, and percentage of children with one or both parents' dead, according to background characteristics, Sierra Leone DHS 2019

Background characteristic	Living with both parents	Living with mother but not with father		Living with father but not with mother		Not living with either parent					Total	Percentage not living with a biological parent	Percentage with one or both parents dead[1]	Number of children
		Father alive	Father dead	Mother alive	Mother dead	Both alive	Only father alive	Only mother alive	Both dead	Missing information on father/ mother				
Age														
0-4	58.5	22.4	1.9	4.0	0.3	11.2	0.6	0.7	0.3	0.0	100.0	12.8	3.9	10,159
<2	64.9	28.5	1.2	1.6	0.1	3.1	0.3	0.1	0.0	0.0	100.0	3.6	1.8	3,900
2-4	54.5	18.6	2.4	5.5	0.4	16.2	0.9	1.0	0.4	0.1	100.0	18.5	5.1	6,259
5-9	44.6	13.8	3.5	7.5	0.9	23.4	1.7	3.4	0.9	0.2	100.0	29.4	10.5	11,155
10-14	35.2	11.8	5.5	8.8	1.5	27.7	2.4	4.9	2.0	0.2	100.0	37.0	16.3	9,840
15-17	31.8	10.7	7.2	7.9	2.0	27.3	3.3	7.0	2.6	0.2	100.0	40.2	22.1	4,419
Sex														
Male	46.2	14.8	4.0	7.9	1.0	19.6	1.8	3.4	1.2	0.2	100.0	25.9	11.4	18,107
Female	42.4	15.9	4.1	5.9	1.1	23.7	1.8	3.6	1.3	0.2	100.0	30.4	11.9	17,465
Residence														
Urban	37.7	18.5	4.2	6.8	1.1	23.9	2.2	4.0	1.3	0.2	100.0	31.5	13.0	13,966
Rural	48.7	13.3	3.9	7.0	1.0	20.1	1.5	3.1	1.2	0.2	100.0	25.9	10.8	21,606
Province														
Eastern	44.1	14.6	4.4	6.6	1.0	22.4	1.6	3.9	1.4	0.2	100.0	29.2	12.3	7,784
Northern	49.9	13.3	4.7	6.7	1.0	17.7	1.8	3.4	1.2	0.1	100.0	24.2	12.3	7,541
North West	44.2	13.6	3.8	7.5	1.2	22.7	1.9	3.6	1.3	0.2	100.0	29.5	11.8	6,507
Southern	43.8	16.3	2.8	6.4	1.0	24.0	1.5	2.9	1.2	0.1	100.0	29.6	9.4	7,176
Western Area	39.2	19.2	4.4	7.6	1.0	21.3	2.2	3.6	1.1	0.3	100.0	28.2	12.4	6,564
District														
Kailahun	42.8	14.9	4.5	7.0	1.4	23.4	1.9	3.0	1.0	0.2	100.0	29.3	11.8	1,788
Kenema	41.4	15.9	3.5	7.1	0.9	23.5	1.7	4.2	1.5	0.2	100.0	30.9	12.0	3,618
Kono	49.2	12.4	5.8	5.4	0.7	19.9	1.1	4.0	1.5	0.0	100.0	26.5	13.1	2,377
Bombali	45.2	15.9	5.8	6.7	0.6	19.4	1.5	3.7	1.2	0.1	100.0	25.8	12.8	2,558
Falaba	63.3	9.2	3.6	2.8	0.4	15.4	2.5	1.7	1.0	0.0	100.0	20.7	9.3	953
Koinadugu	53.6	12.1	4.5	8.7	0.8	14.7	1.6	3.0	1.0	0.0	100.0	20.3	10.9	1,027
Tonkolili	48.5	12.8	4.2	7.3	1.6	18.1	2.0	3.8	1.5	0.3	100.0	25.3	13.2	3,003
Kambia	44.9	12.1	4.5	5.1	0.8	25.5	2.1	3.8	0.8	0.3	100.0	32.2	12.0	2,373
Karene	46.3	13.1	3.1	7.7	1.2	21.2	1.6	3.8	1.9	0.2	100.0	28.4	11.6	1,243
Port Loko	42.6	15.0	3.6	9.3	1.5	21.1	1.8	3.5	1.4	0.1	100.0	27.8	11.8	2,890
Bo	37.7	19.2	2.8	6.3	1.4	26.4	1.9	3.0	1.1	0.2	100.0	32.5	10.2	2,970
Bonthe	55.5	11.6	1.8	6.9	1.4	19.3	1.0	1.8	0.6	0.1	100.0	22.8	6.6	1,173
Moyamba	47.6	15.3	3.3	6.7	0.3	22.0	1.0	2.9	0.6	0.1	100.0	26.5	8.1	1,797
Pujehun	41.9	14.9	3.1	5.9	0.6	25.6	1.7	3.6	2.7	0.0	100.0	33.6	11.7	1,236
Western Area Rural	36.3	20.1	5.6	7.8	1.0	21.0	2.2	4.1	1.6	0.2	100.0	28.8	14.5	2,672
Western Area Urban	41.1	18.6	3.5	7.5	1.0	21.6	2.1	3.3	0.8	0.4	100.0	27.8	11.0	3,893
Wealth quintile														
Lowest	50.8	13.9	5.0	6.4	0.9	18.0	1.2	2.5	1.3	0.1	100.0	23.0	10.8	7,352
Second	50.0	13.5	3.6	7.3	0.9	18.7	1.5	3.2	1.1	0.2	100.0	24.5	10.3	7,340
Middle	45.3	13.7	3.5	7.3	1.2	22.7	1.8	3.6	0.9	0.1	100.0	29.0	11.0	7,507
Fourth	36.6	18.7	4.6	6.0	0.9	24.9	2.1	4.3	1.8	0.2	100.0	33.1	13.7	7,066
Highest	38.1	17.4	3.6	7.8	1.2	24.1	2.4	4.0	1.1	0.3	100.0	31.6	12.5	6,307
Total <15	46.2	16.0	3.6	6.8	0.9	20.8	1.6	3.0	1.1	0.2	100.0	26.4	10.2	31,153
Total <18	44.4	15.3	4.1	6.9	1.0	21.6	1.8	3.5	1.2	0.2	100.0	28.1	11.6	35,572

Note: Table is based on de jure members, i.e., usual residents.
[1] Includes children with father dead, mother dead, both dead, and one parent dead but missing information on survival status of the other parent

Table 2.11 Birth registration of children under age 5

Percentage of de jure children under age 5 whose births are registered with the civil authorities, according to background characteristics, Sierra Leone DHS 2019

Background characteristic	Percentage of children whose births are registered and who: Had a birth certificate	Did not have a birth certificate	Total percentage of children whose births are registered	Number of children
Age				
<2	30.7	62.3	93.0	3,900
2-4	31.7	57.1	88.8	6,259
Sex				
Male	31.4	58.9	90.3	5,139
Female	31.2	59.3	90.5	5,020
Residence				
Urban	40.0	52.9	92.8	3,537
Rural	26.7	62.4	89.1	6,622
Province				
Eastern	20.1	77.8	97.9	2,236
Northern	22.6	58.2	80.8	2,101
North West	39.0	52.7	91.7	1,897
Southern	34.2	55.0	89.2	2,153
Western Area	44.1	48.4	92.5	1,772
District				
Kailahun	27.6	71.4	99.0	537
Kenema	14.0	83.4	97.4	1,070
Kono	24.0	73.8	97.8	629
Bombali	31.2	49.6	80.8	696
Falaba	20.0	32.1	52.1	249
Koinadugu	27.1	39.2	66.4	321
Tonkolili	14.3	80.5	94.8	835
Kambia	38.0	60.0	98.1	676
Karene	27.2	55.8	83.0	375
Port Loko	44.9	45.5	90.4	846
Bo	31.4	66.5	97.9	777
Bonthe	21.0	63.9	84.9	390
Moyamba	34.6	45.1	79.7	593
Pujehun	52.4	38.2	90.6	393
Western Area Rural	31.7	58.3	90.1	767
Western Area Urban	53.6	40.8	94.4	1,005
Wealth quintile				
Lowest	22.3	66.8	89.1	2,457
Second	26.9	62.1	89.0	2,264
Middle	28.9	61.7	90.6	2,096
Fourth	32.9	59.0	91.9	1,852
Highest	54.4	38.4	92.8	1,491
Total	31.3	59.1	90.4	10,159

Table 2.12.1 Educational attainment of the female household population

Percent distribution of the de facto female household population age 6 and over by highest level of schooling attended or completed and median years completed, according to background characteristics, Sierra Leone DHS 2019

Background characteristic	No education	Some primary	Completed primary[1]	Some secondary	Completed secondary[2]	More than secondary	Don't know/ missing	Total	Number	Median years completed
Age										
6-9	15.3	84.6	0.0	0.1	0.0	0.0	0.0	100.0	4,453	0.3
10-14	5.9	74.2	5.4	14.5	0.0	0.0	0.0	100.0	4,814	3.2
15-19	11.5	16.4	4.6	64.6	2.4	0.5	0.0	100.0	3,548	6.8
20-24	21.2	10.3	4.7	47.1	11.3	5.4	0.0	100.0	2,768	7.7
25-29	35.5	12.7	5.0	30.1	9.3	7.3	0.1	100.0	2,746	5.3
30-34	59.1	11.2	3.6	13.9	4.3	7.8	0.0	100.0	2,036	0.0
35-39	70.5	11.1	2.9	9.9	1.9	3.7	0.0	100.0	2,222	0.0
40-44	73.4	8.3	3.2	9.6	1.6	3.9	0.0	100.0	1,347	0.0
45-49	74.9	7.7	5.0	7.4	1.6	3.3	0.1	100.0	1,296	0.0
50-54	79.0	4.5	2.7	8.2	1.8	3.4	0.3	100.0	1,429	0.0
55-59	82.4	4.3	3.6	5.5	1.5	2.1	0.7	100.0	999	0.0
60-64	87.2	2.4	2.1	5.6	0.7	1.7	0.3	100.0	644	0.0
65+	91.7	2.1	1.4	2.9	0.6	1.0	0.4	100.0	1,652	0.0
Residence										
Urban	25.2	29.1	3.4	31.0	5.6	5.6	0.2	100.0	12,993	4.3
Rural	49.6	33.1	3.5	12.3	1.0	0.5	0.0	100.0	16,959	0.0
Province										
Eastern	40.0	35.0	3.7	17.8	2.2	1.3	0.1	100.0	6,290	0.6
Northern	45.1	30.4	3.7	17.0	2.4	1.4	0.1	100.0	6,176	0.2
North West	47.3	32.7	2.1	15.5	1.3	1.0	0.0	100.0	5,264	0.0
Southern	42.6	33.0	4.4	16.4	1.9	1.7	0.0	100.0	5,770	0.4
Western Area	22.3	26.2	3.5	33.8	6.4	7.5	0.2	100.0	6,451	5.2
District										
Kailahun	43.0	36.9	2.4	15.7	0.8	1.0	0.1	100.0	1,511	0.0
Kenema	38.2	35.6	3.5	18.6	2.4	1.7	0.1	100.0	2,871	0.8
Kono	40.4	32.7	4.9	18.0	3.1	0.9	0.0	100.0	1,909	0.8
Bombali	38.2	32.6	2.9	20.8	3.3	2.2	0.0	100.0	2,201	1.6
Falaba	60.6	23.9	2.6	11.1	1.0	0.8	0.0	100.0	785	0.0
Koinadugu	47.7	29.8	1.7	16.6	3.0	1.2	0.0	100.0	846	0.0
Tonkolili	45.4	30.8	5.4	15.5	1.9	0.8	0.2	100.0	2,343	0.0
Kambia	46.4	34.4	1.8	15.6	0.9	0.9	0.1	100.0	1,931	0.0
Karene	54.3	32.4	1.2	11.2	0.6	0.3	0.0	100.0	975	0.0
Port Loko	45.2	31.5	2.7	17.3	2.0	1.4	0.0	100.0	2,357	0.2
Bo	38.2	34.4	4.6	17.7	2.5	2.5	0.1	100.0	2,531	1.3
Bonthe	48.2	27.6	5.7	15.6	1.5	1.5	0.0	100.0	891	0.0
Moyamba	44.3	32.8	4.2	15.8	1.6	1.2	0.0	100.0	1,447	0.0
Pujehun	46.3	34.8	2.6	14.3	1.2	0.7	0.0	100.0	901	0.0
Western Area Rural	25.6	28.7	4.1	31.8	5.0	4.7	0.1	100.0	2,462	4.2
Western Area Urban	20.3	24.7	3.2	35.0	7.3	9.2	0.3	100.0	3,989	5.9
Wealth quintile										
Lowest	57.2	31.6	3.0	7.9	0.2	0.0	0.0	100.0	5,592	0.0
Second	51.3	33.8	3.5	10.8	0.5	0.2	0.0	100.0	5,835	0.0
Middle	42.6	34.6	3.7	17.2	1.5	0.4	0.1	100.0	5,965	0.4
Fourth	29.3	31.2	3.8	29.6	4.0	2.1	0.0	100.0	6,242	3.2
Highest	17.9	26.1	3.4	34.3	8.0	10.0	0.3	100.0	6,318	6.1
Total	39.0	31.4	3.5	20.4	2.9	2.7	0.1	100.0	29,952	1.2

[1] Completed grade 6 at the primary level
[2] Completed grade 6 at the secondary level

Table 2.12.2 Educational attainment of the male household population

Percent distribution of the de facto male household population age 6 and over by highest level of schooling attended or completed and median years completed, according to background characteristics, Sierra Leone DHS 2019

Background characteristic	No education	Some primary	Completed primary[1]	Some secondary	Completed secondary[2]	More than secondary	Don't know/ missing	Total	Number	Median years completed
Age										
6-9	17.7	82.3	0.0	0.0	0.0	0.0	0.0	100.0	4,598	0.2
10-14	10.4	70.4	3.8	15.4	0.0	0.0	0.0	100.0	4,932	3.0
15-19	11.4	16.4	4.1	65.3	2.5	0.3	0.0	100.0	3,570	6.8
20-24	17.2	6.8	3.2	49.8	17.5	5.3	0.2	100.0	2,179	9.1
25-29	20.6	7.0	3.1	35.5	22.2	11.6	0.0	100.0	2,223	8.9
30-34	29.2	7.3	3.1	27.2	15.4	17.2	0.5	100.0	1,658	8.0
35-39	46.1	10.3	4.5	19.1	8.7	10.6	0.6	100.0	1,711	2.7
40-44	50.7	10.2	5.3	18.4	4.4	10.6	0.3	100.0	1,352	0.0
45-49	53.3	9.6	6.6	18.0	4.5	7.5	0.5	100.0	1,411	0.0
50-54	57.5	4.5	3.1	17.0	5.6	11.3	1.0	100.0	920	0.0
55-59	60.0	6.8	4.4	14.6	4.5	8.8	0.9	100.0	895	0.0
60-64	69.8	6.6	2.3	8.9	4.5	7.6	0.3	100.0	767	0.0
65+	76.1	4.0	3.2	8.4	2.5	5.2	0.5	100.0	1,406	0.0
Residence										
Urban	16.0	27.9	3.4	32.6	9.9	9.7	0.4	100.0	11,451	6.1
Rural	37.8	35.4	3.1	18.5	3.2	1.8	0.1	100.0	16,170	0.9
Province										
Eastern	31.2	35.0	3.2	21.9	4.8	3.6	0.2	100.0	5,799	2.0
Northern	31.8	31.0	3.7	23.9	5.8	3.8	0.1	100.0	5,778	2.3
North West	31.5	36.6	1.9	23.5	3.8	2.7	0.0	100.0	4,740	1.9
Southern	35.9	34.4	3.6	17.6	4.3	4.1	0.1	100.0	5,391	1.3
Western Area	14.8	25.7	3.5	34.0	10.7	10.6	0.7	100.0	5,914	6.8
District										
Kailahun	31.5	36.7	3.2	22.2	3.3	3.1	0.1	100.0	1,333	1.8
Kenema	32.8	34.5	2.0	21.8	4.3	4.5	0.1	100.0	2,668	1.8
Kono	28.4	34.6	5.1	21.9	6.6	2.8	0.5	100.0	1,798	2.4
Bombali	24.8	29.9	3.8	28.7	7.4	5.4	0.0	100.0	1,937	4.1
Falaba	51.5	28.8	1.7	14.0	1.7	2.2	0.1	100.0	697	0.0
Koinadugu	35.1	31.2	1.8	19.9	7.2	4.8	0.0	100.0	805	1.4
Tonkolili	30.6	32.4	4.8	24.2	5.3	2.6	0.1	100.0	2,339	2.1
Kambia	32.2	34.7	1.3	26.1	3.4	2.2	0.1	100.0	1,706	1.7
Karene	35.4	40.5	1.6	18.8	1.6	2.1	0.0	100.0	931	1.1
Port Loko	29.2	36.4	2.5	23.4	5.0	3.4	0.0	100.0	2,103	2.2
Bo	28.0	36.1	4.0	20.4	5.6	5.9	0.1	100.0	2,270	2.8
Bonthe	50.2	27.1	4.3	11.9	3.8	2.8	0.0	100.0	880	0.0
Moyamba	35.2	34.1	3.8	20.4	3.0	3.3	0.2	100.0	1,313	1.3
Pujehun	42.7	37.6	1.7	12.0	3.5	2.4	0.0	100.0	928	0.0
Western Area Rural	18.1	29.9	3.3	31.7	8.5	8.3	0.1	100.0	2,205	5.4
Western Area Urban	12.8	23.2	3.7	35.4	11.9	12.0	1.0	100.0	3,709	7.6
Wealth quintile										
Lowest	47.9	35.2	2.6	12.2	1.6	0.4	0.0	100.0	5,358	0.0
Second	37.5	36.6	3.5	18.6	2.9	0.9	0.1	100.0	5,477	0.9
Middle	30.8	35.6	3.4	23.6	3.9	2.6	0.1	100.0	5,502	2.2
Fourth	18.2	31.0	3.5	32.2	9.3	5.7	0.1	100.0	5,485	5.1
Highest	10.9	23.7	3.2	34.2	11.8	15.3	0.8	100.0	5,799	7.8
Total	28.8	32.3	3.2	24.3	6.0	5.1	0.2	100.0	27,620	2.8

[1] Completed grade 6 at the primary level
[2] Completed grade 6 at the secondary level

Table 2.13 School attendance ratios

Net attendance ratios (NAR) and gross attendance ratios (GAR) for the de facto household population by sex and level of schooling, and the gender parity index (GPI), according to background characteristics, Sierra Leone DHS 2019

Background characteristic	Net attendance ratio[1]				Gross attendance ratio[2]			
	Male	Female	Total	Gender parity index[3]	Male	Female	Total	Gender parity index[3]
				PRIMARY SCHOOL				
Residence								
Urban	90.3	90.1	90.2	1.00	126.9	126.6	126.7	1.00
Rural	82.1	87.7	84.7	1.07	124.1	134.3	128.8	1.08
Province								
Eastern	86.6	93.2	89.9	1.08	128.7	139.9	134.2	1.09
Northern	85.2	87.2	86.2	1.02	125.3	131.8	128.5	1.05
North West	85.9	85.9	85.9	1.00	130.0	128.1	129.1	0.99
Southern	80.0	90.7	85.1	1.13	123.0	135.6	128.9	1.10
Western Area	87.7	85.6	86.6	0.98	117.5	117.6	117.5	1.00
District								
Kailahun	89.8	95.0	92.3	1.06	135.0	150.0	142.4	1.11
Kenema	82.6	93.6	88.0	1.13	122.8	136.7	129.6	1.11
Kono	90.4	91.4	90.9	1.01	133.0	137.3	135.1	1.03
Bombali	85.8	87.5	86.7	1.02	130.5	138.7	134.9	1.06
Falaba	72.4	78.5	75.4	1.08	120.9	117.2	119.1	0.97
Koinadugu	89.9	89.2	89.6	0.99	129.9	129.3	129.6	1.00
Tonkolili	87.0	88.9	87.9	1.02	121.6	131.0	126.1	1.08
Kambia	85.8	85.9	85.9	1.00	127.0	134.6	130.8	1.06
Karene	87.2	89.2	88.1	1.02	133.3	127.1	130.5	0.95
Port Loko	85.4	84.4	84.9	0.99	130.8	123.0	127.0	0.94
Bo	85.4	90.9	88.1	1.06	134.0	136.7	135.4	1.02
Bonthe	71.4	85.2	77.3	1.19	103.0	128.9	114.1	1.25
Moyamba	78.8	90.2	84.3	1.14	117.1	131.6	124.0	1.12
Pujehun	77.7	96.1	85.8	1.24	124.7	144.8	133.5	1.16
Western Area Rural	82.6	81.8	82.2	0.99	115.2	119.6	117.4	1.04
Western Area Urban	91.3	88.1	89.6	0.97	119.2	116.3	117.7	0.98
Wealth quintile								
Lowest	76.3	85.6	80.4	1.12	115.1	130.3	121.7	1.13
Second	83.3	88.2	85.5	1.06	123.3	137.6	129.8	1.12
Middle	86.9	89.5	88.2	1.03	133.3	135.4	134.4	1.02
Fourth	89.2	89.3	89.3	1.00	132.3	129.5	130.8	0.98
Highest	92.6	90.7	91.6	0.98	123.6	122.0	122.7	0.99
Total	85.0	88.7	86.8	1.04	125.1	131.1	128.0	1.05
				SECONDARY SCHOOL				
Residence								
Urban	62.1	59.8	60.9	0.96	101.9	96.1	98.8	0.94
Rural	33.7	28.3	31.3	0.84	54.2	43.1	49.2	0.79
Province								
Eastern	43.6	41.7	42.7	0.96	73.2	64.7	69.1	0.88
Northern	49.1	41.2	45.3	0.84	79.4	61.9	71.0	0.78
North West	40.7	36.2	38.6	0.89	66.3	56.5	61.7	0.85
Southern	30.1	37.3	33.4	1.24	52.2	61.8	56.6	1.18
Western Area	64.8	60.2	62.4	0.93	100.9	97.6	99.2	0.97
District								
Kailahun	39.4	32.6	36.0	0.83	63.5	50.7	57.1	0.80
Kenema	42.0	44.2	43.1	1.05	76.5	72.0	74.3	0.94
Kono	48.1	44.6	46.4	0.93	74.8	64.6	69.9	0.86
Bombali	56.7	45.6	51.1	0.81	94.0	70.3	82.0	0.75
Falaba	28.3	33.8	31.1	1.19	48.0	50.3	49.2	1.05
Koinadugu	44.6	43.0	43.8	0.97	70.0	63.8	67.0	0.91
Tonkolili	51.0	38.8	45.5	0.76	80.0	56.4	69.5	0.71
Kambia	45.4	34.1	39.7	0.75	78.2	55.1	66.6	0.71
Karene	32.1	30.1	31.2	0.94	49.1	41.9	46.0	0.85
Port Loko	40.5	40.4	40.4	1.00	63.7	62.9	63.3	0.99
Bo	35.1	38.1	36.5	1.09	61.7	60.6	61.1	0.98
Bonthe	20.0	40.3	29.6	2.01	46.6	74.4	59.8	1.60
Moyamba	35.2	34.1	34.6	0.97	59.5	58.4	59.0	0.98
Pujehun	21.0	36.2	26.7	1.72	27.3	57.6	38.6	2.11
Western Area Rural	58.5	52.1	55.2	0.89	88.2	85.9	87.0	0.97
Western Area Urban	68.8	65.1	66.9	0.95	108.8	104.7	106.7	0.96

Continued...

Table 2.13—*Continued*

Background characteristic	Net attendance ratio[1]				Gross attendance ratio[2]			
	Male	Female	Total	Gender parity index[3]	Male	Female	Total	Gender parity index[3]
Wealth quintile								
Lowest	22.4	22.0	22.2	0.98	34.4	28.9	32.0	0.84
Second	34.5	25.2	30.1	0.73	55.5	37.0	46.8	0.67
Middle	40.9	36.7	39.0	0.90	63.4	57.1	60.6	0.90
Fourth	56.2	55.7	55.9	0.99	98.4	90.8	94.4	0.92
Highest	69.5	65.3	67.3	0.94	111.5	106.4	108.9	0.95
Total	45.9	44.2	45.1	0.96	74.8	69.9	72.4	0.93

[1] The NAR for primary school is the percentage of the primary school-age (6-11 years) population that is attending primary school. The NAR for secondary school is the percentage of the secondary school-age (12-17 years) population that is attending secondary school. By definition, the NAR cannot exceed 100.0.
[2] The GAR for primary school is the total number of primary school students, expressed as a percentage of the official primary school-age population. The GAR for secondary school is the total number of secondary school students, expressed as a percentage of the official secondary school-age population. If there are significant numbers of overage and underage students at a given level of schooling, the GAR can exceed 100.0.
[3] The gender parity index for primary school is the ratio of the primary school NAR (GAR) for females to the NAR (GAR) for males. The gender parity index for secondary school is the ratio of the secondary school NAR (GAR) for females to the NAR (GAR) for males.

CHARACTERISTICS OF RESPONDENTS 3

Key Findings

- ***Education:*** Men are less likely than women to have no education (29% versus 46%) and more likely to have more than a secondary education (8% versus 4%).
- ***Literacy:*** 43% of women and 62% of men are literate.
- ***Exposure to mass media:*** 70% of women and 56% of men do not have access to three specified types of media (newspaper, television, and radio) at least once a week.
- ***Internet usage:*** Overall, 13% of women and 28% of men have used the internet in the past 12 months.
- ***Employment:*** Men are more likely to be employed than women (72% versus 69%).
- ***Tobacco use:*** 3% of women and 19% of men age 15-49 use tobacco products.

This chapter presents information on the demographic and socioeconomic characteristics of the survey respondents such as age, education, place of residence, marital status, employment, and wealth status. This information is useful for understanding the factors that affect use of reproductive health services, contraceptive use, and other health behaviours.

3.1 BASIC CHARACTERISTICS OF SURVEY RESPONDENTS

A total of 15,574 women age 15-49 and 7,197 men age 15-59 were interviewed in the 2019 SLDHS. Twenty-two percent of women and 24% of men are age 15-19, while 8% of women and 11% of men are age 45-49 (**Table 3.1**).

The majority of respondents are Muslims (77% of women and 78% of men). The two main ethnic groups in Sierra Leone are Mende and Temne. Women account for 31% of Mendes and 35% of Temnes, while men account for 30% and 36%, respectively.

Women are more likely to be married than men (59% versus 47%), while women are more likely to be widowed (2% versus 1%).

The majority of respondents live in rural areas (54% of women and 53% of men). By province, the Western Area accounts for the highest percentage of respondents (24% of women and 25% of men). By district, women and men are most likely to reside in Western Area Urban (15% and 17%, respectively).

3.2 EDUCATION AND LITERACY

Literacy

Respondents who had attended higher than secondary school were assumed to be literate. All other respondents, shown a typed sentence to read aloud, were considered literate if they could read all or part of the sentence.

Sample: Women and men age 15-49

Men are less likely than women to have no education (29% versus 46%) and more likely to be educated beyond the secondary level (8% versus 4%) (**Table 3.2.1**, **Table 3.2.2**, and **Figure 3.1**). Four percent of both women and men have completed primary school. However, the proportion of men who have completed some secondary education or higher is greater than the proportion among women (57% versus 41%) (**Table 3.2.1**). Sixty-two percent of men are literate, as compared with 43% of women (**Table 3.3.1** and **Table 3.3.2**).

Trends: The percentage of respondents with no education has declined since 2013, from 56% to 46% among women and from 40% to 29% among men.

Patterns by background characteristics

- Urban women and men (10% and 16%, respectively) are more likely than rural women and men (2% and 7%, respectively) to have completed a secondary education.
- Educational attainment and literacy increase with increasing household wealth. For example, women and men in the lowest wealth quintile (14% and 27%, respectively) are less likely to have completed some secondary education or higher than women and men in the highest wealth quintile (72% and 83%, respectively) (**Figure 3.2**). Nineteen percent of women and 31% of men in the lowest wealth quintile are literate, as compared with 72% of women and 86% of men in the highest quintile.

Figure 3.1 **Education of survey respondents**

Percent distribution of women and men age 15-49 by highest level of schooling attended or completed

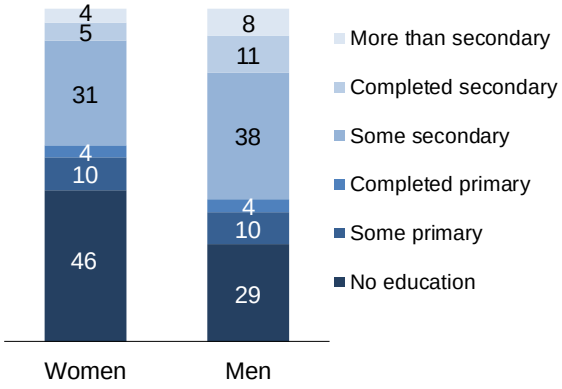
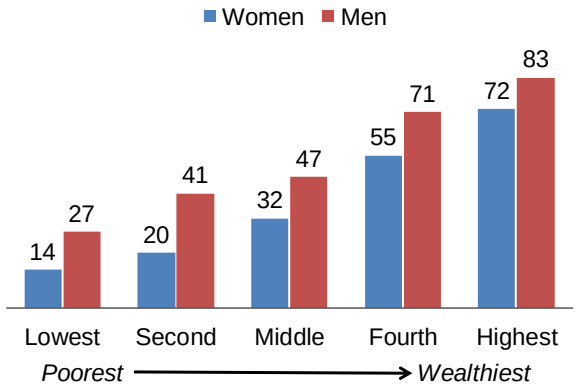


Figure 3.2 **Secondary education by household wealth**

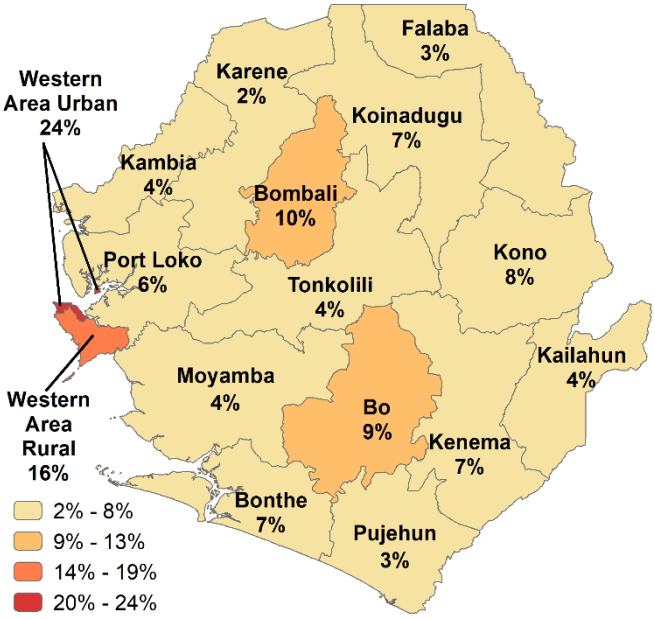
Percentage of women and men age 15-49 with some secondary education or higher



- By district, the percentage of women with a secondary education or higher is highest in Western Area Urban (24%) and lowest in Karene (2%). (**Figure 3.3**).

Figure 3.3 **Secondary education by district**

Percentage of women age 15-49 with a secondary education or higher



3.3 MASS MEDIA EXPOSURE AND INTERNET USAGE

Exposure to mass media

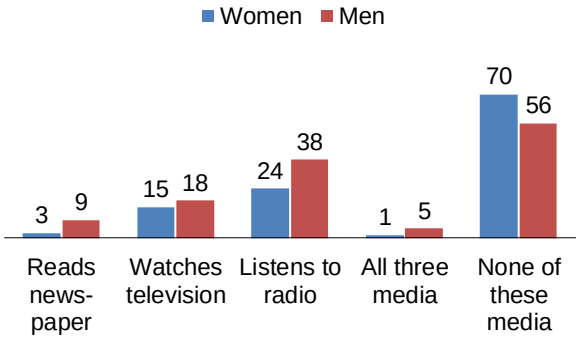
Respondents were asked how often they read a newspaper, listened to the radio, or watched television. Those who responded *at least once a week* are considered regularly exposed to that form of media.

Sample: Women and men age 15-49

Data on men's and women's exposure to mass media are vital to dissemination of information and development of programmes, especially those dealing with family planning, HIV/AIDS awareness, and other vital health topics. The 2019 SLDHS looked at exposure to mass media as well as internet usage.

Figure 3.4 **Exposure to mass media**

Percentage of women and men age 15-49 who are exposed to media on a weekly basis



Among both women and men, radio is the most frequently accessed form of media (24% and 38%, respectively) (**Table 3.4.1** and **3.4.2**). Men are more likely than women to read a newspaper at least once a week (9% versus 3%). **Figure 3.4** shows that only 1% of women and 5% of men have access to all three media sources, while 70% of women and 56% of men have no access to any of the specified media. Thirteen percent of women and 28% of men have used the internet in the past 12 months (**Table 3.5.1** and **3.5.2**). Among those who have used the internet in the past 12 months, 61% of women and 51% of men report using it almost every day during the preceding month. Four percent of men and 1% of women did not use the internet at all in the past month.

Trends: The 2019 SLDHS findings show a decrease among both women and men in terms of exposure to all three forms of media at least once a week. In 2008, 3% of women and 9% of men were exposed to all three forms of media, as compared with 1% of women and 5% of men in 2019.

Patterns by background characteristics

- Women and men age 25-29 are more likely than those in any other age group to read a newspaper at least once a week (3% and 13%, respectively) (**Table 3.4.1** and **Table 3.4.2**).
- Rural women and men (79% and 71%, respectively) are more likely than urban women and men (58% and 38%, respectively) to access none of the three media at least once a week.
- The percentage of women and men who are exposed to all three forms of media is highest in the Western Area province (4% and 14%, respectively).
- At the district level, women (5%) and men (18%) in Western Area Urban are most likely to be exposed to all three forms of media.
- Exposure to all three media forms increases with increasing household wealth and educational level.
- Women age 40-44 (70%) and men age 30-34 (62%) are most likely to use the internet almost every day (**Table 3.5.1** and **3.5.2**).
- Men and women in urban areas (52% and 28%, respectively) are more likely than those in rural areas (11% and 3%, respectively) to have ever used the internet.

3.4 EMPLOYMENT

Currently employed
Respondents who were employed in the 7 days before the survey.
Sample: Women and men age 15-49

Men are more likely than women to be currently employed (72% versus 69%) (**Table 3.6.1** and **Table 3.6.2**). Twenty-eight percent of women and 25% of men reported that they had not been employed in the 12 months preceding the survey.

Trends: The proportion of women who are currently employed increased slightly from 68% in 2013 to 69% in 2019. Over the same period, the proportion of men who are currently employed dropped from 78% to 72%.

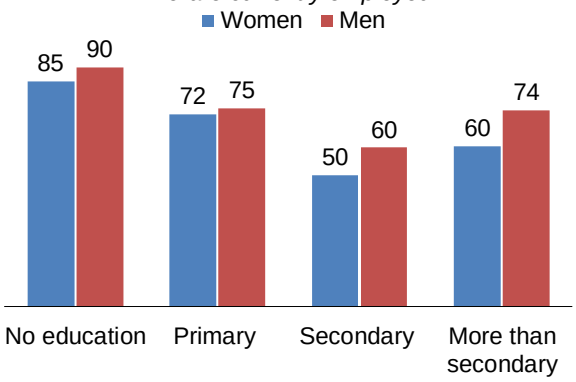
Patterns by background characteristics

- Women and men who are currently married and those who are divorced, separated, or widowed are more likely to be employed than those who have never been married (**Table 3.6.1** and **Table 3.6.2**).
- Rural men and women (82% and 81%, respectively) are more likely than urban men and women (60% and 55%, respectively) to be currently employed.
- Women and men in the Western Area province are less likely to be currently employed than those in other provinces.
- By district, the percentage of women who are currently employed is lowest in Western Area Urban (49%) and highest in Karene (84%).

- Women and men with no education are more likely to be employed than those in the other with education categories (**Figure 3.5**).
- Women and men in the lowest wealth quintile are more likely than those in the highest wealth quintile to be employed (**Table 3.6.1** and **3.6.2**).

Figure 3.5 **Employment status by education**

Percentage of women and men age 15-49 who are currently employed



3.5 OCCUPATION

Occupation
Categorised as professional/technical/managerial, clerical, sales and services, skilled manual, unskilled manual, agriculture, and other.

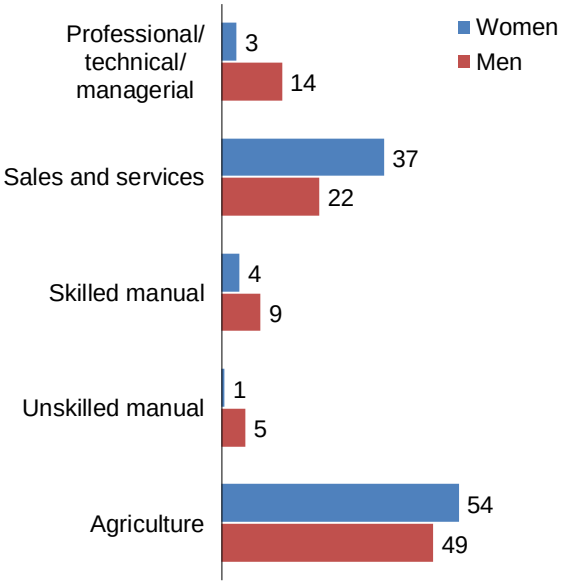
Sample: Women and men age 15-49 who were currently employed or had worked in the 12 months before the survey

Women and men are mostly employed in the agricultural sector (54% and 49%, respectively), followed by sales and services (37% and 22%, respectively) (**Table 3.7.1**, **Table 3.7.2**, and **Figure 3.6**). Women are much less likely than men to be employed in skilled manual labour (4% versus 9%). Women are also less likely to be employed in professional/technical/managerial jobs (3% versus 14%).

Trends: Since 2013, there has been a slight increase in the percentage of women employed in professional/technical/managerial jobs, from 2% to 3%. Similarly, the proportion of women employed in the agricultural sector has increased slightly from 52% to 54%. Among men, the proportion employed in professional/technical/managerial jobs doubled from 7% in 2013 to 14% in 2019, while the proportion working in the agricultural sector declined from 55% to 49%.

Figure 3.6 **Occupation**

Percentage of women and men age 15-49 employed in the 12 months before the survey by occupation



Patterns by background characteristics

- Urban women and men are most likely to be employed in sales and services (70% and 39%, respectively). Conversely, a majority of rural women and men work in agriculture (79% and 73%, respectively) (**Tables 3.7.1**, **3.7.2 and Table 3.8**).
- Women and men with more than a secondary education are more likely than those in the other education categories to have professional/technical/managerial jobs (52% and 57%, respectively). Women and men with no education are more likely to work in agriculture than in any other sector (71% each).

- Men and women in the lowest wealth quintile are most likely to be employed in agriculture (85% and 90%, respectively).

3.6 HEALTH INSURANCE COVERAGE

Ninety-six percent of women and 97% of men age 15-49 do not have health insurance coverage (**Tables 3.9.1** and **3.9.2**). Overall, health insurance coverage is extremely low across background characteristic categories; however, 14% of women and 12% of men with more than a secondary education have some form of insurance.

Trends: The percentage of women with no health insurance decreased from 99% in 2013 to 96% in 2019. Over the same period, the percentage among men decreased from 98% to 97%.

3.7 TOBACCO USE

Tobacco use is not common among women age 15-49, with 3% reporting that they use any type of tobacco (**Table 3.10.1**). Among men age 15-49, 19% currently smoke tobacco, including 17% who smoke on a daily basis (**Table 3.10.2**).

Trends: The percentage of women who smoke cigarettes has dropped slightly since 2013, from 4% to 3%. Similarly, the percentage of men who smoke cigarettes has declined from 27% to 18%.

Patterns by background characteristics

- Women and men age 40-44 are more likely than those in any other age group to smoke cigarettes (7% and 37%, respectively) (**Table 3.10.1** and **Table 3.10.2**).
- The proportion of cigarette smokers is higher among rural women (4%) and men (23%) than among urban women (3%) and men (13%).
- The proportion of women and men who smoke is highest among those with no education and those in the lowest wealth quintile.

LIST OF TABLES

For more information on the characteristics of survey respondents, see the following tables:

- **Table 3.1 Background characteristics of respondents**
- **Table 3.2.1 Educational attainment: Women**
- **Table 3.2.2 Educational attainment: Men**
- **Table 3.3.1 Literacy: Women**
- **Table 3.3.2 Literacy: Men**
- **Table 3.4.1 Exposure to mass media: Women**
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- **Table 3.5.1 Internet usage: Women**
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- **Table 3.6.1 Employment status: Women**
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- **Table 3.10.1 Tobacco smoking: Women**
- **Table 3.10.2 Tobacco smoking: Men**
- **Table 3.11 Average number of cigarettes smoked daily: Men**
- **Table 3.12 Smokeless tobacco use and any tobacco use**

Table 3.1 Background characteristics of respondents

Percent distribution of women and men age 15-49 by selected background characteristics, Sierra Leone DHS 2019

Background characteristic	Women			Men		
	Weighted percent	Weighted number	Unweighted number	Weighted percent	Weighted number	Unweighted number
Age						
15-19	22.0	3,427	3,460	24.1	1,541	1,585
20-24	16.9	2,629	2,602	14.7	937	924
25-29	17.5	2,728	2,619	15.9	1,015	957
30-34	12.5	1,942	1,963	12.4	793	769
35-39	14.3	2,224	2,251	12.4	791	803
40-44	8.6	1,337	1,358	9.8	624	649
45-49	8.3	1,288	1,321	10.7	682	678
Religion						
Christian	23.2	3,616	3,546	22.1	1,409	1,380
Islam	76.7	11,953	12,021	77.9	4,974	4,983
Other[1]	0.0	6	7	0.0	2	2
Ethnic group						
Creole	0.9	139	103	1.9	122	84
Fullah	3.7	576	684	4.0	253	289
Kono	4.4	680	668	4.2	268	275
Limba	8.7	1,361	1,355	8.9	570	567
Loko	2.0	313	294	2.1	132	120
Mandingo	2.8	429	455	2.9	184	204
Mende	31.2	4,863	4,979	29.8	1,904	1,953
Sherbro	1.8	283	296	2.0	126	146
Temne	35.2	5,488	4,886	35.7	2,281	2,039
Korankoh	4.2	658	960	3.5	225	322
Other	5.0	785	894	5.0	318	366
Marital status						
Never married	32.5	5,058	4,966	45.9	2,928	2,896
Married	58.5	9,107	9,281	46.5	2,970	3,042
Living together	3.9	608	556	4.1	264	223
Divorced/separated	2.9	450	445	3.0	190	178
Widowed	2.3	351	326	0.5	32	26
Residence						
Urban	46.0	7,163	6,399	46.8	2,990	2,613
Rural	54.0	8,411	9,175	53.2	3,394	3,752
Province						
Eastern	19.7	3,069	2,978	19.6	1,251	1,245
Northern	21.3	3,317	3,971	21.2	1,353	1,592
North West	16.1	2,508	2,498	15.4	982	993
Southern	18.6	2,900	3,513	18.7	1,192	1,446
Western Area	24.3	3,780	2,614	25.1	1,606	1,089
District						
Kailahun	4.5	707	814	4.8	307	358
Kenema	9.2	1,437	1,196	8.7	557	470
Kono	5.9	925	968	6.1	387	417
Bombali	7.5	1,166	1,134	7.4	472	461
Falaba	3.0	466	922	2.3	148	302
Koinadugu	3.0	469	819	3.1	196	342
Tonkolili	7.8	1,215	1,096	8.4	538	487
Kambia	5.7	890	916	5.4	345	360
Karene	3.0	462	612	3.0	192	252
Port Loko	7.4	1,157	970	7.0	445	381
Bo	8.0	1,250	1,222	8.2	525	521
Bonthe	3.0	468	698	3.1	199	301
Moyamba	4.7	726	896	4.5	290	360
Pujehun	2.9	456	697	2.8	178	264
Western Area Rural	9.0	1,407	1,132	8.5	542	439
Western Area Urban	15.2	2,373	1,482	16.7	1,064	650
Education						
No education	45.5	7,081	7,535	29.2	1,865	2,049
Primary	13.5	2,103	2,034	13.7	876	901
Secondary	36.8	5,724	5,419	48.9	3,120	2,941
More than secondary	4.3	666	586	8.2	523	474

Continued...

Table 3.1—*Continued*

Background characteristic	Women			Men		
	Weighted percent	Weighted number	Unweighted number	Weighted percent	Weighted number	Unweighted number
Wealth quintile						
Lowest	17.6	2,738	3,077	17.3	1,104	1,270
Second	18.2	2,831	3,022	17.6	1,123	1,187
Middle	19.0	2,954	3,190	17.9	1,145	1,258
Fourth	21.7	3,385	3,366	22.3	1,422	1,385
Highest	23.5	3,666	2,919	24.9	1,590	1,265
Total 15-49	100.0	15,574	15,574	100.0	6,384	6,365
50-59	na	na	na	na	813	832
Total 15-59	na	na	na	na	7,197	7,197

Note: Education categories refer to the highest level of education attended, whether or not that level was completed.
na = Not applicable
[1] Other religion includes traditional and none.

Table 3.2.1 Educational attainment: Women

Percent distribution of women age 15-49 by highest level of schooling attended or completed, and median years completed, according to background characteristics, Sierra Leone DHS 2019

Background characteristic	Highest level of schooling						Total	Median years completed	Number of women
	No education	Some primary	Completed primary[1]	Some secondary	Completed secondary[2]	More than secondary			
Age									
15-24	18.5	11.8	4.3	56.0	6.9	2.5	100.0	7.1	6,055
15-19	13.9	14.2	4.4	64.3	2.8	0.4	100.0	6.9	3,427
20-24	24.5	8.6	4.3	45.1	12.3	5.2	100.0	7.6	2,629
25-29	38.9	10.0	4.0	29.4	10.1	7.5	100.0	5.2	2,728
30-34	61.9	9.8	2.8	14.0	3.8	7.6	100.0	0.0	1,942
35-39	74.6	8.7	2.1	9.6	1.7	3.4	100.0	0.0	2,224
40-44	76.9	7.2	2.5	9.0	0.9	3.6	100.0	0.0	1,337
45-49	78.5	5.9	4.2	6.7	1.6	3.1	100.0	0.0	1,288
Residence									
Urban	27.9	7.2	2.9	44.2	9.5	8.4	100.0	7.4	7,163
Rural	60.5	12.2	4.2	20.4	1.9	0.8	100.0	0.0	8,411
Province									
Eastern	49.7	10.4	4.1	29.5	4.1	2.2	100.0	1.0	3,069
Northern	54.5	9.0	3.3	26.9	4.2	2.2	100.0	0.0	3,317
North West	55.4	10.7	3.2	26.0	2.9	1.7	100.0	0.0	2,508
Southern	49.0	12.8	4.7	27.0	3.8	2.7	100.0	1.2	2,900
Western Area	24.9	7.5	3.0	43.7	10.3	10.6	100.0	7.8	3,780
District									
Kailahun	50.2	15.3	3.6	27.1	1.8	2.0	100.0	0.0	707
Kenema	49.5	9.4	3.5	30.8	4.0	2.7	100.0	1.3	1,437
Kono	49.5	8.3	5.2	29.2	6.1	1.7	100.0	1.3	925
Bombali	42.4	10.7	3.3	34.2	5.8	3.7	100.0	4.4	1,166
Falaba	76.8	3.1	3.0	14.1	2.0	1.1	100.0	0.0	466
Koinadugu	55.1	9.9	2.0	25.6	5.2	2.2	100.0	0.0	469
Tonkolili	57.3	9.4	3.8	25.3	3.1	1.2	100.0	0.0	1,215
Kambia	56.4	10.4	2.6	26.7	2.3	1.6	100.0	0.0	890
Karene	58.1	15.8	2.8	21.4	1.5	0.3	100.0	0.0	462
Port Loko	53.6	8.9	3.7	27.4	4.0	2.4	100.0	0.0	1,157
Bo	40.1	16.2	4.7	30.2	4.8	4.0	100.0	4.1	1,250
Bonthe	55.4	8.1	5.3	24.4	4.5	2.4	100.0	0.0	468
Moyamba	53.0	10.1	6.0	26.5	2.5	1.9	100.0	0.0	726
Pujehun	60.4	12.5	2.2	21.7	2.3	0.9	100.0	0.0	456
Western Area Rural	28.6	8.6	3.9	43.1	9.1	6.6	100.0	6.8	1,407
Western Area Urban	22.7	6.8	2.4	44.1	11.1	13.0	100.0	8.5	2,373
Wealth quintile									
Lowest	69.4	13.0	3.9	13.2	0.5	0.1	100.0	0.0	2,738
Second	63.3	12.7	4.1	18.7	0.9	0.2	100.0	0.0	2,831
Middle	52.1	11.2	4.4	28.6	2.9	0.8	100.0	0.0	2,954
Fourth	33.1	8.4	3.4	44.2	7.6	3.3	100.0	6.3	3,385
Highest	19.9	5.8	2.5	45.1	12.5	14.2	100.0	8.8	3,666
Total	45.5	9.9	3.6	31.4	5.4	4.3	100.0	3.7	15,574

[1] Completed grade 6 at the primary level
[2] Completed grade 6 at the secondary level

Table 3.2.2 Educational attainment: Men

Percent distribution of men age 15-49 by highest level of schooling attended or completed, and median years completed, according to background characteristics, Sierra Leone DHS 2019

Background characteristic	Highest level of schooling						Total	Median years completed	Number of men
	No education	Some primary	Completed primary[1]	Some secondary	Completed secondary[2]	More than secondary			
Age									
15-24	13.8	11.4	4.0	58.7	9.7	2.4	100.0	7.5	2,479
15-19	12.4	15.1	4.2	65.6	2.7	0.1	100.0	6.8	1,541
20-24	16.1	5.4	3.8	47.4	21.2	6.1	100.0	9.6	937
25-29	19.3	7.4	3.0	36.3	21.8	12.3	100.0	9.3	1,015
30-34	30.5	6.5	2.5	27.8	15.9	16.7	100.0	8.1	793
35-39	47.2	11.3	3.9	17.2	7.8	12.6	100.0	1.8	791
40-44	51.7	10.3	5.3	19.3	3.8	9.6	100.0	0.0	624
45-49	57.0	8.3	6.0	17.3	4.4	7.0	100.0	0.0	682
Residence									
Urban	15.3	5.9	3.6	45.0	16.0	14.2	100.0	9.3	2,990
Rural	41.5	13.1	4.4	31.6	6.6	2.9	100.0	4.1	3,394
Province									
Eastern	37.2	10.7	4.3	34.3	8.7	4.8	100.0	5.3	1,251
Northern	34.6	7.9	3.2	36.7	11.5	6.1	100.0	6.4	1,353
North West	28.6	12.5	3.1	43.5	7.4	4.9	100.0	6.2	982
Southern	36.4	14.5	5.4	29.2	8.2	6.3	100.0	4.9	1,192
Western Area	13.6	5.3	4.0	44.7	16.6	16.0	100.0	9.8	1,606
District									
Kailahun	34.3	13.0	3.9	37.8	7.0	4.0	100.0	5.3	307
Kenema	40.4	9.7	2.6	33.7	7.9	5.6	100.0	4.9	557
Kono	34.8	10.4	6.9	32.3	11.3	4.2	100.0	5.6	387
Bombali	29.1	7.3	2.6	40.9	13.3	6.9	100.0	7.0	472
Falaba	56.1	10.6	2.7	22.9	3.3	4.5	100.0	0.0	148
Koinadugu	37.5	8.0	1.7	31.9	11.5	9.4	100.0	6.2	196
Tonkolili	32.5	7.6	4.5	38.6	12.2	4.6	100.0	6.5	538
Kambia	26.0	9.9	3.0	51.5	6.2	3.4	100.0	6.9	345
Karene	35.6	18.3	1.0	37.5	5.3	2.4	100.0	4.6	192
Port Loko	27.5	12.0	4.1	40.0	9.2	7.2	100.0	6.5	445
Bo	27.1	15.4	5.4	34.1	9.7	8.3	100.0	6.1	525
Bonthe	52.2	10.1	8.2	18.6	6.4	4.5	100.0	0.0	199
Moyamba	33.4	14.0	5.7	34.9	6.6	5.4	100.0	5.2	290
Pujehun	51.0	17.4	1.7	17.0	8.7	4.1	100.0	0.0	178
Western Area Rural	17.6	8.0	2.4	43.6	17.5	10.8	100.0	9.1	542
Western Area Urban	11.5	3.8	4.8	45.2	16.1	18.6	100.0	10.1	1,064
Wealth quintile									
Lowest	56.6	12.3	3.7	23.0	3.6	0.8	100.0	0.0	1,104
Second	38.5	14.5	5.6	33.7	5.6	2.1	100.0	4.5	1,123
Middle	34.7	13.7	4.2	35.9	7.5	4.0	100.0	5.2	1,145
Fourth	18.1	7.8	3.3	46.1	17.1	7.7	100.0	8.4	1,422
Highest	9.7	3.4	3.5	45.2	17.0	21.1	100.0	10.3	1,590
Total 15-49	29.2	9.7	4.0	37.9	11.0	8.2	100.0	6.8	6,384
50-59	60.4	5.7	3.5	15.7	4.7	9.9	100.0	0.0	813
Total 15-59	32.7	9.3	3.9	35.4	10.3	8.4	100.0	6.4	7,197

[1] Completed grade 6 at the primary level
[2] Completed grade 6 at the secondary level

Table 3.3.1 Literacy: Women

Percent distribution of women age 15-49 by level of schooling attended and level of literacy, and percentage literate, according to background characteristics, Sierra Leone DHS 2019

Background characteristic	Higher than secondary schooling	No schooling, primary or secondary school: Can read a whole sentence	Can read part of a sentence	Cannot read at all	No card with required language	Blind/visually impaired	Total	Percentage literate[1]	Number of women
Age									
15-24	2.5	36.5	29.1	31.8	0.0	0.0	100.0	68.1	6,055
15-19	0.4	39.3	34.1	26.2	0.0	0.1	100.0	73.8	3,427
20-24	5.2	33.0	22.7	39.2	0.0	0.0	100.0	60.8	2,629
25-29	7.5	20.0	18.7	53.6	0.1	0.0	100.0	46.3	2,728
30-34	7.6	7.9	11.1	73.2	0.0	0.1	100.0	26.7	1,942
35-39	3.4	4.7	9.4	82.5	0.0	0.0	100.0	17.5	2,224
40-44	3.6	5.5	5.7	85.2	0.1	0.0	100.0	14.7	1,337
45-49	3.1	3.8	6.8	86.2	0.0	0.0	100.0	13.7	1,288
Residence									
Urban	8.4	32.9	21.0	37.6	0.1	0.0	100.0	62.3	7,163
Rural	0.8	9.3	16.1	73.8	0.0	0.0	100.0	26.2	8,411
Province									
Eastern	2.2	13.6	18.7	65.5	0.0	0.0	100.0	34.5	3,069
Northern	2.2	16.9	19.4	61.5	0.0	0.0	100.0	38.5	3,317
North West	1.7	14.7	15.3	68.2	0.0	0.0	100.0	31.7	2,508
Southern	2.7	18.6	16.4	62.3	0.0	0.0	100.0	37.7	2,900
Western Area	10.6	33.2	20.8	35.2	0.1	0.1	100.0	64.7	3,780
District									
Kailahun	2.0	7.1	15.2	75.7	0.0	0.0	100.0	24.3	707
Kenema	2.7	14.9	21.2	61.2	0.0	0.0	100.0	38.8	1,437
Kono	1.7	16.5	17.4	64.4	0.0	0.1	100.0	35.6	925
Bombali	3.7	24.8	18.5	52.9	0.0	0.1	100.0	47.0	1,166
Falaba	1.1	10.3	8.3	80.3	0.0	0.0	100.0	19.7	466
Koinadugu	2.2	20.6	13.2	64.1	0.0	0.0	100.0	35.9	469
Tonkolili	1.2	10.4	26.8	61.6	0.0	0.0	100.0	38.4	1,215
Kambia	1.6	14.0	18.2	66.1	0.0	0.1	100.0	33.8	890
Karene	0.3	6.8	16.8	76.1	0.0	0.0	100.0	23.9	462
Port Loko	2.4	18.3	12.6	66.7	0.0	0.0	100.0	33.3	1,157
Bo	4.0	21.6	17.7	56.7	0.0	0.0	100.0	43.3	1,250
Bonthe	2.4	16.3	18.7	62.6	0.0	0.0	100.0	37.4	468
Moyamba	1.9	17.5	17.0	63.6	0.0	0.0	100.0	36.4	726
Pujehun	0.9	14.2	9.5	75.1	0.0	0.3	100.0	24.6	456
Western Area Rural	6.6	26.0	24.7	42.6	0.1	0.0	100.0	57.3	1,407
Western Area Urban	13.0	37.5	18.6	30.7	0.2	0.1	100.0	69.0	2,373
Wealth quintile									
Lowest	0.1	4.0	14.4	81.5	0.0	0.1	100.0	18.5	2,738
Second	0.2	7.6	14.7	77.4	0.0	0.0	100.0	22.5	2,831
Middle	0.8	13.7	19.2	66.3	0.0	0.0	100.0	33.7	2,954
Fourth	3.3	29.0	23.2	44.5	0.0	0.0	100.0	55.5	3,385
Highest	14.2	39.0	19.1	27.5	0.1	0.1	100.0	72.3	3,666
Total	4.3	20.2	18.4	57.1	0.0	0.0	100.0	42.8	15,574

[1] Refers to women who attended schooling higher than the secondary level and women who can read a whole sentence or part of a sentence

Table 3.3.2 Literacy: Men

Percent distribution of men age 15-49 by level of schooling attended and level of literacy, and percentage literate, according to background characteristics, Sierra Leone DHS 2019

Background characteristic	Higher than secondary schooling	No schooling, primary or secondary school: Can read a whole sentence	Can read part of a sentence	Cannot read at all	No card with required language	Blind/visually impaired	Total	Percentage literate[1]	Number of men
Age									
15-24	2.4	46.1	29.7	21.7	0.1	0.0	100.0	78.1	2,479
15-19	0.1	44.4	34.1	21.5	0.0	0.0	100.0	78.5	1,541
20-24	6.1	48.8	22.6	22.2	0.3	0.0	100.0	77.5	937
25-29	12.3	36.8	23.8	27.1	0.0	0.0	100.0	72.9	1,015
30-34	16.7	24.4	19.7	39.2	0.0	0.0	100.0	60.8	793
35-39	12.6	11.8	16.9	58.6	0.1	0.0	100.0	41.3	791
40-44	9.6	11.5	18.8	60.1	0.0	0.0	100.0	39.9	624
45-49	7.0	13.1	14.6	65.1	0.0	0.1	100.0	34.7	682
Residence									
Urban	14.2	41.3	23.4	21.0	0.1	0.0	100.0	78.9	2,990
Rural	2.9	21.5	23.1	52.4	0.0	0.0	100.0	47.5	3,394
Province									
Eastern	4.8	30.5	17.8	46.9	0.0	0.0	100.0	53.1	1,251
Northern	6.1	30.5	22.3	41.1	0.0	0.0	100.0	58.9	1,353
North West	4.9	31.8	26.5	36.8	0.0	0.0	100.0	63.2	982
Southern	6.3	20.5	23.2	49.9	0.1	0.1	100.0	50.0	1,192
Western Area	16.0	38.2	26.3	19.3	0.2	0.0	100.0	80.5	1,606
District									
Kailahun	4.0	37.0	16.0	43.0	0.0	0.0	100.0	57.0	307
Kenema	5.6	28.3	15.6	50.4	0.0	0.0	100.0	49.6	557
Kono	4.2	28.5	22.4	44.8	0.0	0.0	100.0	55.2	387
Bombali	6.9	28.4	27.3	37.4	0.0	0.0	100.0	62.6	472
Falaba	4.5	21.4	15.8	58.3	0.0	0.0	100.0	41.7	148
Koinadugu	9.4	38.0	11.0	41.6	0.0	0.0	100.0	58.4	196
Tonkolili	4.6	32.2	23.8	39.4	0.0	0.0	100.0	60.6	538
Kambia	3.4	40.7	23.5	32.4	0.0	0.0	100.0	67.6	345
Karene	2.4	16.7	30.8	50.2	0.0	0.0	100.0	49.8	192
Port Loko	7.2	31.4	27.0	34.4	0.0	0.0	100.0	65.6	445
Bo	8.3	26.6	25.7	39.4	0.0	0.0	100.0	60.6	525
Bonthe	4.5	16.6	20.1	58.8	0.0	0.0	100.0	41.2	199
Moyamba	5.4	14.6	29.8	49.5	0.3	0.3	100.0	49.8	290
Pujehun	4.1	16.3	8.3	71.4	0.0	0.0	100.0	28.6	178
Western Area Rural	10.8	38.3	27.2	23.6	0.0	0.0	100.0	76.4	542
Western Area Urban	18.6	38.1	25.9	17.2	0.3	0.0	100.0	82.6	1,064
Wealth quintile									
Lowest	0.8	13.1	16.9	69.0	0.1	0.1	100.0	30.8	1,104
Second	2.1	20.9	27.2	49.9	0.0	0.0	100.0	50.1	1,123
Middle	4.0	26.7	24.8	44.5	0.0	0.0	100.0	55.5	1,145
Fourth	7.7	43.1	24.2	24.9	0.0	0.0	100.0	75.1	1,422
Highest	21.1	41.9	22.9	13.9	0.2	0.0	100.0	85.9	1,590
Total 15-49	8.2	30.8	23.2	37.7	0.1	0.0	100.0	62.2	6,384
50-59	9.9	10.6	12.1	67.1	0.0	0.4	100.0	32.6	813
Total 15-59	8.4	28.5	22.0	41.0	0.1	0.1	100.0	58.9	7,197

[1] Refers to men who attended schooling higher than the secondary level and men who can read a whole sentence or part of a sentence

Table 3.4.1 Exposure to mass media: Women

Percentage of women age 15-49 who are exposed to specific media on a weekly basis, according to background characteristics, Sierra Leone DHS 2019

Background characteristic	Reads a newspaper at least once a week	Watches television at least once a week	Listens to the radio at least once a week	Accesses all three media at least once a week	Accesses none of the three media at least once a week	Number of women
Age						
15-19	2.1	15.9	19.9	1.0	71.7	3,427
20-24	3.0	17.7	25.5	1.3	66.1	2,629
25-29	3.4	18.4	26.8	1.9	65.3	2,728
30-34	2.4	16.1	26.5	1.5	67.1	1,942
35-39	2.1	11.2	23.7	1.3	72.1	2,224
40-44	2.6	10.0	24.2	2.0	73.2	1,337
45-49	1.3	8.7	22.5	0.7	74.5	1,288
Residence						
Urban	4.5	28.2	29.5	2.8	57.9	7,163
Rural	0.8	3.6	19.4	0.2	79.4	8,411
Province						
Eastern	0.5	6.0	17.8	0.1	78.9	3,069
Northern	1.8	12.3	30.6	0.7	64.9	3,317
North West	1.2	4.1	19.5	0.4	78.6	2,508
Southern	1.6	6.6	16.5	0.4	80.4	2,900
Western Area	6.4	37.9	32.0	4.4	51.4	3,780
District						
Kailahun	0.4	1.5	18.7	0.0	80.3	707
Kenema	0.5	9.7	23.4	0.2	71.6	1,437
Kono	0.5	3.7	8.4	0.2	89.3	925
Bombali	2.6	22.6	43.2	1.1	48.0	1,166
Falaba	0.3	5.2	5.4	0.1	90.5	466
Koinadugu	1.5	3.9	29.3	0.1	68.0	469
Tonkolili	1.8	8.5	28.6	0.7	70.0	1,215
Kambia	0.7	0.9	16.0	0.1	83.6	890
Karene	1.1	5.3	24.0	0.4	73.9	462
Port Loko	1.7	6.0	20.4	0.7	76.7	1,157
Bo	1.3	10.5	15.2	0.5	79.8	1,250
Bonthe	0.8	5.4	11.0	0.2	86.3	468
Moyamba	2.2	1.1	16.0	0.1	82.9	726
Pujehun	2.2	6.0	26.6	0.8	72.1	456
Western Area Rural	5.7	22.4	30.6	3.1	60.9	1,407
Western Area Urban	6.8	47.2	32.9	5.2	45.8	2,373
Education						
No education	0.1	6.5	17.6	0.0	79.3	7,081
Primary	0.4	10.4	23.5	0.1	71.9	2,103
Secondary	3.9	22.9	28.5	1.9	61.0	5,724
More than secondary	23.1	50.0	55.2	15.6	30.3	666
Wealth quintile						
Lowest	0.3	1.7	15.4	0.0	83.9	2,738
Second	0.4	2.4	18.2	0.0	80.9	2,831
Middle	1.0	4.1	19.9	0.2	78.1	2,954
Fourth	2.3	12.3	26.3	0.7	67.7	3,385
Highest	7.3	45.6	36.1	5.2	44.6	3,666
Total	2.5	14.9	24.0	1.4	69.5	15,574

Table 3.4.2 Exposure to mass media: Men

Percentage of men age 15-49 who are exposed to specific media on a weekly basis, according to background characteristics, Sierra Leone DHS 2019

Background characteristic	Reads a newspaper at least once a week	Watches television at least once a week	Listens to the radio at least once a week	Accesses all three media at least once a week	Accesses none of the three media at least once a week	Number of men
Age						
15-19	3.9	15.8	24.4	2.0	67.6	1,541
20-24	10.9	20.4	37.0	4.7	54.2	937
25-29	13.4	25.2	44.7	7.2	46.8	1,015
30-34	12.0	21.3	45.5	6.4	48.8	793
35-39	8.1	15.0	42.0	5.6	53.8	791
40-44	6.9	13.5	41.0	3.2	55.2	624
45-49	7.0	13.2	43.6	4.4	53.7	682
Residence						
Urban	16.5	35.2	49.7	9.3	38.2	2,990
Rural	1.6	3.0	27.6	0.5	70.9	3,394
Province						
Eastern	4.1	8.6	33.1	1.7	63.8	1,251
Northern	3.0	8.4	23.8	1.1	71.8	1,353
North West	3.4	6.2	38.0	1.5	59.5	982
Southern	3.1	8.0	35.8	1.2	60.9	1,192
Western Area	24.0	48.3	55.3	14.3	29.1	1,606
District						
Kailahun	2.8	1.7	43.3	0.0	55.8	307
Kenema	6.1	15.3	31.8	3.2	62.7	557
Kono	2.2	4.5	26.7	1.1	71.7	387
Bombali	2.7	16.0	27.5	1.7	64.8	472
Falaba	3.1	3.3	12.2	0.9	84.7	148
Koinadugu	5.4	9.5	38.7	0.0	54.3	196
Tonkolili	2.2	2.8	18.3	0.9	80.8	538
Kambia	5.7	6.5	43.7	2.5	53.2	345
Karene	1.1	3.4	43.2	0.5	55.3	192
Port Loko	2.5	7.2	31.5	1.0	66.1	445
Bo	2.6	13.6	48.0	0.9	46.2	525
Bonthe	3.0	3.7	25.2	0.7	71.6	199
Moyamba	4.5	3.6	22.8	2.6	76.9	290
Pujehun	2.2	3.6	32.5	0.4	65.9	178
Western Area Rural	16.4	21.3	40.7	6.7	49.0	542
Western Area Urban	28.0	62.0	62.7	18.1	19.0	1,064
Education						
No education	0.0	4.4	26.2	0.0	72.3	1,865
Primary	0.4	9.4	32.3	0.1	64.2	876
Secondary	10.6	23.7	41.4	5.3	49.4	3,120
More than secondary	40.7	47.6	68.6	24.2	18.1	523
Wealth quintile						
Lowest	0.3	0.6	18.7	0.1	80.9	1,104
Second	0.8	1.3	28.3	0.1	70.9	1,123
Middle	3.6	3.4	34.2	0.8	63.7	1,145
Fourth	7.5	12.5	40.2	1.8	53.4	1,422
Highest	24.4	57.6	58.9	16.2	23.2	1,590
Total 15-49	8.6	18.1	38.0	4.6	55.6	6,384
50-59	8.5	10.7	44.6	3.8	51.3	813
Total 15-59	8.6	17.2	38.7	4.5	55.1	7,197

Table 3.5.1 Internet usage: Women

Percentage of women age 15-49 who have ever used the internet and percentage who have used the internet in the past 12 months, and among women who have used the internet in the past 12 months, percent distribution by frequency of internet use in the past month, according to background characteristics, Sierra Leone DHS 2019

Background characteristic	Ever used the internet	Used the internet in the past 12 months	Number	Among respondents who have used the internet in the past 12 months, percentage who, in the past month, used the internet: Almost every day	At least once a week	Less than once a week	Not at all	Total	Number
Age									
15-19	13.0	11.3	3,427	53.0	33.8	12.8	0.3	100.0	389
20-24	23.6	21.6	2,629	59.2	30.0	10.0	0.8	100.0	567
25-29	21.1	19.7	2,728	62.0	28.1	9.3	0.6	100.0	537
30-34	13.4	12.3	1,942	67.2	24.2	8.6	0.0	100.0	239
35-39	8.3	7.7	2,224	65.9	26.2	7.0	0.9	100.0	171
40-44	6.7	6.3	1,337	70.0	19.2	8.5	2.3	100.0	84
45-49	5.0	4.7	1,288	60.2	35.8	3.3	0.7	100.0	60
Residence									
Urban	27.8	25.6	7,163	63.0	27.7	8.9	0.5	100.0	1,832
Rural	2.9	2.6	8,411	41.9	40.0	16.3	1.8	100.0	215
Province									
Eastern	7.6	6.6	3,069	45.6	38.7	15.7	0.0	100.0	203
Northern	8.0	7.1	3,317	61.6	30.6	6.1	1.7	100.0	236
North West	5.2	4.8	2,508	45.0	37.5	15.5	2.1	100.0	121
Southern	8.2	7.5	2,900	73.3	22.6	3.9	0.2	100.0	218
Western Area	36.3	33.6	3,780	62.3	27.4	9.8	0.4	100.0	1,270
District									
Kailahun	3.0	3.0	707	*	*	*	*	*	22
Kenema	6.8	5.8	1,437	52.1	43.6	4.3	0.0	100.0	83
Kono	12.4	10.6	925	40.9	33.1	26.0	0.0	100.0	98
Bombali	11.3	9.8	1,166	64.5	29.9	5.1	0.5	100.0	114
Falaba	4.8	4.7	466	(7.1)	(69.7)	(18.1)	(5.1)	100.0	22
Koinadugu	14.1	11.8	469	61.5	30.2	6.1	2.2	100.0	55
Tonkolili	3.6	3.6	1,215	(81.4)	(13.2)	(2.6)	(2.8)	100.0	44
Kambia	3.3	2.8	890	(56.4)	(35.9)	(7.7)	(0.0)	100.0	25
Karene	1.2	1.0	462	*	*	*	*	*	5
Port Loko	8.4	7.9	1,157	43.6	36.1	17.5	2.7	100.0	91
Bo	11.9	11.3	1,250	80.8	17.9	1.3	0.0	100.0	141
Bonthe	6.1	4.8	468	(42.9)	(46.2)	(8.9)	(2.0)	100.0	23
Moyamba	6.0	5.3	726	(72.5)	(19.1)	(8.5)	(0.0)	100.0	38
Pujehun	3.9	3.4	456	(51.3)	(39.5)	(9.2)	(0.0)	100.0	15
Western Area Rural	25.4	23.4	1,407	59.9	27.5	12.2	0.4	100.0	329
Western Area Urban	42.8	39.6	2,373	63.2	27.4	9.0	0.4	100.0	940
Education									
No education	1.7	1.4	7,081	51.4	32.9	12.0	3.7	100.0	100
Primary	4.8	4.1	2,103	42.5	42.3	15.2	0.0	100.0	86
Secondary	26.2	23.6	5,724	55.6	31.9	11.9	0.6	100.0	1,349
More than secondary	78.3	76.9	666	79.2	18.2	2.3	0.2	100.0	512
Wealth quintile									
Lowest	0.5	0.3	2,738	*	*	*	*	*	9
Second	1.2	1.0	2,831	(34.6)	(47.1)	(16.1)	(2.3)	(100.0)	28
Middle	4.3	3.7	2,954	35.5	42.1	21.4	1.0	100.0	109
Fourth	17.4	15.1	3,385	53.2	31.9	14.2	0.7	100.0	510
Highest	40.4	37.9	3,666	66.3	26.3	6.9	0.5	100.0	1,390
Total	14.4	13.1	15,574	60.7	29.0	9.7	0.6	100.0	2,047

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

Table 3.5.2 Internet usage: Men

Percentage of men age 15-49 who have ever used the internet and percentage who have used the internet in the past 12 months, and among men who have used the internet in the past 12 months, percent distribution by frequency of internet use in the past month, according to background characteristics, Sierra Leone DHS 2019

Background characteristic	Ever used the internet	Used the internet in the past 12 months	Number	Among respondents who have used the internet in the past 12 months, percentage who, in the past month, used the internet: Almost every day	At least once a week	Less than once a week	Not at all	Total	Number
Age									
15-19	23.7	20.9	1,541	45.4	30.6	19.0	5.0	100.0	323
20-24	45.6	42.9	937	44.2	34.1	16.6	5.2	100.0	402
25-29	44.2	39.0	1,015	52.5	33.4	10.7	3.5	100.0	396
30-34	39.4	38.0	793	61.6	25.7	8.6	4.1	100.0	302
35-39	25.3	23.2	791	53.6	29.6	13.9	3.0	100.0	183
40-44	15.9	14.5	624	48.0	30.6	17.2	4.3	100.0	90
45-49	12.7	11.8	682	54.4	35.8	9.9	0.0	100.0	81
Residence									
Urban	52.4	48.9	2,990	53.6	30.3	12.3	3.9	100.0	1,463
Rural	11.0	9.2	3,394	38.1	36.2	20.8	5.0	100.0	313
Province									
Eastern	18.7	17.0	1,251	47.8	35.8	8.8	7.6	100.0	212
Northern	20.9	18.9	1,353	51.8	29.9	15.4	2.9	100.0	255
North West	23.7	20.4	982	56.0	32.0	11.6	0.4	100.0	200
Southern	22.8	20.2	1,192	42.3	35.8	17.0	4.9	100.0	241
Western Area	57.2	54.0	1,606	52.5	29.2	14.1	4.2	100.0	868
District									
Kailahun	12.2	11.3	307	(52.5)	(30.4)	(14.4)	(2.7)	100.0	35
Kenema	22.8	20.9	557	41.1	40.2	6.3	12.4	100.0	116
Kono	18.0	15.9	387	58.0	30.6	10.2	1.2	100.0	62
Bombali	20.3	18.5	472	50.9	29.9	17.5	1.7	100.0	87
Falaba	12.3	10.2	148	(37.3)	(37.7)	(20.8)	(4.1)	100.0	15
Koinadugu	38.4	35.6	196	75.2	15.5	7.0	2.2	100.0	70
Tonkolili	17.4	15.5	538	35.6	40.5	19.3	4.5	100.0	84
Kambia	29.9	25.3	345	60.1	28.3	10.7	0.9	100.0	87
Karene	13.2	10.1	192	(27.9)	(56.9)	(15.3)	(0.0)	100.0	19
Port Loko	23.4	21.0	445	58.0	30.3	11.7	0.0	100.0	94
Bo	33.7	30.5	525	34.3	43.8	19.0	2.9	100.0	160
Bonthe	19.9	16.5	199	53.4	16.7	10.8	19.1	100.0	33
Moyamba	11.9	11.9	290	(61.5)	(22.1)	(16.4)	(0.0)	100.0	35
Pujehun	11.4	7.4	178	*	*	*	*	*	13
Western Area Rural	39.6	36.1	542	38.0	44.3	15.6	2.2	100.0	196
Western Area Urban	66.2	63.2	1,064	56.7	24.8	13.7	4.8	100.0	672
Education									
No education	3.3	2.8	1,865	43.0	29.7	18.1	9.2	100.0	52
Primary	8.7	6.5	876	38.3	27.0	32.6	2.2	100.0	57
Secondary	43.9	40.0	3,120	44.8	34.8	15.8	4.7	100.0	1,247
More than secondary	83.0	80.4	523	71.5	21.8	4.8	1.9	100.0	421
Wealth quintile									
Lowest	4.3	3.1	1,104	(28.6)	(36.6)	(21.0)	(13.8)	(100.0)	35
Second	7.1	5.1	1,123	34.6	26.7	31.1	7.6	100.0	57
Middle	15.9	13.7	1,145	31.7	41.6	23.3	3.4	100.0	157
Fourth	39.4	35.2	1,422	40.8	37.2	16.0	6.1	100.0	500
Highest	67.4	64.6	1,590	60.3	27.0	10.0	2.7	100.0	1,028
Total 15-49	30.4	27.8	6,384	50.9	31.3	13.8	4.1	100.0	1,777
50-59	10.5	9.7	813	46.5	31.7	14.8	6.9	100.0	79
Total 15-59	28.1	25.8	7,197	50.7	31.3	13.8	4.2	100.0	1,855

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

Table 3.6.1 Employment status: Women

Percent distribution of women age 15-49 by employment status, according to background characteristics, Sierra Leone DHS 2019

Background characteristic	Employed in the 12 months preceding the survey		Not employed in the 12 months preceding the survey	Total	Number of women
	Currently employed[1]	Not currently employed			
Age					
15-19	37.0	3.2	59.8	100.0	3,427
20-24	59.2	2.9	38.0	100.0	2,629
25-29	75.9	3.0	21.1	100.0	2,728
30-34	82.1	2.4	15.4	100.0	1,942
35-39	87.5	2.1	10.4	100.0	2,224
40-44	87.6	2.3	10.0	100.0	1,337
45-49	88.2	1.6	10.1	100.0	1,288
Marital status					
Never married	42.0	2.6	55.3	100.0	5,058
Married or living together	82.0	2.7	15.3	100.0	9,715
Divorced/separated/widowed	81.0	2.8	16.1	100.0	801
Number of living children					
0	40.4	3.0	56.6	100.0	4,361
1-2	72.8	2.9	24.3	100.0	5,224
3-4	84.5	2.2	13.3	100.0	3,759
5+	89.6	2.3	8.1	100.0	2,231
Residence					
Urban	54.9	2.1	42.9	100.0	7,163
Rural	80.9	3.1	16.0	100.0	8,411
Province					
Eastern	69.3	2.0	28.7	100.0	3,069
Northern	79.8	3.5	16.6	100.0	3,317
North West	73.2	3.3	23.5	100.0	2,508
Southern	70.9	3.0	26.1	100.0	2,900
Western Area	54.9	1.8	43.3	100.0	3,780
District					
Kailahun	79.0	2.6	18.4	100.0	707
Kenema	68.0	0.9	31.1	100.0	1,437
Kono	64.0	3.2	32.8	100.0	925
Bombali	79.3	1.3	19.4	100.0	1,166
Falaba	71.2	10.6	18.2	100.0	466
Koinadugu	81.7	4.5	13.7	100.0	469
Tonkolili	83.0	2.6	14.4	100.0	1,215
Kambia	64.1	4.7	31.1	100.0	890
Karene	83.5	2.4	14.1	100.0	462
Port Loko	76.1	2.6	21.4	100.0	1,157
Bo	68.1	3.7	28.2	100.0	1,250
Bonthe	67.0	2.1	30.9	100.0	468
Moyamba	79.0	1.9	19.1	100.0	726
Pujehun	69.7	3.6	26.7	100.0	456
Western Area Rural	64.7	2.4	32.9	100.0	1,407
Western Area Urban	49.1	1.4	49.5	100.0	2,373
Education					
No education	84.6	2.5	12.9	100.0	7,081
Primary	72.1	3.8	24.1	100.0	2,103
Secondary	49.5	2.5	47.9	100.0	5,724
More than secondary	60.3	1.7	38.1	100.0	666
Wealth quintile					
Lowest	86.8	2.6	10.6	100.0	2,738
Second	81.9	3.7	14.4	100.0	2,831
Middle	73.4	3.0	23.6	100.0	2,954
Fourth	59.2	2.6	38.2	100.0	3,385
Highest	51.2	1.7	47.1	100.0	3,666
Total	69.0	2.7	28.4	100.0	15,574

[1] "Currently employed" is defined as having done work in the past 7 days. Includes persons who did not work in the past 7 days but who are regularly employed and were absent from work for leave, illness, vacation, or any other such reason.

Table 3.6.2 Employment status: Men

Percent distribution of men age 15-49 by employment status, according to background characteristics, Sierra Leone DHS 2019

Background characteristic	Employed in the 12 months preceding the survey: Currently employed[1]	Employed in the 12 months preceding the survey: Not currently employed	Not employed in the 12 months preceding the survey	Total	Number of men
Age					
15-19	37.0	3.5	59.5	100.0	1,541
20-24	61.0	4.7	34.2	100.0	937
25-29	78.9	5.1	16.1	100.0	1,015
30-34	89.4	3.7	6.9	100.0	793
35-39	90.9	3.8	5.3	100.0	791
40-44	91.8	2.3	5.9	100.0	624
45-49	92.5	2.2	5.3	100.0	682
Marital status					
Never married	49.5	4.2	46.3	100.0	2,928
Married or living together	90.8	3.4	5.9	100.0	3,234
Divorced/separated/widowed	85.7	2.7	11.6	100.0	222
Number of living children					
0	50.1	4.0	45.9	100.0	2,896
1-2	86.6	4.1	9.3	100.0	1,560
3-4	90.7	3.0	6.3	100.0	1,048
5+	93.4	3.1	3.5	100.0	880
Residence					
Urban	60.2	5.1	34.7	100.0	2,990
Rural	81.7	2.6	15.7	100.0	3,394
Province					
Eastern	74.1	4.2	21.7	100.0	1,251
Northern	78.0	2.1	20.0	100.0	1,353
North West	80.3	3.0	16.7	100.0	982
Southern	73.6	2.7	23.7	100.0	1,192
Western Area	57.7	6.0	36.3	100.0	1,606
District					
Kailahun	80.2	4.7	15.0	100.0	307
Kenema	70.3	3.9	25.9	100.0	557
Kono	74.7	4.4	20.8	100.0	387
Bombali	76.7	2.3	21.0	100.0	472
Falaba	92.9	1.6	5.5	100.0	148
Koinadugu	78.2	0.0	21.8	100.0	196
Tonkolili	74.9	2.7	22.4	100.0	538
Kambia	72.3	3.9	23.8	100.0	345
Karene	79.9	2.4	17.7	100.0	192
Port Loko	86.6	2.6	10.9	100.0	445
Bo	62.8	3.3	33.9	100.0	525
Bonthe	84.6	5.3	10.1	100.0	199
Moyamba	76.2	0.3	23.4	100.0	290
Pujehun	89.0	1.6	9.4	100.0	178
Western Area Rural	58.3	3.3	38.4	100.0	542
Western Area Urban	57.4	7.3	35.2	100.0	1,064
Education					
No education	89.8	2.2	8.1	100.0	1,865
Primary	74.5	3.1	22.3	100.0	876
Secondary	59.7	4.1	36.2	100.0	3,120
More than secondary	73.7	8.1	18.1	100.0	523
Wealth quintile					
Lowest	84.0	2.8	13.2	100.0	1,104
Second	82.9	2.8	14.3	100.0	1,123
Middle	78.1	2.2	19.6	100.0	1,145
Fourth	61.8	4.3	33.8	100.0	1,422
Highest	59.2	5.6	35.2	100.0	1,590
Total 15-49	71.7	3.7	24.6	100.0	6,384
50-59	89.8	2.6	7.7	100.0	813
Total 15-59	73.7	3.6	22.7	100.0	7,197

[1] "Currently employed" is defined as having done work in the past 7 days. Includes persons who did not work in the past 7 days but who are regularly employed and were absent from work for leave, illness, vacation, or any other such reason.

Table 3.7.1 Occupation: Women

Percent distribution of women age 15-49 employed in the 12 months preceding the survey by occupation, according to background characteristics, Sierra Leone DHS 2019

Background characteristic	Professional/ technical/ managerial	Clerical	Sales and services	Skilled manual	Unskilled manual	Agriculture	Other	Total	Number of women
Age									
15-19	0.3	0.0	42.4	2.3	0.4	54.6	0.1	100.0	1,378
20-24	2.0	0.0	44.5	6.3	0.3	46.6	0.2	100.0	1,631
25-29	5.8	0.1	42.7	5.2	1.0	45.1	0.1	100.0	2,152
30-34	5.0	0.3	33.8	4.8	0.7	55.3	0.0	100.0	1,642
35-39	2.8	0.0	33.4	3.2	0.9	59.6	0.1	100.0	1,994
40-44	3.5	0.0	33.3	3.5	0.9	58.8	0.0	100.0	1,203
45-49	3.2	0.1	26.4	2.2	0.9	66.8	0.4	100.0	1,157
Marital status									
Never married	5.0	0.2	52.5	5.8	0.6	35.8	0.3	100.0	2,258
Married or living together	2.8	0.1	32.1	3.7	0.8	60.5	0.1	100.0	8,226
Divorced/separated/widowed	5.2	0.0	48.7	3.7	0.8	41.6	0.1	100.0	672
Number of living children									
0	3.2	0.2	46.5	5.2	0.6	43.9	0.4	100.0	1,893
1-2	5.4	0.1	42.9	5.2	0.7	45.4	0.1	100.0	3,954
3-4	2.7	0.0	32.4	3.5	0.8	60.5	0.1	100.0	3,260
5+	0.7	0.1	25.2	1.9	0.6	71.5	0.0	100.0	2,050
Residence									
Urban	7.4	0.2	70.0	9.4	1.3	11.5	0.2	100.0	4,089
Rural	1.0	0.0	18.3	1.0	0.4	79.1	0.1	100.0	7,068
Province									
Eastern	3.0	0.1	22.0	2.6	0.5	71.8	0.1	100.0	2,188
Northern	1.8	0.0	36.7	1.5	0.7	59.2	0.1	100.0	2,766
North West	1.4	0.0	31.6	2.1	0.4	64.4	0.1	100.0	1,918
Southern	2.5	0.1	24.9	0.5	0.3	71.8	0.1	100.0	2,143
Western Area	8.4	0.2	70.9	14.4	1.8	3.8	0.4	100.0	2,142
District									
Kailahun	2.4	0.0	15.6	2.3	0.3	79.4	0.0	100.0	577
Kenema	3.5	0.1	23.5	0.6	0.0	72.2	0.1	100.0	990
Kono	2.8	0.0	25.6	5.9	1.4	64.1	0.1	100.0	621
Bombali	2.1	0.1	56.6	0.7	0.0	40.4	0.1	100.0	940
Falaba	2.3	0.0	10.5	4.4	0.0	82.1	0.6	100.0	381
Koinadugu	2.2	0.0	28.7	2.6	1.7	64.8	0.0	100.0	405
Tonkolili	1.1	0.0	31.4	0.7	1.2	65.6	0.0	100.0	1,039
Kambia	2.3	0.0	37.3	1.9	0.1	58.5	0.0	100.0	613
Karene	0.7	0.0	14.7	1.8	0.0	82.5	0.2	100.0	396
Port Loko	1.2	0.1	35.1	2.5	0.7	60.4	0.0	100.0	909
Bo	3.2	0.1	32.0	0.8	0.1	63.8	0.1	100.0	897
Bonthe	2.0	0.0	24.3	0.2	0.2	73.3	0.0	100.0	324
Moyamba	2.5	0.0	19.3	0.0	0.3	77.8	0.1	100.0	588
Pujehun	1.1	0.1	16.1	0.6	0.7	81.3	0.1	100.0	334
Western Area Rural	5.3	0.3	75.5	7.8	2.6	8.1	0.3	100.0	945
Western Area Urban	10.9	0.2	67.3	19.7	1.1	0.4	0.4	100.0	1,197
Education									
No education	0.3	0.0	26.0	2.6	0.6	70.5	0.1	100.0	6,169
Primary	1.2	0.0	35.7	4.4	0.7	58.0	0.1	100.0	1,595
Secondary	4.0	0.2	61.7	6.9	0.8	26.2	0.2	100.0	2,980
More than secondary	52.3	1.3	34.9	5.5	2.2	2.4	1.4	100.0	412
Wealth quintile									
Lowest	0.1	0.0	9.0	0.4	0.4	90.0	0.0	100.0	2,449
Second	0.4	0.0	16.8	0.9	0.3	81.5	0.0	100.0	2,423
Middle	1.3	0.0	28.8	2.2	0.4	67.2	0.1	100.0	2,257
Fourth	4.7	0.1	72.2	6.3	1.3	15.3	0.1	100.0	2,091
Highest	12.2	0.4	70.6	12.6	1.4	2.4	0.5	100.0	1,938
Total	3.4	0.1	37.2	4.1	0.7	54.3	0.1	100.0	11,157

Table 3.7.2 Occupation: Men

Percent distribution of men age 15-49 employed in the 12 months preceding the survey by occupation, according to background characteristics, Sierra Leone DHS 2019

Background characteristic	Professional/ technical/ managerial	Clerical	Sales and services	Skilled manual	Unskilled manual	Agriculture	Other	Total	Number of men
Age									
15-19	3.6	0.0	18.4	7.4	4.5	65.7	0.4	100.0	623
20-24	12.5	0.6	27.2	9.3	5.8	42.9	1.7	100.0	617
25-29	16.2	0.3	26.0	11.1	5.8	39.8	0.9	100.0	852
30-34	21.4	0.8	25.4	10.5	5.1	36.6	0.2	100.0	738
35-39	13.0	0.4	23.1	9.1	7.0	46.9	0.5	100.0	749
40-44	14.2	0.0	20.0	5.2	4.9	55.4	0.3	100.0	587
45-49	13.6	0.2	15.3	8.0	4.6	58.0	0.2	100.0	646
Marital status									
Never married	12.3	0.4	25.4	10.5	6.0	44.5	0.9	100.0	1,572
Married or living together	14.6	0.3	20.9	7.8	5.1	50.9	0.3	100.0	3,045
Divorced/separated/widowed	12.9	0.0	23.3	12.3	5.8	42.5	3.1	100.0	196
Number of living children									
0	10.6	0.5	25.3	9.6	5.8	47.3	0.8	100.0	1,566
1-2	19.1	0.3	26.8	9.8	5.3	38.0	0.8	100.0	1,415
3-4	14.8	0.3	19.1	9.0	6.5	49.6	0.7	100.0	982
5+	9.8	0.1	13.8	5.7	3.8	66.8	0.0	100.0	849
Residence									
Urban	24.7	0.6	38.5	14.8	7.6	12.7	1.2	100.0	1,952
Rural	6.4	0.2	11.5	4.8	4.0	72.9	0.2	100.0	2,861
Province									
Eastern	7.4	0.2	17.5	4.8	8.3	61.6	0.3	100.0	980
Northern	9.4	0.0	23.6	7.2	3.9	55.4	0.6	100.0	1,083
North West	8.9	0.0	20.2	7.3	1.0	62.2	0.5	100.0	818
Southern	10.4	0.3	14.1	5.5	4.8	64.2	0.6	100.0	909
Western Area	31.7	1.1	35.3	18.8	8.5	3.7	1.0	100.0	1,023
District									
Kailahun	6.8	0.0	10.1	4.6	2.1	76.0	0.3	100.0	261
Kenema	7.0	0.1	21.9	4.0	6.7	60.4	0.0	100.0	413
Kono	8.5	0.4	17.7	6.1	15.6	50.9	0.8	100.0	307
Bombali	10.3	0.0	40.8	4.8	1.1	42.9	0.2	100.0	373
Falaba	6.6	0.0	4.6	11.5	0.8	76.2	0.3	100.0	139
Koinadugu	9.1	0.0	22.4	10.3	7.3	50.9	0.0	100.0	153
Tonkolili	9.6	0.0	14.9	6.7	6.3	61.3	1.2	100.0	418
Kambia	6.4	0.0	18.5	10.2	0.4	64.3	0.3	100.0	263
Karene	6.7	0.0	10.2	1.0	1.4	80.3	0.4	100.0	158
Port Loko	11.3	0.0	25.3	7.8	1.2	53.6	0.8	100.0	397
Bo	16.4	0.0	19.4	10.4	8.4	44.3	1.1	100.0	347
Bonthe	6.4	0.0	9.2	4.0	2.7	77.3	0.3	100.0	179
Moyamba	6.6	1.4	14.5	1.7	0.6	75.0	0.3	100.0	222
Pujehun	7.3	0.0	7.5	1.8	5.0	77.9	0.4	100.0	161
Western Area Rural	30.0	0.0	29.7	19.0	11.5	8.9	0.7	100.0	333
Western Area Urban	32.4	1.6	37.9	18.6	7.1	1.2	1.1	100.0	689
Education									
No education	4.2	0.0	12.3	7.1	5.3	70.8	0.3	100.0	1,715
Primary	9.5	0.0	14.0	10.0	6.4	60.0	0.1	100.0	680
Secondary	14.3	0.4	33.0	10.4	6.1	34.9	1.0	100.0	1,990
More than secondary	56.8	1.9	27.4	7.0	1.4	4.2	1.3	100.0	428
Wealth quintile									
Lowest	3.7	0.1	4.7	2.7	3.7	84.9	0.2	100.0	959
Second	4.5	0.0	9.0	5.2	4.0	77.1	0.3	100.0	962
Middle	8.1	0.3	16.6	8.2	4.0	62.6	0.1	100.0	920
Fourth	20.2	0.0	37.6	13.2	10.0	17.9	1.0	100.0	941
Highest	31.2	1.1	42.9	14.6	5.5	3.3	1.4	100.0	1,031
Total 15-49	13.8	0.3	22.4	8.9	5.4	48.5	0.6	100.0	4,813
50-59	14.9	0.6	12.6	4.0	3.7	62.4	1.9	100.0	750
Total 15-59	14.0	0.4	21.1	8.2	5.2	50.4	0.8	100.0	5,563

Table 3.8 Type of employment: Women

Percent distribution of women age 15-49 employed in the 12 months preceding the survey by type of earnings, type of employer, and continuity of employment, according to type of employment (agricultural or nonagricultural), Sierra Leone DHS 2019

Employment characteristic	Agricultural work	Nonagricultural work	Total
Type of earnings			
Cash only	20.9	62.6	39.9
Cash and in-kind	8.3	4.7	6.7
In-kind only	1.7	1.2	1.5
Not paid	69.0	31.5	51.9
Total	100.0	100.0	100.0
Type of employer			
Employed by family member	24.0	13.1	19.0
Employed by non-family member	1.5	9.1	5.0
Self-employed	74.5	77.9	76.0
Total	100.0	100.0	100.0
Continuity of employment			
All year	71.1	81.8	76.0
Seasonal	22.4	10.8	17.1
Occasional	6.5	7.4	6.9
Total	100.0	100.0	100.0
Number of women employed during the last 12 months	6,062	5,094	11,157

Note: Total includes women with missing information on type of employment who are not shown separately.

Table 3.9.1 Health insurance coverage: Women

Percentage of women age 15-49 with specific types of health insurance coverage, and percentage with any health insurance, according to background characteristics, Sierra Leone DHS 2019

Background characteristic	Social security	Health insurance through employer	Mutual health organisation/ community-based insurance	Privately purchased commercial insurance	Other	None	Any health insurance	Number of women
Age								
15-19	0.1	2.3	0.4	0.1	0.0	97.1	2.9	3,427
20-24	0.3	2.5	0.8	0.2	0.0	96.2	3.8	2,629
25-29	0.7	3.1	0.7	0.2	0.0	95.4	4.6	2,728
30-34	0.7	3.7	0.6	0.1	0.0	95.1	4.9	1,942
35-39	0.4	3.1	0.6	0.2	0.0	95.8	4.2	2,224
40-44	0.5	2.7	0.7	0.1	0.0	96.2	3.8	1,337
45-49	0.5	3.0	1.0	0.0	0.1	95.6	4.4	1,288
Residence								
Urban	0.8	4.0	0.3	0.2	0.0	94.9	5.1	7,163
Rural	0.1	1.9	1.0	0.1	0.0	97.0	3.0	8,411
Province								
Eastern	0.3	0.7	0.0	0.0	0.0	99.1	0.9	3,069
Northern	0.3	0.9	2.2	0.2	0.0	96.5	3.5	3,317
North West	0.1	10.0	0.1	0.0	0.0	89.7	10.3	2,508
Southern	0.1	0.8	0.5	0.1	0.0	98.6	1.4	2,900
Western Area	1.2	3.2	0.3	0.3	0.0	95.4	4.6	3,780
District								
Kailahun	0.1	0.8	0.0	0.0	0.0	99.2	0.8	707
Kenema	0.4	0.6	0.0	0.0	0.0	99.2	0.8	1,437
Kono	0.3	0.8	0.0	0.1	0.0	98.8	1.2	925
Bombali	0.1	0.6	0.0	0.0	0.0	99.3	0.7	1,166
Falaba	1.2	0.0	0.0	0.1	0.0	98.7	1.3	466
Koinadugu	0.0	2.3	0.0	0.0	0.0	97.7	2.3	469
Tonkolili	0.2	1.0	6.0	0.7	0.0	92.4	7.6	1,215
Kambia	0.0	27.5	0.1	0.0	0.0	72.4	27.6	890
Karene	0.0	0.3	0.0	0.0	0.0	99.7	0.3	462
Port Loko	0.2	0.5	0.2	0.0	0.0	99.1	0.9	1,157
Bo	0.0	1.3	0.5	0.1	0.0	98.1	1.9	1,250
Bonthe	0.0	0.2	0.8	0.0	0.1	98.9	1.1	468
Moyamba	0.0	0.6	0.1	0.1	0.0	99.2	0.8	726
Pujehun	0.4	0.0	1.1	0.0	0.0	98.6	1.4	456
Western Area Rural	0.3	2.0	0.2	0.1	0.0	97.7	2.3	1,407
Western Area Urban	1.7	3.8	0.3	0.3	0.0	94.0	6.0	2,373
Education								
No education	0.0	2.7	0.8	0.1	0.0	96.4	3.6	7,081
Primary	0.0	1.9	0.6	0.1	0.0	97.4	2.6	2,103
Secondary	0.7	2.6	0.5	0.2	0.0	96.2	3.8	5,724
More than secondary	3.7	9.5	1.3	0.7	0.0	85.7	14.3	666
Wealth quintile								
Lowest	0.0	0.9	1.0	0.0	0.0	98.1	1.9	2,738
Second	0.1	2.3	1.0	0.1	0.0	96.5	3.5	2,831
Middle	0.3	2.9	0.6	0.0	0.0	96.3	3.7	2,954
Fourth	0.4	3.3	0.4	0.2	0.0	95.9	4.1	3,385
Highest	1.2	4.3	0.4	0.3	0.0	94.0	6.0	3,666
Total	0.4	2.9	0.6	0.1	0.0	96.0	4.0	15,574

Table 3.9.2 Health insurance coverage: Men

Percentage of men age 15-49 with specific types of health insurance coverage, and percentage with any health insurance, according to background characteristics, Sierra Leone DHS 2019

Background characteristic	Social security	Health insurance through employer	Mutual health organisation/ community-based insurance	Privately purchased commercial insurance	Other	None	Any health insurance	Number of men
Age								
15-19	0.1	0.5	0.1	0.2	0.1	99.0	1.0	1,541
20-24	0.0	0.3	0.2	0.0	0.0	99.5	0.5	937
25-29	0.1	2.6	0.1	0.6	0.2	96.4	3.6	1,015
30-34	0.2	3.9	0.4	0.1	0.0	95.3	4.7	793
35-39	1.0	3.8	0.3	0.5	0.0	95.0	5.0	791
40-44	0.7	2.2	0.1	0.8	0.0	96.4	3.6	624
45-49	1.3	2.6	0.2	0.1	0.0	95.7	4.3	682
Residence								
Urban	0.6	3.4	0.1	0.6	0.1	95.4	4.6	2,990
Rural	0.2	0.9	0.3	0.0	0.0	98.6	1.4	3,394
Province								
Eastern	0.4	0.5	0.2	0.1	0.0	98.8	1.2	1,251
Northern	0.2	1.4	0.4	0.1	0.0	97.9	2.1	1,353
North West	0.1	1.0	0.6	0.2	0.0	98.1	1.9	982
Southern	0.4	2.0	0.0	0.0	0.0	97.8	2.2	1,192
Western Area	0.7	4.5	0.0	1.0	0.2	94.0	6.0	1,606
District								
Kailahun	0.0	1.7	0.3	0.2	0.0	97.9	2.1	307
Kenema	0.8	0.2	0.0	0.2	0.0	98.9	1.1	557
Kono	0.3	0.0	0.3	0.0	0.0	99.4	0.6	387
Bombali	0.6	2.9	0.1	0.0	0.0	96.4	3.6	472
Falaba	0.2	0.0	0.0	0.0	0.0	99.8	0.2	148
Koinadugu	0.0	0.0	0.3	0.0	0.0	99.7	0.3	196
Tonkolili	0.0	1.1	0.7	0.2	0.0	98.0	2.0	538
Kambia	0.0	1.0	1.6	0.3	0.0	97.1	2.9	345
Karene	0.4	1.2	0.4	0.0	0.0	97.9	2.1	192
Port Loko	0.0	1.0	0.0	0.1	0.0	98.9	1.1	445
Bo	0.3	1.3	0.0	0.0	0.0	98.7	1.3	525
Bonthe	0.3	3.8	0.0	0.0	0.0	95.9	4.1	199
Moyamba	0.6	1.4	0.0	0.0	0.0	98.0	2.0	290
Pujehun	0.3	3.0	0.0	0.0	0.0	96.7	3.3	178
Western Area Rural	0.0	0.7	0.0	0.3	0.2	98.8	1.2	542
Western Area Urban	1.0	6.4	0.0	1.3	0.2	91.6	8.4	1,064
Education								
No education	0.0	0.8	0.2	0.0	0.0	99.0	1.0	1,865
Primary	0.3	2.4	0.2	0.1	0.0	97.2	2.8	876
Secondary	0.5	1.6	0.2	0.5	0.0	97.4	2.6	3,120
More than secondary	1.5	8.7	0.4	0.5	0.4	88.5	11.5	523
Wealth quintile								
Lowest	0.1	0.6	0.2	0.0	0.0	99.1	0.9	1,104
Second	0.3	0.8	0.2	0.0	0.0	98.8	1.2	1,123
Middle	0.2	0.9	0.1	0.0	0.0	98.9	1.1	1,145
Fourth	0.2	1.1	0.5	0.3	0.2	97.8	2.2	1,422
Highest	1.0	5.6	0.1	1.0	0.1	92.6	7.4	1,590
Total 15-49	0.4	2.0	0.2	0.3	0.1	97.1	2.9	6,384
50-59	1.4	3.4	0.1	0.3	0.0	95.1	4.9	813
Total 15-59	0.5	2.2	0.2	0.3	0.0	96.9	3.1	7,197

Table 3.10.1 Tobacco smoking: Women

Percentage of women age 15-49 who smoke various tobacco products, according to background characteristics, Sierra Leone DHS 2019

Background characteristic	Percentage who smoke:[1]			Number of women
	Cigarettes[2]	Other type of tobacco[3]	Any type of tobacco	
Age				
15-19	0.9	0.0	0.9	3,427
20-24	0.9	0.0	0.9	2,629
25-29	2.5	0.0	2.5	2,728
30-34	5.1	0.5	5.2	1,942
35-39	5.5	0.7	5.5	2,224
40-44	7.0	1.1	7.2	1,337
45-49	5.8	0.4	5.8	1,288
Residence				
Urban	3.0	0.3	3.0	7,163
Rural	3.5	0.3	3.5	8,411
Province				
Eastern	3.5	0.1	3.6	3,069
Northern	3.7	0.3	3.7	3,317
North West	2.6	0.5	2.6	2,508
Southern	2.0	0.3	2.0	2,900
Western Area	4.2	0.3	4.2	3,780
District				
Kailahun	4.3	0.0	4.3	707
Kenema	3.2	0.1	3.2	1,437
Kono	3.4	0.3	3.5	925
Bombali	3.5	0.3	3.5	1,166
Falaba	1.7	0.0	1.7	466
Koinadugu	3.0	0.2	3.0	469
Tonkolili	4.9	0.4	4.9	1,215
Kambia	1.5	0.2	1.6	890
Karene	3.0	0.1	3.0	462
Port Loko	3.2	0.9	3.2	1,157
Bo	2.5	0.1	2.5	1,250
Bonthe	1.1	0.4	1.3	468
Moyamba	2.0	0.8	2.0	726
Pujehun	1.6	0.0	1.6	456
Western Area Rural	3.5	0.4	3.5	1,407
Western Area Urban	4.7	0.3	4.7	2,373
Education				
No education	4.6	0.5	4.6	7,081
Primary	3.2	0.3	3.2	2,103
Secondary	1.8	0.0	1.8	5,724
More than secondary	3.0	0.5	3.0	666
Wealth quintile				
Lowest	4.0	0.4	4.1	2,738
Second	3.7	0.2	3.7	2,831
Middle	2.8	0.3	2.8	2,954
Fourth	2.8	0.3	2.8	3,385
Highest	3.3	0.2	3.3	3,666
Total	3.3	0.3	3.3	15,574

[1] Includes daily and occasional (less than daily) use
[2] Cigarettes include kreteks.
[3] Includes pipes full of tobacco, cigars, cheroots, cigarillos, and water pipes

Table 3.10.2 Tobacco smoking: Men

Percentage of men age 15-49 who smoke various tobacco products, and percent distribution of men by smoking frequency, according to background characteristics, Sierra Leone DHS 2019

Background characteristic	Percentage who smoke:[1]			Smoking frequency			Total	Number of men
	Cigarettes[2]	Other type of tobacco[3]	Any type of tobacco	Daily smoker	Occasional smoker[4]	Non-smoker		
Age								
15-19	1.7	0.2	1.7	1.3	0.4	98.3	100.0	1,541
20-24	9.5	1.9	10.0	8.1	2.1	89.7	100.0	937
25-29	18.5	4.1	20.5	18.1	2.5	79.5	100.0	1,015
30-34	21.5	1.6	21.9	19.0	3.2	77.8	100.0	793
35-39	28.7	4.3	29.3	26.9	3.5	69.6	100.0	791
40-44	36.7	4.6	37.5	36.0	1.8	62.2	100.0	624
45-49	32.5	3.8	33.3	32.0	2.4	65.7	100.0	682
Residence								
Urban	12.8	3.1	13.8	11.9	2.3	85.8	100.0	2,990
Rural	22.7	2.1	23.1	21.5	1.8	76.6	100.0	3,394
Province								
Eastern	23.6	1.7	23.8	22.0	1.8	76.2	100.0	1,251
Northern	14.5	1.5	15.2	14.2	1.3	84.5	100.0	1,353
North West	24.0	3.4	24.1	23.3	1.5	75.2	100.0	982
Southern	19.6	1.3	20.0	17.7	2.3	79.9	100.0	1,192
Western Area	11.9	4.6	13.5	11.0	3.1	85.9	100.0	1,606
District								
Kailahun	31.1	2.6	31.4	30.6	1.0	68.4	100.0	307
Kenema	24.4	2.4	24.6	23.2	1.4	75.4	100.0	557
Kono	16.6	0.0	16.6	13.6	3.0	83.4	100.0	387
Bombali	10.1	2.3	10.9	10.2	0.9	88.9	100.0	472
Falaba	11.0	0.5	11.0	10.3	0.8	89.0	100.0	148
Koinadugu	15.3	0.0	15.3	15.2	0.4	84.4	100.0	196
Tonkolili	19.1	1.5	20.1	18.4	2.1	79.5	100.0	538
Kambia	21.5	0.0	21.5	20.2	1.7	78.1	100.0	345
Karene	30.4	5.9	31.1	29.1	2.0	68.9	100.0	192
Port Loko	23.2	5.1	23.2	23.3	1.1	75.7	100.0	445
Bo	18.2	0.9	18.5	15.4	3.1	81.5	100.0	525
Bonthe	22.3	0.6	22.3	22.0	0.2	77.7	100.0	199
Moyamba	17.3	3.1	18.2	15.8	2.6	81.6	100.0	290
Pujehun	24.9	0.5	24.9	23.0	2.0	75.1	100.0	178
Western Area Rural	12.2	5.6	13.2	11.7	1.5	86.8	100.0	542
Western Area Urban	11.7	4.1	13.6	10.7	3.9	85.4	100.0	1,064
Education								
No education	29.0	3.3	30.0	27.9	2.3	69.8	100.0	1,865
Primary	22.5	3.6	22.8	21.1	1.9	77.0	100.0	876
Secondary	12.0	1.9	12.5	10.6	2.2	87.1	100.0	3,120
More than secondary	7.9	2.3	8.8	9.0	0.7	90.2	100.0	523
Wealth quintile								
Lowest	27.9	2.1	28.4	27.1	1.5	71.4	100.0	1,104
Second	23.2	2.5	23.5	21.6	2.1	76.4	100.0	1,123
Middle	21.2	1.6	21.5	19.7	2.0	78.2	100.0	1,145
Fourth	14.0	3.2	14.6	12.4	2.5	85.1	100.0	1,422
Highest	8.9	3.1	10.3	8.9	2.1	89.0	100.0	1,590
Total 15-49	18.1	2.6	18.7	17.0	2.1	80.9	100.0	6,384
50-59	36.6	4.2	36.9	34.5	2.8	62.7	100.0	813
Total 15-59	20.2	2.8	20.8	19.0	2.2	78.9	100.0	7,197

[1] Includes daily and occasional (less than daily) use
[2] Includes manufactured cigarettes, hand-rolled cigarettes, and kreteks
[3] Includes pipes, cigars, cheroots, cigarillos, and water pipes
[4] Occasional refers to less often than daily use.

Table 3.11 Average number of cigarettes smoked daily: Men

Among men age 15-49 who smoke cigarettes daily, percent distribution by average number of cigarettes smoked per day, according to background characteristics, Sierra Leone DHS 2019

Background characteristic	Average number of cigarettes smoked per day[1]						Total	Number of respondents who smoke cigarettes daily[1]
	<5	5-9	10-14	15-24	≥25	Don't know/ missing		
Age								
15-19	*	*	*	*	*	*	*	19
20-24	35.6	28.3	23.9	5.4	6.8	0.0	100.0	66
25-29	20.9	43.7	23.9	7.7	3.8	0.0	100.0	161
30-34	23.5	36.8	24.6	12.0	3.1	0.0	100.0	145
35-39	14.2	41.9	25.6	13.1	5.3	0.0	100.0	193
40-44	29.3	36.4	23.5	8.9	1.8	0.0	100.0	209
45-49	26.5	36.3	26.5	8.0	2.7	0.0	100.0	199
Residence								
Urban	32.2	33.1	18.9	8.6	7.3	0.0	100.0	299
Rural	21.0	39.9	27.3	9.9	1.8	0.0	100.0	693
Province								
Eastern	28.1	42.9	18.7	9.5	0.7	0.0	100.0	270
Northern	19.4	42.1	34.4	3.6	0.6	0.0	100.0	178
North West	18.7	40.0	32.4	7.5	1.4	0.0	100.0	211
Southern	23.1	30.8	24.6	17.1	4.5	0.0	100.0	208
Western Area	35.2	28.9	11.5	8.9	15.4	0.0	100.0	125
District								
Kailahun	36.7	48.1	10.0	5.2	0.0	0.0	100.0	89
Kenema	25.0	42.2	21.8	11.0	0.0	0.0	100.0	128
Kono	21.4	35.8	26.0	13.3	3.5	0.0	100.0	52
Bombali	(42.2)	(34.2)	(19.0)	(4.6)	(0.0)	(0.0)	100.0	42
Falaba	(18.1)	(23.3)	(47.4)	(4.6)	(6.6)	(0.0)	100.0	15
Koinadugu	26.0	28.8	41.2	4.0	0.0	0.0	100.0	29
Tonkolili	7.1	52.9	37.2	2.8	0.0	0.0	100.0	92
Kambia	14.4	43.1	35.8	3.9	2.8	0.0	100.0	68
Karene	31.6	31.8	35.4	1.3	0.0	0.0	100.0	47
Port Loko	15.4	41.9	28.6	13.0	1.1	0.0	100.0	96
Bo	27.3	41.6	26.5	3.1	1.6	0.0	100.0	80
Bonthe	21.5	20.0	12.9	42.6	3.0	0.0	100.0	44
Moyamba	12.4	22.8	28.7	22.0	14.1	0.0	100.0	43
Pujehun	27.9	29.5	28.9	12.0	1.7	0.0	100.0	41
Western Area Rural	(36.5)	(8.4)	(18.5)	(14.4)	(22.2)	(0.0)	100.0	39
Western Area Urban	(34.6)	(38.4)	(8.3)	(6.4)	(12.3)	(0.0)	100.0	85
Education								
No education	21.2	38.0	26.3	11.6	2.9	0.0	100.0	483
Primary	20.3	34.7	28.3	9.1	7.5	0.0	100.0	174
Secondary	28.7	40.5	21.8	6.6	2.3	0.0	100.0	299
More than secondary	(49.7)	(29.2)	(12.7)	(8.3)	(0.0)	(0.0)	(100.0)	36
Wealth quintile								
Lowest	22.9	37.0	25.9	12.7	1.6	0.0	100.0	288
Second	18.7	46.0	26.7	7.5	1.1	0.0	100.0	228
Middle	19.7	40.3	29.6	7.4	2.9	0.0	100.0	213
Fourth	33.8	29.4	20.0	10.6	6.2	0.0	100.0	156
Highest	36.3	30.2	14.9	7.9	10.8	0.0	100.0	105
Total 15-49	24.4	37.8	24.8	9.5	3.5	0.0	100.0	991
50-59	23.8	38.1	23.0	12.1	3.0	0.0	100.0	269
Total 15-59	24.3	37.9	24.4	10.1	3.4	0.0	100.0	1,261

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

[1] Includes manufactured cigarettes, hand-rolled cigarettes, and kreteks

Table 3.12 Smokeless tobacco use and any tobacco use

Percentage of women and men age 15-49 who currently use smokeless tobacco, according to type of tobacco product, and percentage who use any type of tobacco, Sierra Leone DHS 2019

Tobacco product	Women	Men
Snuff, by mouth	0.9	0.5
Snuff, by nose	0.2	0.1
Chewing tobacco	0.1	0.1
Betel quid with tobacco	0.0	0.0
Other type of smokeless tobacco	0.0	0.1
Any type of smokeless tobacco[1]	1.1	0.6
Any type of tobacco[2]	4.6	19.3
Number	15,574	6,384

Note: Table includes women and men who use smokeless tobacco daily or occasionally (less than daily).
[1] Includes snuff by mouth, snuff by nose, chewing tobacco, and betel quid with tobacco
[2] Includes all types of smokeless tobacco shown in this table along with cigarettes, kreteks, pipes, cigars, cheroots, cigarillos, and water pipes

MARRIAGE AND SEXUAL ACTIVITY 4

Key Findings

- ***Marital status:*** 62% of women and 51% of men are currently in a union.
- ***Polygyny:*** 30% of women and 14% of men are in a polygamous union.
- ***Age at first marriage:*** The median age at first marriage among women age 20-49 increased from 17.2 years in 2008 to 19.8 years in 2019.
- ***Age at first sexual intercourse:*** The median age at first sexual intercourse is 16.1 years among women and 18.3 years among men age 20-49.
- ***Recent sexual activity:*** 10% of women and 17% of men have never had sexual intercourse.

Marriage and sexual activity help determine the extent to which women are exposed to the risk of pregnancy. Thus, they are important determinants of fertility levels. However, the timing and circumstances of marriage and sexual activity also have profound consequences for women's and men's lives.

4.1 MARITAL STATUS

Currently married

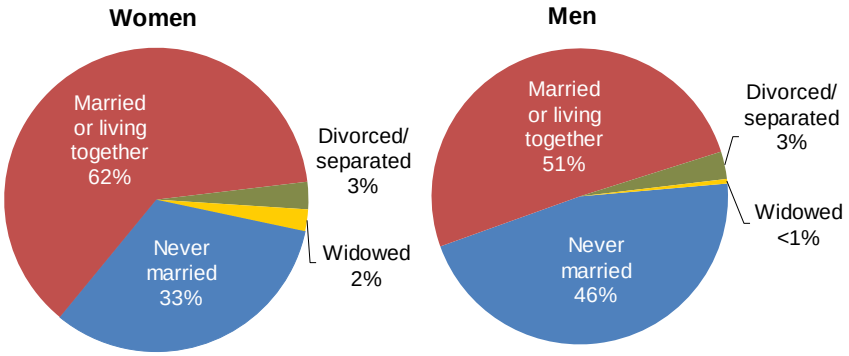
Women and men who report being married or living together with a partner as though married at the time of the survey.

Sample: Women and men age 15-49

In Sierra Leone, 62% of women and 51% of men are currently in a union (**Table 4.1** and **Figure 4.1**). Marriage is nearly universal in Sierra Leone; by age 40-44, only 4% of men and women have never been married.

Figure 4.1 **Marital status**

Percent distribution of women and men age 15-49



Trends: The percentage of women currently in a union declined from 75% in 2008 to 66% in 2013 and 62% in 2019. Among men, the percentage declined from 60% in 2008 to 53% in 2013 and 51% in 2019.

Patterns by background characteristics

- Women are less likely than men to have never been married (33% versus 46%) for men (**Table 4.1**).
- Women generally marry earlier than men; over half of women (52%) age 20-24 are currently married, as compared with 18% of men in the same age group (**Table 4.1**).

4.2 POLYGYNY

Polygyny
Women who report that their husband or partner has other wives are considered to be in a polygynous marriage.
Sample: Currently married women age 15-49

Polygamy is common in Sierra Leone, with 30% of currently married women reporting that their husbands have other wives (**Table 4.2.1**). Fourteen percent of currently married men report having more than one wife (**Table 4.2.2**).

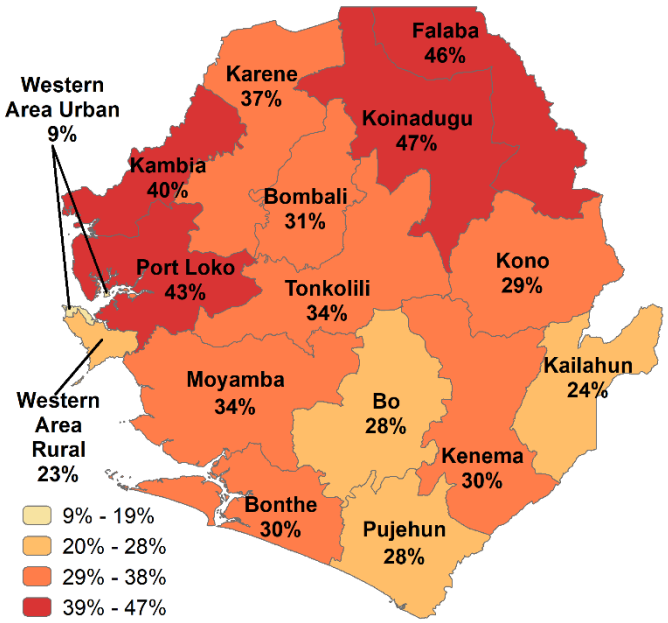
Trends: The percentage of women with one or more co-wives has decreased gradually over time, from 37% in 2008 and 35% in 2013 to 30% in 2019.

Patterns by background characteristics

- Polygamy is more prevalent in rural than urban areas; 36% of rural women have one or more co-wives, as compared with 20% of urban women. Similarly, 19% of rural men report having more than one wife, compared with 7% of urban men (**Table 4.2.1** and **Table 4.2.2**).
- Older men and women are more likely to be in a polygamous marriage than their younger counterparts. The percentage of women with co-wives increases from 17% among those age 15-19 to 44% among those age 45-49 (**Table 4.2.1**). Similarly, the percentage of men with more than one wife increases from 2% among those age 20-24 to 23% among those age 45-49 (**Table 4.2.2**).
- The percentage of women with co-wives ranges from 14% in the Western Area province to 41% in the North West province (**Table 4.2.1**).

Figure 4.2 **Polygyny by district**

Percentage of currently married women age 15-49 in a polygynous union



- At the district level, the percentage of women with co-wives is lowest in Western Area Urban (9%) and highest in Koinadugu (47%) (**Table 4.2.1** and **Figure 4.2**).
- The percentage of men and women in polygamous marriages decreases with increasing education. Nine percent of women with more than a secondary education have co-wives, as compared with 36%

of women with no education. Similarly, 7% of men with more than a secondary education have more than one wife, compared with 19% of men with no education (**Table 4.2.1** and **Table 4.2.2**).

4.3 AGE AT FIRST MARRIAGE

Median age at first marriage

Age by which half of respondents have been married.

Sample: Women age 20-49 and 25-49 and men age 20-49, 25-49, 20-59, and 25-59

In Sierra Leone, the median age at first marriage among women age 20-49 is 19.8 years. Women generally marry earlier than men. About 76% of women age 25-49 were married by age 25, as compared with 47% of men. Similarly, 51% of women age 20-49 were married by age 20, compared with 16% of men (**Table 4.3**).

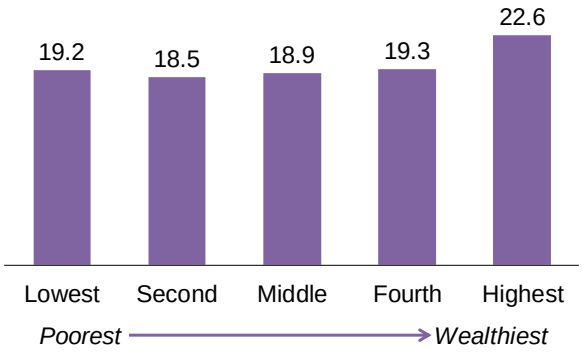
Trends: The median age at first marriage among women age 20-49 has increased over time, from 17.2 years in 2008 and 18.2 years in 2013 to 19.8 years in 2019.

Patterns by background characteristics

- Rural women are more likely to marry early than urban women; the median age at first marriage among rural women age 25-49 is 18.9 years, as compared with 20.6 years among urban women (**Table 4.4**).
- The median age at first marriage ranges from 18.5 years among women in the Eastern province to 21.6 years among women in the Western Area province.
- The median age at first marriage increases with increasing education, from 18.7 years among women with no education to 21.9 years among women with a secondary education.
- The median age at first marriage is 22.6 years among women in the highest wealth quintile, as compared with 19.2 years among women in the lowest quintile (**Table 4.4** and **Figure 4.3**).

Figure 4.3 **Women's median age at marriage by wealth**

Median age at first marriage among women age 25-49



4.4 AGE AT FIRST SEXUAL INTERCOURSE

Median age at first sexual intercourse

Age by which half of respondents have had sexual intercourse.

Sample: Women age 20-49 and 25-49 and men age 20-49, 25-49, 20-59, and 25-59

In Sierra Leone, women start sexual intercourse earlier than men. The median age at first sexual intercourse is 16.1 years among women and 18.3 years among men age 20-49. By age 15, over a quarter (26%) of women had already started sexual intercourse, as compared with 7% of men (**Table 4.5**).

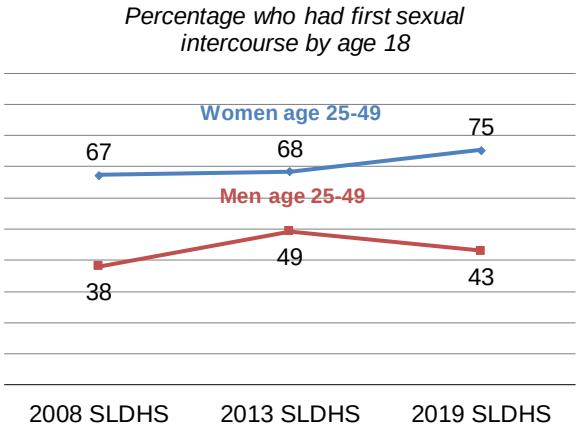
Trends: The percentage of women age 20-49 who have had sexual intercourse by age 18 increased from 67% in 2008 and 68% in 2013 to 74% in 2019. Among men, the percentage initiating sexual intercourse by age 18 increased from 39% in 2008 to 50% in 2013 before decreasing to 44% in 2019.

The percentage of women age 25-49 who have had sexual intercourse by age 18 increased from 67% in 2008 and 68% in 2013 to 75% in 2019. Among men, the percentage initiating sexual intercourse by age 18 increased from 38% in 2008 to 49% in 2013 before declining to 43% in 2019 (**Figure 4.4**).

Patterns by background characteristics

- The median age at first sexual intercourse among women age 25-49 increases with increasing education, from 15.8 years among those with no education to 17.8 years among those with more than a secondary education (**Table 4.6**).
- Rural women start sexual intercourse earlier than urban women; the median age at first sexual intercourse is 15.8 years among rural women and 16.3 years among urban women.
- The median age at first sexual intercourse ranges from 15.7 years among women in the North West and Eastern provinces to 16.6 years among women in the Western Area province.

Figure 4.4 **Trends in early sexual intercourse**



4.5 Recent Sexual Activity

More than half of women (52%) and men (55%) age 15-49 had sexual intercourse within the 4 weeks prior to the survey. Ten percent of women and 17% of men have never had sexual intercourse. Rural women and men (55% and 56%, respectively) were more likely than urban women and men (48% and 54%, respectively) to report having sexual intercourse in the 4 weeks prior to the survey (**Table 4.7.1** and **Table 4.7.2**).

List of Tables

For more information on marriage and sexual activity, see the following tables:

- **Table 4.1 Current marital status**
- **Table 4.2.1 Number of women's co-wives**
- **Table 4.2.2 Number of men's wives**
- **Table 4.3 Age at first marriage**
- **Table 4.4 Median age at first marriage by background characteristics**
- **Table 4.5 Age at first sexual intercourse**
- **Table 4.6 Median age at first sexual intercourse according to background characteristics**
- **Table 4.7.1 Recent sexual activity: Women**
- **Table 4.7.2 Recent sexual activity: Men**

Table 4.1 Current marital status

Percent distribution of women and men age 15-49 by current marital status, according to age, Sierra Leone DHS 2019

Age	Marital status						Total	Percentage of respondents currently in union	Number of respondents
	Never married	Married	Living together	Divorced	Separated	Widowed			
					WOMEN				
15-19	85.5	11.4	2.5	0.0	0.5	0.1	100.0	13.9	3,427
20-24	45.6	46.1	5.8	0.2	1.7	0.6	100.0	51.9	2,629
25-29	18.7	71.1	5.8	0.6	3.2	0.6	100.0	76.9	2,728
30-34	10.0	80.4	3.9	0.6	3.1	2.1	100.0	84.3	1,942
35-39	5.2	84.4	3.7	0.7	2.8	3.1	100.0	88.1	2,224
40-44	4.4	82.1	2.3	0.9	3.5	6.7	100.0	84.5	1,337
45-49	4.0	80.1	1.4	1.3	3.9	9.3	100.0	81.5	1,288
Total 15-49	32.5	58.5	3.9	0.5	2.4	2.3	100.0	62.4	15,574
					MEN				
15-19	99.1	0.4	0.4	0.0	0.1	0.0	100.0	0.8	1,541
20-24	80.8	13.8	3.9	0.1	1.3	0.2	100.0	17.7	937
25-29	41.8	44.0	9.2	0.2	4.7	0.1	100.0	53.2	1,015
30-34	14.8	73.5	6.5	0.2	4.0	0.9	100.0	80.1	793
35-39	7.5	84.2	4.2	1.2	2.5	0.5	100.0	88.4	791
40-44	4.3	86.9	3.8	0.6	3.7	0.7	100.0	90.7	624
45-49	2.4	87.3	2.9	1.3	3.9	2.2	100.0	90.2	682
Total 15-49	45.9	46.5	4.1	0.4	2.6	0.5	100.0	50.7	6,384
50-59	1.3	92.8	0.4	0.9	3.1	1.5	100.0	93.2	813
Total 15-59	40.8	51.7	3.7	0.5	2.6	0.6	100.0	55.5	7,197

Table 4.2.1 Number of women's co-wives

Percent distribution of currently married women age 15-49 by number of co-wives, and percentage of currently married women with one or more co-wives, according to background characteristics, Sierra Leone DHS 2019

Background characteristic	Number of co-wives				Total	Percentage with one or more co-wives[1]	Number of women
	0	1	2+	Don't know			
Age							
15-19	83.4	14.4	2.2	0.0	100.0	16.6	477
20-24	82.0	15.5	2.4	0.1	100.0	17.9	1,365
25-29	76.8	20.8	2.3	0.1	100.0	23.1	2,097
30-34	69.2	26.4	4.1	0.3	100.0	30.6	1,637
35-39	63.4	28.6	8.1	0.0	100.0	36.6	1,960
40-44	61.4	28.9	9.5	0.3	100.0	38.3	1,129
45-49	55.9	31.9	12.3	0.0	100.0	44.1	1,050
Residence							
Urban	79.8	16.7	3.3	0.2	100.0	20.0	3,579
Rural	64.0	28.9	7.0	0.1	100.0	35.9	6,136
Province							
Eastern	71.4	22.7	5.8	0.2	100.0	28.4	2,007
Northern	63.2	29.4	7.2	0.1	100.0	36.7	2,173
North West	59.4	32.2	8.4	0.0	100.0	40.6	1,760
Southern	69.8	25.3	4.9	0.1	100.0	30.1	1,895
Western Area	85.5	12.2	2.1	0.2	100.0	14.2	1,880
District							
Kailahun	76.4	18.1	5.4	0.0	100.0	23.6	478
Kenema	69.4	24.8	5.6	0.2	100.0	30.4	932
Kono	70.5	23.0	6.2	0.2	100.0	29.3	597
Bombali	68.7	26.6	4.8	0.0	100.0	31.3	728
Falaba	53.7	35.4	10.6	0.3	100.0	46.0	291
Koinadugu	52.8	35.8	11.2	0.2	100.0	47.0	318
Tonkolili	65.7	27.5	6.7	0.1	100.0	34.2	836
Kambia	59.9	31.6	8.4	0.1	100.0	40.0	626
Karene	63.1	29.3	7.7	0.0	100.0	36.9	335
Port Loko	57.5	33.9	8.7	0.0	100.0	42.5	799
Bo	71.7	23.5	4.9	0.0	100.0	28.3	724
Bonthe	70.2	26.1	3.7	0.0	100.0	29.8	337
Moyamba	65.8	29.6	4.6	0.0	100.0	34.2	503
Pujehun	71.3	21.7	6.6	0.4	100.0	28.3	331
Western Area Rural	76.9	18.1	4.7	0.3	100.0	22.8	745
Western Area Urban	91.2	8.3	0.3	0.2	100.0	8.6	1,135
Education							
No education	63.6	29.1	7.2	0.1	100.0	36.3	5,957
Primary	71.1	23.6	5.1	0.2	100.0	28.7	1,298
Secondary	83.1	14.3	2.5	0.2	100.0	16.8	2,121
More than secondary	90.7	8.0	0.9	0.3	100.0	9.0	340
Wealth quintile							
Lowest	68.5	26.9	4.5	0.1	100.0	31.4	2,080
Second	62.6	30.4	6.9	0.0	100.0	37.3	2,135
Middle	62.1	29.2	8.6	0.1	100.0	37.8	1,979
Fourth	71.8	22.3	5.6	0.3	100.0	27.9	1,770
Highest	86.8	10.7	2.3	0.2	100.0	13.0	1,751
Total	69.8	24.4	5.7	0.1	100.0	30.1	9,715

[1] Excludes women who responded "don't know" when asked if their husband has other wives

Table 4.2.2 Number of men's wives

Percent distribution of currently married men age 15-49 by number of wives, according to background characteristics, Sierra Leone DHS 2019

Background characteristic	Number of wives		Total	Number of men
	1	2+		
Age				
15-19	*	*	100.0	13
20-24	98.0	2.0	100.0	166
25-29	93.4	6.6	100.0	540
30-34	91.2	8.8	100.0	635
35-39	82.4	17.6	100.0	698
40-44	81.4	18.6	100.0	566
45-49	77.3	22.7	100.0	615
Residence				
Urban	92.6	7.4	100.0	1,271
Rural	81.2	18.8	100.0	1,963
Province				
Eastern	86.8	13.2	100.0	683
Northern	82.7	17.3	100.0	661
North West	76.4	23.6	100.0	520
Southern	83.9	16.1	100.0	653
Western Area	95.8	4.2	100.0	717
District				
Kailahun	91.7	8.3	100.0	164
Kenema	84.2	15.8	100.0	299
Kono	86.5	13.5	100.0	221
Bombali	84.4	15.6	100.0	240
Falaba	70.6	29.4	100.0	68
Koinadugu	85.9	14.1	100.0	106
Tonkolili	82.9	17.1	100.0	247
Kambia	77.0	23.0	100.0	172
Karene	82.9	17.1	100.0	111
Port Loko	73.0	27.0	100.0	238
Bo	81.0	19.0	100.0	241
Bonthe	84.6	15.4	100.0	124
Moyamba	84.4	15.6	100.0	175
Pujehun	88.6	11.4	100.0	114
Western Area Rural	97.8	2.2	100.0	231
Western Area Urban	94.8	5.2	100.0	485
Education				
No education	80.9	19.1	100.0	1,366
Primary	83.9	16.1	100.0	408
Secondary	89.8	10.2	100.0	1,123
More than secondary	93.3	6.7	100.0	337
Wealth quintile				
Lowest	84.6	15.4	100.0	722
Second	78.4	21.6	100.0	657
Middle	81.9	18.1	100.0	597
Fourth	90.8	9.2	100.0	585
Highest	92.9	7.1	100.0	674
Total 15-49	85.7	14.3	100.0	3,234
50-59	75.9	24.1	100.0	757
Total 15-59	83.8	16.2	100.0	3,991

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

Table 4.3 Age at first marriage

Percentage of women and men age 15-49 who were first married by specific exact ages and median age at first marriage, according to current age, Sierra Leone DHS 2019

Current age	Percentage first married by exact age: 15	18	20	22	25	Percentage never married	Number of respondents	Median age at first marriage
				WOMEN				
15-19	3.4	na	na	na	na	85.5	3,427	a
20-24	8.6	29.6	43.8	na	na	45.6	2,629	a
25-29	11.5	34.9	51.5	64.0	76.9	18.7	2,728	19.8
30-34	14.5	40.4	53.3	63.6	75.8	10.0	1,942	19.4
35-39	10.8	39.6	55.4	66.2	76.4	5.2	2,224	19.3
40-44	15.1	41.3	54.9	66.7	77.4	4.4	1,337	19.0
45-49	11.8	37.6	52.8	63.4	73.3	4.0	1,288	19.6
20-49	11.7	36.5	51.3	na	na	17.5	12,147	19.8
25-49	12.5	38.4	53.4	64.7	76.1	9.8	9,519	19.5
				MEN				
15-19	0.0	na	na	na	na	99.1	1,541	a
20-24	0.0	4.1	10.3	na	na	80.8	937	a
25-29	0.0	8.8	17.1	26.6	45.6	41.8	1,015	a
30-34	0.0	9.5	18.8	28.7	48.0	14.8	793	25.3
35-39	0.0	8.8	17.1	32.2	47.5	7.5	791	25.4
40-44	0.0	9.2	17.1	29.1	49.6	4.3	624	25.1
45-49	0.0	9.1	17.4	28.4	42.9	2.4	682	26.0
20-49	0.0	8.1	16.1	na	na	28.9	4,843	a
25-49	0.0	9.0	17.5	28.9	46.6	16.5	3,906	a
20-59	0.0	7.8	15.7	na	na	25.0	5,656	a
25-59	0.0	8.5	16.8	27.9	45.7	13.9	4,718	a

Note: The age at first marriage is defined as the age at which the respondent began living with her/his first spouse/partner.
na = Not applicable due to censoring
a = Omitted because less than 50% of the women or men began living with their spouse or partner for the first time before reaching the beginning of the age group

Table 4.4 Median age at first marriage by background characteristics

Median age at first marriage among women age 20-49 and age 25-49, and median age at first marriage among men age 25-59, according to background characteristics, Sierra Leone DHS 2019

Background characteristic	Women age		Men age
	20-49	25-49	25-59
Residence			
Urban	a	20.6	a
Rural	18.9	18.9	24.4
Province			
Eastern	18.8	18.5	24.3
Northern	19.3	19.2	a
North West	19.2	19.2	24.6
Southern	19.7	19.5	24.6
Western Area	a	21.6	a
District			
Kailahun	18.5	18.5	24.3
Kenema	18.5	18.0	24.4
Kono	19.4	18.9	24.1
Bombali	19.8	19.5	a
Falaba	18.9	18.7	23.5
Koinadugu	18.9	18.9	a
Tonkolili	19.4	19.2	a
Kambia	18.7	18.4	a
Karene	19.0	19.3	24.9
Port Loko	19.7	19.8	24.1
Bo	18.9	18.6	24.7
Bonthe	a	20.2	a
Moyamba	a	20.1	23.2
Pujehun	a	20.7	a
Western Area Rural	a	19.3	a
Western Area Urban	a	23.5	a
Education			
No education	18.6	18.7	25.0
Primary	18.5	18.7	24.8
Secondary	a	21.9	a
More than Secondary	a	a	a
Wealth quintile			
Lowest	19.0	19.2	24.5
Second	18.5	18.5	24.0
Middle	19.0	18.9	24.7
Fourth	a	19.3	a
Highest	a	22.6	a
Total	19.8	19.5	a

Note: The age at first marriage is defined as the age at which the respondent began living with her/his first spouse/partner.
a = Omitted because less than 50% of the respondents began living with their spouse or partner for the first time before reaching the beginning of the age group

Table 4.5 Age at first sexual intercourse

Percentage of women and men age 15-49 who had first sexual intercourse by specific exact ages, percentage who never had sexual intercourse, and median age at first sexual intercourse, according to current age, Sierra Leone DHS 2019

	Percentage who had first sexual intercourse by exact age:					Percentage who never had		Median age at first
Current age	15	18	20	22	25	intercourse	Number	intercourse
				WOMEN				
15-19	16.8	na	na	na	na	43.7	3,427	a
20-24	22.2	70.4	91.2	na	na	3.5	2,629	16.5
25-29	25.9	73.8	92.2	96.8	97.9	0.3	2,728	16.1
30-34	28.9	76.4	92.7	96.5	97.8	0.0	1,942	15.9
35-39	25.5	76.7	92.1	97.3	98.1	0.0	2,224	16.0
40-44	28.3	74.6	90.2	95.6	97.3	0.1	1,337	16.0
45-49	26.6	75.6	90.5	95.8	97.5	0.0	1,288	16.0
20-49	25.8	74.3	91.6	na	na	0.8	12,147	16.1
25-49	26.8	75.4	91.8	96.6	97.8	0.1	9,519	16.0
15-24	19.2	na	na	na	na	26.3	6,055	a
				MEN				
15-19	6.5	na	na	na	na	62.8	1,541	a
20-24	8.3	48.8	79.1	na	na	9.7	937	18.1
25-29	8.7	50.1	79.7	93.7	97.2	1.2	1,015	18.0
30-34	6.9	43.3	73.2	91.8	95.3	0.3	793	18.4
35-39	7.4	42.4	72.2	89.6	94.0	0.2	791	18.5
40-44	6.1	39.5	66.7	86.1	92.4	0.0	624	18.7
45-49	5.4	36.3	65.7	87.0	92.8	0.3	682	18.8
20-49	7.3	44.2	73.6	na	na	2.3	4,843	18.3
25-49	7.1	43.1	72.3	90.1	94.6	0.5	3,906	18.4
15-24	7.2	na	na	na	na	42.7	2,479	a
20-59	6.8	41.6	71.1	na	na	2.0	5,656	18.5
25-59	6.5	40.2	69.5	89.2	94.0	0.4	4,718	18.6

na = Not applicable due to censoring
a = Omitted because less than 50% of the respondents had sexual intercourse for the first time before reaching the beginning of the age group

Table 4.6 Median age at first sexual intercourse according to background characteristics

Median age at first sexual intercourse among women age 20-49 and age 25-49, and median age at first sexual intercourse among men age 20-59 and age 25-59, according to background characteristics, Sierra Leone DHS 2019

	Women age		Men age	
Background characteristic	20-49	25-49	20-59	25-59
Residence				
Urban	16.5	16.3	18.6	18.7
Rural	15.8	15.8	18.4	18.5
Province				
Eastern	15.7	15.7	18.7	18.8
Northern	16.0	16.0	18.6	18.8
North West	15.7	15.7	17.6	17.7
Southern	16.4	16.4	18.4	18.5
Western Area	17.0	16.6	18.7	18.8
District				
Kailahun	15.4	15.4	18.9	19.0
Kenema	15.8	15.7	18.5	18.5
Kono	16.1	15.9	19.4	19.7
Bombali	16.3	16.3	19.2	19.2
Falaba	17.5	17.3	19.6	19.8
Koinadugu	16.1	16.0	18.6	18.7
Tonkolili	15.5	15.5	18.1	18.2
Kambia	15.8	15.8	18.1	18.1
Karene	15.3	15.3	17.1	17.4
Port Loko	15.8	15.8	17.4	17.5
Bo	16.2	16.1	18.0	18.2
Bonthe	16.8	16.9	19.3	19.5
Moyamba	16.9	17.1	17.9	17.8
Pujehun	15.8	15.8	18.5	18.6
Western Area Rural	16.6	16.3	18.6	18.7
Western Area Urban	17.3	16.9	18.8	18.8
Education				
No education	15.8	15.8	18.6	18.7
Primary	15.9	16.0	18.3	18.3
Secondary	16.8	16.7	18.4	18.5
More than secondary	18.1	17.8	18.7	18.8
Wealth quintile				
Lowest	15.8	15.9	18.4	18.5
Second	15.7	15.8	18.3	18.4
Middle	15.9	15.9	18.3	18.4
Fourth	16.2	16.0	18.6	18.8
Highest	17.1	16.9	18.6	18.7
Total	16.1	16.0	18.5	18.6

Table 4.7.1 Recent sexual activity: Women

Percent distribution of women age 15-49 by timing of last sexual intercourse, according to background characteristics, Sierra Leone DHS 2019

Background characteristic	Timing of last sexual intercourse: Within the past 4 weeks	Within 1 year[1]	One or more years	Never had sexual intercourse	Total	Number of women
Age						
15-19	28.9	21.2	6.2	43.7	100.0	3,427
20-24	51.0	31.5	14.0	3.5	100.0	2,629
25-29	59.8	27.4	12.5	0.3	100.0	2,728
30-34	60.2	25.7	14.0	0.0	100.0	1,942
35-39	62.7	22.9	14.4	0.0	100.0	2,224
40-44	62.7	20.3	16.9	0.1	100.0	1,337
45-49	58.7	23.6	17.7	0.0	100.0	1,288
Marital status						
Never married	34.8	25.1	8.5	31.6	100.0	5,058
Married or living together	63.2	24.2	12.5	0.0	100.0	9,715
Divorced/separated/widowed	27.1	32.8	40.1	0.0	100.0	801
Marital duration[2]						
0-4 years	55.7	30.3	13.9	0.1	100.0	1,701
5-9 years	61.6	24.1	14.2	0.0	100.0	1,809
10-14 years	63.8	23.7	12.5	0.0	100.0	1,449
15-19 years	67.7	20.2	12.1	0.0	100.0	1,278
20-24 years	70.1	19.6	10.4	0.0	100.0	862
25+ years	65.3	24.4	10.3	0.0	100.0	759
Married more than once	64.0	24.1	11.8	0.0	100.0	1,856
Residence						
Urban	48.4	26.3	11.3	14.0	100.0	7,163
Rural	55.3	23.8	13.8	7.1	100.0	8,411
Province						
Eastern	51.7	24.7	14.4	9.2	100.0	3,069
Northern	56.8	21.2	12.1	9.9	100.0	3,317
North West	50.8	27.8	14.0	7.3	100.0	2,508
Southern	54.2	23.7	12.7	9.3	100.0	2,900
Western Area	47.7	27.4	10.7	14.1	100.0	3,780
District						
Kailahun	58.2	25.4	11.4	5.0	100.0	707
Kenema	49.4	24.5	16.9	9.2	100.0	1,437
Kono	50.2	24.6	12.8	12.4	100.0	925
Bombali	56.5	21.0	13.0	9.4	100.0	1,166
Falaba	52.0	19.7	9.3	19.0	100.0	466
Koinadugu	45.2	24.7	18.9	11.2	100.0	469
Tonkolili	63.3	20.7	9.6	6.4	100.0	1,215
Kambia	54.2	24.6	13.6	7.6	100.0	890
Karene	49.4	27.3	16.9	6.4	100.0	462
Port Loko	48.8	30.5	13.2	7.5	100.0	1,157
Bo	55.9	24.0	8.7	11.4	100.0	1,250
Bonthe	57.2	25.3	7.9	9.6	100.0	468
Moyamba	54.3	21.3	18.1	6.3	100.0	726
Pujehun	46.1	25.3	20.3	8.2	100.0	456
Western Area Rural	44.8	32.7	10.4	12.1	100.0	1,407
Western Area Urban	49.5	24.3	10.9	15.3	100.0	2,373
Education						
No education	58.9	23.4	15.4	2.2	100.0	7,081
Primary	49.0	21.9	13.3	15.8	100.0	2,103
Secondary	44.1	27.8	9.2	19.0	100.0	5,724
More than secondary	59.1	26.7	10.9	3.4	100.0	666
Wealth quintile						
Lowest	55.1	23.6	15.9	5.4	100.0	2,738
Second	57.5	23.2	12.8	6.5	100.0	2,831
Middle	53.5	24.6	13.1	8.8	100.0	2,954
Fourth	48.0	26.7	12.4	12.9	100.0	3,385
Highest	48.4	26.0	10.0	15.5	100.0	3,666
Total	52.1	25.0	12.6	10.3	100.0	15,574

[1] Excludes women who had sexual intercourse within the last 4 weeks
[2] Excludes women who are not currently married

Table 4.7.2 Recent sexual activity: Men

Percent distribution of men age 15-49 by timing of last sexual intercourse, according to background characteristics, Sierra Leone DHS 2019

Background characteristic	Timing of last sexual intercourse: Within the past 4 weeks	Within 1 year[1]	One or more years	Never had sexual intercourse	Total	Number of men
Age						
15-19	14.5	18.3	4.4	62.8	100.0	1,541
20-24	48.6	33.5	8.2	9.7	100.0	937
25-29	66.7	28.0	4.1	1.2	100.0	1,015
30-34	72.9	23.1	3.7	0.3	100.0	793
35-39	76.3	20.2	3.3	0.2	100.0	791
40-44	72.1	23.7	4.2	0.0	100.0	624
45-49	76.5	17.6	5.5	0.3	100.0	682
Marital status						
Never married	31.8	25.9	5.5	36.8	100.0	2,928
Married or living together	76.0	20.5	3.5	0.0	100.0	3,234
Divorced/separated/widowed	55.1	31.9	13.0	0.0	100.0	222
Marital duration[2]						
0-4 years	74.4	21.3	4.3	0.0	100.0	674
5-9 years	75.3	22.0	2.6	0.0	100.0	638
10-14 years	75.5	20.9	3.6	0.0	100.0	455
15-19 years	77.3	19.4	3.3	0.0	100.0	426
20-24 years	78.5	19.0	2.5	0.0	100.0	199
25+ years	80.1	16.7	3.2	0.0	100.0	131
Married more than once	76.1	19.7	4.2	0.0	100.0	711
Residence						
Urban	54.1	25.1	3.9	16.9	100.0	2,990
Rural	55.7	21.9	5.6	16.8	100.0	3,394
Province						
Eastern	53.4	26.1	5.5	15.0	100.0	1,251
Northern	50.5	23.6	6.0	19.9	100.0	1,353
North West	54.5	22.5	6.2	16.7	100.0	982
Southern	60.1	20.9	3.1	15.9	100.0	1,192
Western Area	56.4	23.4	3.5	16.6	100.0	1,606
District						
Kailahun	53.2	24.9	3.9	17.9	100.0	307
Kenema	56.3	25.2	2.8	15.7	100.0	557
Kono	49.3	28.3	10.6	11.8	100.0	387
Bombali	53.2	21.7	4.4	20.7	100.0	472
Falaba	54.3	15.9	2.4	27.4	100.0	148
Koinadugu	54.9	22.2	4.2	18.7	100.0	196
Tonkolili	45.6	27.9	9.1	17.4	100.0	538
Kambia	46.7	24.2	8.1	21.0	100.0	345
Karene	62.5	17.2	8.1	12.2	100.0	192
Port Loko	57.1	23.5	4.0	15.4	100.0	445
Bo	57.8	20.9	2.6	18.8	100.0	525
Bonthe	68.5	19.8	1.1	10.6	100.0	199
Moyamba	57.2	22.8	5.0	15.0	100.0	290
Pujehun	62.6	19.0	4.0	14.4	100.0	178
Western Area Rural	47.8	29.2	3.6	19.5	100.0	542
Western Area Urban	60.8	20.5	3.5	15.2	100.0	1,064
Education						
No education	66.1	22.0	4.2	7.6	100.0	1,865
Primary	49.4	18.4	5.2	27.0	100.0	876
Secondary	46.9	25.6	5.3	22.3	100.0	3,120
More than secondary	73.1	23.3	3.1	0.5	100.0	523
Wealth quintile						
Lowest	56.7	23.1	5.5	14.8	100.0	1,104
Second	56.5	21.1	5.5	16.8	100.0	1,123
Middle	55.6	20.0	5.5	18.9	100.0	1,145
Fourth	50.3	27.2	5.3	17.2	100.0	1,422
Highest	56.4	24.2	2.7	16.6	100.0	1,590
Total 15-49	55.0	23.4	4.8	16.9	100.0	6,384
50-59	69.9	23.7	6.3	0.1	100.0	813
Total 15-59	56.7	23.4	5.0	15.0	100.0	7,197

[1] Excludes men who had sexual intercourse within the last 4 weeks
[2] Excludes men who are not currently married

FERTILITY 5

Key Findings

- ***Total fertility rate:*** The total fertility rate for the 3 years preceding the survey is 4.2 children per woman, a decline from the rate reported in 2013 (4.9 children per woman).
- ***Patterns of fertility:*** Total fertility rates are lower in urban areas than in rural areas (3.1 and 5.1, respectively). Fertility decreases with increasing educational attainment and household wealth.
- ***Birth intervals:*** The median interval between births is slightly above 3 years (39.5 months).
- ***Age at first birth:*** The median age at first birth among women age 25-49 is 19.5 years.
- ***Teenage pregnancy:*** 21% of women age 15-19 have started childbearing (i.e., they have already had a birth or are pregnant with their first child).

The number of children that a woman bears depends on many factors, including the age she begins childbearing, how long she waits between births, and her fecundity. Postponing first births and extending the interval between births have played a role in reducing fertility levels in many countries. These factors also have positive health consequences. In contrast, short birth intervals (of less than 24 months) can lead to harmful outcomes for both newborns and their mothers, such as preterm birth, low birth weight, and death. Childbearing at a very young age is associated with an increased risk of complications during pregnancy and childbirth and higher rates of neonatal mortality.

This chapter describes the current level of fertility in Sierra Leone and some of its proximate determinants. It presents information on the total fertility rate, birth intervals, insusceptibility to pregnancy (due to postpartum amenorrhoea, postpartum abstinence, or menopause), age at first birth, and teenage childbearing.

5.1 CURRENT FERTILITY

Total fertility rate

The average number of children a woman would have by the end of her childbearing years if she bore children at the current age-specific fertility rates. Age-specific fertility rates are calculated for the 3 years before the survey, based on detailed birth histories provided by women.

Sample: Women age 15-49

To generate data on fertility, all women who were interviewed were asked to report the total number of sons and daughters to whom they had ever given birth. To ensure that all information was reported, women were asked separately about children still living at home, those living elsewhere, and those who had died. A complete birth history was then obtained, including information on the sex, date of birth, and survival status of each child. Age at death for children who had died was also recorded.

If fertility were to remain constant at current levels, a woman in Sierra Leone would bear an average of 4.2 children in her lifetime. **Table 5.1** shows age-specific fertility rates (ASFRs) among women by 5-year age groups for the 3-year period preceding the survey. Age-specific fertility is low among women age 15-19 (102 births per 1,000 women), peaks among women age 20-24 (196 births per 1,000 women), and declines thereafter, to 21 births per 1,000 women among those in the 45-49 age group.

Trends: There has been a steady decline in the total fertility rate (TFR) over time, from 5.1 children per woman in 2008 to 4.9 in 2013 and 4.2 in 2019. There has been a similar decline among women in rural areas (from 5.8 to 5.7 and 5.1, respectively) and urban areas (from 3.8 to 3.5 and 3.1) during the same period (**Figure 5.1**). In the last three SLDHS surveys (2008, 2013, and 2019), the age-specific fertility rate has been highest among women age 20-29 (**Figure 5.2**).

Figure 5.1 **Trends in fertility by residence**

TFR for the 3 years before each survey

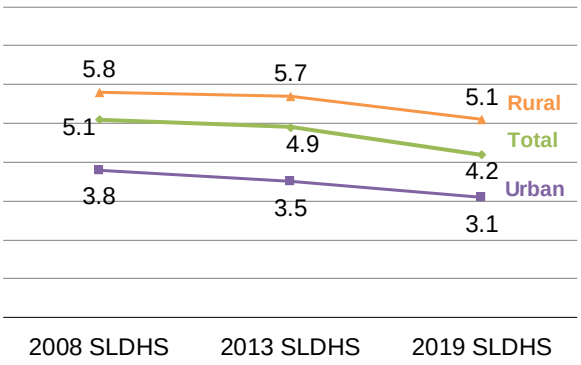
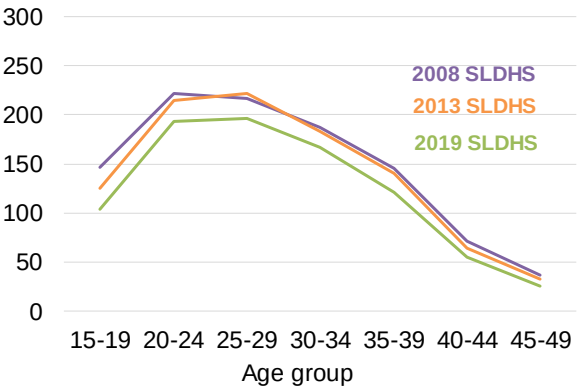


Figure 5.2 **Trends in age-specific fertility**

Births per 1,000 women

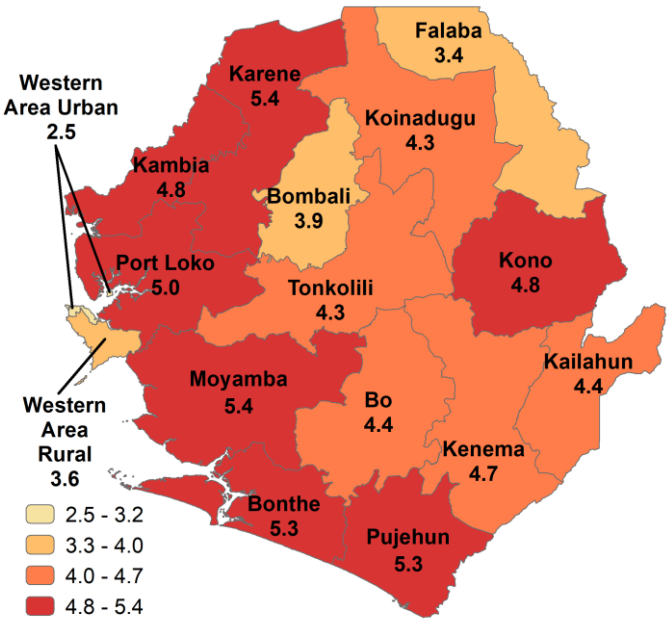


Patterns by background characteristics

- The TFR is highest in the North West and Southern provinces (5.0 children per woman for each province) and lowest in the Western Area province (2.9 children per woman) (**Table 5.2**).
- By district, the TFR is highest in Moyamba and Karene (5.4 children per woman for each district) and lowest in Western Area Urban (2.5 children per woman) (**Table 5.2** and **Figure 5.3**).

Figure 5.3 **Fertility by district**

Total fertility rate for the 3 years before the survey

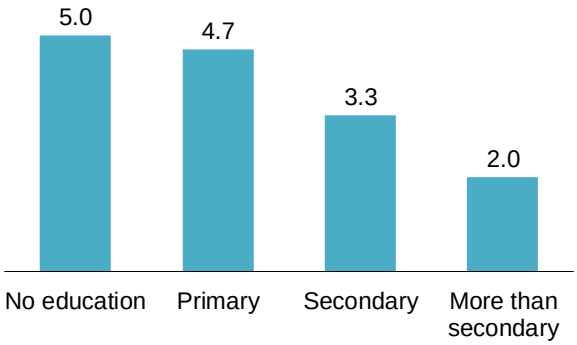


- The total fertility rate declines with increasing education, from 5.0 among women with no education to 2.0 among women with more than a secondary education (**Table 5.2** and **Figure 5.4**).

- Fertility also decreases with increasing household wealth. Women in the lowest wealth quintile give birth to 5.6 children on average, as compared with 2.6 children among women in the highest quintile (**Table 5.2 and Table 5.3**).

Figure 5.4 **Fertility by mother's education**

TFR for the 3 years before the survey



5.2 CHILDREN EVER BORN AND LIVING

The 2019 SLDHS also collected information on the total number of children ever born to women age 15-49 and those still surviving by the time of the survey. Women have a mean of 2.55 children overall and a mean of 2.16 surviving children (a difference of 0.39). Among married women, the corresponding numbers are 3.54 children and 2.99 children (a difference of 0.55). On average, women age 45-49 have given birth to 5.43 children, of whom 4.27 survived to the time of the survey (**Table 5.4**). Of the 5.53 children on average born to currently married women age 45-49, 4.35 survived to the time of the survey. In Sierra Leone, 2% of currently married women age 45-49 have never given birth. Since voluntary childlessness is rare, this is often viewed as a measure of primary sterility (**Table 5.4**).

5.3 BIRTH INTERVALS

Median birth interval

Number of months since the preceding birth by which half of children are born.

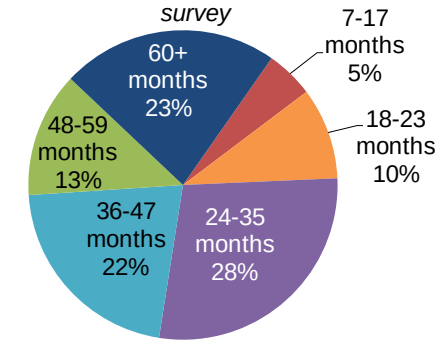
Sample: Non-first births in the 5 years before the survey

Short birth intervals, particularly those less than 24 months, place newborns and their mothers at increased health risk. The median birth interval in Sierra Leone is 39.5 months (**Table 5.5**). Fifteen percent of non-first births occur within 2 years after the preceding birth (**Figure 5.5**). Almost 3 in 10 births (28%) occur 24-35 months after the previous birth (**Figure 5.5**).

Trends: There have been minimal differences in median birth intervals over the last 17 years. Median intervals were 36.2 months in 2008, 36.0 months in 2013, and 39.5 months in 2019.

Figure 5.5 **Birth intervals**

Percent distribution of non-first births by number of months since the preceding birth five years before the survey



Patterns by background characteristics

- Births to older women occur after longer intervals than births to younger women. The median birth interval among women age 40-49 is 45.4 months, as compared with 36.3 months among women age 20-29 (**Table 5.5**).

- As expected, the median birth interval is shorter when the previous child died (31.0 months) than when the previous child is still living (40.5 months) (**Table 5.5**).

5.4 INSUSCEPTIBILITY TO PREGNANCY

Postpartum amenorrhoea
The period of time after the birth of a child and before the resumption of menstruation.

Postpartum abstinence
The period of time after the birth of a child and before the resumption of sexual intercourse.

Postpartum insusceptibility
The period of time during which a woman is considered not at risk of pregnancy because she is postpartum amenorrhoeic and/or abstaining from sexual intercourse postpartum.

Median duration of postpartum amenorrhoea
Number of months after childbirth by which time half of women have begun menstruating.
Sample: Women who gave birth in the 3 years before the survey

Median duration of postpartum insusceptibility
Number of months after childbirth by which time half of women are no longer protected against pregnancy by either postpartum amenorrhoea or abstinence from sexual intercourse.
Sample: Women who gave birth in the 3 years before the survey

Postpartum amenorrhoea refers to the interval between the birth of a child and the resumption of menstruation. The length and intensity of breastfeeding influence the duration of amenorrhoea, which offers protection from conception. Postpartum abstinence refers to the period between childbirth and the time when a woman resumes sexual activity.

For births in the 3 years preceding the survey, the median duration of postpartum amenorrhoea is 10.2 months, while the median duration of abstinence from sexual intercourse is 16.6 months. Overall, women are insusceptible to pregnancy after childbirth for a median duration of 17.3 months (**Table 5.6**).

Trends: In Sierra Leone, the median duration of postpartum amenorrhoea has increased slightly since 2013, from 9.5 months to 10.2 months. There has been a decline in the median duration of postpartum abstinence (17.4 months in 2013 versus 16.6 months in 2019). Similarly, the median duration of insusceptibility has declined slightly, from 18.0 months to 17.3 months.

Patterns by background characteristics

- Rural women have a longer median duration of postpartum insusceptibility than urban women (18.3 months and 15.4 months, respectively) (**Table 5.7**).
- The durations of postpartum insusceptibility and postpartum abstinence are longest in the Northern province (19.4 months and 18.5 months, respectively) and shortest in the Western Area province (14.9 months and 14.6 months, respectively). The duration of postpartum amenorrhoea is longest in the Southern province (11.1 months) and shortest in the Western Area province (7.8 months) (**Table 5.7**).
- The duration of postpartum insusceptibility decreases as mother's education increases.

Menopause

Women are considered to have reached menopause if they are neither pregnant nor postpartum amenorrhoeic and have not had a menstrual period in the 6 months before the survey, if they report being menopausal or having had a hysterectomy, or if they have never menstruated.

Sample: Women age 30-49

Women who have reached menopause are no longer able to become pregnant. In Sierra Leone, 13% of women age 30-49 are menopausal. The percentage of menopausal women increases with age, from 2.7% among those age 30-34 to 56% among those age 48-49 (**Table 5.8**).

5.5 Age at First Birth

Median age at first birth

Age by which half of women have had their first child.

Sample: Women age 20-49 and 25-49

The age at which childbearing commences is an important determinant of the overall level of fertility as well as the health and well-being of the mother and child. In Sierra Leone, the median age at first birth among women age 25-49 is 19.5 years. This means that half of women age 25-49 give birth for the first time before age 20 (**Table 5.9**).

Patterns by background characteristics

- The median age at first birth does not vary substantially by background characteristics. It is slightly higher among urban women than rural women (**Table 5.10**).
- The median age at first birth ranges from 19.0 years among women in the Eastern province to 20.1 years among women in the Western Area province.

5.6 Teenage Childbearing

Teenage childbearing

Percentage of women age 15-19 who have given birth or are pregnant with their first child.

Sample: Women age 15-19

The issue of adolescent fertility is important for both health and social reasons. Children born to very young mothers are at increased risk of sickness and death. Teenage mothers are more likely to experience adverse pregnancy outcomes and to be constrained in their ability to pursue educational opportunities than young women who delay childbearing. In Sierra Leone, 21% of women age 15-19 have begun childbearing; 18% have had a live birth, and 4% are pregnant with their first child (**Table 5.11**).

Trends: The percentage of teenagers who have given birth or are pregnant with their first child has decreased since 2013, from 28% to 21%.

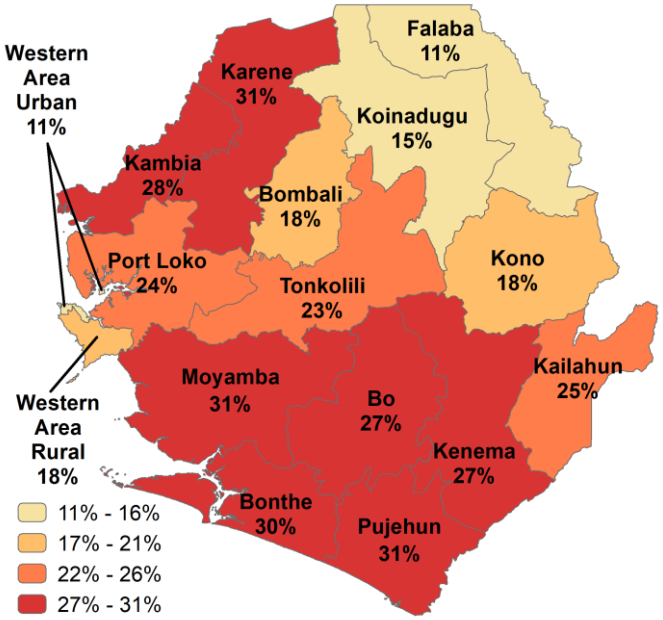
Patterns by background characteristics

- The proportion of teenagers who have begun childbearing rises rapidly with age, from 4% at age 15 to 45% at age 19 (**Table 5.11**).
- Rural teenagers are more likely to have started childbearing than urban teenagers (29% versus 14%) (**Table 5.11**).

- Teenagers with a secondary education and those in the highest wealth quintile are less likely to have started childbearing than those with less education and those in the lower quintiles (**Table 5.11 and Table 5.12**).
- By district, the proportion of teenagers who have begun childbearing is lowest in Western Area Urban and Falaba (11% each) and highest in Pujehun, Moyamba, and Karene (31% each) (**Figure 5.6**).

Figure 5.6 **Teenage pregnancy and motherhood by district**

Percentage of women age 15-19 who have begun childbearing



List of Tables

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- **Table 5.4 Children ever born and living**
- **Table 5.5 Birth intervals**
- **Table 5.6 Postpartum amenorrhoea, abstinence, and insusceptibility**
- **Table 5.7 Median duration of amenorrhoea, postpartum abstinence, and postpartum insusceptibility**
- **Table 5.8 Menopause**
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- **Table 5.11 Teenage pregnancy and motherhood**
- **Table 5.12 Sexual and reproductive health behaviours before age 15**

Table 5.1 Current fertility

Age-specific and total fertility rates, the general fertility rate, and the crude birth rate for the 3 years preceding the survey, by residence, Sierra Leone DHS 2019

	Residence		
Age group	Urban	Rural	Total
10-14	[2]	[6]	[4]
15-19	64	144	102
20-24	152	245	196
25-29	153	220	189
30-34	124	191	165
35-39	95	134	119
40-44	28	67	52
45-49	[9]	[27]	[21]
TFR (15-49)	3.1	5.1	4.2
GFR	110	176	146
CBR	26	33	30

Note: Age-specific fertility rates are per 1,000 women. Estimates in brackets are truncated. Rates are for the period 1-36 months preceding the interview. Rates for the 10-14 age group are based on retrospective data from women age 15-17.
TFR: Total fertility rate, expressed per woman
GFR: General fertility rate, expressed per 1,000 women age 15-44
CBR: Crude birth rate, expressed per 1,000 population

Table 5.2 Fertility by background characteristics

Total fertility rate for the 3 years preceding the survey, percentage of women age 15-49 currently pregnant, and mean number of children ever born to women age 40-49, according to background characteristics, Sierra Leone DHS 2019

Background characteristic	Total fertility rate	Percentage of women age 15-49 currently pregnant	Mean number of children ever born to women age 40-49
Residence			
Urban	3.1	4.3	4.5
Rural	5.1	7.8	5.6
Province			
Eastern	4.6	6.7	5.6
Northern	4.0	6.1	5.1
North West	5.0	8.0	5.7
Southern	5.0	7.6	5.6
Western Area	2.9	3.7	4.0
District			
Kailahun	4.4	6.5	5.2
Kenema	4.7	7.2	5.8
Kono	4.8	6.0	5.6
Bombali	3.9	4.5	5.2
Falaba	3.4	4.7	4.7
Koinadugu	4.3	6.2	5.1
Tonkolili	4.3	8.1	5.1
Kambia	4.8	8.3	5.9
Karene	5.4	8.8	5.5
Port Loko	5.0	7.5	5.7
Bo	4.4	7.3	5.6
Bonthe	5.3	7.0	5.4
Moyamba	5.4	8.5	6.0
Pujehun	5.3	7.4	5.2
Western Area Rural	3.6	4.2	4.6
Western Area Urban	2.5	3.3	3.6
Education			
No education	5.0	7.1	5.4
Primary	4.7	7.3	5.3
Secondary	3.3	5.0	4.1
More than secondary	2.0	3.5	2.9
Wealth quintile			
Lowest	5.6	8.8	5.6
Second	5.1	7.8	5.6
Middle	4.7	6.5	5.7
Fourth	3.6	4.9	5.0
Highest	2.6	4.0	3.7
Total	4.2	6.2	5.2

Note: Total fertility rates are for the period 1-36 months preceding the interview.

Table 5.3 Trends in age-specific fertility rates

Age-specific fertility rates for 5-year periods preceding the survey, according to age group, Sierra Leone DHS 2019

	Number of years preceding survey			
Age group	0-4	5-9	10-14	15-19
10-14	[4]	11	14	19
15-19	104	136	144	153
20-24	193	233	229	233
25-29	196	234	238	241
30-34	167	199	202	[225]
35-39	121	139	[169]	
40-44	55	[90]		
45-49	[25]			

Note: Age-specific fertility rates are per 1,000 women. Estimates in brackets are truncated. Rates exclude the month of the interview. For the 0-4 year period, rates for the 10-14 age group are based on retrospective data from women age 15-19.

Table 5.4 Children ever born and living

Percent distribution of all women and currently married women age 15-49 by number of children ever born, mean number of children ever born, and mean number of living children, according to age group, Sierra Leone DHS 2019

	Number of children ever born														
Age	0	1	2	3	4	5	6	7	8	9	10+	Total	Number of women	Mean number of children ever born	Mean number of living children
ALL WOMEN															
15-19	82.2	15.7	1.9	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	3,427	0.20	0.18
20-24	32.3	35.4	21.7	8.5	1.9	0.2	0.1	0.0	0.0	0.0	0.0	100.0	2,629	1.13	1.01
25-29	10.0	20.9	29.1	21.5	11.4	5.5	1.3	0.3	0.0	0.0	0.0	100.0	2,728	2.26	1.99
30-34	3.9	9.7	18.2	22.3	19.7	13.7	7.7	3.4	1.0	0.3	0.1	100.0	1,942	3.42	2.96
35-39	2.5	6.2	10.1	16.8	17.9	19.0	13.3	8.1	4.0	1.3	0.7	100.0	2,224	4.31	3.66
40-44	1.7	5.1	8.7	12.0	15.7	15.2	14.1	12.5	7.3	4.6	3.2	100.0	1,337	5.02	4.12
45-49	1.7	3.5	7.1	10.0	16.0	14.9	14.1	11.8	8.3	6.6	6.0	100.0	1,288	5.43	4.27
Total	26.4	15.9	14.2	12.3	10.0	7.9	5.5	3.7	2.0	1.2	0.9	100.0	15,574	2.55	2.16
CURRENTLY MARRIED WOMEN															
15-19	34.9	53.3	10.8	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	477	0.78	0.70
20-24	10.8	37.0	33.8	14.3	3.6	0.5	0.1	0.0	0.0	0.0	0.0	100.0	1,365	1.65	1.46
25-29	4.5	16.4	30.6	25.5	14.0	6.8	1.7	0.3	0.0	0.0	0.0	100.0	2,097	2.57	2.25
30-34	3.0	6.3	16.3	23.6	21.3	15.1	8.9	4.0	1.1	0.4	0.1	100.0	1,637	3.65	3.16
35-39	1.8	5.2	9.6	17.0	17.9	19.2	14.3	8.5	4.2	1.5	0.7	100.0	1,960	4.43	3.76
40-44	1.2	3.4	7.0	11.8	16.5	16.6	15.1	12.7	7.5	5.1	3.2	100.0	1,129	5.20	4.29
45-49	2.1	3.3	6.7	8.9	15.7	14.6	14.0	12.3	9.0	7.3	6.2	100.0	1,050	5.53	4.35
Total	5.4	14.2	18.1	17.3	14.3	11.4	8.0	5.3	2.9	1.8	1.2	100.0	9,715	3.54	2.99

Table 5.5 Birth intervals

Percent distribution of non-first births in the 5 years preceding the survey by number of months since preceding birth, and median number of months since preceding birth, according to background characteristics, Sierra Leone DHS 2019

Background characteristic	Months since preceding birth						Total	Number of non-first births	Median number of months since preceding birth
	7-17	18-23	24-35	36-47	48-59	60+			
Mother's age									
15-19	14.6	18.1	47.2	13.1	4.4	2.5	100.0	74	27.7
20-29	5.6	11.0	32.7	22.4	12.9	15.4	100.0	3,183	36.3
30-39	4.1	8.5	25.1	21.3	13.2	27.8	100.0	3,318	42.5
40-49	5.0	7.7	21.2	19.6	13.9	32.5	100.0	846	45.4
Sex of preceding birth									
Male	5.5	9.5	28.0	21.9	12.5	22.5	100.0	3,735	39.1
Female	4.4	9.6	28.3	21.0	13.7	23.0	100.0	3,686	40.0
Survival of preceding birth									
Living	3.5	8.9	28.2	22.1	13.5	23.9	100.0	6,477	40.5
Dead	14.9	14.4	28.0	17.5	10.4	14.9	100.0	944	31.0
Birth order									
2-3	4.7	9.3	28.6	20.3	13.1	23.9	100.0	3,735	39.6
4-6	4.7	9.6	27.7	22.4	12.9	22.6	100.0	2,885	39.9
7+	6.7	10.7	27.8	23.4	13.7	17.7	100.0	802	38.3
Residence									
Urban	3.4	7.4	22.1	20.5	13.9	32.7	100.0	2,350	45.9
Rural	5.7	10.6	31.0	21.9	12.7	18.1	100.0	5,071	37.3
Province									
Eastern	5.1	10.4	27.5	21.3	13.8	22.0	100.0	1,652	39.6
Northern	4.5	8.4	26.6	23.3	13.1	24.2	100.0	1,480	40.7
North West	4.2	9.9	32.5	24.1	12.7	16.7	100.0	1,459	37.2
Southern	7.1	10.9	30.4	20.5	11.7	19.4	100.0	1,644	37.0
Western Area	3.4	7.8	22.5	17.6	14.5	34.2	100.0	1,186	46.9
District									
Kailahun	3.4	7.0	29.5	19.2	14.4	26.5	100.0	365	42.6
Kenema	7.0	12.0	27.2	22.2	13.1	18.5	100.0	814	37.7
Kono	3.1	10.2	26.6	21.3	14.4	24.4	100.0	473	41.9
Bombali	3.7	5.7	25.6	22.9	15.0	27.0	100.0	484	42.4
Falaba	6.0	9.6	24.1	25.0	14.7	20.6	100.0	189	39.7
Koinadugu	2.0	8.5	27.7	24.6	15.3	21.9	100.0	223	41.9
Tonkolili	5.6	10.1	27.8	22.5	10.1	23.9	100.0	584	39.1
Kambia	2.9	13.2	32.0	21.9	12.1	18.1	100.0	465	36.6
Karene	4.2	8.0	29.8	24.5	14.2	19.3	100.0	288	38.9
Port Loko	5.0	8.5	34.0	25.4	12.5	14.6	100.0	706	36.8
Bo	8.5	11.9	29.2	17.0	11.0	22.3	100.0	609	36.3
Bonthe	5.7	8.4	32.9	24.2	11.5	17.3	100.0	298	37.4
Moyamba	4.2	9.9	33.5	21.9	12.7	17.8	100.0	453	37.3
Pujehun	10.3	12.7	25.5	22.0	11.9	17.6	100.0	283	36.8
Western Area Rural	3.6	10.7	22.1	16.5	14.3	32.9	100.0	557	45.6
Western Area Urban	3.2	5.3	22.8	18.6	14.7	35.3	100.0	629	48.0
Mother's education									
No education	5.1	9.8	27.5	21.9	13.3	22.4	100.0	4,611	39.5
Primary	5.8	10.7	32.0	21.2	12.3	18.1	100.0	1,111	36.7
Secondary	4.2	8.5	27.9	20.8	13.1	25.4	100.0	1,544	41.1
More than secondary	3.2	6.4	21.6	16.7	12.3	39.8	100.0	155	53.1
Wealth quintile									
Lowest	6.2	10.9	32.1	22.2	12.2	16.5	100.0	1,886	36.4
Second	5.5	10.6	31.4	21.7	13.2	17.5	100.0	1,744	36.9
Middle	5.0	10.3	28.2	23.7	11.9	20.9	100.0	1,544	39.0
Fourth	3.2	8.8	24.5	20.4	13.8	29.4	100.0	1,262	43.0
Highest	3.9	5.0	19.6	17.6	15.6	38.3	100.0	985	50.8
Total	5.0	9.6	28.2	21.5	13.1	22.7	100.0	7,421	39.5

Note: First-order births are excluded. The interval for multiple births is the number of months since the preceding pregnancy that ended in a live birth.

Table 5.6 Postpartum amenorrhoea, abstinence, and insusceptibility

Percentage of births in the 3 years preceding the survey for which mothers are postpartum amenorrhoeic, abstaining, and insusceptible, by number of months since birth, and median and mean durations, Sierra Leone DHS 2019

	Percentage of births for which the mother is:			
Months since birth	Amenorrhoeic	Abstaining	Insusceptible[1]	Number of births
<2	81.7	96.7	98.3	355
2-3	78.4	95.0	96.8	362
4-5	69.7	93.0	96.1	316
6-7	67.4	87.6	90.9	355
8-9	59.4	87.6	89.0	312
10-11	44.9	85.0	89.4	311
12-13	34.9	68.7	73.4	410
14-15	28.3	54.6	59.9	395
16-17	21.6	50.4	55.0	341
18-19	13.1	34.6	37.7	288
20-21	9.9	20.9	24.3	295
22-23	8.9	24.8	27.4	256
24-25	3.9	8.8	11.5	376
26-27	3.9	7.5	10.2	350
28-29	1.6	8.1	8.4	308
30-31	1.6	5.0	5.8	290
32-33	3.4	3.1	4.9	249
34-35	2.0	3.6	5.6	244
Total	31.4	48.8	51.7	5,812
Median	10.2	16.6	17.3	na
Mean	11.7	17.7	18.7	na

Note: Estimates are based on status at the time of the survey.
na = Not applicable
[1] Includes births for which mothers are either still amenorrhoeic or still abstaining (or both) following birth

Table 5.7 Median duration of amenorrhoea, postpartum abstinence, and postpartum insusceptibility

Median number of months of postpartum amenorrhoea, postpartum abstinence, and postpartum insusceptibility following births in the 3 years preceding the survey, according to background characteristics, Sierra Leone DHS 2019

Background characteristic	Postpartum amenorrhoea	Postpartum abstinence	Postpartum insusceptibility[1]
Mother's age			
15-29	9.7	16.1	16.7
30-49	11.0	17.5	18.2
Residence			
Urban	9.1	15.1	15.4
Rural	11.1	17.3	18.3
Province			
Eastern	10.9	16.1	16.9
Northern	9.9	18.5	19.4
North West	10.8	17.9	18.4
Southern	11.1	15.4	16.2
Western Area	7.8	14.6	14.9
District			
Kailahun	12.3	17.8	18.4
Kenema	9.6	15.5	16.0
Kono	11.1	15.6	18.1
Bombali	9.4	18.5	18.6
Falaba	(11.8)	13.3	(19.2)
Koinadugu	10.7	(20.0)	(20.0)
Tonkolili	10.0	19.2	19.6
Kambia	10.9	17.2	17.7
Karene	(10.5)	17.9	19.0
Port Loko	11.0	18.3	18.5
Bo	11.4	15.2	15.5
Bonthe	11.6	13.3	14.4
Moyamba	11.7	16.7	17.0
Pujehun	(9.1)	14.5	16.3
Western Area Rural	7.4	14.8	15.2
Western Area Urban	8.2	14.4	14.8
Mother's education			
No education	10.8	17.0	18.0
Primary	11.4	17.0	17.9
Secondary	8.2	15.8	16.3
More than secondary	(8.7)	(10.7)	(10.7)
Wealth quintile			
Lowest	11.9	16.9	18.1
Second	10.8	17.6	18.4
Middle	11.2	17.6	18.4
Fourth	8.5	15.6	16.0
Highest	9.1	14.3	14.6
Total	10.2	16.6	17.3

Note: Medians are based on status at the time of the survey (current status). Figures in parentheses are based on 25-49 unweighted cases.
[1] Includes births for which mothers are either still amenorrhoeic or still abstaining (or both) following birth

Table 5.8 Menopause

Percentage of women age 30-49 who are menopausal, according to age, Sierra Leone DHS 2019

Age	Percentage menopausal[1]	Number of women
30-34	2.7	1,942
35-39	4.3	2,224
40-41	9.3	688
42-43	16.1	473
44-45	30.1	615
46-47	38.3	439
48-49	55.7	410
Total	12.8	6,791

[1] Percentage of women (1) who are not pregnant, (2) who have had a birth in the past 5 years and are not postpartum amenorrhoeic, and (3) for whom one of the following additional conditions applies: (a) their last menstrual period occurred 6 or more months preceding the survey, (b) they declared that they are in menopause or have had a hysterectomy, or (c) they have never menstruated

Table 5.9 Age at first birth

Percentage of women age 15-49 who gave birth by exact ages, percentage who have never given birth, and median age at first birth, according to current age, Sierra Leone DHS 2019

	Percentage who gave birth by exact age					Percentage who have never given birth	Number of women	Median age at first birth
Current age	15	18	20	22	25			
15-19	2.6	na	na	na	na	82.2	3,427	a
20-24	6.1	31.3	50.5	na	na	32.3	2,629	19.9
25-29	6.5	33.4	54.1	71.0	85.0	10.0	2,728	19.6
30-34	8.8	36.4	56.5	70.6	85.7	3.9	1,942	19.3
35-39	6.5	32.1	52.2	67.0	82.3	2.5	2,224	19.8
40-44	9.7	39.0	55.5	69.5	83.0	1.7	1,337	19.3
45-49	8.6	35.9	53.5	66.2	79.3	1.7	1,288	19.6
20-49	7.3	34.1	53.4	na	na	10.7	12,147	19.6
25-49	7.7	34.8	54.3	69.1	83.5	4.7	9,519	19.5

na = Not applicable due to censoring
a = Omitted because less than 50% of women had a birth before reaching the beginning of the age group

Table 5.10 Median age at first birth

Median age at first birth among women age 20-49 and age 25-49, according to background characteristics, Sierra Leone DHS 2019

Background characteristic	Women age 20-49	Women age 25-49
Residence		
Urban	a	19.8
Rural	19.3	19.4
Province		
Eastern	19.0	19.0
Northern	19.8	19.8
North West	19.2	19.3
Southern	19.4	19.5
Western Area	a	20.1
District		
Kailahun	19.2	19.3
Kenema	18.7	18.7
Kono	19.5	19.3
Bombali	a	20.0
Falaba	a	20.3
Koinadugu	19.4	19.4
Tonkolili	19.5	19.5
Kambia	19.0	19.0
Karene	19.1	19.5
Port Loko	19.4	19.5
Bo	19.2	19.1
Bonthe	19.5	19.6
Moyamba	19.9	20.0
Pujehun	19.1	19.3
Western Area Rural	19.5	19.0
Western Area Urban	a	20.8
Education		
No education	19.1	19.2
Primary	18.7	18.9
Secondary	a	20.3
More than secondary	a	24.0
Wealth quintile		
Lowest	19.4	19.5
Second	19.2	19.3
Middle	19.0	19.1
Fourth	19.5	19.1
Highest	a	20.6
Total	19.6	19.5

a = Omitted because less than 50% of women had a birth before reaching the beginning of the age group

Table 5.11 Teenage pregnancy and motherhood

Percentage of women age 15-19 who have had a live birth or who are pregnant with their first child, and percentage who have begun childbearing, according to background characteristics, Sierra Leone DHS 2019

Background characteristic	Percentage of women age 15-19 who: Have had a live birth	Are pregnant with first child	Percentage who have begun childbearing	Number of women
Age				
15-17	6.6	2.7	9.3	2,050
15	2.2	2.2	4.3	838
16	8.6	2.1	10.7	623
17	10.8	4.2	15.0	588
18	28.1	5.3	33.4	683
19	40.5	4.4	44.9	694
Residence				
Urban	12.6	1.7	14.4	1,814
Rural	23.5	5.6	29.2	1,613
Province				
Eastern	18.6	4.8	23.4	648
Northern	15.9	2.1	18.0	766
North West	21.7	5.1	26.8	560
Southern	23.3	5.3	28.6	630
Western Area	11.9	1.7	13.6	823
District				
Kailahun	21.2	4.2	25.4	124
Kenema	20.9	5.6	26.5	313
Kono	13.5	4.0	17.5	211
Bombali	16.2	1.7	17.9	280
Falaba	9.7	1.5	11.3	132
Koinadugu	13.8	1.2	15.0	102
Tonkolili	19.6	3.1	22.7	252
Kambia	23.5	4.4	28.0	229
Karene	25.3	5.8	31.1	95
Port Loko	18.5	5.4	23.9	236
Bo	21.3	5.2	26.6	317
Bonthe	23.7	6.4	30.1	102
Moyamba	28.2	3.0	31.2	140
Pujehun	22.1	8.4	30.5	72
Western Area Rural	16.0	1.7	17.7	316
Western Area Urban	9.4	1.6	11.0	507
Education				
No education	35.2	8.3	43.5	477
Primary	17.2	5.2	22.4	636
Secondary	14.4	2.2	16.5	2,300
More than secondary	*	*	*	14
Wealth quintile				
Lowest	27.6	4.9	32.5	434
Second	25.3	6.6	31.9	537
Middle	20.3	4.4	24.7	682
Fourth	15.2	2.2	17.4	898
Highest	8.8	1.9	10.7	876
Total	17.8	3.6	21.3	3,427

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

Table 5.12 Sexual and reproductive health behaviours before age 15

Among women and men age 15-19, percentage who initiated sexual intercourse, were married, and had a live birth/fathered a child before age 15, according to sex, Sierra Leone DHS 2019

Sex	Had sexual intercourse before age 15	Married before age 15	Gave birth/fathered a child before age 15	Number
Women	16.8	3.4	2.6	3,427
Men	6.5	0.0	0.0	1,541

FERTILITY PREFERENCES 6

Key Findings

- ***Desire for another child:*** 26% of currently married women age 15-49 want to have another child soon, while 24% want to wait at least 2 years.
- ***Limiting childbearing:*** Overall, 26% of women and 19% of men want to limit childbearing.
- ***Ideal family size:*** Men prefer to have 4.9 children on average, while women prefer 4.7 children.
- ***Unwanted births:*** Of all births in the past 5 years and current pregnancies, 83% were wanted at the time of conception, 14% were wanted later, and 3% were unwanted.
- ***Wanted births:*** Overall, the total fertility rate is 4.2 and the wanted fertility rate is 3.8.

Information on fertility preferences can help family planning programme planners assess the desire for children, the extent of mistimed and unwanted pregnancies, and the demand for contraception to space or limit births. This information may suggest the direction that fertility patterns will take in the future.

This chapter presents information on whether and when married women and men want more children, ideal family size, whether the last birth was wanted, and the theoretical fertility rate if all unwanted births were prevented.

6.1 DESIRE FOR ANOTHER CHILD

Desire for another child

Women and men were asked whether they wanted more children and, if so, how long they would prefer to wait before the birth of the next child. Women and men who are sterilised are assumed not to want any more children.

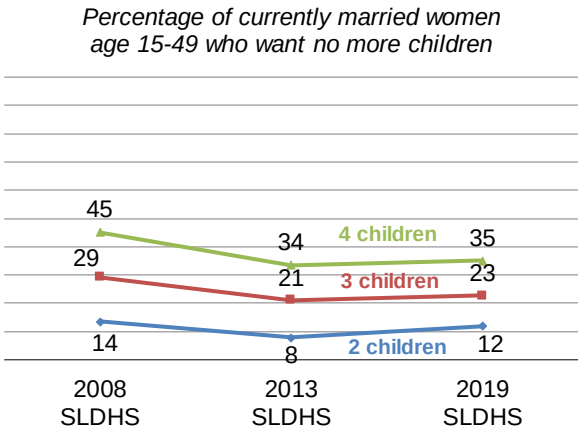
Sample: Currently married women and men age 15-49

Fifty-six percent of currently married women age 15-49 want to have another child; 26% of these women want to have another child within 2 years, 24% want to wait at least 2 years, and 6% are undecided with respect to time. Overall, 26% of currently married women want no more children or are sterilised.

Sixty-one percent of married men in Sierra Leone age 15-49 want to have another child; 32% want a child within 2 years, 21% to wait at least 2 years, and 9% are undecided with respect to time. Nineteen percent of currently married men want no more children or are sterilised (**Table 6.1**).

Trends: The percentage of currently married women with two living children who want no more children increased from 8% in 2013 to 12% in 2019, while the percentage of married women with three living children who want no more children increased from 21% to 23%. Over the same period, the percentage of currently married women with four living children who want no more children increased slightly from 34% to 35% (**Figure 6.1**).

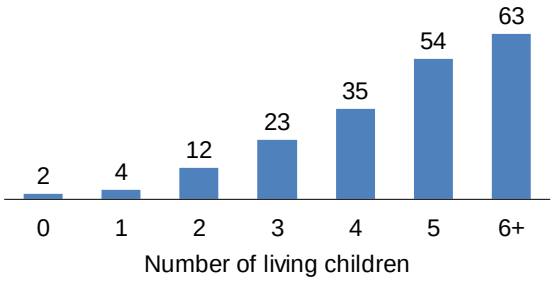
Figure 6.1 **Trends in desire to limit childbearing by number of living children**



Patterns by background characteristics

- Seventy-nine percent of currently married women with no living children want to have a child soon, as compared with 6% of women with six or more children. The corresponding percentages among men are 78% and 25% (**Table 6.1**).
- The proportion of currently married women who want no more children increases with the number of living children, from 2% among those with no children to 63% among those with six or more children (**Figure 6.2**).
- Men in urban areas are slightly less likely to want to limit childbearing than men in rural areas (18% versus 20%, respectively). Women in rural and urban areas are equally likely to want to limit childbearing (26% each) (**Table 6.2.1** and **Table 6.2.2**).
- The desire to limit childbearing is highest among women with no education (31%) and among men with a primary education or no education (20% each).

Figure 6.2 **Desire to limit childbearing by number of living children**



6.2 IDEAL FAMILY SIZE

Ideal family size

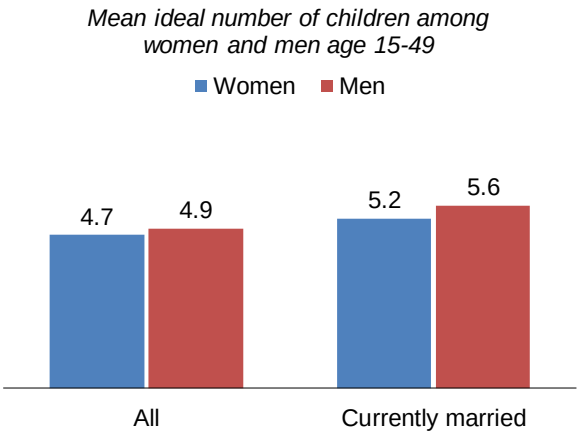
Respondents with no children were asked "If you could choose exactly the number of children to have in your whole life, how many would that be?" Respondents who had children were asked "If you could go back to the time when you did not have any children and could choose exactly the number of children to have in your whole life, how many would that be?"

Sample: Women and men age 15-49

On average, Sierra Leonean men want to have almost the same number of children as women (4.9 children and 4.7 children, respectively) (**Table 6.3**). The mean ideal number of children is larger among currently married women and men than among all women and men (**Figure 6.3**).

Trends: The mean ideal number of children among currently married women decreased from 5.4 in 2013 to 5.2 in 2019.

Figure 6.3 **Ideal family size**



Patterns by background characteristics

- In general, the more children men and women already have, the more children they consider ideal. Women who have one child consider 4.0 children to be ideal on average. In contrast, women who have six or more children consider 6.7 children to be ideal. Men who have six or more children consider 8.1 children ideal (**Figure 6.4**).

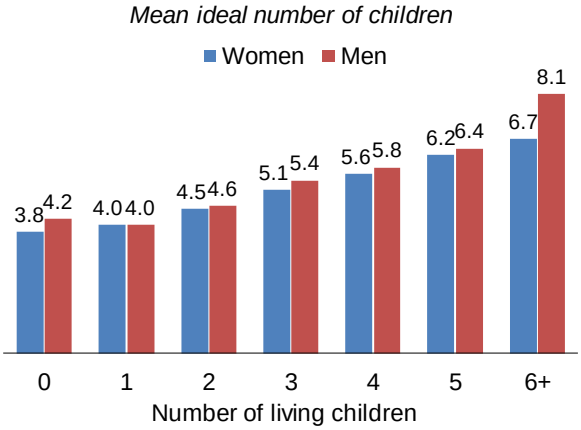
- Urban women prefer fewer children than rural women (4.1 and 5.3 children, respectively) (**Table 6.4**).

- The mean ideal number of children decreases with increasing household wealth. Women in the lowest wealth quintile prefer 5.5 children, while women in the highest quintile prefer 3.8 children.

- Women's ideal family size is highest in the North West province (5.3 children) and lowest in the Western Area province (3.9 children).

- By district, women's ideal family size is highest in Pujehun (5.5 children) and lowest in Western Area Urban (3.7 children).

Figure 6.4 **Ideal family size by number of living children**



6.3 FERTILITY PLANNING STATUS

Planning status of births/pregnancies

Women reported whether their births/pregnancies were wanted at the time (planned birth), at a later time (mistimed birth), or not at all (unwanted birth).

Sample: Current pregnancies and births in the 5 years before the survey to women age 15-49

In Sierra Leone, a large majority of births were wanted at the time of conception (83%), while 14% were mistimed (that is, wanted at a later date). Only 3% of births were not wanted at all (**Figure 6.5**).

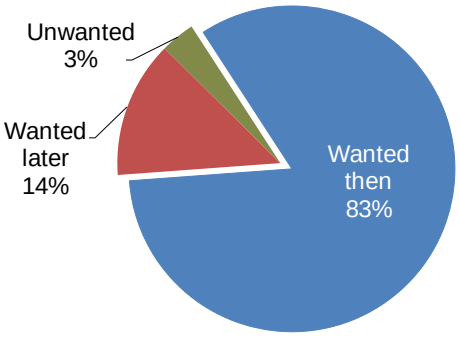
Trends: The proportion of births that were unwanted remained constant at 3% from 2013 to 2019. However, the proportion of mistimed births increased from 11% to 14%.

Patterns by background characteristics

- The more children a woman has, the more likely it is that her most recent birth was unwanted. One percent of first births were unwanted, as compared with 7% of fourth- or higher-order births (**Table 6.5**).

Figure 6.5 **Fertility planning status**

Percent distribution of births to women age 15-49 in the 5 years before the survey (including current pregnancies) by planning status of births



- The proportion of unwanted births increases with age. One percent of births to women age 20-24 were unwanted, compared with 15% of births to women age 45-49.

6.4 WANTED FERTILITY RATES

Unwanted birth

Any birth in excess of the number of children a woman reported as her ideal number.

Wanted birth

Any birth fewer than or equal to the number of children a woman reported as her ideal number.

Wanted fertility rate

The average number of children a woman would have by the end of her childbearing years if she bore children at the current age-specific fertility rates, excluding unwanted births.

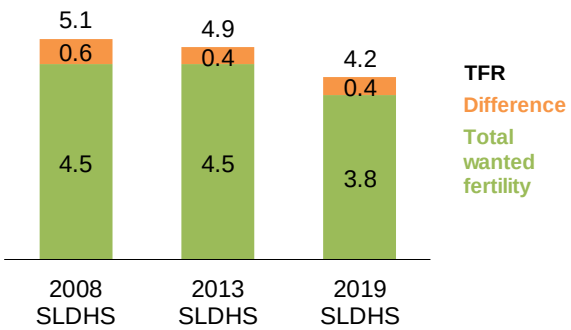
Sample: Women age 15-49

The wanted fertility rate measures the potential demographic impact of fertility that would have prevailed in the 3 years preceding the survey if all unwanted births were prevented. It is calculated in the same manner as the total fertility rate, except that only wanted births are included. A birth is considered wanted if the number of living children at the time of conception is fewer than the ideal number of children reported by the respondent.

Trends: The total wanted fertility rate in Sierra Leone has declined slightly over the past 5 years, from 4.5 children in 2013 to 3.8 children in 2019. The gap between wanted and actual fertility has remained constant at 0.4 (**Figure 6.6**).

Figure 6.6 **Trends in wanted and actual fertility**

Wanted and actual number of children per woman



Patterns by background characteristics

- Although the gap varies by background characteristics, the total wanted fertility rate is consistently lower than the actual fertility rate (**Table 6.6**).

- The gap between the total wanted fertility rate and the actual fertility rate narrows with increasing education and household wealth. For example, the gap falls from 0.5 among women with no education to 0.0 among women with a secondary education or higher. Similarly, the gap decreases from 0.5 among women in the lowest wealth quintile to 0.2 among women in the highest quintile (**Table 6.6**).

List of Tables

For more information on fertility preferences, see the following tables:

- **Table 6.1 Fertility preferences by number of living children**
- **Table 6.2.1 Desire to limit childbearing: Women**
- **Table 6.2.2 Desire to limit childbearing: Men**
- **Table 6.3 Ideal number of children by number of living children**
- **Table 6.4 Mean ideal number of children**
- **Table 6.5 Fertility planning status**
- **Table 6.6 Wanted fertility rates**

Table 6.1 Fertility preferences by number of living children

Percent distribution of currently married women and currently married men age 15-49 by desire for children, according to number of living children, Sierra Leone DHS 2019

Desire for children	Number of living children							Total 15-49	Total 15-59
	0	1	2	3	4	5	6+		
				WOMEN[1]					
Have another soon[2]	78.5	43.9	28.3	22.8	16.3	9.6	5.7	26.0	na
Have another later[3]	7.1	31.6	32.4	26.0	22.4	13.4	8.4	23.5	na
Have another, undecided when	3.3	8.2	9.9	7.5	3.9	2.7	2.4	6.2	na
Undecided	5.1	10.4	15.3	17.3	18.3	14.9	14.2	14.6	na
Want no more	1.9	3.7	12.0	22.7	34.3	53.5	62.6	25.7	na
Sterilised[4]	0.0	0.0	0.0	0.2	0.3	0.6	0.8	0.2	na
Declared infecund	4.0	2.2	2.0	3.6	4.3	5.3	5.9	3.6	na
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	na
Number	481	1,650	2,065	1,849	1,551	1,071	1,047	9,715	na
				MEN[5]					
Have another soon[2]	77.7	39.8	30.3	31.0	22.5	22.4	25.0	31.6	29.1
Have another later[3]	7.0	30.8	29.0	20.2	19.8	14.7	10.4	20.8	18.0
Have another, undecided when	1.9	9.9	12.5	10.9	5.3	8.9	6.3	8.9	7.9
Undecided	10.2	15.1	17.6	20.6	24.3	18.6	19.0	18.6	17.9
Want no more	1.5	3.3	8.8	16.2	26.8	33.4	37.7	18.7	24.0
Sterilised[4]	0.0	0.4	0.2	0.3	0.0	1.0	0.3	0.3	0.5
Declared infecund	1.7	0.7	1.5	0.9	1.3	1.2	1.3	1.2	2.5
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number	157	529	654	590	413	322	570	3,234	3,991

na = Not applicable
[1] The number of living children includes the current pregnancy.
[2] Wants next birth within 2 years
[3] Wants to delay next birth for 2 or more years
[4] Includes both female and male sterilisation
[5] The number of living children includes one additional child if the respondent's wife is pregnant (or if any wife is pregnant for men with more than one current wife).

Table 6.2.1 Desire to limit childbearing: Women

Percentage of currently married women age 15-49 who want no more children, by number of living children, according to background characteristics, Sierra Leone DHS 2019

Background characteristic	Number of living children[1]							Total
	0	1	2	3	4	5	6+	
Residence								
Urban	1.4	2.0	15.7	29.6	43.8	62.7	68.2	26.0
Rural	2.3	5.2	9.4	18.6	30.6	50.3	62.0	25.9
Province								
Eastern	0.0	4.0	17.0	22.9	35.4	56.8	69.6	30.7
Northern	3.7	4.8	8.3	16.5	31.0	51.3	58.6	22.8
North West	1.2	2.8	6.0	11.7	29.0	38.7	51.3	19.3
Southern	2.4	6.2	10.0	23.2	34.4	56.4	70.4	30.3
Western Area	1.8	2.1	18.4	37.7	45.9	70.2	71.5	26.4
District								
Kailahun	*	3.9	5.3	20.2	32.8	51.3	(62.0)	24.4
Kenema	(0.0)	3.9	17.0	21.9	35.2	47.4	68.8	29.4
Kono	*	4.2	26.4	27.0	38.4	71.8	75.5	37.7
Bombali	(0.0)	2.5	2.3	7.1	34.0	51.5	52.4	17.7
Falaba	*	12.6	32.5	31.6	52.4	49.5	78.1	39.9
Koinadugu	(5.1)	2.5	5.4	15.3	25.7	54.8	(64.9)	20.7
Tonkolili	(6.9)	4.8	8.1	19.5	23.9	50.6	51.6	22.1
Kambia	(0.0)	2.6	3.7	8.1	19.5	44.0	48.0	16.9
Karene	*	1.1	13.0	17.4	37.8	34.0	51.4	24.3
Port Loko	(0.0)	3.6	4.9	11.6	31.7	36.7	54.4	19.1
Bo	(2.3)	9.1	12.4	32.5	39.4	62.7	66.9	32.4
Bonthe	*	3.9	6.7	23.2	38.6	55.2	82.8	33.3
Moyamba	(5.3)	5.8	12.2	18.7	28.5	57.8	69.9	30.1
Pujehun	(0.0)	2.7	5.9	11.2	26.1	44.3	65.0	23.0
Western Area Rural	(1.9)	2.5	21.2	38.2	52.4	60.9	(68.6)	30.7
Western Area Urban	1.8	1.9	16.3	37.4	40.5	(80.2)	*	23.5
Education								
No education	3.6	7.1	13.8	23.2	32.5	51.4	63.0	31.0
Primary	1.5	1.4	6.3	15.6	36.2	68.3	69.1	22.2
Secondary	0.4	1.4	9.8	25.4	42.6	59.7	(58.0)	14.7
More than secondary	(0.0)	0.0	27.1	34.5	*	*	*	21.5
Wealth quintile								
Lowest	3.0	5.5	7.6	15.4	30.0	51.3	59.6	25.8
Second	1.6	4.6	8.5	19.7	27.2	46.4	60.4	24.3
Middle	3.3	4.8	13.4	20.6	35.5	50.9	63.0	28.5
Fourth	0.9	2.4	11.6	24.1	40.9	62.3	71.3	26.3
Highest	1.3	2.2	18.2	35.7	46.9	73.4	(79.7)	25.0
Total	1.9	3.7	12.0	22.9	34.6	54.0	63.4	26.0

Note: Women who have been sterilised are considered to want no more children. Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

[1] The number of living children includes the current pregnancy.

Table 6.2.2 Desire to limit childbearing: Men

Percentage of currently married men age 15-49 who want no more children, by number of living children, according to background characteristics, Sierra Leone DHS 2019

Background characteristic	Number of living children[1]							Total
	0	1	2	3	4	5	6+	
Residence								
Urban	1.5	3.0	10.7	19.2	36.5	36.6	42.4	18.1
Rural	1.5	4.4	7.5	14.4	21.7	33.6	36.7	19.6
Province								
Eastern	*	4.3	3.8	13.1	21.3	30.6	43.2	19.6
Northern	(0.0)	0.6	5.5	11.5	18.0	23.0	33.4	14.7
North West	*	9.7	16.4	11.7	21.1	31.2	34.0	19.7
Southern	(0.0)	6.3	7.4	19.3	29.9	42.1	39.4	23.2
Western Area	(2.0)	0.4	12.6	22.9	(46.2)	(49.6)	(41.4)	18.2
District								
Kailahun	*	(0.0)	(5.0)	(20.8)	(21.1)	(23.2)	(69.4)	23.8
Kenema	*	(0.0)	4.0	(9.2)	(11.1)	(27.4)	(28.0)	12.9
Kono	*	(11.6)	(2.6)	(11.7)	(39.7)	(38.5)	46.4	25.7
Bombali	*	(0.0)	(10.8)	(12.1)	(27.7)	*	(41.4)	19.1
Falaba	*	*	*	(5.7)	*	*	(34.9)	13.2
Koinadugu	*	(0.0)	(0.0)	(9.2)	(20.8)	*	(14.5)	11.8
Tonkolili	*	(1.4)	(2.6)	(14.7)	(7.8)	(15.8)	31.7	12.1
Kambia	*	(9.0)	(17.8)	(13.4)	*	*	(26.0)	18.2
Karene	*	*	(18.6)	(16.2)	*	*	(50.4)	27.4
Port Loko	*	(9.8)	(13.8)	(7.8)	*	(21.4)	(31.6)	17.1
Bo	*	(6.7)	(7.4)	(27.9)	(42.3)	(56.1)	(54.7)	31.0
Bonthe	*	(4.8)	(8.3)	(3.1)	*	*	(33.4)	15.0
Moyamba	*	*	(12.6)	(23.9)	(22.1)	(25.1)	29.8	20.3
Pujehun	*	*	(0.0)	(10.7)	(23.6)	*	(33.2)	20.0
Western Area Rural	*	(2.3)	(22.9)	(30.1)	*	*	*	31.0
Western Area Urban	(0.0)	0.0	7.7	18.2	(38.8)	*	*	12.1
Education								
No education	(0.0)	5.3	5.6	9.8	23.5	34.6	32.6	19.7
Primary	*	0.0	8.9	18.0	25.6	26.4	42.7	20.4
Secondary	1.7	4.2	11.9	22.7	30.6	32.3	51.2	18.3
More than secondary	*	2.1	5.8	22.0	(34.3)	*	(47.9)	17.1
Wealth quintile								
Lowest	*	3.9	5.8	15.0	21.4	31.8	37.2	19.3
Second	(4.0)	4.9	9.5	9.5	19.4	31.4	36.5	19.3
Middle	(0.0)	1.2	8.3	16.7	18.9	39.5	36.9	19.5
Fourth	(3.6)	8.8	14.3	18.0	38.8	(37.7)	40.8	21.7
Highest	(0.0)	0.9	7.3	21.9	43.0	(33.8)	(43.3)	15.8
Total 15-49	1.5	3.7	9.0	16.5	26.8	34.3	38.0	19.0
50-59	*	*	(34.7)	49.7	43.6	46.6	52.1	47.9
Total 15-59	1.5	4.6	10.7	20.8	30.1	38.0	43.5	24.5

Note: Men who have been sterilised or who state in response to the question about desire for children that their wife has been sterilised are considered to want no more children. Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

[1] The number of living children includes one additional child if the respondent's wife is pregnant (or if any wife is pregnant for men with more than one current wife).

Table 6.3 Ideal number of children by number of living children

Percent distribution of women and men age 15-49 by ideal number of children, and mean ideal number of children for all respondents and for currently married respondents, according to number of living children, Sierra Leone DHS 2019

Ideal number of children	Number of living children							Total
	0	1	2	3	4	5	6+	
				WOMEN[1]				
0	1.5	1.4	1.9	1.7	1.8	1.2	1.4	1.6
1	0.8	0.4	0.3	0.1	0.3	0.2	0.1	0.4
2	11.5	7.3	3.5	1.9	1.3	1.1	1.0	5.4
3	22.4	22.5	11.9	6.8	2.7	2.2	1.8	13.4
4	42.8	42.8	41.7	31.8	22.4	12.3	11.1	34.2
5	10.2	12.8	17.9	23.3	18.3	19.6	10.6	15.3
6+	9.8	12.0	21.3	33.1	50.3	60.2	71.0	28.0
Non-numeric responses	0.9	0.8	1.5	1.4	2.9	3.4	3.0	1.6
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number	4,068	2,838	2,516	2,109	1,721	1,177	1,145	15,574
Mean ideal number of children for:[2]								
All women	3.8	4.0	4.5	5.1	5.6	6.2	6.7	4.7
Number of women	4,032	2,816	2,478	2,079	1,671	1,137	1,111	15,325
Currently married women	4.3	4.3	4.6	5.1	5.7	6.2	6.7	5.2
Number of currently married women	468	1,634	2,041	1,822	1,509	1,040	1,019	9,534
				MEN[3]				
0	1.1	3.7	1.1	2.2	1.7	1.9	1.9	1.7
1	0.7	0.9	1.4	0.6	0.5	0.5	0.1	0.7
2	13.2	9.8	5.7	2.9	5.7	1.1	1.7	8.7
3	18.8	19.3	10.8	8.8	2.6	4.6	2.1	13.5
4	32.1	35.7	36.4	27.4	21.9	11.2	10.1	28.8
5	13.6	12.6	20.9	18.9	13.3	17.5	7.4	14.5
6+	16.8	14.3	20.7	34.9	50.6	53.2	66.3	27.5
Non-numeric responses	3.8	3.6	3.1	4.2	3.5	9.9	10.4	4.6
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number	2,837	794	757	642	441	331	583	6,384
Mean ideal number of children for:[2]								
All men	4.2	4.0	4.6	5.4	5.8	6.4	8.1	4.9
Number of men	2,730	765	733	615	425	298	522	6,088
Currently married men	4.4	4.1	4.6	5.4	5.8	6.4	8.1	5.6
Number of currently married men	150	509	634	564	398	292	510	3,056
Mean ideal number of children for men 15-59:[2]								
All men	4.3	4.0	4.6	5.4	5.9	6.8	8.4	5.2
Number of men	2,739	787	784	705	522	433	858	6,828
Currently married men	4.5	4.1	4.6	5.5	5.9	6.7	8.4	5.9
Number of currently married men	152	527	676	647	489	419	834	3,745

[1] The number of living children includes the current pregnancy.
[2] Means are calculated excluding respondents who gave non-numeric responses.
[3] The number of living children includes one additional child if the respondent's wife is pregnant (or if any wife is pregnant for men with more than one current wife).

Table 6.4 Mean ideal number of children

Mean ideal number of children for all women age 15-49, according to background characteristics, Sierra Leone DHS 2019

Background characteristic	Mean	Number of women[1]
Age		
15-19	3.9	3,404
20-24	4.2	2,614
25-29	4.5	2,692
30-34	5.0	1,913
35-39	5.4	2,173
40-44	5.7	1,286
45-49	6.0	1,242
Residence		
Urban	4.1	7,012
Rural	5.3	8,313
Province		
Eastern	4.9	3,062
Northern	4.8	3,304
North West	5.3	2,435
Southern	5.2	2,884
Western Area	3.9	3,640
District		
Kailahun	4.9	707
Kenema	5.1	1,435
Kono	4.4	920
Bombali	4.8	1,165
Falaba	5.3	463
Koinadugu	5.0	469
Tonkolili	4.6	1,206
Kambia	5.2	870
Karene	5.1	455
Port Loko	5.4	1,110
Bo	4.9	1,239
Bonthe	5.0	468
Moyamba	5.4	722
Pujehun	5.5	456
Western Area Rural	4.2	1,291
Western Area Urban	3.7	2,349
Education		
No education	5.5	6,920
Primary	4.8	2,068
Secondary	3.9	5,676
More than secondary	3.6	660
Wealth quintile		
Lowest	5.5	2,720
Second	5.3	2,790
Middle	5.1	2,918
Fourth	4.3	3,267
Highest	3.8	3,628
Total	4.7	15,325

[1] Number of women who gave a numeric response

Table 6.5 Fertility planning status

Percent distribution of births to women age 15-49 in the 5 years preceding the survey (including current pregnancies), by planning status of the birth, according to birth order and mother's age at birth, Sierra Leone DHS 2019

Birth order and mother's age at birth	Planning status of birth			Total	Number of births
	Wanted then	Wanted later	Wanted no more		
Birth order					
1	71.6	27.8	0.6	100.0	2,609
2	88.8	10.5	0.8	100.0	2,245
3	87.8	9.2	3.0	100.0	1,831
4+	85.1	8.1	6.8	100.0	4,052
Mother's age at birth					
<20	70.8	28.3	0.9	100.0	1,782
20-24	82.6	16.0	1.4	100.0	2,909
25-29	86.9	10.5	2.6	100.0	2,517
30-34	88.7	7.7	3.7	100.0	1,894
35-39	85.6	4.6	9.8	100.0	1,169
40-44	83.2	5.0	11.8	100.0	389
45-49	80.5	4.3	15.2	100.0	76
Total	83.0	13.6	3.4	100.0	10,737

Table 6.6 Wanted fertility rates

Total wanted fertility rates and total fertility rates for the 3 years preceding the survey, according to background characteristics, Sierra Leone DHS 2019

Background characteristic	Total wanted fertility rate	Total fertility rate
Residence		
Urban	2.9	3.1
Rural	4.7	5.1
Province		
Eastern	4.2	4.6
Northern	3.5	4.0
North West	4.7	5.0
Southern	4.5	5.0
Western Area	2.7	2.9
District		
Kailahun	4.2	4.4
Kenema	4.4	4.7
Kono	4.1	4.8
Bombali	3.6	3.9
Falaba	3.1	3.4
Koinadugu	3.9	4.3
Tonkolili	3.4	4.3
Kambia	4.5	4.8
Karene	4.9	5.4
Port Loko	4.8	5.0
Bo	3.9	4.4
Bonthe	4.8	5.3
Moyamba	5.1	5.4
Pujehun	5.1	5.3
Western Area Rural	3.5	3.6
Western Area Urban	2.3	2.5
Education		
No education	4.5	5.0
Primary	4.5	4.7
Secondary	3.1	3.3
More than secondary	2.0	2.0
Wealth quintile		
Lowest	5.1	5.6
Second	4.7	5.1
Middle	4.3	4.7
Fourth	3.3	3.6
Highest	2.4	2.6
Total	3.8	4.2

Note: Rates are calculated based on births to women age 15-49 in the period 1-36 months preceding the survey. The total fertility rates are the same as those presented in Table 5.2.

FAMILY PLANNING 7

Key Findings

- ***Contraceptive knowledge:*** Knowledge about contraception is widespread in Sierra Leone, with 98% of currently married women and 99% of currently married men knowing at least one modern method.
- ***Contraceptive prevalence rate****:* The contraceptive prevalence rate (CPR) among currently married women is 21%, an increase from the figure reported in 2008 (7%).
- ***Use of modern methods of contraception****:* Injectables (9%) and implants (7%) are the most commonly used modern contraceptive methods among currently married women.
- ***Sources of modern contraceptives:*** The public sector provides coverage to 80% of users of modern methods, while the private sector covers only 18% of users.
- ***Discontinuation of contraceptives:*** More than one out of every three women (35%) who began using a contraceptive method in the 5 years prior to the survey discontinued the method within 12 months.
- ***Demand for family planning:*** Among currently married women, 45% of the demand for family planning is satisfied with modern methods.

Couples can use contraceptive methods to limit or space the number of children they have. This chapter presents information on knowledge, use, and sources of contraceptive methods; informed choice of methods; and rates and reasons for discontinuing contraceptives. It also examines the potential demand for family planning and how much contact nonusers have with family planning providers.

By preventing unwanted and unplanned pregnancies, use of contraception can have a number of other positive effects. For instance, it can reduce maternal mortality, improve educational outcomes for women, and reduce gender inequality and poverty. As such, increasing use of contraception is an important step towards achieving a number of the Sustainable Development Goals (SDGs).

7.1 CONTRACEPTIVE KNOWLEDGE AND USE

Knowledge of contraceptive methods is nearly universal in Sierra Leone, with 98% of currently married women and 99% of men knowing at least one modern method (**Table 7.1**). Among women, pills, injectables, and implants (96% each) are the most well-known contraceptive methods, followed by male condoms (94%). Knowledge of male sterilisation and the standard days method (29% and 31%, respectively) is relatively low.

Among currently married men, the male condom is the most well-known contraceptive method (99%), followed by implants (94%).

Contraceptive prevalence rate

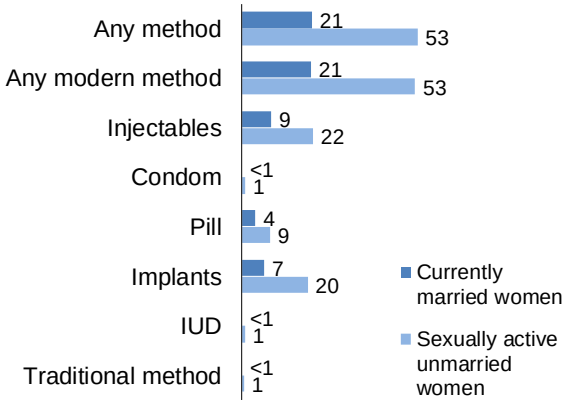
Percentage of women who use any contraceptive method.

Sample: All women age 15-49, currently married women age 15-49, and sexually active unmarried women age 15-49

The contraceptive prevalence rate (CPR) among all women, currently married women, and sexually active unmarried women is 24%, 21%, and 53%, respectively. In each of these groups, nearly all women are using a modern method (**Table 7.3** and **Figure 7.1**).

Figure 7.1 **Contraceptive use**

Percentage of women age 15-49 currently using a contraceptive method



Modern methods

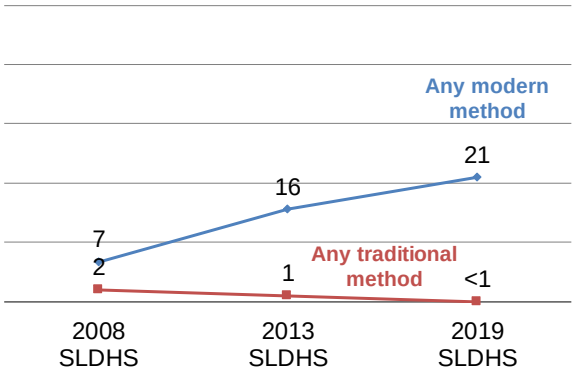
Include male and female sterilisation, injectables, intrauterine devices (IUDs), contraceptive pills, implants, female and male condoms, the standard days method, the lactational amenorrhoea method, and emergency contraception.

Among currently married women, the most commonly used modern contraceptive methods are injectables (9%), followed by implants (7%) and the pill (4%) (**Table 7.3**). Use of the remaining modern methods is low (less than 1% each). In particular, although knowledge of male condoms is high among currently married women (94%), less than 1% use this method (**Table 7.1**).

Trends: Use of modern contraceptive methods among currently married women increased from 7% in 2008 to 21% in 2019 (**Figure 7.2**). Over the same period, use of injectables tripled from 3% to 9%.

Figure 7.2 **Trends in contraceptive use**

Percentage of currently married women currently using a contraceptive method



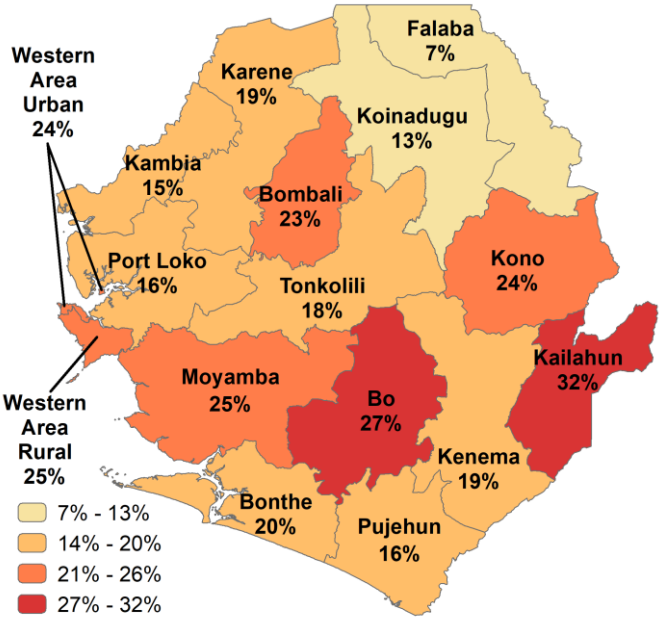
Patterns by background characteristics

- Knowledge of contraceptive methods is universally high across all background characteristics (**Table 7.2**).

- By district, modern contraceptive use ranges from 7% in Falaba to 32% in Kailahun (**Table 7.4** and **Figure 7.3**).
- Contraceptive use generally increases with increasing education. Twenty-nine percent of currently married women with a secondary education use at least one modern method of contraception, as compared with only 17% of those with no education (**Table 7.4** and **Figure 7.4**).
- Among currently married women, use of modern contraceptive methods is more prominent in urban (26%) than in rural (18%) areas (**Table 7.4**).
- Modern contraceptive use among currently married women generally increases with the number of living children. Eight percent of women with no children use a modern method, compared with 23% of those with three or four living children.

Figure 7.3 Modern contraceptive use by district

Percentage of currently married women age 15-49

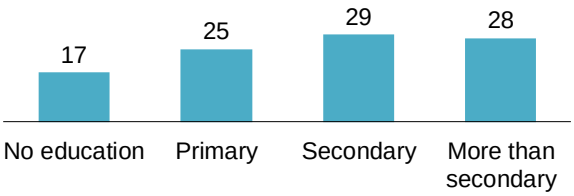


Knowledge of the Fertile Period

Table 7.5 shows that 38% of women know that a woman's fertile period is halfway between two menstrual periods. The most common misconception is that the fertile period occurs right after a woman's menstrual period has ended (26%), while 3% of women report that the fertile period is during the menstrual period. Correct knowledge of the fertile period is highest among women age 25-29 (42%) and lowest among those age 15-19 (28%) (**Table 7.6**).

Figure 7.4 Use of modern methods by education

Percentage of currently married women age 15-49



7.2 Source of Modern Contraceptive Methods

Source of modern contraceptives

The place where the modern method currently being used was obtained the last time it was acquired.

Sample: Women age 15-49 currently using a modern contraceptive method

The predominant source of modern contraceptive methods is the public sector, which covers 80% of all users, while the private medical sector covers only 18% of users. Government health centres are the most popular source for modern contraceptives within the public sector (41%), followed by government

hospitals (25%) and family planning clinics (10%). In the private medical sector, pharmacies (12%) and private hospitals or clinics (4%) are the most common sources of modern contraceptives (**Table 7.7**).

7.3 INFORMED CHOICE

Informed choice

Informed choice indicates that women were informed about their method's side effects, about what to do if they experience side effects, and about other methods they could use.

Sample: Women age 15-49 who are currently using selected modern contraceptive methods and who started the last episode of use within the 5 years before the survey

Informed choice is a vital part of family planning programmes. Seventy-seven percent of women currently using a modern method of contraception were informed about side effects or problems associated with the method they are using, and 74% were informed about what to do if they experienced side effects (**Table 7.9**). Eighty-six percent of women were informed by a health or family planning worker about other contraceptive methods. Overall, 71% of women using a modern contraceptive method were provided with all three types of information making up the method information index (the side effects of the method, what to do if they experience side effects, and other available methods) at the time they started the current episode of contraceptive use. Women obtaining a method from the public sector were more likely to be provided with all three types of information (75%) than those who obtained their method from the private sector (53%).

There were also differences depending on the kind of method used. For instance, 91% of women using IUDs were given all three types of information, as compared with only 57% of women using pills (**Table 7.9**).

7.4 DISCONTINUATION OF CONTRACEPTIVES

Contraceptive discontinuation rate

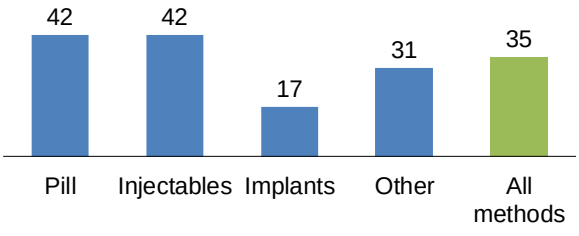
Percentage of contraceptive use episodes discontinued within 12 months.

Sample: Episodes of contraceptive use in the 5 years before the survey experienced by women who are currently age 15-49 (one woman may contribute more than one episode)

One out of every three women (35%) who began using a contraceptive method in the 5 years before the survey discontinued the method within 12 months. The most common reasons for discontinuation were side effects/health concerns (16%) and a desire to become pregnant (9%). The least common reason was method failure (1%) (**Table 7.10**).

***Figure 7.5* Contraceptive discontinuation rates**

Percentage of contraceptive episodes discontinued within 12 months among women age 15-49



7.5 DEMAND FOR FAMILY PLANNING

Unmet need for family planning

Proportion of women who (1) are not pregnant and not postpartum amenorrhoeic and are considered fecund and want to postpone their next birth for 2 or more years or stop childbearing altogether but are not using a contraceptive method, or (2) have a mistimed or unwanted current pregnancy, or (3) are postpartum amenorrhoeic and their last birth in the last 2 years was mistimed or unwanted.

Sample: All women age 15-49, currently married women age 15-49, and sexually active unmarried women age 15-49

Demand for family planning:

Unmet need for family planning
+ current contraceptive use (any method)

Proportion of demand satisfied:

$$\frac{\text{Current contraceptive use (any method)}}{\text{Unmet need + current contraceptive use (any method)}}$$

Proportion of demand satisfied by modern methods:

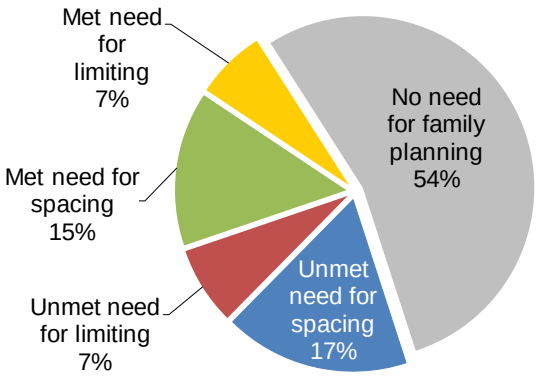
$$\frac{\text{Current contraceptive use (any modern method)}}{\text{Unmet need + current contraceptive use (any method)}}$$

Overall, 46% of currently married women have a demand for family planning; 32% want to space births and 14% want to limit births. Twenty-five percent of women have an unmet need for family planning (17% for spacing and 7% for limiting). Forty-six percent of the demand for family planning is satisfied, 45% through use of modern methods (**Table 7.12.1**).

Trends: Unmet need for family planning among married women age 15-49 has been stable since 2013, at 25%. There has been a slight increase in met need (from 17% to 21%) and total demand (from 42% to 46%) (**Table 7.12.1**).

***Figure 7.6* Demand for family planning**

Percent distribution of currently married women age 15-49 by need for family planning



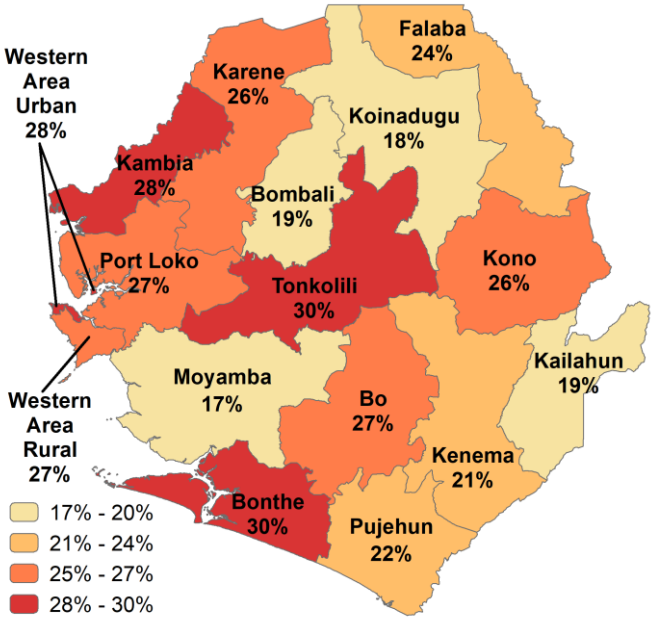
Patterns by background characteristics

- The proportion of married women with an unmet need for spacing births is highest among those age 15-19 (28%), while unmet need for limiting is highest among those age 40-44 (16%) (**Table 7.12.1**).
- The percentage of demand satisfied with modern methods is higher in urban areas (50%) than in rural areas (42%).

- By district, the percentage of women with an unmet need for family planning ranges from 17% in Moyamba to 30% each in Bonthe and Tonkolili (**Figure 7.7**).
- The percentage of demand satisfied with modern methods increases with increasing education, from 40% among women with no education to 61% among those with more than a secondary education.
- Similarly, the percentage of demand satisfied with modern methods increases with increasing household wealth, from 40% among women in the lowest wealth quintile to 50% among those in the highest quintile.

Figure 7.7 Unmet need by district

Percentage of currently married women age 15-49 with unmet need for family planning



Future Use of Contraception

The 2019 SLDHS collected information about nonusers' intention to use contraception. The data revealed that 47% of married women intend to use contraception in the future (**Table 7.14**). Intention to use contraception is highest among nonusers with one or two children (51% each) and lowest among those with no children (37%).

Exposure to Family Planning Messages in the Media

Table 7.15.1 presents information on women's exposure to family planning messages in the media. About one in three (30%) women heard a family planning message on the radio, while 11% saw such a message on television, 5% on a mobile phone, and 2% in a newspaper or magazine. Overall, 69% of women have no exposure to family planning messages in any of these four media sources.

7.6 CONTACT OF NONUSERS WITH FAMILY PLANNING PROVIDERS

Contact of nonusers with family planning providers

Respondent discussed family planning in the 12 months before the survey with a fieldworker or during a visit to a health facility.

Sample: Women age 15-49 who are not currently using any contraceptive methods

Women age 15-49 who were not using contraception during the 12 months prior to the survey were asked whether they discussed family planning with a fieldworker or during a visit to a health facility.

Fifty-eight percent of women responded that they had not discussed family planning either with a fieldworker or during a health facility visit (**Table 7.17)**. Thirty-seven percent of women discussed family planning during a health facility visit, while 15% did not discuss family planning during such a visit. Eighteen percent of women were visited by a fieldworker who discussed family planning.

Patterns by background characteristics

- Sixty-two percent of women in urban areas did not discuss family planning either with a fieldworker or at a health facility, as compared with 55% of women in rural areas.
- The percentage of women who did not discuss family planning with a fieldworker or at a health facility is lowest among those with no education (57%) and highest among those with a secondary education (60%) (**Table 7.17**).
- The percentage of women who did not discuss family planning with a fieldworker or at a health facility increases with increasing household wealth, from 53% among those in the lowest wealth quintile to 65% among those in the highest quintile.

List of Tables

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Table 7.1 Knowledge of contraceptive methods

Percentage of all respondents, currently married respondents, and sexually active unmarried respondents age 15-49 who know any contraceptive method, by specific method, Sierra Leone DHS 2019

	Women			Men		
Method	All women	Currently married women	Sexually active unmarried women[1]	All men	Currently married men	Sexually active unmarried men[1]
Any method	97.6	97.9	99.4	98.1	99.1	99.5
Any modern method	97.4	97.6	99.4	98.1	99.0	99.5
Female sterilisation	62.2	63.0	68.5	54.9	64.6	56.5
Male sterilisation	30.4	28.7	41.6	37.5	44.5	40.8
Pill	95.6	96.2	98.3	88.6	93.4	94.0
IUD	71.2	70.1	79.8	53.5	61.1	60.6
Injectables	95.6	96.2	98.6	87.5	92.7	92.9
Implants	95.2	95.5	98.7	90.3	94.4	94.5
Male condom	94.3	94.1	97.9	97.2	98.7	99.4
Female condom	66.2	64.3	78.3	72.2	77.6	81.6
Emergency contraception	37.2	34.6	51.6	38.0	42.3	47.8
Standard days method	30.4	30.9	38.2	27.8	33.1	28.8
Lactational amenorrhoea (LAM)	50.2	54.2	51.8	34.3	42.7	35.2
Other modern method	3.6	3.9	4.9	0.6	0.8	0.8
Any traditional method	65.0	66.2	74.1	70.7	78.6	82.3
Rhythm	37.2	37.1	45.3	33.0	40.1	38.1
Withdrawal	55.1	54.1	70.7	67.4	74.4	79.7
Other traditional method	12.2	15.5	7.4	13.6	19.1	11.1
Mean number of methods known by respondents 15-49	8.4	8.4	9.3	8.0	8.8	8.6
Number of respondents	15,574	9,715	1,987	6,384	3,234	1,058
Mean number of methods known by respondents 15-59	na	na	na	8.0	8.7	8.6
Number of respondents	na	na	na	7,197	3,991	1,067

na = Not applicable
[1] Had last sexual intercourse within 30 days preceding the survey

Table 7.2 Knowledge of contraceptive methods according to background characteristics

Percentage of currently married women and currently married men age 15-49 who have heard of at least one contraceptive method and who have heard of at least one modern method, by background characteristics, Sierra Leone DHS 2019

Background characteristic	Women			Men		
	Heard of any method	Heard of any modern method[1]	Number	Heard of any method	Heard of any modern method[1]	Number
Age						
15-19	98.4	98.0	477	*	*	13
20-24	97.8	97.4	1,365	99.1	99.1	166
25-29	98.7	98.7	2,097	99.4	99.4	540
30-34	97.9	97.7	1,637	99.3	99.3	635
35-39	98.1	97.7	1,960	98.9	98.6	698
40-44	97.4	97.2	1,129	98.9	98.8	566
45-49	96.3	95.7	1,050	99.3	99.0	615
Residence						
Urban	99.5	99.4	3,579	99.7	99.7	1,271
Rural	97.0	96.6	6,136	98.8	98.6	1,963
Province						
Eastern	99.5	99.4	2,007	99.7	99.7	683
Northern	97.5	96.6	2,173	98.0	97.6	661
North West	99.1	98.8	1,760	99.3	99.1	520
Southern	93.8	93.8	1,895	99.1	99.0	653
Western Area	99.6	99.6	1,880	99.6	99.6	717
District						
Kailahun	99.3	99.0	478	100.0	100.0	164
Kenema	99.4	99.4	932	100.0	100.0	299
Kono	99.9	99.9	597	99.2	99.2	221
Bombali	99.4	99.2	728	99.7	99.7	240
Falaba	92.0	87.0	291	85.4	82.6	68
Koinadugu	96.2	96.2	318	99.0	99.0	106
Tonkolili	98.2	97.8	836	99.4	99.2	247
Kambia	98.7	98.3	626	99.1	99.1	172
Karene	99.3	99.3	335	98.2	97.3	111
Port Loko	99.2	99.0	799	100.0	100.0	238
Bo	99.2	99.1	724	100.0	100.0	241
Bonthe	100.0	100.0	337	99.3	99.3	124
Moyamba	97.9	97.9	503	97.1	97.1	175
Pujehun	69.7	69.6	331	100.0	99.7	114
Western Area Rural	99.3	99.3	745	99.3	99.3	231
Western Area Urban	99.7	99.7	1,135	99.7	99.7	485
Education						
No education	97.1	96.7	5,957	98.1	97.8	1,366
Primary	98.7	98.5	1,298	100.0	99.9	408
Secondary	99.4	99.4	2,121	99.9	99.9	1,123
More than secondary	99.5	99.5	340	100.0	100.0	337
Wealth quintile						
Lowest	96.7	96.3	2,080	98.4	98.2	722
Second	97.0	96.8	2,135	98.9	98.7	657
Middle	97.4	96.8	1,979	99.1	99.0	597
Fourth	99.3	99.2	1,770	99.5	99.5	585
Highest	99.5	99.5	1,751	99.9	99.9	674
Total 15-49	97.9	97.6	9,715	99.1	99.0	3,234
50-59	na	na	na	96.9	96.7	757
Total 15-59	na	na	na	98.7	98.6	3,991

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
na = Not applicable
[1] Female sterilisation, male sterilisation, pill, IUD, injectables, implants, male condom, female condom, emergency contraception, standard days method (SDM), lactational amenorrhoea method (LAM), and other modern methods

Table 7.3 Current use of contraception by age

Percent distribution of all women, currently married women, and sexually active unmarried women age 15-49 by contraceptive method currently used, according to age, Sierra Leone DHS 2019

			Modern method									Traditional method					
Age	Any method	Any modern method	Sterilisation[1]	Pill	IUD	Injectables	Implants	Condom[2]	Emergency contraception	SDM	Other[3]	Any traditional method	Withdrawal	Other[4]	Not currently using	Total	Number of women
								ALL WOMEN									
15-19	21.3	21.0	0.0	1.9	0.3	8.1	10.4	0.2	0.1	0.0	0.0	0.2	0.1	0.1	78.7	100.0	3,427
20-24	30.4	29.9	0.0	4.9	0.6	13.3	9.8	0.7	0.2	0.1	0.3	0.5	0.2	0.3	69.6	100.0	2,629
25-29	31.1	30.6	0.1	6.4	0.6	13.7	9.0	0.4	0.2	0.0	0.2	0.5	0.1	0.4	68.9	100.0	2,728
30-34	26.1	26.0	0.1	6.3	0.3	10.3	8.1	0.2	0.4	0.1	0.0	0.1	0.0	0.1	73.9	100.0	1,942
35-39	24.7	24.4	0.5	5.2	0.6	10.3	7.2	0.1	0.1	0.1	0.2	0.4	0.1	0.3	75.3	100.0	2,224
40-44	17.5	17.2	0.4	4.3	0.5	6.1	5.5	0.2	0.0	0.1	0.0	0.3	0.0	0.3	82.5	100.0	1,337
45-49	8.8	8.6	0.4	1.4	0.2	4.3	2.3	0.0	0.0	0.0	0.1	0.3	0.0	0.3	91.2	100.0	1,288
Total	24.3	23.9	0.2	4.4	0.4	10.1	8.2	0.3	0.1	0.1	0.1	0.3	0.1	0.3	75.7	100.0	15,574
								CURRENTLY MARRIED WOMEN									
15-19	14.4	14.3	0.0	1.0	0.0	4.9	7.9	0.0	0.2	0.0	0.1	0.1	0.0	0.1	85.6	100.0	477
20-24	18.6	18.2	0.0	2.4	0.3	9.4	5.6	0.1	0.0	0.0	0.4	0.4	0.1	0.2	81.4	100.0	1,365
25-29	26.8	26.3	0.1	5.2	0.4	11.3	8.9	0.2	0.0	0.0	0.3	0.5	0.0	0.5	73.2	100.0	2,097
30-34	24.3	24.2	0.2	5.7	0.3	9.8	7.7	0.2	0.2	0.1	0.0	0.0	0.0	0.0	75.7	100.0	1,637
35-39	24.4	24.1	0.5	5.1	0.5	10.1	7.3	0.1	0.2	0.1	0.2	0.3	0.0	0.3	75.6	100.0	1,960
40-44	18.3	17.9	0.5	4.2	0.5	6.3	6.0	0.2	0.0	0.1	0.0	0.4	0.0	0.4	81.7	100.0	1,129
45-49	9.2	8.9	0.4	1.3	0.2	4.4	2.4	0.0	0.0	0.0	0.1	0.3	0.0	0.3	90.8	100.0	1,050
Total	21.2	20.9	0.2	4.1	0.4	8.9	6.8	0.1	0.1	0.1	0.2	0.3	0.0	0.3	78.8	100.0	9,715
								SEXUALLY ACTIVE UNMARRIED WOMEN[5]									
15-19	58.9	58.3	0.0	5.4	0.5	23.4	28.0	1.0	0.1	0.0	0.0	0.6	0.5	0.1	41.1	100.0	729
20-24	58.2	57.7	0.0	8.8	1.3	24.1	20.8	2.0	0.5	0.3	0.0	0.5	0.2	0.3	41.8	100.0	580
25+	42.9	42.1	0.7	11.5	1.1	17.3	10.6	0.3	0.6	0.0	0.0	0.8	0.5	0.2	57.1	100.0	678
Total	53.3	52.6	0.2	8.5	0.9	21.5	19.9	1.0	0.4	0.1	0.0	0.6	0.4	0.2	46.7	100.0	1,987

Note: If more than one method is used, only the most effective method is considered in this tabulation.
SDM = Standard days method
[1] Sterilisation is a combination of both male and female sterilisation.
[2] Condom is a combination of both male and female condoms.
[3] Other includes lactational amenorrhoea method (LAM).
[4] Other includes rhythm.
[5] Women who have had sexual intercourse within 30 days preceding the survey

Table 7.4 Current use of contraception according to background characteristics

Percent distribution of currently married and sexually active unmarried women age 15-49 by contraceptive method currently used, according to background characteristics, Sierra Leone DHS 2019

Background characteristic	Any method	Any modern method	Modern method									Any traditional method	Traditional method	Not currently using	Total	Number of women
			Sterilisation[1]	Pill	IUD	Injectables	Implants	Condom[2]	Emergency contraception	SDM	LAM		Other[3]			
							CURRENTLY MARRIED WOMEN									
Number of living children																
0	8.5	8.4	0.0	1.6	0.1	3.5	2.8	0.0	0.4	0.0	0.0	0.1	0.1	91.5	100.0	662
1-2	21.1	20.6	0.0	3.9	0.4	8.9	6.7	0.2	0.1	0.1	0.3	0.5	0.5	78.9	100.0	3,687
3-4	23.3	23.2	0.3	4.8	0.4	9.8	7.7	0.1	0.0	0.1	0.1	0.1	0.1	76.7	100.0	3,338
5+	22.3	21.9	0.7	4.3	0.3	9.3	6.9	0.0	0.0	0.1	0.2	0.4	0.4	77.7	100.0	2,028
Residence																
Urban	26.0	25.8	0.4	6.3	0.6	11.5	6.4	0.3	0.1	0.1	0.0	0.2	0.2	74.0	100.0	3,579
Rural	18.5	18.1	0.2	2.8	0.2	7.4	7.1	0.1	0.0	0.0	0.3	0.4	0.4	81.5	100.0	6,136
Province																
Eastern	23.8	23.5	0.3	6.3	1.1	8.3	7.3	0.1	0.1	0.1	0.0	0.3	0.3	76.2	100.0	2,007
Northern	18.1	17.6	0.3	1.3	0.2	6.6	8.7	0.2	0.1	0.0	0.1	0.5	0.5	81.9	100.0	2,173
North West	16.0	15.9	0.1	1.9	0.1	7.1	5.8	0.1	0.0	0.0	0.8	0.1	0.1	84.0	100.0	1,760
Southern	23.7	23.3	0.3	5.4	0.1	9.7	7.7	0.0	0.0	0.1	0.0	0.4	0.4	76.3	100.0	1,895
Western Area	24.7	24.5	0.2	5.9	0.3	13.2	4.2	0.3	0.2	0.1	0.0	0.2	0.2	75.3	100.0	1,880
District																
Kailahun	32.2	31.6	0.2	8.8	0.0	11.0	11.2	0.1	0.0	0.3	0.0	0.6	0.6	67.8	100.0	478
Kenema	19.2	19.0	0.0	7.6	0.0	5.8	5.6	0.1	0.0	0.0	0.0	0.2	0.2	80.8	100.0	932
Kono	24.1	23.9	0.7	2.2	3.7	10.1	6.7	0.3	0.2	0.0	0.0	0.2	0.2	75.9	100.0	597
Bombali	24.5	23.1	0.4	1.6	0.3	9.0	11.5	0.0	0.0	0.0	0.2	1.4	1.4	75.5	100.0	728
Falaba	7.1	7.1	1.1	0.3	0.0	1.4	2.7	0.7	0.7	0.0	0.2	0.0	0.0	92.9	100.0	291
Koinadugu	13.1	12.9	0.0	1.6	0.2	3.4	7.4	0.0	0.0	0.0	0.2	0.3	0.3	86.9	100.0	318
Tonkolili	18.2	18.2	0.1	1.2	0.1	7.5	8.9	0.2	0.1	0.0	0.0	0.0	0.0	81.8	100.0	836
Kambia	14.8	14.6	0.0	1.5	0.0	6.5	6.3	0.2	0.1	0.0	0.0	0.2	0.2	85.2	100.0	626
Karene	18.7	18.7	0.8	1.9	0.2	6.2	6.2	0.0	0.0	0.0	3.6	0.0	0.0	81.3	100.0	335
Port Loko	15.8	15.7	0.0	2.3	0.1	7.9	5.2	0.0	0.0	0.0	0.2	0.1	0.1	84.2	100.0	799
Bo	27.1	26.8	0.4	7.2	0.1	10.6	8.2	0.0	0.0	0.2	0.0	0.3	0.3	72.9	100.0	724
Bonthe	20.4	20.4	0.4	5.5	0.0	11.3	3.1	0.0	0.0	0.0	0.2	0.0	0.0	79.6	100.0	337
Moyamba	25.5	24.7	0.0	2.7	0.1	11.2	10.6	0.0	0.0	0.1	0.0	0.7	0.7	74.5	100.0	503
Pujehun	16.7	16.4	0.3	5.5	0.0	3.6	7.1	0.0	0.0	0.0	0.0	0.2	0.2	83.3	100.0	331
Western Area Rural	25.0	24.6	0.3	4.6	0.3	13.5	4.9	0.3	0.2	0.3	0.1	0.4	0.4	75.0	100.0	745
Western Area Urban	24.5	24.4	0.2	6.7	0.3	13.0	3.8	0.2	0.1	0.0	0.0	0.1	0.1	75.5	100.0	1,135
Education																
No education	17.0	16.7	0.3	3.0	0.3	7.1	5.9	0.0	0.0	0.0	0.1	0.3	0.3	83.0	100.0	5,957
Primary	24.6	24.6	0.2	5.0	0.4	10.3	8.2	0.1	0.0	0.0	0.4	0.1	0.1	75.4	100.0	1,298
Secondary	29.9	29.4	0.1	6.0	0.4	13.2	9.1	0.1	0.1	0.1	0.3	0.5	0.5	70.1	100.0	2,121
More than secondary	28.6	28.3	0.7	8.2	1.7	9.5	3.7	1.9	1.9	0.9	0.0	0.3	0.3	71.4	100.0	340
Wealth quintile																
Lowest	16.2	15.8	0.2	2.9	0.1	7.1	5.2	0.0	0.0	0.0	0.4	0.3	0.3	83.8	100.0	2,080
Second	18.4	17.9	0.2	2.2	0.2	6.7	8.2	0.0	0.0	0.0	0.3	0.5	0.5	81.6	100.0	2,135
Middle	20.9	20.8	0.2	4.2	0.3	7.5	8.1	0.2	0.1	0.0	0.2	0.1	0.1	79.1	100.0	1,979
Fourth	26.2	25.9	0.3	4.7	0.7	12.3	7.5	0.1	0.1	0.2	0.0	0.3	0.3	73.8	100.0	1,770
Highest	26.1	25.8	0.5	7.3	0.5	11.9	4.9	0.4	0.2	0.1	0.1	0.3	0.3	73.9	100.0	1,751
Total	21.2	20.9	0.2	4.1	0.4	8.9	6.8	0.1	0.1	0.1	0.2	0.3	0.3	78.8	100.0	9,715

Continued...

Table 7.4—*Continued*

Background characteristic	Any method	Any modern method	Modern method									Traditional method		Not currently using	Total	Number of women
			Sterilisation[1]	Pill	IUD	Injectables	Implants	Condom[2]	Emergency contraception	SDM	LAM	Any traditional method	Other[3]			
			SEXUALLY ACTIVE UNMARRIED WOMEN[4]													
Number of living children																
0	53.6	52.7	0.2	7.3	1.0	21.6	20.4	1.4	0.6	0.0	0.0	0.9	0.9	46.4	100.0	1,203
1-2	56.1	55.8	0.1	10.4	0.8	24.0	19.6	0.6	0.0	0.3	0.0	0.3	0.3	43.9	100.0	625
3-4	41.3	41.3	0.0	11.0	0.4	9.2	20.6	0.0	0.0	0.0	0.0	0.0	0.0	58.7	100.0	123
5+	(34.4)	(34.4)	(4.5)	(3.6)	(0.0)	(18.3)	(8.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(65.6)	100.0	36
Residence																
Urban	53.3	52.6	0.2	10.9	1.2	22.5	15.7	1.4	0.6	0.1	0.0	0.7	0.7	46.7	100.0	1,233
Rural	53.1	52.7	0.2	4.5	0.5	20.0	26.9	0.5	0.0	0.0	0.0	0.5	0.5	46.9	100.0	754
Province																
Eastern	56.1	55.3	0.0	9.9	1.9	22.0	20.1	0.9	0.0	0.5	0.0	0.8	0.8	43.9	100.0	345
Northern	60.8	60.4	0.0	5.0	0.7	22.0	31.4	1.3	0.0	0.0	0.0	0.4	0.4	39.2	100.0	437
North West	50.6	49.6	0.0	4.1	0.3	18.8	26.1	0.3	0.0	0.0	0.0	1.0	1.0	49.4	100.0	236
Southern	56.6	56.6	0.7	11.0	0.2	20.8	22.8	0.6	0.4	0.0	0.0	0.0	0.0	43.4	100.0	343
Western Area	45.5	44.6	0.3	10.3	1.2	22.4	7.9	1.5	1.0	0.0	0.0	0.9	0.9	54.5	100.0	626
District																
Kailahun	58.6	55.9	0.0	8.5	0.0	15.1	31.2	1.0	0.0	0.0	0.0	2.8	2.8	41.4	100.0	102
Kenema	46.0	46.0	0.0	10.6	0.0	17.0	18.1	0.0	0.0	0.3	0.0	0.0	0.0	54.0	100.0	146
Kono	68.6	68.6	0.0	10.3	6.8	36.7	11.4	2.3	0.0	1.2	0.0	0.0	0.0	31.4	100.0	98
Bombali	56.0	55.0	0.0	3.1	0.0	20.5	31.0	0.4	0.0	0.0	0.0	1.0	1.0	44.0	100.0	172
Falaba	59.4	59.4	0.0	10.1	0.0	19.0	25.9	4.4	0.0	0.0	0.0	0.0	0.0	40.6	100.0	52
Koinadugu	60.0	60.0	0.0	9.2	0.0	14.7	36.1	0.0	0.0	0.0	0.0	0.0	0.0	40.0	100.0	35
Tonkolili	66.1	66.1	0.0	4.4	1.7	25.8	32.6	1.6	0.0	0.0	0.0	0.0	0.0	33.9	100.0	178
Kambia	50.3	50.3	0.0	3.0	0.0	14.3	32.9	0.0	0.0	0.0	0.0	0.0	0.0	49.7	100.0	82
Karene	(50.4)	(50.4)	(0.0)	(0.0)	(0.0)	(12.4)	(36.2)	(1.8)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(49.6)	100.0	34
Port Loko	50.9	48.9	0.0	6.0	0.6	23.7	18.5	0.0	0.0	0.0	0.0	2.0	2.0	49.1	100.0	120
Bo	54.6	54.6	1.2	9.3	0.0	19.0	23.9	0.5	0.7	0.0	0.0	0.0	0.0	45.4	100.0	209
Bonthe	76.2	76.2	0.0	26.1	0.0	30.7	17.1	2.3	0.0	0.0	0.0	0.0	0.0	23.8	100.0	38
Moyamba	56.8	56.8	0.0	8.7	0.9	23.0	24.2	0.0	0.0	0.0	0.0	0.0	0.0	43.2	100.0	76
Pujehun	(39.0)	(39.0)	(0.0)	(8.7)	(0.0)	(13.6)	(16.6)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(61.0)	100.0	20
Western Area Rural	45.7	44.9	0.0	10.6	0.0	24.3	9.5	0.5	0.0	0.0	0.0	0.8	0.8	54.3	100.0	180
Western Area Urban	45.5	44.5	0.5	10.2	1.6	21.6	7.3	1.8	1.4	0.0	0.0	1.0	1.0	54.5	100.0	445
Education																
No education	33.0	32.8	0.4	6.3	0.6	13.8	11.6	0.1	0.0	0.0	0.0	0.2	0.2	67.0	100.0	367
Primary	49.5	48.8	0.3	4.1	1.4	21.5	21.5	0.0	0.0	0.0	0.0	0.7	0.7	50.5	100.0	228
Secondary	60.5	59.8	0.0	9.7	0.8	24.3	23.1	1.6	0.1	0.1	0.0	0.7	0.7	39.5	100.0	1,231
More than secondary	49.0	47.9	1.3	10.0	2.2	17.9	12.3	0.6	3.7	0.0	0.0	1.0	1.0	51.0	100.0	162
Wealth quintile																
Lowest	49.6	49.3	0.7	2.8	0.0	22.0	23.8	0.0	0.0	0.0	0.0	0.3	0.3	50.4	100.0	220
Second	51.4	51.0	0.0	7.2	0.4	15.9	27.1	0.4	0.0	0.0	0.0	0.4	0.4	48.6	100.0	238
Middle	59.5	59.2	0.0	6.5	0.9	20.5	29.8	1.3	0.0	0.3	0.0	0.3	0.3	40.5	100.0	336
Fourth	57.9	56.8	0.1	10.1	0.6	24.6	19.9	1.3	0.0	0.1	0.0	1.1	1.1	42.1	100.0	542
Highest	48.1	47.4	0.3	10.4	1.7	21.4	11.0	1.3	1.2	0.0	0.0	0.7	0.7	51.9	100.0	651
Total	53.3	52.6	0.2	8.5	0.9	21.5	19.9	1.0	0.4	0.1	0.0	0.6	0.6	46.7	100.0	1,987

Note: If more than one method is used, only the most effective method is considered in this tabulation. Figures in parentheses are based on 25-49 unweighted cases.
SDM = Standard days method

LAM = Lactational amenorrhoea method
[1] Sterilisation is a combination of both male and female sterilisation.
[2] Condom is a combination of both male and female condoms.
[3] Other includes rhythm and withdrawal.
[4] Women who have had sexual intercourse within 30 days preceding the survey

Table 7.5 Knowledge of fertile period

Percent distribution of rhythm users, SDM users, and all women age 15-49 by knowledge of the fertile period during the ovulatory cycle, Sierra Leone DHS 2019

Perceived fertile period	Users of rhythm method	Users of SDM	All women
Just before her menstrual period begins	*	*	12.2
During her menstrual period	*	*	3.0
Right after her menstrual period has ended	*	*	26.0
Halfway between two menstrual periods	*	*	37.7
Other	*	*	0.0
No specific time	*	*	9.4
Don't know	*	*	11.8
Total	*	*	100.0
Number of women	10	8	15,574

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
SDM = standard days method

Table 7.6 Knowledge of fertile period by age

Percentage of women age 15-49 with correct knowledge of the fertile period during the ovulatory cycle, according to age, Sierra Leone DHS 2019

Age	Percentage with correct knowledge of the fertile period	Number of women
15-19	27.8	3,427
20-24	40.2	2,629
25-29	41.6	2,728
30-34	40.4	1,942
35-39	42.1	2,224
40-44	37.2	1,337
45-49	39.0	1,288
Total	37.7	15,574

Note: Correct knowledge of the fertile period is defined as "halfway between two menstrual periods."

Table 7.7 Source of modern contraceptive methods

Percent distribution of users of modern contraceptive methods age 15-49 by most recent source of method, according to method, Sierra Leone DHS 2019

Source	Sterilisation[1]	IUD	Injectables	Implants	Pill	Condom[2]	Emergency contraception	SDM	Total
Public sector	(82.0)	85.9	81.9	93.1	57.2	(33.2)	*	*	80.4
Government hospital	(67.8)	49.1	25.6	27.9	16.3	(11.3)	*	*	25.2
Government health centre	(8.8)	12.3	43.2	49.4	28.2	(13.2)	*	*	41.0
Family planning clinic	(5.4)	22.4	9.6	10.6	10.4	(7.3)	*	*	10.4
Public mobile clinic	(0.0)	2.1	0.9	1.9	0.5	(0.0)	*	*	1.2
Public fieldworker	(0.0)	0.0	2.6	3.4	1.7	(1.4)	*	*	2.6
Other public sector	(0.0)	0.0	0.0	0.0	0.0	(0.0)	*	*	0.0
Private medical sector	(10.8)	14.1	16.6	5.9	41.0	(62.9)	*	*	18.1
Private hospital/clinic	(10.8)	11.7	3.6	3.7	2.2	(6.3)	*	*	3.6
Pharmacy	(0.0)	0.0	9.9	0.5	36.4	(56.5)	*	*	12.1
Private doctor's office	(0.0)	0.0	0.9	0.3	0.5	(0.0)	*	*	0.6
Private mobile clinic	(0.0)	0.0	0.7	0.5	0.7	(0.0)	*	*	0.6
Private fieldworker	(0.0)	2.4	1.4	0.8	1.3	(0.0)	*	*	1.1
Other private medical	(0.0)	0.0	0.1	0.0	0.0	(0.0)	*	*	0.1
Other source	(0.0)	0.0	1.3	0.6	1.6	(3.9)	*	*	1.2
Shop	(0.0)	0.0	0.1	0.0	1.3	(0.0)	*	*	0.3
Church	(0.0)	0.0	0.0	0.0	0.0	(0.0)	*	*	0.0
Friend/relative	(0.0)	0.0	1.2	0.6	0.3	(3.9)	*	*	0.9
Other	(7.2)	0.0	0.2	0.5	0.2	(0.0)	*	*	0.4
Out of the calendar	(0.0)	0.0	0.0	0.0	0.0	(0.0)	*	*	0.0
Don't know	(0.0)	0.0	0.0	0.0	0.0	(0.0)	*	*	0.0
Total	(100.0)	100.0	100.0	100.0	100.0	(100.0)	*	*	100.0
Number of women	29	70	1,566	1,281	685	43	22	8	3,704

Note: Total includes other modern methods but excludes the lactational amenorrhoea method (LAM). Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
SDM = Standard days method
[1] Sterilisation is a combination of both male and female sterilisation.
[2] Condom is a combination of both male and female condoms.

Table 7.8 Use of social marketing brand pills and condoms

Percentage of pill and condom users age 15-49 using a social marketing brand, by background characteristics, Sierra Leone DHS 2019

Background characteristic	Among pill users						Among condom users[1]				
	Micro-gynon	Microlite	Zinniaf	Other	Don't know	Number of women	Protector Plus	Love	Other[2]	Don't know	Number of women
Age											
15-19	90.8	8.7	0.0	0.6	0.0	66	*	*	*	*	8
20-24	88.6	7.9	0.0	2.1	1.4	129	*	*	*	*	18
25-29	88.7	7.3	4.0	0.0	0.0	175	*	*	*	*	10
30-34	79.6	11.9	6.1	1.2	1.3	123	*	*	*	*	2
35-39	84.0	5.2	9.6	0.0	1.3	116	*	*	*	*	2
40-44	85.3	5.2	9.5	0.0	0.0	57	*	*	*	*	3
45-49	*	*	*	*	*	18	*	*	*	*	0
Residence											
Urban	85.3	8.3	4.5	0.8	1.1	445	(41.1)	(31.2)	(21.2)	(6.5)	32
Rural	87.7	6.9	5.0	0.5	0.0	240	*	*	*	*	9
Province											
Eastern	86.2	11.4	1.6	0.0	0.8	183	*	*	*	*	6
Northern	82.1	8.1	8.7	0.0	1.0	61	*	*	*	*	12
North West	92.8	4.1	2.5	0.7	0.0	57	*	*	*	*	2
Southern	85.2	4.3	10.0	0.4	0.0	168	*	*	*	*	3
Western Area	86.2	8.4	2.5	1.6	1.3	216	*	*	*	*	18
District											
Kailahun	97.3	2.7	0.0	0.0	0.0	54	*	*	*	*	1
Kenema	79.0	16.4	3.0	0.0	1.5	100	*	*	*	*	1
Kono	(89.7)	(10.3)	(0.0)	(0.0)	(0.0)	29	*	*	*	*	4
Bombali	(86.0)	(11.1)	(0.0)	(0.0)	(3.0)	21	*	*	*	*	1
Falaba	*	*	*	*	*	9	*	*	*	*	7
Koinadugu	*	*	*	*	*	12	*	*	*	*	0
Tonkolili	*	*	*	*	*	19	*	*	*	*	5
Kambia	*	*	*	*	*	20	*	*	*	*	1
Karene	*	*	*	*	*	7	*	*	*	*	1
Port Loko	(93.4)	(1.9)	(4.7)	(0.0)	(0.0)	30	*	*	*	*	0
Bo	77.2	6.7	16.1	0.0	0.0	87	*	*	*	*	1
Bonthe	96.4	1.8	1.8	0.0	0.0	34	*	*	*	*	1
Moyamba	(90.6)	(0.0)	(6.3)	(3.1)	(0.0)	23	*	*	*	*	0
Pujehun	(93.1)	(3.5)	(3.4)	(0.0)	(0.0)	25	*	*	*	*	1
Western Area Rural	73.9	13.9	5.7	4.8	1.7	72	*	*	*	*	6
Western Area Urban	92.3	5.7	0.9	0.0	1.1	144	*	*	*	*	12
Education											
No education	84.9	7.5	6.2	0.8	0.7	223	*	*	*	*	4
Primary	85.6	6.1	8.3	0.0	0.0	85	*	*	*	*	0
Secondary	87.0	9.4	2.3	0.2	1.1	321	(50.5)	(29.0)	(15.5)	(4.9)	28
More than secondary	87.1	2.6	6.7	3.6	0.0	56	*	*	*	*	9
Wealth quintile											
Lowest	91.4	7.4	1.2	0.0	0.0	77	*	*	*	*	0
Second	86.0	6.1	7.4	0.5	0.0	72	*	*	*	*	1
Middle	87.8	6.0	4.4	0.6	1.2	122	*	*	*	*	10
Fourth	79.7	11.1	7.3	0.8	1.1	174	*	*	*	*	13
Highest	88.3	7.1	3.2	0.8	0.7	241	*	*	*	*	17
Total	86.1	7.8	4.7	0.7	0.7	685	(43.3)	(29.3)	(22.4)	(5.1)	42

Note: Table excludes pill and condom users who do not know the brand name. Condom use is based on women's reports. Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
[1] Among condom users not also using the pill
[2] Other includes Latex, Rough rider Iquon, and Strawberry.

Table 7.9 Informed choice

Among current users of modern methods age 15-49 who started the last episode of use within the 5 years preceding the survey, percentage who were informed about possible side effects or problems of that method, percentage who were informed about what to do if they experienced side effects, percentage who were informed about other methods they could use, and percentage who were informed of all three, according to method and initial source, Sierra Leone DHS 2019

	Among women who started last episode of modern contraceptive method within 5 years preceding the survey:				
Method/source	Percentage who were informed about side effects or problems of method used	Percentage who were informed about what to do if they experienced side effects	Percentage who were informed by a health or family planning worker of other methods that could be used	Percentage who were informed of all three (method information index)	Number of women
Method					
Female sterilisation	*	*	*	*	13
IUD	94.6	94.6	96.6	91.3	54
Injectables	76.8	73.5	85.7	71.1	1,454
Implants	83.9	79.9	91.0	76.8	1,232
Pill	62.1	58.4	77.6	56.5	601
Initial source of method[1]					
Public sector	80.9	77.3	89.4	74.9	2,760
Government hospital	76.5	71.0	83.9	67.4	859
Government health centre	83.6	80.9	91.7	79.4	1,432
Family planning clinic	81.0	78.5	93.9	76.0	339
Public mobile clinic	(87.9)	(81.7)	(90.3)	(81.7)	46
Public fieldworker	76.5	71.8	87.2	66.1	82
Private medical sector	59.9	57.0	72.6	52.9	548
Private hospital/clinic	83.4	82.3	90.4	77.3	120
Private doctor's office	*	*	*	*	18
Private mobile clinic	*	*	*	*	20
Pharmacy	50.3	47.6	65.2	44.1	349
Private fieldworker	(68.2)	(56.0)	(75.3)	(48.4)	41
Other source	(47.9)	(41.5)	(66.3)	(39.0)	36
Shop	*	*	*	*	11
Friend/relative	*	*	*	*	25
Other	*	*	*	*	10
Total	77.1	73.5	86.3	70.9	3,353

Note: Table includes users of only the methods listed individually. Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
[1] Source at start of current episode of use

Table 7.10 Twelve-month contraceptive discontinuation rates

Among episodes of contraceptive use experienced within the 5 years preceding the survey, percentage of episodes discontinued within 12 months, according to reason for discontinuation and specific method, Sierra Leone DHS 2019

Method	Method failure	Desire to become pregnant	Other fertility-related reasons[1]	Side effects/ health concerns	Wanted more effective method	Other method-related reasons[2]	Other reasons	Any reason[3]	Switched to another method[4]	Number of episodes of use[5]
Injectables	0.3	11.1	1.3	21.8	1.5	3.1	3.0	42.0	1.2	2,356
Implants	0.1	3.6	0.0	11.2	0.1	1.0	1.2	17.3	0.6	1,476
Pill	1.6	13.4	2.9	14.3	3.2	2.8	3.8	42.1	3.3	1,072
Other[6]	0.6	7.2	4.7	1.1	6.1	6.5	4.4	30.7	4.7	340
All methods	0.5	9.3	1.5	15.9	1.8	2.7	2.8	34.5	1.7	5,244

Note: Figures are based on life table calculations using information on episodes of use that occurred 3-62 months preceding the survey.
[1] Includes infrequent sex/husband away, difficult to get pregnant/menopausal, and marital dissolution/separation
[2] Includes lack of access/too far, costs too much, and inconvenient to use
[3] Reasons for discontinuation are mutually exclusive and add to the total given in this column.
[4] A woman is considered to have switched to another method if she used a different method in the month following discontinuation or if she gave "wanted a more effective method" as the reason for discontinuation and started another method within 2 months of discontinuation.
[5] All episodes of use that occurred within the 5 years preceding the survey are included. Episodes of use include both episodes that were discontinued during the period of observation and episodes that were not discontinued during the period of observation.
[6] Includes female sterilisation, male sterilisation, IUD, male condom, female condom, emergency contraception, standard days method (SDM), lactational amenorrhoea method (LAM), rhythm, withdrawal, and other traditional methods

Table 7.11 Reasons for discontinuation

Percent distribution of discontinuations of contraceptive methods in the 5 years preceding the survey by main reason stated for discontinuation, according to specific method, Sierra Leone DHS 2019

Reason	Injectables	Implants	Pill	Male condom	Other[1]	All methods
Became pregnant while using	1.1	0.2	4.1	2.3	4.1	1.8
Wanted to become pregnant	29.6	26.3	35.4	23.2	30.4	30.3
Husband/partner disapproved	3.9	4.8	5.4	5.7	2.9	4.4
Wanted a more effective method	3.2	2.3	7.0	6.9	27.3	5.1
Side effects/health concerns	48.7	56.2	30.2	1.2	13.5	42.6
Lack of access/too far	1.8	1.2	2.2	5.3	0.9	1.9
Cost too much	2.0	1.2	0.9	1.3	0.0	1.5
Inconvenient to use	2.9	4.5	2.8	21.9	6.0	3.8
Up to God/fatalistic	0.6	0.0	0.2	0.0	0.0	0.4
Difficult to get pregnant/menopausal	0.3	0.0	0.0	0.0	1.3	0.2
Infrequent sex/husband away	2.7	0.9	6.3	23.6	4.5	3.9
Marital dissolution/separation	0.4	0.0	0.0	1.6	0.0	0.2
Other	1.8	1.5	2.3	2.1	4.2	2.0
Don't know	0.3	0.3	0.6	4.2	1.0	0.5
Missing	0.7	0.7	2.7	0.6	3.8	1.3
Total	100.0	100.0	100.0	100.0	100.0	100.0
Number of discontinuations	1,171	398	576	63	95	2,303

[1] Other includes withdrawal, rhythm, standard days method (SDM), male sterilisation, IUD, and emergency contraception.

Table 7.12.1 Need and demand for family planning among currently married women

Percentage of currently married women age 15-49 with unmet need for family planning, percentage with met need for family planning, total demand for family planning, and percentage of the demand for family planning that is satisfied, according to background characteristics, Sierra Leone DHS 2019

Background characteristic	Unmet need for family planning			Met need for family planning (currently using)			Total demand for family planning[1]			Number of women	Percentage of demand satisfied[2]	Percentage of demand satisfied by modern methods[3]
	For spacing	For limiting	Total	For spacing	For limiting	Total	For spacing	For limiting	Total			
Age												
15-19	27.6	0.3	27.8	14.0	0.4	14.4	41.6	0.6	42.2	477	34.1	33.8
20-24	26.0	1.5	27.5	17.5	1.1	18.6	43.5	2.6	46.1	1,365	40.3	39.5
25-29	22.2	3.9	26.1	24.0	2.8	26.8	46.2	6.7	53.0	2,097	50.7	49.7
30-34	19.4	5.7	25.1	17.1	7.2	24.3	36.5	12.9	49.4	1,637	49.2	49.1
35-39	15.0	11.1	26.0	12.6	11.7	24.4	27.6	22.8	50.4	1,960	48.3	47.8
40-44	8.2	15.9	24.1	5.9	12.4	18.3	14.2	28.2	42.4	1,129	43.2	42.3
45-49	3.3	12.2	15.5	1.6	7.6	9.2	5.0	19.7	24.7	1,050	37.3	35.9
Residence												
Urban	18.3	7.3	25.6	18.3	7.6	26.0	36.6	14.9	51.5	3,579	50.4	50.0
Rural	16.9	7.5	24.4	12.5	6.0	18.5	29.3	13.5	42.9	6,136	43.1	42.3
Province												
Eastern	13.3	8.8	22.0	15.5	8.3	23.8	28.8	17.0	45.8	2,007	51.9	51.2
Northern	18.1	5.7	23.8	14.9	3.2	18.1	32.9	8.9	41.8	2,173	43.2	42.0
North West	21.2	6.1	27.3	11.5	4.5	16.0	32.7	10.6	43.3	1,760	36.9	36.7
Southern	15.6	8.6	24.1	13.7	9.9	23.7	29.3	18.5	47.8	1,895	49.5	48.7
Western Area	19.3	8.1	27.4	17.3	7.4	24.7	36.6	15.5	52.1	1,880	47.4	46.9
District												
Kailahun	11.7	7.3	19.0	25.5	6.7	32.2	37.2	14.0	51.2	478	62.8	61.6
Kenema	12.4	8.5	20.9	11.8	7.5	19.2	24.1	15.9	40.1	932	47.9	47.5
Kono	15.9	10.3	26.2	13.3	10.8	24.1	29.2	21.1	50.4	597	47.9	47.4
Bombali	16.0	3.0	19.0	20.3	4.2	24.5	36.3	7.2	43.5	728	56.2	53.1
Falaba	11.7	12.5	24.2	3.7	3.4	7.1	15.4	15.9	31.3	291	22.8	22.8
Koinadugu	13.6	4.9	18.4	10.6	2.5	13.1	24.2	7.4	31.6	318	41.6	40.7
Tonkolili	23.8	6.0	29.8	15.7	2.4	18.2	39.5	8.5	47.9	836	37.9	37.9
Kambia	23.4	4.8	28.2	10.8	4.0	14.8	34.2	8.8	43.0	626	34.4	34.0
Karene	19.2	7.0	26.2	11.6	7.1	18.7	30.8	14.2	45.0	335	41.7	41.7
Port Loko	20.4	6.7	27.1	11.9	3.9	15.8	32.3	10.6	42.9	799	36.9	36.7
Bo	17.5	9.6	27.1	15.4	11.7	27.1	33.0	21.2	54.2	724	50.0	49.4
Bonthe	20.3	10.0	30.3	12.3	8.2	20.4	32.5	18.2	50.7	337	40.3	40.3
Moyamba	10.1	7.2	17.3	16.0	9.5	25.5	26.1	16.7	42.8	503	59.5	57.8
Pujehun	14.7	7.1	21.8	8.2	8.4	16.7	23.0	15.5	38.5	331	43.3	42.7
Western Area Rural	17.6	9.0	26.6	14.9	10.1	25.0	32.5	19.1	51.6	745	48.4	47.6
Western Area Urban	20.5	7.4	27.9	18.8	5.7	24.5	39.3	13.1	52.5	1,135	46.8	46.5
Education												
No education	15.7	8.7	24.5	10.1	6.9	17.0	25.8	15.7	41.5	5,957	41.0	40.3
Primary	19.5	7.1	26.6	17.3	7.3	24.6	36.7	14.5	51.2	1,298	48.1	47.9
Secondary	22.1	3.9	26.0	24.7	5.1	29.9	46.8	9.0	55.8	2,121	53.5	52.6
More than secondary	9.9	7.6	17.5	20.9	7.7	28.6	30.9	15.3	46.1	340	62.0	61.4
Wealth quintile												
Lowest	16.5	7.3	23.7	10.7	5.4	16.2	27.2	12.7	39.9	2,080	40.5	39.7
Second	17.9	7.3	25.1	12.8	5.5	18.4	30.7	12.8	43.5	2,135	42.2	41.0
Middle	16.7	8.2	24.9	13.6	7.3	20.9	30.3	15.6	45.8	1,979	45.6	45.4
Fourth	18.1	7.1	25.2	18.4	7.9	26.2	36.5	15.0	51.4	1,770	51.0	50.4
Highest	18.1	7.2	25.3	18.8	7.3	26.1	36.9	14.4	51.4	1,751	50.8	50.3
Total	17.4	7.4	24.8	14.6	6.6	21.2	32.0	14.0	46.1	9,715	46.1	45.4

Note: Numbers in this table correspond to the revised definition of unmet need described in Bradley et al. 2012.
[1] Total demand is the sum of unmet need and met need.
[2] Percentage of demand satisfied is met need divided by total demand.
[3] Modern methods include female sterilisation, male sterilisation, pill, IUD, injectables, implants, male condom, female condom, emergency contraception, standard days method (SDM), lactational amenorrhoea method (LAM), and other modern methods.

Table 7.12.2 Need and demand for family planning for all women and for sexually active unmarried women

Percentage of all women and sexually active unmarried women age 15-49 with unmet need for family planning, percentage with met need for family planning, total demand for family planning, and percentage of the demand for family planning that is satisfied, according to background characteristics, Sierra Leone DHS 2019

Background characteristic	Unmet need for family planning			Met need for family planning (currently using)			Total demand for family planning[1]			Number of women	Percentage of demand satisfied[2]	Percentage of demand satisfied by modern methods[3]
	For spacing	For limiting	Total	For spacing	For limiting	Total	For spacing	For limiting	Total			
					ALL WOMEN							
Age												
15-19	13.9	0.1	13.9	21.0	0.3	21.3	34.9	0.3	35.2	3,427	60.4	59.7
20-24	22.1	0.9	22.9	29.3	1.1	30.4	51.4	1.9	53.3	2,629	57.0	56.1
25-29	21.4	3.2	24.6	28.3	2.8	31.1	49.7	6.0	55.7	2,728	55.8	54.9
30-34	18.7	5.0	23.7	19.2	6.8	26.1	38.0	11.8	49.8	1,942	52.4	52.2
35-39	14.1	10.3	24.4	12.9	11.8	24.7	27.0	22.2	49.1	2,224	50.3	49.6
40-44	7.9	14.3	22.2	5.7	11.8	17.5	13.6	26.1	39.7	1,337	44.1	43.3
45-49	3.0	11.2	14.2	1.5	7.4	8.8	4.5	18.5	23.0	1,288	38.4	37.2
Residence												
Urban	16.0	3.9	19.9	23.0	4.9	27.9	39.0	8.8	47.8	7,163	58.3	57.6
Rural	15.6	5.9	21.5	16.3	4.9	21.2	31.9	10.8	42.7	8,411	49.7	48.8
Province												
Eastern	12.5	6.1	18.6	19.4	6.0	25.3	31.9	12.0	44.0	3,069	57.6	56.9
Northern	15.3	4.1	19.4	20.7	2.6	23.4	36.0	6.8	42.8	3,317	54.7	53.6
North West	19.3	4.5	23.8	17.0	3.5	20.5	36.3	8.0	44.3	2,508	46.4	45.8
Southern	14.8	5.9	20.8	18.6	7.5	26.1	33.4	13.5	46.9	2,900	55.7	55.0
Western Area	17.4	4.4	21.7	20.4	4.9	25.3	37.7	9.2	47.0	3,780	53.7	53.0
District												
Kailahun	12.8	5.5	18.3	29.0	4.6	33.6	41.8	10.1	51.9	707	64.7	62.9
Kenema	12.5	5.9	18.4	15.6	5.4	21.0	28.1	11.3	39.4	1,437	53.3	53.0
Kono	12.4	6.8	19.2	17.9	7.9	25.8	30.4	14.6	45.0	925	57.3	57.0
Bombali	13.7	2.7	16.5	24.8	3.0	27.8	38.5	5.8	44.3	1,166	62.9	60.3
Falaba	10.5	8.0	18.6	10.6	2.5	13.2	21.2	10.6	31.7	466	41.5	41.5
Koinadugu	10.9	3.4	14.3	15.2	2.4	17.7	26.2	5.8	32.0	469	55.2	54.2
Tonkolili	20.2	4.3	24.5	22.8	2.4	25.2	43.0	6.7	49.7	1,215	50.7	50.7
Kambia	20.2	3.4	23.6	17.2	3.2	20.4	37.4	6.5	43.9	890	46.3	46.1
Karene	17.4	5.5	22.9	17.4	5.4	22.7	34.8	10.9	45.7	462	49.8	48.7
Port Loko	19.3	4.9	24.2	16.7	3.1	19.8	36.0	8.0	44.0	1,157	45.0	44.3
Bo	17.4	6.0	23.4	21.0	8.4	29.4	38.4	14.4	52.8	1,250	55.7	55.2
Bonthe	16.3	7.3	23.6	18.0	6.2	24.2	34.3	13.5	47.8	468	50.6	50.6
Moyamba	10.3	5.4	15.7	18.9	7.4	26.3	29.2	12.8	41.9	726	62.6	61.1
Pujehun	13.5	5.3	18.8	11.9	6.8	18.7	25.4	12.1	37.5	456	49.9	49.1
Western Area Rural	15.4	4.8	20.2	20.1	6.4	26.6	35.6	11.2	46.8	1,407	56.8	55.7
Western Area Urban	18.5	4.1	22.6	20.5	3.9	24.5	39.0	8.1	47.1	2,373	51.9	51.4
Education												
No education	14.9	7.8	22.7	10.9	6.6	17.5	25.8	14.4	40.2	7,081	43.5	42.8
Primary	16.7	5.2	21.9	17.4	5.3	22.7	34.1	10.5	44.5	2,103	50.9	50.6
Secondary	16.8	1.5	18.3	29.8	2.5	32.3	46.5	4.0	50.5	5,724	63.9	63.0
More than secondary	13.7	4.3	18.1	26.8	5.6	32.4	40.5	9.9	50.4	666	64.2	62.5
Wealth quintile												
Lowest	15.2	5.8	21.0	14.0	4.6	18.6	29.2	10.4	39.6	2,738	47.0	46.2
Second	16.3	5.9	22.2	15.9	4.5	20.4	32.2	10.4	42.6	2,831	47.9	46.7
Middle	15.1	5.9	21.1	19.3	5.7	25.0	34.5	11.6	46.1	2,954	54.3	53.9
Fourth	15.6	3.9	19.5	24.6	5.2	29.8	40.1	9.2	49.3	3,385	60.4	59.5
Highest	16.6	3.8	20.4	21.3	4.5	25.8	37.9	8.3	46.2	3,666	55.9	55.2
Total	15.8	5.0	20.8	19.4	4.9	24.3	35.2	9.9	45.0	15,574	53.9	53.1
					SEXUALLY ACTIVE UNMARRIED WOMEN[4]							
Age												
15-19	35.6	0.1	35.6	58.4	0.5	58.9	94.0	0.6	94.6	729	62.3	61.6
20-24	32.3	0.1	32.4	57.7	0.5	58.2	90.0	0.6	90.6	580	64.3	63.7
25-29	32.1	1.3	33.4	49.9	2.2	52.1	82.0	3.5	85.5	348	60.9	60.3
30-34	30.7	1.8	32.5	36.4	5.2	41.6	67.1	7.1	74.1	140	56.2	55.4
35-39	19.8	9.6	29.3	24.3	13.2	37.5	44.1	22.8	66.8	99	56.1	52.2
40-44	(23.3)	(19.6)	(42.9)	(6.6)	(7.8)	(14.3)	(29.9)	(27.3)	(57.2)	50	(25.1)	(25.1)
45-49	(10.6)	(36.8)	(47.4)	(0.0)	(17.5)	(17.5)	(10.6)	(54.3)	(64.9)	41	(27.0)	(27.0)
Residence												
Urban	35.2	1.3	36.4	51.0	2.3	53.3	86.2	3.6	89.8	1,233	59.4	58.6
Rural	26.9	3.6	30.5	50.8	2.3	53.1	77.8	5.9	83.6	754	63.5	63.0

Continued...

Table 7.12.2—*Continued*

Background characteristic	Unmet need for family planning			Met need for family planning (currently using)			Total demand for family planning[1]			Number of women	Percentage of demand satisfied[2]	Percentage of demand satisfied by modern methods[3]
	For spacing	For limiting	Total	For spacing	For limiting	Total	For spacing	For limiting	Total			
Province												
Eastern	27.3	2.8	30.1	55.0	1.2	56.1	82.2	3.9	86.2	345	65.1	64.2
Northern	23.5	2.9	26.4	59.0	1.8	60.8	82.5	4.8	87.2	437	69.7	69.3
North West	36.7	0.9	37.6	49.5	1.1	50.6	86.2	2.0	88.2	236	57.4	56.2
Southern	27.8	2.0	29.8	52.6	4.0	56.6	80.3	6.0	86.4	343	65.5	65.5
Western Area	41.3	1.8	43.0	42.7	2.8	45.5	84.0	4.6	88.6	626	51.4	50.4
District												
Kailahun	27.3	2.5	29.9	58.6	0.0	58.6	86.0	2.5	88.5	102	66.2	63.1
Kenema	34.6	4.2	38.8	45.1	0.9	46.0	79.7	5.1	84.8	146	54.2	54.2
Kono	16.4	0.9	17.2	65.8	2.8	68.6	82.2	3.7	85.9	98	79.9	79.9
Bombali	22.9	5.7	28.5	56.0	0.0	56.0	78.8	5.7	84.5	172	66.2	65.1
Falaba	25.6	2.3	27.9	59.4	0.0	59.4	85.0	2.3	87.3	52	68.1	68.1
Koinadugu	23.3	0.0	23.3	55.4	4.6	60.0	78.7	4.6	83.3	35	72.0	72.0
Tonkolili	23.5	1.1	24.5	62.5	3.6	66.1	86.0	4.6	90.6	178	72.9	72.9
Kambia	34.0	0.0	34.0	49.1	1.2	50.3	83.1	1.2	84.2	82	59.7	59.7
Karene	(37.9)	(1.1)	(39.1)	(50.4)	(0.0)	(50.4)	(88.3)	(1.1)	(89.5)	34	(56.3)	(56.3)
Port Loko	38.3	1.5	39.7	49.5	1.4	50.9	87.8	2.8	90.6	120	56.2	53.9
Bo	31.4	2.7	34.1	50.0	4.6	54.6	81.5	7.3	88.7	209	61.5	61.5
Bonthe	10.9	1.7	12.7	76.2	0.0	76.2	87.1	1.7	88.8	38	85.8	85.8
Moyamba	22.3	1.0	23.3	52.3	4.4	56.8	74.6	5.4	80.1	76	70.9	70.9
Pujehun	(42.3)	(0.0)	(42.3)	(34.9)	(4.1)	(39.0)	(77.2)	(4.1)	(81.3)	20	(47.9)	(47.9)
Western Area Rural	43.0	0.0	43.0	43.8	1.9	45.7	86.8	1.9	88.7	180	51.5	50.6
Western Area Urban	40.5	2.5	43.0	42.3	3.2	45.5	82.8	5.7	88.5	445	51.4	50.3
Education												
No education	30.8	7.0	37.7	27.4	5.6	33.0	58.2	12.6	70.8	367	46.7	46.4
Primary	33.4	5.9	39.4	45.5	4.0	49.5	78.9	9.9	88.9	228	55.7	54.9
Secondary	32.1	0.0	32.1	59.5	1.0	60.5	91.6	1.1	92.7	1,231	65.3	64.6
More than secondary	32.7	1.9	34.6	46.6	2.4	49.0	79.3	4.3	83.6	162	58.6	57.4
Wealth quintile												
Lowest	24.3	2.7	27.1	47.2	2.4	49.6	71.6	5.1	76.7	220	64.7	64.3
Second	25.9	4.6	30.4	49.7	1.8	51.4	75.5	6.3	81.8	238	62.8	62.3
Middle	27.5	2.5	30.0	57.4	2.1	59.5	84.9	4.6	89.5	336	66.5	66.2
Fourth	31.2	1.1	32.3	55.7	2.2	57.9	86.9	3.3	90.1	542	64.2	63.0
Highest	39.9	1.8	41.7	45.4	2.7	48.1	85.3	4.5	89.8	651	53.5	52.8
Total	32.0	2.1	34.2	50.9	2.3	53.3	83.0	4.5	87.4	1,987	60.9	60.2

Note: Numbers in this table correspond to the revised definition of unmet need described in Bradley et al. 2012. Figures in parentheses are based on 25-49 unweighted cases.

[1] Total demand is the sum of unmet need and met need.

[2] Percentage of demand satisfied is met need divided by total demand.

[3] Modern methods include female sterilisation, male sterilisation, pill, IUD, injectables, implants, male condom, female condom, emergency contraception, standard days method (SDM), lactational amenorrhea method (LAM), and other modern methods.

[4] Women who have had sexual intercourse within 30 days preceding the survey

Table 7.13 Decision making about family planning

Among currently married women age 15-49 who are current users of family planning, percent distribution by who makes the decision to use family planning, and among currently married women who are not currently using family planning, percent distribution by who makes the decision not to use family planning, according to background characteristics, Sierra Leone DHS 2019

Background characteristic	Among currently married women who are current users of family planning						Among currently married women who are not currently using family planning					
	Mainly wife	Wife and husband jointly	Mainly husband	Other/ don't know/ missing	Total	Number of women	Mainly wife	Wife and husband jointly	Mainly husband	Other/ don't know/ missing	Total	Number of women
Age												
15-19	55.6	36.8	7.5	0.0	100.0	69	49.6	23.7	21.4	5.3	100.0	328
20-24	43.6	38.0	18.4	0.0	100.0	254	48.1	24.6	23.1	4.3	100.0	909
25-29	50.6	32.9	16.5	0.0	100.0	563	50.9	25.6	20.5	3.0	100.0	1,301
30-34	46.5	38.1	15.3	0.1	100.0	398	48.8	27.4	21.5	2.2	100.0	1,089
35-39	52.8	35.2	12.0	0.0	100.0	478	54.2	22.2	19.8	3.8	100.0	1,371
40-44	53.3	32.7	13.9	0.0	100.0	207	54.2	23.0	19.7	3.2	100.0	890
45-49	46.2	39.2	14.6	0.0	100.0	97	58.5	18.0	14.8	8.7	100.0	946
Number of living children												
0	47.6	36.7	15.7	0.0	100.0	56	48.3	27.7	19.3	4.7	100.0	425
1-2	49.3	35.3	15.4	0.0	100.0	777	51.0	24.6	19.5	4.9	100.0	2,588
3-4	49.8	36.5	13.7	0.0	100.0	778	52.6	23.6	20.4	3.4	100.0	2,325
5+	50.5	33.8	15.7	0.1	100.0	452	54.9	20.7	20.5	3.9	100.0	1,496
Residence												
Urban	43.8	39.1	17.0	0.0	100.0	929	51.7	25.9	19.4	3.0	100.0	2,401
Rural	54.5	32.5	13.0	0.0	100.0	1,135	52.6	22.3	20.3	4.8	100.0	4,433
Province												
Eastern	34.7	54.2	11.1	0.0	100.0	477	44.8	32.8	20.3	2.1	100.0	1,357
Northern	61.3	24.5	14.1	0.0	100.0	392	50.3	22.9	24.1	2.7	100.0	1,603
North West	54.6	25.5	19.8	0.1	100.0	282	55.6	12.1	20.3	12.0	100.0	1,303
Southern	58.5	31.4	10.0	0.0	100.0	448	63.4	21.1	13.4	2.1	100.0	1,265
Western Area	43.7	35.4	20.9	0.0	100.0	464	48.4	28.7	20.8	2.1	100.0	1,306
District												
Kailahun	13.4	79.4	7.2	0.0	100.0	154	16.0	63.8	18.4	1.8	100.0	287
Kenema	40.3	47.2	12.5	0.0	100.0	179	45.5	28.8	25.5	0.2	100.0	664
Kono	50.7	35.8	13.5	0.0	100.0	144	63.9	17.4	13.1	5.5	100.0	407
Bombali	66.1	21.6	12.3	0.0	100.0	178	63.9	17.4	18.6	0.0	100.0	510
Falaba	(49.4)	(49.1)	(1.6)	(0.0)	(100.0)	21	23.2	58.0	17.5	1.3	100.0	251
Koinadugu	63.4	26.2	10.4	0.0	100.0	42	49.7	15.0	30.3	5.0	100.0	250
Tonkolili	56.9	24.1	19.1	0.0	100.0	152	50.4	16.0	28.8	4.8	100.0	591
Kambia	61.2	11.0	27.9	0.0	100.0	93	57.1	11.0	22.1	9.8	100.0	469
Karene	46.9	27.6	24.9	0.6	100.0	63	54.2	10.8	34.3	0.7	100.0	237
Port Loko	53.6	35.1	11.3	0.0	100.0	126	54.9	13.5	13.5	18.1	100.0	597
Bo	56.4	37.6	6.1	0.0	100.0	196	71.3	21.8	6.5	0.5	100.0	460
Bonthe	75.7	15.6	8.8	0.0	100.0	69	86.1	4.5	8.4	1.1	100.0	238
Moyamba	54.6	27.8	17.6	0.0	100.0	128	52.8	13.7	28.7	4.8	100.0	322
Pujehun	54.0	37.9	8.1	0.0	100.0	55	40.5	45.7	11.4	2.4	100.0	245
Western Area Rural	48.8	26.2	25.1	0.0	100.0	186	54.9	14.7	27.4	3.0	100.0	506
Western Area Urban	40.3	41.5	18.2	0.0	100.0	278	44.3	37.6	16.5	1.6	100.0	800
Education												
No education	50.3	35.0	14.6	0.0	100.0	1,014	52.4	22.3	20.6	4.7	100.0	4,478
Primary	49.9	34.8	15.3	0.0	100.0	320	54.9	21.5	20.4	3.2	100.0	847
Secondary	50.2	35.2	14.6	0.0	100.0	633	50.7	28.2	18.1	3.1	100.0	1,280
More than secondary	39.3	43.9	16.8	0.0	100.0	97	48.4	31.4	18.5	1.8	100.0	228
Wealth quintile												
Lowest	51.9	34.9	13.0	0.1	100.0	336	53.6	21.2	21.7	3.5	100.0	1,528
Second	59.1	29.3	11.6	0.0	100.0	392	52.1	22.9	20.2	4.8	100.0	1,543
Middle	47.0	37.8	15.2	0.0	100.0	414	52.9	21.5	20.2	5.3	100.0	1,408
Fourth	49.1	33.2	17.6	0.0	100.0	464	56.5	20.4	18.5	4.5	100.0	1,174
Highest	43.0	41.2	15.8	0.0	100.0	457	45.8	33.2	18.8	2.2	100.0	1,182
Total	49.7	35.5	14.8	0.0	100.0	2,064	52.3	23.6	20.0	4.1	100.0	6,834

Note: Table excludes women who are currently pregnant. Figures in parentheses are based on 25-49 unweighted cases.

Table 7.14 Future use of contraception

Percent distribution of currently married women age 15-49 who are not using a contraceptive method by intention to use in the future, according to number of living children, Sierra Leone DHS 2019

	Number of living children[1]					
Intention to use in the future	0	1	2	3	4+	Total
Intends to use	36.6	50.6	51.0	50.2	42.3	46.7
Unsure	6.5	4.1	4.8	4.1	4.0	4.4
Does not intend to use	56.9	45.4	44.2	45.7	53.7	49.0
Total	100.0	100.0	100.0	100.0	100.0	100.0
Number of women	425	1,365	1,572	1,414	2,874	7,651

[1] Includes current pregnancy

Table 7.15.1 Exposure to family planning messages: Women

Percentage of women age 15-49 who heard or saw a family planning message on radio, on television, in a newspaper or magazine, or on a mobile phone in the past few months, according to background characteristics, Sierra Leone DHS 2019

	Media sources					
Background characteristic	Radio	Television	Newspaper/ magazine	Mobile phone	None of these four media sources	Number of women
Age						
15-19	24.6	8.9	1.7	3.2	73.3	3,427
20-24	33.9	12.9	2.9	5.6	64.5	2,629
25-29	35.0	15.5	3.4	8.0	63.0	2,728
30-34	31.4	12.3	1.8	5.5	67.2	1,942
35-39	29.3	10.0	2.4	4.3	70.1	2,224
40-44	25.6	8.7	1.9	3.5	74.0	1,337
45-49	25.4	6.5	1.9	2.5	73.9	1,288
Residence						
Urban	40.1	22.1	4.6	7.9	57.0	7,163
Rural	20.7	1.8	0.4	2.3	79.1	8,411
Province						
Eastern	22.5	2.3	0.6	1.7	77.0	3,069
Northern	31.0	10.0	1.8	6.7	67.7	3,317
North West	20.4	1.1	0.5	0.8	79.2	2,508
Southern	16.7	2.6	0.5	1.7	82.7	2,900
Western Area	50.3	32.4	6.8	10.9	46.0	3,780
District						
Kailahun	21.2	0.9	0.1	1.7	78.5	707
Kenema	19.2	2.0	0.8	0.9	80.5	1,437
Kono	28.7	3.7	0.7	3.2	70.6	925
Bombali	41.3	18.3	2.3	12.3	55.2	1,166
Falaba	2.0	0.0	0.0	0.0	98.0	466
Koinadugu	24.8	1.8	1.4	2.4	74.7	469
Tonkolili	34.6	9.2	2.2	5.7	65.4	1,215
Kambia	18.5	0.2	0.4	0.7	81.3	890
Karene	14.4	0.5	0.4	0.6	85.6	462
Port Loko	24.3	1.9	0.6	0.9	75.0	1,157
Bo	20.8	5.2	0.7	1.5	78.2	1,250
Bonthe	10.8	1.0	0.6	0.6	88.9	468
Moyamba	13.6	0.3	0.5	3.2	85.9	726
Pujehun	16.5	0.7	0.3	1.1	83.5	456
Western Area Rural	53.6	21.0	7.3	11.2	43.5	1,407
Western Area Urban	48.3	39.2	6.5	10.6	47.4	2,373
Education						
No education	20.2	4.5	0.4	1.5	79.3	7,081
Primary	30.6	9.3	1.0	4.0	68.7	2,103
Secondary	37.3	16.2	3.5	7.1	60.2	5,724
More than secondary	60.7	43.1	17.0	24.1	33.9	666
Wealth quintile						
Lowest	14.8	0.6	0.1	1.2	85.2	2,738
Second	20.9	1.2	0.2	1.6	78.9	2,831
Middle	22.5	2.4	0.5	2.0	77.3	2,954
Fourth	36.9	11.0	2.6	6.0	61.6	3,385
Highest	46.6	33.7	7.0	11.3	49.0	3,666
Total 15-49	29.6	11.1	2.3	4.9	68.9	15,574

Table 7.15.2 Exposure to family planning messages: Men

Percentage of men age 15-49 who heard or saw a family planning message on radio, on television, in a newspaper or magazine, or on a mobile phone in the past few months, according to background characteristics, Sierra Leone DHS 2019

Background characteristic	Media sources					
	Radio	Television	Newspaper/ magazine	Mobile phone	None of these four media sources	Number of men
Age						
15-19	32.8	6.0	2.6	3.9	64.4	1,541
20-24	54.3	10.0	6.7	13.7	41.9	937
25-29	60.9	17.8	6.6	18.2	35.0	1,015
30-34	60.1	16.4	9.6	15.6	37.6	793
35-39	55.1	14.7	6.8	12.1	42.0	791
40-44	56.5	12.2	6.4	8.2	41.8	624
45-49	60.5	9.0	4.8	9.1	38.1	682
Residence						
Urban	59.1	23.0	10.4	16.8	36.1	2,990
Rural	45.5	1.9	1.8	6.0	53.4	3,394
Province						
Eastern	44.8	4.5	5.3	11.1	53.1	1,251
Northern	43.3	4.9	3.2	7.0	54.7	1,353
North West	59.8	4.4	2.7	8.5	39.2	982
Southern	52.2	5.3	2.9	8.1	46.9	1,192
Western Area	59.4	32.5	12.6	18.2	33.8	1,606
District						
Kailahun	75.9	1.7	6.7	18.1	22.1	307
Kenema	36.6	4.6	4.9	8.8	61.0	557
Kono	32.0	6.5	4.7	8.8	66.3	387
Bombali	41.6	9.6	4.3	6.1	57.3	472
Falaba	25.2	2.0	6.7	4.4	71.0	148
Koinadugu	53.6	4.2	2.9	6.1	45.6	196
Tonkolili	46.0	1.8	1.4	9.0	51.4	538
Kambia	66.2	2.7	2.5	11.4	32.8	345
Karene	40.8	0.4	0.0	5.8	58.7	192
Port Loko	63.1	7.5	4.0	7.4	35.8	445
Bo	60.4	10.2	3.5	11.0	38.9	525
Bonthe	38.5	0.7	2.0	5.9	60.7	199
Moyamba	57.7	2.3	3.1	6.6	41.0	290
Pujehun	34.3	1.1	1.9	4.6	64.4	178
Western Area Rural	47.9	14.7	8.8	14.0	46.1	542
Western Area Urban	65.3	41.6	14.5	20.3	27.6	1,064
Education						
No education	40.6	2.5	0.4	2.8	58.4	1,865
Primary	43.3	5.0	0.4	3.6	55.0	876
Secondary	55.8	14.0	6.0	14.3	40.2	3,120
More than secondary	82.9	42.5	33.7	33.6	12.8	523
Wealth quintile						
Lowest	36.8	0.8	0.9	2.7	62.6	1,104
Second	45.5	1.6	1.2	6.8	53.3	1,123
Middle	51.1	2.6	2.7	8.3	47.3	1,145
Fourth	53.5	6.6	5.3	12.9	43.7	1,422
Highest	65.8	37.8	15.2	20.2	27.6	1,590
Total 15-49	51.9	11.8	5.8	11.1	45.3	6,384
50-59	56.0	9.5	7.2	8.3	41.6	813
Total 15-59	52.3	11.5	6.0	10.8	44.9	7,197

Table 7.16 Exposure to specific family planning messages

Percentage of women age 15-49 who heard or saw a family planning message in the past few months, according to background characteristics, Sierra Leone DHS 2019

	Women						
Background characteristic	As for me and my partner, we "dey kampe" with female condom	Unspaced children makes the going tough. For the love of your family, go for child spacing today	Well-spaced children are every parent's joy	It's not too late to prevent unwanted pregnancy	Why is your wife looking so good?	Other	Number of women
Age							
15-19	6.6	10.7	13.2	15.2	1.3	0.9	3,427
20-24	7.2	13.7	19.5	21.6	1.7	1.2	2,629
25-29	7.9	14.6	21.9	18.9	2.1	1.2	2,728
30-34	7.6	14.4	19.3	18.6	1.9	0.7	1,942
35-39	6.5	12.0	18.3	16.5	2.3	1.3	2,224
40-44	4.3	12.0	15.8	13.9	2.5	1.0	1,337
45-49	5.6	11.2	15.6	13.3	2.4	1.1	1,288
Residence							
Urban	7.8	15.5	25.2	23.6	2.8	1.2	7,163
Rural	5.9	10.3	11.3	11.9	1.1	0.9	8,411
Province							
Eastern	4.3	6.8	11.4	15.3	1.7	1.2	3,069
Northern	13.9	21.2	21.0	17.2	1.2	1.0	3,317
North West	4.8	6.6	9.1	13.0	2.1	0.8	2,508
Southern	2.9	4.4	7.3	10.0	1.6	0.7	2,900
Western Area	6.8	20.4	33.6	27.3	2.8	1.4	3,780
District							
Kailahun	0.6	4.1	5.5	14.3	0.5	5.2	707
Kenema	2.4	5.9	12.3	12.9	0.8	0.1	1,437
Kono	10.0	10.2	14.4	19.8	4.0	0.0	925
Bombali	21.5	28.4	33.3	30.1	1.6	0.9	1,166
Falaba	0.0	0.5	1.5	0.9	0.1	0.0	466
Koinadugu	0.9	8.9	9.7	13.4	3.9	3.4	469
Tonkolili	17.1	27.1	21.1	12.5	0.3	0.5	1,215
Kambia	5.5	5.6	6.2	7.9	0.3	0.2	890
Karene	3.6	1.2	2.6	3.1	3.3	2.7	462
Port Loko	4.7	9.5	14.0	20.8	2.9	0.6	1,157
Bo	5.6	5.2	5.8	13.4	3.0	1.2	1,250
Bonthe	1.2	2.1	3.4	5.8	0.2	0.8	468
Moyamba	0.2	5.2	10.9	6.2	0.7	0.1	726
Pujehun	1.3	3.0	9.6	11.1	0.5	0.1	456
Western Area Rural	9.3	25.1	33.1	27.5	3.7	0.9	1,407
Western Area Urban	5.3	17.7	33.8	27.2	2.3	1.7	2,373
Education							
No education	4.8	8.4	11.4	10.2	1.3	0.8	7,081
Primary	7.0	12.8	16.8	17.2	2.0	1.4	2,103
Secondary	8.3	16.6	22.6	23.7	2.2	1.1	5,724
More than secondary	14.3	24.4	44.8	37.3	5.8	2.2	666
Wealth quintile							
Lowest	4.8	7.9	7.9	7.4	0.4	0.5	2,738
Second	4.8	10.0	11.7	12.6	1.1	1.2	2,831
Middle	5.2	10.0	11.4	12.3	1.7	0.9	2,954
Fourth	7.5	15.4	21.3	22.3	2.6	1.0	3,385
Highest	10.3	17.9	31.4	27.6	3.2	1.5	3,666
Total 15-49	6.8	12.7	17.7	17.3	1.9	1.0	15,574

Table 7.17 Contact of nonusers with family planning providers

Among women age 15-49 who are not using contraception, percentage who during the past 12 months were visited by a fieldworker who discussed family planning, percentage who visited a health facility and discussed family planning, percentage who visited a health facility but did not discuss family planning, and percentage who did not discuss family planning either with a fieldworker or at a health facility, according to background characteristics, Sierra Leone DHS 2019

Background characteristic	Percentage of women who were visited by a fieldworker who discussed family planning	Percentage of women who visited a health facility in the past 12 months and who:		Percentage of women who did not discuss family planning either with a fieldworker or at a health facility	Number of women
		Discussed family planning	Did not discuss family planning		
Age					
15-19	13.9	21.0	10.4	73.1	2,698
20-24	20.9	45.3	16.8	49.3	1,830
25-29	20.6	49.9	16.7	45.6	1,880
30-34	19.7	47.7	18.4	47.6	1,436
35-39	20.3	41.6	15.7	52.0	1,674
40-44	16.5	31.8	13.3	62.8	1,103
45-49	16.5	21.2	16.1	70.0	1,174
Residence					
Urban	17.9	32.0	14.8	61.7	5,168
Rural	18.4	40.1	15.1	54.5	6,626
Province					
Eastern	18.5	38.4	19.5	55.7	2,291
Northern	22.0	42.1	11.7	52.0	2,542
North West	12.1	37.2	16.6	56.8	1,993
Southern	17.3	34.8	15.6	61.3	2,143
Western Area	19.5	31.1	12.5	62.1	2,825
District					
Kailahun	49.9	59.7	9.1	29.9	470
Kenema	13.7	38.2	19.6	55.7	1,135
Kono	4.8	24.2	26.6	73.5	686
Bombali	14.9	41.9	7.0	54.2	842
Falaba	21.1	41.1	12.1	53.5	405
Koinadugu	16.3	30.0	31.0	61.6	387
Tonkolili	31.4	47.8	7.6	45.4	909
Kambia	10.1	31.9	11.7	60.8	709
Karene	18.8	35.2	16.0	59.0	357
Port Loko	11.0	42.1	20.6	53.0	928
Bo	13.7	21.6	20.6	73.0	882
Bonthe	40.0	43.2	5.6	55.2	355
Moyamba	16.7	57.7	10.4	37.8	536
Pujehun	4.8	24.8	20.6	73.3	370
Western Area Rural	18.0	29.2	12.6	64.9	1,033
Western Area Urban	20.3	32.1	12.5	60.5	1,792
Education					
No education	17.1	37.6	15.7	57.1	5,842
Primary	19.9	39.8	14.4	54.5	1,626
Secondary	18.8	33.4	13.6	60.1	3,876
More than secondary	20.8	39.6	18.5	55.5	450
Wealth quintile					
Lowest	18.0	42.5	14.9	52.9	2,229
Second	18.6	40.0	15.3	54.9	2,254
Middle	19.8	37.6	15.5	54.9	2,215
Fourth	19.4	35.2	13.9	59.1	2,377
Highest	15.4	29.2	15.2	64.9	2,720
Total	18.2	36.6	15.0	57.7	11,794

INFANT AND CHILD MORTALITY 8

Key Findings

- ***Current levels:*** The infant mortality rate was 75 deaths per 1,000 live births for the 5 years preceding the survey, while the under-5 mortality rate was 122 deaths per 1,000 live births. This implies that 1 in 8 children die before their 5th birthday.
- ***Trends:*** The under-5 mortality rate decreased from 156 deaths per 1,000 live births in 2013 to 122 deaths per 1,000 live births in 2019. Similarly, infant mortality decreased from 92 to 75 deaths per 1,000 live births and neonatal mortality declined from 39 to 31 deaths per 1,000 live births.
- ***High-risk fertility behaviour:*** 77% of currently married women have the potential for a high-risk birth, with 30% falling into a single high-risk category and 47% falling into a multiple high-risk category. In the 5 years preceding the survey, 52% of infants were at elevated odds of dying from avoidable risks: 34% were in a single high-risk category, and 18% were in a multiple high-risk category. Only 31% of births were not in any high-risk category, while 17% were in the unavoidable risk category.

Information on infant and child mortality is relevant to a demographic assessment of a country's population and is an important indicator of the country's socioeconomic development and quality of life. It can also help identify children who may be at higher risk of death and lead to strategies to reduce this risk, such as promoting birth spacing.

This chapter presents information on levels, trends, and differentials in perinatal, neonatal, infant, and under-5 mortality rates. It also examines biodemographic factors and fertility behaviours that increase mortality risks for infants and children. The information was collected as part of a retrospective birth history in which female respondents listed all of the children to whom they had given birth, along with each child's date of birth, survivorship status, and current age or age at death.

The quality of mortality estimates calculated from birth histories depends on the mother's ability to recall all of the children she has given birth to, as well as their birth dates and ages at death. Potential data quality problems include:

- The selective omission from birth histories of those births that did not survive, which can result in underestimation of childhood mortality.
- The displacement of birth dates, which may distort mortality trends. This can occur if an interviewer knowingly records a birth as occurring in a different year than the one in which it occurred. This may happen if an interviewer is trying to cut down on his or her overall workload, because live births occurring during the 5 years before the interview are the subject of a lengthy set of additional questions.

- The quality of reporting of age at death. Misreporting the child's age at death may distort the age pattern of mortality, especially if the net effect of the age misreporting is to transfer deaths from one age bracket to another.

- Any method of measuring childhood mortality that relies on mothers' reports (e.g., birth histories) assumes that female adult mortality is not high or, if it is high, that there is little or no correlation between the mortality risks of mothers and those of their children.

Selected indicators of the quality of the mortality data on which the estimates of mortality in this chapter are based are presented in Appendix C, Tables C.3-C.6.

8.1 INFANT AND CHILD MORTALITY

Neonatal mortality: The probability of dying within the first month of life.

Postneonatal mortality: The probability of dying between the first month of life and the first birthday (computed as the difference between infant and neonatal mortality).

Infant mortality: The probability of dying between birth and the first birthday.

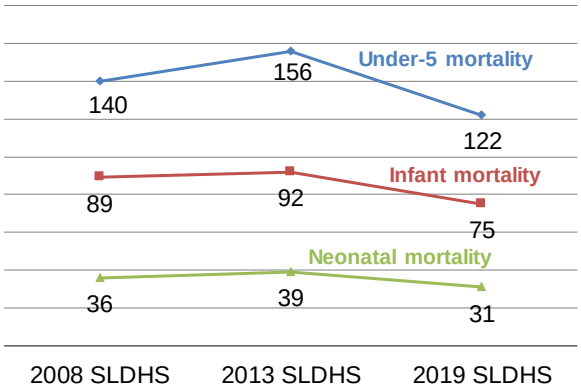
Child mortality: The probability of dying between the first and the fifth birthday.

Under-5 mortality: The probability of dying between birth and the fifth birthday.

The 2019 SLDHS results (**Table 8.1**) show that neonatal mortality was 31 deaths per 1,000 live births, postneonatal mortality was 45 deaths per 1,000 live births, and infant mortality was 75 deaths per 1,000 live births in the 5-year period preceding the survey. The child mortality rate was 50 deaths per 1,000 live births, while under-5 mortality was 122 deaths per 1,000 live births. This implies that 1 in 8 children in Sierra Leone die before their 5th birthday.

Figure 8.1 **Trends in early childhood mortality rates**

Deaths per 1,000 live births in the 5-year period before the survey



Trends: Under-5 mortality increased from 140 deaths per 1,000 live births in 2008 to 156 deaths per 1,000 live births in 2013 before decreasing to 122 deaths per 1,000 live births in 2019. Similar patterns were observed for infant mortality (89 deaths per 1,000 live births in 2008, 92 deaths per 1,000 live births in 2013, and 75 deaths per 1,000 live births in 2019) and neonatal mortality (36 deaths per 1,000 live births in 2008, 39 deaths per 1,000 live births in 2013, and 31 deaths per 1,000 live births in 2019) **(Figure 8.1**).

Patterns by background characteristics

- The under-5 mortality rate is highest in the North West province (155 deaths per 1,000 live births) and lowest in the Northern province (99 deaths per 1,000 live births) (**Table 8.3**).

- By district, under-5 mortality is highest in Port Loko (186 deaths per 1,000 live births) and lowest in Bonthe (74 deaths per 1,000 live births) (**Figure 8.2**).

8.2 BIODEMOGRAPHIC RISK FACTORS

The demographic characteristics of both mothers and children have been found to play an important role in the survival of children. **Tables 8.2** and **8.3** present childhood mortality rates by demographic characteristics (sex of the child, residence, mother's age at birth, birth order, previous birth interval, and infant's size at birth).

Patterns by background characteristics

- Boys are more likely than girls to die in childhood. The difference is particularly pronounced for the under-5 mortality rate (134 male deaths per 1,000 live births versus 110 female deaths per 1,000 live births) and the infant mortality rate (85 male deaths per 1,000 live births versus 66 female deaths per 1,000 live births) (**Table 8.2**).
- The under-5 mortality rate is higher in rural areas than in urban areas (130 and 108 deaths per 1,000 live births, respectively).
- For the 10-year period preceding the survey, under-5 mortality was highest among children of mothers who were less than age 20 at the time of the birth (136 deaths per 1,000 live births) (**Table 8.3**).
- Under-5 mortality is highest among children of mothers who have given birth to seven or more children (189 deaths per 1,000 live births).

Figure 8.2 **Under-5 mortality by district**

Deaths per 1,000 live births for the 10-year period before the survey

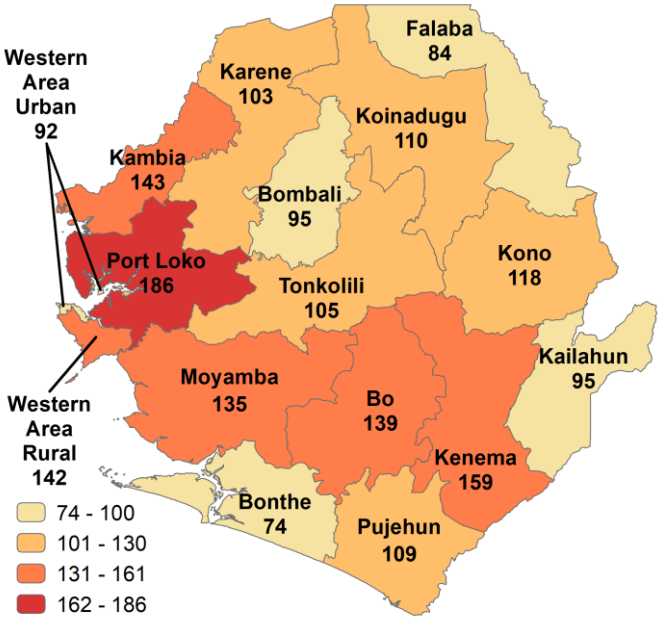
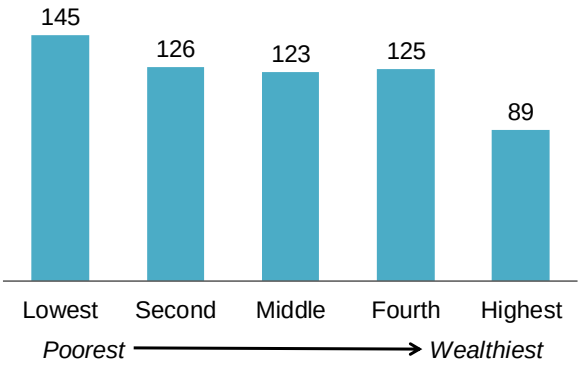


Figure 8.3 **Under-5 mortality by wealth quintile**

Deaths per 1,000 live births for the 10-year period before the survey

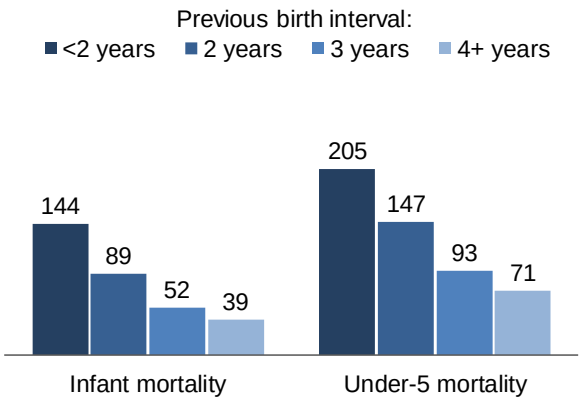


- Under-5 mortality ranges from 145 deaths per 1,000 live births in the lowest wealth quintile to 89 deaths per 1,000 live births in the highest quintile.

- The under-5 mortality rate is almost three times higher among children with birth intervals of less than 2 years (205 deaths per 1,000 live births) than among children with birth intervals of 4 or more years (71 deaths per 1,000 live births) (**Table 8.3** and **Figure 8.4**).

Figure 8.4 **Childhood mortality by previous birth interval**

Deaths per 1,000 live births for the 10-year period before the survey



8.3 PERINATAL MORTALITY

Perinatal mortality rate

Perinatal deaths comprise stillbirths (pregnancy losses occurring after 7 months of gestation) and early neonatal deaths (deaths of live births within the first 7 days of life). The perinatal mortality rate is calculated as the number of perinatal deaths per 1,000 pregnancies of 7 or more months' duration.

Sample: Number of pregnancies of 7 or more months' duration to women age 15-49 in the 5 years before the survey

The causes of stillbirths and early neonatal deaths are closely linked, and it can be difficult to determine whether a death is attributable to one cause or the other. The perinatal mortality rate encompasses both stillbirths and early neonatal deaths and offers a better measure of the level of mortality and quality of antenatal care (ANC) services at delivery. During the 5 years before the survey, the perinatal mortality rate was 34 deaths per 1,000 pregnancies (**Table 8.4**).

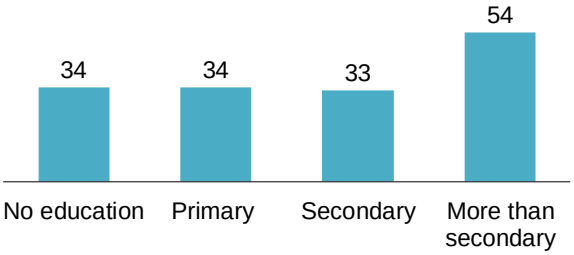
Patterns by background characteristics

- Perinatal mortality is highest among children whose mothers were age 40-49 at the time of the birth (59 deaths per 1,000 pregnancies) and lowest among children whose mothers were age 20-29 and 30-39 (32 deaths each per 1,000 pregnancies) (**Table 8.4**).
- The perinatal mortality rate is relatively high for first pregnancies (47 deaths per 1,000 pregnancies) and among women with a pregnancy interval of less than 15 months (54 deaths per 1,000 pregnancies).
- The perinatal mortality rate is higher in urban than in rural areas (39 versus 31 deaths per 1,000 pregnancies).
- Perinatal mortality is highest in the North West province (43 deaths per 1,000 pregnancies) and lowest in the Southern province (26 deaths per 1,000 pregnancies).
- At the district level, the perinatal mortality rate is highest in Karene (59 deaths per 1,000 pregnancies) and lowest in Pujehun (14 deaths per 1,000 pregnancies).

- The perinatal mortality rate is highest for mothers with more than a secondary education (54 deaths per 1,000 pregnancies) (**Figure 8.5**).

Figure 8.5 Perinatal mortality by mother's education

Perinatal mortality rate in the 5-year period before the survey



8.4 HIGH-RISK FERTILITY BEHAVIOUR

Findings from scientific studies have confirmed a strong relationship between a child's chance of dying and specific fertility behaviours, meaning that the survival of infants and children depends in part on the demographic and biological characteristics of their mothers. The probability of dying in infancy is much greater among children born to mothers who are too young (under age 18) or too old (over age 34), children born after a short birth interval (less than 24 months after the preceding birth), and children born to mothers of high parity (more than three children). The risk is elevated when a child is born to a mother who has a combination of these risk characteristics.

Table 8.5 shows the percent distribution of children born in the 5 years preceding the survey who fall into different risk categories: not in any high-risk category, in an unavoidable risk category, in a single high-risk category, or in a multiple high-risk category.

In the 5 years before the survey, over half of infants in Sierra Leone (52%) were at elevated odds of dying from avoidable risks: 34% were in a single high-risk category, and 18% were in a multiple high-risk category. Thirty-one percent of births were not in any high-risk category, while 17% were in the unavoidable risk category.

In general, risk ratios are higher for children in a multiple high-risk category than for children in a single high-risk category. Risk ratios are highest for births in which the mother was older than age 34, the birth interval was less than 24 months, and the birth order was higher than three (4.82) and births in which the birth interval was less than 24 months and the birth order was higher than three (3.19).

Overall, 77% of currently married women have the potential for a high-risk birth, with 30% falling into a single high-risk category and 47% falling into a multiple high-risk category.

LIST OF TABLES

For more information on infant and child mortality, see the following tables:

- **Table 8.1 Early childhood mortality rates**
- **Table 8.2 Five-year early childhood mortality rates according to background characteristics**
- **Table 8.3 Ten-year early childhood mortality rates according to additional characteristics**
- **Table 8.4 Perinatal mortality**
- **Table 8.5 High-risk fertility behaviour**

Table 8.1 Early childhood mortality rates

Neonatal, postneonatal, infant, child, and under-5 mortality rates for 5-year periods preceding the survey, Sierra Leone DHS 2019

Years preceding the survey	Neonatal mortality (NN)	Postneonatal mortality (PNN)[1]	Infant mortality ($_1q_0$)	Child mortality ($_4q_1$)	Under-5 mortality ($_5q_0$)
0-4	31	45	75	50	122
5-9	29	51	79	51	127
10-14	38	57	95	58	147

[1] Computed as the difference between the infant and neonatal mortality rates

Table 8.2 Five-year early childhood mortality rates according to background characteristics

Neonatal, postneonatal, infant, child, and under-5 mortality rates for the 5-year period preceding the survey, according to background characteristics, Sierra Leone DHS 2019

Background characteristic	Neonatal mortality (NN)	Postneonatal mortality (PNN)[1]	Infant mortality ($_1q_0$)	Child mortality ($_4q_1$)	Under-5 mortality ($_5q_0$)
Child's sex					
Male	35	50	85	54	134
Female	26	40	66	47	110
Residence					
Urban	34	33	67	43	108
Rural	29	51	80	54	130
Total	31	45	75	50	122

[1] Computed as the difference between the infant and neonatal mortality rates

Table 8.3 Ten-year early childhood mortality rates according to additional characteristics

Neonatal, postneonatal, infant, child, and under-5 mortality rates for the 10-year period preceding the survey, according to additional characteristics, Sierra Leone DHS 2019

Characteristic	Neonatal mortality (NN)	Postneonatal mortality (PNN)[1]	Infant mortality ($_1q_0$)	Child mortality ($_4q_1$)	Under-5 mortality ($_5q_0$)
Mother's age at birth					
<20	33	56	89	51	136
20-29	29	43	72	51	120
30-39	27	50	77	48	122
40-49	40	52	92	(58)	(144)
Birth order					
1	36	43	78	46	121
2-3	23	41	64	46	107
4-6	29	53	82	55	132
7+	46	77	123	76	189
Previous birth interval[2]					
<2 years	56	88	144	71	205
2 years	28	61	89	63	147
3 years	16	36	52	44	93
4+ years	17	22	39	33	71
Birth size[3]					
Small/very small	49	58	107	na	na
Average or larger	25	39	64	na	na
Don't know/missing	(108)	*	*	na	na
Province					
Eastern	32	53	85	51	132
Northern	22	32	54	48	99
North West	36	65	101	60	155
Southern	25	55	80	46	122
Western Area	35	32	67	50	114
District					
Kailahun	22	26	48	49	95
Kenema	27	74	101	64	159
Kono	48	41	88	33	118
Bombali	12	29	41	56	95
Falaba	27	24	51	34	84
Koinadugu	31	29	60	53	110
Tonkolili	24	39	63	45	105
Kambia	33	67	100	48	143
Karene	41	22	62	43	103
Port Loko	36	82	118	76	186
Bo	32	67	98	45	139
Bonthe	9	26	36	39	74
Moyamba	27	61	88	51	135
Pujehun	20	49	68	44	109
Western Area Rural	31	47	78	69	142
Western Area Urban	37	21	59	35	92
Mother's education					
No education	29	50	79	52	127
Primary	28	57	85	60	140
Secondary	31	37	68	45	110
More than secondary	(50)	(31)	(81)	(12)	(92)
Wealth quintile					
Lowest	30	61	91	59	145
Second	31	48	78	52	126
Middle	26	51	77	50	123
Fourth	29	44	73	56	125
Highest	33	27	60	31	89

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
na = Not available
[1] Computed as the difference between the infant and neonatal mortality rates
[2] Excludes first-order births
[3] Rates for the 5-year period before the survey

Table 8.4 Perinatal mortality

Number of stillbirths and early neonatal deaths, and the perinatal mortality rate for the 5-year period preceding the survey, according to background characteristics, Sierra Leone DHS 2019

Background characteristic	Number of stillbirths[1]	Number of early neonatal deaths[2]	Perinatal mortality rate[3]	Number of pregnancies of 7+ months' duration
Mother's age at birth				
<20	15	47	38	1,648
20-29	42	114	32	4,936
30-39	34	57	32	2,806
40-49	7	18	59	425
Previous pregnancy interval in months[4]				
First pregnancy	31	76	47	2,299
<15	5	42	54	878
15-26	18	48	37	1,766
27-38	13	27	25	1,611
39+	31	43	23	3,261
Residence				
Urban	45	90	39	3,450
Rural	54	147	31	6,366
Province				
Eastern	18	55	35	2,088
Northern	20	41	32	1,924
North West	17	64	43	1,903
Southern	20	34	26	2,103
Western Area	23	42	36	1,797
District				
Kailahun	5	7	26	459
Kenema	8	23	29	1,032
Kono	6	25	51	597
Bombali	6	9	23	641
Falaba	0	8	32	240
Koinadugu	7	5	41	299
Tonkolili	7	19	35	745
Kambia	5	18	36	641
Karene	4	18	59	372
Port Loko	8	28	40	890
Bo	10	17	33	797
Bonthe	11	2	33	391
Moyamba	0	10	17	555
Pujehun	0	5	14	360
Western Area Rural	8	16	31	788
Western Area Urban	15	26	40	1,009
Mother's education				
No education	50	130	34	5,337
Primary	16	34	34	1,451
Secondary	26	65	33	2,760
More than secondary	6	8	54	267
Wealth quintile				
Lowest	24	56	35	2,297
Second	17	49	30	2,188
Middle	9	54	32	2,001
Fourth	21	43	35	1,820
Highest	26	34	40	1,511
Total	98	237	34	9,816

[1] Stillbirths are foetal deaths in pregnancies lasting 7 or more months.
[2] Early neonatal deaths are deaths at age 0-6 days among live-born children.
[3] The sum of the number of stillbirths and early neonatal deaths divided by the number of pregnancies of 7 or more months' duration, expressed per 1,000
[4] Category cutoffs correspond to birth intervals of <24 months, 24-35 months, 36-47 months, and 48+ months assuming a pregnancy duration of 9 months.

Table 8.5 High-risk fertility behaviour

Percent distribution of children born in the 5 years preceding the survey by category of elevated risk of mortality and the risk ratio, and percent distribution of currently married women by category of risk if they were to conceive a child at the time of the survey, Sierra Leone DHS 2019

Risk category	Births in the 5 years preceding the survey		Percentage of currently married women[1]
	Percentage of births	Risk ratio	
Not in any high-risk category	30.5	1.00	18.8[a]
Unavoidable risk category			
First-order births between age 18 and age 34	17.4	1.30	4.4
In any avoidable high-risk category	52.1	1.58	76.8
Single high-risk category			
Mother's age <18 only	7.0	1.54	0.3
Mother's age >34 only	2.0	1.49	6.0
Birth interval <24 months only	4.7	1.52	8.0
Birth order >3 only	20.6	1.19	15.4
Subtotal	34.3	1.32	29.7
Multiple high-risk category			
Age <18 and birth interval <24 months[2]	0.5	1.71	0.2
Age >34 and birth interval <24 months	0.2	*	0.3
Age >34 and birth order >3	11.5	1.39	32.5
Age >34 and birth interval <24 months and birth order >3	1.4	4.82	5.3
Birth interval <24 months and birth order >3	4.3	3.19	8.8
Subtotal	17.8	2.08	47.1
Total	100.0	na	100.0
Subtotals by individual avoidable high-risk category			
Mother's age <18	7.5	1.55	0.5
Mother's age >34	15.0	1.69	44.1
Birth interval <24 months	11.0	2.56	22.7
Birth order >3	37.7	1.61	62.0
Number of births/women	9,771	na	9,715

Note: Risk ratio is the ratio of the proportion dead among births in a specific high-risk category to the proportion dead among births not in any high-risk category. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
na = Not applicable
[1] Women are assigned to risk categories according to the status they would have at the birth of a child if they were to conceive at the time of the survey: current age less than 17 years and 3 months or older than 34 years and 2 months, latest birth less than 15 months ago, or latest birth being of order 3 or higher.
[2] Includes the category age <18 and birth order >3
[a] Includes sterilised women

MATERNAL HEALTH CARE 9

Key Findings

- ***Antenatal care coverage:*** 98% of women age 15-49 who gave birth in the 5 years preceding the survey received antenatal care (ANC) from a skilled provider during the pregnancy for their most recent birth. Seventy-nine percent had at least four ANC visits.
- ***Components of antenatal care:*** High percentages of women who received antenatal care services had their blood pressure measured (96%), a urine sample taken (85%), and a blood sample taken (95%).
- ***Protection against neonatal tetanus:*** 85% of women who gave birth in the 5 years preceding the survey had a sufficient number of tetanus toxoid injections to ensure that their most recent birth was protected against neonatal tetanus.
- ***Delivery:*** 83% of live births in the 5 years preceding the survey took place in a health facility. Eighty-seven percent of births were assisted by a skilled provider. Four percent of health facility births in the 5 years before the survey were delivered via caesarean section.
- ***Postnatal Checks:*** 86% of mothers and 83% of newborns had a postnatal check within the first 2 days after birth
- ***Signal functions:*** 87% of newborns had at least two signal functions performed during the first 2 days after birth.
- ***Problems in accessing health care:*** 72% of women report at least one serious problem in accessing health care for themselves when they are sick. The most commonly cited problem is getting money for treatment (67%).

Health care services during pregnancy and childbirth and after delivery are important for the survival and well-being of both the mother and the infant. Ensuring access to a continuum of care for women during the antenatal, intrapartum, and postpartum periods is critical for maternal and newborn survival and is a priority of the Ministry of Health and Sanitation (MOHS). The 2019 SLDHS obtained information on key indicators of maternal and newborn care. These findings will help policymakers in the MOHS, its development partners, and other ministries, departments, and agencies in assessing current policies and programmes as well as in decision making to improve maternal and newborn health care services in the country.

9.1 ANTENATAL CARE COVERAGE AND CONTENT

9.1.1 Skilled Providers

Antenatal care (ANC) from a skilled provider

Pregnancy care received from skilled providers, such as doctors and nurses/midwives.

Sample: Women age 15-49 who had a live birth in the 5 years before the survey

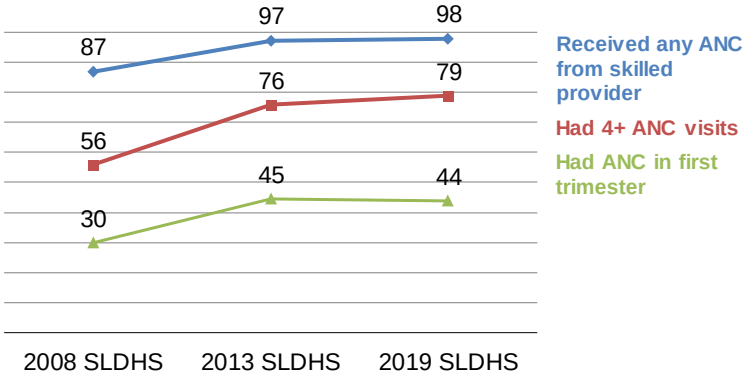
Access to quality ANC services during pregnancy can help prevent maternal deaths. ANC visits allow providers to identify and manage infections as well as obstetric complications and to provide preventive injections, medications, and supplements to women. During ANC visits, women receive education about healthy behaviours during pregnancy, counselling on pregnancy danger signs, and information on family planning. Ninety-eight percent of women age 15-49 received ANC from a skilled provider for their most recent birth.

Ninety percent of women received ANC from nurses/midwives, while 6% received care from doctors and 2% from auxiliary midwives (**Table 9.1**).

Trends: The percentage of women receiving ANC from a skilled provider increased from 87% in 2008 to 97% in 2013. However, the percentage remained relatively stagnant in 2019 (98%).

Figure 9.1 **Trends in antenatal care coverage**

Percentage of women age 15-49 who had a live birth in the 5 years before the survey (for the most recent birth)



Patterns by background characteristics

- Use of ANC services from a skilled provider was universally high across all background characteristics **(Table 9.1).**
- Women in the Western Area province (5%) were more likely than their counterparts in other provinces to have received no ANC.
- Women in the Western Area Urban district (7%) were more likely than their counterparts in other districts to have received no ANC.
- Women with a primary school education or no education (4% each) were less likely than women with more than a secondary education (26%) to receive ANC services from a doctor.
- Similarly, women in the lowest and second wealth quintiles (2% each) were less likely to receive ANC from a doctor than women in the highest wealth quintile (17%).
- Urban women were more than five times as likely to receive ANC from a doctor as rural women (12% versus 2%).

9.1.2 Number of ANC Visits and Timing of First Visit

Seventy-nine percent of women had at least four ANC visits for their most recent birth in the 5 years preceding the survey (**Table 9.2**). Rural women (83%) were more likely than urban women (73%) to have four or more ANC visits. Almost half of pregnant women (46%) had their first antenatal care visit in the fourth or fifth month of pregnancy. Only 44% of women started ANC in the first trimester, and 7% did not seek care until the sixth or seventh month of pregnancy. Rural women (45%) were more likely than urban women (42%) to seek ANC services in the first trimester.

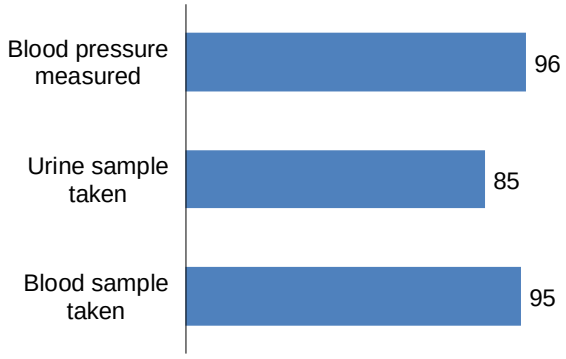
Trends: The percentage of women with four or more ANC visits increased from 76% to 79% between 2013 and 2019. Over the same period, the percentage of women who had an ANC visit in the first trimester declined from 45% to 44% (**Figure 9.1**).

9.2 Components of ANC Visits

Ninety-six percent of women took iron tablets or syrup during their most recent pregnancy, while only 84% took intestinal parasite drugs (**Table 9.3**). Among women who received ANC for their most recent birth, 96% had their blood pressure checked, 85% had a urine sample taken, and 95% had a blood sample taken (**Figure 9.2**).

Figure 9.2 **Components of antenatal care**

Among women who received ANC for their most recent birth, the percentage with selected services



9.3 Protection against Neonatal Tetanus

Protection against neonatal tetanus

The number of tetanus toxoid injections needed to protect a baby from neonatal tetanus depends on the mother's vaccinations. A birth is protected against neonatal tetanus if the mother has received any of the following:

- Two tetanus toxoid injections during the pregnancy
- Two or more injections, the last one within 3 years of the birth
- Three or more injections, the last one within 5 years of the birth
- Four or more injections, the last one within 10 years of the birth
- Five or more injections at any time prior to the birth

Sample: Last live births in the 5 years before the survey to women age 15-49

Neonatal tetanus, a leading cause of death among neonates in developing countries, is often due to failure to observe hygienic procedures during delivery. Eighty-five percent of women's most recent live births were protected against neonatal tetanus, while only 78% of women received two or more tetanus toxoid injections to protect their last live birth against neonatal tetanus (**Table 9.4**).

Patterns by background characteristics

- The percentage of mothers whose last live birth was protected against neonatal tetanus ranges from 77% in the Northern province to 92% in the Southern province.

- By district, the percentage of mothers whose last live birth was protected against neonatal tetanus ranges from 58% in Falaba and Karene to 97% in Bonthe and Kenema.
- The percentage of mothers whose last live birth was protected against neonatal tetanus increases with increasing education, from 84% among those with no education to 90% among those with more than a secondary education.
- There are small differences by household wealth; 84% of women in the lowest wealth quintile had their last live birth protected against neonatal tetanus, as compared with 86% of those in the highest quintile.

9.4 DELIVERY SERVICES

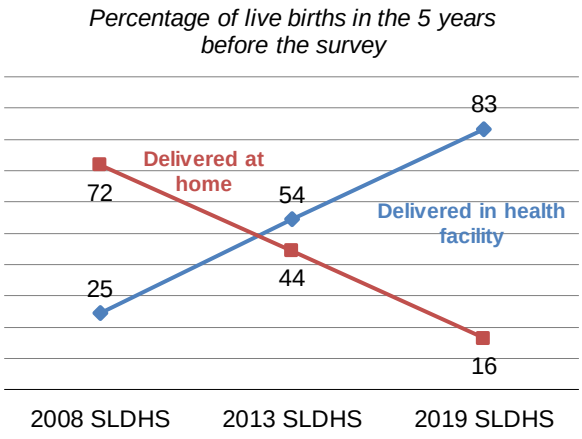
9.4.1 Institutional Deliveries

Institutional deliveries
Deliveries that occur in a health facility.
Sample: All live births in the 5 years before the survey

To reduce maternal and newborn mortality, deliveries should occur in facilities where providers can manage obstetric and newborn complications that may arise during delivery. Eighty-three percent of women in Sierra Leone delivered their last live birth in a health facility (**Table 9.5**). Of these women, 81% delivered in a public facility and 2% in a private facility. Sixteen percent of women delivered at home.

Trends: The percentage of deliveries taking place at health facilities has increased over time, from 25% in 2008 to 54% in 2013 and 83% in 2019. Accordingly, there has been a significant decrease in deliveries occurring at home, from 72% in 2008 to 16% in 2019 (**Figure 9.3**).

Figure 9.3 **Trends in place of birth**



Patterns by background characteristics

- The percentage of live births delivered at home increases with the mother's age, from 14% of births to women less than age 20 to 19% of births to those age 35-49 (**Table 9.5**).
- The higher the birth order, the less likely a woman will deliver at a health facility; 87% of first-order births were delivered at a health facility, as compared with 80% of sixth- and higher-order births.
- The percentage of health facility births increases with the number of ANC visits, from 71% of births to mothers with no ANC visits or one to three ANC visits to 86% of births to those with four or more ANC visits.

- The percentage of births delivered in a health facility increases with increasing mother's education, from 80% of births to women with no education to 95% of births to those with more than a secondary education (**Figure 9.4**)
- Health facility births are more common in urban areas (89%) than in rural areas (81%) (**Table 9.5**).
- The percentage of births delivered in health facilities ranges from 67% in the North West province to 92% in the Eastern province (**Table 9.5**).
- By district, the percentage of births delivered in health facilities ranges from 61% in Port Loko to 97% in Kenema and Pujehun (**Figure 9.5**).

Figure 9.4 **Health facility births by mother's education**

Percentage of live births in the 5 years before the survey that were delivered in a health facility

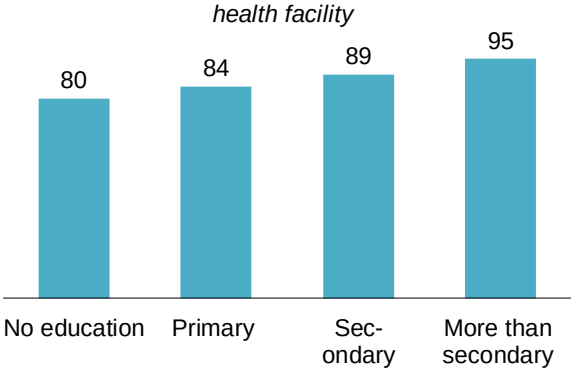
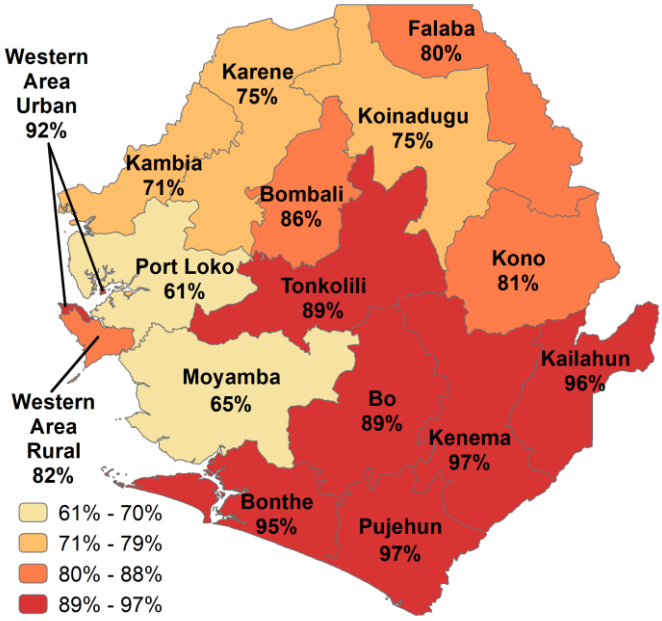


Figure 9.5 **Health facility births by district**

Percentage of live births in the 5 years before the survey that were delivered in a health facility



9.4.2 Skilled Assistance during Delivery

Skilled assistance during delivery
Births delivered with the assistance of doctors and nurses/midwives.
Sample: All live births in the 5 years before the survey

Assistance from a skilled birth attendant during delivery is considered a key factor in reducing maternal and neonatal mortality. In Sierra Leone, 87% of deliveries are assisted by a skilled provider (81% by nurses/midwives, 4% by doctors, and 2% by auxiliary midwives) (**Table 9.6**). Among unskilled providers, traditional birth attendants most frequently assist in deliveries (10%), followed by relatives and others (3%) (**Table 9.6** and **Figure 9.6**). Less than 1% of women do not receive any assistance during delivery.

Trends: The proportion of births assisted by skilled birth attendants has increased over the past decade, from 42% in 2008 and 60% in 2013 to 87% in 2019.

Patterns by background characteristics

- By residence, 94% of births in urban areas are assisted by a skilled provider, as compared with 83% in rural areas.
- The percentage of deliveries attended by a skilled provider decreases with increasing birth order; 91% of first-order births are delivered by a skilled provider, compared with 84% of sixth- or higher-order births (**Table 9.6**).
- The percentage of births assisted by skilled providers ranges from 70% in the North West province to 95% in the Western Area province.
- By district, the percentage of births assisted by skilled providers ranges from 64% in Port Loko to 98% in Kenema and Pujehun.
- The proportion of births attended by skilled providers increases with increasing mother's education, from 83% among births to mothers with no education to 97% among births to mothers with more than a secondary education.
- Women in the highest wealth quintile are more likely (96%) to be assisted by a skilled provider during delivery than those in the lowest quintile (82%) (**Figure 9.7**).

Figure 9.6 **Assistance during delivery**

Percent distribution of births in the 5 years before the survey

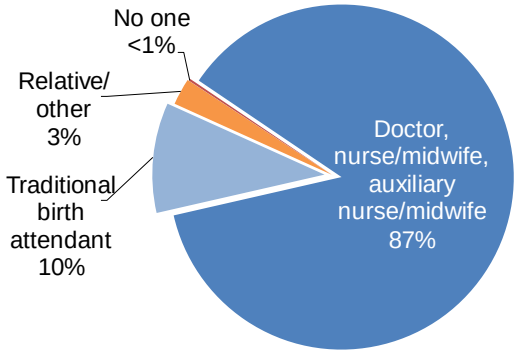
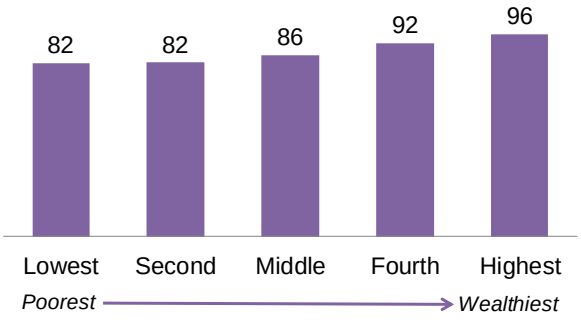


Figure 9.7 **Skilled assistance at delivery by household wealth**

Percentage of live births in the 5 years before the survey assisted by a skilled provider



9.4.3 Delivery by Caesarean

Access to caesarean sections (C-sections) can reduce maternal and neonatal mortality and complications of labour. WHO advises that caesarean sections be done only when medically necessary and does not recommend a target rate for countries to achieve at the population level. Research conducted by WHO has shown that increases in countries' caesarean section rates up to 10% are associated with declines in maternal and neonatal mortality. However, increases in caesarean section rates beyond 10% are not associated with reductions in maternal and newborn mortality rates (WHO 2015a). Among live births in the 5 years preceding the survey, 4% were delivered via caesarean section. One percent of C-sections were planned before the onset of labour, while 3% were decided on after the onset of labour.

Patterns by background characteristics

- Caesarean section deliveries are most common (5%) among first-order births and decrease as birth order increases (**Table 9.7**).
- Caesarean section delivery rates are higher in urban areas (7%) than in rural areas (3%).
- The caesarean section rate is lowest in the North West and Eastern provinces (2% each) and highest in the Northern province (8%).

- By district, the caesarean section rate is lowest in Bonthe, Port Loko, Kambia, Falaba, and Kailahun (1% each) and highest in Tonkolili (17%).
- The proportion of C-section deliveries increases with increasing education and household wealth.

Duration of Stay in Health Facility after Birth

Table 9.8 shows that among women who gave birth by C-section, 61% stayed at the health facility for 3 or more days, as compared with only 20% of women who had a vaginal birth. Most women who gave birth vaginally were discharged within 1-2 days (53%).

9.5 POSTNATAL CARE

9.5.1 Postnatal Health Check for Mothers

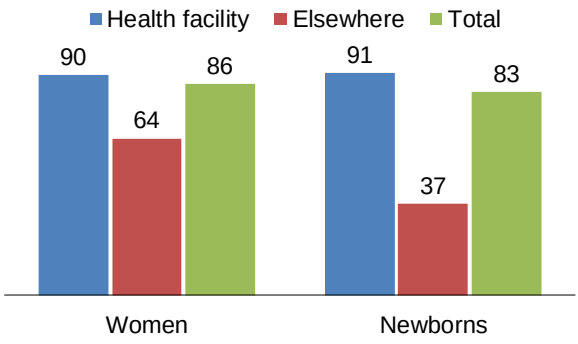
In Sierra Leone, 86% of mothers who gave birth in the 2 years preceding the survey reported seeing someone for a check within the first 2 days after birth, with 77% reporting that they were checked within 4 hours after giving birth (**Table 9.9**). Most women (78%) receiving postnatal care reported seeing a doctor, nurse, or midwife for their postnatal check (**Table 9.10**).

Patterns by background characteristics

- The higher the birth order, the less likely a woman will have a postnatal check during the first 2 days after birth (**Table 9.9**).
- Women who deliver in a health facility (90%) are more likely to receive a postnatal health check within 2 days of delivery than women who deliver elsewhere (64%) (**Figure 9.8**).
- Women in urban areas are more likely than those in rural areas to receive a postnatal check during the first 2 days after delivery (91% and 84%, respectively) (**Table 9.9**).
- The proportion of women with a postnatal check during the first 2 days after birth increases with increasing education and household wealth.

Figure 9.8 **Postnatal care by place of delivery**

Percentage of last births in the 2 years before the survey for which women and newborns received a postnatal check during the first 2 days after birth



9.5.2 Postnatal Health Check for Newborns

Proper care for newborns is essential to reduce neonatal problems and death. According to WHO, postnatal care services for newborns should start immediately after birth because many neonatal deaths occur within the first 48 hours of life (WHO 2015b).

Eighty-three percent of infants born in the 2 years before the survey received a postnatal check during the first 2 days after birth; however, 14% did not receive a postnatal check (**Table 9.11**). The majority (79%) of babies who received a postnatal check were seen by a doctor, nurse, or midwife (**Table 9.12**). Four percent of postnatal checks were conducted by unskilled providers (such as auxiliary midwives, community health workers, and traditional birth attendants). Seventeen percent of infants did not receive a postnatal check during this crucial period. Eighty-seven percent of newborns had at least two signal functions performed during the first 2 days after birth (**Table 9.13**).

Patterns by background characteristics

- Newborns delivered in a health facility were more likely to receive a postnatal health check within 2 days of birth than those delivered elsewhere (91% and 37%, respectively) (**Figure 9.8**).
- Seventy-five percent of newborns in the North West province received postnatal care during the first 2 days after birth, as compared with 91% of newborns in the Western Area province (**Table 9.11**).
- By district, the percentage of newborns receiving postnatal care within the first 2 days of birth is lowest in Kono and Port Loko (68% each) and highest in Bo and Bonthe (95% each) (**Table 9.11**).
- The percentage of newborns receiving postnatal care within the first 2 days of birth increases with increasing mother's education, from 80% among babies born to women with no education to 99% among babies born to women with more than a secondary education.
- Similarly, babies born to women in the lowest wealth quintile were much less likely (78%) to receive postnatal care within 2 days of birth than babies born to women in the highest quintile (90%).
- The percentage of newborns with at least two signal functions performed increases with increasing mother's education and household wealth and decreases with mother's age at birth and birth order (**Table 9.13**).

9.6 Problems in Accessing Health Care

Problems in accessing health care

Women were asked whether each of the following factors is a big problem in seeking medical advice or treatment for themselves when they are sick:

- Getting permission to go to the doctor
- Getting money for advice or treatment
- Distance to a health facility
- Not wanting to go alone

Sample: Women age 15-49

Seventy-two percent of women in Sierra Leone report at least one problem associated with accessing health care for themselves. The least and most common problems women face in accessing health care are not wanting to go alone (22%) and getting money for treatment (67%), respectively (**Table 9.14**).

Patterns by background characteristics

- More women in rural areas (85%) than urban areas (56%) have problems in accessing health care (**Table 9.14**).
- Women with five or more children more often reported getting money for treatment (79%) and distance to a health facility (54%) as problems than women with no children (60% and 38%, respectively).
- Women in the North West province were most likely to report having problems in accessing health care, while those in the Western Area province were least likely to do so (84% versus 43%).
- By district, the percentage of women who reported having at least one problem in accessing health care was highest in Falaba (93%) and lowest in Western Area Urban (35%).
- The proportion of women who reported at least one problem in accessing health care decreases with increasing education and household wealth.

LIST OF TABLES

For more information on maternal health care, see the following tables:

Table 9.1 Antenatal care

Percent distribution of women age 15-49 who had a live birth in the 5 years preceding the survey by antenatal care (ANC) provider during pregnancy for the most recent birth and percentage receiving antenatal care from a skilled provider for the most recent birth, according to background characteristics, Sierra Leone DHS 2019

	Antenatal care provider									
Background characteristic	Doctor	Nurse/ midwife	Auxiliary midwife	Community health worker	Traditional birth attendant	Other	No ANC	Total	Percentage receiving antenatal care from a skilled provider[1]	Number of women
Age at birth										
<20	3.6	93.5	1.7	0.1	0.1	0.0	1.0	100.0	98.8	1,204
20-34	6.5	89.3	2.1	0.2	0.3	0.0	1.7	100.0	97.8	4,897
35-49	5.1	90.9	1.5	0.2	0.7	0.0	1.6	100.0	97.5	1,225
Birth order										
1	6.9	89.0	2.0	0.1	0.1	0.0	1.8	100.0	98.0	1,741
2-3	6.7	89.2	1.9	0.2	0.4	0.0	1.6	100.0	97.8	2,730
4-5	4.7	91.3	2.2	0.2	0.3	0.0	1.4	100.0	98.2	1,703
6+	3.4	93.1	1.5	0.2	0.5	0.0	1.3	100.0	98.0	1,152
Residence										
Urban	11.8	83.9	1.3	0.0	0.1	0.0	2.9	100.0	97.0	2,795
Rural	2.1	94.2	2.3	0.3	0.4	0.0	0.7	100.0	98.5	4,531
Province										
Eastern	3.3	94.4	1.7	0.2	0.2	0.0	0.2	100.0	99.5	1,542
Northern	1.3	96.8	0.1	0.6	0.5	0.0	0.6	100.0	98.3	1,433
North West	3.4	91.5	3.5	0.1	0.3	0.1	1.2	100.0	98.4	1,380
Southern	6.7	89.6	2.5	0.1	0.4	0.0	0.6	100.0	98.8	1,492
Western Area	13.9	79.1	1.7	0.0	0.1	0.0	5.1	100.0	94.7	1,479
District										
Kailahun	0.2	97.8	1.4	0.2	0.2	0.0	0.2	100.0	99.4	354
Kenema	2.7	96.5	0.8	0.0	0.0	0.0	0.0	100.0	100.0	736
Kono	6.7	88.4	3.5	0.4	0.5	0.0	0.5	100.0	98.6	451
Bombali	0.9	98.1	0.0	0.0	0.7	0.0	0.3	100.0	99.0	483
Falaba	0.2	96.4	0.4	0.0	0.4	0.0	2.7	100.0	97.0	181
Koinadugu	1.2	97.3	0.0	0.0	0.3	0.0	1.2	100.0	98.6	218
Tonkolili	2.1	95.7	0.3	1.5	0.5	0.0	0.0	100.0	98.1	551
Kambia	6.7	83.0	8.9	0.2	0.6	0.0	0.7	100.0	98.6	485
Karene	4.0	92.5	0.3	0.0	0.0	0.0	3.2	100.0	96.8	270
Port Loko	0.5	97.6	0.8	0.0	0.3	0.2	0.6	100.0	98.9	625
Bo	11.3	87.5	0.2	0.0	0.8	0.0	0.2	100.0	99.0	573
Bonthe	1.7	97.0	0.4	0.5	0.0	0.0	0.4	100.0	99.1	266
Moyamba	0.5	89.8	8.7	0.2	0.2	0.0	0.6	100.0	99.0	402
Pujehun	11.4	86.3	0.0	0.0	0.4	0.0	1.9	100.0	97.7	251
Western Area Rural	10.5	85.8	1.0	0.0	0.3	0.0	2.4	100.0	97.3	631
Western Area Urban	16.5	74.2	2.2	0.0	0.0	0.0	7.1	100.0	92.9	847
Education										
No education	3.7	91.6	2.3	0.3	0.5	0.0	1.6	100.0	97.6	3,857
Primary	4.4	92.4	1.4	0.2	0.1	0.0	1.5	100.0	98.3	1,033
Secondary	8.0	88.9	1.5	0.1	0.2	0.1	1.3	100.0	98.4	2,214
More than secondary	26.2	70.7	0.7	0.0	0.4	0.0	2.0	100.0	97.6	221
Wealth quintile										
Lowest	2.2	93.8	2.3	0.2	0.7	0.0	0.7	100.0	98.3	1,587
Second	2.2	93.7	2.6	0.4	0.3	0.0	0.8	100.0	98.5	1,551
Middle	2.4	94.4	2.2	0.2	0.2	0.1	0.6	100.0	99.0	1,487
Fourth	6.9	90.9	0.7	0.1	0.1	0.0	1.3	100.0	98.5	1,441
Highest	17.3	76.0	1.6	0.0	0.2	0.0	4.9	100.0	94.9	1,259
Total	5.8	90.3	1.9	0.2	0.3	0.0	1.5	100.0	97.9	7,326

Note: If more than one source of ANC was mentioned, only the provider with the highest qualifications is considered in this tabulation.
[1] Skilled provider includes doctor, nurse/midwife, and auxiliary midwife.

Table 9.2 Number of antenatal care visits and timing of first visit

Percent distribution of women age 15-49 who had a live birth in the 5 years preceding the survey by number of antenatal care (ANC) visits for the most recent live birth and by the timing of the first visit, and among women with ANC, median months pregnant at first visit, according to residence, Sierra Leone DHS 2019

Number of ANC visits and timing of first visit	Residence		
	Urban	Rural	Total
Number of ANC visits			
None	2.9	0.7	1.5
1	0.8	0.8	0.8
2-3	5.3	7.9	6.9
4+	72.5	82.6	78.8
Don't know/missing	18.5	8.0	12.0
Total	100.0	100.0	100.0
Number of months pregnant at time of first ANC visit			
No antenatal care	2.9	0.7	1.5
<4	41.7	45.2	43.9
4-5	45.0	45.8	45.5
6-7	7.3	6.8	6.9
8+	2.3	1.3	1.7
Don't know/missing	0.9	0.2	0.5
Total	100.0	100.0	100.0
Number of women	2,795	4,531	7,326
Median months pregnant at first visit (for those with ANC)	4.2	4.1	4.2
Number of women with ANC	2,714	4,500	7,213

Table 9.3 Components of antenatal care

Among women age 15-49 with a live birth in the 5 years preceding the survey, percentage who took iron tablets or syrup and drugs for intestinal parasites during the pregnancy of the most recent live birth, and among women receiving antenatal care (ANC) for the most recent live birth in the 5 years preceding the survey, percentage receiving specific antenatal services, according to background characteristics, Sierra Leone DHS 2019

	Among women with a live birth in the past 5 years, percentage who during the pregnancy of their most recent live birth:			Among women who received antenatal care for their most recent birth in the past 5 years, percentage with selected services			
Background characteristic	Took iron tablets or syrup	Took intestinal parasite drugs	Number of women with a live birth in the past 5 years	Blood pressure measured	Urine sample taken	Blood sample taken	Number of women with ANC for their most recent birth
Age at birth							
<20	95.7	79.9	1,204	95.9	85.8	94.8	1,192
20-34	96.5	84.1	4,897	96.5	84.8	95.1	4,817
35-49	94.3	84.8	1,225	96.4	83.1	94.1	1,205
Birth order							
1	96.3	82.2	1,741	96.4	87.4	95.0	1,709
2-3	96.5	83.4	2,730	96.3	85.5	95.4	2,687
4-5	95.4	83.5	1,703	96.5	83.4	94.7	1,680
6+	95.1	86.1	1,152	96.1	80.4	93.6	1,138
Residence							
Urban	97.0	86.9	2,795	98.1	93.0	97.1	2,714
Rural	95.3	81.4	4,531	95.3	79.6	93.5	4,500
Province							
Eastern	92.1	77.6	1,542	94.0	78.8	90.8	1,539
Northern	96.7	83.4	1,433	96.6	90.9	96.8	1,424
North West	96.6	79.4	1,380	97.4	86.8	95.7	1,364
Southern	97.5	87.7	1,492	95.4	72.0	93.5	1,483
Western Area	97.1	89.4	1,479	98.6	96.1	97.9	1,403
District							
Kailahun	87.2	60.5	354	93.9	90.4	95.0	354
Kenema	96.4	77.6	736	94.6	83.8	92.8	736
Kono	89.0	91.1	451	93.2	61.6	84.3	449
Bombali	96.5	86.3	483	97.7	96.0	96.4	482
Falaba	95.1	81.9	181	93.0	93.9	95.9	176
Koinadugu	97.2	79.1	218	94.1	85.6	95.3	215
Tonkolili	97.3	83.1	551	97.8	87.4	98.0	551
Kambia	97.5	80.4	485	98.7	86.1	98.7	482
Karene	93.6	77.9	270	97.6	84.1	89.1	261
Port Loko	97.3	79.2	625	96.3	88.5	96.2	621
Bo	99.3	88.1	573	93.0	81.1	91.9	572
Bonthe	96.4	97.0	266	98.8	55.1	97.6	265
Moyamba	96.2	90.3	402	96.2	59.0	93.3	400
Pujehun	96.4	72.5	251	96.1	89.9	93.2	246
Western Area Rural	97.6	89.4	631	98.2	95.3	97.2	616
Western Area Urban	96.8	89.5	847	98.9	96.8	98.4	787
Education							
No education	95.0	82.2	3,857	96.1	81.9	94.1	3,794
Primary	95.9	82.1	1,033	96.3	84.6	94.7	1,018
Secondary	97.4	85.8	2,214	96.6	88.7	95.9	2,185
More than secondary	99.3	90.6	221	98.0	93.5	98.3	217
Wealth quintile							
Lowest	94.5	81.3	1,587	95.2	77.6	92.8	1,576
Second	95.3	81.3	1,551	95.0	81.2	93.5	1,539
Middle	95.6	80.7	1,487	95.4	80.9	94.7	1,479
Fourth	97.3	86.0	1,441	98.4	91.2	95.8	1,423
Highest	97.6	89.6	1,259	98.3	95.4	98.4	1,197
Total	96.0	83.5	7,326	96.3	84.7	94.9	7,213

Table 9.4 Tetanus toxoid injections

Among mothers age 15-49 with a live birth in the 5 years preceding the survey, percentage receiving two or more tetanus toxoid injections during the pregnancy for the most recent live birth and percentage whose last live birth was protected against neonatal tetanus, according to background characteristics, Sierra Leone DHS 2019

Background characteristic	Percentage receiving two or more injections during the pregnancy for the most recent live birth	Percentage whose most recent live birth was protected against neonatal tetanus[1]	Number of mothers
Age at birth			
<20	75.8	82.7	1,204
20-34	79.0	86.0	4,897
35-49	76.9	84.1	1,225
Birth order			
1	78.1	84.5	1,741
2-3	77.7	85.6	2,730
4-5	80.3	86.4	1,703
6+	76.0	83.2	1,152
Residence			
Urban	80.4	86.9	2,795
Rural	76.7	84.0	4,531
Province			
Eastern	80.1	86.7	1,542
Northern	68.0	77.0	1,433
North West	74.8	83.7	1,380
Southern	89.4	91.8	1,492
Western Area	77.7	86.0	1,479
District			
Kailahun	78.2	84.1	354
Kenema	91.1	96.9	736
Kono	63.7	72.3	451
Bombali	66.6	75.5	483
Falaba	51.8	58.3	181
Koinadugu	80.0	84.5	218
Tonkolili	69.8	81.5	551
Kambia	86.8	93.2	485
Karene	47.5	58.2	270
Port Loko	77.2	87.3	625
Bo	95.0	95.2	573
Bonthe	93.5	97.4	266
Moyamba	81.5	82.0	402
Pujehun	85.2	93.5	251
Western Area Rural	76.0	85.2	631
Western Area Urban	79.1	86.6	847
Education			
No education	76.9	84.2	3,857
Primary	79.3	85.0	1,033
Secondary	79.4	86.3	2,214
More than secondary	82.5	90.1	221
Wealth quintile			
Lowest	75.9	83.5	1,587
Second	76.8	84.2	1,551
Middle	79.2	85.4	1,487
Fourth	80.7	87.0	1,441
Highest	78.5	86.0	1,259
Total	78.2	85.1	7,326

[1] Includes mothers with two injections during the pregnancy of their most recent live birth, or two or more injections (the last within 3 years of the most recent live birth), or three or more injections (the last within 5 years of the most recent live birth), or four or more injections (the last within 10 years of the most recent live birth), or five or more injections at any time prior to the most recent birth

Table 9.5 Place of delivery

Percent distribution of live births in the 5 years preceding the survey by place of delivery and percentage delivered in a health facility, according to background characteristics, Sierra Leone DHS 2019

Background characteristic	Health facility		Home	Other	Total	Percentage delivered in a health facility	Number of births
	Public sector	Private sector					
Mother's age at birth							
<20	83.9	1.8	14.3	0.1	100.0	85.6	1,644
20-34	81.0	2.5	16.3	0.2	100.0	83.5	6,660
35-49	79.0	1.4	19.4	0.2	100.0	80.4	1,468
Birth order							
1	83.9	3.1	12.9	0.0	100.0	87.1	2,350
2-3	81.7	2.4	15.7	0.1	100.0	84.1	3,735
4-5	78.7	1.7	19.4	0.2	100.0	80.4	2,240
6+	79.0	1.2	19.5	0.3	100.0	80.2	1,446
Antenatal care visits[1]							
None	70.5	0.7	28.8	0.0	100.0	71.2	113
1-3	67.9	3.3	28.5	0.4	100.0	71.1	566
4+	83.3	2.4	14.2	0.1	100.0	85.7	5,769
Don't know/missing	83.8	3.9	11.9	0.3	100.0	87.8	878
Residence							
Urban	84.1	4.8	11.1	0.0	100.0	88.9	3,422
Rural	79.6	0.9	19.3	0.2	100.0	80.5	6,350
Province							
Eastern	91.1	1.2	7.6	0.1	100.0	92.3	2,077
Northern	82.7	1.7	15.5	0.1	100.0	84.4	1,918
North West	66.0	0.7	33.1	0.3	100.0	66.7	1,894
Southern	83.2	1.9	14.7	0.2	100.0	85.0	2,101
Western Area	81.8	6.1	12.1	0.0	100.0	87.9	1,781
District							
Kailahun	93.6	2.2	4.2	0.0	100.0	95.8	455
Kenema	96.0	1.0	2.8	0.1	100.0	97.0	1,028
Kono	80.5	0.8	18.4	0.2	100.0	81.4	594
Bombali	83.2	2.3	14.4	0.1	100.0	85.5	639
Falaba	80.2	0.2	19.6	0.0	100.0	80.4	244
Koinadugu	72.6	2.2	25.3	0.0	100.0	74.7	294
Tonkolili	87.1	1.4	11.3	0.1	100.0	88.5	741
Kambia	70.5	0.2	29.3	0.0	100.0	70.7	638
Karene	74.0	0.7	24.6	0.8	100.0	74.6	370
Port Loko	59.5	1.0	39.3	0.2	100.0	60.5	886
Bo	85.4	3.5	10.9	0.2	100.0	88.9	797
Bonthe	92.0	2.7	4.8	0.5	100.0	94.7	384
Moyamba	65.2	0.0	34.5	0.3	100.0	65.2	558
Pujehun	96.6	0.2	3.2	0.0	100.0	96.8	363
Western Area Rural	78.4	3.8	17.8	0.0	100.0	82.2	783
Western Area Urban	84.4	8.0	7.7	0.0	100.0	92.3	998
Mother's education							
No education	78.6	1.0	20.2	0.2	100.0	79.6	5,321
Primary	82.3	2.0	15.5	0.2	100.0	84.3	1,441
Secondary	85.6	3.5	10.8	0.1	100.0	89.1	2,748
More than secondary	79.7	15.6	4.7	0.0	100.0	95.3	262
Wealth quintile							
Lowest	77.8	0.8	20.9	0.5	100.0	78.6	2,283
Second	80.1	0.5	19.4	0.0	100.0	80.5	2,183
Middle	82.6	0.9	16.3	0.1	100.0	83.6	2,007
Fourth	83.6	2.5	13.9	0.0	100.0	86.1	1,808
Highest	83.0	8.5	8.5	0.0	100.0	91.5	1,491
Total	81.2	2.2	16.4	0.1	100.0	83.4	9,771

[1] Includes only the most recent birth in the 5 years preceding the survey

Table 9.6 Assistance during delivery

Percent distribution of live births in the 5 years preceding the survey by person providing assistance during delivery, percentage of births assisted by a skilled provider, and percentage with skin-to-skin contact immediately after birth, according to background characteristics, Sierra Leone DHS 2019

Background characteristic	Person providing assistance during delivery							Percentage delivered by a skilled provider[1]	Percentage with skin-to-skin contact immediately after birth	Number of births
	Doctor	Nurse/ midwife	Auxiliary midwife	Traditional birth attendant	Relative/ other	No one	Total			
Mother's age at birth										
<20	3.2	84.3	2.1	8.7	1.7	0.0	100.0	89.5	58.9	1,644
20-34	4.2	80.6	1.8	10.5	2.5	0.3	100.0	86.6	60.7	6,660
35-49	5.0	78.7	1.7	11.2	3.2	0.2	100.0	85.4	58.9	1,468
Birth order										
1	5.8	83.0	2.0	7.7	1.4	0.0	100.0	90.8	59.1	2,350
2-3	4.3	81.3	1.9	9.6	2.6	0.3	100.0	87.5	60.6	3,735
4-5	3.0	79.0	2.1	12.7	2.9	0.3	100.0	84.1	60.9	2,240
6+	2.8	79.9	0.9	12.7	3.4	0.3	100.0	83.6	59.2	1,446
Antenatal care visits[2]										
None	3.2	74.4	1.5	13.9	6.6	0.4	100.0	79.0	66.1	113
1-3	4.4	69.4	2.4	16.8	6.6	0.3	100.0	76.2	51.5	566
4+	4.3	83.1	1.6	8.9	1.9	0.2	100.0	89.1	61.6	5,769
Don't know/ missing	5.9	84.5	1.9	6.7	0.4	0.6	100.0	92.3	60.6	878
Place of delivery										
Health facility	4.9	92.8	1.7	0.5	0.1	0.1	100.0	99.4	67.4	8,151
Public facility	4.3	93.4	1.8	0.5	0.1	0.0	100.0	99.4	67.3	7,931
Private facility	27.7	70.5	0.0	0.5	0.0	1.3	100.0	98.2	72.1	219
Elsewhere	0.4	21.6	2.3	60.0	14.7	1.1	100.0	24.3	23.1	1,621
Residence										
Urban	8.7	83.3	2.0	5.0	0.6	0.3	100.0	94.1	59.9	3,422
Rural	1.7	79.7	1.7	13.2	3.5	0.2	100.0	83.1	60.2	6,350
Province										
Eastern	2.7	89.3	2.3	5.1	0.5	0.1	100.0	94.3	75.3	2,077
Northern	2.1	85.8	0.6	10.2	1.3	0.1	100.0	88.4	58.6	1,918
North West	2.8	64.3	2.7	23.6	6.7	0.0	100.0	69.7	43.8	1,894
Southern	2.6	83.6	1.1	8.7	3.4	0.6	100.0	87.3	65.9	2,101
Western Area	11.3	80.6	2.7	4.4	0.6	0.5	100.0	94.6	54.3	1,781
District										
Kailahun	1.3	92.1	2.6	3.6	0.4	0.0	100.0	96.0	69.8	455
Kenema	1.3	95.6	0.6	2.0	0.5	0.0	100.0	97.5	81.3	1,028
Kono	6.2	76.5	4.9	11.6	0.6	0.2	100.0	87.6	69.2	594
Bombali	2.5	86.4	0.7	9.6	0.9	0.0	100.0	89.6	62.8	639
Falaba	0.6	82.5	0.8	11.0	5.1	0.0	100.0	83.9	33.3	244
Koinadugu	2.0	75.3	0.1	22.2	0.2	0.2	100.0	77.4	46.9	294
Tonkolili	2.3	90.5	0.5	5.8	0.8	0.1	100.0	93.3	67.9	741
Kambia	4.9	61.5	6.3	25.4	1.9	0.0	100.0	72.7	45.4	638
Karene	4.1	74.1	0.2	18.3	3.3	0.0	100.0	78.4	34.9	370
Port Loko	0.8	62.2	1.1	24.4	11.6	0.0	100.0	64.0	46.4	886
Bo	4.0	87.3	0.6	6.9	0.3	0.9	100.0	91.9	55.8	797
Bonthe	1.1	95.3	0.0	3.2	0.2	0.3	100.0	96.3	92.5	384
Moyamba	1.2	63.4	3.3	19.3	12.0	0.8	100.0	67.9	49.1	558
Pujehun	3.3	94.1	0.2	2.2	0.3	0.0	100.0	97.5	86.0	363
Western Area Rural	7.1	84.6	1.3	6.2	0.5	0.5	100.0	92.9	46.6	783
Western Area Urban	14.7	77.4	3.8	3.0	0.7	0.5	100.0	95.9	60.3	998
Mother's education										
No education	2.7	78.5	2.0	13.0	3.5	0.3	100.0	83.3	59.4	5,321
Primary	3.3	82.2	1.2	10.2	2.7	0.4	100.0	86.7	60.8	1,441
Secondary	6.3	85.1	1.8	6.0	0.7	0.1	100.0	93.2	60.8	2,748
More than secondary	16.2	79.7	1.4	2.7	0.0	0.0	100.0	97.3	63.4	262
Wealth quintile										
Lowest	1.6	79.0	1.7	13.5	3.7	0.5	100.0	82.3	60.5	2,283
Second	1.9	78.7	1.8	14.0	3.7	0.0	100.0	82.4	60.4	2,183
Middle	1.9	82.1	2.2	10.9	2.6	0.3	100.0	86.1	60.6	2,007
Fourth	4.8	86.2	0.9	7.2	0.9	0.1	100.0	91.8	57.8	1,808
Highest	13.7	79.3	2.9	3.2	0.6	0.3	100.0	95.9	61.0	1,491
Total	4.1	81.0	1.8	10.3	2.5	0.2	100.0	86.9	60.1	9,771

Note: If the respondent mentioned more than one person attending during delivery, only the most qualified person is considered in this tabulation.
[1] Skilled provider includes doctor, nurse/midwife, and auxiliary midwife.
[2] Includes only the most recent birth in the 5 years preceding the survey

Table 9.7 Caesarean section

Percentage of live births in the 5 years preceding the survey delivered by caesarean section (C-section), percentage delivered by C-section planned before the onset of labour pains, and percentage delivered by C-section decided on after the onset of labour pains, according to background characteristics, Sierra Leone DHS 2019

Background characteristic	Percentage delivered by C-section	Timing of decision to conduct C-section		Number of births
		Before onset of labour pains	After onset of labour pains	
Mother's age at birth				
<20	3.0	0.7	2.3	1,644
20-34	4.3	1.3	2.9	6,660
35-49	4.6	1.3	3.3	1,468
Birth order				
1	5.3	1.6	3.7	2,350
2-3	4.7	1.3	3.4	3,735
4-5	3.5	1.1	2.3	2,240
6+	1.8	0.6	1.1	1,446
Antenatal care visits[1]				
None	1.4	0.0	1.4	113
1-3	5.4	0.9	4.5	566
4+	4.3	1.3	3.0	5,769
Don't know/missing	5.0	1.3	3.7	878
Place of delivery				
Health facility	4.9	1.5	3.5	8,151
Public facility	4.7	1.3	3.4	7,931
Private facility	13.4	6.8	6.7	219
Residence				
Urban	6.5	2.1	4.4	3,422
Rural	2.9	0.8	2.1	6,350
Province				
Eastern	2.4	1.3	1.1	2,077
Northern	8.2	1.1	7.1	1,918
North West	1.5	0.6	0.9	1,894
Southern	2.5	1.2	1.3	2,101
Western Area	6.4	2.0	4.4	1,781
District				
Kailahun	1.4	0.2	1.3	455
Kenema	3.0	2.0	1.0	1,028
Kono	2.3	1.0	1.3	594
Bombali	4.1	1.8	2.4	639
Falaba	0.9	0.2	0.7	244
Koinadugu	1.7	1.2	0.5	294
Tonkolili	16.6	0.7	16.0	741
Kambia	1.0	0.2	0.8	638
Karene	3.2	1.5	1.7	370
Port Loko	1.1	0.4	0.7	886
Bo	3.5	1.9	1.6	797
Bonthe	1.2	0.5	0.8	384
Moyamba	1.7	0.9	0.8	558
Pujehun	3.0	1.1	2.0	363
Western Area Rural	4.4	1.0	3.4	783
Western Area Urban	8.0	2.9	5.1	998
Mother's education				
No education	3.3	0.6	2.7	5,321
Primary	4.3	1.6	2.7	1,441
Secondary	4.7	1.7	3.0	2,748
More than secondary	12.9	6.9	6.0	262
Wealth quintile				
Lowest	2.8	0.6	2.2	2,283
Second	2.8	0.7	2.1	2,183
Middle	3.2	0.9	2.3	2,007
Fourth	4.7	1.2	3.4	1,808
Highest	8.7	3.5	5.2	1,491
Total	4.1	1.2	2.9	9,771

Note: The question on C-section was asked only of women who delivered in a health facility. In this table, it is assumed that women who did not give birth in a health facility did not receive a C-section.
[1] Includes only the most recent birth in the 5 years preceding the survey

Table 9.8 Duration of stay in health facility after birth

Among women with a birth in the 5 years preceding the survey who delivered their most recent live birth in a health facility, percent distribution by duration of stay in the health facility following their most recent live birth, according to type of delivery, Sierra Leone DHS 2019

Type of delivery	<6 hours	6-11 hours	12-23 hours	1-2 days	3+ days	Missing	Total	Number of women
Vaginal birth	16.2	7.2	3.2	53.3	19.8	0.2	100.0	5,859
Caesarean section	19.9	1.4	0.2	17.3	60.6	0.6	100.0	324
Missing	0.0	0.0	0.0	0.0	0.0	100.0	100.0	13

Table 9.9 Timing of first postnatal check for the mother

Among women age 15-49 giving birth in the 2 years preceding the survey, percent distribution of the mother's first postnatal check for the most recent live birth by time after delivery, and percentage of women with a live birth during the 2 years preceding the survey who received a postnatal check in the first 2 days after giving birth, according to background characteristics, Sierra Leone DHS 2019

Background characteristic	Time after delivery of mother's first postnatal check[1]								Percentage of women with a postnatal check during the first 2 days after birth[1]	Number of women
	Less than 4 hours	4-23 hours	1-2 days	3-6 days	7-41 days	Don't know/ missing	No postnatal check[2]	Total		
Age at birth										
<20	78.8	4.2	4.7	0.6	0.4	2.7	8.5	100.0	87.8	663
20-34	76.6	4.1	5.4	0.4	0.7	2.7	10.0	100.0	86.1	2,648
35-49	75.3	3.5	5.1	0.7	0.4	2.3	12.6	100.0	84.0	639
Birth order										
1	81.1	3.2	4.4	0.6	0.4	2.7	7.7	100.0	88.6	976
2-3	76.1	4.5	6.3	0.4	0.9	2.3	9.5	100.0	87.0	1,471
4-5	76.3	3.3	4.9	0.6	0.6	2.9	11.3	100.0	84.6	923
6+	71.6	5.3	4.7	0.5	0.4	3.2	14.4	100.0	81.5	580
Place of delivery										
Health facility	81.2	3.9	4.7	0.3	0.4	2.2	7.3	100.0	89.8	3,370
Elsewhere	50.6	4.8	8.5	1.9	2.0	5.1	27.1	100.0	63.9	580
Residence										
Urban	83.6	3.5	3.6	0.3	0.5	2.0	6.6	100.0	90.7	1,392
Rural	73.0	4.3	6.2	0.7	0.7	3.0	12.2	100.0	83.5	2,558
Province										
Eastern	66.7	6.7	9.7	0.9	1.3	6.2	8.4	100.0	83.1	847
Northern	69.6	6.2	7.1	0.8	0.7	1.0	14.7	100.0	82.8	796
North West	74.9	3.6	4.2	0.7	0.8	2.0	13.7	100.0	82.7	758
Southern	84.8	1.4	3.1	0.0	0.1	1.8	8.8	100.0	89.3	816
Western Area	89.0	2.0	1.7	0.2	0.0	2.0	5.1	100.0	92.7	733
District										
Kailahun	71.2	6.1	14.7	0.5	0.4	0.0	7.0	100.0	92.0	187
Kenema	81.7	3.7	4.4	1.4	1.9	0.0	6.8	100.0	89.8	410
Kono	38.7	11.9	14.7	0.4	1.1	21.1	12.0	100.0	65.3	250
Bombali	74.5	3.4	4.6	0.6	0.2	0.9	15.8	100.0	82.5	290
Falaba	78.4	4.8	5.0	3.1	0.3	2.0	6.3	100.0	88.3	81
Koinadugu	63.2	10.8	11.4	1.4	2.4	1.4	9.4	100.0	85.4	121
Tonkolili	65.1	7.4	8.2	0.0	0.4	0.7	18.2	100.0	80.7	303
Kambia	91.3	2.2	3.2	0.4	0.0	0.3	2.6	100.0	96.7	242
Karene	62.9	3.9	5.4	1.6	1.7	0.8	23.7	100.0	72.2	154
Port Loko	69.1	4.4	4.4	0.5	1.0	3.7	17.0	100.0	77.9	362
Bo	87.8	1.3	4.4	0.0	0.0	1.8	4.7	100.0	93.5	298
Bonthe	89.7	1.9	2.0	0.0	0.5	1.4	4.6	100.0	93.6	157
Moyamba	73.7	0.5	3.4	0.0	0.0	2.1	20.3	100.0	77.7	216
Pujehun	89.9	2.3	1.0	0.0	0.3	1.7	4.8	100.0	93.2	145
Western Area Rural	85.7	2.5	3.4	0.4	0.0	2.9	5.2	100.0	91.5	322
Western Area Urban	91.5	1.6	0.4	0.0	0.0	1.2	5.1	100.0	93.6	412
Education										
No education	73.3	4.3	5.8	0.5	0.8	2.8	12.5	100.0	83.4	2,037
Primary	76.8	4.6	5.1	0.4	0.5	3.7	8.9	100.0	86.5	610
Secondary	81.4	3.5	4.4	0.6	0.4	2.0	7.6	100.0	89.4	1,199
More than secondary	89.9	1.4	4.8	0.0	0.0	1.5	2.3	100.0	96.2	105
Wealth quintile										
Lowest	72.2	3.5	5.7	0.5	0.9	2.9	14.3	100.0	81.4	917
Second	70.2	4.8	7.8	1.0	0.6	2.8	12.8	100.0	82.8	867
Middle	76.2	6.2	5.1	0.4	0.6	2.7	8.8	100.0	87.4	792
Fourth	81.0	3.5	4.4	0.4	0.8	2.3	7.7	100.0	88.8	752
Highest	88.2	1.6	2.5	0.1	0.0	2.5	5.2	100.0	92.2	622
Total	76.7	4.0	5.3	0.5	0.6	2.7	10.2	100.0	86.0	3,950

[1] Includes women who received a check from a doctor, midwife, nurse, community health worker, or traditional birth attendant
[2] Includes women who received a check after 41 days

Table 9.10 Type of provider of first postnatal check for the mother

Among women age 15-49 giving birth in the 2 years preceding the survey, percent distribution by type of provider of the mother's first postnatal health check during the 2 days after the most recent live birth, according to background characteristics, Sierra Leone DHS 2019

Background characteristic	Type of health provider of mother's first postnatal check				No postnatal check during the first 2 days after birth	Total	Number of women
	Doctor/nurse/ midwife	Auxiliary midwife	Community health worker	Traditional birth attendant			
Age at birth							
<20	80.8	1.6	0.3	5.0	12.2	100.0	663
20-34	77.4	1.2	0.6	6.9	13.9	100.0	2,648
35-49	76.3	2.0	0.0	5.7	16.0	100.0	639
Birth order							
1	83.0	1.0	0.4	4.2	11.4	100.0	976
2-3	77.7	1.2	0.7	7.4	13.0	100.0	1,471
4-5	74.6	2.2	0.3	7.5	15.4	100.0	923
6+	74.3	1.3	0.3	5.7	18.5	100.0	580
Place of delivery							
Health facility	87.4	1.2	0.0	1.2	10.2	100.0	3,370
Elsewhere	22.0	2.6	3.0	36.4	36.1	100.0	580
Residence							
Urban	87.1	1.1	0.1	2.4	9.3	100.0	1,392
Rural	72.7	1.6	0.7	8.6	16.5	100.0	2,558
Province							
Eastern	79.1	2.2	0.3	1.6	16.9	100.0	847
Northern	76.6	0.4	0.8	5.0	17.2	100.0	796
North West	61.1	2.2	0.8	18.7	17.3	100.0	758
Southern	82.7	0.9	0.5	5.1	10.7	100.0	816
Western Area	89.3	1.2	0.0	2.2	7.3	100.0	733
District							
Kailahun	87.6	3.0	0.0	1.4	8.0	100.0	187
Kenema	88.0	0.9	0.0	0.9	10.2	100.0	410
Kono	58.0	3.5	0.9	2.9	34.7	100.0	250
Bombali	79.9	0.0	0.2	2.3	17.5	100.0	290
Falaba	81.8	0.8	0.4	5.3	11.7	100.0	81
Koinadugu	70.4	0.0	0.5	14.5	14.6	100.0	121
Tonkolili	74.6	1.0	1.5	3.7	19.3	100.0	303
Kambia	65.3	4.5	0.7	26.2	3.3	100.0	242
Karene	61.9	0.0	1.6	8.7	27.8	100.0	154
Port Loko	57.9	1.6	0.5	17.9	22.1	100.0	362
Bo	89.0	0.0	0.0	4.4	6.5	100.0	298
Bonthe	91.7	0.0	0.4	1.5	6.4	100.0	157
Moyamba	61.1	3.6	1.6	11.3	22.3	100.0	216
Pujehun	92.2	0.0	0.0	1.0	6.8	100.0	145
Western Area Rural	87.6	1.0	0.0	2.9	8.5	100.0	322
Western Area Urban	90.6	1.4	0.0	1.6	6.4	100.0	412
Education							
No education	73.2	1.5	0.5	8.1	16.6	100.0	2,037
Primary	77.0	1.5	0.9	7.1	13.5	100.0	610
Secondary	84.3	1.2	0.1	3.7	10.6	100.0	1,199
More than secondary	96.2	0.0	0.0	0.0	3.8	100.0	105
Wealth quintile							
Lowest	72.0	1.1	0.5	7.8	18.6	100.0	917
Second	70.1	1.9	0.7	10.1	17.2	100.0	867
Middle	76.8	2.1	0.8	7.7	12.6	100.0	792
Fourth	84.8	0.9	0.1	3.0	11.2	100.0	752
Highest	89.8	0.9	0.0	1.5	7.8	100.0	622
Total	77.8	1.4	0.5	6.4	14.0	100.0	3,950

Table 9.11 Timing of first postnatal check for the newborn

Percent distribution of most recent live births in the 2 years preceding the survey by time after birth of first postnatal check, and percentage of births with a postnatal check during the first 2 days after birth, according to background characteristics, Sierra Leone DHS 2019

Background characteristic	Time after delivery of newborn's first postnatal check[1]									
	Less than 1 hour	1-3 hours	4-23 hours	1-2 days	3-6 days	Don't know	No postnatal check[2]	Total	Percentage of births with a postnatal check during the first 2 days after birth[1]	Number of births
Mother's age at birth										
<20	29.2	46.3	3.7	5.6	1.1	1.7	12.2	100.0	84.9	663
20-34	24.7	47.7	4.3	5.9	0.9	2.0	14.4	100.0	82.6	2,648
35-49	24.9	45.0	5.1	5.6	1.7	2.3	15.3	100.0	80.6	639
Birth order										
1	25.4	53.9	2.5	4.5	0.8	1.5	11.4	100.0	86.3	976
2-3	25.4	46.5	4.0	6.3	1.4	2.1	14.3	100.0	82.3	1,471
4-5	24.0	46.1	5.0	6.1	0.6	1.9	16.4	100.0	81.1	923
6+	28.3	38.3	7.0	6.4	1.7	2.9	15.3	100.0	80.0	580
Place of delivery										
Health facility	28.8	53.0	4.3	4.5	0.3	2.2	7.0	100.0	90.5	3,370
Elsewhere	6.4	12.4	4.6	13.7	5.5	1.3	56.1	100.0	37.1	580
Residence										
Urban	27.1	54.2	3.6	3.7	1.0	1.1	9.3	100.0	88.6	1,392
Rural	24.6	43.2	4.7	6.9	1.2	2.6	16.9	100.0	79.4	2,558
Province										
Eastern	16.0	50.0	5.6	7.1	1.3	4.8	15.2	100.0	78.6	847
Northern	18.4	48.2	6.3	9.0	1.0	0.8	16.4	100.0	81.9	796
North West	25.9	36.8	5.5	6.3	1.7	1.3	22.5	100.0	74.5	758
Southern	46.7	35.5	1.6	4.2	0.7	1.9	9.4	100.0	88.1	816
Western Area	20.1	65.8	2.5	2.2	0.7	1.2	7.6	100.0	90.5	733
District										
Kailahun	9.8	55.1	4.4	10.8	1.4	0.0	18.5	100.0	80.1	187
Kenema	20.6	58.9	2.5	2.6	0.0	0.0	15.5	100.0	84.5	410
Kono	13.2	31.5	11.6	11.6	3.4	16.3	12.2	100.0	68.0	250
Bombali	26.8	48.6	4.4	10.1	0.9	0.3	8.8	100.0	89.9	290
Falaba	3.2	73.7	1.4	7.2	0.0	1.9	12.5	100.0	85.6	81
Koinadugu	11.7	41.3	9.5	7.7	3.6	1.9	24.2	100.0	70.2	121
Tonkolili	17.0	43.7	8.2	8.9	0.3	0.5	21.4	100.0	77.8	303
Kambia	22.8	54.8	1.5	1.7	2.9	0.8	15.5	100.0	80.8	242
Karene	30.4	31.3	7.0	12.1	1.8	1.2	16.2	100.0	80.8	154
Port Loko	26.1	27.1	7.5	6.9	0.9	1.6	29.8	100.0	67.6	362
Bo	64.6	24.4	1.1	4.8	0.3	1.8	3.0	100.0	94.9	298
Bonthe	5.6	85.4	1.7	2.2	0.0	2.2	3.0	100.0	94.9	157
Moyamba	56.6	6.0	1.3	6.9	2.0	2.1	25.0	100.0	70.9	216
Pujehun	39.9	48.5	2.7	1.4	0.0	1.2	6.3	100.0	92.5	145
Western Area Rural	19.7	63.8	2.2	3.9	0.7	1.5	8.2	100.0	89.6	322
Western Area Urban	20.4	67.3	2.6	0.8	0.7	1.0	7.1	100.0	91.2	412
Mother's education										
No education	22.7	45.5	5.5	6.4	1.3	2.2	16.4	100.0	80.1	2,037
Primary	27.5	43.3	3.2	5.7	1.1	2.9	16.2	100.0	79.8	610
Secondary	28.7	50.4	3.0	5.0	0.9	1.4	10.6	100.0	87.1	1,199
More than secondary	31.5	61.0	2.3	4.0	0.0	0.7	0.5	100.0	98.7	105
Wealth quintile										
Lowest	25.1	41.3	4.7	6.5	1.3	2.4	18.6	100.0	77.7	917
Second	20.2	45.3	5.8	7.9	1.2	2.1	17.4	100.0	79.3	867
Middle	26.2	44.6	4.5	6.5	1.1	2.4	14.8	100.0	81.8	792
Fourth	30.2	49.6	3.0	4.3	1.0	1.7	10.3	100.0	87.1	752
Highest	26.8	58.0	2.8	2.8	0.8	1.5	7.3	100.0	90.4	622
Total	25.5	47.0	4.3	5.8	1.1	2.0	14.2	100.0	82.7	3,950

[1] Includes newborns who received a check from a doctor, midwife, nurse, community health worker, or traditional birth attendant
[2] Includes newborns who received a check after the first week of life

Table 9.12 Type of provider of first postnatal check for the newborn

Percent distribution of most recent live births in the 2 years preceding the survey by type of provider of the newborn's first postnatal health check during the 2 days after the most recent live birth, according to background characteristics, Sierra Leone DHS 2019

Background characteristic	Type of health provider of newborn's first postnatal check				No postnatal check during the first 2 days after birth	Total	Number of births
	Doctor/nurse/ midwife	Auxiliary midwife	Community health worker	Traditional birth attendant			
Mother's age at birth							
<20	80.5	1.1	0.3	3.0	15.1	100.0	663
20-34	78.5	1.2	0.4	2.4	17.4	100.0	2,648
35-49	77.0	1.4	0.0	2.2	19.4	100.0	639
Birth order							
1	82.8	1.0	0.4	2.1	13.7	100.0	976
2-3	77.7	1.1	0.5	3.0	17.7	100.0	1,471
4-5	77.0	1.6	0.2	2.2	18.9	100.0	923
6+	76.2	1.3	0.1	2.4	20.0	100.0	580
Place of delivery							
Health facility	88.2	1.1	0.0	1.1	9.5	100.0	3,370
Elsewhere	22.6	1.8	2.2	10.4	62.9	100.0	580
Residence							
Urban	86.5	1.2	0.1	0.9	11.4	100.0	1,392
Rural	74.3	1.2	0.5	3.4	20.6	100.0	2,558
Province							
Eastern	76.5	1.8	0.0	0.4	21.4	100.0	847
Northern	77.8	0.5	1.0	2.7	18.1	100.0	796
North West	66.4	1.9	0.3	5.9	25.5	100.0	758
Southern	84.1	0.8	0.4	2.8	11.9	100.0	816
Western Area	88.5	1.2	0.0	0.8	9.5	100.0	733
District							
Kailahun	76.6	3.5	0.0	0.0	19.9	100.0	187
Kenema	84.1	0.0	0.0	0.4	15.5	100.0	410
Kono	64.0	3.3	0.0	0.7	32.0	100.0	250
Bombali	87.9	0.0	0.2	1.8	10.1	100.0	290
Falaba	82.9	0.4	0.0	2.4	14.4	100.0	81
Koinadugu	62.4	0.0	2.1	5.8	29.8	100.0	121
Tonkolili	72.9	1.1	1.5	2.3	22.2	100.0	303
Kambia	63.0	5.1	0.3	12.4	19.2	100.0	242
Karene	75.7	0.6	0.0	4.5	19.2	100.0	154
Port Loko	64.7	0.3	0.5	2.1	32.4	100.0	362
Bo	89.0	0.0	0.0	5.8	5.1	100.0	298
Bonthe	93.4	0.0	0.0	1.5	5.1	100.0	157
Moyamba	64.8	3.0	1.7	1.4	29.1	100.0	216
Pujehun	92.5	0.0	0.0	0.0	7.5	100.0	145
Western Area Rural	88.6	0.1	0.0	0.9	10.4	100.0	322
Western Area Urban	88.3	2.1	0.0	0.8	8.8	100.0	412
Mother's education							
No education	75.8	1.2	0.3	2.7	19.9	100.0	2,037
Primary	74.7	1.0	0.6	3.5	20.2	100.0	610
Secondary	83.6	1.3	0.3	1.9	12.9	100.0	1,199
More than secondary	97.2	1.5	0.0	0.0	1.3	100.0	105
Wealth quintile							
Lowest	73.2	1.2	0.5	2.8	22.3	100.0	917
Second	73.8	1.1	0.6	3.9	20.7	100.0	867
Middle	76.1	1.6	0.4	3.6	18.2	100.0	792
Fourth	85.0	1.1	0.1	0.9	12.9	100.0	752
Highest	88.7	1.0	0.0	0.6	9.6	100.0	622
Total	78.6	1.2	0.3	2.5	17.3	100.0	3,950

Table 9.13 Content of postnatal care for newborns

Among most recent live births in the 2 years preceding the survey, percentage for whom selected functions were performed during the first 2 days after birth and percentage with at least two signal functions performed during the first 2 days after birth, according to background characteristics, Sierra Leone DHS 2019

Background characteristic	Among most recent live births in the 2 years preceding the survey, percentage for whom the selected function was performed during the first 2 days after birth:						Percentage with at least two signal functions performed during the first 2 days after birth	Number of births
	Cord examined	Temperature measured	Counselling on danger signs	Counselling on breastfeeding	Observation of breastfeeding	Weighed[1]		
Mother's age at birth								
<20	84.7	82.1	83.3	84.8	77.1	71.3	88.1	663
20-34	83.6	81.4	80.7	82.8	74.4	74.3	87.2	2,648
35-49	79.6	76.9	77.5	78.4	71.7	73.0	82.2	639
Birth order								
1	86.1	84.1	84.5	85.9	78.5	74.2	89.4	976
2-3	84.6	82.3	81.7	84.1	75.4	74.8	88.6	1,471
4-5	82.1	78.7	78.2	80.4	74.0	73.2	84.7	923
6+	76.0	75.0	74.9	75.5	65.6	69.8	79.8	580
Place of delivery								
Health facility	83.7	83.1	82.1	84.3	77.2	78.9	87.6	3,370
Elsewhere	79.7	67.7	71.6	71.7	58.4	42.4	80.7	580
Residence								
Urban	87.0	85.5	85.6	88.6	79.4	75.9	90.9	1,392
Rural	81.0	78.2	77.8	79.1	71.7	72.3	84.2	2,558
Province								
Eastern	90.1	87.7	85.0	86.6	79.2	79.5	92.2	847
Northern	75.7	75.7	74.2	77.5	65.3	77.7	80.9	796
North West	85.6	79.8	81.0	78.5	65.9	58.0	87.9	758
Southern	73.9	72.2	72.9	75.8	76.0	77.6	77.8	816
Western Area	90.7	89.1	90.5	94.4	85.8	73.7	94.6	733
District								
Kailahun	89.6	88.6	87.4	88.3	85.0	84.8	90.6	187
Kenema	96.7	94.6	92.7	94.9	94.5	79.8	98.1	410
Kono	79.7	75.8	70.7	71.6	49.9	75.3	83.9	250
Bombali	77.7	80.5	78.0	81.6	69.8	80.1	85.0	290
Falaba	85.8	81.0	78.7	84.9	56.9	68.9	88.9	81
Koinadugu	79.5	78.1	85.9	92.3	68.2	66.8	94.0	121
Tonkolili	69.6	68.6	64.6	65.5	62.2	82.0	69.6	303
Kambia	94.3	92.5	91.9	89.9	78.0	65.6	95.7	242
Karene	84.8	83.5	71.8	65.1	55.3	60.4	88.8	154
Port Loko	80.2	69.7	77.7	76.6	62.2	51.8	82.2	362
Bo	88.1	82.5	84.8	89.8	92.0	77.0	93.9	298
Bonthe	58.2	61.7	61.2	62.6	62.8	88.6	64.3	157
Moyamba	53.4	52.5	53.0	54.4	52.2	60.5	54.3	216
Pujehun	92.3	91.8	90.9	93.4	92.8	92.7	94.4	145
Western Area Rural	87.3	86.9	89.6	91.9	85.6	62.7	92.4	322
Western Area Urban	93.4	90.9	91.2	96.3	85.9	82.4	96.3	412
Mother's education								
No education	81.3	79.3	77.6	79.3	70.8	70.1	84.3	2,037
Primary	84.8	80.5	82.0	85.1	79.5	74.4	88.6	610
Secondary	84.7	82.5	84.2	85.5	77.3	77.2	88.7	1,199
More than secondary	91.7	92.8	88.8	91.3	83.3	93.8	93.9	105
Wealth quintile								
Lowest	75.9	73.8	74.0	75.2	71.6	73.0	79.5	917
Second	82.5	78.9	78.2	80.1	71.5	70.3	85.5	867
Middle	84.4	81.9	80.4	81.4	71.5	74.3	87.5	792
Fourth	85.9	85.3	85.5	86.4	78.2	68.5	89.3	752
Highest	89.7	87.2	87.9	92.8	81.9	83.9	94.0	622
Total	83.1	80.8	80.6	82.4	74.4	73.6	86.6	3,950

[1] Captures newborns who were weighed "at birth." May exclude some newborns who were weighed during the 2 days after birth.

Table 9.14 Problems in accessing health care

Percentage of women age 15-49 who reported that they have serious problems in accessing health care for themselves when they are sick, by type of problem, according to background characteristics, Sierra Leone DHS 2019

Background characteristic	Problems in accessing health care					
	Getting permission to go for treatment	Getting money for treatment	Distance to health facility	Not wanting to go alone	At least one problem accessing health care	Number of women
Age						
15-19	25.4	63.4	41.7	21.9	69.3	3,427
20-34	22.6	65.2	42.0	20.0	70.2	7,299
35-49	26.6	72.0	48.8	24.4	76.2	4,848
Number of living children						
0	23.4	59.9	38.3	19.6	65.4	4,361
1-2	22.0	64.4	42.4	20.7	69.8	5,224
3-4	26.1	71.6	47.5	22.9	75.8	3,759
5+	29.4	78.6	53.5	26.7	82.7	2,231
Marital status						
Never married	22.0	58.7	36.6	18.8	64.0	5,058
Married or living together	26.0	70.5	47.7	23.2	75.5	9,715
Divorced/separated/widowed	20.8	75.4	46.6	23.3	78.5	801
Employed last 12 months						
Not employed	20.2	55.2	33.6	18.0	60.7	4,417
Employed for cash	19.7	69.5	42.4	17.8	73.7	5,200
Employed not for cash	31.8	73.3	53.3	28.1	78.6	5,957
Residence						
Urban	16.0	51.7	26.8	11.6	56.2	7,163
Rural	31.6	79.9	58.7	30.4	85.3	8,411
Province						
Eastern	37.4	74.6	51.9	17.9	79.4	3,069
Northern	20.3	75.9	46.8	28.7	80.2	3,317
North West	23.7	79.1	52.9	18.4	84.3	2,508
Southern	32.0	74.9	58.3	36.6	81.5	2,900
Western Area	12.3	38.5	18.6	9.8	42.9	3,780
District						
Kailahun	17.9	48.7	34.7	11.0	52.7	707
Kenema	37.9	85.0	57.6	24.6	90.1	1,437
Kono	51.4	78.1	56.0	12.7	83.1	925
Bombali	17.5	80.3	53.8	23.7	84.8	1,166
Falaba	48.7	89.3	62.9	58.5	92.8	466
Koinadugu	7.6	55.1	42.2	18.9	63.8	469
Tonkolili	17.1	74.6	35.7	25.8	77.3	1,215
Kambia	19.2	78.4	42.0	6.5	84.1	890
Karene	39.3	79.2	69.0	37.2	84.7	462
Port Loko	21.0	79.5	54.8	20.1	84.2	1,157
Bo	20.4	67.7	48.6	21.4	75.0	1,250
Bonthe	44.0	78.6	58.4	51.1	81.8	468
Moyamba	40.3	81.8	68.1	44.4	88.1	726
Pujehun	37.8	80.1	69.3	50.9	88.6	456
Western Area Rural	22.3	51.0	27.4	15.0	55.7	1,407
Western Area Urban	6.3	31.2	13.3	6.8	35.3	2,373
Education						
No education	29.0	76.7	52.8	26.4	80.9	7,081
Primary	29.6	71.0	48.5	25.1	76.8	2,103
Secondary	18.4	56.7	34.1	16.3	62.3	5,724
More than secondary	11.3	37.9	22.3	9.0	42.6	666
Wealth quintile						
Lowest	35.8	82.9	67.0	36.5	87.7	2,738
Second	33.0	81.3	60.1	29.8	86.2	2,831
Middle	27.5	76.6	49.6	24.3	82.4	2,954
Fourth	18.9	61.1	31.4	14.0	65.5	3,385
Highest	11.9	41.4	21.8	9.8	46.4	3,666
Total	24.4	66.9	44.1	21.8	71.9	15,574

CHILD HEALTH 10

Key Findings

- ***Vaccinations:*** 56% of children age 12-23 months had received all basic vaccinations by the time of the survey.
- ***Symptoms of acute respiratory infection (ARI):*** Advice or treatment was sought for 86% of children under age 5 who had symptoms of ARI in the 2 weeks before the survey.
- ***Fever:*** Advice or treatment was sought for 75% of children under age 5 who had a fever in the 2 weeks before the survey.
- ***Diarrhoea:*** Advice or treatment was sought for 75% of children under age 5 who had diarrhoea in the 2 weeks before the survey; 91% of children with diarrhoea received oral rehydration therapy (ORT). However, 6% of children with diarrhoea received no treatment.

Information on child health and survival can help policymakers and programme managers assess the efficacy of current strategies, formulate appropriate interventions to prevent deaths from childhood illnesses, and improve the health of children in Sierra Leone.

This chapter presents information on birth weight and vaccination status for young children. It also looks at the prevalence of, and treatment practices for, three common childhood illnesses: symptoms of acute respiratory infection (ARI), fever, and diarrhoea. Because appropriate sanitary practices can help prevent and reduce the severity of diarrhoeal disease, information is also provided on the disposal of children's faeces.

10.1 BIRTH WEIGHT

Low birth weight

Percentage of births with a reported birth weight below 2.5 kilogrammes regardless of gestational age.

Sample: Live births in the 5 years before the survey that have a reported birth weight, from either a written record or the mother's report

Birth weight is a major determinant of infant and child health and mortality. Children who weigh less than 2.5 kilogrammes (kg) at birth or who are reported to be very small or smaller than average are considered to have a higher than average risk of early childhood death. For births in the 5 years preceding the survey, birth weight was recorded in the questionnaire if available from either a written record or the mother's recall. Because birth weight may not be known for many babies, mothers' estimates of their baby's size at birth were also obtained. Although these estimates are subjective, they can be a useful proxy for birth weight.

Eighty-four percent of births were reported as average or larger than average, 8% as smaller than average, and 5% as very small. Of the 65% of infants with a reported birth weight, 5% had a birth weight of less than 2.5 kg (**Table 10.1**).

Patterns by background characteristics

- The percentage of infants weighing less than 2.5 kg at birth is higher in urban areas (6%) than in rural areas (4%).
- The percentage of infants with a low birth weight ranges from 3% in the Southern province to 6% in the Northern, North West, and Western Area provinces.
- By district, the percentage of infants with a low birth weight ranges from 1% in Moyamba to 13% in Falaba.

10.2 VACCINATION OF CHILDREN

Universal immunisation of children against common vaccine-preventable diseases is crucial to reducing infant and child morbidity and mortality. In Sierra Leone, routine childhood vaccinations protect against tuberculosis, especially the extrapulmonary forms (BCG vaccine); diphtheria, tetanus, and pertussis (DPT vaccine); poliomyelitis (oral polio vaccine [OPV] and inactivated polio vaccine [IPV]); pneumonia, meningitis, and ear infection due to *Haemophilus influenzae* type b (Hib vaccine); hepatitis B (HepB vaccine); *Streptococcus pneumoniae* (pneumococcal conjugate vaccine [PCV]); rotavirus (rotavirus vaccine [RV]); yellow fever (yellow fever vaccine); and measles (measles vaccine). The 2019 SLDHS collected information on coverage of all of these vaccines among children born in the 3 years preceding the survey.

Historically, an important measure of vaccination coverage has been the proportion of children receiving all "basic" vaccinations. Children are considered to have received all basic vaccinations if they have received the BCG vaccine, three doses each of the DPT and polio vaccines, and a single dose of measles. In Sierra Leone, the BCG vaccine is usually given at birth or at the first clinic contact, while the DPT vaccine is given at the approximate ages of 6, 10, and 14 weeks in combination with Hib and HepB (DPT-Hib-HepB). The polio vaccine is given as OPV on the same schedule as the DPT-Hib-HepB. The first measles vaccine should be given at or soon after age 9 months.

All basic vaccinations coverage

Percentage of children age 12-23 months who received specific vaccines at any time before the survey (according to a vaccination card or the mother's report). To have received all basic vaccinations, a child must receive at least:

- One dose of BCG vaccine, which protects against tuberculosis
- Three doses of DPT vaccine, which protects against diphtheria, pertussis (whooping cough), and tetanus
- Three doses of polio vaccine
- One dose of measles vaccine

Sample: Living children age 12-23 months or age 24-35 months

In the 2019 SLDHS, information on vaccination coverage was obtained in two ways: from written vaccination records, including vaccination or health cards, and from verbal reports. For each child born in the 3 years before the survey, mothers were asked to show the interviewer the vaccination card or other document used for recording the child's vaccinations. If the vaccination card or other document was available, the interviewer copied the dates of each vaccination received. If a vaccination was not recorded on the vaccination card or document as having been administered, the mother was asked to recall whether that particular vaccination had been given. If the mother was not able to present the vaccination card or other document for a child, she was asked to recall whether the child had received each of Sierra Leone's

routine childhood vaccinations. If she indicated that the child had received any of the multi-dose vaccines, she was asked the number of doses the child received.

Fifty-six percent of children age 12-23 months and 51% of children age 24-35 months received all basic vaccinations, with 49% of those age 12-23 months and 40% of those age 24-35 months having received all basic vaccinations by age 12 months (**Table 10.2**).

A second measure of vaccination coverage is the percentage of children age 12-23 months and 24-35 months who have received all age-appropriate vaccinations. In this report, children age 12-23 months are considered to have received all age-appropriate vaccinations if they have received all basic vaccinations, a birth dose of OPV, a dose of IPV, three doses of PCV (given at age 6 weeks, 10 weeks, and 14 weeks), a measles vaccination, two doses of RV (given at age 6 weeks and 10 weeks), and a dose of yellow fever vaccine (given at age 9 months). Children age 24-35 months have received all age-appropriate vaccinations if they have received a second dose of the measles vaccine in addition to all of the age-appropriate vaccinations relevant for a child age 12-23 months. Forty-nine percent of children age 12-23 months and 30% of children age 24-35 months have received all of the vaccines appropriate for their age. Forty-three percent of children age 12-23 months and 22% of those age 24-35 months received the vaccines appropriate for their age by age 12 months and by age 24 months, respectively, as recommended.

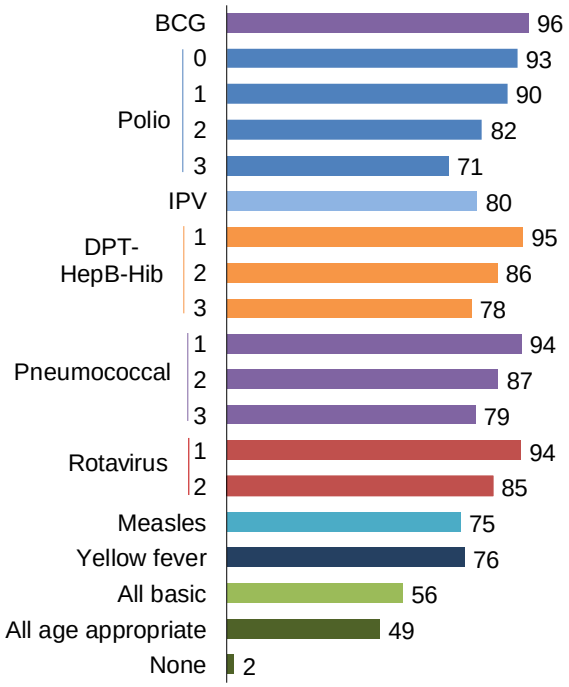
Figure 10.1 shows coverage of all age-appropriate vaccinations among children age 12-23 months. Coverage is highest for the BCG vaccine (96%). In the case of multi-dose vaccines such as OPV, DPT-HepB-Hib, PCV, and RV, coverage is highest for the first dose and falls in subsequent doses. Coverage rates for the first doses of OPV, DPT-HepB-Hib, PCV, and RV are 93%, 95%, 94%, and 94%, respectively. Seventy-one percent of children age 12-23 months received OPV 3, 78% received the third dose of DPT-HepB-Hib, 79% received the third dose of PCV, and 85% received the second dose of RV.

A similar pattern is observed among children age 24-35 months, although coverage for first doses is slightly lower than that reported among children age 12-23 months. The coverage rate for the second measles dose is 54% (**Table 10.2**).

Overall, 2% of children age 12-23 months and 3% of those age 24-35 months were reported not to have received any vaccinations.

Figure 10.1 **Childhood vaccinations**

Percentage of children age 12-23 months vaccinated at any time before the survey



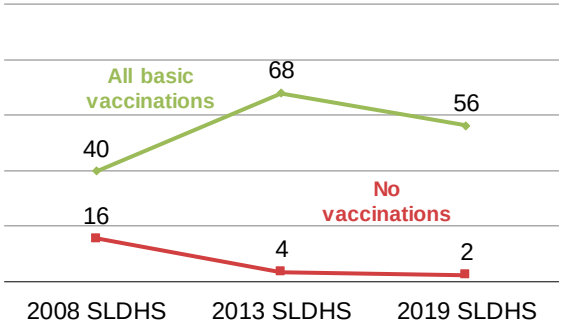
Vaccination Card Ownership and Availability

Vaccination cards are critical tools for ensuring that children receive all recommended vaccinations on schedule. **Table 10.4** shows that 97% of children age 12-23 months and 96% of children age 24-35 months were reported to have ever had vaccination cards. However, not all mothers were able to produce their child's vaccination card at the time of the interview; interviewers were able to see a vaccination card for only 75% of children age 12-23 months and 62% of children age 24-35 months.

Trends: The percentage of children age 12-23 months who received all basic vaccines has fluctuated over time, rising from 40% in 2008 to 68% in 2013 and then decreasing to 56% in 2019 (**Figure 10.2**). However, in a sign that vaccination coverage overall has improved in Sierra Leone during the past decade, the percentage of children who received no vaccinations declined from 16% in 2008 to 4% in 2013 and 2% in 2019. Sierra Leone is still falling short of Sustainable Development Goal 3, for which the target is achieving more than 90% coverage of all basic vaccinations among children age 12-23 months.

Figure 10.2 **Trends in childhood vaccinations**

Percentage of children age 12-23 months who received all basic vaccinations at any time before the survey

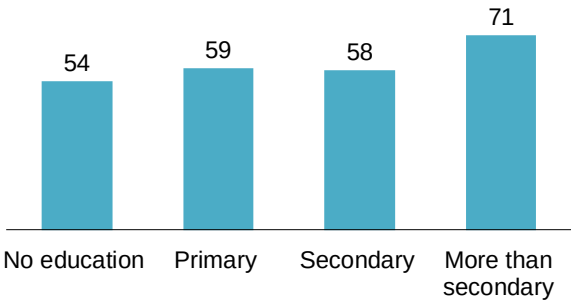


Patterns by background characteristics

- There is no appreciable difference in the percentage of children age 12-23 months in urban and rural areas who received all basic vaccinations (57% versus 56%) (**Table 10.3**).
- Female children age 12-23 months are more likely than their male counterparts to receive all basic vaccinations (58% and 55%, respectively) and all age-appropriate vaccinations (52% and 47%, respectively). However, by age 24-35 months, male children are slightly more likely than female children to have received all age-appropriate vaccinations (31% and 29%, respectively).
- Children age 12-23 months whose vaccination card was seen are much more likely to have received all basic vaccinations and all age-appropriate vaccinations than children who did not have a card or whose card was not seen: 73% of children whose card was seen received all basic vaccinations and 64% received all age-appropriate vaccinations, as compared with 7% and 4%, respectively, of children without a card or whose card was not seen.
- Children whose mothers have more than a secondary education are more likely than those whose mothers have no education to have received all basic vaccinations (71% and 54%, respectively) (**Figure 10.3**).

Figure 10.3 **Vaccination coverage by mother's education**

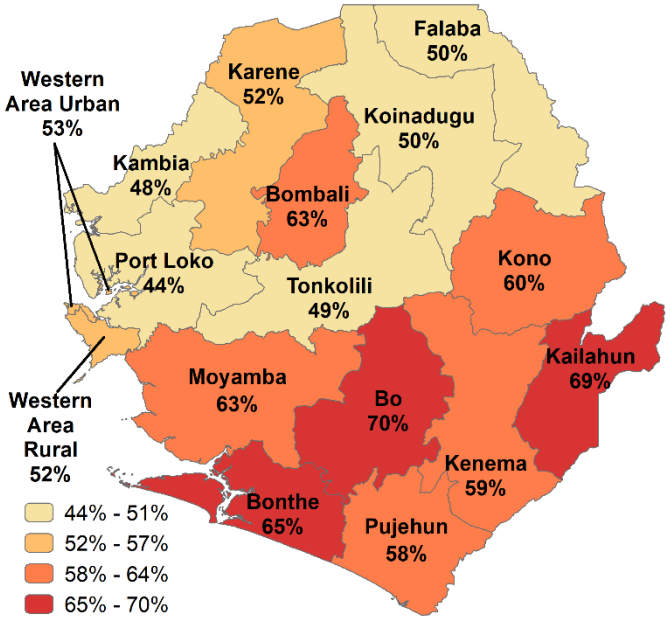
Percentage of children age 12-23 months who received all basic vaccines at any time before the survey



- At the district level, vaccination coverage among children age 12-23 months is highest in Bo (70%) and lowest in Port Loko (44%) (**Figure 10.4**).

Figure 10.4 **Vaccination coverage by district**

Percentage of children age 12-23 months who received all basic vaccines at any time before the survey



10.3 SYMPTOMS OF ACUTE RESPIRATORY INFECTION

Treatment of symptoms of acute respiratory infection (ARI)

Children with symptoms of ARI for whom advice or treatment was sought. ARI symptoms consist of short, rapid breathing that is chest-related and/or difficult breathing that is chest-related.

Sample: Children under age 5 with symptoms of ARI in the 2 weeks before the survey

Acute respiratory infection (ARI) is among the leading causes of childhood morbidity and mortality in Sierra Leone and throughout the world. Pneumonia is the most serious outcome of ARI in young children. Early diagnosis and treatment with antibiotics can prevent a large proportion of deaths caused by pneumonia. In its effort to achieve SDG 3, Sierra Leone is taking progressive actions to reduce pneumonia morbidity and mortality. Integrated management of childhood illness (IMCI) and integrated community case management of childhood illness (ICCMCI) in hard-to-reach areas are among the initiatives that have been scaled up by the Sierra Leone government since the introduction of the free health care initiative in 2010.

The prevalence of ARI symptoms was estimated by asking mothers whether their children under age 5 had experienced short, rapid breathing that was chest-related and/or difficulty breathing that was chest-related in the 2 weeks preceding the survey. **Table 10.5** shows that 2% of children under age 5 had ARI symptoms in the 2 weeks preceding the survey. Advice or treatment was sought for 86% of children with ARI symptoms; however, advice or treatment was sought the same or next day for only 40% of children.

Advice or treatment was most commonly sought from public sector health facilities: one-third (34%) of children with ARI symptoms were taken to a government health centre, 19% were taken to a government hospital, and 11% were taken to a government health post. In 18% of cases, advice or treatment was sought from the private sector, most commonly from a pharmacy (10%) (**Table 10.6**).

10.4 FEVER

Treatment of fever
Children with fever for whom advice or treatment was sought.
Sample: Children under age 5 with a fever in the 2 weeks before the survey

Fever is a common symptom of malaria and other acute infections in children. Other common causes of fever in children include ARI/pneumonia and other bacterial and viral infections. In areas where malaria is endemic such as Sierra Leone, all children with a fever should be taken to a health care facility for advice or treatment because it is essential to exclude malaria as the cause of the fever if the child does not have malaria.

Among children under age 5, 17% were reported to have had a fever in the 2 weeks before the survey. Seventy-five percent of children with a fever were taken for advice or treatment, and 50% were taken for advice or treatment the same day as or the day after the fever's onset (**Table 10.7**). Twenty-five percent of children with a fever received antibiotic drugs.

Trends: The percentage of children with fever for whom advice or treatment was sought increased from 44% in 2008 to 66% in 2013 and 75% in 2019.

Patterns by background characteristics

- The prevalence of fever was lowest among children age 0-5 months (10%) and highest among children age 12-23 months (21%).
- The prevalence of fever among children varied from 11% in the Northern province to 20% in the Eastern province. The percentage of children for whom advice or treatment was sought was highest in the Southern province (80%) and lowest in the Western Area province (70%).
- Fever was common across all wealth quintiles, and differences in the percentage of children with fever for whom advice or treatment was sought were small. However, children from wealthier households were most likely to receive antibiotic drugs; 19% of children from the lowest wealth quintile were given antibiotics, as compared with 38% of children in the highest wealth quintile.

10.5 DIARRHOEAL DISEASE

Diarrhoeal disease remains a leading cause of morbidity and mortality among young children in Sierra Leone. Exposure to diarrhoea-causing pathogens is frequently related to consumption of contaminated water and to unhygienic practices in food preparation and waste disposal.

Treatment of diarrhoea in children should include increased fluids, continued feeding, and a course of zinc. The increased fluids can be provided as increased feeds (especially increased breastfeeding), as recommended homemade fluids (RHF) consisting of a sugar-salt-water solution, or as fluid prepared from a packet of oral rehydration salts (ORS). The combination of high cause-specific mortality and the existence of an effective remedy makes treatment of diarrhoea a priority for health services.

10.5.1 Prevalence of Diarrhoea and Treatment-seeking Behaviour

Table 10.8 shows that 7% of children under age 5 were reported to have had diarrhoea in the 2-week period before the survey. Advice or treatment was sought for 75% of children who had diarrhoea.

Patterns by background characteristics

- The prevalence of diarrhoea peaks among children age 6-23 months (9%-10%). This corresponds to the time when children start losing protection from maternal antibodies through breastfeeding, begin to

walk, and are at increased risk of contamination from the environment. Treatment was most commonly sought for children age 6-11 months (84%).

- Although the prevalence of diarrhoea among children did not differ by urban-rural residence (7% each), rural children with diarrhoea were more likely to be taken for advice or treatment than urban children (77% versus 72%).
- The prevalence of diarrhoea was highest in the North West and Eastern provinces (9% each) and lowest in the Northern province (4%). Advice or treatment was more likely to be sought for children in the Eastern province (90%) than for children in the other provinces (68%-73%). By district, the prevalence of diarrhoea was highest in Port Loko and Pujehun (13% each) and lowest in Bonthe and Tonkolili (2% each).

10.5.2 Feeding Practices

Appropriate feeding practices

Children with diarrhoea are given more liquids than usual and as much food as usual or more than usual.

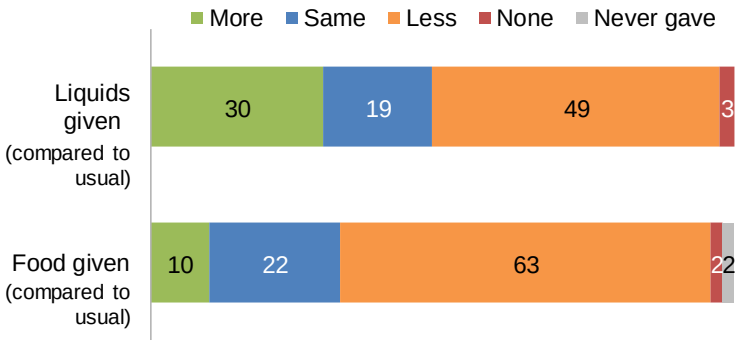
Sample: Children under age 5 with diarrhoea in the 2 weeks before the survey

To reduce dehydration and minimise the effects of diarrhoea on nutritional status, mothers are encouraged to continue normal feeding of children with diarrhoea and to increase the amount of fluids given.

Only 30% of children under age 5 with diarrhoea in the 2 weeks before the survey were given more liquids than usual, as recommended. Nineteen percent received the same amount of liquids. It is of concern that 49% of children were given somewhat less or much less liquid than usual, and 3% were given no fluids at all (**Figure 10.5** and **Table 10.9**).

***Figure 10.5* Feeding practices during diarrhoea**

Percentage of children under age 5 with diarrhoea in the 2 weeks before the survey



One-third (32%) of children with diarrhoea were fed according to the recommended practice of giving the same amount of food as usual or more food than usual. Sixty-three percent of children were given much less or somewhat less food than usual, while 4% received no food (**Figure 10.5** and **Table 10.9**).

10.5.3 Oral Rehydration Therapy and Other Treatments

Deaths from diarrhoea can be averted with early and proper treatment. As noted, all children with diarrhoea should receive increased fluids, continued feeding, and oral zinc. Oral rehydration therapy (ORT) is the most common and simplest treatment. Zinc supplementation during diarrhoeal episodes can reduce morbidity by reducing the severity, frequency, and duration of diarrhoea episodes. Zinc supplementation is part of the national integrated management of neonatal and childhood illness (IMNCI) guidelines for the management of diarrhoea. Depending on illness severity, treatment may involve administration of antibiotics or intravenous solutions.

Oral rehydration therapy

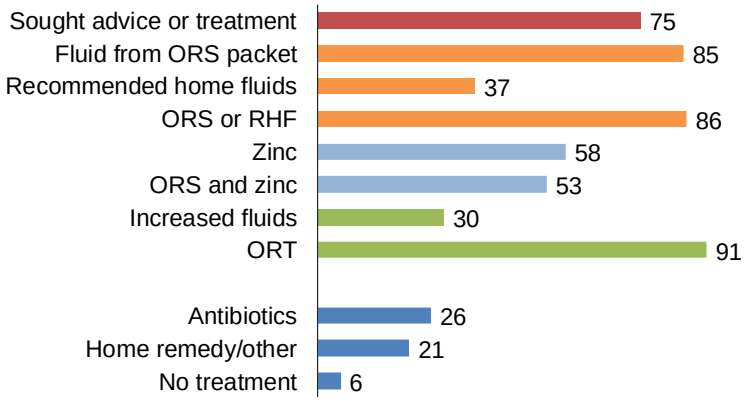
Children with diarrhoea are given increased fluids, a fluid made from a special packet of oral rehydration salts (ORS), or government-recommended homemade fluids (RHF).

Sample: Children under age 5 with diarrhoea in the 2 weeks before the survey

As shown in **Figure 10.6** and **Table 10.10**, 91% of children received ORT; 30% were given increased fluids, 85% were given ORS packets, and 37% were given recommended homemade fluids. Sixty percent of children received ORT and continued feeding, as recommended, and 58% of children received zinc. Twenty-six percent of children with diarrhoea received antibiotics, 21% were given a home remedy, and 2% received antimotility drugs.

***Figure 10.6* Treatment of diarrhoea**

Percentage of children under age 5 with diarrhoea in the 2 weeks before the survey



Among children with diarrhoea, the most common source of advice or treatment was a health centre (39%), followed by a government hospital (14%), and a government health post (12%). Four percent of children with diarrhoea were taken to a pharmacy for advice or treatment (**Table 10.11**).

Trends: Among children with diarrhoea in the 2 weeks before the survey, the percentage for whom advice or treatment was sought increased from 47% in 2008 to 65% in 2013 and 75% in 2019. Over this same time period, the percentage of children who received zinc supplements increased from 2% to 58% and the percentage receiving no treatment decreased from 6% in 2008 to 3%in 2013 but then in 2019 it increased to 6%.

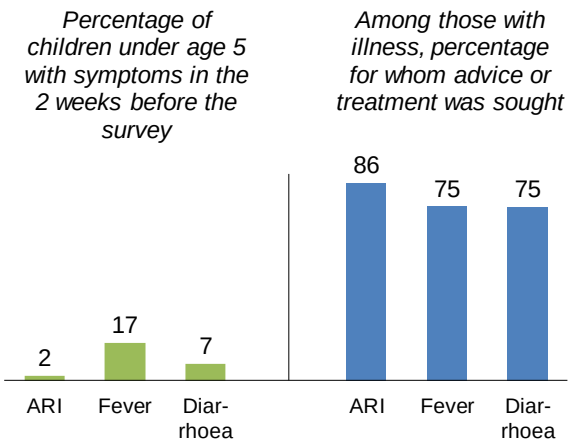
10.5.4 Knowledge of ORS Packets

Among women with a live birth in the 5 years preceding the survey, almost all (99%) know about ORS packets (**Table 10.12**).

10.6 Treatment of Childhood Illness

Fever and diarrhoea were more common than ARI symptoms, but children with ARI symptoms were more likely to be taken for advice or treatment. Advice or treatment was sought for 86% of children with symptoms of ARI, 75% of children with a fever, and 75% of children with diarrhoea (**Figure 10.7**).

***Figure 10.7* Prevalence and treatment of childhood illness**



10.7 Disposal of Children's Stools

Appropriate disposal of children's stools

The child's last stools were put or rinsed into a toilet or latrine or buried, or the child used a toilet or latrine.

Sample: Youngest children under age 2 living with their mother

Globally, nearly 90% of the diarrhoeal disease burden is estimated to be linked to poor water, sanitation, and hygiene provision. Proper disposal of children's faeces is important in preventing the spread of diseases. If faeces are left uncontained, diseases may spread by direct contact or animal contact (WHO/UNICEF 2013).

Table 10.13 presents the percent distribution of youngest children under age 2 living with their mother by the manner of disposal of the child's last stool.

Sixty-four percent of children's stools were disposed of appropriately; 2% of children used a toilet or latrine, 60% of children's stools were put or rinsed into a toilet or latrine, and 2% were buried. Seventeen percent of children's stools were thrown into the garbage, while 2% were left in the open and 17% were put or rinsed into a drain or ditch.

Patterns by background characteristics

- Seventy-one percent of children in households with improved toilet facilities have their stools disposed of appropriately, as compared with 45% of children in households practicing open defecation.
- The percentage of children whose stools are disposed of appropriately is highest in the Western Area province (74%) and lowest in the Southern province (49%).
- At the district level, the percentage of children whose stools are disposed of appropriately is highest in Western Area Rural and Falaba (83% each) and lowest in Moyamba (41%).
- Appropriate disposal of children's stools generally increases with increasing household wealth; 54% of children in the lowest wealth quintile have their stools disposed of appropriately, compared with 73% of children in the fourth quintile.

List of Tables

For more information on low birth weight, vaccinations, childhood illness, and disposal of children's stools, see the following tables:

- **Table 10.1 Child's size and weight at birth**
- **Table 10.2 Vaccinations by source of information**
- **Table 10.3 Vaccinations by background characteristics**
- **Table 10.4 Possession and observation of vaccination cards, according to background characteristics**
- **Table 10.5 Prevalence and treatment of symptoms of ARI**
- **Table 10.6 Source of advice or treatment for children with symptoms of ARI**
- **Table 10.7 Prevalence and treatment of fever**
- **Table 10.8 Prevalence and treatment of diarrhoea**
- **Table 10.9 Feeding practices during diarrhoea**
- **Table 10.10 Oral rehydration therapy, zinc, and other treatments for diarrhoea**
- **Table 10.11 Source of advice or treatment for children with diarrhoea**
- **Table 10.12 Knowledge of ORS packets**
- **Table 10.13 Disposal of children's stools**

Table 10.1 Child's size and weight at birth

Percent distribution of live births in the 5 years preceding the survey by mother's estimate of baby's size at birth, percentage of live births in the 5 years preceding the survey that have a reported birth weight, and among live births in the 5 years preceding the survey with a reported birth weight, percentage less than 2.5 kg, according to background characteristics, Sierra Leone DHS 2019

Background characteristic	Percent distribution of births by size of baby at birth					Percentage of births that have a reported birth weight[1]	Number of births	Among births with a reported birth weight[1]	
	Very small	Smaller than average	Average or larger	Don't know	Total			Percentage less than 2.5 kg	Number of births
Mother's age at birth									
<20	6.3	9.3	81.1	3.3	100.0	60.0	1,644	5.0	986
20-34	4.5	8.3	84.5	2.7	100.0	65.6	6,660	5.0	4,371
35-49	4.8	7.9	84.4	2.9	100.0	65.4	1,468	4.6	961
Birth order									
1	5.4	9.0	82.2	3.3	100.0	63.9	2,350	6.0	1,501
2-3	4.7	7.2	85.6	2.5	100.0	66.4	3,735	4.7	2,482
4-5	4.5	8.5	84.4	2.5	100.0	64.1	2,240	5.4	1,436
6+	5.0	10.1	81.7	3.2	100.0	62.1	1,446	3.2	898
Mother's smoking status									
Smokes cigarettes/ tobacco	6.4	7.0	82.8	3.7	100.0	64.4	288	4.5	185
Does not smoke	4.8	8.4	84.0	2.8	100.0	64.7	9,483	5.0	6,132
Residence									
Urban	4.2	7.2	86.6	1.9	100.0	67.9	3,422	6.2	2,323
Rural	5.2	9.0	82.5	3.3	100.0	62.9	6,350	4.3	3,994
Province									
Eastern	5.7	8.9	81.5	3.9	100.0	71.9	2,077	4.2	1,493
Northern	4.5	6.0	86.9	2.7	100.0	70.5	1,918	6.3	1,352
North West	6.3	8.5	81.6	3.6	100.0	46.9	1,894	5.6	887
Southern	3.9	12.0	82.2	1.9	100.0	67.1	2,101	3.3	1,411
Western Area	4.1	5.9	88.1	1.9	100.0	65.9	1,781	6.0	1,173
District									
Kailahun	12.8	7.9	77.0	2.3	100.0	77.1	455	4.2	351
Kenema	1.7	10.3	83.7	4.3	100.0	73.6	1,028	4.1	757
Kono	7.1	7.4	81.2	4.3	100.0	64.9	594	4.2	385
Bombali	1.9	5.5	92.0	0.6	100.0	73.7	639	3.6	471
Falaba	13.8	4.2	80.4	1.6	100.0	54.5	244	13.4	133
Koinadugu	8.2	4.1	84.5	3.2	100.0	61.1	294	7.7	180
Tonkolili	2.1	7.7	85.6	4.6	100.0	76.8	741	6.5	569
Kambia	0.4	9.3	87.0	3.3	100.0	50.0	638	4.1	319
Karene	11.8	7.1	77.9	3.3	100.0	52.3	370	11.5	193
Port Loko	8.2	8.6	79.3	4.0	100.0	42.3	886	4.0	375
Bo	2.4	9.3	86.5	1.8	100.0	59.9	797	3.1	477
Bonthe	0.1	2.2	93.5	4.2	100.0	78.8	384	4.3	302
Moyamba	3.5	20.6	74.0	1.9	100.0	56.0	558	0.7	312
Pujehun	11.6	15.2	73.3	0.0	100.0	88.0	363	5.1	319
Western Area Rural	3.6	7.5	85.9	3.0	100.0	50.6	783	6.3	396
Western Area Urban	4.5	4.6	89.8	1.1	100.0	77.9	998	5.8	777
Mother's education									
No education	5.0	8.1	83.7	3.2	100.0	62.0	5,321	4.7	3,297
Primary	6.1	9.7	81.3	3.0	100.0	63.2	1,441	4.0	910
Secondary	4.3	8.6	85.0	2.1	100.0	68.8	2,748	5.8	1,891
More than secondary	1.7	5.3	92.4	0.6	100.0	83.9	262	5.8	220
Wealth quintile									
Lowest	4.8	9.0	82.5	3.7	100.0	63.6	2,283	4.6	1,452
Second	5.7	9.8	81.2	3.3	100.0	61.4	2,183	3.4	1,340
Middle	5.2	7.9	83.9	2.9	100.0	64.1	2,007	4.9	1,286
Fourth	3.8	8.4	85.7	2.1	100.0	61.7	1,808	6.3	1,115
Highest	4.7	5.9	88.1	1.3	100.0	75.4	1,491	6.1	1,125
Total	4.9	8.4	83.9	2.8	100.0	64.6	9,771	5.0	6,317

[1] Based on either a written record or the mother's recall

Table 10.2 Vaccinations by source of information

Percentage of children age 12-23 months and children age 24-35 months who received specific vaccines at any time before the survey, by source of information (vaccination card or mother's report), and percentage who received specific vaccines by the appropriate age, Sierra Leone DHS 2019

	Children age 12-23 months				Children age 24-35 months			
	Vaccinated at any time before the survey according to:			Vaccinated by appropriate age[2,3]	Vaccinated at any time before the survey according to:			Vaccinated by appropriate age[3,4]
Vaccine	Vaccination card[1]	Mother's report	Either source		Vaccination card[1]	Mother's report	Either source	
BCG	74.4	22.0	96.4	95.7	60.9	34.0	94.9	93.4
DPT-HepB-Hib								
1	73.6	21.1	94.6	94.1	61.3	32.4	93.6	91.6
2	71.3	15.1	86.4	85.4	59.6	23.9	83.5	81.4
3	67.4	10.7	78.1	76.2	56.3	17.1	73.4	70.2
Polio								
0 (birth dose)	72.3	20.4	92.8	92.4	60.4	31.7	92.1	90.8
1	73.7	15.9	89.6	89.1	61.5	24.6	86.1	84.2
2	71.4	10.1	81.6	80.6	60.0	15.9	75.9	73.9
3	68.3	2.7	70.9	69.5	57.3	3.6	60.9	58.3
IPV	61.5	18.2	79.7	77.8	46.8	29.9	76.6	72.6
Pneumococcal								
1	73.4	20.7	94.1	93.5	61.1	32.9	94.1	92.1
2	71.1	15.6	86.7	85.8	59.3	25.2	84.6	82.4
3	67.5	11.9	79.4	77.5	56.1	18.8	74.9	71.7
Rotavirus								
1	73.2	20.6	93.7	93.2	60.2	32.9	93.1	91.5
2	70.1	15.1	85.2	84.1	57.9	25.0	83.0	80.5
Measles								
1	55.6	19.1	74.7	65.6	49.8	33.0	82.9	64.9
2	na	na	na	na	33.6	20.8	54.4	50.1
Yellow fever	58.2	17.8	76.0	69.8	51.6	29.3	80.9	66.4
All basic vaccinations[5]	54.5	1.8	56.3	49.1	47.8	2.9	50.7	40.1
All age-appropriate vaccinations[6]	48.3	1.0	49.3	43.2	28.3	1.4	29.7	22.2
No vaccinations	0.3	2.1	2.4	na	0.3	3.1	3.4	na
Number of children	1,382	456	1,838	1,838	1,036	630	1,666	1,666

na = Not applicable
BCG = Bacille Calmette-Guérin
DPT = Diphtheria-pertussis-tetanus
HepB = Hepatitis B
Hib = *Haemophilus influenzae* type b
[1] Vaccination card, booklet, or other home-based record
[2] Received by age 12 months
[3] For children whose vaccination information is based on the mother's report, date of vaccination is not collected. The proportions of vaccinations given during the first and second years of life are assumed to be the same as for children with a written record of vaccination.
[4] Received by age 12 months for all vaccines except measles 2, which should be received by age 24 months
[5] BCG, three doses of DPT-HepB-Hib (pentavalent), three doses of oral polio vaccine (excluding polio vaccine given at birth), and one dose of measles vaccine
[6] For children age 12-23 months: BCG, three doses of DPT-HepB-Hib (pentavalent), four doses of oral polio vaccine, one dose of inactivated polio vaccine, three doses of pneumococcal vaccine, two doses of rotavirus vaccine, one dose of measles vaccine, and one dose of yellow fever vaccine. For children age 24-35 months, all of the just-mentioned vaccinations plus a second dose of measles vaccine.

Table 10.3 Vaccinations by background characteristics

Percentage of children age 12-23 months and children age 24-35 months who received specific vaccines at any time before the survey (according to a vaccination card or the mother's report), percentage with all basic vaccinations, and percentage with all age-appropriate vaccinations, according to background characteristics, Sierra Leone DHS 2019

	Children age 12-23 months																				Children age 24-35 months		
		DPT-HepB-Hib			Polio[1]					Pneumococcal			Rotavirus										
Background characteristic	BCG	1	2	3	0 (birth dose)	1	2	3	IPV	1	2	3	1	2	Measles 1	Yellow fever	All basic vaccinations[2]	All age-appropriate vaccinations[3]	No vaccinations	Number of children	Measles 2	All age-appropriate vaccinations[4]	Number of children
Sex																							
Male	96.8	94.8	85.8	76.5	92.9	89.7	80.8	69.4	79.2	94.2	85.7	77.1	94.2	84.1	73.9	75.6	54.8	46.5	2.5	906	57.6	30.8	822
Female	96.0	94.5	86.9	79.7	92.6	89.5	82.3	72.5	80.2	94.0	87.7	81.5	93.3	86.3	75.5	76.4	57.8	52.1	2.4	932	51.2	28.6	844
Birth order																							
1	95.1	93.6	88.3	80.1	91.6	89.6	83.8	68.7	81.9	93.8	88.5	81.4	92.3	87.3	76.5	78.8	55.3	49.6	3.9	433	54.5	30.3	391
2-3	96.8	95.3	85.2	77.9	93.1	90.8	81.1	71.3	82.3	93.7	85.1	78.4	94.1	83.9	76.8	76.4	58.0	51.6	1.6	702	57.0	29.4	639
4-5	96.0	94.1	85.3	76.1	94.4	86.8	79.0	70.6	74.3	94.3	86.4	78.5	94.3	85.3	73.4	74.4	55.8	47.3	2.4	428	48.1	27.6	385
6+	98.0	95.5	88.0	78.8	91.0	91.1	83.3	74.2	78.1	95.2	88.4	80.1	94.2	85.3	68.7	73.0	54.4	46.2	2.0	274	57.4	32.5	252
Vaccination card[5]																							
Seen	98.9	97.8	94.8	89.6	96.2	98.0	95.0	90.8	81.8	97.6	94.5	89.7	97.3	93.2	73.9	77.4	72.5	64.3	0.4	1,382	54.0	45.5	1,036
Not seen/ no card	88.8	85.0	61.0	43.2	82.4	64.2	40.8	10.8	73.3	83.4	63.0	47.9	83.0	61.0	77.1	71.7	7.4	3.9	8.4	456	55.0	3.7	630
Residence																							
Urban	96.9	95.8	87.1	79.2	95.7	88.7	81.6	71.1	83.7	94.6	85.8	80.4	94.1	85.1	74.9	76.5	57.0	52.0	1.5	628	56.3	25.7	590
Rural	96.1	94.0	86.0	77.6	91.2	90.1	81.5	70.8	77.7	93.8	87.2	78.9	93.6	85.3	74.6	75.7	56.0	47.9	2.9	1,209	53.3	31.9	1,076
Province																							
Eastern	95.1	93.1	87.8	78.9	93.6	92.1	82.6	76.2	82.0	92.2	88.6	78.9	93.1	88.2	75.9	78.0	61.5	56.0	4.9	382	59.4	40.7	356
Northern	96.5	94.4	83.4	76.7	92.0	86.4	79.6	71.9	80.5	94.3	84.5	80.5	93.7	82.6	75.0	77.7	53.8	46.7	1.7	368	54.4	31.8	289
North West	96.2	93.8	85.4	74.3	90.6	92.3	79.9	63.0	69.3	95.1	86.8	75.5	95.0	84.6	66.6	67.5	47.0	36.1	2.1	348	44.6	13.0	321
Southern	97.5	96.1	90.2	83.5	92.6	91.4	87.0	75.8	83.4	95.3	90.8	84.1	94.3	88.4	82.2	82.4	65.3	58.4	2.4	393	57.2	35.9	395
Western Area	96.6	95.7	84.6	76.4	95.1	85.7	78.1	66.6	82.7	93.7	82.2	77.2	92.6	81.8	72.6	73.2	52.5	47.6	0.8	347	55.2	24.4	305
District																							
Kailahun	99.2	97.1	93.7	85.8	95.7	96.9	86.4	83.4	86.8	96.1	95.0	85.1	96.2	94.7	81.3	81.3	68.5	60.9	0.8	85	60.4	36.5	89
Kenema	90.5	87.7	81.4	74.2	89.3	87.4	79.9	75.0	81.9	87.6	84.3	75.2	88.7	82.6	68.8	74.9	59.2	56.8	9.5	187	56.9	46.6	169
Kono	100.0	99.0	94.2	81.7	99.1	96.2	84.1	72.5	78.4	97.0	90.9	80.3	98.0	92.9	83.8	80.6	60.0	51.0	0.0	110	62.8	34.2	97
Bombali	98.7	99.4	97.0	90.6	98.7	96.3	88.2	82.2	80.1	99.4	96.4	93.3	99.4	97.0	80.0	84.1	62.7	52.7	0.6	126	72.5	31.8	80
Falaba	94.6	81.6	68.6	64.1	87.6	76.7	71.3	62.0	76.5	81.4	72.3	67.1	81.4	69.7	68.7	66.4	49.8	44.1	3.9	51	48.1	41.1	36
Koinadugu	92.2	94.1	83.3	72.4	85.8	90.7	78.2	63.9	74.0	96.7	87.6	77.5	91.3	83.5	77.4	76.6	49.5	37.6	1.9	48	49.1	20.4	53
Tonkolili	96.7	94.8	76.8	70.6	89.7	79.7	75.5	69.1	84.5	93.7	77.2	74.9	93.9	74.1	72.0	76.3	48.9	45.5	1.9	142	46.8	34.0	121
Kambia	98.4	94.0	88.3	77.6	99.6	94.8	83.4	61.6	76.2	97.6	91.4	81.9	97.6	89.5	73.8	74.3	47.8	42.3	0.0	115	55.8	12.1	125
Karene	96.2	94.5	86.0	75.4	90.9	87.3	78.7	68.2	77.7	94.5	86.2	73.4	93.4	83.1	69.7	70.3	51.8	44.9	2.8	81	35.9	11.4	60
Port Loko	94.6	93.4	82.9	71.2	83.6	93.0	77.8	61.3	59.5	93.4	83.6	71.9	93.8	81.7	59.6	60.7	43.9	26.7	3.4	151	38.1	14.4	136
Bo	99.1	96.5	93.2	87.9	93.6	93.7	89.8	79.6	89.6	95.7	93.4	88.7	93.9	90.5	83.7	84.2	70.1	67.3	0.9	153	63.3	41.9	143
Bonthe	95.0	95.0	87.9	83.4	95.0	87.9	87.0	76.3	87.5	95.0	88.9	82.1	95.0	87.1	80.9	84.8	65.0	62.6	5.0	71	52.7	40.9	73
Moyamba	95.6	94.2	89.9	78.2	84.6	92.1	83.9	72.5	63.0	92.1	90.1	78.2	92.2	86.4	80.4	75.3	63.1	42.2	3.7	96	61.6	29.9	118
Pujehun	98.9	98.9	86.6	81.6	98.9	89.2	85.1	71.6	93.2	98.9	88.4	84.3	97.4	87.8	82.7	85.7	58.4	57.0	1.1	73	40.0	27.3	61
Western Area Rural	98.2	96.7	87.0	79.2	96.3	88.7	73.4	67.8	83.0	94.4	85.1	79.2	92.0	82.7	68.2	70.4	52.2	48.1	1.0	153	64.0	37.4	137
Western Area Urban	95.4	95.0	82.7	74.2	94.1	83.4	81.7	65.7	82.5	93.1	80.0	75.7	93.1	81.0	76.1	75.5	52.7	47.2	0.7	194	48.0	13.8	168

Continued...

Table 10.3—*Continued*

Background characteristic	Children age 12-23 months																				Children age 24-35 months		
		DPT-HepB-Hib			Polio[1]					Pneumococcal			Rotavirus										
	BCG	1	2	3	0 (birth dose)	1	2	3	IPV	1	2	3	1	2	Measles 1	Yellow fever	All basic vaccin-ations[2]	All age-appro-priate vaccin-ations[3]	No vaccin-ations	Number of children	Measles 2	All age-appro-priate vaccin-ations[4]	Number of children
Mother's education																							
No education	96.2	94.1	85.6	75.9	91.6	88.6	80.3	69.5	78.7	93.5	86.3	77.6	93.7	84.6	72.7	73.8	53.9	46.5	2.9	964	51.2	29.4	889
Primary	96.5	96.1	89.3	82.5	94.7	91.1	82.4	75.2	75.6	95.2	89.1	83.4	94.0	87.1	73.9	74.7	58.6	49.8	2.0	295	49.1	29.0	241
Secondary	96.6	94.4	85.7	78.8	93.3	90.2	82.7	70.5	82.2	94.0	85.3	79.4	93.1	84.4	77.4	78.2	58.0	52.0	1.9	522	62.0	30.2	495
More than secondary	97.2	98.1	91.5	86.7	98.1	93.8	88.7	77.9	96.0	99.2	94.6	88.1	99.2	93.8	88.2	99.2	70.6	69.0	0.8	57	(64.1)	(33.6)	41
Wealth quintile																							
Lowest	94.6	93.4	85.3	75.9	89.3	90.1	80.5	72.0	77.9	92.6	86.0	77.3	92.1	83.5	73.8	73.7	56.0	48.5	4.3	437	50.7	29.8	378
Second	97.2	95.6	86.2	78.5	91.3	90.1	82.6	72.0	80.1	94.8	87.5	80.6	94.7	85.2	75.5	77.2	56.1	46.7	2.2	396	52.8	34.0	370
Middle	95.8	92.8	85.9	78.4	92.3	89.9	82.3	70.2	75.4	93.2	86.8	77.9	92.9	86.0	73.5	75.3	56.9	48.9	3.0	386	55.5	32.1	344
Fourth	99.0	96.5	89.9	82.3	97.9	91.6	81.1	70.8	83.4	96.7	89.9	83.3	96.3	88.1	73.6	74.8	55.5	51.0	0.6	325	55.8	27.9	309
Highest	95.8	95.6	85.0	75.8	94.8	85.7	81.3	69.1	83.6	93.5	83.0	78.3	93.2	83.7	77.8	80.0	57.3	52.7	1.2	293	58.7	22.4	264
Total	96.4	94.6	86.4	78.1	92.8	89.6	81.6	70.9	79.7	94.1	86.7	79.4	93.7	85.2	74.7	76.0	56.3	49.3	2.4	1,838	54.4	29.7	1,666

Note: Children are considered to have received the vaccine if it was either written on the child's vaccination card or reported by the mother. For children whose vaccination information is based on the mother's report, date of vaccination is not collected. The proportions of vaccinations given during the first and second years of life are assumed to be the same as for children with a written record of vaccination. Figures in parentheses are based on 25-49 unweighted cases.
BCG = Bacille Calmette-Guérin
DPT = Diphtheria-pertussis-tetanus
HepB = Hepatitis B
Hib = *Haemophilus influenzae* type b
IPV = Inactivated polio vaccine
[1] Polio 0 is the polio vaccination given at birth.
[2] BCG, three doses of DPT-HepB-Hib (pentavalent), three doses of oral polio vaccine (excluding polio vaccine given at birth), and one dose of measles vaccine
[3] BCG, three doses of DPT-HepB-Hib (pentavalent), four doses of oral polio vaccine, one dose of inactivated polio vaccine, three doses of pneumococcal vaccine, two doses of rotavirus vaccine, one dose of measles vaccine, and one dose of yellow fever vaccine
[4] BCG, three doses of DPT-HepB-Hib (pentavalent), four doses of oral polio vaccine, one dose of inactivated polio vaccine, three doses of pneumococcal vaccine, two doses of rotavirus vaccine, two doses of measles vaccine, and one dose of yellow fever vaccine
[5] Vaccination card, booklet, or other home-based record

Table 10.4 Possession and observation of vaccination cards, according to background characteristics

Percentage of children age 12-23 months and children age 24-35 months who ever had a vaccination card, and percentage with a vaccination card seen, according to background characteristics, Sierra Leone DHS 2019

Background characteristic	Children age 12-23 months			Children age 24-35 months		
	Percentage who ever had a vaccination card[1]	Percentage with a vaccination card seen[1]	Number of children	Percentage who ever had a vaccination card[1]	Percentage with a vaccination card seen[1]	Number of children
Sex						
Male	97.6	74.4	906	95.4	61.3	822
Female	96.2	76.0	932	95.9	63.0	844
Birth order						
1	96.1	70.5	433	95.6	57.8	391
2-3	97.3	74.8	702	95.9	60.6	639
4-5	97.2	78.1	428	95.8	65.3	385
6+	96.7	79.2	274	94.9	68.4	252
Residence						
Urban	96.3	73.1	628	95.2	54.7	590
Rural	97.2	76.3	1,209	95.9	66.3	1,076
Province						
Eastern	96.0	79.6	382	94.6	71.5	356
Northern	95.9	75.5	368	89.3	56.1	289
North West	98.5	76.7	348	98.8	62.0	321
Southern	98.6	76.5	393	96.9	66.8	395
Western Area	95.5	67.1	347	97.9	51.4	305
District						
Kailahun	97.9	84.2	85	97.1	74.1	89
Kenema	93.2	80.2	187	92.1	72.0	169
Kono	99.3	75.1	110	96.8	68.1	97
Bombali	97.0	81.6	126	79.3	46.9	80
Falaba	89.4	69.2	51	91.5	71.3	36
Koinadugu	93.4	70.7	48	92.9	65.4	53
Tonkolili	98.1	74.1	142	93.7	53.5	121
Kambia	100.0	72.1	115	97.8	55.2	125
Karene	96.4	75.9	81	98.4	63.6	60
Port Loko	98.4	80.6	151	100.0	67.5	136
Bo	100.0	79.5	153	99.2	65.0	143
Bonthe	100.0	79.0	71	94.8	62.7	73
Moyamba	95.0	71.0	96	94.9	67.2	118
Pujehun	98.9	74.7	73	97.4	75.2	61
Western Area Rural	95.9	62.9	153	98.1	45.9	137
Western Area Urban	95.1	70.3	194	97.8	56.0	168
Mother's education						
No education	97.0	74.5	964	95.1	64.3	889
Primary	98.2	81.0	295	96.7	68.8	241
Secondary	95.8	73.1	522	96.2	56.4	495
More than secondary	99.2	76.3	57	(96.3)	(48.4)	41
Wealth quintile						
Lowest	96.3	76.0	437	94.6	65.4	378
Second	97.8	76.3	396	96.7	68.4	370
Middle	97.4	78.3	386	96.3	65.5	344
Fourth	96.5	72.9	325	96.3	55.1	309
Highest	96.3	71.1	293	94.2	52.9	264
Total	96.9	75.2	1,838	95.6	62.2	1,666

Note: Figures in parentheses are based on 25-49 unweighted cases.
[1] Vaccination card, booklet, or other home-based record

Table 10.5 Prevalence and treatment of symptoms of ARI

Among children under age 5, percentage who had symptoms of acute respiratory infection (ARI) in the 2 weeks preceding the survey, and among children with symptoms of ARI in the 2 weeks preceding the survey, percentage for whom advice or treatment was sought, according to background characteristics, Sierra Leone DHS 2019

	Among children under age 5:		Among children under age 5 with symptoms of ARI:		
Background characteristic	Percentage with symptoms of ARI[1]	Number of children	Percentage for whom advice or treatment was sought[2]	Percentage for whom treatment was sought same or next day	Number of children
Age in months					
<6	2.2	1,012	(76.1)	(47.3)	22
6-11	2.8	945	(90.7)	(49.1)	27
12-23	2.5	1,838	93.8	39.0	46
24-35	1.6	1,666	(76.1)	(52.1)	26
36-47	2.6	1,738	(87.1)	(27.5)	44
48-59	0.9	1,694	*	*	16
Sex					
Male	2.2	4,479	84.5	44.7	100
Female	1.9	4,414	87.1	34.9	82
Mother's smoking status					
Smokes cigarettes/tobacco	5.3	250	*	*	13
Does not smoke	1.9	8,644	85.7	42.3	168
Cooking fuel					
Electricity or gas	*	19	nc	nc	0
Coal/lignite	*	20	nc	nc	0
Charcoal	2.3	2,476	85.2	46.3	57
Wood/straw[3]	2.0	6,378	85.9	37.6	125
Residence					
Urban	2.2	3,137	84.6	41.9	70
Rural	1.9	5,757	86.4	39.3	112
Province					
Eastern	1.5	1,891	(83.8)	(52.6)	29
Northern	2.8	1,776	(83.1)	(25.3)	50
North West	2.2	1,687	(97.4)	(28.0)	38
Southern	1.2	1,914	(78.7)	(57.0)	23
Western Area	2.7	1,626	(83.4)	(51.4)	43
District					
Kailahun	0.4	428	*	*	2
Kenema	2.6	923	*	*	24
Kono	0.6	540	*	*	3
Bombali	3.8	594	*	*	22
Falaba	3.2	224	*	*	7
Koinadugu	2.1	274	*	*	6
Tonkolili	2.1	684	*	*	14
Kambia	0.6	577	*	*	3
Karene	0.4	335	*	*	1
Port Loko	4.3	775	(100.0)	(25.1)	33
Bo	*	701	nc	nc	0
Bonthe	1.5	365	*	*	6
Moyamba	1.5	513	*	*	8
Pujehun	2.8	335	*	*	9
Western Area Rural	4.9	700	(79.0)	(52.3)	34
Western Area Urban	1.0	926	*	*	9
Mother's education					
No education	1.6	4,819	77.5	35.5	77
Primary	2.9	1,297	(91.8)	(39.4)	38
Secondary	2.5	2,530	92.2	43.5	62
More than secondary	1.8	247	*	*	4
Wealth quintile					
Lowest	2.2	2,066	(83.8)	(36.7)	45
Second	1.6	1,987	(82.6)	(36.2)	31
Middle	1.8	1,818	(90.7)	(41.0)	32
Fourth	3.2	1,646	(84.1)	(42.1)	52
Highest	1.6	1,376	*	*	22
Total	2.0	8,893	85.7	40.3	182

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
nc = No cases
[1] Symptoms of ARI include short, rapid breathing that is chest-related and/or difficult breathing that is chest-related.
[2] Includes advice or treatment from the following sources: public sector, private medical sector, shop, market, and itinerant drug seller. Excludes advice or treatment from a traditional practitioner.
[3] Includes shrubs and grass

Table 10.6 Source of advice or treatment for children with symptoms of ARI

Percentage of children under age 5 with symptoms of ARI in the 2 weeks preceding the survey for whom advice or treatment was sought from specific sources, and among children under age 5 with symptoms of ARI in the 2 weeks preceding the survey for whom advice or treatment was sought, percentage for whom advice or treatment was sought from specific sources, Sierra Leone DHS 2019

	Percentage for whom advice or treatment was sought from each source:	
Source	Among children with symptoms of ARI[1]	Among children with symptoms of ARI for whom advice or treatment was sought[1]
Public sector	68.3	79.7
Government hospital	19.1	22.3
Government health centre	33.9	39.6
Government health post	11.3	13.2
Mobile clinic	4.3	5.0
Private medical sector	17.9	20.9
Private hospital/clinic	3.6	4.2
Pharmacy	10.4	12.1
Mobile clinic	3.9	4.6
Number of children	182	156

[1] Symptoms of ARI include short, rapid breathing that is chest-related and/or difficult breathing that is chest-related.

Table 10.7 Prevalence and treatment of fever

Among children under age 5, percentage who had a fever in the 2 weeks preceding the survey, and among children with a fever in the 2 weeks preceding the survey, percentage for whom advice or treatment was sought and percentage who received antibiotics as treatment, according to background characteristics, Sierra Leone DHS 2019

	Among children under age 5:		Among children under age 5 with fever:			
Background characteristic	Percentage with fever	Number of children	Percentage for whom advice or treatment was sought[1]	Percentage for whom treatment was sought same or next day	Percentage who took antibiotic drugs	Number of children with fever
Age in months						
<6	10.0	1,012	79.9	60.3	31.3	101
6-11	20.0	945	75.4	51.2	25.6	189
12-23	21.3	1,838	77.3	48.5	30.0	392
24-35	17.7	1,666	74.7	47.4	23.0	295
36-47	13.1	1,738	70.1	47.4	16.2	228
48-59	15.4	1,694	76.1	50.7	25.3	260
Sex						
Male	16.5	4,479	75.8	51.7	24.7	737
Female	16.5	4,414	75.0	47.6	25.5	728
Residence						
Urban	16.1	3,137	75.1	48.4	33.3	504
Rural	16.7	5,757	75.5	50.4	20.9	961
Province						
Eastern	20.2	1,891	75.5	62.9	13.1	381
Northern	10.7	1,776	73.1	43.9	31.5	189
North West	16.1	1,687	77.0	35.3	35.0	272
Southern	18.6	1,914	79.6	54.8	19.5	356
Western Area	16.4	1,626	69.5	42.6	35.2	266
District						
Kailahun	15.4	428	76.7	58.9	28.5	66
Kenema	24.4	923	72.8	65.0	8.7	226
Kono	16.6	540	81.4	60.4	13.1	90
Bombali	8.4	594	(69.2)	(54.9)	(39.0)	50
Falaba	15.4	224	(75.9)	(52.5)	(8.3)	34
Koinadugu	20.4	274	77.5	42.6	35.4	56
Tonkolili	7.1	684	(69.9)	(28.1)	(35.6)	49
Kambia	15.8	577	84.1	41.1	17.3	91
Karene	14.5	335	70.0	35.1	29.4	49
Port Loko	17.1	775	74.7	31.5	49.3	132
Bo	17.5	701	72.8	59.6	18.0	123
Bonthe	23.1	365	92.4	31.9	11.0	84
Moyamba	15.5	513	76.9	62.8	27.8	79
Pujehun	20.8	335	79.0	64.8	23.1	70
Western Area Rural	20.0	700	59.2	34.6	32.1	140
Western Area Urban	13.6	926	81.0	51.4	38.7	126
Mother's education						
No education	16.0	4,819	74.5	48.4	22.2	772
Primary	20.3	1,297	75.3	49.9	26.3	264
Secondary	15.4	2,530	78.3	53.6	27.8	388
More than secondary	16.7	247	(65.3)	(35.7)	(46.6)	41
Wealth quintile						
Lowest	17.6	2,066	76.6	52.7	19.1	364
Second	15.8	1,987	75.1	47.7	20.7	315
Middle	16.5	1,818	76.0	51.2	21.1	299
Fourth	16.9	1,646	72.5	45.5	32.6	278
Highest	15.2	1,376	76.7	50.7	38.1	209
Total	16.5	8,893	75.4	49.7	25.1	1,465

Note: Figures in parentheses are based on 25-49 unweighted cases.
[1] Includes advice or treatment from the following sources: public sector, private medical sector, shop, market, and itinerant drug seller. Excludes advice or treatment from a traditional practitioner.

Table 10.8 Prevalence and treatment of diarrhoea

Percentage of children under age 5 who had diarrhoea in the 2 weeks preceding the survey, and among children with diarrhoea in the 2 weeks preceding the survey, percentage for whom advice or treatment was sought, according to background characteristics, Sierra Leone DHS 2019

Background characteristic	Percentage with diarrhoea	Number of children	Among children under age 5 with diarrhoea: Percentage for whom advice or treatment was sought[1]	Among children under age 5 with diarrhoea: Number of children with diarrhoea
Age in months				
<6	3.4	1,012	(78.0)	34
6-11	9.1	945	84.1	86
12-23	10.3	1,838	71.5	190
24-35	7.8	1,666	72.0	129
36-47	5.6	1,738	77.9	97
48-59	5.6	1,694	75.7	94
Sex				
Male	7.6	4,479	74.8	341
Female	6.5	4,414	75.9	289
Source of drinking water[2]				
Improved	7.5	5,541	77.6	418
Unimproved	6.3	3,353	70.7	212
Type of toilet facility[3]				
Improved sanitation facility	6.9	4,469	69.0	308
Unimproved facility	6.8	2,566	82.2	175
Open defecation	7.9	1,858	80.2	147
Residence				
Urban	6.9	3,137	72.3	218
Rural	7.2	5,757	76.9	412
Province				
Eastern	8.7	1,891	89.6	164
Northern	4.0	1,776	71.4	71
North West	9.2	1,687	70.0	155
Southern	5.9	1,914	72.5	114
Western Area	7.8	1,626	67.9	127
District				
Kailahun	7.9	428	(90.5)	34
Kenema	11.0	923	88.0	102
Kono	5.2	540	(94.5)	28
Bombali	3.6	594	*	21
Falaba	4.4	224	*	10
Koinadugu	8.6	274	(70.1)	24
Tonkolili	2.3	684	*	16
Kambia	6.3	577	(78.9)	36
Karene	5.6	335	(57.4)	19
Port Loko	12.9	775	69.0	100
Bo	5.6	701	(79.2)	39
Bonthe	2.3	365	*	8
Moyamba	4.1	513	(80.4)	21
Pujehun	13.4	335	63.9	45
Western Area Rural	9.9	700	63.8	70
Western Area Urban	6.2	926	(72.9)	57
Mother's education				
No education	7.0	4,819	74.9	339
Primary	9.4	1,297	81.9	122
Secondary	6.0	2,530	70.0	151
More than secondary	7.3	247	*	18
Wealth quintile				
Lowest	6.6	2,066	79.3	137
Second	8.1	1,987	73.3	161
Middle	7.0	1,818	81.4	128
Fourth	7.1	1,646	71.8	117
Highest	6.4	1,376	68.4	88
Total	7.1	8,893	75.3	630

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
[1] Includes advice or treatment from the following sources: public sector, private medical sector, shop, market, and itinerant drug seller. Excludes advice or treatment from a traditional practitioner.
[2] See Table 2.1.1 for definition of categories.
[3] See Table 2.3.1 for definition of categories.

Table 10.9 Feeding practices during diarrhoea

Percent distribution of children under age 5 who had diarrhoea in the 2 weeks preceding the survey by amount of liquids and food offered compared with normal practice, according to background characteristics, Sierra Leone DHS 2019

Background characteristic	Amount of liquids given							Amount of food given								Number of children with diarrhoea
	More	Same as usual	Somewhat less	Much less	None	Don't know	Total	More	Same as usual	Somewhat less	Much less	None	Never gave food	Don't know	Total	
Age in months																
<6	(23.4)	(12.6)	(24.8)	(27.8)	(11.4)	(0.0)	100.0	(6.8)	(19.5)	(22.8)	(34.8)	(0.0)	(16.2)	(0.0)	100.0	34
6-11	23.8	17.7	30.8	27.7	0.0	0.0	100.0	4.6	21.9	44.2	29.2	0.0	0.0	0.0	100.0	86
12-23	33.3	12.4	27.7	24.5	2.1	0.0	100.0	12.1	14.4	35.7	32.0	4.1	1.8	0.0	100.0	190
24-35	26.0	28.1	12.5	28.3	4.1	1.0	100.0	12.9	27.2	30.1	25.9	0.7	2.3	1.0	100.0	129
36-47	27.7	22.0	25.2	23.2	2.0	0.0	100.0	9.6	28.4	35.1	23.9	2.0	1.1	0.0	100.0	97
48-59	35.9	17.9	22.0	23.1	0.5	0.6	100.0	8.3	27.5	26.6	34.7	2.2	0.0	0.6	100.0	94
Sex																
Male	32.8	16.7	20.5	26.9	3.1	0.2	100.0	12.2	22.8	31.3	30.1	1.5	1.9	0.2	100.0	341
Female	25.6	21.0	27.3	23.9	1.8	0.4	100.0	7.4	21.9	36.2	29.2	2.6	2.2	0.4	100.0	289
Breastfeeding status																
Breastfeeding	29.4	15.2	26.8	25.4	2.6	0.5	100.0	9.5	17.9	32.7	33.8	2.5	3.0	0.5	100.0	249
Not breastfeeding	29.5	20.9	21.5	25.6	2.4	0.1	100.0	10.3	25.4	34.1	27.0	1.6	1.4	0.1	100.0	381
Residence																
Urban	27.5	16.6	27.6	26.7	1.0	0.6	100.0	9.5	18.9	36.7	31.7	2.1	0.6	0.6	100.0	218
Rural	30.6	19.7	21.5	24.9	3.3	0.1	100.0	10.3	24.3	31.9	28.6	1.9	2.8	0.1	100.0	412
Province																
Eastern	29.6	9.3	27.3	26.7	6.3	0.8	100.0	7.3	13.8	39.3	30.7	5.2	3.0	0.8	100.0	164
Northern	9.6	26.8	36.7	26.9	0.0	0.0	100.0	3.5	31.5	43.6	21.4	0.0	0.0	0.0	100.0	71
North West	41.8	19.7	10.0	26.2	1.9	0.3	100.0	21.1	27.0	22.2	26.3	0.6	2.5	0.3	100.0	155
Southern	30.1	31.8	14.6	21.5	2.1	0.0	100.0	5.9	30.9	25.1	33.0	2.7	2.4	0.0	100.0	114
Western Area	24.9	13.1	36.2	25.8	0.0	0.0	100.0	7.3	15.3	42.1	34.2	0.0	1.1	0.0	100.0	127
District																
Kailahun	(48.4)	(13.6)	(9.0)	(2.5)	(26.5)	(0.0)	(100.0)	(10.4)	(21.7)	(22.2)	(6.8)	(24.1)	(14.8)	(0.0)	(100.0)	34
Kenema	21.3	5.4	34.1	36.6	1.4	1.2	100.0	6.4	8.8	46.4	36.8	0.4	0.0	1.2	100.0	102
Kono	(37.4)	(18.1)	(24.5)	(20.0)	(0.0)	(0.0)	(100.0)	(6.8)	(22.0)	(34.0)	(37.2)	(0.0)	(0.0)	(0.0)	(100.0)	28
Bombali	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	21
Falaba	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	10
Koinadugu	(15.0)	(38.7)	(14.0)	(32.3)	(0.0)	(0.0)	(100.0)	(6.6)	(47.8)	(32.4)	(13.2)	(0.0)	(0.0)	(0.0)	(100.0)	24
Tonkolili	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	16
Kambia	(31.5)	(37.3)	(6.8)	(21.7)	(2.7)	(0.0)	(100.0)	(17.7)	(36.8)	(30.9)	(11.8)	(0.0)	(2.7)	(0.0)	(100.0)	36
Karene	(13.1)	(6.4)	(50.8)	(15.9)	(10.9)	(2.9)	(100.0)	(0.0)	(23.8)	(39.5)	(23.0)	(0.0)	(10.9)	(2.9)	(100.0)	19
Port Loko	50.9	15.9	3.5	29.8	0.0	0.0	100.0	26.3	24.0	15.8	32.2	0.9	0.8	0.0	100.0	100
Bo	(34.9)	(27.8)	(6.2)	(31.0)	(0.0)	(0.0)	(100.0)	(0.0)	(26.0)	(24.0)	(43.8)	(6.3)	(0.0)	(0.0)	(100.0)	39
Bonthe	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	8
Moyamba	(47.6)	(18.5)	(24.1)	(6.4)	(3.4)	(0.0)	(100.0)	(8.0)	(40.2)	(34.7)	(13.7)	(0.0)	(3.4)	(0.0)	(100.0)	21
Pujehun	12.0	43.9	17.6	24.3	2.2	0.0	100.0	9.7	35.4	20.7	29.7	0.0	4.4	0.0	100.0	45
Western Area Rural	14.5	11.6	51.4	22.5	0.0	0.0	100.0	1.7	11.0	55.3	32.0	0.0	0.0	0.0	100.0	70
Western Area Urban	(37.6)	(14.8)	(17.8)	(29.9)	(0.0)	(0.0)	(100.0)	(14.1)	(20.6)	(26.1)	(36.8)	(0.0)	(2.4)	(0.0)	(100.0)	57
Mother's education																
No education	30.3	19.0	23.5	24.8	1.9	0.5	100.0	10.6	22.6	35.0	28.9	1.8	0.6	0.5	100.0	339
Primary	34.3	13.9	27.6	20.2	4.0	0.0	100.0	12.6	19.7	33.7	26.6	2.7	4.7	0.0	100.0	122
Secondary	26.1	21.9	21.5	27.9	2.5	0.0	100.0	6.7	21.9	33.0	34.0	1.8	2.5	0.0	100.0	151
More than secondary	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	18

Continued...

Table 10.9—*Continued*

Background characteristic	Amount of liquids given							Amount of food given								Number of children with diarrhoea
	More	Same as usual	Somewhat less	Much less	None	Don't know	Total	More	Same as usual	Somewhat less	Much less	None	Never gave food	Don't know	Total	
Wealth quintile																
Lowest	26.9	21.5	20.8	25.6	4.8	0.4	100.0	8.3	23.9	32.7	28.7	1.3	4.6	0.4	100.0	137
Second	28.2	22.1	20.8	25.8	3.2	0.0	100.0	13.2	26.0	31.1	25.2	2.0	2.6	0.0	100.0	161
Middle	41.7	15.1	20.7	20.2	2.3	0.0	100.0	10.1	22.0	29.7	33.0	4.4	0.8	0.0	100.0	128
Fourth	23.3	16.8	31.4	28.1	0.5	0.0	100.0	6.6	18.7	40.5	33.7	0.5	0.0	0.0	100.0	117
Highest	26.5	15.6	26.9	29.0	0.5	1.4	100.0	11.2	19.2	35.7	29.4	1.5	1.6	1.4	100.0	88
Total	29.5	18.6	23.6	25.5	2.5	0.3	100.0	10.0	22.4	33.6	29.7	2.0	2.0	0.3	100.0	630

Note: It is recommended that children be given more liquids to drink during diarrhoea and that food not be reduced. Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

Table 10.10 Oral rehydration therapy, zinc, and other treatments for diarrhoea

Among children under age 5 who had diarrhoea in the 2 weeks preceding the survey, percentage given fluid from an ORS packet, recommended homemade fluids (RHF), ORS or RHF, zinc, ORS and zinc, ORS or increased fluids, oral rehydration therapy (ORT), continued feeding and ORT, and other treatments, and percentage given no treatment, according to background characteristics, Sierra Leone DHS 2019

	Percentage of children with diarrhoea who were given:													
									Other treatments					
Background characteristic	Fluid from ORS packets	Recom-mended home fluids (RHF)	Either ORS or RHF	Zinc	ORS and zinc	ORS or increased fluids	ORT (ORS, RHF, or increased fluids)	Continued feeding and ORT[1]	Antibiotic drugs	Antimotility drugs	Intravenous solution	Home remedy/ other	No treatment	Number of children with diarrhoea
Age in months														
<6	(65.3)	(27.4)	(69.9)	(68.0)	(48.9)	(74.3)	(78.8)	(38.8)	(36.1)	(0.0)	(0.0)	(15.5)	(13.5)	34
6-11	79.8	26.3	79.8	60.0	54.0	86.4	86.4	62.4	27.2	0.0	1.5	22.3	6.6	86
12-23	90.9	38.5	90.9	58.2	56.6	94.0	94.0	58.1	34.0	2.5	1.2	18.9	4.5	190
24-35	86.0	39.9	86.6	53.2	50.1	91.3	91.3	64.7	24.3	3.7	1.1	19.0	6.4	129
36-47	85.9	42.6	87.9	60.8	55.2	92.0	92.0	65.1	19.4	3.7	1.8	25.9	2.4	97
48-59	84.5	35.4	85.0	54.4	51.0	89.3	89.8	55.8	17.0	2.3	0.0	26.3	5.7	94
Sex														
Male	86.2	38.7	86.9	59.2	55.5	91.7	92.2	61.6	26.3	3.0	1.3	22.1	5.6	341
Female	84.1	34.3	85.0	56.1	51.0	88.7	88.9	57.5	26.6	1.7	0.8	20.6	5.4	289
Residence														
Urban	86.3	35.4	87.9	61.8	58.7	89.9	90.7	58.5	32.1	2.4	1.7	15.9	4.7	218
Rural	84.7	37.4	85.0	55.7	50.7	90.6	90.7	60.3	23.4	2.4	0.7	24.3	5.9	412
Province														
Eastern	90.7	53.2	90.7	50.6	49.6	94.3	94.3	56.5	24.9	1.1	0.5	33.3	3.0	164
Northern	90.2	53.5	90.9	53.5	50.7	90.2	90.9	70.5	20.7	9.3	0.0	25.0	3.6	71
North West	85.3	23.8	85.3	70.8	63.9	92.3	92.3	66.7	24.4	1.7	2.8	18.8	5.6	155
Southern	76.0	29.8	76.6	48.1	42.6	82.9	82.9	49.3	24.7	1.7	0.0	13.7	13.2	114
Western Area	83.8	27.9	86.6	62.3	56.9	89.6	90.8	58.7	35.5	1.9	1.2	14.0	2.9	127
District														
Kailahun	(97.8)	(31.0)	(97.8)	(38.6)	(38.6)	(97.8)	(97.8)	(52.1)	(47.0)	(0.0)	(0.0)	(32.5)	(0.0)	34
Kenema	89.1	69.0	89.1	53.8	53.8	94.1	94.1	58.7	20.9	1.7	0.8	31.7	4.8	102
Kono	(87.7)	(22.7)	(87.7)	(53.5)	(47.5)	(91.1)	(91.1)	(53.9)	(13.2)	(0.0)	(0.0)	(40.1)	(0.0)	28
Bombali	*	*	*	*	*	*	*	*	*	*	*	*	*	21
Falaba	*	*	*	*	*	*	*	*	*	*	*	*	*	10
Koinadugu	(83.0)	(46.3)	(83.0)	(53.0)	(53.0)	(83.0)	(83.0)	(69.8)	(21.9)	(1.2)	(0.0)	(12.7)	(6.8)	24
Tonkolili	*	*	*	*	*	*	*	*	*	*	*	*	*	16
Kambia	(92.1)	(55.2)	(92.1)	(79.2)	(76.0)	(97.3)	(97.3)	(85.5)	(31.9)	(0.0)	(3.7)	(6.8)	(2.7)	36
Karene	(71.5)	(16.8)	(71.5)	(39.4)	(37.4)	(75.2)	(75.2)	(47.2)	(11.0)	(2.0)	(0.0)	(23.6)	(22.8)	19
Port Loko	85.4	13.6	85.4	73.5	64.5	93.7	93.7	63.5	24.2	2.3	3.0	22.2	3.4	100
Bo	(93.3)	(13.6)	(93.3)	(45.2)	(45.2)	(97.2)	(97.2)	(47.2)	(50.1)	(2.3)	(0.0)	(8.7)	(2.8)	39
Bonthe	*	*	*	*	*	*	*	*	*	*	*	*	*	8
Moyamba	(70.7)	(17.3)	(74.1)	(39.1)	(28.4)	(88.1)	(88.1)	(71.0)	(10.5)	(0.0)	(0.0)	(50.7)	(8.1)	21
Pujehun	64.8	44.3	64.8	50.7	45.1	68.5	68.5	45.9	9.7	2.2	0.0	3.4	25.9	45
Western Area Rural	89.3	27.6	89.3	58.4	54.5	92.1	92.1	65.1	48.6	1.1	2.1	9.8	4.0	70
Western Area Urban	(77.2)	(28.3)	(83.3)	(67.0)	(59.9)	(86.5)	(89.2)	(50.9)	(19.5)	(2.9)	(0.0)	(19.2)	(1.5)	57
Mother's education														
No education	87.6	38.8	88.4	60.2	55.1	92.2	92.3	63.1	21.8	2.6	1.3	22.7	4.5	339
Primary	86.2	37.8	86.2	61.0	59.6	90.6	90.6	59.6	33.5	0.2	0.7	20.8	8.2	122
Secondary	78.9	30.9	80.4	48.5	42.8	85.5	86.5	52.6	30.4	4.0	0.8	21.1	5.7	151
More than secondary	*	*	*	*	*	*	*	*	*	*	*	*	*	18

Continued...

Table 10.10—*Continued*

Background characteristic	Percentage of children with diarrhoea who were given:													
									Other treatments					
	Fluid from ORS packets	Recom-mended home fluids (RHF)	Either ORS or RHF	Zinc	ORS and zinc	ORS or increased fluids	ORT (ORS, RHF, or increased fluids)	Continued feeding and ORT[1]	Antibiotic drugs	Antimotility drugs	Intravenous solution	Home remedy/ other	No treatment	Number of children with diarrhoea
Wealth quintile														
Lowest	87.1	41.7	87.1	52.1	47.3	90.1	90.1	57.8	24.2	2.2	1.2	22.7	5.5	137
Second	84.3	36.7	84.3	61.2	57.3	89.7	89.7	65.3	17.2	3.3	0.0	22.8	7.5	161
Middle	85.5	36.2	86.5	52.4	46.4	92.8	93.2	55.6	31.3	1.3	1.7	25.7	4.2	128
Fourth	89.4	38.7	89.4	63.1	60.8	91.6	91.6	61.3	33.8	0.6	2.4	18.9	5.1	117
Highest	78.3	27.0	82.3	61.1	56.4	86.6	88.4	56.4	29.7	5.2	0.0	13.8	4.5	88
Total	85.3	36.7	86.0	57.8	53.4	90.3	90.7	59.7	26.4	2.4	1.1	21.4	5.5	630

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
ORS = Oral rehydration salts
[1] Continued feeding includes children who were given more, the same as usual, or somewhat less food during the diarrhoea episode.

Table 10.11 Source of advice or treatment for children with diarrhoea

Percentage of children under age 5 with diarrhoea in the 2 weeks preceding the survey for whom advice or treatment was sought from specific sources; among children under age 5 with diarrhoea in the 2 weeks preceding the survey for whom advice or treatment was sought, percentage for whom advice or treatment was sought from specific sources; and among children with diarrhoea who received ORS, percentage for whom advice or treatment was sought from specific sources, Sierra Leone DHS 2019

	Percentage for whom advice or treatment was sought from each source:		
Source	Among children with diarrhoea	Among children with diarrhoea for whom advice or treatment was sought	Among children with diarrhoea who received ORS[1]
Public sector	67.3	88.9	73.7
Government hospital	14.3	18.8	16.2
Government health centre	39.1	51.7	42.3
Government health post	12.3	16.3	13.6
Mobile clinic	1.7	2.2	1.7
Fieldworker	0.8	1.0	0.9
Private medical sector	7.2	9.5	7.5
Private hospital/clinic	3.1	4.1	3.5
Pharmacy	3.9	5.1	3.7
Fieldworker	0.2	0.3	0.3
Other private sector	1.0	1.3	1.1
Shop	0.2	0.3	0.2
Traditional practitioner	0.4	0.5	0.5
Itinerant drug seller	0.4	0.5	0.4
Other	0.4	0.6	0.3
Number of children	630	477	537

ORS = Oral rehydration salts
[1] Fluids from ORS packet

Table 10.12 Knowledge of ORS packets

Percentage of women age 15-49 with a live birth in the 5 years preceding the survey who know about ORS packets for treatment of diarrhoea, by background characteristics, Sierra Leone DHS 2019

Background characteristic	Percentage of women who know about ORS packets	Number of women
Age		
15-19	98.2	598
20-24	99.3	1,611
25-34	99.0	3,218
35-49	99.0	1,898
Residence		
Urban	99.4	2,795
Rural	98.8	4,531
Province		
Eastern	99.8	1,542
Northern	98.7	1,433
North West	99.6	1,380
Southern	97.5	1,492
Western Area	99.6	1,479
District		
Kailahun	99.5	354
Kenema	100.0	736
Kono	99.7	451
Bombali	99.8	483
Falaba	96.0	181
Koinadugu	99.7	218
Tonkolili	98.3	551
Kambia	99.8	485
Karene	99.7	270
Port Loko	99.3	625
Bo	98.5	573
Bonthe	93.4	266
Moyamba	99.7	402
Pujehun	95.7	251
Western Area Rural	99.3	631
Western Area Urban	99.7	847
Education		
No education	98.9	3,857
Primary	99.1	1,033
Secondary	99.1	2,214
More than secondary	100.0	221
Wealth quintile		
Lowest	99.0	1,587
Second	98.4	1,551
Middle	98.8	1,487
Fourth	99.2	1,441
Highest	99.8	1,259
Total	99.0	7,326

ORS = Oral rehydration salts

Table 10.13 Disposal of children's stools

Percent distribution of youngest children under age 2 living with their mother by the manner of disposal of the child's last faecal matter, and percentage of children whose stools are disposed of appropriately, according to background characteristics, Sierra Leone DHS 2019

Background characteristic	Manner of disposal of children's stools						Total	Percentage of children whose stools are disposed of appropriately[1]	Number of children
	Child used toilet or latrine	Put/rinsed into toilet or latrine	Buried	Put/rinsed into drain or ditch	Thrown into garbage	Left in the open			
Age of child in months									
0-1	0.5	48.8	2.1	24.7	22.8	1.2	100.0	51.4	332
2-3	0.7	51.7	1.1	23.9	19.5	3.1	100.0	53.5	341
4-5	1.9	51.3	2.6	23.5	19.7	0.9	100.0	55.8	295
6-8	1.1	57.3	3.4	18.1	18.4	1.7	100.0	61.8	482
9-11	2.0	58.0	1.9	18.4	18.1	1.6	100.0	61.9	425
12-17	2.3	65.8	2.1	12.4	14.7	2.6	100.0	70.2	1,026
18-23	2.8	68.8	2.2	9.7	15.4	1.2	100.0	73.8	689
6-23	2.2	63.8	2.3	13.7	16.1	1.9	100.0	68.3	2,622
Type of toilet facility[2]									
Improved sanitation facility	1.8	68.4	1.0	14.3	14.1	0.5	100.0	71.1	1,830
Unimproved facility	2.0	62.8	1.1	19.5	13.7	0.8	100.0	65.9	1,010
Open defecation	1.7	36.9	6.7	17.7	30.4	6.6	100.0	45.3	750
Residence									
Urban	2.7	66.2	0.4	12.6	17.5	0.6	100.0	69.3	1,232
Rural	1.4	57.1	3.1	18.5	17.3	2.5	100.0	61.6	2,359
Province									
Eastern	0.9	64.3	5.7	13.5	11.6	4.0	100.0	70.9	776
Northern	1.0	69.1	0.0	20.1	9.7	0.1	100.0	70.1	730
North West	2.4	54.2	1.8	22.4	17.5	1.7	100.0	58.4	687
Southern	1.0	45.5	2.9	22.1	26.0	2.5	100.0	49.4	758
Western Area	4.2	69.2	0.1	3.1	22.8	0.6	100.0	73.5	639
District									
Kailahun	0.0	39.3	20.7	9.5	20.5	10.1	100.0	60.0	173
Kenema	1.4	72.8	1.7	11.8	9.4	2.8	100.0	75.9	373
Kono	0.9	69.3	0.8	19.2	8.6	1.3	100.0	71.0	230
Bombali	2.0	64.2	0.0	24.2	9.5	0.0	100.0	66.2	270
Falaba	0.7	82.7	0.0	14.8	0.6	1.3	100.0	83.4	75
Koinadugu	1.5	74.0	0.0	18.2	6.3	0.0	100.0	75.5	110
Tonkolili	0.0	68.1	0.0	18.2	13.7	0.0	100.0	68.1	275
Kambia	0.2	46.0	4.0	24.4	25.4	0.0	100.0	50.1	224
Karene	2.5	57.6	0.0	28.9	6.8	4.3	100.0	60.1	137
Port Loko	4.0	58.4	1.0	18.3	16.6	1.8	100.0	63.4	326
Bo	0.3	45.5	0.0	32.6	15.2	6.4	100.0	45.8	277
Bonthe	1.8	42.8	4.6	11.8	38.0	1.0	100.0	49.1	150
Moyamba	0.4	33.1	7.2	11.9	47.4	0.0	100.0	40.6	201
Pujehun	2.5	67.7	0.8	26.9	2.1	0.0	100.0	71.0	131
Western Area Rural	6.2	76.9	0.0	3.5	12.6	0.8	100.0	83.1	272
Western Area Urban	2.7	63.4	0.2	2.8	30.3	0.5	100.0	66.3	367
Mother's education									
No education	1.5	58.8	2.9	17.3	17.3	2.2	100.0	63.3	1,866
Primary	2.7	55.7	2.0	16.4	20.1	3.1	100.0	60.4	563
Secondary	2.0	65.8	1.3	15.6	14.6	0.8	100.0	69.1	1,063
More than secondary	0.6	53.2	0.0	11.8	34.4	0.0	100.0	53.8	99
Wealth quintile									
Lowest	1.4	48.5	3.7	18.1	24.2	4.1	100.0	53.6	850
Second	1.4	58.2	4.3	17.0	17.0	2.1	100.0	63.9	803
Middle	1.6	64.3	1.3	20.0	11.3	1.5	100.0	67.2	723
Fourth	1.1	70.9	0.5	17.3	9.9	0.3	100.0	72.5	665
Highest	4.4	63.1	0.1	7.5	24.5	0.4	100.0	67.6	550
Total	1.8	60.2	2.2	16.5	17.4	1.9	100.0	64.3	3,591

[1] Children's stools are considered to be disposed of safely if the child used a toilet or latrine, if the faecal matter was put/rinsed into a toilet or latrine, or if it was buried.
[2] See Table 2.3.1 for definition of categories.

NUTRITION OF CHILDREN AND ADULTS 11

Key Findings

- ***Nutritional status of children:*** 30% of children in Sierra Leone under age 5 are stunted (short for their age), 5% are wasted (thin for their height), 14% are underweight (thin for their age), and 5% are overweight (heavy for their height).
- ***Breastfeeding:*** 54% of children under age 6 months are exclusively breastfed, and 69% of children age 6-8 months receive timely complementary foods. Seventy-five percent of children started breastfeeding within 1 hour after birth.
- ***Minimum acceptable diet:*** Only 9% of children age 6-23 months were fed a minimum acceptable diet in the day or night preceding the interview.
- ***Anaemia:*** 68% of children age 6-59 months and 47% of women age 15-49 are anaemic.
- ***Nutritional status of women:*** 7% of women age 15-49 are thin (a body mass index [BMI] below 18.5), while 28% are overweight or obese (a BMI equal to or higher than 25.0).
- ***Salt iodisation:*** Almost all (90%) households with tested salt have iodised salt.
- ***Minimum dietary diversity for women:*** 56% of women age 15-49 consumed food from five or more of 10 specified food groups in the day or night preceding the interview.

This chapter reports on nutritional status and anaemia among children and adults. It also reports on infant and young child feeding practices, including breastfeeding and complementary feeding, as well as micronutrient supplementation and deworming for children and pregnant women, minimum dietary diversity for women, and presence of iodine in household cooking salt.

11.1 NUTRITIONAL STATUS OF CHILDREN

The distribution of height and weight among children under age 5 was compared against the WHO Child Growth Standards reference population (WHO 2006). A well-nourished population will be similar to the reference population, while a poorly nourished population will differ from the reference population. Three indices—height-for-age, weight-for-height, and weight-for-age—can be expressed in standard deviation units (Z-scores) from the median of the reference population, and values greater than two standard deviations from the median of the WHO Child Growth Standards are used to define malnutrition.

Stunting, or low height-for-age, is a sign of chronic undernutrition that reflects failure to receive adequate nutrition over a long period of time. The most direct causes of stunting are inadequate nutrition (not eating

enough or eating foods that lack growth-promoting nutrients) and recurrent infections or chronic diseases that cause poor nutrient intake and absorption.

Wasting, or low weight-for-height, is a measure of acute undernutrition and represents the failure to receive adequate nutrition in the period immediately before the survey. Wasting may result from inadequate food intake or from a recent episode of illness or infection causing weight loss.

Overweight, or high weight-for-height, is a measure of overnutrition and results from an imbalance between energy consumed (too much) and energy expended (too little).

Underweight, or low weight-for-age, is a composite index of weight-for-height and height-for-age reflecting both acute (wasting) and chronic (stunting) undernutrition.

Stunting (assessed via height-for-age)

Height-for-age is a measure of linear growth retardation and cumulative growth deficits. Children whose height-for-age Z-score is below minus two standard deviations (-2 SD) from the median of the reference population are considered short for their age (stunted), or chronically undernourished. Children whose Z-score is below minus three standard deviations (-3 SD) from the median are considered severely stunted.

Sample: Children under age 5

Wasting (assessed via weight-for-height)

The weight-for-height index measures body mass in relation to body height or length and describes acute nutritional status. Children whose weight-for-height Z-score is below minus two standard deviations (-2 SD) from the median of the reference population are considered thin (wasted), or acutely undernourished. Children whose Z-score is below minus three standard deviations (-3 SD) from the median are considered severely wasted.

Sample: Children under age 5

Underweight (assessed via weight-for-age)

Weight-for-age is a composite index of height-for-age and weight-for-height. It takes into account both acute and chronic undernutrition. Children whose weight-for-age Z-score is below minus two standard deviations (-2 SD) from the median of the reference population are classified as underweight. Children whose Z-score is below minus three standard deviations (-3 SD) from the median are considered severely underweight.

Sample: Children under age 5

Overweight (assessed via weight-for-height)

Children whose weight-for-height Z-score is more than two standard deviations (+2 SD) above the median of the reference population are considered overweight.

Sample: Children under age 5

The means of the Z-scores for height-for-age, weight-for-height, and weight-for-age are also calculated as summary statistics representing the nutritional status of children in a population. These mean scores describe the nutritional status of the entire population of children without the use of a cutoff point. A mean Z-score of less than 0 (i.e., a negative mean value for stunting, wasting, or underweight) suggests a downward shift in the entire sample population's nutritional status relative to the reference population. The farther away mean Z-scores are from 0, the higher the prevalence of malnutrition.

11.1.1 Anthropometry Training and Data Collection

Health technicians were trained to measure the height and weight of children and adults. Training on child height measurement included standardisation exercises and re-standardisation exercises for those who did not pass the standardisation exercises. Children younger than age 24 months were measured lying down (recumbent length); older children and adults were measured standing up (height). Weight measurements were taken using SECA scales with a digital display (model number SECA 878U). Height and length were measured with a ShorrBoard® measuring board.

The survey identified a total of 5,556 children under age 5 who were eligible for height and weight measurements. Valid height-for-age measurements were obtained for 89% of eligible children (1.3% of the invalid data was due to implausible Z-score values). Similarly, valid weight-for-height measurements were obtained for 89% of eligible children (1.4% of the invalid data was due to implausible Z-score values). Valid weight-for-age measurements were obtained for 90% of eligible children (0.2% of the invalid data was due to implausible Z-score values). Appendix Table C.3 and Appendix Table C.8 provide additional information on the completeness and quality of anthropometry data for children. Fear and stigma around Ebola may have adversely impacted response in some parts of the country.

To assess precision of measurements, one child per cluster was randomly selected to be measured a second time. A difference of 1 centimetre or less between the two height measurements was defined as an acceptable level of precision. Children with a Z-score of less than -3 or more than 3 for height-for-age, weight-for-height, or weight-for-age were flagged and measured a second time. Re-measurement of flagged cases was performed to ensure accurate reporting of height and weight measurements.

Calculation of Z-scores was based on the first measurement among children randomly selected for re-measurement and on the second measurement among children flagged for subsequent re-measurement. The re-measurement completion rate was 99%. Appendix Table C.9 provides additional information on re-measurement data.

11.1.2 Levels of Child Malnutrition

Table 11.1 shows that 30% of children under age 5 are stunted (too short for their age) and 11% are severely stunted. Five percent are wasted (too thin for their height), with 1% being severely wasted. Fourteen percent of children are underweight (too thin for their age), and 3% are severely underweight. Five percent of children are overweight.

Trends: The prevalence of stunting decreased from 36% in 2008 to 30% in 2019. Over the same period, wasting decreased from 10% to 5% and underweight decreased from 21% to 14%.

Patterns by background characteristics

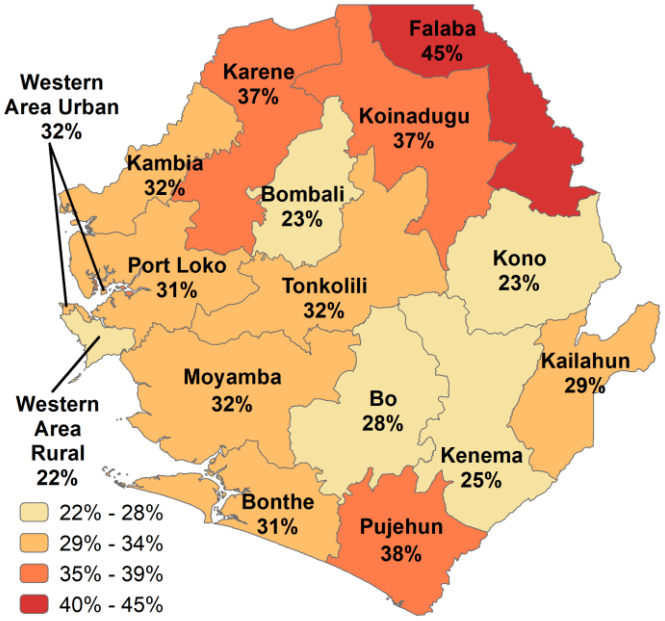
- The prevalence of stunting is 19% among children less than age 6 months and peaks at 40% among children age 24-35 months. Wasting is most prevalent (13%) among children age 6-8 months and least prevalent (3%) among children age 48-59 months (**Table 11.1**).

- The percentage of children who are stunted is highest in the North West and Southern provinces (32% each) and lowest in the Eastern province (25%) (**Table 11.1**), whereas the percentage of children who are wasted is highest in the Western Area province (7%) and lowest in the Eastern province (3%).

- At the district level, the prevalence of stunting is highest in Falaba (45%) and lowest in Western Area Rural (22%) (**Figure 11.1**), whereas the prevalence of wasting is highest in Pujehun (10%) and lowest in Kono (2%).
- Stunting is higher in rural areas (32%) than in urban areas (25%) (**Table 11.1**).

Figure 11.1 **Stunting in children by district**

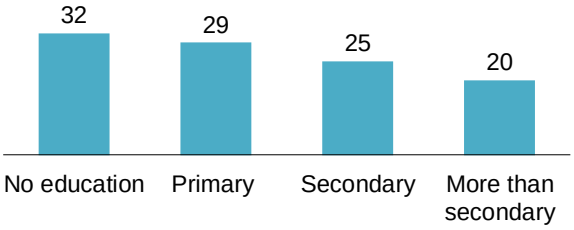
Percentage of children under age 5 who are stunted



- The prevalence of stunting decreases with increasing mother's education, from 32% among children whose mothers have no education to 20% among those whose mothers have more than a secondary education (**Figure 11.2**).
- Similarly, the prevalence of stunting decreases with increasing household wealth, from 33% among children in the lowest wealth quintile to 24% among those in the highest quintile.

Figure 11.2 **Stunting in children by mother's education**

Percentage of children under age 5 who are stunted



11.2 Infant and Young Child Feeding Practices

Appropriate infant and young child feeding (IYCF) practices include early initiation of breastfeeding (within the first hour of life), exclusive breastfeeding for the first 6 months of life, continued breastfeeding for 2 years or more, and introduction of safe, appropriate, and adequate complementary foods at age 6 months (WHO 2008).

11.2.1 Early Initiation of Breastfeeding

Initiation of breastfeeding within the first hour of life is important for both the mother and the child. The first breast milk contains colostrum, which is highly nutritious and has antibodies that protect the newborn from diseases. Early initiation of breastfeeding also encourages bonding between the mother and her newborn, facilitating the production of regular breast milk.

Early initiation of breastfeeding
Initiation of breastfeeding within 1 hour of birth.
Sample: Last-born children who were born in the 2 years before the survey

Table 11.2 shows that 97% of children born in the 2 years before the survey were breastfed at some point. Seventy-five percent of children were breastfed within 1 hour of birth, and 94% were breastfed within 1 day of birth. Ten percent of children received a prelacteal feed.

Trends: Early initiation of breastfeeding increased from 48% in 2008 and 54% in 2013 to 75% in 2019.

Patterns by background characteristics

- The percentage of infants who started breastfeeding within 1 hour of birth ranges from 58% in the Western Area province to 86% in the Southern province (**Table 11.2**).
- By district, the percentage of infants who started breastfeeding within 1 hour of birth is highest in Pujehun (92%) and lowest in Falaba (40%) (**Table 11.2**). However, infants in Pujehun are also most likely to have been given a prelacteal feed (26%).
- Early initiation of breastfeeding is more common among children whose deliveries were assisted by traditional birth attendants (84%) than among those whose deliveries were assisted by health personnel (74%) and others (79%).
- Children born to mothers with no education were more likely to start breastfeeding within an hour of birth (77%) than children born to mothers with more than a secondary education (62%). Conversely, children born to mothers with more than a secondary education (19%) were more likely than those born to mothers at lower educational levels (9%-11%) to receive a prelacteal feed.
- Early initiation of breastfeeding decreases with increasing household wealth (from 82% among children in the lowest wealth quintile to 64% among those in the highest quintile), while prelacteal feeding is more common among children born to mothers in the highest wealth quintile (18%) than among those born to mothers in the lower quintiles (8%-10%).

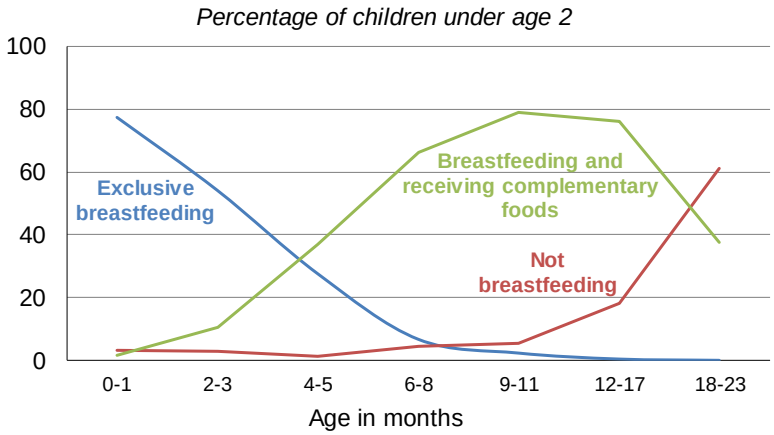
11.2.2 Exclusive Breastfeeding

Breast milk contains all of the nutrients needed by children during their first 6 months of life. It is recommended that children be exclusively breastfed in the first 6 months of their life; that is, they should be given nothing but breast milk. Exclusive breastfeeding for 6 months prevents infections such as diarrhoea and respiratory illnesses and provides all of the nutrients and liquid an infant requires for optimal growth and development. Feeding complementary foods within the first 6 months will have the adverse effect of reducing breast milk output because the production and release of breast milk are modulated by the frequency and intensity of suckling.

Exclusive breastfeeding
Proportion of children age 0-5 months who are fed exclusively with breast milk.
Sample: Last-born children who were born in the 2 years before the survey

Fifty-four percent of children under age 6 months are exclusively breastfed, while 3% are not breastfeeding (**Table 11.3**). The percentage of exclusively breastfed children decreases with age, from 77% among those age 0-1 months to 28% among those age 4-5 months (**Table 11.3**, **Table 11.4**, and **Figure 11.3**). Nineteen percent of children under age 6 months are breastfeeding and consuming plain water only, and 16% are consuming complementary foods. The proportion of children who are consuming complementary foods and breastfeeding peaks at 66% among those age 6-8 months and then drops to 38% among those age 18-23 months (**Table 11.3** and **Figure 11.3**).

Figure 11.3 **Breastfeeding practices by age**



Median Duration of Breastfeeding

The median duration of any breastfeeding among children born in the 3 years before the survey is 18.6 months (**Table 11.5**). The median duration of exclusive breastfeeding is 3.0 months, and the median duration of predominant breastfeeding (either exclusively breastfed or breastfed and receiving plain water and/or non-milk liquids) is 5.1 months.

Trends: Exclusive breastfeeding among children age 0-5 months increased from 11% in 2008 to 32% in 2013 and 54% in 2019.

Patterns by background characteristics

- The median duration of any breastfeeding is 19.5 months among children in rural areas, as compared with 17.1 months among children in urban areas (**Table 11.5**).
- The median duration of predominant breastfeeding is highest among children in the Eastern province (6.0 months) and lowest among those in the Western Area province (3.2 months) (**Table 11.5**).
- The median duration of exclusive breastfeeding is highest among children in the lowest wealth quintile (3.6 months) and lowest among those in the fourth wealth quintile (2.8 months) (**Table 11.5**).

11.2.3 Bottle Feeding

The nipple on a feeding bottle is susceptible to contamination and increases disease risk among children. Thus, bottle feeding is not recommended for children under age 2 (WHO 2005).

Nine percent of children age 0-1 months are fed using a bottle with a nipple. The proportion of children using a bottle with a nipple peaks at age 6-8 months (29%) (**Table 11.3**). Overall, 21% of children age 0-23 months are fed from a bottle with a nipple (**Table 11.4**).

Bottle feeding
Proportion of children age 0-23 months who are fed from a bottle with a nipple.
Sample: Last-born children who were born in the 2 years before the survey

11.2.4 Introduction of Complementary Foods

After the first 6 months, breast milk alone is no longer sufficient to meet the nutritional needs of an infant. After 6 months, appropriate complementary foods should be introduced while breastfeeding is continued until age 2 or older. The transition from exclusive breastfeeding to complementing breastfeeding with family foods is when children are most vulnerable to becoming undernourished, and during this time it is important that they receive solid, semisolid, or soft foods.

Appropriate complementary feeding should include feeding children a variety of foods to ensure that nutrient requirements are met. Fruits and vegetables rich in vitamin A should be consumed daily. Eating a range of fruits and vegetables, in addition to those rich in vitamin A, is also important. Studies have shown that plant-based complementary foods by themselves are insufficient to meet the needs for certain micronutrients. Therefore, it has been recommended that meat, poultry, fish, or eggs be part of the daily diet or eaten as often as possible (WHO 2003).

Table 11.6 indicates the types of foods and liquids consumed by children during the day and night before the interview by their age and breastfeeding status. Overall, children age 6-23 months most commonly consumed foods made from grains (77% among breastfeeding children and 87% among nonbreastfeeding children), followed by meat, fish, and poultry (42% among breastfeeding children and 65% among nonbreastfeeding children).

11.2.5 Minimum Dietary Diversity, Minimum Meal Frequency, and Minimum Acceptable Diet

Infants and young children should be fed a minimum acceptable diet to ensure appropriate growth and development. Without adequate diversity and meal frequency, infants and young children are vulnerable to undernutrition, especially stunting and micronutrient deficiencies, and to increased morbidity and mortality. The WHO minimum acceptable diet recommendation is a combination of minimum dietary diversity and minimum meal frequency. The three indicators are defined in the box below.

Minimum dietary diversity is a proxy for adequate micronutrient density of foods. Consumption of food from at least five groups means that the child has a high likelihood of consuming at least one animal source of food and at least one fruit or vegetable in addition to a staple food such as grains, roots, or tubers (WHO 2008). The five groups should come from a list of eight food groups: breast milk; grains, roots, and tubers; legumes and nuts; dairy products (milk, yogurt, and cheese); flesh foods (meat, fish, poultry, and liver/organ meat); eggs; vitamin A-rich fruits and vegetables; and other fruits and vegetables.

Minimum meal frequency is a proxy for meeting energy requirements. Breastfed children age 6-8 months are considered to be fed with a minimum meal frequency if they receive solid, semisolid, or soft foods at least twice a day. Breastfed children age 6-23 months are considered to be fed with a minimum meal frequency if they receive solid, semisolid, or soft foods at least three times a day. Nonbreastfed children age 6-23 months are considered to be fed with a minimum meal frequency if they receive solid, semisolid, or soft foods or milk feeds at least four times a day and if at least one of the feeds is a solid, semisolid, or soft food.

Minimum dietary diversity

Proportion of children age 6-23 months who received a minimum of five out of eight food groups during the previous day.

Minimum meal frequency

Proportion of children age 6-23 months who received solid, semisolid, or soft food (including milk feeds for nonbreastfed children) the minimum number of times or more during the previous day.

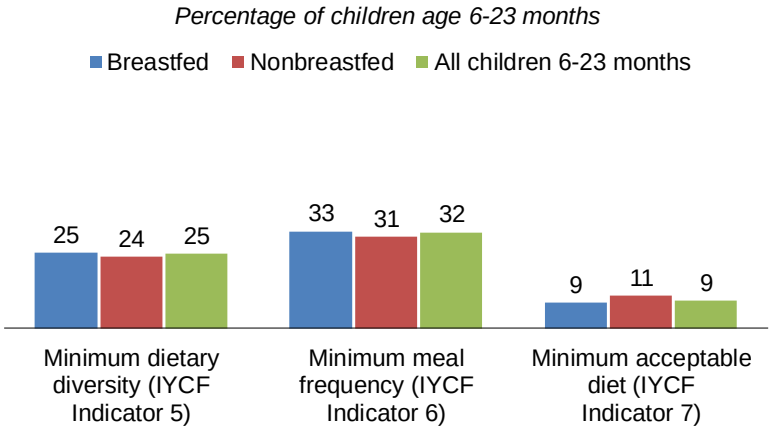
Minimum acceptable diet

Proportion of children age 6-23 months who received a minimum acceptable diet during the previous day. This indicator is a composite of children fed with a minimum dietary diversity and a minimum meal frequency.

Sample: Youngest children age 6-23 months living with their mother

According to the 2019 SLDHS results, 9% of children age 6-23 months living with their mother were fed a minimum acceptable diet during the previous day (**Table 11.7** and **Figure 11.4**). Thirty-two percent of children were fed with a minimum meal frequency, and 25% were fed with a minimum dietary diversity. Eighty-two percent of children months received breast milk, milk, or milk products (**Table 11.7**).

Figure 11.4 **IYCF indicators on minimum acceptable diet**



Patterns by background characteristics

- The Western Area province has the highest proportion of children age 6-23 months who meet the criteria for minimum dietary diversity (33%), minimum meal frequency (46%), and minimum acceptable diet (15%). The proportion of children who meet the criteria for minimum dietary diversity (11%) and minimum acceptable diet (4%) is lowest in the Eastern province, while the proportion who meet the criteria for minimum meal frequency is lowest in the Northern province (22%).

- By district, the proportion of children who meet the criteria for minimum dietary diversity ranges from 6% in Kenema to 43% in Bonthe . The percentage of children who are fed with a minimum meal frequency is highest in Bonthe (57%) and lowest in Falaba (16%), while the percentage who receive a minimum acceptable diet is highest in Bonthe (20%) and lowest in Kenema (2%).

- The percentage of children fed with a minimum meal frequency and a minimum dietary diversity is highest among those born to mothers with more than a secondary education (56% and 45%, respectively). The percentage of children fed with a minimum meal frequency is lowest among those born to mothers with no education (27%), while the percentage fed with a minimum dietary diversity is lowest among those born to mothers with a primary education (22%).

- The proportion of children receiving a minimum acceptable diet rises with increasing mother's education, from 7% among children whose mothers have no education to 23% among those whose mothers have more than a secondary education. Similarly, the proportion of children receiving a minimum acceptable diet increases with increasing household wealth, from 6% to 14%.

11.3 ANAEMIA PREVALENCE IN CHILDREN

Anaemia in children

Anaemia status	Haemoglobin level in grams/decilitre*
Anaemic	<11.0
Mildly anaemic	10.0-10.9
Moderately anaemic	7.0-9.9
Severely anaemic	<7.0
Not anaemic	11.0 or higher
*Haemoglobin levels are adjusted for altitude in enumeration areas that are above 1,000 metres.	

Sample: Children age 6-59 months

Anaemia is a condition that is marked by low levels of haemoglobin in the blood. Iron deficiency is a common cause of anaemia and is estimated to be responsible for half of all anaemia cases in women and children globally. Other causes of anaemia include malaria, hookworm and other helminths, other nutritional deficiencies, chronic infections, and genetic conditions such as thalassemia. Anaemia is a serious concern for children because it can impair cognitive development and is associated with long-term health and economic consequences (Balarajan et al. 2011). Severe anaemia leads to increased mortality. The HemoCue® Hb 201+ device was used to measure haemoglobin levels from a finger-stick blood sample, which was then used to determine anaemia levels in the population.

Table 11.8 and **Figure 11.5** show that 68% of children age 6-59 months are anaemic. Of these children, 30% are mildly anaemic, 35% are moderately anaemic, and 3% are severely anaemic.

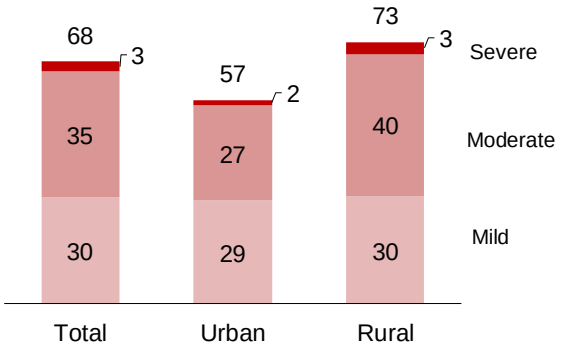
Trends: The prevalence of anaemia among children increased from 76% in 2008 to 80% in 2013 before decreasing to 68% in 2019.

Patterns by background characteristics

- Seventy-three percent of children in rural areas are anaemic, as compared with 57% of children in urban areas (**Table 11.8** and **Figure 11.5**).
- The prevalence of anaemia ranges from 55% among children in the Western Area province to 76% among children in the North West province (**Table 11.8**).

Figure 11.5 **Childhood anaemia by residence**

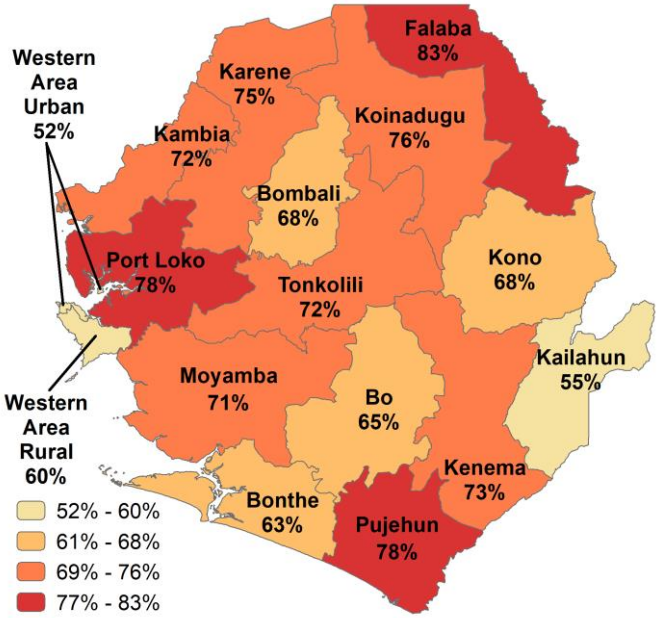
Percentage of children age 6-59 months



- At the district level, the percentage of children with anaemia is highest among those in Falaba (83%) and lowest among those in Western Area Urban (52%) (**Table 11.8** and **Figure 11.6**).
- The prevalence of anaemia is highest among children age 6-8 months and 12-17 months (79% each) and lowest among those age 48-59 months (60%) (**Table 11.8**).
- The prevalence of anaemia is higher among boys (71%) than among girls (65%) (**Table 11.8**).
- The percentage of children with anaemia is highest among those whose mothers have no education (73%) and lowest among those whose mothers have more than a secondary education (54%) (**Table 11.8**).

Figure 11.6 **Anaemia in children by district**

Percentage of children age 6-59 months with any anaemia



- Anaemia levels generally decrease with increasing household wealth; 73% of children in the lowest wealth quintile are anaemic, compared with 51% of children in the highest quintile (**Table 11.8**).

11.4 Presence of Iodised Salt in Households

Iodine is a micronutrient that plays an important role in thyroid function. In line with food and drug regulations, household salt should be fortified with iodine. Sufficient iodine prevents goitre, brain damage, and other thyroid-related health problems.

In the 2019 SLDHS, household salt was tested for the presence or absence of iodine; however, the iodine content of the salt was not measured. In total, 8% of households had no salt and 1% had salt that was not tested. Among households with tested salt, 90% had iodised salt (**Table 11.9**). The proportion of households with no salt was highest in the Western Area province (15%). Among households with tested salt, the Eastern province had the highest percentage with iodised salt (97%) and the North West province had the lowest (66%).

11.5 Micronutrient Intake and Supplementation among Children

Micronutrient deficiency is a major contributor to childhood morbidity and mortality. Micronutrients are available in foods and can also be provided through direct supplementation.

The information collected on food consumption among children age 6-23 months is useful in assessing the extent to which children are consuming food groups rich in two key micronutrients in their daily diet: iron and vitamin A. Iron plays an important role in numerous biological systems and iron deficiency is one of the primary causes of anaemia, which has serious health consequences for children. Vitamin A supports the immune system and plays an important role in maintaining the epithelial tissue in the body. Severe vitamin A deficiency (VAD) can cause eye damage and is the leading cause of childhood blindness. VAD also increases the severity of infections such as measles and diarrhoeal disease and slows recovery from illness.

Table 11.10 presents information on consumption of foods rich in vitamin A and iron in the 24 hours preceding the survey among children age 6-23 months who are living with their mother. It also provides information on micronutrient supplementation and deworming among children age 6-59 months. Overall, 62% of children age 6-23 months consumed foods rich in vitamin A in the 24 hours preceding the survey, and 53% consumed foods rich in iron. Fifty-two percent of children age 6-59 months were given iron supplements in the past 7 days, 69% were given vitamin A supplements in the past 6 months, and 64% were given deworming medication in the past 6 months.

11.6 ADULTS' NUTRITIONAL STATUS

Nutritional Status of Women

The 2019 SLDHS collected anthropometric data on height and weight among women age 15-49. These data were used to calculate measures of nutritional status such as maternal height and body mass index (BMI). The results showed that 65% of women have a normal BMI, while 7% are thin and 28% are overweight or obese. Women's mean BMI (23.5) falls within the range considered as normal. One percent of women are of short stature (**Table 11.11**).

Body mass index (BMI)

BMI is calculated by dividing weight in kilograms by height in metres squared (kg/m^2).

Status	BMI
Too thin for height	Less than 18.5
Normal	Between 18.5 and 24.9
Overweight	Between 25.0 and 29.9
Obese	Greater than or equal to 30.0

Sample: Women age 15-49 who are not pregnant and who have not had a birth in the 2 months before the survey, and men age 15-59

Short stature

Proportion of women with height under 145 cm

Sample: Women age 15-49

Trends: The proportion of women age 15-49 who are thin decreased from 11% in 2008 to 9% in 2013 and 7% in 2019. On the other hand, the proportion of women who are overweight or obese decreased from 30% in 2008 to 18% in 2013 before increasing to 28% in 2019.

Patterns by background characteristics

- Women from the Western Area province (40%) are more likely to be overweight or obese than women from other provinces (**Table 11.11**).
- Women from Western Area Urban (42%) are more likely to be overweight or obese than women from other districts (**Table 11.11**).
- The percentage of women who are overweight or obese is higher in urban than rural areas (36% versus 21%), whereas the percentage of women who are thin is higher in rural areas (8% versus 5%) (**Table 11.11**).
- Women with more than a secondary education are more than twice as likely to be overweight or obese as those with a primary education (51% and 23%, respectively) (**Table 11.11**).

- The percentage of women who are overweight or obese increases from 18% among those in the lowest wealth quintile to 42% among those in the highest quintile. Conversely, the percentage of women who are thin declines with increasing household wealth.

11.7 Anaemia Prevalence in Adults

Haemoglobin levels below which women and men are considered anaemic

Respondents	Haemoglobin level in grams/decilitre*
Non-pregnant women age 15-49	Less than 12.0
Pregnant women age 15-49	Less than 11.0
Men age 15-59	Less than 13.0
*Haemoglobin levels are adjusted for cigarette smoking and for altitude in enumeration areas that are above 1,000 metres.	

The procedure used to measure anaemia among women age 15-49 was similar to that used for children age 6-59 months except that capillary blood was collected exclusively from a finger prick. The methodology employed for haemoglobin testing is described in detail in Chapter 1.

Forty-seven percent of women in Sierra Leone suffer from anaemia (**Table 11.12**). Twenty-three percent are mildly anaemic, 22% are moderately anaemic, and 2% are severely anaemic.

Trends: The prevalence of anaemia among women age 15-49 increased from 45% in 2008 and 2013 to 47% in 2019.

Patterns by background characteristics

- The prevalence of anaemia is higher in rural areas (52%) than urban areas (40%) (**Table 11.12**).
- The percentage of women who are anaemic is highest in the North West province (52%) and lowest in the Western Area province (40%).
- By district, anaemia prevalence is highest in Falaba (60%) and lowest in Western Area Urban (37%).
- The prevalence of anaemia is lowest among women with more than a secondary education (30%) and highest among those with no education (49%) or a primary education (51%).
- Fifty-one percent of women in the lowest wealth quintile are anaemic, as compared with 37% of those in the highest quintile.

11.8 Micronutrient Supplementation and Deworming during Pregnancy

During pregnancy, women are at a higher risk of anaemia due to an increase in blood volume. Severe anaemia can place both the mother and the baby in danger through increased risk of blood loss during labour and can raise the risk of preterm delivery, low birth weight, and perinatal mortality. To prevent anaemia, pregnant women are advised to take iron folate supplements, eat iron-rich foods, and prevent intestinal worms.

The 2019 SLDHS asked women age 15-49 who gave birth in the 5 years before the survey whether they took iron supplements and/or deworming medication during their most recent pregnancy. Eighty-four percent of women with a child born in the last 5 years took deworming medication during their most recent pregnancy (**Table 11.13**). Only 28% of women took iron tablets for 90 days or more during their most recent pregnancy, while 4% took no iron tablets.

Trends: The percentage of women taking iron supplementation for 90 days or more increased from 17% in 2008 to 30% in 2013 before decreasing slightly to 28% in 2019. The percentage of women who did not take any iron supplementation decreased from 17% in 2008 to 6% in 2013 and 4% in 2019. Finally, the percentage of women taking deworming medication during pregnancy increased from 44% in 2008 to 72% in 2013 and 84% in 2019.

Patterns by background characteristics

- Women in urban areas were more likely than those in rural areas to have taken deworming tablets (87% versus 81%) (**Table 11.13**).
- The proportion of women taking iron tablets for 90 days or more increases with increasing education, from 26% among those with no education to 40% among those with more than a secondary education.
- Eighty-one percent of women in the lowest wealth quintile took deworming medication during pregnancy, as compared with 90% of women in the highest quintile.

11.9 Minimum Dietary Diversity for Women

The 2019 SLDHS collected information on women's food consumption. **Table 11.14** indicates that 56% of women age 15-49 consumed food from five or more of the 10 total food groups in the day or night preceding the interview. Seventy percent of women consumed dark green leafy vegetables, 63% consumed fruits and vegetables rich in Vitamin A, 23% consumed foods made from legumes, and 15% each consumed sugary foods and fried snacks.

Patterns by background characteristics

- There are minimal variations in women's food consumption patterns by age with the exception of sugary foods and, to a lesser extent, savoury and fried snacks and sugar-sweetened beverages. Consumption of sugary foods decreases with age, from 19% among women age 15-19 to 12% among women age 40-49.
- Consumption of unhealthy foods and beverages is higher in urban areas than in rural areas. This includes consumption of savoury and fried snacks (19% in urban areas versus 12% in rural areas), sugary foods (20% versus 10%), and sugar-sweetened beverages (29% versus 13%).
- Similar proportions of urban women (56%) and rural women (57%) consumed five or more food groups in the day or night preceding the interview.
- The proportion of women who consumed five or more food groups is highest in the Northern province (62%) and lowest in the Western Area province (53%).
- By district, the proportion of women who consumed five or more food groups is highest in Kailahun and Kambia (77% each) and lowest in Moyamba and Karene (39% each).

LIST OF TABLES

For more information on nutrition of children and adults see the following tables:

Table 11.1 Nutritional status of children

Percentage of children under age 5 classified as malnourished according to three anthropometric indices of nutritional status: height-for-age, weight-for-height, and weight-for-age, according to background characteristics, Sierra Leone DHS 2019

Background characteristic	Height-for-age[1]				Weight-for-height					Weight-for-age				
	Percent-age below -3 SD	Percent-age below -2 SD[2]	Mean Z-score (SD)	Number of children	Percent-age below -3 SD	Percent-age below -2 SD[2]	Percent-age above +2 SD	Mean Z-score (SD)	Number of children	Percent-age below -3 SD	Percent-age below -2 SD[2]	Percent-age above +2 SD	Mean Z-score (SD)	Number of children
Age in months														
<6	7.9	19.2	-0.9	508	1.1	4.3	13.9	0.5	500	2.5	8.7	2.9	-0.3	517
6-8	5.5	18.0	-0.6	263	1.2	13.3	6.1	-0.4	263	4.8	16.1	3.9	-0.6	271
9-11	10.0	18.0	-0.8	210	1.3	8.7	2.1	-0.5	213	5.8	14.5	0.9	-0.9	212
12-17	10.0	27.0	-1.2	551	2.8	12.1	4.4	-0.4	556	5.0	19.2	1.7	-0.8	562
18-23	10.1	34.7	-1.5	373	0.8	4.1	5.3	-0.1	372	4.5	15.2	1.3	-0.9	379
24-35	15.4	39.8	-1.6	914	0.7	3.1	4.1	0.1	918	3.4	15.8	1.4	-0.8	924
36-47	10.1	31.4	-1.3	1,006	1.0	4.5	2.1	-0.1	1,009	3.4	12.3	0.8	-0.9	1,007
48-59	10.5	28.1	-1.4	995	0.6	2.8	2.6	-0.1	994	1.5	10.6	0.4	-0.9	998
Sex														
Male	12.1	32.1	-1.3	2,436	1.2	5.5	5.0	-0.0	2,439	3.8	14.3	1.4	-0.8	2,464
Female	9.3	26.8	-1.2	2,384	0.9	5.3	4.1	-0.1	2,385	2.9	12.8	1.3	-0.8	2,407
Birth interval in months[3]														
First birth[4]	9.1	28.5	-1.3	889	0.7	4.7	4.6	-0.1	892	3.9	13.5	1.4	-0.8	905
<24	14.1	34.4	-1.4	388	0.6	4.6	8.0	0.1	387	2.5	14.7	1.5	-0.8	393
24-47	11.1	30.7	-1.4	1,610	1.0	6.0	4.1	-0.1	1,607	3.5	14.4	1.0	-0.9	1,622
48+	8.8	25.3	-1.1	1,119	1.2	6.1	5.3	-0.0	1,120	3.1	12.2	2.1	-0.6	1,134
Size at birth[3]														
Very small	13.0	38.5	-1.5	174	1.3	6.3	1.0	-0.5	175	5.0	25.7	0.5	-1.2	176
Small	14.7	37.9	-1.6	345	1.4	8.3	4.5	-0.3	339	7.6	24.2	1.6	-1.2	347
Average or larger	9.8	27.9	-1.2	3,411	0.9	5.4	5.2	-0.0	3,412	2.9	12.0	1.5	-0.7	3,452
Missing	6.1	18.6	-1.1	78	1.4	1.4	3.2	0.1	80	0.0	10.8	0.0	-0.5	78
Mother's interview status														
Interviewed	10.3	29.1	-1.3	4,007	1.0	5.6	4.9	-0.1	4,005	3.4	13.6	1.5	-0.8	4,053
Not interviewed but in household	7.5	29.4	-1.0	67	3.2	9.9	0.9	0.0	68	1.4	8.1	0.0	-0.5	67
Not interviewed and not in the household[5]	13.1	31.5	-1.3	747	1.5	3.8	3.0	-0.0	750	3.5	13.9	1.0	-0.8	750
Mother's nutritional status[6]														
Thin (BMI <18.5)	11.5	37.6	-1.5	205	2.0	14.3	3.6	-0.5	207	6.9	26.6	0.4	-1.2	207
Normal (BMI 18.5-24.9)	10.1	30.4	-1.3	2,339	0.9	5.5	4.3	-0.1	2,345	3.4	13.8	1.0	-0.9	2,370
Overweight/obese (BMI ≥25)	9.3	23.1	-1.1	919	0.7	4.5	4.5	0.0	911	3.0	10.3	2.1	-0.6	926
Residence														
Urban	9.6	24.5	-1.1	1,606	1.0	6.3	5.5	-0.1	1,599	4.2	12.9	2.1	-0.7	1,637
Rural	11.2	31.9	-1.4	3,214	1.1	4.9	4.1	-0.0	3,225	2.9	13.9	1.0	-0.8	3,233
Province														
Eastern	5.1	25.3	-1.2	1,122	0.3	3.0	3.5	0.1	1,132	1.7	9.2	0.6	-0.6	1,123
Northern	13.3	30.9	-1.2	1,072	1.2	5.4	3.3	-0.1	1,077	3.6	14.0	1.5	-0.8	1,079
North West	14.5	32.4	-1.4	726	1.4	5.7	4.1	-0.1	730	3.2	16.7	0.5	-0.9	732
Southern	11.0	31.5	-1.4	1,126	1.3	6.2	4.8	-0.1	1,121	3.9	14.9	1.2	-0.8	1,134
Western Area	11.1	27.8	-1.2	774	1.3	7.4	7.9	-0.0	764	4.7	14.4	3.2	-0.7	802
District														
Kailahun	7.1	29.1	-1.4	273	0.6	4.2	1.8	-0.1	273	2.5	14.2	0.8	-0.9	273
Kenema	2.9	24.5	-1.1	531	0.2	2.8	4.3	0.1	532	0.9	7.2	0.5	-0.5	532
Kono	7.1	23.3	-1.1	318	0.3	2.4	3.5	0.1	326	2.6	8.2	0.7	-0.6	318
Bombali	8.3	22.8	-1.0	395	1.1	7.2	3.2	-0.2	394	2.3	10.5	1.9	-0.7	395
Falaba	20.0	44.6	-1.4	137	1.6	3.6	0.7	-0.1	137	2.8	14.8	0.3	-0.9	137
Koinadugu	20.1	37.4	-1.6	118	2.8	6.0	10.5	0.1	121	5.0	17.5	2.4	-0.9	122
Tonkolili	13.9	32.2	-1.3	422	0.7	4.1	2.2	-0.1	426	4.6	15.9	1.3	-0.8	425
Kambia	16.8	31.9	-1.4	219	2.0	8.1	6.7	-0.0	220	4.7	15.9	0.0	-0.9	223
Karene	13.3	37.0	-1.5	143	0.0	3.0	2.5	-0.1	144	3.0	15.7	0.0	-0.9	145
Port Loko	13.6	30.9	-1.3	364	1.6	5.3	3.1	-0.2	365	2.4	17.7	0.9	-0.9	364
Bo	9.0	28.3	-1.3	427	0.4	5.6	4.1	-0.0	427	2.0	13.3	1.0	-0.8	430
Bonthe	13.0	31.0	-1.3	199	2.6	6.5	7.3	-0.0	196	5.5	15.3	0.3	-0.8	199

Continued...

Table 11.1—*Continued*

Background characteristic	Height-for-age[1]				Weight-for-height					Weight-for-age				
	Percentage below -3 SD	Percentage below -2 SD[2]	Mean Z-score (SD)	Number of children	Percentage below -3 SD	Percentage below -2 SD[2]	Percentage above +2 SD	Mean Z-score (SD)	Number of children	Percentage below -3 SD	Percentage below -2 SD[2]	Percentage above +2 SD	Mean Z-score (SD)	Number of children
District (continued)														
Moyamba	9.9	31.8	-1.5	295	1.4	4.3	4.8	-0.0	295	3.0	10.7	1.3	-0.9	296
Pujehun	14.9	38.0	-1.5	206	2.0	9.7	3.6	-0.2	202	7.8	23.8	2.3	-1.0	209
Western Area Rural	4.4	21.8	-0.9	324	1.7	5.0	4.6	-0.1	320	3.9	10.5	2.4	-0.7	332
Western Area Urban	15.9	32.2	-1.5	450	1.1	9.1	10.4	0.0	445	5.3	17.1	3.8	-0.8	471
Mother's education[7]														
No education	12.1	31.8	-1.4	2,199	1.3	5.6	4.8	-0.1	2,207	3.3	14.6	1.3	-0.8	2,223
Primary	9.4	29.4	-1.3	644	0.2	4.2	4.2	-0.1	644	3.2	12.6	1.2	-0.8	654
Secondary	7.6	24.6	-1.1	1,114	0.9	6.5	5.1	-0.0	1,107	3.2	11.9	1.4	-0.7	1,124
More than secondary	5.6	19.5	-0.8	117	0.6	7.2	6.6	-0.0	116	6.1	12.6	4.9	-0.5	119
Wealth quintile														
Lowest	12.6	32.7	-1.4	1,207	1.1	5.2	4.7	-0.0	1,207	3.7	14.5	1.2	-0.8	1,216
Second	10.1	32.3	-1.4	1,095	1.0	4.8	2.7	-0.1	1,103	2.2	13.8	0.9	-0.9	1,099
Middle	10.9	31.2	-1.3	988	1.3	4.4	4.2	-0.0	992	3.1	13.9	0.7	-0.8	994
Fourth	8.4	23.4	-1.1	849	1.0	6.8	4.7	-0.1	846	4.1	11.9	1.8	-0.7	857
Highest	10.8	24.1	-1.1	681	0.8	6.4	7.6	0.0	676	4.1	13.2	2.8	-0.6	704
Total	10.7	29.5	-1.3	4,820	1.1	5.4	4.5	-0.1	4,824	3.4	13.6	1.4	-0.8	4,870

Note: Each of the indices is expressed in standard deviation units (SD) from the median of the WHO Child Growth Standards.
[1] Recumbent length is measured for children under age 2; standing height is measured for all other children.
[2] Includes children who are below -3 standard deviations (SD) from the WHO Child Growth Standards population median
[3] Excludes children whose mothers were not interviewed
[4] First-born twins (triplets, etc.) are counted as first births because they do not have a previous birth interval.
[5] Includes children whose mothers are deceased
[6] Excludes children whose mothers were not weighed and measured, children whose mothers were not interviewed, and children whose mothers are pregnant or gave birth within the preceding 2 months. Mother's nutritional status in terms of BMI (body mass index) is presented in Table 11.11.
[7] For women who are not interviewed, information is taken from the Household Questionnaire. Excludes children whose mothers are not listed in the Household Questionnaire.

Table 11.2 Initial breastfeeding

Among last-born children who were born in the 2 years preceding the survey, percentage who were ever breastfed and percentages who started breastfeeding within 1 hour and within 1 day of birth, and among last-born children born in the 2 years preceding the survey who were ever breastfed, percentage who received a prelacteal feed, according to background characteristics, Sierra Leone DHS 2019

	Among last-born children born in the past 2 years:				Among last-born children born in the past 2 years who were ever breastfed:	
Background characteristic	Percentage ever breastfed	Percentage who started breastfeeding within 1 hour of birth	Percentage who started breastfeeding within 1 day of birth[1]	Number of last-born children	Percentage who received a prelacteal feed[2]	Number of last-born children ever breastfed
Sex						
Male	96.8	73.5	93.3	2,009	11.6	1,946
Female	97.1	77.1	95.0	1,941	8.8	1,883
Assistance at delivery						
Health personnel[3]	96.9	74.2	94.1	3,501	10.3	3,393
Traditional birth attendant	97.6	84.3	96.2	339	8.1	331
Other	95.2	79.2	89.9	99	12.3	94
No one	*	*	*	11	*	11
Place of delivery						
Health facility	97.0	74.7	94.1	3,370	10.2	3,268
At home	96.7	78.9	94.4	574	10.6	555
Other	*	*	*	6	*	6
Residence						
Urban	95.6	66.6	90.9	1,392	13.5	1,331
Rural	97.6	80.0	95.9	2,558	8.5	2,498
Province						
Eastern	97.5	75.1	94.8	847	7.1	826
Northern	97.9	75.2	96.2	796	11.3	779
North West	97.2	80.5	94.7	758	6.8	736
Southern	97.3	86.4	95.7	816	9.7	794
Western Area	94.6	57.8	88.9	733	17.1	694
District						
Kailahun	98.8	50.8	96.6	187	5.6	184
Kenema	97.5	78.5	94.8	410	7.8	400
Kono	96.5	87.6	93.7	250	7.1	242
Bombali	97.9	82.8	96.1	290	2.8	284
Falaba	97.7	39.7	96.5	81	10.2	79
Koinadugu	96.9	75.2	93.7	121	13.2	118
Tonkolili	98.4	77.3	97.2	303	18.8	298
Kambia	97.3	91.0	95.3	242	5.9	236
Karene	97.3	78.2	97.1	154	9.5	150
Port Loko	97.0	74.3	93.2	362	6.2	351
Bo	98.0	79.5	96.1	298	10.4	292
Bonthe	95.5	90.1	95.5	157	1.7	150
Moyamba	98.1	89.5	95.3	216	4.0	212
Pujehun	96.9	92.0	95.3	145	25.5	140
Western Area Rural	93.9	57.9	87.5	322	13.1	302
Western Area Urban	95.1	57.7	90.1	412	20.1	392
Mother's education						
No education	96.9	77.2	94.8	2,037	10.5	1,974
Primary	97.7	74.9	95.6	610	9.2	596
Secondary	96.6	73.4	92.9	1,199	9.5	1,158
More than secondary	96.4	61.7	88.2	105	19.2	101
Wealth quintile						
Lowest	97.4	82.0	96.2	917	8.7	893
Second	97.5	78.1	96.0	867	9.8	845
Middle	97.8	76.9	95.0	792	7.9	774
Fourth	95.3	71.8	92.5	752	8.9	717
Highest	96.3	63.5	89.4	622	17.7	599
Total	96.9	75.3	94.2	3,950	10.2	3,829

Note: Table is based on last-born children born in the 2 years preceding the survey regardless of whether the children are living or dead at the time of the interview. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

[1] Includes children who started breastfeeding within 1 hour of birth

[2] Children given something other than breast milk during the first 3 days of life

[3] Doctor, nurse/midwife, or auxiliary midwife

Table 11.3 Breastfeeding status by age

Percent distribution of youngest children under age 2 who are living with their mother by breastfeeding status and percentage currently breastfeeding, and percentage of all children under age 2 using a bottle with a nipple, according to age in months, Sierra Leone DHS 2019

	Breastfeeding status										
Age in months	Not breast-feeding	Exclusively breastfed	Breastfeeding and consuming plain water only	Breastfeeding and consuming non-milk liquids[1]	Breastfeeding and consuming other milk	Breastfeeding and consuming complementary foods	Total	Percentage currently breast-feeding	Number of youngest children under age 2 living with their mother	Percentage using a bottle with a nipple	Number of all children under age 2
0-1	3.3	77.4	11.3	4.1	2.1	1.7	100.0	96.7	332	8.5	342
2-3	2.9	54.2	22.8	4.9	4.9	10.5	100.0	97.1	341	20.1	361
4-5	1.4	27.7	21.9	3.9	8.0	37.1	100.0	98.6	295	27.1	309
6-8	4.4	6.9	16.4	2.0	4.0	66.4	100.0	95.6	482	29.1	505
9-11	5.3	2.5	8.6	1.4	3.2	79.0	100.0	94.7	425	23.3	440
12-17	18.3	0.6	3.3	0.7	1.0	76.1	100.0	81.7	1,026	21.9	1,070
18-23	61.0	0.2	0.7	0.1	0.3	37.7	100.0	39.0	689	14.8	768
0-3	3.1	65.6	17.1	4.5	3.5	6.2	100.0	96.9	673	14.4	703
0-5	2.5	54.1	18.6	4.3	4.9	15.6	100.0	97.5	969	18.3	1,012
6-9	3.8	6.0	15.2	1.6	4.1	69.3	100.0	96.2	611	27.5	640
12-15	14.9	0.5	3.6	1.0	1.4	78.7	100.0	85.1	724	21.3	759
12-23	35.5	0.5	2.2	0.5	0.7	60.7	100.0	64.5	1,715	18.9	1,838
20-23	70.0	0.0	0.1	0.2	0.4	29.2	100.0	30.0	450	11.4	502

Note: Breastfeeding status refers to a "24-hour" period (yesterday and last night). Children who are classified as breastfeeding and consuming plain water only consumed no liquid or solid supplements. The categories of not breastfeeding, exclusively breastfed, breastfeeding and consuming plain water, non-milk liquids, other milk, and complementary foods (solids and semisolids) are hierarchical and mutually exclusive, and their percentages add to 100%. Thus, children who receive breast milk and non-milk liquids and who do not receive other milk and who do not receive complementary foods are classified in the non-milk liquid category even though they may also get plain water. Any children who get complementary food are classified in that category as long as they are breastfeeding as well.

[1] Non-milk liquids include juice, juice drinks, clear broth, or other liquids.

Table 11.4 Infant and young child feeding (IYCF) indicators on breastfeeding status

Percentage of children fed according to various IYCF practices, Sierra Leone DHS 2019

Indicator	Percentage	Number
Exclusive breastfeeding under 6 months	54.1	969
Exclusive breastfeeding at 4-5 months of age	27.7	295
Continued breastfeeding at 1 year	85.1	724
Introduction of solid, semisolid, or soft foods (6-8 months)	69.4	482
Continued breastfeeding at 2 years	30.0	450
Age-appropriate breastfeeding (0-23 months)[1]	61.8	3,591
Predominant breastfeeding (0-5 months)[2]	77.0	969
Mixed breast and non-breast milk feeding (0-5 months)[3]	11.4	969
Bottle feeding (0-23 months)	20.6	3,796

[1] For children age 0-5 months: exclusively breastfed; for children age 6-23 months: received breast milk and complementary foods
[2] Either exclusively breastfed or received breast milk and plain water and/or non-milk liquids only
[3] Received breast milk and fresh, tinned, or powdered animal milk or commercial infant formula

Table 11.5 Median duration of breastfeeding

Median duration of any breastfeeding, exclusive breastfeeding, and predominant breastfeeding among children born in the 3 years preceding the survey, according to background characteristics, Sierra Leone DHS 2019

Background characteristic	Median duration (months) of breastfeeding among children born in the past 3 years[1]		
	Any breastfeeding	Exclusive breastfeeding	Predominant breastfeeding[2]
Sex			
Male	18.5	2.9	5.2
Female	18.7	3.2	5.0
Residence			
Urban	17.1	2.4	4.1
Rural	19.5	3.4	5.6
Province			
Eastern	19.3	3.4	6.0
Northern	20.4	3.9	5.2
North West	18.2	2.8	5.4
Southern	18.6	3.1	5.2
Western Area	16.6	(1.7)	3.2
District			
Kailahun	(21.0)	4.3	6.0
Kenema	18.5	(1.1)	6.0
Kono	19.4	4.1	5.9
Bombali	20.2	4.3	5.2
Falaba	*	(4.4)	(5.7)
Koinadugu	(20.9)	3.5	4.6
Tonkolili	20.1	3.5	5.6
Kambia	18.4	*	5.0
Karene	18.8	4.8	(7.0)
Port Loko	18.0	(2.1)	5.2
Bo	18.9	(2.3)	4.8
Bonthe	19.4	*	4.1
Moyamba	17.9	5.3	6.1
Pujehun	18.1	*	5.6
Western Area Rural	16.3	*	*
Western Area Urban	16.8	*	3.8
Mother's education			
No education	19.6	3.4	5.5
Primary	18.6	(2.2)	4.8
Secondary	17.1	2.7	4.7
More than secondary	(15.4)	a	(3.1)
Wealth quintile			
Lowest	19.6	3.6	5.4
Second	20.3	3.1	6.0
Middle	18.7	3.4	5.5
Fourth	17.5	2.8	4.2
Highest	16.3	(2.0)	3.9
Total	18.6	3.0	5.1
Mean for all children	18.9	4.4	6.6

Note: Median and mean durations are based on breastfeeding status of the child at the time of the survey (current status). Includes living and deceased children. Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
a = Omitted because less than 50% of the children in this group were exclusively or predominantly breastfeeding
[1] For last-born children under age 24 months who live with their mother and are breastfeeding, information to determine exclusive and predominant breastfeeding comes from a 24-hour dietary recall. Tabulations assume that last-born children age 24 months or older who live with their mother and are breastfeeding are neither exclusively nor predominantly breastfed. It is assumed that last-born children not currently living with their mother and all non-last-born children are not currently breastfeeding.
[2] Either exclusively breastfed or received breast milk and plain water and/or non-milk liquids only

Table 11.6 Foods and liquids consumed by children in the day or night preceding the interview

Percentage of youngest children under age 2 who are living with their mother by type of foods consumed in the day or night preceding the interview, according to breastfeeding status and age, Sierra Leone DHS 2019

	Liquids			Solid or semisolid foods										
Age in months	Infant formula	Other milk[1]	Other liquids[2]	Fortified baby foods	Food made from grains[3]	Fruits and vegetables rich in vitamin A[4]	Other fruits and vege-tables	Food made from roots and tubers	Food made from legumes and nuts	Meat, fish, poultry	Eggs	Cheese, yogurt, other milk products	Any solid or semisolid food	Number of children under age 2
BREASTFEEDING CHILDREN														
0-1	1.2	1.4	5.3	0.3	1.0	0.0	0.0	0.5	0.0	0.5	0.5	0.3	1.8	321
2-3	6.5	6.9	10.5	5.2	6.9	1.0	0.0	0.2	1.0	1.6	0.6	2.2	10.8	331
4-5	18.8	15.7	19.1	25.0	35.1	5.5	2.3	1.9	5.7	2.9	0.9	2.7	37.7	291
6-8	24.2	16.8	28.6	34.2	59.8	13.3	6.5	3.6	8.1	11.4	7.3	7.2	69.4	461
9-11	26.9	20.1	35.4	30.2	73.6	32.3	18.8	14.5	16.3	31.1	13.4	13.1	83.4	402
12-17	16.3	15.6	39.0	20.1	84.1	52.5	25.3	30.5	20.8	56.8	17.8	10.9	93.2	838
18-23	14.2	19.3	41.4	18.5	86.0	59.4	27.0	32.2	21.6	63.4	20.0	15.0	96.6	269
6-23	20.0	17.3	36.1	25.2	76.5	40.2	19.8	21.2	17.0	41.8	14.8	11.0	86.1	1,970
Total	16.3	14.2	28.1	20.2	56.1	27.8	13.6	14.6	12.2	28.8	10.2	8.0	63.4	2,914
NONBREASTFEEDING CHILDREN														
0-1	*	*	*	*	*	*	*	*	*	*	*	*	*	11
2-3	*	*	*	*	*	*	*	*	*	*	*	*	*	10
4-5	*	*	*	*	*	*	*	*	*	*	*	*	*	4
6-8	*	*	*	*	*	*	*	*	*	*	*	*	*	21
9-11	*	*	*	*	*	*	*	*	*	*	*	*	*	22
12-17	26.7	34.5	52.6	28.9	85.3	61.5	28.4	32.2	27.8	62.3	32.2	22.2	98.6	188
18-23	16.3	26.8	46.0	16.9	89.4	65.5	29.7	38.3	23.4	71.2	23.1	24.0	98.9	421
6-23	20.1	28.0	47.3	22.5	86.6	60.8	27.9	34.7	23.7	65.3	25.7	22.4	96.7	652
Total	19.6	27.3	46.0	21.8	84.2	58.9	27.2	33.5	22.8	63.0	24.8	21.8	94.1	677

Note: Breastfeeding status and food consumed refer to a "24-hour" period (yesterday and last night). An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
[1] Other milk includes fresh, tinned, and powdered animal milk.
[2] Does not include plain water. Includes juice, juice drinks, clear broth, or other non-milk liquids.
[3] Includes fortified baby food
[4] Includes pumpkin, carrots, squash, sweet potatoes yellow or orange inside, dark green leafy vegetables, ripe mangoes, and papayas

Table 11.7 Minimum acceptable diet

Percentage of youngest children age 6-23 months living with their mother who are fed a minimum acceptable diet based on breastfeeding status, number of food groups, and times they are fed during the day or night preceding the survey, according to background characteristics, Sierra Leone DHS 2019

Background characteristic	Among breastfed children age 6-23 months, percentage fed:				Among nonbreastfed children age 6-23 months, percentage fed:					Among all children age 6-23 months, percentage fed:				
	Minimum dietary diversity[1]	Minimum meal frequency[2]	Minimum acceptable diet[3]	Number of breastfed children age 6-23 months	Minimum milk feeding frequency[4]	Minimum dietary diversity[1]	Minimum meal frequency[5]	Minimum acceptable diet[6]	Number of nonbreastfed children age 6-23 months	Breast milk, milk, or milk products[7]	Minimum dietary diversity[1]	Minimum meal frequency[8]	Minimum acceptable diet[9]	Number of all children age 6-23 months
Age in months														
6-11	14.5	39.4	6.0	863	(30.8)	(10.1)	(30.5)	(6.4)	44	96.7	14.3	39.0	6.1	907
6-8	8.2	54.7	6.4	461	*	*	*	*	21	97.3	8.2	54.1	6.3	482
9-11	21.7	21.8	5.6	402	*	*	*	*	22	95.9	21.2	21.8	5.7	425
12-17	33.5	25.7	10.0	838	31.9	26.7	35.8	16.1	188	87.5	32.3	27.5	11.1	1,026
18-23	34.9	32.5	12.5	269	22.2	24.4	28.5	9.0	421	52.6	28.5	30.1	10.4	689
Sex														
Male	23.7	32.2	7.7	993	24.5	21.8	30.4	9.6	326	81.3	23.2	31.7	8.1	1,319
Female	27.1	33.1	9.6	977	26.7	26.5	31.1	12.1	326	81.7	27.0	32.6	10.2	1,303
Residence														
Urban	25.3	37.1	9.9	614	41.8	32.0	43.8	17.3	289	81.4	27.5	39.3	12.3	903
Rural	25.4	30.6	8.0	1,356	12.7	17.8	20.4	5.7	363	81.6	23.8	28.4	7.6	1,719
Province														
Eastern	12.8	29.1	4.6	445	10.3	5.6	13.4	2.8	128	80.0	11.2	25.6	4.2	573
Northern	24.7	23.7	6.2	427	14.1	24.6	13.9	9.1	91	85.0	24.7	21.9	6.7	517
North West	31.5	30.3	10.7	376	15.1	21.8	23.7	5.4	115	80.1	29.2	28.8	9.5	491
Southern	30.7	42.3	11.9	403	19.4	26.7	32.6	10.6	155	77.6	29.6	39.6	11.6	557
Western Area	29.9	40.0	10.8	319	57.2	37.5	56.8	22.2	164	85.5	32.5	45.7	14.7	483
District														
Kailahun	15.2	27.9	4.1	105	*	*	*	*	17	87.1	13.7	24.7	3.6	122
Kenema	6.9	32.5	2.2	206	10.1	3.0	14.2	1.7	75	76.1	5.8	27.6	2.0	280
Kono	20.2	24.8	8.7	134	(13.0)	(11.4)	(16.0)	(6.4)	37	81.2	18.3	22.9	8.2	171
Bombali	14.7	24.2	4.2	164	(22.8)	(31.8)	(20.4)	(15.2)	35	86.3	17.8	23.5	6.2	200
Falaba	31.3	17.3	6.2	51	*	*	*	*	10	84.7	27.9	16.2	5.2	61
Koinadugu	38.2	17.1	6.0	71	*	*	*	*	9	93.3	41.2	19.6	9.0	79
Tonkolili	27.2	28.7	8.5	140	(2.4)	(11.8)	(2.4)	(0.0)	37	79.8	24.0	23.2	6.7	177
Kambia	49.0	32.8	17.5	119	(6.5)	(22.5)	(18.9)	(3.8)	44	75.0	41.9	29.1	13.8	163
Karene	14.1	27.3	8.7	80	(25.9)	(14.9)	(30.1)	(6.8)	23	83.5	14.3	27.9	8.3	103
Port Loko	27.6	30.0	7.1	177	(17.8)	(24.4)	(24.9)	(6.2)	49	82.2	26.9	28.9	6.9	226
Bo	20.6	42.6	10.3	156	16.7	19.9	25.4	9.1	57	77.6	20.5	37.9	10.0	213
Bonthe	48.5	62.4	25.2	80	(14.5)	(29.6)	(43.2)	(5.0)	30	76.7	43.4	57.2	19.7	109
Moyamba	31.6	29.9	6.8	101	(12.5)	(26.4)	(17.3)	(2.9)	36	76.9	30.2	26.6	5.8	138
Pujehun	31.3	36.6	7.6	66	(37.2)	(36.7)	(53.5)	(27.8)	31	79.9	33.0	42.0	14.1	97
Western Area Rural	32.9	35.5	11.0	127	38.3	37.9	44.1	15.6	76	76.9	34.8	38.7	12.8	204
Western Area Urban	27.9	43.0	10.7	192	73.6	37.2	67.9	28.0	87	91.7	30.8	50.8	16.1	279

Continued...

Table 11.7—*Continued*

Background characteristic	Among breastfed children age 6-23 months, percentage fed:				Among nonbreastfed children age 6-23 months, percentage fed:					Among all children age 6-23 months, percentage fed:				
	Minimum dietary diversity[1]	Minimum meal frequency[2]	Minimum acceptable diet[3]	Number of breastfed children age 6-23 months	Minimum milk feeding frequency[4]	Minimum dietary diversity[1]	Minimum meal frequency[5]	Minimum acceptable diet[6]	Number of nonbreastfed children age 6-23 months	Breast milk, milk, or milk products[7]	Minimum dietary diversity[1]	Minimum meal frequency[8]	Minimum acceptable diet[9]	Number of all children age 6-23 months
Mother's education														
No education	25.7	28.8	7.7	1,081	12.8	17.4	17.9	5.1	293	81.4	23.9	26.5	7.2	1,374
Primary	22.2	31.8	7.2	331	26.5	23.1	36.1	10.4	99	83.1	22.4	32.8	8.0	430
Secondary	25.6	40.1	10.9	517	34.3	29.2	38.9	15.4	225	80.0	26.7	39.7	12.3	742
More than secondary	(39.6)	(44.2)	(15.3)	41	(74.3)	(50.3)	(69.5)	(30.9)	35	88.1	44.6	55.9	22.5	76
Wealth quintile														
Lowest	22.4	32.2	6.7	472	7.5	10.8	16.4	4.1	144	78.4	19.7	28.5	6.1	616
Second	26.8	30.3	8.8	474	11.5	18.7	17.2	4.1	99	84.7	25.4	28.1	8.0	573
Middle	26.4	27.9	9.2	416	12.3	19.6	19.1	5.3	117	80.8	24.9	25.9	8.3	533
Fourth	24.5	34.1	7.9	343	33.5	39.8	37.1	19.9	147	80.1	29.1	35.0	11.5	489
Highest	27.8	43.1	11.7	265	55.8	28.7	57.0	17.5	146	84.3	28.1	48.0	13.8	411
Total	25.4	32.6	8.6	1,970	25.6	24.1	30.7	10.9	652	81.5	25.1	32.2	9.2	2,622

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

[1] Children received foods from five or more of the following eight food groups: a. breast milk; b. infant formula, milk other than breast milk, cheese or yogurt or other milk products; c. foods made from grains, roots, and tubers, including porridge and fortified baby food from grains; d. vitamin A-rich fruits and vegetables; e. other fruits and vegetables; f. eggs; g. meat, poultry, fish, and shellfish (and organ meats); h. legumes and nuts.

[2] For breastfed children, minimum meal frequency is receiving solid, semisolid, or soft food at least twice a day for infants age 6-8 months and at least three times a day for children age 9-23 months.

[3] Breastfed children age 6-23 months are considered to be fed a minimum acceptable diet if they are fed the minimum dietary diversity as described in footnote 1 and the minimum meal frequency as defined in footnote 2.

[4] Includes two or more feedings of commercial infant formula; fresh, tinned, and powdered animal milk; and yogurt

[5] For nonbreastfed children age 6-23 months, minimum meal frequency is receiving solid, semisolid, or soft food or milk feeds at least four times a day. At least one of the feeds must be a solid, semisolid, or soft feed.

[6] Nonbreastfed children age 6-23 months are considered to be fed a minimum acceptable diet if they receive other milk or milk products at least twice a day, receive the minimum meal frequency as defined in footnote 5, and receive solid, semisolid, or soft foods from at least four food groups not including the milk or milk products food group.

[7] Breastfeeding, or not breastfeeding and receiving two or more feedings of commercial infant formula; fresh, tinned, and powdered animal milk; and yogurt

[8] Children are fed the minimum recommended number of times per day according to their age and breastfeeding status as described in footnotes 2 and 5.

[9] Children age 6-23 months are considered to be fed a minimum acceptable diet if they receive breast milk, receive other milk or milk products as described in footnote 7, are fed the minimum dietary diversity as described in footnote 1, and are fed the minimum meal frequency as described in footnotes 2 and 5.

Table 11.8 Prevalence of anaemia in children

Percentage of children age 6-59 months classified as having anaemia, according to background characteristics, Sierra Leone DHS 2019

Background characteristic	Anaemia status by haemoglobin level				
	Any anaemia (<11.0 g/dl)	Mild anaemia (10.0-10.9 g/dl)	Moderate anaemia (7.0-9.9 g/dl)	Severe anaemia (<7.0 g/dl)	Number of children age 6-59 months
Age in months					
6-8	79.2	31.8	46.3	1.1	262
9-11	72.8	29.7	38.6	4.6	210
12-17	79.0	34.1	41.2	3.7	536
18-23	74.0	27.8	42.6	3.6	366
24-35	67.6	28.2	35.3	4.2	902
36-47	63.4	31.3	30.0	2.1	967
48-59	59.7	27.9	30.6	1.2	980
Sex					
Male	71.1	29.3	38.4	3.4	2,129
Female	64.5	30.4	32.0	2.0	2,094
Mother's interview status					
Interviewed	68.8	30.3	35.8	2.8	3,428
Not interviewed but in household	66.4	24.2	40.1	2.1	60
Not interviewed and not in the household[1]	63.2	28.3	32.3	2.6	736
Residence					
Urban	57.0	29.0	26.5	1.5	1,438
Rural	73.3	30.3	39.7	3.3	2,785
Province					
Eastern	67.6	30.6	33.5	3.5	1,005
Northern	72.0	33.6	36.1	2.3	916
North West	75.5	28.0	43.9	3.7	602
Southern	68.7	29.9	36.3	2.4	992
Western Area	54.9	25.6	27.6	1.7	709
District					
Kailahun	54.9	26.2	26.6	2.1	239
Kenema	73.4	29.2	39.0	5.1	483
Kono	68.4	36.6	29.8	2.0	283
Bombali	67.8	35.1	31.6	1.0	339
Falaba	82.9	18.8	54.4	9.7	112
Koinadugu	75.6	36.0	38.1	1.5	100
Tonkolili	71.6	36.0	34.1	1.5	365
Kambia	71.6	26.0	43.1	2.5	180
Karene	75.0	33.0	39.6	2.4	121
Port Loko	78.0	27.1	46.1	4.8	300
Bo	65.0	30.8	32.6	1.7	387
Bonthe	62.5	38.2	23.1	1.2	163
Moyamba	71.3	25.7	42.5	3.2	256
Pujehun	78.0	26.5	47.3	4.2	185
Western Area Rural	59.8	25.8	31.9	2.1	288
Western Area Urban	51.5	25.5	24.7	1.4	421
Mother's education[2]					
No education	72.9	31.9	37.4	3.6	1,892
Primary	68.3	27.6	39.0	1.6	581
Secondary	62.2	28.4	31.8	1.9	916
More than secondary	53.9	29.4	23.0	1.5	99
Wealth quintile					
Lowest	73.0	30.6	38.7	3.7	1,065
Second	74.8	30.5	41.3	2.9	939
Middle	70.3	29.2	37.7	3.3	858
Fourth	62.7	31.4	30.0	1.3	750
Highest	50.9	26.5	22.8	1.5	612
Total	67.8	29.9	35.2	2.7	4,223

Note: Table is based on children who stayed in the household on the night before the interview and who were tested for anaemia. Prevalence of anaemia, based on haemoglobin levels, is adjusted for altitude using formulas in CDC 1998. Haemoglobin is in grams per decilitre (g/dl).

[1] Includes children whose mothers are deceased

[2] For women who are not interviewed, information is taken from the Household Questionnaire. Excludes children whose mothers are not listed in the Household Questionnaire.

Table 11.9 Presence of iodised salt in household

Among all households, percentage with salt tested for iodine content, percentage with salt in the household but the salt was not tested, and percentage with no salt in the household, and among households with salt tested, percentage with iodised salt, according to background characteristics, Sierra Leone DHS 2019

Background characteristic	Among all households, percentage				Among households with tested salt:	
	With salt tested	With salt, but salt not tested[1]	With no salt in the household	Number of households	Percentage with iodised salt	Number of households
Residence						
Urban	87.0	1.6	11.4	5,680	92.8	4,942
Rural	93.4	0.5	6.1	7,719	87.6	7,210
Province						
Eastern	94.4	0.0	5.6	2,852	97.2	2,694
Northern	89.5	1.5	8.9	2,568	90.9	2,299
North West	89.1	3.6	7.4	2,195	65.6	1,956
Southern	95.5	0.2	4.3	2,641	95.3	2,522
Western Area	85.3	0.2	14.5	3,142	93.6	2,681
District						
Kailahun	86.7	0.0	13.3	771	89.9	668
Kenema	95.8	0.0	4.2	1,220	99.4	1,169
Kono	99.5	0.0	0.5	861	99.9	857
Bombali	91.2	3.9	5.0	947	84.9	863
Falaba	87.3	0.0	12.7	296	78.6	258
Koinadugu	94.8	0.0	5.2	347	95.5	329
Tonkolili	86.7	0.3	13.0	979	99.0	849
Kambia	96.4	0.1	3.4	662	44.6	638
Karene	90.3	3.8	5.9	460	66.2	415
Port Loko	84.0	5.6	10.4	1,074	80.2	902
Bo	93.1	0.1	6.7	1,073	98.8	999
Bonthe	95.9	0.1	4.0	434	98.5	416
Moyamba	97.1	0.4	2.6	646	84.6	627
Pujehun	98.3	0.0	1.7	489	99.3	480
Western Area Rural	91.1	0.1	8.9	1,139	95.4	1,037
Western Area Urban	82.1	0.3	17.7	2,003	92.5	1,643
Wealth quintile						
Lowest	93.1	0.6	6.3	2,879	88.5	2,680
Second	92.9	0.5	6.6	2,568	86.8	2,385
Middle	93.6	0.4	5.9	2,461	87.2	2,304
Fourth	87.3	2.1	10.6	2,704	92.1	2,362
Highest	86.9	1.1	12.0	2,787	94.1	2,421
Total	90.7	1.0	8.4	13,399	89.7	12,152

[1] Includes households in which salt could not be tested for technical or logistical reasons, including availability of test kits

Table 11.10 Micronutrient intake among children

Among youngest children age 6-23 months who are living with their mother, percentages who consumed vitamin A-rich and iron-rich foods in the 24 hours preceding the survey; among all children age 6-59 months, percentages who were given vitamin A supplements in the 6 months preceding the survey, iron supplements in the 7 days preceding the survey, and deworming medication in the 6 months preceding the survey; and among all children age 6-59 months who live in households in which salt was tested for iodine, percentage who live in households with iodised salt, according to background characteristics, Sierra Leone DHS 2019

	Among youngest children age 6-23 months living with their mother:			Among all children age 6-59 months:				Among children age 6-59 months living in households tested for iodised salt	
Background characteristic	Percentage who consumed foods rich in vitamin A in last 24 hours[1]	Percentage who consumed foods rich in iron in last 24 hours[2]	Number of children	Percentage given iron supplements in past 7 days[3]	Percentage given vitamin A supplements in past 6 months[4]	Percentage given deworming medication in past 6 months[3,5]	Number of children	Percentage living in households with iodised salt[6]	Number of children
Age in months									
6-8	21.9	16.5	482	50.4	72.4	25.3	505	88.1	482
9-11	44.5	36.6	425	55.1	83.4	40.7	440	89.8	417
12-17	73.7	63.6	1,026	61.1	76.6	64.0	1,070	86.1	1,016
18-23	84.5	74.2	689	57.2	71.4	70.8	768	89.2	745
24-35	na	na	na	52.5	69.0	70.2	1,666	90.1	1,595
36-47	na	na	na	47.9	64.4	68.0	1,738	89.0	1,668
48-59	na	na	na	47.9	65.1	70.0	1,694	89.4	1,595
Sex									
Male	62.2	52.6	1,319	52.1	69.0	63.7	3,954	88.0	3,765
Female	62.3	54.2	1,303	52.2	69.9	65.0	3,927	89.8	3,754
Breastfeeding status									
Breastfeeding	56.0	47.2	1,970	56.6	76.8	51.3	2,205	87.2	2,099
Not breastfeeding	81.1	72.1	652	50.4	66.6	69.4	5,676	89.6	5,420
Mother's age									
15-19	59.8	50.3	260	53.9	70.5	58.0	449	86.3	420
20-29	61.9	53.0	1,332	52.6	70.3	64.9	3,913	89.4	3,748
30-39	63.5	55.2	870	52.6	68.6	64.1	2,826	88.7	2,687
40-49	62.5	51.4	160	46.7	67.3	66.7	693	89.2	664
Residence									
Urban	60.6	50.5	903	53.3	70.4	66.8	2,780	92.7	2,631
Rural	63.2	54.9	1,719	51.5	68.9	63.0	5,101	86.9	4,888
Province									
Eastern	47.7	39.3	573	49.3	68.6	61.8	1,681	98.3	1,632
Northern	63.6	56.2	517	49.1	71.5	65.2	1,555	89.8	1,442
North West	74.6	65.2	491	48.6	64.4	60.8	1,485	64.1	1,393
Southern	62.7	56.1	557	60.3	73.2	65.4	1,708	95.1	1,674
Western Area	65.1	52.0	483	52.7	68.9	68.8	1,453	94.7	1,379

Continued...

Table 11.10—*Continued*

Background characteristic	Among youngest children age 6-23 months living with their mother:			Among all children age 6-59 months:				Among children age 6-59 months living in households tested for iodised salt	
	Percentage who consumed foods rich in vitamin A in last 24 hours[1]	Percentage who consumed foods rich in iron in last 24 hours[2]	Number of children	Percentage given iron supplements in past 7 days[3]	Percentage given vitamin A supplements in past 6 months[4]	Percentage given deworming medication in past 6 months[3,5]	Number of children	Percentage living in households with iodised salt[6]	Number of children
District									
Kailahun	46.6	33.7	122	43.1	55.8	42.3	374	92.6	352
Kenema	43.3	37.9	280	64.0	72.0	64.8	829	99.7	805
Kono	55.8	45.4	171	28.6	72.7	72.0	477	100.0	475
Bombali	60.8	57.2	200	52.8	68.7	57.2	519	80.3	493
Falaba	62.9	45.5	61	35.6	56.8	41.9	209	85.1	187
Koinadugu	69.2	56.4	79	58.5	78.8	75.3	242	94.2	238
Tonkolili	64.4	58.7	177	46.7	76.3	76.5	585	98.3	524
Kambia	79.1	72.0	163	48.7	75.7	63.7	514	44.3	505
Karene	72.5	56.4	103	50.2	57.1	58.4	297	65.4	281
Port Loko	72.4	64.2	226	47.9	59.0	59.6	674	80.0	607
Bo	62.5	56.0	213	55.2	70.3	65.0	635	99.4	612
Bonthe	61.1	49.6	109	57.0	63.6	44.4	324	98.6	318
Moyamba	67.3	62.1	138	70.0	84.1	88.4	449	83.7	449
Pujehun	58.1	55.1	97	60.1	73.7	54.5	299	99.5	295
Western Area Rural	70.0	58.6	204	46.7	56.2	66.0	620	95.9	598
Western Area Urban	61.6	47.1	279	57.1	78.3	70.9	833	93.8	781
Mother's education									
No education	61.7	52.8	1,374	49.8	67.8	63.0	4,315	86.9	4,110
Primary	63.3	55.6	430	52.8	68.2	62.2	1,159	89.4	1,106
Secondary	61.8	51.9	742	54.7	72.0	66.9	2,183	91.9	2,091
More than secondary	71.9	66.7	76	67.8	82.3	78.0	224	96.8	213
Wealth quintile									
Lowest	62.2	53.5	616	50.1	66.9	62.1	1,827	89.7	1,732
Second	62.8	54.6	573	51.3	69.1	62.3	1,753	85.1	1,669
Middle	63.6	54.8	533	50.6	69.7	63.8	1,618	86.1	1,579
Fourth	60.5	53.3	489	52.0	67.2	65.8	1,455	92.0	1,374
Highest	61.9	49.7	411	58.6	76.0	69.9	1,228	93.7	1,165
Total	62.3	53.4	2,622	52.1	69.4	64.4	7,881	88.9	7,520

na = Not applicable
[1] Includes meat (and organ meat), fish, poultry, eggs, pumpkin, red or yellow yams or squash, carrots, red sweet potatoes, dark green leafy vegetables, ripe mango, ripe papaya, and other locally grown fruits and vegetables that are rich in vitamin A
[2] Includes meat (and organ meat), fish, poultry, and eggs
[3] Based on mother's recall
[4] Based on both mother's recall and the vaccination card (where available)
[5] Deworming for intestinal parasites is commonly done for helminthes and for schistosomiasis.
[6] Excludes children in households in which salt was not tested

Table 11.11 Nutritional status of women

Among women age 15-49, percentage with height under 145 cm, mean body mass index (BMI), and percentage with specific BMI levels, according to background characteristics, Sierra Leone DHS 2019

	Height		Body mass index[1]								
Background characteristic	Percentage below 145 cm	Number of women	Mean body mass index (BMI)	18.5-24.9 (total normal)	<18.5 (total thin)	17.0-18.4 (mildly thin)	<17 (moderately and severely thin)	≥25.0 (total overweight or obese)	25.0-29.9 (overweight)	≥30.0 (obese)	Number of women
Age											
15-19	1.6	1,612	21.5	74.4	13.9	11.3	2.5	11.7	9.8	1.9	1,513
20-29	1.0	2,586	23.3	68.6	4.7	4.1	0.6	26.7	20.7	6.0	2,254
30-39	1.4	2,020	24.3	60.3	4.6	3.5	1.1	35.1	24.1	11.0	1,849
40-49	0.9	1,303	24.7	56.0	5.5	4.3	1.2	38.4	23.3	15.1	1,266
Residence											
Urban	0.6	3,431	24.3	59.1	5.3	4.3	0.9	35.7	23.7	12.0	3,226
Rural	1.7	4,090	22.7	70.8	8.3	6.7	1.6	20.9	16.2	4.7	3,657
Province											
Eastern	1.3	1,641	23.1	68.0	6.8	5.7	1.1	25.3	18.6	6.7	1,488
Northern	1.5	1,570	22.6	71.6	9.0	7.6	1.4	19.4	14.9	4.5	1,434
North West	1.0	1,025	22.8	70.9	7.6	6.2	1.4	21.5	15.6	5.9	909
Southern	2.1	1,519	23.4	64.0	7.7	6.0	1.6	28.4	20.7	7.7	1,376
Western Area	0.4	1,765	24.9	55.7	4.0	3.0	1.1	40.3	26.3	14.0	1,676
District											
Kailahun	2.2	369	22.8	67.9	7.6	7.1	0.5	24.5	20.0	4.5	336
Kenema	1.0	781	22.9	68.2	8.0	6.3	1.7	23.8	17.1	6.7	711
Kono	1.0	491	23.7	67.6	4.1	3.6	0.6	28.3	19.8	8.5	441
Bombali	1.2	583	22.9	67.0	9.9	9.2	0.7	23.2	18.8	4.4	534
Falaba	0.2	199	20.9	75.1	17.8	13.9	3.9	7.1	6.0	1.1	191
Koinadugu	1.2	191	23.0	69.3	6.8	5.6	1.2	23.9	18.4	5.4	173
Tonkolili	2.2	597	22.7	75.8	5.7	4.6	1.2	18.5	13.1	5.5	536
Kambia	0.7	317	23.1	66.5	7.8	7.5	0.4	25.7	19.8	5.9	281
Karene	0.6	183	22.4	72.9	8.9	8.1	0.8	18.2	12.3	5.9	160
Port Loko	1.2	525	22.9	72.9	7.1	4.8	2.3	20.0	14.2	5.8	469
Bo	1.7	683	23.4	62.4	8.7	6.7	2.0	28.9	20.3	8.6	626
Bonthe	2.1	240	23.1	65.8	7.8	5.9	1.9	26.4	21.3	5.1	216
Moyamba	2.6	357	23.4	66.6	7.3	6.3	1.1	26.1	18.6	7.5	319
Pujehun	2.5	239	23.7	62.8	4.9	3.6	1.3	32.3	24.3	8.0	214
Western Area Rural	0.4	627	24.7	57.7	4.2	3.0	1.2	38.1	24.0	14.0	599
Western Area Urban	0.3	1,138	25.0	54.5	3.9	3.0	1.0	41.5	27.5	14.0	1,077
Education											
No education	1.5	3,378	23.6	65.9	5.7	4.4	1.2	28.4	19.8	8.6	3,060
Primary	2.1	1,048	22.8	66.4	10.4	8.5	1.9	23.2	18.0	5.3	943
Secondary	0.7	2,771	23.2	66.6	7.4	6.2	1.1	26.0	19.2	6.8	2,574
More than secondary	0.0	324	26.4	45.4	3.4	2.1	1.2	51.3	28.2	23.1	304
Wealth quintile											
Lowest	2.7	1,368	22.5	74.7	7.6	6.5	1.1	17.7	14.4	3.3	1,196
Second	1.4	1,371	22.3	73.5	9.2	7.6	1.5	17.3	14.1	3.3	1,226
Middle	1.1	1,427	23.0	67.6	8.3	6.0	2.3	24.1	18.3	5.8	1,306
Fourth	0.9	1,632	23.9	61.7	6.0	5.0	1.0	32.3	22.0	10.2	1,524
Highest	0.4	1,724	25.1	53.8	4.3	3.5	0.7	41.9	26.8	15.1	1,632
Total	1.2	7,522	23.5	65.3	6.9	5.6	1.3	27.8	19.7	8.1	6,882

Note: The body mass index (BMI) is expressed as the ratio of weight in kilograms to the square of height in meters (kg/m^2).
[1] Excludes pregnant women and women with a birth in the preceding 2 months

Table 11.12 Prevalence of anaemia in women

Percentage of women age 15-49 with anaemia, according to background characteristics, Sierra Leone DHS 2019

Background characteristic	Anaemia status by haemoglobin level: Any (NP <12.0 g/dl/ P <11.0 g/dl)	Mild (NP 11.0-11.9 g/dl/ P 10.0-10.9 g/dl)	Moderate (NP 8.0-10.9 g/dl/ P 7.0-9.9 g/dl)	Severe (NP <8.0 g/dl/ P <7.0 g/dl)	Number of women
Age					
15-19	49.4	21.9	25.4	2.1	1,568
20-29	46.6	24.9	20.4	1.3	2,490
30-39	45.3	22.7	21.7	0.9	1,947
40-49	44.4	21.0	21.1	2.2	1,262
Number of children ever born					
0	45.6	21.5	22.2	2.0	1,862
1	45.0	21.1	22.8	1.1	1,161
2-3	47.8	26.3	20.2	1.3	1,908
4-5	47.6	22.3	23.6	1.8	1,323
6+	45.7	22.4	21.8	1.5	1,012
Maternity status					
Pregnant	55.7	22.8	31.8	1.1	439
Breastfeeding	52.9	23.7	27.5	1.7	1,535
Neither	43.8	22.8	19.5	1.5	5,293
Using IUD					
Yes	(41.3)	(23.8)	(17.4)	(0.0)	29
No	46.5	23.0	22.0	1.6	7,237
Cigarette use[1]					
Smokes cigarettes	39.1	16.5	19.8	2.7	240
Does not smoke cigarettes	46.7	23.2	22.0	1.5	7,026
Residence					
Urban	40.4	21.1	17.9	1.3	3,320
Rural	51.6	24.5	25.3	1.8	3,946
Province					
Eastern	45.7	20.2	23.8	1.7	1,614
Northern	48.6	25.4	21.3	1.9	1,503
North West	51.7	25.2	25.3	1.2	960
Southern	48.9	23.6	24.2	1.1	1,483
Western Area	40.3	21.7	16.9	1.7	1,706
District					
Kailahun	42.2	19.5	21.8	0.8	368
Kenema	50.6	20.1	27.8	2.8	783
Kono	40.0	20.8	18.7	0.6	463
Bombali	42.6	22.8	16.4	3.5	564
Falaba	60.3	28.1	31.7	0.5	174
Koinadugu	48.0	19.2	26.2	2.7	179
Tonkolili	51.2	29.1	21.5	0.6	586
Kambia	47.9	25.3	21.8	0.9	280
Karene	50.0	25.1	23.1	1.8	174
Port Loko	54.4	25.1	28.1	1.2	505
Bo	45.8	20.9	23.6	1.2	670
Bonthe	47.4	24.8	21.2	1.4	225
Moyamba	49.8	25.4	23.7	0.7	351
Pujehun	57.6	27.0	29.4	1.2	238
Western Area Rural	47.3	24.3	22.0	1.1	594
Western Area Urban	36.5	20.3	14.2	2.0	1,113
Education					
No education	49.3	23.0	24.6	1.6	3,244
Primary	50.8	23.6	25.4	1.8	1,030
Secondary	43.3	23.2	18.7	1.5	2,684
More than secondary	29.7	18.1	10.6	1.0	308
Wealth quintile					
Lowest	50.5	25.3	23.0	2.2	1,326
Second	53.4	23.5	28.1	1.8	1,314
Middle	50.0	24.3	24.4	1.2	1,376
Fourth	43.9	22.2	20.9	0.9	1,582
Highest	37.3	20.3	15.3	1.7	1,668
Total	46.5	23.0	22.0	1.6	7,266

Note: Prevalence is adjusted for altitude and for smoking status if known using formulas in CDC 1998. Figures in parentheses are based on 25-49 unweighted cases.

[1] Includes manufactured cigarettes and hand-rolled cigarettes

Table 11.13 Micronutrient intake among mothers

Among women age 15-49 with a child born in the 5 years preceding the survey, percent distribution by number of days they took iron tablets or syrup during the pregnancy of the last child and percentage who took deworming medication during the pregnancy of the last child, and among women age 15-49 with a child born in the 5 years preceding the survey who live in households that were tested for iodised salt, percentage who live in households with iodised salt, according to background characteristics, Sierra Leone DHS 2019

Background characteristic	Number of days women took iron tablets or syrup during pregnancy of last birth						Percentage of women who took deworming medication during pregnancy of last birth	Number of women	Among women with a child born in the past 5 years who live in households in which salt was tested:	
	None	<60	60-89	90+	Don't know/ missing	Total			Percentage living in households with iodised salt[1]	Number of women
Age										
15-19	3.9	41.1	3.8	22.9	28.3	100.0	82.5	598	87.5	562
20-29	3.6	39.7	3.8	28.3	24.6	100.0	83.4	3,521	89.6	3,360
30-39	4.7	37.8	4.9	28.3	24.3	100.0	83.7	2,543	88.9	2,421
40-49	5.8	40.4	6.1	26.3	21.4	100.0	84.8	664	88.4	635
Residence										
Urban	3.1	34.3	4.0	27.0	31.6	100.0	86.9	2,795	93.1	2,639
Rural	4.9	42.3	4.6	28.1	20.1	100.0	81.4	4,531	86.6	4,339
Province										
Eastern	8.3	47.1	3.3	28.5	12.9	100.0	77.6	1,542	98.1	1,498
Northern	3.4	48.7	3.1	21.4	23.4	100.0	83.4	1,433	90.5	1,325
North West	3.1	32.5	6.4	39.0	19.0	100.0	79.4	1,380	64.5	1,288
Southern	3.2	42.8	5.0	24.7	24.3	100.0	87.7	1,492	95.1	1,464
Western Area	2.6	24.7	4.3	25.4	43.0	100.0	89.4	1,479	94.5	1,403
District										
Kailahun	12.9	47.6	5.0	32.5	2.0	100.0	60.5	354	92.1	333
Kenema	4.4	60.9	3.3	27.9	3.6	100.0	77.6	736	99.7	716
Kono	11.0	24.1	1.9	26.3	36.8	100.0	91.1	451	100.0	449
Bombali	3.5	57.6	4.8	25.1	9.0	100.0	86.3	483	81.7	457
Falaba	3.7	73.5	3.4	5.0	14.4	100.0	81.9	181	86.4	161
Koinadugu	2.8	48.2	6.7	38.8	3.4	100.0	79.1	218	93.7	213
Tonkolili	3.5	32.9	0.1	16.6	46.9	100.0	83.1	551	98.5	493
Kambia	2.3	42.5	3.3	16.5	35.3	100.0	80.4	485	43.7	476
Karene	6.4	53.2	8.3	10.6	21.5	100.0	77.9	270	66.5	255
Port Loko	2.3	15.7	7.9	68.8	5.2	100.0	79.2	625	81.3	557
Bo	2.6	45.1	3.3	27.3	21.7	100.0	88.1	573	98.8	555
Bonthe	2.7	38.3	1.8	1.1	56.0	100.0	97.0	266	98.8	260
Moyamba	4.2	16.8	10.0	48.8	20.2	100.0	90.3	402	84.7	401
Pujehun	3.6	84.0	4.2	4.9	3.3	100.0	72.5	251	99.5	249
Western Area Rural	1.6	27.6	7.8	14.2	48.8	100.0	89.4	631	95.7	610
Western Area Urban	3.4	22.5	1.7	33.7	38.7	100.0	89.5	847	93.6	793
Education										
No education	5.3	41.3	4.6	25.6	23.2	100.0	82.2	3,857	86.8	3,667
Primary	4.1	41.1	4.9	28.3	21.5	100.0	82.1	1,033	88.9	983
Secondary	2.6	35.6	3.8	29.7	28.3	100.0	85.8	2,214	92.4	2,118
More than secondary	1.4	30.8	4.6	39.9	23.2	100.0	90.6	221	96.1	210
Wealth quintile										
Lowest	5.6	41.3	5.1	26.4	21.6	100.0	81.3	1,587	88.7	1,506
Second	5.1	43.5	4.2	28.8	18.3	100.0	81.3	1,551	85.4	1,473
Middle	4.5	42.7	4.8	27.7	20.3	100.0	80.7	1,487	86.1	1,449
Fourth	2.9	36.9	5.1	21.8	33.3	100.0	86.0	1,441	92.5	1,358
Highest	2.5	29.9	2.4	34.5	30.7	100.0	89.6	1,259	93.9	1,191
Total	4.2	39.2	4.4	27.7	24.5	100.0	83.5	7,326	89.1	6,978

[1] Excludes women in households where salt was not tested

Table 11.14 Foods and liquids consumed by mothers in the day or night preceding the interview

Percentage of women age 15-49 by type of foods consumed in the day or night preceding the interview, according to background characteristics, Sierra Leone DHS 2019

	Solid or semisolid foods																				
Background characteristic	Foods made of grains, white tubers and roots, or other starchy foods	Food made from legumes	Food made from nuts and seeds	Milk, cheese, yogurt, other milk products	Meat, fish, poultry	Eggs	Dark green leafy vege-tables	Fruits and vege-tables rich in vitamin A[1]	Other vege-tables	Other fruits	Insects and other small protein foods	Red palm oil	Oil and fat	Savoury and fried snacks	Sugary foods[2]	Sugar-sweet-ened bever-ages	Any condi-ments and season-ings	Any other bever-ages and foods[3]	Consume d ≥5 food groups[4]	Mean number of food groups	Number of women
Age																					
15-19	96.1	22.2	29.8	20.0	89.9	18.7	72.1	62.2	64.5	29.2	6.7	83.4	34.3	16.9	18.9	22.4	64.2	35.8	58.6	5.0	3,427
20-29	95.3	23.1	27.4	19.2	88.6	18.4	68.3	62.7	62.9	28.7	7.1	81.7	35.2	16.0	15.6	22.3	64.0	36.1	54.5	4.9	5,356
30-39	96.2	23.1	30.8	15.1	88.9	17.6	70.2	62.5	63.9	29.2	7.1	83.7	31.3	13.4	13.1	18.8	66.2	38.9	55.9	5.0	4,166
40-49	96.4	22.1	30.7	15.4	90.4	16.9	71.9	62.7	66.0	31.7	6.4	84.6	29.9	12.2	11.5	17.8	67.2	40.9	58.3	5.0	2,624
Residence																					
Urban	93.0	25.5	27.0	26.6	88.4	22.6	63.9	62.8	62.8	28.4	8.0	76.4	40.8	18.7	20.3	29.2	61.0	36.0	56.2	5.0	7,163
Rural	98.3	20.3	31.4	10.0	90.0	14.1	75.7	62.2	65.1	30.3	6.0	88.8	26.5	11.6	10.4	13.3	68.7	39.0	56.6	5.0	8,411
Province																					
Eastern	99.2	23.1	29.3	10.8	94.9	11.7	68.9	49.9	58.7	42.6	4.1	84.6	22.2	9.3	12.8	10.7	72.6	45.4	53.7	4.9	3,069
Northern	98.0	24.5	28.5	17.2	87.3	19.6	82.5	66.5	75.4	29.5	6.2	91.5	41.4	11.8	14.2	24.2	62.1	48.8	62.3	5.3	3,317
North West	98.7	15.5	31.7	7.7	93.2	11.0	75.1	69.5	64.5	17.3	1.0	86.8	24.3	14.8	7.3	10.4	85.0	23.3	58.9	4.8	2,508
Southern	97.9	19.6	35.2	14.4	89.9	16.2	75.0	53.9	67.1	29.2	11.9	88.0	30.1	14.8	13.3	14.2	70.7	40.2	55.6	5.0	2,900
Western Area	88.0	28.0	24.3	32.8	83.3	27.8	53.8	71.2	55.7	27.1	9.9	68.3	42.7	22.2	23.8	37.3	44.4	28.9	52.5	4.9	3,780
District																					
Kailahun	98.7	44.0	43.9	3.5	96.2	4.0	82.0	70.7	87.6	60.5	0.5	92.2	12.9	7.3	3.5	2.3	83.2	83.3	77.2	5.9	707
Kenema	99.2	14.4	31.5	12.9	95.5	11.9	55.9	35.0	47.5	32.3	5.9	77.2	29.3	6.6	11.5	12.2	52.1	34.3	43.1	4.4	1,437
Kono	99.4	20.6	14.5	13.0	93.0	17.2	78.9	57.0	53.9	44.8	4.3	90.4	18.2	15.1	22.0	14.8	96.5	33.6	52.1	4.9	925
Bombali	99.3	30.3	32.6	13.6	96.4	17.7	89.5	62.0	81.9	17.2	1.6	95.1	39.2	6.6	8.4	20.4	84.5	55.1	70.0	5.4	1,166
Falaba	97.6	19.3	28.6	28.1	82.5	21.1	87.5	90.7	71.8	39.9	15.7	88.8	59.4	10.9	35.4	40.2	18.7	19.1	71.3	5.7	466
Koinadugu	99.4	34.9	42.6	26.2	95.3	13.0	79.5	79.0	84.4	52.3	9.9	93.5	50.8	22.0	23.3	27.8	95.7	58.4	74.7	6.1	469
Tonkolili	96.3	16.8	19.1	12.9	77.3	23.5	75.1	56.8	67.2	28.4	5.5	88.4	32.9	13.1	8.2	20.4	44.1	50.6	46.7	4.7	1,215
Kambia	99.3	17.6	29.0	7.2	98.0	11.6	79.9	89.6	77.5	22.8	1.3	81.9	37.4	21.6	7.4	9.5	79.9	12.9	77.4	5.3	890
Karene	99.0	14.3	18.3	7.9	82.4	5.4	64.2	51.7	56.5	8.3	2.0	87.2	11.3	7.3	2.4	13.3	84.6	9.8	38.9	4.1	462
Port Loko	98.1	14.5	39.2	8.0	93.7	12.7	75.7	61.1	57.7	16.7	0.3	90.4	19.4	12.5	9.2	9.9	89.1	36.6	52.7	4.8	1,157
Bo	99.6	11.1	26.2	5.0	96.9	7.4	79.9	56.5	77.2	21.9	1.9	86.5	22.7	14.1	9.6	7.8	84.8	49.8	57.9	4.8	1,250
Bonthe	93.5	38.4	51.0	25.6	79.3	25.3	63.3	68.8	54.8	40.7	26.0	89.4	48.4	13.1	23.2	31.0	76.3	43.1	61.0	5.4	468
Moyamba	96.8	12.8	37.0	6.5	80.5	9.1	66.1	29.0	58.5	14.3	14.1	92.8	13.9	7.3	2.4	4.0	45.2	16.7	39.0	4.1	726
Pujehun	99.4	34.8	41.1	41.0	96.3	42.7	88.1	71.3	66.0	61.1	21.3	83.1	57.3	30.2	30.7	31.0	66.9	48.4	70.2	6.4	456
Western Area Rural	96.2	36.4	32.6	34.9	82.8	22.4	63.9	77.4	61.7	32.6	8.8	71.1	48.3	23.7	30.0	42.2	44.3	29.3	65.3	5.4	1,407
Western Area Urban	83.1	23.0	19.4	31.5	83.6	31.0	47.8	67.6	52.1	23.7	10.6	66.7	39.4	21.3	20.1	34.4	44.4	28.7	44.9	4.6	2,373

Continued...

Table 11.14—*Continued*

Background characteristic	Solid or semisolid foods																				
	Foods made of grains, white tubers and roots, or other starchy foods	Food made from legumes	Food made from nuts and seeds	Milk, cheese, yogurt, other milk products	Meat, fish, poultry	Eggs	Dark green leafy vege-tables	Fruits and vege-tables rich in vitamin A[1]	Other vege-tables	Other fruits	Insects and other small protein foods	Red palm oil	Oil and fat	Savoury and fried snacks	Sugary foods[2]	Sugar-sweet-ened bever-ages	Any condi-ments and season-ings	Any other bever-ages and foods[3]	Consumed ≥5 food groups[4]	Mean number of food groups	Number of women
Education																					
No education	96.8	21.2	29.1	12.9	89.4	15.2	72.9	62.6	62.8	29.5	7.1	85.8	29.4	12.0	11.5	15.5	65.2	37.6	55.2	4.9	7,081
Primary	96.0	24.2	30.8	13.9	88.6	16.3	70.2	62.1	64.5	30.3	5.2	84.0	28.5	15.2	14.1	18.0	67.0	38.2	56.4	5.0	2,103
Secondary	94.8	23.6	29.5	22.7	88.9	20.5	67.7	62.2	64.7	28.4	6.8	79.9	37.7	17.6	18.3	25.3	64.1	37.3	57.1	5.0	5,724
More than secondary	95.2	26.7	28.2	36.4	92.5	32.0	64.2	65.4	70.2	35.7	11.3	79.6	46.1	20.4	26.0	43.3	67.9	38.7	63.7	5.5	666
Wealth quintile																					
Lowest	98.0	19.3	29.4	7.0	87.6	12.4	73.5	57.3	59.5	28.1	6.9	88.1	22.8	10.5	6.6	9.9	62.6	41.5	50.6	4.7	2,738
Second	98.1	21.1	31.8	10.0	90.2	13.8	77.5	65.1	66.1	33.6	5.9	89.6	25.8	11.8	10.3	14.1	69.8	36.6	59.0	5.1	2,831
Middle	98.3	22.4	34.1	11.7	91.7	14.5	76.0	63.1	67.3	31.0	5.7	88.3	29.4	12.5	14.1	14.9	71.4	38.6	60.2	5.1	2,954
Fourth	97.6	26.4	29.7	22.0	89.8	18.0	70.8	62.8	67.4	29.1	6.2	80.4	41.0	18.8	20.4	25.1	68.8	36.2	60.4	5.1	3,385
Highest	89.0	23.3	23.4	32.3	87.3	28.4	57.0	63.8	60.1	26.4	9.3	72.7	41.9	18.8	20.5	34.1	55.1	36.0	52.1	4.9	3,666
Total	95.9	22.7	29.4	17.6	89.3	18.0	70.3	62.5	64.0	29.5	6.9	83.1	33.1	14.9	15.0	20.6	65.2	37.6	56.4	5.0	15,574

[1] Includes squash that is orange inside, pumpkin, carrot, red sweet pepper (tatase), sweet potato that is orange inside (orange flesh sweet potatoes), ripe pawpaw (gwanda/ibeppe/okwuru oru/bobo), ripe mango, ripe passion fruit, dorowa (locust bean fruit), red palm fruit, hog plum (tsadan gida, iyeye, ngulungu), ripe cantaloupe, musk melon, monkey cola (ndiya), and bush mango fruit

[2] Includes chocolates, candies, cakes, sweet biscuits, sweet pastries, and ice cream

[3] Includes coffee or tea if unsweetened, alcohol, clear broth, soup broth, olives, pickled cucumbers, herbal beverages/infusions (zobo), kunun aya, kunun dawa, water, kolanut, and bitter kola

[4] Women who consume foods from 5 or more of the following 10 food groups are considered to have a diet adequate in micronutrients: a) grains, white tubers and roots, or other starchy foods; b) legumes; c) nuts and seeds; d) milk, cheese, yogurt, other milk products; e) meat, fish, poultry; f) eggs; g) dark green leafy vegetables; h) fruits and vegetables rich in vitamin A; i) other vegetables; j) other fruits.

HIV/AIDS-RELATED KNOWLEDGE, ATTITUDES, AND BEHAVIOUR

12

Key Findings

- ***Knowledge about HIV transmission and prevention:*** 28% of women and 33% of men have comprehensive knowledge about HIV.
- ***Knowledge of mother-to-child transmission (MTCT) of HIV:*** 65% of women and 52% of men know that HIV can be transmitted during pregnancy, 68% of women and 57% of men know that HIV can be transmitted during delivery, and 72% of women and 60% of men know that HIV can be transmitted through breastfeeding.
- ***Discriminatory attitudes towards people living with HIV:*** 80% of women and 71% of men express discriminatory attitudes towards people living with HIV.
- ***Self-reported prevalence of STIs:*** 22% of women and 14% of men who had ever had sexual intercourse reported having had a sexually transmitted infection (STI) and/or STI symptoms in the 12 months preceding the survey.
- ***Comprehensive knowledge of HIV among young people:*** 29% of young women and 28% of young men age 15-24 have comprehensive knowledge of HIV.

Acquired immunodeficiency syndrome (AIDS) is one of the most serious public health and development challenges facing the world today. AIDS is caused by the human immunodeficiency virus (HIV). HIV weakens the immune system, making the body susceptible to secondary infections and opportunistic diseases. Without treatment, HIV infection leads to AIDS, which is invariably fatal. The predominant mode of HIV transmission is sexual contact. Other modes of transmission are unsafe injections, use of tainted blood supplies during blood transfusions, and mother-to-child transmission (in which the mother passes HIV to her child during pregnancy, delivery, or breastfeeding).

Sierra Leone has had a structured multisectoral response to HIV and AIDS since 2002, when the National AIDS Committee (NAC) and its operating base, the National AIDS Secretariat (NAS), were established. The programme has received support from international donors, partners, and the government to scale up prevention, care, and treatment efforts.

The objective of this chapter is to provide data on levels of and trends in HIV/AIDS knowledge, attitudes, and behaviour, including knowledge of HIV prevention.

12.1 HIV/AIDS KNOWLEDGE, TRANSMISSION, AND PREVENTION METHODS

The 2019 SLDHS included a series of questions to measure respondents' knowledge and attitudes regarding HIV/AIDS. Ever-married women and men age 15-49 were first asked whether they had heard of HIV/AIDS. Those who reported having heard of HIV/AIDS were asked additional questions regarding the various modes of prevention, including whether it is possible to reduce the chances of getting the HIV

virus by having just one faithful sex partner and using a condom during every sexual encounter. To allow an assessment of the extent of possible misconceptions, respondents were also asked whether they think it is possible for a healthy-looking person to have the HIV/AIDS virus and whether a person can contract HIV/AIDS from mosquito bites, by sharing food with a person who has HIV/AIDS, or through supernatural means.

Eighty-two percent of women and 87% of men know that limiting sexual intercourse to one uninfected faithful partner can reduce the risk of getting HIV. Sixty-nine percent of women and 81% of men know that both consistent condom use and limiting sexual intercourse to one uninfected partner can reduce the risk of HIV (**Table 12.1**).

Trends: The percentage of respondents who know that using condoms and limiting sexual intercourse to one uninfected partner who has no other partners can reduce the risk of HIV has increased since 2013, from 63% to 69% among women and from 74% to 81% among men.

Patterns by background characteristics

- The percentage of women who know that using condoms and limiting sexual intercourse to one uninfected faithful partner can reduce the risk of HIV varies by age, from 65% among those age 40-49 to 74% among those age 25-29. The same pattern is observed among men (82% and 89%, respectively) (**Table 12.1**).
- Knowledge of HIV prevention methods is higher among urban women and men (73% and 83%, respectively) than their rural counterparts (66% and 79%, respectively).
- Among women, knowledge that using condoms and limiting sexual intercourse to one uninfected partner who has no other partners are methods of HIV/AIDS prevention is highest in the Northern province (79%) and lowest in the North West province (64%). Among men, knowledge of both methods is highest in the Eastern province (87%) and lowest in the Southern province (76%).
- By district, the proportion of women with knowledge of both HIV prevention methods is highest in Koinadugu (88%) and lowest in Karene (46%). Among men, the proportion is highest in Kailahun (93%) and lowest in Western Area Rural (64%).
- The proportions of women and men who know about both HIV prevention methods are lowest among those with no education (63% and 73%, respectively) and highest among those with more than a secondary education (85% and 94%, respectively).
- Knowledge of both prevention methods generally increases with increasing household wealth; 64% of women and 77% of men in the lowest quintile know of both methods, as compared with 76% of women and 86% of men in the highest quintile.

Comprehensive knowledge of HIV

Knowing that consistent use of condoms during sexual intercourse and having just one uninfected faithful partner can reduce the chances of getting HIV, knowing that a healthy-looking person can have HIV, and rejecting the two most common local misconceptions about transmission or prevention of HIV.

Sample: Women and men age 15-24 and 15-49

The two most common local misconceptions about HIV transmission in Sierra Leone are that HIV can be transmitted through mosquitoes and sharing of food. The survey results showed that 28% of women and 33% of men age 15-49 have comprehensive knowledge of HIV (**Table 12.2**).

Trends: The percentage of women and men with comprehensive knowledge of HIV has increased since 2013, from 25% to 28% among women and from 31% to 33% among men.

Patterns by background characteristics

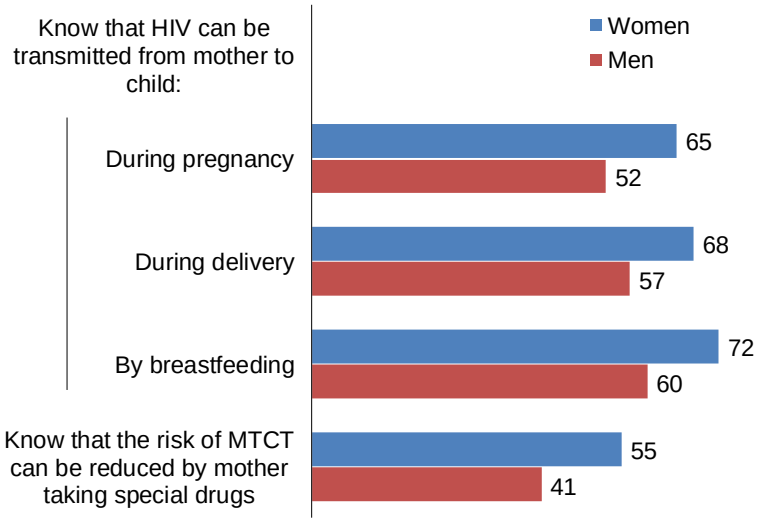
- Among respondents age 40-49, women are less likely than men to have comprehensive knowledge of HIV (24% versus 33%).
- Comprehensive knowledge is highest among men and women age 25-29 (40% and 32%, respectively.

12.2 KNOWLEDGE ABOUT MOTHER-TO-CHILD TRANSMISSION

Increasing the level of general knowledge about transmission of HIV from mother to child and reducing the risk of transmission using antiretroviral drugs are critical in reducing mother-to-child transmission (MTCT) of HIV. To assess MTCT knowledge, respondents were asked whether HIV can be transmitted from a mother to her child during pregnancy, during delivery, or through breastfeeding and whether a mother with HIV can reduce the risk of transmission to her baby by taking certain drugs during pregnancy.

Figure 12.1 **Knowledge of mother-to-child transmission (MTCT)**

Percentage of women and men age 15-49

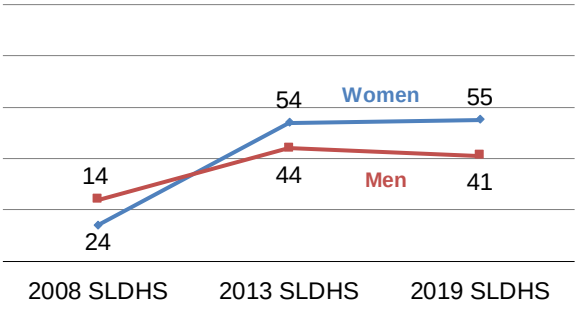


Overall, women are more likely than men to be aware of all three means of HIV transmission (60% versus 44%) (**Table 12.3**). Almost two-thirds (65%) of women know that HIV can be transmitted during pregnancy, 68% know that it can be transmitted during delivery, and 72% know that it can be transmitted through breastfeeding. Among men, 52% know that HIV can be transmitted during pregnancy, 57% know that it can be transmitted during delivery, and 60% know that it can be transmitted during breastfeeding (**Figure 12.1**).

Trends: The percentage of women who know that MTCT can be reduced by taking special medications increased from 24% in 2008 to 54% in 2013 and 55% in 2019. The percentage among men increased from 14% in 2008 to 44% in 2013 but dropped slightly to 41% in 2019 (**Figure 12.2**).

Figure 12.2 **Trends in knowledge of mother-to-child transmission (MTCT)**

Percentage of women and men age 15-49 who know that the risk of MTCT can be reduced by mother taking special drugs



Patterns by background characteristics

- The percentages of women who know that HIV can be transmitted during breastfeeding vary by age, from 65% among those age 15-19 to 78% among those age 25-29 (**Table 12.3**).

12.3 Discriminatory Attitudes towards People Living with HIV

Widespread stigma and discrimination in a population can adversely affect both people's willingness to be tested and their adherence to antiretroviral therapy (ART). Thus, reduction of stigma and discrimination in a population is an important indicator of the success of programmes targeting HIV/AIDS prevention and control.

Discriminatory attitudes towards people living with HIV

Women and men are asked two questions to assess discriminatory attitudes towards people living with HIV. Respondents with discriminatory attitudes towards people living with HIV are those who say that they would not buy fresh vegetables from a shopkeeper or vendor if they knew that person had HIV or who say that children living with HIV should not be allowed to attend school with children who do not have HIV.

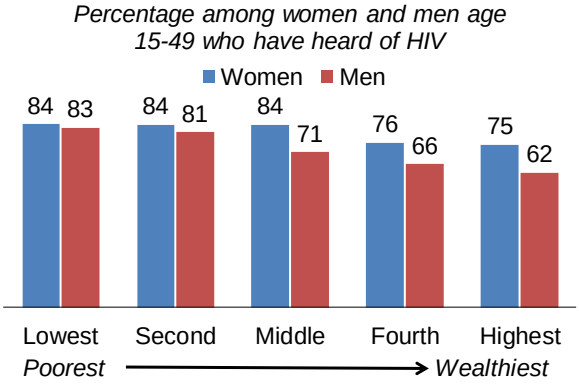
Sample: Women and men age 15-49 who have heard of HIV or AIDS

The results showed that, overall, discriminatory attitudes are more common among women (80%) than men (71%) (**Table 12.4**). Sixty-four percent of women and 58% of men do not think that children living with HIV should be able to attend school with children who are HIV negative. Similarly, 76% of women and 65% of men would not buy fresh vegetables from a shopkeeper who has HIV.

Patterns by background characteristics

- The percentages of women and men with discriminatory attitudes are lower in urban areas (75% and 63%, respectively) than in rural areas (84% and 79%, respectively) (**Table 12.4**).
- Women and men in the North West province (90% and 84%, respectively) are more likely to have discriminatory attitudes towards people with HIV than women and men in other provinces.
- Women in the Tonkolili and Pujehun districts (95% each) are more likely to have discriminatory attitudes towards people with HIV than women in other districts. Similarly, men in Koinadugu andPort Loko (87% each) are more likely than men in other provinces to have discriminatory attitudes.

Figure 12.3 **Discriminatory attitudes towards people living with HIV by household wealth**



Note: Respondents have discriminatory attitudes if they do not think that children living with HIV should be able to attend school with children who are HIV negative or would not buy fresh vegetables from a shopkeeper who has HIV.

- The proportion of women and men with discriminatory attitudes generally decreases with increasing education; 82% of women and 78% of men with no education have discriminatory attitudes, as compared with 58% of women and 46% of men with more than a secondary education (**Table 12.4**).
- Discriminatory attitudes also decrease with increasing wealth. The percentage of women with discriminatory attitudes decreases from 84% among those in the lowest wealth quintile to 75% among those in the highest quintile. The corresponding proportions among men are 83% and 62% (**Figure 12.3**).

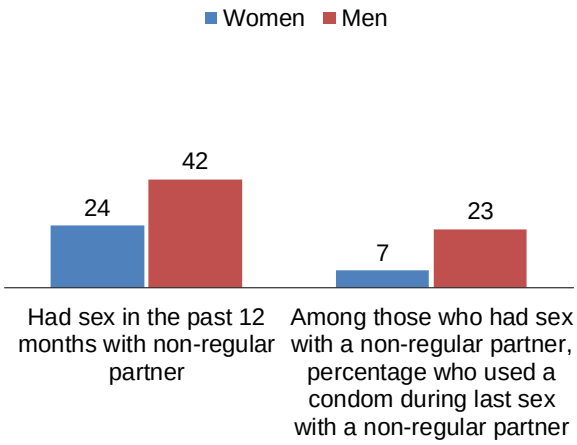
12.4 Multiple Sexual Partners

In Sierra Leone, HIV infections are acquired mostly through unprotected sexual intercourse. Thus, information on number of sexual partners and use of safe sex practices is important in designing and monitoring interventions that can control the spread of HIV.

Only 4% of women age 15-49 reported having two or more sexual partners in the past 12 months. In the 12 months before the survey, 24% of women reported having sexual intercourse with a person who neither was their husband nor lived with them, and only 7% of those women reported using a condom during the last sexual intercourse with such a partner (**Table 12.5.1** and **Figure 12.4**). The mean lifetime number of sexual partners among women age 15-49 is 2.7. Only 7% of women age 15-49 reporting using a condom during their last sexual intercourse in the past 12 months with a person who was neither their husband nor living with them (**Table 12.5.1** and **Figure 12.4**).

Figure 12.4 **Sex and condom use with non-regular partners**

Percentage of women and men age 15-49



Among men age 15-49, 22% reported having two or more sexual partners in the 12 months before the survey, and 42% reported having sexual intercourse with a person who neither was their wife nor lived with them (**Table 12.5.2**). Twenty-three percent of men reported using a condom during the last sexual intercourse with such a partner. The mean lifetime number of sexual partners among men is 8.9.

Patterns by background characteristics

- Women in urban areas are almost twice as likely (32%) as women in rural areas (17%) to have had sex in the last 12 months with a person who neither was their husband nor lived with them. They are also more likely to have used a condom during the last sexual intercourse with such a partner (8% versus 4%), although condom use is quite low in both urban and rural areas. The pattern is somewhat similar among men (**Tables 12.5.1** and **12.5.2**).
- The percentage of men who used a condom during their last sexual intercourse with a non-marital or non-cohabiting partner is higher among those with more than a secondary education (34%) than among those with no education (16%) (**Table 12.5.2**).
- The percentage of women who had intercourse in the past 12 months with a person who neither was their husband nor lived with them is higher among those in the highest wealth quintile (33%) than among those in the lowest wealth quintile (14%) (**Table 12.5.1**).
- Women living in urban and rural areas reported comparable numbers of lifetime partners (2.9 and 2.6, respectively). Urban men also reported a similar number of lifetime partners as rural men (9.1 and 8.7, respectively) (**Table 12.5.1** and **Table 12.5.2**).

12.5 Paid Sex

The act of paying for sex introduces an uneven negotiating ground for safer sexual intercourse. Transactional sex is the exchange of money, favours, or gifts for sexual intercourse. This type of sexual intercourse is associated with a greater risk of contracting HIV and other sexually transmitted infections (STIs) because of compromised power relations and the likelihood of having multiple partners.

Nine percent of men age 15-49 reported that they had ever paid for sex. The percentage of men who have paid for sex increases from 3% among those age 15-19 to 16% among those age 25-29 and then decreases to 8% among those age 40-49. Among men who paid for sex in the last 12 months, 57% reported using a condom during their last paid sexual intercourse (**Table 12.6**).

12.6 Male Circumcision

Male circumcision is widely practiced in Sierra Leone, mainly for traditional, health, and other reasons, and often serves as a rite of passage to adulthood. The timing varies across different traditions and cultures. Male circumcision has been shown to be associated with lower rates of STI transmission, including transmission of HIV (WHO and UNAIDS 2007).

Ninety-nine percent of men age 15-49 have been circumcised, 64% by health professionals and 16% by traditional practitioners or family and friends (**Table 12.7**).

Patterns by background characteristics

- Men age 15-19 (69%) are more likely than men age 40-49 (57%) to have been circumcised by a health worker or a health professional. In contrast, men age 40-49 are more likely to have been circumcised by traditional practitioners or family and friends (27%) (**Table 12.7**).
- Rural men are somewhat more likely than urban men to have been circumcised by a health worker or a health professional (66% versus 61%). Rural men also are more likely to have been circumcised by traditional practitioners or family and friends (19% versus 12%).
- Muslim men are more likely than Christian men to have been circumcised by a traditional practitioner or family and friends (17% versus 13%).
- The proportion of men who have been circumcised by a traditional practitioner or family and friends varies markedly by ethnic group, from 6% among Creoles to 30% among the Kurankoh.

12.7 Self-Reporting of Sexually Transmitted Infections

Sexually transmitted infections (STIs) and symptoms

Respondents who have ever had sex are asked whether they had an STI or symptoms of an STI (a bad-smelling, abnormal discharge from the vagina/penis or a genital sore or ulcer) in the 12 months before the survey.

Sample: Women and men age 15-49 who have ever had sex

Sexually transmitted diseases are associated with HIV, and people with an STI are more likely to contract HIV than those without an STI. Overall, 22% of women and 14% of men who had ever had sexual intercourse reported having an STI or STI symptoms in the 12 months preceding the survey (**Table 12.8**).

The results show that 58% of women and 53% of men who had an STI or STI symptoms sought advice or treatment from a clinic, hospital, private doctor, or other health professional. Seventeen percent of women and 23% of men sought advice or medicine from a shop or pharmacy, while 26% of women and 24% of men did not seek any advice or treatment (**Table 12.9**).

The data show differences by educational status. Women with a secondary education (24%) or more than a secondary education (27%) were more likely to report having an STI and/or symptoms than those with less education (20%).

Women in the lowest (16%), second (20%), and middle (21%) wealth quintiles were more likely to report having an STI and/or symptoms than those in the fourth and highest wealth quintiles (25% each).

12.8 HIV/AIDS-RELATED KNOWLEDGE AND BEHAVIOUR AMONG YOUNG PEOPLE

This section addresses HIV/AIDS-related knowledge among young people age 15-24 and also assesses the extent to which young people are engaged in behaviours that may place them at risk of contracting HIV.

12.8.1 Knowledge

Knowledge of how HIV is transmitted is critical in enabling people to avoid contracting it, and this is especially true for young people, who are often at greater risk because they may have shorter relationships with more partners or engage in other risky behaviours. Twenty-nine percent of young women and 28% of young men age 15-24 have comprehensive knowledge of HIV/AIDS (defined as knowing that consistent use of condoms during sexual intercourse and having just one uninfected faithful partner can reduce the chances of getting HIV, knowing that a healthy-looking person can have HIV, and rejecting the two most common local misconceptions about HIV transmission or prevention) (**Table 12.10**).

Patterns by background characteristics

- Comprehensive knowledge about HIV is lowest among young people age 15-17; 25% of young women and 19% of young men age 15-17 have comprehensive knowledge, as compared with 32% of women age 20-22 and 39% of men age 23-24 (**Table 12.10**).
- Young women and men in urban areas (34% and 33%, respectively) are more likely than their counterparts in rural areas (23% each) to have comprehensive knowledge about HIV.
- Comprehensive knowledge about HIV generally increases with increasing education. Forty-seven percent of young women with more than a secondary education have comprehensive knowledge, compared with 18% of young women with no education. The corresponding proportions among young men are 66% and 14%.

12.8.2 First Sex

Young people who initiate sex at an early age are typically at higher risk of becoming pregnant or contracting an STI than young people who initiate sex later. Consistent condom use can reduce such risks. Nineteen percent of young women and 7% of young men age 15-24 had sexual intercourse before age 15 (**Table 12.11**). As a result of early female marriage, a higher proportion of young women (71%) than young men (47%) reported having sex before age 18.

Patterns by background characteristics

- Young women in rural areas (25%) are more likely to have sex before age 15 than their urban counterparts (14%). Similarly, young women and men in rural areas (82% and 51%, respectively) are more likely than those in urban areas (62% and 43%, respectively) to have sex before age 18 (**Table 12.11**).
- The percentage of young women who had sexual intercourse before age 18 generally decreases with increasing education, from 83% among those with no education to 34% among those with more than a secondary education. However, no major differences by education are observed among men.

12.8.3 Premarital Sex

Table 12.12 shows that 38% of never-married young women and 46% of never-married young men age 15-24 have never had sexual intercourse. The percentage of never-married respondents who have never had sexual intercourse decreases sharply with age; 64% of young women and 77% of young men age 15-17 have never had sex, as compared with 4% of women and 9% of men age 23-24.

The percentage of never-married young men age 15-24 who have never had sexual intercourse is higher in rural areas than in urban areas (50% versus 43%); there is only a slight difference between young women in urban and rural areas.

The proportion of never-married respondents who have never had sexual intercourse generally decreases with increasing education, from 39% among young women and 45% among young men with no education to 15% among young women and 3% among young men with more than a secondary education (**Table 12.12**).

12.8.4 Multiple Sexual Partners

Young men age 15-24 are more likely than their female counterparts to have had more than one partner in the 12 months before the survey; 12% of men had more than one partner in the previous 12 months, as compared with 4% of women (**Table 12.13.1** and **Table 12.13.2**). Young men (47%) are also more likely than young women (40%) to have had intercourse with a non-marital, non-cohabiting partner in the last 12 months. Six percent of young women and 20% of young men used a condom during their last sex with a non-marital, non-cohabiting partner.

Patterns by background characteristics

- The proportion of respondents who used a condom during their last sex with a non-marital, non-cohabiting partner is higher in urban than rural areas; 8% of young women and 26% of young men in urban areas used a condom during their last sexual intercourse with such a partner, as compared with 4% of young women and 13% of young men in rural areas (**Table 12.13.1** and **Table 12.13.2**).

- The percentage of young women who reported using a condom during their last sexual intercourse with a non-marital, non-cohabiting partner increases with increasing education, from 3% among those with no education to 7% among those with more than a secondary education. Among men, the percentage who reported using a condom during their last sexual intercourse with such a partner increases from 11% among those with no education to 23% among those with a secondary education.

LIST OF TABLES

For more information on HIV/AIDS-related knowledge, attitudes, and behaviour, see the following tables:

Table 12.1 Knowledge of HIV prevention methods

Percentage of women and men age 15-49 who, in response to prompted questions, say that people can reduce the risk of getting HIV by using condoms every time they have sexual intercourse and by having one sex partner who is not infected and has no other partners, by background characteristics, Sierra Leone DHS 2019

	Women				Men			
Background characteristic	Using condoms[1]	Limiting sexual intercourse to one uninfected partner[2]	Using condoms and limiting sexual intercourse to one uninfected partner[1,2]	Number of women	Using condoms[1]	Limiting sexual intercourse to one uninfected partner[2]	Using condoms and limiting sexual intercourse to one uninfected partner[1,2]	Number of men
Age								
15-24	73.3	81.7	69.2	6,055	80.1	82.6	75.0	2,479
15-19	70.5	78.7	66.1	3,427	75.2	76.9	69.0	1,541
20-24	76.9	85.7	73.3	2,629	88.2	91.9	84.9	937
25-29	78.3	86.2	74.4	2,728	92.5	92.1	88.5	1,015
30-39	73.6	80.7	68.8	4,166	88.6	89.4	84.7	1,584
40-49	69.1	77.2	64.8	2,624	85.2	87.5	81.5	1,306
Residence								
Urban	76.7	86.5	73.3	7,163	87.2	89.1	83.2	2,990
Rural	70.9	77.2	65.8	8,411	83.5	84.8	78.8	3,394
Province								
Eastern	76.1	79.1	68.5	3,069	88.6	91.3	87.1	1,251
Northern	81.2	86.0	79.4	3,317	85.5	88.3	82.4	1,353
North West	69.3	79.3	64.2	2,508	87.5	86.7	80.7	982
Southern	69.7	74.6	64.8	2,900	81.7	82.3	75.9	1,192
Western Area	70.6	86.1	67.8	3,780	83.6	85.5	78.5	1,606
District								
Kailahun	84.6	87.3	81.9	707	93.6	95.4	92.9	307
Kenema	78.0	78.9	66.0	1,437	86.4	89.5	84.2	557
Kono	66.7	73.3	62.3	925	88.0	90.6	86.6	387
Bombali	87.9	88.6	85.3	1,166	90.6	92.8	89.4	472
Falaba	74.5	77.8	73.0	466	74.8	81.5	66.8	148
Koinadugu	88.7	95.2	88.2	469	78.2	87.0	77.4	196
Tonkolili	74.6	83.2	72.8	1,215	86.7	86.8	82.4	538
Kambia	66.7	78.6	63.7	890	80.7	78.2	69.6	345
Karene	57.5	68.4	45.5	462	88.6	89.1	86.5	192
Port Loko	76.0	84.2	71.9	1,157	92.3	92.1	86.8	445
Bo	71.8	76.5	66.7	1,250	87.0	84.8	80.8	525
Bonthe	81.7	78.8	69.3	468	82.1	74.0	68.1	199
Moyamba	69.7	79.2	68.7	726	71.3	80.8	70.1	290
Pujehun	51.4	57.4	48.6	456	82.3	86.6	79.7	178
Western Area Rural	62.7	78.6	60.2	1,407	72.9	72.8	63.9	542
Western Area Urban	75.2	90.6	72.3	2,373	89.0	92.0	86.0	1,064
Education								
No education	68.3	75.8	63.3	7,081	78.4	80.3	72.9	1,865
Primary	67.9	78.0	63.4	2,103	81.0	81.5	75.2	876
Secondary	80.4	88.3	76.9	5,724	88.7	90.6	85.0	3,120
More than secondary	88.5	94.1	85.4	666	96.3	96.4	94.4	523
Wealth quintile								
Lowest	69.5	74.6	63.5	2,738	80.5	83.0	76.8	1,104
Second	69.2	77.6	64.4	2,831	83.7	84.0	77.6	1,123
Middle	73.2	78.4	68.1	2,954	85.8	87.6	81.6	1,145
Fourth	74.8	84.1	71.6	3,385	84.1	86.0	80.0	1,422
Highest	79.1	89.6	76.1	3,666	90.2	91.6	86.3	1,590
Total 15-49	73.6	81.5	69.3	15,574	85.2	86.8	80.9	6,384
50-59	na	na	na	na	84.1	85.0	79.2	813
Total 15-59	na	na	na	na	85.1	86.6	80.7	7,197

na = Not applicable
[1] Using condoms every time they have sexual intercourse
[2] Partner who has no other partners

Table 12.2 Comprehensive knowledge about HIV

Percentage of women and men age 15-49 who say that a healthy-looking person can have HIV and who, in response to prompted questions, correctly reject local misconceptions about transmission or prevention of HIV, and percentage with comprehensive knowledge about HIV, according to age, Sierra Leone DHS 2019

Age	Percentage of respondents who say that:				Percentage who say that a healthy-looking person can have HIV and who reject the two most common local miscon-ceptions[1]	Percentage with comprehensive knowledge about HIV[2]	Number of respondents
	A healthy-looking person can have HIV	HIV cannot be transmitted by mosquito bites	HIV cannot be transmitted by supernatural means	A person cannot become infected by sharing food with a person who has HIV			
				WOMEN			
15-24	65.2	71.2	80.7	55.2	35.8	28.7	6,055
15-19	62.4	69.8	79.3	54.6	33.6	26.5	3,427
20-24	68.7	73.1	82.5	56.0	38.6	31.6	2,629
25-29	70.0	71.3	83.1	59.2	38.6	31.9	2,728
30-39	63.5	66.4	78.2	53.7	33.1	27.3	4,166
40-49	56.6	61.4	72.4	48.1	29.2	24.3	2,624
Total 15-49	64.1	68.3	79.0	54.3	34.4	28.2	15,574
				MEN			
15-24	62.8	63.1	71.3	47.4	30.9	27.7	2,479
15-19	55.6	58.3	65.2	41.2	25.2	22.2	1,541
20-24	74.6	70.9	81.3	57.6	40.4	36.7	937
25-29	76.5	69.7	82.9	56.5	41.8	39.5	1,015
30-39	75.2	70.5	77.8	55.5	40.4	37.8	1,584
40-49	69.4	63.7	73.6	48.8	35.2	33.2	1,306
Total 15-49	69.4	66.1	75.3	51.1	35.9	33.2	6,384
50-59	67.3	61.9	73.5	53.0	36.2	34.1	813
Total 15-59	69.2	65.6	75.1	51.3	35.9	33.3	7,197

[1] Two most common local misconceptions: the AIDS virus can be transmitted by mosquito bites and by sharing food with a person who has HIV
[2] Comprehensive knowledge means knowing that consistent use of condoms during sexual intercourse and having just one uninfected faithful partner can reduce the chance of getting HIV, knowing that a healthy-looking person can have HIV, and rejecting the two most common local misconceptions about AIDS transmission or prevention.

Table 12.3 Knowledge of prevention of mother-to-child transmission of HIV

Percentage of women and men age 15-49 who know that HIV can be transmitted from mother to child during pregnancy, during delivery, by breastfeeding, and by all three means, and percentage who know that the risk of mother-to-child transmission (MTCT) of HIV can be reduced by the mother taking special drugs, according to age, Sierra Leone DHS 2019

Age	Percentage who know that HIV can be transmitted from mother to child:				Percentage who know that the risk of MTCT can be reduced by mother taking special drugs	Number of respondents
	During pregnancy	During delivery	By breastfeeding	By all three means		
			WOMEN			
15-24	61.8	64.2	70.0	56.9	52.7	6,055
15-19	57.8	59.3	65.3	52.9	45.5	3,427
20-24	67.0	70.6	76.0	62.2	62.0	2,629
25-29	71.3	74.2	78.0	66.1	62.8	2,728
30-39	67.2	70.4	74.6	63.0	57.4	4,166
40-49	61.2	65.2	68.1	57.3	48.4	2,624
Total 15-49	64.8	67.8	72.3	60.2	55.0	15,574
			MEN			
15-24	47.4	49.9	52.6	39.2	32.0	2,479
15-19	43.7	45.6	48.9	36.6	26.4	1,541
20-24	53.4	56.9	58.7	43.5	41.2	937
25-29	55.9	60.3	63.1	46.4	47.5	1,015
30-39	54.8	61.5	65.1	47.4	48.3	1,584
40-49	55.8	60.1	63.6	47.2	43.1	1,306
Total 15-49	52.3	56.5	59.6	44.0	40.8	6,384
50-59	52.5	56.3	56.2	43.2	38.8	813
Total 15-59	52.3	56.5	59.2	43.9	40.6	7,197

Table 12.4 Discriminatory attitudes towards people living with HIV

Among women and men age 15-49 who have heard of HIV or AIDS, percentage who do not think that children living with HIV should be able to attend school with children who are HIV negative, percentage who would not buy fresh vegetables from a shopkeeper who has HIV, and percentage with discriminatory attitudes towards people living with HIV, according to background characteristics, Sierra Leone DHS 2019

	Women				Men			
Background characteristic	Percentage who do not think that children living with HIV should be able to attend school with children who are HIV negative	Percentage who would not buy fresh vegetables from a shopkeeper who has HIV	Percentage with discriminatory attitudes towards people living with HIV[1]	Number of women who have heard of AIDS	Percentage who do not think that children living with HIV should be able to attend school with children who are HIV negative	Percentage who would not buy fresh vegetables from a shopkeeper who has HIV	Percentage with discriminatory attitudes towards people living with HIV[1]	Number of men who have heard of AIDS
Age								
15-24	63.6	76.6	80.4	5,706	61.7	70.9	75.9	2,309
15-19	64.8	78.0	81.7	3,202	65.1	73.5	78.6	1,392
20-24	62.0	74.7	78.7	2,505	56.7	67.1	71.9	918
25-29	61.6	74.4	78.1	2,611	53.5	58.7	65.1	999
30-39	64.0	73.6	77.8	3,909	54.5	62.1	68.1	1,543
40-49	69.7	78.9	83.0	2,377	59.1	64.2	70.4	1,265
Marital status								
Never married	59.6	73.6	77.0	4,822	58.4	67.0	72.3	2,740
Ever had sex	58.4	72.3	75.7	3,360	54.5	62.9	68.5	1,809
Never had sex	62.5	76.5	80.1	1,462	66.2	74.9	79.6	931
Married/living together	67.0	77.2	81.2	9,025	58.0	64.4	70.3	3,158
Divorced/separated/ widowed	62.4	73.2	79.6	756	52.7	58.0	66.5	218
Residence								
Urban	58.1	71.1	75.0	7,010	48.6	56.2	62.7	2,919
Rural	70.1	80.1	84.0	7,593	66.6	73.6	78.6	3,197
Province								
Eastern	70.3	75.0	77.2	2,905	57.2	61.7	66.4	1,225
Northern	62.4	75.4	78.1	3,045	59.6	73.8	78.9	1,278
North West	69.8	88.1	90.1	2,362	72.6	78.8	84.3	941
Southern	72.3	76.2	85.0	2,551	64.8	68.2	72.8	1,109
Western Area	52.3	68.6	72.8	3,740	43.8	51.1	59.1	1,562
District								
Kailahun	45.1	50.6	52.8	654	28.7	33.9	37.6	297
Kenema	79.8	84.8	86.5	1,394	67.0	70.0	76.1	550
Kono	74.2	77.8	80.9	857	65.2	71.5	74.9	378
Bombali	51.1	63.2	65.9	1,157	58.9	79.4	83.3	447
Falaba	53.0	63.6	65.3	374	42.4	47.2	54.8	137
Koinadugu	67.6	78.4	80.1	461	80.2	83.3	87.2	191
Tonkolili	76.0	91.8	95.1	1,053	57.1	72.3	78.4	504
Kambia	76.7	88.2	90.4	833	75.7	77.6	83.6	326
Karene	60.3	78.7	83.0	413	56.6	74.8	78.8	176
Port Loko	68.2	91.5	92.6	1,116	76.6	81.3	86.9	440
Bo	74.1	84.3	86.3	1,205	68.1	69.3	73.8	503
Bonthe	59.2	32.7	67.5	453	73.3	68.9	77.5	177
Moyamba	78.2	87.0	90.7	594	57.4	65.6	67.4	265
Pujehun	73.2	88.0	94.5	299	57.7	67.9	73.3	164
Western Area Rural	52.3	61.4	65.9	1,393	35.3	42.7	51.4	511
Western Area Urban	52.3	72.8	76.9	2,347	47.9	55.2	62.8	1,051
Education								
No education	68.4	78.2	82.1	6,391	66.0	72.7	77.6	1,738
Primary	70.3	79.6	83.8	1,949	71.7	78.0	83.2	808
Secondary	60.6	74.3	78.2	5,597	54.8	62.5	68.4	3,051
More than secondary	38.9	53.1	57.5	666	29.1	37.4	45.7	519
Wealth quintile								
Lowest	73.2	79.3	84.0	2,424	70.0	77.7	82.5	1,013
Second	70.3	79.9	83.9	2,551	69.0	74.9	80.5	1,065
Middle	69.3	80.5	83.8	2,712	60.0	66.7	71.3	1,093
Fourth	61.0	71.8	75.6	3,292	51.1	59.4	65.6	1,379
Highest	53.4	70.6	74.6	3,625	47.5	55.0	61.9	1,566
Total 15-49	64.3	75.8	79.7	14,603	58.0	65.3	71.1	6,116
50-59	na	na	na	0	54.0	61.1	67.4	777
Total 15-59	na	na	na	0	57.6	64.8	70.6	6,892

na = Not applicable

[1] Percentage who do not think that children living with HIV should be able to attend school with children who are HIV negative and/or would not buy fresh vegetables from a shopkeeper who has HIV

Table 12.5.1 Multiple sexual partners and higher-risk sexual intercourse in the past 12 months: Women

Among all women age 15-49, percentage who had sexual intercourse with more than one sexual partner in the past 12 months and percentage who had intercourse in the past 12 months with a person who neither was their husband nor lived with them; among women having more than one partner in the past 12 months, percentage reporting that a condom was used during last intercourse; among women who had sexual intercourse in the past 12 months with a person who neither was their husband nor lived with them, percentage who used a condom during last sexual intercourse with such a partner; and among women who ever had sexual intercourse, mean number of sexual partners during their lifetime, according to background characteristics, Sierra Leone DHS 2019

	All women			Women who had 2+ partners in the past 12 months		Women who had intercourse in the past 12 months with a person who neither was their husband nor lived with them		Women who ever had sexual intercourse[1]	
Background characteristic	Percentage who had 2+ partners in the past 12 months	Percentage who had intercourse in the past 12 months with a person who neither was their husband nor lived with them	Number of women	Percentage who reported using a condom during last sexual inter-course	Number of women	Percentage who reported using a condom during last sexual intercourse with such a partner	Number of women	Mean number of sexual partners in lifetime	Number of women
Age									
15-24	4.3	39.6	6,055	3.2	259	6.0	2,400	2.4	4,394
15-19	2.8	39.0	3,427	1.2	96	5.8	1,335	1.8	1,913
20-24	6.2	40.5	2,629	4.4	164	6.2	1,065	2.9	2,481
25-29	4.0	22.0	2,728	4.1	109	10.0	599	2.8	2,630
30-39	3.7	12.4	4,166	2.2	156	6.6	517	3.0	4,022
40-49	2.1	8.1	2,624	0.0	55	4.1	212	2.6	2,530
Marital status									
Never married	5.1	59.6	5,058	5.2	257	6.6	3,013	2.6	3,364
Married/living together	2.9	3.7	9,715	0.9	285	7.6	363	2.6	9,448
Divorced/separated/ widowed	4.8	44.0	801	(1.2)	38	5.9	353	3.9	765
Residence									
Urban	4.5	32.0	7,163	4.0	324	8.3	2,290	2.9	5,934
Rural	3.0	17.1	8,411	1.3	256	3.8	1,438	2.6	7,642
Province									
Eastern	2.1	21.8	3,069	2.5	64	4.6	670	2.6	2,741
Northern	3.8	21.8	3,317	3.8	128	7.3	723	2.4	2,942
North West	3.6	20.4	2,508	2.9	90	4.7	511	2.6	2,280
Southern	3.4	21.2	2,900	1.4	97	3.6	615	2.6	2,471
Western Area	5.3	32.0	3,780	2.9	200	9.6	1,210	3.2	3,142
District									
Kailahun	2.1	24.3	707	*	15	4.9	172	2.9	660
Kenema	2.1	22.1	1,437	*	30	5.4	317	2.6	1,289
Kono	2.2	19.6	925	*	20	3.0	181	2.3	792
Bombali	4.6	24.5	1,166	2.7	54	7.6	286	2.4	1,056
Falaba	3.6	19.6	466	(6.3)	17	17.1	91	1.9	363
Koinadugu	2.0	15.1	469	*	9	12.2	71	2.2	409
Tonkolili	3.9	22.6	1,215	(2.6)	48	2.4	275	2.7	1,114
Kambia	2.6	19.9	890	*	23	3.5	177	2.5	783
Karene	3.3	18.1	462	*	15	4.6	84	2.9	430
Port Loko	4.5	21.6	1,157	(5.0)	52	5.5	250	2.6	1,066
Bo	4.6	28.3	1,250	0.0	57	3.9	354	2.7	1,010
Bonthe	1.9	13.7	468	*	9	4.2	64	1.9	415
Moyamba	3.5	19.0	726	(2.1)	26	0.3	138	3.4	638
Pujehun	1.2	13.0	456	*	6	9.0	59	2.1	408
Western Area Rural	5.5	30.6	1,407	3.0	78	7.7	431	3.4	1,202
Western Area Urban	5.2	32.8	2,373	2.9	123	10.7	779	3.0	1,940
Education									
No education	2.9	10.6	7,081	1.3	204	4.1	753	2.6	6,740
Primary	3.7	20.0	2,103	1.2	77	3.6	420	2.8	1,726
Secondary	4.6	39.9	5,724	3.7	260	7.1	2,281	2.6	4,498
More than secondary	5.7	41.0	666	(8.4)	38	14.4	273	3.7	612
Wealth quintile									
Lowest	2.4	14.4	2,738	2.7	66	2.5	394	2.7	2,543
Second	3.5	16.9	2,831	0.0	100	2.9	477	2.5	2,585
Middle	3.1	20.8	2,954	0.6	92	5.0	614	2.5	2,636
Fourth	4.5	30.9	3,385	3.6	152	5.6	1,046	2.6	2,827
Highest	4.6	32.7	3,666	5.0	170	11.1	1,197	3.1	2,986
Total 15-49	3.7	23.9	15,574	2.8	580	6.6	3,728	2.7	13,576

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
[1] Means are calculated excluding respondents who gave non-numeric responses.

Table 12.5.2 Multiple sexual partners and higher-risk sexual intercourse in the past 12 months: Men

Among all men age 15-49, percentage who had sexual intercourse with more than one sexual partner in the past 12 months and percentage who had intercourse in the past 12 months with a person who neither was their wife nor lived with them; among men having more than one partner in the past 12 months, percentage reporting that a condom was used during last intercourse; among men who had sexual intercourse in the past 12 months with a person who neither was their wife nor lived with them, percentage who used a condom during last sexual intercourse with such a partner; and among men who ever had sexual intercourse, mean number of sexual partners during their lifetime, according to background characteristics, Sierra Leone DHS 2019

	All men			Men who had 2+ partners in the past 12 months		Men who had intercourse in the past 12 months with a person who neither was their wife nor lived with them		Men who ever had sexual intercourse[1]	
Background characteristic	Percentage who had 2+ partners in the past 12 months	Percentage who had intercourse in the past 12 months with a person who neither was their wife nor lived with them	Number of men	Percentage who reported using a condom during last sexual inter-course	Number of men	Percentage who reported using a condom during last sexual intercourse with such a partner	Number of men	Mean number of sexual partners in lifetime	Number of men
Age									
15-24	12.0	46.9	2,479	21.8	298	20.1	1,164	4.8	1,293
15-19	5.5	32.4	1,541	14.5	85	15.2	500	2.7	553
20-24	22.8	70.8	937	24.7	213	23.8	664	6.3	740
25-29	31.2	62.8	1,015	14.6	317	25.1	638	9.4	828
30-39	26.8	36.3	1,584	14.0	424	27.4	575	10.1	1,243
40-49	26.4	23.2	1,306	8.0	345	20.0	304	12.2	1,019
Marital status									
Never married	15.1	57.4	2,928	20.6	441	20.3	1,681	5.7	1,613
Married/living together	27.3	25.7	3,234	10.3	883	28.3	832	10.8	2,596
Divorced/separated/widowed	27.4	75.2	222	27.5	61	22.0	167	9.4	173
Type of union									
In polygynous union	68.2	12.4	463	1.6	316	27.2	58	12.4	364
In non-polygynous union	20.5	28.0	2,771	15.1	567	28.4	775	10.5	2,232
Not currently in union	15.9	58.6	3,150	21.4	502	20.4	1,847	6.1	1,786
Residence									
Urban	20.9	49.3	2,990	19.8	624	27.5	1,476	9.1	2,002
Rural	22.4	35.5	3,394	9.8	760	17.2	1,204	8.7	2,380
Province									
Eastern	22.6	41.1	1,251	14.9	283	24.1	514	6.8	968
Northern	18.3	38.4	1,353	13.2	248	22.0	520	8.7	942
North West	23.3	39.6	982	7.9	229	17.5	389	11.2	639
Southern	27.4	43.3	1,192	12.0	326	18.0	516	9.2	785
Western Area	18.6	46.2	1,606	22.1	298	28.8	741	9.2	1,048
District									
Kailahun	23.7	45.2	307	13.5	73	18.0	139	6.9	167
Kenema	23.6	43.6	557	17.0	131	26.1	243	7.9	467
Kono	20.5	34.2	387	12.6	79	26.7	133	5.2	335
Bombali	19.7	39.5	472	16.2	93	24.6	186	14.2	307
Falaba	12.2	32.2	148	(1.9)	18	5.0	48	10.9	84
Koinadugu	15.7	35.7	196	8.3	31	30.0	70	4.7	143
Tonkolili	19.7	40.1	538	13.9	106	20.9	216	5.5	409
Kambia	16.1	32.9	345	5.1	56	14.7	114	8.5	227
Karene	28.1	41.7	192	7.4	54	19.6	80	19.9	139
Port Loko	26.9	43.9	445	9.5	120	18.4	195	9.2	274
Bo	28.0	47.0	525	12.7	147	17.1	247	8.5	296
Bonthe	42.5	52.4	199	18.4	85	26.2	104	4.5	175
Moyamba	21.3	36.3	290	0.9	62	11.7	105	13.5	171
Pujehun	18.4	33.2	178	13.6	33	18.8	59	11.4	143
Western Area Rural	12.7	40.8	542	28.4	69	22.6	221	15.3	297
Western Area Urban	21.5	48.9	1,064	20.2	229	31.5	520	6.8	751
Education									
No education	23.0	31.6	1,865	8.2	429	16.2	589	9.8	1,397
Primary	20.3	33.4	876	8.8	178	14.8	292	9.2	518
Secondary	19.6	48.6	3,120	17.1	612	24.9	1,517	7.7	2,045
More than secondary	31.7	53.6	523	26.1	166	34.2	281	11.1	422
Wealth quintile									
Lowest	20.0	31.2	1,104	12.8	221	19.4	344	8.5	807
Second	23.6	33.9	1,123	7.3	265	15.1	380	8.9	802
Middle	22.3	39.3	1,145	9.0	256	15.7	450	9.4	763
Fourth	19.3	48.3	1,422	14.0	274	23.3	687	9.1	917
Highest	23.2	51.5	1,590	24.2	368	31.5	818	8.6	1,094
Total 15-49	21.7	42.0	6,384	14.3	1,384	22.9	2,680	8.9	4,382
50-59	20.4	11.5	813	2.5	166	10.7	94	11.0	610
Total 15-59	21.5	38.5	7,197	13.1	1,550	22.5	2,773	9.1	4,992

Note: Figures in parentheses are based on 25-49 unweighted cases.
[1] Means are calculated excluding respondents who gave non-numeric responses.

Table 12.6 Payment for sexual intercourse and condom use at last paid sexual intercourse

Percentage of men age 15-49 who ever paid for sexual intercourse and percentage reporting payment for sexual intercourse in the past 12 months, and among them, percentage reporting that a condom was used the last time they paid for sexual intercourse, according to age, Sierra Leone DHS 2019

	Among all men:			Among men who paid for sex in the past 12 months:	
Age	Percentage who ever paid for sexual intercourse	Percentage who paid for sexual intercourse in the past 12 months	Number of men	Percentage reporting condom use at last paid sexual intercourse	Number of men
15-24	6.8	3.6	2,479	59.3	90
15-19	2.8	1.9	1,541	(37.1)	29
20-24	13.3	6.5	937	70.0	61
25-29	15.8	6.1	1,015	55.1	62
30-39	10.5	3.6	1,584	56.3	57
40-49	7.5	2.1	1,306	(54.3)	28
Total 15-49	9.3	3.7	6,384	56.9	237
50-59	5.9	0.9	813	*	8
Total 15-59	8.9	3.4	7,197	55.4	245

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

Table 12.7 Male circumcision

Percent distribution of men age 15-49 by circumcision status and provider of circumcision, and percentage of men circumcised, according to background characteristics, Sierra Leone DHS 2019

Background characteristic	Circumcised by: Health worker/ professional	Traditional practitioner/ family friend	Other/don't know/ missing	Not circumcised	Don't know/ missing circumcision status	Total	Percentage of men circumcised[1]	Number of men
Age								
15-24	67.1	10.9	20.6	0.9	0.6	100.0	98.6	2,479
15-19	68.5	9.3	20.4	1.1	0.8	100.0	98.1	1,541
20-24	64.8	13.4	21.0	0.5	0.2	100.0	99.3	937
25-29	66.0	11.1	22.5	0.3	0.1	100.0	99.6	1,015
30-39	62.8	17.3	19.4	0.3	0.2	100.0	99.6	1,584
40-49	57.2	26.9	15.0	0.6	0.2	100.0	99.1	1,306
Residence								
Urban	61.3	12.4	25.1	0.5	0.6	100.0	98.9	2,990
Rural	66.1	18.7	14.5	0.6	0.1	100.0	99.2	3,394
Province								
Eastern	71.4	14.0	14.3	0.3	0.0	100.0	99.7	1,251
Northern	54.9	27.2	16.9	0.7	0.3	100.0	99.0	1,353
North West	69.0	19.3	11.4	0.3	0.1	100.0	99.7	982
Southern	71.5	7.6	20.1	0.8	0.0	100.0	99.2	1,192
Western Area	56.6	11.5	30.1	0.7	1.0	100.0	98.3	1,606
Religion								
Christian	64.8	13.2	21.1	0.8	0.0	100.0	99.2	1,409
Islam	63.6	16.5	19.0	0.5	0.4	100.0	99.1	4,974
Other[2]	*	*	*	*	*	*	*	2
District								
Kailahun	71.8	11.7	16.4	0.0	0.0	100.0	100.0	307
Kenema	75.5	9.5	15.0	0.0	0.0	100.0	100.0	557
Kono	65.0	22.2	11.7	1.1	0.0	100.0	98.9	387
Bombali	39.9	31.0	27.3	1.2	0.6	100.0	98.2	472
Falaba	52.7	23.8	23.5	0.0	0.0	100.0	100.0	148
Koinadugu	61.2	28.8	9.1	0.0	0.9	100.0	99.1	196
Tonkolili	66.3	24.3	8.7	0.7	0.0	100.0	99.3	538
Kambia	74.0	14.9	10.8	0.4	0.0	100.0	99.6	345
Karene	70.6	21.0	8.1	0.3	0.0	100.0	99.7	192
Port Loko	64.5	21.9	13.3	0.2	0.2	100.0	99.7	445
Bo	78.4	3.5	17.5	0.6	0.0	100.0	99.4	525
Bonthe	87.8	4.7	6.8	0.6	0.0	100.0	99.4	199
Moyamba	61.3	9.3	28.1	1.3	0.0	100.0	98.7	290
Pujehun	49.6	20.3	29.4	0.7	0.0	100.0	99.3	178
Western Area Rural	60.3	9.7	27.9	1.1	1.0	100.0	97.9	542
Western Area Urban	54.8	12.4	31.3	0.5	1.0	100.0	98.4	1,064
Ethnic group								
Creole	79.8	5.7	13.9	0.6	0.0	100.0	99.4	122
Fullah	61.8	20.4	15.3	0.9	1.6	100.0	97.5	253
Kono	63.4	19.4	16.1	1.0	0.0	100.0	99.0	268
Limba	53.7	22.1	23.0	0.6	0.6	100.0	98.8	570
Loko	60.6	13.0	26.4	0.0	0.0	100.0	100.0	132
Mandingo	57.9	18.6	22.8	0.5	0.2	100.0	99.3	184
Mende	70.8	9.0	19.5	0.6	0.1	100.0	99.3	1,904
Sherbro	70.2	7.2	20.4	2.1	0.0	100.0	97.9	126
Temne	60.8	18.3	19.8	0.6	0.4	100.0	99.0	2,281
Kurankoh	57.4	29.6	12.7	0.0	0.3	100.0	99.7	225
Other	64.4	17.5	17.8	0.2	0.0	100.0	99.8	318
Total 15-49	63.8	15.8	19.5	0.6	0.3	100.0	99.1	6,384
50-59	45.7	37.6	16.5	0.1	0.0	100.0	99.9	813
Total 15-59	61.8	18.3	19.1	0.5	0.3	100.0	99.2	7,197

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
[1] Includes all men who report they are circumcised, regardless of provider
[2] Other religion includes traditional religions and no religion.

Table 12.8 Self-reported prevalence of sexually transmitted infections (STIs) and STI symptoms

Among women and men age 15-49 who ever had sexual intercourse, percentage reporting having an STI and/or symptoms of an STI in the past 12 months, according to background characteristics, Sierra Leone DHS 2019

	Percentage of women who reported having in the past 12 months:					Percentage of men who reported having in the past 12 months:				
Background characteristic	STI	Bad-smelling/ abnormal genital discharge	Genital sore or ulcer	STI/genital discharge/ sore or ulcer	Number of women who ever had sexual intercourse	STI	Abnormal discharge from penis	Genital sore or ulcer	STI/ abnormal discharge from penis/ sore or ulcer	Number of men who ever had sexual intercourse
Age										
15-24	12.3	18.9	10.2	23.6	4,465	11.7	12.0	7.2	16.5	1,420
15-19	12.2	17.6	9.5	22.7	1,930	8.2	8.6	6.2	13.1	574
20-24	12.4	19.8	10.8	24.3	2,536	14.1	14.3	7.9	18.9	847
25-29	14.8	18.4	10.8	23.7	2,720	12.0	11.6	7.0	15.5	1,003
30-39	12.0	17.2	9.9	21.8	4,166	9.3	8.0	4.9	12.9	1,580
40-49	8.0	12.2	6.8	15.8	2,624	6.2	6.4	3.5	9.3	1,304
Marital status										
Never married	13.9	19.0	11.3	24.0	3,462	12.0	12.2	6.8	16.8	1,851
Married or living together	11.3	16.4	8.9	20.8	9,712	8.2	7.5	4.8	11.2	3,234
Divorced/separated/ widowed	10.5	16.0	10.0	21.0	801	12.2	13.1	6.8	18.2	222
Circumcised										
Yes[1]	na	na	na	na	na	9.6	9.3	5.6	13.4	5,270
No	na	na	na	na	na	*	*	*	*	22
Don't know/missing	na	na	na	na	na	*	*	*	*	15
Residence										
Urban	15.3	19.1	11.4	24.7	6,159	9.3	8.4	4.7	12.6	2,485
Rural	9.2	15.4	8.2	19.2	7,817	10.0	10.2	6.3	14.2	2,823
Province										
Eastern	7.1	9.7	6.3	13.6	2,788	10.4	9.1	4.7	13.5	1,063
Northern	13.8	24.1	16.0	26.9	2,988	9.7	9.3	5.9	13.7	1,085
North West	18.1	29.6	12.2	36.7	2,325	7.5	9.1	3.7	11.9	818
Southern	5.2	5.8	1.7	9.9	2,629	12.1	11.8	8.9	15.7	1,003
Western Area	15.3	16.9	10.9	22.4	3,246	8.6	7.9	4.7	12.6	1,339
District										
Kailahun	10.1	8.3	7.8	12.3	672	14.8	11.5	6.9	18.1	252
Kenema	7.4	9.3	7.0	13.0	1,305	9.1	8.2	4.9	10.9	470
Kono	4.0	11.6	4.1	15.6	811	8.8	8.6	2.7	13.6	342
Bombali	23.1	34.0	24.0	36.8	1,056	6.8	6.2	2.9	9.0	374
Falaba	5.0	17.9	10.0	23.9	378	17.7	21.7	19.5	32.9	107
Koinadugu	12.2	28.8	15.7	31.2	417	14.1	7.3	3.9	14.5	159
Tonkolili	8.6	15.2	10.8	17.0	1,137	8.7	9.6	5.8	12.7	444
Kambia	36.8	34.8	9.5	47.0	822	6.0	4.2	3.4	8.9	272
Karene	8.6	13.4	6.2	17.5	432	9.4	10.7	3.6	11.8	169
Port Loko	7.5	32.1	16.6	36.6	1,070	7.7	11.9	3.9	14.1	377
Bo	5.4	8.0	1.7	13.1	1,108	8.5	9.3	4.5	10.9	426
Bonthe	10.0	4.0	2.5	13.2	423	30.4	26.8	29.5	37.1	178
Moyamba	3.7	4.2	1.2	5.2	680	8.5	9.1	5.2	11.7	246
Pujehun	2.6	4.2	1.8	5.8	418	6.4	5.7	3.0	10.6	152
Western Area Rural	17.3	16.3	13.1	23.6	1,237	7.3	6.2	4.6	10.5	436
Western Area Urban	14.0	17.4	9.6	21.7	2,010	9.3	8.8	4.7	13.6	902
Education										
No education	10.6	15.4	8.4	19.7	6,924	9.4	10.0	6.0	13.9	1,723
Primary	10.9	17.0	9.4	20.3	1,770	7.4	7.2	4.3	9.7	639
Secondary	13.6	18.9	11.1	24.2	4,639	11.1	10.8	5.9	14.9	2,425
More than secondary	16.9	21.8	11.0	27.1	643	6.6	3.5	4.2	10.1	521
Wealth quintile										
Lowest	8.0	12.8	7.0	16.4	2,591	9.4	9.3	6.6	13.4	941
Second	9.5	15.9	8.1	19.8	2,646	9.7	11.0	6.5	14.7	934
Middle	9.8	15.9	9.0	20.7	2,693	11.5	11.0	6.3	15.0	929
Fourth	15.7	19.8	11.5	25.3	2,947	9.9	8.2	4.5	12.7	1,178
Highest	15.3	19.9	11.7	24.9	3,098	8.4	8.1	4.5	12.3	1,326
Total 15-49	11.9	17.0	9.6	21.6	13,975	9.7	9.4	5.6	13.5	5,307
50-59	na	na	na	na	na	5.2	4.1	3.0	7.6	812
Total 15-59	na	na	na	na	na	9.1	8.7	5.2	12.7	6,119

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
na = Not applicable
[1] Includes all men who report they are circumcised, regardless of provider

Table 12.9 Women and men seeking treatment for STIs

Percentage of women and men age 15-49 reporting an STI or symptoms of an STI in the past 12 months who sought advice or treatment, Sierra Leone DHS 2019

Source of advice or treatment	Women	Men
Clinic/hospital/private doctor/other health professional	57.5	53.4
Advice or medicine from shop/pharmacy	16.8	22.9
Advice or treatment from any other source	2.6	2.8
No advice or treatment	25.8	23.9
Number with STI or symptoms of STI	3,022	715

Table 12.10 Comprehensive knowledge about HIV among young people

Percentage of young women and young men age 15-24 with comprehensive knowledge about HIV, according to background characteristics, Sierra Leone DHS 2019

	Women age 15-24		Men age 15-24	
Background characteristic	Percentage with comprehensive knowledge of AIDS[1]	Number of women	Percentage with comprehensive knowledge of AIDS[1]	Number of men
Age				
15-19	26.5	3,427	22.2	1,541
15-17	24.8	2,050	18.8	977
18-19	28.9	1,377	27.9	564
20-24	31.6	2,629	36.7	937
20-22	32.2	1,657	35.4	609
23-24	30.7	972	39.2	328
Marital status				
Never married	30.9	4,129	27.2	2,284
Ever had sex	34.4	2,542	35.2	1,226
Never had sex	25.2	1,587	17.8	1,058
Ever married	24.0	1,927	33.4	194
Residence				
Urban	34.1	3,201	32.5	1,218
Rural	22.7	2,854	23.0	1,261
Education				
No education	17.7	1,121	13.7	342
Primary	18.6	975	13.1	384
Secondary	33.8	3,810	32.4	1,694
More than secondary	46.5	150	66.1	59
Total	28.7	6,055	27.7	2,479

[1] Comprehensive knowledge means knowing that consistent use of condoms during sexual intercourse and having just one uninfected faithful partner can reduce the chance of getting HIV, knowing that a healthy-looking person can have HIV, and rejecting the two most common local misconceptions about AIDS transmission or prevention. The components of comprehensive knowledge are presented in Tables 12.1 and 12.2.

Table 12.11 Age at first sexual intercourse among young people

Percentage of young women and young men age 15-24 who had sexual intercourse before age 15 and percentage of young women and young men age 18-24 who had sexual intercourse before age 18, according to background characteristics, Sierra Leone DHS 2019

	Women				Men			
Background characteristic	Percentage who had sexual intercourse before age 15	Number of women (15-24)	Percentage who had sexual intercourse before age 18	Number of women (18-24)	Percentage who had sexual intercourse before age 15	Number of men (15-24)	Percentage who had sexual intercourse before age 18	Number of men (18-24)
Age								
15-19	16.8	3,427	na	na	6.5	1,541	na	na
15-17	16.7	2,050	na	na	6.7	977	na	na
18-19	17.0	1,377	73.1	1,377	6.2	564	43.5	564
20-24	22.2	2,629	70.4	2,629	8.3	937	48.8	937
20-22	21.9	1,657	71.9	1,657	8.2	609	49.3	609
23-24	22.7	972	67.7	972	8.4	328	47.8	328
Residence								
Urban	13.9	3,201	62.2	2,113	6.8	1,218	43.1	788
Rural	25.0	2,854	81.5	1,893	7.6	1,261	50.9	713
Education								
No education	30.8	1,121	82.7	887	5.5	342	47.1	224
Primary	24.1	975	85.7	506	4.1	384	49.0	154
Secondary	15.1	3,810	66.5	2,464	8.1	1,694	46.3	1,064
More than secondary	2.4	150	34.2	149	12.0	59	47.4	59
Total	19.2	6,055	71.3	4,006	7.2	2,479	46.8	1,501

na = Not applicable

Table 12.12 Premarital sexual intercourse among young people

Among never-married women and men age 15-24, percentage who have never had sexual intercourse, according to background characteristics, Sierra Leone DHS 2019

	Women age 15-24		Men age 15-24	
Background characteristic	Percentage who have never had sexual intercourse	Number of never married women	Percentage who have never had sexual intercourse	Number of never married men
Age				
15-19	51.0	2,930	63.4	1,527
15-17	63.5	1,957	76.8	973
18-19	25.9	974	39.7	554
20-24	7.8	1,199	12.0	757
20-22	9.4	849	13.5	512
23-24	3.8	349	8.7	245
Residence				
Urban	39.7	2,508	42.8	1,161
Rural	36.5	1,621	50.0	1,123
Education				
No education	38.8	403	44.8	302
Primary	54.1	616	66.6	355
Secondary	36.2	2,983	43.5	1,574
More than secondary	15.2	127	3.0	53
Total 15-24	38.4	4,129	46.3	2,284

Table 12.13.1 Multiple sexual partners and higher-risk sexual intercourse in the past 12 months among young people: Women

Among all young women age 15-24, percentage who had sexual intercourse with more than one sexual partner in the past 12 months and percentage who had intercourse in the past 12 months with a person who neither was their husband nor lived with them; among young women having more than one partner in the past 12 months, percentage reporting that a condom was used during last intercourse; and among young women who had sexual intercourse in the past 12 months with a person who neither was their husband nor lived with them, percentage who used a condom during last sexual intercourse with such a partner, according to background characteristics, Sierra Leone DHS 2019

	Women age 15-24			Women age 15-24 who had 2+ partners in the past 12 months		Women age 15-24 who had intercourse in the past 12 months with a person who neither was their husband nor lived with them	
Background characteristic	Percentage who had 2+ partners in the past 12 months	Percentage who had intercourse in the past 12 months with a person who neither was their husband nor lived with them	Number of women	Percentage who reported using a condom during last sexual intercourse	Number of women	Percentage who reported using a condom during last sexual intercourse with such a partner	Number of women
Age							
15-19	2.8	39.0	3,427	1.2	96	5.8	1,335
15-17	1.7	32.6	2,050	(0.0)	34	5.8	668
18-19	4.4	48.5	1,377	1.9	61	5.9	667
20-24	6.2	40.5	2,629	4.4	164	6.2	1,065
20-22	4.9	42.6	1,657	5.6	82	6.3	706
23-24	8.4	36.9	972	3.2	82	5.9	358
Marital status							
Never married	4.4	55.0	4,129	4.6	183	6.1	2,270
Ever married	4.0	6.7	1,927	0.0	77	4.5	130
Residence							
Urban	4.7	44.9	3,201	4.5	152	7.5	1,437
Rural	3.8	33.8	2,854	1.5	107	3.6	963
Education							
No education	4.1	22.3	1,121	(0.0)	46	2.9	250
Primary	2.7	27.5	975	(1.8)	27	4.1	268
Secondary	4.6	46.6	3,810	4.2	174	6.6	1,775
More than secondary	8.7	71.2	150	*	13	6.6	107
Total 15-24	4.3	39.6	6,055	3.2	259	6.0	2,400

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

Table 12.13.2 Multiple sexual partners and higher-risk sexual intercourse in the past 12 months among young people: Men

Among all young men age 15-24, percentage who had sexual intercourse with more than one sexual partner in the past 12 months and percentage who had intercourse in the past 12 months with a person who neither was their wife nor lived with them; among young men having more than one partner in the past 12 months, percentage reporting that a condom was used during last intercourse; and among young men who had sexual intercourse in the past 12 months with a person who neither was their wife nor lived with them, percentage who used a condom during last sexual intercourse with such a partner, according to background characteristics, Sierra Leone DHS 2019

	Men age 15-24			Men age 15-24 who had 2+ partners in the past 12 months		Men age 15-24 who had intercourse in the past 12 months with a person who neither was their wife nor lived with them	
Background characteristic	Percentage who had 2+ partners in the past 12 months	Percentage who had intercourse in the past 12 months with a person who neither was their wife nor lived with them	Number of men	Percentage who reported using a condom during last sexual intercourse	Number of men	Percentage who reported using a condom during last sexual intercourse with such a partner	Number of men
Age							
15-19	5.5	32.4	1,541	14.5	85	15.2	500
15-17	2.4	20.3	977	*	23	14.6	199
18-19	11.0	53.4	564	15.6	62	15.6	301
20-24	22.8	70.8	937	24.7	213	23.8	664
20-22	19.4	69.6	609	20.0	118	22.8	424
23-24	29.0	73.1	328	30.5	95	25.6	240
Marital status							
Never married	10.8	48.0	2,284	22.8	247	19.7	1,096
Ever married	26.3	34.7	194	16.8	51	26.9	68
Residence							
Urban	13.0	51.4	1,218	28.2	158	25.9	626
Rural	11.1	42.6	1,261	14.6	140	13.4	537
Education							
No education	13.6	50.3	342	12.4	47	10.7	172
Primary	7.5	29.8	384	(8.4)	29	7.0	114
Secondary	12.0	48.9	1,694	25.1	204	23.2	829
More than secondary	32.0	82.5	59	*	19	(30.8)	48
Total 15-24	12.0	46.9	2,479	21.8	298	20.1	1,164

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

HIV PREVALENCE 13

Key Findings

- ***HIV prevalence:*** 1.7% of women and men age 15-49 in Sierra Leone are living with HIV; HIV prevalence is higher among women than men (2.2% versus 1.1%).
- ***HIV prevalence by residence:*** Among women and men combined, HIV prevalence is higher in urban areas than in rural areas (2.3% versus 1.2%).
- ***HIV prevalence according to province:*** HIV prevalence is highest in the Western Area province (2.5%) and lowest in the Eastern province (1.2%).
- ***HIV prevalence among young people:*** Overall, 1.0% of young women and men age 15-24 are HIV positive. HIV prevalence is higher among young women than young men (1.5% versus 0.5%).

The 2019 SLDHS included HIV prevalence testing for women age 15-49 and men age 15-59. The specimen collection and HIV testing procedures are described in Chapter 1.

13.1 COVERAGE RATES FOR HIV TESTING

Eighty-four percent of women and 81% of men age 15-49 who were eligible for HIV testing were interviewed, consented to the HIV test, and provided a blood specimen for testing (**Table 13.1**). Twelve percent of women and 13% of men eligible for HIV testing refused to provide a blood specimen. Men (6%) were more likely than women (3%) to be absent for blood collection after repeated attempts to contact them.

HIV testing coverage rate

Percentage of women and men who are tested for HIV as part of the DHS survey.

Sample: Women and men who are in households selected for HIV testing and are within the eligible age range for HIV testing based on information collected in the Household Questionnaire.

The HIV testing coverage rate is calculated as follows:

$$\frac{\text{Women and men age 15-49 who were interviewed and whose blood sample underwent the complete HIV testing algorithm with a final result of positive, negative, indeterminate, or inconclusive}}{\text{All women and men age 15-49 in households selected for HIV testing}}$$

Trends: Participation in HIV testing among women and men rose from 86% in 2008 to 91% in 2013 before declining to 83% in 2019. Among women, testing participation increased from 88% to 93% between 2008 and 2013 and then declined to 84% in 2019. Among men, participation increased from 85% to 89% before declining to 81%.

Patterns by background characteristics

- Among women, the HIV testing participation rate is higher in urban areas than rural areas (86% versus 83%). There is no difference by residence among men (81% each) (**Table 13.1**).
- HIV response rates are highest for women and men in the Eastern province (94% and 90%, respectively) and lowest for women and men in the North West province (67% and 63%, respectively).
- By district, the HIV response rate is highest for women in Kenema (98%) and men in Kenema and Pujehun (96%). Among both women and men, the rate is lowest in Kambia (58% and 56%, respectively).
- Participation is lowest among women in the second and middle wealth quintiles (82% each) and among men in the middle quintile (79%) (**Table 13.2**).

13.2 HIV PREVALENCE

13.2.1 HIV Prevalence by Age and Sex

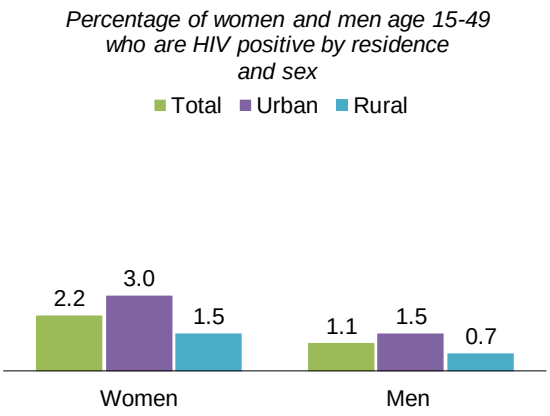
HIV prevalence

Percentage of women and men testing positive for HIV as part of the DHS survey.

Sample: Women and men age 15-49 who are tested for HIV as part of the survey

Table 13.3 shows that 1.7% of the population age 15-49 in Sierra Leone is HIV positive. HIV prevalence is higher among women than men (2.2% versus 1.1%) (**Figure 13.1**).

Figure 13.1 **HIV prevalence by residence and sex**



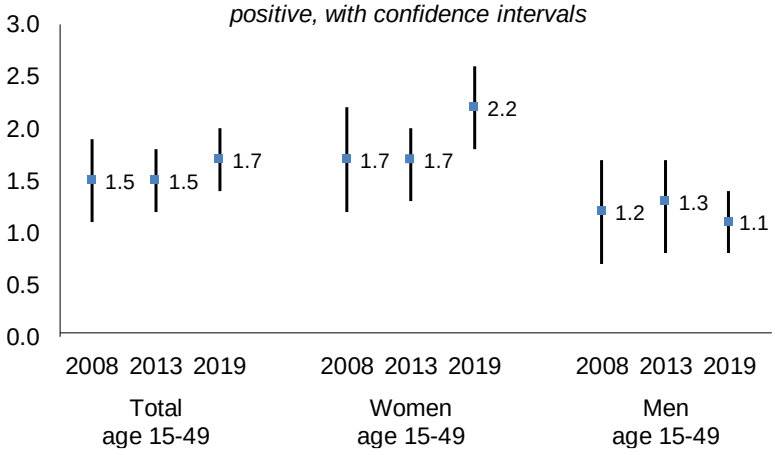
Trends: Although the HIV prevalence among women and men age 15-49 age appears to have increased slightly from 2013 to 2019, from 1.5% (CI: 1.2%, 1.8%) to 1.7% (CI: 1.4%, 2.0%), the change is not statistically significant (**Figure 13.2**). The change in HIV prevalence among women from 1.7% in 2013 to 2.2% in 2019 is also not statistically significant at the 95% level; however, the change is statistically significant at the 90% level (p=0.077). It should also be noted that with the sample size of the 2019 SLDHS, the chance of detecting a statistically significant difference at the 95% level for the change of 0.5 percentage points in the HIV prevalence among women is low.

Patterns by background characteristics

- The HIV prevalence among women fluctuates by age; the prevalence increases from 0.5% among women age 15-19 to 3.3% among those age 30-34, declines to 1.3% among those age 40-44, and subsequently increases to 2.2% among those age 45-49. The pattern is similar among men (0.3% at age 15-19, 2.0% at age 35-39, 0.8% at age 40-44, 2.2% at age 45-49, and 2.9% at age 50-59) (**Figure 13.2** and **Figure 13.3**).

Figure 13.2 Trends in HIV prevalence

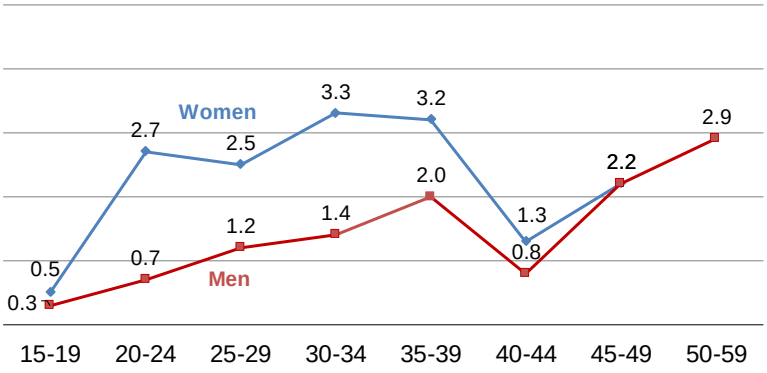
Percentage of women and men age 15-49 who are HIV positive, with confidence intervals



- Among women and men combined, HIV prevalence is nearly twice as high in urban areas as in rural areas (2.3% versus 1.2%) (**Table 13.4**). The HIV prevalence among women is 3.0% in urban areas and 1.5% in rural areas. Among men, the prevalence is 1.5% in urban areas and 0.7% in rural areas.

Figure 13.3 HIV prevalence by age

Percentage of women and men who are HIV positive by age

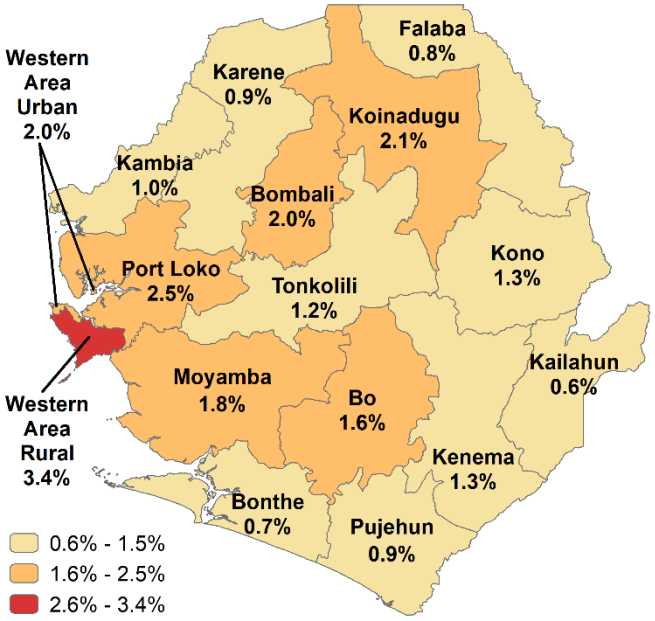


- HIV prevalence ranges from a high of 2.5% in the Western Area province to a low of 1.2% in the Eastern province (**Table 13.4**).

- By district, HIV prevalence ranges from a high of 3.4% in Western Area Rural to a low of 0.6% in Kailahun (**Figure 13.4**).

***Figure 13.4* HIV prevalence by district**

Percentage of women and men age 15-49 who are HIV positive

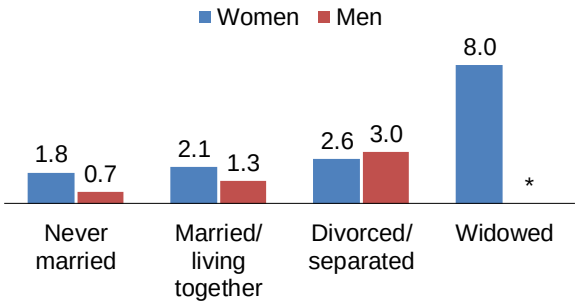


Patterns by other sociodemographic and health characteristics

- HIV prevalence varies notably by marital status and is highest among women age 15-49 who reported being widowed (8.0%). Women and men who are divorced or separated also have relatively high prevalence rates (2.6% and 3.0%, respectively). Those who have never been married and those who are married or living together with a partner as if married have the lowest prevalence (**Table 13.5** and **Figure 13.5**).

***Figure 13.5* HIV prevalence by marital status**

Percentage of women and men age 15-49 who are HIV positive



An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

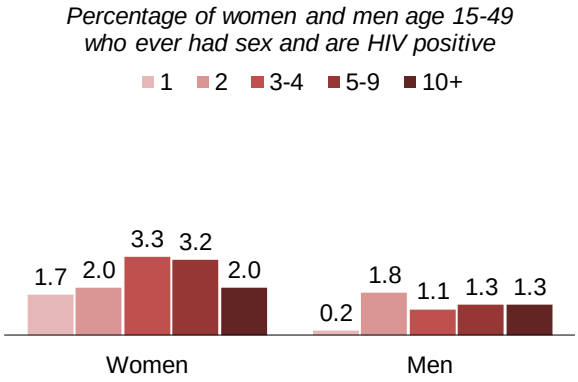
- HIV prevalence is similar among women who are pregnant (2.1%) and those who are not pregnant or not sure (2.2%).

13.2.2 HIV Prevalence by Sexual Risk Behaviour

- Women who reported first sexual intercourse before age 16 have a higher HIV prevalence (2.7%) than women who had their first sex at an older age. By contrast, HIV prevalence is slightly lower among men who first had sex before age 16 (1.1%) than among their counterparts who initiated sexual activity at age 16-19 (**Table 13.6**).

- HIV prevalence among women generally increases with number of lifetime sexual partners, from 1.7% among those with one lifetime sexual partner to 3.3% among those with three or four partners. There is no clear relationship between number of lifetime sexual partners and HIV status among men. HIV prevalence is lowest among men with one lifetime sexual partner (0.2%) and highest among those with two partners (1.8%), with men with three or more lifetime partners falling in between (1.1-1.3%) (**Table 13.6** and **Figure 13.6**).

Figure 13.6 **HIV prevalence by number of lifetime partners**



13.2.3 HIV Prevalence among Young People

Tables 13.7 and **13.8** show HIV prevalence among young people age 15-24 according to background characteristics and sexual risk behaviours. Overall, 1.0% of young women and men age 15-24 are HIV positive. HIV prevalence is higher among young women than young men (1.5% versus 0.5%).

Patterns by background characteristics

- Young women who are married or living together with a partner have a higher HIV prevalence than their never-married counterparts (1.9% versus 1.3%).
- HIV prevalence is higher among young women in urban areas (2.0%) than those in rural areas (0.9%). Among young men, HIV prevalence is similar in urban and rural areas (0.5% and 0.4%, respectively) (**Table 13.7**).
- Among young women and men who have ever had sex, HIV prevalence is higher among those with two or more sexual partners in the past 12 months (2.2%) than among their counterparts with one partner (1.2%) or no partners (1.9%) (**Table 13.8**). It is interesting to note the difference in the relationship between recent sexual partners and HIV status according to sex. Young women with no sexual partners in the past 12 months are most likely to have HIV, whereas young men with no partners in the past 12 months are least likely to have HIV.

13.2.4 HIV Prevalence by Other Characteristics Related to HIV Risk

- As shown in **Table 13.9**, HIV prevalence is higher among women and men who reported having a sexually transmitted infection (STI) or symptoms of an STI in the past 12 months than among those who did not (2.3% versus 1.8%). Among women and men combined, 1.3% of those who never received an HIV test are living with HIV, as compared with 2.6% of those who have ever been tested for HIV.
- Among HIV-positive women and men, just 49% reported having ever been tested for HIV and having received the result of their most recent test. Twenty-one percent of HIV-positive women and men were tested for HIV and received the result in the past 12 months, and 28% were tested 12 or more months ago and received the result. Fourteen percent of HIV-positive women and men have ever been tested for HIV but did not receive the result of their most recent test, and 37% have never been tested for HIV (**Table 13.10**). Among respondents living with HIV, women are much more likely than men to have ever been tested (57% versus 28%).
- Circumcision (either medical or traditional) is nearly universal in Sierra Leone. HIV prevalence is lower among men who report that they were medically circumcised (1.0%) than among those who

report that they were traditionally circumcised (1.6%) (**Table 13.11**). However, it is important to note that 20% of circumcised men were not able to report whether the procedure was performed by a medical or traditional practitioner.

13.2.5 HIV Prevalence among Couples

A total of 2.4% of the cohabitating couples interviewed in the 2019 SLDHS are affected by HIV, meaning that one or both members are HIV positive. This includes 0.3% of couples in which both members are HIV positive, 1.1% of couples in which the man is HIV positive and the woman is HIV negative, and 1.0% of couples in which the woman is HIV positive and the man is HIV negative (**Table 13.12**).

LIST OF TABLES

For more information on HIV prevalence, see the following tables:

- **Table 13.1 Coverage of HIV testing by residence and region**
- **Table 13.2 Coverage of HIV testing according to selected background characteristics**
- **Table 13.3 HIV prevalence by age**
- **Table 13.4 HIV prevalence by socioeconomic characteristics**
- **Table 13.5 HIV prevalence by demographic characteristics**
- **Table 13.6 HIV prevalence by sexual behaviour**
- **Table 13.7 HIV prevalence among young people by background characteristics**
- **Table 13.8 HIV prevalence among young people by sexual behaviour**
- **Table 13.9 HIV prevalence by other characteristics**
- **Table 13.10 Prior HIV testing by current HIV status**
- **Table 13.11 HIV prevalence by male circumcision**
- **Table 13.12 HIV prevalence among couples**

Table 13.1 Coverage of HIV testing by residence and region

Percent distribution of women and men age 15-49 eligible for HIV testing by testing status, according to residence, province, and district (unweighted), Sierra Leone DHS 2019

Residence, province, and district	HIV test status								Total	Number
	DBS tested[1]		Refused to provide blood		Absent at the time of blood collection		Other/missing[2]			
	Interviewed	Not interviewed	Interviewed	Not interviewed	Interviewed	Not interviewed	Interviewed	Not interviewed		
WOMEN										
Residence										
Urban	86.2	0.2	9.7	0.7	1.5	1.4	0.3	0.1	100.0	3,398
Rural	82.9	0.3	11.7	1.6	1.9	1.4	0.1	0.1	100.0	5,030
Province										
Eastern	94.4	0.4	3.3	0.1	0.4	1.4	0.0	0.1	100.0	1,627
Northern	79.5	0.1	15.7	1.2	2.6	0.4	0.4	0.0	100.0	2,089
North West	67.1	0.3	21.5	4.1	3.5	3.0	0.1	0.4	100.0	1,428
Southern	92.5	0.3	5.1	0.4	0.6	0.9	0.1	0.1	100.0	1,909
Western Area	85.8	0.2	9.8	0.8	1.6	1.6	0.1	0.0	100.0	1,375
District										
Kailahun	95.9	0.7	1.4	0.0	0.5	1.6	0.0	0.0	100.0	439
Kenema	97.5	0.6	0.6	0.1	0.4	0.7	0.0	0.0	100.0	667
Kono	89.3	0.0	8.3	0.0	0.2	2.1	0.0	0.2	100.0	521
Bombali	83.8	0.0	13.3	0.5	1.1	0.3	1.0	0.0	100.0	618
Falaba	69.2	0.0	24.3	3.0	3.0	0.4	0.2	0.0	100.0	474
Koinadugu	71.8	0.0	21.5	1.2	4.8	0.2	0.5	0.0	100.0	419
Tonkolili	88.8	0.5	7.1	0.5	2.2	0.7	0.0	0.2	100.0	578
Kambia	57.8	0.4	30.9	4.1	2.3	3.7	0.0	0.8	100.0	512
Karene	69.7	0.0	21.3	4.1	4.4	0.6	0.0	0.0	100.0	343
Port Loko	73.8	0.3	13.3	4.2	4.0	3.8	0.3	0.2	100.0	573
Bo	94.2	0.0	4.5	0.4	0.1	0.3	0.3	0.1	100.0	671
Bonthe	89.8	0.0	7.5	0.3	0.8	1.3	0.0	0.3	100.0	374
Moyamba	89.7	0.8	5.2	0.8	1.4	2.1	0.0	0.0	100.0	484
Pujehun	95.5	0.5	3.7	0.0	0.3	0.0	0.0	0.0	100.0	380
Western Area Rural	82.1	0.5	13.0	1.0	1.3	2.0	0.2	0.0	100.0	609
Western Area Urban	88.8	0.0	7.3	0.7	1.8	1.3	0.1	0.0	100.0	766
Total 15-49	84.2	0.3	10.9	1.2	1.7	1.4	0.2	0.1	100.0	8,428
MEN										
Residence										
Urban	80.5	0.1	11.6	0.8	4.2	2.4	0.2	0.2	100.0	2,709
Rural	80.8	0.3	12.3	0.7	3.6	1.8	0.3	0.2	100.0	3,867
Province										
Eastern	90.3	0.2	5.6	0.1	1.9	1.6	0.1	0.3	100.0	1,273
Northern	78.0	0.1	15.2	0.7	4.9	0.8	0.2	0.1	100.0	1,620
North West	62.7	0.4	22.8	2.1	6.5	4.3	0.7	0.6	100.0	1,071
Southern	89.9	0.4	6.6	0.1	2.0	1.0	0.1	0.0	100.0	1,468
Western Area	79.0	0.2	11.6	1.1	4.4	3.4	0.2	0.1	100.0	1,144
District										
Kailahun	91.3	0.5	3.3	0.0	3.0	1.4	0.0	0.5	100.0	367
Kenema	96.4	0.0	1.5	0.0	0.8	0.8	0.2	0.2	100.0	475
Kono	82.6	0.0	12.1	0.2	2.1	2.8	0.0	0.2	100.0	431
Bombali	82.7	0.2	13.5	0.2	2.6	0.9	0.0	0.0	100.0	467
Falaba	64.1	0.0	26.9	1.3	5.8	1.6	0.0	0.3	100.0	312
Koinadugu	68.2	0.0	19.8	2.0	9.2	0.0	0.9	0.0	100.0	349
Tonkolili	89.2	0.0	6.1	0.0	3.7	0.8	0.0	0.2	100.0	492
Kambia	55.6	0.5	27.8	1.5	5.2	7.9	0.7	0.7	100.0	403
Karene	64.2	0.8	24.5	3.0	5.3	1.1	1.1	0.0	100.0	265
Port Loko	68.7	0.0	16.6	2.0	8.7	2.7	0.5	0.7	100.0	403
Bo	89.2	0.4	8.4	0.0	1.5	0.6	0.0	0.0	100.0	526
Bonthe	89.3	0.3	6.5	0.0	2.3	1.6	0.0	0.0	100.0	307
Moyamba	87.0	0.5	6.5	0.3	3.8	1.9	0.0	0.0	100.0	370
Pujehun	95.8	0.4	3.4	0.0	0.0	0.0	0.4	0.0	100.0	265
Western Area Rural	72.4	0.4	17.5	1.1	5.0	3.5	0.0	0.2	100.0	463
Western Area Urban	83.6	0.0	7.6	1.2	4.0	3.4	0.3	0.0	100.0	681
Total 15-49	80.7	0.2	12.0	0.7	3.8	2.0	0.2	0.2	100.0	6,576
50-59	82.1	0.0	11.8	0.7	2.8	1.6	0.8	0.1	100.0	853
Total 15-59	80.8	0.2	12.0	0.7	3.7	2.0	0.3	0.2	100.0	7,429

Continued...

Table 13.1—*Continued*

Residence, province, and district	HIV test status								Total	Number
	DBS tested[1]		Refused to provide blood		Absent at the time of blood collection		Other/missing[2]			
	Interviewed	Not interviewed	Interviewed	Not interviewed	Interviewed	Not interviewed	Interviewed	Not interviewed		
	TOTAL									
Residence										
Urban	83.7	0.2	10.5	0.8	2.7	1.8	0.2	0.1	100.0	6,107
Rural	82.0	0.3	12.0	1.2	2.6	1.5	0.2	0.1	100.0	8,897
Province										
Eastern	92.6	0.3	4.3	0.1	1.0	1.5	0.0	0.2	100.0	2,900
Northern	78.8	0.1	15.5	1.0	3.6	0.6	0.3	0.1	100.0	3,709
North West	65.2	0.3	22.0	3.2	4.8	3.6	0.4	0.4	100.0	2,499
Southern	91.3	0.4	5.7	0.3	1.2	0.9	0.1	0.1	100.0	3,377
Western Area	82.7	0.2	10.6	1.0	2.9	2.4	0.2	0.0	100.0	2,519
District										
Kailahun	93.8	0.6	2.2	0.0	1.6	1.5	0.0	0.2	100.0	806
Kenema	97.0	0.4	1.0	0.1	0.6	0.8	0.1	0.1	100.0	1,142
Kono	86.2	0.0	10.0	0.1	1.1	2.4	0.0	0.2	100.0	952
Bombali	83.3	0.1	13.4	0.4	1.8	0.6	0.6	0.0	100.0	1,085
Falaba	67.2	0.0	25.3	2.3	4.1	0.9	0.1	0.1	100.0	786
Koinadugu	70.2	0.0	20.7	1.6	6.8	0.1	0.7	0.0	100.0	768
Tonkolili	89.0	0.3	6.6	0.3	2.9	0.7	0.0	0.2	100.0	1,070
Kambia	56.8	0.4	29.5	3.0	3.6	5.6	0.3	0.8	100.0	915
Karene	67.3	0.3	22.7	3.6	4.8	0.8	0.5	0.0	100.0	608
Port Loko	71.7	0.2	14.7	3.3	5.9	3.4	0.4	0.4	100.0	976
Bo	92.0	0.2	6.2	0.3	0.8	0.4	0.2	0.1	100.0	1,197
Bonthe	89.6	0.1	7.0	0.1	1.5	1.5	0.0	0.1	100.0	681
Moyamba	88.5	0.7	5.7	0.6	2.5	2.0	0.0	0.0	100.0	854
Pujehun	95.7	0.5	3.6	0.0	0.2	0.0	0.2	0.0	100.0	645
Western Area Rural	77.9	0.5	14.9	1.0	2.9	2.6	0.1	0.1	100.0	1,072
Western Area Urban	86.3	0.0	7.5	0.9	2.8	2.3	0.2	0.0	100.0	1,447
Total 15-49	82.7	0.3	11.4	1.0	2.6	1.7	0.2	0.1	100.0	15,004

[1] Includes all dried blood spot (DBS) specimens tested at the lab and for which there is a final result, i.e., positive, negative, or inconclusive
[2] Includes (1) other results of blood collection (e.g., technical problem in the field), (2) lost specimens, (3) noncorresponding bar codes, and (4) lab results such as blood not tested for technical reason or not enough blood to complete the algorithm

Table 13.2 Coverage of HIV testing according to selected background characteristics

Percent distribution of women and men age 15-49 eligible for HIV testing by testing status, according to selected background characteristics (unweighted), Sierra Leone DHS 2019

Background characteristic	HIV test status								Total	Number
	DBS tested[1]		Refused to provide blood		Absent at the time of blood collection		Other/missing[2]			
	Interviewed	Not interviewed	Interviewed	Not interviewed	Interviewed	Not interviewed	Interviewed	Not interviewed		
					WOMEN					
Age										
15-19	83.1	0.2	11.6	0.9	2.5	1.4	0.2	0.2	100.0	1,825
20-24	84.7	0.2	10.7	1.3	1.5	1.5	0.1	0.0	100.0	1,453
25-29	84.5	0.1	11.1	1.5	1.4	1.2	0.1	0.1	100.0	1,371
30-34	84.6	0.2	11.0	1.7	1.0	1.0	0.4	0.1	100.0	1,056
35-39	84.8	0.5	10.3	1.1	1.6	1.3	0.3	0.1	100.0	1,229
40-44	84.5	0.5	10.7	0.8	1.9	1.5	0.1	0.0	100.0	747
45-49	84.1	0.4	10.4	1.5	1.6	1.7	0.0	0.3	100.0	747
Education										
No education	82.1	0.5	12.4	1.5	1.8	1.3	0.2	0.2	100.0	4,076
Primary	87.6	0.3	8.1	1.7	0.7	1.4	0.1	0.1	100.0	1,122
Secondary	85.5	<0.1	10.3	0.7	1.9	1.3	0.2	<0.1	100.0	2,924
More than secondary	87.9	<0.1	7.5	0.7	2.6	1.3	<0.1	<0.1	100.0	306
Wealth quintile										
Lowest	85.4	0.4	10.2	1.2	1.3	1.4	0.1	0.1	100.0	1,703
Second	82.2	0.3	11.6	1.9	2.3	1.4	0.2	0.2	100.0	1,626
Middle	82.2	0.3	12.8	1.5	1.7	1.4	0.1	0.1	100.0	1,755
Fourth	84.2	0.3	11.5	0.8	1.8	1.2	0.2	0.1	100.0	1,847
Highest	87.5	0.1	8.2	0.8	1.5	1.5	0.3	0.1	100.0	1,497
Total	84.2	0.3	10.9	1.2	1.7	1.4	0.2	0.1	100.0	8,428
					MEN					
Age										
15-19	79.9	0.2	13.5	0.7	4.0	1.5	0.2	0.1	100.0	1,623
20-24	82.6	0.3	9.9	0.8	3.5	2.3	0.2	0.3	100.0	960
25-29	79.9	0.3	11.8	1.1	4.6	1.7	0.2	0.3	100.0	992
30-34	81.0	0.1	10.5	0.4	4.1	3.4	0.2	0.2	100.0	801
35-39	80.3	0.2	12.2	0.8	4.3	1.8	0.1	0.1	100.0	829
40-44	82.1	0.1	12.1	0.7	2.2	2.1	0.3	0.3	100.0	671
45-49	79.7	0.3	13.4	0.6	3.4	2.1	0.3	0.1	100.0	700
Education										
No education	79.2	0.4	13.4	1.0	3.3	2.0	0.2	0.3	100.0	2,129
Primary	84.2	0.1	10.5	0.2	3.6	1.3	0.0	0.1	100.0	917
Secondary	80.5	0.2	11.9	0.8	4.1	2.2	0.3	0.1	100.0	3,040
More than secondary	82.5	0.0	9.7	0.4	5.1	1.6	0.2	0.4	100.0	486
Missing	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	100.0	4
Wealth quintile										
Lowest	84.4	0.4	10.2	0.3	2.8	1.5	0.2	0.2	100.0	1,301
Second	79.6	0.2	13.4	0.7	3.3	2.2	0.3	0.1	100.0	1,227
Middle	78.6	0.3	13.6	1.5	4.0	1.7	0.2	0.2	100.0	1,306
Fourth	79.8	0.1	12.0	0.6	4.8	2.2	0.3	0.3	100.0	1,429
Highest	81.0	0.2	11.0	0.6	4.2	2.7	0.1	0.2	100.0	1,313
Total	80.7	0.2	12.0	0.7	3.8	2.0	0.2	0.2	100.0	6,576

[1] Includes all dried blood spot (DBS) specimens tested at the lab and for which there is a final result, i.e., positive, negative, or inconclusive
[2] Includes (1) other results of blood collection (e.g., technical problem in the field), (2) lost specimens, (3) noncorresponding bar codes, and (4) lab results such as blood not tested for technical reason or not enough blood to complete the algorithm

Table 13.3 HIV prevalence by age

Among de facto women age 15-49 and men age 15-59 who were interviewed and tested, percentage HIV positive, according to age, Sierra Leone DHS 2019

	Women		Men		Total	
Age	Percentage HIV positive	Number	Percentage HIV positive	Number	Percentage HIV positive	Number
15-19	0.5	1,506	0.3	1,319	0.4	2,824
20-24	2.7	1,205	0.7	825	1.9	2,030
25-29	2.5	1,171	1.2	855	1.9	2,026
30-34	3.3	849	1.4	685	2.5	1,534
35-39	3.2	1,004	2.0	670	2.7	1,674
40-44	1.3	611	0.8	538	1.0	1,148
45-49	2.2	597	2.2	573	2.2	1,170
50-59	na	na	2.9	698	na	na
Total 15-49	2.2	6,941	1.1	5,465	1.7	12,407
Confidence interval	(1.8, 2.6)		(0.8, 1.4)		(1.4, 2.0)	
Total 15-59	na	na	1.3	6,164	na	na
Confidence interval			(0.9, 1.7)			

na = Not applicable

Table 13.4 HIV prevalence by socioeconomic characteristics

Percentage HIV positive among women and men age 15-49 who were tested, according to socioeconomic characteristics, Sierra Leone DHS 2019

Background characteristic	Women		Men		Total	
	Percentage HIV positive	Number	Percentage HIV positive	Number	Percentage HIV positive	Number
Ethnic group						
Creole	6.0	71	1.7	111	3.4	182
Fullah	2.2	263	5.4	202	3.6	465
Kono	2.5	300	<0.1	229	1.4	529
Limba	3.4	641	0.5	506	2.1	1,148
Loko	3.9	138	3.4	109	3.7	247
Mandingo	2.2	173	1.4	169	1.8	342
Mende	2.0	2,240	0.5	1,647	1.4	3,887
Sherbro	2.6	121	<0.1	112	1.4	232
Temne	2.0	2,345	1.3	1,915	1.7	4,260
Kurankoh	0.5	272	0.8	177	0.6	448
Other Sierra Leone	1.2	348	1.4	271	1.3	619
Other foreign	(2.4)	28	*	17	(1.5)	46
Religion						
Christian	2.9	1,680	0.9	1,232	2.0	2,912
Islam	1.9	5,258	1.2	4,233	1.6	9,491
Other[1]	*	3	*	1	*	3
Employment (past 12 months)						
Not employed	1.6	1,978	0.8	1,367	1.2	3,345
Employed	2.4	4,963	1.2	4,099	1.9	9,062
Residence						
Urban	3.0	3,149	1.5	2,571	2.3	5,720
Rural	1.5	3,792	0.7	2,895	1.2	6,687
Province						
Eastern	1.8	1,398	0.3	1,070	1.2	2,469
Northern	1.9	1,474	1.2	1,153	1.6	2,627
North West	1.8	1,129	1.5	843	1.7	1,971
Southern	2.1	1,318	0.5	1,023	1.4	2,341
Western Area	3.1	1,622	1.8	1,376	2.5	2,998
District						
Kailahun	1.2	312	0.0	264	0.6	575
Kenema	2.1	668	0.2	477	1.3	1,145
Kono	1.8	419	0.7	329	1.3	748
Bombali	2.5	533	1.3	403	2.0	936
Falaba	0.3	203	1.6	124	0.8	327
Koinadugu	2.6	202	1.5	168	2.1	370
Tonkolili	1.6	536	0.9	458	1.2	994
Kambia	1.2	379	0.6	293	1.0	672
Karene	0.4	207	1.4	165	0.9	372
Port Loko	2.8	543	2.2	384	2.5	927
Bo	2.4	582	0.7	453	1.6	1,035
Bonthe	0.7	206	0.7	171	0.7	377
Moyamba	2.9	319	0.4	248	1.8	567
Pujehun	1.4	212	0.3	151	0.9	363
Western Area Rural	4.1	604	2.3	458	3.4	1,063
Western Area Urban	2.4	1,017	1.6	918	2.0	1,936
Education						
No education	1.8	3,109	1.4	1,570	1.6	4,678
Primary	2.2	986	0.6	763	1.5	1,749
Secondary	2.5	2,556	1.1	2,683	1.8	5,239
More than secondary	3.4	291	1.1	450	2.0	741
Wealth quintile						
Lowest	0.9	1,239	0.7	952	0.8	2,192
Second	1.5	1,267	0.8	956	1.2	2,223
Middle	1.9	1,343	1.1	978	1.5	2,321
Fourth	2.6	1,539	1.3	1,235	2.0	2,775
Highest	3.6	1,553	1.5	1,344	2.6	2,897
Total 15-49	2.2	6,941	1.1	5,465	1.7	12,407
50-59	na	na	2.9	698	na	na
Total 15-59	na	na	1.3	6,164	na	na

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
na = Not applicable
[1] Other religion includes traditional religions and no religion.

Table 13.5 HIV prevalence by demographic characteristics

Percentage HIV positive among women and men age 15-49 who were tested, according to demographic characteristics, Sierra Leone DHS 2019

Demographic characteristic	Women		Men		Total	
	Percentage HIV positive	Number	Percentage HIV positive	Number	Percentage HIV positive	Number
Marital status						
Never married	1.8	2,211	0.7	2,505	1.2	4,717
Ever had sexual intercourse	2.4	1,515	1.0	1,573	1.7	3,088
Never had sexual intercourse	0.6	696	0.1	932	0.4	1,629
Married/living together	2.1	4,372	1.3	2,767	1.8	7,140
Divorced or separated	2.6	196	3.0	165	2.8	361
Widowed	8.0	161	*	28	7.9	189
Type of union						
In polygynous union	2.3	1,381	0.8	394	1.9	1,775
In non-polygynous union	2.0	2,984	1.4	2,373	1.8	5,357
Not currently in union	2.3	2,569	0.9	2,698	1.6	5,267
Times slept away from home in past 12 months						
None	1.9	4,550	1.0	2,773	1.6	7,324
1-2	2.5	1,308	1.5	732	2.2	2,040
3-4	2.0	539	0.7	555	1.3	1,095
5+	3.3	544	1.3	1,404	1.9	1,948
Time away in past 12 months						
Away for more than 1 month at a time	2.2	860	1.6	1,037	1.9	1,897
Away only for less than 1 month at a time	2.8	1,531	1.0	1,655	1.8	3,186
Not away	1.9	4,550	1.0	2,773	1.6	7,324
Currently pregnant						
Pregnant	2.1	420	na	na	na	na
Not pregnant or not sure	2.2	6,521	na	na	na	na
ANC for last birth in the last 3 years						
ANC provided by the public sector	1.9	2,388	na	na	na	na
ANC provided by other than the public sector	3.9	69	na	na	na	na
No ANC/no birth in last 3 years	2.3	4,484	na	na	na	na
Total 15-49	2.2	6,941	1.1	5,465	1.7	12,407
50-59	na	na	2.9	698	na	na
Total 15-59	na	na	1.3	6,164	na	na

Note: Total includes 7 cases with missing information on type of union. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
na = Not applicable

Table 13.6 HIV prevalence by sexual behaviour

Percentage HIV positive among women and men age 15-49 who ever had sex and were tested for HIV, according to sexual behaviour characteristics, Sierra Leone DHS 2019

Sexual behaviour characteristic	Women		Men		Total	
	Percentage HIV positive	Number	Percentage HIV positive	Number	Percentage HIV positive	Number
Age at first sexual intercourse						
<16	2.7	3,041	1.1	946	2.3	3,987
16-17	2.0	1,732	1.3	1,260	1.7	2,992
18-19	2.0	1,029	1.6	1,322	1.7	2,351
20+	1.5	341	1.0	958	1.1	1,298
Missing	3.0	100	2.8	46	2.9	147
Number of lifetime partners						
1	1.7	2,046	0.2	461	1.4	2,507
2	2.0	1,958	1.8	639	2.0	2,597
3-4	3.3	1,583	1.1	885	2.5	2,468
5-9	3.2	457	1.3	957	1.9	1,414
10+	(2.0)	47	1.3	803	1.3	849
Missing	2.3	151	1.8	788	1.8	939
Number of sexual partners in past 12 months						
0	3.3	866	0.9	270	2.7	1,136
1	2.2	5,139	1.2	3,064	1.8	8,204
2+	2.2	237	1.7	1,199	1.8	1,435
Non-marital, non-cohabiting partners in past 12 months[1]						
0	2.3	4,614	1.0	2,240	1.9	6,854
1	2.5	1,508	1.3	1,773	1.8	3,281
2+	2.2	120	2.5	520	2.4	640
Condom use at last sexual intercourse in past 12 months						
Used condom	0.5	131	1.6	512	1.4	644
Did not use condom	2.2	5,245	1.3	3,751	1.8	8,996
No sexual intercourse in past 12 months	3.3	866	0.9	270	2.7	1,136
Condom use at last sexual intercourse with a non-marital, non-cohabiting partner in past 12 months[1]						
Used condom	0.0	113	2.0	516	1.7	629
Did not use condom	2.6	1,515	1.4	1,774	2.0	3,289
No sexual intercourse with any non-marital, non-cohabiting partners in past 12 months[1]	2.3	4,614	1.0	2,243	1.9	6,858
Paid for sexual intercourse in past 12 months						
Yes	na	na	4.2	200	na	na
Used condom	na	na	4.0	115	na	na
Did not use condom	na	na	4.4	84	na	na
No (no paid sexual intercourse/no sexual intercourse in last 12 months)	na	na	1.2	4,333	na	na
Total 15-49	2.3	6,242	1.3	4,533	1.9	10,775
50-59	na	na	2.9	698	na	na
Total 15-59	na	na	1.5	5,231	na	na

Note: Figures in parentheses are based on 25-49 unweighted cases.
na = Not applicable
[1] Any partner who was not a spouse and did not live with the respondent

Table 13.7 HIV prevalence among young people by background characteristics

Percentage HIV positive among women and men age 15-24 who were tested for HIV, according to background characteristics, Sierra Leone DHS 2019

Background characteristic	Women		Men		Total	
	Percentage HIV positive	Number	Percentage HIV positive	Number	Percentage HIV positive	Number
Age						
15-19	0.5	1,506	0.3	1,319	0.4	2,824
15-17	0.3	891	0.2	833	0.3	1,723
18-19	0.9	615	0.4	486	0.7	1,101
20-24	2.7	1,205	0.7	825	1.9	2,030
20-22	2.9	769	<0.1	545	1.7	1,314
23-24	2.3	436	2.1	280	2.3	716
Marital status						
Never married	1.3	1,802	0.4	1,974	0.9	3,776
Ever had sex	1.8	1,111	0.6	1,056	1.2	2,166
Never had sex	0.6	692	0.1	918	0.4	1,610
Married/living together	1.9	867	1.1	157	1.7	1,024
Divorced/separated/ widowed	(0.0)	41	*	13	<0.1	55
Currently pregnant						
Pregnant	1.4	183	na	na	na	na
Not pregnant or not sure	1.5	2,527	na	na	na	na
Residence						
Urban	2.0	1,435	0.5	1,077	1.4	2,512
Rural	0.9	1,276	0.4	1,067	0.7	2,343
Province						
Eastern	1.1	518	0.1	406	0.6	924
Northern	1.4	540	0.6	473	1.0	1,014
North West	0.8	460	0.4	356	0.6	816
Southern	1.1	483	<0.1	411	0.6	893
Western Area	2.5	709	1.0	499	1.9	1,208
District						
Kailahun	0.4	111	0.0	98	0.2	209
Kenema	1.9	254	0.0	191	1.1	445
Kono	0.3	153	0.2	117	0.3	270
Bombali	1.3	197	0.5	159	0.9	356
Falaba	0.8	77	0.5	51	0.7	128
Koinadugu	1.1	75	0.0	57	0.6	132
Tonkolili	1.9	191	0.9	207	1.4	398
Kambia	0.0	168	0.0	135	0.0	303
Karene	0.0	84	0.0	58	0.0	142
Port Loko	1.9	209	0.9	162	1.4	371
Bo	0.9	243	0.0	205	0.5	448
Bonthe	0.6	72	0.0	65	0.3	137
Moyamba	2.0	103	0.0	90	1.0	193
Pujehun	0.9	65	0.0	50	0.5	116
Western Area Rural	2.6	277	0.0	186	1.6	463
Western Area Urban	2.4	432	1.7	312	2.1	745
Education						
No education	1.3	466	0.1	284	0.8	751
Primary	0.4	474	<0.1	330	0.3	804
Secondary	1.8	1,715	0.6	1,475	1.3	3,190
More than secondary	1.4	56	<0.1	55	0.7	110
Wealth quintile						
Lowest	0.2	362	0.5	304	0.4	666
Second	1.3	430	<0.1	348	0.7	778
Middle	1.2	537	0.5	390	0.9	927
Fourth	1.6	711	0.1	578	0.9	1,289
Highest	2.3	670	1.0	523	1.8	1,194
Total	1.5	2,710	0.5	2,144	1.0	4,855

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
na = Not applicable

Table 13.8 HIV prevalence among young people by sexual behaviour

Percentage HIV positive among women and men age 15-24 who have ever had sex and were tested for HIV, according to sexual behaviour, Sierra Leone DHS 2019

Sexual behaviour characteristic	Women		Men		Total	
	Percentage HIV positive	Number	Percentage HIV positive	Number	Percentage HIV positive	Number
Number of sexual partners in past 12 months						
0	2.7	258	0.2	127	1.9	385
1	1.6	1,653	0.3	835	1.2	2,488
2+	2.5	105	2.1	264	2.2	369
Non-marital, non-cohabiting partners in past 12 months[1]						
0	2.3	961	0.1	229	1.8	1,190
1	1.3	983	0.5	768	0.9	1,751
2+	2.3	72	1.8	229	1.9	301
Condom use at last sexual intercourse in past 12 months						
Used condom	0.0	72	2.1	199	1.5	271
Did not use condom	1.7	1,686	0.4	900	1.3	2,586
No sexual intercourse in past 12 months	2.7	258	0.2	127	1.9	385
Total	1.8	2,016	0.7	1,226	1.4	3,242

[1] Any partner who was not a spouse and did not live with the respondent

Table 13.9 HIV prevalence by other characteristics

Percentage HIV positive among women and men age 15-49 who have ever had sex and were tested for HIV, according to whether they had an STI in the past 12 months and prior testing for HIV, Sierra Leone DHS 2019

Characteristic	Women		Men		Total	
	Percentage HIV positive	Number	Percentage HIV positive	Number	Percentage HIV positive	Number
Sexually transmitted infection in past 12 months						
Had STI or STI symptoms	2.5	1,261	1.7	614	2.3	1,875
No STI, no symptoms	2.3	4,967	1.2	3,915	1.8	8,882
Prior HIV testing						
Ever tested	2.8	3,945	2.0	1,194	2.6	5,139
Received results	2.8	3,126	1.6	1,055	2.5	4,181
Did not receive results	2.6	819	5.1	139	2.9	958
Never tested	1.6	2,297	1.0	3,339	1.3	5,636
Total 15-49	2.3	6,242	1.3	4,533	1.9	10,775

Note: Total includes 19 cases with missing information on history of STI or STI symptoms.

Table 13.10 Prior HIV testing by current HIV status

Percent distribution of women and men age 15-49 who tested HIV positive and who tested HIV negative, according to HIV testing status prior to the survey, Sierra Leone DHS 2019

HIV testing prior to the survey	Women		Men		Total	
	HIV positive	HIV negative	HIV positive	HIV negative	HIV positive	HIV negative
Ever tested for HIV and received the result of the most recent test	56.8	44.8	28.4	19.8	48.7	33.7
Tested in the past 12 months and received the result[1]	23.9	19.4	12.7	11.7	20.7	16.0
Tested 12 or more months ago and received the result[1]	33.0	25.4	15.7	8.1	28.0	17.8
Ever tested for HIV and did not receive the result of the most recent test	15.5	12.6	11.8	2.7	14.4	8.2
Not previously tested	27.7	42.6	59.8	77.5	36.9	58.1
Total	100.0	100.0	100.0	100.0	100.0	100.0
Number	150	6,791	60	5,405	211	12,196

[1] Of the most recent HIV test

Table 13.11 HIV prevalence by male circumcision

Among men age 15-49 who were tested for HIV, percentage HIV positive according to whether circumcised, according to background characteristics, Sierra Leone DHS 2019

Background characteristic	Circumcised: Circumcised by health worker/professional		Circumcised: Circumcised by traditional practitioner/family/friend		Circumcised: All circumcised[1]		Uncircumcised	
	Percentage HIV positive	Number	Percentage HIV positive	Number	Percentage HIV positive	Number	Percentage HIV positive	Number
Age								
15-19	0.2	905	<0.1	124	0.3	1,292	*	14
20-24	0.9	530	1.1	113	0.7	820	*	4
25-29	1.3	565	1.0	92	1.2	852	*	2
30-34	0.8	425	5.6	97	1.4	682	*	1
35-39	2.1	411	2.1	139	2.0	667	*	2
40-44	0.5	318	<0.1	134	0.8	534	*	4
45-49	2.4	325	2.0	160	2.3	568	*	3
Religion								
Christian	0.8	800	1.6	160	0.9	1,223	*	9
Islam	1.1	2,679	1.6	699	1.2	4,191	*	20
Other[2]	*	1	*	<0.1	*	1	*	0
Ethnic group								
Creole	2.1	88	*	6	1.7	111	*	0
Fullah	6.7	123	(6.7)	42	5.5	198	*	1
Kono	<0.1	145	(0.0)	46	<0.1	228	*	1
Limba	<0.1	267	2.2	119	0.5	500	*	3
Loko	<0.1	64	*	13	3.4	109	*	0
Mandingo	1.3	96	(0.0)	34	1.4	167	*	1
Mende	0.6	1,174	0.0	138	0.5	1,635	*	9
Sherbro	<0.1	81	*	5	<0.1	110	*	2
Temne	1.2	1,157	1.8	351	1.3	1,892	*	13
Kurankoh	0.6	100	<0.1	55	0.8	176	*	0
Other Sierra Leone	1.5	170	<0.1	50	1.4	271	*	0
Other foreign	*	16	*	<0.1	*	17	*	0
Residence								
Urban	1.5	1,586	2.0		1.5	2,540	*	13
Rural	0.6	1,894	1.4	560	0.8	2,874	*	17
Province								
Eastern	0.3	763	0.3	150	0.3	1,069	*	1
Northern	1.0	628	1.6	330	1.2	1,140	*	8
North West	0.8	586	2.9	155	1.5	839	*	2
Southern	0.8	734	<0.1	75	0.6	1,015	*	8
Western Area	2.2	767	2.1	149	1.8	1,351	*	10
District								
Kailahun	0.0	190	(0.0)	30	0.0	264	*	0
Kenema	0.3	359	(0.0)	46	0.2	477	*	0
Kono	0.5	214	0.6	74	0.7	328	*	1
Bombali	0.9	164	2.1	128	1.3	396	*	5
Falaba	1.9	64	2.3	34	1.6	124	*	0
Koinadugu	0.6	98	1.3	52	1.5	166	*	0
Tonkolili	0.9	302	1.1	117	0.9	455	*	3
Kambia	0.9	214	(0.0)	47	0.6	292	*	1
Karene	1.1	122	(3.3)	31	1.4	165	*	1
Port Loko	0.6	250	4.6	78	2.2	383	*	1
Bo	0.8	358	*	14	0.7	450	*	3
Bonthe	0.8	151	*	8	0.7	170	*	1
Moyamba	0.7	151	(0.0)	22	0.4	245	*	3
Pujehun	0.6	74	(0.0)	31	0.3	151	*	1
Western Area Rural	3.6	277	(0.0)	43	2.4	449	*	4
Western Area Urban	1.4	491	3.0	106	1.6	902	*	6
Education								
No education	1.5	886	1.2	388	1.4	1,558	*	6
Primary	0.3	474	1.8	126	0.7	757	*	5
Secondary	0.9	1,799	2.2	303	1.1	2,650	*	17
More than secondary	1.3	321	(0.0)	41	1.1	450	*	0
Wealth quintile								
Lowest	0.8	572	0.9	224	0.7	943	*	8
Second	0.6	639	1.0	178	0.8	950	*	4
Middle	0.8	673	2.1	158	1.1	971	*	5
Fourth	1.5	793	1.8	159	1.3	1,220	*	4
Highest	1.3	802	2.6	140	1.5	1,330	*	8
Total 15-49	1.0	3,479	1.6	859	1.1	5,415	(0.0)	29
50-59	2.2	312	4.6	275	2.9	698	*	1
Total 15-59	1.1	3,791	2.3	1,134	1.3	6,112	(0.0)	30

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

[1] Includes all men who report they are circumcised, including men circumcised by medical or traditional practitioners. Also includes those circumcised by other practitioners, those who don't know what practitioner performed their circumcision, and those who did not report a practitioner of circumcision, who are not shown separately.

[2] Other religion includes traditional religions and no religion.

Table 13.12 HIV prevalence among couples

Percent distribution of couples living in the same household, both of whom were tested for HIV, by HIV status, according to background characteristics, Sierra Leone DHS 2019

Background characteristic	Both HIV positive	Man HIV positive, woman HIV negative	Woman HIV positive, man HIV negative	Both HIV negative	Total	Number
Woman's age						
15-19	0.0	2.2	0.0	97.8	100.0	135
20-29	0.3	1.1	0.9	97.7	100.0	1,075
30-39	0.4	0.5	1.6	97.5	100.0	1,015
40-49	0.2	1.9	0.3	97.6	100.0	556
Man's age						
15-19	*	*	*	*	100.0	7
20-29	0.0	1.3	0.5	98.2	100.0	442
30-39	0.3	0.9	1.4	97.5	100.0	978
40-49	0.3	0.8	0.6	98.2	100.0	889
50-59	0.7	1.9	1.3	96.1	100.0	464
Age difference between partners						
Woman older	0.0	1.9	1.5	96.6	100.0	147
Same age/man older by 0-4 years	0.1	0.6	0.5	98.9	100.0	803
Man older by 5-9 years	0.1	1.6	1.2	97.1	100.0	925
Man older by 10-14 years	0.8	1.3	1.4	96.4	100.0	510
Man older by 15+ years	0.7	0.4	0.8	98.1	100.0	395
Type of union						
Non-polygynous	0.3	1.5	1.1	97.2	100.0	2,007
Polygynous	0.4	0.0	0.8	98.7	100.0	771
Multiple partners in past 12 months[1]						
Both no	0.2	1.2	1.0	97.6	100.0	1,868
Man yes, woman no	0.5	0.9	0.7	97.9	100.0	852
Woman yes, man no	(0.0)	(1.7)	(3.7)	(94.5)	100.0	34
Both yes	*	*	*	*	100.0	26
Residence						
Urban	0.6	1.8	1.4	96.3	100.0	942
Rural	0.2	0.7	0.8	98.3	100.0	1,838
Province						
Eastern	0.2	0.5	1.8	97.6	100.0	610
Northern	0.3	1.1	1.0	97.5	100.0	643
North West	0.2	1.2	0.3	98.2	100.0	448
Southern	0.3	0.7	1.1	98.0	100.0	570
Western Area	0.6	2.1	0.5	96.8	100.0	510
District						
Kailahun	0.0	0.4	1.3	98.2	100.0	138
Kenema	0.0	0.4	2.1	97.5	100.0	278
Kono	0.6	0.6	1.6	97.2	100.0	194
Bombali	0.4	1.5	1.7	96.4	100.0	234
Falaba	0.0	2.2	0.0	97.8	100.0	72
Koinadugu	1.3	0.7	0.5	97.5	100.0	92
Tonkolili	0.0	0.5	0.9	98.5	100.0	246
Kambia	0.0	0.0	0.0	100.0	100.0	137
Karene	0.0	0.0	0.0	100.0	100.0	98
Port Loko	0.5	2.6	0.6	96.3	100.0	213
Bo	0.0	1.1	1.8	97.1	100.0	208
Bonthe	0.0	1.1	0.0	98.9	100.0	109
Moyamba	0.7	0.3	1.5	97.5	100.0	154
Pujehun	0.4	0.0	0.0	99.6	100.0	100
Western Area Rural	0.4	0.0	0.7	98.9	100.0	169
Western Area Urban	0.6	3.2	0.4	95.7	100.0	340
Woman's education						
No education	0.3	1.3	1.1	97.4	100.0	1,681
Primary	0.2	0.3	0.8	98.8	100.0	408
Secondary	0.5	1.2	0.9	97.5	100.0	608
More than secondary	0.0	1.0	1.4	97.5	100.0	84
Man's education						
No education	0.3	1.3	0.9	97.5	100.0	1,348
Primary	0.0	0.4	0.7	98.9	100.0	357
Secondary	0.4	1.2	1.5	96.9	100.0	811
More than secondary	0.4	0.9	0.3	98.4	100.0	265
Wealth quintile						
Lowest	0.0	0.8	0.7	98.5	100.0	652
Second	0.1	1.0	0.9	98.0	100.0	621
Middle	0.2	0.6	1.0	98.2	100.0	573
Fourth	0.3	0.8	0.7	98.2	100.0	458
Highest	1.2	2.6	1.7	94.5	100.0	476
Total	0.3	1.1	1.0	97.6	100.0	2,780

Note: Table is based on couples for whom a valid test result (positive or negative) is available for both partners. Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
[1] Total includes 3 cases with missing information on type of union.

ADULT AND MATERNAL MORTALITY 14

Key Findings

- ***Adult mortality:*** The adult mortality rate is 4.69 deaths per 1,000 population among women and 5.59 deaths per 1,000 population among men.
- ***Lifetime risk of maternal death:*** The lifetime risk of maternal death indicates that one in 31 women in Sierra Leone will have a death related to maternal causes.
- ***Maternal mortality ratio:*** The maternal mortality ratio for the 7-year period before the 2019 SLDHS is estimated at 717 maternal deaths per 100,000 live births.

Adult and maternal mortality indicators can be used to assess the health status of a population. There is a need for reliable data on adult and maternal deaths as they continue to be a serious problem in Sierra Leone.

WHO explains this problem using a delay model that includes delays in seeking health care, delays in reaching health facilities, and poor health services in facilities. This model has been associated with human, health system, and socioeconomic factors such as poverty, poor emergency obstetric services, and fatalistic beliefs. The target of SDG 3.1 is to reduce the global maternal mortality ratio to less than 70 per 100,000 live births by 2030.

Estimation of mortality rates requires complete and accurate data on adult and maternal deaths. In the 2019 SLDHS, data were collected from all female respondents on the survival of their sisters and brothers to obtain an estimate of adult mortality. Questions were included to determine if any of the sisters' deaths were maternity-related, which permits an estimation of maternal mortality—a key indicator of maternal health and well-being.

This chapter presents information on the levels of and trends in adult mortality and maternal mortality in Sierra Leone. The chapter includes a summary measure ($_{35}q_{15}$) that represents the probability of dying between exact ages 15 and 50—that is, between the 15th and 50th birthdays.

14.1 DATA

To obtain a sibling history, each respondent was first asked to provide the total number of her mother's live births. The respondent was then asked to provide a list of all children born to her mother, starting with the first born, and the survival status of each sibling. Information on current age was collected for each surviving sibling. Age at death and number of years since death were recorded for each deceased sibling. When a respondent could not provide precise information on age at death or years since death, the interviewers were instructed to accept an approximate but quantitative answer. For sisters who died at age 12 or above, three questions were used to determine whether the death was maternity-related: "Was [NAME OF SISTER] pregnant when she died?" and, if not, "Did she die during childbirth?" and, if not, "Did she die within 2 months after the end of a pregnancy or childbirth?" Estimation of adult and maternal mortality by either direct or indirect means requires reasonably accurate reporting of the respondent's number of sisters and brothers, the number who have died, and (for maternal mortality) the number of sisters who died of maternal causes.

14.2 Direct Estimates of Adult Mortality

Adult mortality rate

The number of adult deaths per 1,000 population age 15-49. Adult mortality rates by 5-year age groups are calculated as follows: the number of deaths to a respondent's siblings in each age group is divided by the number of person-years of exposure to the risk of dying in that age group during the 7 years preceding the survey. The number of deaths is the number of siblings (brothers or sisters) reported as having died within the 7 years preceding the survey. The person-years of exposure in each age group are calculated for both surviving and dead siblings based on their current age (living siblings) or age at death and years since death (dead siblings).

Sample: Siblings (both living and dead) who were age 15-49 in the 7 years preceding the survey, by sex and 5-year age groups

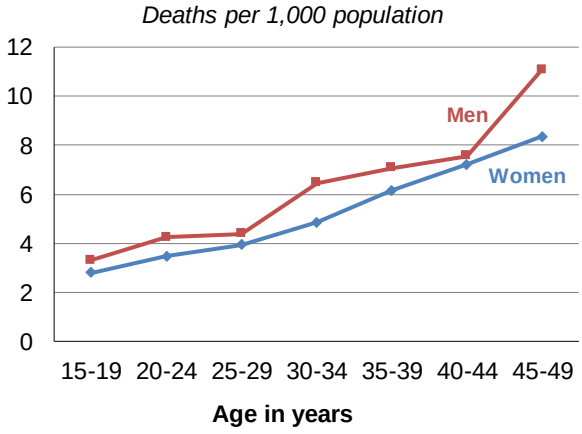
One way to assess the quality of the data used to estimate maternal mortality is to evaluate the plausibility and stability of overall adult mortality. If estimated rates of overall adult mortality are implausible, rates based on a subset of deaths (maternal deaths in particular) may have questionable plausibility.

The reported ages at death and years since death of the respondents' brothers and sisters are used to make direct estimates of adult mortality. Age- and sex-specific death rates are presented in this report because of the differentials in exposure to the risk of dying. To ensure a sufficiently large number of adult deaths to generate a robust estimate, the rates are calculated for the 7-year period before the survey (approximately mid-2012 to mid-2019). Nevertheless, age-specific mortality rates obtained in this manner are subject to considerable sampling variation. Use of this 7-year period was a compromise between the desire for the most recent data and the need to minimise sampling error.

Table 14.1 and **Figure 14.1** show direct estimates of age-specific mortality rates among women and men age 15-49 for the 7-year period before the survey. Overall, the level of adult mortality is slightly higher among men (5.59 deaths per 1,000 population) than among women (4.69 deaths per 1,000 population). Mortality rates rise steadily with age among women, from 2.81 per 1,000 population in the 15-19 age group to 8.36 per 1,000 population in the 45-49 age group. Similarly, mortality rates among men increase from 3.31 per 1,000 population in the 15-19 age group to 11.08 per 1,000 in the 45-49 age group.

Trends: There has been an improvement in adult mortality rates since 2008, from 5.78 to 4.69 deaths per 1,000 population among women and from 6.64 to 5.59 deaths per 1,000 population among men.

Figure 14.1 **Adult mortality rates by age**



14.3 Trends in Adult Mortality

Table 14.2 shows the probability of dying between exact ages 15 and 50 ($_{35}q_{15}$) in the 7 years preceding the 2019 and 2008 SLDHS surveys; $_{35}q_{15}$ is the probability of a woman or man who has just reached age 15 dying before age 50 if age-specific death rates in the 7 years before the survey are constant. The 2019 SLDHS data show that women have a lower probability of dying than men: 168 of 1,000 women age 15 and 198 of 1,000 men age 15 would be expected to die before age 50. Since 2008, the probability of dying between exact ages 15 and 50 has improved among women, declining from 186 per 1,000 women in the 7 years before the 2008 SLDHS to 168 per 1,000 women in the 7 years before 2019. Similarly, the

probability among men decreased from 218 per 1,000 men in the 7 years before 2008 to 198 per 1,000 men in the 7 years before 2019.

14.4 DIRECT ESTIMATES OF MATERNAL MORTALITY

Maternal mortality rate

The number of maternal deaths per 1,000 women age 15-49. Maternal mortality rates by 5-year age groups are calculated by dividing the number of maternal deaths to female siblings of respondents in each age group by the total person-years of exposure of the sisters to the risk of dying in that age group during the 7 years preceding the survey. The number of deaths is the number of sisters reported as having died in the 7 years preceding the survey either during pregnancy or delivery, or in the 42 days following the delivery or termination of a pregnancy, by their age group at the time of death; deaths due to accidents or violence are excluded. The person-years of exposure in each age group are calculated for both surviving and dead sisters based on their reported current age (living sisters) or age at death and years since death (dead sisters).

Sample: Sisters (both living and dead) age 15-49 in the 7 years preceding the survey, by 5-year age groups

Maternal mortality ratio

The number of maternal deaths per 100,000 live births. The maternal mortality ratio is calculated by dividing the age-standardised maternal mortality rate for women age 15-49 in the 7 years preceding the survey by the general fertility rate (GFR) for the same time period.

Maternal deaths are a subset of all female deaths; they are defined as any deaths that occur during pregnancy or childbirth or within 42 days after the birth or termination of a pregnancy. Maternal deaths do not include deaths due to accidents or violence. Two methods are generally used to estimate maternal mortality in developing countries: the indirect sisterhood method (Graham et al. 1989) and a direct variant of the sisterhood method (Rutenberg and Sullivan 1991; Stanton et al. 1997). **Table 14.3** presents age-specific direct estimates of maternal mortality from the reported survivorship of sisters for the 7-year period prior to the 2019 SLDHS. These rates were calculated by dividing the number of maternal deaths by woman-years of exposure. To remove the effect of truncation bias (the lower boundary for eligibility among women interviewed in the survey is 15 years, and the upper boundary is 49 years), the overall rate for women age 15-49 was standardised by the age distribution of survey respondents.

Table 14.3 shows that the maternal mortality rate among women age 15-49 is 1.01 deaths per 1,000 woman-years of exposure. By 5-year age groups, the maternal mortality rate is highest among women age 35-39 (1.69) and lowest among those age 15-19 (0.56). The overall percentage of female deaths due to maternal causes is 23%. The percentage of female deaths that are maternal deaths increases from 20% in the 15-19 age group to 27% in the 35-39 age group and subsequently decreases to 8% in the 45-49 age group.

The estimated maternal mortality ratio is 717 deaths per 100,000 live births during the 7-year period before the survey (with a 95% confidence interval of 562 to 873) (**Table 14.4**). Thus, for every 1,000 live births in Sierra Leone during the 7 years before the 2019 SLDHS, approximately seven women died during pregnancy, during childbirth, or within 2 months after childbirth. The lifetime risk of maternal death (0.032) indicates that of 1,000 women of exact age 15, about 32 (one in 31 women) would die before age 50 during pregnancy, during childbirth, or within 2 months of childbirth.

14.5 TRENDS IN PREGNANCY-RELATED MORTALITY

Pregnancy-related mortality rate

The number of pregnancy-related deaths per 1,000 women age 15-49. Pregnancy-related mortality rates by 5-year age groups are calculated by dividing the number of pregnancy-related deaths to female siblings of respondents in each age group by the total person-years of exposure of the sisters to the risk of dying in that age group during the 7 years preceding the survey. The number of deaths is the number of sisters reported as having died in the 7 years preceding the survey either during pregnancy or delivery, or in the 2 months following the delivery or termination of a pregnancy, by their age group at the time of death. The person-years of exposure in each age group are calculated for both surviving and dead sisters based on their reported current age (living sisters) or age at death and years since death (dead sisters).

Sample: Sisters (both living and dead) age 15-49 in the 7 years preceding the survey, by 5-year age groups

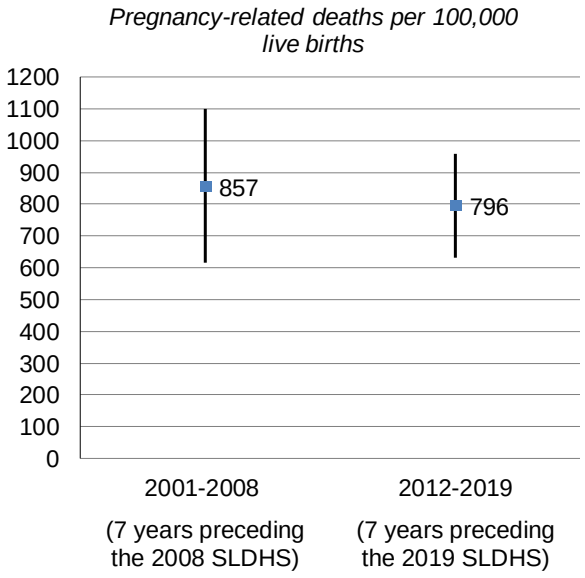
Pregnancy-related mortality ratio

The number of pregnancy-related deaths per 100,000 live births. The pregnancy-related mortality ratio is calculated by dividing the age-standardised pregnancy-related mortality rate for women age 15-49 in the 7 years preceding the survey by the general fertility rate (GFR) for the same time period.

To allow comparisons with estimates from previous SLDHS surveys, the 2019 SLDHS defines a pregnancy-related death as the death of a woman during pregnancy or childbirth or within 2 months of delivery or termination of a pregnancy, irrespective of the cause of death. Estimates of pregnancy-related mortality are therefore based solely on the timing of the death in relationship to the pregnancy. Note that this definition varies from the WHO definition of a pregnancy-related death, which limits the window to 42 days. What the current SLDHS defines as a pregnancy-related death had been labelled a maternal death in prior SLDHS surveys.

Figure 14.2 presents estimates of the pregnancy-related mortality ratio (PRMR) with confidence intervals for the current and 2008 SLDHS surveys. No pregnancy-related mortality data were collected in 2013. The pregnancy-related maternal mortality ratio for the 2019 SLDHS is 796 (CI: 632-960) deaths per 100,000 live births, a decline from 857 deaths per 100,000 live births in the 7 years before the 2008 SLDHS. However, the confidence intervals for the PRMR estimates from 2008 and 2019 overlap, and thus the difference between the 2008 and 2019 estimates of the PRMR is not statistically significant.

Figure 14.2 **Trends in the pregnancy-related mortality ratio (PRMR) with confidence intervals**



List of Tables

For more information on adult and maternal mortality, see the following tables:

- **Table 14.1 Adult mortality rates**
- **Table 14.2 Adult mortality probabilities**
- **Table 14.3 Maternal mortality**
- **Table 14.4 Maternal mortality ratio**

Table 14.1 Adult mortality rates

Direct estimates of female and male mortality rates for the 7 years preceding the survey, by 5-year age groups, Sierra Leone DHS 2019

Age	Deaths	Exposure years	Mortality rate[1]
	FEMALE		
15-19	81	28,878	2.81
20-24	110	31,728	3.48
25-29	118	29,997	3.95
30-34	121	25,059	4.85
35-39	118	19,233	6.15
40-44	87	12,122	7.22
45-49	53	6,348	8.36
Total 15-49	690	153,364	4.69[a]
	MALE		
15-19	89	27,020	3.31
20-24	130	30,497	4.25
25-29	127	28,993	4.38
30-34	157	24,235	6.47
35-39	129	18,173	7.07
40-44	83	10,999	7.55
45-49	65	5,875	11.08
Total 15-49	779	145,791	5.59a

[1] Expressed per 1,000 population
[a] Age-adjusted rate

Table 14.2 Adult mortality probabilities

The probability of dying between ages 15 and 50 for women and men during the 7 years preceding the survey, Sierra Leone DHS 2008 and 2019

Survey	Female ${}_{35}q_{15}$[1]	Male ${}_{35}q_{15}$[1]
2019 Sierra Leone DHS	168	198
2008 Sierra Leone DHS	186	218

[1] The probability of dying between exact ages 15 and 50, expressed per 1,000 persons age 15

Table 14.3 Maternal mortality

Direct estimates of maternal mortality rates for the 7 years preceding the survey, by 5-year age groups, Sierra Leone DHS 2019

Age	Percentage of female deaths that are maternal	Maternal deaths[1]	Exposure years	Maternal mortality rate[2]
15-19	19.8	16	28,878	0.56
20-24	26.8	30	31,728	0.93
25-29	25.8	31	29,997	1.02
30-34	27.2	33	25,059	1.32
35-39	27.4	32	19,233	1.69
40-44	15.6	14	12,122	1.13
45-49	7.7	4	6,348	0.65
Total 15-49	23.1	159	153,364	1.01[a]

[1] A maternal death is defined as the death of a woman while pregnant or within 42 days of termination of pregnancy, from any cause except accidents or violence.
[2] Expressed per 1,000 woman-years of exposure
[a] Age-adjusted rate

Table 14.4 Maternal mortality ratio

Total fertility rate, general fertility rate, maternal mortality ratio, and lifetime risk of maternal death for the 7 years preceding the survey, Sierra Leone DHS 2019

Total fertility rate (TFR)	4.5
General fertility rate (GFR)[1]	141
Maternal mortality ratio (MMR)[2]	717 (CI: 562, 873)
Lifetime risk of maternal death[3]	0.032

CI: Confidence interval
[1] Age-adjusted rate, expressed per 1,000 women age 15-49
[2] Expressed per 100,000 live births; calculated as the age-adjusted maternal mortality rate (shown in Table 14.3) times 100 divided by the age-adjusted general fertility rate
[3] Calculated as $1-(1-MMR)^{TFR}$, where TFR represents the total fertility rate for the 7 years preceding the survey

WOMEN'S EMPOWERMENT 15

Key Findings

- ***Employment and cash earnings of currently married women and men:*** 85% of currently married women and 94% of currently married men were employed in the past 12 months. Forty-five percent of employed women received cash for their work, as compared with 72% of employed men. The percentage of employed women who earned cash has increased over time (from 41% in 2013 to 45% in 2019).
- ***Control over women's earnings***: 68% of currently married employed women with cash earnings participate in decisions about the use of their earnings alone or jointly with their husband, less than in 2013 (73%).
- ***Ownership of assets*****:** 39% of women and 32% of men own a house, and 32% of women and 33% of men own land.
- ***Ownership and use of bank accounts and mobile phones:*** Only 6% of women and 13% of men have an account in a bank or financial institution that they use. Forty-three percent of women and 64% of men have a mobile phone.
- ***Participation in decision making:*** 35% of currently married women participate alone or jointly with their husbands in three specified household decisions, less than in 2013 (45%).
- ***Attitudes towards wife beating:*** 49% of women agree that a husband is justified in beating his wife in at least one of five specified circumstances, as compared with 31% of men. The percentage of women and men agreeing with wife beating has decreased since 2013, with a particular decline among women.
- ***Negotiating sexual relations:*** 68% of currently married women can say no to their husband if they do not want to have sexual intercourse, and 45% can ask their husband to use a condom.

This chapter explores women's empowerment in terms of employment, earnings, control over earnings, magnitude of earnings relative to those of their partners, household decision making, empowering attitudes, and property ownership. Wherever relevant, gender differences are also shown. These indicators provide information about the status of women and shed light on the context in which women make family and health choices. In addition, responses to specific questions are used to define two different indicators of women's empowerment: their participation in household decision making and their attitudes towards wife beating.

15.1 MARRIED WOMEN'S AND MEN'S EMPLOYMENT

Employment

Respondents are considered to be employed if they have done any work other than their housework in the 12 months before the survey.

Sample: Currently married women and men age 15-49

Earning cash for employment

Respondents are asked if they are paid for their labour in cash or in-kind. Only those who receive payment in cash only or in cash and in-kind are considered to earn cash for their employment.

Sample: Currently married women and men age 15-49 employed in the 12 months before the survey

Eighty-five percent of currently married women and 94% of currently married men are employed. Among those employed, women are more likely than men to be unpaid (54% versus 27%). Thirty-eight percent of women and 51% of men receive only cash for their work, and another 7% of women and 21% of men are paid in cash and in-kind (**Table 15.1**).

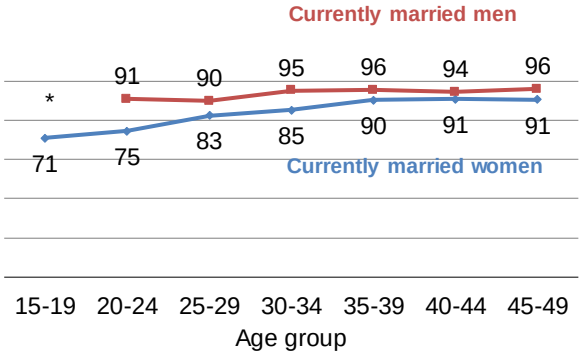
Trends: The percentage of currently married women who are employed has remained unchanged at 85% since 2008; however, the percentage who receive cash (including those paid in cash and in-kind) has increased over time, from 23% in 2008 to 41% in 2013 and 45% in 2019.

Patterns by background characteristics

- Employment increases with age among currently married women (from 71% among those age 15-19 to 91% among those age 40-49) but does not vary extensively by age among men (**Table 15.1** and **Figure 15.1**).
- The percentage of employed women and men who earn cash (cash only or cash and in-kind) does not vary greatly by age; in every age group, however, employed men are much more likely than employed women to earn cash.

Figure 15.1 **Employment by age**

Percentage of currently married women and men who were employed at any time in the 12 months before the survey



Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

15.2 CONTROL OVER WOMEN'S EARNINGS

Control over one's own cash earnings

Respondents are considered to have control over their own earnings if they participate in decisions alone or jointly with their spouse about how their own earnings will be used.

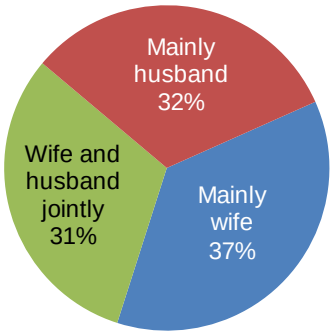
Sample: Currently married women and men age 15-49 who received cash earnings (cash only or cash and in-kind) for employment during the 12 months before the survey

Women's access to financial resources is a key mechanism for reducing poverty (SDG 1). If women are to be considered empowered, they need to have a stake in decision making about the use of their earnings. Thirty-seven percent of currently married women who have earnings mainly decide alone how their earnings are used, 31% decide jointly with their husband, and 32% report that their husband is the main decision maker (**Table 15.2.1** and **Figure 15.2**).

Among currently married women who are employed and have cash earnings, 74% earn less than their husband, 10% earn about the same as their husband, and 9% earn more than their husband.

Figure 15.2 **Control over women's earnings**

Percent distribution of currently married women with cash earnings in the 12 months before the survey



Trends: The percentage of currently married women who participate alone or jointly with their husband in decisions about the use of their earnings has declined since 2013, from 73% to 68%. The percentage of women who earn more than their husbands has remained unchanged (9%), while the percentage who earn about the same as their husband has increased from 7% to 10%.

Patterns by background characteristics

- Women's control over their own earnings varies by province. Women in the Northern province are more likely than women in any other province to make decisions mainly alone about their own earnings (48%), women in the Southern province are more likely than those in other provinces to make decisions jointly with their husband (45%), and women in the Western Area province are more likely than those in other provinces to report that their husband is the main decision maker (46%). Women's control over their earnings also varies substantially by district.

- The percentage of currently married women with cash earnings who decide alone about the use of their earnings declines with increasing education, whereas the percentage who decide jointly with their husband rises with increasing education. Specifically, 40% of women with no education mainly decide alone about the use of their earnings, as compared with 26% of women with more than a secondary education. Conversely, 29% of women with no education decide jointly with their husband about the use of their earnings, compared with 46% of women with more than a secondary education (**Table 15.2.1**).

15.3 Control over Men's Earnings

More than half (51%) of currently married men with earnings report that they themselves mainly make the decision about use of their own earnings, and 41% say that they make decisions jointly with their wives. By contrast, 62% of women report that their husband mainly makes decisions about his earnings, and a much lower percentage (30%) report that these decisions are made jointly (**Table 15.2.2**).

For information on how women's control over their earnings and their husband's earnings varies by whether they earn more or less than their husband, see **Table 15.3**.

15.4 Women's and Men's Ownership of Assets

Ownership of a house or land

Respondents who own a house or land, whether alone or jointly with someone else.

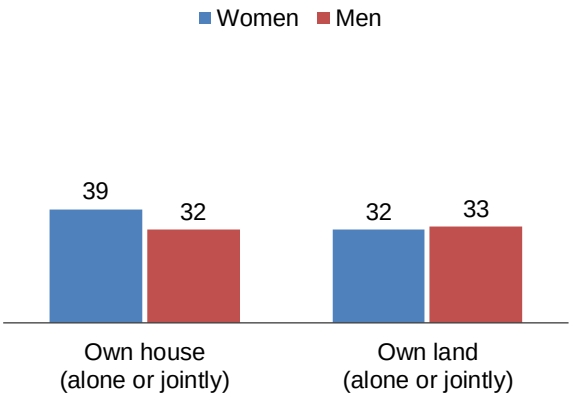
Sample: Women and men age 15-49

Ownership of and control over assets are key for financial empowerment. In Sierra Leone, ownership of assets in the form of a house and land is fairly equitable. Overall, 39% of women and 32% of men own a house, and 32% of women and 33% of men own land (**Figure 15.3**). However, men are more likely than women to own a house alone (19% versus 5%) and land alone (18% versus 5%) (**Table 15.4.1** and **Table 15.4.2**).

Trends: The percentage of women who own a house has remained unchanged at 39% since 2013, but the percentage who own land has declined marginally from 36% to 32%. Among men, ownership of both a house and land has declined marginally over the same period.

***Figure 15.3* Ownership of assets**

Percentage of women and men age 15-49 by ownership of specific assets



Patterns by background characteristics

- House and land ownership increases sharply with age among both women and men. For example, house ownership ranges from 19% among women age 15-49 to 68% among women age 45-49 and from 10% among men age 15-19 to65% among men age 45-49 (**Table 15.4.1** and **Table 15.4.2**).
- Women and men in rural areas are more likely to own a house (53% and 47%, respectively) than those in urban areas (23% and 16%, respectively). Similarly, rural women and men are more likely to own land (49% and 52%, respectively) than urban women and men (11% and 12%, respectively).
- The percentages of women who own a house and land are lowest in the Western Area province (16% and 5%, respectively) and highest in the Eastern province (51% and 46%, respectively). Among men, those in the Western Area province are least likely to own a house and land (11% and 5%, respectively). The percentage of men who own a house is highest in the Southern province (46%), and the percentage who own land is highest in the Eastern and Southern provinces (45% each).
- By district, house ownership ranges from a low of 12% in Western Area Urban to a high of 65% in Pujehun among women and from a low of 10% in Western Area Rural to a high of 59% in Bonthe among men. Land ownership ranges from a low of 3% in Western Area Urban to a high of 66% in Falaba among women and from a low of 4% in Western Area Urban to a high of 67% in Bonthe among men.
- House and land ownership declines sharply with increasing education and household wealth among both women and men. For example, 55% of women and 59% of men in the lowest wealth quintile own land, as compared with 6% each of women and men in the highest wealth quintile.

15.5 Possession of Title or Deed for a House or Land

Women and men who said that they owned a house or land were asked if they had a title or deed for the property and whether their name was on the title or deed. Overall, 19% of women and 25% of men who own a house have a title or deed with their name on it, and 67% of women and 69% of men who own a house do not have a title or deed at all. Similarly, 13% of women and 14% of men who own land have a title or deed with their name on it, and 77% of women and 83% of men who own land do not have a title or deed (**Tables 15.5.1**, **15.5.2**, **15.6.1**, and **Table 15.6.2**).

Patterns by background characteristics

- Although both women and men in urban areas are less likely to own either a house or land than their rural counterparts, women and men in urban areas are much more likely than their rural counterparts to have a title deed to the property with their name on it. For example, 20% of urban women and 28% of urban men who own land have a title or deed with their name on it, as compared with 11% of rural women and 12% of rural men who own land.

- Women and men who own a house or land in the Western Area province are much more likely than those in any other province to have a title or deed with their name on it.

- Women and men with more than a secondary education and those in the wealthiest quintile are less likely than less educated and less wealthy women and men, respectively, to own a house or land. However, among those who do own such property, women and men in the higher education and wealth categories are much more likely to have a title to the property with their name on it. For example, 39% of women and 52% of men with more than a secondary education who own a house have a title or deed with their name on it, compared with 17% of women and 20% of men with no education.

15.6 Ownership and Use of Bank Accounts and Mobile Phones

Ownership of bank accounts

Respondents who have an account in a bank or other financial institution that they themselves use.

Sample: Women and men age 15-49

Ownership of a mobile phone

Respondents who own a mobile phone.

Sample: Women and men age 15-49

In Sierra Leone, only 6% of women and 13% of men have an account in a bank or other financial institution that they use, and 43% of women and 64% of men own a mobile phone. Among those with a mobile phone, 41% of women and 48% of men use their phone for financial transactions (**Tables 15.7.1** and **Table 15.7.2**).

Patterns by background characteristics

- Urban women and men are more likely than rural women and men to have a bank account or to own a mobile phone. For example, 11% of urban women and 1% of rural women have a bank account, and 65% of urban women 24% of rural women own a cell phone (**Table 15.7.1**) .

- Women (14%) and men (25%) in the Western Area province are more likely to have an account in a bank or financial institution than women (2%-4%) and men (8%-10%) in any other province. Similarly, women (71%) and men (85%) in the Western Area province are more likely than women (30%-38%) and men (54%-60%) in other provinces to have a mobile phone.

- By district, mobile phone ownership among women ranges from a low of 18% in Karene to a high of 75% in Western Area Urban. Among men, ownership ranges from 49% in both Kailahun and Pujehun to 87% in Western Area Urban.

- Fifty-six percent of women and 69% of men with more than a secondary education have an account in a bank or other financial institution, as compared with 6% or less of women and 11% or less of men in the other education categories. Similarly, 29% of women and 54% of men with no education own a mobile phone, compared with 97% of women and 98% of men with more than a secondary education.

The percentages of women and men who own a mobile phone and use their phone for financial transactions increase sharply with increasing education.

- Only 18% of women and 33% of men in the highest wealth quintile have an account in a bank or other financial institution. In general, the percentages of women and men who own a mobile phone and use their phone for financial transactions increase steadily with increasing wealth.

15.7 Women's Participation in Decision Making

Participation in major household decisions

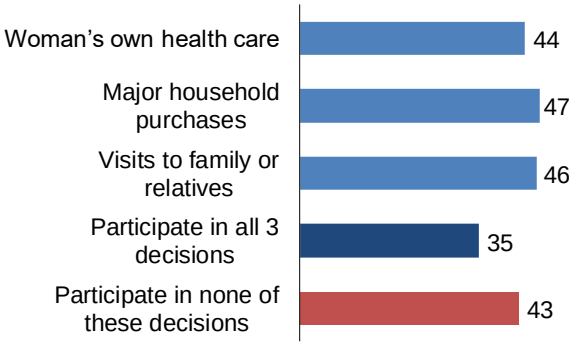
Women are considered to participate in household decisions if they make decisions alone or jointly with their husband in all three of the following areas: (1) their own health care, (2) major household purchases, and (3) visits to their family or relatives.

Sample: Currently married women age 15-49

Women are slightly more likely to participate in decisions about major household purchases (47%) and visits to their family or relatives (46%) than in decisions about their own health care (44%) (**Table 15.8** and **Table 15.9.1**). In the case of each type of decision, women are much more likely to make the decision jointly with their husband than alone (**Table 15.8**). Thirty-five percent of currently married women participate in all three specified household decisions either alone or jointly with their husbands. Forty-three percent of currently married women do not participate in any of the three decisions (**Table 15.9.1** and **Figure 15.4**).

Figure 15.4 **Women's participation in decision making**

Percentage of currently married women age 15-49 participating in specific decisions



Currently married men were also asked about decision making regarding their own health care and making major household purchases. Overall, 83% of men say that they participate alone or jointly with their wives in both decisions, and 10% say that they do not participate in either decision (**Table 15.9.2**).

Trends: The percentage of currently married women who participate alone or jointly with their husband in all three of the specified decisions declined from 45% in 2013 to 35% in 2019. The percentage who do not participate in any of the three decisions increased over the same period, from 31% to 43%.

Patterns by background characteristics

- Women who are employed for cash are more likely to participate in all three decisions (43%) than women who are not employed (28%) (**Table 15.9.1**).

- Women's participation in all three decisions varies by province, from a low of 30% in the North West province to a high of 41% in the Southern province. Participation also varies by district, from 21% in Falaba to 51% in Moyamba.

- The percentage of women who participate in all three decisions increases with increasing education, from 33% among those with no education to 49% among those with more than a secondary education. However, women's participation in all three decisions does not vary systematically with wealth.

15.8 ATTITUDES TOWARD WIFE BEATING

Attitudes toward wife beating

Respondents are asked if they agree that a husband is justified in hitting or beating his wife under each of the following five circumstances: she burns the food, she argues with him, she goes out without telling him, she neglects the children, and she refuses to have sex with him. If respondents answer "yes" in at least one circumstance, they are considered to have attitudes justifying wife beating.

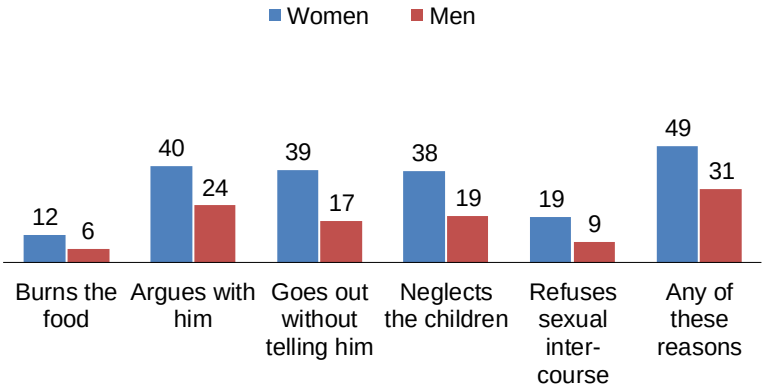
Sample: Women and men age 15-49

The 2019 SLDHS collected information on women's and men's attitudes toward wife beating in five separate circumstances. Overall, 49% of women believe that a husband is justified in beating his wife in at least one of the five specified circumstances, as compared with 31% of men (**Table 15.10.1** and **Table 15.10.2**). Forty percent of women agree that wife beating is justified if a wife argues with her husband, 39% agree that it is justified if she goes out without telling him, 38% agree that it is justified if she neglects the children, 19% agree that it is justified if she refuses to have sexual intercourse with him, and 12% agree that it is justified if she burns the food (**Table 15.10.1**). Men are less likely than women to agree with any of the five specified reasons for wife beating.

Trends: The percentage of women who agree that wife beating is justified in at least one of the five specified circumstances has declined substantially over time, from 63% in 2013 to 49% in 2019. The percentage of men justifying wife beating in at least one of the specified circumstances has also declined, from 34% to 31% (**Figure 15.5**).

Figure 15.5 **Attitudes towards wife beating**

Percentage of women and men age 15-49 who agree that a husband is justified in beating his wife for specific reasons



Patterns by background characteristics

- Women who are employed for cash are more likely to agree that wife beating is justified in at least one of the five specified circumstances (54%) than women who are not employed (41%) and women who are employed but not for cash (50%) (**Table 15.10.1**).
- More than half of currently married women (54%) agree that wife beating is justified in at least one of the five specified circumstances, as compared with about two in five (39%) never-married women.
- Fifty-three percent of rural women agree that wife beating is justified, compared with 44% of urban women.
- Women's agreement with wife beating is highest in the North West province (65%) and lowest in the Southern province (44%). By district, agreement with wife beating is highest in Port Loko (72%) and lowest in Pujehun (14%).
- Agreement with wife beating declines sharply with increasing education: 55% of women with no education agree that wife beating is justified in at least one of the five specified circumstances, as compared with 25% of women with more than a secondary education.

15.9 NEGOTIATING SEXUAL RELATIONS

To assess attitudes toward negotiating safer sexual relations with husbands, women and men were asked whether they thought that a wife is justified in refusing to have sexual intercourse with her husband if she knows he has sex with other women or asking that he use a condom if she knows he has a sexually transmitted infection (STI).

The majority of women and men age 15-49 agree that a woman is justified in refusing to have sexual intercourse with her husband if she knows that he has sex with other women (63% each). Seventy percent of women and 78% of men agree that a woman is justified in asking her husband to use a condom if he has an STI (**Table 15.11**).

To assess the ability of women to actually negotiate safer sexual relations with their husband, currently married women were asked whether they can say no to their husband if they do not want to have sexual intercourse and whether they can ask their husband to use a condom. Sixty-eight percent of women said that they can say no to their husband if they do not want to have sexual intercourse, and 45% said that they can ask their husband to use a condom (**Table 15.12**).

Patterns by background characteristics

- Women's ability to negotiate safer sex with their husband tends to decline with age. Seventy percent of women age 15-24 can say no to their husband if they do not want to have sexual intercourse, as compared with 63% of women age 40-49. Similarly, 48% of women age 15-24 can ask their husband to use a condom, compared with 39% of women age 40-49 (**Table 15.12**).
- Urban women are more likely than rural women to be able to say no to their husband if they do not want to have sexual intercourse (76% versus 63%) or to ask their husband to use a condom (59% versus 36%).
- Women's ability to negotiate safer sex with their husband varies greatly by district. The percentage who can say no to their husband if they do not want to have sexual intercourse ranges from 44% in Falaba to 89% in Kailahun, and the percentage who can ask their husband to use a condom ranges from 10% in Port Loko to 71% in Bombali.
- The ability of women to negotiate safer sex increases sharply with increasing education and household wealth.

LIST OF TABLES

For more information on women's empowerment, see the following tables:

Table 15.1 Employment and cash earnings of currently married women and men

Percentage of currently married women and men age 15-49 who were employed at any time in the past 12 months and percent distribution of currently married women and men employed in the past 12 months by type of earnings, according to age, Sierra Leone DHS 2019

	Among currently married respondents:		Percent distribution of currently married respondents employed in the past 12 months, by type of earnings					
Age	Percentage employed in past 12 months	Number of respondents	Cash only	Cash and in-kind	In-kind only	Not paid	Total	Number of respondents
				WOMEN				
15-19	70.8	477	35.2	8.3	2.1	54.4	100.0	338
20-24	74.6	1,365	37.4	4.7	0.6	57.3	100.0	1,018
25-29	82.5	2,097	43.1	7.2	0.9	48.7	100.0	1,729
30-34	85.2	1,637	36.5	6.0	1.0	56.5	100.0	1,395
35-39	90.3	1,960	36.9	7.1	1.3	54.7	100.0	1,770
40-44	90.8	1,129	39.7	7.6	1.0	51.6	100.0	1,025
45-49	90.6	1,050	34.8	8.0	0.5	56.6	100.0	951
Total 15-49	84.7	9,715	38.3	6.9	1.0	53.9	100.0	8,226
				MEN				
15-19	*	13	*	*	*	*	*	13
20-24	90.8	166	50.3	21.1	0.4	28.2	100.0	151
25-29	89.8	540	54.4	19.5	1.8	24.4	100.0	485
30-34	95.0	635	57.1	19.4	0.8	22.7	100.0	604
35-39	95.5	698	50.7	22.3	0.6	26.4	100.0	667
40-44	94.3	566	49.2	21.4	0.5	28.9	100.0	534
45-49	96.0	615	46.5	20.3	1.0	32.1	100.0	591
Total 15-49	94.1	3,234	51.3	20.6	0.9	27.2	100.0	3,045
50-59	92.9	757	43.8	22.2	0.8	33.1	100.0	704
Total 15-59	93.9	3,991	49.9	20.9	0.9	28.3	100.0	3,748

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

Table 15.2.1 Control over women's cash earnings and relative magnitude of women's cash earnings

Percent distribution of currently married women age 15-49 who received cash earnings for employment in the 12 months preceding the survey by person who decides how the wife's cash earnings are used and by whether she earned more or less than her husband, according to background characteristics, Sierra Leone DHS 2019

	Person who decides how the wife's cash earnings are used:					Wife's cash earnings compared with husband's cash earnings:						
Background characteristic	Mainly wife	Wife and husband jointly	Mainly husband	Other	Total	More	Less	About the same	Husband has no earnings	Don't know	Total	Number of women
Age												
15-19	32.3	37.2	30.5	0.0	100.0	6.9	77.7	6.6	2.4	6.4	100.0	147
20-24	30.4	32.8	36.5	0.3	100.0	7.4	79.8	9.1	2.7	0.9	100.0	429
25-29	33.7	29.6	36.6	0.1	100.0	8.8	76.4	8.6	1.7	4.4	100.0	871
30-34	33.1	35.9	31.0	0.0	100.0	9.4	72.8	10.3	1.7	5.8	100.0	593
35-39	39.4	28.8	31.8	0.0	100.0	9.1	72.8	10.6	3.4	4.2	100.0	778
40-44	40.3	33.9	25.8	0.0	100.0	12.6	68.6	9.8	3.6	5.4	100.0	485
45-49	45.8	25.2	29.1	0.0	100.0	9.2	70.0	12.2	3.9	4.8	100.0	408
Number of living children												
0	26.5	35.8	37.7	0.0	100.0	9.3	74.0	10.5	3.6	2.6	100.0	252
1-2	34.8	31.5	33.5	0.2	100.0	10.4	73.1	9.4	3.2	4.0	100.0	1,490
3-4	37.1	31.0	31.9	0.0	100.0	8.4	73.3	10.6	2.3	5.4	100.0	1,241
5+	42.6	29.3	28.1	0.0	100.0	8.4	76.0	9.2	2.1	4.3	100.0	729
Residence												
Urban	32.9	33.8	33.2	0.1	100.0	12.1	69.6	7.5	4.9	5.9	100.0	1,743
Rural	39.8	28.9	31.3	0.1	100.0	6.8	77.5	11.9	0.7	3.1	100.0	1,968
Province												
Eastern	37.7	32.7	29.3	0.2	100.0	8.7	71.7	12.3	1.3	6.0	100.0	597
Northern	48.1	20.6	31.3	0.0	100.0	8.9	70.9	14.2	1.6	4.3	100.0	757
North West	47.3	28.0	24.8	0.0	100.0	6.3	83.9	7.6	0.3	1.9	100.0	723
Southern	33.2	45.0	21.6	0.2	100.0	5.6	79.7	10.1	0.5	4.1	100.0	605
Western Area	21.8	32.2	46.0	0.0	100.0	14.1	66.5	6.6	7.2	5.6	100.0	1,028
District												
Kailahun	21.7	41.9	36.3	0.0	100.0	23.3	67.6	5.3	3.8	0.0	100.0	67
Kenema	40.1	31.1	28.8	0.0	100.0	5.0	80.0	10.7	1.0	3.3	100.0	299
Kono	39.4	32.1	28.0	0.6	100.0	9.2	62.1	16.5	1.0	11.2	100.0	231
Bombali	47.3	11.1	41.6	0.0	100.0	17.5	62.8	18.9	0.4	0.4	100.0	261
Falaba	75.9	17.4	6.7	0.0	100.0	0.0	93.3	1.7	5.0	0.0	100.0	58
Koinadugu	43.5	32.4	24.1	0.0	100.0	7.5	69.9	11.6	0.4	10.6	100.0	132
Tonkolili	45.4	24.3	30.3	0.0	100.0	3.9	73.9	13.8	2.6	5.9	100.0	306
Kambia	40.2	29.0	30.7	0.0	100.0	5.2	88.3	4.0	0.0	2.5	100.0	403
Karene	30.2	33.4	36.5	0.0	100.0	7.1	82.6	9.5	0.0	0.8	100.0	58
Port Loko	61.8	25.2	13.0	0.0	100.0	7.9	77.5	12.6	0.8	1.2	100.0	262
Bo	42.3	44.3	13.0	0.4	100.0	4.5	78.0	10.4	0.0	7.1	100.0	310
Bonthe	(57.9)	(28.0)	(14.0)	(0.0)	100.0	(13.6)	(78.2)	(4.2)	(0.0)	(4.1)	100.0	30
Moyamba	17.3	80.0	2.7	0.0	100.0	4.5	78.1	14.9	2.1	0.4	100.0	142
Pujehun	22.7	10.2	67.1	0.0	100.0	7.6	86.4	5.4	0.0	0.6	100.0	123
Western Area Rural	27.9	33.6	38.6	0.0	100.0	11.3	74.3	7.1	4.3	2.9	100.0	530
Western Area Urban	15.4	30.8	53.8	0.0	100.0	17.0	58.2	6.1	10.2	8.4	100.0	499
Education												
No education	39.6	29.3	31.0	0.1	100.0	7.7	76.2	9.9	2.1	4.1	100.0	2,120
Primary	34.6	28.1	37.3	0.0	100.0	10.6	72.6	9.2	2.9	4.6	100.0	522
Secondary	32.6	34.1	33.1	0.1	100.0	10.4	71.5	9.1	4.2	4.9	100.0	858
More than secondary	26.3	46.0	27.7	0.0	100.0	17.0	62.0	13.6	2.3	5.1	100.0	210
Wealth quintile												
Lowest	35.0	30.2	34.8	0.0	100.0	4.8	77.0	14.3	0.4	3.5	100.0	578
Second	44.9	25.2	29.7	0.2	100.0	7.9	77.5	11.2	1.1	2.5	100.0	688
Middle	40.3	30.1	29.5	0.0	100.0	6.8	80.0	9.0	0.6	3.6	100.0	706
Fourth	38.6	34.8	26.5	0.1	100.0	10.6	72.2	8.1	3.7	5.4	100.0	891
Highest	25.5	33.7	40.8	0.0	100.0	14.1	65.1	8.3	6.2	6.3	100.0	848
Total	36.6	31.2	32.2	0.1	100.0	9.3	73.8	9.8	2.7	4.4	100.0	3,711

Note: Figures in parentheses are based on 25-49 unweighted cases.

Table 15.2.2 Control over men's cash earnings

Percent distributions of currently married men age 15-49 who receive cash earnings and of currently married women age 15-49 whose husbands receive cash earnings, by person who decides how the husband's cash earnings are used, according to background characteristics, Sierra Leone DHS 2019

	Men						Women					
Background characteristic	Mainly wife	Husband and wife jointly	Mainly husband	Other	Total	Number	Mainly wife	Husband and wife jointly	Mainly husband	Other	Total	Number
Age												
15-19	*	*	*	*	100.0	5	9.5	26.7	63.6	0.2	100.0	458
20-24	10.4	29.1	53.4	7.1	100.0	108	6.2	31.8	61.8	0.2	100.0	1,332
25-29	5.9	40.8	52.3	0.9	100.0	358	6.6	29.1	64.1	0.2	100.0	2,052
30-34	8.0	46.0	46.0	0.0	100.0	462	7.3	31.1	61.4	0.2	100.0	1,608
35-39	8.8	39.4	51.8	0.0	100.0	487	8.6	29.8	61.6	0.0	100.0	1,909
40-44	8.5	38.4	53.1	0.0	100.0	377	11.4	30.7	58.0	0.0	100.0	1,095
45-49	8.9	40.7	50.0	0.5	100.0	395	8.9	27.7	63.4	0.1	100.0	1,018
Number of living children												
0	9.3	42.1	47.3	1.3	100.0	152	8.2	32.6	59.2	0.0	100.0	635
1-2	7.5	42.8	48.9	0.8	100.0	849	7.2	30.9	61.8	0.2	100.0	3,585
3-4	8.6	38.3	52.5	0.6	100.0	669	8.1	29.8	62.0	0.1	100.0	3,264
5+	8.7	39.1	52.1	0.0	100.0	522	9.3	27.2	63.3	0.2	100.0	1,987
Residence												
Urban	6.5	42.8	50.3	0.3	100.0	1,049	8.9	32.4	58.6	0.0	100.0	3,467
Rural	9.8	38.4	51.0	0.8	100.0	1,142	7.5	28.4	64.0	0.2	100.0	6,004
Province												
Eastern	5.3	36.5	57.4	0.8	100.0	441	7.9	32.8	59.3	0.0	100.0	1,990
Northern	12.7	33.9	53.2	0.2	100.0	411	6.0	22.2	71.7	0.1	100.0	2,085
North West	10.9	46.9	40.9	1.3	100.0	358	11.2	28.2	60.3	0.3	100.0	1,743
Southern	8.7	33.9	57.0	0.4	100.0	371	7.0	34.4	58.6	0.1	100.0	1,865
Western Area	5.5	48.1	46.0	0.3	100.0	611	8.5	32.5	58.9	0.1	100.0	1,789
District												
Kailahun	6.8	26.6	66.6	0.0	100.0	156	5.9	39.3	54.7	0.2	100.0	474
Kenema	2.0	39.0	58.9	0.0	100.0	123	10.9	29.4	59.6	0.0	100.0	929
Kono	6.2	44.2	47.5	2.2	100.0	162	4.8	32.8	62.4	0.0	100.0	587
Bombali	3.2	28.3	68.5	0.0	100.0	181	7.0	25.1	67.9	0.1	100.0	724
Falaba	11.2	50.7	38.1	0.0	100.0	32	7.6	21.9	70.5	0.0	100.0	288
Koinadugu	37.9	25.3	36.8	0.0	100.0	71	5.5	32.2	62.1	0.2	100.0	318
Tonkolili	12.5	42.4	44.5	0.6	100.0	128	4.7	15.3	80.0	0.0	100.0	755
Kambia	8.9	54.6	34.9	1.6	100.0	134	7.7	25.0	67.3	0.0	100.0	626
Karene	19.9	3.9	76.2	0.0	100.0	43	10.8	28.7	60.5	0.0	100.0	334
Port Loko	10.3	51.3	37.0	1.4	100.0	181	14.1	30.5	54.7	0.7	100.0	783
Bo	7.0	38.7	53.3	0.9	100.0	174	6.8	38.3	54.8	0.2	100.0	724
Bonthe	4.4	18.3	77.2	0.0	100.0	65	6.8	26.2	66.7	0.3	100.0	337
Moyamba	25.8	28.5	45.7	0.0	100.0	57	6.4	45.5	48.1	0.0	100.0	475
Pujehun	3.0	40.5	56.4	0.0	100.0	74	8.3	18.0	73.7	0.0	100.0	330
Western Area Rural	8.0	49.8	42.2	0.0	100.0	195	10.7	34.8	54.5	0.0	100.0	719
Western Area Urban	4.4	47.3	47.8	0.5	100.0	415	7.0	30.9	61.9	0.2	100.0	1,070
Education												
No education	7.4	38.5	53.8	0.3	100.0	796	8.2	27.5	64.2	0.1	100.0	5,814
Primary	7.1	41.7	50.2	1.1	100.0	264	8.6	29.5	61.8	0.1	100.0	1,272
Secondary	9.1	40.2	49.9	0.9	100.0	843	7.4	33.7	58.8	0.2	100.0	2,052
More than secondary	9.3	45.9	44.8	0.0	100.0	288	6.0	48.7	44.9	0.5	100.0	333
Wealth quintile												
Lowest	7.8	37.0	55.1	0.2	100.0	352	6.9	30.1	62.9	0.1	100.0	2,011
Second	9.6	39.5	50.3	0.6	100.0	391	7.7	26.6	65.6	0.1	100.0	2,092
Middle	10.3	41.3	47.8	0.6	100.0	383	8.8	27.8	63.3	0.2	100.0	1,957
Fourth	9.0	38.1	51.8	1.0	100.0	476	9.2	31.3	59.3	0.1	100.0	1,724
Highest	5.7	44.7	49.3	0.3	100.0	589	7.6	34.6	57.7	0.1	100.0	1,687
Total 15-49	8.2	40.5	50.7	0.6	100.0	2,191	8.0	29.8	62.0	0.1	100.0	9,471
50-59	10.4	42.5	47.1	0.0	100.0	465	na	na	na	na	na	na
Total 15-59	8.6	40.9	50.1	0.5	100.0	2,656	na	na	na	na	na	na

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
na = Not applicable

Table 15.3 Women's control over their own earnings and over those of their husbands

Percent distribution of currently married women age 15-49 with cash earnings in the last 12 months by person who decides how the wife's cash earnings are used and percent distribution of currently married women age 15-49 whose husbands have cash earnings by person who decides how the husband's cash earnings are used, according to the relation between wife's and husband's cash earnings, Sierra Leone DHS 2019

Woman's earnings relative to husband's earnings	Person who decides how the wife's cash earnings are used:						Person who decides how the husband's cash earnings are used:					
	Mainly wife	Wife and husband jointly	Mainly husband	Other	Total	Number of women	Mainly wife	Wife and husband jointly	Mainly husband	Other	Total	Number of women
More than husband	31.4	34.7	33.9	0.0	100.0	344	15.6	34.2	50.2	0.0	100.0	344
Less than husband	39.1	27.3	33.5	0.1	100.0	2,739	7.3	27.6	65.1	0.0	100.0	2,739
Same as husband	21.5	54.6	23.9	0.0	100.0	365	4.1	53.3	42.6	0.0	100.0	365
Husband has no cash earnings or did not work	19.3	39.8	40.9	0.0	100.0	98	na	na	na	na	na	0
Woman worked but has no cash earnings	na	na	na	na	na	0	8.2	30.2	61.5	0.1	100.0	4,394
Woman did not work	na	na	na	na	na	0	6.7	26.1	66.9	0.3	100.0	1,465
Total[1]	36.6	31.2	32.2	0.1	100.0	3,711	8.0	29.8	62.0	0.1	100.0	9,471

na = Not applicable
[1] Includes cases where a woman does not know whether she earned more or less than her husband

Table 15.4.1 Ownership of assets: Women

Percent distribution of women age 15-49 by ownership of housing and land, according to background characteristics, Sierra Leone DHS 2019

Background characteristic	Percentage who own a house: Alone	Jointly	Alone and jointly	Percentage who do not own a house	Total	Percentage who own land: Alone	Jointly	Alone and jointly	Percentage who do not own land	Total	Number
Age											
15-19	0.4	15.2	3.2	81.2	100.0	0.7	11.1	2.1	86.1	100.0	3,427
20-24	2.5	20.3	4.3	72.9	100.0	3.0	16.8	2.8	77.3	100.0	2,629
25-29	4.0	26.2	4.9	64.8	100.0	4.6	22.0	3.4	70.0	100.0	2,728
30-34	5.9	33.6	6.8	53.7	100.0	6.1	27.6	4.8	61.5	100.0	1,942
35-39	6.1	38.9	9.6	45.4	100.0	6.6	30.9	6.8	55.6	100.0	2,224
40-44	9.2	41.1	9.9	39.8	100.0	9.2	31.6	6.0	53.2	100.0	1,337
45-49	11.7	46.4	9.6	32.4	100.0	10.5	38.4	6.8	44.4	100.0	1,288
Residence											
Urban	2.8	16.6	3.8	76.8	100.0	2.1	7.7	1.4	88.7	100.0	7,163
Rural	6.1	38.6	8.1	47.2	100.0	7.1	35.8	6.5	50.5	100.0	8,411
Province											
Eastern	8.5	35.1	7.4	49.0	100.0	10.4	31.5	3.7	54.4	100.0	3,069
Northern	4.3	32.4	7.9	55.4	100.0	4.9	24.5	6.6	64.0	100.0	3,317
North West	2.4	37.0	6.1	54.5	100.0	2.8	33.5	6.7	57.0	100.0	2,508
Southern	4.8	34.1	5.9	55.2	100.0	5.7	29.4	3.6	61.4	100.0	2,900
Western Area	2.9	9.7	3.9	83.5	100.0	1.0	2.5	1.2	95.3	100.0	3,780
District											
Kailahun	19.1	22.0	2.1	56.8	100.0	26.3	25.0	1.5	47.2	100.0	707
Kenema	4.6	37.0	11.6	46.7	100.0	6.5	33.3	4.0	56.2	100.0	1,437
Kono	6.3	42.2	4.8	46.7	100.0	4.3	33.7	4.8	57.2	100.0	925
Bombali	5.3	27.6	1.2	65.8	100.0	4.0	20.0	0.2	75.8	100.0	1,166
Falaba	1.4	30.4	29.7	38.4	100.0	4.1	32.3	29.5	34.1	100.0	466
Koinadugu	1.8	27.2	11.9	59.1	100.0	4.3	23.5	9.0	63.2	100.0	469
Tonkolili	5.4	39.7	4.4	50.4	100.0	6.2	26.2	3.1	64.5	100.0	1,215
Kambia	0.9	55.7	0.8	42.6	100.0	2.6	49.3	0.6	47.5	100.0	890
Karene	6.4	35.2	4.1	54.3	100.0	6.4	32.7	4.7	56.2	100.0	462
Port Loko	2.0	23.3	10.9	63.8	100.0	1.5	21.6	12.3	64.7	100.0	1,157
Bo	2.5	28.3	6.1	63.1	100.0	4.3	26.1	3.4	66.1	100.0	1,250
Bonthe	4.6	43.2	4.9	47.4	100.0	4.3	33.4	4.2	58.1	100.0	468
Moyamba	4.8	29.6	6.1	59.5	100.0	3.8	24.4	4.9	66.9	100.0	726
Pujehun	11.6	47.7	5.9	34.8	100.0	13.7	42.0	1.4	42.9	100.0	456
Western Area Rural	3.4	13.3	6.4	76.9	100.0	1.7	3.6	2.2	92.5	100.0	1,407
Western Area Urban	2.5	7.6	2.4	87.5	100.0	0.6	1.9	0.6	97.0	100.0	2,373
Education											
No education	7.0	38.6	8.5	45.9	100.0	7.7	33.9	6.3	52.1	100.0	7,081
Primary	4.1	30.4	5.7	59.8	100.0	4.7	25.1	3.9	66.3	100.0	2,103
Secondary	1.8	16.7	3.5	78.0	100.0	1.7	10.5	1.8	86.1	100.0	5,724
More than secondary	4.2	15.8	5.3	74.7	100.0	2.4	6.2	2.4	89.0	100.0	666
Wealth quintile											
Lowest	7.4	40.8	8.9	42.9	100.0	9.4	39.1	6.5	45.0	100.0	2,738
Second	6.8	37.8	8.5	46.9	100.0	8.1	36.3	7.0	48.6	100.0	2,831
Middle	4.1	36.3	7.0	52.6	100.0	4.9	32.1	5.7	57.3	100.0	2,954
Fourth	2.6	22.0	3.9	71.5	100.0	2.4	11.1	1.8	84.8	100.0	3,385
Highest	2.9	11.7	3.8	81.6	100.0	1.0	3.9	1.3	93.8	100.0	3,666
Total	4.6	28.5	6.2	60.8	100.0	4.8	22.9	4.2	68.1	100.0	15,574

Table 15.4.2 Ownership of assets: Men

Percent distribution of men age 15-49 by ownership of housing and land, according to background characteristics, Sierra Leone DHS 2019

Background characteristic	Percentage who own a house: Alone	Jointly	Alone and jointly	Percentage who do not own a house	Total	Percentage who own land: Alone	Jointly	Alone and jointly	Percentage who do not own land	Total	Number
Age											
15-19	0.4	8.9	0.8	90.0	100.0	1.6	9.0	0.8	88.6	100.0	1,541
20-24	2.5	11.6	0.9	84.9	100.0	5.6	11.6	2.5	80.2	100.0	937
25-29	10.3	13.2	2.6	73.9	100.0	13.4	12.2	2.7	71.7	100.0	1,015
30-34	16.5	14.3	3.5	65.7	100.0	19.8	14.6	3.3	62.3	100.0	793
35-39	27.8	17.6	5.4	49.1	100.0	24.7	18.4	7.0	49.9	100.0	791
40-44	35.4	19.2	7.2	38.2	100.0	33.0	18.0	6.0	43.0	100.0	624
45-49	38.5	20.0	6.4	35.1	100.0	32.9	20.5	8.6	38.0	100.0	682
Residence											
Urban	6.3	8.1	1.6	84.1	100.0	5.3	5.8	1.2	87.6	100.0	2,990
Rural	23.0	19.1	4.7	53.3	100.0	24.7	20.9	6.0	48.4	100.0	3,394
Province											
Eastern	16.0	14.6	6.9	62.5	100.0	21.4	14.9	8.8	55.0	100.0	1,251
Northern	17.2	22.6	1.8	58.4	100.0	19.8	21.5	1.4	57.4	100.0	1,353
North West	16.3	10.1	5.6	68.0	100.0	16.1	14.1	8.0	61.8	100.0	982
Southern	23.7	19.6	2.4	54.3	100.0	22.5	19.7	2.6	55.3	100.0	1,192
Western Area	5.8	4.2	0.7	89.3	100.0	2.2	2.2	0.1	95.4	100.0	1,606
District											
Kailahun	13.5	23.0	8.1	55.3	100.0	19.3	29.4	11.9	39.4	100.0	307
Kenema	16.2	9.0	3.0	71.8	100.0	20.8	10.3	5.2	63.7	100.0	557
Kono	17.7	16.0	11.6	54.7	100.0	24.0	9.9	11.4	54.7	100.0	387
Bombali	16.8	18.5	0.3	64.3	100.0	17.7	16.1	1.1	65.1	100.0	472
Falaba	22.9	18.9	6.2	52.0	100.0	23.2	18.2	5.4	53.3	100.0	148
Koinadugu	15.3	30.3	0.0	54.5	100.0	15.8	40.0	0.0	44.2	100.0	196
Tonkolili	16.7	24.4	2.5	56.4	100.0	22.1	20.3	1.1	56.6	100.0	538
Kambia	16.7	5.5	3.3	74.5	100.0	20.2	11.8	3.4	64.6	100.0	345
Karene	18.6	19.8	4.6	56.9	100.0	10.0	19.8	14.2	56.1	100.0	192
Port Loko	15.0	9.5	7.8	67.7	100.0	15.5	13.3	9.0	62.2	100.0	445
Bo	14.2	28.8	1.6	55.5	100.0	16.6	23.0	1.7	58.7	100.0	525
Bonthe	42.7	14.8	1.5	41.1	100.0	29.6	35.4	2.3	32.7	100.0	199
Moyamba	27.7	11.2	1.6	59.4	100.0	26.5	8.4	1.6	63.6	100.0	290
Pujehun	24.1	11.5	7.3	57.1	100.0	25.6	10.6	6.9	56.8	100.0	178
Western Area Rural	6.5	1.9	1.3	90.2	100.0	4.1	2.0	0.2	93.7	100.0	542
Western Area Urban	5.4	5.3	0.4	88.9	100.0	1.3	2.3	0.1	96.3	100.0	1,064
Education											
No education	28.7	16.3	6.0	49.0	100.0	29.1	18.5	7.0	45.4	100.0	1,865
Primary	15.0	14.6	3.4	67.0	100.0	15.7	15.0	5.0	64.3	100.0	876
Secondary	7.3	12.2	1.6	78.9	100.0	8.3	11.4	1.7	78.6	100.0	3,120
More than secondary	14.3	14.3	2.8	68.6	100.0	11.2	10.2	2.2	76.4	100.0	523
Wealth quintile											
Lowest	29.5	20.5	4.4	45.6	100.0	31.7	22.5	5.2	40.6	100.0	1,104
Second	22.8	20.3	5.8	51.2	100.0	24.0	23.0	7.3	45.7	100.0	1,123
Middle	17.0	17.6	4.6	60.8	100.0	18.0	19.9	5.9	56.2	100.0	1,145
Fourth	6.4	9.2	1.5	82.9	100.0	8.5	7.6	1.8	82.1	100.0	1,422
Highest	6.4	6.4	1.2	86.0	100.0	3.2	2.6	0.5	93.7	100.0	1,590
Total 15-49	15.2	13.9	3.2	67.7	100.0	15.6	13.9	3.8	66.8	100.0	6,384
50-59	45.1	22.4	9.5	23.0	100.0	40.5	20.0	7.9	31.5	100.0	813
Total 15-59	18.6	14.9	3.9	62.6	100.0	18.4	14.6	4.2	62.8	100.0	7,197

Table 15.5.1 Ownership of title or deed for house: Women

Among women age 15-49 who own a house, percent distribution by whether the house owned has a title or deed and whether or not the woman's name appears on the title or deed, according to background characteristics, Sierra Leone DHS 2019

Background characteristic	House has a title or deed and:		Does not have a title/deed	Don't know/ missing[1]	Total	Number who own a house[2]
	Woman's name is on title/deed	Woman's name is not on title/deed				
Age						
15-19	8.7	10.3	70.7	10.3	100.0	644
20-24	13.2	11.0	69.5	6.2	100.0	711
25-29	16.2	7.6	71.8	4.4	100.0	959
30-34	16.1	7.4	70.5	5.9	100.0	900
35-39	22.5	7.1	65.7	4.7	100.0	1,214
40-44	26.0	6.8	61.1	6.1	100.0	805
45-49	25.8	5.9	63.6	4.7	100.0	871
Residence						
Urban	30.8	13.4	49.9	5.8	100.0	1,664
Rural	14.5	5.7	74.0	5.8	100.0	4,441
Province						
Eastern	8.0	15.0	72.2	4.8	100.0	1,564
Northern	16.0	4.4	74.7	4.9	100.0	1,479
North West	11.0	6.2	73.9	8.9	100.0	1,140
Southern	27.2	5.4	60.2	7.2	100.0	1,299
Western Area	51.1	5.7	41.4	1.8	100.0	622
District						
Kailahun	5.6	15.9	74.6	3.9	100.0	305
Kenema	8.9	16.6	71.9	2.6	100.0	766
Kono	7.9	11.8	71.3	8.9	100.0	493
Bombali	11.0	6.4	71.4	11.2	100.0	398
Falaba	19.5	1.9	76.1	2.5	100.0	287
Koinadugu	12.8	9.4	72.8	5.0	100.0	192
Tonkolili	18.6	2.8	76.8	1.8	100.0	602
Kambia	5.7	10.7	79.9	3.8	100.0	511
Karene	2.7	0.7	74.2	22.4	100.0	211
Port Loko	21.7	3.5	66.4	8.4	100.0	418
Bo	21.6	11.5	53.9	13.0	100.0	462
Bonthe	16.1	1.1	79.7	3.2	100.0	246
Moyamba	21.0	0.8	71.9	6.3	100.0	294
Pujehun	51.3	4.3	42.1	2.3	100.0	297
Western Area Rural	71.8	4.4	21.9	2.0	100.0	326
Western Area Urban	28.4	7.1	62.9	1.7	100.0	296
Education						
No education	17.2	6.2	71.1	5.5	100.0	3,832
Primary	19.2	8.8	65.4	6.6	100.0	846
Secondary	21.5	11.5	60.3	6.7	100.0	1,258
More than secondary	38.5	11.3	48.2	2.0	100.0	169
Wealth quintile						
Lowest	13.1	4.4	77.7	4.7	100.0	1,564
Second	13.0	5.5	75.4	6.1	100.0	1,503
Middle	15.5	7.6	70.4	6.5	100.0	1,400
Fourth	30.0	13.1	48.9	8.0	100.0	963
Highest	37.2	13.6	46.2	3.0	100.0	675
Total	19.0	7.8	67.4	5.8	100.0	6,105

[1] Includes women who have a house with a title/deed, but they do not know if their name is on it (or this information is missing), and women who do not know if there is a title/deed for the house (or this information is missing)
[2] Includes sole, joint, or sole and joint ownership

Table 15.5.2 Ownership of title or deed for house: Men

Among men age 15-49 who own a house, percent distribution by whether the house owned has a title or deed and whether or not the man's name appears on the title or deed, according to background characteristics, Sierra Leone DHS 2019

Background characteristic	House has a title or deed and: Man's name is on title/deed	House has a title or deed and: Man's name is not on title/deed	Does not have a title/deed	Don't know/ missing[1]	Total	Number who own a house[2]
Age						
15-19	13.2	2.4	66.0	18.5	100.0	154
20-24	22.3	1.4	66.3	10.0	100.0	141
25-29	22.8	3.4	70.0	3.8	100.0	265
30-34	22.7	4.6	70.8	2.0	100.0	272
35-39	26.4	2.5	69.8	1.2	100.0	402
40-44	26.1	3.7	69.3	0.9	100.0	386
45-49	29.4	3.6	66.4	0.5	100.0	443
Residence						
Urban	47.1	6.5	39.2	7.2	100.0	477
Rural	18.1	2.3	77.5	2.2	100.0	1,586
Province						
Eastern	19.2	3.3	74.5	3.0	100.0	470
Northern	16.7	2.8	77.9	2.6	100.0	563
North West	18.6	0.3	80.5	0.6	100.0	314
Southern	28.6	4.0	60.7	6.7	100.0	545
Western Area	65.5	8.3	25.3	1.0	100.0	171
District						
Kailahun	9.4	2.6	82.8	5.2	100.0	137
Kenema	28.4	3.4	67.0	1.2	100.0	157
Kono	18.6	3.7	74.8	2.9	100.0	175
Bombali	17.2	0.9	81.9	0.0	100.0	169
Falaba	47.3	5.1	45.9	1.7	100.0	71
Koinadugu	11.3	5.1	80.3	3.2	100.0	89
Tonkolili	9.2	2.6	83.7	4.5	100.0	234
Kambia	17.1	1.2	81.7	0.0	100.0	88
Karene	12.9	0.0	86.0	1.1	100.0	83
Port Loko	22.8	0.0	76.6	0.6	100.0	144
Bo	37.8	6.4	40.9	14.9	100.0	234
Bonthe	23.2	1.9	73.8	1.0	100.0	117
Moyamba	26.3	3.1	70.6	0.0	100.0	118
Pujehun	12.5	0.9	85.7	0.9	100.0	76
Western Area Rural	(62.2)	(5.3)	(29.4)	(3.1)	100.0	53
Western Area Urban	67.0	9.6	23.4	0.0	100.0	118
Education						
No education	19.8	2.1	76.6	1.5	100.0	952
Primary	17.4	4.3	74.2	4.0	100.0	289
Secondary	28.4	4.0	61.8	5.8	100.0	658
More than secondary	52.0	5.6	39.6	2.8	100.0	164
Wealth quintile						
Lowest	11.6	1.4	85.4	1.6	100.0	600
Second	16.4	2.5	79.2	2.0	100.0	548
Middle	22.4	3.8	69.5	4.4	100.0	449
Fourth	43.7	6.0	44.3	6.1	100.0	243
Highest	65.2	6.5	22.2	6.2	100.0	222
Total 15-49	24.8	3.3	68.6	3.3	100.0	2,063
50-59	34.8	0.8	64.3	0.1	100.0	626
Total 15-59	27.1	2.7	67.6	2.6	100.0	2,689

Note: Figures in parentheses are based on 25-49 unweighted cases.
[1] Includes men who have a house with a title/deed, but they do not know if their name is on it (or this information is missing), and men who do not know if there is a title/deed for the house (or this information is missing)
[2] Includes sole, joint, or sole and joint ownership

Table 15.6.1 Ownership of title or deed for land: Women

Among women age 15-49 who own land, percent distribution by whether the land owned has a title or deed and whether or not the woman's name appears on the title or deed, according to background characteristics, Sierra Leone DHS 2019

Background characteristic	Land has a title or deed and: Woman's name is on title/deed	Woman's name is not on title/deed	Does not have a title/deed	Don't know/ missing[1]	Total	Number who own land[2]
Age						
15-19	7.2	2.6	82.4	7.9	100.0	477
20-24	9.8	7.2	78.6	4.3	100.0	596
25-29	12.0	4.2	78.4	5.3	100.0	819
30-34	14.0	4.9	75.8	5.3	100.0	749
35-39	13.8	5.2	75.9	5.1	100.0	987
40-44	16.5	4.8	73.5	5.2	100.0	625
45-49	13.7	4.1	78.5	3.8	100.0	716
Residence						
Urban	19.7	6.9	67.1	6.3	100.0	807
Rural	11.4	4.4	79.3	5.0	100.0	4,161
Province						
Eastern	3.7	9.0	84.0	3.3	100.0	1,399
Northern	13.9	1.5	81.5	3.2	100.0	1,194
North West	9.4	4.3	76.2	10.1	100.0	1,078
Southern	21.3	3.4	70.3	5.0	100.0	1,120
Western Area	42.9	4.4	47.8	4.9	100.0	178
District						
Kailahun	2.5	13.9	81.6	2.0	100.0	374
Kenema	4.6	10.1	83.8	1.5	100.0	630
Kono	3.5	2.7	86.5	7.3	100.0	396
Bombali	12.2	1.7	75.9	10.2	100.0	282
Falaba	10.7	0.4	88.6	0.3	100.0	307
Koinadugu	10.5	2.9	83.9	2.8	100.0	173
Tonkolili	18.6	1.6	79.2	0.7	100.0	432
Kambia	4.9	7.6	82.1	5.4	100.0	467
Karene	2.0	0.2	74.7	23.0	100.0	202
Port Loko	18.1	2.6	70.2	9.1	100.0	409
Bo	11.8	6.6	72.4	9.2	100.0	423
Bonthe	13.6	1.5	82.1	2.8	100.0	196
Moyamba	14.6	0.6	80.9	3.8	100.0	240
Pujehun	48.7	2.4	48.1	0.9	100.0	260
Western Area Rural	61.1	3.8	33.5	1.7	100.0	105
Western Area Urban	(16.4)	(5.2)	(68.8)	(9.6)	100.0	72
Education						
No education	12.2	4.1	78.9	4.9	100.0	3,390
Primary	10.8	5.6	78.1	5.5	100.0	708
Secondary	14.3	6.8	73.1	5.8	100.0	796
More than secondary	41.2	6.7	42.3	9.8	100.0	74
Wealth quintile						
Lowest	11.7	3.9	79.8	4.5	100.0	1,508
Second	10.6	3.6	81.0	4.8	100.0	1,455
Middle	9.7	5.9	79.1	5.4	100.0	1,261
Fourth	19.1	7.1	67.1	6.7	100.0	516
Highest	35.6	6.5	50.3	7.7	100.0	228
Total	12.7	4.8	77.3	5.2	100.0	4,968

Note: Figures in parentheses are based on 25-49 unweighted cases.
[1] Includes women who have land with a title/deed, but they do not know if their name is on it (or this information is missing), and women who do not know if there is a title/deed for the land (or this information is missing)
[2] Includes sole, joint, or sole and joint ownership

Table 15.6.2 Ownership of title or deed for land: Men

Among men age 15-49 who own land, percent distribution by whether the land owned has a title or deed and whether or not the man's name appears on the title or deed, according to background characteristics, Sierra Leone DHS 2019

Background characteristic	Land has a title or deed and: Man's name is on title/deed	Man's name is not on title/deed	Does not have a title/deed	Don't know/ missing[1]	Total	Number who own land[2]
Age						
15-19	5.3	0.6	86.8	7.3	100.0	176
20-24	11.2	1.7	83.3	3.7	100.0	185
25-29	13.3	1.5	83.5	1.7	100.0	287
30-34	18.2	0.3	81.0	0.5	100.0	299
35-39	16.7	1.8	81.2	0.4	100.0	396
40-44	13.1	1.2	85.1	0.6	100.0	356
45-49	16.6	2.2	80.9	0.4	100.0	423
Residence						
Urban	27.5	3.3	66.4	2.8	100.0	370
Rural	11.6	1.0	86.2	1.2	100.0	1,752
Province						
Eastern	9.9	1.5	86.4	2.1	100.0	563
Northern	12.8	1.5	84.5	1.1	100.0	577
North West	12.0	0.6	87.4	0.0	100.0	375
Southern	18.5	1.6	77.4	2.4	100.0	533
Western Area	43.3	1.9	54.8	0.0	100.0	73
District						
Kailahun	2.0	1.3	94.2	2.5	100.0	186
Kenema	19.0	0.5	76.8	3.6	100.0	202
Kono	7.9	2.9	89.2	0.0	100.0	175
Bombali	8.3	1.5	90.1	0.0	100.0	165
Falaba	39.0	1.3	57.2	2.5	100.0	69
Koinadugu	9.8	1.8	85.3	3.1	100.0	109
Tonkolili	9.6	1.5	88.3	0.6	100.0	234
Kambia	13.1	1.3	85.6	0.0	100.0	122
Karene	7.4	0.0	92.6	0.0	100.0	84
Port Loko	13.5	0.4	86.1	0.0	100.0	168
Bo	24.2	2.7	68.5	4.6	100.0	217
Bonthe	12.7	0.3	86.5	0.4	100.0	134
Moyamba	25.0	1.6	73.3	0.0	100.0	105
Pujehun	3.9	0.9	92.4	2.8	100.0	77
Western Area Rural	(31.6)	(0.0)	(68.4)	(0.0)	100.0	34
Western Area Urban	(53.6)	(3.6)	(42.8)	(0.0)	100.0	39
Education						
No education	12.0	1.0	85.9	1.0	100.0	1,018
Primary	9.5	2.8	85.8	2.0	100.0	312
Secondary	16.8	1.4	79.8	2.1	100.0	668
More than secondary	33.3	1.4	64.5	0.8	100.0	123
Wealth quintile						
Lowest	8.1	0.5	90.0	1.4	100.0	656
Second	10.9	0.8	87.1	1.2	100.0	610
Middle	13.5	1.6	83.1	1.9	100.0	502
Fourth	26.2	4.5	67.7	1.7	100.0	254
Highest	51.5	2.3	44.9	1.3	100.0	100
Total 15-49	14.4	1.4	82.7	1.5	100.0	2,122
50-59	17.6	2.0	79.9	0.5	100.0	556
Total 15-59	15.1	1.5	82.1	1.3	100.0	2,678

Note: Figures in parentheses are based on 25-49 unweighted cases.
[1] Includes men who have land with a title/deed, but they do not know if their name is on it (or this information is missing), and men who do not know if there is a title/deed for the land (or this information is missing)
[2] Includes sole, joint, or sole and joint ownership

Table 15.7.1 Ownership and use of bank accounts and mobile phones: Women

Percentage of women age 15-49 who have and use an account in a bank or other financial institution and percentage who own a mobile phone, and among women who own a mobile phone, percentage who use it for financial transactions, according to background characteristics, Sierra Leone DHS 2019

Background characteristic	Have and use a bank account	Own a mobile phone	Number of women	Use mobile phone for financial transactions	Number of women who own a mobile phone
Age					
15-19	1.2	28.1	3,427	31.7	963
20-24	4.1	51.2	2,629	43.8	1,347
25-29	8.6	52.7	2,728	45.9	1,437
30-34	9.2	45.7	1,942	40.7	889
35-39	6.3	43.8	2,224	37.0	973
40-44	7.6	40.4	1,337	41.5	540
45-49	7.0	38.1	1,288	38.1	490
Residence					
Urban	10.9	64.7	7,163	45.0	4,631
Rural	1.4	23.9	8,411	30.0	2,007
Province					
Eastern	3.9	33.3	3,069	50.2	1,023
Northern	2.6	37.7	3,317	33.9	1,249
North West	2.2	30.4	2,508	33.7	763
Southern	4.0	32.4	2,900	54.1	941
Western Area	13.8	70.5	3,780	36.9	2,663
District					
Kailahun	1.8	28.2	707	33.1	199
Kenema	4.4	32.2	1,437	56.2	462
Kono	4.6	39.1	925	52.0	362
Bombali	3.8	48.4	1,166	37.6	564
Falaba	1.8	34.7	466	19.3	162
Koinadugu	3.1	44.0	469	41.5	206
Tonkolili	1.6	26.0	1,215	29.7	316
Kambia	2.0	36.5	890	31.3	325
Karene	0.8	18.3	462	20.2	85
Port Loko	2.9	30.6	1,157	39.1	353
Bo	5.7	39.1	1,250	60.0	488
Bonthe	2.4	30.1	468	49.4	141
Moyamba	3.5	27.5	726	51.7	199
Pujehun	1.5	24.7	456	38.6	112
Western Area Rural	10.1	63.1	1,407	43.0	888
Western Area Urban	15.9	74.8	2,373	33.9	1,775
Education					
No education	1.4	29.0	7,081	26.6	2,050
Primary	2.6	33.1	2,103	33.8	695
Secondary	6.4	56.8	5,724	44.4	3,249
More than secondary	56.1	96.8	666	72.2	645
Wealth quintile					
Lowest	0.3	12.0	2,738	22.7	330
Second	0.6	22.1	2,831	22.9	627
Middle	1.6	34.0	2,954	30.9	1,004
Fourth	4.8	58.6	3,385	47.5	1,983
Highest	18.0	73.5	3,666	45.1	2,696
Total	5.8	42.6	15,574	40.5	6,639

Table 15.7.2 Ownership and use of bank accounts and mobile phones: Men

Percentage of men age 15-49 who have and use an account in a bank or other financial institution and percentage who own a mobile phone, and among men who own a mobile phone, percentage who use it for financial transactions, according to background characteristics, Sierra Leone DHS 2019

Background characteristic	Have and use a bank account	Own a mobile phone	Number of men	Use mobile phone for financial transactions	Number of men who own a mobile phone
Age					
15-19	0.5	30.6	1,541	31.7	471
20-24	6.8	69.1	937	48.6	647
25-29	16.2	79.6	1,015	51.3	808
30-34	25.1	82.9	793	56.2	658
35-39	19.6	73.8	791	51.0	584
40-44	17.3	70.7	624	42.6	441
45-49	19.5	72.2	682	45.9	492
Residence					
Urban	22.8	80.0	2,990	58.4	2,392
Rural	4.4	50.4	3,394	33.0	1,711
Province					
Eastern	8.8	54.2	1,251	45.9	678
Northern	8.2	59.7	1,353	40.2	809
North West	7.9	59.9	982	37.8	588
Southern	10.4	55.3	1,192	46.7	660
Western Area	25.4	85.2	1,606	58.1	1,367
District					
Kailahun	7.0	48.6	307	47.8	149
Kenema	8.8	51.3	557	50.1	286
Kono	10.3	62.9	387	39.9	244
Bombali	12.3	62.6	472	50.0	296
Falaba	2.7	60.8	148	17.9	90
Koinadugu	9.4	70.2	196	42.4	137
Tonkolili	5.6	53.1	538	35.9	286
Kambia	8.2	68.8	345	35.4	237
Karene	2.5	50.8	192	43.3	98
Port Loko	10.0	56.8	445	38.0	253
Bo	13.5	58.5	525	59.1	307
Bonthe	9.6	56.2	199	32.3	112
Moyamba	7.7	52.8	290	38.5	153
Pujehun	6.4	49.1	178	35.6	87
Western Area Rural	16.8	82.6	542	46.5	447
Western Area Urban	29.9	86.5	1,064	63.7	920
Education					
No education	3.5	54.3	1,865	28.3	1,014
Primary	6.3	48.7	876	34.7	427
Secondary	11.3	68.8	3,120	51.6	2,147
More than secondary	68.6	98.3	523	81.3	514
Wealth quintile					
Lowest	0.6	34.9	1,104	22.0	386
Second	2.7	52.7	1,123	32.2	591
Middle	5.2	59.4	1,145	34.0	681
Fourth	14.5	76.3	1,422	49.4	1,085
Highest	33.3	85.5	1,590	67.5	1,359
Total 15-49	13.0	64.3	6,384	47.8	4,102
50-59	17.5	64.1	813	44.1	521
Total 15-59	13.5	64.2	7,197	47.4	4,623

Table 15.8 Participation in decision making

Percent distribution of currently married women and currently married men age 15-49 by person who usually makes decisions about various issues, Sierra Leone DHS 2019

Decision	Mainly wife	Wife and husband jointly	Mainly husband	Someone else	Other	Total	Number
			WOMEN				
Own health care	9.9	34.0	55.8	0.2	0.1	100.0	9,715
Major household purchases	12.1	34.8	52.4	0.5	0.1	100.0	9,715
Visits to her family or relatives	13.8	32.5	53.4	0.2	0.1	100.0	9,715
			MEN				
Own health care	11.0	40.9	47.0	0.8	0.2	100.0	3,234
Major household purchases	13.7	40.4	45.2	0.5	0.2	100.0	3,234

Table 15.9.1 Women's participation in decision making by background characteristics

Percentage of currently married women age 15-49 who usually make specific decisions either by themselves or jointly with their husband, by background characteristics, Sierra Leone DHS 2019

Background characteristic	Specific decisions			All three decisions	None of the three decisions	Number of women
	Woman's own health care	Making major household purchases	Visits to her family or relatives			
Age						
15-19	35.4	39.4	40.0	27.4	49.0	477
20-24	42.0	43.8	43.3	31.8	44.5	1,365
25-29	40.7	42.9	43.6	31.9	46.6	2,097
30-34	44.3	47.7	47.4	36.0	41.9	1,637
35-39	45.3	48.6	46.5	36.3	42.1	1,960
40-44	49.5	53.4	52.1	41.1	37.0	1,129
45-49	47.0	51.3	49.7	37.4	37.9	1,050
Employment (past 12 months)						
Not employed	35.8	36.6	40.9	27.8	51.2	1,489
Employed for cash	52.9	55.0	56.4	43.3	33.6	3,711
Employed not for cash	39.1	43.8	39.7	30.4	47.3	4,515
Number of living children						
0	44.3	45.1	47.5	34.9	42.6	662
1-2	43.1	44.8	45.5	33.5	44.0	3,687
3-4	44.2	48.9	46.8	36.1	42.0	3,338
5+	44.7	48.2	46.3	35.6	41.4	2,028
Residence						
Urban	45.3	47.2	47.6	37.5	43.1	3,579
Rural	43.0	46.8	45.5	33.4	42.4	6,136
Province						
Eastern	43.6	49.3	49.4	34.7	38.6	2,007
Northern	38.3	43.7	42.2	31.7	47.4	2,173
North West	46.5	50.4	39.2	30.3	40.0	1,760
Southern	47.8	48.6	55.6	40.9	38.4	1,895
Western Area	44.0	43.3	44.7	37.1	48.2	1,880
District						
Kailahun	40.4	53.0	48.2	33.8	36.0	478
Kenema	40.9	41.7	42.0	32.6	49.6	932
Kono	50.6	58.2	62.1	38.9	23.6	597
Bombali	50.3	46.8	51.6	45.2	47.2	728
Falaba	30.0	58.7	25.7	21.2	37.3	291
Koinadugu	41.5	44.5	41.6	34.8	49.6	318
Tonkolili	29.6	35.4	40.1	22.6	50.4	836
Kambia	45.6	49.4	40.2	33.6	42.5	626
Karene	53.9	47.5	53.9	38.2	36.3	335
Port Loko	44.1	52.3	32.2	24.4	39.7	799
Bo	46.3	52.0	56.2	40.0	34.6	724
Bonthe	37.8	33.1	54.0	24.6	39.9	337
Moyamba	56.6	54.8	59.5	50.7	36.4	503
Pujehun	47.9	47.4	50.0	44.6	48.4	331
Western Area Rural	55.6	54.9	56.7	48.2	37.3	745
Western Area Urban	36.5	35.7	36.9	29.8	55.4	1,135
Education						
No education	42.1	45.8	44.6	33.4	44.0	5,957
Primary	42.8	46.2	45.3	34.3	43.8	1,298
Secondary	47.0	48.5	49.1	37.4	40.3	2,121
More than secondary	58.6	58.8	61.4	48.5	29.8	340
Wealth quintile						
Lowest	42.1	45.2	45.6	34.3	44.5	2,080
Second	41.8	46.0	44.3	31.1	42.3	2,135
Middle	42.6	47.1	44.5	33.4	42.8	1,979
Fourth	50.0	53.1	53.6	41.9	36.9	1,770
Highest	43.7	43.7	44.0	35.1	46.7	1,751
Total	43.9	46.9	46.3	34.9	42.7	9,715

Table 15.9.2 Men's participation in decision making by background characteristics

Percentage of currently married men age 15-49 who usually make specific decisions either alone or jointly with their wife, by background characteristics, Sierra Leone DHS 2019

Background characteristic	Specific decisions		Both decisions	Neither of the two decisions	Number of men
	Man's own health	Making major household purchases			
Age					
15-19	*	*	*	*	13
20-24	79.1	77.7	74.2	17.4	166
25-29	86.3	86.5	83.5	10.7	540
30-34	91.2	86.4	85.0	7.4	635
35-39	89.3	86.7	84.4	8.3	698
40-44	88.5	86.7	84.8	9.6	566
45-49	86.6	83.9	82.0	11.4	615
Employment (past 12 months)					
Not employed	87.7	86.1	83.7	9.9	190
Employed for cash	89.5	87.2	85.0	8.3	2,191
Employed not for cash	84.2	81.5	79.4	13.7	853
Number of living children					
0	84.8	82.2	80.3	13.3	216
1-2	88.1	86.1	83.8	9.6	1,193
3-4	89.4	85.9	84.0	8.7	968
5+	87.0	85.4	83.1	10.6	858
Residence					
Urban	91.5	88.3	86.0	6.2	1,271
Rural	85.7	83.8	81.8	12.2	1,963
Province					
Eastern	92.6	83.0	81.6	6.1	683
Northern	81.6	81.1	79.9	17.2	661
North West	85.6	87.3	83.4	10.5	520
Southern	85.5	84.0	82.0	12.5	653
Western Area	93.5	92.5	89.7	3.8	717
District					
Kailahun	88.2	81.8	80.2	10.3	164
Kenema	95.3	78.7	77.1	3.2	299
Kono	92.2	89.6	88.8	7.0	221
Bombali	94.4	93.4	93.4	5.6	240
Falaba	88.0	95.4	87.1	3.7	68
Koinadugu	69.5	68.3	67.7	29.8	106
Tonkolili	72.5	70.8	70.0	26.8	247
Kambia	82.9	89.0	79.8	7.9	172
Karene	83.6	83.6	83.6	16.4	111
Port Loko	88.6	87.8	86.0	9.6	238
Bo	87.5	86.0	84.5	11.0	241
Bonthe	84.6	87.0	84.1	12.5	124
Moyamba	75.6	74.4	72.1	22.2	175
Pujehun	97.6	91.1	89.7	1.0	114
Western Area Rural	89.8	88.7	85.9	7.4	231
Western Area Urban	95.2	94.3	91.5	2.0	485
Education					
No education	88.1	84.8	83.1	10.2	1,366
Primary	88.4	86.0	84.2	9.8	408
Secondary	87.4	85.8	83.0	9.8	1,123
More than secondary	89.0	87.7	85.3	8.5	337
Wealth quintile					
Lowest	86.7	85.4	83.2	11.2	722
Second	87.9	84.9	82.9	10.2	657
Middle	84.0	80.6	78.0	13.4	597
Fourth	88.3	85.2	83.6	10.1	585
Highest	92.8	91.3	88.8	4.7	674
Total 15-49	88.0	85.6	83.4	9.8	3,234
50-59	88.2	83.5	81.7	10.0	757
Total 15-59	88.0	85.2	83.1	9.9	3,991

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

Table 15.10.1 Attitude toward wife beating: Women

Percentage of all women age 15-49 who agree that a husband is justified in hitting or beating his wife for specific reasons, by background characteristics, Sierra Leone DHS 2019

Background characteristic	Husband is justified in hitting or beating his wife if she:					Percentage who agree with at least one specified reason	Number
	Burns the food	Argues with him	Goes out without telling him	Neglects the children	Refuses to have sexual intercourse with him		
Age							
15-19	11.3	34.9	33.3	33.5	14.3	43.1	3,427
20-24	11.5	38.4	37.5	36.5	17.4	47.6	2,629
25-29	11.0	40.9	39.6	39.5	19.2	49.6	2,728
30-34	11.1	40.5	39.4	38.6	21.2	50.4	1,942
35-39	12.9	43.9	41.7	40.7	23.3	51.8	2,224
40-44	12.5	43.9	43.3	40.4	20.8	51.2	1,337
45-49	12.6	45.7	42.9	43.3	21.2	52.7	1,288
Employment (past 12 months)							
Not employed	11.2	33.0	31.7	32.2	16.2	40.7	4,417
Employed for cash	10.4	44.7	44.2	42.7	18.7	54.0	5,200
Employed not for cash	13.2	41.6	39.2	38.5	21.3	49.8	5,957
Number of living children							
0	11.0	32.8	31.1	31.7	14.1	40.8	4,361
1-2	11.3	40.7	39.1	38.1	19.2	49.4	5,224
3-4	12.1	43.6	42.7	41.4	21.2	52.5	3,759
5+	13.3	47.7	46.1	45.2	24.2	55.5	2,231
Marital status							
Never married	10.4	30.6	29.1	29.2	12.7	38.6	5,058
Married or living together	12.5	45.3	43.7	42.7	22.4	53.8	9,715
Divorced/separated/ widowed	9.5	38.1	39.8	39.2	17.2	49.0	801
Residence							
Urban	10.9	36.1	32.6	34.0	16.5	43.8	7,163
Rural	12.3	43.7	43.9	41.7	21.0	52.8	8,411
Province							
Eastern	7.6	33.7	36.7	30.0	14.8	44.8	3,069
Northern	11.4	40.9	39.0	35.5	17.3	47.2	3,317
North West	13.5	57.2	57.6	57.5	27.5	65.0	2,508
Southern	8.2	32.9	32.9	36.4	14.7	43.5	2,900
Western Area	16.7	39.1	32.1	35.6	21.4	46.0	3,780
District							
Kailahun	8.0	31.4	33.4	24.6	8.8	42.1	707
Kenema	6.8	28.5	30.5	30.4	9.6	36.9	1,437
Kono	8.6	43.5	49.0	33.4	27.6	59.1	925
Bombali	6.3	14.2	13.4	12.5	7.5	16.7	1,166
Falaba	22.1	62.3	54.8	32.7	26.6	66.8	466
Koinadugu	14.0	56.7	48.2	52.6	32.4	64.5	469
Tonkolili	11.1	52.3	53.8	51.9	17.4	62.4	1,215
Kambia	11.3	54.7	54.6	54.7	22.0	58.8	890
Karene	17.6	49.8	43.6	38.1	24.8	59.4	462
Port Loko	13.5	62.1	65.6	67.4	32.9	72.1	1,157
Bo	11.2	41.2	46.5	47.2	12.0	53.3	1,250
Bonthe	5.5	22.9	22.6	39.7	32.3	45.4	468
Moyamba	7.0	38.0	32.0	32.0	15.5	43.9	726
Pujehun	4.8	12.0	7.6	10.3	2.7	14.1	456
Western Area Rural	19.4	44.0	37.0	39.7	25.5	51.8	1,407
Western Area Urban	15.2	36.3	29.2	33.2	18.9	42.5	2,373
Education							
No education	12.9	47.3	45.6	43.9	24.0	55.3	7,081
Primary	14.2	40.1	41.0	40.5	19.6	50.4	2,103
Secondary	10.0	33.9	32.1	32.2	13.9	42.4	5,724
More than secondary	5.9	19.0	16.1	20.5	7.2	25.3	666
Wealth quintile							
Lowest	11.8	41.8	42.3	40.0	21.6	51.2	2,738
Second	12.3	45.6	45.6	42.9	21.7	54.4	2,831
Middle	13.0	44.2	44.3	42.2	20.7	53.2	2,954
Fourth	10.0	38.1	35.9	36.6	16.8	46.9	3,385
Highest	11.6	33.4	28.9	31.2	15.5	40.1	3,666
Total	11.7	40.2	38.7	38.1	19.0	48.6	15,574

Table 15.10.2 Attitude toward wife beating: Men

Percentage of all men age 15-49 who agree that a husband is justified in hitting or beating his wife for specific reasons, by background characteristics, Sierra Leone DHS 2019

Background characteristic	Husband is justified in hitting or beating his wife if she:					Percentage who agree with at least one specified reason	Number
	Burns the food	Argues with him	Goes out without telling him	Neglects the children	Refuses to have sexual intercourse with him		
Age							
15-19	7.0	27.8	19.8	22.3	9.9	34.7	1,541
20-24	4.9	25.5	17.9	19.8	8.0	32.6	937
25-29	6.7	23.2	18.5	20.3	8.3	30.5	1,015
30-34	5.3	17.8	12.7	16.2	5.9	24.3	793
35-39	5.6	25.2	16.5	19.3	8.8	33.1	791
40-44	5.9	22.4	16.7	18.9	9.1	28.0	624
45-49	4.3	20.0	15.6	15.2	8.5	24.8	682
Employment (past 12 months)							
Not employed	4.7	21.4	16.2	17.3	7.6	26.1	1,571
Employed for cash	6.0	22.2	15.5	17.8	7.3	29.2	3,318
Employed not for cash	6.7	30.0	22.3	25.2	12.1	38.2	1,495
Number of living children							
0	5.9	26.0	18.9	20.9	9.4	33.0	2,896
1-2	5.3	20.7	14.5	16.9	6.8	27.4	1,560
3-4	6.1	22.2	16.7	18.6	8.4	28.4	1,048
5+	6.3	24.0	17.7	19.9	8.9	30.7	880
Marital status							
Never married	5.9	25.7	18.5	20.5	9.4	32.1	2,928
Married or living together	6.0	22.2	16.0	18.4	7.7	29.1	3,234
Divorced/separated/widowed	2.7	21.4	19.2	20.2	9.1	30.3	222
Residence							
Urban	4.1	19.0	13.8	16.0	6.8	25.0	2,990
Rural	7.4	28.0	20.3	22.4	10.0	35.4	3,394
Province							
Eastern	6.3	31.0	20.1	20.1	9.1	35.7	1,251
Northern	5.1	21.8	13.9	17.0	7.1	27.9	1,353
North West	10.4	32.5	26.6	30.1	15.6	41.2	982
Southern	5.5	19.8	17.1	18.3	5.7	28.1	1,192
Western Area	3.7	17.6	12.4	15.2	7.1	24.0	1,606
District							
Kailahun	4.2	30.7	18.5	20.2	5.4	35.2	307
Kenema	7.4	23.6	19.5	19.0	9.9	28.0	557
Kono	6.3	42.1	22.3	21.4	10.8	47.1	387
Bombali	7.4	14.9	12.7	13.6	8.1	18.0	472
Falaba	7.0	33.0	7.2	20.5	14.1	43.9	148
Koinadugu	1.7	9.9	7.5	10.0	7.6	16.0	196
Tonkolili	3.6	29.0	19.1	21.6	4.2	36.5	538
Kambia	9.9	32.9	24.3	26.6	12.4	41.8	345
Karene	24.7	54.9	49.7	55.2	33.7	66.7	192
Port Loko	4.6	22.6	18.4	21.9	10.2	29.8	445
Bo	7.2	18.8	17.7	17.1	5.4	25.6	525
Bonthe	9.2	22.7	16.7	29.2	9.6	41.9	199
Moyamba	2.5	22.3	22.8	20.7	6.5	30.0	290
Pujehun	1.2	15.1	6.3	6.0	0.8	17.4	178
Western Area Rural	5.8	18.9	12.9	16.2	9.9	24.7	542
Western Area Urban	2.6	16.9	12.2	14.7	5.6	23.6	1,064
Education							
No education	7.9	29.2	21.3	23.9	12.6	36.1	1,865
Primary	7.3	28.4	21.1	22.1	9.5	35.6	876
Secondary	5.0	22.2	16.0	18.3	7.1	29.4	3,120
More than secondary	1.5	6.2	4.1	5.1	0.7	9.2	523
Wealth quintile							
Lowest	7.1	25.0	20.0	21.9	10.5	32.8	1,104
Second	7.8	30.2	21.3	23.3	10.6	37.2	1,123
Middle	7.2	30.5	21.4	22.8	10.3	38.0	1,145
Fourth	5.5	21.3	16.2	18.9	7.8	27.8	1,422
Highest	2.9	15.9	10.5	12.9	5.0	21.3	1,590
Total 15-49	5.8	23.8	17.3	19.4	8.5	30.5	6,384
50-59	3.5	18.6	13.6	16.1	7.3	24.6	813
Total 15-59	5.6	23.2	16.9	19.0	8.4	29.9	7,197

Table 15.11 Attitudes toward negotiating safer sexual relations with husband

Percentage of women and men age 15-49 who believe that a woman is justified in refusing to have sexual intercourse with her husband if she knows that he has sexual intercourse with other women, and percentage who believe that a woman is justified in asking that they use a condom if she knows that her husband has a sexually transmitted infection (STI), according to background characteristics, Sierra Leone DHS 2019

	Women			Men		
Background characteristic	Refusing to have sexual intercourse with her husband if she knows he has sex with other women	Asking that they use a condom if she knows that her husband has an STI	Number of women	Refusing to have sexual intercourse with her husband if she knows he has sex with other women	Asking that they use a condom if she knows that her husband has an STI	Number of men
Age						
15-24	64.5	69.0	6,055	59.5	72.3	2,479
15-19	60.2	64.2	3,427	56.4	67.5	1,541
20-24	70.0	75.4	2,629	64.7	80.2	937
25-29	67.3	74.6	2,728	68.6	82.4	1,015
30-39	61.5	71.1	4,166	65.8	81.2	1,584
40-49	57.7	68.1	2,624	63.4	79.5	1,306
Marital status						
Never married	66.2	69.2	5,058	60.7	73.2	2,928
Ever had sex	73.7	75.9	3,462	64.9	80.3	1,851
Never had sex	49.9	54.5	1,596	53.4	61.1	1,077
Married/living together	61.2	70.6	9,715	65.6	80.8	3,234
Divorced/separated/ widowed	65.7	76.0	801	64.9	88.1	222
Residence						
Urban	70.7	75.3	7,163	67.7	76.7	2,990
Rural	56.5	66.2	8,411	59.5	78.4	3,394
Province						
Eastern	70.8	71.2	3,069	61.4	86.8	1,251
Northern	59.1	64.9	3,317	64.1	80.2	1,353
North West	56.9	76.2	2,508	66.7	77.6	982
Southern	58.3	69.2	2,900	65.1	80.5	1,192
Western Area	67.9	71.7	3,780	60.7	66.0	1,606
District						
Kailahun	85.9	88.2	707	41.6	89.1	307
Kenema	61.2	62.5	1,437	73.0	90.6	557
Kono	74.3	71.6	925	60.4	79.7	387
Bombali	66.5	70.1	1,166	68.2	84.9	472
Falaba	38.5	52.9	466	34.5	49.0	148
Koinadugu	68.2	90.2	469	79.5	77.9	196
Tonkolili	56.4	54.7	1,215	63.1	85.5	538
Kambia	50.0	75.5	890	74.1	80.5	345
Karene	49.5	51.6	462	44.7	66.0	192
Port Loko	65.1	86.5	1,157	70.6	80.3	445
Bo	68.8	75.8	1,250	74.0	91.1	525
Bonthe	37.8	49.4	468	63.4	88.2	199
Moyamba	51.0	73.3	726	47.6	53.7	290
Pujehun	62.3	64.8	456	69.4	84.4	178
Western Area Rural	69.6	65.0	1,407	40.9	40.8	542
Western Area Urban	66.9	75.6	2,373	70.8	78.8	1,064
Education						
No education	56.4	66.0	7,081	57.9	74.5	1,865
Primary	58.3	64.3	2,103	61.5	77.2	876
Secondary	71.6	76.3	5,724	64.0	77.7	3,120
More than secondary	74.6	86.4	666	82.0	88.6	523
Wealth quintile						
Lowest	54.8	60.5	2,738	57.7	77.6	1,104
Second	55.5	66.7	2,831	59.8	78.6	1,123
Middle	60.1	71.1	2,954	61.0	79.9	1,145
Fourth	69.3	74.6	3,385	62.4	72.4	1,422
Highest	71.6	76.1	3,666	72.2	79.9	1,590
Total 15-49	63.0	70.4	15,574	63.3	77.6	6,384
50-59	na	na	na	61.5	79.5	813
Total 15-59	na	na	na	63.1	77.8	7,197

na = Not applicable

Table 15.12 Ability to negotiate sexual relations with husband

Percentage of currently married women age 15-49 who can say no to their husband if they do not want to have sexual intercourse, and percentage who can ask their husband to use a condom, according to background characteristics, Sierra Leone DHS 2019

Background characteristic	Percentage who can say no to their husband if they do not want to have sexual intercourse	Percentage who can ask their husband to use a condom	Number of women
Age			
15-24	70.2	48.0	1,842
15-19	65.5	45.3	477
20-24	71.8	48.9	1,365
25-29	70.4	49.1	2,097
30-39	67.3	43.6	3,597
40-49	62.7	38.7	2,179
Residence			
Urban	75.5	59.1	3,579
Rural	62.8	36.0	6,136
Province			
Eastern	70.9	44.4	2,007
Northern	64.2	44.6	2,173
North West	58.2	23.0	1,760
Southern	66.6	46.9	1,895
Western Area	77.1	62.1	1,880
District			
Kailahun	88.5	60.2	478
Kenema	61.4	41.2	932
Kono	71.7	36.7	597
Bombali	76.4	70.7	728
Falaba	43.5	39.1	291
Koinadugu	65.2	49.1	318
Tonkolili	60.3	22.2	836
Kambia	52.6	32.3	626
Karene	64.0	37.2	335
Port Loko	60.1	9.8	799
Bo	84.5	66.6	724
Bonthe	62.4	35.4	337
Moyamba	54.7	31.7	503
Pujehun	49.8	38.8	331
Western Area Rural	80.2	63.6	745
Western Area Urban	75.1	61.2	1,135
Education			
No education	61.9	37.5	5,957
Primary	69.7	44.0	1,298
Secondary	78.9	60.6	2,121
More than secondary	85.9	69.3	340
Wealth quintile			
Lowest	62.6	34.7	2,080
Second	62.9	35.1	2,135
Middle	62.7	37.1	1,979
Fourth	74.8	58.0	1,770
Highest	76.9	62.3	1,751
Total	67.5	44.5	9,715

Table 15.13 Indicators of women's empowerment

Percentage of currently married women age 15-49 who participate in all decision making and percentage who disagree with all of the reasons justifying wife beating, by value on each of the indicators of women's empowerment, Sierra Leone DHS 2019

Empowerment indicator	Percentage who participate in all decision making	Percentage who disagree with all of the reasons justifying wife beating	Number of women
Number of decisions in which women participate[1]			
0	na	42.4	4,145
1-2	na	34.0	2,176
3	na	58.6	3,393
Number of reasons for which wife beating is justified[2]			
0	44.3	na	4,485
1-2	27.9	na	1,558
3-4	27.5	na	2,835
5	22.9	na	838

na = Not applicable
[1] See Table 15.9.1 for the list of decisions.
[2] See Table 15.10.1 for the list of reasons.

Table 15.14 Current use of contraception by women's empowerment

Percent distribution of currently married women age 15-49 by current contraceptive method, according to selected indicators of women's status, Sierra Leone DHS 2019

			Modern methods						
Empowerment indicator	Any method	Any modern method[1]	Sterilisation[2]	Temporary modern female methods[3]	Male condom	Any traditional method	Not currently using	Total	Number of women
Number of decisions in which women participate[4]									
0	17.6	17.5	0.1	17.3	0.1	0.1	82.4	100.0	4,145
1-2	23.6	22.9	0.4	22.2	0.3	0.7	76.4	100.0	2,176
3	24.1	23.9	0.3	23.4	0.1	0.3	75.9	100.0	3,393
Number of reasons for which wife beating is justified[5]									
0	22.0	21.6	0.2	21.2	0.1	0.4	78.0	100.0	4,485
1-2	23.1	23.1	0.2	22.8	0.1	0.0	76.9	100.0	1,558
3-4	19.6	19.3	0.2	19.0	0.1	0.3	80.4	100.0	2,835
5	19.0	18.9	0.6	18.0	0.3	0.1	81.0	100.0	838
Total	21.2	20.9	0.2	20.6	0.1	0.3	78.8	100.0	9,715

Note: If more than one method is used, only the most effective method is considered in this tabulation.
[1] Female sterilisation, male sterilisation, pill, IUD, injectables, implants, male condom, female condom, emergency contraception, standard days method (SDM), lactational amenorrhoea method (LAM), and other modern methods
[2] Sterilisation is a combination of female and male sterilisation.
[3] Pill, IUD, injectables, implants, female condom, emergency contraception, standard days method, lactational amenorrhoea method, and other modern methods
[4] See Table 15.9.1 for the list of decisions.
[5] See Table 15.10.1 for the list of reasons.

Table 15.15 Ideal number of children and unmet need for family planning by women's empowerment

Mean ideal number of children for women age 15-49 and percentage of currently married women age 15-49 with an unmet need for family planning, by indicators of women's empowerment, Sierra Leone DHS 2019

Empowerment indicator	Mean ideal number of children[1]	Number of women	Percentage of currently married women with an unmet need for family planning[2]			Number of women
			For spacing	For limiting	Total	
Number of decisions in which women participate[3]						
0	5.2	4,085	18.0	7.5	25.4	4,145
1-2	5.3	2,156	17.4	6.9	24.2	2,176
3	5.1	3,294	16.8	7.7	24.5	3,393
Number of reasons for which wife beating is justified[4]						
0	4.5	7,919	16.8	7.3	24.1	4,485
1-2	4.8	2,414	16.9	8.8	25.7	1,558
3-4	5.0	3,829	18.6	7.0	25.6	2,835
5	5.1	1,164	17.7	6.6	24.3	838
Total	4.7	15,325	17.4	7.4	24.8	9,715

[1] Mean excludes respondents who gave non-numeric responses.
[2] Figures for unmet need correspond to the revised definition described in Bradley et al. 2012.
[3] Restricted to currently married women. See Table 15.9.1 for the list of decisions.
[4] See Table 15.10.1 for the list of reasons.

Table 15.16 Reproductive health care by women's empowerment

Percentage of women age 15-49 with a live birth in the 5 years preceding the survey who received antenatal care, delivery assistance, and postnatal care from health personnel for the most recent birth, according to indicators of women's empowerment, Sierra Leone DHS 2019

Empowerment indicator	Percentage receiving antenatal care from a skilled provider[1]	Percentage receiving delivery care from a skilled provider[1]	Percentage with a postnatal check during the first 2 days after birth[2]	Number of women with a child born in the last 5 years
Number of decisions in which women participate[1]				
0	97.1	87.2	85.6	2,648
1-2	99.1	85.2	84.7	1,350
3	98.2	89.2	85.8	1,999
Number of reasons for which wife beating is justified[2]				
0	97.4	91.3	86.7	3,434
1-2	98.5	90.0	84.0	1,216
3-4	98.2	82.9	86.7	2,071
5	99.2	86.5	80.5	605
Total	97.9	88.3	85.8	7,326

[1] "Skilled provider" includes doctor, nurse, midwife, or auxiliary nurse/midwife.
[2] Includes women who received a postnatal checkup from a doctor, nurse, midwife, community health worker, or traditional birth attendant (TBA) in the first 2 days after the birth. Includes women who gave birth in a health facility and those who did not give birth in a health facility.
[3] Restricted to currently married women. See Table 15.9.1 for the list of decisions.
[4] See Table 15.10.1 for the list of reasons.

Table 15.17 Early childhood mortality rates by women's status

Infant, child, and under-5 mortality rates for the 10-year period preceding the survey, according to indicators of women's empowerment, Sierra Leone DHS 2019

Empowerment indicator	Infant mortality ($_1q_0$)	Child mortality ($_4q_1$)	Under-5 mortality ($_5q_0$)
Number of decisions in which women participate[1]			
0	83	55	134
1-2	81	48	125
3	67	49	112
Number of reasons for which wife beating is justified[2]			
0	64	47	108
1-2	81	51	127
3-4	94	55	143
5	89	56	140

[1] Restricted to currently married women. See Table 15.9.1 for the list of decisions.
[2] See Table 15.10.1 for the list of reasons.

DOMESTIC VIOLENCE 16

Key Findings

- ***Experience of violence:*** 61% of women age 15-49 have experienced physical violence by anyone since age 15 (up from 56% in 2013), and 7% have experienced sexual violence (down from 11% in 2013).
- ***Marital control:*** 48% of ever-married women report that their husbands/partners display three or more specified marital control behaviours, while 21% say that their husbands/partners display none.
- ***Spousal violence:*** 61% of ever-married women have experienced physical, sexual, or emotional violence by their current or most recent husband/partner, up from 51% in 2013; 50% experienced such violence in the 12 months preceding the survey.
- ***Injuries due to spousal violence:*** 30% of ever-married women who have experienced spousal physical or sexual violence have sustained injuries.
- ***Help seeking:*** 40% of women who have ever experienced physical or sexual violence by anyone have sought help to stop the violence, down from 55% in 2013.

Gender-based violence has been acknowledged worldwide as a violation of basic human rights. Increasing research has highlighted the health burdens, intergenerational effects, and demographic consequences of such violence (United Nations 2006). Gender-based violence is defined by the United Nations as any act of violence that results in physical, sexual, or psychological harm or suffering to women, girls, men, and boys, as well as threats of such acts, coercion, or the arbitrary deprivation of liberty. This chapter focuses on domestic violence experienced by women, a form of gender-based violence.

In Sierra Leone, prevention of and reductions in levels of domestic violence have been placed on the national transformation agenda as one of the country's priorities. The Sierra Leone Domestic Violence Act, 2007 was designed to protect women from domestic violence by providing accessible legal instruments aiming to prevent further incidents of abuse within domestic relationships. Under this act, violence against women is classified as a public crime allowing women to secure a protection order from the courts.

The 2019 SLDHS included the DHS domestic violence module, designed to collect information on domestic violence from all eligible women. The module was implemented in half of the sample households. In households with more than one eligible woman, only one woman was randomly selected for the module. Furthermore, the module was administered only if complete privacy was obtained. In total, 5,248 women were successfully interviewed with the module; 1% of eligible women could not be interviewed, mainly due to lack of privacy. Specially constructed weights were used to adjust for the

selection of only one woman per household and to ensure that the domestic violence subsample was nationally representative.

16.1 Measurement of Violence

In the 2019 SLDHS, information was obtained from never-married women on their experience of violence committed by anyone and from ever-married women on their experience of violence committed by their current and former husbands/partners and by others. More specifically, violence committed by the current husband/partner (for currently married women) and by the most recent husband/partner (for formerly married women) was measured by asking all ever-married women if their husband/partner ever did the following to them:

> ***Physical spousal violence:*** push you, shake you, or throw something at you; slap you; twist your arm or pull your hair; punch you with his/her fist or with something that could hurt you; kick you, drag you, or beat you up; try to choke you or burn you on purpose; or threaten or attack you with a knife, gun, or any other weapon
>
> ***Sexual spousal violence:*** physically force you to have sexual intercourse with him even when you did not want to, physically force you to perform any other sexual acts you did not want to, or force you with threats or in any other way to perform sexual acts you did not want to
>
> ***Emotional spousal violence:*** say or do something to humiliate you in front of others, threaten to hurt or harm you or someone close to you, or insult you or make you feel bad about yourself

Women married more than once were also asked separately about physical, sexual, and emotional violence committed by a previous husband/partner. Additionally, information was obtained from all women (married and unmarried) about physical violence committed by anyone (other than the current or most recent husband/partner) since they were age 15 by asking if anyone had hit, slapped, kicked, or done something else to hurt them physically. Similarly, information was gathered from all women about experiences of sexual violence committed by anyone (other than a current or most recent husband/partner) at any time in their life, as a child or as an adult, by asking if they were forced in any way to have sexual intercourse or to perform any other sexual acts when they did not want to do.

In this chapter, married women include both women who said they were married and women who said they were living with a man as if married. Correspondingly, husbands include both husbands of married women and partners of women who are not married but are living with a man as if married.

16.2 Women's Experience of Physical Violence

Physical violence by anyone

Percentage of women who have experienced any physical violence (committed by a husband or anyone else) since age 15 and in the 12 months before the survey.

Sample: Women age 15-49

16.2.1 Prevalence of Physical Violence

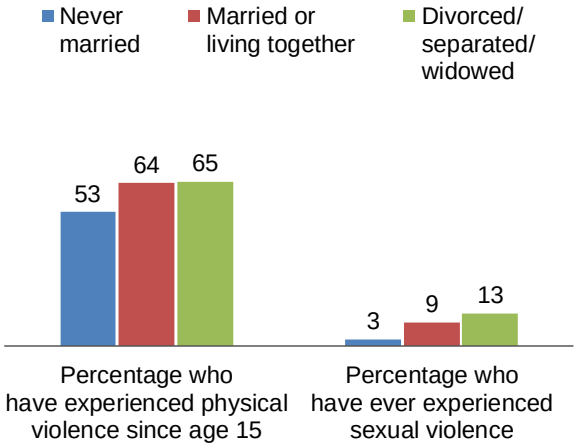
Sixty-one percent of women age 15-49 have experienced physical violence since age 15, and 43% experienced physical violence often or sometimes during the 12 months preceding the survey (**Table 16.1**).

Trends: The percentage of women who have experienced physical violence since age 15 increased from 56% in 2013 to 61% in 2019. The percentage who experienced physical violence in the 12 months preceding the survey increased even more sharply over the same period, from 27% to 43%.

Patterns by background characteristics

- Never-married women are less likely (53%) than ever-married women (64%-65%) to have experienced physical violence since age 15 (**Table 16.1** and **Figure 16.1**).
- Women in the North West province are more likely (68%) to have experienced physical violence since age 15 than women in the Eastern (64%), Southern and Western Area (60% each), and Northern (55%) provinces.
- By district, the percentage of women who have ever experienced physical violence is highest in Kono and Kambia (71% each) and lowest in Koinadugu (44%).

Figure 16.1 **Women's experience of violence by marital status**



- Experience of physical violence is more common among women who are employed for cash (66%) than among women who are employed but do not earn cash (60%) and women who are not employed (56%).
- Women's experience of physical violence varies inconsistently by education. The percentage of women who have experienced physical violence since age 15 is lowest among those with more than a secondary education (55%) and highest among those with a primary education (69%). There is also no consistent variation by wealth.

16.2.2 Perpetrators of Physical Violence

Among ever-married women who have experienced physical violence, the most common perpetrator of violence is the current husband/partner (72%). Among never-married women, the most common perpetrators are mothers/stepmothers (54%) and fathers/stepfathers (39%), followed by other family members. Notably, 19% of never-married women who have experienced violence since age 15 report that a teacher was the perpetrator (**Table 16.2**).

16.3 Experience of Sexual Violence

Sexual violence

Percentage of women who have experienced any sexual violence (committed by a husband or anyone else) ever and in the 12 months before the survey.

Sample: Women age 15-49

16.3.1 Prevalence of Sexual Violence

Seven percent of women age 15-49 have ever experienced sexual violence, and 5% of women experienced sexual violence in the 12 months preceding the survey (**Table 16.3**).

Trends: The proportion of women who have ever experienced sexual violence declined from 11% in 2013 to 7% in 2019; however, there was no change in the proportion who experienced sexual violence in the 12 months preceding the survey.

Patterns by background characteristics

- The percentage of women who have ever experienced sexual violence ranges from 4% in the Southern province to 13% in the North West province; by district, the percentage ranges from 1% in Bonthe to 21% in Falaba (**Table 16.3**).
- Divorced, separated, or widowed women (13%) are more likely to have ever experienced sexual violence than currently married women (9%) and never-married women (3%).
- Employed women are nearly twice as likely (8%-9%) to have experienced sexual violence as women who are not employed (5%).
- Women's likelihood of having ever experienced sexual violence does not vary consistently with education or wealth.

16.3.2 Perpetrators of Sexual Violence

The survey results show that sexual violence is most often committed by individuals with whom women have an intimate relationship. Among ever-married women who have experienced sexual violence, the most common perpetrators are the current husband/partner (78%) and a former husband/partner (19%) (**Table 16.4**).

Table 16.5 shows the age by which women first experience sexual violence. In Sierra Leone, 2% of women have experienced sexual violence by age 15 and 5% by age 22.

16.4 Experience of Different Forms of Violence

Physical and sexual violence may not occur in isolation; rather, women may experience a combination of different forms of violence. Overall, 62% of women age 15-49 have experienced physical or sexual violence: 55% have experienced physical violence only, 1% have experienced sexual violence only, and 6% have experienced both physical and sexual violence (**Table 16.6**).

In Sierra Leone, 6% of women who have ever been pregnant have experienced violence during a pregnancy, down from 8% in 2013 (**Table 16.7**). Among women who have ever been pregnant, those from the Mandingo (23%) and Kono (17%) ethnic groups, those living in the Kono district (14%), those who have never been married (13%), and those age 15-19 (12%) are more likely than their counterparts in other categories to have experienced physical violence during pregnancy.

16.5 Marital Control by Husband

Marital control

Percentage of women whose current husband/partner (if currently married) or most recent husband/partner (if formerly married) demonstrates at least one of the following controlling behaviours: is jealous or angry if she talks to other men, frequently accuses her of being unfaithful, does not permit her to meet her female friends, tries to limit her contact with her family, and insists on knowing where she is at all times.

Sample: Ever-married women age 15-49

Attempts by husbands to closely control and monitor their wives' behaviour can be an expression of women's subordinate status in the family. Marital controlling behaviours can also be important early warning signs and/or correlates of violence in a relationship. Because the concentration of behaviours is likely to be more significant than the display of any single behaviour, the proportion of women whose husband/partner displays at least three of the specified behaviours is also discussed.

Sixty-seven percent of ever-married women report that their husband/partner is jealous or angry if they talk to other men, 61% report that he insists on knowing where they are at all times, 45% report that he frequently accuses them of being unfaithful, 35% say that he does not permit them to meet their female friends, and 22% say that he tries to limit their contact with their families. Forty-eight percent of women report that their husband/partner displays three or more of these behaviours, while 21% say that he displays none of the behaviours (**Table 16.8**).

Patterns by background characteristics

- The proportion of women whose husband displays three or more controlling behaviours varies greatly by province (from 36% in the Northern province to 56% in the North West province) and district (from 26% in Bombali to 63% in Kambia) (**Table 16.8**).
- Ever-married women with no children or one to two children are more likely (53%-54%) to report that their husband/partner displays three or more controlling behaviours than women with three or more children (43%-44%).
- As expected, women who are never afraid of their husband are less likely to have a husband/partner who displays three or more of these behaviours (35%) than women who are sometimes afraid of their husband (48%) or are afraid of their husband most of the time (64%).

16.6 Forms of Spousal Violence

Spousal violence

Percentage of women who have experienced any of the specified acts of physical, sexual, or emotional violence committed by their current husband/partner (if currently married) or most recent husband/partner (if formerly married), ever and in the 12 months preceding the survey.

Sample: Ever-married women age 15-49

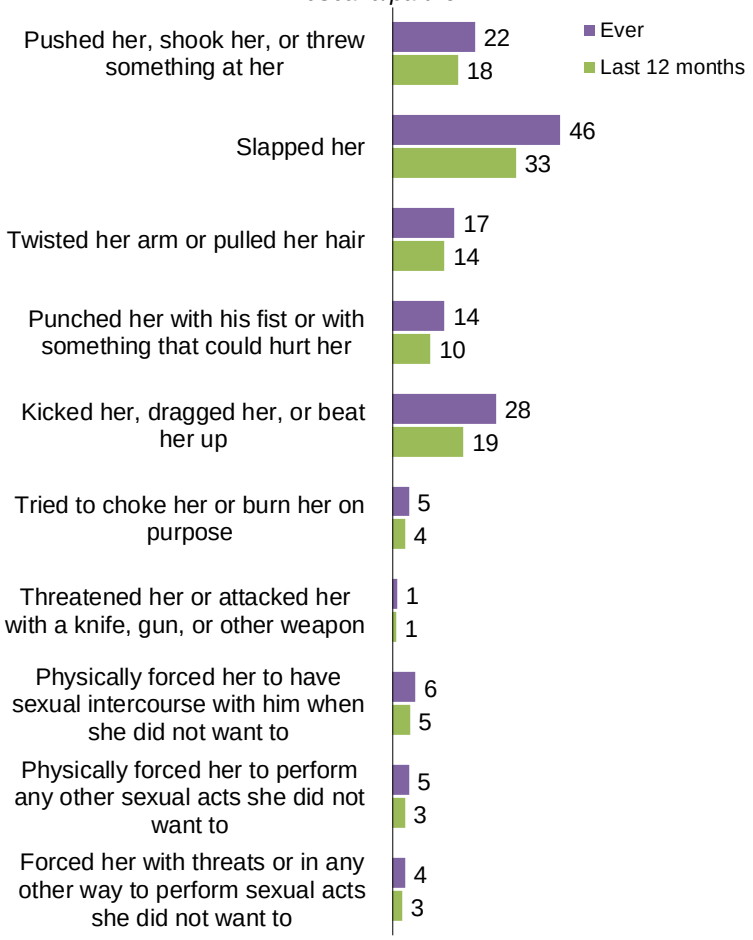
Sixty-one percent of ever-married women age 15-49 have experienced physical, sexual, or emotional violence by their current or most recent husband/partner, and 50% experienced such violence in the 12 months preceding the survey (**Table 16.9**).

Fifty percent of women have experienced spousal physical violence, with 38% experiencing this type of violence in the past 12 months. The most common types of physical violence reported by women are being slapped (46%); being kicked, dragged, or beaten up (28%); and being pushed or shaken or having something thrown at them (22%). Five percent of women report that their husband/partner tried to choke or burn them on purpose, and 1% report that their husband/partner threatened them or attacked them with a knife, gun, or other weapon (**Figure 16.2**).

Eight percent of women have experienced spousal sexual violence, mostly in the form of being physically forced to have sexual intercourse with their husband. Forty-six percent of women have experienced emotional violence. The most common form of emotional violence is being insulted by their husband or being made to feel bad about themselves (40%), followed by their husband saying or doing something to humiliate them in front of others (33%).

Figure 16.2 Forms of spousal violence

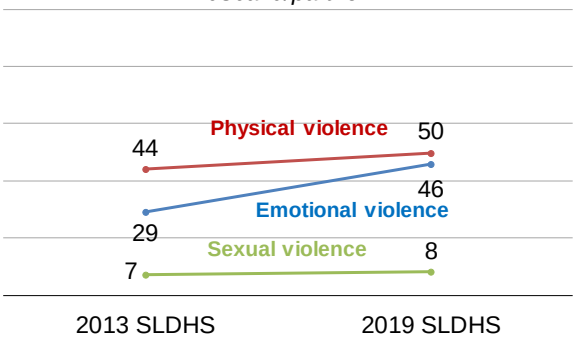
Percentage of ever-married women age 15-49 who have ever experienced specfic acts of violence by their husband/partner



Trends: The percentage of ever-married women who have experienced spousal physical, sexual, or emotional violence increased from 51% in 2013 to 61% in 2019, and the percentage who experienced such violence in the 12 months preceding the survey increased from 34% to 50%. Notably, most forms of spousal violence measured increased between 2013 and 2019 (**Figure 16.3**).

Figure 16.3 Trends in women's experience of spousal violence

Percentage of ever-married women who have experienced specified forms of violence by their current or most recent husband/partner

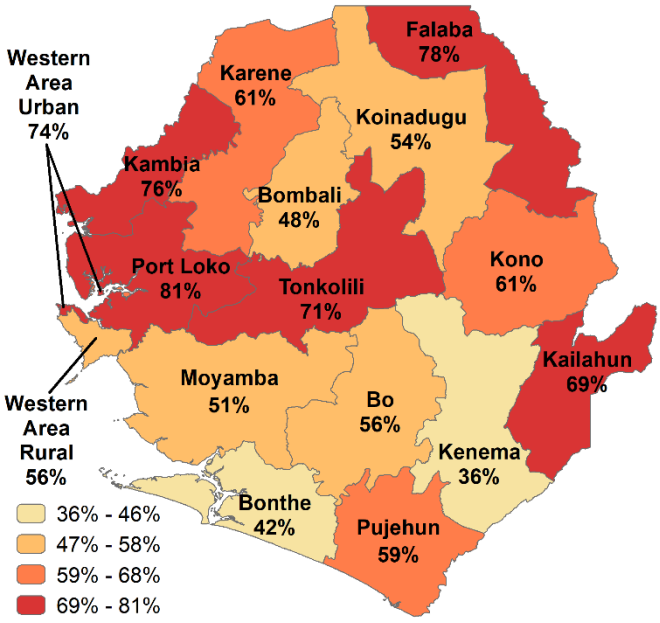


Patterns by background characteristics

- Women's experience of spousal physical, sexual, or emotional violence increases from 58% among those age 15-19 to 70% among those age 25-29 before declining to 52% among those age 40-49 (**Table 16.10**).
- The percentage of women who have experienced spousal physical, sexual, or emotional violence ranges from 51% in the Eastern province to 67% in the Western Area province. By district, the percentage ranges from 36% in Kenema to 81% in Port Loko (**Figure 16.4**).
- Women's experience of spousal physical, sexual, or emotional violence does not vary consistently by education, although women with more than a secondary education are slightly less likely (55%) to have experienced such violence than women with no or less education.

Figure 16.4 Spousal violence by district

Percentage of ever-married women age 15-49 who have experienced physical, sexual, or emotional violence committed by their husband/partner

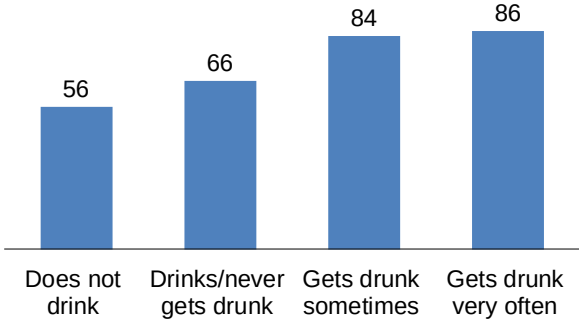


Patterns by husband's characteristics and empowerment indicators

- Women in couples where the husband and wife are equally educated are more likely to have experienced any form of spousal violence (71%) than women in couples where the husband is better educated (66%), the wife is better educated (61%), or neither is educated (56%) (**Table 16.11**).
- Women whose husbands/partners are often drunk (86%) are much more likely to have experienced spousal physical, sexual, or emotional violence than women whose husbands/partners do not drink alcohol (56%) (**Figure 16.5**).
- The percentage of women who have experienced any spousal violence increases from 29% among those whose husband/partner does not display any controlling behaviours to 77% among those whose husband/partner displays all five controlling behaviours.

Figure 16.5 Spousal violence by husband's alcohol consumption

Percentage of ever-married women who have ever experienced spousal (physical, sexual, or emotional) violence by their husband/partner



- Women who report that their father beat their mother are more likely to have themselves experienced spousal physical, sexual, or emotional violence (74%) than women who report that their father did not beat their mother (54%).
- Women's experience of spousal violence varies greatly by whether they report being afraid of their husband/partner. Seventy-two percent of women who say that they are afraid of their husband/partner

most of the time have experienced spousal physical, sexual, or emotional violence, as compared with 42% of women who say that they are never afraid of their husband/partner.

- Women who have been married more than once could have experienced violence not just by their current or most recent husband/partner but also by any previous husband/partner. The results show that when all husbands/partners are taken into consideration, 62% of ever-married women have experienced spousal physical, sexual, or emotional violence, and 50% experienced such violence in the 12 months preceding the survey. **Table 16.12** shows how women's experience of the different forms and combinations of violence perpetrated in the 12 months preceding the survey by any husband/partner varies by background characteristics.

- Among currently married women age 15-49 who have been married only once, 30% first experienced spousal physical or sexual violence within the first 2 years of marriage, 50% within 5 years of marriage, and 52% within 10 years of marriage. Eight percent of currently married women experienced spousal physical or sexual violence before marriage (**Table 16.13**).

16.7 Injuries to Women due to Spousal Violence

Injuries due to spousal violence

Percentage of women who have the following types of injuries from spousal violence: cuts, bruises, or aches; eye injuries, sprains, dislocations, or burns; or deep wounds, broken bones, broken teeth, or any other serious injury

Sample: Ever-married women age 15-49 who have experienced physical or sexual violence committed by their current husband (if currently married) or most recent husband (if formerly married)

Among ever-married women age 15-49 who have experienced spousal physical or sexual violence by their current or most recent husband/partner, 30% have ever sustained some kind of injury (**Table 16.14**). Cuts, bruises, or aches are the most common types of injuries (27%) reported by women who have experienced spousal physical or sexual violence. However, a substantial proportion of women reported having serious injuries such as eye injuries, sprains, dislocations, or burns (10%) and deep wounds, broken bones, and broken teeth (6%). Thirty-one percent of women sustained injuries from spousal physical or sexual violence in the 12 months preceding the survey (**Table 16.14**).

Trends: The proportion of ever-married women who have sustained injuries after experiencing spousal physical or sexual violence decreased from 39% in 2013 to 30% in 2019.

16.8 Violence Initiated by Women against Husbands

Initiation of physical violence by wives

Percentage of women who have ever hit, slapped, kicked, or done anything else to physically hurt their current (if currently married) or most recent (if formerly married) husband at times when he was not already beating or physically hurting them.

Sample: Ever-married women age 15-49

Six percent of ever-married women reported initiating physical violence against their husband/partner, and 5% reported having done so in the 12 months preceding the survey (**Table 16.15**).

Trends: There has been a slight decrease over time in the percentage of women who have ever initiated violence against their husband/partner, from 8% in 2013 to 6% in 2019. Violence initiated by women against their husband/partner in the 12 months preceding the survey, however, has increased slightly from 4% to 5%.

Patterns by background characteristics

- Women who have themselves experienced spousal physical violence are much more likely than women who have not experienced any spousal physical violence to have committed physical violence against their husband/partner (12% versus 1%) (**Table 16.15**).
- The percentage of women who have committed violence against their husband/partner ranges from a high of 11% in the North West province to a low of 3% in the Northern province.
- Women whose husbands/partners are often drunk are more likely to have committed violence than women whose husbands/partners do not drink alcohol (13% versus 6%) (**Table 16.16**).
- The percentage of women who have committed violence against their husband/partner increases with the number of controlling behaviours that their husband/partner displays, from 2% among women whose husband/partner does not display any of the specified controlling behaviours to 9% among women whose husband/partner displays three to five controlling behaviours.
- Women who are afraid of their husband/partner most of the time are more likely to have ever initiated violence (9%) than women who are never afraid of their husband/partner (5%).

16.9 Help Seeking among Women Who Have Experienced Violence

Among women age 15-49 who have ever experienced physical or sexual violence by anyone, 49% have never sought help or told anyone about the violence, and only 40% have sought help to stop violence (**Table 16.17**).

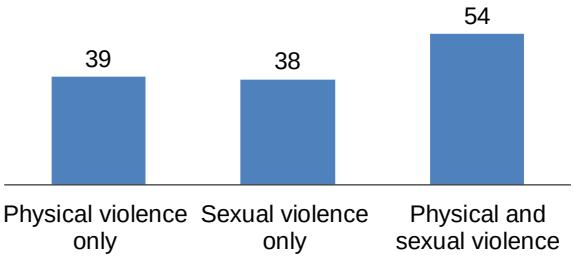
Trends: There has been a sharp decrease over time in the percentage of women who have experienced physical or sexual violence and sought help, from 55% in 2013 to 40% in 2019.

Patterns by background characteristics

- Women who have experienced sexual violence only and those who have experienced physical violence only are less likely to seek help (38%-39) than women who have experienced both physical and sexual violence (54%) (**Table 16.17** and **Figure 16.6**).
- The percentage of women who have sought help increases from 31% among those age 15-19 to 43%-44% among those age 25 and above.
- Never-married women (29%) are least likely to seek help, and divorced, separated, or widowed women are most likely to do so (51%).

***Figure 16.6* Help seeking by type of violence experienced**

Percentage of women age 15-49 who have experienced physical or sexual violence and sought help



- Help seeking varies from a high of 53% in the North West province to a low of 17% in the Eastern province.
- Help seeking does not vary consistently by education or household wealth.

Sources for Help

Among women who have experienced physical or sexual violence and sought help, the most frequently cited source for help is their own family (81%), followed by their husband's/partner's family (37%). Other

sources of help include neighbours (20%), friends (17%), religious leaders (10%), and the police (5%) (**Table 16.18**).

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- **Table 16.2 Persons committing physical violence**
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Table 16.1 Experience of physical violence

Percentage of women age 15-49 who have experienced physical violence since age 15 and percentage who have experienced physical violence during the 12 months preceding the survey, according to background characteristics, Sierra Leone DHS 2019

Background characteristic	Percentage who have experienced physical violence since age 15[1]	Percentage who have experienced physical violence in the past 12 months			Number of women
		Often	Sometimes	Often or sometimes[2]	
Age					
15-19	54.2	5.5	37.6	43.1	1,124
20-24	61.2	7.6	36.2	44.1	892
25-29	67.0	11.1	39.9	51.0	894
30-39	62.9	8.3	34.3	42.8	1,445
40-49	58.3	5.5	27.6	33.1	892
Religion					
Christian	59.3	7.3	32.0	39.4	1,244
Islam	61.1	7.7	36.1	43.9	4,000
Other[3]	*	*	*	*	4
Ethnic group					
Creole	(45.3)	(3.3)	(25.2)	(28.4)	50
Fullah	53.2	7.6	25.2	32.8	221
Kono	70.6	8.0	31.9	40.1	232
Limba	60.7	11.2	37.7	49.4	471
Loko	56.6	7.1	35.4	42.5	101
Mandingo	65.4	20.1	34.4	54.5	128
Mende	59.5	4.8	32.3	37.2	1,674
Sherbro	53.1	4.2	36.8	41.0	84
Temne	62.5	8.4	40.4	48.9	1,818
Kurankoh	53.2	6.6	29.1	35.7	207
Other	62.8	9.2	29.5	39.0	261
Residence					
Urban	56.8	10.0	31.8	42.0	2,367
Rural	63.8	5.6	37.8	43.5	2,881
Province					
Eastern	63.5	5.3	32.8	38.3	1,079
Northern	55.0	3.6	41.3	44.9	1,146
North West	67.7	7.9	37.2	45.4	806
Southern	59.6	4.3	33.5	37.8	1,015
Western Area	59.7	15.9	31.4	47.4	1,202
District					
Kailahun	63.2	1.6	30.5	32.4	238
Kenema	59.2	3.8	37.5	41.3	519
Kono	70.6	10.6	26.8	37.8	322
Bombali	46.9	1.6	38.9	40.5	417
Falaba	48.4	5.0	25.0	29.9	153
Koinadugu	43.9	4.6	23.7	28.2	156
Tonkolili	69.5	4.8	56.1	60.9	420
Kambia	70.7	8.6	38.7	48.0	270
Karene	56.3	12.7	30.2	42.9	155
Port Loko	70.2	5.5	39.1	44.5	381
Bo	66.4	5.4	35.1	40.5	452
Bonthe	48.1	4.7	36.5	41.2	155
Moyamba	57.6	4.5	31.7	36.3	243
Pujehun	55.0	0.8	28.9	29.7	165
Western Area Rural	45.9	6.9	27.0	34.3	437
Western Area Urban	67.6	21.0	33.9	54.9	765
Marital status					
Never married	52.8	6.4	33.1	39.5	1,637
Married or living together	64.2	8.1	36.9	45.1	3,357
Divorced/separated/widowed	64.9	8.5	24.6	34.0	254
Employment					
Employed for cash	65.5	7.3	34.9	42.3	1,720
Employed not for cash	60.0	5.7	37.2	43.0	2,061
Not employed	55.9	10.5	32.5	43.1	1,467
Number of living children					
0	55.0	6.0	36.8	42.7	1,422
1-2	64.5	10.4	36.2	46.8	1,752
3-4	61.7	6.6	33.8	40.4	1,297
5+	60.6	5.8	32.0	38.2	777
Education					
No education	59.9	6.5	33.9	40.5	2,383
Primary	68.6	11.2	37.7	49.0	713
Secondary	59.4	7.5	36.6	44.2	1,951
More than secondary	54.6	8.4	27.0	35.4	200

Continued...

Table 16.1—*Continued*

Background characteristic	Percentage who have experienced physical violence since age 15[1]	Percentage who have experienced physical violence in the past 12 months			Number of women
		Often	Sometimes	Often or sometimes[2]	
Wealth quintile					
Lowest	62.2	5.3	37.3	42.7	954
Second	62.6	6.6	36.2	42.8	958
Middle	64.4	5.0	37.9	43.1	1,012
Fourth	54.4	6.3	32.8	39.4	1,164
Highest	60.8	13.7	32.4	46.1	1,159
Total	60.7	7.6	35.1	42.8	5,248

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
[1] Includes violence in the past 12 months. For women who were married before age 15 and reported physical violence only by their husband/partner, the violence could have occurred before age 15.
[2] Includes women for whom frequency in the past 12 months is not known
[3] Other religion includes traditional and none.

Table 16.2 Persons committing physical violence

Among women age 15-49 who have experienced physical violence since age 15, percentage who report specific persons who committed the violence, by the respondent's current marital status, Sierra Leone DHS 2019

Person	Marital status		Total
	Ever married	Never married	
Current husband/partner	72.4	na	52.7
Former husband/partner	12.7	na	9.2
Current boyfriend	0.9	11.6	3.8
Former boyfriend	5.2	11.6	7.0
Father/stepfather	22.0	38.9	26.6
Mother/stepmother	27.9	53.7	34.9
Sister/brother	11.3	23.2	14.5
Daughter/son	0.2	0.3	0.3
Other relative	10.5	22.8	13.8
Mother-in-law	0.2	na	0.3
Father-in-law	0.1	na	0.0
Other in-law	0.8	na	0.6
Teacher	4.0	18.6	8.0
Employer/someone at work	0.1	0.0	0.0
Police/soldier	0.0	0.0	0.0
Other	1.4	2.7	1.7
Number of women who have experienced physical violence since age 15	2,319	864	3,183

Note: Women can report more than one person who committed the violence.
na = Not applicable

Table 16.3 Experience of sexual violence

Percentage of women age 15-49 who have ever experienced sexual violence and percentage who have experienced sexual violence in the 12 months preceding the survey, according to background characteristics, Sierra Leone DHS 2019

Background characteristic	Percentage who have experienced sexual violence: Ever[1]	In the past 12 months	Number of women
Age			
15-19	3.4	1.8	1,124
20-24	7.0	4.0	892
25-29	8.7	5.9	894
30-39	9.7	6.3	1,445
40-49	7.8	3.8	892
Religion			
Christian	6.2	3.8	1,244
Islam	7.8	4.7	4,000
Other[2]	*	*	4
Ethnic group			
Creole	(1.7)	(0.0)	50
Fullah	9.0	6.0	221
Kono	10.2	5.2	232
Limba	8.2	6.7	471
Loko	7.3	5.0	101
Mandingo	9.5	7.5	128
Mende	3.7	2.4	1,674
Sherbro	6.5	2.5	84
Temne	8.9	4.8	1,818
Kurankoh	15.3	9.6	207
Other	8.9	5.0	261
Residence			
Urban	7.2	4.3	2,367
Rural	7.5	4.6	2,881
Province			
Eastern	4.5	2.5	1,079
Northern	6.8	4.2	1,146
North West	12.8	7.9	806
Southern	4.1	2.2	1,015
Western Area	9.7	6.0	1,202
District			
Kailahun	2.1	0.5	238
Kenema	2.0	1.0	519
Kono	10.2	6.3	322
Bombali	4.2	1.9	417
Falaba	21.2	14.9	153
Koinadugu	9.2	5.4	156
Tonkolili	3.2	2.2	420
Kambia	9.7	6.9	270
Karene	15.7	8.0	155
Port Loko	13.8	8.5	381
Bo	3.2	1.9	452
Bonthe	1.0	0.4	155
Moyamba	6.6	1.9	243
Pujehun	6.0	5.4	165
Western Area Rural	8.0	5.1	437
Western Area Urban	10.8	6.6	765
Marital status			
Never married	2.6	0.4	1,637
Married or living together	9.3	6.3	3,357
Divorced/separated/widowed	12.9	5.9	254
Employment			
Employed for cash	8.6	4.6	1,720
Employed not for cash	7.9	5.1	2,061
Not employed	5.2	3.3	1,467
Number of living children			
0	3.8	1.6	1,422
1-2	8.2	4.8	1,752
3-4	10.0	6.9	1,297
5+	7.8	4.7	777
Education			
No education	7.9	5.3	2,383
Primary	9.9	4.4	713
Secondary	6.0	3.7	1,951
More than secondary	6.7	1.8	200

Continued...

Table 16.3—*Continued*

Background characteristic	Percentage who have experienced sexual violence: Ever[1]	In the past 12 months	Number of women
Wealth quintile			
Lowest	5.5	3.5	954
Second	9.1	5.0	958
Middle	7.4	4.6	1,012
Fourth	6.7	4.2	1,164
Highest	8.2	4.9	1,159
Total	7.4	4.5	5,248

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
[1] Includes violence in the past 12 months
[2] Other religion includes traditional and none.

Table 16.4 Persons committing sexual violence

Among women age 15-49 who have experienced sexual violence, percentage who report specific persons who committed the violence, according to the respondent's current marital status, Sierra Leone DHS 2019

Person	Marital status		Total
	Ever married	Never married	
Current husband/partner	77.5	na	69.1
Former husband/partner	18.8	na	16.8
Current/former boyfriend	5.5	(22.6)	7.4
Father/stepfather	0.5	(0.0)	0.5
Brother/stepbrother	0.6	(1.9)	0.7
Other relative	2.5	(40.0)	6.6
In-law	0.1	na	0.1
Own friend/acquaintance	0.8	(8.5)	1.7
Family friend	1.4	(0.0)	1.3
Teacher	0.4	(2.8)	0.6
Employer/someone at work	0.0	(0.9)	0.1
Police/soldier	0.0	(0.0)	0.0
Priest/religious leader	0.3	(0.0)	0.2
Stranger	1.7	(1.9)	1.7
Other	0.8	(21.3)	3.0
Missing	0.0	(0.0)	0.0
Number of women who have experienced sexual violence	346	42	388

Note: Ever-married women can report up to three perpetrators: a current husband, former husband, or one other person who is not a current or former husband. Never-married women can report only the person who was the first to commit the violence. Figures in parentheses are based on 25-49 unweighted cases.
na = Not applicable

Table 16.5 Age at first experience of sexual violence

Percentage of women age 15-49 who experienced sexual violence by specific exact ages, according to current age and current marital status, Sierra Leone DHS 2019

Background characteristic	Percentage who first experienced sexual violence by exact age:					Percentage who have not experienced sexual violence	Number of women
	10	12	15	18	22		
Age							
15-19	0.0	0.4	1.3	na	na	96.6	1,124
20-24	0.6	0.8	1.6	3.1	na	93.0	892
25-29	0.0	0.2	2.0	3.2	4.9	91.3	894
30-39	0.3	0.5	1.7	3.8	5.8	90.3	1,445
40-49	0.2	0.3	1.2	2.4	3.5	92.2	892
Marital status							
Never married	0.3	0.6	1.2	2.1	2.4	97.4	1,637
Ever married	0.2	0.4	1.7	3.6	5.6	90.4	3,611
Total	0.2	0.4	1.6	3.1	4.6	92.6	5,248

na = Not applicable

Table 16.6 Experience of different forms of violence

Percentage of women age 15-49 who have ever experienced different forms of violence, by current age, Sierra Leone DHS 2019

Age	Physical violence only	Sexual violence only	Physical and sexual violence	Physical or sexual violence	Number of women
15-19	51.2	0.5	2.9	54.7	1,124
15-17	47.2	0.5	2.4	50.1	663
18-19	57.1	0.5	3.6	61.2	461
20-24	54.8	0.6	6.4	61.8	892
25-29	59.7	1.4	7.3	68.4	894
30-39	55.3	2.1	7.5	65.0	1,445
40-49	52.3	1.8	6.0	60.1	892
Total	54.6	1.3	6.1	62.0	5,248

Table 16.7 Experience of violence during pregnancy

Among women age 15-49 who have ever been pregnant, percentage who have ever experienced physical violence during pregnancy, according to background characteristics, Sierra Leone DHS 2019

Background characteristic	Percentage who experienced violence during pregnancy	Number of women who have ever been pregnant
Age		
15-19	11.7	232
20-24	6.0	676
25-29	8.8	832
30-39	6.1	1,417
40-49	3.8	887
Religion		
Christian	6.0	939
Islam	6.6	3,103
Other[1]	*	3
Ethnic group		
Creole	(2.2)	39
Fullah	1.2	150
Kono	16.6	167
Limba	6.0	341
Loko	5.2	76
Mandingo	22.7	105
Mende	5.2	1,332
Sherbro	2.3	68
Temne	6.6	1,395
Kurankoh	6.0	162
Other	4.9	210
Residence		
Urban	6.0	1,581
Rural	6.7	2,463
Province		
Eastern	7.1	849
Northern	4.2	899
North West	10.4	663
Southern	5.1	818
Western Area	6.2	816
District		
Kailahun	5.2	201
Kenema	4.2	406
Kono	13.7	242
Bombali	5.4	308
Falaba	6.3	114
Koinadugu	4.0	128
Tonkolili	2.6	349
Kambia	11.3	216
Karene	11.4	133
Port Loko	9.4	314
Bo	5.3	332
Bonthe	5.4	126
Moyamba	7.9	213
Pujehun	0.7	147
Western Area Rural	2.2	320
Western Area Urban	8.8	496
Marital status		
Never married	12.6	533
Married or living together	5.3	3,259
Divorced/separated/widowed	8.4	252
Number of living children		
0	2.1	219
1-2	8.1	1,752
3-4	5.6	1,297
5+	5.3	777
Education		
No education	5.5	2,260
Primary	9.9	527
Secondary	6.9	1,099
More than secondary	5.0	159

Continued...

Table 16.7—*Continued*

Background characteristic	Percentage who experienced violence during pregnancy	Number of women who have ever been pregnant
Wealth quintile		
Lowest	5.4	851
Second	7.5	827
Middle	6.8	818
Fourth	6.0	797
Highest	6.6	752
Total	6.4	4,045

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
[1] Other religion includes traditional and none.

Table 16.8 Marital control exercised by husbands

Percentage of ever-married women age 15-49 whose husbands/partners have ever demonstrated specific types of controlling behaviours, according to background characteristics, Sierra Leone DHS 2019

Background characteristic	Percentage of women whose husband/partner: Is jealous or angry if she talks to other men	Frequently accuses her of being unfaithful	Does not permit her to meet her female friends	Tries to limit her contact with her family	Insists on knowing where she is at all times	Displays 3 or more of the specific behaviours	Displays none of the specific behaviours	Number of ever-married women
Age								
15-19	76.8	51.7	35.3	26.5	70.2	55.6	12.0	170
20-24	76.6	54.8	44.7	29.0	71.8	63.5	13.7	498
25-29	70.2	51.8	41.4	23.2	64.5	54.8	17.2	719
30-39	65.4	42.0	33.1	21.1	58.9	45.2	22.8	1,361
40-49	59.9	35.4	27.0	17.6	54.9	36.8	26.5	862
Religion								
Christian	61.3	41.4	34.5	19.7	56.6	42.9	24.9	768
Islam	68.7	45.4	35.2	22.7	62.7	49.5	19.7	2,841
Other[1]	*	*	*	*	*	*	*	2
Ethnic group								
Creole	*	*	*	*	*	*	*	23
Fullah	61.4	27.0	42.6	29.3	51.1	41.9	24.8	144
Kono	66.6	38.9	24.0	16.6	59.3	37.8	14.8	151
Limba	53.5	38.8	29.2	17.0	47.0	39.5	36.6	299
Loko	69.8	46.6	35.5	36.1	69.1	52.4	22.1	66
Mandingo	71.0	43.4	32.7	19.7	56.2	49.2	22.1	83
Mende	70.9	52.5	35.0	21.7	68.5	53.8	17.5	1,178
Sherbro	66.0	52.9	28.3	18.9	47.3	43.1	27.9	64
Temne	68.2	44.3	36.4	23.5	61.5	48.1	19.1	1,266
Kurankoh	70.7	26.7	35.4	23.3	61.3	42.7	20.2	148
Other	59.9	38.6	42.0	18.4	56.6	46.6	23.4	190
Residence								
Urban	66.5	43.4	39.4	26.3	58.3	48.4	22.2	1,338
Rural	67.5	45.3	32.4	19.5	63.2	47.9	20.0	2,273
Province								
Eastern	67.3	45.2	25.8	18.4	65.8	46.7	19.8	753
Northern	55.0	32.0	29.2	14.2	52.6	36.0	30.4	824
North West	79.4	50.9	38.5	27.4	69.1	56.3	11.5	621
Southern	69.7	54.3	37.1	19.4	66.6	54.2	17.9	718
Western Area	67.7	43.3	46.6	33.2	54.7	50.5	21.8	694
District								
Kailahun	58.5	37.3	24.3	11.0	61.1	41.0	27.5	170
Kenema	70.7	54.0	29.5	24.4	73.3	56.3	18.0	356
Kono	68.7	37.2	21.1	14.7	57.7	35.8	16.8	226
Bombali	30.0	23.1	20.3	16.4	40.2	25.5	50.9	285
Falaba	73.4	36.7	47.5	19.5	55.3	46.3	18.6	97
Koinadugu	60.8	20.8	38.1	27.1	58.5	43.7	28.7	125
Tonkolili	69.6	42.8	28.1	5.5	60.6	39.3	16.4	317
Kambia	83.1	60.2	31.9	12.6	75.4	62.5	8.2	211
Karene	55.9	24.6	23.0	32.0	55.2	39.9	25.1	117
Port Loko	86.1	54.8	49.5	36.2	70.1	58.3	8.4	293
Bo	71.4	56.2	35.0	10.5	82.2	57.3	8.8	272
Bonthe	66.6	50.1	47.8	36.0	56.9	50.8	23.5	120
Moyamba	72.5	56.8	30.2	13.2	49.7	50.2	22.1	194
Pujehun	64.9	50.4	41.6	31.8	68.0	56.9	25.3	132
Western Area Rural	65.8	42.3	34.4	12.7	48.3	42.1	24.7	279
Western Area Urban	69.1	44.0	54.8	46.9	59.1	56.2	19.9	415
Marital status								
Married or living together	67.3	44.4	35.1	22.3	62.0	48.5	20.4	3,357
Divorced/separated/ widowed	64.4	46.7	34.0	18.5	52.6	43.6	25.9	254
Number of living children								
0	75.2	52.9	35.3	23.5	62.8	53.0	12.7	248
1-2	69.1	49.0	40.1	26.0	64.6	53.8	19.8	1,351
3-4	65.7	41.0	32.4	19.9	60.1	44.0	21.3	1,250
5+	63.5	39.9	30.0	18.0	57.3	43.3	24.5	761
Employment								
Employed for cash	66.0	44.0	36.0	17.8	62.8	46.4	19.3	1,373
Employed not for cash	68.0	46.0	32.8	23.2	60.5	49.0	21.7	1,674
Not employed	67.3	41.8	38.8	28.6	60.4	49.5	21.6	564

Continued...

Table 16.8—*Continued*

Background characteristic	Percentage of women whose husband/partner: Is jealous or angry if she talks to other men	Frequently accuses her of being unfaithful	Does not permit her to meet her female friends	Tries to limit her contact with her family	Insists on knowing where she is at all times	Displays 3 or more of the specific behaviours	Displays none of the specific behaviours	Number of ever-married women
Education								
No education	64.3	41.9	31.3	20.4	59.1	43.9	23.3	2,193
Primary	72.4	50.2	35.4	18.6	68.1	54.6	15.2	467
Secondary	72.3	48.7	42.6	26.5	64.9	55.8	17.4	827
More than secondary	63.5	43.1	49.0	33.2	52.8	46.4	21.1	123
Wealth quintile								
Lowest	64.8	44.7	29.0	18.1	60.7	45.2	22.7	800
Second	70.3	48.9	33.6	22.5	66.3	52.3	17.0	764
Middle	68.6	46.4	33.4	18.1	63.6	49.4	20.4	739
Fourth	65.7	39.9	34.7	19.1	58.8	44.7	21.7	668
Highest	66.1	42.1	46.3	34.0	56.5	49.0	22.5	639
Woman afraid of husband/partner								
Afraid most of the time	77.6	60.3	42.0	33.5	82.1	64.0	8.0	722
Sometimes afraid	69.4	44.5	35.6	20.9	58.6	47.8	20.4	2,096
Never afraid	51.7	30.4	27.0	14.5	50.0	34.5	33.7	792
Total	67.1	44.6	35.0	22.0	61.4	48.1	20.8	3,611

Note: Husband/partner refers to the current husband/partner for currently married women and the most recent husband/partner for divorced, separated, or widowed women. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
[1] Other religion includes traditional and none.

Table 16.9 Forms of spousal violence

Percentage of ever-married women age 15-49 who have experienced various forms of violence ever or in the 12 months preceding the survey committed by their current or most recent husband/partner, Sierra Leone DHS 2019

Type of violence experienced	Ever experienced	Experienced in the past 12 months	Frequency in the past 12 months	
			Often	Sometimes
Physical violence				
Any physical violence	49.8	38.2	7.2	31.0
Pushed her, shook her, or threw something at her	22.3	17.7	2.8	14.9
Slapped her	45.5	33.4	5.2	28.2
Twisted her arm or pulled her hair	16.8	14.1	2.7	11.5
Punched her with his fist or with something that could hurt her	14.1	10.3	2.3	8.0
Kicked her, dragged her, or beat her up	28.0	19.2	1.9	17.3
Tried to choke her or burn her on purpose	4.5	3.5	0.8	2.7
Threatened her or attacked her with a knife, gun, or other weapon	1.4	1.1	0.7	0.5
Sexual violence				
Any sexual violence	8.1	6.2	1.2	4.9
Physically forced her to have sexual intercourse with him when she did not want to	6.3	4.8	0.9	3.9
Physically forced her to perform any other sexual acts she did not want to	4.5	3.4	0.9	2.6
Forced her with threats or in any other way to perform sexual acts she did not want to	3.5	2.7	0.6	2.1
Emotional violence				
Any emotional violence	45.9	38.2	7.4	30.7
Said or did something to humiliate her in front of others	33.0	27.1	4.9	22.2
Threatened to hurt or harm her or someone she cared about	15.7	13.3	3.1	10.3
Insulted her or made her feel bad about herself	40.1	32.5	5.7	26.8
Any form of physical and/or sexual violence	51.7	39.8	7.6	32.2
Any form of emotional and/or physical and/or sexual violence	60.8	49.7	10.7	39.0
Spousal violence committed by any husband/partner				
Physical violence	51.1	38.4	na	na
Sexual violence	8.9	6.2	na	na
Emotional violence	47.1	38.3	na	na
Any form of physical or sexual violence	53.0	40.0	na	na
Any form of emotional or physical or sexual violence	62.1	49.8	na	na
Number of ever- married women	3,611	3,611	3,611	3,611

na = Not applicable

Table 16.10 Spousal violence by background characteristics

Percentage of ever-married women age 15-49 who have ever experienced emotional, physical, or sexual violence committed by their current or most recent husband/partner, according to background characteristics, Sierra Leone DHS 2019

Background characteristic	Emotional violence	Physical violence	Sexual violence	Physical and sexual	Physical and sexual and emotional	Physical or sexual	Physical or sexual or emotional	Number of ever-married women
Age								
15-19	39.7	46.3	9.6	8.4	8.2	47.5	58.2	170
20-24	51.6	54.4	8.3	6.6	6.0	56.2	65.7	498
25-29	52.7	58.7	9.0	8.0	6.5	59.7	69.8	719
30-39	45.9	48.2	9.0	6.6	5.6	50.6	60.3	1,361
40-49	38.1	43.0	5.7	3.8	3.6	44.8	51.9	862
Religion								
Christian	43.6	48.8	7.6	5.8	3.9	50.5	60.0	768
Islam	46.5	50.1	8.3	6.4	5.9	51.9	61.0	2,841
Other[1]	*	*	*	*	*	*	*	2
Ethnic group								
Creole	*	*	*	*	*	*	*	23
Fullah	31.0	28.9	9.7	3.9	3.9	34.7	45.0	144
Kono	53.0	50.3	9.9	8.8	7.2	51.4	65.8	151
Limba	45.2	50.2	11.1	8.3	8.1	53.1	59.2	299
Loko	51.3	64.9	7.8	7.8	3.5	64.9	67.7	66
Mandingo	60.7	52.5	12.3	11.4	11.4	53.3	63.7	83
Mende	39.8	39.6	3.8	3.2	3.0	40.1	52.1	1,178
Sherbro	32.1	31.2	5.4	1.7	1.7	34.9	46.1	64
Temne	51.3	61.5	9.7	8.5	7.0	62.7	69.9	1,266
Kurankoh	45.7	45.7	19.3	9.1	8.8	55.9	61.1	148
Other	51.5	54.4	9.0	4.4	4.1	58.9	67.6	190
Residence								
Urban	48.1	50.8	9.5	7.8	6.4	52.5	61.5	1,338
Rural	44.6	49.2	7.3	5.4	4.9	51.2	60.4	2,273
Province								
Eastern	38.0	38.0	4.4	3.7	3.1	38.8	50.6	753
Northern	42.8	51.5	7.9	4.0	3.7	55.4	61.4	824
North West	58.7	64.3	12.3	10.7	10.2	65.9	75.4	621
Southern	38.6	40.9	3.3	3.2	2.9	41.0	52.8	718
Western Area	54.1	56.9	13.7	11.1	8.5	59.5	66.5	694
District								
Kailahun	46.9	47.9	1.7	1.3	1.0	48.3	68.5	170
Kenema	27.4	28.1	1.8	1.3	1.3	28.6	35.5	356
Kono	48.1	46.2	10.5	9.2	7.6	47.5	60.7	226
Bombali	29.6	44.3	5.1	3.4	3.0	46.0	48.0	285
Falaba	54.7	45.0	31.6	6.0	5.7	70.6	77.9	97
Koinadugu	49.0	36.0	8.8	6.4	6.4	38.4	54.0	125
Tonkolili	48.6	66.0	2.9	2.9	2.7	66.0	71.2	317
Kambia	63.8	58.7	10.6	10.3	10.1	59.0	76.4	211
Karene	46.6	57.5	10.7	10.0	9.4	58.2	60.6	117
Port Loko	60.0	71.1	14.3	11.3	10.6	74.0	80.5	293
Bo	38.3	47.9	2.5	2.5	2.5	47.9	56.0	272
Bonthe	37.8	23.1	0.5	0.5	0.5	23.1	41.7	120
Moyamba	35.7	40.9	3.1	2.9	2.9	41.1	51.3	194
Pujehun	44.4	42.6	7.6	7.4	6.0	42.8	58.5	132
Western Area Rural	47.2	43.8	10.1	8.7	8.4	45.2	55.5	279
Western Area Urban	58.7	65.7	16.2	12.7	8.6	69.2	74.0	415
Marital status								
Married or living together	45.7	50.0	8.0	6.0	5.2	51.9	61.2	3,357
Divorced/separated/widowed	48.3	47.9	10.5	9.5	9.2	48.9	56.1	254
Number of living children								
0	38.9	48.2	7.4	6.6	6.2	49.0	56.8	248
1-2	51.5	53.9	8.7	7.4	5.8	55.3	65.8	1,351
3-4	43.6	47.6	9.0	6.1	5.8	50.5	58.6	1,250
5+	41.9	46.6	6.0	4.6	4.2	48.0	56.9	761
Employment								
Employed for cash	48.4	55.4	8.5	7.5	6.0	56.4	65.2	1,373
Employed not for cash	43.6	46.2	7.2	5.2	4.9	48.1	57.5	1,674
Not employed	46.6	47.1	10.0	6.4	5.9	50.8	59.8	564
Education								
No education	42.8	46.8	7.2	5.3	5.0	48.7	57.7	2,193
Primary	54.1	57.1	11.3	9.3	7.5	59.1	68.6	467
Secondary	51.0	54.0	9.5	7.8	6.1	55.7	65.4	827
More than secondary	35.8	48.2	3.2	2.4	1.9	48.9	55.4	123

Continued...

Table 16.10—*Continued*

Background characteristic	Emotional violence	Physical violence	Sexual violence	Physical and sexual	Physical and sexual and emotional	Physical or sexual	Physical or sexual or emotional	Number of ever-married women
Wealth quintile								
Lowest	40.1	47.7	5.1	4.8	4.5	48.0	56.2	800
Second	47.6	49.5	8.2	4.9	4.5	52.8	63.1	764
Middle	48.3	50.1	8.2	6.5	5.9	51.9	61.7	739
Fourth	47.6	50.6	8.9	7.8	7.3	51.7	62.2	668
Highest	46.6	51.6	11.1	8.1	5.4	54.6	61.3	639
Total	45.9	49.8	8.1	6.3	5.5	51.7	60.8	3,611

Note: Husband/partner refers to the current husband/partner for currently married women and the most recent husband/partner for divorced, separated, or widowed women.
An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
[1] Other religion includes traditional and none.

Table 16.11 Spousal violence by husband's characteristics and empowerment indicators

Percentage of ever-married women age 15-49 who have ever experienced emotional, physical, or sexual violence committed by their current or most recent husband/partner, according to the husband's characteristics and women's empowerment indicators, Sierra Leone DHS 2019

Background characteristic	Emotional violence	Physical violence	Sexual violence	Physical and sexual	Physical and sexual and emotional	Physical or sexual	Physical or sexual or emotional	Number of ever-married women
Husband's/partner's education[1]								
No education	44.1	45.7	7.1	5.2	4.9	47.7	57.6	1,786
Primary	46.6	52.1	10.7	10.5	7.0	52.4	62.6	275
Secondary	47.2	56.0	10.1	7.5	6.2	58.6	67.3	880
More than secondary	50.2	53.5	5.8	4.2	3.4	55.1	63.1	318
Don't know/missing	45.4	55.3	3.5	2.7	2.7	56.1	61.1	99
Husband's/partner's alcohol consumption								
Does not drink alcohol	41.3	44.7	6.8	5.2	4.6	46.3	56.0	2,966
Drinks alcohol but is never drunk	58.7	55.8	8.0	6.8	6.8	57.0	66.3	52
Is sometimes drunk	68.6	74.0	12.7	9.1	8.3	77.6	83.9	434
Is often drunk	66.2	77.3	21.6	19.2	14.1	79.6	85.8	158
Spousal education difference[1]								
Husband better educated	47.7	54.4	9.1	6.7	5.5	56.8	66.1	1,145
Wife better educated	48.9	48.3	6.5	4.9	4.5	49.9	60.7	504
Both equally educated	51.7	61.8	15.2	14.7	9.4	62.3	70.8	166
Neither educated	42.2	45.2	7.1	5.2	4.9	47.1	56.3	1,438
Don't know//missing	46.9	55.4	3.3	2.6	2.6	56.2	61.9	104
Spousal age difference[1]								
Wife older	46.8	50.4	3.9	3.9	3.9	50.4	63.2	122
Wife is same age	41.2	46.1	6.2	6.2	5.6	46.1	55.4	63
Wife 1-4 years younger	43.3	54.2	7.6	6.5	4.3	55.4	61.8	770
Wife 5-9 years younger	47.7	50.8	8.9	6.1	5.5	53.6	62.4	1,077
Wife 10 or more years younger	45.7	46.9	7.9	5.9	5.6	48.9	59.9	1,326
Number of marital control behaviours displayed by husband/partner[2]								
0	17.8	22.9	2.8	1.7	0.5	24.1	29.1	751
1-2	41.1	47.6	7.1	5.2	4.7	49.5	58.4	1,122
3-4	59.8	62.1	11.3	9.0	8.1	64.4	75.7	1,331
5	65.5	65.4	10.4	9.0	8.5	66.8	77.3	407
Number of decisions in which women participate[1]								
0	45.1	50.2	8.6	6.3	5.2	52.5	60.9	1,373
1-2	53.6	55.9	8.5	6.6	6.2	57.8	69.1	740
3	41.7	46.2	6.9	5.5	4.6	47.7	56.8	1,244
Number of reasons for which wife beating is justified[2]								
0	40.2	42.3	6.3	4.9	4.7	43.7	53.5	1,706
1-2	50.4	60.7	10.3	8.8	5.6	62.2	70.3	601
3-4	52.3	54.6	9.7	7.3	6.7	57.0	66.3	1,043
5	47.3	54.5	9.0	5.5	5.1	58.0	65.1	260
Father beat mother								
Yes	59.7	65.9	8.5	8.3	7.8	66.1	74.2	1,021
No	39.7	41.9	8.0	5.2	4.4	44.8	54.4	2,184
Don't know/missing	44.3	51.8	7.6	7.0	5.2	52.5	61.7	406
Woman afraid of husband/partner								
Afraid most of the time	58.2	63.2	11.5	10.6	10.4	64.0	71.7	722
Sometimes afraid	49.1	52.5	7.4	5.4	4.7	54.4	64.0	2,096
Never afraid	26.3	30.6	7.1	4.6	3.1	33.1	42.4	792
Total	45.9	49.8	8.1	6.3	5.5	51.7	60.8	3,611

Note: Husband/partner refers to the current husband/partner for currently married women and the most recent husband/partner for divorced, separated, or widowed women.
[1] Includes only currently married women
[2] According to the wife's report. See Table 16.8 for list of behaviours.
[3] According to the wife's report. Includes only currently married women. See Table 15.9.1 for list of decisions.
[4] According to the wife's report. See Table 15.10.1 for list of reasons.

Table 16.12 Violence by any husband/partner in the last 12 months

Percentage of ever-married women who have experienced emotional, physical, or sexual violence by any husband/partner in the past 12 months, according to background characteristics, Sierra Leone DHS 2019

Background characteristic	Emotional violence	Physical violence	Sexual violence	Physical and sexual	Physical and sexual and emotional	Physical or sexual	Physical or sexual or emotional	Number of ever-married women
Age								
15-19	33.2	41.6	8.5	7.3	6.9	42.8	49.7	170
20-24	47.0	47.3	7.0	5.2	4.6	49.1	61.1	498
25-29	45.6	48.2	7.2	6.2	5.6	49.2	60.1	719
30-39	39.0	37.2	6.6	4.6	4.3	39.1	49.2	1,361
40-49	27.0	26.4	3.9	2.5	1.8	27.7	35.6	862
Residence								
Urban	40.9	40.3	7.3	5.6	5.3	42.0	51.6	1,338
Rural	36.8	37.3	5.6	4.1	3.5	38.8	48.8	2,273
Province								
Eastern	27.0	27.7	3.0	2.0	1.6	28.7	37.7	753
Northern	38.4	43.5	5.9	3.4	3.1	45.9	52.5	824
North West	46.0	46.4	9.9	8.3	7.1	47.9	60.0	621
Southern	31.3	29.0	2.8	2.7	2.4	29.2	40.6	718
Western Area	50.7	46.5	10.3	7.7	7.3	49.2	60.2	694
District								
Kailahun	31.0	34.3	0.4	0.0	0.0	34.7	51.1	170
Kenema	22.0	22.2	1.2	0.6	0.6	22.7	29.2	356
Kono	31.9	31.5	7.9	5.8	4.2	33.6	41.0	226
Bombali	27.8	36.6	2.8	2.7	2.3	36.7	39.3	285
Falaba	45.4	26.3	23.5	5.2	4.4	44.5	57.3	97
Koinadugu	35.5	24.3	6.8	4.9	4.9	26.2	39.5	125
Tonkolili	47.0	62.4	2.9	2.9	2.7	62.4	68.0	317
Kambia	49.7	43.8	8.5	8.0	7.8	44.4	60.5	211
Karene	36.1	47.4	10.5	9.2	8.4	48.7	52.0	117
Port Loko	47.3	47.9	10.6	8.3	6.1	50.2	62.9	293
Bo	30.1	32.0	2.2	2.2	2.2	32.0	39.9	272
Bonthe	37.4	21.9	0.5	0.5	0.5	21.9	40.1	120
Moyamba	26.6	28.0	2.4	2.0	2.0	28.4	37.3	194
Pujehun	35.1	31.0	6.8	6.6	5.2	31.2	47.4	132
Western Area Rural	42.0	32.8	7.9	6.5	6.2	34.2	48.1	279
Western Area Urban	56.6	55.8	11.9	8.5	8.0	59.2	68.4	415
Education								
No education	34.6	35.0	5.8	4.1	3.7	36.7	46.0	2,193
Primary	45.2	42.6	6.4	5.6	5.3	43.4	55.4	467
Secondary	44.9	45.3	7.9	5.9	5.1	47.3	57.5	827
More than secondary	33.9	36.2	2.5	1.8	1.2	37.0	45.3	123
Wealth quintile								
Lowest	33.3	36.8	4.0	3.4	3.2	37.4	45.7	800
Second	38.2	37.6	6.1	3.6	2.7	40.1	50.4	764
Middle	38.9	37.7	6.1	5.2	4.6	38.6	48.8	739
Fourth	40.2	39.6	7.2	6.2	5.7	40.7	51.6	668
Highest	41.9	40.8	8.2	5.2	4.8	43.8	53.6	639
Total	38.3	38.4	6.2	4.6	4.1	40.0	49.8	3,611

Note: Any husband/partner includes all current, most recent, and former husbands/partners.

Table 16.13 Experience of spousal violence by duration of marriage

Among currently married women age 15-49 who have been married only once, percentage who first experienced physical or sexual violence committed by their current husband/partner by specific exact years since marriage, according to marital duration, Sierra Leone DHS 2019

	Percentage who first experienced spousal physical or sexual violence by exact marital duration				Percentage who have not experienced sexual or physical violence	Number of currently married women who have been married only once
Years since marriage	Before marriage	2 years	5 years	10 years		
<2	11.9	na	na	na	50.1	213
2-4	8.4	37.7	na	na	48.5	389
5-9	5.8	31.5	54.7	na	43.9	617
10+	7.6	25.8	47.6	50.8	47.4	1,482
Total	7.6	30.2	49.7	51.9	47.0	2,701

na = Not applicable

Table 16.14 Injuries to women due to spousal violence

Among ever-married women age 15-49 who have experienced violence committed by their current or most recent husband/partner, percentage who have been injured as a result of the violence, by types of injuries, according to type of violence, Sierra Leone DHS 2019

Type of violence experienced	Cuts, bruises, or aches	Eye injuries, sprains, dislocations, or burns	Deep wounds, broken bones, broken teeth, or any other serious injury	Any of these injuries	Number of ever-married women who have experienced physical or sexual violence
Physical violence[1]					
Ever[2]	27.4	10.4	6.4	31.2	1,798
Past 12 months	28.4	11.3	7.0	32.4	1,380
Sexual violence					
Ever[2]	31.6	19.0	13.0	38.7	294
Past 12 months	31.1	19.3	13.9	40.1	223
Physical or sexual violence[1]					
Ever[2]	26.5	10.0	6.3	30.2	1,865
Past 12 months	27.4	10.9	6.8	31.3	1,437

Note: Husband/partner refers to the current husband/partner for currently married women and the most recent husband/partner for divorced, separated, or widowed women.
[1] Excludes women who reported violence only in response to a direct question on violence during pregnancy
[2] Includes in the past 12 months

Table 16.15 Violence by women against their husband by women's background characteristics

Percentage of ever-married women who have committed physical violence against their current or most recent husband/partner when he was not already beating or physically hurting them, ever and in the past 12 months, according to women's own experience of spousal violence and background characteristics, Sierra Leone DHS 2019

Background characteristic	Percentage who committed physical violence against their husband/partner		Number of ever-married women
	Ever[1]	Past 12 months	
Woman's experience of spousal physical violence			
Ever[1]	12.1	9.6	1,798
In the past 12 months	13.0	11.6	1,380
Never	0.8	0.7	1,812
Age			
15-19	5.3	3.9	170
20-24	9.5	8.6	498
25-29	8.1	7.5	719
30-39	5.3	3.9	1,361
40-49	5.1	3.3	862
Religion			
Christian	8.1	6.6	768
Islam	5.9	4.6	2,841
Other[2]	*	*	2
Ethnic group			
Creole	*	*	23
Fullah	2.9	2.9	144
Kono	13.5	7.0	151
Limba	7.9	6.3	299
Loko	11.1	8.9	66
Mandingo	10.8	7.9	83
Mende	4.3	3.9	1,178
Sherbro	5.0	5.0	64
Temne	7.1	5.7	1,266
Kurankoh	6.6	4.6	148
Other	7.2	5.1	190
Residence			
Urban	7.7	6.8	1,338
Rural	5.7	4.1	2,273
Province			
Eastern	4.4	2.7	753
Northern	3.2	1.9	824
North West	11.2	8.9	621
Southern	4.8	4.4	718
Western Area	9.9	8.9	694
District			
Kailahun	3.3	2.6	170
Kenema	0.4	0.4	356
Kono	11.7	6.2	226
Bombali	2.7	0.6	285
Falaba	3.0	3.0	97
Koinadugu	3.0	1.2	125
Tonkolili	3.7	3.0	317
Kambia	21.3	18.2	211
Karene	7.9	6.6	117
Port Loko	5.2	3.1	293
Bo	2.3	2.0	272
Bonthe	13.5	12.1	120
Moyamba	5.6	5.4	194
Pujehun	0.8	0.8	132
Western Area Rural	11.1	9.9	279
Western Area Urban	9.0	8.2	415
Marital status			
Married or living together	6.2	5.0	3,357
Divorced/separated/widowed	9.1	6.5	254
Employment			
Employed for cash	7.8	5.3	1,373
Employed not for cash	5.1	4.6	1,674
Not employed	6.9	6.0	564

Continued...

Table 16.15—*Continued*

Background characteristic	Percentage who committed physical violence against their husband/partner		Number of ever-married women
	Ever[1]	Past 12 months	
Number of living children			
0	5.3	5.1	248
1-2	7.6	6.8	1,351
3-4	5.6	4.0	1,250
5+	6.0	3.9	761
Education			
No education	5.5	3.9	2,193
Primary	8.5	7.0	467
Secondary	7.6	7.0	827
More than secondary	6.8	6.3	123
Wealth quintile			
Lowest	4.6	3.3	800
Second	6.1	4.6	764
Middle	6.8	4.8	739
Fourth	7.4	6.7	668
Highest	7.7	6.7	639
Total	6.4	5.1	3,611

Note: Husband/partner refers to the current husband/partner for currently married women and the most recent husband/partner for divorced, separated, or widowed women. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

[1] Includes in the past 12 months

[2] Other religion includes traditional and none.

Table 16.16 Violence by women against their husband by husband's characteristics and empowerment indicators

Percentage of ever-married women who have committed physical violence against their current or most recent husband/partner when he was not already beating or physically hurting them, ever and in the past 12 months, according to their husband's characteristics and women's empowerment indicators, Sierra Leone DHS 2019

Background characteristic	Percentage who committed physical violence against their husband/partner		Number of ever-married women
	Ever[1]	Past 12 months	
Husband's/partner's education[2]			
No education	4.2	3.1	1,786
Primary	6.4	5.9	275
Secondary	8.1	6.3	880
More than secondary	9.0	8.5	318
Don't know/missing	17.3	13.6	99
Husband's/partner's alcohol consumption			
Does not drink alcohol	5.6	4.3	2,966
Drinks alcohol but is never drunk	11.8	5.6	52
Is sometimes drunk	9.2	7.8	434
Is often drunk	13.2	12.6	158
Spousal education difference[2]			
Husband better educated	7.9	6.3	1,145
Wife better educated	4.4	3.9	504
Both equally educated	9.8	9.8	166
Neither educated	4.4	3.2	1,438
Don't know//missing	17.0	13.5	104
Spousal age difference[2]			
Wife older	8.3	6.8	122
Wife is same age	16.7	13.9	63
Wife 1-4 years younger	6.1	5.0	770
Wife 5-9 years younger	5.6	4.3	1,077
Wife 10 or more years younger	6.1	5.0	1,326
Number of marital control behaviours displayed by husband/partner[3]			
0	1.5	1.5	751
1-2	5.8	4.4	1,122
3-4	8.9	6.9	1,331
5	8.9	8.1	407
Number of decisions in which women participate[4]			
0	5.2	4.3	1,373
1-2	7.0	5.9	740
3	6.8	5.2	1,244
Number of reasons for which wife beating is justified[5]			
0	5.5	4.7	1,706
1-2	9.4	6.8	601
3-4	6.7	5.2	1,043
5	4.7	3.9	260
Father beat mother			
Yes	8.4	7.0	1,021
No	3.9	3.0	2,184
Don't know/missing	14.8	11.5	406
Woman afraid of husband/partner			
Afraid most of the time	8.5	7.1	722
Sometimes afraid	6.3	5.1	2,096
Never afraid	4.8	3.2	792
Total	6.4	5.1	3,611

Note: Husband/partner refers to the current husband/partner for currently married women and the most recent husband/partner for divorced, separated, or widowed women.

[1] Includes in the past 12 months

[2] Includes only currently married women

[3] According to the wife's report. See Table 16.8 for list of behaviours.

[4] According to the wife's report. Includes only currently married women. See Table 15.9.1 for list of decisions.

[5] According to the wife's report. See Table 15.10.1 for list of reasons.

Table 16.17 Help seeking to stop violence

Percent distribution of women age 15-49 who have ever experienced physical or sexual violence by their help-seeking behaviour, according to type of violence and background characteristics, Sierra Leone DHS 2019

Type of violence/ background characteristic	Sought help to stop violence	Never sought help but told someone	Never sought help, never told anyone	Total	Number of women who have ever experienced any physical or sexual violence
Type of violence experienced					
Physical only	38.6	10.9	50.5	100.0	2,865
Sexual only	37.6	4.9	57.5	100.0	70
Both physical and sexual	53.9	10.6	35.5	100.0	318
Age					
15-19	31.3	11.7	57.0	100.0	614
20-24	35.4	13.5	51.1	100.0	551
25-29	43.8	10.5	45.7	100.0	612
30-39	44.4	9.5	46.1	100.0	940
40-49	43.1	9.1	47.7	100.0	537
Religion					
Christian	35.9	12.4	51.7	100.0	750
Islam	41.3	10.2	48.4	100.0	2,501
Other[1]	*	*	*	100.0	2
Ethnic group					
Creole	*	*	*	100.0	23
Fullah	39.5	8.0	52.5	100.0	128
Kono	21.4	19.7	58.9	100.0	164
Limba	40.6	15.3	44.1	100.0	294
Loko	48.1	10.1	41.7	100.0	57
Mandingo	40.2	25.4	34.4	100.0	85
Mende	31.4	7.6	61.0	100.0	1,006
Sherbro	42.4	26.3	31.3	100.0	46
Temne	48.8	10.9	40.3	100.0	1,154
Kurankoh	58.5	5.0	36.5	100.0	125
Other	33.2	6.1	60.6	100.0	172
Residence					
Urban	38.7	12.1	49.2	100.0	1,371
Rural	41.1	9.7	49.2	100.0	1,883
Province					
Eastern	17.3	9.4	73.2	100.0	689
Northern	48.2	7.5	44.3	100.0	662
North West	52.7	13.1	34.1	100.0	554
Southern	40.0	8.9	51.1	100.0	610
Western Area	44.7	14.5	40.8	100.0	739
District					
Kailahun	18.1	5.7	76.3	100.0	150
Kenema	15.6	3.0	81.4	100.0	311
Kono	19.2	20.7	60.1	100.0	228
Bombali	48.9	5.5	45.7	100.0	200
Falaba	62.9	1.2	36.0	100.0	97
Koinadugu	50.0	12.7	37.3	100.0	72
Tonkolili	42.4	9.7	47.9	100.0	292
Kambia	42.7	19.0	38.3	100.0	191
Karene	31.4	15.2	53.4	100.0	88
Port Loko	66.6	8.4	25.0	100.0	275
Bo	29.3	1.0	69.7	100.0	301
Bonthe	74.9	2.4	22.7	100.0	75
Moyamba	43.4	25.5	31.1	100.0	143
Pujehun	41.0	14.3	44.7	100.0	91
Western Area Rural	39.9	21.3	38.8	100.0	203
Western Area Urban	46.5	12.0	41.5	100.0	535
Marital status					
Never married	28.7	12.1	59.3	100.0	872
Married or living together	43.8	10.6	45.7	100.0	2,214
Divorced/separated/widowed	51.2	5.8	43.0	100.0	168
Number of living children					
0	28.9	12.5	58.6	100.0	792
1-2	42.6	12.3	45.2	100.0	1,148
3-4	46.4	7.8	45.8	100.0	834
5+	41.7	9.2	49.1	100.0	480
Employment					
Employed for cash	47.9	12.3	39.8	100.0	1,139
Employed not for cash	39.2	9.1	51.7	100.0	1,271
Not employed	30.8	11.0	58.1	100.0	844

Continued...

Table 16.17—*Continued*

Type of violence/ background characteristic	Sought help to stop violence	Never sought help but told someone	Never sought help, never told anyone	Total	Number of women who have ever experienced any physical or sexual violence
Education					
No education	42.9	10.1	47.0	100.0	1,468
Primary	43.5	9.3	47.3	100.0	498
Secondary	35.2	12.5	52.4	100.0	1,175
More than secondary	40.2	7.2	52.5	100.0	113
Wealth quintile					
Lowest	40.2	9.5	50.4	100.0	597
Second	39.3	10.1	50.6	100.0	624
Middle	41.6	10.1	48.3	100.0	664
Fourth	40.1	12.1	47.8	100.0	639
Highest	39.3	11.6	49.0	100.0	729
Total	40.1	10.7	49.2	100.0	3,254

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
[1] Other religion includes traditional and none.

Table 16.18 Sources for help to stop the violence

Percentage of women age 15-49 who have experienced physical or sexual violence and sought help by sources from which they sought help, according to the type of violence that women reported, Sierra Leone DHS 2019

	Type of violence experienced			Physical or sexual violence
Source	Physical only	Sexual only	Both physical and sexual	
Own family	81.6	*	79.1	81.3
Husband/partner's family	36.2	*	40.3	36.7
Husband/partner	0.9	*	0.3	0.8
Boyfriend	0.2	*	1.1	0.4
Friend	16.3	*	23.7	17.1
Neighbour	21.2	*	13.3	19.8
Religious leader	9.5	*	12.1	9.7
Doctor/medical personnel	0.6	*	0.7	0.6
Police	3.9	*	13.9	5.2
Lawyer	0.3	*	0.3	0.3
Social work organisation	0.0	*	1.1	0.2
Other	1.8	*	0.8	1.6
Number of women who have sought help	1,107	26	171	1,305

Note: Women can report more than one source from which they sought help. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

FEMALE GENITAL CUTTING 17

Key Findings

- ***Prevalence of female genital cutting**:* 83% of women age 15-49 are circumcised, a decrease from 2013 (90%).
- ***Age at circumcision**:* In Sierra Leone, female circumcision occurs mostly between age 10 and age 14; 71% of women age 15-49 were circumcised before age 15.
- ***Attitudes towards female circumcision:*** Among women who have heard of female circumcision, 48% believe that it is not a requirement of their religion and 34% believe that female circumcision should not be continued.

Female genital cutting (FGC), also known as female genital mutilation or female circumcision, is defined by the World Health Organization (WHO) as any procedure that involves partial or total removal of the external genitalia or any other injury to the female genital organs, whether for cultural or any other nonmedical reasons (WHO, UNICEF, and UNFPA 1997). In Sierra Leone, many people regard FGC as an accepted practice and one that is important to curb sexual appetite and prepare women for marriage. Acceptability of FGC continues despite its violation of women's rights and potential for causing serious medical complications and harm to women's reproductive health.

The 2019 SLDHS collected information on FGC in Sierra Leone from all women age 15-49. The topics covered included knowledge and prevalence of FGC and age at circumcision.

17.1 RESPONDENTS' KNOWLEDGE OF FEMALE GENITAL CUTTING

Table 17.1 shows that 98% of all women and 99% of ever-married women in Sierra Leone have heard of FGC.

Patterns by background characteristics

- Ninety-five percent of younger women age 15-19 and 99% of women age 45-49 have heard of FGC.
- Ninety-eight percent of women in both urban and rural areas have heard of FGC.
- At least 95% of women in every background characteristic category in **Table 17.1** are knowledgeable about FGC.

17.2 Prevalence of Female Genital Cutting

17.2.1 Type of Circumcision

Table 17.2 shows that 83% of women age 15-49 are circumcised. The most common type of FGC in Sierra Leone is type II (some flesh removed), with 84% of women undergoing this procedure. One percent of women underwent a type I procedure (clitoris nicked, no flesh removed), and 12% underwent a type III procedure (sewn closed) (**Figure 17.1**).

Trends: The proportion of women who are circumcised decreased from 90% in 2013 to 83% in 2019 (**Figure 17.2**).

Patterns by background characteristics

- The prevalence of circumcision in Sierra Leone increases by age. Sixty-one percent of women age 15-19 have been circumcised, as compared with 95% of women age 45-49 (**Figure 17.3**).
- Muslim women (87%) are more likely to be circumcised than Christian women (69%) (**Table 17.2**).
- The percentage of women who have been circumcised is higher in rural areas than in urban areas (89% and 76%, respectively).
- The prevalence of FGC is highest in the North West province (93%) and lowest in the Southern province (74%).

Figure 17.1 **Types of female genital cutting**

Percentage among circumcised women age 15-49

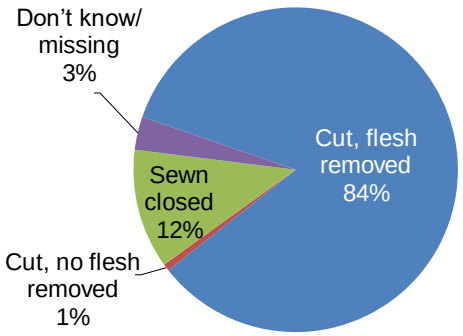


Figure 17.2 **Trends in female genital cutting by residence**

Percentage of women age 15-49 who are circumcised

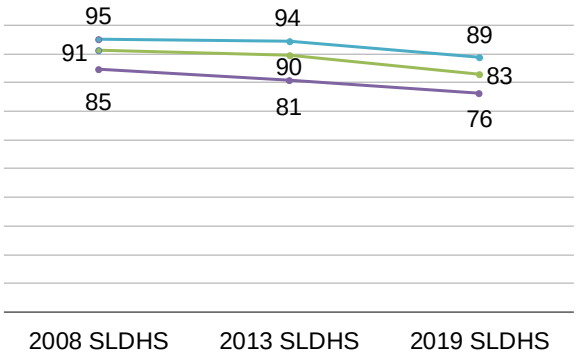
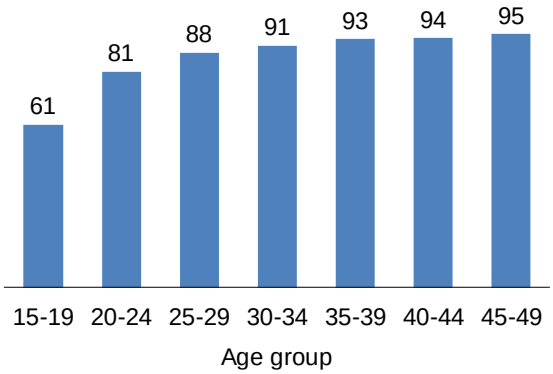


Figure 17.3 **Female genital cutting by age**

Percentage of women age 15-49 who are circumcised



- By district, the prevalence of FGC is highest in Karene (98%) and lowest in Bo (65%) (**Figure 17.4**).

17.2.2 Age at Circumcision

In Sierra Leone, female circumcision occurs mostly between age 10 and age 14 (45%); 71% of women were circumcised before age 15 (**Table 17.3** and **Figure 17.5**).

Patterns by background characteristics

- Women age 15-19 are more likely than women age 20-24 to have been circumcised at age 10-14 (50% versus 41%) (**Table 17.3**).
- Forty-seven percent of rural women were circumcised at age 10-14, as compared with 42% of urban women.
- The proportion of women circumcised at age 10-14 is highest in the Eastern province (56%) and lowest in the Southern province (38%).
- By district, the proportion of women circumcised at age 10-14 is highest in Kailahun (62%) and lowest in Bonthe (22%).

Figure 17.4 Female genital cutting by district

Percentage of women age 15-49 who are circumcised

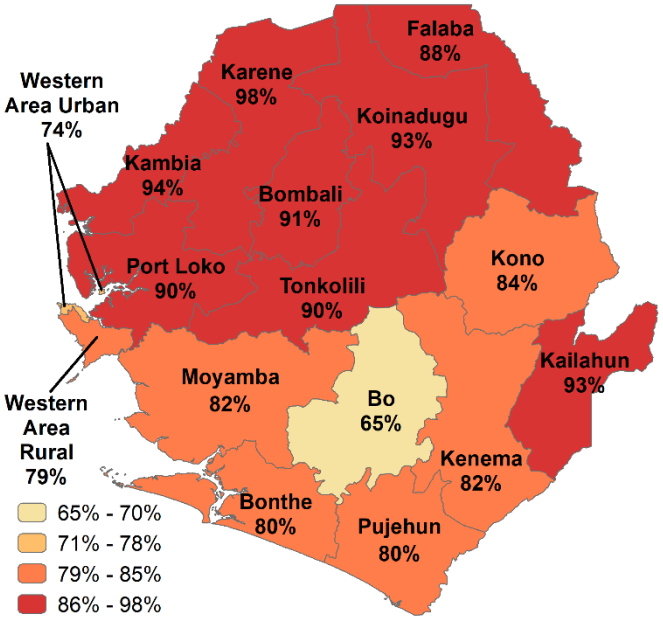
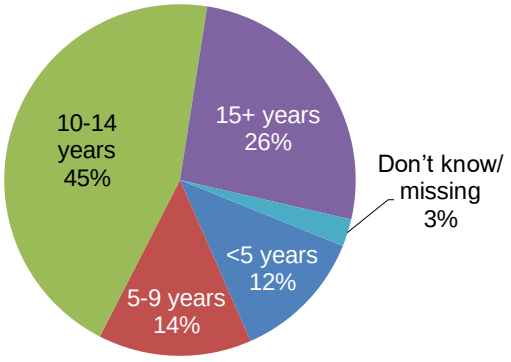


Figure 17.5 Age at Circumcision

Percent distribution of women who are circumcised



17.3 Circumcision of Daughters

The 2019 SLDHS asked women with female children whether their daughters age 0-14 had been circumcised and, if so, at what age. Ninety-two percent of daughters have not been circumcised (**Table 17.4**).

The survey also included questions to ascertain the prevalence of various types of FGC among daughters. Women who said their daughter was circumcised were asked whether her genital area had been sewn closed (a process known as infibulation). **Table 17.6** shows that 16% of girls in Sierra Leone have been infibulated.

Patterns by background characteristics

- Nine percent of girls whose mothers are Muslims have been circumcised, as compared with 5% of girls whose mothers are Christian (**Table 17.5**).
- Daughters of women with more than a secondary education (2%) are less likely than daughters of women with no education (10%) to have been circumcised.
- Daughters of women who are circumcised are more likely to be circumcised themselves. Nine percent of girls whose mothers are circumcised are also circumcised, compared with 1% of girls whose mothers are not circumcised.

- Girls whose mothers have experienced infibulation are more likely to have undergone the procedure themselves (94%) than girls whose mothers were circumcised but not infibulated (5%) (**Table 17.6**).

17.4 Person Who Performed Circumcision

The survey included questions on the person who performed the circumcision. **Table 17.7** shows the percentage of circumcised girls age 0-14 by current age and women age 15-49 according to the person performing the circumcision and type of circumcision.

Traditional agents such as traditional circumcisers (95% for girls and 96% for women) and traditional birth attendants (4% for girls and 3% for women) perform almost all female circumcisions in Sierra Leone. One percent of girls and less than 1% of women were circumcised by medical professionals. Sixteen percent of girls age 0-14 had their genital area sewn closed, as compared with 12% of women age 15-49.

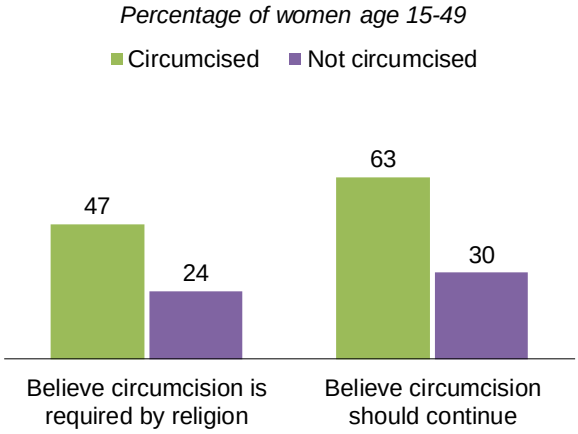
17.5 Attitudes towards Female Circumcision

Women age 15-49 who have heard of female circumcision were asked whether this practice is a requirement of their religion. Forty-eight percent believe that it is not a requirement (**Table 17.8**). Similarly, 34% believe that female circumcision should not be continued (**Table 17.9**).

Patterns by background characteristics

- Women who are circumcised are more likely than those who are not circumcised to believe that FGC is required by their religion (47% and 24%, respectively). Similarly, women who are circumcised are more likely to believe that FGC should be continued than those who are not circumcised (63% and 30%, respectively) (**Table 17.9** and **Figure 17.6**).
- Rural women are more likely than urban women to believe that FGC is required by their religion (50% and 34%, respectively) and that FGC should be continued (66% and 47%, respectively) (**Table 17.9**).

Figure 17.6 **Attitudes about female genital cutting by circumcision status**



- Education and wealth have strong influences on beliefs regarding whether FGC is required by one's religion. Women with more than a secondary education and those in the highest wealth quintile are least likely to believe that circumcision is required by their religion.

List of Tables

For more information on female genital cutting, see the following tables:

Table 17.1 Knowledge of female circumcision

Percentage of all women age 15-49 and ever-married women age 15-49 who have heard of female circumcision, according to background characteristics, Sierra Leone DHS 2019

Background characteristic	All women		Ever-married women	
	Have heard of female circumcision	Number of women	Have heard of female circumcision	Number of women
Age				
15-19	95.0	3,427	98.3	497
20-24	98.0	2,629	98.1	1,430
25-29	98.9	2,728	99.1	2,219
30-34	99.0	1,942	99.1	1,749
35-39	99.0	2,224	99.1	2,108
40-44	99.1	1,337	99.3	1,278
45-49	98.7	1,288	98.7	1,236
Religion				
Christian	97.6	3,616	98.7	2,159
Islam	98.0	11,953	98.9	8,354
Other[1]	*	6	*	3
Ethnic group				
Creole	98.3	139	97.7	67
Fullah	99.1	576	98.9	383
Kono	99.2	680	99.3	436
Limba	98.1	1,361	99.5	877
Loko	98.7	313	99.5	193
Mandingo	98.9	429	99.4	269
Mende	97.2	4,863	98.6	3,331
Sherbro	99.0	283	98.9	198
Temne	98.2	5,488	99.0	3,746
Kurankoh	96.0	658	97.7	462
Other	98.9	785	99.1	554
Residence				
Urban	97.5	7,163	98.6	3,993
Rural	98.3	8,411	99.1	6,523
Province				
Eastern	97.1	3,069	98.8	2,139
Northern	97.5	3,317	98.9	2,343
North West	98.6	2,508	99.2	1,877
Southern	98.2	2,900	98.9	2,054
Western Area	98.4	3,780	98.5	2,103
District				
Kailahun	97.0	707	99.8	515
Kenema	95.3	1,437	97.6	986
Kono	99.9	925	99.8	638
Bombali	96.9	1,166	99.2	804
Falaba	96.8	466	97.8	303
Koinadugu	96.1	469	97.6	345
Tonkolili	98.8	1,215	99.5	890
Kambia	99.0	890	99.1	668
Karene	99.1	462	99.7	349
Port Loko	98.0	1,157	99.2	861
Bo	98.0	1,250	98.7	803
Bonthe	98.1	468	98.7	354
Moyamba	99.8	726	99.9	548
Pujehun	96.4	456	98.5	349
Western Area Rural	98.1	1,407	98.3	850
Western Area Urban	98.5	2,373	98.7	1,253
Education				
No education	98.8	7,081	99.0	6,398
Primary	97.3	2,103	99.0	1,416
Secondary	97.2	5,724	99.0	2,314
More than secondary	97.1	666	96.3	388
Wealth quintile				
Lowest	98.4	2,738	99.1	2,226
Second	98.2	2,831	98.8	2,250
Middle	97.8	2,954	99.0	2,124
Fourth	98.0	3,385	99.1	1,976
Highest	97.4	3,666	98.4	1,940
Total 15-49	97.9	15,574	98.9	10,516

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
[1] Other religion includes traditional religions and no religion.

Table 17.2 Prevalence of female circumcision

Percentage of women age 15-49 who have been circumcised, and percent distribution of circumcised women by type of circumcision, according to background characteristics, Sierra Leone DHS 2019

Background characteristic	Percentage of women circumcised	Number of women	Type of circumcision				Total	Number of circumcised women
			Cut, no flesh removed	Cut, flesh removed	Sewn closed	Don't know/ missing		
Age								
15-19	61.1	3,427	0.7	82.6	12.9	3.8	100.0	2,095
20-24	81.0	2,629	0.9	82.5	12.8	3.8	100.0	2,129
25-29	88.1	2,728	0.6	84.9	11.1	3.4	100.0	2,404
30-34	90.7	1,942	0.4	83.2	13.2	3.2	100.0	1,761
35-39	93.1	2,224	1.0	85.5	10.5	2.9	100.0	2,071
40-44	93.5	1,337	0.6	84.7	11.9	2.8	100.0	1,249
45-49	94.9	1,288	0.6	85.4	11.1	2.8	100.0	1,222
Religion								
Christian	69.0	3,616	0.5	82.6	13.6	3.3	100.0	2,496
Islam	87.3	11,953	0.8	84.4	11.6	3.3	100.0	10,432
Other[1]	*	6	*	*	*	*	100.0	4
Ethnic group								
Creole	19.6	139	*	*	*	*	100.0	27
Fullah	89.2	576	1.0	84.0	8.2	6.7	100.0	514
Kono	78.7	680	0.0	97.3	2.0	0.7	100.0	535
Limba	84.5	1,361	0.6	75.4	20.2	3.8	100.0	1,150
Loko	81.4	313	0.6	83.0	6.2	10.2	100.0	255
Mandingo	89.1	429	0.6	80.6	15.5	3.3	100.0	382
Mende	77.0	4,863	0.4	83.2	13.5	3.0	100.0	3,744
Sherbro	77.4	283	0.5	89.3	4.3	5.8	100.0	219
Temne	88.1	5,488	0.7	86.1	9.8	3.4	100.0	4,836
Kurankoh	88.9	658	1.9	88.5	8.6	1.0	100.0	585
Other	87.4	785	2.2	74.9	20.9	2.0	100.0	686
Residence								
Urban	76.4	7,163	0.7	81.5	11.2	6.7	100.0	5,474
Rural	88.7	8,411	0.7	85.9	12.5	0.8	100.0	7,458
Province								
Eastern	85.1	3,069	0.1	83.4	15.3	1.3	100.0	2,612
Northern	90.2	3,317	0.6	80.5	18.5	0.4	100.0	2,991
North West	92.9	2,508	1.7	85.8	11.1	1.3	100.0	2,329
Southern	74.2	2,900	0.3	88.6	8.9	2.1	100.0	2,152
Western Area	75.4	3,780	1.0	83.4	4.9	10.8	100.0	2,848
District								
Kailahun	93.3	707	0.0	61.7	35.8	2.4	100.0	659
Kenema	81.8	1,437	0.2	86.9	11.6	1.4	100.0	1,175
Kono	84.1	925	0.0	96.3	3.6	0.1	100.0	778
Bombali	90.6	1,166	0.2	75.4	24.3	0.0	100.0	1,056
Falaba	88.1	466	2.8	91.4	5.3	0.6	100.0	410
Koinadugu	92.5	469	0.6	87.5	11.7	0.3	100.0	434
Tonkolili	89.7	1,215	0.0	78.6	20.6	0.7	100.0	1,090
Kambia	94.2	890	2.8	66.9	26.7	3.7	100.0	838
Karene	97.6	462	3.8	92.9	3.3	0.0	100.0	451
Port Loko	89.9	1,157	0.0	98.0	2.0	0.0	100.0	1,040
Bo	65.1	1,250	0.0	98.9	1.1	0.0	100.0	813
Bonthe	79.9	468	1.4	77.8	11.1	9.7	100.0	374
Moyamba	82.4	726	0.2	98.2	0.2	1.3	100.0	598
Pujehun	80.3	456	0.2	61.1	38.4	0.3	100.0	366
Western Area Rural	78.5	1,407	0.4	93.7	4.1	1.7	100.0	1,105
Western Area Urban	73.5	2,373	1.3	76.8	5.4	16.5	100.0	1,744
Total	83.0	15,574	0.7	84.0	11.9	3.3	100.0	12,932

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
[1] Other religion includes traditional religions and none.

Table 17.3 Age at circumcision

Percent distribution of circumcised women age 15-49 by age at circumcision, according to background characteristics, Sierra Leone DHS 2019

Background characteristic	Age at circumcision					Total	Number of circumcised women
	<5[1]	5-9	10-14	15+	Don't know/ missing		
Age							
15-19	12.1	14.9	49.5	21.7	1.7	100.0	2,095
20-24	11.5	16.9	40.7	28.8	2.2	100.0	2,129
25-29	12.5	14.7	43.2	27.2	2.4	100.0	2,404
30-34	13.0	13.2	44.2	27.3	2.3	100.0	1,761
35-39	13.0	13.5	44.6	25.8	3.1	100.0	2,071
40-44	13.0	13.1	47.2	22.7	4.0	100.0	1,249
45-49	11.1	10.0	46.7	29.5	2.6	100.0	1,222
Religion							
Christian	12.0	12.8	45.1	27.4	2.8	100.0	2,496
Islam	12.4	14.4	44.8	25.9	2.5	100.0	10,432
Other[2]	*	*	*	*	*	100.0	4
Ethnic group							
Creole	*	*	*	*	*	100.0	27
Fullah	13.3	27.8	35.1	19.9	3.9	100.0	514
Kono	14.4	7.5	50.7	23.8	3.5	100.0	535
Limba	15.4	16.7	43.9	21.4	2.6	100.0	1,150
Loko	10.9	21.2	43.8	17.3	6.9	100.0	255
Mandingo	10.6	20.2	43.1	23.2	2.9	100.0	382
Mende	7.4	12.1	47.3	32.2	1.0	100.0	3,744
Sherbro	15.1	12.7	21.1	49.9	1.1	100.0	219
Temne	14.9	13.4	44.2	23.9	3.5	100.0	4,836
Kurankoh	11.8	11.8	51.2	23.5	1.7	100.0	585
Other	14.2	17.6	45.5	21.7	1.1	100.0	686
Residence							
Urban	12.5	17.4	41.8	24.8	3.4	100.0	5,474
Rural	12.2	11.7	47.1	27.1	1.9	100.0	7,458
Province							
Eastern	7.8	11.5	56.2	23.6	0.9	100.0	2,612
Northern	14.3	10.3	49.3	24.8	1.4	100.0	2,991
North West	19.9	15.5	40.7	19.4	4.5	100.0	2,329
Southern	11.2	12.0	37.5	38.2	1.1	100.0	2,152
Western Area	9.0	20.9	38.9	26.4	4.7	100.0	2,848
District							
Kailahun	5.3	14.2	62.3	18.2	0.0	100.0	659
Kenema	4.1	12.9	54.6	28.0	0.4	100.0	1,175
Kono	15.5	7.2	53.4	21.4	2.4	100.0	778
Bombali	15.0	11.7	46.4	25.0	1.9	100.0	1,056
Falaba	11.5	6.6	41.1	39.1	1.7	100.0	410
Koinadugu	9.2	20.3	55.5	14.9	0.1	100.0	434
Tonkolili	16.7	6.3	52.6	23.1	1.3	100.0	1,090
Kambia	28.0	11.6	40.9	19.4	0.1	100.0	838
Karene	3.6	26.3	51.6	10.9	7.6	100.0	451
Port Loko	20.4	14.1	35.8	23.0	6.8	100.0	1,040
Bo	3.3	15.4	47.0	31.9	2.3	100.0	813
Bonthe	26.3	15.4	21.8	35.6	0.8	100.0	374
Moyamba	15.3	5.9	23.5	55.3	0.0	100.0	598
Pujehun	6.8	11.0	55.3	26.6	0.2	100.0	366
Western Area Rural	7.0	21.5	40.6	27.0	4.0	100.0	1,105
Western Area Urban	10.3	20.6	37.8	26.1	5.2	100.0	1,744
Total	12.3	14.1	44.9	26.1	2.5	100.0	12,932

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
[1] Includes women who reported that they were circumcised during infancy but did not provide a specific age
[2] Other religion includes traditional religions and none.

Table 17.4 Prevalence of circumcision and age at circumcision: Girls 0-14

Percent distribution of girls age 0-14 by age at circumcision, and percentage of girls circumcised according to current age, Sierra Leone DHS 2019

	Age at circumcision								
Current age	<1	1-4	5-9	10-14	Don't know/ missing	Percentage not circumcised	Total	Number of girls	Percentage circumcised
0-4	0.0	0.3	na	na	0.0	99.7	100.0	4,414	0.3
5-9	0.0	0.6	4.4	na	0.1	94.9	100.0	4,333	5.1
10-14	0.1	0.9	9.3	11.2	0.3	78.2	100.0	3,290	21.8
Total	0.0	0.6	4.1	3.1	0.1	92.1	100.0	12,037	7.9

Note: The circumcision status of girls is reported by their mothers.
na = Not applicable due to censoring

Table 17.5 Circumcision of girls age 0-14 by mother's background characteristics

Percentage of girls age 0-14 who are circumcised, according to age and mother's background characteristics, Sierra Leone DHS 2019

Background characteristic	Current age of girls			All 0-14
	0-4	5-9	10-14	
Religion				
Christian	0.1	2.9	13.4	4.6
Islam	0.3	5.6	23.8	8.7
Ethnic group				
Creole	*	*	*	0.8
Fullah	0.0	17.8	28.9	14.8
Kono	0.0	2.2	15.4	5.0
Limba	0.1	7.1	27.9	10.3
Loko	0.8	2.4	25.5	8.4
Mandingo	0.0	6.6	28.4	10.0
Mende	0.3	3.0	15.8	5.4
Sherbro	0.0	1.5	8.3	2.9
Temne	0.3	5.5	24.3	8.8
Kurankoh	0.0	5.8	21.4	7.8
Other	0.4	7.7	37.7	13.4
Residence				
Urban	0.2	4.0	17.7	6.3
Rural	0.3	5.6	23.9	8.7
Province				
Eastern	0.4	3.7	19.0	6.6
Northern	0.1	7.7	31.1	12.1
North West	0.7	8.8	32.0	11.6
Southern	0.1	2.3	12.0	4.2
Western Area	0.0	2.7	14.1	4.6
District				
Kailahun	0.0	4.0	19.1	7.3
Kenema	0.8	3.9	21.7	6.9
Kono	0.0	3.2	15.5	5.6
Bombali	0.0	7.5	31.4	12.6
Falaba	0.0	10.4	38.0	14.7
Koinadugu	0.0	10.3	41.0	14.0
Tonkolili	0.4	5.9	25.7	10.1
Kambia	0.5	9.0	40.8	14.6
Karene	1.7	12.2	35.9	13.8
Port Loko	0.4	7.3	22.6	8.4
Bo	0.0	1.3	10.1	3.4
Bonthe	0.0	0.0	6.7	1.6
Moyamba	0.0	2.9	9.8	3.7
Pujehun	0.5	6.1	23.9	9.3
Western Area Rural	0.0	3.0	15.5	5.0
Western Area Urban	0.0	2.5	13.2	4.4
Mother's education				
No education	0.4	6.1	24.8	10.2
Primary	0.2	2.9	19.1	5.9
Secondary	0.1	2.9	10.4	2.7
More than secondary	0.0	3.8	3.4	2.1
Mother's circumcision status				
Circumcised	0.3	5.5	23.3	8.6
Not circumcised	0.0	0.0	2.9	0.5
Wealth quintile				
Lowest	0.3	5.2	24.1	8.4
Second	0.3	5.7	24.4	8.9
Middle	0.3	6.2	24.4	9.1
Fourth	0.2	4.2	19.9	7.1
Highest	0.1	3.4	13.1	4.8
Total	0.3	5.1	21.8	7.9

Note: The circumcision status of girls is reported by their mothers. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

Table 17.6 Infibulation among circumcised girls age 0-14

Percent distribution of girls age 0-14 who are circumcised by whether or not they are infibulated, according to mother's background characteristics, Sierra Leone DHS 2019

Background characteristic	Infibulation status: Sewn closed	Not sewn closed	Don't know/ missing	Total	Number
Religion					
Christian	20.6	79.4	0.0	100.0	112
Islam	15.2	83.8	1.0	100.0	834
Other[1]	*	*	*	100.0	1
Ethnic group					
Creole	*	*	*	100.0	1
Fullah	22.5	75.0	2.5	100.0	50
Kono	(7.9)	(92.1)	(0.0)	100.0	27
Limba	24.7	75.3	0.0	100.0	100
Loko	*	*	*	100.0	17
Mandingo	(10.8)	(89.2)	(0.0)	100.0	30
Mende	10.9	87.1	2.0	100.0	214
Sherbro	*	*	*	100.0	7
Temne	14.6	84.9	0.5	100.0	378
Kurankoh	7.1	92.9	0.0	100.0	40
Other	30.4	69.6	0.0	100.0	82
Residence					
Urban	20.3	78.7	1.0	100.0	266
Rural	14.1	85.1	0.8	100.0	681
Province					
Eastern	13.9	85.4	0.7	100.0	174
Northern	14.6	85.4	0.0	100.0	317
North West	21.5	77.7	0.8	100.0	253
Southern	7.5	88.0	4.6	100.0	106
Western Area	17.9	82.1	0.0	100.0	96
District					
Kailahun	30.2	69.8	0.0	100.0	46
Kenema	9.7	88.8	1.5	100.0	83
Kono	(4.8)	(95.2)	(0.0)	100.0	45
Bombali	22.5	77.5	0.0	100.0	116
Falaba	12.2	87.8	0.0	100.0	50
Koinadugu	11.9	88.1	0.0	100.0	50
Tonkolili	8.2	91.8	0.0	100.0	101
Kambia	43.4	56.1	0.5	100.0	113
Karene	4.9	95.1	0.0	100.0	57
Port Loko	3.3	95.0	1.7	100.0	83
Bo	(0.0)	(100.0)	(0.0)	100.0	32
Bonthe	*	*	*	100.0	8
Moyamba	(7.7)	(90.1)	(2.2)	100.0	26
Pujehun	10.5	87.8	1.7	100.0	41
Western Area Rural	(25.7)	(74.3)	(0.0)	100.0	44
Western Area Urban	(11.5)	(88.5)	(0.0)	100.0	53
Mother's education					
No education	15.6	83.5	1.0	100.0	777
Primary	11.3	88.1	0.6	100.0	97
Secondary	25.6	74.4	0.0	100.0	65
More than secondary	*	*	*	100.0	7
Mother's circumcision status					
Infibulated	93.9	3.1	3.1	100.0	115
Circumcised, not infibulated	5.1	94.3	0.5	100.0	829
Not circumcised	*	*	*	100.0	3
Wealth quintile					
Lowest	11.6	87.4	1.0	100.0	233
Second	13.8	85.8	0.5	100.0	241
Middle	18.7	80.2	1.1	100.0	228
Fourth	15.6	83.1	1.3	100.0	153
Highest	25.8	74.2	0.0	100.0	91
Total	15.9	83.3	0.8	100.0	946

Note: The circumcision status of girls is reported by their mothers. Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

[1] Other religion includes traditional religions and none.

Table 17.7 Aspects of circumcision among circumcised girls age 0-14 and women age 15-49

Percent distribution of circumcised girls age 0-14 by current age and women age 15-49, according to person performing the circumcision and type of circumcision, Sierra Leone DHS 2019

Background characteristic	Current age of girls 0-4	5-9	10-14	Girls age 0-14	Women age 15-49
Person who performed the circumcision					
Traditional agent	*	99.2	99.5	99.4	98.4
Traditional circumciser	*	94.6	95.6	95.4	95.5
Traditional birth attendant	*	4.6	3.8	4.0	2.8
Other traditional agent	*	0.0	0.0	0.0	0.0
Medical professional	*	0.8	0.5	0.6	0.4
Doctor	*	0.0	0.0	0.0	0.1
Nurse/midwife	*	0.8	0.5	0.6	0.3
Other health professional	*	0.0	0.0	0.0	0.0
Don't know/missing	*	0.0	0.0	0.0	1.2
Total	100.0	100.0	100.0	100.0	100.0
Type of circumcision					
Sewn closed	*	16.1	15.7	15.9	11.9
Not sewn closed	*	83.6	83.3	83.3	85.3
Don't know/missing	*	0.3	1.0	0.8	2.8
Total	100.0	100.0	100.0	100.0	100.0
Number	12	219	716	946	12,932

Note: The circumcision status of girls is reported by their mothers. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

Table 17.8 Opinions of women about whether circumcision is required by religion

Percentage of women age 15-49 who have heard of female circumcision by their opinion on whether their religion requires female circumcision, according to background characteristics, Sierra Leone DHS 2019

Background characteristic	Required	Not required	Don't know/ missing	Total	Number of respondents
Female circumcision status					
Circumcised	46.9	46.9	6.2	100.0	12,932
Not circumcised	23.6	68.8	7.6	100.0	1,760
Age					
15-19	36.8	50.8	12.4	100.0	3,254
20-24	37.5	53.0	9.4	100.0	2,577
25-29	40.0	51.8	8.2	100.0	2,698
30-34	45.5	45.0	9.5	100.0	1,924
35-39	46.8	43.8	9.4	100.0	2,202
40-44	48.7	42.4	8.9	100.0	1,325
45-49	54.2	36.5	9.2	100.0	1,271
Religion					
Christian	30.7	57.3	12.0	100.0	3,527
Islam	46.1	44.8	9.1	100.0	11,718
Other[1]	*	*	*	100.0	6
Ethnic group					
Creole	5.9	83.7	10.3	100.0	137
Fullah	47.6	47.9	4.5	100.0	570
Kono	27.5	62.5	10.0	100.0	674
Limba	34.6	56.8	8.6	100.0	1,335
Loko	26.8	66.2	7.0	100.0	309
Mandingo	48.6	44.2	7.2	100.0	424
Mende	53.9	33.7	12.4	100.0	4,725
Sherbro	53.8	37.6	8.7	100.0	280
Temne	34.2	56.2	9.6	100.0	5,389
Kurankoh	58.6	33.1	8.3	100.0	632
Other	46.0	48.9	5.2	100.0	776
Residence					
Urban	33.8	56.6	9.6	100.0	6,986
Rural	49.9	40.2	10.0	100.0	8,265
Province					
Eastern	58.6	34.0	7.4	100.0	2,980
Northern	43.9	44.3	11.7	100.0	3,233
North West	36.4	57.2	6.5	100.0	2,472
Southern	52.2	30.3	17.5	100.0	2,848
Western Area	25.0	68.7	6.3	100.0	3,718
District					
Kailahun	87.7	10.5	1.8	100.0	685
Kenema	61.6	30.5	7.9	100.0	1,370
Kono	32.7	56.5	10.9	100.0	924
Bombali	38.7	54.1	7.2	100.0	1,131
Falaba	73.1	24.5	2.4	100.0	451
Koinadugu	63.7	35.0	1.4	100.0	451
Tonkolili	30.5	46.0	23.5	100.0	1,200
Kambia	32.1	59.9	8.0	100.0	881
Karene	28.2	70.0	1.8	100.0	458
Port Loko	43.0	49.8	7.1	100.0	1,134
Bo	56.6	17.0	26.4	100.0	1,225
Bonthe	32.7	50.5	16.8	100.0	459
Moyamba	59.3	35.4	5.3	100.0	725
Pujehun	48.5	37.7	13.8	100.0	439
Western Area Rural	25.5	68.5	6.0	100.0	1,380
Western Area Urban	24.8	68.8	6.4	100.0	2,337
Education					
No education	50.4	40.3	9.2	100.0	6,996
Primary	45.8	42.6	11.6	100.0	2,045
Secondary	33.7	56.1	10.2	100.0	5,564
More than secondary	21.8	71.6	6.6	100.0	647
Wealth quintile					
Lowest	53.0	34.9	12.2	100.0	2,694
Second	52.0	39.2	8.8	100.0	2,781
Middle	47.9	43.0	9.1	100.0	2,890
Fourth	35.7	54.3	10.1	100.0	3,317
Highest	29.2	61.7	9.1	100.0	3,569
Total 15-49	42.5	47.7	9.8	100.0	15,251

Note: Women whose circumcision status is unknown are excluded. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
[1] Other religion includes traditional religions and none.

Table 17.9 Opinions of women about whether the practice of circumcision should continue

Percent distribution of women age 15-49 who have heard of female circumcision by their opinion on whether the practice of circumcision should be continued, according to background characteristics, Sierra Leone DHS 2019

Background characteristic	Continued	Not continued	Don't know/ missing/depends	Total	Number of respondents
Female circumcision status					
Circumcised	63.1	31.0	5.9	100.0	12,932
Not circumcised	30.0	63.5	6.5	100.0	1,760
Age					
15-19	46.9	41.5	11.5	100.0	3,254
20-24	52.8	38.4	8.8	100.0	2,577
25-29	54.1	36.4	9.5	100.0	2,698
30-34	57.8	33.0	9.2	100.0	1,924
35-39	64.8	26.6	8.6	100.0	2,202
40-44	67.2	23.4	9.4	100.0	1,325
45-49	72.0	21.0	7.1	100.0	1,271
Religion					
Christian	40.3	49.3	10.4	100.0	3,527
Islam	62.0	28.8	9.1	100.0	11,718
Other[1]	*	*	*	100.0	6
Ethnic group					
Creole	10.9	76.2	12.9	100.0	137
Fullah	60.7	31.7	7.6	100.0	570
Kono	45.0	42.2	12.8	100.0	674
Limba	47.8	45.6	6.6	100.0	1,335
Loko	41.9	51.7	6.4	100.0	309
Mandingo	57.5	33.3	9.2	100.0	424
Mende	65.6	23.3	11.1	100.0	4,725
Sherbro	69.9	23.6	6.5	100.0	280
Temne	52.0	38.7	9.3	100.0	5,389
Kurankoh	62.6	29.8	7.6	100.0	632
Other	66.9	26.0	7.1	100.0	776
Residence					
Urban	46.5	42.6	10.9	100.0	6,986
Rural	65.8	25.9	8.2	100.0	8,265
Province					
Eastern	69.7	22.2	8.1	100.0	2,980
Northern	48.8	46.3	4.9	100.0	3,233
North West	66.7	21.0	12.3	100.0	2,472
Southern	65.9	19.1	15.0	100.0	2,848
Western Area	40.6	51.1	8.4	100.0	3,718
District					
Kailahun	86.6	12.2	1.2	100.0	685
Kenema	73.3	19.6	7.1	100.0	1,370
Kono	51.7	33.5	14.7	100.0	924
Bombali	45.2	51.2	3.6	100.0	1,131
Falaba	63.9	29.6	6.4	100.0	451
Koinadugu	70.6	25.4	4.0	100.0	451
Tonkolili	38.4	55.9	5.7	100.0	1,200
Kambia	73.7	15.4	10.9	100.0	881
Karene	74.9	14.4	10.7	100.0	458
Port Loko	58.0	28.0	14.0	100.0	1,134
Bo	67.9	10.0	22.1	100.0	1,225
Bonthe	69.3	10.2	20.5	100.0	459
Moyamba	66.2	32.3	1.5	100.0	725
Pujehun	56.6	31.6	11.8	100.0	439
Western Area Rural	49.9	41.0	9.1	100.0	1,380
Western Area Urban	35.0	57.1	7.9	100.0	2,337
Education					
No education	68.6	22.6	8.8	100.0	6,996
Primary	61.5	29.3	9.2	100.0	2,045
Secondary	44.4	45.4	10.3	100.0	5,564
More than secondary	25.8	64.1	10.1	100.0	647
Wealth quintile					
Lowest	68.9	23.6	7.5	100.0	2,694
Second	68.5	24.3	7.1	100.0	2,781
Middle	63.3	27.4	9.3	100.0	2,890
Fourth	52.6	36.0	11.4	100.0	3,317
Highest	37.9	51.0	11.0	100.0	3,569
Total 15-49	57.0	33.6	9.4	100.0	15,251

Note: Women whose circumcision status is unknown are excluded. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
[1] Other religion includes traditional religions and none.

MALARIA 18

Key Findings

- ***Household possession of mosquito nets:*** 68% of households in Sierra Leone own at least one ITN.
- ***Use of ITNs by children and pregnant women:*** ITN use by children under age 5 increased from 26% in 2008 to 59% in 2019, while ITN use by pregnant women increased from 27% to 64% over the same period.
- ***Case management of fever in children:*** 17% of children under age 5 had a fever in the 2 weeks preceding the survey. Advice or treatment was sought for 75% of these children, and 61% had blood taken from a finger or heel for testing.
- ***Type of antimalarial drugs used:*** Among children who were given antimalarial medicines, 32% received artemisinin-based combination therapy (ACT).
- ***Prevalence of severe anaemia:*** 7% of children age 6-59 months have haemoglobin levels below 8.0 g/dl.

Sierra Leone has one of the highest burdens of malaria in the world. Although malaria is a preventable and curable disease, it is one of the country's leading causes of death and illness, taking its greatest toll on children under age 5 and pregnant women (https://www.afro.who.int/news/tackling-malaria-sierra-leone).

In response, over the last 15 years, substantial malaria control investments have been made in Sierra Leone. This is most recently manifested in the Malaria Strategic Plan 2016-2020, which gives direction to anti-malaria efforts with the goal of reducing poverty by improving population health outcomes (Ministry of Health and Sanitation 2015).

This chapter presents data that are useful in assessing how well malaria control strategies are being implemented, including the availability and use of mosquito nets, the prophylactic and therapeutic use of antimalarial drugs, diagnostic testing of children with fever, and prevalence of severe anaemia among children under age 5.

18.1 OWNERSHIP OF INSECTICIDE-TREATED NETS

Ownership of insecticide-treated nets

Households that have at least one insecticide-treated net (ITN). An ITN is defined as a factory-treated net that does not require any further treatment.
Sample: Households

Full household ITN coverage

Percentage of households with at least one ITN for every two people.

Sample: Households

An ITN is defined as a factory-treated net that does not require any further treatment. In the 2013 SLDHS, 2013 SLMIS, and 2016 SLMIS, ITNs included nets that had been soaked with insecticides within the past 12 months. In recent questionnaires, The DHS Program dropped questions on retreatment of nets. This was done because bed nets that require annual retreatment and the products used for retreatment are no longer distributed and the distinction between ITNs and long-lasting insecticide-treated nets (LLINs) is no longer meaningful. ITNs as defined in the 2019 SLDHS were previously known as LLINs in the 2013 SLDHS, 2013 SLMIS, and 2016 SLMIS.

Household ownership and use of mosquito nets (in particular, ITNs) is a central strategy in malaria prevention. All households in the 2019 SLDHS were asked if they owned mosquito nets, and, if so, they were asked a series of follow-up questions about each net: what type it was, where it was obtained, and who slept under it the night before the survey.

Overall, 69% of households have at least one mosquito net, while 68% have at least one ITN. This implies that almost all mosquito nets owned by households in Sierra Leone are ITNs. The average number of ITNs per household is 1.3 (**Table 18.1**). Twenty-five percent of households have at least one ITN for every two persons who stayed in the household the night preceding the survey (**Table 18.1** and **Figure 18.1)**.

Trends: The percentage of households that own at least one ITN increased from 37% in 2008 to 68% in 2019 (**Figure 18.2)**.

Patterns by background characteristics

- A higher percentage of households in rural areas (74%) than in urban areas (60%) have at least one ITN (**Table 18.1)**.
- Household ownership of at least one ITN is highest in the Eastern province (79%) and lowest in the Western Area province (49%) (**Table 18.1**). The percentage of households with at least one ITN for every two persons who stayed in the household the night before the survey is highest in the Eastern and Southern provinces (29% each) and lowest in the Western Area province (18%).

Figure 18.1 **Household ownership of ITNs**

Percent distribution of households

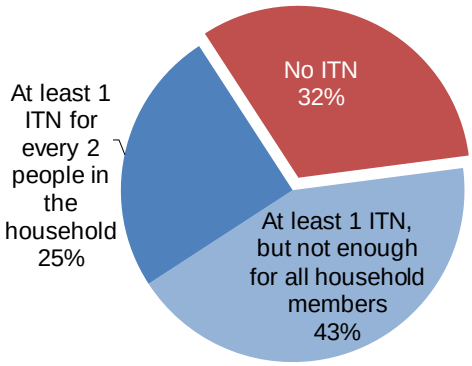
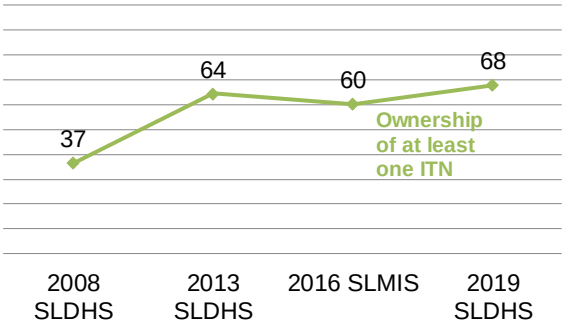


Figure 18.2 **Trends in household ownership of ITNs**

Percentage of households owning at least one insecticide-treated net (ITN)



Note: The definition of an ITN in surveys conducted prior to 2019 included nets that had been soaked with insecticides within the past 12 months.

- The percentage of households with at least one ITN ranges from a high of 77% in the middle wealth quintile to a low of 57% in the highest wealth quintile (**Figure 18.3**).
- By district, household ownership of at least one ITN is highest in Bonthe (95%) and lowest in Western Area Rural (49%) (**Figure 18.4**). Similarly, the percentage of households with at least one ITN for every two persons who stayed in the household the night before the survey is highest in Bonthe (48%) and lowest in Western Area Rural (17%).

***Figure 18.3* ITN ownership by household wealth**

Percentage of households with at least one insecticide-treated net (ITN)

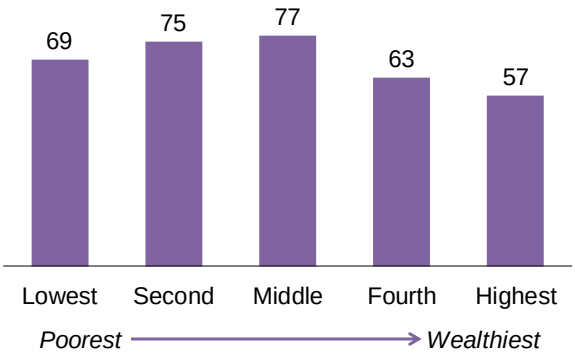
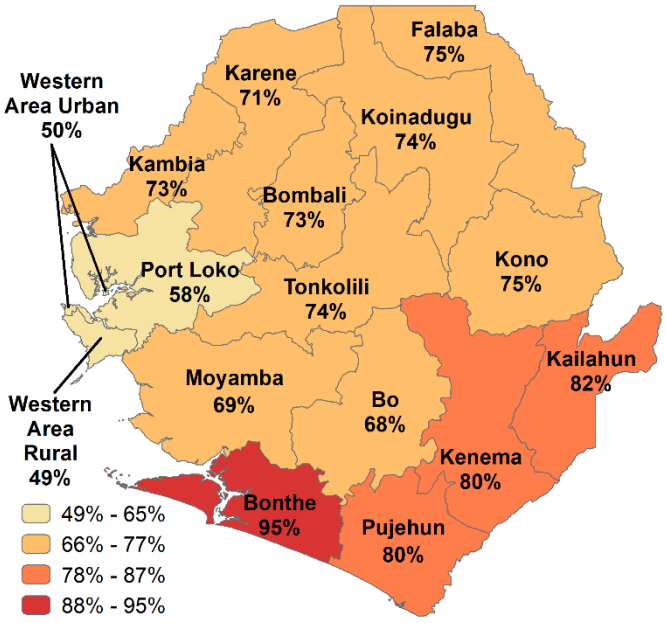


***Figure 18.4* ITN ownership by district**

Percentage of households with at least one insecticide-treated net (ITN)

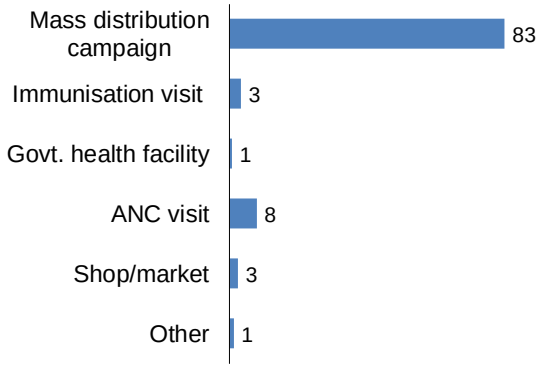


Source of Nets

Eighty-three percent of ITNs in Sierra Leone are obtained through mass distribution campaigns, 8% are obtained during antenatal care visits, and 3% each are obtained during immunisation visits and from shops/markets. One percent or less of ITNs are obtained from government health facilities and other sources (**Table 18.2** and **Figure 18.5**).

***Figure 18.5* Source of ITNs**

Percent distribution of insecticide-treated nets (ITNs) in interviewed households



Patterns by background characteristics

- Eighty-six percent of nets in rural areas and 79% in urban areas were obtained through mass distribution campaigns (**Table 18.2**).

- The percentage of nets obtained through mass campaigns is highest in the Northern and Southern provinces (87%) and lowest in the Western Area province (72%).
- At the district level, the percentage of nets obtained through mass campaigns is highest in Falaba (94%) and lowest in Western Area Rural (70%).

18.2 Household Access to and Use of ITNs

Access to an ITN

Percentage of the population that could sleep under an ITN if each ITN in the household were used by up to two people.

Sample: De facto household population

Use of ITNs

Percentage of the population that slept under an ITN the night before the survey.

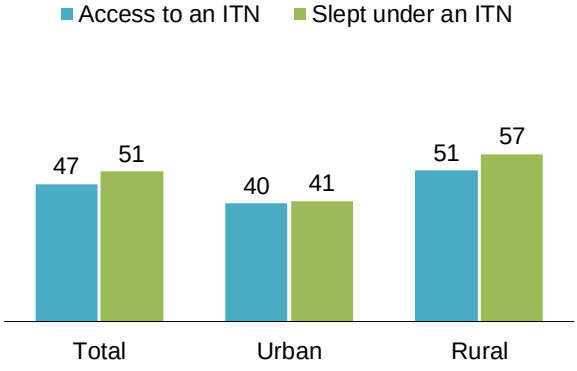
Sample: De facto household population

Access to an ITN is measured by the proportion of the population that could sleep under an ITN if each ITN in the household were used by up to two people. Comparing ITN access and ITN use indicators can help programmes identify if there is a behavioural gap in which available ITNs are not being used. If the difference between these indicators is substantial, the ITN programme may need to focus on behaviour change and identify the main barriers to ITN use. This analysis helps ITN programmes determine whether they need to achieve higher ITN coverage, promote ITN use, or both.

Forty-seven percent of the de facto household population has access to an ITN (**Table 18.3 and Table 18.4)**, and 51% of the population slept under an ITN the night before the survey (**Table 18.5** and **Figure 18.6**). A comparison of these two population-level indicators shows that there is only a slight difference between ITN access and use. Overall, 90% of ITNs were used the night before the survey (**Table 18.6**).

Figure 18.6 **Access to and use of ITNs by residence**

Percentage of the household population with access to an insecticide-treated net (ITN) and percentage that slept under an ITN the night before the survey



Patterns by background characteristics

- The difference between ITN access and use is higher in rural areas (6 percentage points) than urban areas (1 percentage point) (**Figure 18.6**).
- The percentage of the household population that slept under an ITN the night before the survey is highest in the Eastern province (62%) and lowest in the Western Area province (29%) (**Table 18.5**).
- By district, the percentage of the population that slept under an ITN the night before the survey is highest in Bonthe (79%) and lowest in Western Area Urban (27%) (**Table 18.5**).
- Use of existing ITNs is more common in households in the lowest wealth quintile (93%) than in households in the highest wealth quintile (79%) (**Table 18.6**).

18.3 USE OF ITNS BY CHILDREN AND PREGNANT WOMEN

Children and pregnant women are particularly vulnerable to malaria. Fifty-nine percent of children under age 5 and 64% of pregnant women slept under an ITN the night before the survey (**Table 18.7** and **Table 18.8**).

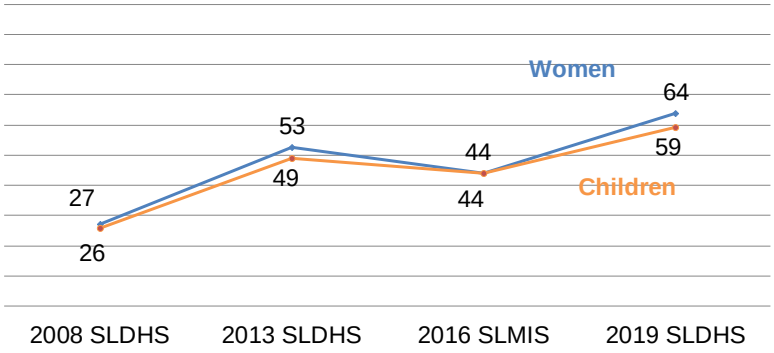
Trends: Use of ITNs among children under age 5 increased from 26% in 2008 to 59% in 2019. Among pregnant women, use of ITNs increased from 27% to 64% (**Figure 18.7**).

Patterns by background characteristics

- ITN use by children under age 5 decreases with increasing age, from 68% among those less than age 12 months to 53% among those age 48-59 months (**Table 18.7**).

Figure 18.7 **Trends in use of ITNs by pregnant women and children**

Percentage who slept under an insecticide-treated net (ITN)



Note: The definition of an ITN in surveys conducted prior to 2019 included nets that had been soaked with insecticides within the past 12 months.

- A higher percentage of rural (63%) than urban (51%) children slept under an ITN the night before the survey (**Table 18.7**). A similar pattern is observed among pregnant women (68% and 56%, respectively) (**Table 18.8**).
- The percentages of children and pregnant women who slept under an ITN the night before the survey are highest in the Eastern province (70% and 76%, respectively) and lowest in the Western Area province (38% and 37%, respectively).
- By district, the percentage of children who slept under an ITN the night before the survey is highest in Bonthe (86%) and lowest in Western Area Rural (37%).
- Children and pregnant women from households in the lowest wealth quintile (59% and 68%, respectively) were more likely to sleep under an ITN the night before the survey than those from households in the highest wealth quintile (46% and 48%, respectively) (**Table 18.7** and **Table 18.8**).

18.4 MALARIA IN PREGNANCY

Intermittent preventive treatment (IPTp) during pregnancy

Percentage of women who took at least three doses of SP/Fansidar during their last pregnancy.

Sample: Women age 15-49 with a live birth in the 2 years before the survey

Malaria infection during pregnancy is a major public health problem in Sierra Leone, with substantial risks for the mother, her foetus, and the neonate. Intermittent preventive treatment of malaria in pregnancy (IPTp) is a full therapeutic course of antimalarial medicine given to pregnant women at routine antenatal care visits to prevent malaria. IPTp helps prevent maternal malaria episodes, maternal and foetal anaemia, placental parasitaemia, low birth weight, and neonatal mortality.

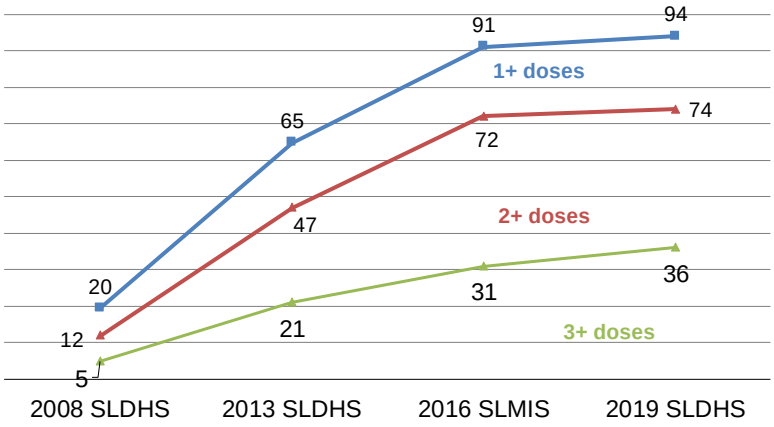
The World Health Organization (WHO) recommends a three-pronged approach for reducing the negative health effects associated with malaria in pregnancy: prompt diagnosis and treatment of confirmed infections, use of long-lasting insecticidal nets (LLINs), and IPTp (World Health Organization 2004).

Ninety-four percent (94%) of women with a live birth in the 2 years preceding the survey reported having taken one or more doses of SP/Fansidar, and 74% reported having taken two or more doses; however, only 36% of women reported having taken three or more doses (**Table 18.9**).

Trends: IPTp coverage for all doses has increased over the years. The percentage of women receiving at least one dose increased from 20% in 2008 to 94% in 2019, while the percentage receiving at least two doses increased from 12% to 74% and the percentage receiving at least three doses increased from 5% to 36% over the same period (**Figure 18.8**).

Figure 18.8 **Trends in IPTp use by pregnant women**

Percentage of women with a live birth in the 2 years before the survey who received at least 1, 2, or 3 doses of SP/Fansidar



Patterns by background characteristics

- IPTp coverage with three or more doses is highest in the Northern province (43%) and lowest in the Western Area province (24%).
- By district, IPTp coverage of three or more doses is highest in Falaba (72%) and lowest in Moyamba and Kono (13%).
- The percentage of pregnant women who received three or more doses of SP/Fansidar is higher in rural areas (38%) than in urban areas (32%) (**Table 18.9**).

18.5 Case Management of Malaria in Children

Care seeking for children under age 5 with fever

Percentage of children under age 5 with a fever in the 2 weeks before the survey for whom advice or treatment was sought from a health provider, a health facility, or a pharmacy.

Sample: Children under age 5 with a fever in the 2 weeks before the survey

Diagnosis of malaria in children under age 5 with fever

Percentage of children under age 5 with a fever in the 2 weeks before the survey who had blood taken from a finger or heel for testing. Fever or a history of fever is an entry point for parasitological testing for malaria.

Sample: Children under age 5 with a fever in the 2 weeks before the survey

Artemisinin-based combination therapy (ACT) for children under age 5 with fever

ACT is the recommended medicine for treatment of confirmed uncomplicated malaria in Sierra Leone. However, this survey collected information on the use of ACT for treatment of fever.

Among children under age 5 with a fever in the 2 weeks before the survey who took any antimalarial drugs, the percentage who received artemisinin-based combination therapy.

Sample: Children under age 5 with a fever in the 2 weeks before the survey

Seventeen percent of children under age 5 had a fever in the 2 weeks preceding the survey (**Table 18.10**). Advice or treatment was sought for 75% of these children, and 61% had blood taken from a finger or heel for testing.

Patterns by background characteristics

- The percentage of children with a fever in the 2 weeks preceding the survey ranges from 11% in the Northern province to 20% in the Eastern province (**Table 18.10**).
- By district, the percentage of children with a fever in the 2 weeks preceding the survey ranges from 7% in Tonkolili to 24% in Kenema.
- Sixty-five percent of rural children with a fever had blood taken from a finger or heel for testing, as compared with 54% of urban children.
- The percentage of children with fever who had blood taken from a finger or heel for testing decreases with increasing household wealth, from 67% among children in the lowest wealth quintile to 53% among those in the highest quintile (**Table 18.10**).

Source of Advice or Treatment for Children with Fever

Among children who received advice or treatment for fever in the 2 weeks preceding the survey, 88% went to a public sector provider, while 11% went to a private institution (**Table 18.11**). Among public sector institutions, most children received advice or treatment from government health centres (47%) and government hospitals (24%). Among private sector providers, the most prominent sources of care were pharmacies (8%) and private hospitals/clinics (3%).

Type of Antimalarial Drugs Used

WHO recommends artemisinin-based combination therapy (ACT) for the treatment of uncomplicated malaria caused by the *Plasmodium falciparum* parasite. In sub-Saharan Africa, the two most frequently recommended types of ACT are the drug combinations artesunate/amodiaquine (ASAQ) and artemether/lumefantrine (AL) (WHO 2015c). In 2013, ASAQ was the first-line ACT in Sierra Leone with AL as the alternate; in 2015, however, following the mass drug administration campaign during the Ebola outbreak, AL replaced ASAQ as the treatment of choice for uncomplicated malaria (Banek et al. 2018). Currently in Sierra Leone, the first-line drug for the treatment of uncomplicated malaria is AL, with ASAQ as an alternative option (Ministry of Health and Sanitation 2015).

The 2019 SLDHS results showed that among children with fever who were given antimalarial medications, almost one in three (32%) received ACT (**Table 18.12**), followed by amodiaquine (28%), SP/Fansidar (26%), artesunate rectal (19%), and artesunate injection/IV (7%). It is noteworthy that use of ACT among children with fever who were given antimalarial medications declined drastically from 96% in 2016 SLMIS to 32% in 2019. This decline may be due to confusion among respondents regarding the question "What drugs did [NAME] take?" In answering, respondents may have said amodiaquine when referring to the recommended antimalarial drug ACT. In Sierra Leone, ACT is colloquially referred to as amodiaquine, making it difficult to distinguish use of the single drug and the combination therapy. This confusion may stem from the word amodiaquine being part of the drug combination artesunate/amodiaquine, which was the first-line drug for many years in Sierra Leone.

To ensure the highest possible data quality during fieldwork, the enumerators were instructed to probe when a respondent said amodiaquine and were given samples of common antimalarial drugs to show to respondents to ensure that the correct drug was documented in the questionnaire. However, it is not always possible to accurately distinguish types of antimalarial drugs from respondents' recall during fieldwork without seeing the drug packaging from respondents. Additionally, the 2016 SLMIS and 2013 SLDHS questionnaires included a detailed list of various ACT medications, whereas the 2019 SLDHS

questionnaire included only a single broad ACT category. This could have led to confusion among enumerators when documenting the antimalarial drugs reported by respondents. Thus, it is possible that many of the children who reportedly received amodiaquine actually received ACT. If so, this would affect the estimate of children with fever who received ACT.

Patterns by background characteristics

- Use of ACT for treatment of fever is highest in the Northern province (46%) and lowest in the North West province (28%).
- Use of ACT for treatment of fever varies only minimally by mother's education.
- Among children with fever who took an antimalarial drug, the percentage who took ACT ranges from a high of 43% in the highest wealth quintile to a low of 25% in the fourth wealth quintile.

18.6 Prevalence of Low Haemoglobin in Children

Prevalence of low haemoglobin in children

Percentage of children age 6-59 months who had a haemoglobin measurement of less than 8 grams per decilitre (g/dl) of blood. The cutoff of 8 g/dl is often used to classify malaria-related anaemia.

Sample: Children age 6-59 months

Anaemia, defined as a reduced level of haemoglobin in the blood, decreases the amount of oxygen reaching the tissues and organs of the body and reduces their capacity to function. Anaemia is associated with impaired motor and cognitive development in children. The main causes of anaemia in children are malaria and inadequate intake of iron, folate, vitamin B12, and other nutrients. Other causes of anaemia include intestinal worms, haemoglobinopathy, and sickle cell disease. Although anaemia is not specific to malaria, trends in anaemia prevalence can reflect malaria morbidity, and they respond to changes in the coverage of malaria interventions (Korenromp et al. 2004).

In the 2019 SLDHS, samples for anaemia testing were drawn from children age 6-59 months in 50% of the households selected for the men's survey. The testing was conducted using the battery-operated portable HemoCue analyser. Among the children eligible for testing, 87% were tested for anaemia (**Table 18.13**). Results of the tests were given to the mothers or caregivers of the children. Mothers of children whose results indicated anaemia were counselled and referred to a nearby health centre. Overall, 7% of children age 6-59 months had a haemoglobin level of less than 8.0 g/dl (**Table 18.14**).

Patterns by background characteristics

- The prevalence of severe anaemia (haemoglobin level below 8.0 g/dl) is highest among children age 12-17 months (12%) and lowest among children age 48-59 months (5%) (**Table 18.14**).
- The percentage of children with severe anaemia decreases with increasing mother's education, from 9% among children whose mothers have no education to 3% among those whose mothers have more than a secondary education.
- Severe anaemia generally decreases with increasing household wealth, from 9% among children in the lowest wealth quintile to 3% among those in the highest quintile.

LIST OF TABLES

For more information on malaria, see the following tables:

Table 18.1 Household possession of mosquito nets

Percentage of households with at least one mosquito net (treated or untreated) and one insecticide-treated net (ITN), average number of nets and ITNs per household, and percentage of households with at least one net and ITN per two persons who stayed in the household last night, according to background characteristics, Sierra Leone DHS 2019

Background characteristic	Percentage of households with at least one mosquito net		Average number of nets per household		Number of households	Percentage of households with at least one net for every two persons who stayed in the household last night		Number of households with at least one person who stayed in the household last night
	Any mosquito net	Insecticide-treated mosquito net (ITN)[1]	Any mosquito net	Insecticide-treated mosquito net (ITN)[1]		Any mosquito net	Insecticide-treated mosquito net (ITN)[1]	
Residence								
Urban	61.4	60.0	1.1	1.1	5,680	21.4	20.7	5,670
Rural	73.8	73.7	1.5	1.5	7,719	28.2	28.1	7,715
Province								
Eastern	79.0	78.8	1.5	1.5	2,852	29.2	29.1	2,849
Northern	73.8	73.4	1.6	1.6	2,568	25.0	24.8	2,568
North West	65.4	65.1	1.4	1.4	2,195	24.6	24.4	2,193
Southern	75.2	75.0	1.5	1.5	2,641	29.1	29.0	2,640
Western Area	51.4	49.3	0.9	0.8	3,142	19.3	18.3	3,134
District								
Kailahun	81.7	81.6	1.5	1.5	771	36.1	36.0	771
Kenema	79.9	79.7	1.6	1.6	1,220	27.2	27.2	1,217
Kono	75.3	75.3	1.4	1.4	861	25.8	25.8	861
Bombali	72.9	72.5	1.4	1.4	947	25.7	25.3	947
Falaba	75.1	74.9	1.6	1.6	296	19.9	19.7	296
Koinadugu	75.7	74.4	1.7	1.7	347	25.7	25.2	347
Tonkolili	73.6	73.5	1.6	1.6	979	25.6	25.6	979
Kambia	72.8	72.5	1.9	1.9	662	28.6	28.5	662
Karene	72.0	71.4	1.4	1.4	460	30.6	30.2	460
Port Loko	58.1	57.9	1.1	1.1	1,074	19.6	19.3	1,071
Bo	68.7	68.3	1.3	1.3	1,073	23.3	23.1	1,073
Bonthe	94.8	94.8	2.2	2.2	434	47.7	47.7	434
Moyamba	69.4	69.3	1.3	1.3	646	19.4	19.4	645
Pujehun	79.8	79.8	1.6	1.6	489	38.2	38.2	488
Western Area Rural	51.8	48.8	0.9	0.9	1,139	18.0	16.6	1,137
Western Area Urban	51.2	49.6	0.9	0.8	2,003	20.0	19.2	1,997
Wealth quintile								
Lowest	68.8	68.7	1.2	1.2	2,879	25.8	25.7	2,877
Second	75.4	75.4	1.6	1.6	2,568	28.2	28.1	2,566
Middle	77.2	76.9	1.7	1.7	2,461	28.1	28.1	2,461
Fourth	64.0	62.6	1.2	1.2	2,704	23.5	22.8	2,703
Highest	58.8	57.2	1.1	1.1	2,787	21.5	20.6	2,778
Total	68.6	67.9	1.4	1.3	13,399	25.3	25.0	13,384

[1] An insecticide-treated net (ITN) is a factory-treated net that does not require any further treatment. In the 2013 SLDHS, 2013 SLMIS, and 2016 SLMIS, this was known as a long-lasting insecticidal net (LLIN).

Table 18.2 Source of mosquito nets

Percent distribution of mosquito nets by source of net, according to background characteristics, Sierra Leone DHS 2019

Background characteristic	Mass distribution campaign	ANC visit	Immunisation visit	Government health facility	Private health facility	Pharmacy	Shop/ market	Community health worker	Religious institution	School	Other	Don't know/ missing	Total	Number of mosquito nets
Type of net														
ITN[1]	83.9	8.1	3.4	0.6	0.0	0.0	2.5	0.1	0.0	0.1	1.2	0.0	100.0	18,028
Other[2]	0.0	0.0	0.0	0.0	0.0	0.0	84.6	0.0	0.0	0.8	12.3	2.3	100.0	182
Residence														
Urban	78.7	6.6	3.9	0.6	0.1	0.0	7.6	0.0	0.0	0.0	2.4	0.1	100.0	6,494
Rural	85.5	8.8	3.1	0.6	0.0	0.0	0.9	0.1	0.0	0.2	0.7	0.0	100.0	11,717
Province														
Eastern	84.9	8.5	2.6	0.2	0.0	0.0	2.2	0.0	0.0	0.0	1.7	0.0	100.0	4,363
Northern	86.5	7.1	3.7	0.1	0.0	0.0	1.5	0.3	0.0	0.0	0.7	0.0	100.0	4,056
North West	81.2	12.8	3.2	0.0	0.0	0.0	2.1	0.1	0.0	0.0	0.6	0.0	100.0	3,098
Southern	87.0	6.2	3.7	0.3	0.1	0.0	0.9	0.0	0.0	0.5	1.2	0.0	100.0	3,923
Western Area	71.6	6.0	4.1	3.0	0.1	0.0	12.4	0.0	0.0	0.0	2.6	0.2	100.0	2,770
District														
Kailahun	91.4	2.6	4.1	0.1	0.0	0.0	0.8	0.1	0.0	0.0	0.8	0.0	100.0	1,168
Kenema	79.8	13.8	1.6	0.0	0.0	0.0	2.0	0.0	0.0	0.0	2.8	0.0	100.0	1,968
Kono	86.9	5.6	2.6	0.5	0.0	0.0	3.8	0.0	0.0	0.0	0.7	0.0	100.0	1,227
Bombali	85.8	6.9	4.2	0.1	0.0	0.0	2.2	0.0	0.0	0.0	0.9	0.0	100.0	1,368
Falaba	93.9	1.6	3.0	0.0	0.0	0.0	0.9	0.0	0.0	0.0	0.6	0.1	100.0	476
Koinadugu	82.2	8.7	5.7	0.0	0.0	0.0	2.9	0.0	0.0	0.0	0.5	0.0	100.0	604
Tonkolili	86.5	8.4	2.8	0.3	0.0	0.0	0.6	0.7	0.0	0.0	0.7	0.0	100.0	1,608
Kambia	84.1	11.0	3.2	0.1	0.0	0.0	1.1	0.0	0.0	0.0	0.6	0.0	100.0	1,278
Karene	77.1	11.5	6.4	0.0	0.1	0.0	3.8	0.5	0.0	0.0	0.7	0.0	100.0	639
Port Loko	80.3	15.4	1.4	0.0	0.0	0.1	2.3	0.0	0.0	0.0	0.5	0.0	100.0	1,181
Bo	87.5	4.0	4.2	0.4	0.0	0.0	1.2	0.0	0.0	0.0	2.7	0.0	100.0	1,370
Bonthe	85.0	6.2	6.3	0.4	0.3	0.0	1.4	0.0	0.0	0.0	0.3	0.0	100.0	956
Moyamba	88.7	6.4	1.6	0.0	0.0	0.0	0.6	0.0	0.0	2.3	0.2	0.1	100.0	828
Pujehun	86.9	9.9	1.8	0.5	0.1	0.0	0.2	0.0	0.1	0.0	0.5	0.0	100.0	768
Western Area Rural	69.7	3.0	5.9	7.0	0.0	0.0	12.2	0.0	0.0	0.0	1.9	0.3	100.0	1,045
Western Area Urban	72.8	7.7	3.1	0.6	0.2	0.0	12.5	0.0	0.0	0.0	3.0	0.2	100.0	1,725
Wealth quintile														
Lowest	84.6	10.1	3.5	0.2	0.0	0.0	0.8	0.1	0.0	0.0	0.6	0.0	100.0	3,529
Second	85.7	9.4	2.9	0.5	0.0	0.0	0.6	0.2	0.0	0.0	0.7	0.0	100.0	4,070
Middle	86.2	7.5	3.2	1.1	0.0	0.0	1.2	0.1	0.0	0.0	0.7	0.0	100.0	4,162
Fourth	81.4	6.8	4.5	0.6	0.0	0.0	4.6	0.0	0.0	0.5	1.5	0.1	100.0	3,360
Highest	75.3	6.0	3.0	0.6	0.2	0.0	11.1	0.0	0.0	0.0	3.5	0.2	100.0	3,089
Total	83.1	8.0	3.4	0.6	0.0	0.0	3.3	0.1	0.0	0.1	1.3	0.0	100.0	18,210

ANC = Antenatal care
[1] An insecticide-treated net (ITN) is a factory-treated net that does not require any further treatment. In the 2013 SLDHS, 2013 SLMIS, and 2016 SLMIS, this was known as a long-lasting insecticidal net (LLIN).
[2] Any net that is not an ITN

Table 18.3 Access to an insecticide-treated net (ITN)

Percent distribution of the de facto household population by number of ITNs the household owns, according to number of persons who stayed in the household the night before the survey, Sierra Leone DHS 2019

	Number of persons who stayed in the household the night before the survey								
Number of ITNs[1]	1	2	3	4	5	6	7	8+	Total
0	50.4	38.4	33.4	31.6	27.3	32.5	26.2	28.0	29.8
1	44.9	44.5	41.9	36.5	28.0	21.5	17.3	12.0	23.4
2	3.5	13.7	18.3	23.6	29.4	23.7	24.9	16.3	21.2
3	1.1	2.2	5.2	6.8	11.8	16.5	21.4	17.8	14.0
4	0.2	1.2	0.6	1.2	2.9	4.0	8.7	13.3	6.7
5	0.0	0.0	0.5	0.3	0.5	1.4	1.2	8.0	3.1
6	0.0	0.0	0.0	0.0	0.0	0.5	0.3	2.8	1.0
7	0.0	0.0	0.0	0.0	0.0	0.0	0.1	1.8	0.6
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number	946	2,221	5,309	8,797	10,904	10,071	8,347	23,122	69,717
Percentage of the de facto population with access to an ITN[2]	49.6	61.6	52.6	50.1	50.0	45.3	47.7	41.5	46.8

[1] An insecticide-treated net (ITN) is a factory-treated net that does not require any further treatment. In the 2013 SLDHS, 2013 SLMIS, and 2016 SLMIS, this was known as a long-lasting insecticidal net (LLIN).
[2] Percentage of the de facto household population who could sleep under an ITN if each ITN in the household were used by up to two people

Table 18.4 Access to an ITN according to background characteristics

Percentage of the de facto population with access to an ITN in the household, by background characteristics, Sierra Leone DHS 2019

Background characteristic	Percentage of the de facto population with access to an ITN[1,2]	Number of persons
Residence		
Urban	40.2	28,632
Rural	51.4	41,085
Province		
Eastern	53.5	14,726
Northern	50.7	14,527
North West	45.5	12,277
Southern	51.6	13,735
Western Area	32.5	14,452
District		
Kailahun	57.6	3,485
Kenema	53.5	6,791
Kono	50.5	4,451
Bombali	49.6	5,002
Falaba	49.1	1,787
Koinadugu	54.0	2,037
Tonkolili	51.0	5,701
Kambia	52.4	4,443
Karene	48.9	2,363
Port Loko	38.5	5,471
Bo	43.9	5,740
Bonthe	75.4	2,233
Moyamba	43.9	3,474
Pujehun	59.1	2,288
Western Area Rural	32.2	5,568
Western Area Urban	32.7	8,884
Wealth quintile		
Lowest	45.9	13,893
Second	52.6	14,004
Middle	54.0	13,999
Fourth	42.7	13,902
Highest	38.6	13,920
Total	46.8	69,717

[1] An insecticide-treated net (ITN) is a factory-treated net that does not require any further treatment. In the 2013 SLDHS, 2013 SLMIS, and 2016 SLMIS, this was known as a long-lasting insecticidal net (LLIN).
[2] Percentage of the de facto household population who could sleep under an ITN if each ITN in the household were used by up to two people

Table 18.5 Use of mosquito nets by persons in the household

Percentage of the de facto household population who slept the night before the survey under a mosquito net (treated or untreated) and under an insecticide-treated net (ITN), and among the de facto household population in households with at least one ITN, percentage who slept under an ITN the night before the survey, according to background characteristics, Sierra Leone DHS 2019

	Household population			Household population in households with at least one ITN[1]	
Background characteristic	Percentage who slept under any mosquito net last night	Percentage who slept under an ITN[1] last night	Number of persons	Percentage who slept under an ITN[1] last night	Number of persons
Age					
<5	59.6	59.1	10,162	79.8	7,528
5-14	43.4	43.1	20,780	61.1	14,651
15-34	46.7	46.3	20,628	68.1	14,038
35-49	61.3	60.7	9,439	86.2	6,646
50+	58.5	57.9	8,708	83.2	6,062
Sex					
Male	48.4	48.1	33,793	69.1	23,535
Female	53.4	53.0	35,924	75.0	25,391
Residence					
Urban	41.6	40.9	28,632	64.3	18,196
Rural	57.6	57.4	41,085	76.8	30,730
Province					
Eastern	61.9	61.8	14,726	77.7	11,720
Northern	56.5	56.4	14,527	75.0	10,917
North West	48.4	48.1	12,277	72.0	8,200
Southern	57.9	57.8	13,735	75.6	10,495
Western Area	30.0	28.8	14,452	54.7	7,595
District					
Kailahun	64.2	64.1	3,485	76.5	2,922
Kenema	61.6	61.5	6,791	76.7	5,447
Kono	60.6	60.5	4,451	80.3	3,351
Bombali	55.7	55.7	5,002	74.9	3,714
Falaba	54.3	54.0	1,787	70.2	1,373
Koinadugu	59.9	59.2	2,037	76.1	1,585
Tonkolili	56.8	56.8	5,701	76.2	4,244
Kambia	53.5	53.2	4,443	72.0	3,284
Karene	56.5	56.0	2,363	79.4	1,666
Port Loko	40.8	40.5	5,471	68.2	3,249
Bo	50.4	50.1	5,740	72.6	3,960
Bonthe	79.3	79.3	2,233	82.8	2,138
Moyamba	49.8	49.7	3,474	69.8	2,471
Pujehun	68.3	68.3	2,288	81.1	1,926
Western Area Rural	33.0	31.0	5,568	59.8	2,893
Western Area Urban	28.1	27.3	8,884	51.7	4,702
Wealth quintile					
Lowest	53.1	53.0	13,893	76.6	9,603
Second	58.7	58.7	14,004	77.2	10,658
Middle	60.1	59.8	13,999	76.6	10,930
Fourth	46.4	45.5	13,902	69.0	9,175
Highest	36.6	36.0	13,920	58.5	8,560
Total	51.0	50.6	69,717	72.1	48,926

[1] An insecticide-treated net (ITN) is a factory-treated net that does not require any further treatment. In the 2013 SLDHS, 2013 SLMIS, and 2016 SLMIS, this was known as a long-lasting insecticidal net (LLIN).

Table 18.6 Use of existing ITNs

Percentage of insecticide-treated nets (ITNs) that were used by anyone the night before the survey, according to background characteristics, Sierra Leone DHS 2019

Background characteristic	Percentage of existing ITNs[1] used last night	Number of ITNs[1]
Residence		
Urban	84.9	6,342
Rural	92.0	11,686
Province		
Eastern	93.2	4,358
Northern	91.4	4,042
North West	92.6	3,076
Southern	91.8	3,911
Western Area	73.7	2,642
District		
Kailahun	89.8	1,166
Kenema	93.7	1,966
Kono	95.7	1,226
Bombali	93.0	1,364
Falaba	88.6	472
Koinadugu	87.5	598
Tonkolili	92.1	1,607
Kambia	92.5	1,274
Karene	93.7	631
Port Loko	92.1	1,171
Bo	95.6	1,361
Bonthe	89.8	956
Moyamba	87.4	825
Pujehun	92.1	768
Western Area Rural	82.8	971
Western Area Urban	68.4	1,670
Wealth quintile		
Lowest	92.9	3,520
Second	92.3	4,066
Middle	92.5	4,144
Fourth	88.5	3,293
Highest	78.7	3,004
Total	89.5	18,028

[1] An insecticide-treated net (ITN) is a factory-treated net that does not require any further treatment. In the 2013 SLDHS, 2013 SLMIS, and 2016 SLMIS, this was known as a long-lasting insecticidal net (LLIN).

Table 18.7 Use of mosquito nets by children

Percentage of children under age 5 who, the night before the survey, slept under a mosquito net (treated or untreated) and under an insecticide-treated net (ITN), and among children under age 5 in households with at least one ITN, percentage who slept under an ITN the night before the survey, according to background characteristics, Sierra Leone DHS 2019

	Children under age 5 in all households			Children under age 5 in households with at least one ITN[1]	
Background characteristic	Percentage who slept under any mosquito net last night	Percentage who slept under an ITN[1] last night	Number of children	Percentage who slept under an ITN[1] last night	Number of children
Age in months					
<12	68.1	67.6	1,995	85.9	1,570
12-23	62.4	61.9	1,972	83.8	1,456
24-35	60.2	59.8	1,892	79.4	1,426
36-47	54.3	53.9	2,166	74.8	1,560
48-59	53.6	53.2	2,137	75.0	1,517
Sex					
Male	59.5	59.1	5,131	79.5	3,815
Female	59.6	59.1	5,030	80.1	3,713
Residence					
Urban	52.0	51.0	3,512	74.7	2,395
Rural	63.5	63.4	6,650	82.1	5,133
Province					
Eastern	70.2	70.0	2,203	86.0	1,794
Northern	64.7	64.5	2,124	82.8	1,655
North West	55.1	54.5	1,915	76.3	1,366
Southern	64.3	64.2	2,163	81.8	1,699
Western Area	39.1	37.6	1,757	65.1	1,015
District					
Kailahun	68.9	68.9	530	81.3	450
Kenema	70.2	70.0	1,050	86.0	855
Kono	71.1	71.0	623	90.2	490
Bombali	65.2	65.2	704	85.0	540
Falaba	68.1	67.9	256	82.3	211
Koinadugu	66.8	65.7	323	82.1	259
Tonkolili	62.5	62.5	841	81.4	645
Kambia	56.2	55.4	680	71.2	529
Karene	60.4	60.1	378	84.1	270
Port Loko	51.8	51.2	857	77.4	567
Bo	57.2	57.0	783	79.8	559
Bonthe	85.5	85.5	390	88.3	378
Moyamba	53.8	53.8	607	76.0	429
Pujehun	73.8	73.8	384	85.0	333
Western Area Rural	38.9	37.2	764	68.1	417
Western Area Urban	39.2	37.9	994	63.0	597
Wealth quintile					
Lowest	59.2	59.0	2,449	82.0	1,763
Second	65.5	65.4	2,261	82.3	1,797
Middle	66.7	66.3	2,123	82.9	1,698
Fourth	54.5	53.4	1,842	79.1	1,242
Highest	47.3	46.3	1,486	67.0	1,027
Total	59.6	59.1	10,162	79.8	7,528

Note: Table is based on children who stayed in the household the night before the interview.
[1] An insecticide-treated net (ITN) is a factory-treated net that does not require any further treatment. In the 2013 SLDHS, 2013 SLMIS, and 2016 SLMIS, this was known as a long-lasting insecticidal net (LLIN).

Table 18.8 Use of mosquito nets by pregnant women

Percentage of pregnant women age 15-49 who, the night before the survey, slept under a mosquito net (treated or untreated) and under an insecticide-treated net (ITN), and among pregnant women age 15-49 in households with at least one ITN, percentage who slept under an ITN the night before the survey, according to background characteristics, Sierra Leone DHS 2019

	Among pregnant women age 15-49 in all households			Among pregnant women age 15-49 in households with at least one ITN[1]	
Background characteristic	Percentage who slept under any mosquito net last night	Percentage who slept under an ITN[1] last night	Number of pregnant women	Percentage who slept under an ITN[1] last night	Number of pregnant women
Residence					
Urban	56.5	55.9	311	77.8	223
Rural	67.8	67.6	645	87.6	497
Province					
Eastern	76.6	76.3	203	86.6	179
Northern	66.4	66.4	202	90.1	149
North West	62.5	62.3	191	83.4	143
Southern	68.3	68.0	221	88.2	171
Western Area	37.9	37.0	138	64.1	80
District					
Kailahun	72.7	71.2	45	(84.0)	38
Kenema	80.5	80.5	103	86.3	96
Kono	72.6	72.6	55	(89.4)	44
Bombali	62.5	62.5	53	(81.8)	41
Falaba	(56.2)	(56.2)	22	(84.6)	15
Koinadugu	77.8	77.8	29	(91.8)	25
Tonkolili	67.4	67.4	98	95.7	69
Kambia	68.8	68.8	69	78.5	61
Karene	47.2	46.3	40	(74.5)	25
Port Loko	64.5	64.5	82	(92.4)	58
Bo	60.2	60.2	93	89.2	62
Bonthe	(91.9)	(91.9)	33	(93.6)	32
Moyamba	66.6	65.5	62	85.2	47
Pujehun	70.4	70.4	34	(84.8)	29
Western Area Rural	(41.7)	(39.8)	60	(70.8)	34
Western Area Urban	34.9	34.9	78	(59.2)	46
Education					
No education	66.8	66.4	496	91.4	361
Primary	64.3	64.3	152	74.1	132
Secondary	59.8	59.4	284	81.0	208
More than secondary	*	*	23	*	20
Wealth quintile					
Lowest	68.1	68.1	238	92.8	174
Second	66.5	66.5	219	83.9	174
Middle	66.9	66.5	188	87.7	143
Fourth	66.3	65.0	166	85.5	126
Highest	47.7	47.7	145	66.6	104
Total	64.1	63.8	956	84.6	721

Note: Table is based on women who stayed in the household the night before the interview. Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

[1] An insecticide-treated net (ITN) is a factory-treated net that does not require any further treatment. In the 2013 SLDHS, 2013 SLMIS, and 2016 SLMIS, this was known as a long-lasting insecticidal net (LLIN).

Table 18.9 Use of intermittent preventive treatment (IPTp) by women during pregnancy

Percentage of women age 15-49 with a live birth in the 2 years preceding the survey who, during the pregnancy that resulted in the last live birth, received one or more doses of SP/Fansidar, received two or more doses of SP/Fansidar, and received three or more doses of SP/Fansidar, according to background characteristics, Sierra Leone DHS 2019

Background characteristic	Percentage who received one or more doses of SP/Fansidar	Percentage who received two or more doses of SP/Fansidar	Percentage who received three or more doses of SP/Fansidar	Number of women with a live birth in the 2 years preceding the survey
Residence				
Urban	94.2	73.0	31.6	1,392
Rural	93.1	74.3	37.9	2,558
Province				
Eastern	90.9	72.3	35.4	847
Northern	95.5	71.1	42.6	796
North West	95.3	78.8	41.1	758
Southern	92.3	76.0	34.6	816
Western Area	93.7	71.0	24.2	733
District				
Kailahun	94.2	71.9	40.2	187
Kenema	87.1	76.9	46.8	410
Kono	94.6	65.2	13.1	250
Bombali	96.7	67.5	36.8	290
Falaba	89.1	79.4	71.7	81
Koinadugu	92.8	73.6	56.5	121
Tonkolili	97.1	71.4	34.8	303
Kambia	96.9	84.7	43.6	242
Karene	92.6	76.3	48.3	154
Port Loko	95.4	75.9	36.4	362
Bo	95.6	83.0	51.8	298
Bonthe	90.5	67.3	26.0	157
Moyamba	91.1	71.8	13.3	216
Pujehun	89.1	77.4	40.1	145
Western Area Rural	89.1	68.9	21.6	322
Western Area Urban	97.3	72.6	26.2	412
Education				
No education	93.4	73.7	36.2	2,037
Primary	89.7	72.4	38.1	610
Secondary	95.4	74.8	33.9	1,199
More than secondary	94.2	73.3	32.4	105
Wealth quintile				
Lowest	92.0	70.5	34.0	917
Second	92.3	75.0	40.6	867
Middle	94.1	78.6	40.8	792
Fourth	93.8	72.3	32.5	752
Highest	96.1	73.0	28.8	622
Total	93.5	73.8	35.7	3,950

Table 18.10 Prevalence, diagnosis, and prompt treatment of children with fever

Percentage of children under age 5 with a fever in the 2 weeks preceding the survey, and among children under age 5 with fever, percentage for whom advice or treatment was sought, percentage for whom advice or treatment was sought the same or next day following the onset of fever, and percentage who had blood taken from a finger or heel for testing, according to background characteristics, Sierra Leone DHS 2019

	Children under age 5		Children under age 5 with fever			
Background characteristic	Percentage with a fever in the 2 weeks preceding the survey	Number of children	Percentage for whom advice or treatment was sought[1]	Percentage for whom advice or treatment was sought the same or next day[1]	Percentage who had blood taken from a finger or heel for testing	Number of children
Age in months						
<12	14.8	1,958	76.9	54.4	50.1	290
12-23	21.3	1,838	77.3	48.5	66.8	392
24-35	17.7	1,666	74.7	47.3	65.8	295
36-47	13.1	1,738	70.1	47.4	61.5	228
48-59	15.4	1,694	76.1	50.7	60.1	260
Sex						
Male	16.5	4,479	75.8	51.7	62.2	737
Female	16.5	4,414	75.0	47.6	60.4	728
Residence						
Urban	16.1	3,137	75.1	48.4	54.4	504
Rural	16.7	5,757	75.5	50.3	64.9	961
Province						
Eastern	20.2	1,891	75.5	62.8	64.1	381
Northern	10.7	1,776	73.1	43.9	55.7	189
North West	16.1	1,687	77.0	35.3	56.8	272
Southern	18.6	1,914	79.6	54.8	72.2	356
Western Area	16.4	1,626	69.5	42.6	51.2	266
District						
Kailahun	15.4	428	76.7	58.9	69.6	66
Kenema	24.4	923	72.8	65.0	78.5	226
Kono	16.6	540	81.4	60.1	23.7	90
Bombali	8.4	594	(69.2)	(54.9)	(54.8)	50
Falaba	15.4	224	(75.9)	(52.5)	(48.7)	34
Koinadugu	20.4	274	77.5	42.6	63.3	56
Tonkolili	7.1	684	(69.9)	(28.1)	(52.9)	49
Kambia	15.8	577	84.1	41.1	65.9	91
Karene	14.5	335	70.0	35.1	49.8	49
Port Loko	17.1	775	74.7	31.5	53.1	132
Bo	17.5	701	72.8	59.6	66.2	123
Bonthe	23.1	365	92.4	31.9	84.8	84
Moyamba	15.5	513	76.9	62.8	66.0	79
Pujehun	20.8	335	79.0	64.8	74.4	70
Western Area Rural	20.0	700	59.2	34.6	53.5	140
Western Area Urban	13.6	926	81.0	51.4	48.7	126
Mother's education						
No education	16.0	4,819	74.5	48.3	60.9	772
Primary	20.3	1,297	75.3	49.9	60.1	264
Secondary	15.4	2,530	78.3	53.6	63.8	388
More than secondary	16.7	247	(65.3)	(35.7)	(52.7)	41
Wealth quintile						
Lowest	17.6	2,066	76.6	52.6	66.5	364
Second	15.8	1,987	75.1	47.7	66.6	315
Middle	16.5	1,818	76.0	51.2	61.1	299
Fourth	16.9	1,646	72.5	45.5	54.7	278
Highest	15.2	1,376	76.7	50.7	53.0	209
Total	16.5	8,893	75.4	49.6	61.3	1,465

Note: Figures in parentheses are based on 25-49 unweighted cases.
[1] Includes advice or treatment from the following sources: public sector, private medical sector, shop, market, and itinerant drug seller. Excludes advice or treatment from a traditional practitioner.

Table 18.11 Source of advice or treatment for children with fever

Percentage of children under age 5 with a fever in the 2 weeks preceding the survey for whom advice or treatment was sought from specific sources, and among children under age 5 with a fever in the 2 weeks preceding the survey for whom advice or treatment was sought, percentage for whom advice or treatment was sought from specific sources, Sierra Leone DHS 2019

	Percentage for whom advice or treatment was sought from each source	
Source	Among children with fever	Among children with fever for whom advice or treatment was sought
Public sector	66.6	88.2
Government hospital	17.9	23.7
Government health centre	35.2	46.7
Government health post	12.3	16.3
Mobile clinic	0.7	0.9
Fieldworker/CHW	1.1	1.5
Private sector	8.2	10.8
Private hospital/clinic	1.9	2.5
Pharmacy	5.9	7.8
Private doctor	0.1	0.1
Fieldworker/CHW	0.3	0.5
Other private sector	1.2	1.6
Shop	0.3	0.4
Traditional practitioner	0.1	0.2
Market	0.1	0.1
Itinerant drug seller	0.7	1.0
Other	0.2	0.2
Number of children	1,465	1,106

CHW = Community health worker

Table 18.12 Type of antimalarial drugs used

Among children under age 5 with a fever in the 2 weeks preceding the survey who took any antimalarial medication, percentage who took specific antimalarial drugs, according to background characteristics, Sierra Leone DHS 2019

Background characteristic	Percentage of children who took:									Number of children with fever who took anti-malarial drug
	Any ACT	SP/ Fansidar	Chloro-quine	Amodia-quine	Quinine pills	Quinine injection/IV	Artesunate rectal	Artesunate injection/IV	Other anti-malarial	
Age in months										
<6	(28.6)	(17.9)	(10.6)	(16.6)	(0.0)	(3.3)	(20.8)	(3.5)	(0.0)	34
6-11	38.1	23.3	4.0	23.3	0.2	0.2	25.4	2.8	1.6	97
12-23	22.4	28.5	2.2	29.2	1.3	0.4	21.9	6.9	2.2	225
24-35	38.9	25.8	0.5	25.5	1.5	1.7	15.3	10.1	1.3	173
36-47	30.1	30.6	4.3	27.7	0.0	3.3	14.9	9.6	1.3	135
48-59	36.5	22.0	3.0	32.5	1.2	1.4	16.8	4.3	0.7	156
Sex										
Male	31.9	25.2	2.9	29.5	0.8	1.3	21.8	4.9	0.8	416
Female	32.0	26.8	2.8	25.6	1.0	1.5	15.6	9.0	2.1	403
Residence										
Urban	30.3	24.1	5.5	26.4	0.9	0.9	19.0	8.3	2.7	270
Rural	32.7	26.9	1.6	28.1	0.9	1.7	18.6	6.2	0.8	550
Province										
Eastern	29.5	24.4	1.1	44.5	1.1	0.0	3.7	1.6	2.5	204
Northern	46.0	31.6	9.1	21.7	3.9	8.6	8.4	8.1	0.0	96
North West	28.0	21.1	2.3	9.3	0.0	0.8	51.3	12.8	2.1	160
Southern	28.9	28.6	0.5	35.2	0.7	0.9	12.7	7.1	0.7	222
Western Area	35.3	25.9	5.8	15.5	0.0	0.0	20.3	6.8	1.1	137
District										
Kailahun	(57.6)	(22.0)	(1.4)	(15.9)	(0.0)	(0.0)	(3.6)	(2.6)	(2.1)	41
Kenema	15.9	25.6	1.1	60.7	1.0	0.0	1.1	0.0	3.6	117
Kono	(39.5)	(23.3)	(0.9)	(28.7)	(2.1)	(0.0)	(10.3)	(4.8)	(0.0)	46
Bombali	(49.7)	(37.7)	(6.3)	(27.0)	(6.8)	(3.4)	(6.2)	(3.4)	(0.0)	24
Falaba	(68.5)	(29.5)	(11.9)	(12.3)	(4.2)	(16.5)	(0.0)	(4.2)	(0.0)	25
Koinadugu	(37.0)	(38.2)	(10.7)	(35.6)	(3.7)	(6.4)	(0.0)	(3.2)	(0.0)	29
Tonkolili	*	*	*	*	*	*	*	*	*	18
Kambia	26.7	13.5	5.9	9.9	0.0	0.0	55.5	20.3	2.0	62
Karene	(57.0)	(32.3)	(0.0)	(3.3)	(0.0)	(1.7)	(0.0)	(8.3)	(3.3)	29
Port Loko	17.1	23.3	0.0	11.2	0.0	1.3	68.7	7.9	1.7	69
Bo	33.7	38.7	0.0	48.8	0.0	0.0	2.4	2.0	1.1	81
Bonthe	12.7	33.9	1.4	32.9	0.0	0.8	15.4	15.0	0.0	80
Moyamba	64.1	0.0	0.0	0.9	0.0	1.5	32.7	1.7	0.0	40
Pujehun	(4.7)	(24.9)	(0.0)	(56.6)	(7.2)	(4.1)	(3.5)	(7.1)	(3.3)	21
Western Area Rural	32.5	34.0	3.5	8.4	0.0	0.0	20.1	7.9	0.0	85
Western Area Urban	(39.8)	(12.7)	(9.5)	(27.2)	(0.0)	(0.0)	(20.6)	(5.0)	(2.9)	52
Mother's education										
No education	31.1	26.4	3.4	26.7	1.3	2.3	20.1	8.3	1.1	435
Primary	34.2	24.8	2.9	28.0	0.8	0.3	16.3	5.1	0.5	145
Secondary	31.0	27.7	2.0	29.0	0.0	0.6	18.0	5.7	2.1	223
More than secondary	*	*	*	*	*	*	*	*	*	17
Wealth quintile										
Lowest	30.8	25.8	0.6	32.6	1.4	0.7	14.3	4.6	0.7	222
Second	31.7	28.4	2.1	28.2	0.1	4.3	20.0	7.8	0.2	169
Middle	33.7	23.7	2.3	24.6	0.8	1.3	21.7	8.5	3.3	171
Fourth	25.2	27.9	5.9	26.0	0.9	0.4	22.1	8.2	0.8	159
Highest	42.8	23.2	5.6	22.7	1.7	0.0	15.9	5.9	2.8	98
Total	31.9	26.0	2.9	27.6	0.9	1.4	18.8	6.9	1.4	820

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
ACT = Artemisinin-based combination therapy

Table 18.13 Coverage of testing for anaemia in children

Percentage of eligible children age 6-59 months who were tested for anaemia, according to background characteristics (unweighted), Sierra Leone DHS 2019

Background characteristic	Percentage tested for anaemia	Number of children
Age in months		
6-8	84.4	314
9-11	88.2	238
12-17	85.7	643
18-23	87.2	422
24-35	89.8	1,043
36-47	84.1	1,147
48-59	86.7	1,147
Sex		
Male	87.0	2,525
Female	86.2	2,429
Mother's interview status		
Interviewed	88.6	3,957
Not interviewed but in household	43.9	132
Not interviewed and not in the household[1]	83.9	865
Residence		
Urban	88.4	1,473
Rural	85.9	3,481
Province		
Eastern	96.5	994
Northern	83.4	1,214
North West	67.8	941
Southern	95.2	1,236
Western Area	88.6	569
District		
Kailahun	97.1	276
Kenema	98.5	403
Kono	93.3	315
Bombali	82.6	373
Falaba	79.5	258
Koinadugu	71.5	239
Tonkolili	95.6	344
Kambia	60.1	331
Karene	67.8	255
Port Loko	74.9	355
Bo	99.1	345
Bonthe	90.6	266
Moyamba	94.0	349
Pujehun	96.4	276
Western Area Rural	84.6	285
Western Area Urban	92.6	284
Mother's education[2]		
No education	85.0	2,374
Primary	92.4	609
Secondary	88.7	1,003
More than secondary	91.3	103
Wealth quintile		
Lowest	88.6	1,325
Second	84.7	1,144
Middle	85.0	1,078
Fourth	86.2	847
Highest	89.6	560
Total	86.6	4,954

[1] Includes children whose mothers are deceased
[2] For women who are not interviewed, information on education is taken from the Household Questionnaire. Excludes children whose mothers are not listed in the Household Questionnaire.

Table 18.14 Haemoglobin <8.0 g/dl in children

Percentage of children age 6-59 months with haemoglobin lower than 8.0 g/dl, by background characteristics, Sierra Leone DHS 2019

Background characteristic	Haemoglobin <8.0 g/dl	Number of children
Age in months		
6-8	6.7	262
9-11	7.9	210
12-17	11.7	536
18-23	8.3	366
24-35	7.2	902
36-47	7.1	967
48-59	4.9	980
Sex		
Male	8.5	2,129
Female	6.1	2,094
Mother's interview status		
Interviewed	7.6	3,428
Not interviewed but in household	10.9	60
Not interviewed and not in the household[1]	5.5	736
Residence		
Urban	4.2	1,438
Rural	8.9	2,785
Province		
Eastern	8.7	1,005
Northern	7.7	916
North West	8.9	602
Southern	6.1	992
Western Area	5.1	709
District		
Kailahun	6.0	239
Kenema	12.2	483
Kono	5.1	283
Bombali	5.5	339
Falaba	23.8	112
Koinadugu	6.9	100
Tonkolili	5.1	365
Kambia	7.4	180
Karene	6.0	121
Port Loko	11.0	300
Bo	4.5	387
Bonthe	3.8	163
Moyamba	8.4	256
Pujehun	8.2	185
Western Area Rural	7.2	288
Western Area Urban	3.7	421
Mother's education[2]		
No education	9.4	1,892
Primary	6.2	581
Secondary	5.6	916
More than secondary	3.4	99
Wealth quintile		
Lowest	9.2	1,065
Second	9.7	939
Middle	7.6	858
Fourth	4.9	750
Highest	2.8	612
Total	7.3	4,223

Note: Table is based on children who stayed in the household the night before the interview. Prevalence of anaemia is based on haemoglobin levels and is adjusted for altitude using CDC formulas (CDC 1998). Haemoglobin is measured in grams per decilitre (g/dl).

[1] Includes children whose mothers are deceased

[2] For women who are not interviewed, information is taken from the Household Questionnaire. Excludes children whose mothers are not listed in the Household Questionnaire.

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SAMPLE DESIGN

Appendix A

A.1 INTRODUCTION

This appendix describes the objectives of the survey, the overall sample size, survey domains, and any subsamples used. The 2019 Sierra Leone Demographic and Health Survey (2019 SLDHS) is a nationwide survey with a nationally representative sample of approximately 13,872 selected households. All women age 15-49 who are usual household members or who spent the night before the survey in the selected households were eligible for individual interviews. In a subsample of every second household selected for the survey, all men age 15-59 were selected for interviewing. In this subsample, all women and men eligible for the individual survey were also eligible for HIV testing. In the same subsample of households, all women and men eligible for the survey and all children age 6-59 months were eligible for anaemia testing and height and weight measurements.

The survey was designed to produce reliable estimates for key indicators at the national level as well as for urban and rural areas and each of Sierra Leone's five provinces and 16 districts.

A.2 SAMPLE FRAME

Administratively, Sierra Leone is divided into five provinces. Each province is subdivided into districts, each district into chiefdoms/census wards (census wards in the Western Area province and chiefdoms in the other provinces), and each chiefdom/census ward into sections. In total, there are 16 districts, 195 chiefdoms, 12 census wards, and 1,343 sections. In addition to these administrative units, during the 2015 Sierra Leone Population and Housing Census (2015 SLPHC), each section was subdivided into convenient area units called enumeration areas (EAs).

The sampling frame used for the 2019 SLDHS is the frame of the 2015 SLPHC, provided by Statistics Sierra Leone (Stats SL). The census frame is a complete list of all census enumeration areas created for the 2015 census. **Table A.1** shows the distribution of households at the time of the 2015 census by the geographic domains of interest in the SLDHS (i.e., provinces, districts, and urban-rural areas). The proportion of households varies by district, from 2.11% inFalaba to 18.17% in Western Area Urban. In Sierra Leone, 44.88% of households are in urban areas. **Table A.2** presents the distribution of EAs and their average size in number of households by province, district, and type of residence. There are 12,856 EAs in total; among them, 5,296 are in urban areas and 7,560 are in rural areas. The average EA size is 98 households (107 households in urban areas and 92 households in rural areas). The EA size is adequate for a primary sampling unit (PSU), with a sample take of 26 households per EA. The small size of EAs and the availability of sketch maps and other materials to delimit their geographic boundaries make census EAs ideal for use as the frame in the first stage of selection of the SLDHS sample.

Table A.1 Households

Distribution of households in the census frame by district and residence

Province/district	Households in frame			Percent of total households	Percent urban
	Urban	Rural	Total		
Eastern					
Kailahun	26,032	57,316	83,348	6.59	31.23
Kenema	48,343	63,391	111,734	8.83	43.27
Kono	24,189	61,930	86,119	6.80	28.09
Northern					
Bombali	30,545	46,499	77,044	6.09	39.65
Falaba	1,634	25,100	26,734	2.11	6.11
Koinadugu	8,530	20,844	29,374	2.32	29.04
Tonkolili	18,393	65,854	84,247	6.66%	21.83
North West					
Kambia	16,256	37,570	53,826	4.25	30.20
Karene	3,055	43,038	46,093	3.64	6.63
Port Loko	29,319	67,872	97,191	7.68	30.17
Southern					
Bo	34,311	68,412	102,723	8.12	33.40
Bonthe	6,214	26,324	32,538	2.57	19.10
Moyamba	4,489	57,391	61,880	4.89	7.25
Pujehun	4,416	47,098	51,514	4.07	8.57
Western Area					
Western Area Rural	82,386	8,898	91,284	7.21	90.25
Western Area Urban	229,951	0	229,951	18.17	100.00
Sierra Leone	568,063	697,537	1,265,600	100.00	44.88

Table A.2 Enumeration areas

Number of EAs and average EA size by district and type of residence

Province/district	Number of EAs			Average EA size		
	Urban	Rural	Total	Urban	Rural	Total
Eastern						
Kailahun	276	615	891	94	93	94
Kenema	441	678	1,119	110	93	100
Kono	201	586	787	120	106	109
Northern						
Bombali	266	464	730	115	100	106
Falaba	24	330	354	68	76	76
Koinadugu	123	271	394	69	77	75
Tonkolili	207	834	1,041	89	79	81
North West						
Kambia	200	376	576	81	100	93
Karene	26	409	435	118	105	106
Port Loko	294	706	1,000	100	96	97
Southern						
Bo	323	708	1,031	106	97	100
Bonthe	71	390	461	88	67	71
Moyamba	37	579	616	121	99	100
Pujehun	33	549	582	134	86	89
Western Area						
Western Area Rural	635	65	700	130	137	130
Western Area Urban	2,139	0	2,139	108	0	108
Sierra Leone	5,296	7,560	12,856	107	92	98

A.3 SAMPLE DESIGN AND IMPLEMENTATION

The sample for the 2019 SLDHS is a stratified sample selected in two stages from the sampling frame. Stratification was achieved by separating each district into urban and rural areas; in total, 31 sampling strata were created since there are no rural areas in Western Area Urban. Samples were selected independently in each sampling stratum through a two-stage selection. In the first stage, 578 EAs were selected with a probability proportional to size selection procedure, according to the sample allocation given in **Table A.3**. EA size is the number of households in the EA based on the 2015 census. Implicit stratification with proportional allocation was achieved at each of the lower administrative unit levels by sorting the EA frame before the sample selection according to a certain geographic order within each explicit stratum and by using a probability proportional to size selection procedure.

After the selection of EAs and before the main survey, a household listing operation was carried out in all of the selected EAs. The household listing operation consisted of visiting each of the 578 selected EAs, drawing a location map and a detailed sketch map, and recording in the household listing forms all occupied residential households found in the EA with the address and the name of the head of the household. The resulting list of households served as a sampling frame for the selection of households in the second stage. Some of the selected EAs were large in size. In order to limit the workload during household listing, selected EAs with more than 300 households (estimated by the listing team in the field) were segmented by the listing team in the field before the household listing. Only one segment was selected for the survey with probability proportional to segment size. Household listing was conducted only in the selected segment.

In the second stage of selection, a fixed number of 24 households were selected in every cluster through equal probability systematic sampling based on the newly updated household listing. The allocation of the sampled households is given in **Table A.3**; a total of 13,872 households were selected, 5,564 in urban areas and 8,308 in rural areas. The survey interviewers interviewed only the pre-selected households. No replacements and no changes of the pre-selected households were allowed in the implementing stages in order to prevent bias.

Table A.3 Sample allocation

Sample allocation of clusters and selected households by district and type of residence

	Allocation of sample clusters			Allocation of selected households		
Province/district	Urban	Rural	Total	Urban	Rural	Total
Eastern						
Kailahun	12	26	38	312	576	888
Kenema	18	24	42	468	524	992
Kono	11	27	38	286	646	932
Northern						
Bombali	15	23	38	390	498	888
Falaba	2	23	25	52	498	550
Koinadugu	8	18	26	208	468	676
Tonkolili	8	30	38	208	680	888
North West						
Kambia	10	22	32	260	472	732
Karene	2	28	30	52	628	680
Port Loko	12	28	40	312	628	940
Southern						
Bo	14	28	42	364	628	992
Bonthe	5	22	27	130	572	702
Moyamba	3	32	35	78	732	810
Pujehun	3	29	32	78	654	732
Western Area						
Western Area Rural	36	4	40	936	104	1,040
Western Area Urban	55	0	55	1,430	0	1,430
Sierra Leone	214	364	578	5,564	8,308	13,872

Table A.4 shows the sample allocation of the expected number of women's interviews and the expected number of men's interviews. The sample allocation for women was a power allocation because a proportional allocation would not have met the minimum number of women's interviews per survey domain needed for a DHS survey. The expected numbers of completed interviews for women and men in **Table A.4** are based on the household allocation in **Table A.3** after consideration of non-response among households, women, and men and the average number of women age 15-49 and men age 15-59 per household.

Table A.4 Sample allocation of women and men

Expected numbers of women age 15-49 and men age 15-59 found and interviewed by district and type of residence

	Expected number of interviewed women age 15-49			Expected number of interviewed men age 15-59		
Province/district	Urban	Rural	Total	Urban	Rural	Total
Eastern						
Kailahun	446	808	1,254	197	350	547
Kenema	669	746	1,415	294	323	617
Kono	410	839	1,249	180	363	543
Northern						
Bombali	558	715	1,273	245	309	554
Falaba	75	715	790	32	309	341
Koinadugu	298	559	857	131	242	373
Tonkolili	298	932	1,230	131	404	535
North West						
Kambia	372	685	1,057	163	297	460
Karene	75	871	946	32	378	410
Port Loko	446	871	1,317	197	378	575
Southern						
Bo	520	871	1,391	229	378	607
Bonthe	185	685	870	82	297	379
Moyamba	111	995	1,106	48	431	479
Pujehun	111	901	1,012	48	390	438
Western Area						
Western Area Rural	1,337	124	1,461	588	54	642
Western Area Urban	2,045	0	2,045	900	0	900
Sierra Leone	7,956	11,317	19,273	3,497	4,903	8,400

The sample allocations in **Table A.4** are calculated based on estimates obtained from the 2013 SLDHS. There are 1.53 and 1.26 women age 15-49 per household in urban and rural areas, respectively, and there are 1.37 and 1.09 men age 15-59 per household in urban and rural areas, respectively. The household response rate is 99%; the individual response rate for both women and men is 97%.

Table A.5 and **Table A.6** present response rates for women and men, respectively, by urban and rural areas and by province. The male subsample constituted one in two households selected for the women's sample.

Table A.5 Sample implementation: Women

Percent distribution of households and eligible women age 15-49 by results of the household and women's interviews, and household, eligible women, and overall women response rates, according to urban-rural residence and province (unweighted), Sierra Leone DHS 2019

	Residence		Province					
Result	Urban	Rural	Eastern	Northern	North West	Southern	Western Area	Total
Selected households								
Completed (C)	96.9	97.3	99.6	98.0	93.1	98.5	95.2	97.1
Household present but no competent respondent at home (HP)	0.2	0.2	0.0	0.1	0.2	0.3	0.4	0.2
Postponed (P)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Refused (R)	0.6	1.4	0.0	1.2	4.2	0.0	0.6	1.1
Dwelling not found (DNF)	0.3	0.1	0.0	0.1	0.1	0.2	0.4	0.2
Household absent (HA)	0.6	0.4	0.2	0.2	0.8	0.5	0.8	0.5
Dwelling vacant/address not a dwelling (DV)	1.1	0.4	0.1	0.3	1.2	0.3	1.9	0.7
Dwelling destroyed (DD)	0.4	0.1	0.1	0.0	0.2	0.2	0.7	0.2
Other (O)	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of sample households	5,136	8,657	2,826	3,018	2,424	3,245	2,280	13,793
Household response rate (HRR)[1]	98.9	98.3	100.0	98.6	95.3	99.5	98.5	98.5
Eligible women								
Completed (EWC)	97.5	96.2	97.0	98.0	93.0	97.6	97.1	96.7
Not at home (EWNH)	1.5	1.9	2.1	0.6	3.3	1.7	1.9	1.8
Postponed (EWP)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Refused (EWR)	0.6	1.4	0.4	1.1	3.1	0.3	0.9	1.1
Partly completed (EWPC)	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0
Incapacitated (EWI)	0.3	0.4	0.6	0.2	0.5	0.4	0.2	0.4
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of women	6,560	9,539	3,071	4,051	2,685	3,599	2,693	16,099
Eligible women response rate (EWRR)[2]	97.5	96.2	97.0	98.0	93.0	97.6	97.1	96.7
Overall women response rate (OWRR)[3]	96.4	94.5	96.9	96.7	88.7	97.1	95.6	95.3

[1] Using the number of households falling into specific response categories, the household response rate (HRR) is calculated as:

$$\frac{100 * C}{C + HP + P + R + DNF}$$

[2] The eligible women response rate (EWRR) is equivalent to the percentage of interviews completed (EWC).
[3] The overall women response rate (OWRR) is calculated as:
OWRR = HRR * EWRR/100

Table A.6 Sample implementation: Men

Percent distribution of households and eligible men age 15-59 by results of the household and men's interviews, and household, eligible men, and overall men response rates, according to urban-rural residence and province (unweighted), Sierra Leone DHS 2019

	Residence		Province					
Result	Urban	Rural	Eastern	Northern	North West	Southern	Western Area	Total
Selected households								
Completed (C)	96.9	97.6	99.8	98.3	93.3	98.6	95.4	97.3
Household present but no competent respondent at home (HP)	0.1	0.2	0.0	0.1	0.2	0.2	0.2	0.2
Postponed (P)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Refused (R)	0.6	1.2	0.0	1.1	4.0	0.0	0.5	1.0
Dwelling not found (DNF)	0.3	0.1	0.0	0.1	0.0	0.2	0.4	0.1
Household absent (HA)	0.6	0.4	0.1	0.1	0.8	0.6	0.9	0.5
Dwelling vacant/address not a dwelling (DV)	1.1	0.3	0.0	0.3	1.3	0.2	1.8	0.6
Dwelling destroyed (DD)	0.4	0.1	0.1	0.0	0.3	0.2	0.8	0.2
Other (O)	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of sampled households	2,568	4,329	1,413	1,509	1,212	1,623	1,140	6,897
Household response rate (HRR)[1]	99.0	98.5	100.0	98.7	95.7	99.6	98.8	98.7
Eligible men								
Completed (EMC)	96.3	97.3	97.9	98.4	93.2	98.6	94.6	96.9
Not at home (EMNH)	2.3	1.6	1.5	0.5	4.4	1.0	3.2	1.9
Refused (EMR)	1.0	0.6	0.0	0.8	1.3	0.2	1.6	0.7
Partly completed (EMPC)	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0
Incapacitated (EMI)	0.3	0.6	0.6	0.2	1.1	0.2	0.5	0.5
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of men	2,964	4,465	1,474	1,852	1,191	1,667	1,245	7,429
Eligible men response rate (EMRR)[2]	96.3	97.3	97.9	98.4	93.2	98.6	94.6	96.9
Overall men response rate (OMRR)[3]	95.3	95.8	97.9	97.1	89.2	98.1	93.5	95.6

[1] Using the number of households falling into specific response categories, the household response rate (HRR) is calculated as:

$$\frac{100 * C}{C + HP + P + R + DNF}$$

[2] The eligible men response rate (EMRR) is equivalent to the percentage of interviews completed (EMC).
[3] The overall men response rate (OMRR) is calculated as:
OMRR = HRR * EMRR/100

Table A.7 and **Table A.8** present information on coverage of HIV testing among women and men by social and demographic characteristics.

Table A.7 Coverage of HIV testing by social and demographic characteristics: Women

Percent distribution of interviewed women age 15-49 by HIV testing status, according to social and demographic characteristics (unweighted), Sierra Leone DHS 2019

	HIV test status					
Characteristic	DBS tested[1]	Refused to provide blood	Absent at the time of blood collection	Other/missing[2]	Total	Number
Marital status						
Never married	86.1	11.5	2.2	0.2	100.0	2,555
Ever had sexual intercourse	87.5	10.9	1.5	0.1	100.0	1,749
Never had sexual intercourse	83.3	12.8	3.6	0.4	100.0	806
Married/living together	87.0	11.3	1.5	0.1	100.0	5,226
Divorced or separated	89.5	8.3	1.8	0.4	100.0	228
Widowed	87.0	9.5	2.4	1.2	100.0	169
Type of union						
In polygynous union	84.8	13.4	1.5	0.3	100.0	1,696
In non-polygynous union	88.0	10.3	1.6	0.1	100.0	3,522
Not currently in union	86.4	11.1	2.2	0.3	100.0	2,952
Don't know/missing	100.0	0.0	0.0	0.0	100.0	8
Ever had sexual intercourse						
Yes	87.2	11.1	1.6	0.2	100.0	7,370
No	83.3	12.7	3.6	0.4	100.0	808
Currently pregnant						
Pregnant	87.7	10.9	1.2	0.2	100.0	506
Not pregnant or not sure	86.7	11.3	1.8	0.2	100.0	7,672
Times slept away from home in past 12 months						
None	87.1	10.9	1.8	0.2	100.0	5,209
1-2	86.6	11.7	1.6	0.1	100.0	1,602
3-4	85.9	11.7	2.4	0.0	100.0	669
5+	86.0	12.5	1.4	0.1	100.0	698
Time away in past 12 months						
Away for more than 1 month at a time	86.2	12.1	1.7	0.0	100.0	1,090
Away for only less than 1 month at a time	86.3	11.7	1.8	0.2	100.0	1,879
Not away	87.1	10.9	1.8	0.2	100.0	5,209
Ethnic group						
Creole	94.3	0.0	5.7	0.0	100.0	53
Fullah	80.4	16.0	2.7	0.8	100.0	368
Kono	92.3	6.9	0.9	0.0	100.0	350
Limba	84.8	14.0	1.0	0.3	100.0	709
Loko	85.4	11.4	3.2	0.0	100.0	158
Mandingo	84.0	12.4	3.6	0.0	100.0	225
Mende	95.8	3.6	0.6	0.1	100.0	2,685
Sherbro	90.3	9.7	0.0	0.0	100.0	155
Temne	81.6	15.6	2.6	0.2	100.0	2,515
Kurankoh	70.9	26.8	1.9	0.4	100.0	485
Other Sierra Leone	83.5	12.9	3.6	0.0	100.0	448
Other foreign	92.6	0.0	7.4	0.0	100.0	27
Religion						
Christian	91.2	7.5	1.2	0.2	100.0	1,890
Islam	85.5	12.4	1.9	0.2	100.0	6,283
Other[3]	60.0	40.0	0.0	0.0	100.0	5
Total	86.8	11.2	1.8	0.2	100.0	8,178

[1] Includes all dried blood spot (DBS) specimens tested at the lab and for which there is a final result, i.e., positive, negative, or inconclusive
[2] Includes (1) other results of blood collection (e.g., technical problem in the field), (2) lost specimens, (3) noncorresponding bar codes, and (4) lab results such as blood not tested for technical reason or not enough blood to complete the algorithm
[3] Other religion includes traditional religions and no religion.

Table A.8 Coverage of HIV testing by social and demographic characteristics: Men

Percent distribution of interviewed men age 15-49 by HIV testing status, according to social and demographic characteristics (unweighted), Sierra Leone DHS 2019

Characteristic	HIV test status				Total	Number
	DBS tested[1]	Refused to provide blood	Absent at the time of blood collection	Other/missing[2]		
Marital status						
Never married	82.7	12.9	4.1	0.3	100.0	2,896
Ever had sexual intercourse	82.5	12.8	4.3	0.3	100.0	1,814
Never had sexual intercourse	83.0	13.0	3.8	0.2	100.0	1,082
Married/living together	83.8	12.2	3.9	0.2	100.0	3,265
Divorced or separated	87.1	9.6	3.4	0.0	100.0	178
Widowed	80.8	11.5	7.7	0.0	100.0	26
Type of union						
In polygynous union	80.3	14.1	5.4	0.2	100.0	503
In non-polygynous union	84.4	11.8	3.6	0.2	100.0	2,762
Not currently in union	82.9	12.7	4.1	0.3	100.0	3,100
Ever had sexual intercourse						
Yes	96.7	14.2	4.5	0.4	115.7	5,283
No	83.1	13.0	3.8	0.2	100.1	1,082
Circumcised						
Yes	83.4	12.4	4.0	0.2	100.0	6,308
No	74.4	23.1	2.6	0.0	100.0	39
Don't know/missing	94.4	5.6	0.0	0.0	100.0	18
Times slept away from home in past 12 months						
None	85.1	11.1	3.6	0.3	100.0	3,118
1-2	81.6	13.7	4.5	0.1	100.0	844
3-4	81.8	13.5	4.2	0.6	100.0	719
5+	81.8	13.7	4.4	0.1	100.0	1,684
Time away in past 12 months						
Away for more than 1 month at a time	83.0	13.0	3.8	0.2	100.0	1,231
Away for only less than 1 month at a time	81.0	14.1	4.7	0.2	100.0	2,016
Not away	85.1	11.1	3.6	0.3	100.0	3,118
Ethnic group						
Creole	90.5	7.1	2.4	0.0	100.0	84
Fullah	72.0	21.8	6.2	0.0	100.0	289
Kono	86.2	9.8	4.0	0.0	100.0	275
Limba	82.2	13.9	3.9	0.0	100.0	567
Loko	78.3	15.0	4.2	2.5	100.0	120
Mandingo	79.9	15.2	4.4	0.5	100.0	204
Mende	92.8	4.8	2.3	0.1	100.0	1,953
Sherbro	86.3	12.3	1.4	0.0	100.0	146
Temne	78.5	15.9	5.2	0.3	100.0	2,039
Kurankoh	68.9	26.4	4.0	0.6	100.0	322
Other Sierra Leone	81.3	12.9	5.7	0.0	100.0	348
Other foreign	94.4	5.6	0.0	0.0	100.0	18
Religion						
Christian	87.8	8.6	3.4	0.2	100.0	1,380
Islam	82.1	13.5	4.1	0.2	100.0	4,983
Other[3]	50.0	0.0	50.0	0.0	100.0	2
Total 15-49	83.4	12.4	4.0	0.2	100.0	6,365
Total 15-59	94.4	14.0	4.4	0.3	113.1	7,429

[1] Includes all dried blood spot (DBS) specimens tested at the lab and for which there is a final result, i.e., positive, negative, or inconclusive
[2] Includes (1) other results of blood collection (e.g., technical problem in the field), (2) lost specimens, (3) noncorresponding bar codes, and (4) lab results such as blood not tested for technical reason or not enough blood to complete the algorithm
[3] Other religion includes traditional religions and no religion.

Table A.9 and **Table A.10** present information on coverage of HIV testing among women and men by sexual behaviour characteristics.

Table A.9 Coverage of HIV testing by sexual behaviour characteristics: Women

Percent distribution of interviewed women age 15-49 who ever had sexual intercourse by HIV test status, according to sexual behaviour characteristics (unweighted), Sierra Leone DHS 2019

	HIV test status					
Sexual behaviour characteristic	DBS tested[1]	Refused to provide blood	Absent at the time of blood collection	Other/missing[2]	Total	Number
Age at first sexual intercourse						
<16	86.8	11.4	1.7	0.1	100.0	3,624
16-17	87.3	11.2	1.3	0.2	100.0	2,044
18-19	88.2	9.8	1.8	0.2	100.0	1,178
20+	86.7	11.3	1.7	0.2	100.0	407
Missing	87.2	12.0	0.9	0.0	100.0	117
Number of lifetime partners						
1	85.4	12.4	2.0	0.1	100.0	2,541
2	88.2	10.4	1.2	0.1	100.0	2,244
3-4	88.5	9.8	1.5	0.2	100.0	1,834
5-9	89.3	9.7	0.8	0.2	100.0	494
10+	84.2	14.0	1.8	0.0	100.0	57
Missing	82.5	15.5	1.5	0.5	100.0	200
Multiple sexual partners in past 12 months						
0	85.8	12.5	1.3	0.4	100.0	1,066
1	87.6	10.7	1.6	0.1	100.0	6,033
2+	83.8	14.4	1.8	0.0	100.0	271
Non-marital, non-cohabiting partners in past 12 months						
0	87.3	11.0	1.5	0.2	100.0	5,517
1	87.2	11.0	1.6	0.2	100.0	1,702
2+	84.1	13.9	2.0	0.0	100.0	151
Condom use at last sexual intercourse in past 12 months						
Used condom	87.1	10.0	2.9	0.0	100.0	140
Did not use condom	87.4	10.9	1.6	0.1	100.0	6,164
No sexual intercourse in past 12 months	85.8	12.5	1.3	0.4	100.0	1,066
Condom use at last sexual intercourse with a non-marital, non-cohabiting partner in past 12 months						
Used condom	87.4	9.2	3.4	0.0	100.0	119
Did not use condom	86.9	11.4	1.6	0.2	100.0	1,734
No sexual intercourse with any non-marital, non-cohabiting partners in past 12 months	87.3	11.0	1.5	0.2	100.0	5,517
Prior HIV testing						
Ever tested	88.6	10.1	1.1	0.2	100.0	4,479
Received results	89.1	9.9	1.0	0.1	100.0	3,592
Did not receive results	86.7	11.3	1.6	0.5	100.0	887
Never tested	85.0	12.6	2.2	0.2	100.0	2,891
Total	87.2	11.1	1.6	0.2	100.0	7,370

[1] Includes all dried blood spot (DBS) specimens tested at the lab and for which there is a final result, i.e., positive, negative, or inconclusive
[2] Include: (1) other results of blood collection (e.g., technical problem in the field), (2) lost specimens, (3) noncorresponding bar codes, and (4) lab results such as blood not tested for technical reason and not enough blood to complete the algorithm

Table A.10 Coverage of HIV testing by sexual behaviour characteristics: Men

Percent distribution of interviewed men age 15-49 who ever had sexual intercourse by HIV test status, according to sexual behaviour characteristics (unweighted), Sierra Leone DHS 2019

Sexual behaviour characteristic	HIV test status					
	DBS tested[1]	Refused to provide blood	Absent at the time of blood collection	Other/ missing[2]	Total	Number
Age at first sexual intercourse						
<16	81.7	12.4	5.5	0.4	100.0	1,136
16-17	82.8	13.5	3.6	0.2	100.0	1,464
18-19	85.2	10.9	3.7	0.1	100.0	1,491
20+	83.4	12.8	3.6	0.3	100.0	1,136
Missing	89.3	7.1	3.6	0.0	100.0	56
Number of lifetime partners						
1	80.7	13.6	5.2	0.5	100.0	575
2	84.9	11.9	3.1	0.1	100.0	750
3-4	83.3	12.0	4.3	0.3	100.0	1,063
5-9	83.9	12.6	3.4	0.2	100.0	1,074
10+	84.8	11.6	3.4	0.2	100.0	890
Missing	82.2	12.6	5.0	0.2	100.0	931
Multiple sexual partners in past 12 months						
0	85.4	11.0	2.6	1.0	100.0	309
1	82.7	12.7	4.4	0.2	100.0	3,582
2+	84.9	11.5	3.5	0.1	100.0	1,368
Don't know/missing	83.3	16.7	0.0	0.0	100.0	24
Non-marital, non-cohabiting partners in past 12 months						
0	83.5	12.6	3.5	0.3	100.0	2,648
1	83.0	11.8	5.0	0.1	100.0	2,051
2+	84.6	12.5	2.7	0.2	100.0	584
Condom use at last sexual intercourse in past 12 months						
Used condom	82.8	12.2	4.8	0.2	100.0	558
Did not use condom	83.4	12.4	4.0	0.2	100.0	4,416
No sexual intercourse in past 12 months	85.4	11.0	2.6	1.0	100.0	309
Condom use at last sexual intercourse with a non-marital, non-cohabiting partner in past 12 months						
Used condom	83.1	12.2	4.5	0.2	100.0	581
Did not use condom	83.5	11.8	4.5	0.1	100.0	2,048
No sexual intercourse with any non-marital, non-cohabiting partners in past 12 months	83.4	12.7	3.5	0.3	100.0	2,654
Paid for sexual intercourse in past 12 months						
Yes	87.4	7.0	5.1	0.5	100.0	215
Used condom	89.4	8.0	2.7	0.0	100.0	113
Did not use condom	85.3	5.9	7.8	1.0	100.0	102
No (no paid sexual intercourse/no sexual intercourse in last 12 months)	83.3	12.5	4.0	0.2	100.0	5,068
Prior HIV testing						
Ever tested	82.9	11.6	5.2	0.2	100.0	1,318
Received results	82.3	11.7	5.7	0.3	100.0	1,170
Did not receive results	87.8	10.8	1.4	0.0	100.0	148
Never tested	83.6	12.5	3.6	0.3	100.0	3,965
Total 15-49	83.4	12.3	4.0	0.2	100.0	5,283
Total 15-59	96.7	14.2	4.5	0.4	115.7	5,283

[1] Includes all dried blood spot (DBS) specimens tested at the lab and for which there is a final result, i.e., positive, negative, or inconclusive
[2] Includes (1) other results of blood collection (e.g., technical problem in the field), (2) lost specimens, (3) noncorresponding bar codes, and (4) lab results such as blood not tested for technical reason and not enough blood to complete the algorithm

A.4 SAMPLE PROBABILITIES AND SAMPLING WEIGHTS

Due to the non-proportional allocation of samples to different provinces and to their urban and rural areas and the possible differences in response rates, sampling weights will be required for any analysis using the 2019 SLDHS data to ensure the actual representativeness of the survey results at the national level as well as at the domain level. Since the 2019 SLDHS sample is a two-stage stratified cluster sample, sampling

weights were calculated based on sampling probabilities separately for each sampling stage and for each cluster. The following notations were used:

P_{1hi}: first-stage sampling probability of the i^{th} cluster in stratum h
P_{2hi}: second-stage sampling probability within the i^{th} cluster (households)
P_{hi}: overall sampling probability of any households in the i^{th} cluster in stratum h

Let a_h be the number of EAs selected in stratum h, M_{hi} the number of households according to the sampling frame in the i^{th} EA, and $\sum M_{hi}$ the total number of households in the stratum. The probability of selecting the i^{th} EA in the 2019 SLDHS sample is calculated as follows:

$$\frac{a_h M_{hi}}{\sum M_{hi}}$$

Let b_{hi} be the proportion of households in the selected cluster relative to the total number of households in EA i in stratum h if the EA is segmented; otherwise, $b_{hi} = 1$. Then the probability of selecting cluster i in the sample is:

$$P_{1hi} = \frac{a_h M_{hi}}{\sum M_{hi}} \times b_{hi}$$

Let L_{hi} be the number of households listed in the household listing operation in cluster i in stratum h, and let g_{hi} be the number of households selected in the cluster. The second stage's selection probability for each household in the cluster is calculated as follows:

$$P_{2hi} = \frac{g_{hi}}{L_{hi}}$$

The overall selection probability of each household in cluster i in stratum h is therefore the product of the two stages' selection probabilities:

$$P_{hi} = P_{1hi} \times P_{2hi}$$

The sampling weight for each household in cluster i of stratum h is the inverse of its overall selection probability:

$$W_{hi} = 1 / P_{hi}$$

The design weights were adjusted for household non-response and individual non-response to obtain the sampling weights for households and for women and men. Non-response is adjusted at the sampling stratum level. For the household sampling weight, the household design weight is multiplied by the inverse of the household response rate by stratum. For women's individual sampling weight, the household sampling weight is multiplied by the inverse of women's individual response rate by stratum. After adjusting for non-response, the sampling weights are normalised to obtain the final standard weights that appear in the data files. The normalisation process is done to obtain a total number of unweighted cases equal to the total number of weighted cases at the national level for the total number of households, women, and men. Normalisation is done by multiplying the sampling weights by the estimated sampling fraction obtained from the survey for the household weights and the individual women's and men's weights. The normalised weights are relative weights that are valid for estimating means, proportions, ratios, and rates but are not valid for estimating population totals or for pooled data. HIV weights were produced that accounted for HIV testing non-response among women and men separately.

ESTIMATES OF SAMPLING ERRORS

Appendix B

The estimates from a sample survey are affected by two types of errors: nonsampling errors and sampling errors. Nonsampling errors are the results of mistakes made in implementing data collection and data processing, such as failure to locate and interview the correct household, misunderstanding of the questions on the part of either the interviewer or the respondent, and data entry errors. Although numerous efforts were made during the implementation of the 2019 Sierra Leone Demographic and Health Survey (SLDHS) to minimise this type of error, nonsampling errors are impossible to avoid and difficult to evaluate statistically.

Sampling errors, on the other hand, can be evaluated statistically. The sample of respondents selected in the 2019 SLDHS is only one of many samples that could have been selected from the same population, using the same design and expected size. Each of these samples would yield results that differ somewhat from the results of the actual sample selected. Sampling errors are a measure of the variability among all possible samples. Although the degree of variability is not known exactly, it can be estimated from the survey results.

Sampling errors are usually measured in terms of the *standard error* for a particular statistic (mean, percentage, etc.), which is the square root of the variance. The standard error can be used to calculate confidence intervals within which the true value for the population can reasonably be assumed to fall. For example, for any given statistic calculated from a sample survey, the value of that statistic will fall within a range of plus or minus two times the standard error of that statistic in 95% of all possible samples of identical size and design.

If the sample of respondents had been selected as a simple random sample, it would have been possible to use straightforward formulas for calculating sampling errors. However, the 2019 SLDHS sample is the result of a multi-stage stratified design, and, consequently, it was necessary to use more complex formulas. Sampling errors are computed in SAS, using programmes developed by ICF. These programmes use the Taylor linearization method to estimate variances for survey estimates that are means, proportions, or ratios. The Jackknife repeated replication method is used for variance estimation of more complex statistics such as fertility and mortality rates.

The Taylor linearization method treats any percentage or average as a ratio estimate, $r = y/x$, where y represents the total sample value for variable y and x represents the total number of cases in the group or subgroup under consideration. The variance of r is computed using the formula given below, with the standard error being the square root of the variance:

$$SE^2(r) = var(r) = \frac{1-f}{x^2}\sum_{h=1}^{H}\left[\frac{m_h}{m_h-1}\left(\sum_{i=1}^{m_h} z_{hi}^2 - \frac{z_h^2}{m_h}\right)\right]$$

in which

$$z_{hi} = y_{hi} - rx_{hi} \text{ and } z_h = y_h - rx_h$$

where h represents the stratum, which varies from 1 to H;
m_h is the total number of clusters selected in the h^{th} stratum;
y_{hi} is the sum of the weighted values of variable y in the i^{th} cluster in the h^{th} stratum;
x_{hi} is the sum of the weighted number of cases in the i^{th} cluster in the h^{th} stratum; and
f is the overall sampling fraction, which is so small that it is ignored.

The Jackknife repeated replication method derives estimates of complex rates from each of several replications of the parent sample and calculates standard errors for these estimates using simple formulas. Each replication considers *all but one* cluster in the calculation of the estimates. Pseudo-independent replications are thus created. In the 2019 SLDHS, there were 576 non-empty clusters. Hence, 576 replications were created. The variance of a rate r is calculated as follows:

$$SE^2(r) = var(r) = \frac{1}{k(k-1)} \sum_{i=1}^{k} (r_i - r)^2$$

in which

$$r_i = kr - (k-1)r_{(i)}$$

where r is the estimate computed from the full sample of 576 clusters,
$r_{(i)}$ is the estimate computed from the reduced sample of 575 clusters (i^{th} cluster excluded), and
k is the total number of clusters.

In addition to the standard error, the design effect (DEFT) for each estimate is calculated. The design effect is defined as the ratio between the standard error using the given sample design and the standard error that would result if a simple random sample had been used. A DEFT value of 1.0 indicates that the sample design is as efficient as a simple random sample, while a value greater than 1.0 indicates the increase in the sampling error due to the use of a more complex and less statistically efficient design. Relative standard errors and confidence limits for the estimates are also calculated.

Sampling errors for the 2019 SLDHS are calculated for selected variables considered to be of primary interest. The results are presented in this appendix for the country as a whole, for urban and rural areas, for each of the five provinces, and for each of the 16 districts. For each variable, the type of statistic (mean, proportion, or rate) and the base population are given in Table B.1. Tables B.2 through B.25 present the value of the statistic (R), its standard error (SE), the number of unweighted (N) and weighted (WN) cases, the design effect (DEFT), the relative standard error (SE/R), and the 95% confidence limits (R±2SE) for each selected variable. The DEFT is considered undefined when the standard error considering a simple random sample is zero (when the estimate is close to 0 or 1).

The confidence interval (e.g., as calculated for ideal number of children) can be interpreted as follows: the overall average from the national sample is 4.732 and its standard error is 0.032. Therefore, to obtain the 95% confidence limits, one adds and subtracts twice the standard error to the sample estimate, i.e., 4.732 ± 2 × 0.032. There is a high probability (95%) that the true ideal number of children is between 4.667 and 4.797.

For the total sample, the value of the DEFT, averaged over all indicators in the appendix, is about 1.5. This means that, due to multi-stage clustering of the sample, the average standard error is increased by a factor of 1.5 over that in an equivalent simple random sample.

Table B.1 List of selected variables for sampling errors, Sierra Leone 2019

Variable	Estimate	Base population
HOUSEHOLDS AND POPULATION		
Ownership of at least one ITN	Proportion	Households
De facto population with access to an ITN	Proportion	De facto household population
Household population that slept under an ITN last night	Proportion	De facto household population
WOMEN		
Urban residence	Proportion	Women 15-49
Literacy	Proportion	Women 15-49
No education	Proportion	Women 15-49
Secondary education or higher	Proportion	Women 15-49
Never married/never in union	Proportion	Women 15-49
Currently married/in union	Proportion	Women 15-49
Married before age 18	Proportion	Women 20-49
Had sexual intercourse before age 18	Proportion	Women 20-49
Currently pregnant	Proportion	Women 15-49
Know any contraceptive method	Proportion	Currently married women 15-49
Know a modern method	Proportion	Currently married women 15-49
Currently using any method	Proportion	Currently married women 15-49
Currently using a modern method	Proportion	Currently married women 15-49
Currently using pill	Proportion	Currently married women 15-49
Currently using male condoms	Proportion	Currently married women 15-49
Currently using injectables	Proportion	Currently married women 15-49
Currently using implants	Proportion	Currently married women 15-49
Currently using female sterilisation	Proportion	Currently married women 15-49
Currently using withdrawal	Proportion	Currently married women 15-49
Currently using rhythm	Proportion	Currently married women 15-49
Used public sector source	Proportion	Current users of modern method
Want no more children	Proportion	Currently married women 15-49
Want to delay next birth at least 2 years	Proportion	Currently married women 15-49
Ideal number of children	Mean	Women 15-49
Mothers protected against tetanus for last birth	Proportion	Women with a live birth in last 5 years
Births with skilled attendant at delivery	Proportion	Births occurring 1-59 months before survey
Received 3+ doses of SP/Fansidar	Proportion	Last birth of women 15-49 with live births in the last 2 years
Treated with ORS	Proportion	Children under 5 with diarrhoea in past 2 weeks
Sought treatment	Proportion	Children under 5 with diarrhoea in past 2 weeks
Ever had vaccination card	Proportion	Children 12-23 months
Received BCG vaccination	Proportion	Children 12-23 months
Received birth dose HepB vaccination	Proportion	Children 12-23 months
Received DPT-HepB-Hib vaccination (3 doses)	Proportion	Children 12-23 months
Received birth dose polio 0 vaccination	Proportion	Children 12-23 months
Received polio vaccination (3 doses)	Proportion	Children 12-23 months
Received IPV vaccination	Proportion	Children 12-23 months
Received pneumococcal vaccination (3 doses)	Proportion	Children 12-23 months
Received rotavirus vaccination (3 doses)	Proportion	Children 12-23 months
Received measles 1 vaccination	Proportion	Children 12-23 months
Received all basic vaccinations	Proportion	Children 12-23 months
Received all age-appropriate vaccinations (12-23 months)	Proportion	Children 12-23 months
Received measles/MMR 2 vaccination	Proportion	Children 24-35 months
Received all age-appropriate vaccinations (24-35 months)	Proportion	Children 24-35 months
Height-for-age (-2SD)	Proportion	Children under 5 who were measured
Weight-for-height (-2SD)	Proportion	Children under 5 who were measured
Weight-for-age (-2SD)	Proportion	Children under 5 who were measured
Body mass index (BMI) <18.5	Proportion	Women 15-49 who were measured
Body mass index (BMI) ≥25	Proportion	Women 15-49 who were measured
Prevalence of anaemia (children 6-59 months)	Proportion	Children 6-59 months who were tested
Prevalence of anaemia (women 15-49)	Proportion	Women 15-49 who were tested
Had 2+ sexual partners in past 12 months	Proportion	Women 15-49
Condom use at last sex	Proportion	Women 15-49 with non-marital, non-cohabiting partner in past 12 months
Abstinence among young people (never had sex)	Proportion	Never-married women 15-24
Had an HIV test and received results in past 12 months	Proportion	Women 15-49
Discriminatory attitudes towards people with HIV	Proportion	Women who have heard of HIV/AIDS
HIV prevalence among women 15-49	Proportion	Interviewed women with dried blood spot (DBS) specimen tested at the lab
HIV prevalence among pregnant women 15-49	Proportion	Interviewed pregnant women 15-49 with DBS tested at the lab
HIV prevalence among young women 15-24	Proportion	Interviewed women 15-24 with DBS tested at the lab
Total fertility rate (3 years)	Rate	Women-years of exposure to childbearing
Neonatal mortality rate[1]	Rate	Children exposed to the risk of mortality
Postneonatal mortality rate[1]	Rate	Children exposed to the risk of mortality
Infant mortality rate[1]	Rate	Children exposed to the risk of mortality
Child mortality rate[1]	Rate	Children exposed to the risk of mortality
Under-5 mortality rate[1]	Rate	Children exposed to the risk of mortality

Continued...

Table B.1—*Continued*

Variable	Estimate	Base population
	MEN	
Urban residence	Proportion	Men 15-49
Literacy	Proportion	Men 15-49
No education	Proportion	Men 15-49
Secondary education or higher	Proportion	Men 15-49
Never married/never in union	Proportion	Men 15-49
Currently married/in union	Proportion	Men 15-49
Had sexual intercourse before age 18	Proportion	Men 20-49
Know any contraceptive method	Proportion	Currently married men 15-49
Know a modern method	Proportion	Currently married men 15-49
Want no more children	Proportion	Currently married men 15-49
Want to delay next birth at least 2 years	Proportion	Currently married men 15-49
Ideal number of children	Mean	Men 15-49
Had 2+ sexual partners in past 12 months	Proportion	Men 15-49
Condom use at last sex	Proportion	Men 15-49 with non-marital, non-cohabiting partner in past 12 months
Abstinence among young people (never had sex)	Proportion	Never-married men 15-24
Paid for sexual intercourse in past 12 months	Proportion	Men 15-49
Had an HIV test and received results in past 12 months	Proportion	Men 15-49
Discriminatory attitudes towards people with HIV	Proportion	Men who have heard of HIV/AIDS
HIV prevalence among men 15-49	Proportion	Interviewed men with dried blood spot (DBS) specimen tested at the lab
HIV prevalence among young men 15-24	Proportion	Interviewed men 15-24 with DBS tested at the lab
HIV prevalence among men 15-59	Proportion	Interviewed men 15-59 with DBS tested at the lab
	WOMEN AND MEN	
HIV prevalence among respondents 15-49	Proportion	Interviewed women and men 15-49 with DBS tested at the lab
HIV prevalence among respondents 15-24	Proportion	Interviewed women and men 15-24 with DBS tested at the lab

[1] Mortality rates are calculated for the 5 years before the survey for the national, urban, and rural samples and for the 10 years before the survey for the regional samples.

Table B.2 Sampling errors: Total sample, Sierra Leone 2019

Variable	Value (R)	Standard error (SE)	Number of cases: Un-weighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative Error (SE/R)	Confidence limits: Lower (R-2SE)	Confidence limits: Upper (R+2SE)
HOUSEHOLDS AND POPULATION								
Ownership of at least one ITN	0.679	0.008	13,399	13,399	1.977	0.012	0.663	0.695
De facto population with access to an ITN	0.468	0.007	70,602	69,717	1.938	0.015	0.454	0.482
Household population that slept under an ITN last night	0.506	0.008	70,602	69,717	1.980	0.015	0.491	0.522
WOMEN								
Urban residence	0.460	0.012	15,574	15,574	3.039	0.026	0.436	0.484
Literacy	0.428	0.007	15,574	15,574	1.884	0.017	0.413	0.443
No education	0.455	0.007	15,574	15,574	1.818	0.016	0.440	0.469
Secondary or higher education	0.410	0.007	15,574	15,574	1.901	0.018	0.395	0.425
Never married (never in union)	0.325	0.006	15,574	15,574	1.673	0.019	0.312	0.337
Currently married (in union)	0.624	0.006	15,574	15,574	1.593	0.010	0.611	0.636
Married before age 18	0.365	0.007	12,114	12,147	1.542	0.018	0.351	0.378
Had sexual intercourse before age 18	0.743	0.007	12,114	12,147	1.706	0.009	0.729	0.756
Currently pregnant	0.062	0.002	15,574	15,574	1.236	0.039	0.057	0.067
Know any contraceptive method	0.979	0.002	9,837	9,715	1.518	0.002	0.974	0.983
Know a modern method	0.976	0.003	9,837	9,715	1.654	0.003	0.971	0.981
Currently using any method	0.212	0.006	9,837	9,715	1.549	0.030	0.200	0.225
Currently using a modern method	0.209	0.006	9,837	9,715	1.506	0.030	0.197	0.222
Currently using pill	0.041	0.003	9,837	9,715	1.439	0.070	0.035	0.047
Currently using male condoms	0.001	0.000	9,837	9,715	1.014	0.289	0.001	0.002
Currently using injectables	0.089	0.004	9,837	9,715	1.354	0.044	0.081	0.097
Currently using implants	0.068	0.004	9,837	9,715	1.421	0.053	0.061	0.076
Currently using female sterilisation	0.002	0.001	9,837	9,715	1.129	0.231	0.001	0.004
Currently using withdrawal	0.000	0.000	9,837	9,715	0.947	0.696	0.000	0.000
Currently using rhythm	0.000	0.000	9,837	9,715	0.779	0.599	0.000	0.000
Using public sector source	0.804	0.010	3,637	3,704	1.538	0.013	0.784	0.824
Want no more children	0.260	0.007	9,837	9,715	1.569	0.027	0.246	0.273
Want to delay next birth at least 2 years	0.235	0.008	9,837	9,715	1.952	0.035	0.219	0.252
Ideal number of children	4.732	0.032	15,366	15,325	1.992	0.007	4.667	4.797
Mothers protected against tetanus for last birth	0.851	0.007	7,377	7,326	1.721	0.008	0.837	0.866
Births with skilled attendant at delivery	0.869	0.008	9,899	9,771	2.039	0.009	0.853	0.886
Received 3+ doses of SP/Fansidar	0.357	0.014	3,970	3,950	1.776	0.038	0.330	0.384
Treated with ORS	0.853	0.018	599	630	1.223	0.021	0.818	0.888
Sought medical treatment for diarrhoea	0.753	0.019	599	630	1.117	0.026	0.714	0.792
Ever had vaccination card	0.969	0.005	1,861	1,838	1.146	0.005	0.960	0.978
Received BCG vaccination	0.964	0.006	1,861	1,838	1.416	0.006	0.952	0.976
Received birth dose HepB vaccination	0.210	0.013	1,861	1,838	1.322	0.060	0.185	0.235
Received DPT-HepB-Hib vaccination (3 doses)	0.781	0.012	1,861	1,838	1.247	0.016	0.757	0.806
Received birth dose polio 0 vaccination	0.928	0.008	1,861	1,838	1.344	0.009	0.911	0.944
Received polio vaccination (3 doses)	0.709	0.014	1,861	1,838	1.290	0.019	0.682	0.737
Received IPV vaccination	0.797	0.013	1,861	1,838	1.390	0.017	0.771	0.824
Received pneumococcal vaccination (3 doses)	0.794	0.012	1,861	1,838	1.213	0.015	0.771	0.817
Received rotavirus vaccination (2 doses)	0.852	0.010	1,861	1,838	1.252	0.012	0.831	0.873
Received measles 1 vaccination	0.747	0.014	1,861	1,838	1.342	0.018	0.720	0.775
Received all basic vaccinations (12-23 months)	0.563	0.014	1,861	1,838	1.234	0.026	0.534	0.592
Received all age-appropriate vaccinations (12-23 months)	0.500	0.015	1,861	1,838	1.247	0.029	0.470	0.529
Received measles/MMR 2 vaccination	0.544	0.015	1,729	1,666	1.252	0.028	0.513	0.575
Received all age-appropriate vaccinations (24-35 months)	0.299	0.014	1,729	1,666	1.241	0.047	0.271	0.327
Height-for-age (-2SD)	0.295	0.008	4,939	4,820	1.220	0.029	0.278	0.312
Weight-for-height (-2SD)	0.054	0.004	4,951	4,824	1.154	0.071	0.046	0.061
Weight-for-age (-2SD)	0.136	0.006	4,996	4,870	1.239	0.047	0.123	0.148
Body mass index (BMI) <18.5	0.069	0.004	6,853	6,882	1.324	0.059	0.060	0.077
Body mass index (BMI) ≥25	0.278	0.008	6,853	6,882	1.401	0.027	0.263	0.293
Prevalence of anaemia (children 6-59 months)	0.678	0.011	4,291	4,223	1.418	0.016	0.657	0.699
Prevalence of anaemia (women 15-49)	0.465	0.009	7,210	7,266	1.461	0.018	0.448	0.482
Had 2+ sexual partners in past 12 months	0.037	0.002	15,574	15,574	1.610	0.066	0.032	0.042
Condom use at last sex	0.028	0.007	537	580	0.992	0.252	0.014	0.042
Abstinence among young people (never had sex)	0.384	0.010	4,117	4,129	1.254	0.025	0.365	0.403
Had an HIV test and received results in past 12 months	0.193	0.005	15,574	15,574	1.681	0.028	0.183	0.204
Discriminatory attitudes towards people living with HIV	0.797	0.008	14,434	14,603	2.272	0.010	0.782	0.812
HIV prevalence among women 15-49	0.022	0.002	7,099	6,941	1.139	0.091	0.018	0.026
HIV prevalence among pregnant women 15-49	0.021	0.007	444	420	0.971	0.315	0.008	0.034
HIV prevalence among young women 15-24	0.015	0.003	2,746	2,710	1.238	0.192	0.009	0.021
Total fertility rate (last 3 years)	4.218	0.086	43,100	43,154	1.382	0.020	4.047	4.390
Neonatal mortality (last 0-4 years)	30.536	2.299	9,911	9,783	1.235	0.075	25.939	35.133
Postneonatal mortality (last 0-4 years)	44.881	2.871	9,965	9,828	1.263	0.064	39.139	50.623
Infant mortality (last 0-4 years)	75.417	3.637	9,961	9,833	1.235	0.048	68.143	82.690
Child mortality (last 0-4 years)	50.459	3.421	9,868	9,764	1.470	0.068	43.617	57.301
Under-5 mortality (last 0-4 years)	122.070	4.845	10,165	10,050	1.334	0.040	112.381	131.760

Continued...

Table B.2—*Continued*

Variable	Value (R)	Standard error (SE)	Number of cases: Un-weighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative Error (SE/R)	Confidence limits: Lower (R-2SE)	Confidence limits: Upper (R+2SE)
			MEN					
Urban residence	0.468	0.013	6,365	6,384	2.044	0.027	0.443	0.494
Literacy	0.622	0.010	6,365	6,384	1.577	0.015	0.603	0.641
No education	0.292	0.009	6,365	6,384	1.499	0.029	0.275	0.309
Secondary or higher education	0.571	0.009	6,365	6,384	1.515	0.016	0.552	0.589
Never married (in union)	0.459	0.008	6,365	6,384	1.277	0.017	0.443	0.475
Currently married (in union)	0.507	0.008	6,365	6,384	1.286	0.016	0.490	0.523
Had first sexual intercourse before age 18	0.442	0.010	4,780	4,843	1.391	0.023	0.422	0.462
Know any contraceptive method	0.991	0.002	3,265	3,234	1.178	0.002	0.988	0.995
Know any modern contraceptive method	0.990	0.002	3,265	3,234	1.187	0.002	0.986	0.994
Want no more children	0.190	0.010	3,265	3,234	1.434	0.052	0.171	0.210
Want to delay birth at least 2 years	0.208	0.009	3,265	3,234	1.286	0.044	0.189	0.226
Ideal number of children	4.919	0.051	6,082	6,088	1.351	0.010	4.818	5.020
Had 2+ sexual partners in past 12 months	0.217	0.007	6,365	6,384	1.317	0.031	0.203	0.230
Condom use at last sex	0.143	0.012	1,392	1,384	1.236	0.081	0.120	0.166
Abstinence among young people (never had sex)	0.463	0.014	2,306	2,284	1.302	0.029	0.436	0.490
Had paid sex in past 12 months	0.037	0.003	6,365	6,384	1.246	0.080	0.031	0.043
Had HIV test and received results in past 12 months	0.119	0.009	6,365	6,384	2.206	0.075	0.101	0.137
Discriminatory attitudes towards people living with HIV	0.711	0.011	6,064	6,116	1.886	0.015	0.689	0.732
HIV prevalence among men 15-49	0.011	0.002	5,306	5,465	1.213	0.158	0.008	0.014
HIV prevalence among young men 15-24	0.005	0.002	2,090	2,144	1.088	0.353	0.001	0.008
HIV prevalence among men 15-59	0.013	0.002	6,006	6,164	1.406	0.158	0.009	0.017
			WOMEN AND MEN					
HIV prevalence among respondents 15-49	0.017	0.001	12,405	12,407	1.155	0.079	0.014	0.020
HIV prevalence among respondents 15-24	0.010	0.002	4,836	4,855	1.184	0.167	0.007	0.014

Table B.3 Sampling errors: Urban sample, Sierra Leone 2019

Variable	Value (R)	Standard error (SE)	Number of cases: Un-weighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative Error (SE/R)	Confidence limits: Lower (R-2SE)	Confidence limits: Upper (R+2SE)
HOUSEHOLDS AND POPULATION								
Ownership of at least one ITN	0.600	0.014	4,976	5,680	2.003	0.023	0.572	0.628
De facto population with access to an ITN	0.402	0.010	25,747	28,632	1.679	0.024	0.382	0.421
Household population that slept under an ITN last night	0.409	0.011	25,747	28,632	1.779	0.028	0.386	0.431
WOMEN								
Urban residence	1.000	0.000	6,399	7,163	na	0.000	1.000	1.000
Literacy	0.623	0.010	6,399	7,163	1.612	0.016	0.604	0.643
No education	0.279	0.008	6,399	7,163	1.487	0.030	0.262	0.295
Secondary or higher education	0.621	0.009	6,399	7,163	1.528	0.015	0.602	0.639
Never married (never in union)	0.443	0.009	6,399	7,163	1.447	0.020	0.425	0.461
Currently married (in union)	0.500	0.009	6,399	7,163	1.408	0.018	0.482	0.517
Married before age 18	0.300	0.010	4,720	5,349	1.519	0.034	0.280	0.320
Had sexual intercourse before age 18	0.683	0.010	4,720	5,349	1.510	0.015	0.662	0.703
Currently pregnant	0.043	0.003	6,399	7,163	1.080	0.063	0.038	0.049
Know any contraceptive method	0.995	0.002	3,167	3,579	1.314	0.002	0.991	0.998
Know a modern method	0.994	0.002	3,167	3,579	1.350	0.002	0.990	0.998
Currently using any method	0.260	0.010	3,167	3,579	1.333	0.040	0.239	0.280
Currently using a modern method	0.258	0.010	3,167	3,579	1.340	0.040	0.237	0.278
Currently using pill	0.063	0.006	3,167	3,579	1.282	0.088	0.052	0.075
Currently using male condoms	0.003	0.001	3,167	3,579	0.901	0.315	0.001	0.004
Currently using injectables	0.115	0.007	3,167	3,579	1.283	0.063	0.100	0.130
Currently using implants	0.064	0.005	3,167	3,579	1.187	0.081	0.054	0.074
Currently using female sterilisation	0.003	0.001	3,167	3,579	1.081	0.332	0.001	0.006
Currently using withdrawal	0.000	0.000	3,167	3,579	na	na	0.000	0.000
Currently using rhythm	0.000	0.000	3,167	3,579	0.653	1.002	0.000	0.000
Using public sector source	0.708	0.017	1,821	1,972	1.562	0.024	0.675	0.741
Want no more children	0.260	0.012	3,167	3,579	1.576	0.047	0.235	0.285
Want to delay next birth at least 2 years	0.191	0.010	3,167	3,579	1.470	0.054	0.170	0.211
Ideal number of children	4.082	0.040	6,286	7,012	2.021	0.010	4.001	4.163
Mothers protected against tetanus for last birth	0.869	0.010	2,473	2,795	1.506	0.012	0.849	0.890
Births with skilled attendant at delivery	0.941	0.007	3,026	3,422	1.450	0.008	0.927	0.955
Received 3+ doses of SP/Fansidar	0.316	0.020	1,215	1,392	1.518	0.064	0.276	0.356
Treated with ORS	0.863	0.034	178	218	1.375	0.040	0.794	0.931
Sought medical treatment for diarrhoea	0.723	0.036	178	218	1.100	0.049	0.652	0.794
Ever had vaccination card	0.963	0.010	551	628	1.273	0.011	0.943	0.983
Received BCG vaccination	0.969	0.013	551	628	1.780	0.014	0.943	0.995
Received birth dose HepB vaccination	0.240	0.026	551	628	1.425	0.108	0.189	0.292
Received DPT-HepB-Hib vaccination (3 doses)	0.792	0.020	551	628	1.171	0.026	0.751	0.833
Received birth dose polio 0 vaccination	0.957	0.011	551	628	1.269	0.011	0.936	0.979
Received polio vaccination (3 doses)	0.711	0.024	551	628	1.236	0.034	0.663	0.759
Received IPV vaccination	0.837	0.020	551	628	1.233	0.024	0.797	0.877
Received pneumococcal vaccination (3 doses)	0.804	0.019	551	628	1.137	0.024	0.765	0.842
Received rotavirus vaccination (2 doses)	0.851	0.017	551	628	1.122	0.020	0.817	0.885
Received measles 1 vaccination	0.749	0.023	551	628	1.234	0.031	0.703	0.795
Received all basic vaccinations (12-23 months)	0.570	0.024	551	628	1.125	0.042	0.523	0.618
Received all age-appropriate vaccinations (12-23 months)	0.530	0.025	551	628	1.170	0.047	0.480	0.580
Received measles/MMR 2 vaccination	0.563	0.028	542	590	1.271	0.049	0.508	0.619
Received all age-appropriate vaccinations (24-35 months)	0.260	0.024	542	590	1.217	0.092	0.213	0.308
Height-for-age (-2SD)	0.245	0.017	1,468	1,606	1.387	0.069	0.211	0.279
Weight-for-height (-2SD)	0.063	0.008	1,470	1,599	1.272	0.133	0.046	0.080
Weight-for-age (-2SD)	0.129	0.011	1,498	1,637	1.185	0.087	0.106	0.151
Body mass index (BMI) <18.5	0.053	0.006	2,889	3,226	1.366	0.108	0.041	0.064
Body mass index (BMI) ≥25	0.357	0.012	2,889	3,226	1.310	0.033	0.333	0.380
Prevalence of anaemia (children 6-59 months)	0.570	0.020	1,302	1,438	1.395	0.035	0.530	0.610
Prevalence of anaemia (women 15-49)	0.404	0.012	2,967	3,320	1.386	0.031	0.379	0.429
Had 2+ sexual partners in past 12 months	0.045	0.004	6,399	7,163	1.680	0.097	0.036	0.054
Condom use at last sex	0.040	0.012	272	324	1.009	0.300	0.016	0.064
Abstinence among young people (never had sex)	0.397	0.012	2,305	2,508	1.151	0.030	0.373	0.420
Had an HIV test and received results in past 12 months	0.241	0.008	6,399	7,163	1.567	0.035	0.224	0.258
Discriminatory attitudes towards people living with HIV	0.750	0.012	6,247	7,010	2.113	0.015	0.727	0.774
HIV prevalence among women 15-49	0.030	0.003	2,929	3,149	1.071	0.113	0.023	0.037
HIV prevalence among pregnant women 15-49	0.021	0.011	135	135	0.879	0.515	0.000	0.043
HIV prevalence among young women 15-24	0.020	0.005	1,346	1,435	1.281	0.245	0.010	0.030
Total fertility rate (last 3 years)	3.128	0.088	17,486	19,666	1.153	0.028	2.953	3.304
Neonatal mortality (last 0-4 years)	34.238	4.276	3,020	3,413	1.265	0.125	25.687	42.789
Postneonatal mortality (last 0-4 years)	33.195	3.605	3,034	3,436	1.084	0.109	25.985	40.405
Infant mortality (last 0-4 years)	67.433	5.348	3,029	3,423	1.172	0.079	56.736	78.129
Child mortality (last 0-4 years)	43.002	5.546	2,985	3,377	1.383	0.129	31.910	54.094
Under-5 mortality (last 0-4 years)	107.535	7.662	3,075	3,478	1.283	0.071	92.212	122.859

Continued...

Table B.3—*Continued*

Variable	Value (R)	Standard error (SE)	Number of cases: Un-weighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative Error (SE/R)	Confidence limits: Lower (R-2SE)	Confidence limits: Upper (R+2SE)
			MEN					
Urban residence	1.000	0.000	2,613	2,990	na	0.000	1.000	1.000
Literacy	0.789	0.012	2,613	2,990	1.483	0.015	0.765	0.812
No education	0.153	0.010	2,613	2,990	1.418	0.065	0.133	0.173
Secondary or higher education	0.752	0.012	2,613	2,990	1.432	0.016	0.728	0.776
Never married (in union)	0.536	0.012	2,613	2,990	1.209	0.022	0.513	0.560
Currently married (in union)	0.425	0.012	2,613	2,990	1.227	0.028	0.401	0.449
Had first sexual intercourse before age 18	0.409	0.014	1,945	2,277	1.290	0.035	0.380	0.438
Know any contraceptive method	0.997	0.002	1,084	1,271	1.111	0.002	0.993	1.001
Know any modern contraceptive method	0.997	0.002	1,084	1,271	1.111	0.002	0.993	1.001
Want no more children	0.181	0.017	1,084	1,271	1.453	0.094	0.147	0.215
Want to delay birth at least 2 years	0.191	0.015	1,084	1,271	1.254	0.078	0.161	0.221
Ideal number of children	3.980	0.053	2,502	2,849	1.349	0.013	3.874	4.087
Had 2+ sexual partners in past 12 months	0.209	0.011	2,613	2,990	1.393	0.053	0.186	0.231
Condom use at last sex	0.198	0.021	564	624	1.227	0.104	0.157	0.239
Abstinence among young people (never had sex)	0.428	0.019	1,067	1,161	1.273	0.045	0.389	0.467
Had paid sex in past 12 months	0.046	0.005	2,613	2,990	1.165	0.104	0.037	0.056
Had HIV test and received results in past 12 months	0.163	0.017	2,613	2,990	2.379	0.106	0.128	0.197
Discriminatory attitudes towards people living with HIV	0.627	0.017	2,550	2,919	1.776	0.027	0.593	0.661
HIV prevalence among men 15-49	0.015	0.003	2,180	2,571	1.192	0.207	0.009	0.021
HIV prevalence among young men 15-24	0.005	0.003	955	1,077	1.089	0.475	0.000	0.011
HIV prevalence among men 15-59	0.019	0.004	2,366	2,801	1.366	0.200	0.012	0.027
			WOMEN AND MEN					
HIV prevalence among respondents 15-49	0.023	0.002	5,109	5,720	1.066	0.097	0.019	0.028
HIV prevalence among respondents 15-24	0.014	0.003	2,301	2,512	1.220	0.215	0.008	0.020

na = Not available

Table B.4 Sampling errors: Rural sample, Sierra Leone 2019

Variable	Value (R)	Standard error (SE)	Number of cases: Un-weighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative Error (SE/R)	Confidence limits: Lower (R-2SE)	Confidence limits: Upper (R+2SE)
HOUSEHOLDS AND POPULATION								
Ownership of at least one ITN	0.737	0.009	8,423	7,719	1.852	0.012	0.719	0.754
De facto population with access to an ITN	0.514	0.009	44,855	41,085	2.029	0.017	0.496	0.532
Household population that slept under an ITN last night	0.574	0.010	44,855	41,085	2.003	0.017	0.555	0.593
WOMEN								
Urban residence	0.000	0.000	9,175	8,411	na	na	0.000	0.000
Literacy	0.262	0.010	9,175	8,411	2.109	0.037	0.242	0.281
No education	0.605	0.011	9,175	8,411	2.062	0.017	0.583	0.626
Secondary or higher education	0.231	0.009	9,175	8,411	2.121	0.040	0.212	0.250
Never married (never in union)	0.224	0.008	9,175	8,411	1.723	0.033	0.209	0.239
Currently married (in union)	0.730	0.007	9,175	8,411	1.616	0.010	0.715	0.745
Married before age 18	0.416	0.009	7,394	6,798	1.537	0.021	0.398	0.434
Had sexual intercourse before age 18	0.790	0.009	7,394	6,798	1.880	0.011	0.772	0.808
Currently pregnant	0.078	0.004	9,175	8,411	1.314	0.047	0.071	0.085
Know any contraceptive method	0.970	0.003	6,670	6,136	1.600	0.003	0.963	0.976
Know a modern method	0.966	0.004	6,670	6,136	1.741	0.004	0.958	0.973
Currently using any method	0.185	0.008	6,670	6,136	1.722	0.044	0.169	0.201
Currently using a modern method	0.181	0.008	6,670	6,136	1.629	0.042	0.166	0.197
Currently using pill	0.028	0.003	6,670	6,136	1.540	0.111	0.022	0.035
Currently using male condoms	0.000	0.000	6,670	6,136	1.240	0.695	0.000	0.001
Currently using injectables	0.074	0.004	6,670	6,136	1.383	0.060	0.065	0.083
Currently using implants	0.071	0.005	6,670	6,136	1.546	0.069	0.061	0.081
Currently using female sterilisation	0.002	0.001	6,670	6,136	1.143	0.321	0.001	0.003
Currently using withdrawal	0.000	0.000	6,670	6,136	0.982	0.696	0.000	0.001
Currently using rhythm	0.000	0.000	6,670	6,136	0.838	0.737	0.000	0.000
Using public sector source	0.914	0.009	1,816	1,733	1.355	0.010	0.896	0.932
Want no more children	0.259	0.008	6,670	6,136	1.550	0.032	0.243	0.276
Want to delay next birth at least 2 years	0.261	0.011	6,670	6,136	2.123	0.044	0.239	0.284
Ideal number of children	5.280	0.045	9,080	8,313	1.963	0.008	5.190	5.369
Mothers protected against tetanus for last birth	0.840	0.010	4,904	4,531	1.851	0.012	0.821	0.860
Births with skilled attendant at delivery	0.831	0.012	6,873	6,350	2.200	0.014	0.807	0.854
Received 3+ doses of SP/Fansidar	0.379	0.018	2,755	2,558	1.924	0.047	0.344	0.415
Treated with ORS	0.847	0.020	421	412	1.138	0.023	0.808	0.887
Sought medical treatment for diarrhoea	0.769	0.022	421	412	1.103	0.029	0.724	0.814
Ever had vaccination card	0.972	0.005	1,310	1,209	1.021	0.005	0.963	0.981
Received BCG vaccination	0.961	0.006	1,310	1,209	1.205	0.007	0.948	0.974
Received birth dose HepB vaccination	0.194	0.013	1,310	1,209	1.201	0.068	0.167	0.220
Received DPT-HepB-Hib vaccination (3 doses)	0.776	0.015	1,310	1,209	1.294	0.019	0.745	0.806
Received birth dose polio 0 vaccination	0.912	0.011	1,310	1,209	1.387	0.012	0.890	0.934
Received polio vaccination (3 doses)	0.708	0.017	1,310	1,209	1.327	0.024	0.675	0.742
Received IPV vaccination	0.777	0.017	1,310	1,209	1.472	0.022	0.742	0.811
Received pneumococcal vaccination (3 doses)	0.789	0.014	1,310	1,209	1.261	0.018	0.760	0.817
Received rotavirus vaccination (2 doses)	0.853	0.013	1,310	1,209	1.331	0.015	0.827	0.879
Received measles 1 vaccination	0.746	0.017	1,310	1,209	1.410	0.023	0.712	0.781
Received all basic vaccinations (12-23 months)	0.560	0.018	1,310	1,209	1.302	0.032	0.523	0.596
Received all age-appropriate vaccinations (12-23 months)	0.484	0.018	1,310	1,209	1.293	0.037	0.448	0.520
Received measles/MMR 2 vaccination	0.533	0.018	1,187	1,076	1.239	0.034	0.497	0.570
Received all age-appropriate vaccinations (24-35 months)	0.320	0.017	1,187	1,076	1.247	0.054	0.286	0.355
Height-for-age (-2SD)	0.319	0.010	3,471	3,214	1.160	0.030	0.300	0.339
Weight-for-height (-2SD)	0.049	0.004	3,481	3,225	1.053	0.080	0.041	0.057
Weight-for-age (-2SD)	0.139	0.008	3,498	3,233	1.283	0.056	0.123	0.155
Body mass index (BMI) <18.5	0.083	0.006	3,964	3,657	1.293	0.068	0.071	0.094
Body mass index (BMI) ≥25	0.209	0.009	3,964	3,657	1.462	0.045	0.190	0.228
Prevalence of anaemia (children 6-59 months)	0.733	0.011	2,989	2,785	1.333	0.015	0.711	0.756
Prevalence of anaemia (women 15-49)	0.516	0.011	4,243	3,946	1.422	0.021	0.494	0.538
Had 2+ sexual partners in past 12 months	0.030	0.003	9,175	8,411	1.436	0.085	0.025	0.036
Condom use at last sex	0.013	0.006	265	256	0.867	0.461	0.001	0.025
Abstinence among young people (never had sex)	0.365	0.016	1,812	1,621	1.404	0.044	0.333	0.397
Had an HIV test and received results in past 12 months	0.153	0.006	9,175	8,411	1.678	0.041	0.140	0.165
Discriminatory attitudes towards people living with HIV	0.840	0.010	8,187	7,593	2.447	0.012	0.820	0.860
HIV prevalence among women 15-49	0.015	0.002	4,170	3,792	1.186	0.149	0.010	0.019
HIV prevalence among pregnant women 15-49	0.021	0.008	309	285	1.014	0.396	0.004	0.037
HIV prevalence among young women 15-24	0.009	0.003	1,400	1,276	1.019	0.283	0.004	0.014
Total fertility rate (last 3 years)	5.140	0.115	25,614	23,488	1.649	0.022	4.910	5.369
Neonatal mortality (last 0-4 years)	28.547	2.676	6,891	6,370	1.217	0.094	23.195	33.899
Postneonatal mortality (last 0-4 years)	51.146	3.896	6,931	6,393	1.349	0.076	43.354	58.938
Infant mortality (last 0-4 years)	79.693	4.799	6,932	6,410	1.292	0.060	70.096	89.290
Child mortality (last 0-4 years)	54.462	4.326	6,883	6,387	1.535	0.079	45.809	63.115
Under-5 mortality (last 0-4 years)	129.815	6.190	7,090	6,573	1.387	0.048	117.434	142.195

Continued...

Table B.4—*Continued*

Variable	Value (R)	Standard error (SE)	Number of cases: Un-weighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative Error (SE/R)	Confidence limits: Lower (R-2SE)	Confidence limits: Upper (R+2SE)
			MEN					
Urban residence	0.000	0.000	3,752	3,394	na	na	0.000	0.000
Literacy	0.475	0.014	3,752	3,394	1.741	0.030	0.447	0.504
No education	0.415	0.013	3,752	3,394	1.580	0.031	0.389	0.440
Secondary or higher education	0.411	0.014	3,752	3,394	1.744	0.034	0.383	0.439
Never married (in union)	0.390	0.011	3,752	3,394	1.379	0.028	0.368	0.412
Currently married (in union)	0.579	0.011	3,752	3,394	1.376	0.019	0.556	0.601
Had first sexual intercourse before age 18	0.471	0.014	2,835	2,566	1.517	0.030	0.442	0.499
Know any contraceptive method	0.988	0.003	2,181	1,963	1.230	0.003	0.982	0.994
Know any modern contraceptive method	0.986	0.003	2,181	1,963	1.242	0.003	0.980	0.992
Want no more children	0.196	0.012	2,181	1,963	1.410	0.061	0.172	0.220
Want to delay birth at least 2 years	0.218	0.011	2,181	1,963	1.282	0.052	0.196	0.241
Ideal number of children	5.745	0.076	3,580	3,239	1.351	0.013	5.594	5.896
Had 2+ sexual partners in past 12 months	0.224	0.008	3,752	3,394	1.206	0.037	0.208	0.240
Condom use at last sex	0.098	0.013	828	760	1.244	0.131	0.073	0.124
Abstinence among young people (never had sex)	0.500	0.018	1,239	1,123	1.292	0.037	0.463	0.537
Had paid sex in past 12 months	0.029	0.004	3,752	3,394	1.313	0.123	0.022	0.036
Had HIV test and received results in past 12 months	0.080	0.006	3,752	3,394	1.392	0.077	0.068	0.092
Discriminatory attitudes towards people living with HIV	0.786	0.013	3,514	3,197	1.839	0.016	0.761	0.812
HIV prevalence among men 15-49	0.007	0.002	3,126	2,895	1.160	0.239	0.004	0.011
HIV prevalence among young men 15-24	0.004	0.002	1,135	1,067	1.041	0.519	0.000	0.007
HIV prevalence among men 15-59	0.008	0.002	3,640	3,363	1.259	0.236	0.004	0.011
			WOMEN AND MEN					
HIV prevalence among respondents 15-49	0.012	0.002	7,296	6,687	1.235	0.133	0.009	0.015
HIV prevalence among respondents 15-24	0.007	0.002	2,535	2,343	0.994	0.242	0.003	0.010

na = Not available

Table B.5 Sampling errors: Eastern sample, Sierra Leone 2019

Variable	Value (R)	Standard error (SE)	Number of cases: Un-weighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative Error (SE/R)	Confidence limits: Lower (R-2SE)	Confidence limits: Upper (R+2SE)
HOUSEHOLDS AND POPULATION								
Ownership of at least one ITN	0.788	0.013	2,816	2,852	1.659	0.016	0.763	0.814
De facto population with access to an ITN	0.535	0.012	14,295	14,726	1.719	0.023	0.510	0.560
Household population that slept under an ITN last night	0.618	0.016	14,295	14,726	1.925	0.025	0.587	0.649
WOMEN								
Urban residence	0.399	0.021	2,978	3,069	2.307	0.052	0.358	0.440
Literacy	0.345	0.017	2,978	3,069	1.951	0.049	0.311	0.379
No education	0.497	0.018	2,978	3,069	1.951	0.036	0.461	0.532
Secondary or higher education	0.358	0.017	2,978	3,069	1.968	0.048	0.324	0.393
Never married (never in union)	0.303	0.013	2,978	3,069	1.517	0.042	0.278	0.329
Currently married (in union)	0.654	0.013	2,978	3,069	1.508	0.020	0.628	0.680
Married before age 18	0.439	0.018	2,353	2,421	1.804	0.042	0.402	0.476
Had sexual intercourse before age 18	0.833	0.012	2,353	2,421	1.546	0.014	0.809	0.857
Currently pregnant	0.067	0.005	2,978	3,069	1.087	0.075	0.057	0.076
Know any contraceptive method	0.995	0.002	1,932	2,007	1.026	0.002	0.992	0.998
Know a modern method	0.994	0.002	1,932	2,007	1.080	0.002	0.991	0.998
Currently using any method	0.238	0.014	1,932	2,007	1.430	0.058	0.210	0.265
Currently using a modern method	0.235	0.014	1,932	2,007	1.436	0.059	0.207	0.262
Currently using pill	0.063	0.008	1,932	2,007	1.457	0.128	0.047	0.079
Currently using male condoms	0.001	0.001	1,932	2,007	0.832	0.614	0.000	0.002
Currently using injectables	0.083	0.007	1,932	2,007	1.163	0.088	0.068	0.098
Currently using implants	0.073	0.007	1,932	2,007	1.181	0.096	0.059	0.086
Currently using female sterilisation	0.003	0.002	1,932	2,007	1.277	0.559	0.000	0.006
Currently using withdrawal	0.001	0.001	1,932	2,007	0.923	0.696	0.000	0.002
Currently using rhythm	0.000	0.000	1,932	2,007	0.643	1.005	0.000	0.001
Using public sector source	0.847	0.014	774	768	1.115	0.017	0.818	0.876
Want no more children	0.307	0.015	1,932	2,007	1.458	0.050	0.276	0.338
Want to delay next birth at least 2 years	0.259	0.019	1,932	2,007	1.869	0.072	0.222	0.296
Ideal number of children	4.856	0.071	2,971	3,062	1.969	0.015	4.714	4.997
Mothers protected against tetanus for last birth	0.867	0.012	1,475	1,542	1.383	0.014	0.843	0.892
Births with skilled attendant at delivery	0.943	0.012	1,972	2,077	2.097	0.013	0.919	0.968
Received 3+ doses of SP/Fansidar	0.354	0.030	791	847	1.784	0.084	0.294	0.414
Treated with ORS	0.907	0.027	151	164	1.193	0.030	0.852	0.962
Sought medical treatment for diarrhoea	0.896	0.029	151	164	1.092	0.032	0.839	0.954
Ever had vaccination card	0.960	0.011	360	382	1.063	0.011	0.938	0.982
Received BCG vaccination	0.951	0.013	360	382	1.186	0.014	0.925	0.978
Received birth dose HepB vaccination	0.156	0.019	360	382	1.002	0.122	0.118	0.194
Received DPT-HepB-Hib vaccination (3 doses)	0.789	0.022	360	382	1.039	0.028	0.744	0.834
Received birth dose polio 0 vaccination	0.936	0.014	360	382	1.085	0.015	0.908	0.963
Received polio vaccination (3 doses)	0.762	0.025	360	382	1.090	0.032	0.713	0.811
Received IPV vaccination	0.820	0.022	360	382	1.066	0.027	0.776	0.864
Received pneumococcal vaccination (3 doses)	0.789	0.023	360	382	1.056	0.029	0.743	0.834
Received rotavirus vaccination (2 doses)	0.882	0.018	360	382	1.050	0.020	0.846	0.919
Received measles 1 vaccination	0.759	0.027	360	382	1.210	0.036	0.704	0.814
Received all basic vaccinations (12-23 months)	0.615	0.028	360	382	1.093	0.046	0.558	0.671
Received all age-appropriate vaccinations (12-23 months)	0.562	0.029	360	382	1.090	0.051	0.505	0.620
Received measles/MMR 2 vaccination	0.594	0.032	347	356	1.186	0.053	0.530	0.657
Received all age-appropriate vaccinations (24-35 months)	0.407	0.032	347	356	1.201	0.079	0.343	0.471
Height-for-age (-2SD)	0.253	0.017	1,074	1,122	1.197	0.066	0.220	0.286
Weight-for-height (-2SD)	0.030	0.006	1,084	1,132	1.083	0.194	0.019	0.042
Weight-for-age (-2SD)	0.092	0.011	1,075	1,123	1.216	0.124	0.069	0.115
Body mass index (BMI) <18.5	0.068	0.009	1,425	1,488	1.288	0.126	0.050	0.085
Body mass index (BMI) ≥25	0.253	0.014	1,425	1,488	1.202	0.054	0.225	0.280
Prevalence of anaemia (children 6-59 months)	0.676	0.020	959	1,005	1.313	0.030	0.635	0.716
Prevalence of anaemia (women 15-49)	0.457	0.017	1,547	1,614	1.384	0.038	0.422	0.491
Had 2+ sexual partners in past 12 months	0.021	0.003	2,978	3,069	1.066	0.134	0.015	0.027
Condom use at last sex	0.025	0.018	60	64	0.894	0.724	0.000	0.061
Abstinence among young people (never had sex)	0.368	0.021	743	761	1.167	0.056	0.327	0.409
Had an HIV test and received results in past 12 months	0.190	0.012	2,978	3,069	1.677	0.063	0.166	0.214
Discriminatory attitudes towards people living with HIV	0.772	0.023	2,805	2,905	2.839	0.029	0.727	0.817
HIV prevalence among women 15-49	0.018	0.004	1,536	1,398	1.165	0.220	0.010	0.026
HIV prevalence among pregnant women 15-49	0.021	0.013	112	98	0.959	0.618	0.000	0.047
HIV prevalence among young women 15-24	0.011	0.005	575	518	1.050	0.420	0.002	0.020
Total fertility rate (last 3 years)	4.649	0.161	8,225	8,480	1.097	0.035	4.328	4.970
Neonatal mortality (last 0-9 years)	32.062	3.165	4,135	4,317	1.037	0.099	25.732	38.393
Postneonatal mortality (last 0-9 years)	53.419	5.149	4,170	4,352	1.234	0.096	43.120	63.718
Infant mortality (last 0-9 years)	85.482	5.936	4,153	4,336	1.160	0.069	73.609	97.354
Child mortality (last 0-9 years)	51.339	4.472	4,131	4,290	1.051	0.087	42.395	60.283
Under-5 mortality (last 0-9 years)	132.432	7.681	4,197	4,380	1.218	0.058	117.069	147.795

Continued...

Table B.5—*Continued*

Variable	Value (R)	Standard error (SE)	Number of cases: Un-weighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative Error (SE/R)	Confidence limits: Lower (R-2SE)	Confidence limits: Upper (R+2SE)
			MEN					
Urban residence	0.402	0.020	1,245	1,251	1.419	0.049	0.362	0.441
Literacy	0.531	0.023	1,245	1,251	1.623	0.043	0.485	0.577
No education	0.372	0.020	1,245	1,251	1.435	0.053	0.333	0.411
Secondary or higher education	0.478	0.021	1,245	1,251	1.499	0.044	0.436	0.521
Never married (in union)	0.425	0.019	1,245	1,251	1.341	0.044	0.388	0.463
Currently married (in union)	0.546	0.018	1,245	1,251	1.299	0.034	0.509	0.583
Had first sexual intercourse before age 18	0.410	0.017	938	938	1.085	0.043	0.375	0.445
Know any contraceptive method	0.997	0.002	687	683	0.830	0.002	0.994	1.001
Know any modern contraceptive method	0.997	0.002	687	683	0.830	0.002	0.994	1.001
Want no more children	0.196	0.017	687	683	1.112	0.086	0.163	0.230
Want to delay birth at least 2 years	0.233	0.020	687	683	1.259	0.087	0.192	0.274
Ideal number of children	5.116	0.094	1,231	1,236	1.157	0.018	4.928	5.303
Had 2+ sexual partners in past 12 months	0.226	0.017	1,245	1,251	1.430	0.075	0.192	0.260
Condom use at last sex	0.149	0.022	276	283	1.039	0.150	0.104	0.193
Abstinence among young people (never had sex)	0.416	0.027	435	445	1.156	0.066	0.361	0.471
Had paid sex in past 12 months	0.042	0.006	1,245	1,251	1.086	0.148	0.029	0.054
Had HIV test and received results in past 12 months	0.088	0.009	1,245	1,251	1.099	0.100	0.070	0.106
Discriminatory attitudes towards people living with HIV	0.664	0.022	1,215	1,225	1.589	0.032	0.621	0.707
HIV prevalence among men 15-49	0.003	0.001	1,149	1,070	0.898	0.467	0.000	0.006
HIV prevalence among young men 15-24	0.001	0.001	434	406	0.550	1.007	0.000	0.002
HIV prevalence among men 15-59	0.003	0.001	1,334	1,250	0.885	0.426	0.000	0.006
			WOMEN AND MEN					
HIV prevalence among respondents 15-49	0.012	0.003	2,685	2,469	1.218	0.218	0.007	0.017
HIV prevalence among respondents 15-24	0.006	0.003	1,009	924	1.020	0.402	0.001	0.011

Table B.6 Sampling errors: Northern sample, Sierra Leone 2019

Variable	Value (R)	Standard error (SE)	Number of cases: Un-weighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative Error (SE/R)	Confidence limits: Lower (R-2SE)	Confidence limits: Upper (R+2SE)
HOUSEHOLDS AND POPULATION								
Ownership of at least one ITN	0.734	0.016	2,958	2,568	1.984	0.022	0.702	0.767
De facto population with access to an ITN	0.507	0.018	16,864	14,527	2.527	0.036	0.470	0.544
Household population that slept under an ITN last night	0.564	0.017	16,864	14,527	2.146	0.030	0.530	0.597
WOMEN								
Urban residence	0.270	0.024	3,971	3,317	3.439	0.090	0.222	0.319
Literacy	0.385	0.015	3,971	3,317	1.938	0.039	0.355	0.415
No education	0.545	0.016	3,971	3,317	2.059	0.030	0.512	0.577
Secondary or higher education	0.333	0.015	3,971	3,317	1.997	0.045	0.303	0.362
Never married (never in union)	0.294	0.014	3,971	3,317	1.881	0.046	0.266	0.321
Currently married (in union)	0.655	0.012	3,971	3,317	1.592	0.018	0.631	0.679
Married before age 18	0.385	0.011	3,038	2,551	1.253	0.029	0.363	0.407
Had sexual intercourse before age 18	0.761	0.015	3,038	2,551	1.926	0.020	0.731	0.791
Currently pregnant	0.061	0.006	3,971	3,317	1.560	0.097	0.049	0.073
Know any contraceptive method	0.975	0.005	2,570	2,173	1.510	0.005	0.966	0.984
Know a modern method	0.966	0.007	2,570	2,173	2.025	0.008	0.951	0.980
Currently using any method	0.181	0.015	2,570	2,173	2.041	0.086	0.150	0.212
Currently using a modern method	0.176	0.013	2,570	2,173	1.772	0.076	0.149	0.202
Currently using pill	0.013	0.003	2,570	2,173	1.330	0.229	0.007	0.019
Currently using male condoms	0.002	0.001	2,570	2,173	1.248	0.598	0.000	0.004
Currently using injectables	0.066	0.008	2,570	2,173	1.676	0.124	0.050	0.082
Currently using implants	0.087	0.009	2,570	2,173	1.533	0.098	0.070	0.104
Currently using female sterilisation	0.003	0.001	2,570	2,173	1.305	0.458	0.000	0.006
Currently using withdrawal	0.000	0.000	2,570	2,173	na	na	0.000	0.000
Currently using rhythm	0.000	0.000	2,570	2,173	na	na	0.000	0.000
Using public sector source	0.856	0.016	826	756	1.272	0.018	0.825	0.887
Want no more children	0.228	0.014	2,570	2,173	1.669	0.061	0.200	0.256
Want to delay next birth at least 2 years	0.256	0.023	2,570	2,173	2.684	0.090	0.210	0.302
Ideal number of children	4.811	0.080	3,955	3,304	2.549	0.017	4.651	4.971
Mothers protected against tetanus for last birth	0.770	0.022	1,713	1,433	2.181	0.029	0.725	0.815
Births with skilled attendant at delivery	0.884	0.015	2,294	1,918	1.907	0.017	0.853	0.915
Received 3+ doses of SP/Fansidar	0.426	0.040	937	796	2.466	0.094	0.346	0.506
Treated with ORS	0.902	0.033	88	71	0.952	0.037	0.836	0.968
Sought medical treatment for diarrhoea	0.714	0.054	88	71	1.061	0.076	0.606	0.823
Ever had vaccination card	0.959	0.011	440	368	1.083	0.011	0.938	0.980
Received BCG vaccination	0.965	0.010	440	368	1.090	0.010	0.945	0.985
Received birth dose HepB vaccination	0.197	0.026	440	368	1.370	0.134	0.145	0.250
Received DPT-HepB-Hib vaccination (3 doses)	0.767	0.030	440	368	1.476	0.039	0.707	0.828
Received birth dose polio 0 vaccination	0.920	0.021	440	368	1.580	0.023	0.878	0.962
Received polio vaccination (3 doses)	0.719	0.029	440	368	1.335	0.041	0.661	0.777
Received IPV vaccination	0.805	0.038	440	368	1.958	0.047	0.730	0.880
Received pneumococcal vaccination (3 doses)	0.805	0.026	440	368	1.343	0.032	0.753	0.856
Received rotavirus vaccination (2 doses)	0.826	0.029	440	368	1.548	0.035	0.769	0.883
Received measles 1 vaccination	0.750	0.031	440	368	1.492	0.042	0.687	0.813
Received all basic vaccinations (12-23 months)	0.538	0.034	440	368	1.399	0.063	0.470	0.606
Received all age-appropriate vaccinations (12-23 months)	0.475	0.038	440	368	1.557	0.080	0.398	0.551
Received measles/MMR 2 vaccination	0.544	0.031	364	289	1.124	0.057	0.483	0.606
Received all age-appropriate vaccinations (24-35 months)	0.318	0.034	364	289	1.337	0.108	0.249	0.386
Height-for-age (-2SD)	0.309	0.019	1,194	1,072	1.323	0.060	0.272	0.346
Weight-for-height (-2SD)	0.054	0.007	1,199	1,077	1.108	0.131	0.040	0.068
Weight-for-age (-2SD)	0.140	0.016	1,205	1,079	1.511	0.113	0.108	0.171
Body mass index (BMI) <18.5	0.090	0.011	1,678	1,434	1.642	0.126	0.067	0.113
Body mass index (BMI) ≥25	0.194	0.017	1,678	1,434	1.729	0.085	0.161	0.227
Prevalence of anaemia (children 6-59 months)	0.720	0.022	1,013	916	1.510	0.030	0.677	0.763
Prevalence of anaemia (women 15-49)	0.486	0.021	1,728	1,503	1.759	0.043	0.445	0.528
Had 2+ sexual partners in past 12 months	0.038	0.005	3,971	3,317	1.607	0.128	0.029	0.048
Condom use at last sex	0.038	0.016	154	128	1.051	0.429	0.005	0.070
Abstinence among young people (never had sex)	0.378	0.023	1,076	865	1.568	0.061	0.332	0.425
Had an HIV test and received results in past 12 months	0.145	0.011	3,971	3,317	1.949	0.075	0.123	0.167
Discriminatory attitudes towards people living with HIV	0.781	0.014	3,645	3,045	2.021	0.018	0.753	0.808
HIV prevalence among women 15-49	0.019	0.004	1,660	1,474	1.132	0.201	0.011	0.026
HIV prevalence among pregnant women 15-49	0.030	0.017	88	78	0.951	0.582	0.000	0.064
HIV prevalence among young women 15-24	0.014	0.005	626	540	1.008	0.334	0.005	0.024
Total fertility rate (last 3 years)	4.022	0.193	10,836	9,053	1.918	0.048	3.636	4.408
Neonatal mortality (last 0-9 years)	21.679	2.833	4,691	4,039	1.240	0.131	16.013	27.344
Postneonatal mortality (last 0-9 years)	32.301	3.777	4,711	4,047	1.330	0.117	24.747	39.855
Infant mortality (last 0-9 years)	53.980	5.059	4,700	4,048	1.352	0.094	43.861	64.099
Child mortality (last 0-9 years)	48.056	4.665	4,724	4,070	1.458	0.097	38.726	57.386
Under-5 mortality (last 0-9 years)	99.442	5.391	4,741	4,083	1.070	0.054	88.659	110.224

Continued...

Table B.6—*Continued*

Variable	Value (R)	Standard error (SE)	Number of cases: Un-weighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative Error (SE/R)	Confidence limits: Lower (R-2SE)	Confidence limits: Upper (R+2SE)
			MEN					
Urban residence	0.277	0.028	1,592	1,353	2.478	0.101	0.221	0.332
Literacy	0.589	0.023	1,592	1,353	1.876	0.039	0.543	0.636
No education	0.346	0.021	1,592	1,353	1.757	0.061	0.304	0.388
Secondary or higher education	0.543	0.021	1,592	1,353	1.672	0.038	0.502	0.585
Never married (in union)	0.483	0.018	1,592	1,353	1.475	0.038	0.446	0.520
Currently married (in union)	0.488	0.019	1,592	1,353	1.554	0.040	0.449	0.527
Had first sexual intercourse before age 18	0.405	0.028	1,149	983	1.961	0.070	0.348	0.462
Know any contraceptive method	0.980	0.007	778	661	1.480	0.008	0.965	0.995
Know any modern contraceptive method	0.976	0.008	778	661	1.502	0.008	0.960	0.993
Want no more children	0.147	0.021	778	661	1.661	0.143	0.105	0.190
Want to delay birth at least 2 years	0.173	0.019	778	661	1.374	0.108	0.136	0.211
Ideal number of children	5.432	0.124	1,528	1,301	1.549	0.023	5.184	5.680
Had 2+ sexual partners in past 12 months	0.183	0.013	1,592	1,353	1.368	0.073	0.156	0.209
Condom use at last sex	0.132	0.026	262	248	1.232	0.196	0.080	0.184
Abstinence among young people (never had sex)	0.501	0.028	628	533	1.383	0.055	0.446	0.557
Had paid sex in past 12 months	0.024	0.005	1,592	1,353	1.275	0.205	0.014	0.033
Had HIV test and received results in past 12 months	0.124	0.015	1,592	1,353	1.845	0.123	0.094	0.155
Discriminatory attitudes towards people living with HIV	0.789	0.021	1,502	1,278	2.013	0.027	0.747	0.832
HIV prevalence among men 15-49	0.012	0.003	1,263	1,153	1.026	0.264	0.006	0.018
HIV prevalence among young men 15-24	0.006	0.003	516	473	0.950	0.539	0.000	0.012
HIV prevalence among men 15-59	0.012	0.003	1,453	1,323	1.138	0.271	0.006	0.019
			WOMEN AND MEN					
HIV prevalence among respondents 15-49	0.016	0.003	2,923	2,627	1.198	0.175	0.010	0.021
HIV prevalence among respondents 15-24	0.010	0.003	1,142	1,014	0.945	0.272	0.005	0.016

na = Not available

Table B.7 Sampling errors: North West sample, Sierra Leone 2019

Variable	Value (R)	Standard error (SE)	Number of cases: Un-weighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative Error (SE/R)	Confidence limits: Lower (R-2SE)	Confidence limits: Upper (R+2SE)
HOUSEHOLDS AND POPULATION								
Ownership of at least one ITN	0.651	0.016	2,257	2,195	1.637	0.025	0.618	0.684
De facto population with access to an ITN	0.455	0.015	12,828	12,277	1.641	0.032	0.426	0.484
Household population that slept under an ITN last night	0.481	0.017	12,828	12,277	1.809	0.035	0.447	0.515
WOMEN								
Urban residence	0.257	0.018	2,498	2,508	2.107	0.072	0.220	0.293
Literacy	0.317	0.018	2,498	2,508	1.936	0.057	0.281	0.354
No education	0.554	0.017	2,498	2,508	1.751	0.031	0.519	0.589
Secondary or higher education	0.307	0.016	2,498	2,508	1.784	0.054	0.274	0.340
Never married (never in union)	0.252	0.012	2,498	2,508	1.383	0.048	0.228	0.276
Currently married (in union)	0.702	0.013	2,498	2,508	1.448	0.019	0.675	0.728
Married before age 18	0.389	0.012	1,927	1,948	1.072	0.031	0.366	0.413
Had sexual intercourse before age 18	0.819	0.017	1,927	1,948	1.940	0.021	0.785	0.853
Currently pregnant	0.080	0.005	2,498	2,508	0.964	0.065	0.070	0.091
Know any contraceptive method	0.991	0.005	1,741	1,760	1.998	0.005	0.981	1.000
Know a modern method	0.988	0.005	1,741	1,760	1.837	0.005	0.979	0.998
Currently using any method	0.160	0.013	1,741	1,760	1.456	0.080	0.134	0.186
Currently using a modern method	0.159	0.013	1,741	1,760	1.451	0.080	0.134	0.185
Currently using pill	0.019	0.004	1,741	1,760	1.261	0.215	0.011	0.028
Currently using male condoms	0.001	0.001	1,741	1,760	0.850	0.735	0.000	0.002
Currently using injectables	0.071	0.009	1,741	1,760	1.418	0.123	0.053	0.088
Currently using implants	0.058	0.006	1,741	1,760	1.139	0.110	0.045	0.071
Currently using female sterilisation	0.001	0.001	1,741	1,760	0.841	0.521	0.000	0.003
Currently using withdrawal	0.000	0.000	1,741	1,760	na	na	0.000	0.000
Currently using rhythm	0.000	0.000	1,741	1,760	0.692	1.003	0.000	0.001
Using public sector source	0.826	0.025	505	494	1.465	0.030	0.777	0.876
Want no more children	0.193	0.011	1,741	1,760	1.155	0.057	0.172	0.215
Want to delay next birth at least 2 years	0.285	0.019	1,741	1,760	1.786	0.068	0.247	0.324
Ideal number of children	5.272	0.065	2,433	2,435	1.516	0.012	5.142	5.403
Mothers protected against tetanus for last birth	0.837	0.016	1,379	1,380	1.601	0.019	0.805	0.869
Births with skilled attendant at delivery	0.697	0.026	1,882	1,894	2.142	0.038	0.644	0.750
Received 3+ doses of SP/Fansidar	0.411	0.029	752	758	1.596	0.069	0.354	0.468
Treated with ORS	0.853	0.036	140	155	1.208	0.042	0.781	0.925
Sought medical treatment for diarrhoea	0.700	0.031	140	155	0.836	0.044	0.639	0.761
Ever had vaccination card	0.985	0.007	347	348	0.993	0.007	0.971	0.998
Received BCG vaccination	0.962	0.013	347	348	1.264	0.013	0.936	0.988
Received birth dose HepB vaccination	0.204	0.026	347	348	1.190	0.127	0.152	0.256
Received DPT-HepB-Hib vaccination (3 doses)	0.743	0.028	347	348	1.179	0.038	0.687	0.799
Received birth dose polio 0 vaccination	0.906	0.023	347	348	1.412	0.025	0.860	0.952
Received polio vaccination (3 doses)	0.630	0.036	347	348	1.372	0.057	0.558	0.702
Received IPV vaccination	0.693	0.034	347	348	1.373	0.049	0.624	0.761
Received pneumococcal vaccination (3 doses)	0.755	0.028	347	348	1.186	0.037	0.700	0.811
Received rotavirus vaccination (2 doses)	0.846	0.025	347	348	1.272	0.029	0.797	0.895
Received measles 1 vaccination	0.666	0.032	347	348	1.250	0.048	0.602	0.731
Received all basic vaccinations (12-23 months)	0.470	0.035	347	348	1.273	0.074	0.401	0.539
Received all age-appropriate vaccinations (12-23 months)	0.364	0.032	347	348	1.224	0.088	0.300	0.429
Received measles/MMR 2 vaccination	0.446	0.037	321	321	1.344	0.084	0.371	0.521
Received all age-appropriate vaccinations (24-35 months)	0.130	0.021	321	321	1.138	0.164	0.087	0.172
Height-for-age (-2SD)	0.324	0.019	772	726	1.093	0.058	0.286	0.362
Weight-for-height (-2SD)	0.057	0.009	776	730	1.048	0.158	0.039	0.075
Weight-for-age (-2SD)	0.167	0.017	780	732	1.185	0.101	0.134	0.201
Body mass index (BMI) <18.5	0.076	0.011	908	909	1.281	0.148	0.054	0.099
Body mass index (BMI) ≥25	0.215	0.018	908	909	1.325	0.084	0.179	0.251
Prevalence of anaemia (children 6-59 months)	0.755	0.021	638	602	1.195	0.028	0.713	0.797
Prevalence of anaemia (women 15-49)	0.517	0.021	961	960	1.304	0.041	0.475	0.559
Had 2+ sexual partners in past 12 months	0.036	0.004	2,498	2,508	1.184	0.122	0.027	0.045
Condom use at last sex	0.029	0.020	84	90	1.105	0.704	0.000	0.070
Abstinence among young people (never had sex)	0.323	0.021	569	565	1.062	0.065	0.281	0.365
Had an HIV test and received results in past 12 months	0.154	0.011	2,498	2,508	1.523	0.071	0.132	0.176
Discriminatory attitudes towards people living with HIV	0.901	0.013	2,352	2,362	2.078	0.014	0.876	0.927
HIV prevalence among women 15-49	0.018	0.004	958	1,129	0.924	0.218	0.010	0.026
HIV prevalence among pregnant women 15-49	0.000	0.000	75	87	na	na	0.000	0.000
HIV prevalence among young women 15-24	0.008	0.004	388	460	0.948	0.520	0.000	0.017
Total fertility rate (last 3 years)	5.013	0.149	6,954	6,992	1.064	0.030	4.715	5.311
Neonatal mortality (last 0-9 years)	36.115	4.347	3,740	3,767	1.288	0.120	27.420	44.809
Postneonatal mortality (last 0-9 years)	64.962	6.135	3,745	3,774	1.263	0.094	52.693	77.231
Infant mortality (last 0-9 years)	101.076	7.775	3,749	3,778	1.334	0.077	85.527	116.625
Child mortality (last 0-9 years)	59.823	6.737	3,694	3,720	1.478	0.113	46.350	73.296
Under-5 mortality (last 0-9 years)	154.853	9.527	3,781	3,812	1.335	0.062	135.798	173.908

Continued...

Table B.7—*Continued*

Variable	Value (R)	Standard error (SE)	Number of cases: Un-weighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative Error (SE/R)	Confidence limits: Lower (R-2SE)	Confidence limits: Upper (R+2SE)
			MEN					
Urban residence	0.278	0.023	993	982	1.646	0.084	0.231	0.325
Literacy	0.632	0.021	993	982	1.386	0.034	0.590	0.675
No education	0.286	0.019	993	982	1.327	0.067	0.248	0.324
Secondary or higher education	0.559	0.023	993	982	1.434	0.040	0.513	0.604
Never married (in union)	0.432	0.016	993	982	0.986	0.036	0.401	0.463
Currently married (in union)	0.530	0.014	993	982	0.911	0.027	0.501	0.559
Had first sexual intercourse before age 18	0.596	0.024	738	731	1.327	0.040	0.548	0.644
Know any contraceptive method	0.993	0.003	532	520	0.941	0.003	0.986	1.000
Know any modern contraceptive method	0.991	0.004	532	520	0.929	0.004	0.984	0.999
Want no more children	0.197	0.023	532	520	1.333	0.117	0.150	0.243
Want to delay birth at least 2 years	0.265	0.024	532	520	1.231	0.089	0.217	0.312
Ideal number of children	5.512	0.126	941	930	1.135	0.023	5.261	5.763
Had 2+ sexual partners in past 12 months	0.233	0.017	993	982	1.265	0.073	0.199	0.267
Condom use at last sex	0.079	0.019	234	229	1.084	0.242	0.041	0.118
Abstinence among young people (never had sex)	0.447	0.029	355	351	1.100	0.065	0.389	0.505
Had paid sex in past 12 months	0.030	0.008	993	982	1.449	0.260	0.015	0.046
Had HIV test and received results in past 12 months	0.103	0.011	993	982	1.149	0.108	0.081	0.125
Discriminatory attitudes towards people living with HIV	0.843	0.016	946	941	1.312	0.018	0.812	0.874
HIV prevalence among men 15-49	0.015	0.005	671	843	1.132	0.355	0.004	0.026
HIV prevalence among young men 15-24	0.004	0.004	281	356	1.046	0.999	0.000	0.012
HIV prevalence among men 15-59	0.016	0.005	746	939	1.178	0.338	0.005	0.027
			WOMEN AND MEN					
HIV prevalence among respondents 15-49	0.017	0.003	1,629	1,971	1.030	0.195	0.010	0.023
HIV prevalence among respondents 15-24	0.006	0.003	669	816	0.945	0.452	0.001	0.012

na = Not available

Table B.8 Sampling errors: Southern sample, Sierra Leone 2019

Variable	Value (R)	Standard error (SE)	Number of cases: Un-weighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative Error (SE/R)	Confidence limits: Lower (R-2SE)	Confidence limits: Upper (R+2SE)
HOUSEHOLDS AND POPULATION								
Ownership of at least one ITN	0.750	0.014	3,197	2,641	1.783	0.018	0.723	0.778
De facto population with access to an ITN	0.516	0.012	16,499	13,735	1.641	0.023	0.492	0.539
Household population that slept under an ITN last night	0.578	0.014	16,499	13,735	1.755	0.024	0.550	0.605
WOMEN								
Urban residence	0.244	0.011	3,513	2,900	1.583	0.047	0.221	0.267
Literacy	0.377	0.016	3,513	2,900	1.946	0.042	0.345	0.409
No education	0.490	0.015	3,513	2,900	1.799	0.031	0.460	0.520
Secondary or higher education	0.335	0.016	3,513	2,900	1.990	0.047	0.303	0.367
Never married (never in union)	0.292	0.012	3,513	2,900	1.534	0.040	0.268	0.315
Currently married (in union)	0.653	0.012	3,513	2,900	1.503	0.018	0.629	0.677
Married before age 18	0.363	0.013	2,761	2,270	1.449	0.037	0.336	0.389
Had sexual intercourse before age 18	0.716	0.015	2,761	2,270	1.707	0.020	0.686	0.745
Currently pregnant	0.076	0.006	3,513	2,900	1.373	0.081	0.064	0.088
Know any contraceptive method	0.938	0.009	2,299	1,895	1.709	0.009	0.921	0.955
Know a modern method	0.938	0.009	2,299	1,895	1.702	0.009	0.921	0.955
Currently using any method	0.237	0.013	2,299	1,895	1.519	0.057	0.210	0.264
Currently using a modern method	0.233	0.013	2,299	1,895	1.527	0.058	0.206	0.260
Currently using pill	0.054	0.006	2,299	1,895	1.270	0.111	0.042	0.066
Currently using male condoms	0.000	0.000	2,299	1,895	na	na	0.000	0.000
Currently using injectables	0.097	0.008	2,299	1,895	1.227	0.078	0.082	0.112
Currently using implants	0.077	0.009	2,299	1,895	1.635	0.118	0.059	0.096
Currently using female sterilisation	0.002	0.001	2,299	1,895	0.998	0.428	0.000	0.004
Currently using withdrawal	0.000	0.000	2,299	1,895	na	na	0.000	0.000
Currently using rhythm	0.000	0.000	2,299	1,895	0.964	1.000	0.000	0.001
Using public sector source	0.838	0.018	885	747	1.457	0.022	0.802	0.874
Want no more children	0.303	0.015	2,299	1,895	1.587	0.050	0.273	0.334
Want to delay next birth at least 2 years	0.227	0.012	2,299	1,895	1.372	0.053	0.203	0.251
Ideal number of children	5.155	0.075	3,494	2,884	1.920	0.015	5.004	5.306
Mothers protected against tetanus for last birth	0.918	0.012	1,794	1,492	1.806	0.013	0.894	0.941
Births with skilled attendant at delivery	0.873	0.018	2,521	2,101	2.214	0.020	0.838	0.909
Received 3+ doses of SP/Fansidar	0.346	0.023	989	816	1.548	0.068	0.299	0.393
Treated with ORS	0.760	0.043	136	114	1.184	0.056	0.674	0.845
Sought medical treatment for diarrhoea	0.725	0.048	136	114	1.241	0.066	0.629	0.821
Ever had vaccination card	0.986	0.005	480	393	1.005	0.006	0.975	0.997
Received BCG vaccination	0.975	0.007	480	393	1.008	0.007	0.960	0.989
Received birth dose HepB vaccination	0.196	0.020	480	393	1.089	0.103	0.156	0.236
Received DPT-HepB-Hib vaccination (3 doses)	0.835	0.023	480	393	1.324	0.027	0.790	0.880
Received birth dose polio 0 vaccination	0.926	0.016	480	393	1.323	0.017	0.895	0.958
Received polio vaccination (3 doses)	0.758	0.023	480	393	1.178	0.031	0.711	0.805
Received IPV vaccination	0.834	0.020	480	393	1.183	0.024	0.793	0.874
Received pneumococcal vaccination (3 doses)	0.841	0.022	480	393	1.327	0.026	0.797	0.886
Received rotavirus vaccination (2 doses)	0.884	0.019	480	393	1.267	0.021	0.847	0.921
Received measles 1 vaccination	0.822	0.025	480	393	1.434	0.031	0.772	0.873
Received all basic vaccinations (12-23 months)	0.653	0.026	480	393	1.200	0.040	0.600	0.705
Received all age-appropriate vaccinations (12-23 months)	0.590	0.024	480	393	1.051	0.040	0.542	0.638
Received measles/MMR 2 vaccination	0.572	0.028	479	395	1.212	0.048	0.517	0.627
Received all age-appropriate vaccinations (24-35 months)	0.365	0.025	479	395	1.131	0.069	0.315	0.415
Height-for-age (-2SD)	0.315	0.015	1,342	1,126	1.125	0.048	0.285	0.345
Weight-for-height (-2SD)	0.062	0.007	1,337	1,121	1.088	0.121	0.047	0.076
Weight-for-age (-2SD)	0.149	0.012	1,354	1,134	1.138	0.077	0.126	0.172
Body mass index (BMI) <18.5	0.077	0.007	1,658	1,376	1.051	0.089	0.063	0.090
Body mass index (BMI) ≥25	0.284	0.015	1,658	1,376	1.321	0.051	0.254	0.313
Prevalence of anaemia (children 6-59 months)	0.687	0.019	1,177	992	1.331	0.027	0.649	0.724
Prevalence of anaemia (women 15-49)	0.489	0.015	1,781	1,483	1.280	0.031	0.459	0.519
Had 2+ sexual partners in past 12 months	0.034	0.004	3,513	2,900	1.429	0.129	0.025	0.042
Condom use at last sex	0.014	0.010	109	97	0.917	0.731	0.000	0.035
Abstinence among young people (never had sex)	0.381	0.017	854	705	1.045	0.046	0.346	0.415
Had an HIV test and received results in past 12 months	0.168	0.010	3,513	2,900	1.546	0.058	0.148	0.187
Discriminatory attitudes towards people living with HIV	0.850	0.012	3,047	2,551	1.886	0.014	0.825	0.874
HIV prevalence among women 15-49	0.021	0.004	1,765	1,318	1.137	0.186	0.013	0.029
HIV prevalence among pregnant women 15-49	0.047	0.022	120	94	1.121	0.464	0.003	0.090
HIV prevalence among young women 15-24	0.011	0.004	635	483	0.921	0.349	0.003	0.018
Total fertility rate (last 3 years)	4.970	0.202	9,787	8,076	1.356	0.041	4.567	5.374
Neonatal mortality (last 0-9 years)	24.608	3.160	5,003	4,184	1.255	0.128	18.288	30.927
Postneonatal mortality (last 0-9 years)	54.984	5.611	5,022	4,200	1.548	0.102	43.762	66.206
Infant mortality (last 0-9 years)	79.592	7.229	5,013	4,190	1.568	0.091	65.133	94.050
Child mortality (last 0-9 years)	45.599	4.290	5,002	4,185	1.224	0.094	37.019	54.179
Under-5 mortality (last 0-9 years)	121.561	9.521	5,054	4,220	1.706	0.078	102.519	140.603

Continued...

Table B.8—*Continued*

Variable	Value (R)	Standard error (SE)	Number of cases: Un-weighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative Error (SE/R)	Confidence limits: Lower (R-2SE)	Confidence limits: Upper (R+2SE)
			MEN					
Urban residence	0.232	0.015	1,446	1,192	1.364	0.065	0.202	0.263
Literacy	0.500	0.022	1,446	1,192	1.657	0.044	0.456	0.544
No education	0.364	0.018	1,446	1,192	1.454	0.051	0.327	0.401
Secondary or higher education	0.437	0.022	1,446	1,192	1.706	0.051	0.393	0.482
Never married (in union)	0.418	0.018	1,446	1,192	1.371	0.043	0.383	0.454
Currently married (in union)	0.548	0.018	1,446	1,192	1.338	0.032	0.513	0.583
Had first sexual intercourse before age 18	0.472	0.019	1,084	887	1.247	0.040	0.434	0.510
Know any contraceptive method	0.991	0.003	800	653	0.985	0.003	0.984	0.998
Know any modern contraceptive method	0.990	0.003	800	653	0.970	0.003	0.984	0.997
Want no more children	0.232	0.022	800	653	1.450	0.093	0.189	0.275
Want to delay birth at least 2 years	0.211	0.016	800	653	1.124	0.077	0.179	0.244
Ideal number of children	5.501	0.111	1,358	1,114	1.377	0.020	5.279	5.724
Had 2+ sexual partners in past 12 months	0.274	0.013	1,446	1,192	1.114	0.048	0.247	0.300
Condom use at last sex	0.120	0.019	410	326	1.181	0.158	0.082	0.158
Abstinence among young people (never had sex)	0.449	0.029	506	420	1.310	0.065	0.391	0.507
Had paid sex in past 12 months	0.036	0.005	1,446	1,192	1.119	0.152	0.025	0.047
Had HIV test and received results in past 12 months	0.095	0.010	1,446	1,192	1.315	0.107	0.074	0.115
Discriminatory attitudes towards people living with HIV	0.728	0.020	1,347	1,109	1.654	0.028	0.688	0.768
HIV prevalence among men 15-49	0.005	0.002	1,319	1,023	1.027	0.381	0.001	0.010
HIV prevalence among young men 15-24	0.000	0.000	516	411	na	na	0.000	0.000
HIV prevalence among men 15-59	0.005	0.002	1,499	1,153	1.018	0.357	0.002	0.009
			WOMEN AND MEN					
HIV prevalence among respondents 15-49	0.014	0.002	3,084	2,341	1.111	0.167	0.009	0.019
HIV prevalence among respondents 15-24	0.006	0.002	1,151	893	0.926	0.356	0.002	0.010

na = Not available

Table B.9 Sampling errors: Western Area sample, Sierra Leone 2019

Variable	Value (R)	Standard error (SE)	Number of cases: Un-weighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative Error (SE/R)	Confidence limits: Lower (R-2SE)	Confidence limits: Upper (R+2SE)
HOUSEHOLDS AND POPULATION								
Ownership of at least one ITN	0.493	0.024	2,171	3,142	2.214	0.048	0.445	0.540
De facto population with access to an ITN	0.325	0.015	10,116	14,452	1.794	0.047	0.294	0.356
Household population that slept under an ITN last night	0.288	0.017	10,116	14,452	1.925	0.060	0.253	0.322
WOMEN								
Urban residence	0.976	0.004	2,614	3,780	1.348	0.004	0.968	0.984
Literacy	0.647	0.013	2,614	3,780	1.423	0.021	0.620	0.673
No education	0.249	0.010	2,614	3,780	1.228	0.042	0.228	0.269
Secondary or higher education	0.647	0.012	2,614	3,780	1.314	0.019	0.622	0.672
Never married (never in union)	0.444	0.014	2,614	3,780	1.485	0.033	0.415	0.472
Currently married (in union)	0.497	0.014	2,614	3,780	1.389	0.027	0.470	0.525
Married before age 18	0.272	0.015	2,035	2,957	1.510	0.055	0.243	0.302
Had sexual intercourse before age 18	0.624	0.014	2,035	2,957	1.327	0.023	0.596	0.653
Currently pregnant	0.037	0.003	2,614	3,780	0.946	0.095	0.030	0.044
Know any contraceptive method	0.996	0.002	1,295	1,880	1.318	0.002	0.991	1.000
Know a modern method	0.996	0.002	1,295	1,880	1.318	0.002	0.991	1.000
Currently using any method	0.247	0.016	1,295	1,880	1.306	0.063	0.216	0.278
Currently using a modern method	0.245	0.016	1,295	1,880	1.318	0.064	0.213	0.276
Currently using pill	0.059	0.008	1,295	1,880	1.270	0.141	0.042	0.075
Currently using male condoms	0.003	0.001	1,295	1,880	0.829	0.437	0.000	0.005
Currently using injectables	0.132	0.011	1,295	1,880	1.175	0.084	0.110	0.154
Currently using implants	0.042	0.008	1,295	1,880	1.386	0.183	0.027	0.058
Currently using female sterilisation	0.002	0.001	1,295	1,880	0.907	0.534	0.000	0.005
Currently using withdrawal	0.000	0.000	1,295	1,880	na	na	0.000	0.000
Currently using rhythm	0.000	0.000	1,295	1,880	na	na	0.000	0.000
Using public sector source	0.689	0.030	647	940	1.619	0.043	0.630	0.748
Want no more children	0.264	0.019	1,295	1,880	1.550	0.072	0.226	0.302
Want to delay next birth at least 2 years	0.148	0.013	1,295	1,880	1.369	0.092	0.121	0.175
Ideal number of children	3.859	0.044	2,513	3,640	1.561	0.011	3.770	3.948
Mothers protected against tetanus for last birth	0.860	0.015	1,016	1,479	1.414	0.018	0.829	0.891
Births with skilled attendant at delivery	0.946	0.010	1,230	1,781	1.356	0.010	0.926	0.965
Received 3+ doses of SP/Fansidar	0.242	0.024	501	733	1.237	0.098	0.195	0.289
Treated with ORS	0.838	0.051	84	127	1.299	0.061	0.736	0.941
Sought medical treatment for diarrhoea	0.679	0.052	84	127	1.042	0.077	0.575	0.783
Ever had vaccination card	0.955	0.016	234	347	1.199	0.017	0.922	0.987
Received BCG vaccination	0.966	0.022	234	347	1.918	0.023	0.922	1.011
Received birth dose HepB vaccination	0.304	0.040	234	347	1.331	0.132	0.224	0.383
Received DPT-HepB-Hib vaccination (3 doses)	0.764	0.032	234	347	1.156	0.042	0.699	0.829
Received birth dose polio 0 vaccination	0.951	0.018	234	347	1.247	0.018	0.915	0.986
Received polio vaccination (3 doses)	0.666	0.037	234	347	1.192	0.055	0.592	0.740
Received IPV vaccination	0.827	0.032	234	347	1.231	0.038	0.764	0.890
Received pneumococcal vaccination (3 doses)	0.772	0.031	234	347	1.100	0.040	0.711	0.833
Received rotavirus vaccination (2 doses)	0.818	0.026	234	347	1.052	0.032	0.765	0.871
Received measles 1 vaccination	0.726	0.038	234	347	1.287	0.052	0.651	0.802
Received all basic vaccinations (12-23 months)	0.525	0.036	234	347	1.109	0.069	0.452	0.598
Received all age-appropriate vaccinations (12-23 months)	0.490	0.038	234	347	1.167	0.078	0.413	0.567
Received measles/MMR 2 vaccination	0.552	0.043	218	305	1.237	0.078	0.466	0.638
Received all age-appropriate vaccinations (24-35 months)	0.248	0.038	218	305	1.215	0.151	0.173	0.323
Height-for-age (-2SD)	0.278	0.028	557	774	1.345	0.099	0.223	0.334
Weight-for-height (-2SD)	0.074	0.015	555	764	1.293	0.197	0.045	0.103
Weight-for-age (-2SD)	0.144	0.018	582	802	1.178	0.126	0.108	0.180
Body mass index (BMI) <18.5	0.040	0.006	1,184	1,676	1.077	0.154	0.028	0.053
Body mass index (BMI) ≥25	0.403	0.017	1,184	1,676	1.204	0.043	0.368	0.438
Prevalence of anaemia (children 6-59 months)	0.549	0.032	504	709	1.371	0.059	0.485	0.613
Prevalence of anaemia (women 15-49)	0.403	0.019	1,193	1,706	1.317	0.047	0.365	0.440
Had 2+ sexual partners in past 12 months	0.053	0.007	2,614	3,780	1.690	0.140	0.038	0.068
Condom use at last sex	0.029	0.013	130	200	0.888	0.449	0.003	0.056
Abstinence among young people (never had sex)	0.429	0.019	875	1,232	1.154	0.045	0.390	0.468
Had an HIV test and received results in past 12 months	0.284	0.012	2,614	3,780	1.318	0.041	0.260	0.307
Discriminatory attitudes towards people living with HIV	0.728	0.017	2,585	3,740	1.942	0.023	0.694	0.762
HIV prevalence among women 15-49	0.031	0.005	1,180	1,622	1.068	0.175	0.020	0.041
HIV prevalence among pregnant women 15-49	0.000	0.000	49	63	na	na	0.000	0.000
HIV prevalence among young women 15-24	0.025	0.009	522	709	1.307	0.357	0.007	0.043
Total fertility rate (last 3 years)	2.931	0.123	7,298	10,552	1.101	0.042	2.686	3.176
Neonatal mortality (last 0-9 years)	34.836	5.129	2,423	3,515	1.272	0.147	24.577	45.094
Postneonatal mortality (last 0-9 years)	32.193	4.021	2,430	3,525	1.048	0.125	24.152	40.235
Infant mortality (last 0-9 years)	67.029	7.051	2,429	3,525	1.272	0.105	52.927	81.131
Child mortality (last 0-9 years)	49.829	6.294	2,386	3,458	1.184	0.126	37.242	62.416
Under-5 mortality (last 0-9 years)	113.518	8.608	2,455	3,557	1.155	0.076	96.301	130.735

Continued...

Table B.9—*Continued*

Variable	Value (R)	Standard error (SE)	Number of cases: Un-weighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative Error (SE/R)	Confidence limits: Lower (R-2SE)	Confidence limits: Upper (R+2SE)
			MEN					
Urban residence	0.974	0.003	1,089	1,606	0.527	0.003	0.969	0.979
Literacy	0.805	0.016	1,089	1,606	1.299	0.019	0.774	0.836
No education	0.136	0.014	1,089	1,606	1.302	0.100	0.109	0.163
Secondary or higher education	0.772	0.017	1,089	1,606	1.304	0.021	0.739	0.805
Never married (in union)	0.511	0.017	1,089	1,606	1.143	0.034	0.476	0.545
Currently married (in union)	0.446	0.018	1,089	1,606	1.192	0.040	0.411	0.482
Had first sexual intercourse before age 18	0.385	0.020	871	1,304	1.228	0.053	0.344	0.425
Know any contraceptive method	0.996	0.003	468	717	1.025	0.003	0.989	1.002
Know any modern contraceptive method	0.996	0.003	468	717	1.025	0.003	0.989	1.002
Want no more children	0.182	0.024	468	717	1.370	0.134	0.133	0.231
Want to delay birth at least 2 years	0.171	0.022	468	717	1.290	0.132	0.126	0.215
Ideal number of children	3.520	0.079	1,024	1,508	1.447	0.023	3.361	3.678
Had 2+ sexual partners in past 12 months	0.186	0.015	1,089	1,606	1.285	0.082	0.155	0.216
Condom use at last sex	0.221	0.036	210	298	1.240	0.161	0.150	0.292
Abstinence among young people (never had sex)	0.486	0.034	382	535	1.317	0.069	0.419	0.554
Had paid sex in past 12 months	0.050	0.008	1,089	1,606	1.136	0.150	0.035	0.065
Had HIV test and received results in past 12 months	0.165	0.030	1,089	1,606	2.629	0.180	0.106	0.225
Discriminatory attitudes towards people living with HIV	0.591	0.027	1,054	1,562	1.782	0.046	0.537	0.645
HIV prevalence among men 15-49	0.018	0.005	904	1,376	1.166	0.286	0.008	0.028
HIV prevalence among young men 15-24	0.010	0.005	343	499	0.987	0.521	0.000	0.021
HIV prevalence among men 15-59	0.026	0.007	974	1,499	1.294	0.254	0.013	0.039
			WOMEN AND MEN					
HIV prevalence among respondents 15-49	0.025	0.003	2,084	2,998	1.015	0.139	0.018	0.032
HIV prevalence among respondents 15-24	0.019	0.006	865	1,208	1.209	0.295	0.008	0.030

na = Not available

Table B.10 Sampling errors: Kailahun sample, Sierra Leone 2019

Variable	Value (R)	Standard error (SE)	Number of cases: Un-weighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative Error (SE/R)	Confidence limits: Lower (R-2SE)	Confidence limits: Upper (R+2SE)
HOUSEHOLDS AND POPULATION								
Ownership of at least one ITN	0.816	0.018	905	771	1.433	0.023	0.779	0.853
De facto population with access to an ITN	0.576	0.020	4,050	3,485	1.533	0.034	0.536	0.615
Household population that slept under an ITN last night	0.641	0.020	4,050	3,485	1.516	0.032	0.601	0.682
WOMEN								
Urban residence	0.319	0.032	814	707	1.957	0.101	0.255	0.383
Literacy	0.243	0.028	814	707	1.873	0.116	0.186	0.299
No education	0.502	0.027	814	707	1.525	0.053	0.448	0.555
Secondary or higher education	0.308	0.026	814	707	1.620	0.085	0.256	0.361
Never married (never in union)	0.272	0.022	814	707	1.427	0.082	0.228	0.317
Currently married (in union)	0.676	0.024	814	707	1.484	0.036	0.628	0.725
Married before age 18	0.457	0.018	674	583	0.949	0.040	0.421	0.494
Had sexual intercourse before age 18	0.889	0.019	674	583	1.593	0.022	0.850	0.928
Currently pregnant	0.065	0.009	814	707	1.056	0.140	0.047	0.083
Know any contraceptive method	0.993	0.004	546	478	1.105	0.004	0.985	1.001
Know a modern method	0.990	0.005	546	478	1.241	0.005	0.980	1.001
Currently using any method	0.322	0.024	546	478	1.174	0.073	0.275	0.369
Currently using a modern method	0.316	0.023	546	478	1.165	0.073	0.269	0.362
Currently using pill	0.088	0.012	546	478	0.949	0.131	0.065	0.111
Currently using male condoms	0.001	0.001	546	478	0.770	1.020	0.000	0.003
Currently using injectables	0.110	0.018	546	478	1.321	0.161	0.074	0.145
Currently using implants	0.112	0.018	546	478	1.365	0.165	0.075	0.149
Currently using female sterilisation	0.002	0.002	546	478	1.066	1.000	0.000	0.006
Currently using withdrawal	0.004	0.003	546	478	1.004	0.694	0.000	0.009
Currently using rhythm	0.001	0.001	546	478	0.711	1.021	0.000	0.003
Using public sector source	0.860	0.022	264	231	1.046	0.026	0.815	0.905
Want no more children	0.244	0.025	546	478	1.332	0.100	0.195	0.293
Want to delay next birth at least 2 years	0.257	0.030	546	478	1.609	0.117	0.197	0.318
Ideal number of children	4.916	0.085	814	707	1.331	0.017	4.746	5.085
Mothers protected against tetanus for last birth	0.841	0.027	398	354	1.471	0.032	0.788	0.895
Births with skilled attendant at delivery	0.960	0.017	511	455	1.711	0.018	0.925	0.995
Received 3+ doses of SP/Fansidar	0.402	0.043	206	187	1.281	0.107	0.316	0.489
Treated with ORS	0.978	0.022	40	34	0.933	0.023	0.934	1.022
Sought medical treatment for diarrhoea	0.905	0.058	40	34	1.004	0.064	0.788	1.021
Ever had vaccination card	0.979	0.013	92	85	0.890	0.013	0.953	1.005
Received BCG vaccination	0.992	0.009	92	85	0.921	0.009	0.975	1.009
Received birth dose HepB vaccination	0.150	0.035	92	85	0.972	0.236	0.079	0.221
Received DPT-HepB-Hib vaccination (3 doses)	0.858	0.038	92	85	1.078	0.045	0.782	0.935
Received birth dose polio 0 vaccination	0.957	0.021	92	85	1.036	0.022	0.915	1.000
Received polio vaccination (3 doses)	0.834	0.042	92	85	1.105	0.050	0.750	0.918
Received IPV vaccination	0.868	0.035	92	85	1.018	0.041	0.797	0.938
Received pneumococcal vaccination (3 doses)	0.851	0.037	92	85	1.023	0.044	0.776	0.925
Received rotavirus vaccination (2 doses)	0.947	0.021	92	85	0.941	0.023	0.904	0.990
Received measles 1 vaccination	0.813	0.033	92	85	0.825	0.040	0.748	0.879
Received all basic vaccinations (12-23 months)	0.685	0.041	92	85	0.852	0.060	0.603	0.766
Received all age-appropriate vaccinations (12-23 months)	0.618	0.040	92	85	0.797	0.065	0.537	0.698
Received measles/MMR 2 vaccination	0.604	0.070	101	89	1.419	0.116	0.464	0.744
Received all age-appropriate vaccinations (24-35 months)	0.365	0.058	101	89	1.188	0.160	0.248	0.482
Height-for-age (-2SD)	0.291	0.029	306	273	1.100	0.101	0.233	0.350
Weight-for-height (-2SD)	0.042	0.013	306	273	1.003	0.317	0.016	0.069
Weight-for-age (-2SD)	0.142	0.021	306	273	1.029	0.148	0.100	0.184
Body mass index (BMI) <18.5	0.076	0.014	383	336	1.037	0.184	0.048	0.103
Body mass index (BMI) ≥25	0.245	0.023	383	336	1.037	0.093	0.200	0.291
Prevalence of anaemia (children 6-59 months)	0.549	0.043	268	239	1.414	0.079	0.462	0.635
Prevalence of anaemia (women 15-49)	0.422	0.028	423	368	1.175	0.067	0.365	0.478
Had 2+ sexual partners in past 12 months	0.021	0.004	814	707	0.868	0.210	0.012	0.029
Condom use at last sex	0.049	0.049	19	15	0.975	1.015	0.000	0.148
Abstinence among never-married youth (never had sex)	0.242	0.035	170	146	1.073	0.146	0.171	0.313
Had an HIV test and received results in past 12 months	0.315	0.024	814	707	1.465	0.076	0.267	0.363
Discriminatory attitudes towards people living with HIV	0.528	0.062	753	654	3.396	0.118	0.403	0.652
HIV prevalence among women 15-49	0.012	0.005	421	312	0.987	0.440	0.001	0.022
HIV prevalence among pregnant women 15-49	0.000	0.000	29	20	na	na	0.000	0.000
HIV prevalence among young women 15-24	0.004	0.004	152	111	0.752	1.010	0.000	0.011
Total fertility rate (last 3 years)	4.432	0.312	2,284	1,979	1.295	0.070	3.809	5.055
Neonatal mortality (last 0-9 years)	21.923	5.238	1,100	953	1.047	0.239	11.447	32.398
Postneonatal mortality (last 0-9 years)	25.623	6.069	1,108	961	1.151	0.237	13.485	37.761
Infant mortality (last 0-9 years)	47.546	9.347	1,106	958	1.283	0.197	28.851	66.241
Child mortality (last 0-9 years)	49.386	8.006	1,108	953	1.023	0.162	33.374	65.398
Under-5 mortality (last 0-9 years)	94.584	12.747	1,117	966	1.244	0.135	69.090	120.078

Continued...

Table B.10—*Continued*

Variable	Value (R)	Standard error (SE)	Number of cases: Un-weighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative Error (SE/R)	Confidence limits: Lower (R-2SE)	Confidence limits: Upper (R+2SE)
			MEN					
Urban residence	0.319	0.035	358	307	1.408	0.109	0.250	0.389
Literacy	0.570	0.039	358	307	1.500	0.069	0.491	0.648
No education	0.343	0.037	358	307	1.474	0.108	0.268	0.417
Secondary or higher education	0.488	0.033	358	307	1.255	0.068	0.422	0.555
Never married (in union)	0.427	0.033	358	307	1.256	0.077	0.361	0.492
Currently married (in union)	0.533	0.030	358	307	1.119	0.055	0.474	0.592
Had first sexual intercourse before age 18	0.404	0.031	279	237	1.037	0.076	0.343	0.465
Know any contraceptive method	1.000	0.000	198	164	na	0.000	1.000	1.000
Know any modern contraceptive method	1.000	0.000	198	164	na	0.000	1.000	1.000
Want no more children	0.238	0.033	198	164	1.071	0.137	0.173	0.303
Want to delay birth at least 2 years	0.283	0.041	198	164	1.264	0.144	0.202	0.364
Ideal number of children	4.947	0.113	357	306	1.058	0.023	4.721	5.173
Had 2+ sexual partners in past 12 months	0.237	0.026	358	307	1.166	0.111	0.184	0.289
Condom use at last sex	0.135	0.040	80	73	1.041	0.297	0.055	0.215
Abstinence among never married youth (never had sex)	0.500	0.045	119	106	0.977	0.090	0.410	0.590
Had paid sex in past 12 months	0.057	0.012	358	307	1.002	0.216	0.032	0.081
Had HIV test and received results in past 12 months	0.108	0.019	358	307	1.141	0.174	0.070	0.145
Discriminatory attitudes towards people living with HIV	0.376	0.045	346	297	1.706	0.119	0.287	0.465
HIV prevalence among men 15-49	0.000	0.000	335	264	na	na	0.000	0.000
HIV prevalence among young men 15-24	0.000	0.000	122	98	na	na	0.000	0.000
HIV prevalence among men 15-59	0.002	0.002	390	308	0.875	1.009	0.000	0.006
			WOMEN AND MEN					
HIV prevalence among respondents 15-49	0.006	0.003	756	575	0.985	0.446	0.001	0.012
HIV prevalence among respondents 15-24	0.002	0.002	274	209	0.742	1.018	0.000	0.006

na = Not available

Table B.11 Sampling errors: Kenema sample, Sierra Leone 2019

Variable	Value (R)	Standard error (SE)	Number of cases: Un-weighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative Error (SE/R)	Confidence limits: Lower (R-2SE)	Confidence limits: Upper (R+2SE)
HOUSEHOLDS AND POPULATION								
Ownership of at least one ITN	0.797	0.023	1,003	1,220	1.814	0.029	0.751	0.843
De facto population with access to an ITN	0.535	0.023	5,569	6,791	1.881	0.042	0.490	0.580
Household population that slept under an ITN last night	0.615	0.028	5,569	6,791	2.102	0.046	0.559	0.672
WOMEN								
Urban residence	0.471	0.035	1,196	1,437	2.417	0.074	0.401	0.541
Literacy	0.388	0.029	1,196	1,437	2.019	0.073	0.331	0.445
No education	0.495	0.032	1,196	1,437	2.175	0.064	0.432	0.558
Secondary or higher education	0.375	0.029	1,196	1,437	2.099	0.078	0.316	0.434
Never married (never in union)	0.314	0.023	1,196	1,437	1.681	0.072	0.268	0.359
Currently married (in union)	0.648	0.023	1,196	1,437	1.633	0.035	0.603	0.694
Married before age 18	0.470	0.035	930	1,124	2.152	0.075	0.400	0.541
Had sexual intercourse before age 18	0.839	0.019	930	1,124	1.540	0.022	0.802	0.876
Currently pregnant	0.072	0.008	1,196	1,437	1.076	0.112	0.056	0.088
Know any contraceptive method	0.994	0.003	763	932	0.978	0.003	0.988	0.999
Know a modern method	0.994	0.003	763	932	0.978	0.003	0.988	0.999
Currently using any method	0.192	0.022	763	932	1.506	0.112	0.149	0.235
Currently using a modern method	0.190	0.022	763	932	1.522	0.114	0.147	0.234
Currently using pill	0.076	0.016	763	932	1.618	0.205	0.045	0.107
Currently using male condoms	0.001	0.001	763	932	0.878	1.012	0.000	0.003
Currently using injectables	0.058	0.009	763	932	1.047	0.153	0.040	0.075
Currently using implants	0.056	0.009	763	932	1.042	0.155	0.039	0.074
Currently using female sterilisation	0.000	0.000	763	932	na	na	0.000	0.000
Currently using withdrawal	0.000	0.000	763	932	na	na	0.000	0.000
Currently using rhythm	0.000	0.000	763	932	na	na	0.000	0.000
Using public sector source	0.814	0.022	257	300	0.897	0.027	0.770	0.857
Want no more children	0.294	0.026	763	932	1.558	0.088	0.243	0.345
Want to delay next birth at least 2 years	0.311	0.034	763	932	2.046	0.111	0.242	0.380
Ideal number of children	5.093	0.130	1,195	1,435	2.111	0.025	4.834	5.352
Mothers protected against tetanus for last birth	0.969	0.010	610	736	1.402	0.010	0.949	0.989
Births with skilled attendant at delivery	0.975	0.009	849	1,028	1.544	0.009	0.957	0.993
Received 3+ doses of SP/Fansidar	0.468	0.054	333	410	1.987	0.115	0.360	0.576
Treated with ORS	0.891	0.038	83	102	1.130	0.043	0.815	0.967
Sought medical treatment for diarrhoea	0.880	0.041	83	102	1.106	0.047	0.798	0.963
Ever had vaccination card	0.932	0.020	155	187	0.978	0.021	0.892	0.972
Received BCG vaccination	0.905	0.025	155	187	1.036	0.027	0.856	0.954
Received birth dose HepB vaccination	0.114	0.022	155	187	0.874	0.196	0.069	0.159
Received DPT-HepB-Hib vaccination (3 doses)	0.742	0.034	155	187	0.948	0.046	0.674	0.810
Received birth dose polio 0 vaccination	0.893	0.024	155	187	0.983	0.027	0.845	0.942
Received polio vaccination (3 doses)	0.750	0.038	155	187	1.054	0.050	0.675	0.825
Received IPV vaccination	0.819	0.035	155	187	1.085	0.042	0.750	0.889
Received pneumococcal vaccination (3 doses)	0.752	0.036	155	187	1.022	0.048	0.679	0.825
Received rotavirus vaccination (2 doses)	0.826	0.031	155	187	0.983	0.038	0.764	0.888
Received measles 1 vaccination	0.688	0.048	155	187	1.251	0.069	0.593	0.783
Received all basic vaccinations (12-23 months)	0.592	0.046	155	187	1.149	0.078	0.499	0.684
Received all age-appropriate vaccinations (12-23 months)	0.568	0.049	155	187	1.199	0.086	0.471	0.665
Received measles/MMR 2 vaccination	0.569	0.045	143	169	1.066	0.079	0.479	0.659
Received all age-appropriate vaccinations (24-35 months)	0.466	0.047	143	169	1.126	0.102	0.372	0.561
Height-for-age (-2SD)	0.245	0.023	438	531	1.083	0.094	0.199	0.291
Weight-for-height (-2SD)	0.028	0.009	439	532	1.096	0.305	0.011	0.045
Weight-for-age (-2SD)	0.072	0.017	439	532	1.312	0.239	0.038	0.106
Body mass index (BMI) <18.5	0.080	0.015	590	711	1.388	0.194	0.049	0.111
Body mass index (BMI) ≥25	0.238	0.019	590	711	1.111	0.082	0.199	0.277
Prevalence of anaemia (children 6-59 months)	0.734	0.031	397	483	1.340	0.042	0.673	0.795
Prevalence of anaemia (women 15-49)	0.506	0.029	650	783	1.501	0.058	0.447	0.565
Had 2+ sexual partners in past 12 months	0.021	0.005	1,196	1,437	1.209	0.241	0.011	0.031
Condom use at last sex	0.000	0.000	22	30	na	na	0.000	0.000
Abstinence among never-married youth (never had sex)	0.357	0.035	311	366	1.269	0.097	0.287	0.426
Had an HIV test and received results in past 12 months	0.176	0.020	1,196	1,437	1.851	0.116	0.135	0.216
Discriminatory attitudes towards people living with HIV	0.865	0.028	1,162	1,394	2.827	0.033	0.808	0.922
HIV prevalence among women 15-49	0.021	0.007	650	668	1.166	0.315	0.008	0.034
HIV prevalence among pregnant women 15-49	0.000	0.000	49	50	na	na	0.000	0.000
HIV prevalence among young women 15-24	0.019	0.009	253	254	1.007	0.459	0.002	0.036
Total fertility rate (last 3 years)	4.719	0.281	3,304	3,975	1.040	0.060	4.156	5.281
Neonatal mortality (last 0-9 years)	27.270	4.449	1,730	2,101	1.022	0.163	18.373	36.168
Postneonatal mortality (last 0-9 years)	73.706	8.089	1,748	2,123	1.173	0.110	57.528	89.883
Infant mortality (last 0-9 years)	100.976	9.373	1,738	2,111	1.122	0.093	82.230	119.722
Child mortality (last 0-9 years)	64.147	7.420	1,708	2,070	1.019	0.116	49.307	78.987
Under-5 mortality (last 0-9 years)	158.645	11.732	1,761	2,138	1.175	0.074	135.181	182.110

Continued...

Table B.11—*Continued*

Variable	Value (R)	Standard error (SE)	Number of cases: Un-weighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative Error (SE/R)	Confidence limits: Lower (R-2SE)	Confidence limits: Upper (R+2SE)
			MEN					
Urban residence	0.476	0.032	470	557	1.378	0.067	0.413	0.540
Literacy	0.496	0.042	470	557	1.794	0.084	0.412	0.579
No education	0.404	0.035	470	557	1.521	0.085	0.335	0.473
Secondary or higher education	0.472	0.038	470	557	1.657	0.081	0.396	0.549
Never married (in union)	0.434	0.032	470	557	1.380	0.073	0.371	0.497
Currently married (in union)	0.536	0.031	470	557	1.329	0.057	0.475	0.597
Had first sexual intercourse before age 18	0.433	0.031	346	410	1.155	0.071	0.371	0.495
Know any contraceptive method	1.000	0.000	253	299	na	0.000	1.000	1.000
Know any modern contraceptive method	1.000	0.000	253	299	na	0.000	1.000	1.000
Want no more children	0.129	0.020	253	299	0.966	0.158	0.088	0.170
Want to delay birth at least 2 years	0.255	0.034	253	299	1.238	0.133	0.187	0.323
Ideal number of children	5.242	0.137	464	549	1.142	0.026	4.968	5.517
Had 2+ sexual partners in past 12 months	0.236	0.026	470	557	1.348	0.112	0.183	0.289
Condom use at last sex	0.170	0.034	111	131	0.948	0.199	0.103	0.238
Abstinence among never married youth (never had sex)	0.421	0.042	174	208	1.123	0.100	0.337	0.506
Had paid sex in past 12 months	0.033	0.008	470	557	1.001	0.250	0.017	0.050
Had HIV test and received results in past 12 months	0.068	0.012	470	557	1.062	0.182	0.043	0.092
Discriminatory attitudes towards people living with HIV	0.761	0.032	463	550	1.594	0.042	0.697	0.824
HIV prevalence among men 15-49	0.002	0.002	458	477	1.019	0.996	0.000	0.007
HIV prevalence among young men 15-24	0.000	0.000	184	191	na	na	0.000	0.000
HIV prevalence among men 15-59	0.002	0.002	533	560	1.018	0.999	0.000	0.006
			WOMEN AND MEN					
HIV prevalence among respondents 15-49	0.013	0.004	1,108	1,145	1.209	0.316	0.005	0.021
HIV prevalence among respondents 15-24	0.011	0.005	437	445	0.991	0.456	0.001	0.020

na = Not available

Table B.12 Sampling errors: Kono sample, Sierra Leone 2019

Variable	Value (R)	Standard error (SE)	Number of cases: Un-weighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative Error (SE/R)	Confidence limits: Lower (R-2SE)	Confidence limits: Upper (R+2SE)
HOUSEHOLDS AND POPULATION								
Ownership of at least one ITN	0.753	0.021	908	861	1.481	0.028	0.710	0.795
De facto population with access to an ITN	0.505	0.017	4,676	4,451	1.305	0.033	0.472	0.539
Household population that slept under an ITN last night	0.605	0.023	4,676	4,451	1.548	0.038	0.559	0.650
WOMEN								
Urban residence	0.349	0.028	968	925	1.803	0.079	0.294	0.404
Literacy	0.356	0.025	968	925	1.634	0.071	0.305	0.406
No education	0.495	0.027	968	925	1.649	0.054	0.442	0.548
Secondary or higher education	0.370	0.027	968	925	1.743	0.073	0.316	0.424
Never married (never in union)	0.310	0.017	968	925	1.116	0.053	0.277	0.344
Currently married (in union)	0.646	0.018	968	925	1.182	0.028	0.609	0.682
Married before age 18	0.374	0.022	749	714	1.233	0.058	0.331	0.418
Had sexual intercourse before age 18	0.777	0.022	749	714	1.461	0.029	0.733	0.822
Currently pregnant	0.060	0.008	968	925	1.055	0.135	0.044	0.076
Know any contraceptive method	0.999	0.001	623	597	0.883	0.001	0.996	1.001
Know a modern method	0.999	0.001	623	597	0.883	0.001	0.996	1.001
Currently using any method	0.241	0.025	623	597	1.453	0.103	0.191	0.291
Currently using a modern method	0.239	0.025	623	597	1.453	0.104	0.189	0.288
Currently using pill	0.022	0.006	623	597	1.084	0.290	0.009	0.035
Currently using male condoms	0.001	0.001	623	597	0.722	1.015	0.000	0.002
Currently using injectables	0.101	0.014	623	597	1.118	0.134	0.074	0.128
Currently using implants	0.067	0.012	623	597	1.228	0.184	0.042	0.091
Currently using female sterilisation	0.007	0.005	623	597	1.379	0.641	0.000	0.017
Currently using withdrawal	0.000	0.000	623	597	na	na	0.000	0.000
Currently using rhythm	0.000	0.000	623	597	na	na	0.000	0.000
Using public sector source	0.876	0.032	253	237	1.530	0.036	0.812	0.940
Want no more children	0.377	0.025	623	597	1.270	0.065	0.328	0.427
Want to delay next birth at least 2 years	0.180	0.018	623	597	1.138	0.097	0.145	0.215
Ideal number of children	4.439	0.093	962	920	1.661	0.021	4.253	4.625
Mothers protected against tetanus for last birth	0.723	0.030	467	451	1.428	0.041	0.663	0.782
Births with skilled attendant at delivery	0.876	0.037	612	594	2.432	0.042	0.802	0.949
Received 3+ doses of SP/Fansidar	0.131	0.026	252	250	1.260	0.201	0.078	0.184
Treated with ORS	0.877	0.075	28	28	1.229	0.085	0.727	1.026
Sought medical treatment for diarrhoea	0.945	0.039	28	28	0.929	0.042	0.866	1.023
Ever had vaccination card	0.993	0.007	113	110	0.882	0.007	0.980	1.007
Received BCG vaccination	1.000	0.000	113	110	na	0.000	1.000	1.000
Received birth dose HepB vaccination	0.233	0.045	113	110	1.126	0.192	0.143	0.322
Received DPT-HepB-Hib vaccination (3 doses)	0.817	0.042	113	110	1.169	0.052	0.732	0.902
Received birth dose polio 0 vaccination	0.991	0.009	113	110	1.029	0.009	0.972	1.009
Received polio vaccination (3 doses)	0.725	0.046	113	110	1.090	0.063	0.634	0.817
Received IPV vaccination	0.784	0.038	113	110	0.964	0.048	0.708	0.860
Received pneumococcal vaccination (3 doses)	0.803	0.041	113	110	1.090	0.051	0.721	0.884
Received rotavirus vaccination (2 doses)	0.929	0.024	113	110	1.003	0.026	0.880	0.977
Received measles 1 vaccination	0.838	0.032	113	110	0.917	0.038	0.775	0.902
Received all basic vaccinations (12-23 months)	0.600	0.047	113	110	1.017	0.079	0.505	0.694
Received all age-appropriate vaccinations (12-23 months)	0.510	0.047	113	110	0.993	0.092	0.416	0.604
Received measles/MMR 2 vaccination	0.628	0.057	103	97	1.189	0.092	0.513	0.743
Received all age-appropriate vaccinations (24-35 months)	0.342	0.060	103	97	1.239	0.174	0.223	0.461
Height-for-age (-2SD)	0.233	0.036	330	318	1.407	0.154	0.162	0.305
Weight-for-height (-2SD)	0.024	0.010	339	326	1.162	0.395	0.005	0.043
Weight-for-age (-2SD)	0.082	0.020	330	318	1.137	0.239	0.043	0.121
Body mass index (BMI) <18.5	0.041	0.009	452	441	0.991	0.223	0.023	0.059
Body mass index (BMI) ≥25	0.283	0.029	452	441	1.363	0.101	0.226	0.340
Prevalence of anaemia (children 6-59 months)	0.684	0.030	294	283	1.089	0.044	0.624	0.744
Prevalence of anaemia (women 15-49)	0.400	0.028	474	463	1.251	0.070	0.345	0.456
Had 2+ sexual partners in past 12 months	0.022	0.004	968	925	0.842	0.181	0.014	0.030
Condom use at last sex	0.045	0.046	19	20	0.951	1.031	0.000	0.138
Abstinence among never-married youth (never had sex)	0.459	0.031	262	249	1.010	0.068	0.397	0.521
Had an HIV test and received results in past 12 months	0.117	0.014	968	925	1.389	0.123	0.089	0.146
Discriminatory attitudes towards people living with HIV	0.809	0.026	890	857	2.003	0.033	0.756	0.862
HIV prevalence among women 15-49	0.018	0.007	465	419	1.141	0.391	0.004	0.032
HIV prevalence among pregnant women 15-49	0.073	0.046	34	29	1.024	0.637	0.000	0.165
HIV prevalence among young women 15-24	0.003	0.003	170	153	0.720	1.035	0.000	0.009
Total fertility rate (last 3 years)	4.750	0.241	2,637	2,526	1.035	0.051	4.268	5.232
Neonatal mortality (last 0-9 years)	47.704	6.044	1,305	1,263	1.013	0.127	35.616	59.792
Postneonatal mortality (last 0-9 years)	40.738	5.645	1,314	1,269	0.978	0.139	29.447	52.029
Infant mortality (last 0-9 years)	88.442	7.389	1,309	1,268	0.906	0.084	73.664	103.220
Child mortality (last 0-9 years)	32.673	5.089	1,315	1,268	0.889	0.156	22.495	42.850
Under-5 mortality (last 0-9 years)	118.225	9.544	1,319	1,276	0.936	0.081	99.136	137.314

Continued...

Table B.12—*Continued*

Variable	Value (R)	Standard error (SE)	Number of cases: Un-weighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative Error (SE/R)	Confidence limits: Lower (R-2SE)	Confidence limits: Upper (R+2SE)
			MEN					
Urban residence	0.360	0.031	417	387	1.332	0.087	0.297	0.423
Literacy	0.552	0.032	417	387	1.300	0.057	0.489	0.615
No education	0.348	0.027	417	387	1.153	0.077	0.294	0.402
Secondary or higher education	0.479	0.031	417	387	1.284	0.066	0.416	0.541
Never married (in union)	0.411	0.031	417	387	1.270	0.075	0.350	0.473
Currently married (in union)	0.570	0.032	417	387	1.306	0.056	0.507	0.634
Had first sexual intercourse before age 18	0.383	0.026	313	291	0.949	0.068	0.331	0.435
Know any contraceptive method	0.992	0.005	236	221	0.884	0.005	0.982	1.002
Know any modern contraceptive method	0.992	0.005	236	221	0.884	0.005	0.982	1.002
Want no more children	0.257	0.037	236	221	1.283	0.143	0.183	0.330
Want to delay birth at least 2 years	0.166	0.030	236	221	1.235	0.181	0.106	0.225
Ideal number of children	5.069	0.215	410	380	1.189	0.042	4.639	5.498
Had 2+ sexual partners in past 12 months	0.205	0.033	417	387	1.677	0.162	0.138	0.271
Condom use at last sex	0.126	0.044	85	79	1.211	0.349	0.038	0.214
Abstinence among never married youth (never had sex)	0.340	0.051	142	132	1.266	0.149	0.239	0.442
Had paid sex in past 12 months	0.042	0.012	417	387	1.250	0.292	0.018	0.067
Had HIV test and received results in past 12 months	0.102	0.016	417	387	1.048	0.153	0.071	0.133
Discriminatory attitudes towards people living with HIV	0.749	0.035	406	378	1.603	0.046	0.679	0.818
HIV prevalence among men 15-49	0.007	0.004	356	329	0.836	0.523	0.000	0.015
HIV prevalence among young men 15-24	0.002	0.002	128	117	0.565	1.022	0.000	0.007
HIV prevalence among men 15-59	0.006	0.003	411	382	0.827	0.519	0.000	0.013
			WOMEN AND MEN					
HIV prevalence among respondents 15-49	0.013	0.005	821	748	1.240	0.374	0.003	0.023
HIV prevalence among respondents 15-24	0.003	0.002	298	270	0.675	0.760	0.000	0.007

na = Not available

Table B.13 Sampling errors: Bombali sample, Sierra Leone 2019

Variable	Value (R)	Standard error (SE)	Number of cases: Un-weighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative Error (SE/R)	Confidence limits: Lower (R-2SE)	Confidence limits: Upper (R+2SE)
HOUSEHOLDS AND POPULATION								
Ownership of at least one ITN	0.725	0.021	889	947	1.406	0.029	0.683	0.767
De facto population with access to an ITN	0.496	0.034	4,781	5,002	2.556	0.069	0.427	0.564
Household population that slept under an ITN last night	0.557	0.026	4,781	5,002	1.767	0.046	0.505	0.608
WOMEN								
Urban residence	0.361	0.064	1,134	1,166	4.446	0.177	0.233	0.489
Literacy	0.470	0.027	1,134	1,166	1.844	0.058	0.416	0.525
No education	0.424	0.024	1,134	1,166	1.611	0.056	0.376	0.471
Secondary or higher education	0.437	0.037	1,134	1,166	2.473	0.084	0.364	0.510
Never married (never in union)	0.310	0.030	1,134	1,166	2.174	0.096	0.251	0.370
Currently married (in union)	0.624	0.024	1,134	1,166	1.672	0.039	0.576	0.672
Married before age 18	0.370	0.016	862	887	0.987	0.044	0.337	0.402
Had sexual intercourse before age 18	0.747	0.029	862	887	1.931	0.038	0.690	0.804
Currently pregnant	0.045	0.009	1,134	1,166	1.433	0.196	0.027	0.063
Know any contraceptive method	0.994	0.003	694	728	1.119	0.003	0.988	1.001
Know a modern method	0.992	0.005	694	728	1.447	0.005	0.983	1.002
Currently using any method	0.245	0.029	694	728	1.762	0.118	0.187	0.302
Currently using a modern method	0.231	0.023	694	728	1.410	0.098	0.186	0.276
Currently using pill	0.016	0.007	694	728	1.412	0.420	0.003	0.030
Currently using male condoms	0.000	0.000	694	728	na	na	0.000	0.000
Currently using injectables	0.090	0.017	694	728	1.599	0.193	0.055	0.125
Currently using implants	0.115	0.015	694	728	1.197	0.126	0.086	0.144
Currently using female sterilisation	0.004	0.003	694	728	1.311	0.793	0.000	0.010
Currently using withdrawal	0.000	0.000	694	728	na	na	0.000	0.000
Currently using rhythm	0.000	0.000	694	728	na	na	0.000	0.000
Using public sector source	0.838	0.019	291	308	0.883	0.023	0.800	0.876
Want no more children	0.177	0.021	694	728	1.424	0.117	0.135	0.218
Want to delay next birth at least 2 years	0.298	0.030	694	728	1.731	0.101	0.238	0.358
Ideal number of children	4.752	0.064	1,133	1,165	1.268	0.014	4.623	4.881
Mothers protected against tetanus for last birth	0.755	0.039	498	483	1.960	0.052	0.676	0.834
Births with skilled attendant at delivery	0.896	0.021	649	639	1.412	0.024	0.853	0.939
Received 3+ doses of SP/Fansidar	0.368	0.066	286	290	2.250	0.178	0.237	0.500
Treated with ORS	0.920	0.061	23	21	1.004	0.066	0.798	1.041
Sought medical treatment for diarrhoea	0.722	0.133	23	21	1.296	0.184	0.456	0.987
Ever had vaccination card	0.970	0.018	124	126	1.124	0.018	0.935	1.005
Received BCG vaccination	0.987	0.009	124	126	0.890	0.009	0.968	1.005
Received birth dose HepB vaccination	0.178	0.044	124	126	1.265	0.250	0.089	0.266
Received DPT-HepB-Hib vaccination (3 doses)	0.906	0.030	124	126	1.115	0.033	0.846	0.965
Received birth dose polio 0 vaccination	0.987	0.013	124	126	1.274	0.013	0.961	1.013
Received polio vaccination (3 doses)	0.822	0.042	124	126	1.187	0.051	0.739	0.905
Received IPV vaccination	0.801	0.096	124	126	2.610	0.120	0.609	0.993
Received pneumococcal vaccination (3 doses)	0.933	0.020	124	126	0.867	0.021	0.894	0.973
Received rotavirus vaccination (2 doses)	0.970	0.014	124	126	0.897	0.014	0.942	0.998
Received measles 1 vaccination	0.800	0.042	124	126	1.154	0.053	0.716	0.885
Received all basic vaccinations (12-23 months)	0.627	0.039	124	126	0.870	0.062	0.550	0.705
Received all age-appropriate vaccinations (12-23 months)	0.527	0.072	124	126	1.563	0.137	0.383	0.671
Received measles/MMR 2 vaccination	0.725	0.058	97	80	1.114	0.079	0.610	0.840
Received all age-appropriate vaccinations (24-35 months)	0.318	0.048	97	80	0.897	0.152	0.222	0.415
Height-for-age (-2SD)	0.228	0.025	358	395	1.124	0.109	0.178	0.278
Weight-for-height (-2SD)	0.072	0.012	356	394	0.906	0.166	0.048	0.097
Weight-for-age (-2SD)	0.105	0.028	358	395	1.601	0.269	0.048	0.161
Body mass index (BMI) <18.5	0.099	0.023	511	534	1.776	0.236	0.052	0.145
Body mass index (BMI) ≥25	0.232	0.034	511	534	1.840	0.147	0.163	0.300
Prevalence of anaemia (children 6-59 months)	0.678	0.051	308	339	1.934	0.076	0.575	0.781
Prevalence of anaemia (women 15-49)	0.426	0.049	529	564	2.292	0.114	0.329	0.523
Had 2+ sexual partners in past 12 months	0.046	0.008	1,134	1,166	1.347	0.182	0.029	0.063
Condom use at last sex	0.027	0.018	52	54	0.797	0.672	0.000	0.062
Abstinence among never-married youth (never had sex)	0.340	0.034	328	324	1.294	0.100	0.272	0.407
Had an HIV test and received results in past 12 months	0.196	0.017	1,134	1,166	1.424	0.086	0.163	0.230
Discriminatory attitudes towards people living with HIV	0.659	0.031	1,119	1,157	2.170	0.047	0.598	0.721
HIV prevalence among women 15-49	0.025	0.007	518	533	1.084	0.297	0.010	0.040
HIV prevalence among pregnant women 15-49	0.074	0.052	28	23	1.037	0.708	0.000	0.178
HIV prevalence among young women 15-24	0.013	0.008	209	197	0.955	0.569	0.000	0.029
Total fertility rate (last 3 years)	3.874	0.436	3,115	3,178	2.252	0.112	3.003	4.746
Neonatal mortality (last 0-9 years)	11.824	4.119	1,275	1,317	1.254	0.348	3.586	20.061
Postneonatal mortality (last 0-9 years)	29.488	9.033	1,276	1,316	1.558	0.306	11.423	47.553
Infant mortality (last 0-9 years)	41.312	10.492	1,278	1,320	1.543	0.254	20.328	62.296
Child mortality (last 0-9 years)	55.639	9.537	1,247	1,295	1.398	0.171	36.565	74.712
Under-5 mortality (last 0-9 years)	94.652	9.844	1,289	1,331	1.061	0.104	74.964	114.340

Continued...

Table B.13—*Continued*

Variable	Value (R)	Standard error (SE)	Number of cases: Un-weighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative Error (SE/R)	Confidence limits: Lower (R-2SE)	Confidence limits: Upper (R+2SE)
			MEN					
Urban residence	0.363	0.066	461	472	2.931	0.183	0.230	0.495
Literacy	0.626	0.041	461	472	1.808	0.065	0.544	0.708
No education	0.291	0.031	461	472	1.457	0.106	0.229	0.353
Secondary or higher education	0.611	0.034	461	472	1.474	0.055	0.544	0.678
Never married (in union)	0.473	0.039	461	472	1.651	0.081	0.396	0.550
Currently married (in union)	0.509	0.042	461	472	1.812	0.083	0.425	0.594
Had first sexual intercourse before age 18	0.346	0.055	340	355	2.110	0.158	0.236	0.455
Know any contraceptive method	0.997	0.003	221	240	0.817	0.003	0.991	1.003
Know any modern contraceptive method	0.997	0.003	221	240	0.817	0.003	0.991	1.003
Want no more children	0.191	0.055	221	240	2.063	0.288	0.081	0.301
Want to delay birth at least 2 years	0.140	0.038	221	240	1.632	0.274	0.063	0.217
Ideal number of children	4.431	0.178	451	463	1.497	0.040	4.074	4.787
Had 2+ sexual partners in past 12 months	0.197	0.026	461	472	1.403	0.132	0.145	0.249
Condom use at last sex	0.162	0.051	79	93	1.230	0.318	0.059	0.265
Abstinence among never married youth (never had sex)	0.530	0.041	190	183	1.119	0.077	0.448	0.611
Had paid sex in past 12 months	0.029	0.010	461	472	1.303	0.353	0.009	0.049
Had HIV test and received results in past 12 months	0.143	0.026	461	472	1.617	0.185	0.090	0.195
Discriminatory attitudes towards people living with HIV	0.833	0.038	434	447	2.103	0.045	0.758	0.909
HIV prevalence among men 15-49	0.013	0.006	386	403	1.125	0.505	0.000	0.026
HIV prevalence among young men 15-24	0.005	0.005	162	159	0.879	1.017	0.000	0.014
HIV prevalence among men 15-59	0.015	0.008	430	450	1.329	0.515	0.000	0.031
			WOMEN AND MEN					
HIV prevalence among respondents 15-49	0.020	0.006	904	936	1.328	0.311	0.007	0.032
HIV prevalence among respondents 15-24	0.009	0.005	371	356	0.924	0.492	0.000	0.019

na = Not available

Table B.14 Sampling errors: Falaba sample, Sierra Leone 2019

Variable	Value (R)	Standard error (SE)	Number of cases: Un-weighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative Error (SE/R)	Confidence limits: Lower (R-2SE)	Confidence limits: Upper (R+2SE)
HOUSEHOLDS AND POPULATION								
Ownership of at least one ITN	0.749	0.041	584	296	2.293	0.055	0.666	0.832
De facto population with access to an ITN	0.491	0.040	3,430	1,787	2.700	0.082	0.410	0.571
Household population that slept under an ITN last night	0.540	0.030	3,430	1,787	1.896	0.055	0.480	0.599
WOMEN								
Urban residence	0.048	0.022	922	466	3.171	0.469	0.003	0.092
Literacy	0.197	0.019	922	466	1.473	0.098	0.159	0.236
No education	0.768	0.020	922	466	1.460	0.026	0.727	0.809
Secondary or higher education	0.172	0.023	922	466	1.858	0.135	0.125	0.218
Never married (never in union)	0.349	0.034	922	466	2.140	0.097	0.281	0.416
Currently married (in union)	0.624	0.031	922	466	1.953	0.050	0.561	0.686
Married before age 18	0.386	0.031	670	334	1.638	0.080	0.325	0.448
Had sexual intercourse before age 18	0.562	0.038	670	334	1.977	0.068	0.486	0.638
Currently pregnant	0.047	0.008	922	466	1.115	0.166	0.031	0.063
Know any contraceptive method	0.920	0.023	561	291	1.956	0.024	0.875	0.965
Know a modern method	0.870	0.037	561	291	2.622	0.043	0.796	0.945
Currently using any method	0.071	0.018	561	291	1.696	0.259	0.034	0.108
Currently using a modern method	0.071	0.018	561	291	1.696	0.259	0.034	0.108
Currently using pill	0.003	0.002	561	291	0.953	0.734	0.000	0.007
Currently using male condoms	0.007	0.006	561	291	1.673	0.868	0.000	0.018
Currently using injectables	0.014	0.006	561	291	1.227	0.438	0.002	0.026
Currently using implants	0.027	0.012	561	291	1.699	0.429	0.004	0.051
Currently using female sterilisation	0.011	0.006	561	291	1.383	0.545	0.000	0.024
Currently using withdrawal	0.000	0.000	561	291	na	na	0.000	0.000
Currently using rhythm	0.000	0.000	561	291	na	na	0.000	0.000
Using public sector source	0.756	0.066	114	61	1.625	0.088	0.624	0.888
Want no more children	0.399	0.025	561	291	1.212	0.063	0.349	0.450
Want to delay next birth at least 2 years	0.183	0.024	561	291	1.475	0.132	0.134	0.231
Ideal number of children	5.298	0.166	918	463	2.881	0.031	4.966	5.630
Mothers protected against tetanus for last birth	0.583	0.051	342	181	1.957	0.088	0.480	0.685
Births with skilled attendant at delivery	0.839	0.054	461	244	2.621	0.064	0.731	0.947
Received 3+ doses of SP/Fansidar	0.717	0.051	160	81	1.425	0.071	0.615	0.819
Treated with ORS	0.949	0.057	11	10	1.146	0.060	0.835	1.064
Sought medical treatment for diarrhoea	0.702	0.087	11	10	0.841	0.124	0.527	0.876
Ever had vaccination card	0.894	0.049	97	51	1.512	0.055	0.796	0.992
Received BCG vaccination	0.946	0.037	97	51	1.487	0.039	0.871	1.021
Received birth dose HepB vaccination	0.185	0.040	97	51	1.033	0.217	0.105	0.266
Received DPT-HepB-Hib vaccination (3 doses)	0.641	0.060	97	51	1.232	0.094	0.520	0.762
Received birth dose polio 0 vaccination	0.876	0.046	97	51	1.340	0.053	0.784	0.969
Received polio vaccination (3 doses)	0.620	0.061	97	51	1.234	0.099	0.498	0.743
Received IPV vaccination	0.765	0.068	97	51	1.567	0.089	0.629	0.902
Received pneumococcal vaccination (3 doses)	0.671	0.085	97	51	1.777	0.127	0.500	0.842
Received rotavirus vaccination (2 doses)	0.697	0.088	97	51	1.877	0.127	0.520	0.874
Received measles 1 vaccination	0.687	0.093	97	51	1.940	0.135	0.501	0.873
Received all basic vaccinations (12-23 months)	0.498	0.080	97	51	1.550	0.160	0.339	0.657
Received all age-appropriate vaccinations (12-23 months)	0.488	0.080	97	51	1.554	0.164	0.328	0.648
Received measles/MMR 2 vaccination	0.481	0.069	75	36	1.119	0.144	0.343	0.620
Received all age-appropriate vaccinations (24-35 months)	0.411	0.083	75	36	1.349	0.201	0.245	0.576
Height-for-age (-2SD)	0.446	0.024	247	137	0.684	0.053	0.399	0.494
Weight-for-height (-2SD)	0.036	0.022	246	137	2.023	0.609	0.000	0.081
Weight-for-age (-2SD)	0.148	0.021	248	137	0.897	0.141	0.106	0.190
Body mass index (BMI) <18.5	0.178	0.029	380	191	1.471	0.163	0.120	0.236
Body mass index (BMI) ≥25	0.071	0.025	380	191	1.884	0.350	0.021	0.121
Prevalence of anaemia (children 6-59 months)	0.829	0.043	205	112	1.531	0.051	0.744	0.914
Prevalence of anaemia (women 15-49)	0.603	0.046	367	174	1.744	0.076	0.511	0.695
Had 2+ sexual partners in past 12 months	0.036	0.010	922	466	1.635	0.277	0.016	0.057
Condom use at last sex	0.063	0.060	38	17	1.486	0.959	0.000	0.184
Abstinence among never-married youth (never had sex)	0.588	0.056	305	150	1.981	0.096	0.476	0.700
Had an HIV test and received results in past 12 months	0.072	0.014	922	466	1.661	0.196	0.044	0.101
Discriminatory attitudes towards people living with HIV	0.653	0.034	760	374	1.978	0.052	0.585	0.722
HIV prevalence among women 15-49	0.003	0.003	328	203	1.041	1.013	0.000	0.010
HIV prevalence among pregnant women 15-49	0.078	0.078	12	8	0.964	0.995	0.000	0.234
HIV prevalence among young women 15-24	0.008	0.009	121	77	1.045	1.032	0.000	0.026
Total fertility rate (last 3 years)	3.419	0.331	2,459	1,238	1.954	0.097	2.757	4.081
Neonatal mortality (last 0-9 years)	27.197	7.891	959	515	1.325	0.290	11.416	42.979
Postneonatal mortality (last 0-9 years)	23.869	8.378	973	523	1.358	0.351	7.113	40.626
Infant mortality (last 0-9 years)	51.067	11.220	961	516	1.362	0.220	28.626	73.507
Child mortality (last 0-9 years)	34.242	14.175	1,013	549	2.298	0.414	5.892	62.592
Under-5 mortality (last 0-9 years)	83.560	9.591	968	520	0.936	0.115	64.378	102.742

Continued...

Table B.14—*Continued*

Variable	Value (R)	Standard error (SE)	Number of cases: Un-weighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative Error (SE/R)	Confidence limits: Lower (R-2SE)	Confidence limits: Upper (R+2SE)
			MEN					
Urban residence	0.036	0.013	302	148	1.253	0.377	0.009	0.062
Literacy	0.417	0.060	302	148	2.111	0.145	0.296	0.538
No education	0.561	0.061	302	148	2.121	0.109	0.439	0.683
Secondary or higher education	0.307	0.039	302	148	1.455	0.126	0.229	0.384
Never married (in union)	0.505	0.025	302	148	0.866	0.049	0.455	0.555
Currently married (in union)	0.462	0.027	302	148	0.946	0.059	0.408	0.517
Had first sexual intercourse before age 18	0.324	0.041	194	92	1.224	0.128	0.241	0.406
Know any contraceptive method	0.854	0.064	144	68	2.156	0.075	0.725	0.983
Know any modern contraceptive method	0.826	0.072	144	68	2.228	0.087	0.683	0.969
Want no more children	0.132	0.049	144	68	1.730	0.374	0.033	0.230
Want to delay birth at least 2 years	0.054	0.028	144	68	1.481	0.519	0.000	0.111
Ideal number of children	6.712	0.207	284	139	1.098	0.031	6.299	7.126
Had 2+ sexual partners in past 12 months	0.122	0.015	302	148	0.817	0.126	0.091	0.153
Condom use at last sex	0.019	0.020	34	18	0.837	1.040	0.000	0.059
Abstinence among never married youth (never had sex)	0.622	0.070	130	65	1.631	0.113	0.482	0.763
Had paid sex in past 12 months	0.018	0.007	302	148	0.930	0.391	0.004	0.033
Had HIV test and received results in past 12 months	0.025	0.020	302	148	2.203	0.800	0.000	0.065
Discriminatory attitudes towards people living with HIV	0.548	0.037	278	137	1.220	0.067	0.475	0.621
HIV prevalence among men 15-49	0.016	0.008	200	124	0.948	0.528	0.000	0.033
HIV prevalence among young men 15-24	0.005	0.005	80	51	0.681	1.058	0.000	0.016
HIV prevalence among men 15-59	0.015	0.007	249	157	0.953	0.483	0.001	0.030
			WOMEN AND MEN					
HIV prevalence among respondents 15-49	0.008	0.005	528	327	1.188	0.576	0.000	0.017
HIV prevalence among respondents 15-24	0.007	0.006	201	128	0.928	0.772	0.000	0.018

na = Not available

Table B.15 Sampling errors: Koinadugu sample, Sierra Leone 2019

Variable	Value (R)	Standard error (SE)	Number of cases: Un-weighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative Error (SE/R)	Confidence limits: Lower (R-2SE)	Confidence limits: Upper (R+2SE)
HOUSEHOLDS AND POPULATION								
Ownership of at least one ITN	0.744	0.045	604	347	2.541	0.061	0.654	0.835
De facto population with access to an ITN	0.540	0.037	3,551	2,037	2.356	0.069	0.466	0.614
Household population that slept under an ITN last night	0.592	0.040	3,551	2,037	2.373	0.067	0.513	0.672
WOMEN								
Urban residence	0.335	0.052	819	469	3.143	0.156	0.231	0.439
Literacy	0.359	0.035	819	469	2.071	0.097	0.290	0.429
No education	0.551	0.029	819	469	1.666	0.053	0.493	0.609
Secondary or higher education	0.330	0.033	819	469	1.990	0.099	0.264	0.395
Never married (never in union)	0.266	0.022	819	469	1.412	0.082	0.222	0.310
Currently married (in union)	0.678	0.028	819	469	1.704	0.041	0.622	0.734
Married before age 18	0.425	0.026	639	368	1.329	0.061	0.373	0.477
Had sexual intercourse before age 18	0.780	0.023	639	368	1.390	0.029	0.735	0.826
Currently pregnant	0.062	0.010	819	469	1.195	0.162	0.042	0.082
Know any contraceptive method	0.962	0.015	555	318	1.860	0.016	0.931	0.992
Know a modern method	0.962	0.015	555	318	1.860	0.016	0.931	0.992
Currently using any method	0.131	0.014	555	318	1.002	0.110	0.102	0.160
Currently using a modern method	0.129	0.014	555	318	0.971	0.107	0.101	0.156
Currently using pill	0.016	0.006	555	318	1.081	0.359	0.005	0.028
Currently using male condoms	0.000	0.000	555	318	na	na	0.000	0.000
Currently using injectables	0.034	0.007	555	318	0.896	0.203	0.020	0.048
Currently using implants	0.074	0.010	555	318	0.857	0.129	0.055	0.093
Currently using female sterilisation	0.000	0.000	555	318	na	na	0.000	0.000
Currently using withdrawal	0.000	0.000	555	318	na	na	0.000	0.000
Currently using rhythm	0.000	0.000	555	318	na	na	0.000	0.000
Using public sector source	0.841	0.032	147	81	1.065	0.038	0.777	0.906
Want no more children	0.207	0.019	555	318	1.112	0.093	0.169	0.245
Want to delay next birth at least 2 years	0.304	0.027	555	318	1.371	0.088	0.250	0.358
Ideal number of children	5.037	0.126	817	469	2.069	0.025	4.786	5.288
Mothers protected against tetanus for last birth	0.845	0.030	376	218	1.624	0.036	0.784	0.906
Births with skilled attendant at delivery	0.774	0.058	507	294	2.612	0.075	0.658	0.889
Received 3+ doses of SP/Fansidar	0.565	0.071	210	121	2.086	0.126	0.422	0.708
Treated with ORS	0.830	0.059	39	24	0.923	0.072	0.711	0.949
Sought medical treatment for diarrhoea	0.701	0.066	39	24	0.870	0.094	0.570	0.833
Ever had vaccination card	0.934	0.024	87	48	0.879	0.026	0.886	0.982
Received BCG vaccination	0.922	0.032	87	48	1.106	0.035	0.857	0.987
Received birth dose HepB vaccination	0.178	0.049	87	48	1.178	0.277	0.079	0.276
Received DPT-HepB-Hib vaccination (3 doses)	0.724	0.060	87	48	1.225	0.083	0.604	0.844
Received birth dose polio 0 vaccination	0.858	0.052	87	48	1.372	0.061	0.753	0.963
Received polio vaccination (3 doses)	0.639	0.061	87	48	1.148	0.095	0.518	0.760
Received IPV vaccination	0.740	0.054	87	48	1.117	0.073	0.632	0.847
Received pneumococcal vaccination (3 doses)	0.775	0.048	87	48	1.040	0.061	0.680	0.870
Received rotavirus vaccination (2 doses)	0.835	0.055	87	48	1.346	0.065	0.726	0.944
Received measles 1 vaccination	0.774	0.064	87	48	1.392	0.082	0.647	0.902
Received all basic vaccinations (12-23 months)	0.495	0.069	87	48	1.250	0.140	0.356	0.633
Received all age-appropriate vaccinations (12-23 months)	0.376	0.066	87	48	1.227	0.177	0.243	0.508
Received measles/MMR 2 vaccination	0.491	0.055	88	53	1.031	0.113	0.380	0.601
Received all age-appropriate vaccinations (24-35 months)	0.204	0.054	88	53	1.223	0.265	0.096	0.313
Height-for-age (-2SD)	0.374	0.046	206	118	1.240	0.124	0.281	0.466
Weight-for-height (-2SD)	0.060	0.020	210	121	1.152	0.337	0.019	0.100
Weight-for-age (-2SD)	0.175	0.029	212	122	1.064	0.167	0.117	0.234
Body mass index (BMI) <18.5	0.068	0.016	303	173	1.128	0.240	0.035	0.101
Body mass index (BMI) ≥25	0.239	0.044	303	173	1.779	0.183	0.151	0.326
Prevalence of anaemia (children 6-59 months)	0.756	0.045	171	100	1.365	0.059	0.666	0.845
Prevalence of anaemia (women 15-49)	0.480	0.042	304	179	1.485	0.088	0.396	0.564
Had 2+ sexual partners in past 12 months	0.020	0.005	819	469	1.094	0.271	0.009	0.030
Condom use at last sex	0.118	0.077	19	9	1.017	0.654	0.000	0.273
Abstinence among never-married youth (never had sex)	0.481	0.036	189	106	0.987	0.075	0.409	0.553
Had an HIV test and received results in past 12 months	0.136	0.017	819	469	1.454	0.128	0.101	0.171
Discriminatory attitudes towards people living with HIV	0.801	0.029	805	461	2.022	0.036	0.744	0.858
HIV prevalence among women 15-49	0.026	0.009	301	202	1.017	0.362	0.007	0.044
HIV prevalence among pregnant women 15-49	0.000	0.000	18	13	na	na	0.000	0.000
HIV prevalence among young women 15-24	0.011	0.008	114	75	0.860	0.761	0.000	0.028
Total fertility rate (last 3 years)	4.269	0.401	2,241	1,287	1.638	0.094	3.466	5.072
Neonatal mortality (last 0-9 years)	31.261	5.990	1,011	588	1.033	0.192	19.281	43.240
Postneonatal mortality (last 0-9 years)	28.889	5.134	1,015	589	0.905	0.178	18.621	39.156
Infant mortality (last 0-9 years)	60.150	7.302	1,012	588	0.862	0.121	45.546	74.754
Child mortality (last 0-9 years)	53.427	9.871	1,000	578	1.224	0.185	33.685	73.169
Under-5 mortality (last 0-9 years)	110.363	14.985	1,023	594	1.268	0.136	80.393	140.333

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Table B.15—*Continued*

Variable	Value (R)	Standard error (SE)	Number of cases: Un-weighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative Error (SE/R)	Confidence limits: Lower (R-2SE)	Confidence limits: Upper (R+2SE)
			MEN					
Urban residence	0.383	0.072	342	196	2.714	0.188	0.238	0.527
Literacy	0.584	0.048	342	196	1.804	0.083	0.487	0.681
No education	0.375	0.046	342	196	1.735	0.122	0.284	0.466
Secondary or higher education	0.528	0.053	342	196	1.951	0.100	0.422	0.634
Never married (in union)	0.445	0.036	342	196	1.352	0.082	0.372	0.518
Currently married (in union)	0.539	0.037	342	196	1.368	0.069	0.465	0.613
Had first sexual intercourse before age 18	0.331	0.033	259	149	1.119	0.099	0.265	0.397
Know any contraceptive method	0.990	0.010	183	106	1.383	0.011	0.969	1.010
Know any modern contraceptive method	0.990	0.010	183	106	1.383	0.011	0.969	1.010
Want no more children	0.118	0.024	183	106	1.002	0.203	0.070	0.166
Want to delay birth at least 2 years	0.247	0.035	183	106	1.099	0.143	0.176	0.317
Ideal number of children	5.796	0.203	331	190	1.535	0.035	5.391	6.201
Had 2+ sexual partners in past 12 months	0.157	0.025	342	196	1.273	0.160	0.106	0.207
Condom use at last sex	0.083	0.037	58	31	1.013	0.447	0.009	0.156
Abstinence among never married youth (never had sex)	0.580	0.056	112	62	1.194	0.097	0.468	0.692
Had paid sex in past 12 months	0.006	0.004	342	196	1.050	0.747	0.000	0.014
Had HIV test and received results in past 12 months	0.309	0.046	342	196	1.827	0.149	0.217	0.400
Discriminatory attitudes towards people living with HIV	0.872	0.023	333	191	1.241	0.026	0.827	0.918
HIV prevalence among men 15-49	0.015	0.008	238	168	0.963	0.507	0.000	0.030
HIV prevalence among young men 15-24	0.000	0.000	80	57	na	na	0.000	0.000
HIV prevalence among men 15-59	0.013	0.007	266	187	0.969	0.509	0.000	0.027
			WOMEN AND MEN					
HIV prevalence among respondents 15-49	0.021	0.008	539	370	1.220	0.361	0.006	0.036
HIV prevalence among respondents 15-24	0.006	0.005	194	132	0.827	0.744	0.000	0.016

na = Not available

Table B.16 Sampling errors: Tonkolili sample, Sierra Leone 2019

Variable	Value (R)	Standard error (SE)	Number of cases: Un-weighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative Error (SE/R)	Confidence limits: Lower (R-2SE)	Confidence limits: Upper (R+2SE)
HOUSEHOLDS AND POPULATION								
Ownership of at least one ITN	0.735	0.031	881	979	2.098	0.042	0.673	0.798
De facto population with access to an ITN	0.510	0.032	5,102	5,701	2.319	0.062	0.446	0.573
Household population that slept under an ITN last night	0.568	0.032	5,102	5,701	2.206	0.057	0.503	0.632
WOMEN								
Urban residence	0.244	0.020	1,096	1,215	1.540	0.082	0.204	0.284
Literacy	0.384	0.024	1,096	1,215	1.650	0.063	0.336	0.433
No education	0.573	0.025	1,096	1,215	1.663	0.043	0.523	0.623
Secondary or higher education	0.295	0.021	1,096	1,215	1.536	0.072	0.253	0.338
Never married (never in union)	0.267	0.019	1,096	1,215	1.441	0.072	0.228	0.305
Currently married (in union)	0.688	0.020	1,096	1,215	1.395	0.028	0.649	0.727
Married before age 18	0.383	0.019	867	962	1.175	0.051	0.344	0.421
Had sexual intercourse before age 18	0.836	0.019	867	962	1.469	0.022	0.799	0.873
Currently pregnant	0.081	0.011	1,096	1,215	1.333	0.136	0.059	0.103
Know any contraceptive method	0.982	0.006	760	836	1.308	0.006	0.970	0.995
Know a modern method	0.978	0.008	760	836	1.500	0.008	0.962	0.994
Currently using any method	0.182	0.020	760	836	1.450	0.112	0.141	0.222
Currently using a modern method	0.182	0.020	760	836	1.450	0.112	0.141	0.222
Currently using pill	0.012	0.005	760	836	1.149	0.371	0.003	0.022
Currently using male condoms	0.002	0.001	760	836	0.842	0.666	0.000	0.005
Currently using injectables	0.075	0.010	760	836	1.083	0.138	0.055	0.096
Currently using implants	0.089	0.014	760	836	1.349	0.157	0.061	0.117
Currently using female sterilisation	0.001	0.001	760	836	0.797	1.017	0.000	0.002
Currently using withdrawal	0.000	0.000	760	836	na	na	0.000	0.000
Currently using rhythm	0.000	0.000	760	836	na	na	0.000	0.000
Using public sector source	0.898	0.026	274	306	1.410	0.029	0.847	0.950
Want no more children	0.221	0.022	760	836	1.456	0.099	0.177	0.265
Want to delay next birth at least 2 years	0.226	0.050	760	836	3.272	0.221	0.126	0.327
Ideal number of children	4.594	0.197	1,087	1,206	2.808	0.043	4.199	4.988
Mothers protected against tetanus for last birth	0.815	0.035	497	551	2.010	0.043	0.745	0.885
Births with skilled attendant at delivery	0.933	0.019	677	741	1.793	0.021	0.894	0.971
Received 3+ doses of SP/Fansidar	0.348	0.076	281	303	2.624	0.218	0.197	0.500
Treated with ORS	0.955	0.040	15	16	0.723	0.042	0.875	1.034
Sought medical treatment for diarrhoea	0.732	0.115	15	16	0.973	0.158	0.501	0.962
Ever had vaccination card	0.981	0.013	132	142	1.096	0.013	0.955	1.008
Received BCG vaccination	0.967	0.016	132	142	1.039	0.017	0.934	1.000
Received birth dose HepB vaccination	0.226	0.050	132	142	1.339	0.220	0.127	0.326
Received DPT-HepB-Hib vaccination (3 doses)	0.706	0.059	132	142	1.454	0.083	0.588	0.823
Received birth dose polio 0 vaccination	0.897	0.045	132	142	1.671	0.050	0.807	0.987
Received polio vaccination (3 doses)	0.691	0.050	132	142	1.206	0.072	0.592	0.790
Received IPV vaccination	0.845	0.037	132	142	1.140	0.043	0.772	0.918
Received pneumococcal vaccination (3 doses)	0.749	0.047	132	142	1.232	0.063	0.654	0.844
Received rotavirus vaccination (2 doses)	0.741	0.057	132	142	1.458	0.077	0.627	0.854
Received measles 1 vaccination	0.720	0.063	132	142	1.585	0.088	0.594	0.847
Received all basic vaccinations (12-23 months)	0.489	0.070	132	142	1.574	0.144	0.348	0.629
Received all age-appropriate vaccinations (12-23 months)	0.457	0.066	132	142	1.481	0.144	0.325	0.589
Received measles/MMR 2 vaccination	0.468	0.050	104	121	1.056	0.108	0.367	0.568
Received all age-appropriate vaccinations (24-35 months)	0.340	0.066	104	121	1.451	0.194	0.208	0.471
Height-for-age (-2SD)	0.322	0.027	383	422	1.104	0.085	0.267	0.377
Weight-for-height (-2SD)	0.041	0.010	387	426	0.996	0.242	0.021	0.061
Weight-for-age (-2SD)	0.159	0.022	387	425	1.169	0.140	0.115	0.204
Body mass index (BMI) <18.5	0.057	0.012	484	536	1.098	0.203	0.034	0.081
Body mass index (BMI) ≥25	0.185	0.023	484	536	1.296	0.124	0.139	0.231
Prevalence of anaemia (children 6-59 months)	0.716	0.028	329	365	1.059	0.039	0.661	0.771
Prevalence of anaemia (women 15-49)	0.512	0.026	528	586	1.176	0.050	0.461	0.563
Had 2+ sexual partners in past 12 months	0.039	0.009	1,096	1,215	1.581	0.236	0.021	0.058
Condom use at last sex	0.026	0.027	45	48	1.109	1.027	0.000	0.079
Abstinence among never-married youth (never had sex)	0.274	0.031	254	285	1.115	0.114	0.211	0.336
Had an HIV test and received results in past 12 months	0.127	0.023	1,096	1,215	2.254	0.179	0.081	0.172
Discriminatory attitudes towards people living with HIV	0.951	0.013	961	1,053	1.898	0.014	0.924	0.977
HIV prevalence among women 15-49	0.016	0.007	513	536	1.263	0.444	0.002	0.029
HIV prevalence among pregnant women 15-49	0.000	0.000	30	34	na	na	0.000	0.000
HIV prevalence among young women 15-24	0.019	0.010	182	191	0.951	0.505	0.000	0.039
Total fertility rate (last 3 years)	4.287	0.260	3,021	3,351	1.207	0.061	3.766	4.807
Neonatal mortality (last 0-9 years)	24.437	4.875	1,446	1,619	1.126	0.200	14.687	34.188
Postneonatal mortality (last 0-9 years)	38.611	5.405	1,447	1,620	0.981	0.140	27.802	49.420
Infant mortality (last 0-9 years)	63.049	7.790	1,449	1,623	1.062	0.124	47.468	78.629
Child mortality (last 0-9 years)	44.886	6.432	1,464	1,648	1.054	0.143	32.023	57.749
Under-5 mortality (last 0-9 years)	105.104	9.093	1,461	1,637	0.957	0.087	86.918	123.291

Continued...

Table B.16—*Continued*

Variable	Value (R)	Standard error (SE)	Number of cases: Un-weighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative Error (SE/R)	Confidence limits: Lower (R-2SE)	Confidence limits: Upper (R+2SE)
			MEN					
Urban residence	0.229	0.027	487	538	1.403	0.117	0.175	0.282
Literacy	0.606	0.037	487	538	1.664	0.061	0.533	0.680
No education	0.325	0.035	487	538	1.654	0.108	0.254	0.395
Secondary or higher education	0.555	0.033	487	538	1.460	0.059	0.489	0.620
Never married (in union)	0.500	0.027	487	538	1.183	0.054	0.446	0.553
Currently married (in union)	0.459	0.025	487	538	1.092	0.054	0.410	0.508
Had first sexual intercourse before age 18	0.508	0.039	356	386	1.452	0.076	0.431	0.585
Know any contraceptive method	0.994	0.006	230	247	1.197	0.006	0.981	1.006
Know any modern contraceptive method	0.992	0.007	230	247	1.092	0.007	0.979	1.005
Want no more children	0.121	0.023	230	247	1.054	0.187	0.076	0.167
Want to delay birth at least 2 years	0.207	0.032	230	247	1.189	0.154	0.143	0.270
Ideal number of children	5.855	0.220	462	509	1.319	0.038	5.415	6.294
Had 2+ sexual partners in past 12 months	0.197	0.020	487	538	1.129	0.103	0.156	0.238
Condom use at last sex	0.139	0.033	91	106	0.912	0.239	0.073	0.206
Abstinence among never married youth (never had sex)	0.421	0.049	196	223	1.393	0.117	0.322	0.520
Had paid sex in past 12 months	0.027	0.008	487	538	1.079	0.292	0.011	0.043
Had HIV test and received results in past 12 months	0.069	0.014	487	538	1.227	0.205	0.041	0.097
Discriminatory attitudes towards people living with HIV	0.784	0.034	457	504	1.767	0.044	0.715	0.852
HIV prevalence among men 15-49	0.009	0.004	439	458	0.957	0.483	0.000	0.017
HIV prevalence among young men 15-24	0.009	0.006	194	207	0.917	0.695	0.000	0.021
HIV prevalence among men 15-59	0.008	0.004	508	529	0.956	0.482	0.000	0.015
			WOMEN AND MEN					
HIV prevalence among respondents 15-49	0.012	0.004	952	994	1.047	0.302	0.005	0.020
HIV prevalence among respondents 15-24	0.014	0.005	376	398	0.877	0.382	0.003	0.024

na = Not available

Table B.17 Sampling errors: Kambia sample, Sierra Leone 2019

Variable	Value (R)	Standard error (SE)	Number of cases: Un-weighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative Error (SE/R)	Confidence limits: Lower (R-2SE)	Confidence limits: Upper (R+2SE)
HOUSEHOLDS AND POPULATION								
Ownership of at least one ITN	0.725	0.030	717	662	1.789	0.041	0.665	0.785
De facto population with access to an ITN	0.524	0.026	4,846	4,443	1.687	0.049	0.472	0.575
Household population that slept under an ITN last night	0.532	0.030	4,846	4,443	1.912	0.057	0.471	0.593
WOMEN								
Urban residence	0.315	0.039	916	890	2.556	0.125	0.237	0.394
Literacy	0.338	0.030	916	890	1.903	0.088	0.278	0.397
No education	0.564	0.033	916	890	2.005	0.058	0.498	0.630
Secondary or higher education	0.305	0.026	916	890	1.681	0.084	0.254	0.357
Never married (never in union)	0.249	0.017	916	890	1.222	0.070	0.214	0.284
Currently married (in union)	0.703	0.022	916	890	1.428	0.031	0.660	0.747
Married before age 18	0.435	0.022	687	661	1.140	0.050	0.392	0.478
Had sexual intercourse before age 18	0.843	0.016	687	661	1.176	0.019	0.810	0.876
Currently pregnant	0.083	0.008	916	890	0.908	0.100	0.066	0.099
Know any contraceptive method	0.987	0.010	660	626	2.269	0.010	0.967	1.007
Know a modern method	0.983	0.010	660	626	2.048	0.010	0.963	1.004
Currently using any method	0.148	0.018	660	626	1.273	0.119	0.113	0.183
Currently using a modern method	0.146	0.017	660	626	1.263	0.119	0.112	0.181
Currently using pill	0.015	0.007	660	626	1.411	0.449	0.001	0.028
Currently using male condoms	0.002	0.002	660	626	0.892	0.746	0.000	0.005
Currently using injectables	0.065	0.011	660	626	1.181	0.175	0.042	0.088
Currently using implants	0.063	0.011	660	626	1.123	0.169	0.042	0.084
Currently using female sterilisation	0.000	0.000	660	626	na	na	0.000	0.000
Currently using withdrawal	0.000	0.000	660	626	na	na	0.000	0.000
Currently using rhythm	0.000	0.000	660	626	na	na	0.000	0.000
Using public sector source	0.869	0.027	168	180	1.039	0.031	0.815	0.923
Want no more children	0.169	0.014	660	626	0.949	0.082	0.142	0.197
Want to delay next birth at least 2 years	0.219	0.030	660	626	1.843	0.136	0.160	0.279
Ideal number of children	5.183	0.113	896	870	1.636	0.022	4.957	5.410
Mothers protected against tetanus for last birth	0.932	0.016	506	485	1.475	0.018	0.900	0.965
Births with skilled attendant at delivery	0.727	0.040	669	638	2.009	0.055	0.646	0.807
Received 3+ doses of SP/Fansidar	0.436	0.042	260	242	1.354	0.097	0.352	0.521
Treated with ORS	0.921	0.044	35	36	1.010	0.048	0.832	1.010
Sought medical treatment for diarrhoea	0.789	0.065	35	36	0.980	0.083	0.659	0.920
Ever had vaccination card	1.000	0.000	122	115	na	0.000	1.000	1.000
Received BCG vaccination	0.984	0.011	122	115	0.989	0.012	0.961	1.006
Received birth dose HepB vaccination	0.279	0.038	122	115	0.930	0.136	0.203	0.355
Received DPT-HepB-Hib vaccination (3 doses)	0.776	0.042	122	115	1.103	0.054	0.692	0.860
Received birth dose polio 0 vaccination	0.996	0.004	122	115	0.699	0.004	0.988	1.004
Received polio vaccination (3 doses)	0.616	0.053	122	115	1.202	0.086	0.509	0.722
Received IPV vaccination	0.762	0.043	122	115	1.114	0.057	0.675	0.848
Received pneumococcal vaccination (3 doses)	0.819	0.035	122	115	1.003	0.043	0.748	0.889
Received rotavirus vaccination (2 doses)	0.895	0.033	122	115	1.187	0.037	0.829	0.961
Received measles 1 vaccination	0.738	0.045	122	115	1.118	0.061	0.648	0.827
Received all basic vaccinations (12-23 months)	0.478	0.052	122	115	1.140	0.109	0.374	0.582
Received all age-appropriate vaccinations (12-23 months)	0.423	0.048	122	115	1.056	0.112	0.328	0.518
Received measles/MMR 2 vaccination	0.558	0.074	125	125	1.675	0.133	0.410	0.706
Received all age-appropriate vaccinations (24-35 months)	0.121	0.036	125	125	1.266	0.298	0.049	0.194
Height-for-age (-2SD)	0.319	0.045	246	219	1.404	0.140	0.229	0.408
Weight-for-height (-2SD)	0.081	0.021	248	220	1.118	0.254	0.040	0.123
Weight-for-age (-2SD)	0.159	0.037	252	223	1.384	0.233	0.085	0.234
Body mass index (BMI) <18.5	0.078	0.020	295	281	1.249	0.253	0.039	0.118
Body mass index (BMI) ≥25	0.257	0.029	295	281	1.115	0.112	0.200	0.314
Prevalence of anaemia (children 6-59 months)	0.716	0.051	199	180	1.518	0.071	0.615	0.818
Prevalence of anaemia (women 15-49)	0.479	0.036	296	280	1.217	0.075	0.408	0.551
Had 2+ sexual partners in past 12 months	0.026	0.008	916	890	1.515	0.305	0.010	0.042
Condom use at last sex	0.000	0.000	19	23	na	na	0.000	0.000
Abstinence among never-married youth (never had sex)	0.323	0.028	203	209	0.862	0.088	0.266	0.379
Had an HIV test and received results in past 12 months	0.150	0.019	916	890	1.603	0.126	0.113	0.188
Discriminatory attitudes towards people living with HIV	0.904	0.020	854	833	1.968	0.022	0.864	0.944
HIV prevalence among women 15-49	0.012	0.007	296	379	1.045	0.548	0.000	0.026
HIV prevalence among pregnant women 15-49	0.000	0.000	27	35	na	na	0.000	0.000
HIV prevalence among young women 15-24	0.000	0.000	123	168	na	na	0.000	0.000
Total fertility rate (last 3 years)	4.836	0.211	2,549	2,460	1.071	0.044	4.414	5.259
Neonatal mortality (last 0-9 years)	33.302	6.456	1,332	1,271	1.092	0.194	20.390	46.214
Postneonatal mortality (last 0-9 years)	66.944	7.320	1,336	1,277	0.946	0.109	52.304	81.584
Infant mortality (last 0-9 years)	100.246	10.064	1,334	1,273	1.098	0.100	80.118	120.373
Child mortality (last 0-9 years)	47.633	8.225	1,305	1,249	1.093	0.173	31.184	64.083
Under-5 mortality (last 0-9 years)	143.104	11.900	1,348	1,286	1.098	0.083	119.303	166.905

Continued...

Table B.17—*Continued*

Variable	Value (R)	Standard error (SE)	Number of cases: Un-weighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative Error (SE/R)	Confidence limits: Lower (R-2SE)	Confidence limits: Upper (R+2SE)
			MEN					
Urban residence	0.350	0.042	360	345	1.651	0.119	0.266	0.433
Literacy	0.676	0.040	360	345	1.623	0.059	0.596	0.757
No education	0.260	0.035	360	345	1.511	0.135	0.190	0.330
Secondary or higher education	0.611	0.034	360	345	1.323	0.056	0.543	0.679
Never married (in union)	0.479	0.025	360	345	0.944	0.052	0.429	0.529
Currently married (in union)	0.498	0.023	360	345	0.877	0.046	0.452	0.545
Had first sexual intercourse before age 18	0.502	0.043	258	247	1.372	0.085	0.417	0.588
Know any contraceptive method	0.991	0.006	184	172	0.898	0.006	0.979	1.004
Know any modern contraceptive method	0.991	0.006	184	172	0.898	0.006	0.979	1.004
Want no more children	0.182	0.042	184	172	1.485	0.234	0.097	0.266
Want to delay birth at least 2 years	0.324	0.032	184	172	0.925	0.099	0.260	0.388
Ideal number of children	5.681	0.235	355	341	1.117	0.041	5.210	6.151
Had 2+ sexual partners in past 12 months	0.161	0.026	360	345	1.319	0.159	0.110	0.213
Condom use at last sex	0.051	0.029	64	56	1.039	0.566	0.000	0.108
Abstinence among never married youth (never had sex)	0.488	0.055	148	143	1.334	0.113	0.377	0.598
Had paid sex in past 12 months	0.023	0.011	360	345	1.429	0.498	0.000	0.045
Had HIV test and received results in past 12 months	0.042	0.012	360	345	1.119	0.283	0.018	0.065
Discriminatory attitudes towards people living with HIV	0.836	0.022	339	326	1.098	0.026	0.792	0.880
HIV prevalence among men 15-49	0.006	0.006	224	293	1.200	0.998	0.000	0.019
HIV prevalence among young men 15-24	0.000	0.000	102	135	na	na	0.000	0.000
HIV prevalence among men 15-59	0.006	0.006	246	326	1.188	0.995	0.000	0.017
			WOMEN AND MEN					
HIV prevalence among respondents 15-49	0.010	0.004	520	672	1.002	0.444	0.001	0.018
HIV prevalence among respondents 15-24	0.000	0.000	225	303	na	na	0.000	0.000

na = Not available

Table B.18 Sampling errors: Karene sample, Sierra Leone 2019

Variable	Value (R)	Standard error (SE)	Number of cases: Un-weighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative Error (SE/R)	Confidence limits: Lower (R-2SE)	Confidence limits: Upper (R+2SE)
HOUSEHOLDS AND POPULATION								
Ownership of at least one ITN	0.714	0.040	625	460	2.219	0.056	0.634	0.795
De facto population with access to an ITN	0.489	0.033	3,232	2,363	2.003	0.068	0.422	0.556
Household population that slept under an ITN last night	0.560	0.041	3,232	2,363	2.207	0.073	0.478	0.641
WOMEN								
Urban residence	0.088	0.023	612	462	2.038	0.267	0.041	0.134
Literacy	0.239	0.022	612	462	1.276	0.092	0.195	0.283
No education	0.581	0.032	612	462	1.590	0.055	0.518	0.645
Secondary or higher education	0.233	0.021	612	462	1.205	0.089	0.192	0.274
Never married (never in union)	0.245	0.022	612	462	1.243	0.088	0.202	0.288
Currently married (in union)	0.727	0.022	612	462	1.203	0.030	0.683	0.770
Married before age 18	0.407	0.028	473	366	1.239	0.069	0.351	0.463
Had sexual intercourse before age 18	0.913	0.014	473	366	1.087	0.015	0.884	0.941
Currently pregnant	0.088	0.011	612	462	0.980	0.128	0.065	0.110
Know any contraceptive method	0.993	0.004	437	335	1.043	0.004	0.985	1.001
Know a modern method	0.993	0.004	437	335	1.043	0.004	0.985	1.001
Currently using any method	0.187	0.029	437	335	1.547	0.155	0.130	0.245
Currently using a modern method	0.187	0.029	437	335	1.547	0.155	0.130	0.245
Currently using pill	0.019	0.007	437	335	1.131	0.394	0.004	0.033
Currently using male condoms	0.000	0.000	437	335	na	na	0.000	0.000
Currently using injectables	0.062	0.013	437	335	1.158	0.216	0.035	0.088
Currently using implants	0.062	0.013	437	335	1.157	0.216	0.035	0.089
Currently using female sterilisation	0.008	0.004	437	335	0.988	0.532	0.000	0.016
Currently using withdrawal	0.000	0.000	437	335	na	na	0.000	0.000
Currently using rhythm	0.000	0.000	437	335	na	na	0.000	0.000
Using public sector source	0.846	0.060	126	90	1.840	0.071	0.726	0.966
Want no more children	0.243	0.025	437	335	1.216	0.103	0.193	0.293
Want to delay next birth at least 2 years	0.212	0.048	437	335	2.460	0.229	0.115	0.309
Ideal number of children	5.144	0.111	604	455	1.317	0.022	4.922	5.366
Mothers protected against tetanus for last birth	0.582	0.050	358	270	1.910	0.086	0.482	0.682
Births with skilled attendant at delivery	0.784	0.051	493	370	2.526	0.066	0.681	0.887
Received 3+ doses of SP/Fansidar	0.483	0.060	199	154	1.695	0.123	0.364	0.602
Treated with ORS	0.715	0.128	25	19	1.400	0.178	0.460	0.971
Sought medical treatment for diarrhoea	0.574	0.119	25	19	1.198	0.208	0.335	0.813
Ever had vaccination card	0.964	0.018	101	81	1.002	0.019	0.927	1.000
Received BCG vaccination	0.962	0.020	101	81	1.085	0.021	0.922	1.002
Received birth dose HepB vaccination	0.201	0.046	101	81	1.199	0.231	0.108	0.294
Received DPT-HepB-Hib vaccination (3 doses)	0.754	0.043	101	81	1.034	0.057	0.668	0.840
Received birth dose polio 0 vaccination	0.909	0.032	101	81	1.167	0.036	0.844	0.974
Received polio vaccination (3 doses)	0.682	0.051	101	81	1.141	0.075	0.579	0.785
Received IPV vaccination	0.777	0.056	101	81	1.378	0.071	0.666	0.888
Received pneumococcal vaccination (3 doses)	0.734	0.050	101	81	1.181	0.069	0.633	0.835
Received rotavirus vaccination (2 doses)	0.831	0.039	101	81	1.088	0.047	0.752	0.910
Received measles 1 vaccination	0.697	0.064	101	81	1.445	0.092	0.568	0.826
Received all basic vaccinations (12-23 months)	0.518	0.066	101	81	1.349	0.127	0.387	0.649
Received all age-appropriate vaccinations (12-23 months)	0.449	0.070	101	81	1.448	0.156	0.309	0.589
Received measles/MMR 2 vaccination	0.359	0.053	83	60	0.988	0.149	0.253	0.466
Received all age-appropriate vaccinations (24-35 months)	0.114	0.033	83	60	0.926	0.291	0.048	0.180
Height-for-age (-2SD)	0.370	0.042	207	143	1.221	0.115	0.286	0.455
Weight-for-height (-2SD)	0.030	0.011	208	144	0.901	0.360	0.008	0.051
Weight-for-age (-2SD)	0.157	0.031	209	145	1.247	0.198	0.094	0.219
Body mass index (BMI) <18.5	0.089	0.022	217	160	1.123	0.247	0.045	0.133
Body mass index (BMI) ≥25	0.182	0.039	217	160	1.480	0.216	0.103	0.261
Prevalence of anaemia (children 6-59 months)	0.750	0.038	173	121	1.091	0.051	0.673	0.826
Prevalence of anaemia (women 15-49)	0.500	0.041	240	174	1.240	0.082	0.418	0.581
Had 2+ sexual partners in past 12 months	0.033	0.006	612	462	0.859	0.189	0.020	0.045
Condom use at last sex	0.000	0.000	21	15	na	na	0.000	0.000
Abstinence among never-married youth (never had sex)	0.312	0.061	130	93	1.478	0.194	0.191	0.433
Had an HIV test and received results in past 12 months	0.126	0.019	612	462	1.448	0.154	0.087	0.165
Discriminatory attitudes towards people living with HIV	0.830	0.040	555	413	2.504	0.048	0.750	0.910
HIV prevalence among women 15-49	0.004	0.004	239	207	0.978	0.980	0.000	0.012
HIV prevalence among pregnant women 15-49	0.000	0.000	22	17	na	na	0.000	0.000
HIV prevalence among young women 15-24	0.000	0.000	97	84	na	na	0.000	0.000
Total fertility rate (last 3 years)	5.352	0.347	1,684	1,280	1.108	0.065	4.658	6.046
Neonatal mortality (last 0-9 years)	40.733	10.519	979	741	1.377	0.258	19.695	61.771
Postneonatal mortality (last 0-9 years)	21.725	9.682	979	742	1.772	0.446	2.362	41.089
Infant mortality (last 0-9 years)	62.459	18.416	980	742	1.828	0.295	25.626	99.291
Child mortality (last 0-9 years)	43.050	10.068	992	752	1.419	0.234	22.913	63.186
Under-5 mortality (last 0-9 years)	102.820	19.444	986	748	1.571	0.189	63.932	141.708

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Table B.18—*Continued*

Variable	Value (R)	Standard error (SE)	Number of cases: Un-weighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative Error (SE/R)	Confidence limits: Lower (R-2SE)	Confidence limits: Upper (R+2SE)
			MEN					
Urban residence	0.083	0.033	252	192	1.907	0.402	0.016	0.150
Literacy	0.498	0.034	252	192	1.068	0.068	0.431	0.565
No education	0.356	0.033	252	192	1.098	0.093	0.290	0.422
Secondary or higher education	0.451	0.039	252	192	1.243	0.087	0.373	0.529
Never married (in union)	0.367	0.034	252	192	1.103	0.091	0.300	0.434
Currently married (in union)	0.577	0.032	252	192	1.041	0.056	0.512	0.641
Had first sexual intercourse before age 18	0.658	0.043	201	153	1.287	0.066	0.571	0.744
Know any contraceptive method	0.982	0.012	150	111	1.096	0.012	0.958	1.006
Know any modern contraceptive method	0.973	0.014	150	111	1.046	0.014	0.945	1.001
Want no more children	0.274	0.040	150	111	1.096	0.146	0.194	0.354
Want to delay birth at least 2 years	0.253	0.052	150	111	1.443	0.204	0.150	0.357
Ideal number of children	5.045	0.213	233	177	1.149	0.042	4.618	5.472
Had 2+ sexual partners in past 12 months	0.281	0.042	252	192	1.491	0.151	0.196	0.365
Condom use at last sex	0.074	0.045	70	54	1.410	0.605	0.000	0.164
Abstinence among never married youth (never had sex)	0.411	0.057	68	52	0.947	0.138	0.298	0.525
Had paid sex in past 12 months	0.013	0.008	252	192	1.039	0.565	0.000	0.028
Had HIV test and received results in past 12 months	0.139	0.020	252	192	0.931	0.146	0.099	0.180
Discriminatory attitudes towards people living with HIV	0.788	0.040	230	176	1.481	0.051	0.708	0.868
HIV prevalence among men 15-49	0.014	0.010	170	165	1.081	0.696	0.000	0.034
HIV prevalence among young men 15-24	0.000	0.000	56	58	na	na	0.000	0.000
HIV prevalence among men 15-59	0.013	0.009	192	186	1.082	0.695	0.000	0.030
			WOMEN AND MEN					
HIV prevalence among respondents 15-49	0.009	0.005	409	372	1.037	0.552	0.000	0.018
HIV prevalence among respondents 15-24	0.000	0.000	153	142	na	na	0.000	0.000

na = Not available

Table B.19 Sampling errors: Port Loko sample, Sierra Leone 2019

Variable	Value (R)	Standard error (SE)	Number of cases: Un-weighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative Error (SE/R)	Confidence limits: Lower (R-2SE)	Confidence limits: Upper (R+2SE)
HOUSEHOLDS AND POPULATION								
Ownership of at least one ITN	0.579	0.020	915	1,074	1.245	0.035	0.538	0.619
De facto population with access to an ITN	0.385	0.018	4,750	5,471	1.291	0.046	0.350	0.420
Household population that slept under an ITN last night	0.405	0.022	4,750	5,471	1.505	0.054	0.362	0.449
WOMEN								
Urban residence	0.279	0.025	970	1,157	1.732	0.090	0.229	0.329
Literacy	0.333	0.030	970	1,157	1.980	0.090	0.273	0.393
No education	0.536	0.025	970	1,157	1.566	0.047	0.485	0.586
Secondary or higher education	0.338	0.028	970	1,157	1.864	0.084	0.282	0.395
Never married (never in union)	0.256	0.021	970	1,157	1.466	0.080	0.215	0.297
Currently married (in union)	0.690	0.022	970	1,157	1.463	0.031	0.647	0.734
Married before age 18	0.350	0.017	767	921	0.991	0.049	0.316	0.384
Had sexual intercourse before age 18	0.765	0.032	767	921	2.097	0.042	0.701	0.829
Currently pregnant	0.075	0.008	970	1,157	0.980	0.110	0.059	0.092
Know any contraceptive method	0.992	0.006	644	799	1.821	0.006	0.980	1.005
Know a modern method	0.990	0.006	644	799	1.662	0.007	0.977	1.003
Currently using any method	0.158	0.021	644	799	1.484	0.135	0.115	0.201
Currently using a modern method	0.157	0.021	644	799	1.480	0.135	0.115	0.200
Currently using pill	0.023	0.007	644	799	1.163	0.296	0.010	0.037
Currently using male condoms	0.000	0.000	644	799	na	na	0.000	0.000
Currently using injectables	0.079	0.016	644	799	1.510	0.204	0.047	0.111
Currently using implants	0.052	0.010	644	799	1.121	0.189	0.032	0.072
Currently using female sterilisation	0.000	0.000	644	799	na	na	0.000	0.000
Currently using withdrawal	0.000	0.000	644	799	na	na	0.000	0.000
Currently using rhythm	0.001	0.001	644	799	0.627	1.007	0.000	0.002
Using public sector source	0.784	0.042	211	224	1.486	0.054	0.700	0.869
Want no more children	0.191	0.018	644	799	1.187	0.096	0.155	0.228
Want to delay next birth at least 2 years	0.368	0.029	644	799	1.548	0.080	0.309	0.427
Ideal number of children	5.395	0.102	933	1,110	1.441	0.019	5.190	5.599
Mothers protected against tetanus for last birth	0.873	0.022	515	625	1.504	0.025	0.829	0.917
Births with skilled attendant at delivery	0.640	0.043	720	886	2.042	0.067	0.554	0.726
Received 3+ doses of SP/Fansidar	0.364	0.048	293	362	1.721	0.132	0.268	0.460
Treated with ORS	0.854	0.046	80	100	1.104	0.054	0.762	0.947
Sought medical treatment for diarrhoea	0.690	0.034	80	100	0.684	0.049	0.622	0.759
Ever had vaccination card	0.984	0.011	124	151	0.955	0.011	0.963	1.006
Received BCG vaccination	0.946	0.026	124	151	1.267	0.027	0.894	0.997
Received birth dose HepB vaccination	0.149	0.045	124	151	1.392	0.300	0.059	0.238
Received DPT-HepB-Hib vaccination (3 doses)	0.712	0.051	124	151	1.210	0.071	0.610	0.813
Received birth dose polio 0 vaccination	0.836	0.049	124	151	1.397	0.058	0.738	0.934
Received polio vaccination (3 doses)	0.613	0.065	124	151	1.463	0.106	0.483	0.743
Received IPV vaccination	0.595	0.059	124	151	1.318	0.099	0.477	0.713
Received pneumococcal vaccination (3 doses)	0.719	0.051	124	151	1.231	0.071	0.616	0.821
Received rotavirus vaccination (2 doses)	0.817	0.045	124	151	1.295	0.055	0.726	0.907
Received measles 1 vaccination	0.596	0.053	124	151	1.168	0.089	0.490	0.702
Received all basic vaccinations (12-23 months)	0.439	0.058	124	151	1.269	0.132	0.323	0.554
Received all age-appropriate vaccinations (12-23 months)	0.274	0.046	124	151	1.108	0.167	0.182	0.365
Received measles/MMR 2 vaccination	0.381	0.053	113	136	1.153	0.138	0.276	0.486
Received all age-appropriate vaccinations (24-35 months)	0.144	0.035	113	136	1.058	0.241	0.075	0.214
Height-for-age (-2SD)	0.309	0.020	319	364	0.793	0.066	0.268	0.349
Weight-for-height (-2SD)	0.053	0.012	320	365	0.980	0.236	0.028	0.078
Weight-for-age (-2SD)	0.177	0.022	319	364	1.001	0.125	0.133	0.221
Body mass index (BMI) <18.5	0.071	0.017	396	469	1.305	0.238	0.037	0.105
Body mass index (BMI) ≥25	0.200	0.027	396	469	1.326	0.134	0.147	0.254
Prevalence of anaemia (children 6-59 months)	0.780	0.024	266	300	0.916	0.030	0.733	0.827
Prevalence of anaemia (women 15-49)	0.544	0.031	425	505	1.286	0.057	0.482	0.606
Had 2+ sexual partners in past 12 months	0.045	0.007	970	1,157	1.065	0.158	0.031	0.059
Condom use at last sex	0.050	0.036	44	52	1.068	0.709	0.000	0.122
Abstinence among never-married youth (never had sex)	0.327	0.032	236	262	1.044	0.098	0.263	0.391
Had an HIV test and received results in past 12 months	0.168	0.017	970	1,157	1.416	0.101	0.134	0.202
Discriminatory attitudes towards people living with HIV	0.926	0.017	943	1,116	1.942	0.018	0.893	0.959
HIV prevalence among women 15-49	0.028	0.007	423	543	0.853	0.244	0.014	0.042
HIV prevalence among pregnant women 15-49	0.000	0.000	26	35	na	na	0.000	0.000
HIV prevalence among young women 15-24	0.019	0.010	168	209	0.922	0.516	0.000	0.038
Total fertility rate (last 3 years)	5.001	0.245	2,721	3,253	1.019	0.049	4.512	5.490
Neonatal mortality (last 0-9 years)	36.205	6.943	1,429	1,755	1.361	0.192	22.319	50.091
Postneonatal mortality (last 0-9 years)	82.064	10.554	1,430	1,755	1.316	0.129	60.956	103.172
Infant mortality (last 0-9 years)	118.269	12.739	1,435	1,762	1.327	0.108	92.791	143.747
Child mortality (last 0-9 years)	76.421	12.205	1,397	1,719	1.516	0.160	52.011	100.830
Under-5 mortality (last 0-9 years)	185.651	15.566	1,447	1,779	1.348	0.084	154.520	216.783

Continued...

Table B.19—*Continued*

Variable	Value (R)	Standard error (SE)	Number of cases: Un-weighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative Error (SE/R)	Confidence limits: Lower (R-2SE)	Confidence limits: Upper (R+2SE)
			MEN					
Urban residence	0.306	0.036	381	445	1.531	0.118	0.234	0.379
Literacy	0.656	0.029	381	445	1.180	0.044	0.598	0.713
No education	0.275	0.027	381	445	1.195	0.100	0.220	0.330
Secondary or higher education	0.564	0.037	381	445	1.460	0.066	0.490	0.639
Never married (in union)	0.424	0.024	381	445	0.935	0.056	0.376	0.471
Currently married (in union)	0.534	0.022	381	445	0.862	0.041	0.490	0.578
Had first sexual intercourse before age 18	0.638	0.033	279	331	1.139	0.051	0.572	0.704
Know any contraceptive method	1.000	0.000	198	238	na	0.000	1.000	1.000
Know any modern contraceptive method	1.000	0.000	198	238	na	0.000	1.000	1.000
Want no more children	0.171	0.035	198	238	1.293	0.203	0.102	0.241
Want to delay birth at least 2 years	0.227	0.039	198	238	1.311	0.173	0.149	0.306
Ideal number of children	5.573	0.182	353	412	1.114	0.033	5.208	5.938
Had 2+ sexual partners in past 12 months	0.269	0.024	381	445	1.054	0.089	0.221	0.317
Condom use at last sex	0.095	0.027	100	120	0.926	0.288	0.040	0.149
Abstinence among never married youth (never had sex)	0.421	0.037	139	155	0.881	0.088	0.347	0.495
Had paid sex in past 12 months	0.044	0.015	381	445	1.416	0.340	0.014	0.074
Had HIV test and received results in past 12 months	0.135	0.020	381	445	1.120	0.146	0.096	0.174
Discriminatory attitudes towards people living with HIV	0.869	0.024	377	440	1.379	0.028	0.821	0.917
HIV prevalence among men 15-49	0.022	0.010	277	384	1.106	0.447	0.002	0.041
HIV prevalence among young men 15-24	0.009	0.009	123	162	1.023	0.997	0.000	0.026
HIV prevalence among men 15-59	0.025	0.010	308	427	1.167	0.413	0.004	0.046
			WOMEN AND MEN					
HIV prevalence among respondents 15-49	0.025	0.006	700	927	1.008	0.236	0.013	0.037
HIV prevalence among respondents 15-24	0.014	0.006	291	371	0.903	0.440	0.002	0.027

na = Not available

Table B.20 Sampling errors: Bo sample, Sierra Leone 2019

Variable	Value (R)	Standard error (SE)	Number of cases: Un-weighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative Error (SE/R)	Confidence limits: Lower (R-2SE)	Confidence limits: Upper (R+2SE)
HOUSEHOLDS AND POPULATION								
Ownership of at least one ITN	0.683	0.024	992	1,073	1.605	0.035	0.635	0.730
De facto population with access to an ITN	0.439	0.020	5,407	5,740	1.609	0.046	0.399	0.480
Household population that slept under an ITN last night	0.501	0.025	5,407	5,740	1.731	0.049	0.452	0.550
WOMEN								
Urban residence	0.372	0.022	1,222	1,250	1.603	0.060	0.328	0.416
Literacy	0.433	0.024	1,222	1,250	1.677	0.055	0.386	0.481
No education	0.401	0.024	1,222	1,250	1.703	0.060	0.353	0.449
Secondary or higher education	0.390	0.022	1,222	1,250	1.595	0.057	0.345	0.434
Never married (never in union)	0.358	0.020	1,222	1,250	1.423	0.055	0.319	0.397
Currently married (in union)	0.579	0.018	1,222	1,250	1.301	0.032	0.542	0.616
Married before age 18	0.410	0.018	906	933	1.128	0.045	0.373	0.447
Had sexual intercourse before age 18	0.757	0.016	906	933	1.117	0.021	0.726	0.789
Currently pregnant	0.073	0.012	1,222	1,250	1.630	0.166	0.049	0.098
Know any contraceptive method	0.992	0.004	677	724	1.218	0.004	0.984	1.000
Know a modern method	0.991	0.004	677	724	1.161	0.004	0.982	0.999
Currently using any method	0.271	0.023	677	724	1.316	0.083	0.226	0.316
Currently using a modern method	0.268	0.022	677	724	1.319	0.084	0.223	0.313
Currently using pill	0.072	0.012	677	724	1.160	0.160	0.049	0.095
Currently using male condoms	0.000	0.000	677	724	na	na	0.000	0.000
Currently using injectables	0.106	0.014	677	724	1.193	0.133	0.078	0.135
Currently using implants	0.082	0.017	677	724	1.586	0.204	0.049	0.116
Currently using female sterilisation	0.004	0.002	677	724	0.941	0.567	0.000	0.009
Currently using withdrawal	0.000	0.000	677	724	na	na	0.000	0.000
Currently using rhythm	0.000	0.000	677	724	na	na	0.000	0.000
Using public sector source	0.799	0.031	357	364	1.442	0.038	0.738	0.860
Want no more children	0.324	0.032	677	724	1.767	0.098	0.260	0.388
Want to delay next birth at least 2 years	0.209	0.025	677	724	1.615	0.121	0.159	0.260
Ideal number of children	4.935	0.125	1,209	1,239	1.706	0.025	4.684	5.186
Mothers protected against tetanus for last birth	0.952	0.011	533	573	1.207	0.012	0.930	0.974
Births with skilled attendant at delivery	0.919	0.023	725	797	2.020	0.025	0.873	0.966
Received 3+ doses of SP/Fansidar	0.518	0.043	274	298	1.454	0.083	0.432	0.604
Treated with ORS	0.933	0.036	32	39	0.929	0.039	0.860	1.006
Sought medical treatment for diarrhoea	0.792	0.059	32	39	0.884	0.075	0.673	0.910
Ever had vaccination card	1.000	0.000	137	153	na	0.000	1.000	1.000
Received BCG vaccination	0.991	0.008	137	153	1.056	0.008	0.975	1.008
Received birth dose HepB vaccination	0.155	0.033	137	153	1.058	0.214	0.089	0.221
Received DPT-HepB-Hib vaccination (3 doses)	0.879	0.038	137	153	1.397	0.043	0.803	0.954
Received birth dose polio 0 vaccination	0.936	0.034	137	153	1.670	0.036	0.868	1.004
Received polio vaccination (3 doses)	0.796	0.038	137	153	1.090	0.047	0.721	0.871
Received IPV vaccination	0.896	0.035	137	153	1.382	0.039	0.826	0.966
Received pneumococcal vaccination (3 doses)	0.887	0.038	137	153	1.439	0.043	0.812	0.963
Received rotavirus vaccination (2 doses)	0.905	0.036	137	153	1.468	0.039	0.833	0.976
Received measles 1 vaccination	0.837	0.053	137	153	1.718	0.063	0.732	0.943
Received all basic vaccinations (12-23 months)	0.701	0.046	137	153	1.179	0.065	0.609	0.792
Received all age-appropriate vaccinations (12-23 months)	0.681	0.043	137	153	1.097	0.063	0.594	0.767
Received measles/MMR 2 vaccination	0.633	0.046	133	143	1.127	0.073	0.540	0.726
Received all age-appropriate vaccinations (24-35 months)	0.427	0.052	133	143	1.236	0.122	0.323	0.532
Height-for-age (-2SD)	0.283	0.023	382	427	0.961	0.082	0.237	0.330
Weight-for-height (-2SD)	0.056	0.012	382	427	0.949	0.206	0.033	0.079
Weight-for-age (-2SD)	0.133	0.017	385	430	0.984	0.128	0.099	0.167
Body mass index (BMI) <18.5	0.087	0.012	608	626	1.025	0.134	0.064	0.110
Body mass index (BMI) ≥25	0.289	0.024	608	626	1.335	0.085	0.240	0.338
Prevalence of anaemia (children 6-59 months)	0.650	0.033	342	387	1.223	0.051	0.584	0.717
Prevalence of anaemia (women 15-49)	0.458	0.027	645	670	1.361	0.058	0.405	0.511
Had 2+ sexual partners in past 12 months	0.046	0.009	1,222	1,250	1.444	0.189	0.028	0.063
Condom use at last sex	0.000	0.000	56	57	na	na	0.000	0.000
Abstinence among never-married youth (never had sex)	0.382	0.025	383	370	0.991	0.064	0.333	0.431
Had an HIV test and received results in past 12 months	0.124	0.012	1,222	1,250	1.309	0.099	0.100	0.149
Discriminatory attitudes towards people living with HIV	0.863	0.020	1,185	1,205	1.996	0.023	0.824	0.903
HIV prevalence among women 15-49	0.024	0.007	632	582	1.179	0.302	0.009	0.038
HIV prevalence among pregnant women 15-49	0.042	0.030	39	39	0.926	0.714	0.000	0.102
HIV prevalence among young women 15-24	0.009	0.005	267	243	0.867	0.552	0.000	0.019
Total fertility rate (last 3 years)	4.449	0.399	3,338	3,427	1.353	0.090	3.652	5.246
Neonatal mortality (last 0-9 years)	31.766	7.056	1,447	1,590	1.333	0.222	17.654	45.878
Postneonatal mortality (last 0-9 years)	66.631	12.007	1,452	1,596	1.664	0.180	42.617	90.645
Infant mortality (last 0-9 years)	98.397	15.336	1,447	1,590	1.678	0.156	67.724	129.069
Child mortality (last 0-9 years)	45.496	8.608	1,463	1,606	1.283	0.189	28.280	62.711
Under-5 mortality (last 0-9 years)	139.416	20.795	1,457	1,599	1.888	0.149	97.825	181.006

Continued...

Table B.20—*Continued*

Variable	Value (R)	Standard error (SE)	Number of cases: Un-weighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative Error (SE/R)	Confidence limits: Lower (R-2SE)	Confidence limits: Upper (R+2SE)
			MEN					
Urban residence	0.378	0.031	521	525	1.441	0.081	0.317	0.439
Literacy	0.606	0.027	521	525	1.263	0.045	0.552	0.661
No education	0.271	0.024	521	525	1.256	0.090	0.222	0.320
Secondary or higher education	0.522	0.033	521	525	1.506	0.063	0.456	0.588
Never married (in union)	0.492	0.030	521	525	1.349	0.060	0.433	0.551
Currently married (in union)	0.458	0.028	521	525	1.266	0.060	0.403	0.514
Had first sexual intercourse before age 18	0.538	0.031	360	369	1.196	0.059	0.475	0.601
Know any contraceptive method	1.000	0.000	223	241	na	0.000	1.000	1.000
Know any modern contraceptive method	1.000	0.000	223	241	na	0.000	1.000	1.000
Want no more children	0.310	0.047	223	241	1.512	0.152	0.216	0.404
Want to delay birth at least 2 years	0.317	0.035	223	241	1.109	0.109	0.248	0.387
Ideal number of children	4.996	0.172	470	474	1.548	0.034	4.652	5.339
Had 2+ sexual partners in past 12 months	0.280	0.021	521	525	1.084	0.076	0.237	0.323
Condom use at last sex	0.127	0.033	150	147	1.192	0.256	0.062	0.192
Abstinence among never married youth (never had sex)	0.469	0.044	223	211	1.314	0.094	0.381	0.557
Had paid sex in past 12 months	0.045	0.010	521	525	1.118	0.227	0.024	0.065
Had HIV test and received results in past 12 months	0.110	0.016	521	525	1.194	0.149	0.077	0.142
Discriminatory attitudes towards people living with HIV	0.738	0.028	502	503	1.438	0.038	0.682	0.795
HIV prevalence among men 15-49	0.007	0.004	469	453	1.040	0.589	0.000	0.014
HIV prevalence among young men 15-24	0.000	0.000	220	205	na	na	0.000	0.000
HIV prevalence among men 15-59	0.006	0.003	528	508	1.043	0.590	0.000	0.013
			WOMEN AND MEN					
HIV prevalence among respondents 15-49	0.016	0.004	1,101	1,035	1.097	0.258	0.008	0.025
HIV prevalence among respondents 15-24	0.005	0.003	487	448	0.886	0.569	0.000	0.011

na = Not available

Table B.21 Sampling errors: Bonthe sample, Sierra Leone 2019

Variable	Value (R)	Standard error (SE)	Number of cases: Un-weighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative Error (SE/R)	Confidence limits: Lower (R-2SE)	Confidence limits: Upper (R+2SE)
HOUSEHOLDS AND POPULATION								
Ownership of at least one ITN	0.948	0.015	646	434	1.653	0.015	0.919	0.977
De facto population with access to an ITN	0.754	0.018	3,304	2,233	1.492	0.024	0.719	0.790
Household population that slept under an ITN last night	0.793	0.023	3,304	2,233	1.836	0.028	0.748	0.838
WOMEN								
Urban residence	0.254	0.022	698	468	1.337	0.087	0.210	0.298
Literacy	0.374	0.032	698	468	1.756	0.086	0.309	0.438
No education	0.554	0.036	698	468	1.926	0.066	0.481	0.627
Secondary or higher education	0.313	0.033	698	468	1.857	0.105	0.247	0.378
Never married (never in union)	0.244	0.027	698	468	1.636	0.109	0.191	0.297
Currently married (in union)	0.721	0.026	698	468	1.526	0.036	0.669	0.773
Married before age 18	0.321	0.030	544	366	1.506	0.094	0.260	0.381
Had sexual intercourse before age 18	0.679	0.040	544	366	1.989	0.059	0.599	0.759
Currently pregnant	0.070	0.010	698	468	1.038	0.143	0.050	0.090
Know any contraceptive method	1.000	0.000	499	337	na	0.000	1.000	1.000
Know a modern method	1.000	0.000	499	337	na	0.000	1.000	1.000
Currently using any method	0.204	0.024	499	337	1.316	0.116	0.157	0.252
Currently using a modern method	0.204	0.024	499	337	1.316	0.116	0.157	0.252
Currently using pill	0.055	0.013	499	337	1.274	0.237	0.029	0.081
Currently using male condoms	0.000	0.000	499	337	na	na	0.000	0.000
Currently using injectables	0.113	0.017	499	337	1.211	0.152	0.079	0.148
Currently using implants	0.031	0.007	499	337	0.962	0.242	0.016	0.046
Currently using female sterilisation	0.002	0.002	499	337	0.893	1.013	0.000	0.005
Currently using withdrawal	0.000	0.000	499	337	na	na	0.000	0.000
Currently using rhythm	0.000	0.000	499	337	na	na	0.000	0.000
Using public sector source	0.821	0.034	171	113	1.146	0.041	0.753	0.888
Want no more children	0.333	0.030	499	337	1.400	0.089	0.273	0.392
Want to delay next birth at least 2 years	0.168	0.018	499	337	1.103	0.110	0.131	0.204
Ideal number of children	4.954	0.169	698	468	2.393	0.034	4.616	5.292
Mothers protected against tetanus for last birth	0.974	0.010	392	266	1.253	0.010	0.953	0.994
Births with skilled attendant at delivery	0.963	0.013	569	384	1.446	0.014	0.937	0.990
Received 3+ doses of SP/Fansidar	0.260	0.043	232	157	1.493	0.165	0.174	0.345
Treated with ORS	0.675	0.125	12	8	0.943	0.185	0.425	0.925
Sought medical treatment for diarrhoea	0.675	0.125	12	8	0.943	0.185	0.425	0.925
Ever had vaccination card	1.000	0.000	107	71	na	0.000	1.000	1.000
Received BCG vaccination	0.950	0.023	107	71	1.072	0.024	0.904	0.995
Received birth dose HepB vaccination	0.159	0.031	107	71	0.874	0.196	0.097	0.222
Received DPT-HepB-Hib vaccination (3 doses)	0.834	0.033	107	71	0.898	0.039	0.769	0.899
Received birth dose polio 0 vaccination	0.950	0.023	107	71	1.072	0.024	0.904	0.995
Received polio vaccination (3 doses)	0.763	0.034	107	71	0.820	0.045	0.695	0.831
Received IPV vaccination	0.875	0.031	107	71	0.966	0.036	0.813	0.937
Received pneumococcal vaccination (3 doses)	0.821	0.040	107	71	1.078	0.049	0.741	0.902
Received rotavirus vaccination (2 doses)	0.871	0.030	107	71	0.931	0.035	0.811	0.932
Received measles 1 vaccination	0.809	0.034	107	71	0.899	0.042	0.741	0.878
Received all basic vaccinations (12-23 months)	0.650	0.047	107	71	1.016	0.073	0.556	0.744
Received all age-appropriate vaccinations (12-23 months)	0.634	0.044	107	71	0.938	0.069	0.546	0.722
Received measles/MMR 2 vaccination	0.527	0.049	107	73	1.002	0.093	0.429	0.624
Received all age-appropriate vaccinations (24-35 months)	0.409	0.050	107	73	1.043	0.123	0.309	0.510
Height-for-age (-2SD)	0.310	0.031	294	199	1.119	0.101	0.247	0.373
Weight-for-height (-2SD)	0.065	0.019	290	196	1.330	0.299	0.026	0.103
Weight-for-age (-2SD)	0.153	0.025	294	199	1.086	0.160	0.104	0.203
Body mass index (BMI) <18.5	0.078	0.016	327	216	1.041	0.199	0.047	0.109
Body mass index (BMI) ≥25	0.264	0.036	327	216	1.457	0.136	0.192	0.335
Prevalence of anaemia (children 6-59 months)	0.625	0.025	241	163	0.909	0.040	0.575	0.676
Prevalence of anaemia (women 15-49)	0.474	0.029	337	225	1.070	0.062	0.416	0.533
Had 2+ sexual partners in past 12 months	0.019	0.005	698	468	1.049	0.283	0.008	0.030
Condom use at last sex	0.095	0.094	13	9	1.096	0.983	0.000	0.283
Abstinence among never-married youth (never had sex)	0.419	0.042	159	106	1.072	0.100	0.335	0.503
Had an HIV test and received results in past 12 months	0.333	0.031	698	468	1.730	0.093	0.272	0.395
Discriminatory attitudes towards people living with HIV	0.675	0.032	674	453	1.749	0.047	0.611	0.738
HIV prevalence among women 15-49	0.007	0.005	336	206	1.057	0.703	0.000	0.016
HIV prevalence among pregnant women 15-49	0.000	0.000	23	15	na	na	0.000	0.000
HIV prevalence among young women 15-24	0.006	0.006	118	72	0.800	0.984	0.000	0.017
Total fertility rate (last 3 years)	5.347	0.282	1,949	1,309	1.113	0.053	4.783	5.912
Neonatal mortality (last 0-9 years)	9.278	2.822	1,083	731	0.993	0.304	3.634	14.922
Postneonatal mortality (last 0-9 years)	26.390	5.649	1,089	735	1.188	0.214	15.092	37.688
Infant mortality (last 0-9 years)	35.667	6.767	1,087	734	1.169	0.190	22.134	49.201
Child mortality (last 0-9 years)	39.488	8.616	1,054	712	1.248	0.218	22.256	56.721
Under-5 mortality (last 0-9 years)	73.747	10.374	1,095	739	1.130	0.141	53.000	94.495

Continued...

Table B.21—*Continued*

Variable	Value (R)	Standard error (SE)	Number of cases: Un-weighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative Error (SE/R)	Confidence limits: Lower (R-2SE)	Confidence limits: Upper (R+2SE)
			MEN					
Urban residence	0.198	0.024	301	199	1.043	0.121	0.150	0.246
Literacy	0.412	0.042	301	199	1.463	0.101	0.329	0.495
No education	0.522	0.047	301	199	1.627	0.090	0.428	0.617
Secondary or higher education	0.295	0.031	301	199	1.191	0.106	0.232	0.357
Never married (in union)	0.357	0.040	301	199	1.456	0.113	0.277	0.438
Currently married (in union)	0.620	0.042	301	199	1.486	0.067	0.537	0.704
Had first sexual intercourse before age 18	0.205	0.034	229	152	1.271	0.166	0.137	0.273
Know any contraceptive method	0.993	0.007	185	124	1.131	0.007	0.979	1.007
Know any modern contraceptive method	0.993	0.007	185	124	1.131	0.007	0.979	1.007
Want no more children	0.150	0.033	185	124	1.262	0.222	0.083	0.216
Want to delay birth at least 2 years	0.195	0.023	185	124	0.799	0.119	0.149	0.242
Ideal number of children	6.061	0.196	294	194	1.201	0.032	5.669	6.453
Had 2+ sexual partners in past 12 months	0.425	0.031	301	199	1.091	0.073	0.363	0.487
Condom use at last sex	0.184	0.041	128	85	1.195	0.224	0.102	0.266
Abstinence among never married youth (never had sex)	0.332	0.057	97	64	1.192	0.173	0.217	0.447
Had paid sex in past 12 months	0.022	0.007	301	199	0.877	0.337	0.007	0.037
Had HIV test and received results in past 12 months	0.150	0.027	301	199	1.300	0.179	0.096	0.203
Discriminatory attitudes towards people living with HIV	0.775	0.041	270	177	1.607	0.053	0.693	0.857
HIV prevalence among men 15-49	0.007	0.005	274	171	0.973	0.712	0.000	0.016
HIV prevalence among young men 15-24	0.000	0.000	104	65	na	na	0.000	0.000
HIV prevalence among men 15-59	0.006	0.004	309	193	0.960	0.703	0.000	0.014
			WOMEN AND MEN					
HIV prevalence among respondents 15-49	0.007	0.003	610	377	0.964	0.474	0.000	0.013
HIV prevalence among respondents 15-24	0.003	0.003	222	137	0.813	1.005	0.000	0.009

na = Not available

Table B.22 Sampling errors: Moyamba sample, Sierra Leone 2019

Variable	Value (R)	Standard error (SE)	Number of cases: Un-weighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative Error (SE/R)	Confidence limits: Lower (R-2SE)	Confidence limits: Upper (R+2SE)
HOUSEHOLDS AND POPULATION								
Ownership of at least one ITN	0.693	0.032	817	646	1.956	0.046	0.630	0.757
De facto population with access to an ITN	0.439	0.024	4,378	3,474	1.841	0.055	0.390	0.487
Household population that slept under an ITN last night	0.497	0.028	4,378	3,474	1.879	0.057	0.440	0.553
WOMEN								
Urban residence	0.085	0.010	896	726	1.078	0.118	0.065	0.105
Literacy	0.364	0.039	896	726	2.400	0.106	0.287	0.441
No education	0.530	0.032	896	726	1.901	0.060	0.467	0.594
Secondary or higher education	0.309	0.041	896	726	2.659	0.134	0.226	0.391
Never married (never in union)	0.245	0.024	896	726	1.639	0.096	0.198	0.292
Currently married (in union)	0.692	0.024	896	726	1.585	0.035	0.643	0.741
Married before age 18	0.323	0.030	730	587	1.728	0.093	0.263	0.383
Had sexual intercourse before age 18	0.652	0.040	730	587	2.255	0.061	0.572	0.732
Currently pregnant	0.085	0.008	896	726	0.860	0.094	0.069	0.101
Know any contraceptive method	0.979	0.009	621	503	1.615	0.010	0.960	0.997
Know a modern method	0.979	0.009	621	503	1.615	0.010	0.960	0.997
Currently using any method	0.255	0.032	621	503	1.803	0.124	0.191	0.318
Currently using a modern method	0.247	0.032	621	503	1.833	0.129	0.184	0.311
Currently using pill	0.027	0.008	621	503	1.226	0.293	0.011	0.043
Currently using male condoms	0.000	0.000	621	503	na	na	0.000	0.000
Currently using injectables	0.112	0.013	621	503	1.059	0.120	0.085	0.138
Currently using implants	0.106	0.021	621	503	1.718	0.201	0.063	0.148
Currently using female sterilisation	0.000	0.000	621	503	na	na	0.000	0.000
Currently using withdrawal	0.000	0.000	621	503	na	na	0.000	0.000
Currently using rhythm	0.000	0.000	621	503	na	na	0.000	0.000
Using public sector source	0.920	0.025	228	186	1.400	0.027	0.870	0.971
Want no more children	0.301	0.022	621	503	1.194	0.073	0.257	0.345
Want to delay next birth at least 2 years	0.267	0.020	621	503	1.135	0.075	0.227	0.308
Ideal number of children	5.438	0.136	890	722	1.936	0.025	5.167	5.709
Mothers protected against tetanus for last birth	0.820	0.038	497	402	2.182	0.046	0.745	0.896
Births with skilled attendant at delivery	0.679	0.051	689	558	2.354	0.076	0.576	0.782
Received 3+ doses of SP/Fansidar	0.133	0.026	267	216	1.244	0.195	0.081	0.185
Treated with ORS	0.707	0.074	26	21	0.832	0.105	0.558	0.855
Sought medical treatment for diarrhoea	0.804	0.082	26	21	1.047	0.101	0.641	0.967
Ever had vaccination card	0.950	0.021	123	96	1.048	0.022	0.908	0.992
Received BCG vaccination	0.956	0.021	123	96	1.109	0.022	0.914	0.998
Received birth dose HepB vaccination	0.253	0.046	123	96	1.136	0.180	0.162	0.344
Received DPT-HepB-Hib vaccination (3 doses)	0.782	0.055	123	96	1.437	0.070	0.673	0.892
Received birth dose polio 0 vaccination	0.846	0.032	123	96	0.967	0.038	0.781	0.910
Received polio vaccination (3 doses)	0.725	0.061	123	96	1.486	0.084	0.603	0.848
Received IPV vaccination	0.630	0.057	123	96	1.274	0.090	0.516	0.743
Received pneumococcal vaccination (3 doses)	0.782	0.051	123	96	1.336	0.065	0.680	0.884
Received rotavirus vaccination (2 doses)	0.864	0.035	123	96	1.093	0.040	0.795	0.933
Received measles 1 vaccination	0.804	0.043	123	96	1.175	0.054	0.718	0.890
Received all basic vaccinations (12-23 months)	0.631	0.062	123	96	1.392	0.098	0.507	0.755
Received all age-appropriate vaccinations (12-23 months)	0.428	0.049	123	96	1.061	0.114	0.331	0.526
Received measles/MMR 2 vaccination	0.616	0.058	149	118	1.412	0.094	0.501	0.732
Received all age-appropriate vaccinations (24-35 months)	0.304	0.039	149	118	0.996	0.130	0.225	0.383
Height-for-age (-2SD)	0.318	0.027	372	295	1.065	0.085	0.264	0.373
Weight-for-height (-2SD)	0.043	0.013	373	295	1.185	0.300	0.017	0.070
Weight-for-age (-2SD)	0.107	0.017	376	296	1.107	0.161	0.072	0.141
Body mass index (BMI) <18.5	0.073	0.012	397	319	0.942	0.169	0.049	0.098
Body mass index (BMI) ≥25	0.261	0.025	397	319	1.110	0.094	0.212	0.310
Prevalence of anaemia (children 6-59 months)	0.713	0.040	328	256	1.447	0.057	0.633	0.794
Prevalence of anaemia (women 15-49)	0.498	0.027	436	351	1.120	0.054	0.444	0.552
Had 2+ sexual partners in past 12 months	0.035	0.008	896	726	1.265	0.221	0.020	0.051
Condom use at last sex	0.021	0.021	32	26	0.824	1.012	0.000	0.063
Abstinence among never-married youth (never had sex)	0.305	0.033	183	151	0.959	0.107	0.240	0.371
Had an HIV test and received results in past 12 months	0.151	0.018	896	726	1.496	0.119	0.115	0.186
Discriminatory attitudes towards people living with HIV	0.907	0.020	740	594	1.911	0.022	0.867	0.948
HIV prevalence among women 15-49	0.029	0.008	434	319	0.949	0.262	0.014	0.045
HIV prevalence among pregnant women 15-49	0.109	0.064	32	25	1.137	0.585	0.000	0.238
HIV prevalence among young women 15-24	0.020	0.011	135	103	0.954	0.583	0.000	0.042
Total fertility rate (last 3 years)	5.362	0.354	2,532	2,050	1.579	0.066	4.653	6.071
Neonatal mortality (last 0-9 years)	27.441	4.376	1,450	1,169	0.943	0.159	18.689	36.193
Postneonatal mortality (last 0-9 years)	60.618	7.170	1,454	1,172	1.098	0.118	46.277	74.958
Infant mortality (last 0-9 years)	88.059	8.260	1,454	1,172	1.075	0.094	71.540	104.578
Child mortality (last 0-9 years)	50.936	7.115	1,455	1,170	1.037	0.140	36.706	65.166
Under-5 mortality (last 0-9 years)	134.509	10.997	1,470	1,183	1.177	0.082	112.515	156.504

Continued...

Table B.22—*Continued*

Variable	Value (R)	Standard error (SE)	Number of cases: Un-weighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative Error (SE/R)	Confidence limits: Lower (R-2SE)	Confidence limits: Upper (R+2SE)
			MEN					
Urban residence	0.065	0.012	360	290	0.914	0.183	0.041	0.088
Literacy	0.498	0.058	360	290	2.196	0.117	0.382	0.615
No education	0.334	0.045	360	290	1.783	0.133	0.245	0.423
Secondary or higher education	0.468	0.057	360	290	2.171	0.123	0.353	0.583
Never married (in union)	0.371	0.038	360	290	1.504	0.103	0.294	0.448
Currently married (in union)	0.605	0.038	360	290	1.472	0.063	0.529	0.681
Had first sexual intercourse before age 18	0.538	0.031	288	227	1.069	0.059	0.475	0.600
Know any contraceptive method	0.971	0.011	224	175	0.956	0.011	0.950	0.993
Know any modern contraceptive method	0.971	0.011	224	175	0.956	0.011	0.950	0.993
Want no more children	0.203	0.027	224	175	1.009	0.134	0.149	0.258
Want to delay birth at least 2 years	0.085	0.015	224	175	0.779	0.171	0.056	0.114
Ideal number of children	5.609	0.266	340	275	1.362	0.047	5.078	6.141
Had 2+ sexual partners in past 12 months	0.213	0.024	360	290	1.105	0.112	0.165	0.260
Condom use at last sex	0.009	0.009	81	62	0.870	0.998	0.000	0.028
Abstinence among never married youth (never had sex)	0.462	0.055	108	93	1.137	0.119	0.352	0.572
Had paid sex in past 12 months	0.039	0.011	360	290	1.068	0.280	0.017	0.061
Had HIV test and received results in past 12 months	0.056	0.021	360	290	1.747	0.378	0.014	0.099
Discriminatory attitudes towards people living with HIV	0.674	0.051	331	265	1.984	0.076	0.571	0.777
HIV prevalence among men 15-49	0.004	0.003	322	248	0.842	0.731	0.000	0.010
HIV prevalence among young men 15-24	0.000	0.000	107	90	na	na	0.000	0.000
HIV prevalence among men 15-59	0.006	0.004	357	274	0.877	0.595	0.000	0.013
			WOMEN AND MEN					
HIV prevalence among respondents 15-49	0.018	0.005	756	567	1.031	0.275	0.008	0.028
HIV prevalence among respondents 15-24	0.010	0.006	242	193	0.933	0.584	0.000	0.023

na = Not available

Table B.23 Sampling errors: Pujehun sample, Sierra Leone 2019

Variable	Value (R)	Standard error (SE)	Number of cases: Un-weighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative Error (SE/R)	Confidence limits: Lower (R-2SE)	Confidence limits: Upper (R+2SE)
HOUSEHOLDS AND POPULATION								
Ownership of at least one ITN	0.798	0.029	742	489	1.936	0.036	0.741	0.856
De facto population with access to an ITN	0.591	0.022	3,410	2,288	1.430	0.037	0.548	0.635
Household population that slept under an ITN last night	0.683	0.025	3,410	2,288	1.494	0.037	0.632	0.734
WOMEN								
Urban residence	0.137	0.019	697	456	1.466	0.139	0.099	0.176
Literacy	0.246	0.033	697	456	2.008	0.133	0.181	0.312
No education	0.604	0.031	697	456	1.674	0.051	0.542	0.666
Secondary or higher education	0.249	0.035	697	456	2.107	0.139	0.180	0.318
Never married (never in union)	0.234	0.024	697	456	1.498	0.103	0.186	0.282
Currently married (in union)	0.726	0.032	697	456	1.873	0.044	0.663	0.790
Married before age 18	0.350	0.027	581	384	1.386	0.079	0.295	0.405
Had sexual intercourse before age 18	0.746	0.024	581	384	1.342	0.033	0.697	0.794
Currently pregnant	0.074	0.012	697	456	1.237	0.166	0.050	0.099
Know any contraceptive method	0.697	0.050	502	331	2.437	0.072	0.596	0.797
Know a modern method	0.696	0.050	502	331	2.438	0.072	0.595	0.797
Currently using any method	0.167	0.021	502	331	1.261	0.126	0.125	0.209
Currently using a modern method	0.164	0.021	502	331	1.251	0.126	0.123	0.206
Currently using pill	0.055	0.014	502	331	1.363	0.253	0.027	0.082
Currently using male condoms	0.000	0.000	502	331	na	na	0.000	0.000
Currently using injectables	0.036	0.010	502	331	1.260	0.293	0.015	0.057
Currently using implants	0.071	0.015	502	331	1.331	0.215	0.040	0.101
Currently using female sterilisation	0.003	0.002	502	331	0.945	0.764	0.000	0.008
Currently using withdrawal	0.000	0.000	502	331	na	na	0.000	0.000
Currently using rhythm	0.002	0.002	502	331	1.076	0.998	0.000	0.007
Using public sector source	0.848	0.043	129	84	1.358	0.051	0.762	0.935
Want no more children	0.230	0.022	502	331	1.147	0.094	0.187	0.274
Want to delay next birth at least 2 years	0.266	0.017	502	331	0.877	0.065	0.231	0.301
Ideal number of children	5.509	0.179	697	456	2.006	0.032	5.152	5.866
Mothers protected against tetanus for last birth	0.935	0.014	372	251	1.122	0.015	0.906	0.963
Births with skilled attendant at delivery	0.975	0.010	538	363	1.470	0.010	0.956	0.995
Received 3+ doses of SP/Fansidar	0.401	0.058	216	145	1.755	0.145	0.284	0.518
Treated with ORS	0.648	0.109	66	45	1.817	0.168	0.431	0.866
Sought medical treatment for diarrhoea	0.639	0.109	66	45	1.777	0.171	0.421	0.858
Ever had vaccination card	0.989	0.010	113	73	1.058	0.011	0.968	1.010
Received BCG vaccination	0.989	0.010	113	73	1.058	0.011	0.968	1.010
Received birth dose HepB vaccination	0.242	0.042	113	73	1.026	0.173	0.158	0.326
Received DPT-HepB-Hib vaccination (3 doses)	0.816	0.048	113	73	1.312	0.059	0.719	0.913
Received birth dose polio 0 vaccination	0.989	0.010	113	73	1.058	0.011	0.968	1.010
Received polio vaccination (3 doses)	0.716	0.046	113	73	1.063	0.064	0.624	0.807
Received IPV vaccination	0.932	0.028	113	73	1.147	0.030	0.876	0.987
Received pneumococcal vaccination (3 doses)	0.843	0.049	113	73	1.405	0.058	0.746	0.940
Received rotavirus vaccination (2 doses)	0.878	0.043	113	73	1.373	0.049	0.793	0.964
Received measles 1 vaccination	0.827	0.049	113	73	1.364	0.059	0.729	0.925
Received all basic vaccinations (12-23 months)	0.584	0.057	113	73	1.213	0.097	0.470	0.698
Received all age-appropriate vaccinations (12-23 months)	0.570	0.058	113	73	1.224	0.101	0.455	0.685
Received measles/MMR 2 vaccination	0.400	0.057	90	61	1.124	0.143	0.285	0.514
Received all age-appropriate vaccinations (24-35 months)	0.284	0.051	90	61	1.090	0.180	0.182	0.386
Height-for-age (-2SD)	0.380	0.041	294	206	1.328	0.107	0.299	0.461
Weight-for-height (-2SD)	0.097	0.020	292	202	1.100	0.202	0.057	0.136
Weight-for-age (-2SD)	0.238	0.037	299	209	1.376	0.155	0.164	0.312
Body mass index (BMI) <18.5	0.049	0.012	326	214	1.044	0.254	0.024	0.074
Body mass index (BMI) ≥25	0.323	0.033	326	214	1.275	0.102	0.257	0.389
Prevalence of anaemia (children 6-59 months)	0.780	0.035	266	185	1.361	0.045	0.709	0.850
Prevalence of anaemia (women 15-49)	0.576	0.029	363	238	1.102	0.050	0.519	0.633
Had 2+ sexual partners in past 12 months	0.012	0.005	697	456	1.237	0.419	0.002	0.023
Condom use at last sex	0.000	0.000	8	6	na	na	0.000	0.000
Abstinence among never-married youth (never had sex)	0.466	0.061	129	79	1.375	0.131	0.344	0.587
Had an HIV test and received results in past 12 months	0.144	0.025	697	456	1.900	0.176	0.093	0.195
Discriminatory attitudes towards people living with HIV	0.945	0.013	448	299	1.226	0.014	0.919	0.972
HIV prevalence among women 15-49	0.014	0.006	363	212	0.945	0.417	0.002	0.026
HIV prevalence among pregnant women 15-49	0.000	0.000	26	15	na	na	0.000	0.000
HIV prevalence among young women 15-24	0.009	0.009	115	65	0.996	0.973	0.000	0.027
Total fertility rate (last 3 years)	5.337	0.351	1,969	1,291	1.218	0.066	4.636	6.039
Neonatal mortality (last 0-9 years)	19.585	5.325	1,023	694	1.132	0.272	8.936	30.235
Postneonatal mortality (last 0-9 years)	48.596	10.218	1,027	697	1.413	0.210	28.161	69.031
Infant mortality (last 0-9 years)	68.181	13.159	1,025	695	1.411	0.193	41.863	94.499
Child mortality (last 0-9 years)	43.664	8.636	1,030	698	1.285	0.198	26.393	60.935
Under-5 mortality (last 0-9 years)	108.868	17.021	1,032	699	1.512	0.156	74.826	142.910

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Table B.23—*Continued*

Variable	Value (R)	Standard error (SE)	Number of cases: Un-weighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative Error (SE/R)	Confidence limits: Lower (R-2SE)	Confidence limits: Upper (R+2SE)
			MEN					
Urban residence	0.115	0.023	264	178	1.183	0.202	0.069	0.162
Literacy	0.286	0.041	264	178	1.453	0.142	0.205	0.368
No education	0.510	0.030	264	178	0.965	0.058	0.451	0.570
Secondary or higher education	0.298	0.037	264	178	1.316	0.125	0.224	0.372
Never married (in union)	0.344	0.031	264	178	1.068	0.091	0.282	0.407
Currently married (in union)	0.638	0.033	264	178	1.114	0.052	0.572	0.704
Had first sexual intercourse before age 18	0.482	0.045	207	139	1.300	0.094	0.391	0.573
Know any contraceptive method	1.000	0.000	168	114	na	0.000	1.000	1.000
Know any modern contraceptive method	0.997	0.004	168	114	0.780	0.004	0.989	1.004
Want no more children	0.200	0.029	168	114	0.947	0.146	0.142	0.259
Want to delay birth at least 2 years	0.198	0.032	168	114	1.024	0.159	0.135	0.261
Ideal number of children	6.093	0.233	254	171	1.133	0.038	5.627	6.559
Had 2+ sexual partners in past 12 months	0.184	0.022	264	178	0.940	0.122	0.139	0.229
Condom use at last sex	0.136	0.055	51	33	1.130	0.403	0.026	0.246
Abstinence among never married youth (never had sex)	0.488	0.084	78	52	1.459	0.172	0.321	0.656
Had paid sex in past 12 months	0.022	0.009	264	178	0.982	0.402	0.004	0.040
Had HIV test and received results in past 12 months	0.051	0.014	264	178	1.019	0.271	0.023	0.079
Discriminatory attitudes towards people living with HIV	0.733	0.039	244	164	1.383	0.054	0.655	0.812
HIV prevalence among men 15-49	0.003	0.003	254	151	0.870	1.023	0.000	0.009
HIV prevalence among young men 15-24	0.000	0.000	85	50	na	na	0.000	0.000
HIV prevalence among men 15-59	0.002	0.002	305	179	0.877	1.024	0.000	0.007
			WOMEN AND MEN					
HIV prevalence among respondents 15-49	0.009	0.004	617	363	1.047	0.435	0.001	0.017
HIV prevalence among respondents 15-24	0.005	0.005	200	116	0.991	0.979	0.000	0.015

na = Not available

Table B.24 Sampling errors: Western Area Rural sample, Sierra Leone 2019

Variable	Value (R)	Standard error (SE)	Number of cases: Un-weighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative Error (SE/R)	Confidence limits: Lower (R-2SE)	Confidence limits: Upper (R+2SE)
HOUSEHOLDS AND POPULATION								
Ownership of at least one ITN	0.488	0.033	917	1,139	2.014	0.068	0.421	0.554
De facto population with access to an ITN	0.322	0.026	4,501	5,568	1.924	0.080	0.271	0.373
Household population that slept under an ITN last night	0.310	0.029	4,501	5,568	2.022	0.094	0.252	0.369
WOMEN								
Urban residence	0.936	0.012	1,132	1,407	1.616	0.013	0.913	0.960
Literacy	0.573	0.019	1,132	1,407	1.325	0.034	0.534	0.612
No education	0.286	0.016	1,132	1,407	1.169	0.055	0.255	0.317
Secondary or higher education	0.589	0.015	1,132	1,407	1.048	0.026	0.558	0.619
Never married (never in union)	0.396	0.020	1,132	1,407	1.388	0.051	0.356	0.436
Currently married (in union)	0.530	0.022	1,132	1,407	1.453	0.041	0.486	0.573
Married before age 18	0.366	0.026	878	1,092	1.598	0.071	0.314	0.418
Had sexual intercourse before age 18	0.693	0.027	878	1,092	1.757	0.040	0.638	0.748
Currently pregnant	0.042	0.005	1,132	1,407	0.853	0.121	0.032	0.052
Know any contraceptive method	0.993	0.005	600	745	1.583	0.005	0.983	1.004
Know a modern method	0.993	0.005	600	745	1.583	0.005	0.983	1.004
Currently using any method	0.250	0.019	600	745	1.048	0.074	0.212	0.287
Currently using a modern method	0.246	0.018	600	745	1.037	0.074	0.209	0.282
Currently using pill	0.046	0.009	600	745	0.998	0.186	0.029	0.063
Currently using male condoms	0.003	0.002	600	745	0.831	0.589	0.000	0.007
Currently using injectables	0.135	0.016	600	745	1.126	0.117	0.103	0.166
Currently using implants	0.049	0.015	600	745	1.652	0.297	0.020	0.079
Currently using female sterilisation	0.003	0.002	600	745	0.910	0.707	0.000	0.007
Currently using withdrawal	0.000	0.000	600	745	na	na	0.000	0.000
Currently using rhythm	0.000	0.000	600	745	na	na	0.000	0.000
Using public sector source	0.714	0.036	298	365	1.366	0.050	0.642	0.785
Want no more children	0.307	0.023	600	745	1.231	0.076	0.260	0.353
Want to delay next birth at least 2 years	0.074	0.016	600	745	1.500	0.217	0.042	0.106
Ideal number of children	4.168	0.052	1,047	1,291	1.119	0.013	4.063	4.273
Mothers protected against tetanus for last birth	0.852	0.018	498	631	1.135	0.021	0.816	0.888
Births with skilled attendant at delivery	0.929	0.016	620	783	1.406	0.017	0.897	0.960
Received 3+ doses of SP/Fansidar	0.216	0.031	248	322	1.195	0.142	0.154	0.277
Treated with ORS	0.893	0.040	51	70	0.962	0.045	0.814	0.973
Sought medical treatment for diarrhoea	0.638	0.065	51	70	1.011	0.102	0.507	0.768
Ever had vaccination card	0.959	0.022	118	153	1.245	0.023	0.914	1.004
Received BCG vaccination	0.982	0.013	118	153	1.050	0.013	0.957	1.007
Received birth dose HepB vaccination	0.346	0.054	118	153	1.253	0.156	0.238	0.454
Received DPT-HepB-Hib vaccination (3 doses)	0.792	0.038	118	153	1.036	0.048	0.716	0.868
Received birth dose polio 0 vaccination	0.963	0.017	118	153	0.987	0.018	0.929	0.997
Received polio vaccination (3 doses)	0.678	0.044	118	153	1.039	0.065	0.589	0.766
Received IPV vaccination	0.830	0.031	118	153	0.921	0.038	0.767	0.893
Received pneumococcal vaccination (3 doses)	0.792	0.041	118	153	1.101	0.051	0.711	0.873
Received rotavirus vaccination (2 doses)	0.827	0.038	118	153	1.109	0.046	0.751	0.903
Received measles 1 vaccination	0.682	0.041	118	153	0.977	0.060	0.600	0.765
Received all basic vaccinations (12-23 months)	0.522	0.047	118	153	1.034	0.090	0.428	0.616
Received all age-appropriate vaccinations (12-23 months)	0.498	0.049	118	153	1.077	0.098	0.400	0.596
Received measles/MMR 2 vaccination	0.640	0.055	114	137	1.180	0.086	0.530	0.750
Received all age-appropriate vaccinations (24-35 months)	0.384	0.063	114	137	1.301	0.164	0.258	0.510
Height-for-age (-2SD)	0.218	0.033	270	324	1.252	0.151	0.152	0.284
Weight-for-height (-2SD)	0.050	0.013	272	320	0.975	0.259	0.024	0.075
Weight-for-age (-2SD)	0.105	0.019	280	332	1.008	0.180	0.067	0.143
Body mass index (BMI) <18.5	0.042	0.011	510	599	1.230	0.268	0.019	0.064
Body mass index (BMI) ≥25	0.381	0.036	510	599	1.640	0.095	0.308	0.453
Prevalence of anaemia (children 6-59 months)	0.598	0.057	241	288	1.761	0.095	0.485	0.711
Prevalence of anaemia (women 15-49)	0.473	0.022	503	594	0.951	0.046	0.429	0.516
Had 2+ sexual partners in past 12 months	0.055	0.011	1,132	1,407	1.576	0.194	0.034	0.077
Condom use at last sex	0.030	0.019	55	78	0.822	0.636	0.000	0.068
Abstinence among never-married youth (never had sex)	0.394	0.021	352	431	0.820	0.054	0.352	0.437
Had an HIV test and received results in past 12 months	0.259	0.015	1,132	1,407	1.155	0.058	0.228	0.289
Discriminatory attitudes towards people living with HIV	0.659	0.030	1,120	1,393	2.093	0.045	0.599	0.718
HIV prevalence among women 15-49	0.041	0.008	500	604	0.907	0.195	0.025	0.058
HIV prevalence among pregnant women 15-49	0.000	0.000	23	26	na	na	0.000	0.000
HIV prevalence among young women 15-24	0.026	0.010	227	277	0.929	0.375	0.007	0.046
Total fertility rate (last 3 years)	3.647	0.182	3,167	3,941	1.087	0.050	3.282	4.012
Neonatal mortality (last 0-9 years)	31.485	7.545	1,209	1,529	1.391	0.240	16.394	46.576
Postneonatal mortality (last 0-9 years)	46.508	7.517	1,214	1,537	1.192	0.162	31.473	61.543
Infant mortality (last 0-9 years)	77.993	11.465	1,213	1,536	1.387	0.147	55.063	100.924
Child mortality (last 0-9 years)	69.115	10.722	1,187	1,494	1.235	0.155	47.671	90.559
Under-5 mortality (last 0-9 years)	141.718	11.735	1,230	1,555	1.129	0.083	118.248	165.187

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Table B.24—*Continued*

Variable	Value (R)	Standard error (SE)	Number of cases: Un-weighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative Error (SE/R)	Confidence limits: Lower (R-2SE)	Confidence limits: Upper (R+2SE)
			MEN					
Urban residence	0.922	0.009	439	542	0.728	0.010	0.903	0.941
Literacy	0.764	0.029	439	542	1.433	0.038	0.706	0.822
No education	0.176	0.027	439	542	1.458	0.151	0.123	0.229
Secondary or higher education	0.719	0.031	439	542	1.444	0.043	0.657	0.781
Never married (in union)	0.553	0.027	439	542	1.125	0.048	0.500	0.606
Currently married (in union)	0.427	0.029	439	542	1.236	0.068	0.369	0.486
Had first sexual intercourse before age 18	0.404	0.038	342	432	1.422	0.094	0.329	0.480
Know any contraceptive method	0.993	0.006	179	231	1.073	0.007	0.981	1.006
Know any modern contraceptive method	0.993	0.006	179	231	1.073	0.007	0.981	1.006
Want no more children	0.310	0.043	179	231	1.241	0.139	0.224	0.396
Want to delay birth at least 2 years	0.056	0.019	179	231	1.096	0.339	0.018	0.093
Ideal number of children	3.502	0.084	432	533	1.015	0.024	3.335	3.670
Had 2+ sexual partners in past 12 months	0.127	0.019	439	542	1.220	0.153	0.088	0.166
Condom use at last sex	0.284	0.069	58	69	1.145	0.242	0.147	0.421
Abstinence among never married youth (never had sex)	0.536	0.054	162	191	1.375	0.101	0.427	0.644
Had paid sex in past 12 months	0.040	0.010	439	542	1.111	0.260	0.019	0.061
Had HIV test and received results in past 12 months	0.135	0.025	439	542	1.508	0.183	0.086	0.184
Discriminatory attitudes towards people living with HIV	0.514	0.045	413	511	1.816	0.087	0.425	0.604
HIV prevalence among men 15-49	0.023	0.011	335	458	1.312	0.466	0.002	0.045
HIV prevalence among young men 15-24	0.000	0.000	140	186	na	na	0.000	0.000
HIV prevalence among men 15-59	0.032	0.013	361	504	1.378	0.403	0.006	0.057
			WOMEN AND MEN					
HIV prevalence among respondents 15-49	0.034	0.005	835	1,063	0.853	0.158	0.023	0.044
HIV prevalence among respondents 15-24	0.016	0.006	367	463	0.918	0.378	0.004	0.028

na = Not available

Table B.25 Sampling errors: Western Area Urban sample, Sierra Leone 2019

Variable	Value (R)	Standard error (SE)	Number of cases: Un-weighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative Error (SE/R)	Confidence limits: Lower (R-2SE)	Confidence limits: Upper (R+2SE)
HOUSEHOLDS AND POPULATION								
Ownership of at least one ITN	0.496	0.032	1,254	2,003	2.261	0.065	0.432	0.560
De facto population with access to an ITN	0.327	0.019	5,615	8,884	1.707	0.059	0.289	0.366
Household population that slept under an ITN last night	0.273	0.021	5,615	8,884	1.892	0.078	0.231	0.316
WOMEN								
Urban residence	1.000	0.000	1,482	2,373	na	0.000	1.000	1.000
Literacy	0.690	0.019	1,482	2,373	1.576	0.027	0.652	0.728
No education	0.227	0.014	1,482	2,373	1.311	0.063	0.198	0.255
Secondary or higher education	0.682	0.018	1,482	2,373	1.475	0.026	0.646	0.717
Never married (never in union)	0.472	0.020	1,482	2,373	1.556	0.043	0.431	0.512
Currently married (in union)	0.478	0.018	1,482	2,373	1.406	0.038	0.442	0.515
Married before age 18	0.218	0.019	1,157	1,866	1.559	0.087	0.180	0.256
Had sexual intercourse before age 18	0.584	0.018	1,157	1,866	1.216	0.030	0.548	0.619
Currently pregnant	0.033	0.005	1,482	2,373	0.978	0.137	0.024	0.042
Know any contraceptive method	0.997	0.002	695	1,135	0.998	0.002	0.993	1.001
Know a modern method	0.997	0.002	695	1,135	0.998	0.002	0.993	1.001
Currently using any method	0.245	0.023	695	1,135	1.408	0.094	0.199	0.291
Currently using a modern method	0.244	0.023	695	1,135	1.424	0.095	0.197	0.290
Currently using pill	0.067	0.012	695	1,135	1.294	0.183	0.043	0.092
Currently using male condoms	0.002	0.002	695	1,135	0.829	0.639	0.000	0.006
Currently using injectables	0.130	0.015	695	1,135	1.196	0.118	0.099	0.160
Currently using implants	0.038	0.009	695	1,135	1.177	0.225	0.021	0.055
Currently using female sterilisation	0.002	0.001	695	1,135	0.909	0.796	0.000	0.005
Currently using withdrawal	0.000	0.000	695	1,135	na	na	0.000	0.000
Currently using rhythm	0.000	0.000	695	1,135	na	na	0.000	0.000
Using public sector source	0.673	0.042	349	575	1.682	0.063	0.588	0.758
Want no more children	0.235	0.029	695	1,135	1.768	0.121	0.178	0.292
Want to delay next birth at least 2 years	0.196	0.019	695	1,135	1.250	0.096	0.158	0.233
Ideal number of children	3.689	0.060	1,466	2,349	1.702	0.016	3.570	3.809
Mothers protected against tetanus for last birth	0.866	0.023	518	847	1.551	0.027	0.819	0.912
Births with skilled attendant at delivery	0.959	0.012	610	998	1.378	0.013	0.934	0.983
Received 3+ doses of SP/Fansidar	0.262	0.035	253	412	1.263	0.134	0.192	0.332
Treated with ORS	0.772	0.100	33	57	1.405	0.129	0.572	0.971
Sought medical treatment for diarrhoea	0.729	0.086	33	57	1.139	0.117	0.558	0.900
Ever had vaccination card	0.951	0.023	116	194	1.154	0.024	0.906	0.997
Received BCG vaccination	0.954	0.039	116	194	2.007	0.041	0.876	1.031
Received birth dose HepB vaccination	0.270	0.056	116	194	1.364	0.207	0.158	0.382
Received DPT-HepB-Hib vaccination (3 doses)	0.742	0.050	116	194	1.215	0.068	0.641	0.842
Received birth dose polio 0 vaccination	0.941	0.028	116	194	1.298	0.030	0.885	0.997
Received polio vaccination (3 doses)	0.657	0.056	116	194	1.251	0.085	0.545	0.768
Received IPV vaccination	0.825	0.051	116	194	1.350	0.062	0.724	0.927
Received pneumococcal vaccination (3 doses)	0.757	0.045	116	194	1.101	0.059	0.667	0.846
Received rotavirus vaccination (2 doses)	0.810	0.037	116	194	1.019	0.046	0.736	0.884
Received measles 1 vaccination	0.761	0.058	116	194	1.440	0.076	0.645	0.877
Received all basic vaccinations (12-23 months)	0.527	0.054	116	194	1.148	0.102	0.420	0.634
Received all age-appropriate vaccinations (12-23 months)	0.483	0.056	116	194	1.204	0.116	0.371	0.596
Received measles/MMR 2 vaccination	0.480	0.063	104	168	1.283	0.132	0.353	0.607
Received all age-appropriate vaccinations (24-35 months)	0.138	0.035	104	168	1.029	0.254	0.068	0.208
Height-for-age (-2SD)	0.322	0.042	287	450	1.410	0.131	0.237	0.406
Weight-for-height (-2SD)	0.091	0.023	283	445	1.361	0.257	0.044	0.137
Weight-for-age (-2SD)	0.171	0.028	302	471	1.219	0.163	0.115	0.226
Body mass index (BMI) <18.5	0.039	0.007	674	1,077	0.990	0.188	0.025	0.054
Body mass index (BMI) ≥25	0.415	0.017	674	1,077	0.898	0.041	0.381	0.449
Prevalence of anaemia (children 6-59 months)	0.515	0.040	263	421	1.228	0.078	0.435	0.596
Prevalence of anaemia (women 15-49)	0.365	0.025	690	1,113	1.370	0.069	0.315	0.415
Had 2+ sexual partners in past 12 months	0.052	0.010	1,482	2,373	1.718	0.191	0.032	0.072
Condom use at last sex	0.029	0.018	75	123	0.917	0.615	0.000	0.065
Abstinence among never-married youth (never had sex)	0.447	0.027	523	801	1.256	0.061	0.393	0.502
Had an HIV test and received results in past 12 months	0.299	0.016	1,482	2,373	1.365	0.054	0.266	0.331
Discriminatory attitudes towards people living with HIV	0.769	0.019	1,465	2,347	1.714	0.025	0.731	0.807
HIV prevalence among women 15-49	0.024	0.007	680	1,017	1.164	0.284	0.010	0.038
HIV prevalence among pregnant women 15-49	0.000	0.000	26	37	na	na	0.000	0.000
HIV prevalence among young women 15-24	0.024	0.013	295	432	1.476	0.546	0.000	0.051
Total fertility rate (last 3 years)	2.509	0.133	4,131	6,611	1.042	0.053	2.243	2.775
Neonatal mortality (last 0-9 years)	37.415	7.037	1,214	1,986	1.182	0.188	23.341	51.490
Postneonatal mortality (last 0-9 years)	21.363	3.533	1,216	1,988	0.869	0.165	14.297	28.430
Infant mortality (last 0-9 years)	58.779	9.201	1,216	1,989	1.221	0.157	40.376	77.181
Child mortality (last 0-9 years)	35.492	6.638	1,199	1,965	1.063	0.187	22.216	48.769
Under-5 mortality (last 0-9 years)	92.185	11.520	1,225	2,003	1.182	0.125	69.144	115.225

Continued...

Table B.25—*Continued*

Variable	Value (R)	Standard error (SE)	Number of cases: Un-weighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative Error (SE/R)	Confidence limits: Lower (R-2SE)	Confidence limits: Upper (R+2SE)
			MEN					
Urban residence	1.000	0.000	650	1,064	na	0.000	1.000	1.000
Literacy	0.826	0.018	650	1,064	1.202	0.022	0.790	0.862
No education	0.115	0.014	650	1,064	1.135	0.124	0.087	0.143
Secondary or higher education	0.799	0.019	650	1,064	1.199	0.024	0.761	0.837
Never married (in union)	0.489	0.022	650	1,064	1.144	0.046	0.444	0.534
Currently married (in union)	0.456	0.023	650	1,064	1.166	0.050	0.411	0.502
Had first sexual intercourse before age 18	0.375	0.024	529	872	1.119	0.063	0.328	0.422
Know any contraceptive method	0.997	0.003	289	485	1.006	0.003	0.990	1.004
Know any modern contraceptive method	0.997	0.003	289	485	1.006	0.003	0.990	1.004
Want no more children	0.121	0.024	289	485	1.268	0.202	0.072	0.170
Want to delay birth at least 2 years	0.225	0.032	289	485	1.283	0.140	0.162	0.289
Ideal number of children	3.529	0.113	592	975	1.558	0.032	3.302	3.756
Had 2+ sexual partners in past 12 months	0.215	0.022	650	1,064	1.342	0.101	0.172	0.259
Condom use at last sex	0.202	0.041	152	229	1.240	0.201	0.121	0.283
Abstinence among never married youth (never had sex)	0.459	0.043	220	344	1.266	0.093	0.374	0.544
Had paid sex in past 12 months	0.055	0.010	650	1,064	1.130	0.184	0.035	0.075
Had HIV test and received results in past 12 months	0.181	0.042	650	1,064	2.787	0.234	0.096	0.265
Discriminatory attitudes towards people living with HIV	0.628	0.035	641	1,051	1.810	0.055	0.559	0.697
HIV prevalence among men 15-49	0.016	0.005	569	918	1.056	0.353	0.005	0.026
HIV prevalence among young men 15-24	0.017	0.009	203	312	0.956	0.518	0.000	0.034
HIV prevalence among men 15-59	0.023	0.008	613	995	1.239	0.326	0.008	0.038
			WOMEN AND MEN					
HIV prevalence among respondents 15-49	0.020	0.004	1,249	1,936	1.102	0.218	0.011	0.029
HIV prevalence among respondents 15-24	0.021	0.008	498	745	1.290	0.394	0.004	0.038

na = Not available

DATA QUALITY TABLES

Appendix C

Table C.1 Household age distribution

Single-year age distribution of the de facto household population by sex (weighted), Sierra Leone DHS 2019

	Male		Female			Male		Female	
Age	Number	Percent	Number	Percent	Age	Number	Percent	Number	Percent
0	1,006	3.0	952	2.6	37	310	0.9	334	0.9
1	973	2.9	955	2.7	38	328	1.0	444	1.2
2	917	2.7	941	2.6	39	227	0.7	296	0.8
3	1,120	3.3	1,080	3.0	40	468	1.4	520	1.4
4	1,098	3.3	1,069	3.0	41	204	0.6	179	0.5
5	1,060	3.1	974	2.7	42	294	0.9	271	0.8
6	1,117	3.3	1,155	3.2	43	230	0.7	214	0.6
7	1,267	3.7	1,191	3.3	44	155	0.5	163	0.5
8	1,161	3.4	1,139	3.2	45	544	1.6	461	1.3
9	1,054	3.1	967	2.7	46	204	0.6	193	0.5
10	1,134	3.4	1,158	3.2	47	232	0.7	233	0.6
11	875	2.6	788	2.2	48	260	0.8	248	0.7
12	1,077	3.2	1,135	3.2	49	171	0.5	161	0.4
13	992	2.9	965	2.7	50	280	0.8	301	0.8
14	852	2.5	767	2.1	51	148	0.4	281	0.8
15	966	2.9	857	2.4	52	168	0.5	387	1.1
16	638	1.9	628	1.7	53	141	0.4	230	0.6
17	672	2.0	611	1.7	54	183	0.5	229	0.6
18	680	2.0	731	2.0	55	306	0.9	347	1.0
19	613	1.8	721	2.0	56	150	0.4	191	0.5
20	654	1.9	705	2.0	57	145	0.4	176	0.5
21	372	1.1	441	1.2	58	159	0.5	202	0.6
22	421	1.2	600	1.7	59	134	0.4	83	0.2
23	392	1.2	549	1.5	60	260	0.8	290	0.8
24	339	1.0	474	1.3	61	124	0.4	84	0.2
25	694	2.1	824	2.3	62	157	0.5	94	0.3
26	362	1.1	459	1.3	63	132	0.4	98	0.3
27	426	1.3	499	1.4	64	95	0.3	78	0.2
28	426	1.3	607	1.7	65	246	0.7	223	0.6
29	315	0.9	357	1.0	66	55	0.2	41	0.1
30	511	1.5	717	2.0	67	100	0.3	94	0.3
31	220	0.7	281	0.8	68	78	0.2	116	0.3
32	412	1.2	454	1.3	69	51	0.2	59	0.2
33	269	0.8	323	0.9	70+	876	2.6	1,118	3.1
34	247	0.7	261	0.7					
35	581	1.7	804	2.2	Total	33,793	100.0	35,924	100.0
36	265	0.8	345	1.0					

Note: The de facto population includes all residents and nonresidents who stayed in the household the night before the interview.

Table C.2.1 Age distribution of eligible and interviewed women

De facto household population of women age 10-54, number and percent distribution of interviewed women age 15-49, and percentage of eligible women who were interviewed (weighted), by 5-year age groups, Sierra Leone DHS 2019

Age group	Household population of women age 10-54	Interviewed women age 15-49		Percentage of eligible women interviewed
		Number	Percentage	
10-14	4,814	na	na	na
15-19	3,548	3,435	22.3	96.8
20-24	2,768	2,675	17.3	96.7
25-29	2,746	2,673	17.3	97.3
30-34	2,036	1,968	12.7	96.7
35-39	2,222	2,152	13.9	96.8
40-44	1,347	1,300	8.4	96.6
45-49	1,296	1,235	8.0	95.3
50-54	1,429	na	na	na
15-49	15,962	15,439	100.0	96.7

Note: The de facto population includes all residents and nonresidents who stayed in the household the night before the interview. Weights for both the household population of women and interviewed women are household weights. Age is based on the Household Questionnaire.
na = Not applicable

Table C.2.2 Age distribution of eligible and interviewed men

De facto household population of men age 10-64, interviewed men age 15-59, and number and percent distribution of eligible men who were interviewed (weighted), by 5-year age groups, Sierra Leone DHS 2019

Age group	Household population of men age 10-64	Interviewed men age 15-59		Percentage of eligible men interviewed
		Number	Percentage	
10-14	2,591	na	na	na
15-19	1,592	1,555	21.6	97.7
20-24	966	930	12.9	96.3
25-29	1,037	1,004	14.0	96.8
30-34	803	771	10.7	96.0
35-39	823	795	11.1	96.6
40-44	650	624	8.7	96.1
45-49	709	689	9.6	97.1
50-54	443	427	5.9	96.3
55-59	402	389	5.4	96.8
60-64	461	na	na	na
15-59	7,423	7,183	100.0	96.8

Note: The de facto population includes all residents and nonresidents who stayed in the household the night before the interview. Weights for both the household population of men and interviewed men are household weights. Age is based on the Household Questionnaire.
na = Not applicable

Table C.3 Completeness of reporting

Percentage of observations missing information for selected demographic and health questions (weighted), Sierra Leone DHS 2019

Subject	Reference group	Percentage with information missing	Number of cases
Birth date	Births in the 15 years preceding the survey		
Day only		0.78	27,848
Day and month		1.00	27,848
Day, month, and year		0.30	27,848
Age at death	Deceased children born in the 15 years preceding the survey	0.00	3,553
Age/date at first union[1]	Ever-married women age 15-49	0.53	10,516
	Ever-married men age 15-59	1.49	4,258
Respondent's education	Women age 15-49	0.00	15,574
	Men age 15-59	0.00	7,197
Diarrhoea in last 2 weeks	Living children age 0-59 months	2.04	8,893
Anthropometry of children	Living children age 0-59 months (from the Biomarker Questionnaire)		
Height		9.24	5,392
Weight		9.21	5,392
Height or weight		9.24	5,392
Anthropometry of women	Women age 15-49 (from the Biomarker Questionnaire)		
Height		10.23	8,365
Weight		10.23	8,365
Height or weight		10.23	8,365
Anthropometry of men	Men age 15-49 (from the Biomarker Questionnaire)		
Height		12.84	6,582
Weight		12.83	6,582
Height or weight		12.84	6,582
Anaemia			
Children	Living children age 6-59 months (from the Biomarker Questionnaire)	13.07	4,858
Women	All women (from the Biomarker Questionnaire)	13.44	8,365
Men	All men (from the Biomarker Questionnaire)	16.88	7,427

[1] Both year and age missing

Table C.4 Births by calendar years

Number of births, percentage with complete birth date, sex ratio at birth, and calendar year ratio by calendar year, according to living, dead, and total children (weighted), Sierra Leone DHS 2019

	Number of births			Percentage with year and month of birth given			Sex ratio at birth[1]			Calendar year ratio[2]		
Calendar year	Living	Dead	Total	Living	Dead	Total	Living	Dead	Total	Living	Dead	Total
2019	1,023	46	1,068	100.0	100.0	100.0	111.1	135.0	112.0	na	na	na
2018	1,988	148	2,136	100.0	99.0	99.9	102.7	124.3	104.1	na	na	na
2017	1,741	200	1,941	99.9	98.0	99.7	95.6	130.4	98.6	93.5	110.9	95.0
2016	1,736	213	1,949	99.6	98.5	99.5	100.9	165.1	106.3	99.1	104.9	99.7
2015	1,761	206	1,967	99.8	98.8	99.7	105.1	137.8	108.1	103.3	95.3	102.4
2014	1,673	219	1,892	99.4	98.5	99.3	95.3	101.6	96.0	91.6	82.8	90.5
2013	1,890	324	2,213	98.8	96.4	98.4	93.6	127.0	97.9	105.7	137.4	109.4
2012	1,904	252	2,156	98.7	94.3	98.2	103.7	104.3	103.7	106.5	87.8	103.9
2011	1,687	250	1,937	98.3	96.1	98.0	104.5	123.6	106.8	94.8	99.3	95.3
2010	1,656	251	1,907	98.7	96.3	98.4	102.5	134.9	106.3	99.1	88.8	97.6
2015-2019	8,248	811	9,060	99.8	98.6	99.7	102.3	139.6	105.1	na	na	na
2010-2014	8,809	1,296	10,105	98.8	96.3	98.4	99.8	118.4	102.0	na	na	na
2005-2009	6,915	1,372	8,288	98.5	95.0	97.9	103.9	112.6	105.3	na	na	na
2000-2004	4,997	1,139	6,136	98.3	96.3	98.0	98.7	118.0	102.0	na	na	na
<2000	4,621	1,555	6,176	98.3	95.5	97.6	100.4	105.4	101.7	na	na	na
All	33,591	6,173	39,764	98.9	96.1	98.4	101.1	116.1	103.3	na	na	na

na = Not applicable

[1] $(B_m/B_f)x100$, where B_m and B_f are the numbers of male and female births, respectively

[2] $[2B_x/(B_x\text{-}1+B_x+1)]x100$, where B_x is the number of births in calendar year x

Table C.5 Reporting of age at death in days

Distribution of reported deaths under age 1 month by age at death in days and percentage of neonatal deaths reported to occur at age 0-6 days, for 5-year periods preceding the survey (weighted), Sierra Leone DHS 2019

	Number of years preceding the survey				Total
Age at death (days)	0-4	5-9	10-14	15-19	0-19
<1	85	113	144	89	431
1	66	46	37	30	180
2	32	29	19	21	101
3	33	35	19	16	103
4	6	11	8	3	27
5	7	2	12	6	27
6	8	7	11	3	28
7	18	22	24	21	84
8	1	2	4	7	15
9	2	1	3	2	9
10	2	2	5	5	13
11	2	0	2	0	3
12	0	1	1	2	4
13	1	2	1	0	4
14	10	12	5	13	40
15	4	2	1	2	9
16	0	1	4	0	4
17	6	0	0	1	7
18	1	2	1	1	5
20	2	2	1	0	5
21	6	1	2	2	12
22	1	0	0	0	1
23	0	0	0	0	0
25	3	0	0	0	3
26	0	2	0	0	2
28	1	0	0	0	1
29	0	0	1	0	1
30	2	0	0	3	5
Total 0-30	298	293	304	227	1,123
Percentage early neonatal[1]	79.5	82.5	82.2	74.0	79.9

[1] 0-6 days/0-30 days

Table C.6 Reporting of age at death in months

Distribution of reported deaths under age 2 by age at death in months and percentage of infant deaths reported to occur under age 1 month, for 5-year periods preceding the survey (weighted), Sierra Leone DHS 2019

	Number of years preceding the survey				Total
Age at death (months)	0-4	5-9	10-14	15-19	0-19
<1[a]	298	293	304	227	1,123
1	60	49	50	37	196
2	56	72	53	44	225
3	42	57	54	40	193
4	25	39	28	48	141
5	32	27	24	33	115
6	36	66	54	65	222
7	27	52	37	34	150
8	21	45	55	33	154
9	39	66	60	34	199
10	11	16	19	10	56
11	19	24	19	21	83
12	64	66	58	74	262
13	14	12	11	17	54
14	5	25	12	11	53
15	5	14	17	9	46
16	10	10	7	6	33
17	4	5	3	2	13
18	17	19	21	43	99
19	0	13	6	8	27
20	7	13	4	4	28
21	1	5	3	1	10
22	2	3	1	1	8
23	4	5	4	3	15
Total 0-11	667	807	758	627	2,859
Percentage neonatal[1]	44.7	36.3	40.1	36.3	39.3

[a] Includes deaths under 1 month reported in days
[1] Under 1 month/under 1 year

Table C.7 Standardisation exercise results from anthropometry training

Trainees' precision and accuracy for height measurements from the anthropometry training, Sierra Leone DHS 2019

	Standardisation exercise[1]		Re-standardisation exercise[1]	
Measurer	Trainees' precision[2]	Trainees' accuracy[2]	Trainees' precision[2]	Trainees' accuracy[2]
Trainee 1	0.57	0.38	na	na
Trainee 2	0.90	0.58	0.11	0.07
Trainee 3	0.52	0.29	na	na
Trainee 4	0.75	0.33	0.13	0.09
Trainee 5	0.33	0.36	na	na
Trainee 6	0.33	0.39	na	na
Trainee 7	0.50	0.28	na	na
Trainee 8	0.57	0.45	na	na
Trainee 9	1.12	0.78	0.07	0.08
Trainee 10	0.44	0.30	na	na
Trainee 11	0.59	0.45	na	na
Trainee 12	0.11	0.28	na	na
Trainee 13	0.08	0.36	na	na
Trainee 14	0.07	0.29	na	na
Trainee 15	0.06	0.48	na	na
Trainee 16	0.51	0.33	na	na
Trainee 17	0.21	0.25	na	na
Trainee 18	0.14	0.37	na	na
Trainee 19	0.23	0.27	na	na
Trainee 20	0.47	0.46	na	na
Trainee 21	0.17	0.29	na	na
Trainee 22	0.24	0.34	na	na
Trainee 23	0.48	0.24	na	na
Trainee 24	0.21	0.27	na	na
Trainee 25	0.14	0.26	na	na
Trainee 26	0.09	0.25	na	na
Trainee 27	0.22	0.31	na	na
Average	0.37	0.36	na	na

na = Not applicable

[1] Ten children were measured twice for each standardisation and re-standardisation exercise.

[2] Trainees' precision and accuracy are defined as technical error of measurement (TEM), which is calculated as $\sqrt{\sum[(D^2)/2N]}$, where D is the difference in height and N is the number of repeat measurements. An acceptable TEM according to WHO-UNICEF is a TEM of <0.6 cm for precision and <0.8 cm for accuracy.

Table C.8 Height and weight data completeness and quality for children

Among children under age 5 (age 0-59 months) who were eligible for anthropometry, percentage with incomplete or missing height and/or weight measurements and/or date of birth; percentage with out-of-range height-for-age, and/or weight-for-height, and/or weight-for-age data; and percentage with valid data, according to background characteristics (unweighted), Sierra Leone DHS 2019

	Percentage with data missing or incomplete:				Percentage with out-of-range data for[4]:						Percentage with valid data for[9]:			
Background characteristic	Height[1]	Weight[2]	Age in months[3]	Number of children	Height-for-age[5]	Number of children with complete height and age[6]	Weight-for-height[7]	Number of children with complete weight and height	Weight-for-age[8]	Number of children with complete weight and age[5]	Height-for-age	Weight-for-height	Weight-for-age	Number of children
Age in months														
<6	8.1	8.1	0.8	602	3.6	553	4.3	553	1.3	553	88.5	87.9	90.7	602
6-8	11.5	11.5	1.0	314	2.9	278	2.9	278	0.4	278	86.0	86.0	88.2	314
9-11	10.1	10.1	0.4	238	0.9	213	0.5	214	0.0	213	88.7	89.5	89.5	238
12-17	10.3	10.1	0.8	643	1.6	577	0.9	577	0.0	578	88.3	89.0	89.9	643
18-23	8.5	8.3	0.5	422	1.0	386	1.0	386	0.0	387	90.5	90.5	91.7	422
24-35	6.9	6.9	1.0	1,043	1.4	967	1.4	971	0.3	967	91.4	91.8	92.4	1,043
36-47	11.5	11.5	1.5	1,147	0.4	1,012	0.3	1,015	0.1	1,012	87.9	88.2	88.1	1,147
48-59	10.5	10.5	1.5	1,147	0.6	1,020	1.0	1,026	0.0	1,020	88.4	88.6	88.9	1,147
Sex														
Male	9.2	9.2	1.1	2,835	1.5	2,566	1.4	2,573	0.3	2,567	89.1	89.5	90.3	2,835
Female	10.1	10.0	1.1	2,721	1.1	2,440	1.3	2,447	0.2	2,441	88.6	88.8	89.6	2,721
Mother's interview status														
Interviewed	7.4	7.3	0.1	4,535	1.5	4,197	1.4	4,201	0.3	4,198	91.1	91.3	92.3	4,535
Not interviewed but in household	56.6	56.6	20.4	152	0.0	64	1.5	66	0.0	64	42.1	42.8	42.1	152
Not interviewed and not in the household[10]	13.3	13.2	2.9	869	0.4	745	1.1	753	0.0	746	85.4	85.7	85.8	869
Residence														
Urban	8.6	8.5	1.0	1,644	2.0	1,498	2.2	1,503	0.1	1,499	89.3	89.4	91.1	1,644
Rural	10.1	10.1	1.1	3,912	1.1	3,508	1.0	3,517	0.3	3,509	88.7	89.0	89.4	3,912
Province														
Eastern	1.7	1.7	1.1	1,104	0.1	1,075	0.1	1,085	0.0	1,075	97.3	98.2	97.4	1,104
Northern	11.2	11.2	1.0	1,363	1.2	1,209	0.9	1,210	0.3	1,209	87.6	88.0	88.4	1,363
North West	26.2	26.1	2.4	1,063	1.4	783	1.1	785	0.5	784	72.6	73.0	73.4	1,063
Southern	2.7	2.7	0.5	1,396	1.1	1,357	1.5	1,358	0.2	1,357	96.1	95.8	97.0	1,396
Western Area	7.6	7.5	0.3	630	4.3	582	4.6	582	0.2	583	88.4	88.1	92.4	630
District														
Kailahun	2.2	2.2	0.0	313	0.0	306	0.0	306	0.0	306	97.8	97.8	97.8	313
Kenema	1.1	1.1	0.0	444	0.2	439	0.0	439	0.0	439	98.6	98.9	98.9	444
Kono	2.0	2.0	3.5	347	0.0	330	0.3	340	0.0	330	95.1	97.7	95.1	347
Bombali	13.1	13.1	0.5	413	0.3	359	0.8	359	0.3	359	86.7	86.2	86.7	413
Falaba	11.7	11.7	1.8	281	0.4	248	0.8	248	0.0	248	87.9	87.5	88.3	281
Koinadugu	20.0	20.0	1.5	265	2.8	212	0.9	212	0.0	212	77.7	79.2	80.0	265
Tonkolili	3.2	3.2	0.5	404	1.8	390	1.0	391	0.8	390	94.8	95.8	95.8	404
Kambia	31.5	31.3	0.0	371	3.1	254	2.4	254	1.2	255	66.3	66.8	67.9	371
Karene	28.6	28.6	5.8	294	1.0	209	1.0	210	0.0	209	70.4	70.7	71.1	294
Port Loko	19.3	19.3	2.3	398	0.3	320	0.3	321	0.3	320	80.2	80.4	80.2	398
Bo	0.5	0.5	0.0	387	0.8	385	0.8	385	0.0	385	98.7	98.7	99.5	387
Bonthe	2.6	2.6	0.0	302	0.0	294	1.4	294	0.0	294	97.4	96.0	97.4	302
Moyamba	5.0	5.0	1.8	398	1.3	377	1.3	378	0.3	377	93.5	93.7	94.5	398
Pujehun	2.6	2.6	0.0	309	2.3	301	3.0	301	0.7	301	95.1	94.5	96.8	309
Western Area Rural	10.9	10.5	0.0	313	3.2	279	2.5	279	0.0	280	86.3	86.9	89.5	313
Western Area Urban	4.4	4.4	0.6	317	5.3	303	6.6	303	0.3	303	90.5	89.3	95.3	317
Mother's education														
No education	10.4	10.4	1.0	2,684	1.5	2,400	1.3	2,405	0.3	2,400	88.1	88.5	89.2	2,684
Primary	6.3	6.1	0.6	687	2.0	644	1.9	644	0.6	645	91.8	92.0	93.3	687
Secondary	7.8	7.8	0.2	1,199	1.3	1,105	1.4	1,106	0.2	1,105	91.0	90.9	92.0	1,199
More than secondary	4.3	4.3	0.9	117	1.8	112	1.8	112	0.0	112	94.0	94.0	95.7	117
Total	9.6	9.6	1.1	5,556	1.3	5,006	1.4	5,020	0.2	5,008	88.9	89.1	89.9	5,556

[1] Child's height in centimetres is missing, child was not present, child refused, and "other" result codes
[2] Child's weight in kilogrammes is missing, child was not present, child refused, and "other" result codes
[3] Incomplete date of birth; a complete date of birth is month/day/year or month/year.
[4] Cases with missing or incomplete data are not considered to be out-of-range cases.
[5] Out-of-range cases for height-for-age are defined as more than 6 standard deviations (SD) above or below the standard population median (Z-scores) based on the WHO Child Growth Standards.
[6] Complete age is calculated from month and year of birth.
[7] Out-of-range cases for weight-for-height are defined as more than 5 SD above or below the standard population median (Z-scores) based on the WHO Child Growth Standards among children with complete weight and height data.
[8] Out-of-range cases for weight-for-age are defined as more than 6 SD below or 5 SD above the standard population median (Z-scores) based on the WHO Child Growth Standards among children with complete weight and month/year of birth data.
[9] No missing data, incomplete data, or out-of-range data
[10] Includes children whose mothers are deceased

Table C.9 Height measurements from random subsample of measured children

Differences in first height measurement and second height measurement among children under age 5 (0-59 months) randomly selected and remeasured, according to province, district, and team (unweighted), Sierra Leone DHS 2019

Background characteristic	Median difference in height measurements[1]	Maximum difference in height measurements	Percentage of height measurements with a difference >1 cm	Measurers' precision[2]	Number of children randomly selected and remeasured
Province					
Eastern	0.1	0.7	0.0	0.1	151
Northern	0.2	22.0	1.1	1.3	179
North West	0.1	14.9	3.1	1.2	131
Southern	0.2	22.1	3.5	1.2	172
Western Area	0.2	60.0	4.3	3.9	116
District					
Kailahun	0.0	0.0	0.0	0.1	47
Kenema	0.1	0.0	0.0	0.1	48
Kono	0.2	0.0	0.0	0.1	56
Bombali	0.1	0.0	0.0	0.1	45
Falaba	0.2	0.0	0.0	0.1	35
Koinadugu	0.2	0.0	0.0	0.1	40
Tonkolili	0.2	0.0	3.4	2.2	59
Kambia	0.1	0.0	2.3	1.6	43
Karene	0.0	0.0	0.0	0.1	33
Port Loko	0.2	0.0	5.5	1.3	55
Bo	0.1	1.4	1.8	2.1	57
Bonthe	0.1	22.0	0.0	0.1	32
Moyamba	0.2	14.9	2.3	0.2	44
Pujehun	0.3	0.0	10.3	0.4	39
Western Area Rural	0.1	0.0	8.3	6.1	48
Western Area Urban	0.2	0.0	1.5	0.3	68
Team					
Team 1	0.2	0.6	0.0	0.1	33
Team 2	0.2	60.0	6.7	7.8	30
Team 3	0.1	1.1	6.5	0.2	31
Team 4	0.1	0.1	0.0	0.1	28
Team 5	0.0	1.0	0.0	0.1	28
Team 6	0.4	2.0	6.9	0.4	29
Team 7	0.2	2.0	10.7	0.4	28
Team 8	0.0	0.1	0.0	0.0	29
Team 9	0.1	0.7	0.0	0.1	33
Team 10	0.1	22.0	2.9	2.7	34
Team 11	0.2	0.3	0.0	0.1	33
Team 12	0.1	22.1	3.0	2.7	33
Team 13	0.1	0.2	0.0	0.1	31
Team 14	0.2	9.2	2.3	1.0	44
Team 15	0.1	0.5	0.0	0.1	25
Team 16	0.2	1.4	2.9	0.2	34
Team 17	0.2	0.2	0.0	0.1	30
Team 18	0.2	0.9	0.0	0.2	31
Team 19	0.1	0.4	0.0	0.1	31
Team 20	0.0	0.5	0.0	0.1	26
Team 21	0.0	1.0	0.0	0.1	32
Team 22	0.1	0.2	0.0	0.1	31
Team 23	0.2	14.9	2.9	1.8	35
Team 24	0.4	10.0	10.0	1.7	30
Total	0.2	60.0	2.3	1.8	749

[1] Median absolute difference between measurers' first and second height measurements
[2] Measurers' precision defined as technical error of measurement, which is calculated as $\sqrt{\sum[(D2)/2N]}$, where D is the difference in height and N is the number of repeat measurements.

Table C.10 Sibship size and sex ratio of siblings

Mean sibship size and sex ratio of siblings at birth, Sierra Leone DHS 2019

Age of respondents	Mean sibship size[1]	Sex ratio of siblings at birth[2]
15-19	5.0	96.6
20-24	5.2	98.2
25-29	5.3	99.8
30-34	5.1	98.7
35-39	5.2	91.1
40-44	5.1	95.8
45-49	5.0	104.0
Total	5.1	97.4

[1] Includes the respondent
[2] Excludes the respondent

Table C.11 Pregnancy-related mortality trends

Direct estimates of pregnancy-related mortality rates for the 7 years preceding eacht survey, by 5-year age groups, Sierra Leone DHS 2019

	Pregnancy-related mortality rates[1,2]	
Age	2019 SLDHS (2012-2019)	2008 SLDHS (2001-2008)
15-19	0.63	1.72
20-24	0.98	1.45
25-29	1.12	1.51
30-34	1.49	2.35
35-39	1.92	1.22
40-44	1.27	0.88
45-49	0.65	0.51
Total 15-49	1.12[a]	1.48[a]
Total fertility rate (TFR)	4.5	5.1
General fertility rate (GFR)[3]	141	180
Pregnancy-related mortality ratio (PRMR)[4]	796	857
Confidence interval	(632, 960)	(615, 1,099)
Lifetime risk of pregnancy-related death[5]	0.035	0.045

[1] Pregnancy-related mortality is defined as the death of a woman while pregnant or within 2 months of termination of pregnancy, from any cause including accidents or violence.
[2] Expressed per 1,000 women-years of exposure
[3] Age-adjusted rate, expressed per 1,000 women age 15-49
[4] Expressed per 100,000 live births; calculated as the age-adjusted pregnancy-related mortality rate times 100 divided by the age-adjusted general fertility rate
[5] Calculated as $1-(1-PRMR)^{TFR}$, where TFR represents the total fertility rate for the 7 years preceding the survey
[a] Age-adjusted rate

Table C.12 Completeness of information on siblings

Completeness of data on survival status of sisters and brothers reported by interviewed women, age of living siblings, and age at death (AD) and years since death (YSD) of dead siblings (unweighted), Sierra Leone DHS 2019

	Sisters		Brothers		All siblings	
	Number	Percent	Number	Percent	Number	Percent
All siblings	32,299	100.0	31,683	100.0	63,982	100.0
Living	28,363	87.8	27,274	86.1	55,637	87.0
Dead	3,930	12.2	4,398	13.9	8,328	13.0
Survival status unknown	6	0.0	11	0.0	17	0.0
Living siblings	28,363	100.0	27,274	100.0	55,637	100.0
Age reported	28,363	100.0	27,274	100.0	55,637	100.0
Dead siblings	3,930	100.0	4,398	100.0	8,328	100.0
AD and YSD reported	3,930	100.0	4,398	100.0	8,328	100.0

PERSONS INVOLVED IN THE 2019 SIERRA LEONE DEMOGRAPHIC AND HEALTH SURVEY

Appendix D

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Hawanatu Kamara
Michael Duramany
Samuel Kotay Sesay
Konah Darl Lebbie
Henry Conteh
Brima Papa Conteh
Lahai Koroma
Tejan Tarawally
Alice Sia Yambasu
Florence Gbassay Kargbo
Mashiatu S. Conteh
Momoh Vandi
Bridget Kanu
Isatu T. Johnny
Theophilus Amadu Fofanah
Karifala Koroma
Sulaiman Turay
Idrissa Kargbo
Patrick Kaimasa Swaray
Christian Lebbie
Joseph Sam-Row (Jr.)
Mohamed Fofanah
Mohamed Bangura
Paul B. Fandewo
Sallieu Koroma
Komba Kongomanyi
Kandeh Kinetic Kargbo
Alimamy Sesay
Albert Max Thornton
Hassan A. Dawoh
Yusif Kanu
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Susan Turay

Logistics Supervisors

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Nyakeh Sundifu
Mohamed Leigh
Augustine Soko Koroma
Philip Robert
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Mohamed Kapry Kamara
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James M. Minah
James Ahmed Sesay
Ernest H. Tommy
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Mansaray Abubakarr Tejan
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Amadu Mansaray
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Annie J. Lappia
Mahawa Bai Kamara
Jaminatu Kornya Boima
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Leolina Anglo
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Rhoda Doherty
Abibatu Tamu
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Isata M. Bangura
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Rosalyn A. Ngenneh
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Florence Jenneh Sandy
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Siatta Kpaka
Henrietta Mansaray
Nasratu Sesay
Jiwai Dukullay
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Mariama Bailor Bah
Fatmata Lamrana Jalloh
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Janet Raymond
Hannah M. Jonah
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Phebian P. Williams
Fatmata Sesay
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Zainab Mayo Koroma
Zainab Mabinty Koroma
Christiana Fewry
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Salamatu J. Sessay
Rosaline F. Kamara
Eric Henry Jusu
Catherine M. Gbla
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Patricia Moriba
Kadijatu Bah
Alexa Sahr Demby
Alex A. Fofanah
Isata Kabia
Thaimu Tarawally
Aminata K. Lansana
Mariama T. Tarawally
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Esther Conteh
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Rugiatu Bangura
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Samualla Jenneba Ansumana
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Martin S. Kamanda
Isata H. Bangura
Abdul James
James Marah
Momodu Conteh
Kadijatu C. Kargbo
Aminata Tina Kainessie
Alpha Bunduka
Jenneh M. Kamara
Sheku Sesay
Hawa Turay
Albert B. Conteh
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Shadrach Bassie
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Marion S. Kamara
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QUESTIONNAIRES

Appendix **E**

FORMATTING DATE: 16 Mar 2017
ENGLISH LANGUAGE: 19 Feb 2018

SIERRA LEONE DEMOGRAPHIC AND HEALTH SURVEY 2019
HOUSEHOLD QUESTIONNAIRE

SIERRA LEONE
STATISTICS SIERRA LEONE

IDENTIFICATION

LOCALITY NAME _____

LOCAL COUNCIL _____

NAME OF HOUSEHOLD HEAD _____

DISTRICT CODE . . . . . [ ][ ]

PROVINCE NAME AND CODE _____ [ ]

CHIEFDOM CODE . . . . . [ ][ ][ ]

SECTION CODE . . . . . [ ][ ]

CLUSTER NUMBER . . . . . [ ][ ][ ]

ENUMERATION AREA CODE . . . . . [ ][ ]

RURAL(1)/URBAN(2) . . . . . [ ]

HOUSEHOLD NUMBER . . . . . [ ][ ][ ]

HOUSEHOLD SELECTED FOR MAN'S SURVEY? (1=YES, 2=NO) . . . . . [ ]

INTERVIEWER VISITS

	1	2	3	FINAL VISIT
DATE	_____	_____	_____	DAY [ ][ ]
				MONTH [ ][ ]
				YEAR [ ][ ]
INTERVIEWER'S NAME	_____	_____	_____	INT. NO. [ ][ ]
RESULT*	_____	_____	_____	RESULT* [ ]
NEXT VISIT: DATE	_____	_____		TOTAL NUMBER OF VISITS [ ]
TIME	_____	_____		

*RESULT CODES:

1 COMPLETED
2 NO HOUSEHOLD MEMBER AT HOME OR NO COMPETENT RESPONDENT AT HOME AT TIME OF VISIT
3 ENTIRE HOUSEHOLD ABSENT FOR EXTENDED PERIOD OF TIME
4 POSTPONED
5 REFUSED
6 DWELLING VACANT OR ADDRESS NOT A DWELLING
7 DWELLING DESTROYED
8 DWELLING NOT FOUND
9 OTHER _____ (SPECIFY)

TOTAL PERSONS IN HOUSEHOLD [ ][ ]

TOTAL ELIGIBLE WOMEN [ ][ ]

TOTAL ELIGIBLE MEN [ ][ ]

LINE NO. OF RESPONDENT TO HOUSEHOLD QUESTIONNAIRE [ ][ ]

TOTAL ELIGIBLE GIRLS [ ][ ]

LANGUAGE OF QUESTIONNAIRE** [0][1] LANGUAGE OF INTERVIEW** [ ][ ] NATIVE LANGUAGE OF RESPONDENT** [ ][ ] TRANSLATOR USED (YES = 1, NO = 2) [ ]

LANGUAGE OF QUESTIONNAIRE** **ENGLISH**

**LANGUAGE CODES:
01 ENGLISH 03 TEMNE 05 LIMBA
02 KRIO 04 MENDE 06 OTHER

SUPERVISOR		FIELD EDITOR		OFFICE EDITOR	KEYED BY
NAME	NUMBER	NAME	NUMBER	NUMBER	NUMBER
_____	[ ][ ][ ][ ]	_____	[ ][ ][ ][ ]	[ ][ ]	[ ][ ]

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INTRODUCTION AND CONSENT

Hello. My name is _____. I am working with Statistics Sierra Leone. We are conducting a survey about health and other topics all over Sierra Leone. The information we collect will help the government to plan health services. Your household was selected for the survey. I would like to ask you some questions about your household. The questions usually take about 15 to 20 minutes. All of the answers you give will be confidential and will not be shared with anyone other than members of our survey team. You don't have to be in the survey, but we hope you will agree to answer the questions since your views are important. If I ask you any question you don't want to answer, just let me know and I will go on to the next question or you can stop the interview at any time. In case you need more information about the survey, you may contact the person listed on this card.

GIVE CARD WITH CONTACT INFORMATION

Do you have any questions?
May I begin the interview now?

SIGNATURE OF INTERVIEWER _____ DATE _____

RESPONDENT AGREES TO BE INTERVIEWED . . 1 ↓

RESPONDENT DOES NOT AGREE TO BE INTERVIEWED . . 2 → END

100	RECORD THE TIME.	HOURS . . . . . MINUTES . . . . .

HOUSEHOLD SCHEDULE

							IF AGE 15 OR OLDER			
LINE NO.	USUAL RESIDENTS AND VISITORS	RELATIONSHIP TO HEAD OF HOUSEHOLD	SEX	RESIDENCE		AGE	MARITAL STATUS	ELIGIBILITY		
1	2	3	4	5	6	7	8	9	10	11
	Please give me the names of the persons who usually live in your household and guests of the household who stayed here last night, starting with the head of the household. AFTER LISTING THE NAMES AND RECORDING THE RELATIONSHIP AND SEX FOR EACH PERSON, ASK QUESTIONS 2A-2C TO BE SURE THAT THE LISTING IS COMPLETE. THEN ASK APPROPRIATE QUESTIONS IN COLUMNS 5-20 FOR EACH PERSON.	What is the relationship of (NAME) to the head of the household? SEE CODES BELOW.	Is (NAME) male or female?	Does (NAME) usually live here?	Did (NAME) stay here last night?	How old is (NAME)? IF 95 OR MORE, RECORD '95'.	What is (NAME)'s current marital status? 1 = MARRIED OR LIVING TOGETHER 2 = DIVORCED/ SEPARATED 3 = WIDOWED 4 = NEVER-MARRIED AND NEVER LIVED TOGETHER	CIRCLE LINE NUMBER OF ALL WOMEN AGE 15-49	**IF HOUSE-HOLD SELEC-TED FOR MAN'S SURVEY** CIRCLE LINE NUMBER OF ALL MEN AGE 15-59	CIRCLE LINE NUMBER OF ALL CHILDREN AGE 0-5
01			M F 1 2	Y N 1 2	Y N 1 2	IN YEARS		01	01	01
02			1 2	1 2	1 2			02	02	02
03			1 2	1 2	1 2			03	03	03
04			1 2	1 2	1 2			04	04	04
05			1 2	1 2	1 2			05	05	05
06			1 2	1 2	1 2			06	06	06
07			1 2	1 2	1 2			07	07	07
08			1 2	1 2	1 2			08	08	08
09			1 2	1 2	1 2			09	09	09
10			1 2	1 2	1 2			10	10	10

2A) Just to make sure that I have a complete listing: are there any other people such as small children or infants that we have not listed?	YES → ADD TO TABLE	NO
2B) Are there any other people who may not be members of your family, such as domestic servants, lodgers, or friends who usually live here?	YES → ADD TO TABLE	NO
2C) Are there any guests or temporary visitors staying here, or anyone else who stayed here last night, who have not been listed?	YES → ADD TO TABLE	NO

CODES FOR Q. 3: RELATIONSHIP TO HEAD OF HOUSEHOLD

01 = HEAD
02 = WIFE OR HUSBAND
03 = SON OR DAUGHTER
04 = SON-IN-LAW OR DAUGHTER-IN-LAW
05 = GRANDCHILD
06 = PARENT
07 = PARENT-IN-LAW
08 = BROTHER OR SISTER
09 = BROTHER-IN-LAW/SISTER-IN LAW
10 = NIECE/NEPHEW BY BLOOD
11 = NIECE/NEPHEW BY MARRIAGE
12 = OTHER RELATIVE
13 = ADOPTED/FOSTER/ STEPCHILD
14 = NOT RELATED
15 = CO-WIFE
98 = DON'T KNOW

HOUSEHOLD SCHEDULE

	IF AGE 0-17 YEARS				IF AGE 5 YEARS OR OLDER		IF AGE 5-24 YEARS		IF AGE 0-4 YEARS
LINE NO.	SURVIVORSHIP AND RESIDENCE OF BIOLOGICAL PARENTS				EVER ATTENDED SCHOOL		CURRENT/RECENT SCHOOL ATTENDANCE		BIRTH REGISTRATION
	12	13	14	15	16	17	18	19	20
	Is (NAME)'s natural mother alive?	Does (NAME)'s natural mother usually live in this household or was she a guest last night? IF YES: What RECORD MOTHER'S LINE NUMBER. IF NO, RECORD '00'.	Is (NAME)'s natural father alive?	Does (NAME)'s natural father usually live in this household or was he a guest last night? IF YES: What RECORD FATHER'S LINE NUMBER. IF NO, RECORD '00'.	Has (NAME) ever attended school?	What is the highest level of school (NAME) has attended? What is the highest grade (NAME) completed at that level? SEE CODES BELOW.	Did (NAME) attend school at any time during the 2018-2019 school year?	During [this/that] school year, what level and grade [is/was] (NAME) attending? SEE CODES BELOW.	Does (NAME) have a birth certificate? IF NO, PROBE: Has (NAME)'s birth ever been registered with the civil authority? 1 = HAS CERTIFICATE 2 = REGISTERED 3 = NEITHER 8 = DON'T KNOW
01	Y N DK 1 2 8 GO TO 14		Y N DK 1 2 8 GO TO 16		Y N 1 2 NEXT LINE	LEVEL GRADE	Y N 1 2 NEXT LINE	LEVEL GRADE	
02	1 2 8 GO TO 14		1 2 8 GO TO 16		1 2 NEXT LINE		1 2 NEXT LINE		
03	1 2 8 GO TO 14		1 2 8 GO TO 16		1 2 NEXT LINE		1 2 NEXT LINE		
04	1 2 8 GO TO 14		1 2 8 GO TO 16		1 2 NEXT LINE		1 2 NEXT LINE		
05	1 2 8 GO TO 14		1 2 8 GO TO 16		1 2 NEXT LINE		1 2 NEXT LINE		
06	1 2 8 GO TO 14		1 2 8 GO TO 16		1 2 NEXT LINE		1 2 NEXT LINE		
07	1 2 8 GO TO 14		1 2 8 GO TO 16		1 2 NEXT LINE		1 2 NEXT LINE		
08	1 2 8 GO TO 14		1 2 8 GO TO 16		1 2 NEXT LINE		1 2 NEXT LINE		
09	1 2 8 GO TO 14		1 2 8 GO TO 16		1 2 NEXT LINE		1 2 NEXT LINE		
10	1 2 8 GO TO 14		1 2 8 GO TO 16		1 2 NEXT LINE		1 2 NEXT LINE		

CODES FOR Qs. 17 AND 19: EDUCATION

LEVEL
0 = PRESCHOOL
1 = PRIMARY
2 = JSS (MIDDLE SCHOOL)
3 = SSS (HIGH SCHOOL)
4 = VOCATIONAL/TECH/NURSING/TEACHER
5 = HIGHER
8 = DON'T KNOW

GRADE
00 = LESS THAN 1 YEAR COMPLETED
1-6
1-3
1-3
1-3
1-7*

(USE '00' FOR Q. 17 ONLY. THIS CODE IS NOT ALLOWED FOR Q. 19.)
98 = DON'T KNOW

***FOR `HIGHER' TOTAL THE NUMBER OF YEARS A**
THE POST-SECONDARY LEVEL

HOUSEHOLD SCHEDULE

							IF AGE 15 OR OLDER			
LINE NO.	USUAL RESIDENTS AND VISITORS	RELATIONSHIP TO HEAD OF HOUSEHOLD	SEX	RESIDENCE		AGE	MARITAL STATUS	ELIGIBILITY		
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**
	Please give me the names of the persons who usually live in your household and guests of the household who stayed here last night, starting with the head of the household. AFTER LISTING THE NAMES AND RECORDING THE RELATIONSHIP AND SEX FOR EACH PERSON, ASK QUESTIONS 2A-2C TO BE SURE THAT THE LISTING IS COMPLETE. THEN ASK APPROPRIATE QUESTIONS IN COLUMNS 5-20 FOR EACH PERSON.	What is the relationship of (NAME) to the head of the household? SEE CODES BELOW.	Is (NAME) male or female? M F 1 2	Does (NAME) usually live here? Y N 1 2	Did (NAME) stay here last night? Y N 1 2	How old is (NAME)? IN YEARS IF 95 OR MORE, RECORD '95'.	What is (NAME)'s current marital status? 1 = MARRIED OR LIVING TOGETHER 2 = DIVORCED/ SEPARATED 3 = WIDOWED 4 = NEVER-MARRIED AND NEVER LIVED TOGETHER	CIRCLE LINE NUMBER OF ALL WOMEN AGE 15-49	**IF HOUSE-HOLD SELEC-TED FOR MAN'S SURVEY** CIRCLE LINE NUMBER OF ALL MEN AGE 15-59	CIRCLE LINE NUMBER OF ALL CHILDREN AGE 0-5
11			1 2	1 2	1 2			11	11	11
12			1 2	1 2	1 2			12	12	12
13			1 2	1 2	1 2			13	13	13
14			1 2	1 2	1 2			14	14	14
15			1 2	1 2	1 2			15	15	15
16			1 2	1 2	1 2			16	16	16
17			1 2	1 2	1 2			17	17	17
18			1 2	1 2	1 2			18	18	18
19			1 2	1 2	1 2			19	19	19
20			1 2	1 2	1 2			20	20	20

TICK HERE IF CONTINUATION SHEET USED ☐

CODES FOR Q. 3: RELATIONSHIP TO HEAD OF HOUSEHOLD

01 = HEAD
02 = WIFE OR HUSBAND
03 = SON OR DAUGHTER
04 = SON-IN-LAW OR DAUGHTER-IN-LAW
05 = GRANDCHILD
06 = PARENT
07 = PARENT-IN-LAW
08 = BROTHER OR SISTER
09 = BROTHER-IN-LAW/SISTER-IN LAW
10 = NIECE/NEPHEW BY BLOOD
11 = NIECE/NEPHEW BY MARRIAGE
12 = OTHER RELATIVE
13 = ADOPTED/FOSTER/ STEPCHILD
14 = NOT RELATED
15 = CO-WIFE
98 = DON'T KNOW

HOUSEHOLD SCHEDULE

	IF AGE 0-17 YEARS				IF AGE 5 YEARS OR OLDER		IF AGE 5-24 YEARS		IF AGE 0-4 YEARS
LINE NO.	SURVIVORSHIP AND RESIDENCE OF BIOLOGICAL PARENTS				EVER ATTENDED SCHOOL		CURRENT/RECENT SCHOOL ATTENDANCE		BIRTH REGISTRATION
	12	13	14	15	16	17	18	19	20
	Is (NAME)'s natural mother alive?	Does (NAME)'s natural mother usually live in this household or was she a guest last night? IF YES: What RECORD MOTHER'S LINE NUMBER. IF NO, RECORD '00'.	Is (NAME)'s natural father alive?	Does (NAME)'s natural father usually live in this household or was he a guest last night? IF YES: What RECORD FATHER'S LINE NUMBER. IF NO, RECORD '00'.	Has (NAME) ever attended school?	What is the highest level of school (NAME) has attended? What is the highest grade (NAME) completed at that level? SEE CODES BELOW.	Did (NAME) attend school at any time during the 2018-2019 school year?	During [this/that] school year, what level and grade [is/was] (NAME) attending? SEE CODES BELOW.	Does (NAME) have a birth certificate? IF NO, PROBE: Has (NAME)'s birth ever been registered with the civil authority? 1 = HAS CERTIFICATE 2 = REGISTERED 3 = NEITHER 8 = DON'T KNOW
11	Y N DK 1 2 8 GO TO 14		Y N DK 1 2 8 GO TO 16		Y N 1 2 NEXT LINE	LEVEL GRADE	Y N 1 2 NEXT LINE	LEVEL GRADE	
12	1 2 8 GO TO 14		1 2 8 GO TO 16		1 2 NEXT LINE		1 2 NEXT LINE		
13	1 2 8 GO TO 14		1 2 8 GO TO 16		1 2 NEXT LINE		1 2 NEXT LINE		
14	1 2 8 GO TO 14		1 2 8 GO TO 16		1 2 NEXT LINE		1 2 NEXT LINE		
15	1 2 8 GO TO 14		1 2 8 GO TO 16		1 2 NEXT LINE		1 2 NEXT LINE		
16	1 2 8 GO TO 14		1 2 8 GO TO 16		1 2 NEXT LINE		1 2 NEXT LINE		
17	1 2 8 GO TO 14		1 2 8 GO TO 16		1 2 NEXT LINE		1 2 NEXT LINE		
18	1 2 8 GO TO 14		1 2 8 GO TO 16		1 2 NEXT LINE		1 2 NEXT LINE		
19	1 2 8 GO TO 14		1 2 8 GO TO 16		1 2 NEXT LINE		1 2 NEXT LINE		
20	1 2 8 GO TO 14		1 2 8 GO TO 16		1 2 NEXT LINE		1 2 NEXT LINE		

CODES FOR Qs. 17 AND 19: EDUCATION

LEVEL
0 = PRESCHOOL
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GRADE
00 = LESS THAN 1 YEAR COMPLETED
1-6
1-3
1-3
1-3
1-7*

(USE '00' FOR Q. 17 ONLY. THIS CODE IS NOT ALLOWED FOR Q. 19.)
98 = DON'T KNOW

***FOR `HIGHER' TOTAL THE NUMBER OF YEARS AT THE POST-SECONDARY LEVEL**

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
101	What is the main source of drinking water for members of your household?	**PIPED WATER** PIPED INTO DWELLING . . . . . 11 PIPED TO YARD/PLOT . . . . . 12 PIPED TO NEIGHBOR . . . . . 13 PUBLIC TAP/STANDPIPE . . . . . 14 TUBE WELL OR BOREHOLE . . . . . 21 **DUG WELL** PROTECTED WELL . . . . . 31 UNPROTECTED WELL . . . . . 32 **WATER FROM SPRING** PROTECTED SPRING . . . . . 41 UNPROTECTED SPRING . . . . . 42 RAINWATER . . . . . 51 TANKER TRUCK . . . . . 61 CART WITH SMALL TANK . . . . . 71 SURFACE WATER (RIVER/DAM/ LAKE/POND/STREAM/CANAL/ IRRIGATION CHANNEL) . . . . . 81 BOTTLED WATER . . . . . 91 SACHET WATER . . . . . 92 OTHER _____ 96 (SPECIFY)	→ 106 → 103 → 103
102	What is the main source of water used by your household for other purposes such as cooking and handwashing?	**PIPED WATER** PIPED INTO DWELLING . . . . . 11 PIPED TO YARD/PLOT . . . . . 12 PIPED TO NEIGHBOR . . . . . 13 PUBLIC TAP/STANDPIPE . . . . . 14 TUBE WELL OR BOREHOLE . . . . . 21 **DUG WELL** PROTECTED WELL . . . . . 31 UNPROTECTED WELL . . . . . 32 **WATER FROM SPRING** PROTECTED SPRING . . . . . 41 UNPROTECTED SPRING . . . . . 42 RAINWATER . . . . . 51 TANKER TRUCK . . . . . 61 CART WITH SMALL TANK . . . . . 71 SURFACE WATER (RIVER/DAM/ LAKE/POND/STREAM/CANAL/ IRRIGATION CHANNEL) . . . . . 81 OTHER _____ 96 (SPECIFY)	→ 106
103	Where is that water source located?	IN OWN DWELLING . . . . . 1 IN OWN YARD/PLOT . . . . . 2 ELSEWHERE 3	→ 105
104	How long does it take to go there, get water, and come back?	MINUTES . . . . . ☐☐☐ DON'T KNOW 998	
105	CHECK 101 AND 102: CODE '14' OR '21' CIRCLED? YES ☐ ↓ NO ☐ →		→ 107

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
106	In the past two weeks, was the water from this source not available for at least one full day?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
107	Do you do anything to the water to make it safer to drink?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 109
108	What do you usually do to make the water safer to drink? Anything else? RECORD ALL MENTIONED.	BOIL . . . . . A ADD BLEACH/CHLORINE . . . . . B STRAIN THROUGH A CLOTH . . . . . C USE WATER FILTER (CERAMIC/ SAND/COMPOSITE/ETC) . . . . . D SOLAR DISINFECTION . . . . . E LET IT STAND AND SETTLE . . . . . F OTHER _____ X (SPECIFY) DON'T KNOW . . . . . Z	
109	What kind of toilet facility do members of your household usually use? IF NOT POSSIBLE TO DETERMINE, ASK PERMISSION TO OBSERVE THE FACILITY.	**FLUSH OR POUR FLUSH TOILET** FLUSH TO PIPED SEWER SYSTEM . . . . . 11 FLUSH TO SEPTIC TANK . . . . . 12 FLUSH TO PIT LATRINE . . . . . 13 FLUSH TO SOMEWHERE ELSE . . . . . 14 FLUSH, DON'T KNOW WHERE . . . . . 15 **PIT LATRINE** VENTILATED IMPROVED PIT LATRINE . . . . . 21 PIT LATRINE WITH SLAB . . . . . 22 PIT LATRINE WITHOUT SLAB/OPEN PIT . . . . . 23 COMPOSTING TOILET . . . . . 31 BUCKET TOILET . . . . . 41 HANGING TOILET/HANGING LATRINE . . . . . 51 NO FACILITY/BUSH/FIELD . . . . . 61 OTHER _____ 96 (SPECIFY)	→ 113
110	Do you share this toilet facility with other households?	YES . . . . . 1 NO 2	→ 112
111	Including your own household, how many households use this toilet facility?	NO. OF HOUSEHOLDS IF LESS THAN 10 . . . . . 0 ☐ 10 OR MORE HOUSEHOLDS . . . . . 95 DON'T KNOW 98	
112	Where is this toilet facility located?	IN OWN DWELLING . . . . . 1 IN OWN YARD/PLOT . . . . . 2 ELSEWHERE 3	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
113	What type of fuel does your household mainly use for cooking?	ELECTRICITY . . . . . 01 LPG . . . . . 02 NATURAL GAS . . . . . 03 BIOGAS . . . . . 04 KEROSENE . . . . . 05 COAL, LIGNITE . . . . . 06 CHARCOAL . . . . . 07 WOOD . . . . . 08 STRAW/SHRUBS/GRASS . . . . . 09 AGRICULTURAL CROP . . . . . 10 ANIMAL DUNG . . . . . 11 NO FOOD COOKED IN HOUSEHOLD . . . . . 95 OTHER _____ 96 (SPECIFY)	→ 116
114	Is the cooking usually done in the house, in a separate building, or outdoors?	IN THE HOUSE . . . . . 1 IN A SEPARATE BUILDING . . . . . 2 OUTDOORS . . . . . 3 OTHER _____ 6 (SPECIFY)	→ 116
115	Do you have a separate room which is used as a kitchen?	YES . . . . . 1 NO 2	
116	How many rooms in this household are used for sleeping?	ROOMS	
117	Does this household own any livestock, herds, other farm animals, or poultry?	YES . . . . . 1 NO 2	→ 119
118	How many of the following animals does this household own? IF NONE, RECORD '00'. IF 95 OR MORE, RECORD '95'. IF UNKNOWN, RECORD '98'. a) Milk cows or bulls? b) Other cattle? c) Horses, donkeys, or mules? d) Goats? e) Sheep? f) Chickens or other poultry?	a) COWS/BULLS . . . . . b) OTHER CATTLE . . . . . c) HORSES/DONKEYS/MULES . . . . . d) GOATS . . . . . e) SHEEP . . . . . f) CHICKENS/POULTRY	
119	Does any member of this household own any agricultural land?	YES . . . . . 1 NO 2	→ 121
120	How many hectares of agricultural land do members of this household own? IF 95 OR MORE, CIRCLE '950'.	HECTARES . . . . 95 OR MORE HECTARES . . . . . 950 DON'T KNOW 998	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
121	Does your household have: a) Electricity? b) A radio? c) A television? d) A non-mobile telephone? e) A computer? f) A refrigerator?	YES NO a) ELECTRICITY . . . . . 1 2 b) RADIO . . . . . 1 2 c) TELEVISION . . . . . 1 2 d) NON-MOBILE TELEPHONE . . 1 2 e) COMPUTER . . . . . 1 2 f) REFRIGERATOR 1 2	
122	Does any member of this household own: a) A watch? b) A mobile phone? c) A bicycle? d) A motorcycle or motor scooter? e) An animal-drawn cart? f) A car or truck? g) A boat with a motor?	YES NO a) WATCH . . . . . 1 2 b) MOBILE PHONE . . . . . 1 2 c) BICYCLE . . . . . 1 2 d) MOTORCYCLE/SCOOTER . . . . . 1 2 e) ANIMAL-DRAWN CART . . . . . 1 2 f) CAR/TRUCK . . . . . 1 2 g) BOAT WITH MOTOR 1 2	
123	Does any member of this household have a bank account?	YES . . . . . 1 NO 2	
124	How often does anyone smoke inside your house? Would you say daily, weekly, monthly, less often than once a month, or never?	DAILY . . . . . 1 WEEKLY . . . . . 2 MONTHLY . . . . . 3 LESS OFTEN THAN ONCE A MONTH . . . . . 4 NEVER 5	
127	Does your household have any mosquito nets?	YES . . . . . 1 NO 2	→ 139
128	How many mosquito nets does your household have? IF 7 OR MORE NETS, RECORD '7'.	NUMBER OF NETS . . . . . ☐	

		NET #1	NET #2	NET #3
129	ASK THE RESPONDENT TO SHOW YOU ALL THE NETS IN THE HOUSEHOLD. IF MORE THAN 3 NETS, USE ADDITIONAL QUESTIONNAIRE(S).	OBSERVED . . . . 1 NOT OBSERVED 2	OBSERVED . . . . 1 NOT OBSERVED 2	OBSERVED . . . . 1 NOT OBSERVED 2
130	How many months ago did your household get the mosquito net? IF LESS THAN ONE MONTH AGO, RECORD '00'.	MONTHS AGO . . . . . [ ][ ] MORE THAN 36 MONTHS AGO . . . . . 95 NOT SURE 98	MONTHS AGO . . . . . [ ][ ] MORE THAN 36 MONTHS AGO . . . . . 95 NOT SURE 98	MONTHS AGO . . . . . [ ][ ] MORE THAN 36 MONTHS AGO . . . . . 95 NOT SURE 98
131	OBSERVE OR ASK BRAND/TYPE OF MOSQUITO NET. IF BRAND IS UNKNOWN AND YOU CANNOT OBSERVE THE NET, SHOW PICTURES OF TYPICAL NET TYPES/BRANDS TO RESPONDENT.	**LONG-LASTING INSECTICIDE-TREATED NET (LLIN)** PERMANET. . . . . 11 OLYSET . . . . 12 DURANET .... 13 OTHER/DON . . . . BRAND 16 OTHER TYPE . . . . 96 DON'T KNOW TYPE . . 98	**LONG-LASTING INSECTICIDE-TREATED NET (LLIN)** PERMANET. . . . . 11 OLYSET . . . . 12 DURANET .... 13 OTHER/DON . . . . BRAND 16 OTHER TYPE . . . . 96 DON'T KNOW TYPE . . 98	**LONG-LASTING INSECTICIDE-TREATED NET (LLIN)** PERMANET. . . . . 11 OLYSET . . . . 12 DURANET .... 13 OTHER/DON . . . . BRAND 16 OTHER TYPE . . . . 96 DON'T KNOW TYPE . . 98
134	Did you get the net through a mass distribution campaign, during an antenatal care visit, or during an immunization visit?	YES, MASS DISTRIBUTION. CAMPAIGN . . . . 1 YES, ANC . . . . 2 YES, IMMUNIZATION VISIT . . . . 3 (SKIP TO 136) NO 4	YES, MASS DISTRIBUTION. CAMPAIGN . . . . 1 YES, ANC . . . . 2 YES, IMMUNIZATION VISIT . . . . 3 (SKIP TO 136) NO 4	YES, MASS DISTRIBUTION. CAMPAIGN . . . . 1 YES, ANC . . . . 2 YES, IMMUNIZATION VISIT . . . . 3 (SKIP TO 136) NO 4
135	Where did you get the net?	GOVT. HEALTH FACILITY . . . . 01 PRIVATE HEALTH FACILITY . . . . 02 PHARMACY . . . . 03 SHOP/MARKET . . . . . 04 CHW . . . . 05 RELIGIOUS INSTITUTION . . . . . 06 SCHOOL . . . . 07 OTHER . . . . 96 DON'T KNOW 98	GOVT. HEALTH FACILITY . . . . 01 PRIVATE HEALTH FACILITY . . . . 02 PHARMACY . . . . 03 SHOP/MARKET . . . . . 04 CHW . . . . 05 RELIGIOUS INSTITUTION . . . . . 06 SCHOOL . . . . 07 OTHER . . . . 96 DON'T KNOW 98	GOVT. HEALTH FACILITY . . . . 01 PRIVATE HEALTH FACILITY . . . . 02 PHARMACY . . . . 03 SHOP/MARKET . . . . . 04 CHW . . . . 05 RELIGIOUS INSTITUTION . . . . . 06 SCHOOL . . . . 07 OTHER . . . . 96 DON'T KNOW 98

MOSQUITO NETS

		NET #1	NET #2	NET #3
136	Did anyone sleep under this mosquito net last night?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 138) NOT SURE 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO 138) NOT SURE 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO 138) NOT SURE 8
137	Who slept under this mosquito net last night? RECORD THE PERSON'S NAME AND LINE NUMBER FROM HOUSEHOLD SCHEDULE.	NAME _____ LINE NO.	NAME _____ LINE NO.	NAME _____ LINE NO. . . . .
		NAME _____ LINE NO.	NAME _____ LINE NO.	NAME _____ LINE NO. . . . .
		NAME _____ LINE NO.	NAME _____ LINE NO.	NAME _____ LINE NO. . . . .
		NAME _____ LINE NO.	NAME _____ LINE NO.	NAME _____ LINE NO. . . . .
138		GO BACK TO 129 FOR NEXT NET; OR, IF NO MORE NETS, GO TO 139.	GO BACK TO 129 FOR NEXT NET; OR, IF NO MORE NETS, GO TO 139.	GO TO 129 IN FIRST COLUMN OF A NEW QUESTIONNAIRE; OR, IF NO MORE NETS, GO TO 139.

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
139	We would like to learn about the places that households use to wash their hands. Can you please show me where members of your household most often wash their hands?	OBSERVED, FIXED PLACE . . . . . 1 OBSERVED, MOBILE . . . . . 2 NOT OBSERVED, NOT IN DWELLING/YARD/PLOT . . . . . 3 NOT OBSERVED, NO PERMISSION TO SEE . . . . . 4 NOT OBSERVED, OTHER REASON 5	→ 142
140	OBSERVE PRESENCE OF WATER AT THE PLACE FOR HANDWASHING. RECORD OBSERVATION.	WATER IS AVAILABLE . . . . . 1 WATER IS NOT AVAILABLE 2	
141	OBSERVE PRESENCE OF SOAP, DETERGENT, OR OTHER CLEANSING AGENT AT THE PLACE FOR HANDWASHING. RECORD OBSERVATION.	SOAP OR DETERGENT (BAR, LIQUID, POWDER, PASTE) . . . . . A ASH, MUD, SAND . . . . . B NONE . . . . . Y	
142	OBSERVE MAIN MATERIAL OF THE FLOOR OF THE DWELLING. RECORD OBSERVATION.	**NATURAL FLOOR** EARTH/SAND . . . . . 11 DUNG . . . . . 12 **RUDIMENTARY FLOOR** WOOD PLANKS . . . . . 21 PALM/BAMBOO . . . . . 22 **FINISHED FLOOR** PARQUET OR POLISHED WOOD . . . . . 31 VINYL OR ASPHALT STRIPS . . . . . 32 CERAMIC TILES . . . . . 33 CEMENT . . . . . 34 CARPET . . . . . 35 OTHER _____ 96 (SPECIFY)	
143	OBSERVE MAIN MATERIAL OF THE ROOF OF THE DWELLING. RECORD OBSERVATION.	**NATURAL ROOFING** NO ROOF . . . . . 11 THATCH/PALM LEAF . . . . . 12 SOD . . . . . 13 **RUDIMENTARY ROOFING** RUSTIC MAT . . . . . 21 PALM/BAMBOO . . . . . 22 WOOD PLANKS . . . . . 23 CARDBOARD . . . . . 24 **FINISHED ROOFING** METAL/ZINC . . . . . 31 WOOD . . . . . 32 CALAMINE/CEMENT FIBER . . . . . 33 CERAMIC TILES . . . . . 34 CEMENT . . . . . 35 ROOFING SHINGLES . . . . . 36 OTHER _____ 96 (SPECIFY)	

ADDITIONAL HOUSEHOLD CHARACTERISTICS

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
144	OBSERVE MAIN MATERIAL OF THE EXTERIOR WALLS OF THE DWELLING. RECORD OBSERVATION.	**NATURAL WALLS** NO WALLS . . . . . 11 CANE/PALM/TRUNKS . . . . . 12 DIRT . . . . . 13 **RUDIMENTARY WALLS** BAMBOO WITH MUD . . . . . 21 STONE WITH MUD . . . . . 22 UNCOVERED ADOBE . . . . . 23 PLYWOOD . . . . . 24 CARDBOARD . . . . . 25 REUSED WOOD . . . . . 26 **FINISHED WALLS** CEMENT . . . . . 31 STONE WITH LIME/CEMENT . . . . . 32 BRICKS . . . . . 33 CEMENT BLOCKS . . . . . 34 COVERED ADOBE . . . . . 35 WOOD PLANKS/SHINGLES . . . . . 36 OTHER _____ 96 (SPECIFY)	
145	I would like to check whether the salt used in your household is iodized. May I have a sample of the salt used to cook meals in your household? TEST SALT FOR IODINE.	IODINE PRESENT . . . . . 1 NO IODINE . . . . . 2 NO SALT IN HOUSEHOLD . . . . . 3 SALT NOT TESTED _____ 6 (SPECIFY REASON)	
146	RECORD THE TIME.	HOURS . . . . . [ ][ ] MINUTES . . . . . [ ][ ]	

INTERVIEWER'S OBSERVATIONS

TO BE FILLED IN AFTER COMPLETING INTERVIEW

COMMENTS ABOUT INTERVIEW:

COMMENTS ON SPECIFIC QUESTIONS:

ANY OTHER COMMENTS:

SUPERVISOR'S OBSERVATIONS

EDITOR'S OBSERVATIONS

SIERRA LEONE DEMOGRAPHIC AND HEALTH SURVEY 2019
WOMAN'S QUESTIONNAIRE

SIERRA LEONE
STATISTICS SIERRA LEONE

IDENTIFICATION

LOCALITY NAME _____

LOCAL COUNCIL _____

NAME OF HOUSEHOLD HEAD _____

DISTRICT CODE . . . . . [ ][ ]

PROVINCE NAME AND CODE _____ [ ]

CHIEFDOM CODE . . . . . [ ][ ][ ][ ]

SECTION CODE . . . . . [ ][ ]

CLUSTER NUMBER . . . . . [ ][ ][ ][ ]

ENUMERATION AREA CODE . . . . . [ ][ ]

RURAL(1)/URBAN(2) . . . . . [ ]

HOUSEHOLD NUMBER . . . . . [ ][ ][ ][ ]

NAME AND LINE NUMBER OF WOMAN _____ [ ][ ]

CHECK COVER PAGE OF HOUSEHOLD QUESTIONNAIRE: HOUSEHOLD SELECTED FOR MAN'S SURVEY? (1=YES, 2=NO) [ ]

NOTE: IF HOUSEHOLD SELECTED FOR MAN'S SURVEY, THEN HOUSEHOLD SELECTED FOR DV MODULE (1=YES, 2=NO) [ ]

INTERVIEWER VISITS

	1	2	3	FINAL VISIT
DATE	_____	_____	_____	DAY [ ][ ]
				MONTH [ ][ ]
				YEAR [ ][ ][ ][ ]
INTERVIEWER'S NAME	_____	_____	_____	INT. NO. [ ][ ][ ][ ]
RESULT*	_____	_____	_____	RESULT* [ ]
NEXT VISIT: DATE	_____	_____		TOTAL NUMBER OF VISITS [ ]
TIME	_____	_____		

*RESULT CODES: 1 COMPLETED; 2 NOT AT HOME; 3 POSTPONED; 4 REFUSED; 5 PARTLY COMPLETED; 6 INCAPACITATED; 7 OTHER _____ (SPECIFY)

LANGUAGE OF QUESTIONNAIRE** **0 1** | LANGUAGE OF INTERVIEW** [ ][ ] | NATIVE LANGUAGE OF RESPONDENT** [ ][ ] | TRANSLATOR USED (YES = 1, NO = 2) [ ]

LANGUAGE OF QUESTIONNAIRE** **ENGLISH**

**LANGUAGE CODES:
01 ENGLISH; 02 KRIO; 03 TEMNE; 04 MENDE; 05 LIMBA; 06 OTHER

SUPERVISOR		FIELD EDITOR		OFFICE EDITOR	KEYED BY
NAME	NUMBER	NAME	NUMBER	NUMBER	NUMBER
_____	[ ][ ][ ][ ]	_____	[ ][ ][ ][ ]	[ ][ ]	[ ][ ]

INTRODUCTION AND CONSENT

Hello. My name is _____. I am working with Statistics Sierra Leone. We are conducting a survey about health and other topics all over Sierra Leone. The information we collect will help the government to plan health services. Your household was selected for the survey. The questions usually take about 30 to 60 minutes. All of the answers you give will be confidential and will not be shared with anyone other than members of our survey team. You don't have to be in the survey, but we hope you will agree to answer the questions since your views are important. If I ask you any question you don't want to answer, just let me know and I will go on to the next question or you can stop the interview at any time.

In case you need more information about the survey, you may contact the person listed on the card that has already been given to your household.

Do you have any questions?
May I begin the interview now?

SIGNATURE OF INTERVIEWER _____ DATE _____

RESPONDENT AGREES TO BE INTERVIEWED . . 1 ↓

RESPONDENT DOES NOT AGREE TO BE INTERVIEWED . . 2 → END

SECTION 1. RESPONDENT'S BACKGROUND

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
101	RECORD THE TIME.	HOURS . . . . . ☐☐ MINUTES . . . . . ☐☐	
102	How long have you been living continuously in (NAME OF CURRENT CITY, TOWN OR VILLAGE OF RESIDENCE)? IF LESS THAN ONE YEAR, RECORD '00' YEARS.	YEARS . . . . . ☐☐ ALWAYS . . . . . 95 VISITOR 96	→ 105
103	Just before you moved here, did you live in a city, in a town, or in a rural area?	CITY . . . . . 1 TOWN . . . . . 2 RURAL AREA 3	
104	Before you moved here, which province did you live in?	EASTERN PROVINCE . . . . . 01 NORTHERN PROVINCE . . . . . 02 SOUTHERN PROVINCE . . . . . 03 NORTH WEST PROVINCE . . . . . 04 WESTERN AREA . . . . . 05 OUTSIDE OFSIERRA LEONE 96	
105	In what month and year were you born?	MONTH . . . . . ☐☐ DON'T KNOW MONTH . . . . . 98 YEAR . . . . . ☐☐☐☐ DON'T KNOW YEAR 9998	
106	How old were you at your last birthday? COMPARE AND CORRECT 105 AND/OR 106 IF INCONSISTENT.	AGE IN COMPLETED YEARS . . . . . ☐☐	
107	Have you ever attended school?	YES . . . . . 1 NO 2	→ 111
108	What is the highest level of school you attended: primary, secondary, or higher?	PRIMARY . . . . . 1 JUNIOR SECONDARY . . . . . 2 SENIOR SECONDARY . . . . . 3 VOCATIONAL/COMMERCIAL/NURSING TECHNICAL/TEACHING . . . . . 4 HIGHER 5	

SECTION 1. RESPONDENT'S BACKGROUND

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
109	What is the highest [GRADE/FORM/YEAR] you completed at that level? IF COMPLETED LESS THAN ONE YEAR AT THAT LEVEL, RECORD '00'.	GRADE/FORM/YEAR . . . . . ☐☐	
110	CHECK 108: PRIMARY OR SECONDARY VOCATIONAL/COMMERCIAL/NURSING TECHNICAL/TEACHING ☐ HIGHER ☐ → 113		
111	Now I would like you to read this sentence to me. SHOW CARD TO RESPONDENT. IF RESPONDENT CANNOT READ WHOLE SENTENCE, PROBE: Can you read any part of the sentence to me?	CANNOT READ AT ALL . . . . . 1 ABLE TO READ ONLY PART OF THE SENTENCE . . . . . 2 ABLE TO READ WHOLE SENTENCE . . . . . 3 NO CARD WITH REQUIRED LANGUAGE _____ 4 (SPECIFY LANGUAGE) BLIND/VISUALLY IMPAIRED 5	
112	CHECK 111: CODE '2', '3' OR '4' CIRCLED ☐ CODE '1' OR '5' CIRCLED ☐ → 114		
113	Do you read a newspaper or magazine at least once a week, less than once a week or not at all?	AT LEAST ONCE A WEEK . . . . . 1 LESS THAN ONCE A WEEK . . . . . 2 NOT AT ALL 3	
114	Do you listen to the radio at least once a week, less than once a week or not at all?	AT LEAST ONCE A WEEK . . . . . 1 LESS THAN ONCE A WEEK . . . . . 2 NOT AT ALL 3	
115	Do you watch television at least once a week, less than once a week or not at all?	AT LEAST ONCE A WEEK . . . . . 1 LESS THAN ONCE A WEEK . . . . . 2 NOT AT ALL 3	
116	Do you own a mobile telephone?	YES . . . . . 1 NO 2	→ 118
117	Do you use your mobile phone for any financial transactions?	YES . . . . . 1 NO 2	
118	Do you have an account in a bank or other financial institution that you yourself use?	YES . . . . . 1 NO 2	
119	Have you ever used the internet?	YES . . . . . 1 NO 2	→ 122
120	In the last 12 months, have you used the internet? IF NECESSARY, PROBE FOR USE FROM ANY LOCATION, WITH ANY DEVICE.	YES . . . . . 1 NO 2	→ 122
121	During the last one month, how often did you use the internet: almost every day, at least once a week, less than once a week, or not at all?	ALMOST EVERY DAY . . . . . 1 AT LEAST ONCE A WEEK . . . . . 2 LESS THAN ONCE A WEEK . . . . . 3 NOT AT ALL 4	

SECTION 1. RESPONDENT'S BACKGROUND

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
122	What is your religion?	CHRISTIAN ..... 1 ISLAM ..... 2 BAHAI ..... 3 TRADITIONAL ..... 4 NONE ..... 5 OTHER _____ 6 SPECIFY	
123	What is your ethnic group?	CREOLE 11 FULLAH 12 KONO 13 LIMBA 14 LOKO 15 MANDINGO 16 MENDE 17 SHERBRO 18 TEMNE 19 OTHER SIERRA LEONE _____ 95 SPECIFY OTHER FOREIGN _____ 96 SPECIFY	
124	In the last 12 months, how many times have you been away from home for one or more nights?	NUMBER OF TIMES ..... [ ][ ] NONE 00	→ 201
125	In the last 12 months, have you been away from home for more than one month at a time?	YES ..... 1 NO 2	

SECTION 2. REPRODUCTION

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
201	Now I would like to ask about all the births you have had during your life. Have you ever given birth?	YES . . . . . 1 NO 2	→ 206
202	Do you have any sons or daughters to whom you have given birth who are now living with you?	YES . . . . . 1 NO 2	→ 204
203	a) How many sons live with you? b) And how many daughters live with you? IF NONE, RECORD '00'.	a) SONS AT HOME . . . . . [ ][ ] b) DAUGHTERS AT HOME . . . . . [ ][ ]	
204	Do you have any sons or daughters to whom you have given birth who are alive but do not live with you?	YES . . . . . 1 NO 2	→ 206
205	a) How many sons are alive but do not live with you? b) And how many daughters are alive but do not live with you? IF NONE, RECORD '00'.	a) SONS ELSEWHERE . . . . . [ ][ ] b) DAUGHTERS ELSEWHERE . . . . . [ ][ ]	
206	Have you ever given birth to a boy or girl who was born alive but later died? IF NO, PROBE: Any baby who cried, who made any movement, sound, or effort to breathe, or who showed any other signs of life even if for a very short time?	YES . . . . . 1 NO 2	→ 208
207	a) How many boys have died? b) And how many girls have died? IF NONE, RECORD '00'.	a) BOYS DEAD . . . . . [ ][ ] b) GIRLS DEAD . . . . . [ ][ ]	
208	SUM ANSWERS TO 203, 205, AND 207, AND ENTER TOTAL. IF NONE, RECORD '00'.	TOTAL BIRTHS . . . . . [ ][ ]	
209	CHECK 208: Just to make sure that I have this right: you have had in TOTAL _____ births during your life. Is that correct? YES ☐ NO ☐ → PROBE AND CORRECT 201-208 AS NECESSARY.		
210	CHECK 208: ONE OR MORE BIRTHS ☐ NO BIRTHS ☐ →		→ 226

SECTION 2. REPRODUCTION

211 Now I would like to record the names of all your births, whether still alive or not, starting with the first one you had. RECORD NAMES OF ALL THE BIRTHS IN 212. RECORD TWINS AND TRIPLETS ON SEPARATE ROWS. IF THERE ARE MORE THAN 10 BIRTHS, USE AN ADDITIONAL QUESTIONNAIRE, STARTING WITH THE SECOND ROW.

212 What name was given to your (first/ next) baby? RECORD NAME. BIRTH HISTORY NUMBER.	213 Is (NAME) a boy or a girl?	214 Were any of these births twins?	215 On what day, month, and year was (NAME) born?	216 Is (NAME) still alive?	217 IF ALIVE: How old was (NAME) at (NAME)'s last birthday? RECORD AGE IN COMP-LETED YEARS.	218 IF ALIVE: Is (NAME) living with you?	219 IF ALIVE: RECORD HOUSEHOLD LINE NUMBER OF CHILD. RECORD '00' IF CHILD NOT LISTED IN HOUSEHOLD.	220 IF DEAD: How old was (NAME) when (he/she) died? IF '12 MONTHS' OR '1 YR', ASK: Did (NAME) have (his/her) first birthday? THEN ASK: Exactly how many months old was (NAME) when (he/she) died? RECORD DAYS IF LESS THAN 1 MONTH; MONTHS IF LESS THAN TWO YEARS; OR YEARS.	221 Were there any other live births between (NAME OF PREVIOUS BIRTH) and (NAME), including any children who died after birth?
01	BOY 1 GIRL 2	SING 1 MULT 2	DAY ☐☐ MONTH ☐☐ ☐☐☐☐ YEAR	YES 1 NO 2 → (SKIP TO	AGE IN YEARS ☐☐	YES 1 NO 2	HOUSEHOLD LINE NUMBER ☐☐ → (NEXT BIRTH)	DAYS 1 ☐☐ MONTHS 2 ☐☐ YEARS 3 ☐☐	
02	BOY 1 GIRL 2	SING 1 MULT 2	DAY ☐☐ MONTH ☐☐ ☐☐☐☐ YEAR	YES 1 NO 2 → (SKIP TO	AGE IN YEARS ☐☐	YES 1 NO 2	HOUSEHOLD LINE NUMBER ☐☐ → (SKIP TO 221)	DAYS 1 ☐☐ MONTHS 2 ☐☐ YEARS 3 ☐☐	YES 1 (ADD BIRTH) NO 2 (NEXT BIRTH)
03	BOY 1 GIRL 2	SING 1 MULT 2	DAY ☐☐ MONTH ☐☐ ☐☐☐☐ YEAR	YES 1 NO 2 → (SKIP TO	AGE IN YEARS ☐☐	YES 1 NO 2	HOUSEHOLD LINE NUMBER ☐☐ → (SKIP TO 221)	DAYS 1 ☐☐ MONTHS 2 ☐☐ YEARS 3 ☐☐	YES 1 (ADD BIRTH) NO 2 (NEXT BIRTH)
04	BOY 1 GIRL 2	SING 1 MULT 2	DAY ☐☐ MONTH ☐☐ ☐☐☐☐ YEAR	YES 1 NO 2 → (SKIP TO	AGE IN YEARS ☐☐	YES 1 NO 2	HOUSEHOLD LINE NUMBER ☐☐ → (SKIP TO 221)	DAYS 1 ☐☐ MONTHS 2 ☐☐ YEARS 3 ☐☐	YES 1 (ADD BIRTH) NO 2 (NEXT BIRTH)
05	BOY 1 GIRL 2	SING 1 MULT 2	DAY ☐☐ MONTH ☐☐ ☐☐☐☐ YEAR	YES 1 NO 2 → (SKIP TO	AGE IN YEARS ☐☐	YES 1 NO 2	HOUSEHOLD LINE NUMBER ☐☐ → (SKIP TO 221)	DAYS 1 ☐☐ MONTHS 2 ☐☐ YEARS 3 ☐☐	YES 1 (ADD BIRTH) NO 2 (NEXT BIRTH)

212 What name was given to your (first/ next) baby? RECORD NAME. BIRTH HISTORY NUMBER.	213 Is (NAME) a boy or a girl?	214 Were any of these births twins?	215 On what day, month, and year was (NAME) born?	216 Is (NAME) still alive?	217 IF ALIVE: How old was (NAME) at (NAME)'s last birthday? RECORD AGE IN COMP-LETED YEARS.	218 IF ALIVE: Is (NAME) living with you?	219 IF ALIVE: RECORD HOUSEHOLD LINE NUMBER OF CHILD. RECORD '00' IF CHILD NOT LISTED IN HOUSEHOLD.	220 IF DEAD: How old was (NAME) when (he/she) died? IF '12 MONTHS' OR '1 YR', ASK: Did (NAME) have (his/her) first birthday? THEN ASK: Exactly how many months old was (NAME) when (he/she) died? RECORD DAYS IF LESS THAN 1 MONTH; MONTHS IF LESS THAN TWO YEARS; OR YEARS.	221 Were there any other live births between (NAME OF PREVIOUS BIRTH) and (NAME), including any children who died after birth?
06	BOY 1 GIRL 2	SING 1 MULT 2	DAY ☐☐ MONTH ☐☐ ☐☐☐☐ YEAR	YES 1 NO 2 ↓ (SKIP TO	AGE IN YEARS ☐☐	YES 1 NO 2	HOUSEHOLD LINE NUMBER ☐☐ ↓ (SKIP TO 221)	DAYS 1 ☐☐ MONTHS 2 ☐☐ YEARS 3 ☐☐	YES 1 (ADD BIRTH) ↵ NO 2 (NEXT BIRTH) ↵
07	BOY 1 GIRL 2	SING 1 MULT 2	DAY ☐☐ MONTH ☐☐ ☐☐☐☐ YEAR	YES 1 NO 2 ↓ (SKIP TO	AGE IN YEARS ☐☐	YES 1 NO 2	HOUSEHOLD LINE NUMBER ☐☐ ↓ (SKIP TO 221)	DAYS 1 ☐☐ MONTHS 2 ☐☐ YEARS 3 ☐☐	YES 1 (ADD BIRTH) ↵ NO 2 (NEXT BIRTH) ↵
08	BOY 1 GIRL 2	SING 1 MULT 2	DAY ☐☐ MONTH ☐☐ ☐☐☐☐ YEAR	YES 1 NO 2 ↓ (SKIP TO	AGE IN YEARS ☐☐	YES 1 NO 2	HOUSEHOLD LINE NUMBER ☐☐ ↓ (SKIP TO 221)	DAYS 1 ☐☐ MONTHS 2 ☐☐ YEARS 3 ☐☐	YES 1 (ADD BIRTH) ↵ NO 2 (NEXT BIRTH) ↵
09	BOY 1 GIRL 2	SING 1 MULT 2	DAY ☐☐ MONTH ☐☐ ☐☐☐☐ YEAR	YES 1 NO 2 ↓ (SKIP TO	AGE IN YEARS ☐☐	YES 1 NO 2	HOUSEHOLD LINE NUMBER ☐☐ ↓ (SKIP TO 221)	DAYS 1 ☐☐ MONTHS 2 ☐☐ YEARS 3 ☐☐	YES 1 (ADD BIRTH) ↵ NO 2 (NEXT BIRTH) ↵
10	BOY 1 GIRL 2	SING 1 MULT 2	DAY ☐☐ MONTH ☐☐ ☐☐☐☐ YEAR	YES 1 NO 2 ↓ (SKIP TO	AGE IN YEARS ☐☐	YES 1 NO 2	HOUSEHOLD LINE NUMBER ☐☐ ↓ (SKIP TO 221)	DAYS 1 ☐☐ MONTHS 2 ☐☐ YEARS 3 ☐☐	YES 1 (ADD BIRTH) ↵ NO 2 (NEXT BIRTH) ↵

SECTION 2. REPRODUCTION

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
222	Have you had any live births since the birth of (NAME OF LAST BIRTH)?	YES . . . . . 1 → (RECORD BIRTH(S) IN TABLE) NO 2	
223	COMPARE 208 WITH NUMBER OF BIRTHS IN BIRTH HISTORY NUMBERS ARE SAME ☐ NUMBERS ARE DIFFERENT ☐ → (PROBE AND RECONCILE)		
224	CHECK 215: ENTER THE NUMBER OF BIRTHS IN 2014-2019	NUMBER OF BIRTHS . . . . . ☐☐ NONE 0	→ 226
225	**C** FOR EACH BIRTH IN 2014-2019, ENTER 'B' IN THE MONTH OF BIRTH IN THE CALENDAR. WRITE THE NAME OF THE CHILD TO THE LEFT OF THE 'B' CODE. FOR EACH BIRTH, ASK THE NUMBER OF COMPLETED MONTHS THE PREGNANCY LASTED AND RECORD 'P' IN EACH OF THE PRECEDING MONTHS ACCORDING TO THE DURATION OF PREGNANCY. (NOTE: THE NUMBER OF 'P's MUST BE ONE LESS THAN THE NUMBER OF MONTHS THAT THE PREGNANCY LASTED.)		
226	Are you pregnant now?	YES . . . . . 1 NO . . . . . 2 UNSURE 8	→ 230
227	How many months pregnant are you? RECORD NUMBER OF COMPLETED MONTHS. **C** ENTER 'P's IN THE CALENDAR, BEGINNING WITH THE MONTH OF INTERVIEW AND FOR THE TOTAL NUMBER OF COMPLETED MONTHS.	MONTHS . . . . . ☐☐	
228	When you got pregnant, did you want to get pregnant at that time?	YES . . . . . 1 NO 2	→ 230
229	CHECK 208: TOTAL NUMBER OF BIRTHS ONE OR MORE ☐ → a) Did you want to have a baby later on or did you not want any more children? NONE ☐ → b) Did you want to have a baby later on or did you not want any children?	LATER . . . . . 1 NO MORE/NONE 2	
230	Have you ever had a pregnancy that miscarried, was aborted, or ended in a stillbirth?	YES . . . . . 1 NO 2	→ 239
231	When did the last such pregnancy end?	MONTH . . . . . ☐☐ YEAR . . . . . ☐☐☐☐	

SECTION 2. REPRODUCTION

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
232	CHECK 231: LAST PREGNANCY ENDED IN 2014-2019 ☐ → 234 LAST PREGNANCY ENDED IN 2013 OR EARLIER ☐ → 239		

LINE NO.	233 In what month and year did the preceding such pregnancy end?	234 How many months pregnant were you when that pregnancy ended?	235 Since January 2014, have you had any other pregnancies that did not result in a live birth?	SKIP
01		NUMBER OF MONTHS	YES . . . . . 1 NO 2	→ NEXT LINE → 236
02	MONTH ____ YEAR ____	NUMBER OF MONTHS	YES . . . . . 1 NO 2	→ NEXT LINE → 236
03	MONTH ____ YEAR ____	NUMBER OF MONTHS	YES . . . . . 1 NO 2	→ NEXT LINE → 236
04	MONTH ____ YEAR ____	NUMBER OF MONTHS	YES . . . . . 1 NO 2	→ 236

236	**C** FOR EACH PREGNANCY THAT DID NOT END IN A LIVE BIRTH IN 2014-2019 OR LATER, ENTER 'T' IN THE CALENDAR IN THE MONTH THAT THE PREGNANCY TERMINATED AND 'P' FOR THE REMAINING NUMBER OF COMPLETED MONTHS OF PREGNANCY. IF THERE ARE MORE THAN FOUR PREGNANCIES THAT DID NOT END IN A LIVE BIRTH, USE AN ADDITIONAL QUESTIONNAIRE STARTING ON THE SECOND LINE.		
237	Did you have any miscarriages, abortions or stillbirths that ended before 2014?	YES . . . . . 1 NO 2	→ 239
238	When did the last such pregnancy that terminated before 2014 end?	MONTH . . . . . ____ YEAR . . . . . ____	

SECTION 2. REPRODUCTION

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
239	When did your last menstrual period start? _____ (DATE, IF GIVEN)	DAYS AGO . . . . . 1 [ ][ ] WEEKS AGO . . . . . 2 [ ][ ] MONTHS AGO . . . . . 3 [ ][ ] YEARS AGO . . . . . 4 [ ][ ] IN MENOPAUSE/ HAS HAD HYSTERECTOMY . . . . . 994 BEFORE LAST BIRTH . . . . . 995 NEVER MENSTRUATED 996	
240	From one menstrual period to the next, are there certain days when a woman is more likely to become pregnant?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 242
241	Is this time just before her period begins, during her period, right after her period has ended, or halfway between two periods?	JUST BEFORE HER PERIOD BEGINS . . . . . 1 DURING HER PERIOD . . . . . 2 RIGHT AFTER HER PERIOD HAS ENDED . . . . . 3 HALFWAY BETWEEN TWO PERIODS . . . . . 4 OTHER _____ 6 (SPECIFY) DON'T KNOW 8	
242	After the birth of a child, can a woman become pregnant before her menstrual period has returned?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	

SECTION 3. CONTRACEPTION

301	Now I would like to talk about family planning - the various ways or methods that a couple can use to delay or avoid a pregnancy. Have you ever heard of (METHOD)?	
01	Female Sterilization. PROBE: Women can have an operation to avoid having any more children.	YES . . . . . 1 NO 2
02	Male Sterilization. PROBE: Men can have an operation to avoid having any more children.	YES . . . . . 1 NO 2
03	IUD. PROBE: Women can have a loop or coil placed inside them by a doctor or a nurse which can prevent pregnancy for one or more years.	YES . . . . . 1 NO 2
04	Injectables. PROBE: Women can have an injection by a health provider that stops them from becoming pregnant for one or more months.	YES . . . . . 1 NO 2
05	Implants. PROBE: Women can have one or more small rods placed in their upper arm by a doctor or nurse which can prevent pregnancy for one or more years.	YES . . . . . 1 NO 2
06	Pill. PROBE: Women can take a pill every day to avoid becoming pregnant.	YES . . . . . 1 NO 2
07	Condom. PROBE: Men can put a rubber sheath on their penis before sexual intercourse.	YES . . . . . 1 NO 2
08	Female Condom. PROBE: Women can place a sheath in their vagina before sexual intercourse.	YES . . . . . 1 NO 2
09	Emergency Contraception. PROBE: As an emergency measure, within three days after they have unprotected sexual intercourse, women can take special pills to prevent pregnancy.	YES . . . . . 1 NO 2
10	Standard Days Method. PROBE: A woman uses a string of colored beads to know the days she can get pregnant. On the days she can get pregnant, she uses a condom or does not have sexual intercourse.	YES . . . . . 1 NO 2
11	Lactational Amenorrhea Method (LAM). PROBE: Up to six months after childbirth, before the menstrual period has returned, women use a method requiring frequent breastfeeding day and night.	YES . . . . . 1 NO 2
12	Rhythm Method. PROBE: To avoid pregnancy, women do not have sexual intercourse on the days of the month they think they can get pregnant.	YES . . . . . 1 NO 2
13	Withdrawal. PROBE: Men can be careful and pull out before climax.	YES . . . . . 1 NO 2
14	Have you heard of any other ways or methods that women or men can use to avoid pregnancy?	YES, MODERN METHOD _____ A (SPECIFY) YES, TRADITIONAL METHOD _____ B (SPECIFY) NO . . . . . Y

SECTION 3. CONTRACEPTION

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
302	CHECK 226: NOT PREGNANT OR UNSURE ☐ PREGNANT ☐		→ 312
303	Are you or your partner currently doing something or using any method to delay or avoid getting pregnant?	YES . . . . . 1 NO 2	→ 312
304	Which method are you using? RECORD ALL MENTIONED. IF MORE THAN ONE METHOD MENTIONED, FOLLOW SKIP INSTRUCTION FOR HIGHEST METHOD IN LIST.	FEMALE STERILIZATION . . . . . A MALE STERILIZATION . . . . . B IUD . . . . . C INJECTABLES . . . . . D IMPLANTS . . . . . E PILL . . . . . F CONDOM . . . . . G FEMALE CONDOM . . . . . H EMERGENCY CONTRACEPTION . . . . . I STANDARD DAYS METHOD . . . . . J LACTATIONAL AMENORRHEA METHOD . . . . . K RHYTHM METHOD . . . . . L WITHDRAWAL . . . . . M OTHER MODERN METHOD . . . . . X OTHER TRADITIONAL METHOD . . . . . Y	A → 307 B C D → 309 E F G → 306 H I J K L → 309 M X Y
305	What is the brand name of the pills you are using? IF DON'T KNOW THE BRAND, ASK TO SEE THE PACKAGE.	MICROGYNON . . . . . 01 MICROLUTE . . . . . 02 ZINNIAF . . . . . 03 OTHER _____ 96 (SPECIFY) DON'T KNOW 98	→ 309
306	What is the brand name of the condoms you are using? IF DON'T KNOW THE BRAND, ASK TO SEE THE PACKAGE.	MALE CONDOMS LATEX . . . . . 01 PROTECTOR PLUS . . . . . 02 LOVE . . . . . 03 ROUGH RIDER . . . . . 04 IQUON . . . . . 05 STRAWBERRY . . . . . 06 OTHER _____ 96 (SPECIFY) DON'T KNOW 98	→ 309

SECTION 3. CONTRACEPTION

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
307	In what facility did the sterilization take place? PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE)	**PUBLIC SECTOR** GOVERNMENT HOSPITAL . . . . . 11 GOVERNMENT HEALTH CENTER . . . . . 12 FAMILY PLANNING CLINIC . . . . . 13 MOBILE CLINIC . . . . . 14 OTHER PUBLIC SECTOR _____ 16 (SPECIFY) **PRIVATE MEDICAL SECTOR** PRIVATE HOSPITAL/CLINIC . . . . . 21 PRIVATE DOCTOR'S OFFICE . . . . . 22 MOBILE CLINIC . . . . . 23 OTHER PRIVATE MEDICAL SECTOR _____ 26 (SPECIFY) OTHER _____ 96 (SPECIFY) DON'T KNOW 98	
308	In what month and year was the sterilization performed?	MONTH . . . . . ☐☐ YEAR . . . . . ☐☐☐☐	→ 310
309	Since what month and year have you been using (CURRENT METHOD) without stopping? PROBE: For how long have you been using (CURRENT METHOD) now without stopping?	MONTH . . . . . ☐☐ YEAR . . . . . ☐☐☐☐	
310	CHECK 308 AND 309, 215 AND 231: ANY BIRTH OR PREGNANCY TERMINATION AFTER MONTH AND YEAR OF START OF USE OF CONTRACEPTION IN 308 OR 309 NO ☐ ↓ YES ☐ → GO BACK TO 308 OR 309, PROBE AND RECORD MONTH AND YEAR AT START OF CONTINUOUS USE OF CURRENT METHOD (MUST BE AFTER LAST BIRTH OR PREGNANCY TERMINATION).		

SECTION 3. CONTRACEPTION (CAPI OPTION)

311	CHECK 308 AND 309: YEAR IS 2014-2019 → **C** ENTER CODE FOR METHOD USED IN MONTH OF INTERVIEW IN THE CALENDAR AND IN EACH MONTH BACK TO THE DATE STARTED USING. → THEN CONTINUE YEAR IS 2013 OR EARLIER → **C** ENTER CODE FOR METHOD USED IN MONTH OF INTERVIEW IN THE CALENDAR AND EACH MONTH BACK TO JANUARY 2014 . → THEN (SKIP TO 324)
312	I would like to ask you some questions about the times you or your partner may have used a method to avoid getting pregnant during the last few years. **C** USE CALENDAR TO PROBE FOR EARLIER PERIODS OF USE AND NONUSE, STARTING WITH MOST RECENT USE, BACK TO JANUARY 2014. USE NAMES OF CHILDREN, DATES OF BIRTH, AND PERIODS OF PREGNANCY AS REFERENCE POINTS.

		COLUMN 1	COLUMN 2	COLUMN 3
312A	MONTH AND YEAR OF START OF INTERVAL OF USE OR NON-USE.	MONTH ☐☐ YEAR ☐☐☐☐	MONTH ☐☐ YEAR ☐☐☐☐	MONTH ☐☐ YEAR ☐☐☐☐
312B	Between (EVENT) in (MONTH/YEAR) and (EVENT) in (MONTH/YEAR), did you or your partner use any method of contraception?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 312I)	YES . . . . . 1 NO . . . . . 2 (SKIP TO 312I)	YES . . . . . 1 NO . . . . . 2 (SKIP TO 312I)
312C	Which method was that?	METHOD CODE . . ☐	METHOD CODE . . ☐	METHOD CODE . . ☐
312D	How many months after (EVENT) in (MONTH/YEAR) did you start to use (METHOD)? CIRCLE '95' IF RESPONDENT GIVES THE DATE OF STARTING TO USE THE METHOD.	IMMEDIATELY . . . . . 00 MONTHS . . ☐☐ (SKIP TO 312F) DATE GIVEN 95	IMMEDIATELY . . . . . 00 MONTHS . . ☐☐ (SKIP TO 312F) DATE GIVEN 95	IMMEDIATELY . . . . . 00 MONTHS . . ☐☐ (SKIP TO 312F) DATE GIVEN 95
312E	RECORD MONTH AND YEAR RESPONDENT STARTED USING METHOD.	MONTH ☐☐ YEAR ☐☐☐☐	MONTH ☐☐ YEAR ☐☐☐☐	MONTH ☐☐ YEAR ☐☐☐☐
312F	For how many months did you use (METHOD)? CIRCLE '95' IF RESPONDENT GIVES THE DATE OF TERMINATION OF USE.	MONTHS . . ☐☐ (SKIP TO 312H) DATE GIVEN 95	MONTHS . . ☐☐ (SKIP TO 312H) DATE GIVEN 95	MONTHS . . ☐☐ (SKIP TO 312H) DATE GIVEN 95
312G	RECORD MONTH AND YEAR RESPONDENT STOPPED USING METHOD.	MONTH ☐☐ YEAR ☐☐☐☐	MONTH ☐☐ YEAR ☐☐☐☐	MONTH ☐☐ YEAR ☐☐☐☐
312H	Why did you stop using (METHOD)?	REASON STOPPED . . . . . ☐	REASON STOPPED . . . . . ☐	REASON STOPPED . . . . . ☐
312I		GO BACK TO 312A IN NEXT COLUMN; OR, IF NO MORE GAPS, GO TO 313.	GO BACK TO 312A IN NEXT COLUMN; OR, IF NO MORE GAPS, GO TO 313.	GO BACK TO 312A IN NEW QUESTIONNAIRE; OR, IF NO MORE GAPS, GO TO 313.

SECTION 3. CONTRACEPTION

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
313	CHECK THE CALENDAR FOR USE OF ANY CONTRACEPTIVE METHOD IN ANY MONTH NO METHOD USED ☐ ↓ ANY METHOD USED ☐		→ 315
314	Have you ever used anything or tried in any way to delay or avoid getting pregnant?	YES . . . . . 1 NO 2	→ 326
315	CHECK 304: CIRCLE METHOD CODE: IF MORE THAN ONE METHOD CODE CIRCLED IN 304, CIRCLE CODE FOR HIGHEST METHOD IN LIST.	NO CODE CIRCLED . . . . . 00 FEMALE STERILIZATION . . . . . 01 MALE STERILIZATION . . . . . 02 IUD . . . . . 03 INJECTABLES . . . . . 04 IMPLANTS . . . . . 05 PILL . . . . . 06 CONDOM . . . . . 07 FEMALE CONDOM . . . . . 08 EMERGENCY CONTRACEPTION . . . . . 09 STANDARD DAYS METHOD . . . . . 10 LACTATIONAL AMENORRHEA METHOD . . . . . 11 RHYTHM METHOD . . . . . 12 WITHDRAWAL . . . . . 13 OTHER MODERN METHOD . . . . . 95 OTHER TRADITIONAL METHOD 96	→ 326 → 319 → 327 → 323
316	You first started using (CURRENT METHOD) in (DATE FROM 309). Where did you get it at that time? PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE)	**PUBLIC SECTOR** GOVERNMENT HOSPITAL . . . . . 11 GOVERNMENT HEALTH CENTER . . . . . 12 FAMILY PLANNING CLINIC . . . . . 13 MOBILE CLINIC . . . . . 14 FIELDWORKER . . . . . 15 OTHER PUBLIC SECTOR _____ 16 (SPECIFY) **PRIVATE MEDICAL SECTOR** PRIVATE HOSPITAL/CLINIC . . . . . 21 PHARMACY . . . . . 22 PRIVATE DOCTOR . . . . . 23 MOBILE CLINIC . . . . . 24 FIELDWORKER . . . . . 25 OTHER PRIVATE MEDICAL SECTOR _____ 26 (SPECIFY) **OTHER SOURCE** SHOP . . . . . 31 CHURCH . . . . . 32 FRIEND/RELATIVE . . . . . 33 OTHER _____ 96 (SPECIFY)	
317	CHECK 304: CIRCLE METHOD CODE: IF MORE THAN ONE METHOD CODE CIRCLED IN 304, CIRCLE CODE FOR HIGHEST METHOD IN LIST.	IUD . . . . . 03 INJECTABLES . . . . . 04 IMPLANTS . . . . . 05 PILL . . . . . 06 CONDOM . . . . . 07 FEMALE CONDOM . . . . . 08 EMERGENCY CONTRACEPTION . . . . . 09 STANDARD DAYS METHOD . . . . . 10 OTHER MODERN METHOD . . . . . 95 OTHER TRADITIONAL METHOD 96	→ 323 → 322 → 323

SECTION 3. CONTRACEPTION

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
318	At that time, were you told about side effects or problems you might have with the method?	YES . . . 1 NO . . . 2	→ 321 → 320
319	When you got sterilized, were you told about side effects or problems you might have with the method?	YES . . . 1 NO . . . 2	→ 321
320	Were you ever told by a health or family planning worker about side effects or problems you might have with the method?	YES . . . 1 NO . . . 2	→ 322
321	Were you told what to do if you experienced side effects or problems?	YES . . . 1 NO . . . 2	
322	CHECK 318 AND 319: ANY 'YES' → a) At that time, were you told about other methods of family planning that you could use? OTHER → b) When you obtained (CURRENT METHOD FROM 315) from (SOURCE OF METHOD FROM 307 OR 316), were you told about other methods of family planning that you could use?	YES . . . 1 NO . . . 2	→ 324
323	Were you ever told by a health or family planning worker about other methods of family planning that you could use?	YES . . . 1 NO . . . 2	
324	CHECK 304: CIRCLE METHOD CODE: IF MORE THAN ONE METHOD CODE CIRCLED IN 304, CIRCLE CODE FOR HIGHEST METHOD IN LIST.	FEMALE STERILIZATION . . . 01 MALE STERILIZATION . . . 02 IUD . . . 03 INJECTABLES . . . 04 IMPLANTS . . . 05 PILL . . . 06 CONDOM . . . 07 FEMALE CONDOM . . . 08 EMERGENCY CONTRACEPTION . . . 09 STANDARD DAYS METHOD . . . 10 LACTATIONAL AMENORRHEA METHOD . . . 11 RHYTHM METHOD . . . 12 WITHDRAWAL . . . 13 OTHER MODERN METHOD . . . 95 OTHER TRADITIONAL METHOD . . . 96	→ 327 → 327 → 327

SECTION 3. CONTRACEPTION

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
325	Where did you obtain (CURRENT METHOD) the last time? PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE)	**PUBLIC SECTOR** GOVERNMENT HOSPITAL . . . . . 11 GOVERNMENT HEALTH CENTER . . . . . 12 FAMILY PLANNING CLINIC . . . . . 13 MOBILE CLINIC . . . . . 14 FIELDWORKER . . . . . 15 OTHER PUBLIC SECTOR _____ 16 (SPECIFY) **PRIVATE MEDICAL SECTOR** PRIVATE HOSPITAL/CLINIC . . . . . 21 PHARMACY . . . . . 22 PRIVATE DOCTOR . . . . . 23 MOBILE CLINIC . . . . . 24 FIELDWORKER . . . . . 25 OTHER PRIVATE MEDICAL SECTOR _____ 26 (SPECIFY) **OTHER SOURCE** SHOP . . . . . 31 CHURCH . . . . . 32 FRIEND/RELATIVE . . . . . 33 OTHER _____ 96 (SPECIFY)	→ 327
326	Do you know of a place where you can obtain a method of family planning?	YES . . . . . 1 NO 2	
327	In the last 12 months, were you visited by a fieldworker?	YES . . . . . 1 NO 2	→ 329
328	Did the fieldworker talk to you about family planning?	YES . . . . . 1 NO 2	
329	CHECK 202: CHILDREN LIVING WITH THE YES ↓ a) In the last 12 months, have you visited a health facility for care for yourself or your children? NO ↓ b) In the last 12 months, have you visited a health facility for care for yourself?	YES . . . . . 1 NO 2	→ 401
330	Did any staff member at the health facility speak to you about family planning methods?	YES . . . . . 1 NO 2	

SECTION 4. PREGNANCY AND POSTNATAL CARE

401	CHECK 224: ONE OR MORE BIRTHS IN 2014-2019 ☐ ↓ NO BIRTHS IN 2014-2019 ☐ → 648		
402	CHECK 215. RECORD THE BIRTH HISTORY NUMBER IN 403 AND THE NAME AND SURVIVAL STATUS IN 404 FOR EACH BIRTH IN 2014-2019. ASK THE QUESTIONS ABOUT ALL OF THESE BIRTHS. BEGIN WITH THE LAST BIRTH. IF THERE ARE MORE THAN 2 BIRTHS, USE LAST COLUMN OF ADDITIONAL QUESTIONNAIRE(S). Now I would like to ask some questions about your children born in the last five years. (We will talk about each separately.)		
403	BIRTH HISTORY NUMBER FROM 212 IN BIRTH HISTORY.	LAST BIRTH BIRTH HISTORY NUMBER . . . . . ☐☐	NEXT-TO-LAST BIRTH BIRTH HISTORY NUMBER . . . . . ☐☐
404	FROM 212 AND 216:	NAME _____ LIVING ☐ ↓ DEAD ☐ ↓	NAME _____ LIVING ☐ ↓ DEAD ☐ ↓
405	When you got pregnant with (NAME), did you want to get pregnant at that time?	YES . . . . . 1 ┐ (SKIP TO 408) ← NO 2	YES . . . . . 1 ┐ (SKIP TO 426) ← NO 2
406	CHECK 208: ONLY ONE BIRTH ☐ ↓ a) Did you want to have a baby later on, or did you not want any children? MORE THAN ONE BIRTH ☐ ↓ b) Did you want to have a baby later on, or did you not want any more children?	LATER . . . . . 1 NO MORE/NONE . . . . . 2 ┐ (SKIP TO 408) ←	LATER . . . . . 1 NO MORE/NONE . . . . . 2 ┐ (SKIP TO 426) ←
407	How much longer did you want to wait?	MONTHS . . . . . 1 ☐☐ YEARS . . . . . 2 ☐☐ DON'T KNOW 998	MONTHS . . . . . 1 ☐☐ YEARS . . . . . 2 ☐☐ DON'T KNOW 998
408	Did you see anyone for antenatal care for this pregnancy?	YES . . . . . 1 NO . . . . . 2 ┐ (SKIP TO 414) ←	
409	Whom did you see? Anyone else? PROBE TO IDENTIFY EACH TYPE OF PERSON AND RECORD ALL MENTIONED.	**HEALTH PERSONNEL** DOCTOR . . . . . A NURSE/MIDWIFE . . . . . B AUXILIARY MIDWIFE . . . . . C **OTHER PERSON** TRADITIONAL BIRTH ATTENDANT . . . . . D COMMUNITY/ VILLAGE HEALTH WORKER . . . . . E OTHER _____ X (SPECIFY)	

SECTION 4. PREGNANCY AND POSTNATAL CARE

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____
410	Where did you receive antenatal care for this pregnancy? Anywhere else? PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE)	**HOME** HER HOME . . . . . A OTHER HOME . . . . . B **PUBLIC SECTOR** GOVERNMENT HOSPITAL . . C GOVERNMENT HEALTH CENTER . . . . . D GOVERNMENT HEALTH POST . . . . . E OTHER PUBLIC SECTOR _____ F (SPECIFY) **PRIVATE MEDICAL SECTOR** PRIVATE HOSPITAL/ CLINIC . . . . . G OTHER PRIVATE MEDICAL SECTOR _____ H (SPECIFY) OTHER _____ X (SPECIFY)	
411	How many months pregnant were you when you first received antenatal care for this pregnancy?	MONTHS . . . . . [ ][ ] DON'T KNOW 98	
412	How many times did you receive antenatal care during this pregnancy?	NUMBER OF TIMES . . . . . [ ][ ] DON'T KNOW 98	
413	As part of your antenatal care during this pregnancy, were any of the following done at least once: a) Was your blood pressure measured? b) Did you give a urine sample? c) Did you give a blood sample?	YES NO a) BP . . . . . 1 2 b) URINE . . . . . 1 2 c) BLOOD 1 2	
414	During this pregnancy, were you given an injection in the arm to prevent the baby from getting tetanus, that is, convulsions after birth?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 417) DON'T KNOW 8	
415	During this pregnancy, how many times did you get a tetanus injection?	TIMES . . . . . [ ] DON'T KNOW 8	
416	CHECK 415:	2 OR MORE TIMES (SKIP TO 420) OTHER	

SECTION 4. PREGNANCY AND POSTNATAL CARE

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____
417	At any time before this pregnancy, did you receive any tetanus injections?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 420) DON'T KNOW 8	
418	Before this pregnancy, how many times did you receive a tetanus injection? IF 7 OR MORE TIMES, RECORD '7'.	TIMES . . . . . [ ] DON'T KNOW 8	
419	CHECK 418: ONLY ONE: a) How many years ago did you receive that tetanus injection? MORE THAN ONE: b) How many years ago did you receive the last tetanus injection prior to this pregnancy?	YEARS AGO . . . . . [ ][ ]	
420	During this pregnancy, were you given or did you buy any iron tablets or iron syrup? SHOW TABLETS/SYRUP.	YES . . . . . 1 NO . . . . . 2 (SKIP TO 422) DON'T KNOW 8	
421	During the whole pregnancy, for how many days did you take the tablets or syrup? IF ANSWER IS NOT NUMERIC, PROBE FOR APPROXIMATE NUMBER OF DAYS.	DAYS . . . . . [ ][ ][ ] DON'T KNOW 998	
422	During this pregnancy, did you take any drug for intestinal worms?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
423	During this pregnancy, did you take SP/Fansidar to keep you from getting malaria?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 426) DON'T KNOW 8	
424	How many times did you take SP/Fansidar during this pregnancy?	TIMES . . . . . [ ][ ]	
425	Did you get the SP/Fansidar during any antenatal care visit, during another visit to a health facility or from another source? IF MORE THAN ONE SOURCE, RECORD THE HIGHEST SOURCE ON THE LIST.	ANTENATAL VISIT . . . . . 1 ANOTHER FACILITY VISIT . . . . . 2 OTHER SOURCE 6	

SECTION 4. PREGNANCY AND POSTNATAL CARE

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____
426	When (NAME) was born, was (NAME) very large, larger than average, average, smaller than average, or very small?	VERY LARGE . . . . . 1 LARGER THAN AVERAGE . . . . . 2 AVERAGE . . . . . 3 SMALLER THAN AVERAGE . . . . . 4 VERY SMALL . . . . . 5 DON'T KNOW 8	VERY LARGE . . . . . 1 LARGER THAN AVERAGE . . . . . 2 AVERAGE . . . . . 3 SMALLER THAN AVERAGE . . . . . 4 VERY SMALL . . . . . 5 DON'T KNOW 8
427	Was (NAME) weighed at birth?	YES . . . . . 1 NO . . . . . 2 → (SKIP TO 429) DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 → (SKIP TO 429) DON'T KNOW 8
428	How much did (NAME) weigh? RECORD WEIGHT IN KILOGRAMS FROM HEALTH CARD, IF AVAILABLE.	KG FROM CARD 1 ☐☐.☐☐☐ KG FROM RECALL 2 ☐☐.☐☐☐ DON'T KNOW 99998	KG FROM CARD 1 ☐☐.☐☐☐ KG FROM RECALL 2 ☐☐.☐☐☐ DON'T KNOW 99998
429	Who assisted with the delivery of (NAME)? Anyone else? PROBE FOR THE TYPE(S) OF PERSON(S) AND RECORD ALL MENTIONED. IF RESPONDENT SAYS NO ONE ASSISTED, PROBE TO DETERMINE WHETHER ANY ADULTS WERE PRESENT AT THE DELIVERY.	**HEALTH PERSONNEL** DOCTOR . . . . . A NURSE/MIDWIFE . . . . . B AUXILIARY MIDWIFE . . . . . C **OTHER PERSON** TRADITIONAL BIRTH ATTENDANT . . . . . D RELATIVE/FRIEND . . . . . E OTHER _____ X (SPECIFY) NO ONE ASSISTED . . . . . Y	**HEALTH PERSONNEL** DOCTOR . . . . . A NURSE/MIDWIFE . . . . . B AUXILIARY MIDWIFE . . . . . C **OTHER PERSON** TRADITIONAL BIRTH ATTENDANT . . . . . D RELATIVE/FRIEND . . . . . E OTHER _____ X (SPECIFY) NO ONE ASSISTED . . . . . Y

SECTION 4. PREGNANCY AND POSTNATAL CARE

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____
430	Where did you give birth to (NAME)? PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE)	**HOME** HER HOME . . . . . 11 (SKIP TO 434) OTHER HOME . . . . . 12 **PUBLIC SECTOR** GOVERNMENT HOSPITAL . . 21 GOVERNMENT HEALTH CENTER . . . . . 22 GOVERNMENT HEALTH POST . . . . . 23 OTHER PUBLIC SECTOR _____ 26 (SPECIFY) **PRIVATE MEDICAL SECTOR** PRIVATE HOSPITAL/ CLINIC . . . . . 31 OTHER PRIVATE MEDICAL SECTOR _____ 36 (SPECIFY) OTHER _____ 96 (SPECIFY) (SKIP TO 434)	**HOME** HER HOME . . . . . 11 (SKIP TO 434) OTHER HOME . . . . . 12 **PUBLIC SECTOR** GOVERNMENT HOSPITAL . . 21 GOVERNMENT HEALTH CENTER . . . . . 22 GOVERNMENT HEALTH POST . . . . . 23 OTHER PUBLIC SECTOR _____ 26 (SPECIFY) **PRIVATE MEDICAL SECTOR** PRIVATE HOSPITAL/ CLINIC . . . . . 31 OTHER PRIVATE MEDICAL SECTOR _____ 36 (SPECIFY) OTHER _____ 96 (SPECIFY) (SKIP TO 434)
431	How long after (NAME) was delivered did you stay there? IF LESS THAN ONE DAY, RECORD HOURS; IF LESS THAN ONE WEEK, RECORD DAYS.	HOURS . . . . . 1 DAYS . . . . . 2 WEEKS . . . . . 3 DON'T KNOW 998	
432	Was (NAME) delivered by caesarean, that is, did they cut your belly open to take the baby out?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 434)	YES . . . . . 1 NO . . . . . 2 (SKIP TO 434)
433	When was the decision made to have the caesarean section? Was it before or after your labor pains started?	BEFORE . . . . . 1 AFTER 2	BEFORE . . . . . 1 AFTER 2
434	Immediately after the birth, was (NAME) put on your chest?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 434B) DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO 459) DON'T KNOW 8
434A	Was (NAME)'s bare skin touching your bare skin?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8
434B	CHECK 430: PLACE OF DELIVERY	CODE 11, 12, OR 96 CIRCLED (SKIP TO 449) OTHER	

SECTION 4. PREGNANCY AND POSTNATAL CARE

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____
435	I would like to talk to you about checks on your health after delivery, for example, someone asking you questions about your health or examining you. Did anyone check on your health while you were still in the facility?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 438)	
436	How long after delivery did the first check take place? IF LESS THAN ONE DAY, RECORD HOURS; IF LESS THAN ONE WEEK, RECORD DAYS.	HOURS . . . . . 1 ☐☐ DAYS . . . . . 2 ☐☐ WEEKS . . . . . 3 ☐☐ DON'T KNOW 998	
437	Who checked on your health at that time? PROBE FOR MOST QUALIFIED PERSON.	**HEALTH PERSONNEL** DOCTOR . . . . . 11 NURSE/MIDWIFE . . . . . 12 AUXILIARY MIDWIFE . . . . . 13 **OTHER PERSON** TRADITIONAL BIRTH ATTENDANT . . . . . 21 COMMUNITY/ VILLAGE HEALTH WORKER . . . . . 22 OTHER _____ 96 (SPECIFY)	
438	Now I would like to talk to you about checks on (NAME)'s health after delivery – for example, someone examining (NAME), checking the cord, or seeing if (NAME) is OK. Did anyone check on (NAME)'s health while you were still in the facility?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 441) DON'T KNOW 8	
439	How long after delivery was (NAME)'s health first checked? IF LESS THAN ONE DAY, RECORD HOURS; IF LESS THAN ONE WEEK, RECORD DAYS.	HOURS . . . . . 1 ☐☐ DAYS . . . . . 2 ☐☐ WEEKS . . . . . 3 ☐☐ DON'T KNOW 998	
440	Who checked on (NAME)'s health at that time? PROBE FOR MOST QUALIFIED PERSON.	**HEALTH PERSONNEL** DOCTOR . . . . . 11 NURSE/MIDWIFE . . . . . 12 AUXILIARY MIDWIFE . . . . . 13 **OTHER PERSON** TRADITIONAL BIRTH ATTENDANT . . . . . 21 COMMUNITY/ VILLAGE HEALTH WORKER . . . . . 22 OTHER _____ 96 (SPECIFY)	

SECTION 4. PREGNANCY AND POSTNATAL CARE

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____
441	Now I want to talk to you about what happened after you left the facility. Did anyone check on your health after you left the facility?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 445) ←	
442	How long after delivery did that check take place? IF LESS THAN ONE DAY, RECORD HOURS; IF LESS THAN ONE WEEK, RECORD DAYS.	HOURS . . . . . 1 ☐☐ DAYS . . . . . 2 ☐☐ WEEKS . . . . . 3 ☐☐ DON'T KNOW 998	
443	Who checked on your health at that time? PROBE FOR MOST QUALIFIED PERSON.	**HEALTH PERSONNEL** DOCTOR . . . . . 11 NURSE/MIDWIFE . . . . . 12 AUXILIARY MIDWIFE . . . . . 13 **OTHER PERSON** TRADITIONAL BIRTH ATTENDANT . . . . . 21 COMMUNITY/ VILLAGE HEALTH WORKER . . . . . 22 OTHER _____ 96 (SPECIFY)	
444	Where did the check take place? PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE)	**HOME** HER HOME . . . . . 11 OTHER HOME . . . . . 12 **PUBLIC SECTOR** GOVERNMENT HOSPITAL . . 21 GOVERNMENT HEALTH CENTER . . . . . 22 GOVERNMENT HEALTH POST . . . . . 23 OTHER PUBLIC SECTOR _____ 26 (SPECIFY) **PRIVATE MEDICAL SECTOR** PRIVATE HOSPITAL/ CLINIC . . . . . 31 OTHER PRIVATE MEDICAL SECTOR _____ 36 (SPECIFY) OTHER _____ 96 (SPECIFY)	
445	I would like to talk to you about checks on (NAME)'s health after you left (FACILITY IN 430). Did any health care provider or a traditional birth attendant check on (NAME)'s health in the two months after you left (FACILITY IN 430)?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 457) ← DON'T KNOW 8	

SECTION 4. PREGNANCY AND POSTNATAL CARE

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____
446	How many hours, days or weeks after the birth of (NAME) did that check take place? IF LESS THAN ONE DAY, RECORD HOURS; IF LESS THAN ONE WEEK, RECORD DAYS.	HOURS . . . . . 1 ☐☐ DAYS . . . . . 2 ☐☐ WEEKS . . . . . 3 ☐☐ DON'T KNOW 998	
447	Who checked on (NAME)'s health at that time? PROBE FOR MOST QUALIFIED PERSON.	**HEALTH PERSONNEL** DOCTOR . . . . . 11 NURSE/MIDWIFE . . . . . 12 AUXILIARY MIDWIFE . . . . . 13 **OTHER PERSON** TRADITIONAL BIRTH ATTENDANT . . . . . 21 COMMUNITY/ VILLAGE HEALTH WORKER . . . . . 22 OTHER _____ 96 (SPECIFY)	
448	Where did this check of (NAME) take place? PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE)	**HOME** HER HOME . . . . . 11 OTHER HOME . . . . . 12 **PUBLIC SECTOR** GOVERNMENT HOSPITAL . . 21 GOVERNMENT HEALTH CENTER . . . . . 22 GOVERNMENT HEALTH POST . . . . . 23 OTHER PUBLIC SECTOR _____ 26 (SPECIFY) **PRIVATE MEDICAL SECTOR** PRIVATE HOSPITAL/ CLINIC . . . . . 31 OTHER PRIVATE MEDICAL SECTOR _____ 36 (SPECIFY) OTHER _____ 96 (SPECIFY) (SKIP TO 457)	
449	I would like to talk to you about checks on your health after delivery, for example, someone asking you questions about your health or examining you. Did anyone check on your health after you gave birth to (NAME)?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 453)	

SECTION 4. PREGNANCY AND POSTNATAL CARE

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____
450	How long after delivery did the first check take place? IF LESS THAN ONE DAY, RECORD HOURS; IF LESS THAN ONE WEEK, RECORD DAYS.	HOURS . . . . . 1 ☐☐ DAYS . . . . . 2 ☐☐ WEEKS . . . . . 3 ☐☐ DON'T KNOW 998	
451	Who checked on your health at that time? PROBE FOR MOST QUALIFIED PERSON.	**HEALTH PERSONNEL** DOCTOR . . . . . 11 NURSE/MIDWIFE . . . . . 12 AUXILIARY MIDWIFE . . . . . 13 **OTHER PERSON** TRADITIONAL BIRTH ATTENDANT . . . . . 21 COMMUNITY/ VILLAGE HEALTH WORKER . . . . . 22 OTHER _____ 96 (SPECIFY)	
452	Where did this first check take place? PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE)	**HOME** HER HOME . . . . . 11 OTHER HOME . . . . . 12 **PUBLIC SECTOR** GOVERNMENT HOSPITAL . . 21 GOVERNMENT HEALTH CENTER . . . . . 22 GOVERNMENT HEALTH POST . . . . . 23 OTHER PUBLIC SECTOR _____ 26 (SPECIFY) **PRIVATE MEDICAL SECTOR** PRIVATE HOSPITAL/ CLINIC . . . . . 31 OTHER PRIVATE MEDICAL SECTOR _____ 36 (SPECIFY) OTHER _____ 96 (SPECIFY)	
453	I would like to talk to you about checks on (NAME)'s health after delivery – for example, someone examining (NAME), checking the cord, or seeing if (NAME) is OK. In the two months after (NAME) was born, did any health care provider or a traditional birth attendant check on (NAME)'s health?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 457) DON'T KNOW 8	

SECTION 4. PREGNANCY AND POSTNATAL CARE

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____
454	How many hours, days or weeks after the birth of (NAME) did the first check take place? IF LESS THAN ONE DAY, RECORD HOURS; IF LESS THAN ONE WEEK, RECORD DAYS.	HOURS AFTER BIRTH ..... 1 [ ][ ] DAYS AFTER BIRTH ..... 2 [ ][ ] WEEKS AFTER BIRTH ..... 3 [ ][ ] DON'T KNOW 998	
455	Who checked on (NAME)'s health at that time? PROBE FOR MOST QUALIFIED PERSON.	**HEALTH PERSONNEL** DOCTOR ..... 11 NURSE/MIDWIFE ..... 12 AUXILIARY MIDWIFE ..... 13 **OTHER PERSON** TRADITIONAL BIRTH ATTENDANT ..... 21 COMMUNITY/ VILLAGE HEALTH WORKER ..... 22 OTHER _____ 96 (SPECIFY)	
456	Where did this first check of (NAME) take place? PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE)	**HOME** HER HOME ..... 11 OTHER HOME ..... 12 **PUBLIC SECTOR** GOVERNMENT HOSPITAL .. 21 GOVERNMENT HEALTH CENTER ..... 22 GOVERNMENT HEALTH POST ..... 23 OTHER PUBLIC SECTOR _____ 26 (SPECIFY) **PRIVATE MEDICAL SECTOR** PRIVATE HOSPITAL/ CLINIC ..... 31 OTHER PRIVATE MEDICAL SECTOR _____ 36 (SPECIFY) OTHER _____ 96 SPECIFY	

SECTION 4. PREGNANCY AND POSTNATAL CARE

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____
457	During the first two days after (NAME)'s birth, did any health care provider do the following: a) Examine the cord? b) Measure (NAME)'s temperature? c) Counsel you on danger signs for newborns? d) Counsel you on breastfeeding? e) Observe (NAME) breastfeeding?	YES NO DK a) CORD . . . . . 1 2 8 b) TEMP. . . . . 1 2 8 c) SIGNS . . . . . 1 2 8 d) COUNSEL BREAST-FEED 1 2 8 e) OBSERVE BREAST-FEED 1 2 8	
458	Has your menstrual period returned since the birth of (NAME)?	YES . . . . . 1 → (SKIP TO 460) NO . . . . . 2 → (SKIP TO 461)	
459	Did your period return between the birth of (NAME) and your next pregnancy?		YES . . . . . 1 NO . . . . . 2 → (SKIP TO 463)
460	For how many months after the birth of (NAME) did you not have a period?	MONTHS . . . . . ☐☐ DON'T KNOW 98	MONTHS . . . . . ☐☐ DON'T KNOW 98
461	CHECK 226: IS RESPONDENT PREGNANT?	NOT PREGNANT ↓ PREGNANT OR UNSURE → (SKIP TO 463)	
462	Have you had sexual intercourse since the birth of (NAME)?	YES . . . . . 1 NO . . . . . 2 → (SKIP TO 464)	
463	For how many months after the birth of (NAME) did you not have sexual intercourse?	MONTHS . . . . . ☐☐ DON'T KNOW 98	MONTHS . . . . . ☐☐ DON'T KNOW 98
464	Did you ever breastfeed (NAME)?	YES . . . . . 1 → (SKIP TO 466) NO 2	YES . . . . . 1 NO 2
465	CHECK 404: IS CHILD LIVING?	LIVING → (SKIP TO 470) DEAD → (SKIP TO 471)	
466	How long after birth did you first put (NAME) to the breast? IF LESS THAN 1 HOUR, RECORD '00' HOURS; IF LESS THAN 24 HOURS, RECORD HOURS; OTHERWISE, RECORD DAYS.	IMMEDIATELY . . . . . 000 HOURS . . . . . 1 ☐☐ DAYS . . . . . 2 ☐☐	
467	In the first three days after delivery, was (NAME) given anything to drink other than breast milk?	YES . . . . . 1 NO 2	

SECTION 4. PREGNANCY AND POSTNATAL CARE

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____
468	CHECK 404: IS CHILD LIVING?	LIVING → DEAD (SKIP TO 471)	LIVING → DEAD (SKIP TO 471)
469	Are you still breastfeeding (NAME)?	YES . . . . . 1 NO 2	
470	Did (NAME) drink anything from a bottle with a nipple yesterday or last night?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8
471		GO BACK TO 405 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 501A.	GO BACK TO 405 IN NEXT-TO-LAST COLUMN OF NEW QUESTIONNAIRE; OR, IF NO MORE BIRTHS, GO TO 501A.

SECTION 5A. CHILD IMMUNIZATION (LAST BIRTH)

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
501A	CHECK 215 IN THE BIRTH HISTORY: ANY BIRTHS IN 2016-2019? ONE OR MORE BIRTHS IN 2016-2019 ☐ NO BIRTHS IN 2016-2019 ☐		→ 601
502A	RECORD THE NAME AND BIRTH HISTORY NUMBER FROM 212 OF THE LAST CHILD BORN IN 2016-2019. NAME OF LAST BIRTH _____ BIRTH HISTORY NUMBER . . . . . ☐☐		
503A	CHECK 216 FOR CHILD: LIVING ☐ DEAD ☐		→ 501B
504A	Do you have a card or other document where (NAME)'s vaccinations are written down?	YES, HAS ONLY A CARD . . . . . 1 YES, HAS ONLY ANOTHER DOCUMENT . . . . . 2 YES, HAS CARD AND OTHER DOCUMENT . . . . . 3 NO, NO CARD AND NO OTHER DOCUMENT . . 4	→ 507A → 507A
505A	Did you ever have a vaccination card for (NAME)?	YES . . . . . 1 NO 2	
506A	CHECK 504A: CODE '2' CIRCLED ☐ CODE '4' CIRCLED ☐		→ 511A
507A	May I see the card or other document where (NAME)'s vaccinations are written down?	YES, ONLY CARD SEEN . . . . . 1 YES, ONLY OTHER DOCUMENT SEEN . . . . . 2 YES, CARD AND OTHER DOCUMENT SEEN . . 3 NO CARD AND NO OTHER DOCUMENT SEEN . . 4	 → 511A

SECTION 5A. CHILD IMMUNIZATION (LAST BIRTH)

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
	NAME OF LAST BIRTH _____	BIRTH HISTORY NUMBER	
508A	COPY DATES FROM THE CARD. WRITE '44' IN 'DAY' COLUMN IF CARD SHOWS THAT A DOSE WAS GIVEN, BUT NO DATE IS RECORDED.		

	DAY		MONTH		YEAR			
BCG								
ORAL POLIO VACCINE (OPV) 0 (BIRTH DOSE)								
ORAL POLIO VACCINE (OPV) 1								
ORAL POLIO VACCINE (OPV) 2								
ORAL POLIO VACCINE (OPV) 3								
DPT-HEP.B-HIB (PENTAVALENT) 1								
DPT-HEP.B-HIB (PENTAVALENT) 2								
DPT-HEP.B-HIB (PENTAVALENT) 3								
PNEUMOCOCCAL 1								
PNEUMOCOCCAL 2								
PNEUMOCOCCAL 3								
INACTIVATED POLIO VIRUS (IPV)								
ROTAVIRUS 1								
ROTAVIRUS 2								
MEASLES 1								
MEASLES 2								
YELLOW FEVER								
VITAMIN A (MOST RECENT)								

509A	CHECK 508A: 'BCG' TO 'MEASLES ALL RECORDED? NO ☐ ↓ YES ☐ → 525A		
510A	In addition to what is recorded on (this document/these documents), did (NAME) receive any other vaccinations, including vaccinations received in campaigns or immunization days or child health days? RECORD 'YES' ONLY IF THE RESPONDENT MENTIONS AT LEAST ONE OF THE VACCINATIONS IN 508A THAT ARE NOT RECORDED AS HAVING BEEN GIVEN.	YES . . . . . 1 (PROBE FOR VACCINATIONS AND WRITE '66' IN THE CORRESPONDING DAY COLUMN IN 508A THEN WRITE '00' IN THE CORRESPONDING DAY COLUMN FOR ALL VACCINATIONS NOT GIVEN) (THEN SKIP TO 525A) NO . . . . . 2 DON'T KNOW . . . . . 8 (WRITE '00' IN THE CORRESPONDING DAY COLUMN FOR ALL VACCINATIONS NOT GIVEN) (THEN SKIP TO 525A)	

SECTION 5A. CHILD IMMUNIZATION (LAST BIRTH)

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
	NAME OF LAST BIRTH _____	BIRTH HISTORY NUMBER	
511A	Did (NAME) ever receive any vaccinations to prevent (NAME) from getting diseases, including vaccinations received in campaigns or immunization days or child health days?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 525A
512A	Has (NAME) ever received a BCG vaccination against tuberculosis, that is, an injection in the arm or shoulder that usually causes a scar?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
514A	Has (NAME) ever received oral polio vaccine, that is, about two drops in the mouth to prevent polio?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 517A
515A	Did (NAME) receive the first oral polio vaccine in the first two weeks after birth or later?	FIRST TWO WEEKS . . . . . 1 LATER 2	
516A	How many times did (NAME) receive the oral polio vaccine?	NUMBER OF TIMES	
516A1	The last time (NAME) receive the polio drops, did (NAME) also get an IPV injection in the arm to protect against polio?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
517A	Has (NAME) ever received a pentavalent vaccination, that is, an injection given in the thigh sometimes at the same time as polio drops?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 519A
518A	How many times did (NAME) receive the pentavalent vaccine?	NUMBER OF TIMES	

SECTION 5A. CHILD IMMUNIZATION (LAST BIRTH)

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
	NAME OF LAST BIRTH _____	BIRTH HISTORY NUMBER	
519A	Has (NAME) ever received a pneumococcal vaccination, that is, an injection in the thigh to prevent pneumonia?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 521A
520A	How many times did (NAME) receive the pneumococcal vaccine?	NUMBER OF TIMES	
521A	Has (NAME) ever received a rotavirus vaccination, that is, liquid in the mouth to prevent diarrhea?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 523A
522A	How many times did (NAME) receive the rotavirus vaccine?	NUMBER OF TIMES	
523A	Has (NAME) ever received a measles vaccination, that is, an injection in the arm to prevent measles?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 524A1
524A	How many times did (NAME) receive the measles vaccine?	NUMBER OF TIMES	
524A1	Has (NAME) ever received a yellow fever vaccination, that is, an injection in the upper right arm to prevent yellow fever?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
525A	In the last 7 days was (NAME) given: a) READY TO USE THERAPEUTIC FOOD AS PLUMPY'NUT? b) SUPPLEMETAL FOOD SUCH AS PLUMPY'DOZ	YES NO DK b) PLUMPY'NUT . . . . . 1 2 8 c) PLUMPY'DOZ 1 2 8	
526A	CONTINUE WITH 501B.		

SECTION 5B. CHILD IMMUNIZATION (NEXT-TO-LAST BIRTH)

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
501B	CHECK 215 IN THE BIRTH HISTORY: ANY MORE BIRTHS IN 2016-2019? MORE BIRTHS IN 2016-2019 ☐ NO MORE BIRTHS IN 2016-2019 ☐		→ 601
502B	RECORD THE NAME AND BIRTH HISTORY NUMBER FROM 212 OF THE NEXT-TO-LAST CHILD BORN IN 2016-2019. NAME OF NEXT-TO-LAST BIRTH _____ BIRTH HISTORY NUMBER . . . . . ☐☐		
503B	CHECK 216 FOR CHILD: LIVING ☐ DEAD ☐		→ 526B
504B	Do you have a card or other document where (NAME)'s vaccinations are written down?	YES, HAS ONLY A CARD . . . . . 1 YES, HAS ONLY ANOTHER DOCUMENT . . . . . 2 YES, HAS CARD AND OTHER DOCUMENT . . . . . 3 NO, NO CARD AND NO OTHER DOCUMENT . . 4	→ 507B → 507B
505B	Did you ever have a vaccination card for (NAME)?	YES . . . . . 1 NO 2	
506B	CHECK 504B: CODE '2' CIRCLED ☐ CODE '4' CIRCLED ☐		→ 511B
507B	May I see the card or other document where (NAME)'s vaccinations are written down?	YES, ONLY CARD SEEN . . . . . 1 YES, ONLY OTHER DOCUMENT SEEN . . . . . 2 YES, CARD AND OTHER DOCUMENT SEEN . . 3 NO CARD AND NO OTHER DOCUMENT SEEN . . 4	 → 511B

SECTION 5B. CHILD IMMUNIZATION (NEXT-TO-LAST BIRTH)

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
	NAME OF NEXT-TO-LAST BIRTH _____	BIRTH HISTORY NUMBER	

508B COPY DATES FROM THE CARD.
WRITE '44' IN 'DAY' COLUMN IF CARD SHOWS THAT A DOSE WAS GIVEN, BUT NO DATE IS RECORDED.

	DAY		MONTH		YEAR			
BCG (AT BIRTH)								
ORAL POLIO VACCINE (OPV) 0 (BIRTH DOSE)								
ORAL POLIO VACCINE (OPV) 1								
ORAL POLIO VACCINE (OPV) 2								
ORAL POLIO VACCINE (OPV) 3								
DPT-HEP.B-HIB (PENTAVALENT) 1								
DPT-HEP.B-HIB (PENTAVALENT) 2								
DPT-HEP.B-HIB (PENTAVALENT) 3								
PNEUMOCOCCAL 1								
PNEUMOCOCCAL 2								
PNEUMOCOCCAL 3								
INACTIVATED POLIO VIRUS (IPV)								
ROTAVIRUS 1								
ROTAVIRUS 2								
MEASLES 1								
MEASLES 2								
YELLOW FEVER								
VITAMIN A (MOST RECENT)								

509B CHECK 508B: 'BCG' TO 'MEASLES ALL RECORDED?

NO ☐ ↓

YES ☐ → 525B

510B In addition to what is recorded on (this document/these documents), did (NAME) receive any other vaccinations, including vaccinations received in campaigns or immunization days or child health days?

RECORD 'YES' ONLY IF THE RESPONDENT MENTIONS AT LEAST ONE OF THE VACCINATIONS IN 508B THAT ARE NOT RECORDED AS HAVING BEEN GIVEN.

YES 1
(PROBE FOR VACCINATIONS AND WRITE '66' IN THE CORRESPONDING DAY COLUMN IN 508B
THEN WRITE '00' IN THE CORRESPONDING DAY COLUMN FOR ALL VACCINATIONS NOT GIVEN)
(THEN SKIP TO 525B)

NO 2
DON'T KNOW 8
(WRITE '00' IN THE CORRESPONDING DAY COLUMN FOR ALL VACCINATIONS NOT GIVEN)
(THEN SKIP TO 525B)

SECTION 5B. CHILD IMMUNIZATION (NEXT-TO-LAST BIRTH)

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
	NAME OF NEXT-TO-LAST BIRTH _____	BIRTH HISTORY NUMBER	
511B	Did (NAME) ever receive any vaccinations to prevent (NAME) from getting diseases, including vaccinations received in campaigns or immunization days or child health days?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 525B
512B	Has (NAME) ever received a BCG vaccination against tuberculosis, that is, an injection in the arm or shoulder that usually causes a scar?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
514B	Has (NAME) ever received oral polio vaccine, that is, about two drops in the mouth to prevent polio?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 517B
515B	Did (NAME) receive the first oral polio vaccine in the first two weeks after birth or later?	FIRST TWO WEEKS . . . . . 1 LATER 2	
516B	How many times did (NAME) receive the oral polio vaccine?	NUMBER OF TIMES	
516B1	The last time (NAME) receive the polio drops, did (NAME) also get an IPV injection in the arm to protect against polio?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
517B	Has (NAME) ever received a pentavalent vaccination, that is, an injection given in the thigh sometimes at the same time as polio drops?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 519B
518B	How many times did (NAME) receive the pentavalent vaccine?	NUMBER OF TIMES	

SECTION 5B. CHILD IMMUNIZATION (NEXT-TO-LAST BIRTH)

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
	NAME OF NEXT-TO-LAST BIRTH _____	BIRTH HISTORY NUMBER	
519B	Has (NAME) ever received a pneumococcal vaccination, that is, an injection in the thigh to prevent pneumonia?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 521B
520B	How many times did (NAME) receive the pneumococcal vaccine?	NUMBER OF TIMES	
521B	Has (NAME) ever received a rotavirus vaccination, that is, liquid in the mouth to prevent diarrhea?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 523B
522B	How many times did (NAME) receive the rotavirus vaccine?	NUMBER OF TIMES	
523B	Has (NAME) ever received a measles vaccination, that is, an injection in the arm to prevent measles?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 523B1
524B	How many times did (NAME) receive the measles vaccine?	NUMBER OF TIMES	
524B1	Has (NAME) ever received a yellow fever vaccination, that is, an injection in the upper right arm to prevent yellow fever?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
525B	In the last 7 days was (NAME) given: a) READY TO USE THERAPEUTIC FOOD AS PLUMPY'NUT? b) SUPPLEMETAL FOOD SUCH AS PLUMPY'DOZ	YES NO DK b) PLUMPY'NUT . . . . . 1 2 8 c) PLUMPY'DOZ 1 2 8	
527B	CHECK 215 IN BIRTH HISTORY: ANY MORE BIRTHS IN 2016-2019? MORE BIRTHS IN 2016-2019 → (GO TO 502B IN AN ADDITIONAL QUESTIONNAIRE) NO MORE BIRTHS IN 2016-2019 → 601		

601	CHECK 224: ONE OR MORE BIRTHS IN 2014-2019 ☐ ↓ NO BIRTHS IN 2014-2019 ☐ → 648		
602	CHECK 215: RECORD THE BIRTH HISTORY NUMBER IN 603 AND THE NAME AND SURVIVAL STATUS IN 604 FOR EACH BIRTH IN 2014-2019. ASK THE QUESTIONS ABOUT ALL OF THESE BIRTHS. BEGIN WITH THE LAST BIRTH. IF THERE ARE MORE THAN 2 BIRTHS, USE LAST COLUMN OF ADDITIONAL QUESTIONNAIRE(S). Now I would like to ask some questions about your children born in the last five years. (We will talk about each separately.)		
603	BIRTH HISTORY NUMBER FROM 212 IN BIRTH HISTORY.	LAST BIRTH BIRTH HISTORY NUMBER . . . . . ☐☐	NEXT-TO-LAST BIRTH BIRTH HISTORY NUMBER . . . . . ☐☐
604	FROM 212 AND 216:	NAME _____ LIVING ↓ DEAD ☐ → (SKIP TO 646)	NAME _____ LIVING ↓ DEAD ☐ → (SKIP TO 646)
605	In the last six months, was (NAME) given a vitamin A dose like [this/any of these]? SHOW COMMON TYPES OF AMPULES/CAPSULES/SYRUPS.	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8
606	In the last seven days, was (NAME) given iron pills, sprinkles with iron, or iron syrup like [this/any of these]? SHOW COMMON TYPES OF PILLS/SPRINKLES/SYRUPS.	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8
607	Was (NAME) given any drug for intestinal worms in the last six months?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8
608	Has (NAME) had diarrhea in the last 2 weeks?	YES . . . . . 1 NO . . . . . 2 → (SKIP TO 618) DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 → (SKIP TO 618) DON'T KNOW 8

SECTION 6. CHILD HEALTH AND NUTRITION

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____
609	CHECK 469: CURRENTLY BREASTFEEDING? YES ⚑ / NO/ NOT ASKED ⚑ a) Now I would like to know how much (NAME) was given to drink during the diarrhea including breastmilk. Was (NAME) given less than usual to drink, about the same amount, or more than usual to drink? IF LESS, PROBE: Was (NAME) given much less than usual to drink or somewhat less? b) Now I would like to know how much (NAME) was given to drink during the diarrhea. Was (NAME) given less than usual to drink, about the same amount, or more than usual to drink? IF LESS, PROBE: Was (NAME) given much less than usual to drink or somewhat less?	MUCH LESS . . . . . 1 SOMEWHAT LESS . . . . . 2 ABOUT THE SAME . . . . . 3 MORE . . . . . 4 NOTHING TO DRINK . . . . . 5 DON'T KNOW 8	MUCH LESS . . . . . 1 SOMEWHAT LESS . . . . . 2 ABOUT THE SAME . . . . . 3 MORE . . . . . 4 NOTHING TO DRINK . . . . . 5 DON'T KNOW 8
610	When (NAME) had diarrhea, was (NAME) given less than usual to eat, about the same amount, more than usual, or nothing to eat? IF LESS, PROBE: Was (NAME) given much less than usual to eat or somewhat less?	MUCH LESS . . . . . 1 SOMEWHAT LESS . . . . . 2 ABOUT THE SAME . . . . . 3 MORE . . . . . 4 STOPPED FOOD . . . . . 5 NEVER GAVE FOOD . . . . . 6 DON'T KNOW 8	MUCH LESS . . . . . 1 SOMEWHAT LESS . . . . . 2 ABOUT THE SAME . . . . . 3 MORE . . . . . 4 STOPPED FOOD . . . . . 5 NEVER GAVE FOOD . . . . . 6 DON'T KNOW 8
611	Did you seek advice or treatment for the diarrhea from any source?	YES . . . . . 1 NO . . . . . 2 → (SKIP TO 615)	YES . . . . . 1 NO . . . . . 2 → (SKIP TO 615)

SECTION 6. CHILD HEALTH AND NUTRITION

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____
612	Where did you seek advice or treatment? Anywhere else? PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE(S). _____ (NAME OF PLACE(S))	**PUBLIC SECTOR** GOVERNMENT HOSPITAL . . A GOVERNMENT HEALTH CENTER . . . . . B GOVERNMENT HEALTH POST . . . . . C MOBILE CLINIC . . . . . D FIELDWORKER . . . . . E OTHER PUBLIC SECTOR _____ F (SPECIFY) **PRIVATE MEDICAL SECTOR** PRIVATE HOSPITAL/ CLINIC . . . . . G PHARMACY . . . . . H PRIVATE DOCTOR . . . . . I MOBILE CLINIC . . . . . J FIELDWORKER . . . . . K OTHER PRIVATE MEDICAL SECTOR _____ L (SPECIFY) **OTHER SOURCE** SHOP . . . . . M TRADITIONAL PRACTITIONER . . . . . N MARKET . . . . . O ITINERANT DRUG SELLER . . . . . P OTHER _____ X (SPECIFY)	**PUBLIC SECTOR** GOVERNMENT HOSPITAL . . A GOVERNMENT HEALTH CENTER . . . . . B GOVERNMENT HEALTH POST . . . . . C MOBILE CLINIC . . . . . D FIELDWORKER . . . . . E OTHER PUBLIC SECTOR _____ F (SPECIFY) **PRIVATE MEDICAL SECTOR** PRIVATE HOSPITAL/ CLINIC . . . . . G PHARMACY . . . . . H PRIVATE DOCTOR . . . . . I MOBILE CLINIC . . . . . J FIELDWORKER . . . . . K OTHER PRIVATE MEDICAL SECTOR _____ L (SPECIFY) **OTHER SOURCE** SHOP . . . . . M TRADITIONAL PRACTITIONER . . . . . N MARKET . . . . . O ITINERANT DRUG SELLER . . . . . P OTHER _____ X (SPECIFY)
613	CHECK 612:	TWO OR MORE CODES CIRCLED ☐ ONLY ONE CODE CIRCLED ☐ → (SKIP TO 615)	TWO OR MORE CODES CIRCLED ☐ ONLY ONE CODE CIRCLED ☐ → (SKIP TO 615)
614	Where did you first seek advice or treatment? USE LETTER CODE FROM 612.	FIRST PLACE . . . . . ☐	FIRST PLACE . . . . . ☐

SECTION 6. CHILD HEALTH AND NUTRITION

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____
615	Was (NAME) given any of the following at any time since (NAME) started having the diarrhea: a) A fluid made from a special packet called (ORS)? b) A pre-packed ORS liquid such as (PARENT CHOICE, ELECTRORUSH) c) A government-recommended homemade fluid? d) Zinc tablets or syrup?	YES NO DK a) FLUID FROM ORS 1 2 8 b) ORS LIQUID . . 1 2 8 c) HOMEMADE FLUID . . . . . 1 2 8 d) ZINC 1 2 8	YES NO DK a) FLUID FROM ORS 1 2 8 b) ORS LIQUID . . 1 2 8 c) HOMEMADE FLUID . . . . . 1 2 8 d) ZINC 1 2 8
616	CHECK 615: ANY 'YES' → a) Was anything else given to treat the diarrhea? ALL 'NO' OR 'DK' → b) Was anything given to treat the diarrhea?	YES . . . . . 1 NO . . . . . 2 → (SKIP TO 618) DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 → (SKIP TO 618) DON'T KNOW 8
617	CHECK 615: ANY 'YES' → a) What else was given to treat the diarrhea? Anything else? ALL 'NO' OR 'DK' → b) What was given to treat the diarrhea? Anything else? RECORD ALL TREATMENTS GIVEN.	**PILL OR SYRUP** ANTIBIOTIC . . . . . A ANTIMOTILITY . . . . . B OTHER (NOT ANTIBIOTIC OR ANTIMOTILITY) . . . . . C UNKNOWN PILL OR SYRUP . . . . . D **INJECTION** ANTIBIOTIC . . . . . E NON-ANTIBIOTIC . . . . . F UNKNOWN INJECTION . . . . . G (IV) INTRAVENOUS . . . . . H HOME REMEDY/ HERBAL MEDICINE . . . . . I OTHER _____ (SPECIFY) X	**PILL OR SYRUP** ANTIBIOTIC . . . . . A ANTIMOTILITY . . . . . B OTHER (NOT ANTIBIOTIC OR ANTIMOTILITY) . . . . . C UNKNOWN PILL OR SYRUP . . . . . D **INJECTION** ANTIBIOTIC . . . . . E NON-ANTIBIOTIC . . . . . F UNKNOWN INJECTION . . . . . G (IV) INTRAVENOUS . . . . . H HOME REMEDY/ HERBAL MEDICINE . . . . . I OTHER _____ (SPECIFY) X
618	Has (NAME) been ill with a fever at any time in the last 2 weeks?	YES . . . . . 1 NO . . . . . 2 → (SKIP TO 620) DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 → (SKIP TO 620) DON'T KNOW 8
619	At any time during the illness, did (NAME) have blood taken from (NAME)'s finger or heel for testing?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8
620	Has (NAME) had an illness with a cough at any time in the last 2 weeks?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8
621	Has (NAME) had fast, short, rapid breaths or difficulty breathing at any time in the last 2 weeks?	YES . . . . . 1 NO . . . . . 2 → (SKIP TO 623) DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 → (SKIP TO 623) DON'T KNOW 8

SECTION 6. CHILD HEALTH AND NUTRITION

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____
622	Was the fast or difficult breathing due to a problem in the chest or to a blocked or runny nose?	CHEST ONLY . . . . . 1 NOSE ONLY . . . . . 2 BOTH . . . . . 3 OTHER _____ 6 (SPECIFY) DON'T KNOW . . . . . 8 (SKIP TO 624)	CHEST ONLY . . . . . 1 NOSE ONLY . . . . . 2 BOTH . . . . . 3 OTHER _____ 6 (SPECIFY) DON'T KNOW . . . . . 8 (SKIP TO 624)
623	CHECK 618: HAD FEVER?	YES / NO OR DK (SKIP TO 646)	YES / NO OR DK (SKIP TO 646)
624	Did you seek advice or treatment for the illness from any source?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 629)	YES . . . . . 1 NO . . . . . 2 (SKIP TO 629)
625	Where did you seek advice or treatment? Anywhere else? PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE(S). _____ (NAME OF PLACE(S))	**PUBLIC SECTOR** GOVERNMENT HOSPITAL . . A GOVERNMENT HEALTH CENTER . . . . . B GOVERNMENT HEALTH POST . . . . . C MOBILE CLINIC . . . . . D FIELDWORKER/CHW . . . . . E OTHER PUBLIC SECTOR _____ F (SPECIFY) **PRIVATE MEDICAL SECTOR** PRIVATE HOSPITAL/ CLINIC . . . . . G PHARMACY . . . . . H PRIVATE DOCTOR . . . . . I MOBILE CLINIC . . . . . J FIELDWORKER/CHW . . . . . K OTHER PRIVATE MEDICAL SECTOR _____ L (SPECIFY) **OTHER SOURCE** SHOP . . . . . M TRADITIONAL PRACTITIONER . . . . . N MARKET . . . . . O ITINERANT DRUG SELLER . . . . . P OTHER _____ X (SPECIFY)	**PUBLIC SECTOR** GOVERNMENT HOSPITAL . . A GOVERNMENT HEALTH CENTER . . . . . B GOVERNMENT HEALTH POST . . . . . C MOBILE CLINIC . . . . . D FIELDWORKER/CHW . . . . . E OTHER PUBLIC SECTOR _____ F (SPECIFY) **PRIVATE MEDICAL SECTOR** PRIVATE HOSPITAL/ CLINIC . . . . . G PHARMACY . . . . . H PRIVATE DOCTOR . . . . . I MOBILE CLINIC . . . . . J FIELDWORKER/CHW . . . . . K OTHER PRIVATE MEDICAL SECTOR _____ L (SPECIFY) **OTHER SOURCE** SHOP . . . . . M TRADITIONAL PRACTITIONER . . . . . N MARKET . . . . . O ITINERANT DRUG SELLER . . . . . P OTHER _____ X (SPECIFY)
626	CHECK 625:	TWO OR MORE CODES CIRCLED / ONLY ONE CODE CIRCLED (SKIP TO 628)	TWO OR MORE CODES CIRCLED / ONLY ONE CODE CIRCLED (SKIP TO 628)

SECTION 6. CHILD HEALTH AND NUTRITION

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____
627	Where did you first seek advice or treatment? USE LETTER CODE FROM 625.	FIRST PLACE . . . . . [ ]	FIRST PLACE . . . . . [ ]
628	How many days after the illness began did you first seek advice or treatment for (NAME)? IF THE SAME DAY RECORD '00'.	DAYS . . . . . [ ][ ]	DAYS . . . . . [ ][ ]
629	At any time during the illness, did (NAME) take any drugs for the illness?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 646) DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO 646) DON'T KNOW 8
630	What drugs did (NAME) take? Any other drugs? RECORD ALL MENTIONED.	**ANTIMALARIAL DRUGS** ARTEMISININ COMBINATION THERAPY (ACT) . . . . . A SP/FANSIDAR . . . . . B CHLOROQUINE . . . . . C AMODIAQUINE . . . . . D QUININE PILLS . . . . . E INJECTION/IV . . . . . F ARTESUNATE RECTAL . . . . . G INJECTION/IV . . . . . H OTHER ANTIMALARIAL _____ I (SPECIFY) **ANTIBIOTIC DRUGS** PILL/SYRUP . . . . . J INJECTION/IV . . . . . K **OTHER DRUGS** ASPIRIN . . . . . L ACETAMINOPHEN . . . . . M IBUPROFEN . . . . . N OTHER _____ X (SPECIFY) DON'T KNOW . . . . . Z	**ANTIMALARIAL DRUGS** ARTEMISININ COMBINATION THERAPY (ACT) . . . . . A SP/FANSIDAR . . . . . B CHLOROQUINE . . . . . C AMODIAQUINE . . . . . D QUININE PILLS . . . . . E INJECTION/IV . . . . . F ARTESUNATE RECTAL . . . . . G INJECTION/IV . . . . . H OTHER ANTIMALARIAL _____ I (SPECIFY) **ANTIBIOTIC DRUGS** PILL/SYRUP . . . . . J INJECTION/IV . . . . . K **OTHER DRUGS** ASPIRIN . . . . . L ACETAMINOPHEN . . . . . M IBUPROFEN . . . . . N OTHER _____ X (SPECIFY) DON'T KNOW . . . . . Z

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____
631	CHECK 630: ANY CODE A-I CIRCLED?	YES → NO → (SKIP TO 646)	YES → NO → (SKIP TO 646)
632	CHECK 630: ARTEMISININ COMBINATION THERAPY ('A') GIVEN	CODE 'A' CIRCLED → CODE 'A' NOT CIRCLED → (SKIP TO 634)	CODE 'A' CIRCLED → CODE 'A' NOT CIRCLED → (SKIP TO 634)
633	How long after the fever started did (NAME) first take an artemisinin combination therapy?	SAME DAY . . . . . 0 NEXT DAY . . . . . 1 TWO DAYS AFTER FEVER . . . . . 2 THREE OR MORE DAYS AFTER FEVER . . . . . 3 DON'T KNOW 8	SAME DAY . . . . . 0 NEXT DAY . . . . . 1 TWO DAYS AFTER FEVER . . . . . 2 THREE OR MORE DAYS AFTER FEVER . . . . . 3 DON'T KNOW 8
634	CHECK 630: SP/FANSIDAR ('B') GIVEN	CODE 'B' CIRCLED → CODE 'B' NOT CIRCLED → (SKIP TO 636)	CODE 'B' CIRCLED → CODE 'B' NOT CIRCLED → (SKIP TO 636)
635	How long after the fever started did (NAME) first take SP/Fansidar?	SAME DAY . . . . . 0 NEXT DAY . . . . . 1 TWO DAYS AFTER FEVER . . . . . 2 THREE OR MORE DAYS AFTER FEVER . . . . . 3 DON'T KNOW 8	SAME DAY . . . . . 0 NEXT DAY . . . . . 1 TWO DAYS AFTER FEVER . . . . . 2 THREE OR MORE DAYS AFTER FEVER . . . . . 3 DON'T KNOW 8
636	CHECK 630: CHLOROQUINE ('C') GIVEN	CODE 'C' CIRCLED → CODE 'C' NOT CIRCLED → (SKIP TO 638)	CODE 'C' CIRCLED → CODE 'C' NOT CIRCLED → (SKIP TO 638)
637	How long after the fever started did (NAME) first take chloroquine?	SAME DAY . . . . . 0 NEXT DAY . . . . . 1 TWO DAYS AFTER FEVER . . . . . 2 THREE OR MORE DAYS AFTER FEVER . . . . . 3 DON'T KNOW 8	SAME DAY . . . . . 0 NEXT DAY . . . . . 1 TWO DAYS AFTER FEVER . . . . . 2 THREE OR MORE DAYS AFTER FEVER . . . . . 3 DON'T KNOW 8
638	CHECK 630: AMODIAQUINE ('D') GIVEN	CODE 'D' CIRCLED → CODE 'D' NOT CIRCLED → (SKIP TO 640)	CODE 'D' CIRCLED → CODE 'D' NOT CIRCLED → (SKIP TO 640)
639	How long after the fever started did (NAME) first take amodiaquine?	SAME DAY . . . . . 0 NEXT DAY . . . . . 1 TWO DAYS AFTER FEVER . . . . . 2 THREE OR MORE DAYS AFTER FEVER . . . . . 3 DON'T KNOW 8	SAME DAY . . . . . 0 NEXT DAY . . . . . 1 TWO DAYS AFTER FEVER . . . . . 2 THREE OR MORE DAYS AFTER FEVER . . . . . 3 DON'T KNOW 8

SECTION 6. CHILD HEALTH AND NUTRITION

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____
640	CHECK 630: QUININE ('E' OR 'F') GIVEN	CODE 'E' OR 'F' CIRCLED CODE 'E' OR 'F' NOT CIRCLED (SKIP TO 642)	CODE 'E' OR 'F' CIRCLED CODE 'E' OR 'F' NOT CIRCLED (SKIP TO 642)
641	How long after the fever started did (NAME) first take quinine?	SAME DAY . . . . . 0 NEXT DAY . . . . . 1 TWO DAYS AFTER FEVER . . . . . 2 THREE OR MORE DAYS AFTER FEVER . . . . . 3 DON'T KNOW 8	SAME DAY . . . . . 0 NEXT DAY . . . . . 1 TWO DAYS AFTER FEVER . . . . . 2 THREE OR MORE DAYS AFTER FEVER . . . . . 3 DON'T KNOW 8
642	CHECK 630: ARTESUNATE ('G' OR 'H') GIVEN	CODE 'G' OR 'H' CIRCLED CODE 'G' OR 'H' NOT CIRCLED (SKIP TO 644)	CODE 'G' OR 'H' CIRCLED CODE 'G' OR 'H' NOT CIRCLED (SKIP TO 644)
643	How long after the fever started did (NAME) first take artesunate?	SAME DAY . . . . . 0 NEXT DAY . . . . . 1 TWO DAYS AFTER FEVER . . . . . 2 THREE OR MORE DAYS AFTER FEVER . . . . . 3 DON'T KNOW 8	SAME DAY . . . . . 0 NEXT DAY . . . . . 1 TWO DAYS AFTER FEVER . . . . . 2 THREE OR MORE DAYS AFTER FEVER . . . . . 3 DON'T KNOW 8
644	CHECK 630: OTHER ANTIMALARIAL ('I') GIVEN	CODE 'I' CIRCLED CODE 'I' NOT CIRCLED (SKIP TO 646)	CODE 'I' CIRCLED CODE 'I' NOT CIRCLED (SKIP TO 646)
645	How long after the fever started did (NAME) first take (OTHER ANTIMALARIAL)?	SAME DAY . . . . . 0 NEXT DAY . . . . . 1 TWO DAYS AFTER FEVER . . . . . 2 THREE OR MORE DAYS AFTER FEVER . . . . . 3 DON'T KNOW 8	SAME DAY . . . . . 0 NEXT DAY . . . . . 1 TWO DAYS AFTER FEVER . . . . . 2 THREE OR MORE DAYS AFTER FEVER . . . . . 3 DON'T KNOW 8
646		GO BACK TO 604 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 647.	GO TO 604 IN NEXT-TO-LAST COLUMN OF NEW QUESTIONNAIRE; OR, IF NO MORE BIRTHS, GO TO 647.

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NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
647	CHECK 615(a) AND 615(b), ALL COLUMNS: NO CHILD RECEIVED FLUID FROM ORS PACKET OR PRE-PACKAGED ORS LIQUID ☐ ANY CHILD RECEIVED FLUID FROM ORS PACKET OR PRE-PACKAGED ORS LIQUID ☐ → 649		
648	Have you ever heard of a special product called Parent Choice/Electrorush you can get for the treatment of diarrhea?	YES . . . . . 1 NO 2	
649	CHECK 215 AND 218, ALL ROWS: NUMBER OF CHILDREN BORN IN 2017-2019 LIVING WITH THE RESPONDENT ONE OR MORE ☐ (NAME OF YOUNGEST CHILD LIVING WITH HER) NONE ☐ → 653A		

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
650	Now I would like to ask you about liquids or foods that (NAME FROM 649) had yesterday during the day or at night. I am interested in whether your child had the item I mention even if it was combined with other foods. Did (NAME FROM 649) drink or eat:	YES NO DK	
	a) Plain water?	a) 1 2 8	
	b) Juice or juice drinks?	b) 1 2 8	
	c) Clear broth?	c) 1 2 8	
	d) Milk such as tinned, powdered, or fresh animal milk? IF YES: How many times did (NAME) drink milk? IF 7 OR MORE TIMES, RECORD '7'.	d) . . . . . 1 2 8 NUMBER OF TIMES DRANK ☐	
	e) Infant formula? IF YES: How many times did (NAME) drink infant formula? IF 7 OR MORE TIMES, RECORD '7'.	e) . . . . . 1 2 8 NUMBER OF TIMES DRANK ☐	
	f) Any other liquids?	f) 1 2 8	
	g) Yogurt? IF YES: How many times did (NAME) eat yogurt? IF 7 OR MORE TIMES, RECORD '7'.	g) . . . . . 1 2 8 NUMBER OF TIMES ATE ☐	
	h) Any commercially fortified baby food like Cerelac, Bennimix or Frisocream?	h) 1 2 8	
	i) Bread, rice, noodles, porridge, or other foods made from grains?	i) 1 2 8	
	j) Pumpkin, carrots, squash, or sweet potatoes that are yellow or orange inside?	j) 1 2 8	
	k) White potatoes, white yams, manioc, cassava, or any other foods made from roots?	k) 1 2 8	
	l) Any dark green, leafy vegetables?	l) 1 2 8	
	m) Ripe mangoes, papayas, etc?	m) 1 2 8	
	n) Any other fruits or vegetables?	n) 1 2 8	
	o) Liver, kidney, heart, or other organ meats?	o) 1 2 8	
	p) Any meat, such as beef, pork, lamb, goat, chicken, or duck?	p) 1 2 8	
	q) Eggs?	q) 1 2 8	
	r) Fresh or dried fish or shellfish?	r) 1 2 8	
	s) Any foods made from beans, peas, lentils, or nuts?	s) 1 2 8	
	t) Cheese or other food made from milk?	t) 1 2 8	
	u) Any other solid, semi-solid, or soft food?	u) 1 2 8	
651	CHECK 650 (CATEGORIES 'g' THROUGH 'u'): NOT A SINGLE 'YES' ☐ ↓ AT LEAST ONE 'YES' ☐ →		653

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
652	Did (NAME FROM 649) eat any solid, semi-solid, or soft foods yesterday during the day or at night? IF 'YES' PROBE: What kind of solid, semi-solid or soft foods did (NAME) eat?	YES . . . . . 1 (GO BACK TO 650 TO RECORD FOOD EATEN YESTERDAY) (THEN CONTINUE TO 653) NO 2	→ 653A
653	How many times did (NAME FROM 649) eat solid, semi-solid, or soft foods yesterday during the day or at night? IF 7 OR MORE TIMES, RECORD '7'.	NUMBER OF TIMES . . . . . [ ] DON'T KNOW 8	

653A Now I would like to ask you about foods and drinks that you ate or drank yesterday during the day or night, whether you ate it at home or anywhere else.
I am interested in whether you had the food items I will mention even if they were combined with other foods. For example, if you had a soup made with carrots, potatoes and meat, you should reply "yes" for each of these ingredients when I read you the list. However, if you consumed only the broth of a soup, but not the meat or vegetable, do not say "yes" for the meat or vegetable.
As I ask you about foods and drinks, please think of foods and drinks you had as snacks or small meals as well as during any main meals. Please also remember foods you may have eaten while preparing meals or preparing food for others.
Please do not include any food used in a small amount for seasoning or condiments (like spices, herbs or crayfish powder). I will ask you about those foods separately.

Yesterday during the day or at night, did you eat or drink:

		YES	NO	DK
Any foods made from cereal grains, like: a) Wheat, oats, maize, rice, sorghum (guinea corn), millet, couscous, spaghetti, macaroni, noodles, bread or other foods made from cereal grains?	a)	1	2	8
Any vegetables or roots that are orange coloured inside like: b) Squash that is orange inside, pumpkin, carrot, red sweet pepper, sweet potato that is orange inside (orange flesh sweet potatoes), cassava?	b)	1	2	8
Any white roots and tubers or plantains, such as: c) Yam, three leaf yam, water yam, aeriel yam, cocoyam, irish potato, garri, fufu, cassava, tapioca, tigernut flour, white or yellow fleshed sweet potato, native potato, plantain?	c)	1	2	8
Any dark green leafy vegetables, such as: d) Bitter leaf, Moringa, Sorrel leaves, sweet potato leaves, cassava leaves, cocoyam leaves, amaranthus/spinach, water leaf, lettuce, wild spinach, young okro leaves,egg plant leaves, other green leaves eaten?	d)	1	2	8
Any fruits that are dark yellow or orange inside, like: e) Ripe pawpaw, ripe mango, ripe passion fruit, locust bean fruit, red palm fruit, hog plum, ripe cantaloupe, musk melon, monkey cola, bush mango fruit?	e)	1	2	8

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
	Any other fruits: f) Apple, banana, lemon, watermelon, tangerine, grapes, avocado pear, oranges, pears, melon, dates, strawberries, guava, pineapple, grapefruit, coconut, sugar cane, African cherry/African star apple, breadfruit, lime, cashew fruit, soursop, tamarind, melon, golden melon, baobab fruit, figs, shea fruit, pomegranate, tamarind fruit, doum palm fruit?	f) 1 2 8	
	Any other vegetables: g) Cabbage, cucumber, cauliflower, fresh tomato, onion, green beans, green pepper, radish, red chili pepper, okro, garden egg, eggplant, green peas, boiled or roasted fresh corn, beets, mushroom?	g) 1 2 8	
	Any meat made from animal organs, such as: h) Liver, kidney, heart, gizzard?	h) 1 2 8	
	Any other types of meat or poultry, like: i) Beef, mutton, goat, rabbit, chicken, goose, turkey, quail, pork, lamb, grass cutter, guinea fowl, hawk, monitor lizard, pigeon, small kangaroo, dove, squirrel, guinea pig, deer, alligator lizard, crocodile, peacock, camel, antelope, bat, bush rat, and other bush meat/bird, horse, camel, duck, ox tail, cow leg, cow skin, biscuit bones, lung, stomach, intestines,tongue, brain, spleen, frog, toad, porcupine, dog, monkey, snake?	i) 1 2 8	
	Any eggs j) Quail eggs, chicken eggs, duck eggs, guinea fowl eggs, eggs from any other bird?	j) 1 2 8	
	Any fish or seafood, whether fresh or dried k) Fresh fish, frozen fish (e.g. mackerel/Titus), canned fish (sardine, Geisha), smoked fish, dried fish, crab, lobster, cray fish, shrimp, stock fish, bonga fish, mud fish, tilapia, cat fish, barracuda, any other type of fish?	k) 1 2 8	
	Any beans or peas, such as: l) Brown beans, white beans, all kinds of cowpea (iron beans), chickpeas, soya beans, bambara nut, mucuna beans/velvet beans, pigeon pea, African yam bean, kidney bean, lima bean, Jack bean, winged bean, ground bean?	l) 1 2 8	
	Any nuts or seeds, like: m) Sesame seed/beniseed, melon seed (egusi), almonds, pumpkin seeds, sunflower seeds, walnuts, groundnuts, shea nut, cashew nuts, bush mango seeds, significant quantity of locust bean seed, african oil bean seed, bread fruit seed?	m) 1 2 8	
	Any milk or milk products, such as: n) Milk, sour milk, skim milk, yogurt, ice-cream, cheese, powdered milk, condensed milk, evaporated milk, goat milk, camel milk, but NOT including butter, ice cream, cream or sour cream?	n) 1 2 8	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
	Any insects and other small protein foods, such as: o) Winged termite, cricket, snails, sea snails, periwinkle, African palm weevil larva, other edible insect larvae?	o) 1 2 8	
	Any red palm oil: p) Foods made with red palm oil, red palm nut, or red palm nut pulp sauces	p) 1 2 8	
	Any other oils and fats: q) Oil, fats or butter added to food or used for cooking, including vegetable oil, any other type of oil, butter, margarine (blue band), mayonnaise, shea butter, manshanu, extracted oils from nuts, fruits and seeds, and all animal fat. Does not include red palm oil.	q) 1 2 8	
	Any savory and fried snacks such as: r) Crisps and chips, fried dough (puffpuff), other fried snacks (beans akara, cheese straw), pop corn	r) 1 2 8	
	Any sweets such as: s) Sugary foods, such as chocolates, candies, cookies/sweet biscuits and cakes, jam, sweet pastries or ice cream, honey	s) 1 2 8	
	Any sugar-sweetened beverages such as: t) Soft drinks and all drinks with added sugar, such as sweetened fruit juices and “juice drinks”, soft drinks/fizzy drinks, chocolate drinks(milo), malt drinks, yoghurt drinks, sweet tea or coffee with sugar	t) 1 2 8	
	Any condiments and seasonings, such as: u) Salt, chicken/beef stock cubes (e.g. Maggi, Knorr), black pepper, alligator pepper, nutmeg, pottash, bay leaf, scent leaves as seasoning, thyme, curry, ginger, garlic, cloves, mint leaves, lemon grass, tomato paste, crayfish powder, locust bean used as seasoning?	u) 1 2 8	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
	Any other beverages and foods: v) Coffee without milk, black tea (lipton), green tea, alcohol, clear broth, soup broth, olives, picked cucumbers, herbal beverages/infusions, water, kolanut, bitter kola	v) 1 2 8	
654	The last time (NAME FROM 649) passed stools, what was done to dispose of the stools?	CHILD USED TOILET OR LATRINE . . . . . 01 PUT/RINSED INTO TOILET OR LATRINE . . . . . 02 PUT/RINSED INTO DRAIN OR DITCH . . . . . 03 THROWN INTO GARBAGE . . . . . 04 BURIED . . . . . 05 LEFT IN THE OPEN . . . . . 06 OTHER _____ 96 (SPECIFY)	

SECTION 7. MARRIAGE AND SEXUAL ACTIVITY

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
701	Are you currently married or living together with a man as if married?	YES, CURRENTLY MARRIED . . . . . 1 YES, LIVING WITH A MAN . . . . . 2 NO, NOT IN UNION 3	→ 704
702	Have you ever been married or lived together with a man as if married?	YES, FORMERLY MARRIED . . . . . 1 YES, LIVED WITH A MAN . . . . . 2 NO 3	→ 712
703	What is your marital status now: are you widowed, divorced, or separated?	WIDOWED . . . . . 1 DIVORCED . . . . . 2 SEPARATED 3	→ 709
704	Is your (husband/partner) living with you now or is he staying elsewhere?	LIVING WITH HER . . . . . 1 STAYING ELSEWHERE 2	
705	RECORD THE HUSBAND'S/PARTNER'S NAME AND LINE NUMBER FROM THE HOUSEHOLD QUESTIONNAIRE. IF HE IS NOT LISTED IN THE HOUSEHOLD, RECORD '00'.	NAME _____ LINE NO. . . . . ☐☐	
706	Does your (husband/partner) have other wives or does he live with other women as if married?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 709
707	Including yourself, in total, how many wives or live-in partners does he have?	TOTAL NUMBER OF WIVES AND LIVE-IN PARTNERS . . . . . ☐☐ DON'T KNOW 98	
708	Are you the first, second, … wife?	RANK . . . . . ☐☐	
709	Have you been married or lived with a man only once or more than once?	ONLY ONCE . . . . . 1 MORE THAN ONCE 2	
710	CHECK 709: MARRIED/ LIVED WITH A MAN ONLY ONCE ↓ a) In what month and year did you start living with your (husband/partner)? MARRIED/ LIVED WITH A MAN MORE THAN ONCE ↓ b) Now I would like to ask about your first (husband/partner). In what month and year did you start living with him?	MONTH . . . . . ☐☐ DON'T KNOW MONTH . . . . . 98 YEAR . . . . . ☐☐☐☐ DON'T KNOW YEAR 9998	→ 712
711	How old were you when you first started living with him?	AGE . . . . . ☐☐	

SECTION 7. MARRIAGE AND SEXUAL ACTIVITY

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
712	**CHECK FOR PRESENCE OF OTHERS. BEFORE CONTINUING, MAKE EVERY EFFORT TO ENSURE PRIVACY.**		
713	Now I would like to ask some questions about sexual activity in order to gain a better understanding of some important life issues. Let me assure you again that your answers are completely confidential and will not be told to anyone. If we should come to any question that you don't want to answer, just let me know and we will go to the next question. How old were you when you had sexual intercourse for the very first time?	NEVER HAD SEXUAL INTERCOURSE . . . . . 00 AGE IN YEARS	→ 731
714	I would like to ask you about your recent sexual activity. When was the last time you had sexual intercourse? IF LESS THAN 12 MONTHS, ANSWER MUST BE RECORDED IN DAYS, WEEKS OR MONTHS. IF 12 MONTHS (ONE YEAR) OR MORE, ANSWER MUST BE RECORDED IN YEARS.	DAYS AGO . . . . . 1 WEEKS AGO . . . . . 2 MONTHS AGO . . . . . 3 YEARS AGO 4	→ 716 → 727

		LAST SEXUAL PARTNER	SECOND-TO-LAST SEXUAL PARTNER	THIRD-TO-LAST SEXUAL PARTNER
715	When was the last time you had sexual intercourse with this person?		DAYS AGO . . 1 WEEKS AGO . . 2 MONTHS AGO . . 3	DAYS AGO . . 1 WEEKS AGO . . 2 MONTHS AGO . . 3
716	The last time you had sexual intercourse with this person, was a condom used?	YES . . . . 1 NO . . . . 2 (SKIP TO 718)	YES . . . . 1 NO . . . . 2 (SKIP TO 718)	YES . . . . 1 NO . . . . 2 (SKIP TO 718)
717	Was a condom used every time you had sexual intercourse with this person in the last 12 months?	YES . . . . 1 NO 2	YES . . . . 1 NO 2	YES . . . . 1 NO 2
718	What was your relationship to this person with whom you had sexual intercourse? IF BOYFRIEND: Were you living together as if married? IF YES, RECORD '2'. IF NO, RECORD '3'.	HUSBAND . . . . 1 LIVE-IN PARTNER . . . . . 2 BOYFRIEND NOT LIVING WITH RESPONDENT . . . . . 3 CASUAL ACQUAINTANCE . . 4 CLIENT/SEX WORKER . . 5 OTHER ____________ 6 (SPECIFY)	HUSBAND . . . . 1 LIVE-IN PARTNER . . . . . 2 BOYFRIEND NOT LIVING WITH RESPONDENT . . . . . 3 CASUAL ACQUAINTANCE . . 4 CLIENT/SEX WORKER . . 5 OTHER ____________ 6 (SPECIFY)	HUSBAND . . . . 1 LIVE-IN PARTNER . . . . . 2 BOYFRIEND NOT LIVING WITH RESPONDENT . . . . . 3 CASUAL ACQUAINTANCE . . 4 CLIENT/SEX WORKER . . 5 OTHER ____________ 6 (SPECIFY)
719	How long ago did you first have sexual intercourse with this person?	DAYS AGO . . 1 WEEKS AGO . . 2 MONTHS AGO . . 3 YEARS AGO . . 4	DAYS AGO . . 1 WEEKS AGO . . 2 MONTHS AGO . . 3 YEARS AGO . . 4	DAYS AGO . . 1 WEEKS AGO . . 2 MONTHS AGO . . 3 YEARS AGO . . 4
720	How many times during the last 12 months did you have sexual intercourse with this person? IF NON-NUMERIC ANSWER, PROBE TO GET AN ESTIMATE. IF NUMBER OF TIMES IS 95 OR MORE, RECORD '95'.	NUMBER OF TIMES	NUMBER OF TIMES	NUMBER OF TIMES . . . . .
721	How old is this person?	AGE OF PARTNER DON'T KNOW 98	AGE OF PARTNER DON'T KNOW 98	AGE OF PARTNER DON'T KNOW 98
722	Apart from this person, have you had sexual intercourse with any other person in the last 12 months?	YES . . . . 1 (GO BACK TO 715 IN NEXT COLUMN) NO . . . . 2 (SKIP TO 724)	YES . . . . 1 (GO BACK TO 715 IN NEXT COLUMN) NO . . . . 2 (SKIP TO 724)	
723	In total, with how many different people have you had sexual intercourse in the last 12 months? IF NON-NUMERIC ANSWER, PROBE TO GET AN ESTIMATE. IF NUMBER OF PARTNERS IS 95 OR MORE, RECORD '95'.			NUMBER OF PARTNERS LAST 12 MONTHS . . DON'T KNOW 98

SECTION 7. MARRIAGE AND SEXUAL ACTIVITY

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
724	CHECK 106: AGE 15-24 ☐ ↓ AGE 25-49 ☐ → 727		
725	CHECK 701: NOT IN A UNION ☐ ↓ CURRENTLY MARRIED/ LIVING WITH A MAN ☐ → 727		
726	In the past 12 months have you had sex or been sexually involved with anyone because he gave you or told you he would give you gifts, cash, or anything else?	YES . . . . . 1 NO 2	
727	In total, with how many different people have you had sexual intercourse in your lifetime? IF NON-NUMERIC ANSWER, PROBE TO GET AN ESTIMATE. IF NUMBER OF PARTNERS IS 95 OR MORE, RECORD '95'.	NUMBER OF PARTNERS IN LIFETIME . . . . . ☐☐ DON'T KNOW 98	
728	CHECK 716, MOST RECENT PARTNER (FIRST COLUMN): YES, CONDOM USED ☐ ↓ NO, CONDOM NOT USED ☐ → 731 NOT ASKED ☐ → 731		
729	You told me that a condom was used the last time you had sex. What is the brand name of the condom used at that time? IF BRAND NOT KNOWN, ASK TO SEE THE PACKAGE.	LATEX . . . . . 01 PROTECTOR PLUS 02 LOVE . . . . . 03 ROUGH RIDER . . . . . 04 IQUON . . . . . 05 STRAWBERRY . . . . . 06 OTHER _____ 96 (SPECIFY) DON'T KNOW 98	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
730	From where did you obtain the condom the last time? PROBE TO IDENTIFY TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE)	**PUBLIC SECTOR** GOVERNMENT HOSPITAL . . . . . 11 GOVERNMENT HEALTH CENTER . . . . . 12 FAMILY PLANNING CLINIC . . . . . 13 MOBILE CLINIC . . . . . 14 FIELDWORKER . . . . . 15 OTHER PUBLIC SECTOR _____ 16 (SPECIFY) **PRIVATE MEDICAL SECTOR** PRIVATE HOSPITAL/CLINIC . . . . . 21 PHARMACY . . . . . 22 PRIVATE DOCTOR . . . . . 23 MOBILE CLINIC . . . . . 24 FIELDWORKER . . . . . 25 OTHER PRIVATE MEDICAL SECTOR _____ 26 (SPECIFY) **OTHER SOURCE** SHOP . . . . . 31 CHURCH . . . . . 32 FRIEND/RELATIVE . . . . . 33 OTHER _____ 96 (SPECIFY) DON'T KNOW 98	
731	PRESENCE OF OTHERS DURING THIS SECTION.	YES NO CHILDREN <10 . . . . . 1 2 MALE ADULTS . . . . . 1 2 FEMALE ADULTS 1 2	

SECTION 8. FERTILITY PREFERENCES

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
801	CHECK 304: NEITHER STERILIZED ☐ HE OR SHE STERILIZED ☐		→ 813
802	CHECK 226: PREGNANT ☐ NOT PREGNANT OR UNSURE ☐		→ 804
803	Now I have some questions about the future. After the child you are expecting now, would you like to have another child, or would you prefer not to have any more children?	HAVE ANOTHER CHILD . . . . . 1 NO MORE . . . . . 2 UNDECIDED/DON'T KNOW 8	→ 805 → 812
804	Now I have some questions about the future. Would you like to have (a/another) child, or would you prefer not to have any (more) children?	HAVE (A/ANOTHER) CHILD . . . . . 1 NO MORE/NONE . . . . . 2 SAYS SHE CAN'T GET PREGNANT . . . . . 3 UNDECIDED/DON'T KNOW 8	→ 807 → 813 → 811
805	CHECK 226: NOT PREGNANT OR UNSURE ☐ a) How long would you like to wait from now before the birth of (a/another) child? PREGNANT ☐ b) After the birth of the child you are expecting now, how long would you like to wait before the birth of another child?	MONTHS . . . . . 1 ☐☐ YEARS . . . . . 2 ☐☐ SOON/NOW . . . . . 993 SAYS SHE CAN'T GET PREGNANT . . . . . 994 AFTER MARRIAGE . . . . . 995 OTHER _____ (SPECIFY) 996 DON'T KNOW 998	→ 811 → 813 → 811
806	CHECK 226: NOT PREGNANT OR UNSURE ☐ PREGNANT ☐		→ 812
807	CHECK 303: USING A CONTRACEPTIVE METHOD? NOT CURRENTLY USING ☐ CURRENTLY USING ☐		→ 813
808	CHECK 805: '24' OR MORE MONTHS OR '02' OR MORE YEARS ☐ NOT ASKED ☐ '00-23' MONTHS OR '00-01' YEAR ☐		→ 812
809	CHECK 714: DAYS, WEEKS OR MONTHS AGO ☐ YEARS AGO ☐ NOT ASKED ☐		→ 811 → 811

SECTION 8. FERTILITY PREFERENCES

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
810	CHECK 804: WANTS TO HAVE A/ANOTHER CHILD ↓ a) You have said that you do not want (a/another) child soon. Can you tell me why you are not using a method to prevent pregnancy? Any other reason? WANTS NO MORE/ NONE ↓ b) You have said that you do not want any (more) children. Can you tell me why you are not using a method to prevent pregnancy? Any other reason? RECORD ALL REASONS MENTIONED.	NOT MARRIED . . . . . A **FERTILITY-RELATED REASONS** NOT HAVING SEX . . . . . B INFREQUENT SEX . . . . . C MENOPAUSAL/HYSTERECTOMY . . . . . D CAN'T GET PREGNANT . . . . . E NOT MENSTRUATED SINCE LAST BIRTH . . . . . F BREASTFEEDING . . . . . G UP TO GOD/FATALISTIC . . . . . H **OPPOSITION TO USE** RESPONDENT OPPOSED . . . . . I HUSBAND/PARTNER OPPOSED . . . . . J OTHERS OPPOSED . . . . . K RELIGIOUS PROHIBITION . . . . . L **LACK OF KNOWLEDGE** KNOWS NO METHOD . . . . . M KNOWS NO SOURCE . . . . . N **METHOD-RELATED REASONS** SIDE EFFECTS/HEALTH CONCERNS . . . . . O LACK OF ACCESS/TOO FAR . . . . . P COSTS TOO MUCH . . . . . Q PREFERRED METHOD NOT AVAILABLE . . . . . R NO METHOD AVAILABLE . . . . . S INCONVENIENT TO USE . . . . . T INTERFERES WITH BODY'S NORMAL PROCESSES . . . . . U OTHER _____ X (SPECIFY) DON'T KNOW . . . . . Z	
811	CHECK 303: USING A CONTRACEPTIVE METHOD? NOT ASKED ↓ NO, NOT CURRENTLY USING ↓ YES, CURRENTLY USING →		813
812	Do you think you will use a contraceptive method to delay or avoid pregnancy at any time in the future?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
813	CHECK 216: HAS LIVING CHILDREN ↓ a) If you could go back to the time you did not have any children and could choose exactly the number of children to have in your whole life, how many would that be? NO LIVING CHILDREN ↓ b) If you could choose exactly the number of children to have in your whole life, how many would that be? PROBE FOR A NUMERIC RESPONSE.	NONE . . . . . 00 → 815 NUMBER . . . . . ☐☐ OTHER _____ 96 → 815 (SPECIFY)	
814	How many of these children would you like to be boys, how many would you like to be girls and for how many would it not matter if it's a boy or a girl?	BOYS GIRLS EITHER NUMBER . . ☐☐ ☐☐ ☐☐ OTHER _____ 96 (SPECIFY)	

SECTION 8. FERTILITY PREFERENCES

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
815	In the last few months have you: a) Heard about family planning on the radio? b) Seen anything about family planning on the television? c) Read about family planning in a newspaper or magazine? d) Received a voice or text message about family planning on a mobile phone?	YES NO a) RADIO . . . . . 1 2 b) TELEVISION . . . . . 1 2 c) NEWSPAPER OR MAGAZINE . . . . . 1 2 d) MOBILE PHONE 1 2	
816	Please tell me which family planning messages you have heard or seen in the past few months? PROBE: Any others?	AS FOR ME AND MY PARTNER WE USE FEMALE CONDOM . . . . . A UNSPACED CHILDREN MAKES THE GOING TOUGH FOR THE LOVE OF YOUR FAMILY, GO FOR CHILD SPACING TODAY . . . . . B WELL-SPACED CHILDREN ARE EVERY PARENT'S JOY . . . . . C IT'S NOT TOO LATE TO PREVENT UNWANTED PREGNANCY . . . . . D WHY IS YOUR WIFE LOOKING SO GOOI . . . . . E OTHER _____ X (SPECIFY)	
817	CHECK 701: YES, CURRENTLY MARRIED ☐ ↓ YES, LIVING WITH A MAN ☐ ↓ NO, NOT IN A UNION ☐ → 901		
818	CHECK 303: USING A CONTRACEPTIVE METHOD? CURRENTLY USING ☐ ↓ NOT CURRENTLY USING ☐ → 820 NOT ASKED ☐ → 822		
819	Would you say that using contraception is mainly your decision, mainly your (husband's/partner's) decision, or did you both decide together?	MAINLY RESPONDENT . . . . . 1 MAINLY HUSBAND/PARTNER . . . . . 2 JOINT DECISION . . . . . 3 OTHER _____ 6 (SPECIFY)	→ 821
820	Would you say that not using contraception is mainly your decision, mainly your (husband's/partner's) decision, or did you both decide together?	MAINLY RESPONDENT . . . . . 1 MAINLY HUSBAND/PARTNER . . . . . 2 JOINT DECISION . . . . . 3 OTHER _____ 6 (SPECIFY)	
821	CHECK 304: NEITHER ARE STERILIZED ☐ ↓ HE OR SHE ARE STERILIZED ☐ → 901		
822	Does your (husband/partner) want the same number of children that you want, or does he want more or fewer than you want?	SAME NUMBER . . . . . 1 MORE CHILDREN . . . . . 2 FEWER CHILDREN . . . . . 3 DON'T KNOW 8	

SECTION 9. HUSBAND'S BACKGROUND AND WOMAN'S WORK

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
901	CHECK 701: CURRENTLY MARRIED/ LIVING WITH A MAN ☐ ↓ NOT IN UNION ☐ →		→ 909
902	How old was your (husband/partner) on his last birthday?	AGE IN COMPLETED YEARS . . . . . ☐☐	
903	Did your (husband/partner) ever attend school?	YES . . . . . 1 NO 2	→ 906
904	What was the highest level of school he attended: primary, secondary, or higher?	PRIMARY . . . . . 1 JUNIOR SECONDARY . . . . . 2 SENIOR SECONDARY . . . . . 3 VOCATIONAL/COMMERCIAL/NURSING TECHNICAL/TEACHING . . . . . 4 HIGHER . . . . . 5 DON'T KNOW 8	→ 906
905	What was the highest [GRADE/FORM/YEAR] he completed at that level? IF COMPLETED LESS THAN ONE YEAR AT THAT LEVEL, RECORD '00'.	[GRADE/FORM/YEAR] . . . . . ☐☐ DON'T KNOW 98	
906	Has your (husband/partner) done any work in the last 7 days?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 908
907	Has your (husband/partner) done any work in the last 12 months?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 909
908	What is your (husband's/partner's) occupation? That is, what kind of work does he mainly do?	_____ _____ ☐☐ _____	
909	Aside from your own housework, have you done any work in the last seven days?	YES . . . . . 1 NO 2	→ 913
910	As you know, some women take up jobs for which they are paid in cash or kind. Others sell things, have a small business or work on the family farm or in the family business. In the last seven days, have you done any of these things or any other work?	YES . . . . . 1 NO 2	→ 913
911	Although you did not work in the last seven days, do you have any job or business from which you were absent for leave, illness, vacation, maternity leave, or any other such reason?	YES . . . . . 1 NO 2	→ 913
912	Have you done any work in the last 12 months?	YES . . . . . 1 NO 2	→ 917
913	What is your occupation? That is, what kind of work do you mainly do?	_____ _____ ☐☐ _____	

SECTION 9. HUSBAND'S BACKGROUND AND WOMAN'S WORK

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
914	Do you do this work for a member of your family, for someone else, or are you self-employed?	FOR FAMILY MEMBER . . . . . 1 FOR SOMEONE ELSE . . . . . 2 SELF-EMPLOYED 3	
915	Do you usually work throughout the year, or do you work seasonally, or only once in a while?	THROUGHOUT THE YEAR . . . . . 1 SEASONALLY/PART OF THE YEAR . . . . . 2 ONCE IN A WHILE 3	
916	Are you paid in cash or kind for this work or are you not paid at all?	CASH ONLY . . . . . 1 CASH AND KIND . . . . . 2 IN KIND ONLY . . . . . 3 NOT PAID 4	
917	CHECK 701: CURRENTLY MARRIED/LIVING WITH A MAN ☐ NOT IN UNION ☐		→ 925
918	CHECK 916: CODE '1' OR '2' CIRCLED ☐ OTHER ☐		→ 921
919	Who usually decides how the money you earn will be used: you, your (husband/partner), or you and your (husband/partner) jointly?	RESPONDENT . . . . . 1 HUSBAND/PARTNER . . . . . 2 RESPONDENT AND HUSBAND/PARTNER JOINTLY . . . . . 3 OTHER _____ 6 (SPECIFY)	
920	Would you say that the money that you earn is more than what your (husband/partner) earns, less than what he earns, or about the same?	MORE THAN HIM . . . . . 1 LESS THAN HIM . . . . . 2 ABOUT THE SAME . . . . . 3 HUSBAND/PARTNER HAS NO EARNINGS . . . . . 4 DON'T KNOW 8	→ 922
921	Who usually decides how your (husband's/partner's) earnings will be used: you, your (husband/partner), or you and your (husband/partner) jointly?	RESPONDENT . . . . . 1 HUSBAND/PARTNER . . . . . 2 RESPONDENT AND HUSBAND/PARTNER JOINTLY . . . . . 3 HUSBAND/PARTNER HAS NO EARNINGS . . . . . 4 OTHER _____ 6 (SPECIFY)	
922	Who usually makes decisions about health care for yourself: you, your (husband/partner), you and your (husband/partner) jointly, or someone else?	RESPONDENT . . . . . 1 HUSBAND/PARTNER . . . . . 2 RESPONDENT AND HUSBAND/PARTNER JOINTLY . . . . . 3 SOMEONE ELSE . . . . . 4 OTHER 6	
923	Who usually makes decisions about making major household purchases?	RESPONDENT . . . . . 1 HUSBAND/PARTNER . . . . . 2 RESPONDENT AND HUSBAND/PARTNER JOINTLY . . . . . 3 SOMEONE ELSE . . . . . 4 OTHER 6	

SECTION 9. HUSBAND'S BACKGROUND AND WOMAN'S WORK

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
924	Who usually makes decisions about visits to your family or relatives?	RESPONDENT . . . . . 1 HUSBAND/PARTNER . . . . . 2 RESPONDENT AND HUSBAND/PARTNER JOINTLY . . . . . 3 SOMEONE ELSE . . . . . 4 OTHER 6	
925	Do you own this or any other house either alone or jointly with someone else?	ALONE ONLY . . . . . 1 JOINTLY ONLY . . . . . 2 BOTH ALONE AND JOINTLY . . . . . 3 DOES NOT OWN 4	→ 928
926	Do you have a title deed for any house you own?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 928
927	Is your name on the title deed?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
928	Do you own any agricultural or non-agricultural land either alone or jointly with someone else?	ALONE ONLY . . . . . 1 JOINTLY ONLY . . . . . 2 BOTH ALONE AND JOINTLY . . . . . 3 DOES NOT OWN 4	→ 931
929	Do you have a title deed for any land you own?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 931
930	Is your name on the title deed?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
931	PRESENCE OF OTHERS AT THIS POINT (PRESENT AND LISTENING, PRESENT BUT NOT LISTENING, OR NOT PRESENT)	PRES./ LISTEN. / PRES./ NOT LISTEN. / NOT PRES. CHILDREN < 10 . . . . . 1 / 2 / 3 HUSBAND . . . . . 1 / 2 / 3 OTHER MALES . . . . . 1 / 2 / 3 OTHER FEMALES . . . . . 1 / 2 / 3	
932	In your opinion, is a husband justified in hitting or beating his wife in the following situations: a) If she goes out without telling him? b) If she neglects the children? c) If she argues with him? d) If she refuses to have sex with him? e) If she burns the food?	YES / NO / DK a) GOES OUT . . . . . 1 / 2 / 8 b) NEGLECTS CHILDREN . . 1 / 2 / 8 c) ARGUES . . . . . 1 / 2 / 8 d) REFUSES SEX . . . . . 1 / 2 / 8 e) BURNS FOOD . . . . . 1 / 2 / 8	

SECTION 10. HIV/AIDS

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1001	Now I would like to talk about something else. Have you ever heard of HIV or AIDS?	YES . . . . . 1 NO 2	→ 1042
1002	HIV is the virus that can lead to AIDS. Can people reduce their chance of getting HIV by having just one uninfected sex partner who has no other sex partners?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
1003	Can people get HIV from mosquito bites?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
1004	Can people reduce their chance of getting HIV by using a condom every time they have sex?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
1005	Can people get HIV by sharing food with a person who has HIV?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
1006	Can people get HIV because of witchcraft or other supernatural means?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
1007	Is it possible for a healthy-looking person to have HIV?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
1008	Can HIV be transmitted from a mother to her baby: a) During pregnancy? b) During delivery? c) By breastfeeding?	YES NO DK a) DURING PREGNANCY . . 1 2 8 b) DURING DELIVERY . . . . . 1 2 8 c) BREASTFEEDING 1 2 8	
1009	CHECK 1008: AT LEAST ONE 'YES' ↓ OTHER →		1011
1010	Are there any special drugs that a doctor or a nurse can give to a woman infected with HIV to reduce the risk of transmission to the baby?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
1011	CHECK 208 AND 215: LAST BIRTH IN 2017-2019 ↓ NO BIRTHS → LAST BIRTH IN 2016 OR EARLIER →		1027 1027
1012	CHECK 408 FOR LAST BIRTH: HAD ANTENATAL CARE ↓ NO ANTENATAL CARE →		1020
1013	**CHECK FOR PRESENCE OF OTHERS. BEFORE CONTINUING, MAKE EVERY EFFORT TO ENSURE PRIVACY.**		
1014	During any of the antenatal visits for your last birth were you given any information about: a) Babies getting HIV from their mother? b) Things that you can do to prevent getting HIV? c) Getting tested for HIV?	YES NO DK a) HIV FROM MOTHER . . 1 2 8 b) THINGS TO DO . . . . . 1 2 8 c) TESTED FOR HIV 1 2 8	

SECTION 10. HIV/AIDS

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1015	Were you offered a test for HIV as part of your antenatal care?	YES . . . . . 1 NO 2	
1016	I don't want to know the results, but were you tested for HIV as part of your antenatal care?	YES . . . . . 1 NO 2	→ 1020
1017	Where was the test done? PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE)	**PUBLIC SECTOR** GOVERNMENT HOSPITAL . . . . . 11 GOVERNMENT HEALTH CENTER . . . . . 12 STAND-ALONE HTC CENTER . . . . . 13 FAMILY PLANNING CLINIC . . . . . 14 MOBILE HTC SERVICES . . . . . 15 OTHER PUBLIC SECTOR _____ 16 (SPECIFY) **PRIVATE MEDICAL SECTOR** PRIVATE HOSPITAL/CLINIC/ PRIVATE DOCTOR . . . . . 21 STAND-ALONE HTC CENTER . . . . . 22 PHARMACY . . . . . 23 MOBILE HTC SERVICES . . . . . 24 OTHER PRIVATE MEDICAL SECTOR _____ 26 (SPECIFY) **OTHER SOURCE** HOME . . . . . 31 WORKPLACE . . . . . 32 CORRECTIONAL FACILITY . . . . . 33 OTHER _____ 96 (SPECIFY)	
1018	I don't want to know the results, but did you get the results of the test?	YES . . . . . 1 NO 2	→ 1020
1019	All women are supposed to receive counseling after being tested. After you were tested, did you receive counseling?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
1020	CHECK 430 FOR LAST BIRTH: ANY CODE '21-36' CIRCLED ☐ ↓ OTHER ☐		→ 1024
1021	Between the time you went for delivery but before the baby was born, were you offered an HIV test?	YES . . . . . 1 NO 2	
1022	I don't want to know the results, but were you tested for HIV at that time?	YES . . . . . 1 NO 2	→ 1024
1023	I don't want to know the results, but did you get the results of the test?	YES . . . . . 1 NO 2	→ 1025
1024	CHECK 1016: YES ☐ ↓ NO OR NOT ASKED ☐		→ 1027
1025	Have you been tested for HIV since that time you were tested during your pregnancy?	YES . . . . . 1 NO 2	→ 1028
1026	How many months ago was your most recent HIV test?	MONTHS AGO . . . . . ☐☐ TWO OR MORE YEARS 95	→ 1033

SECTION 10. HIV/AIDS

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1027	I don't want to know the results, but have you ever been tested for HIV?	YES . . . . . 1 NO 2	→ 1031
1028	How many months ago was your most recent HIV test?	MONTHS AGO . . . . . [ ][ ] TWO OR MORE YEARS 95	
1029	I don't want to know the results, but did you get the results of the test?	YES . . . . . 1 NO 2	
1030	Where was the test done? PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE)	**PUBLIC SECTOR** GOVERNMENT HOSPITAL . . . . . 11 GOVERNMENT HEALTH CENTER . . . . . 12 STAND-ALONE HTC CENTER . . . . . 13 FAMILY PLANNING CLINIC . . . . . 14 MOBILE HTC SERVICES . . . . . 15 OTHER PUBLIC SECTOR _____ 16 (SPECIFY) **PRIVATE MEDICAL SECTOR** PRIVATE HOSPITAL/CLINIC/ PRIVATE DOCTOR . . . . . 21 STAND-ALONE HTC CENTER . . . . . 22 PHARMACY . . . . . 23 MOBILE HTC SERVICES . . . . . 24 OTHER PRIVATE MEDICAL SECTOR _____ 26 (SPECIFY) **OTHER SOURCE** HOME . . . . . 31 WORKPLACE . . . . . 32 CORRECTIONAL FACILITY . . . . . 33 OTHER _____ 96 (SPECIFY)	→ 1033
1031	Do you know of a place where people can go to get an HIV test?	YES . . . . . 1 NO 2	→ 1033
1032	Where is that? Any other place? PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE)	**PUBLIC SECTOR** GOVERNMENT HOSPITAL . . . . . A GOVERNMENT HEALTH CENTER . . . . . B STAND-ALONE HTC CENTER . . . . . C FAMILY PLANNING CLINIC . . . . . D MOBILE HTC SERVICES . . . . . E OTHER PUBLIC SECTOR _____ F (SPECIFY) **PRIVATE MEDICAL SECTOR** PRIVATE HOSPITAL/CLINIC/ PRIVATE DOCTOR . . . . . G STAND-ALONE HTC CENTER . . . . . H PHARMACY . . . . . I MOBILE HTC SERVICES . . . . . J OTHER PRIVATE MEDICAL SECTOR _____ K (SPECIFY) OTHER _____ X (SPECIFY)	

SECTION 10. HIV/AIDS

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1033	Have you heard of test kits people can use to test themselves for HIV?	YES . . . . . 1 NO 2	→ 1035
1034	Have you ever tested yourself for HIV using a self-test kit?	YES . . . . . 1 NO 2	
1035	Would you buy fresh vegetables from a shopkeeper or vendor if you knew that this person had HIV?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW/NOT SURE/DEPENDS 8	
1036	Do you think children living with HIV should be allowed to attend school with children who do not have HIV?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW/NOT SURE/DEPENDS 8	
1037	Do you think people hesitate to take an HIV test because they are afraid of how other people will react if the test result is positive for HIV?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW/NOT SURE/DEPENDS 8	
1038	Do people talk badly about people living with HIV, or who are thought to be living with HIV?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW/NOT SURE/DEPENDS 8	
1039	Do people living with HIV, or thought to be living with HIV, lose the respect of other people?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW/NOT SURE/DEPENDS 8	
1040	Do you agree or disagree with the following statement: I would be ashamed if someone in my family had HIV.	AGREE . . . . . 1 DISAGREE . . . . . 2 DON'T KNOW/NOT SURE/DEPENDS 8	
1041	Do you fear that you could get HIV if you come into contact with the saliva of a person living with HIV?	YES . . . . . 1 NO . . . . . 2 SAYS SHE HAS HIV . . . . . 3 DON'T KNOW/NOT SURE/DEPENDS 8	
1042	CHECK 1001: HEARD ABOUT HIV OR AIDS ☐ ↓ a) Apart from HIV, have you heard about other infections that can be transmitted through sexual contact? NOT HEARD ABOUT HIV OR AIDS ☐ ↓ b) Have you heard about infections that can be transmitted through sexual contact?	YES . . . . . 1 NO 2	
1043	CHECK 713: HAS HAD SEXUAL INTERCOURSE ☐ ↓ NEVER HAD SEXUAL INTERCOURSE ☐ →		1051
1044	CHECK 1042: HEARD ABOUT OTHER SEXUALLY TRANSMITTED INFECTIONS? YES ☐ ↓ NO ☐ →		1046

SECTION 10. HIV/AIDS

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1045	Now I would like to ask you some questions about your health in the last 12 months. During the last 12 months, have you had a disease which you got through sexual contact?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
1046	Sometimes women experience a bad-smelling abnormal genital discharge. During the last 12 months, have you had a bad-smelling abnormal genital discharge?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
1047	Sometimes women have a genital sore or ulcer. During the last 12 months, have you had a genital sore or ulcer?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
1048	CHECK 1045, 1046, AND 1047: HAS HAD AN INFECTION (ANY 'YES') ☐ ↓ HAS NOT HAD AN INFECTION OR DOES NOT KNOW ☐ →		1051
1049	The last time you had (PROBLEM FROM 1045/1046/1047), did you seek any kind of advice or treatment?	YES . . . . . 1 NO 2	→ 1051
1050	Where did you go? Any other place? PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE)	**PUBLIC SECTOR** GOVERNMENT HOSPITAL . . . . . A GOVERNMENT HEALTH CENTER . . . . . B STAND-ALONE HTC CENTER . . . . . C FAMILY PLANNING CLINIC . . . . . D MOBILE HTC SERVICES . . . . . E OTHER PUBLIC SECTOR _____ F (SPECIFY) **PRIVATE MEDICAL SECTOR** PRIVATE HOSPITAL/CLINIC/ PRIVATE DOCTOR . . . . . G STAND-ALONE HTC CENTER . . . . . H PHARMACY . . . . . I MOBILE HTC SERVICES . . . . . J OTHER PRIVATE MEDICAL SECTOR _____ K (SPECIFY) **OTHER SOURCE** SHOP . . . . . L OTHER _____ X (SPECIFY)	
1051	If a wife knows her husband has a disease that she can get during sexual intercourse, is she justified in asking that they use a condom when they have sex?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
1052	Is a wife justified in refusing to have sex with her husband when she knows he has sex with other women?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	

SECTION 10. HIV/AIDS

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1053	CHECK 701: CURRENTLY MARRIED/ LIVING WITH A MAN ☐ ↓ NOT IN UNION ☐ → 1101		
1054	Can you say no to your (husband/partner) if you do not want to have sexual intercourse?	YES . . . . . 1 NO . . . . . 2 DEPENDS/NOT SURE 8	
1055	Could you ask your (husband/partner) to use a condom if you wanted him to?	YES . . . . . 1 NO . . . . . 2 DEPENDS/NOT SURE 8	

SECTION 11. OTHER HEALTH ISSUES

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1101	Now I would like to ask you some other questions relating to health matters. Have you had an injection for any reason in the last 12 months? IF YES: How many injections have you had? IF NUMBER OF INJECTIONS IS 90 OR MORE, OR DAILY FOR 3 MONTHS OR MORE, RECORD '90'. IF NON-NUMERIC ANSWER, PROBE TO GET AN ESTIMATE.	NUMBER OF INJECTIONS . . . . . ☐☐ NONE 00	→ 1104
1102	Among these injections, how many were administered by a doctor, a nurse, a pharmacist, a dentist, or any other health worker? IF NUMBER OF INJECTIONS IS 90 OR MORE, OR DAILY FOR 3 MONTHS OR MORE, RECORD '90'. IF NON-NUMERIC ANSWER, PROBE TO GET AN ESTIMATE.	NUMBER OF INJECTIONS . . . . . ☐☐ NONE 00	→ 1104
1103	The last time you got an injection from a health worker, did he/she take the syringe and needle from a new, unopened package?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
1104	Do you currently smoke cigarettes every day, some days, or not at all?	EVERY DAY . . . . . 1 SOME DAYS . . . . . 2 NOT AT ALL 3	→ 1106
1105	On average, how many cigarettes do you currently smoke each day?	NUMBER OF CIGARETTES . . . . . ☐☐	
1106	Do you currently smoke or use any other type of tobacco every day, some days, or not at all?	EVERY DAY . . . . . 1 SOME DAYS . . . . . 2 NOT AT ALL 3	→ 1107A
1107	What other type of tobacco do you currently smoke or use? RECORD ALL MENTIONED.	KRETEKS . . . . . A PIPES FULL OF TOBACCO . . . . . B CIGARS, CHEROOTS, OR CIGARILLOS . . . . . C WATER PIPE . . . . . D SNUFF BY MOUTH . . . . . E SNUFF BY NOSE . . . . . F CHEWING TOBACCO . . . . . G BETEL QUID WITH TOBACCO . . . . . H OTHER _____ X (SPECIFY)	
1107A	Have you ever heard of an illness called tuberculosis or TB?	YES . . . . . 1 NO 2	→ 1108
1107B	What are the common symptoms of TB ? RECORD ALL MENTIONED.	COUGH FOR MORE THAN 2 WEEKS . . . . . A FEVER IN THE EVENINGS . . . . . B CHEST PAIN . . . . . C LOSS OF WEIGI . . . . . D LOSS OF APPETITE . . . . . E HEMOPTYSIS . . . . . F OTHER _____ X (SPECIFY) DON'T KNOW . . . . . Z	

SECTION 11. OTHER HEALTH ISSUES

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1107C	How does tuberculosis spread from one person to another? RECORD ALL MENTIONED.	THROUGH THE AIR WHEN COUGHING OR SNEEZING . . . . . A THROUGH SHARING UTENSILS . . . . . B THROUGH TOUCHING A PERSON WITH TI . . . . . C THROUGH FOOD . . . . . D THROUGH SEXUAL CONTACT . . . . . E THROUGH MOSQUITO BITES . . . . . F THROUGH SPIT . . . . . G THROUGH GENES . . . . . H OTHER _____ X (SPECIFY) DON'T KNOW . . . . . Z	
1107D	If you were sick with TB, where would you prefer to seek care? RECORD ALL MENTIONED.	**PUBLIC SECTOR** GOVERNMENT HOSPITAL/CLINIC . . . . . A PRIMARY HEALTH CARE CENTER . . . . . B HEALTH POST/SUB-HEALTH POST . . . . . C PHC OUTREACH CLINI . . . . . D MOBILE CAMP . . . . . E FCHV . . . . . F OTHER _____ G (SPECIFY) **NON-GOVT. (NGO) SECTOR** FPAN . . . . . H MARIE STOPES . . . . . I OTHER NGO FACILITIES _____ J (SPECIFY) **PRIVATE MEDICAL SECTOR** PRIVATE HOSPITAL/NURSING HOME . . . . . K PRIVATE CLINIC . . . . . L PHARMACY . . . . . M OTHER PRIVATE MEDICAL FACILITIES _____ N (SPECIFY) **OTHER SOURCE** SHOP . . . . . O FRIEND/RELATIVE . . . . . P TRADITIONAL HEALER . . . . . Q OTHER _____ X (SPECIFY) DON'T KNOW . . . . . Z	
1107E	If a member of your family got tuberculosis, would you want it to remain a secret or not?	YES, REMAIN A SECRET . . . . . 1 NO . . . . . 2 DON'T KNOW/UNSURE 8	
1108	Many different factors can prevent women from getting medical advice or treatment for themselves. When you are sick and want to get medical advice or treatment, is each of the following a big problem or not a big problem: a) Getting permission to go to the doctor? b) Getting money needed for advice or treatment? c) The distance to the health facility? d) Not wanting to go alone?	BIG PROBLEM / NOT A BIG PROBLEM a) PERMISSION TO GO . . . . . 1 2 b) GETTING MONEY . . . . . 1 2 c) DISTANCE . . . . . 1 2 d) GO ALONE 1 2	

SECTION 11. OTHER HEALTH ISSUES

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1109	Are you covered by any health insurance?	YES . . . . . 1 NO 2	→ 1201
1110	What type of health insurance are you covered by? RECORD ALL MENTIONED.	MUTUAL HEALTH ORGANIZATION/ COMMUNITY-BASED HEALTH INSURANCE . . . . . A HEALTH INSURANCE THROUGH EMPLOYER . . . . . B SOCIAL SECURITY . . . . . C OTHER PRIVATELY PURCHASED COMMERCIAL HEALTH INSURANCE . . . . . D OTHER _____ X (SPECIFY)	

SECTION 12. FEMALE GENITAL CUTTING/MUTILATION

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1201	Now I would like to ask some questions about a practice known as female circumcision, that is, a practice in which a girl may have part of her genitals cut, for example, excision of the clitoris and the labia minora, scraping of tissue surrounding the vaginal orifice or cutting of the vagina and even use of corrosive sunstances or herbs into vagina to tighten or narrow it or to cause bleeding. Have you ever heard about any of these practices?	YES . . . . . 1 NO . . . . . 2 → 1301	
1202	In some countries, there is a practice in which a girl may have part of her genitals cut. Have you ever heard about this practice?	YES . . . . . 1 NO . . . . . 2 → 1301	
1203	Have you yourself ever been circumcised?	YES . . . . . 1 NO . . . . . 2 → 1209	
1204	Now I would like to ask you what was done to you at that time. Was any flesh removed from the genital area?	YES . . . . . 1 → 1206 NO . . . . . 2 DON'T KNOW 8	
1205	Was the genital area just nicked without removing any flesh?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
1206	Was your genital area sewn closed?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
1207	How old were you when you were circumcised? IF THE RESPONDENT DOES NOT KNOW THE EXACT AGE, PROBE TO GET AN ESTIMATE.	AGE IN COMPLETED YEARS . . . . . [ ][ ] AS A BABY/DURING INFANCY . . . . . 95 DON'T KNOW 98	
1208	Who performed the circumcision?	**TRADITIONAL** TRAD. CIRCUMCISER . . . . . 11 TRAD. BIRTH ATTENDANT . . . . . 12 OTHER TRAD. _____ 16 (SPECIFY) **HEALTH PROFESSIONAL** DOCTOR . . . . . 21 NURSE/MIDWIFE . . . . . 22 OTHER HEALTH PROFESSIONAL _____ 26 (SPECIFY) DON'T KNOW 98	
1209	CHECK 213, 215 AND 216: HAS ONE OR MORE LIVING DAUGHTERS BORN IN 2004 OR LATER ☐ ↓ HAS NO LIVING DAUGHTERS BORN IN 2004 OR LATER ☐ →		1216

1209A	CHECK 213, 215 AND 216: ENTER IN THE TABLE THE BIRTH HISTORY NUMBER AND NAME OF EACH LIVING DAUGHTER BORN IN 2004 OR LATER. ASK THE QUESTIONS ABOUT ALL OF THESE DAUGHTERS. BEGIN WITH THE YOUNGEST DAUGHTER. (IF THERE ARE MORE THAN 3 DAUGHTERS, USE ADDITIONAL QUESTIONNAIRES). Now I would like to ask you some questions about your (daughter/daughters).			
1210	BIRTH HISTORY NUMBER AND NAME OF EACH LIVING DAUGHTER BORN IN 2004 OR LATER.	YOUNGEST LIVING DAUGHTER BIRTH HISTORY NUMBER . . ☐☐ NAME ________	NEXT-TO-YOUNGEST LIVING DAUGHTER BIRTH HISTORY NUMBER . . ☐☐ NAME ________	SECOND-TO-YOUNGEST LIVING DAUGHTER BIRTH HISTORY NUMBER . . ☐☐ NAME ________
1211	Is (NAME OF DAUGHTER) circumcised?	YES . . . . 1 NO . . . . 2 (GO TO 1211 IN NEXT COLUMN; OR IF NO MORE DAUGHTERS, GO TO GC1216)	YES . . . . 1 NO . . . . 2 (GO TO 1211 IN NEXT COLUMN; OR IF NO MORE DAUGHTERS, GO TO GC1216)	YES . 1 NO . 2 (GO TO 1211 IN FIRST COLUMN OF NEW QUESTIONNAIRE; OR IF NO MORE DAUGHTERS, GO TO GC1216)
1212	How old was (NAME OF DAUGHTER) when she was circumcised? IF THE RESPONDENT DOES NOT KNOW THE AGE, PROBE TO GET AN ESTIMATE.	AGE IN COMPLE-TED YRS . . ☐☐ DON'T KNOW 98	AGE IN COMPLE-TED YRS . . ☐☐ DON'T KNOW 98	AGE IN COMPLE-TED YRS . . ☐☐ DON'T KNOW 98
1213	Was her genital area sewn closed?	YES . . . . 1 NO . . . . 2 DON'T KNOW 8	YES . . . . 1 NO . . . . 2 DON'T KNOW 8	YES . . . . 1 NO . . . . 2 DON'T KNOW 8
1214	Who performed the circumcision?	**TRADITIONAL** TRADITIONAL CIRCUMCISER . . 11 TRAD. BIRTH ATTENDANT . . 12 OTHER TRAD. ________ 16 (SPECIFY) **HEALTH PROFESSIONAL** DOCTOR . . . . 21 NURSE/MIDWIFE . . 22 OTHER HEALTH PROFESSIONAL ________ 26 (SPECIFY) DON'T KNOW 98	**TRADITIONAL** TRADITIONAL CIRCUMCISER . . 11 TRAD. BIRTH ATTENDANT . . 12 OTHER TRAD. ________ 16 (SPECIFY) **HEALTH PROFESSIONAL** DOCTOR . . . . 21 NURSE/MIDWIFE . . 22 OTHER HEALTH PROFESSIONAL ________ 26 (SPECIFY) DON'T KNOW 98	**TRADITIONAL** TRADITIONAL CIRCUMCISER . . 11 TRAD. BIRTH ATTENDANT . . 12 OTHER TRAD. ________ 16 (SPECIFY) **HEALTH PROFESSIONAL** DOCTOR . . . . 21 NURSE/MIDWIFE . . 22 OTHER HEALTH PROFESSIONAL ________ 26 (SPECIFY) DON'T KNOW 98
1215		GO BACK TO 1211 IN NEXT COLUMN; OR, IF NO MORE DAUGHTERS, GO TO 1216.	GO BACK TO1211 IN NEXT COLUMN; OR, IF NO MORE DAUGHTERS, GO TO 1216.	GO TO1211 IN FIRST COLUMN OF NEW QUESTIONNAIRE; OR IF NO MORE DAUGHTERS, GO TO 1216.

SECTION 12. FEMALE GENITAL CUTTING/MUTILATION

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1216	Do you believe that female circumcision is required by your religion?	YES . . . . . 1 NO . . . . . 2 NO RELIGION . . . . . 3 DON'T KNOW 8	
1217	Do you think that female circumcision should be continued, or should it be stopped?	CONTINUED . . . . . 1 STOPPED . . . . . 2 DEPENDS . . . . . 3 DON'T KNOW 8	

SECTION 14. ADULT AND MATERNAL MORTALITY

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1401	Now I would like to ask you some questions about your brothers and sisters born to your natural mother, including those who are living with you, those living elsewhere and those who have died. From our experience in prior surveys, we know it may sometimes be difficult to establish a complete list of all the children born to your natural mother. We will work together to draw the most complete list and work to recall all your siblings. Could you please now give me the names of all of your brothers and sisters born to your natural mother. DO NOT FILL IN THE ORDER NUMBER YET. NAME / ORDER NUMBER a _____ ☐☐ b _____ ☐☐ c _____ ☐☐ d _____ ☐☐ e _____ ☐☐ f _____ ☐☐ g _____ ☐☐ h _____ ☐☐ i _____ ☐☐ j _____ ☐☐ k _____ ☐☐ l _____ ☐☐ m _____ ☐☐ n _____ ☐☐ o _____ ☐☐ p _____ ☐☐ q _____ ☐☐ r _____ ☐☐ s _____ ☐☐ t _____ ☐☐		
1402	CHECK 1401: ONE OR MORE BROTHERS OR SISTERS LISTED ☐ ↓ NO BROTHERS OR SISTERS LISTED ☐ → 1404		
1403	READ THE NAMES OF THE BROTHERS AND SISTERS TO THE RESPONDENT AND AFTER THE LAST ONE ASK: Are there any other brothers and sisters from the same mother that you have not mentioned? NO ☐ ↓ YES ☐ → LIST ADDITIONAL BROTHERS AND SISTERS IN 1401.		
1404	Sometimes people forget to mention children born to their natural mother because they do not live with them or they do not see them very often. Are there any brothers or sisters who do not live with you that you have not mentioned? NO ☐ ↓ YES ☐ → LIST ADDITIONAL BROTHERS AND SISTERS IN 1401.		
1405	Sometimes people forget to mention children born to their natural mother because they have died. Are there any brothers or sisters who died that you have not mentioned? NO ☐ ↓ YES ☐ → LIST ADDITIONAL BROTHERS AND SISTERS IN 1401.		
1406	Some people have brothers or sisters from the same mother but a different father. Are there any brothers or sisters born to your natural mother, but who have a different natural father, that you have not mentioned? NO ☐ ↓ YES ☐ → LIST ADDITIONAL BROTHERS AND SISTERS IN 1401.		
1407	COUNT THE NUMBER OF BROTHERS AND SISTERS RECORDED IN1401.	TOTAL BROTHERS AND SISTERS . . ☐☐	

SECTION 14. ADULT AND MATERNAL MORTALITY

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1408	CHECK 1407: Just to make make sure that I have this right: Your mother had in TOTAL _____ births, excluding you, during her lifetime. Is that correct? YES ☐ NO ☐ → PROBE AND CORRECT 1401 AND/OR 1407.		
1409	CHECK 1407: ONE OR MORE BROTHERS/SISTERS ☐ NO BROTHER OR SISTER ☐ → 1425		
1410	Please tell me, which brother or sister was born first? And which was born next? RECORD '01' FOR THE ORDER NUMBER IN MM01 FOR THE FIRST BROTHER OR SISTER, '02' FOR THE SECOND, AND SO ON UNTIL YOU HAVE RECORDED THE ORDER NUMBER FOR ALL BROTHERS AND SISTERS.		
1411	How many births did your mother have before you were born?	NUMBER OF PRECEDING BIRTHS . . ☐☐	

1412	LIST THE BROTHERS AND SISTERS ACCORDING TO THE ORDER NUMBER IN 1401. ASK 1413 TO 1424 FOR ONE BROTHER OR SISTER BEFORE ASKING ABOUT THE NEXT BROTHER OR SISTER. IF THERE ARE MORE THAN 12 BROTHERS AND SISTERS, USE AN ADDITIONAL QUESTIONNAIRE.						
1413	NAME OF BROTHER OR SISTER.	(01) _____	(02) _____	(03) _____	(04) _____	(05) _____	(06) _____
1414	Is (NAME) male or female?	MALE . . . . 1 FEMALE . 2	MALE . . . . 1 FEMALE . 2	MALE . . . . 1 FEMALE . 2	MALE . . . . 1 FEMALE . 2	MALE . . . . 1 FEMALE . 2	MALE . . . . 1 FEMALE . 2
1415	Is (NAME) still alive?	YES . . . . . 1 NO . . . . . 2 → GO TO 1417 DK . . . . . 8 → GO TO (02)	YES . . . . . 1 NO . . . . . 2 → GO TO 1417 DK . . . . . 8 → GO TO (03)	YES . . . . . 1 NO . . . . . 2 → GO TO 1417 DK . . . . . 8 → GO TO (04)	YES . . . . . 1 NO . . . . . 2 → GO TO 1417 DK . . . . . 8 → GO TO (05)	YES . . . . . 1 NO . . . . . 2 → GO TO 1417 DK . . . . . 8 → GO TO (06)	YES . . . . . 1 NO . . . . . 2 → GO TO 1417 DK . . . . . 8 → GO TO (07)
1416	How old is (NAME)?	☐☐ GO TO (02)	☐☐ GO TO (03)	☐☐ GO TO (04)	☐☐ GO TO (05)	☐☐ GO TO (06)	☐☐ GO TO (07)
1417	How many years ago did (NAME) die?	☐☐	☐☐	☐☐	☐☐	☐☐	☐☐
1418	How old was (NAME) when (he/she) died? IF DON'T KNOW, PROBE AND ASK ADDITIONAL QUESTIONS TO GET AN ESTIMATE.	☐☐ IF MALE OR DIED BEFORE 12 YEARS OF AGE, GO TO 1423	☐☐ IF MALE OR DIED BEFORE 12 YEARS OF AGE, GO TO 1423	☐☐ IF MALE OR DIED BEFORE 12 YEARS OF AGE, GO TO 1423	☐☐ IF MALE OR DIED BEFORE 12 YEARS OF AGE, GO TO 1423	☐☐ IF MALE OR DIED BEFORE 12 YEARS OF AGE, GO TO 1423	☐☐ IF MALE OR DIED BEFORE 12 YEARS OF AGE, GO TO 1423
1419	Was (NAME) pregnant when she died?	YES . . . . . 1 → GO TO 1423 NO 2	YES . . . . . 1 → GO TO1423 NO 2	YES . . . . . 1 → GO TO 1423 NO 2	YES . . . . . 1 → GO TO 1423 NO 2	YES . . . . . 1 → GO TO 1423 NO 2	YES . . . . . 1 → GO TO 1423 NO 2
1420	Did (NAME) die during childbirth?	YES . . . . . 1 → GO TO (02) NO 2	YES . . . . . 1 → GO TO (03) NO 2	YES . . . . . 1 → GO TO (04) NO 2	YES . . . . . 1 → GO TO (05) NO 2	YES . . . . . 1 → GO TO (06) NO 2	YES . . . . . 1 → GO TO (07) NO 2
1421	Did (NAME) die within two months after the end of a pregnancy or childbirth?	YES . . . . . 1 NO . . . . . 2 → GO TO 1423	YES . . . . . 1 NO . . . . . 2 → GO TO 1423	YES . . . . . 1 NO . . . . . 2 → GO TO 1423	YES . . . . . 1 NO . . . . . 2 → GO TO 1423	YES . . . . . 1 NO . . . . . 2 → GO TO 1423	YES . . . . . 1 NO . . . . . 2 → GO TO 1423
1422	How many days after the end of the pregnancy did (NAME) die?	☐☐	☐☐	☐☐	☐☐	☐☐	☐☐

1423	Was (NAME)'s death due to an act of violence?	YES . . . . . 1 GO TO (02) NO 2	YES . . . . . 1 GO TO (03) NO 2	YES . . . . . 1 GO TO (04) NO 2	YES . . . . . 1 GO TO (05) NO 2	YES . . . . . 1 GO TO (06) NO 2	YES . . . . . 1 GO TO (07) NO 2
1424	Was (NAME)'s death due to an accident?	YES . . . . . 1 NO 2 GO TO (02)	YES . . . . . 1 NO 2 GO TO (03)	YES . . . . . 1 NO 2 GO TO (04)	YES . . . . . 1 NO 2 GO TO (05)	YES . . . . . 1 NO 2 GO TO (06)	YES . . . . . 1 NO 2 GO TO (07)

IF NO MORE BROTHERS OR SISTERS, COTINUE TO DV IF HOUSEHOLD WAS SELCTED FOR DV OR RECORD TIME.

1425	RECORD THE TIME.	HOURS MINUTES	

1412	LIST THE BROTHERS AND SISTERS ACCORDING TO THE ORDER NUMBER IN 1401. ASK 1413 TO 1424 FOR ONE BROTHER OR SISTER BEFORE ASKING ABOUT THE NEXT BROTHER OR SISTER. IF THERE ARE MORE THAN 12 BROTHERS AND SISTERS, USE AN ADDITIONAL QUESTIONNAIRE.						
1413	NAME OF BROTHER OR SISTER.	(07) _____	(08) _____	(09) _____	(10) _____	(11) _____	(12) _____
1414	Is (NAME) male or female?	MALE . . . . 1 FEMALE . 2	MALE . . . . 1 FEMALE . 2	MALE . . . . 1 FEMALE . 2	MALE . . . . 1 FEMALE . 2	MALE . . . . 1 FEMALE . 2	MALE . . . . 1 FEMALE . 2
1415	Is (NAME) still alive?	YES . . . . . 1 NO . . . . . 2 → GO TO 1417 DK . . . . . 8 → GO TO (08)	YES . . . . . 1 NO . . . . . 2 → GO TO 1417 DK . . . . . 8 → GO TO (09)	YES . . . . . 1 NO . . . . . 2 → GO TO 1417 DK . . . . . 8 → GO TO (10)	YES . . . . . 1 NO . . . . . 2 → GO TO 1417 DK . . . . . 8 → GO TO (11)	YES . . . . . 1 NO . . . . . 2 → GO TO 1417 DK . . . . . 8 → GO TO 12)	YES . . . . . 1 NO . . . . . 2 → GO TO 1417 DK . . . . . 8 → GO TO (07)
1416	How old is (NAME)?	☐☐ GO TO (02)	☐☐ GO TO (03)	☐☐ GO TO (04)	☐☐ GO TO (05)	☐☐ GO TO (06)	☐☐ GO TO (07)
1417	How many years ago did (NAME) die?	☐☐	☐☐	☐☐	☐☐	☐☐	☐☐
1418	How old was (NAME) when (he/she) died? IF DON'T KNOW, PROBE AND ASK ADDITIONAL QUESTIONS TO GET AN ESTIMATE.	☐☐ IF MALE OR DIED BEFORE 12 YEARS OF AGE, GO TO 1423	☐☐ IF MALE OR DIED BEFORE 12 YEARS OF AGE, GO TO 1423	☐☐ IF MALE OR DIED BEFORE 12 YEARS OF AGE, GO TO 1423	☐☐ IF MALE OR DIED BEFORE 12 YEARS OF AGE, GO TO 1423	☐☐ IF MALE OR DIED BEFORE 12 YEARS OF AGE, GO TO 1423	☐☐ IF MALE OR DIED BEFORE 12 YEARS OF AGE, GO TO 1423
1419	Was (NAME) pregnant when she died?	YES . . . . . 1 → GO TO 1423 NO 2	YES . . . . . 1 → GO TO1423 NO 2	YES . . . . . 1 → GO TO 1423 NO 2	YES . . . . . 1 → GO TO 1423 NO 2	YES . . . . . 1 → GO TO 1423 NO 2	YES . . . . . 1 → GO TO 1423 NO 2
1420	Did (NAME) die during childbirth?	YES . . . . . 1 → GO TO (02) NO 2	YES . . . . . 1 → GO TO (03) NO 2	YES . . . . . 1 → GO TO (04) NO 2	YES . . . . . 1 → GO TO (05) NO 2	YES . . . . . 1 → GO TO (06) NO 2	YES . . . . . 1 → GO TO (07) NO 2
1421	Did (NAME) die within two months after the end of a pregnancy or childbirth?	YES . . . . . 1 NO . . . . . 2 → GO TO 1423	YES . . . . . 1 NO . . . . . 2 → GO TO 1423	YES . . . . . 1 NO . . . . . 2 → GO TO 1423	YES . . . . . 1 NO . . . . . 2 → GO TO 1423	YES . . . . . 1 NO . . . . . 2 → GO TO 1423	YES . . . . . 1 NO . . . . . 2 → GO TO 1423
1422	How many days after the end of the pregnancy did (NAME) die?	☐☐	☐☐	☐☐	☐☐	☐☐	☐☐
1423	Was (NAME)'s death due to an act of violence?	YES . . . . . 1 → GO TO (02) NO 2	YES . . . . . 1 → GO TO (03) NO 2	YES . . . . . 1 → GO TO (04) NO 2	YES . . . . . 1 → GO TO (05) NO 2	YES . . . . . 1 → GO TO (06) NO 2	YES . . . . . 1 → GO TO (07) NO 2
1424	Was (NAME)'s death due to an accident?	YES . . . . . 1 NO . . . . . 2 GO TO (02)	YES . . . . . 1 NO . . . . . 2 GO TO (03)	YES . . . . . 1 NO . . . . . 2 GO TO (04)	YES . . . . . 1 NO . . . . . 2 GO TO (05)	YES . . . . . 1 NO . . . . . 2 GO TO (06)	YES . . . . . 1 NO . . . . . 2 GO TO (07)
IF NO MORE BROTHERS OR SISTERS, GO TO THE NEXT SECTION.							

SECTION 15: DOMESTIC VIOLENCE MODULE

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1500	CHECK COVER PAGE: WOMAN SELECTED FOR DV MODULE? WOMAN SELECTED FOR THIS SECTION ☐ ↓ WOMAN NOT SELECTED ☐ →		1533
1501	CHECK FOR PRESENCE OF OTHERS: DO NOT CONTINUE UNTIL PRIVACY IS ENSURED. PRIVACY OBTAINED . . . . . 1 ↓ PRIVACY NOT POSSIBLE . . . . . 2 →		1532
1501A	READ TO THE RESPONDENT: Now I would like to ask you questions about some other important aspects of a woman's life. You may find some of these questions very personal. However, your answers are crucial for helping to understand the condition of women in Sierra Leone. Let me assure you that your answers are completely confidential and will not be told to anyone and no one else in your household will know that you were asked these questions. If I ask you any question you don't want to answer, just let me know and I will go on to the next question.		
1502	CHECK 701 AND 702: CURRENTLY MARRIED/ LIVING WITH A MAN ☐ ↓ FORMERLY MARRIED/ LIVED WITH A MAN (READ IN PAST TENSE AND USE 'LAST' WITH 'HUSBAND/PARTNER') ☐ ↓ NEVER MARRIED/ NEVER LIVED WITH A MAN ☐ →		1516
1503	First, I am going to ask you about some situations which happen to some women. Please tell me if these apply to your relationship with your (last) (husband/partner)?	YES NO DK	
	a) He (is/was) jealous or angry if you (talk/talked) to other	JEALOUS 1 2 8	
	b) He frequently (accuses/accused) you of being unfaithful?	ACCUSES 1 2 8	
	c) He (does/did) not permit you to meet your female friends?	NOT MEET FRIENDS . . 1 2 8	
	d) He (tries/tried) to limit your contact with your family?	NO FAMILY 1 2 8	
	e) He (insists/insisted) on knowing where you (are/were) at all times?	WHERE YOU ARE 1 2 8	
1504	Now I need to ask some more questions about your relationship with your (last) (husband/partner).		
	A. Did your (last) (husband/partner) ever:	B. How often did this happen during the last 12 months: often, only sometimes, or not at all?	
		EVER / OFTEN / SOME-TIMES / NOT IN LAST 12 MONTHS	
	a) say or do something to humiliate you in front of others?	YES 1 → 1 2 3 NO 2 ↓	
	b) threaten to hurt or harm you or someone you care about?	YES 1 → 1 2 3 NO 2 ↓	
	c) insult you or make you feel bad about yourself?	YES 1 → 1 2 3 NO 2 ↓	

SECTION 15: DOMESTIC VIOLENCE MODULE

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1505	A. Did your (last) (husband/partner) ever do any of the following things to you: B. How often did this happen during the last 12 months: often, only sometimes, or not at all?		

	EVER		OFTEN	SOME-TIMES	NOT IN LAST 12 MONTHS
a) push you, shake you, or throw something at you?	YES	1 →	1	2	3
	NO	2 ↓			
b) slap you?	YES	1 →	1	2	3
	NO	2 ↓			
c) twist your arm or pull your hair?	YES	1 →	1	2	3
	NO	2 ↓			
d) punch you with his fist or with something that could hurt you?	YES	1 →	1	2	3
	NO	2 ↓			
e) kick you, drag you, or beat you up?	YES	1 →	1	2	3
	NO	2 ↓			
f) try to choke you or burn you on purpose?	YES	1 →	1	2	3
	NO	2 ↓			
g) threaten or attack you with a knife, gun, or other weapon?	YES	1 →	1	2	3
	NO	2 ↓			
h) physically force you to have sexual intercourse with him when you did not want to?	YES	1 →	1	2	3
	NO	2 ↓			
i) physically force you to perform any other sexual acts you did not want to?	YES	1 →	1	2	3
	NO	2 ↓			
j) force you with threats or in any other way to perform sexual acts you did not want to?	YES	1 →	1	2	3
	NO	2 ↓			

1506	CHECK 1505A (a-j): AT LEAST ONE 'YES' ☐ ↓ NOT A SINGLE 'YES' ☐ →		1509
1507	How long after you first (got married/started living together) with your (last) (husband/partner) did (this/any of these things) first happen? IF LESS THAN ONE YEAR, RECORD '00'.	NUMBER OF YEARS . . . . . ☐☐ BEFORE MARRIAGE/BEFORE LIVING TOGETHER 95	
1508	Did the following ever happen as a result of what your (last) (husband/partner) did to you: a) You had cuts, bruises, or aches? b) You had eye injuries, sprains, dislocations, or burns? c) You had deep wounds, broken bones, broken teeth, or any other serious injury?	YES . . . . . 1 NO . . . . . 2 YES . . . . . 1 NO . . . . . 2 YES . . . . . 1 NO 2	
1509	Have you ever hit, slapped, kicked, or done anything else to physically hurt your (last) (husband/partner) at times when he was not already beating or physically hurting you?	YES . . . . . 1 NO . . . . . 2 →	1511
1510	In the last 12 months, how often have you done this to your (last) (husband/partner): often, only sometimes, or not at all?	OFTEN . . . . . 1 SOMETIMES . . . . . 2 NOT AT ALL 3	

SECTION 15: DOMESTIC VIOLENCE MODULE

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1511	Does (did) your (last) (husband/partner) drink alcohol?	YES . . . . . 1 NO 2	→ 1513
1512	How often does (did) he get drunk: often, only sometimes, or never?	OFTEN . . . . . 1 SOMETIMES . . . . . 2 NEVER 3	
1513	Are (Were) you afraid of your (last) (husband/partner): most of the time, sometimes, or never?	MOST OF THE TIME AFRAID . . . . . 1 SOMETIMES AFRAID . . . . . 2 NEVER AFRAID 3	
1514	CHECK 709: MARRIED MORE THAN ONCE ☐↓ MARRIED ONLY ONCE ☐ →		1516
1515	A. So far we have been talking about the behavior of your (current/last) (husband/partner). Now I want to ask you about the behavior of any previous (husband/partner).	B. How long ago did this last happen?	

	EVER	0 - 11 MONTHS AGO	12+ MONTHS AGO	DON'T REMEMBER
a) Did any previous (husband/partner) ever hit, slap, kick, or do anything else to hurt you physically?	YES 1 → / NO 2 ↓	1	2	3
b) Did any previous (husband/partner) physically force you to have intercourse or perform any other sexual acts against your will?	YES 1 → / NO 2 ↓	1	2	3
c) Did any previous (husband/partner) humiliate you in front of others, threaten to hurt you or someone you care about, or insult you or make you feel bad about yourself?	YES 1 → / NO 2 ↓	1	2	3

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1516	CHECK 701 AND 702: EVER MARRIED/EVER LIVED WITH A MAN ☐↓ NEVER MARRIED/NEVER LIVED WITH A MAN ☐↓ a) From the time you were 15 years old has anyone other than (your/any) (husband/partner) hit you, slapped you, kicked you, or done anything else to hurt you physically? b) From the time you were 15 years old has anyone hit you, slapped you, kicked you, or done anything else to hurt you physically?	YES . . . . . 1 NO . . . . . 2 REFUSED TO ANSWER/ NO ANSWER 3	→ 1519
1517	Who has hurt you in this way? Anyone else? RECORD ALL MENTIONED.	MOTHER/STEP-MOTHER . . . . . A FATHER/STEP-FATHER . . . . . B SISTER/BROTHER . . . . . C DAUGHTER/SON . . . . . D OTHER RELATIVE . . . . . E CURRENT BOYFRIEND . . . . . F FORMER BOYFRIEND . . . . . G MOTHER-IN-LAW . . . . . H FATHER-IN-LAW . . . . . I OTHER IN-LAW . . . . . J TEACHER . . . . . K EMPLOYER/SOMEONE AT WORK . . . . . L POLICE/SOLDIER . . . . . M OTHER _____ (SPECIFY) X	

SECTION 15: DOMESTIC VIOLENCE MODULE

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1518	In the last 12 months, how often has (this person/have these persons) physically hurt you: often, only sometimes, or not at all?	OFTEN . . . . . 1 SOMETIMES . . . . . 2 NOT AT ALL 3	
1519	CHECK 201, 226, AND 230: EVER BEEN PREGNANT ('YES' ON 201 OR 226 OR 230) ↓ NEVER BEEN PREGNANT →		1522
1520	Has any one ever hit, slapped, kicked, or done anything else to hurt you physically while you were pregnant?	YES . . . . . 1 NO 2	→ 1522
1521	Who has done any of these things to physically hurt you while you were pregnant? Anyone else? RECORD ALL MENTIONED.	CURRENT HUSBAND/PARTNER . . . . . A MOTHER/STEP-MOTHER . . . . . B FATHER/STEP-FATHER . . . . . C SISTER/BROTHER . . . . . D DAUGHTER/SON . . . . . E OTHER RELATIVE . . . . . F FORMER HUSBAND/PARTNER . . . . . G CURRENT BOYFRIEND . . . . . H FORMER BOYFRIEND . . . . . I MOTHER-IN-LAW . . . . . J FATHER-IN-LAW . . . . . K OTHER IN-LAW . . . . . L TEACHER . . . . . M EMPLOYER/SOMEONE AT WORK . . . . . N POLICE/SOLDIER . . . . . O OTHER _____ X (SPECIFY)	
1522	CHECK 701 AND 702: EVER MARRIED/EVER LIVED WITH A MAN ↓ NEVER MARRIED/NEVER LIVED WITH A MAN →		1522B
1522A	Now I want to ask you about things that may have been done to you by someone other than (your/any) (husband/partner). At any time in your life, as a child or as an adult, has anyone ever forced you in any way to have sexual intercourse or perform any other sexual acts when you did not want to?	YES . . . . . 1 NO . . . . . 2 REFUSED TO ANSWER/ NO ANSWER 3	→ 1523 → 1524A
1522B	At any time in your life, as a child or as an adult, has anyone ever forced you in any way to have sexual intercourse or perform any other sexual acts when you did not want to?	YES . . . . . 1 NO . . . . . 2 REFUSED TO ANSWER/ NO ANSWER 3	→ 1526
1523	Who was the person who was forcing you the very first time this happened?	CURRENT HUSBAND/PARTNER . . . . . 01 FORMER HUSBAND/PARTNER . . . . . 02 CURRENT/FORMER BOYFRIEND . . . . . 03 FATHER/STEP-FATHER . . . . . 04 BROTHER/STEP-BROTHER . . . . . 05 OTHER RELATIVE . . . . . 06 IN-LAW . . . . . 07 OWN FRIEND/ACQUAINTANCE . . . . . 08 FAMILY FRIEND . . . . . 09 TEACHER . . . . . 10 EMPLOYER/SOMEONE AT WORK . . . . . 11 POLICE/SOLDIER . . . . . 12 PRIEST/RELIGIOUS LEADER . . . . . 13 STRANGER . . . . . 14 OTHER _____ 96 (SPECIFY)	

SECTION 15: DOMESTIC VIOLENCE MODULE

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1524	CHECK 701 AND 702: EVER MARRIED/EVER LIVED WITH A MAN ☐ → a) In the last 12 months, has anyone other than (your/any) (husband/partner) physically forced you to have sexual intercourse when you did not want to? NEVER MARRIED/NEVER LIVED WITH A MAN ☐ → b) In the last 12 months has anyone physically forced you to have sexual intercourse when you did not want to?	YES . . . . . 1 NO 2	→ 1525
1524A	CHECK 1505A (h-j) and 1515A(b) AT LEAST ONE 'YES' ☐	NOT A SINGLE 'YES' ☐	→ 1526
1525	CHECK 701 AND 702: EVER MARRIED/EVER LIVED WITH A MAN ☐ → a) How old were you the first time you were forced to have sexual intercourse or perform any other sexual acts by anyone, including (your/any) husband/partner? NEVER MARRIED/NEVER LIVED WITH A MAN ☐ → b) How old were you the first first time you were forced to have sexual intercourse or perform any other sexual acts?	AGE IN COMPLETED YEARS . . . . . ☐☐ DON'T KNOW 98	
1526	CHECK 1505A (a-j), 1515A (a,b), 1516, 1520, 1522A, AND 1522B: AT LEAST ONE 'YES' ☐	NOT A SINGLE 'YES' ☐	→ 1530
1527	Thinking about what you yourself have experienced among the different things we have been talking about, have you ever tried to seek help?	YES . . . . . 1 NO 2	→ 1529
1528	From whom have you sought help? Anyone else? RECORD ALL MENTIONED.	OWN FAMILY . . . . . A HUSBAND'S/PARTNER'S FAMILY . . . . . B CURRENT/FORMER HUSBAND/PARTNER . . . . . C CURRENT/FORMER BOYFRIEND . . . . . D FRIEND . . . . . E NEIGHBOR . . . . . F RELIGIOUS LEADER . . . . . G DOCTOR/MEDICAL PERSONNEL . . . . . H POLICE . . . . . I LAWYER . . . . . J SOCIAL SERVICE ORGANIZATION . . . . . K OTHER _____ (SPECIFY) X	→ 1530
1529	Have you ever told any one about this?	YES . . . . . 1 NO 2	
1530	As far as you know, did your father ever beat your mother?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
	THANK THE RESPONDENT FOR HER COOPERATION AND REASSURE HER ABOUT THE CONFIDENTIALITY OF HER ANSWERS. FILL OUT THE QUESTIONS BELOW WITH REFERENCE TO THE DOMESTIC VIOLENCE		
1531	DID YOU HAVE TO INTERRUPT THE INTERVIEW BECAUSE SOME ADULT WAS TRYING TO LISTEN, OR CAME INTO THE ROOM, OR INTERFERED IN ANY OTHER WAY?	YES, ONCE / YES, MORE THAN ONCE / NO HUSBAND . . . . . 1 / 2 / 3 OTHER MALE ADU . . . . . 1 / 2 / 3 FEMALE ADUL . . . . . 1 / 2 / 3	

SECTION 15: DOMESTIC VIOLENCE MODULE

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1532	INTERVIEWER'S COMMENTS/EXPLANATION FOR NOT COMPLETING THE DOMESTIC VIOLENCE MODULE. _____ _____ _____		
1533	RECORD THE TIME.	HOURS ☐☐ MINUTES ☐☐	

INTERVIEWER'S OBSERVATIONS

TO BE FILLED IN AFTER COMPLETING INTERVIEW

COMMENTS ABOUT INTERVIEW:

COMMENTS ON SPECIFIC QUESTIONS:

ANY OTHER COMMENTS:

SUPERVISOR'S OBSERVATIONS

EDITOR'S OBSERVATIONS

INSTRUCTIONS:

ONLY ONE CODE SHOULD APPEAR IN ANY BOX.
COLUMN 1 REQUIRES A CODE IN EVERY MONTH.

CODES FOR EACH COLUMN:

COLUMN 1: BIRTHS, PREGNANCIES, CONTRACEPTIVE USE

B BIRTHS
P PREGNANCIES
T TERMINATIONS

0 NO METHOD

1 FEMALE STERILIZATION
2 MALE STERILIZATION
3 IUD
4 INJECTABLES
5 IMPLANTS
6 PILL
7 CONDOM
8 FEMALE CONDOM
9 EMERGENCY CONTRACEPTION
J STANDARD DAYS METHOD
K LACTATIONAL AMENORRHEA METHOD
L RHYTHM METHOD

M WITHDRAWAL
X OTHER MODERN METHOD
Y OTHER TRADITIONAL METHOD

COLUMN 2: DISCONTINUATION OF CONTRACEPTIVE USE

0 INFREQUENT SEX/HUSBAND AWAY
1 BECAME PREGNANT WHILE USING
2 WANTED TO BECOME PREGNANT
3 HUSBAND/PARTNER DISAPPROVED
4 WANTED MORE EFFECTIVE METHOD
5 SIDE EFFECTS/HEALTH CONCERNS

6 LACK OF ACCESS/TOO FAR
7 COSTS TOO MUCH
8 INCONVENIENT TO USE
F UP TO GOD/FATALISTIC
A DIFFICULT TO GET PREGNANT/MENOPAUSAL
D MARITAL DISSOLUTION/SEPARATION
X OTHER

_____
(SPECIFY)

Z DON'T KNOW

NOTE:
THIS CALENDAR IS INCLUDED IN THE PRINTED QUESTIONNAIRE FOR EASE OF UNDERSTANDING WHAT INFORMATION RELATED TO THE MONTHLY CLAENDAR WAS INCLUDED IN THE SURVEY.

THE CAPI PROGRAM COLLECTS ALL OF THIS CALENDAR INFORMATION, ALTHOUGH THE INTERVIEWERS DO NOT EXPLICITLY USE THE CALENDAR FORMAT WHEN COLLECTING THE DATA.

				COL. 1	COL. 2	
	12	DEC	01			
	11	NOV	02			
	10	OCT	03			
2	09	SEP	04			2
	08	AUG	05			
0	07	JUL	06			0
	06	JUN	07			
1	05	MAY	08			1
	04	APR	09			
9	03	MAR	10			9
	02	FEB	11			
	01	JAN	12			
	12	DEC	13			
	11	NOV	14			
	10	OCT	15			
2	09	SEP	16			2
	08	AUG	17			
0	07	JUL	18			0
	06	JUN	19			
1	05	MAY	20			1
	04	APR	21			
8	03	MAR	22			8
	02	FEB	23			
	01	JAN	24			
	12	DEC	25			
	11	NOV	26			
	10	OCT	27			
2	09	SEP	28			2
	08	AUG	29			
0	07	JUL	30			0
	06	JUN	31			
1	05	MAY	32			1
	04	APR	33			
7	03	MAR	34			7
	02	FEB	35			
	01	JAN	36			
	12	DEC	37			
	11	NOV	38			
	10	OCT	39			
2	09	SEP	40			2
	08	AUG	41			
0	07	JUL	42			0
	06	JUN	43			
1	05	MAY	44			1
	04	APR	45			
6	03	MAR	46			6
	02	FEB	47			
	01	JAN	48			
	12	DEC	49			
	11	NOV	50			
	10	OCT	51			
2	09	SEP	52			2
	08	AUG	53			
0	07	JUL	54			0
	06	JUN	55			
1	05	MAY	56			1
	04	APR	57			
5	03	MAR	58			5
	02	FEB	59			
	01	JAN	60			
	12	DEC	61			
	11	NOV	62			
	10	OCT	63			
2	09	SEP	64			2
	08	AUG	65			
0	07	JUL	66			0
	06	JUN	67			
1	05	MAY	68			1
	04	APR	69			
4	03	MAR	70			4
	02	FEB	71			
	01	JAN	72			

SIERRA LEONE DEMOGRAPHIC AND HEALTH SURVEY 2019
MAN'S QUESTIONNAIRE

SIERRA LEONE
STATISTICS SIERRA LEONE

IDENTIFICATION

LOCALITY NAME _____

LOCAL COUNCIL _____

NAME OF HOUSEHOLD HEAD _____

DISTRICT CODE . . . . . | | |

PROVINCE NAME AND CODE _____ | |

CHIEFDOM CODE . . . . . | | | | |

SECTION CODE . . . . . | | |

CLUSTER NUMBER . . . . . | | | | |

ENUMERATION AREA CODE . . . . . | | |

RURAL(1)/URBAN(2) . . . . . | |

HOUSEHOLD NUMBER . . . . . | | | | |

PLACE NAME _____

NAME OF HOUSEHOLD HEAD _____

CLUSTER NUMBER . . . . . | | | | |

HOUSEHOLD NUMBER . . . . . | | | | |

NAME AND LINE NUMBER OF MAN _____ | |

INTERVIEWER VISITS

	1	2	3	FINAL VISIT
DATE				DAY | | MONTH | | YEAR | | | |
INTERVIEWER'S NAME				INT. NO. | | | |
RESULT*				RESULT* |
NEXT VISIT: DATE				TOTAL NUMBER OF VISITS |
TIME				

*RESULT CODES: 1 COMPLETED; 2 NOT AT HOME; 3 POSTPONED; 4 REFUSED; 5 PARTLY COMPLETED; 6 INCAPACITATED; 7 OTHER _____ SPECIFY

LANGUAGE OF QUESTIONNAIRE** 0 1 | LANGUAGE OF INTERVIEW** | | | NATIVE LANGUAGE OF RESPONDENT** | | | TRANSLATOR USED (YES = 1, NO = 2) |

LANGUAGE OF QUESTIONNAIRE** **ENGLISH**

**LANGUAGE CODES:
01 ENGLISH; 02 KRIO; 03 TEMNE; 04 MENDE; 05 LIMBA; 06 OTHER

SUPERVISOR		FIELD EDITOR		OFFICE EDITOR	KEYED BY
NAME	NUMBER	NAME	NUMBER	NUMBER	NUMBER

INTRODUCTION AND CONSENT

Hello. My name is _____. I am working with Statistics Sierra Leone. We are conducting a survey about health and other topics all over Sierra Leone. The information we collect will help the government to plan health services. Your household was selected for the survey. The questions usually take about 20 minutes. All of the answers you give will be confidential and will not be shared with anyone other than members of our survey team. You don't have to be in the survey, but we hope you will agree to answer the questions since your views are important. If I ask you any question you don't want to answer, just let me know and I will go on to the next question or you can stop the interview at any time.

In case you need more information about the survey, you may contact the person listed on the card that has already been given to your household.

Do you have any questions?
May I begin the interview now?

SIGNATURE OF INTERVIEWER _____ DATE _____

RESPONDENT AGREES TO BE INTERVIEWED . . 1 ↓

RESPONDENT DOES NOT AGREE TO BE INTERVIEWED . . 2 → END

SECTION 1. RESPONDENT'S BACKGROUND

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
101	RECORD THE TIME.	HOURS . . . . . [ ][ ] MINUTES . . . . . [ ][ ]	
102	How long have you been living continuously in (NAME OF CURRENT CITY, TOWN OR VILLAGE OF RESIDENCE)? IF LESS THAN ONE YEAR, RECORD '00' YEARS.	YEARS . . . . . [ ][ ] ALWAYS . . . . . 95 VISITOR 96	→ 105
103	Just before you moved here, did you live in a city, in a town, or in a rural area?	CITY . . . . . 1 TOWN . . . . . 2 RURAL AREA 3	
104	Before you moved here, which province did you live in?	EASTERN PROVINCE . . . . . 01 NORTHERN PROVINCE . . . . . 02 SOUTHERN PROVINCE . . . . . 03 NORTH WEST PROVINCE . . . . . 04 WESTERN AREA 05 OUTSIDE OFSIERRA LEONE 96	
105	In what month and year were you born?	MONTH . . . . . [ ][ ] DON'T KNOW MONTH . . . . . 98 YEAR . . . . . [ ][ ][ ][ ] DON'T KNOW YEAR 9998	
106	How old were you at your last birthday? COMPARE AND CORRECT 105 AND/OR 106 IF INCONSISTENT.	AGE IN COMPLETED YEARS . . . . . [ ][ ]	
107	Have you ever attended school?	YES . . . . . 1 NO 2	→ 111
108	What is the highest level of school you attended: primary, secondary, or higher?	PRIMARY . . . . . 1 JUNIOR SECONDARY ..... 2 SENIOR SECONDARY ..... 3 VOCATIONAL/COMMERCIAL/NURSING TECHNICAL/TEACHING ..... 4 HIGHER 5	

SECTION 1. RESPONDENT'S BACKGROUND

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
109	What is the highest [GRADE/FORM/YEAR] you completed at that level? IF COMPLETED LESS THAN ONE YEAR AT THAT LEVEL, RECORD '00'.	GRADE/FORM/YEAR . . . . . ☐☐	
110	CHECK 108: PRIMARY OR SECONDARY VOCATIONAL/COMMERCIAL/NURSING TECHNICAL/TEACHING ☐ HIGHER ☐		→ 113
111	Now I would like you to read this sentence to me. SHOW CARD TO RESPONDENT. IF RESPONDENT CANNOT READ WHOLE SENTENCE, PROBE: Can you read any part of the sentence to me?	CANNOT READ AT ALL . . . . . 1 ABLE TO READ ONLY PART OF THE SENTENCE . . . . . 2 ABLE TO READ WHOLE SENTENCE . . . . . 3 NO CARD WITH REQUIRED LANGUAGE _____ 4 (SPECIFY LANGUAGE) BLIND/VISUALLY IMPAIRED 5	
112	CHECK 111: CODE '2', '3' OR '4' CIRCLED ☐ CODE '1' OR '5' CIRCLED ☐		→ 114
113	Do you read a newspaper or magazine at least once a week, less than once a week or not at all?	AT LEAST ONCE A WEEK . . . . . 1 LESS THAN ONCE A WEEK . . . . . 2 NOT AT ALL 3	
114	Do you listen to the radio at least once a week, less than once a week or not at all?	AT LEAST ONCE A WEEK . . . . . 1 LESS THAN ONCE A WEEK . . . . . 2 NOT AT ALL 3	
115	Do you watch television at least once a week, less than once a week or not at all?	AT LEAST ONCE A WEEK . . . . . 1 LESS THAN ONCE A WEEK . . . . . 2 NOT AT ALL 3	
116	Do you own a mobile telephone?	YES . . . . . 1 NO 2	→ 118
117	Do you use your mobile phone for any financial transactions?	YES . . . . . 1 NO 2	
118	Do you have an account in a bank or other financial institution that you yourself use?	YES . . . . . 1 NO 2	
119	Have you ever used the internet?	YES . . . . . 1 NO 2	→ 122
120	In the last 12 months, have you used the internet? IF NECESSARY, PROBE FOR USE FROM ANY LOCATION, WITH ANY DEVICE.	YES . . . . . 1 NO 2	→ 122
121	During the last one month, how often did you use the internet: almost every day, at least once a week, less than once a week, or not at all?	ALMOST EVERY DAY . . . . . 1 AT LEAST ONCE A WEEK . . . . . 2 LESS THAN ONCE A WEEK . . . . . 3 NOT AT ALL 4	

SECTION 1. RESPONDENT'S BACKGROUND

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
122	What is your religion?	CHRISTIAN ..... 1 ISLAM ..... 2 BAHAI ..... 3 TRADITIONAL ..... 4 NONE ..... 5 OTHER _____ 6 SPECIFY	
123	What is your ethnic group?	CREOLE 11 FULLAH 12 KONO 13 LIMBA 14 LOKO 15 MANDINGO 16 MENDE 17 SHERBRO 18 TEMNE 19 OTHER SIERRA LEONE _____ 95 SPECIFY OTHER FOREIGN _____ 96 SPECIFY	
124	In the last 12 months, how many times have you been away from home for one or more nights?	NUMBER OF TIMES ..... [ ][ ] NONE 00	→ 201
125	In the last 12 months, have you been away from home for more than one month at a time?	YES ..... 1 NO 2	

SECTION 2. REPRODUCTION

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
201	Now I would like to ask about any children you have had during your life. I am interested in all of the children that are biologically yours, even if they are not legally yours or do not have your last name. Have you ever fathered any children with any woman?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 206
202	Do you have any sons or daughters that you have fathered who are now living with you?	YES . . . . . 1 NO 2	→ 204
203	a) How many sons live with you? b) And how many daughters live with you? IF NONE, RECORD '00'.	a) SONS AT HOME . . . . . [ ][ ] b) DAUGHTERS AT HOME . . . . . [ ][ ]	
204	Do you have any sons or daughters that you have fathered who are alive but do not live with you?	YES . . . . . 1 NO 2	→ 206
205	a) How many sons are alive but do not live with you? b) And how many daughters are alive but do not live with you? IF NONE, RECORD '00'.	a) SONS ELSEWHERE . . . . . [ ][ ] b) DAUGHTERS ELSEWHERE . . . . . [ ][ ]	
206	Have you ever fathered a son or a daughter who was born alive but later died? IF NO, PROBE: Any baby who cried, who made any movement, sound, or effort to breathe, or who showed any other signs of life even if for a very short time?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 208
207	a) How many boys have died? b) And how many girls have died? IF NONE, RECORD '00'.	a) BOYS DEAD . . . . . [ ][ ] b) GIRLS DEAD . . . . . [ ][ ]	
208	SUM ANSWERS TO 203, 205, AND 207, AND ENTER TOTAL. IF NONE, RECORD '00'.	TOTAL CHILDREN . . . . . [ ][ ]	
209	CHECK 208: HAS HAD MORE THAN ONE CHILD ↓ HAS HAD ONLY ONE CHILD → 211 HAS NOT HAD ANY CHILDREN → 301		
210	Did all of the children you have fathered have the same biological mother?	YES . . . . . 1 NO 2	
211	CHECK 208: HAS HAD MORE THAN ONE CHILD ↓ a) How old were you when your first child was born?	HAS HAD ONLY ONE CHILD ↓ b) How old were you when your child was born? AGE IN YEARS . . . . . [ ][ ]	
212	CHECK 203 AND 205: AT LEAST ONE LIVING CHILD ↓ NO LIVING CHILDREN → 301		

SECTION 2. REPRODUCTION

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
213	CHECK 203 AND 205: MORE THAN ONE LIVING CHILD → a) How old is your youngest child? ONLY ONE LIVING CHILD → b) How old is your child?	AGE IN YEARS	
214	CHECK 213: (YOUNGEST) CHILD IS AGE 0-2 YEARS (YOUNGEST) CHILD IS AGE 3 YEARS OR OLDER → 301		
215	CHECK 203 AND 205: MORE THAN ONE LIVING CHILD → a) What is the name of your youngest child? ONLY ONE LIVING CHILD → b) What is the name of your child?	_____ (NAME OF (YOUNGEST) CHILD)	
216	When (NAME)'s mother was pregnant with (NAME), did she have any antenatal check-ups?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 218
217	Were you ever present during any of those antenatal check-ups?	PRESENT . . . . . 1 NOT PRESENT 2	
218	Was (NAME) born in a hospital or health facility?	HOSPITAL/HEALTH FACILITY . . . . . 1 OTHER 2	
219	When a child has diarrhea, how much should he or she be given to drink: more than usual, about the same as usual, less than usual, or nothing to drink at all?	MORE THAN USUAL . . . . . 1 ABOUT THE SAME . . . . . 2 LESS THAN USUAL . . . . . 3 NOTHING TO DRINK . . . . . 4 DON'T KNOW 8	

SECTION 3. CONTRACEPTION

301	Now I would like to talk about family planning - the various ways or methods that a couple can use to delay or avoid a pregnancy. Have you ever heard of (METHOD)?	
01	Female Sterilization. PROBE: Women can have an operation to avoid having any more children.	YES . . . . . 1 NO 2
02	Male Sterilization. PROBE: Men can have an operation to avoid having any more children.	YES . . . . . 1 NO 2
03	IUD. PROBE: Women can have a loop or coil placed inside them by a doctor or a nurse which can prevent pregnancy for one or more years.	YES . . . . . 1 NO 2
04	Injectables. PROBE: Women can have an injection by a health provider that stops them from becoming pregnant for one or more months.	YES . . . . . 1 NO 2
05	Implants. PROBE: Women can have one or more small rods placed in their upper arm by a doctor or nurse which can prevent pregnancy for one or more years.	YES . . . . . 1 NO 2
06	Pill. PROBE: Women can take a pill every day to avoid becoming pregnant.	YES . . . . . 1 NO 2
07	Condom. PROBE: Men can put a rubber sheath on their penis before sexual intercourse.	YES . . . . . 1 NO 2
08	Female Condom. PROBE: Women can place a sheath in their vagina before sexual intercourse.	YES . . . . . 1 NO 2
09	Emergency Contraception. PROBE: As an emergency measure, within three days after they have unprotected sexual intercourse, women can take special pills to prevent pregnancy.	YES . . . . . 1 NO 2
10	Standard Days Method. PROBE: A woman uses a string of colored beads to know the days she can get pregnant. On the days she can get pregnant, she uses a condom or does not have sexual intercourse.	YES . . . . . 1 NO 2
11	Lactational Amenorrhea Method (LAM). PROBE: Up to six months after childbirth, before the menstrual period has returned, women use a method requiring frequent breastfeeding day and night.	YES . . . . . 1 NO 2
12	Rhythm Method. PROBE: To avoid pregnancy, women do not have sexual intercourse on the days of the month they think they can get pregnant.	YES . . . . . 1 NO 2
13	Withdrawal. PROBE: Men can be careful and pull out before climax.	YES . . . . . 1 NO 2
14	Have you heard of any other ways or methods that women or men can use to avoid pregnancy?	YES, MODERN METHOD _____ A (SPECIFY) YES, TRADITIONAL METHOD _____ B (SPECIFY) NO . . . . . Y

SECTION 3. CONTRACEPTION

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
302	In the last few months have you: a) Heard about family planning on the radio? b) Seen anything about family planning on the television? c) Read about family planning in a newspaper or magazine? d) Received a voice or text message about family planning on a mobile phone?	YES NO a) RADIO . . . . . 1 2 b) TELEVISION . . . . . 1 2 c) NEWSPAPER OR MAGAZINE . . . . . 1 2 d) MOBILE PHONE 1 2	
303	In the last few months, have you discussed family planning with a health worker or health professional?	YES . . . . . 1 NO 2	
304	Now I would like to ask you about a woman's risk of pregnancy. From one menstrual period to the next, are there certain days when a woman is more likely to become pregnant when she has sexual relations?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 306
305	Is this time just before her period begins, during her period, right after her period has ended, or halfway between two periods?	JUST BEFORE HER PERIOD BEGINS . . . . . 1 DURING HER PERIOD . . . . . 2 RIGHT AFTER HER PERIOD HAS ENDE . . . . . 3 HALFWAY BETWEEN TWO PERIODS . . . . . 4 OTHER _____ 6 (SPECIFY) DON'T KNOW 8	
306	After the birth of a child, can a woman become pregnant before her menstrual period has returned?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
307	I will now read you some statements about contraception. Please tell me if you agree or disagree with each one. a) Contraception is a woman's concern and a man should not have to worry about it. b) Women who use contraception may become promiscuous.	AGREE DISAGREE DK a) CONTRACEPTION WOMAN'S CONCERN 1 2 8 b) WOMEN MAY BECOME PROMISCUOUS 1 2 8	

SECTION 4. MARRIAGE AND SEXUAL ACTIVITY

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
401	Are you currently married or living together with a woman as if married?	YES, CURRENTLY MARRIED . . . . . 1 YES, LIVING WITH A WOMAN . . . . . 2 NO, NOT IN UNION 3	→ 404
402	Have you ever been married or lived together with a woman as if married?	YES, FORMERLY MARRIED . . . . . 1 YES, LIVED WITH A WOMAN . . . . . 2 NO 3	→ 413
403	What is your marital status now: are you widowed, divorced, or separated?	WIDOWED . . . . . 1 DIVORCED . . . . . 2 SEPARATED 3	→ 410
404	Is your (wife/partner) living with you now or is she staying elsewhere?	LIVING WITH HIM . . . . . 1 STAYING ELSEWHERE 2	
405	Do you have other wives or do you live with other women as if married?	YES (MORE THAN ONE WIFE) . . . . . 1 NO (ONLY ONE WIFE) 2	→ 407
406	Altogether, how many wives or live-in partners do you have?	TOTAL NUMBER OF WIVES AND LIVE-IN PARTNERS	
407	CHECK 405: ONE WIFE/ PARTNER → a) Please tell me the name of (your wife/the woman you are living with as if married). MORE THAN ONE WIFE/ PARTNER → b) Please tell me the name of each of your wives or each woman you are living with as if married. RECORD THE NAME AND THE LINE NUMBER FROM THE HOUSEHOLD QUESTIONNAIRE FOR EACH WIFE AND LIVE-IN PARTNER. IF A WOMAN IS NOT LISTED IN THE HOUSEHOLD, RECORD '00'.	NAME / LINE NUMBER / 408 (1) How old was (NAME) on her last birthday? / AGE	
408	ASK 408 FOR EACH PERSON.		
409	CHECK 407: ONE WIFE/ PARTNER MORE THAN ONE WIFE/ PARTNER →		→ 411
410	Have you been married or lived with a woman only once or more than once?	MORE THAN ONCE . . . . . 1 ONLY ONCE 2	
411	CHECK 405 AND 410: BOTH ARE CODE '2' → a) In what month and year did you start living with your (wife/partner)? OTHER → b) Now I would like to ask about your first (wife/partner). In what month and year did you start living with her?	MONTH . . . . . DON'T KNOW MONTH . . . . . 98 YEAR . . . . . DON'T KNOW YEAR 9998	→ 413
412	How old were you when you first started living with her?	AGE	

SECTION 4. MARRIAGE AND SEXUAL ACTIVITY

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
413	**CHECK FOR PRESENCE OF OTHERS. BEFORE CONTINUING, MAKE EVERY EFFORT TO ENSURE PRIVACY.**		
414	I would like to ask some questions about sexual activity in order to gain a better understanding of some important life issues. Let me assure you again that your answers are completely confidential and will not be told to anyone. If we should come to any question that you don't want to answer, just let me know and we will go to the next question. How old were you when you had sexual intercourse for the very first time?	NEVER HAD SEXUAL INTERCOURSE . . . . . 00 AGE IN YEARS	→ 501
415	I would like to ask you about your recent sexual activity. When was the last time you had sexual intercourse? IF LESS THAN 12 MONTHS, ANSWER MUST BE RECORDED IN DAYS, WEEKS OR MONTHS. IF 12 MONTHS (ONE YEAR) OR MORE, ANSWER MUST BE RECORDED IN YEARS.	DAYS AGO . . . . . 1 WEEKS AGO . . . . . 2 MONTHS AGO . . . . . 3 YEARS AGO 4	→ 417 → 427

		LAST SEXUAL PARTNER	SECOND-TO-LAST SEXUAL PARTNER	THIRD-TO-LAST SEXUAL PARTNER
416	When was the last time you had sexual intercourse with this person?		DAYS AGO . . 1 [ ][ ] WEEKS AGO . . 2 [ ][ ] MONTHS AGO . . 3 [ ][ ]	DAYS AGO . . 1 [ ][ ] WEEKS AGO . . 2 [ ][ ] MONTHS AGO . . 3 [ ][ ]
417	The last time you had sexual intercourse with this person, was a condom used?	YES . . . . 1 NO . . . . 2 (SKIP TO 419)	YES . . . . 1 NO . . . . 2 (SKIP TO 419)	YES . . . . 1 NO . . . . 2 (SKIP TO 419)
418	Was a condom used every time you had sexual intercourse with this person in the last 12 months?	YES . . . . 1 NO 2	YES . . . . 1 NO 2	YES . . . . 1 NO 2
419	What was your relationship to this person with whom you had sexual intercourse? IF GIRLFRIEND: Were you living together as if married? IF YES, RECORD '2'. IF NO, RECORD '3'.	WIFE . . . . 1 LIVE-IN PARTNER . . . . . 2 GIRLFRIEND NOT LIVING WITH RESPONDENT . . . . . 3 CASUAL ACQUAINTANCE . . 4 CLIENT/SEX WORKER . . 5 OTHER ____________ 6 (SPECIFY)	WIFE . . . . 1 LIVE-IN PARTNER . . . . . 2 GIRLFRIEND NOT LIVING WITH RESPONDENT . . . . . 3 CASUAL ACQUAINTANCE . . 4 CLIENT/SEX WORKER . . 5 OTHER ____________ 6 (SPECIFY)	WIFE . . . . 1 LIVE-IN PARTNER . . . . . 2 GIRLFRIEND NOT LIVING WITH RESPONDENT . . . . . 3 CASUAL ACQUAINTANCE . . 4 CLIENT/SEX WORKER . . 5 OTHER ____________ 6 (SPECIFY)
420	How long ago did you first have sexual intercourse with this person?	DAYS AGO . . 1 [ ][ ] WEEKS AGO . . 2 [ ][ ] MONTHS AGO . . 3 [ ][ ] YEARS AGO . . 4 [ ][ ]	DAYS AGO . . 1 [ ][ ] WEEKS AGO . . 2 [ ][ ] MONTHS AGO . . 3 [ ][ ] YEARS AGO . . 4 [ ][ ]	DAYS AGO . . 1 [ ][ ] WEEKS AGO . . 2 [ ][ ] MONTHS AGO . . 3 [ ][ ] YEARS AGO . . 4 [ ][ ]
421	How many times during the last 12 months did you have sexual intercourse with this person? IF NON-NUMERIC ANSWER, PROBE TO GET AN ESTIMATE. IF NUMBER OF TIMES IS 95 OR MORE, RECORD '95'.	NUMBER OF TIMES . . . . . [ ][ ]	NUMBER OF TIMES . . . . . [ ][ ]	NUMBER OF TIMES . . . . . [ ][ ]
422	How old is this person?	AGE OF PARTNER [ ][ ] DON'T KNOW 98	AGE OF PARTNER [ ][ ] DON'T KNOW 98	AGE OF PARTNER [ ][ ] DON'T KNOW 98
423	Apart from this person, have you had sexual intercourse with any other person in the last 12 months?	YES . . . . 1 (GO BACK TO 416 IN NEXT COLUMN) NO . . . . 2 (SKIP TO 425)	YES . . . . 1 (GO BACK TO 416 IN NEXT COLUMN) NO . . . . 2 (SKIP TO 425)	
424	In total, with how many different people have you had sexual intercourse in the last 12 months? IF NON-NUMERIC ANSWER, PROBE TO GET AN ESTIMATE. IF NUMBER OF PARTNERS IS 95 OR MORE, RECORD '95'.			NUMBER OF PARTNERS LAST 12 MONTHS . . [ ][ ] DON'T KNOW 98

SECTION 4. MARRIAGE AND SEXUAL ACTIVITY

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
425	CHECK 419 (ALL COLUMNS): AT LEAST ONE PARTNER IS A SEX WORKER ☐ ↓ NO PARTNERS ARE SEX WORKERS ☐ → 427		
426	CHECK 419 AND 417 (ALL COLUMNS): CONDOM USED WITH EVERY SEX WORKER ☐ → 430 OTHER ☐ → 431		
427	In the last 12 months, did you pay anyone in exchange for having sexual intercourse?	YES . . . . . 1 NO 2	→ 429
428	Have you ever paid anyone in exchange for having sexual intercourse?	YES . . . . . 1 NO 2	→ 431
429	The last time you paid someone in exchange for having sexual intercourse, was a condom used?	YES . . . . . 1 NO 2	→ 431
430	Was a condom used during sexual intercourse every time you paid someone in exchange for having sexual intercourse in the last 12 months?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
431	In the past 12 months have you given any gifts or other goods in order to have sex or to become sexually involved with anyone?	YES . . . . . 1 NO 2	→ 433
432	Have you ever given any gifts or other goods in order to have sex or to become sexually involved with anyone?	YES . . . . . 1 NO 2	
433	In total, with how many different people have you had sexual intercourse in your lifetime? IF NON-NUMERIC ANSWER, PROBE TO GET AN ESTIMATE. IF NUMBER OF PARTNERS IS 95 OR MORE, RECORD '95'.	NUMBER OF PARTNERS IN LIFETIME . . . . . ☐☐ DON'T KNOW 98	
434	CHECK 417: MOST RECENT PARTNER (FIRST COLUMN) CONDOM USED ☐ ↓ NOT ASKED ☐ → 438 NO CONDOM USED ☐ → 438		
435	You told me that a condom was used the last time you had sex. What is the brand name of the condom used at that time? IF BRAND NOT KNOWN, ASK TO SEE THE PACKAGE.	LATEX . . . . . 01 PROTECTOR PLUS 02 LOVE . . . . . 03 ROUGH RIDER 04 IQUON 05 STRAWBERRY 06 OTHER _____ 96 (SPECIFY) DON'T KNOW 98	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
436	From where did you obtain the condom the last time? PROBE TO IDENTIFY TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE)	**PUBLIC SECTOR** GOVERNMENT HOSPITAL . . . . . 11 GOVERNMENT HEALTH CENTER . . . . . 12 FAMILY PLANNING CLINIC . . . . . 13 MOBILE CLINIC . . . . . 14 FIELDWORKER . . . . . 15 OTHER PUBLIC SECTOR _____ 16 (SPECIFY) **PRIVATE MEDICAL SECTOR** PRIVATE HOSPITAL/CLINIC . . . . . 21 PHARMACY . . . . . 22 PRIVATE DOCTOR . . . . . 23 MOBILE CLINIC . . . . . 24 FIELDWORKER . . . . . 25 OTHER PRIVATE MEDICAL SECTOR _____ 26 (SPECIFY) **OTHER SOURCE** SHOP . . . . . 31 CHURCH . . . . . 32 FRIEND/RELATIVE . . . . . 33 OTHER _____ 96 (SPECIFY) DON'T KNOW 98	
437	The last time you had sex did you or your partner use any method other than a condom to avoid or prevent a pregnancy?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 439 → 440
438	The last time you had sex did you or your partner use any method to avoid or prevent a pregnancy?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 440
439	What method did you or your partner use? PROBE: Did you or your partner use any other method to prevent pregnancy? RECORD ALL MENTIONED.	FEMALE STERILIZATION . . . . . A MALE STERILIZATION . . . . . B IUD . . . . . C INJECTABLES . . . . . D IMPLANTS . . . . . E PILL . . . . . F CONDOM . . . . . G FEMALE CONDOM . . . . . H EMERGENCY CONTRACEPTION . . . . . I STANDARD DAYS METHOD . . . . . J LACTATIONAL AMENORRHEA METHOD . . . . . K RHYTHM METHOD . . . . . L WITHDRAWAL . . . . . M OTHER MODERN METHOD . . . . . X OTHER TRADITIONAL METHOD . . . . . Y	→ 501
440	Do you know of a place where you can obtain a method of family planning?	YES . . . . . 1 NO 2	

SECTION 5. FERTILITY PREFERENCES

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
501	CHECK 401: CURRENTLY MARRIED OR LIVING WITH A PARTNER ☐ NOT CURRENTLY MARRIED AND NOT LIVING WITH A PARTNER ☐		→ 514
502	CHECK 439: MAN NOT STERILIZED ☐ MAN STERILIZED ☐		→ 514
503	CHECK 407: ONE WIFE/ PARTNER ☐ MORE THAN ONE WIFE/ PARTNER ☐		→ 509
504	Is your (wife/partner) currently pregnant?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 507
505	Now I have some questions about the future. After the child you and your (wife/partner) are expecting now, would you like to have another child, or would you prefer not to have any more children?	HAVE ANOTHER CHILD . . . . . 1 NO MORE . . . . . 2 UNDECIDED/DON'T KNOW 8	→ 514
506	After the birth of the child you are expecting now, how long would you like to wait before the birth of another child?	MONTHS . . . . . 1 ☐☐ YEARS . . . . . 2 ☐☐ SOON/NOW . . . . . 993 OTHER _____ 996 (SPECIFY) DON'T KNOW 998	→ 514
507	CHECK 208: HAS FATHERED CHILDREN ☐ a) Now I have some questions about the future. Would you like to have another child, or would you prefer not to have any more children? HAS NOT FATHERED CHILDREN ☐ b) Now I have some questions about the future. Would you like to have a child, or would you prefer not to have any children?	HAVE (A/ANOTHER) CHILD . . . . . 1 NO MORE/NONE . . . . . 2 SAYS COUPLE CAN'T GET PREGNANT . . . . . 3 WIFE/PARTNER STERILIZED . . . . . 4 UNDECIDED/DON'T KNOW 8	→ 514
508	CHECK 208: HAS FATHERED CHILDREN ☐ a) How long would you like to wait from now before the birth of another child? HAS NOT FATHERED CHILDREN ☐ b) How long would you like to wait from now before the birth of a child?	MONTHS . . . . . 1 ☐☐ YEARS . . . . . 2 ☐☐ SOON/NOW . . . . . 993 SAYS COUPLE CAN'T GET PREGNANT . . . . . 994 OTHER _____ 996 (SPECIFY) DON'T KNOW 998	→ 514
509	Are any of your (wives/partners) currently pregnant?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 512

SECTION 5. FERTILITY PREFERENCES

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
510	Now I have some questions about the future. After the (child/children) you and your (wives/partners) are expecting now, would you like to have another child, or would you prefer not to have any more children?	HAVE ANOTHER CHILD . . . . . 1 NO MORE . . . . . 2 UNDECIDED/DON'T KNOW 8	→ 514
511	After the birth of the child you are expecting now, how long would you like to wait before the birth of another child?	MONTHS . . . . . 1 ☐☐ YEARS . . . . . 2 ☐☐ SOON/NOW . . . . . 993 OTHER _____ 996 (SPECIFY) DON'T KNOW 998	→ 514
512	CHECK 208: HAS FATHERED CHILDREN ☐ → a) Now I have some questions about the future. Would you like to have another child, or would you prefer not to have any more children? HAS NOT FATHERED CHILDREN ☐ → b) Now I have some questions about the future. Would you like to have a child, or would you prefer not to have any children?	HAVE (A/ANOTHER) CHILD . . . . . 1 NO MORE/NONE . . . . . 2 SAYS COUPLE CAN'T GET PREGNANT . . . . . 3 (WIFE/WIVES/PARTNER(S)) STERILIZED . . . . . 4 UNDECIDED/DON'T KNOW 8	→ 514
513	CHECK 208: HAS FATHERED CHILDREN ☐ → a) How long would you like to wait from now before the birth of another child? HAS NOT FATHERED CHILDREN ☐ → b) How long would you like to wait from now before the birth of a child?	MONTHS . . . . . 1 ☐☐ YEARS . . . . . 2 ☐☐ SOON/NOW . . . . . 993 SAYS COUPLE CAN'T GET PREGNANT . . . . . 994 OTHER _____ 996 (SPECIFY) DON'T KNOW 998	
514	CHECK 203 AND 205: HAS LIVING CHILDREN ☐ → a) If you could go back to the time you did not have any children and could choose exactly the number of children to have in your whole life, how many would that be? NO LIVING CHILDREN ☐ → b) If you could choose exactly the number of children to have in your whole life, how many would that be? PROBE FOR A NUMERIC RESPONSE.	NONE . . . . . 00 → 601 NUMBER . . . . . ☐☐ OTHER _____ 96 → 601 (SPECIFY)	
515	How many of these children would you like to be boys, how many would you like to be girls and for how many would it not matter if it's a boy or a girl?	BOYS GIRLS EITHER NUMBER . . ☐☐ ☐☐ ☐☐ OTHER _____ 96 (SPECIFY)	

SECTION 6. EMPLOYMENT AND GENDER ROLES

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
601	Have you done any work in the last seven days?	YES . . . . . 1 NO 2	→ 604
602	Although you did not work in the last seven days, do you have any job or business from which you were absent for leave, illness, vacation, or any other such reason?	YES . . . . . 1 NO 2	→ 604
603	Have you done any work in the last 12 months?	YES . . . . . 1 NO 2	→ 607
604	What is your occupation? That is, what kind of work do you mainly do?	_____ _____ _____ ☐☐	
605	Do you usually work throughout the year, or do you work seasonally, or only once in a while?	THROUGHOUT THE YEAR . . . . . 1 SEASONALLY/PART OF THE YEAR . . . . . 2 ONCE IN A WHILE 3	
606	Are you paid in cash or kind for this work or are you not paid at all?	CASH ONLY . . . . . 1 CASH AND KIND . . . . . 2 IN KIND ONLY . . . . . 3 NOT PAID 4	
607	CHECK 401: CURRENTLY MARRIED OR LIVING WITH A PARTNER ☐ ↓ NOT CURRENTLY MARRIED AND NOT LIVING WITH A PARTNER ☐ →		612
608	CHECK 606: CODE '1' OR '2' CIRCLED ☐ ↓ OTHER ☐ →		610
609	Who usually decides how the money you earn will be used: you, your (wife/partner), or you and your (wife/partner) jointly?	RESPONDENT . . . . . 1 WIFE/PARTNER . . . . . 2 RESPONDENT AND WIFE/PARTNER JOINTLY . . 3 OTHER _____ 6 (SPECIFY)	
610	Who usually makes decisions about health care for yourself: you, your (wife/partner), you and your (wife/partner) jointly, or someone else?	RESPONDENT . . . . . 1 WIFE/PARTNER . . . . . 2 RESPONDENT AND WIFE/PARTNER JOINTLY . . 3 SOMEONE ELSE . . . . . 4 OTHER 6	
611	Who usually makes decisions about making major household purchases?	RESPONDENT . . . . . 1 WIFE/PARTNER . . . . . 2 RESPONDENT AND WIFE/PARTNER JOINTLY . . 3 SOMEONE ELSE . . . . . 4 OTHER 6	

SECTION 6. EMPLOYMENT AND GENDER ROLES

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
612	Do you own this or any other house either alone or jointly with someone else?	ALONE ONLY . . . . . 1 JOINTLY ONLY . . . . . 2 BOTH ALONE AND JOINTLY . . . . . 3 DOES NOT OWN 4	→ 615
613	Do you have a title deed for any house you own?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 615
614	Is your name on the title deed?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
615	Do you own any agricultural or non-agricultural land either alone or jointly with someone else?	ALONE ONLY . . . . . 1 JOINTLY ONLY . . . . . 2 BOTH ALONE AND JOINTLY . . . . . 3 DOES NOT OWN 4	→ 618
616	Do you have a title deed for any land you own?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 618
617	Is your name on the title deed?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
618	In your opinion, is a husband justified in hitting or beating his wife in the following situations: a) If she goes out without telling him? b) If she neglects the children? c) If she argues with him? d) If she refuses to have sex with him? e) If she burns the food?	YES NO DK a) GOES OUT . . . . . 1 2 8 b) NEGLECTS CHILDREN . . 1 2 8 c) ARGUES . . . . . 1 2 8 d) REFUSES SEX . . . . . 1 2 8 e) BURNS FOOD 1 2 8	

SECTION 7. HIV/AIDS

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
701	Now I would like to talk about something else. Have you ever heard of HIV or AIDS?	YES . . . . . 1 NO 2	→ 727
702	HIV is the virus that can lead to AIDS. Can people reduce their chance of getting HIV by having just one uninfected sex partner who has no other sex partners?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
703	Can people get HIV from mosquito bites?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
704	Can people reduce their chance of getting HIV by using a condom every time they have sex?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
705	Can people get HIV by sharing food with a person who has HIV?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
706	Can people get HIV because of witchcraft or other supernatural means?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
707	Is it possible for a healthy-looking person to have HIV?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
708	Can HIV be transmitted from a mother to her baby: a) During pregnancy? b) During delivery? c) By breastfeeding?	YES NO DK a) DURING PREGNANCY . . 1 2 8 b) DURING DELIVERY . . . . . 1 2 8 c) BREASTFEEDING 1 2 8	
709	CHECK 708: AT LEAST ONE 'YES' ☐ ↓ OTHER ☐ →		711
710	Are there any special drugs that a doctor or a nurse can give to a woman infected with HIV to reduce the risk of transmission to the baby?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
711	**CHECK FOR PRESENCE OF OTHERS. BEFORE CONTINUING, MAKE EVERY EFFORT TO ENSURE PRIVACY.**		
712	I don't want to know the results, but have you ever been tested for HIV?	YES . . . . . 1 NO 2	→ 716
713	How many months ago was your most recent HIV test?	MONTHS AGO . . . . . ☐☐ TWO OR MORE YEARS 95	

SECTION 7. HIV/AIDS

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
714	I don't want to know the results, but did you get the results of the test?	YES . . . . . 1 NO 2	
715	Where was the test done? PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE)	**PUBLIC SECTOR** GOVERNMENT HOSPITAL . . . . . 11 GOVERNMENT HEALTH CENTER . . . . . 12 STAND-ALONE HTC CENTER . . . . . 13 FAMILY PLANNING CLINIC . . . . . 14 MOBILE HTC SERVICES . . . . . 15 OTHER PUBLIC SECTOR _____ 16 (SPECIFY) **PRIVATE MEDICAL SECTOR** PRIVATE HOSPITAL/CLINIC/ PRIVATE DOCTOR . . . . . 21 STAND-ALONE HTC CENTER . . . . . 22 PHARMACY . . . . . 23 MOBILE HTC SERVICES . . . . . 24 OTHER PRIVATE MEDICAL SECTOR _____ 26 (SPECIFY) **OTHER SOURCE** HOME . . . . . 31 WORKPLACE . . . . . 32 CORRECTIONAL FACILITY . . . . . 33 OTHER _____ 96 (SPECIFY)	→ 718
716	Do you know of a place where people can go to get an HIV test?	YES . . . . . 1 NO 2	→ 718
717	Where is that? Any other place? PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE)	**PUBLIC SECTOR** GOVERNMENT HOSPITAL . . . . . A GOVERNMENT HEALTH CENTER . . . . . B STAND-ALONE HTC CENTER . . . . . C FAMILY PLANNING CLINIC . . . . . D MOBILE HTC SERVICES . . . . . E OTHER PUBLIC SECTOR _____ F (SPECIFY) **PRIVATE MEDICAL SECTOR** PRIVATE HOSPITAL/CLINIC/ PRIVATE DOCTOR . . . . . G STAND-ALONE HTC CENTER . . . . . H PHARMACY . . . . . I MOBILE HTC SERVICES . . . . . J OTHER PRIVATE MEDICAL SECTOR _____ K (SPECIFY) OTHER _____ X (SPECIFY)	
718	Have you heard of test kits people can use to test themselves for HIV?	YES . . . . . 1 NO 2	→ 720
719	Have you ever tested yourself for HIV using a self-test kit?	YES . . . . . 1 NO 2	

SECTION 7. HIV/AIDS

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
720	Would you buy fresh vegetables from a shopkeeper or vendor if you knew that this person had HIV?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW/NOT SURE/DEPENDS 8	
721	Do you think children living with HIV should be allowed to attend school with children who do not have HIV?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW/NOT SURE/DEPENDS 8	
722	Do you think people hesitate to take an HIV test because they are afraid of how other people will react if the test result is positive for HIV?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW/NOT SURE/DEPENDS 8	
723	Do people talk badly about people living with HIV, or who are thought to be living with HIV?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW/NOT SURE/DEPENDS 8	
724	Do people living with HIV, or thought to be living with HIV, lose the respect of other people?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW/NOT SURE/DEPENDS 8	
725	Do you agree or disagree with the following statement: I would be ashamed if someone in my family had HIV.	AGREE . . . . . 1 DISAGREE . . . . . 2 DON'T KNOW/NOT SURE/DEPENDS 8	
726	Do you fear that you could get HIV if you come into contact with the saliva of a person living with HIV?	YES . . . . . 1 NO . . . . . 2 SAYS HE HAS HIV . . . . . 3 DON'T KNOW/NOT SURE/DEPENDS 8	
727	CHECK 701: HEARD ABOUT HIV OR AIDS → a) Apart from HIV, have you heard about other infections that can be transmitted through sexual contact? NOT HEARD ABOUT HIV OR AIDS → b) Have you heard about infections that can be transmitted through sexual contact?	YES . . . . . 1 NO 2	
728	CHECK 414: HAS HAD SEXUAL INTERCOURSE NEVER HAD SEXUAL INTERCOURSE → 736		
729	CHECK 727: HEARD ABOUT OTHER SEXUALLY TRANSMITTED INFECTIONS? YES NO → 731		
730	Now I would like to ask you some questions about your health in the last 12 months. During the last 12 months, have you had a disease which you got through sexual contact?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
731	Sometimes men experience an abnormal discharge from their penis. During the last 12 months, have you had an abnormal discharge from your penis?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
732	Sometimes men have a sore or ulcer near their penis. During the last 12 months, have you had a sore or ulcer on or near your penis?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	

SECTION 7. HIV/AIDS

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
733	CHECK 730, 731 AND 732: HAS HAD AN INFECTION (ANY 'YES') ☐ ↓ HAS NOT HAD AN INFECTION OR DOES NOT KNOW ☐ → 736		
734	The last time you had (PROBLEM FROM 730/731/732), did you seek any kind of advice or treatment?	YES . . . . . 1 NO . . . . . 2 → 736	
735	Where did you go? Any other place? PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE)	**PUBLIC SECTOR** GOVERNMENT HOSPITAL . . . . . A GOVERNMENT HEALTH CENTER . . . . . B STAND-ALONE HTC CENTER . . . . . C FAMILY PLANNING CLINIC . . . . . D MOBILE HTC SERVICES . . . . . E OTHER PUBLIC SECTOR _____ F (SPECIFY) **PRIVATE MEDICAL SECTOR** PRIVATE HOSPITAL/CLINIC/ PRIVATE DOCTOR . . . . . G STAND-ALONE HTC CENTER . . . . . H PHARMACY . . . . . I MOBILE HTC SERVICES . . . . . J OTHER PRIVATE MEDICAL SECTOR _____ K (SPECIFY) **OTHER SOURCE** SHOP . . . . . L OTHER _____ X (SPECIFY)	
736	If a wife knows her husband has a disease that she can get during sexual intercourse, is she justified in asking that they use a condom when they have sex?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
737	Is a wife justified in refusing to have sex with her husband when she knows he has sex with other women?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	

SECTION 8. OTHER HEALTH ISSUES

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
801	Some men are circumcised, that is, the foreskin is completely removed from the penis. Are you circumcised?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 805
802	How old were you when you got circumcised?	AGE IN COMPLETED YEARS . . . . . [ ][ ] DURING CHILDHOOD (<5 YEARS) . . . . . 95 DON'T KNOW 98	
803	Who did the circumcision?	TRADITIONAL PRACTITIONER/FAMILY/FRIEND . . 1 HEALTH WORKER/PROFESSIONAL . . . . . 2 OTHER . . . . . 3 DON'T KNOW 8	
804	Where was it done?	HEALTH FACILITY . . . . . 1 HOME OF A HEALTH WORKER/PROFESSIONA . . 2 CIRCUMCISION DONE AT HOME . . . . . 3 RITUAL SITE . . . . . 4 OTHER HOME/PLACE . . . . . 5 DON'T KNOW 8	
805	Now I would like to ask you some other questions relating to health matters. Have you had an injection for any reason in the last 12 months? IF YES: How many injections have you had? IF NUMBER OF INJECTIONS IS 90 OR MORE, OR DAILY FOR 3 MONTHS OR MORE, RECORD '90'. IF NON-NUMERIC ANSWER, PROBE TO GET AN ESTIMATE.	NUMBER OF INJECTIONS . . . . . [ ][ ] NONE 00	→ 808
806	Among these injections, how many were administered by a doctor, a nurse, a pharmacist, a dentist, or any other health worker? IF NUMBER OF INJECTIONS IS 90 OR MORE, OR DAILY FOR 3 MONTHS OR MORE, RECORD '90'. IF NON-NUMERIC ANSWER, PROBE TO GET AN ESTIMATE.	NUMBER OF INJECTIONS . . . . . [ ][ ] NONE 00	→ 808
807	The last time you got an injection from a health worker, did he/she take the syringe and needle from a new, unopened package?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
808	Do you currently smoke tobacco every day, some days, or not at all?	EVERY DAY . . . . . 1 SOME DAYS . . . . . 2 NOT AT ALL 3	→ 811 → 810
809	In the past, have you smoked tobacco every day?	YES . . . . . 1 NO 2	→ 812
810	In the past, have you ever smoked tobacco every day, some days, or not at all?	EVERY DAY . . . . . 1 SOME DAYS . . . . . 2 NOT AT ALL 3	→ 813

SECTION 8. OTHER HEALTH ISSUES

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
811	On average, how many of the following products do you currently smoke each day? Also, let me know if you use the product, but not every day. IF RESPONDENT REPORTS USING THE PRODUCT BUT NOT EVERY DAY, RECORD '888'. IF THE PRODUCT IS NOT USED AT ALL, RECORD '000'. a) Manufactured cigarettes? b) Hand-rolled cigarettes? c) Kreteks? d) Pipes full of tobacco? e) Cigars, cheroots, or cigarillos? f) Number of water pipe sessions? g) Any others? _____ (SPECIFY)	NUMBER DAILY a) MANUFACTURED CIGARETTES . . . . . [ ][ ][ ] b) HAND-ROLLED CIGARETTES . . . . . [ ][ ][ ] c) KRETEKS . . . . . [ ][ ][ ] d) PIPES FULL OF TOBACCO . . . . . [ ][ ][ ] e) CIGARS, CHEROOTS, OR CIGARILLOS . . . . . [ ][ ][ ] f) NUMBER OF WATER PIPE SESSIONS . . . . . [ ][ ][ ] g) OTHERS . . . . . [ ][ ][ ]	→ 813
812	On average, how many of the following products do you currently smoke each week? Also, let me know if you use the product, but not every week. IF RESPONDENT REPORTS USING THE PRODUCT BUT NOT EVERY WEEK, RECORD '888'. IF THE PRODUCT IS NOT USED AT ALL, RECORD '000'. a) Manufactured cigarettes? b) Hand-rolled cigarettes? c) Kreteks? d) Pipes full of tobacco? e) Cigars, cheroots, or cigarillos? f) Number of water pipe sessions? g) Any others? _____ (SPECIFY)	NUMBER WEEKLY a) MANUFACTURED CIGARETTES . . . . . [ ][ ][ ] b) HAND-ROLLED CIGARETTES . . . . . [ ][ ][ ] c) KRETEKS . . . . . [ ][ ][ ] d) PIPES FULL OF TOBACCO . . . . . [ ][ ][ ] e) CIGARS, CHEROOTS, OR CIGARILLOS . . . . . [ ][ ][ ] f) NUMBER OF WATER PIPE SESSIONS . . . . . [ ][ ][ ] g) OTHERS . . . . . [ ][ ][ ]	
813	Do you currently use smokeless tobacco every day, some days, or not at all?	EVERY DAY . . . . . 1 SOME DAYS . . . . . 2 NOT AT ALL 3	→ 815 → 815F

SECTION 8. OTHER HEALTH ISSUES

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
814	On average, how many times a day do you use the following products? Also, let me know if you use the product, but not every day. IF RESPONDENT REPORTS USING THE PRODUCT BUT NOT EVERY DAY, RECORD '888'. IF THE PRODUCT IS NOT USED AT ALL, RECORD '000'. a) Snuff, by mouth? b) Snuff, by nose? c) Chewing tobacco? d) Betel quid with tobacco? e) Any others? _____ (SPECIFY)	TIMES DAILY a) SNUFF, BY MOUTH . . . . . [ ][ ][ ] b) SNUFF, BY NOSE . . . . . [ ][ ][ ] c) CHEWING TOBACCO . . . . . [ ][ ][ ] d) BETEL QUID WITH TOBACCO . . . . . [ ][ ][ ] e) ANY OTHERS . . . . . [ ][ ][ ]	→ 815F
815	On average, how many times a week do you use the following products? Also, let me know if you use the product, but not every week. IF RESPONDENT REPORTS USING THE PRODUCT BUT NOT EVERY WEEK, RECORD '888'. IF THE PRODUCT IS NOT USED AT ALL, RECORD '000'. a) Snuff, by mouth? b) Snuff, by nose? c) Chewing tobacco? d) Betel quid with tobacco? e) Any others? _____ (SPECIFY)	TIMES WEEKLY a) SNUFF, BY MOUTH . . . . . [ ][ ][ ] b) SNUFF, BY NOSE . . . . . [ ][ ][ ] c) CHEWING TOBACCO . . . . . [ ][ ][ ] d) BETEL QUID WITH TOBACCO . . . . . [ ][ ][ ] e) ANY OTHERS . . . . . [ ][ ][ ]	
815F	Have you ever heard of an illness called tuberculosis or TB?	YES . . . . . 1 NO 2	→ 816
815G	What are the common symptoms of TB ? RECORD ALL MENTIONED.	COUGH FOR MORE THAN 2 WEEKS . . . . . A FEVER IN THE EVENINGS . . . . . B CHEST PAIN . . . . . C LOSS OF WEIGH . . . . . D LOSS OF APPETITE . . . . . E HEMOPTYSIS . . . . . F OTHER _____ (SPECIFY) X DON'T KNOW . . . . . Z	
815H	How does tuberculosis spread from one person to another? RECORD ALL MENTIONED.	THROUGH THE AIR WHEN COUGHING OR SNEEZING . . . . . A THROUGH SHARING UTENSILS . . . . . B THROUGH TOUCHING A PERSON WITH TB . . . . . C THROUGH FOOI . . . . . D THROUGH SEXUAL CONTACT . . . . . E THROUGH MOSQUITO BITES . . . . . F THROUGH SPIT . . . . . G THROUGH GENES . . . . . H OTHER _____ (SPECIFY) X DON'T KNOW . . . . . Z	

SECTION 8. OTHER HEALTH ISSUES

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
815I	If you were sick with TB, where would you prefer to seek care? RECORD ALL MENTIONED.	**PUBLIC SECTOR** GOVERNMENT HOSPITAL/CLINIC . . . . . A PRIMARY HEALTH CARE CENTEI . . . . . B HEALTH POST/SUB- HEALTH POST . . . . . C PHC OUTREACH CLINI . . . . . D MOBILE CAMP . . . . . E FCHV . . . . . F OTHER _____ G (SPECIFY) **NON-GOVT. (NGO) SECTOR** FPAN . . . . . H MARIE STOPES . . . . . I OTHER NGO FACILITIES _____ J (SPECIFY) **PRIVATE MEDICAL SECTOR** PRIVATE HOSPITAL/ NURSING HOME . . . . . K PRIVATE CLINIC . . . . . L PHARMACY . . . . . M OTHER PRIVATE MEDICAL FACILITIES _____ N (SPECIFY) **OTHER SOURCE** SHOP . . . . . O FRIEND/RELATIVE . . . . . P TRADITIONAL HEALER . . . . . Q OTHER _____ X (SPECIFY) DON'T KNOW . . . . . Z	
815J	If a member of your family got tuberculosis, would you want it to remain a secret or not?	YES, REMAIN A SECRET . . . . . 1 NO . . . . . 2 DON'T KNOW/UNSURE 8	
816	Are you covered by any health insurance?	YES . . . . . 1 NO 2	→ 818
817	What type of health insurance are you covered by? RECORD ALL MENTIONED.	MUTUAL HEALTH ORGANIZATION/ COMMUNITY-BASED HEALTH INSURANCE . . . . . A HEALTH INSURANCE THROUGH EMPLOYER . . . . . B SOCIAL SECURITY . . . . . C OTHER PRIVATELY PURCHASED COMMERCIAL HEALTH INSURANCE . . . . . D OTHER _____ X (SPECIFY)	
818	RECORD THE TIME.	HOURS . . . . . ☐☐ MINUTES . . . . . ☐☐	

INTERVIEWER'S OBSERVATIONS

TO BE FILLED IN AFTER COMPLETING INTERVIEW

COMMENTS ABOUT INTERVIEW:

COMMENTS ON SPECIFIC QUESTIONS:

ANY OTHER COMMENTS:

SUPERVISOR'S OBSERVATIONS

EDITOR'S OBSERVATIONS

SIERRA LEONE DEMOGRAPHIC AND HEALTH SURVEY 2019
BIOMARKER QUESTIONNAIRE

SIERRA LEONE
STATISTICS SIERRA LEONE

IDENTIFICATION

LOCALITY NAME _____

LOCAL COUNCIL _____

NAME OF HOUSEHOLD HEAD _____

DISTRICT CODE . . . . . [ ][ ]

PROVINCE NAME AND CODE _____ [ ]

CHIEFDOM CODE . . . . . [ ][ ][ ]

SECTION CODE . . . . . [ ][ ]

CLUSTER NUMBER . . . . . [ ][ ][ ]

ENUMERATION AREA CODE . . . . . [ ][ ]

RURAL(1)/URBAN(2) . . . . . [ ]

HOUSEHOLD NUMBER . . . . . [ ][ ][ ]

HOUSEHOLD SELECTED FOR MAN'S SURVEY? (1=YES, 2=NO) . . . . . [ ]

FIELDWORKER VISITS

	1	2	3	FINAL VISIT
DATE	_____	_____	_____	DAY [ ][ ]
FIELDWORKER'S NAME	_____	_____	_____	MONTH [ ][ ]
				YEAR [ ][ ][ ][ ]
NEXT VISIT: DATE	_____	_____		TOTAL NUMBER OF VISITS [ ]
TIME	_____	_____		

NOTES:

_____

_____

_____

_____

_____

TOTAL ELIGIBLE WOMEN [ ][ ]

TOTAL ELIGIBLE MEN [ ][ ]

TOTAL ELIGIBLE CHILDREN [ ][ ]

LANGUAGE OF QUESTIONNAIRE** [0][1] LANGUAGE OF INTERVIEW** [ ][ ] NATIVE LANGUAGE OF RESPONDENT** [ ][ ] TRANSLATOR (YES = 1, NO = 2) [ ]

LANGUAGE OF QUESTIONNAIRE** **ENGLISH**

**LANGUAGE CODES:

01 ENGLISH	03 TEMNE	05 LANGUAGE 5
02 CREOLE	04 LANGUAGE 4	06 LANGUAGE 6

SUPERVISOR		FIELD EDITOR		OFFICE EDITOR	KEYED BY
NAME	NUMBER	NAME	NUMBER	NUMBER	NUMBER
_____	[ ][ ][ ][ ]	_____	[ ][ ][ ][ ]	[ ][ ]	[ ][ ]

WEIGHT, HEIGHT AND HEMOGLOBIN MEASUREMENT FOR CHILDREN AGE 0-5

101	CHECK COLUMN 11 IN HOUSEHOLD QUESTIONNAIRE. RECORD THE LINE NUMBER AND NAME FOR ALL ELIGIBLE CHILDREN 0-5 YEARS IN QUESTION 102; IF MORE THAN SIX CHILDREN, USE ADDITIONAL QUESTIONNAIRE(S).			
		CHILD 1	CHILD 2	CHILD 3
102	CHECK HOUSEHOLD QUESTIONNAIRE: LINE NUMBER FROM COLUMN 11.	LINE NUMBER . . . . . ☐☐ NAME _____	LINE NUMBER . . . . . ☐☐ NAME _____	LINE NUMBER . . . . . ☐☐ NAME _____
103	IF MOTHER INTERVIEWED: COPY CHILD'S DATE OF BIRTH (DAY, MONTH, AND YEAR) FROM BIRTH HISTORY. IF MOTHER NOT INTERVIEWED ASK: What is (NAME)'s date of birth?	DAY . . . . . ☐☐ MONTH . . . . . ☐☐ YEAR . . . ☐☐☐☐	DAY . . . . . ☐☐ MONTH . . . . . ☐☐ YEAR . . . ☐☐☐☐	DAY . . . . . ☐☐ MONTH . . . . . ☐☐ YEAR . . . ☐☐☐☐
104	CHECK 103: CHILD BORN IN 2014-2019?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 114)	YES . . . . . 1 NO . . . . . 2 (SKIP TO 114)	YES . . . . . 1 NO . . . . . 2 (SKIP TO 114)
105	WEIGHT IN KILOGRAMS.	KG. . . . ☐☐.☐☐ NOT PRESENT . . . . 9994 REFUSED . . . . . 9995 OTHER 9996	KG. . . . ☐☐.☐☐ NOT PRESENT . . . . 9994 REFUSED . . . . . 9995 OTHER 9996	KG. . . . ☐☐.☐☐ NOT PRESENT . . . . 9994 REFUSED . . . . . 9995 OTHER 9996
106	HEIGHT IN CENTIMETERS.	CM. . . . ☐☐☐.☐ NOT PRESENT . . . . 9994 REFUSED . . . . . 9995 OTHER . . . . . 9996 (SKIP TO 108)	CM. . . . ☐☐☐.☐ NOT PRESENT . . . . 9994 REFUSED . . . . . 9995 OTHER . . . . . 9996 (SKIP TO 108)	CM. . . . ☐☐☐.☐ NOT PRESENT . . . . 9994 REFUSED . . . . . 9995 OTHER . . . . . 9996 (SKIP TO 108)
107	MEASURED LYING DOWN OR STANDING UP?	LYING DOWN . . . . . 1 STANDING UP 2	LYING DOWN . . . . . 1 STANDING UP 2	LYING DOWN . . . . . 1 STANDING UP 2
108	MEASURER: ENTER YOUR FIELDWORKER NUMBER.	☐☐☐☐ FIELDWORKER NUMBER	☐☐☐☐ FIELDWORKER NUMBER	☐☐☐☐ FIELDWORKER NUMBER

WEIGHT, HEIGHT AND HEMOGLOBIN MEASUREMENT FOR CHILDREN AGE 0-5

101	CHECK COLUMN 11 IN HOUSEHOLD QUESTIONNAIRE. RECORD THE LINE NUMBER AND NAME FOR ALL ELIGIBLE CHILDREN 0-5 YEARS IN QUESTION 102; IF MORE THAN SIX CHILDREN, USE ADDITIONAL QUESTIONNAIRE(S).			
		CHILD 1	CHILD 2	CHILD 3
102	CHECK HOUSEHOLD QUESTIONNAIRE: LINE NUMBER FROM COLUMN 11.	LINE NUMBER . . . . . ☐☐ NAME _____	LINE NUMBER . . . . . ☐☐ NAME _____	LINE NUMBER . . . . . ☐☐ NAME _____
109	CHECK 103: CHILD AGE 0-5 MONTHS, I.E., WAS CHILD BORN IN MONTH OF INTERVIEW OR 5 PREVIOUS MONTHS?	0-5 MONTHS . . . . . 1 (SKIP TO 114) OLDER 2	0-5 MONTHS . . . . . 1 (SKIP TO 114) OLDER 2	0-5 MONTHS . . . . . 1 (SKIP TO 114) OLDER 2
110	LINE NUMBER OF PARENT/OTHER ADULT RESPONSIBLE FOR THE CHILD FROM COLUMN 1 OF HOUSEHOLD SCHEDULE.	LINE NUMBER . . . . . ☐☐ (RECORD '00' IF NOT LISTED)	LINE NUMBER . . . . . ☐☐ (RECORD '00' IF NOT LISTED)	LINE NUMBER . . . . . ☐☐ (RECORD '00' IF NOT LISTED)
111	ASK CONSENT FOR ANEMIA TEST FROM PARENT/OTHER ADULT.	As part of this survey, we are asking people all over the country to take an anemia test. Anemia is a serious health problem that usually results from poor nutrition, infection, or chronic disease. This survey will assist the government to develop programs to prevent and treat anemia. We ask that all children born in 2014 or later take part in anemia testing in this survey and give a few drops of blood from a finger or heel. The equipment used to take the blood is clean and completely safe. It has never been used before and will be thrown away after each test. The blood will be tested for anemia immediately, and the result will be told to you right away. The result will be kept strictly confidential and will not be shared with anyone other than members of our survey team. Do you have any questions? You can say yes or no. It is up to you to decide. Will you allow (NAME OF CHILD) to participate in the anemia test?		
112	CIRCLE THE CODE AND SIGN YOUR NAME.	GRANTED . . . . . 1 _____ (SIGN) REFUSED . . . . . 2 NOT PRESENT/OTHER . 3 (SKIP TO 114)	GRANTED . . . . . 1 _____ (SIGN) REFUSED . . . . . 2 NOT PRESENT/OTHER . 3 (SKIP TO 114)	GRANTED . . . . . 1 _____ (SIGN) REFUSED . . . . . 2 NOT PRESENT/OTHER . 3 (SKIP TO 114)
113	RECORD HEMOGLOBIN LEVEL HERE AND IN THE ANEMIA PAMPHLET.	G/DL . . . . ☐☐.☐ REFUSED . . . . . 995 OTHER 996	G/DL . . . . ☐☐.☐ REFUSED . . . . . 995 OTHER 996	G/DL . . . . ☐☐.☐ REFUSED . . . . . 995 OTHER 996
114	GO BACK TO 103 IN NEXT COLUMN OF THIS QUESTIONNAIRE OR IN THE FIRST COLUMN OF THE NEXT PAGE; IF NO MORE CHILDREN, GO TO 201.			

		CHILD 4	CHILD 5	CHILD 6
102	CHECK HOUSEHOLD QUESTIONNAIRE: LINE NUMBER FROM COLUMN 11.	LINE NUMBER . . . . . ☐☐ NAME _____	LINE NUMBER . . . . . ☐☐ NAME _____	LINE NUMBER . . . . . ☐☐ NAME _____
103	IF MOTHER INTERVIEWED: COPY CHILD'S DATE OF BIRTH (DAY, MONTH, AND YEAR) FROM BIRTH HISTORY. IF MOTHER NOT INTERVIEWED ASK: What is (NAME)'s date of birth?	DAY . . . . . ☐☐ MONTH . . . . . ☐☐ YEAR . . . ☐☐☐☐	DAY . . . . . ☐☐ MONTH . . . . . ☐☐ YEAR . . . ☐☐☐☐	DAY . . . . . ☐☐ MONTH . . . . . ☐☐ YEAR . . . ☐☐☐☐
104	CHECK 103: CHILD BORN IN 2014-2019?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 114)	YES . . . . . 1 NO . . . . . 2 (SKIP TO 114)	YES . . . . . 1 NO . . . . . 2 (SKIP TO 114)
105	WEIGHT IN KILOGRAMS.	KG. . . . ☐☐.☐☐ NOT PRESENT . . . . 9994 REFUSED . . . . . 9995 OTHER 9996	KG. . . . ☐☐.☐☐ NOT PRESENT . . . . 9994 REFUSED . . . . . 9995 OTHER 9996	KG. . . . ☐☐.☐☐ NOT PRESENT . . . . 9994 REFUSED . . . . . 9995 OTHER 9996
106	HEIGHT IN CENTIMETERS.	CM. . . . ☐☐☐.☐ NOT PRESENT . . . . 9994 REFUSED . . . . . 9995 OTHER . . . . . 9996 (SKIP TO 108)	CM. . . . ☐☐☐.☐ NOT PRESENT . . . . 9994 REFUSED . . . . . 9995 OTHER . . . . . 9996 (SKIP TO 108)	CM. . . . ☐☐☐.☐ NOT PRESENT . . . . 9994 REFUSED . . . . . 9995 OTHER . . . . . 9996 (SKIP TO 108)
107	MEASURED LYING DOWN OR STANDING UP?	LYING DOWN . . . . . 1 STANDING UP 2	LYING DOWN . . . . . 1 STANDING UP 2	LYING DOWN . . . . . 1 STANDING UP 2
108	MEASURER: ENTER YOUR FIELDWORKER NUMBER.	☐☐☐☐ FIELDWORKER NUMBER	☐☐☐☐ FIELDWORKER NUMBER	☐☐☐☐ FIELDWORKER NUMBER

		CHILD 4	CHILD 5	CHILD 6
102	CHECK HOUSEHOLD QUESTIONNAIRE: LINE NUMBER FROM COLUMN 11.	LINE NUMBER . . . . . ☐☐ NAME _____	LINE NUMBER . . . . . ☐☐ NAME _____	LINE NUMBER . . . . . ☐☐ NAME _____
109	CHECK 103: CHILD AGE 0-5 MONTHS, I.E., WAS CHILD BORN IN MONTH OF INTERVIEW OR 5 PREVIOUS MONTHS?	0-5 MONTHS . . . . . 1 (SKIP TO 114) OLDER 2	0-5 MONTHS . . . . . 1 (SKIP TO 114) OLDER 2	0-5 MONTHS . . . . . 1 (SKIP TO 114) OLDER 2
110	LINE NUMBER OF PARENT/OTHER ADULT RESPONSIBLE FOR THE CHILD FROM COLUMN 1 OF HOUSEHOLD SCHEDULE.	LINE NUMBER . . . . . ☐☐ (RECORD '00' IF NOT LISTED)	LINE NUMBER . . . . . ☐☐ (RECORD '00' IF NOT LISTED)	LINE NUMBER . . . . . ☐☐ (RECORD '00' IF NOT LISTED)
111	ASK CONSENT FOR ANEMIA TEST FROM PARENT/OTHER ADULT.	As part of this survey, we are asking people all over the country to take an anemia test. Anemia is a serious health problem that usually results from poor nutrition, infection, or chronic disease. This survey will assist the government to develop programs to prevent and treat anemia. We ask that all children born in 2014 or later take part in anemia testing in this survey and give a few drops of blood from a finger or heel. The equipment used to take the blood is clean and completely safe. It has never been used before and will be thrown away after each test. The blood will be tested for anemia immediately, and the result will be told to you right away. The result will be kept strictly confidential and will not be shared with anyone other than members of our survey team. Do you have any questions? You can say yes or no. It is up to you to decide. Will you allow (NAME OF CHILD) to participate in the anemia test?		
112	CIRCLE THE CODE AND SIGN YOUR NAME.	GRANTED . . . . . 1 _____ (SIGN) REFUSED . . . . . 2 NOT PRESENT/OTHER . 3 (SKIP TO 114)	GRANTED . . . . . 1 _____ (SIGN) REFUSED . . . . . 2 NOT PRESENT/OTHER . 3 (SKIP TO 114)	GRANTED . . . . . 1 _____ (SIGN) REFUSED . . . . . 2 NOT PRESENT/OTHER . 3 (SKIP TO 114)
113	RECORD HEMOGLOBIN LEVEL HERE AND IN THE ANEMIA PAMPHLET.	G/DL . . . . ☐☐.☐ REFUSED . . . . . 995 OTHER 996	G/DL . . . . ☐☐.☐ REFUSED . . . . . 995 OTHER 996	G/DL . . . . ☐☐.☐ REFUSED . . . . . 995 OTHER 996
114	GO BACK TO 103 IN NEXT COLUMN OF THIS QUESTIONNAIRE OR IN THE FIRST COLUMN OF AN ADDITIONAL QUESTIONNAIRE; IF NO MORE CHILDREN, GO TO 201.			

201	CHECK COLUMN 9 IN HOUSEHOLD QUESTIONNAIRE. RECORD THE LINE NUMBER, NAME, AGE, AND MARITAL STATUS FOR ALL ELIGIBLE WOMEN IN 202, 203, AND 204. IF THERE ARE MORE THAN THREE WOMEN, USE ADDITIONAL QUESTIONNAIRE(S).			
		WOMAN 1	WOMAN 2	WOMAN 3
202	CHECK HOUSEHOLD QUESTIONNAIRE: LINE NUMBER FROM COLUMN 9. NAME FROM COLUMN 2.	LINE NUMBER . . . . . ☐☐ NAME _____	LINE NUMBER . . . . . ☐☐ NAME _____	LINE NUMBER . . . . . ☐☐ NAME _____
203	CHECK HOUSEHOLD QUESTIONNAIRE COLUMN 7 (AGE):	15-17 YEARS . . . . . 1 18-49 YEARS 2	15-17 YEARS . . . . . 1 18-49 YEARS 2	15-17 YEARS . . . . . 1 18-49 YEARS 2
204	CHECK HOUSEHOLD QUESTIONNAIRE COLUMN 8 (MARITAL STATUS):	CODE 4 (NEVER IN UNION) . 1 OTHER 2	CODE 4 (NEVER IN UNION) . 1 OTHER 2	CODE 4 (NEVER IN UNION) . 1 OTHER 2

205	WEIGHT IN KILOGRAMS.	KG. . . . ☐☐☐.☐☐ NOT PRESENT . . . . . 99994 REFUSED . . . . . 99995 OTHER 99996	KG. . . . ☐☐☐.☐☐ NOT PRESENT . . . . . 99994 REFUSED . . . . . 99995 OTHER 99996	KG. . . . ☐☐☐.☐☐ NOT PRESENT . . . . . 99994 REFUSED . . . . . 99995 OTHER 99996
206	HEIGHT IN CENTIMETERS.	CM. . . . . ☐☐☐.☐ NOT PRESENT . . . . . 9994 REFUSED . . . . . 9995 OTHER 9996	CM. . . . . ☐☐☐.☐ NOT PRESENT . . . . . 9994 REFUSED . . . . . 9995 OTHER 9996	CM. . . . . ☐☐☐.☐ NOT PRESENT . . . . . 9994 REFUSED . . . . . 9995 OTHER 9996
207	MEASURER: ENTER YOUR FIELDWORKER NUMBER.	☐☐☐☐ FIELDWORKER NUMBER	☐☐☐☐ FIELDWORKER NUMBER	☐☐☐☐ FIELDWORKER NUMBER
208	CHECK 203: AGE	15-17 YEARS . . . . . 1 18-49 YEARS . . . . . 2 (SKIP TO 210) ←	15-17 YEARS . . . . . 1 18-49 YEARS . . . . . 2 (SKIP TO 210) ←	15-17 YEARS . . . . . 1 18-49 YEARS . . . . . 2 (SKIP TO 210) ←
209	CHECK 204: MARITAL STATUS	CODE 4 (NEVER IN UNION) . 1 (SKIP TO 216) ← OTHER 2	CODE 4 (NEVER IN UNION) . 1 (SKIP TO 216) ← OTHER 2	CODE 4 (NEVER IN UNION) . 1 (SKIP TO 216) ← OTHER 2

		WOMAN 1	WOMAN 2	WOMAN 3
	NAME FROM COLUMN 2.	NAME ____________	NAME ____________	NAME ____________

ADULT RESPONDENT CONSENT FOR ANEMIA TEST

210	ASK CONSENT FOR ANEMIA TEST.	As part of this survey, we are asking people all over the country to take an anemia test. Anemia is a serious health problem that usually results from poor nutrition, infection, or chronic disease. This survey will assist the government to develop programs to prevent and treat anemia. For the anemia testing, we will need a few drops of blood from a finger. The equipment used to take the blood is clean and completely safe. It has never been used before and will be thrown away after we take your blood. The blood will be tested for anemia immediately, and the result will be told to you right away. The result will be kept strictly confidential and will not be shared with anyone other than members of our survey team. Do you have any questions? You can say yes or no. It is up to you to decide. Will you take the anemia test?		
211	CIRCLE THE CODE AND SIGN YOUR NAME.	GRANTED . . . . 1 RESPONDENT REFUSED . . . 2 ____________ (SIGN) (IF REFUSED, SKIP TO 212) NOT PRESENT/OTHER . . . . 3 (SKIP TO 212)	GRANTED . . . . 1 RESPONDENT REFUSED . . . 2 ____________ (SIGN) (IF REFUSED, SKIP TO 212) NOT PRESENT/OTHER . . . . 3 (SKIP TO 212)	GRANTED . . . . 1 RESPONDENT REFUSED . . . 2 ____________ (SIGN) (IF REFUSED, SKIP TO 212) NOT PRESENT/OTHER . . . . 3 (SKIP TO 212)
211A	CHECK 226 IN WOMAN'S QUESTIONNAIRE OR ASK: Are you pregnant?	YES . . . . 1 NO . . . . 2 DON'T KNOW 8	YES . . . . 1 NO . . . . 2 DON'T KNOW 8	YES . . . . 1 NO . . . . 2 DON'T KNOW 8

ADULT RESPONDENT CONSENT

ADULT RESPONDENT CONSENT FOR DBS COLLECTION

212	ASK CONSENT FOR DBS COLLECTION.	As part of the survey we also are asking people all over the country to give blood for HIV testing to be done in a laboratory. HIV is the virus that can lead to AIDS. The HIV testing is being done to see how many people have HIV. For the HIV testing, we need a few (more) drops of blood from a finger. The blood will be collected on a paper card. The equipment used to take the blood is clean and completely safe. It has never been used before and will be thrown away after we take your blood. No names will be written on the card so we will not be able to tell you the test results. No one else will be able to know your test results either. Do you have any questions? You can say yes or no. It is up to you to decide. Will you give blood on a paper card for HIV testing in a laboratory?		
213	CIRCLE THE CODE, SIGN YOUR NAME, AND ENTER YOUR FIELDWORKER NUMBER.	GRANTED . . . . 1 RESPONDENT REFUSED . . . 2 ____________ (SIGN AND ENTER YOUR FIELDWORKER NUMBER) [ ][ ][ ][ ] (IF REFUSED, SKIP TO 215A) NOT PRESENT/OTHER . . . . 3 (SKIP TO 215A)	GRANTED . . . . 1 RESPONDENT REFUSED . . . 2 ____________ (SIGN AND ENTER YOUR FIELDWORKER ID NUMBER) [ ][ ][ ][ ] (IF REFUSED, SKIP TO 215A) NOT PRESENT/OTHER . . . . 3 (SKIP TO 215A)	GRANTED . . . . 1 RESPONDENT REFUSED . . . 2 ____________ (SIGN AND ENTER YOUR FIELDWORKER ID NUMBER) [ ][ ][ ][ ] (IF REFUSED, SKIP TO 215A) NOT PRESENT/OTHER . . . . 3 (SKIP TO 215A)

ADULT RESPONDENT CONSENT

		WOMAN 1	WOMAN 2	WOMAN 3
	NAME FROM COLUMN 2.	NAME _____	NAME _____	NAME _____

ADULT RESPONDENT CONSENT

ADULT RESPONDENT CONSENT FOR ADDITIONAL TESTING

214	ASK CONSENT FOR ADDITIONAL TESTING.	We ask you to allow Statistics Sierra Leone to store part of the blood sample at the laboratory for additional tests or research. We are not certain about what additional tests might be done. The blood sample will not have any name or other data attached that could identify you. You do not have to agree. If you do not want the blood sample stored for additional testing, you can still participate in the HIV testing in this survey. Will you allow us to keep the blood sample stored for additional testing?

		WOMAN 1	WOMAN 2	WOMAN 3
215	CIRCLE THE CODE AND SIGN YOUR NAME.	GRANTED . . . . . 1 RESPONDENT REFUSED . . . 2 _____ (SIGN)	GRANTED . . . . . 1 RESPONDENT REFUSED . . . 2 _____ (SIGN)	GRANTED . . . . . 1 RESPONDENT REFUSED . . . 2 _____ (SIGN)

ADULT RESPONDENT CONSENT FOR RDT TESTING

215A	ASK CONSENT FOR RDT TESTING	If you want to know your HIV status right now, we can do a rapid test and tell you the result. The testing is free and we will offer counselling before and after the test. For the rapid HIV test, we need a few (more) drops of blood from a finger. The equipment used to take the blood is clean and completely safe. It has never been used before and will be thrown away after each test. The result of the test will be available in 20-30 minutes. If the test is positive, I will give you a referral form to go to the nearest health facility for follow up with medical personnel, as is recommended by the Ministry of Health. Do you have any questions? You can say yes or no. It is up to you to decide. Will you give blood for the rapid HIV testing?

		WOMAN 1	WOMAN 2	WOMAN 3
215B	CIRCLE THE CODE AND SIGN YOUR NAME.	GRANTED . . . . . 1 RESPONDENT REFUSED . . . 2 _____ (SIGN AND SKIP TO 229)	GRANTED . . . . . 1 RESPONDENT REFUSED . . . 2 _____ (SIGN AND SKIP TO 229)	GRANTED . . . . . 1 RESPONDENT REFUSED . . . 2 _____ (SIGN AND SKIP TO 229)

WEIGHT, HEIGHT, HEMOGLOBIN MEASUREMENT AND HIV TESTING FOR WOMEN AGE 15-49

		WOMAN 1	WOMAN 2	WOMAN 3
	NAME FROM COLUMN 2.	NAME ____________	NAME ____________	NAME ____________
216	RECORD LINE NUMBER OF PARENT/OTHER ADULT RESPONSIBLE FOR ADOLESCENT.	LINE NUMBER OF PARENT OR OTHER RESPONSIBLE ADULT [ ][ ] (RECORD '00' IF NOT LISTED)	LINE NUMBER OF PARENT OR OTHER RESPONSIBLE ADULT [ ][ ] (RECORD '00' IF NOT LISTED)	LINE NUMBER OF PARENT OR OTHER RESPONSIBLE ADULT [ ][ ] (RECORD '00' IF NOT LISTED)

PARENT — RESP ADULT CONSENT

PARENTAL/RESPONSIBLE ADULT CONSENT FOR ANEMIA TEST

217	ASK CONSENT FOR ANEMIA TEST FROM PARENT/ADULT.	As part of this survey, we are asking people all over the country to take an anemia test. Anemia is a serious health problem that usually results from poor nutrition, infection, or chronic disease. This survey will assist the government to develop programs to prevent and treat anemia. For the anemia testing, we will need a few drops of blood from a finger. The equipment used to take the blood is clean and completely safe. It has never been used before and will be thrown away after each test. The blood will be tested for anemia immediately, and the result will be told to you and (NAME OF MINOR) right away. The result will be kept strictly confidential and will not be shared with anyone other than members of our survey team. Do you have any questions? You can say yes or no. It is up to you to decide. Will you allow (NAME OF MINOR) to take the anemia test?		
218	CIRCLE THE CODE AND SIGN YOUR NAME.	GRANTED . . . . 1 PARENT/OTHER RESPONSIBLE ADULT REFUSED . . . . . . 2 ____________ (SIGN) (IF REFUSED, SKIP TO 221) NOT PRESENT/OTHER . . . . 3 (SKIP TO 221)	GRANTED . . . . 1 PARENT/OTHER RESPONSIBLE ADULT REFUSED . . . . . . 2 ____________ (SIGN) (IF REFUSED, SKIP TO 221) NOT PRESENT/OTHER . . . . 3 (SKIP TO 221)	GRANTED . . . . 1 PARENT/OTHER RESPONSIBLE ADULT REFUSED . . . . . . 2 ____________ (SIGN) (IF REFUSED, SKIP TO 221) NOT PRESENT/OTHER . . . . 3 (SKIP TO 221)

MINOR RESPONDENT CONSENT

MINOR RESPONDENT CONSENT FOR ANEMIA TEST

219	ASK CONSENT FOR ANEMIA TEST FROM RESPONDENT.	As part of this survey, we are asking people all over the country to take an anemia test. Anemia is a serious health problem that usually results from poor nutrition, infection, or chronic disease. This survey will assist the government to develop programs to prevent and treat anemia. For the anemia testing, we will need a few drops of blood from a finger. The equipment used to take the blood is clean and completely safe. It has never been used before and will be thrown away after we take your blood. The blood will be tested for anemia immediately, and the result will be told to you and (NAME OF PARENT/RESPONSIBLE ADULT) right away. The result will be kept strictly confidential and will not be shared with anyone other than members of our survey team. Do you have any questions? You can say yes or no. It is up to you to decide. Will you take the anemia test?		
220	CIRCLE THE CODE AND SIGN YOUR NAME.	GRANTED . . . . 1 MINOR RESPONDENT REFUSED . . . . 2 ____________ (SIGN) (IF REFUSED, SKIP TO 221) NOT PRESENT/OTHER . . . . 3 (SKIP TO 221)	GRANTED . . . . 1 MINOR RESPONDENT REFUSED . . . . 2 ____________ (SIGN) (IF REFUSED, SKIP TO 221) NOT PRESENT/OTHER . . . . 3 (SKIP TO 221)	GRANTED . . . . 1 MINOR RESPONDENT REFUSED . . . . 2 ____________ (SIGN) (IF REFUSED, SKIP TO 221) NOT PRESENT/OTHER . . . . 3 (SKIP TO 221)
220A	CHECK 226 IN WOMAN'S QUESTIONNAIRE OR ASK: Are you pregnant?	YES . . . . 1 NO . . . . 2 DON'T KNOW 8	YES . . . . 1 NO . . . . 2 DON'T KNOW 8	YES . . . . 1 NO . . . . 2 DON'T KNOW 8

		WOMAN 1	WOMAN 2	WOMAN 3
	NAME FROM COLUMN 2.	NAME ______	NAME ______	NAME ______

PARENTAL/RESPONSIBLE ADULT CONSENT FOR DBS COLLECTION

(PARENT — RESP ADULT CONSENT)

221	ASK CONSENT FOR DBS COLLECTION FROM PARENT/ADULT.	As part of the survey we also are asking people all over the country to give blood for HIV testing to be done in a laboratory. HIV is the virus that can lead to AIDS. The HIV test is being done to see how many people have HIV. For the HIV test, we need a few (more) drops of blood from a finger. The blood will be collected on a paper card. The equipment used to take the blood is clean and completely safe. It has never been used before and will be thrown away after each test. No names will be written on the card so we will not be able to provide the results of (NAME OF MINOR)'s test. No one else will be able to know (NAME OF MINOR)'s test results either. Do you have any questions? You can say yes or no. It is up to you to decide. Will you allow (NAME OF MINOR) to give blood on a paper card for the HIV testing in a laboratory?		
222	CIRCLE THE CODE, SIGN YOUR NAME, AND ENTER YOUR FIELDWORKER NUMBER.	GRANTED . . . . 1 PARENT/OTHER RESPONSIBLE ADULT REFUSED . . . . . . 2 ______ (SIGN AND ENTER YOUR FIELDWORKER NUMBER) [ ][ ][ ][ ] (IF REFUSED, SKIP TO 228B) NOT PRESENT/OTHER . . . . 3 (SKIP TO 228B)	GRANTED . . . . 1 PARENT/OTHER RESPONSIBLE ADULT REFUSED . . . . . . 2 ______ (SIGN AND ENTER YOUR FIELDWORKER NUMBER) [ ][ ][ ][ ] (IF REFUSED, SKIP TO 228B) NOT PRESENT/OTHER . . . . 3 (SKIP TO 228B)	GRANTED . . . . 1 PARENT/OTHER RESPONSIBLE ADULT REFUSED . . . . . . 2 ______ (SIGN AND ENTER YOUR FIELDWORKER NUMBER) [ ][ ][ ][ ] (IF REFUSED, SKIP TO 228B) NOT PRESENT/OTHER . . . . 3 (SKIP TO 228B)

MINOR RESPONDENT CONSENT FOR DBS COLLECTION

(MINOR RESPONDENT CONSENT)

223	ASK CONSENT FOR DBS COLLECTION FROM MINOR RESPONDENT.	As part of the survey we also are asking people all over the country to give blood for HIV testing to be done in a laboratory. HIV is the virus that can lead to AIDS. The HIV testing is being done to see how many people have HIV. For the HIV testing, we need a few (more) drops of blood from a finger. The blood will be collected on a paper card. The equipment used to take the blood is clean and completely safe. It has never been used before and will be thrown away after we take your blood. No names will be written on the card so we will not be able to tell you the test results. No one else will be able to know your test results either. Do you have any questions? You can say yes or no. It is up to you to decide. Will you give blood on a paper card for the HIV testing in a laboratory?		
224	CIRCLE THE CODE AND SIGN YOUR NAME.	GRANTED . . . . 1 MINOR RESPONDENT REFUSED . . . . 2 ______ (SIGN) (IF REFUSED, SKIP TO 228B) NOT PRESENT/OTHER . . . . 3 (SKIP TO 228B)	GRANTED . . . . 1 MINOR RESPONDENT REFUSED . . . . 2 ______ (SIGN) (IF REFUSED, SKIP TO 228B) NOT PRESENT/OTHER . . . . 3 (SKIP TO 228B)	GRANTED . . . . 1 MINOR RESPONDENT REFUSED . . . . 2 ______ (SIGN) (IF REFUSED, SKIP TO 228B) NOT PRESENT/OTHER . . . . 3 (SKIP TO 228B)

		WOMAN 1	WOMAN 2	WOMAN 3
	NAME FROM COLUMN 2.	NAME _____	NAME _____	NAME _____

RESP ADULT CONSENT

PARENTAL/RESPONSIBLE ADULT CONSENT FOR ADDITIONAL TESTING

225	ASK CONSENT FOR ADDITIONAL TESTING FROM PARENT/ADULT.	We ask you to allow Statistics Sierra Leone to store part of the blood sample at the laboratory for additional tests or research. We are not certain about what additional tests might be done. The blood sample will not have any name or other data attached that could identify (NAME OF MINOR). You do not have to agree. If you do not want the blood sample stored for additional testing, (NAME OF MINOR) can still participate in the HIV testing in this survey. Will you allow us to keep the blood sample stored for additional testing?		
226	CIRCLE THE CODE AND SIGN YOUR NAME.	GRANTED . . . . . 1 PARENT/OTHER RESPONSIBLE ADULT REFUSED . . . . . 2 _____ (SIGN) (IF REFUSED, SKIP TO 228B)	GRANTED . . . . . 1 PARENT/OTHER RESPONSIBLE ADULT REFUSED . . . . . 2 _____ (SIGN) (IF REFUSED, SKIP TO 228B)	GRANTED . . . . . 1 PARENT/OTHER RESPONSIBLE ADULT REFUSED . . . . . 2 _____ (SIGN) (IF REFUSED, SKIP TO 228B)

MINOR RESPONDENT CONSENT

MINOR RESPONDENT CONSENT FOR ADDITIONAL TESTING

227	ASK CONSENT FOR ADDITIONAL TESTING FROM MINOR RESPONDENT.	We ask you to allow Statistics Sierra Leone to store part of the blood sample at the laboratory for additional tests or research. We are not certain about what additional tests might be done. The blood sample will not have any name or other data attached that could identify you. You do not have to agree. If you do not want the blood sample stored for additional testing, you can still participate in the HIV testing in this survey. Will you allow us to keep the blood sample stored for additional testing?		
228A	CIRCLE THE CODE AND SIGN YOUR NAME.	GRANTED . . . . . 1 MINOR RESPONDENT REFUSED . . . . . 2 _____ (SIGN)	GRANTED . . . . . 1 MINOR RESPONDENT REFUSED . . . . . 2 _____ (SIGN)	GRANTED . . . . . 1 MINOR RESPONDENT REFUSED . . . . . 2 _____ (SIGN)

		WOMAN 1	WOMAN 2	WOMAN 3
	NAME FROM COLUMN 2.	NAME _____	NAME _____	NAME _____

PARENT/RESP ADULT CONSENT

PARENTAL/RESPONSIBLE ADULT CONSENT FOR RDT TESTING

228B	ASK CONSENT FOR RDT FROM PARENT/ RESPONSIBLE ADULT	If you want (NAME OF MINOR) to know her HIV status right now, we can do a rapid test and tell her the result. The testing is free and we will offer counselling before and after the test. For the rapid HIV test, we need a few (more) drops of blood from a finger. The equipment used to take the blood is clean and completely safe. It has never been used before and will be thrown away after each test. The result of the test will be available in 20-30 minutes. If the test is positive, I will give (NAME OF MINOR) a referral form to go to the nearest health facility for follow up with medical personnel, as is recommended by the Ministry of Health. Do you have any questions? You can say yes to the test, or you can say no. It is up to you to decide. Will you allow (NAME OF MINOR) to give blood for the rapid HIV test?		
228C	CIRCLE THE CODE AND SIGN YOUR NAME.	GRANTED . . . . . 1 PARENT/OTHER RESPONSIBLE ADULT REFUSED . . . . . 2 _____ (SIGN) (IF REFUSED, SKIP TO 229)	GRANTED . . . . . 1 PARENT/OTHER RESPONSIBLE ADULT REFUSED . . . . . 2 _____ (SIGN) (IF REFUSED, SKIP TO 229)	GRANTED . . . . . 1 PARENT/OTHER RESPONSIBLE ADULT REFUSED . . . . . 2 _____ (SIGN) (IF REFUSED, SKIP TO 229)

MINOR RESPONDENT CONSENT

MINOR RESPONDENT CONSENT FOR RDT TESTING

228D	ASK CONSENT FOR RDT TESTING FROM MINOR RESPONDENT.	If you want to know your HIV status right now, we can do a rapid test and tell you the result. The testing is free and we will offer counselling before and after the test. For the rapid HIV test, we need a few (more) drops of blood from a finger. The equipment used to take the blood is clean and completely safe. It has never been used before and will be thrown away after each test. The result of the test will be available in 20-30 minutes. If the test is positive, I will give you a referral form to go to the nearest health facility for follow up with medical personnal, as is recommended by the Ministry of Health. Do you have any questions? You can say yes or no. It is up to you to decide. Will you give blood for the rapid HIV testing?		
228E	CIRCLE THE CODE AND SIGN YOUR NAME.	GRANTED . . . . . 1 MINOR RESPONDENT REFUSED . . . . . 2 _____ (SIGN)	GRANTED . . . . . 1 MINOR RESPONDENT REFUSED . . . . . 2 _____ (SIGN)	GRANTED . . . . . 1 MINOR RESPONDENT REFUSED . . . . . 2 _____ (SIGN)

WEIGHT, HEIGHT, HEMOGLOBIN MEASUREMENT AND HIV TESTING FOR WOMEN AGE 15-49

		WOMAN 1	WOMAN 2	WOMAN 3
	NAME FROM COLUMN 2.	NAME ________	NAME ________	NAME ________
229	PREPARE EQUIPMENT AND SUPPLIES ONLY FOR THE TEST(S) FOR WHICH CONSENT HAS BEEN OBTAINED AND PROCEED WITH THE TEST(S).			
230	ADDITIONAL TESTS.	IF ADULT RESPONDENT, CHECK 215; IF MINOR RESPONDENT, CHECK 226 AND 228A. IF CONSENT HAS NOT BEEN GRANTED, WRITE "NO ADDITIONAL TESTS" ON THE FILTER PAPER.	IF ADULT RESPONDENT, CHECK 215; IF MINOR RESPONDENT, CHECK 226 AND 228A. IF CONSENT HAS NOT BEEN GRANTED, WRITE "NO ADDITIONAL TESTS" ON THE FILTER PAPER.	IF ADULT RESPONDENT, CHECK 215; IF MINOR RESPONDENT, CHECK 226 AND 228A. IF CONSENT HAS NOT BEEN GRANTED, WRITE "NO ADDITIONAL TESTS" ON THE FILTER PAPER.
231	RECORD HEMOGLOBIN LEVEL HERE AND IN ANEMIA PAMPHLET.	G/DL . . . . [ ][ ].[ ] NOT PRESENT . . . . 994 REFUSED . . . . 995 OTHER 996	G/DL . . . . [ ][ ].[ ] NOT PRESENT . . . . 994 REFUSED . . . . 995 OTHER 996	G/DL . . . . [ ][ ].[ ] NOT PRESENT . . . . 994 REFUSED . . . . 995 OTHER 996
232	PLACE BAR CODE LABEL.	PUT THE 1ST BAR CODE LABEL HERE. NOT PRESENT . . . . . . 99994 REFUSED . . . . 99995 OTHER . . . . 99996 PUT THE 2ND BAR CODE LABEL ON THE RESPONDENT'S FILTER PAPER AND THE 3RD ON THE TRANSMITTAL FORM.	PUT THE 1ST BAR CODE LABEL HERE. NOT PRESENT . . . . . . 99994 REFUSED . . . . 99995 OTHER . . . . 99996 PUT THE 2ND BAR CODE LABEL ON THE RESPONDENT'S FILTER PAPER AND THE 3RD ON THE TRANSMITTAL FORM.	PUT THE 1ST BAR CODE LABEL HERE. NOT PRESENT . . . . . . 99994 REFUSED . . . . 99995 OTHER . . . . 99996 PUT THE 2ND BAR CODE LABEL ON THE RESPONDENT'S FILTER PAPER AND THE 3RD ON THE TRANSMITTAL FORM.
233	RECORD THE RESULT OF THE "DETERMINE HIV RDT" HERE.	POSITIVE . . . . 1 NEGATIVE . . . . 2 (SKIP TO 236) NOT PRESENT . . . . 3 REFUSED . . . 4 OTHER . . . . 5 (SKIP TO 238)	POSITIVE . . . . 1 NEGATIVE . . . . 2 (SKIP TO 236) NOT PRESENT . . . . 3 REFUSED . . . . 4 OTHER . . . . 5 (SKIP TO 238)	POSITIVE . . . . 1 NEGATIVE . . . . 2 (SKIP TO 236) NOT PRESENT . . . . 3 REFUSED . . . . 4 OTHER . . . . 5 (SKIP TO 238)
234	RECORD THE RESULT OF THE "STATPAK HIV RDT" HERE	POSITIVE . . . . 1 NEGATIVE . . . . 2 (SKIP TO 237) NOT PRESENT . . . . 3 REFUSED . . . . 4 OTHER . . . . 5 (SKIP TO 238)	POSITIVE . . . . 1 NEGATIVE . . . . 2 (SKIP TO 237) NOT PRESENT . . . . 3 REFUSED . . . . 4 OTHER . . . . 5 (SKIP TO 238)	POSITIVE . . . . 1 NEGATIVE . . . . 2 (SKIP TO 237) NOT PRESENT . . . . 3 REFUSED . . . . 4 OTHER . . . . 5 (SKIP TO 238)
235	IF 233 AND 234 ARE POSITIVE, RESPONDENT IS HIV POSITIVE: INFORM SURVEY PARTICIPANT ABOUT POSITIVE HIV STATUS AND PROVIDE POST-TEST COUNSELING. AS PART OF POST-TEST COUNSELING, PROVIDE A REFERRAL TO THE NEAREST HEALTH FACILITY WHERE HIV CARE AND TREATMENT SERVICES ARE AVAILABLE. SKIP TO 238			
236	IF 233 IS NEGATIVE, RESPONDENT IS HIV NEGATIVE: INFORM THE RESPONDENT OF NEGATIVE TEST RESULT, AND CONDUCT POST-TEST COUNSELING. SKIP TO 238			

WEIGHT, HEIGHT, HEMOGLOBIN MEASUREMENT AND HIV TESTING FOR WOMEN AGE 15-49

		WOMAN 1	WOMAN 2	WOMAN 3
	NAME FROM COLUMN 2.	NAME _____	NAME _____	NAME _____
237	IF 233 IS POSITIVE AND 234 IS NEGATIVE, RESPONDENT'S HIV STATUS IS INDETERMINATE: INFORM THE RESPONDENT OF INDETERMINATE TEST RESULT, AND CONDUCT POST-TEST COUNSELINTG. AS PART OF POST-TEST COUNSELING, RECOMMEND THAT RESPONDENT IS RETESTED IN 14 DAYS AND PROVIDE A REFERRAL TO THE NEAREST HEALTH FACILITY WHERE HIV TESTING CAN BE CONDUCTED.			
238	WHILE TESTING THIS PERSON, WAS ANY RDT INVALID/DID ANY RDT FAIL TO RUN, THAT IS, THE CONTROL BAND DID NOT APPEAR?	RDT CONDUCTED, YES ANY INVALID . . . . . 1 RDT CONDUCTED, NONE INVALID . . . . . 2 NO RDT CONDUCTED . . . . 3 (SKIP TO 241)	RDT CONDUCTED, YES ANY INVALID . . . . . 1 RDT CONDUCTED, NONE INVALID . . . . . 2 NO RDT CONDUCTED . . . . 3 (SKIP TO 241)	RDT CONDUCTED, YES ANY INVALID . . . . . 1 RDT CONDUCTED, NONE INVALID . . . . . 2 NO RDT CONDUCTED . . . . 3 (SKIP TO 241)
239	RECORD NUMBER OF INVALID RESULTS USING "DETERMINE HIV RDT"	☐☐ RECORD NUMBER OF INVALID RESULTS, IF NONE ENTER 00	☐☐ RECORD NUMBER OF INVALID RESULTS, IF NONE ENTER 00	☐☐ RECORD NUMBER OF INVALID RESULTS, IF NONE ENTER 00
240	RECORD NUMBER OF INVALID RESULTS USING "STATPAK HIV RDT" HERE	☐☐ RECORD NUMBER OF INVALID RESULTS, IF NONE ENTER 00	☐☐ RECORD NUMBER OF INVALID RESULTS, IF NONE ENTER 00	☐☐ RECORD NUMBER OF INVALID RESULTS, IF NONE ENTER 00
241	GO BACK TO 202 IN NEXT COLUMN OF THIS QUESTIONNAIRE OR IN THE FIRST COLUMN OF AN ADDITIONAL QUESTIONNAIRE; IF NO MORE WOMEN, GO TO 301.			

WEIGHT, HEIGHT, HEMOGLOBIN MEASUREMENT AND HIV TESTING FOR MEN AGE 15-59

301	CHECK COLUMN 10 IN HOUSEHOLD QUESTIONNAIRE. RECORD THE LINE NUMBER, NAME, AGE, AND MARITAL STATUS FOR ALL ELIGIBLE MEN IN 302, 303, AND 304. IF THERE ARE MORE THAN THREE MEN, USE ADDITIONAL QUESTIONNAIRE(S).			
		MAN 1	MAN 2	MAN 3
302	CHECK HOUSEHOLD QUESTIONNAIRE: LINE NUMBER FROM COLUMN 10. NAME FROM COLUMN 2.	LINE NUMBER . . . . . ☐☐ NAME _____	LINE NUMBER . . . . . ☐☐ NAME _____	LINE NUMBER . . . . . ☐☐ NAME _____
303	CHECK HOUSEHOLD QUESTIONNAIRE COLUMN 7 (AGE):	15-17 YEARS . . . . . 1 18-59 YEARS 2	15-17 YEARS . . . . . 1 18-59 YEARS 2	15-17 YEARS . . . . . 1 18-59 YEARS 2
304	CHECK HOUSEHOLD QUESTIONNAIRE COLUMN 8 (MARITAL STATUS):	CODE 4 (NEVER IN UNION) . 1 OTHER 2	CODE 4 (NEVER IN UNION) . 1 OTHER 2	CODE 4 (NEVER IN UNION) . 1 OTHER 2
305	WEIGHT IN KILOGRAMS.	KG. . . . ☐☐☐.☐☐ NOT PRESENT . . . . . 99994 REFUSED . . . . . 99995 OTHER 99996	KG. . . . ☐☐☐.☐☐ NOT PRESENT . . . . . 99994 REFUSED . . . . . 99995 OTHER 99996	KG. . . . ☐☐☐.☐☐ NOT PRESENT . . . . . 99994 REFUSED . . . . . 99995 OTHER 99996
306	HEIGHT IN CENTIMETERS.	CM. . . . . ☐☐☐.☐ NOT PRESENT . . . . . 9994 REFUSED . . . . . 9995 OTHER 9996	CM. . . . . ☐☐☐.☐ NOT PRESENT . . . . . 9994 REFUSED . . . . . 9995 OTHER 9996	CM. . . . . ☐☐☐.☐ NOT PRESENT . . . . . 9994 REFUSED . . . . . 9995 OTHER 9996
307	MEASURER: ENTER YOUR FIELDWORKER NUMBER.	☐☐☐☐ FIELDWORKER NUMBER	☐☐☐☐ FIELDWORKER NUMBER	☐☐☐☐ FIELDWORKER NUMBER
308	CHECK 303: AGE	15-17 YEARS . . . . . 1 18-59 YEARS . . . . . 2 (SKIP TO 310) ←	15-17 YEARS . . . . . 1 18-59 YEARS . . . . . 2 (SKIP TO 310) ←	15-17 YEARS . . . . . 1 18-59 YEARS . . . . . 2 (SKIP TO 310) ←
309	CHECK 304: MARITAL STATUS	CODE 4 (NEVER IN UNION) . 1 (SKIP TO 316) ← OTHER 2	CODE 4 (NEVER IN UNION) . 1 (SKIP TO 316) ← OTHER 2	CODE 4 (NEVER IN UNION) . 1 (SKIP TO 316) ← OTHER 2

WEIGHT, HEIGHT, HEMOGLOBIN MEASUREMENT AND HIV TESTING FOR MEN AGE 15-[49]

		MAN 1	MAN 2	MAN 3
	NAME FROM COLUMN 2.	NAME ______	NAME ______	NAME ______

ADULT RESPONDENT CONSENT FOR ANEMIA TEST

310	ASK CONSENT FOR ANEMIA TEST.	As part of this survey, we are asking people all over the country to take an anemia test. Anemia is a serious health problem that usually results from poor nutrition, infection, or chronic disease. This survey will assist the government to develop programs to prevent and treat anemia. For the anemia testing, we will need a few drops of blood from a finger. The equipment used to take the blood is clean and completely safe. It has never been used before and will be thrown away after each test. The blood will be tested for anemia immediately, and the result will be told to you right away. The result will be kept strictly confidential and will not be shared with anyone other than members of our survey team. Do you have any questions? You can say yes or no. It is up to you to decide. Will you take the anemia test?		
311	CIRCLE THE CODE AND SIGN YOUR NAME.	GRANTED . . . . 1 RESPONDENT REFUSED . . . 2 ______ (SIGN) NOT PRESENT/OTHER 3	GRANTED . . . . 1 RESPONDENT REFUSED . . . 2 ______ (SIGN) NOT PRESENT/OTHER 3	GRANTED . . . . 1 RESPONDENT REFUSED . . . 2 ______ (SIGN) NOT PRESENT/OTHER 3

ADULT RESPONDENT CONSENT FOR DBS COLLECTION

312	ASK CONSENT FOR DBS COLLECTION.	As part of the survey we also are asking people all over the country to give blood for HIV testing to be done in a laboratory. HIV is the virus that can lead to AIDS. The HIV testing is being done to see how many people have HIV. For the HIV testing, we need a few (more) drops of blood from a finger. The blood will be collected on a paper card. The equipment used to take the blood is clean and completely safe. It has never been used before and will be thrown away after we take your blood. No names will be written on the card so we will not be able to tell you the test results. No one else will be able to know your test results either. Do you have any questions? You can say yes or no. It is up to you to decide. Will you give blood on a paper card for the HIV testing in a laboratory?		
313	CIRCLE THE CODE, SIGN YOUR NAME, AND ENTER YOUR FIELDWORKER NUMBER.	GRANTED . . . . 1 RESPONDENT REFUSED . . . 2 ______ (SIGN AND ENTER YOUR FIELDWORKER NUMBER) [ ][ ][ ][ ] (IF REFUSED, SKIP TO 315A) NOT PRESENT/OTHER . . . . 3 (SKIP TO 315A)	GRANTED . . . . 1 RESPONDENT REFUSED . . . 2 ______ (SIGN AND ENTER YOUR FIELDWORKER NUMBER) [ ][ ][ ][ ] (IF REFUSED, SKIP TO 315A) NOT PRESENT/OTHER . . . . 3 (SKIP TO 315A)	GRANTED . . . . 1 RESPONDENT REFUSED . . . 2 ______ (SIGN AND ENTER YOUR FIELDWORKER NUMBER) [ ][ ][ ][ ] (IF REFUSED, SKIP TO 315A) NOT PRESENT/OTHER . . . . 3 (SKIP TO 315A)

		MAN 1	MAN 2	MAN 3
	NAME FROM COLUMN 2.	NAME _____	NAME _____	NAME _____

ADULT RESPONDENT CONSENT

ADULT RESPONDENT CONSENT FOR ADDITIONAL TESTING

314	ASK CONSENT FOR ADDITIONAL TESTING.	We ask you to allow Statistics Sierra Leone to store part of the blood sample at the laboratory for additional tests or research. We are not certain about what additional tests might be done. The blood sample will not have any name or other data attached that could identify you. You do not have to agree. If you do not want the blood sample stored for additional testing, you can still participate in the HIV testing in this survey. Will you allow us to keep the blood sample stored for additional testing?

		MAN 1	MAN 2	MAN 3
315	CIRCLE THE CODE AND SIGN YOUR NAME.	GRANTED . . . . . 1 RESPONDENT REFUSED . . . 2 _____ (SIGN)	GRANTED . . . . . 1 RESPONDENT REFUSED . . . 2 _____ (SIGN)	GRANTED . . . . . 1 RESPONDENT REFUSED . . . 2 _____ (SIGN)

ADULT RESPONDENT CONSENT FOR RDT TESTING

315A	ASK CONSENT FOR RDT TESTING	If you want to know your HIV status right now, we can do a rapid test and tell you the result. The testing is free and we will offer counselling before and after the test. For the rapid HIV test, we need a few (more) drops of blood from a finger. The equipment used to take the blood is clean and completely safe. It has never been used before and will be thrown away after each test. The result of the test will be available in 20-30 minutes. If the test is positive, I will give you a referral form to go to the nearest health facility for follow up with medical personnel, as is recommended by the Ministry of Health. Do you have any questions? You can say yes or no. It is up to you to decide. Will you give blood for the rapid HIV testing?

		MAN 1	MAN 2	MAN 3
315B	CIRCLE THE CODE AND SIGN YOUR NAME.	GRANTED . . . . . 1 RESPONDENT REFUSED . . . 2 _____ (SIGN AND SKIP TO 329)	GRANTED . . . . . 1 RESPONDENT REFUSED . . . 2 _____ (SIGN AND SKIP TO 329)	GRANTED . . . . . 1 RESPONDENT REFUSED . . . 2 _____ (SIGN AND SKIP TO 329)

		MAN 1	MAN 2	MAN 3
	NAME FROM COLUMN 2.	NAME ____________	NAME ____________	NAME ____________
316	RECORD LINE NUMBER OF PARENT/OTHER ADULT RESPONSIBLE FOR ADOLESCENT.	LINE NUMBER OF PARENT OR OTHER RESPONSIBLE ADULT [ ][ ] (RECORD '00' IF NOT LISTED)	LINE NUMBER OF PARENT OR OTHER RESPONSIBLE ADULT [ ][ ] (RECORD '00' IF NOT LISTED)	LINE NUMBER OF PARENT OR OTHER RESPONSIBLE ADULT [ ][ ] (RECORD '00' IF NOT LISTED)

PARENT — RESP ADULT CONSENT

PARENTAL/RESPONSIBLE ADULT CONSENT FOR ANEMIA TEST

317	ASK CONSENT FOR ANEMIA TEST FROM PARENT/ADULT.	As part of this survey, we are asking people all over the country to take an anemia test. Anemia is a serious health problem that usually results from poor nutrition, infection, or chronic disease. This survey will assist the government to develop programs to prevent and treat anemia. For the anemia testing, we will need a few drops of blood from a finger. The equipment used to take the blood is clean and completely safe. It has never been used before and will be thrown away after each test. The blood will be tested for anemia immediately, and the result will be told to you and (NAME OF MINOR) right away. The result will be kept strictly confidential and will not be shared with anyone other than members of our survey team. Do you have any questions? You can say yes or no. It is up to you to decide. Will you allow (NAME OF MINOR) to take the anemia test?

		MAN 1	MAN 2	MAN 3
318	CIRCLE THE CODE AND SIGN YOUR NAME.	GRANTED . . . . 1 PARENT/OTHER RESPONSIBLE ADULT REFUSED . . . . . . 2 ____________ (SIGN) (IF REFUSED, SKIP TO 321) NOT PRESENT/OTHER . . . . 3 (SKIP TO 321)	GRANTED . . . . 1 PARENT/OTHER RESPONSIBLE ADULT REFUSED . . . . . . 2 ____________ (SIGN) (IF REFUSED, SKIP TO 321) NOT PRESENT/OTHER . . . . 3 (SKIP TO 321)	GRANTED . . . . 1 PARENT/OTHER RESPONSIBLE ADULT REFUSED . . . . . . 2 ____________ (SIGN) (IF REFUSED, SKIP TO 321) NOT PRESENT/OTHER . . . . 3 (SKIP TO 321)

MINOR RESPONDENT CONSENT

MINOR RESPONDENT CONSENT FOR ANEMIA TEST

319	ASK CONSENT FOR ANEMIA TEST FROM RESPONDENT.	As part of this survey, we are asking people all over the country to take an anemia test. Anemia is a serious health problem that usually results from poor nutrition, infection, or chronic disease. This survey will assist the government to develop programs to prevent and treat anemia. For the anemia testing, we will need a few drops of blood from a finger. The equipment used to take the blood is clean and completely safe. It has never been used before and will be thrown away after we take your blood. The blood will be tested for anemia immediately, and the result will be told to you and (NAME OF PARENT/RESPONSIBLE ADULT) right away. The result will be kept strictly confidential and will not be shared with anyone other than members of our survey team. Do you have any questions? You can say yes or no. It is up to you to decide. Will you take the anemia test?

		MAN 1	MAN 2	MAN 3
320	CIRCLE THE CODE AND SIGN YOUR NAME.	GRANTED . . . . 1 MINOR RESPONDENT REFUSED . . . . 2 ____________ (SIGN) NOT PRESENT/OTHER 3	GRANTED . . . . 1 MINOR RESPONDENT REFUSED . . . . 2 ____________ (SIGN) NOT PRESENT/OTHER 3	GRANTED . . . . 1 MINOR RESPONDENT REFUSED . . . . 2 ____________ (SIGN) NOT PRESENT/OTHER 3

		MAN 1	MAN 2	MAN 3
	NAME FROM COLUMN 2.	NAME ______	NAME ______	NAME ______

PARENTAL/RESPONSIBLE ADULT CONSENT FOR DBS COLLECTION

PARENT/RESP ADULT CONSENT

		MAN 1	MAN 2	MAN 3
321	ASK CONSENT FOR DBS COLLECTION FROM PARENT/ADULT.	As part of the survey we also are asking people all over the country to give blood for HIV testing to be done in a laboratory. HIV is the virus that can lead to AIDS. The HIV test is being done to see how many people have HIV. For the HIV test, we need a few (more) drops of blood from a finger. The blood will be collected on a paper card. The equipment used to take the blood is clean and completely safe. It has never been used before and will be thrown away after each test. No names will be written on the card so we will not be able to provide the results of (NAME OF MINOR)'s test. No one else will be able to know (NAME OF MINOR)'s test results either. Do you have any questions? You can say yes or no. It is up to you to decide. Will you allow (NAME OF MINOR) to give blood on a paper card for the HIV testing in a laboratory?		
322	CIRCLE THE CODE, SIGN YOUR NAME, AND ENTER YOUR FIELDWORKER NUMBER.	GRANTED . . . . 1 PARENT/OTHER RESPONSIBLE ADULT REFUSED . . . . . . 2 ______ (SIGN AND ENTER YOUR FIELDWORKER NUMBER) [ ][ ][ ][ ] (IF REFUSED, SKIP TO 328B) NOT PRESENT/OTHER . . . . 3 (SKIP TO 328B)	GRANTED . . . . 1 PARENT/OTHER RESPONSIBLE ADULT REFUSED . . . . . . 2 ______ (SIGN AND ENTER YOUR FIELDWORKER NUMBER) [ ][ ][ ][ ] (IF REFUSED, SKIP TO 328B) NOT PRESENT/OTHER . . . . 3 (SKIP TO 328B)	GRANTED . . . . 1 PARENT/OTHER RESPONSIBLE ADULT REFUSED . . . . . . 2 ______ (SIGN AND ENTER YOUR FIELDWORKER NUMBER) [ ][ ][ ][ ] (IF REFUSED, SKIP TO 328B) NOT PRESENT/OTHER . . . . 3 (SKIP TO 328B)

MINOR RESPONDENT CONSENT FOR DBS COLLECTION

MINOR RESPONDENT CONSENT

		MAN 1	MAN 2	MAN 3
323	ASK CONSENT FOR DBS COLLECTION FROM MINOR RESPONDENT.	As part of the survey we also are asking people all over the country to give blood for HIV testing to be done in a laboratory. HIV is the virus that can lead to AIDS. The HIV testing is being done to see how many people have HIV. For the HIV testing, we need a few (more) drops of blood from a finger. The blood will be collected on a paper card. The equipment used to take the blood is clean and completely safe. It has never been used before and will be thrown away after we take your blood. No names will be written on the card so we will not be able to tell you the test results. No one else will be able to know your test results either. Do you have any questions? You can say yes or no. It is up to you to decide. Will you give blood on a paper card for the HIV testing in a laboratory?		
324	CIRCLE THE CODE AND SIGN YOUR NAME.	GRANTED . . . . 1 MINOR RESPONDENT REFUSED . . . . 2 ______ (SIGN) (IF REFUSED, SKIP TO 328B) NOT PRESENT/OTHER . . . . 3 (SKIP TO 328B)	GRANTED . . . . 1 MINOR RESPONDENT REFUSED . . . . 2 ______ (SIGN) (IF REFUSED, SKIP TO 328B) NOT PRESENT/OTHER . . . . 3 (SKIP TO 328B)	GRANTED . . . . 1 MINOR RESPONDENT REFUSED . . . . 2 ______ (SIGN) (IF REFUSED, SKIP TO 328B) NOT PRESENT/OTHER . . . . 3 (SKIP TO 328B)

		MAN 1	MAN 2	MAN 3
	NAME FROM COLUMN 2.	NAME _____	NAME _____	NAME _____

PARENT/RESP ADULT CONSENT

PARENTAL/RESPONSIBLE ADULT CONSENT FOR ADDITIONAL TESTING

325	ASK CONSENT FOR ADDITIONAL TESTING FROM PARENT/ADULT.	We ask you to allow Statistics Sierra Leone to store part of the blood sample at the laboratory for additional tests or research. We are not certain about what additional tests might be done. The blood sample will not have any name or other data attached that could identify (NAME OF MINOR). You do not have to agree. If you do not want the blood sample stored for additional testing, (NAME OF MINOR) can still participate in the HIV testing in this survey. Will you allow us to keep the blood sample stored for additional testing?		
326	CIRCLE THE CODE AND SIGN YOUR NAME.	GRANTED . . . . . 1 PARENT/OTHER RESPONSIBLE ADULT REFUSED . . . . . 2 _____ (SIGN) (IF REFUSED, SKIP TO 328B)	GRANTED . . . . . 1 PARENT/OTHER RESPONSIBLE ADULT REFUSED . . . . . 2 _____ (SIGN) (IF REFUSED, SKIP TO 328B)	GRANTED . . . . . 1 PARENT/OTHER RESPONSIBLE ADULT REFUSED . . . . . 2 _____ (SIGN) (IF REFUSED, SKIP TO 328B)

MINOR RESPONDENT CONSENT

MINOR RESPONDENT CONSENT FOR ADDITIONAL TESTING

327	ASK CONSENT FOR ADDITIONAL TESTING FROM MINOR RESPONDENT.	We ask you to allow Statistics Sierra Leone to store part of the blood sample at the laboratory for additional tests or research. We are not certain about what additional tests might be done. The blood sample will not have any name or other data attached that could identify you. You do not have to agree. If you do not want the blood sample stored for additional testing, you can still participate in the HIV testing in this survey. Will you allow us to keep the blood sample stored for additional testing?		
328A	CIRCLE THE CODE AND SIGN YOUR NAME.	GRANTED . . . . . 1 MINOR RESPONDENT REFUSED . . . . . 2 _____ (SIGN)	GRANTED . . . . . 1 MINOR RESPONDENT REFUSED . . . . . 2 _____ (SIGN)	GRANTED . . . . . 1 MINOR RESPONDENT REFUSED . . . . . 2 _____ (SIGN)

		MAN 1	MAN 2	MAN 3
	NAME FROM COLUMN 2.	NAME _____	NAME _____	NAME _____

PARENT — RESP ADULT CONSENT

PARENTAL/RESPONSIBLE ADULT CONSENT FOR RDT TESTING

328B	ASK CONSENT FOR RDT FROM PARENT/ RESPONSIBLE ADULT	If you want (NAME OF MINOR) to know his HIV status right now, we can do a rapid test and tell him the result. The testing is free and we will offer counselling before and after the test. For the rapid HIV test, we need a few (more) drops of blood from a finger. The equipment used to take the blood is clean and completely safe. It has never been used before and will be thrown away after each test. The result of the test will be available in 20-30 minutes. If the test is positive, I will give (NAME OF MINOR) a referral form to go to the nearest health facility for follow up with medical personnel, as is recommended by the Ministry of Health. Do you have any questions? You can say yes to the test, or you can say no. It is up to you to decide. Will you allow (NAME OF MINOR) to give blood for the rapid HIV test?		
328C	CIRCLE THE CODE AND SIGN YOUR NAME.	GRANTED . . . . . 1 PARENT/OTHER RESPONSIBLE ADULT REFUSED . . . . . 2 _____ (SIGN) (IF REFUSED, SKIP TO 229)	GRANTED . . . . . 1 PARENT/OTHER RESPONSIBLE ADULT REFUSED . . . . . 2 _____ (SIGN) (IF REFUSED, SKIP TO 229)	GRANTED . . . . . 1 PARENT/OTHER RESPONSIBLE ADULT REFUSED . . . . . 2 _____ (SIGN) (IF REFUSED, SKIP TO 329)

MINOR RESPONDENT CONSENT

MINOR RESPONDENT CONSENT FOR RDT TESTING

328D	ASK CONSENT FOR RDT TESTING FROM MINOR RESPONDENT.	If you want to know your HIV status right now, we can do a rapid test and tell you the result. The testing is free and we will offer counselling before and after the test. For the rapid HIV test, we need a few (more) drops of blood from a finger. The equipment used to take the blood is clean and completely safe. It has never been used before and will be thrown away after each test. The result of the test will be available in 20-30 minutes. If the test is positive, I will give you a referral form to go to the nearest health facility for follow up with medical personnal, as is recommended by the Ministry of Health. Do you have any questions? You can say yes or no. It is up to you to decide. Will you give blood for the rapid HIV testing?		
328E	CIRCLE THE CODE AND SIGN YOUR NAME.	GRANTED . . . . . 1 MINOR RESPONDENT REFUSED . . . . . 2 _____ (SIGN)	GRANTED . . . . . 1 MINOR RESPONDENT REFUSED . . . . . 2 _____ (SIGN)	GRANTED . . . . . 1 MINOR RESPONDENT REFUSED . . . . . 2 _____ (SIGN)

		MAN 1	MAN 2	MAN 3
	NAME FROM COLUMN 2.	NAME ______	NAME ______	NAME ______
329	PREPARE EQUIPMENT AND SUPPLIES ONLY FOR THE TEST(S) FOR WHICH CONSENT HAS BEEN OBTAINED AND PROCEED WITH THE TEST(S).			
330	ADDITIONAL TESTS.	IF ADULT RESPONDENT, CHECK 315; IF MINOR RESPONDENT, CHECK 326 AND 328A. IF CONSENT HAS NOT BEEN GRANTED, WRITE "NO ADDITIONAL TESTS" ON THE FILTER PAPER.	IF ADULT RESPONDENT, CHECK 315; IF MINOR RESPONDENT, CHECK 326 AND 328A. IF CONSENT HAS NOT BEEN GRANTED, WRITE "NO ADDITIONAL TESTS" ON THE FILTER PAPER.	IF ADULT RESPONDENT, CHECK 315; IF MINOR RESPONDENT, CHECK 326 AND 328A. IF CONSENT HAS NOT BEEN GRANTED, WRITE "NO ADDITIONAL TESTS" ON THE FILTER PAPER.
331	RECORD HEMOGLOBIN LEVEL HERE AND IN ANEMIA PAMPHLET.	G/DL . . . . [ ][ ].[ ] NOT PRESENT . . . . 994 REFUSED . . . . 995 OTHER 996	G/DL . . . . [ ][ ].[ ] NOT PRESENT . . . . 994 REFUSED . . . . 995 OTHER 996	G/DL . . . . [ ][ ].[ ] NOT PRESENT . . . . 994 REFUSED . . . . 995 OTHER 996
332	PLACE BAR CODE LABEL.	PUT THE 1ST BAR CODE LABEL HERE. NOT PRESENT . . . . . . 99994 REFUSED . . . . 99995 OTHER . . . . 99996 PUT THE 2ND BAR CODE LABEL ON THE RESPONDENT'S FILTER PAPER AND THE 3RD ON THE TRANSMITTAL FORM.	PUT THE 1ST BAR CODE LABEL HERE. NOT PRESENT . . . . . . 99994 REFUSED . . . . 99995 OTHER . . . . 99996 PUT THE 2ND BAR CODE LABEL ON THE RESPONDENT'S FILTER PAPER AND THE 3RD ON THE TRANSMITTAL FORM.	PUT THE 1ST BAR CODE LABEL HERE. NOT PRESENT . . . . . . 99994 REFUSED . . . . 99995 OTHER . . . . 99996 PUT THE 2ND BAR CODE LABEL ON THE RESPONDENT'S FILTER PAPER AND THE 3RD ON THE TRANSMITTAL FORM.
333	RECORD THE RESULT OF THE "DETERMINE HIV RDT" HERE.	POSITIVE . . . . 1 NEGATIVE . . . . 2 (SKIP TO 336) NOT PRESENT . . . . 3 REFUSED . . . 4 OTHER . . . . 5 (SKIP TO 338)	POSITIVE . . . . 1 NEGATIVE . . . . 2 (SKIP TO 336) NOT PRESENT . . . . 3 REFUSED . . . . 4 OTHER . . . . 5 (SKIP TO 338)	POSITIVE . . . . 1 NEGATIVE . . . . 2 (SKIP TO 336) NOT PRESENT . . . . 3 REFUSED . . . . 4 OTHER . . . . 5 (SKIP TO 338)
334	RECORD THE RESULT OF THE "STATPAK HIV RDT" HERE	POSITIVE . . . . 1 NEGATIVE . . . . 2 (SKIP TO 337) NOT PRESENT . . . . 3 REFUSED . . . . 4 OTHER . . . . 5 (SKIP TO 338)	POSITIVE . . . . 1 NEGATIVE . . . . 2 (SKIP TO 337) NOT PRESENT . . . . 3 REFUSED . . . . 4 OTHER . . . . 5 (SKIP TO 338)	POSITIVE . . . . 1 NEGATIVE . . . . 2 (SKIP TO 337) NOT PRESENT . . . . 3 REFUSED . . . . 4 OTHER . . . . 5 (SKIP TO 338)
335	IF 333 AND 334 ARE POSITIVE, RESPONDENT IS HIV POSITIVE: INFORM SURVEY PARTICIPANT ABOUT POSITIVE HIV STATUS AND PROVIDE POST-TEST COUNSELING. AS PART OF POST-TEST COUNSELING, PROVIDE A REFERRAL TO THE NEAREST HEALTH FACILITY WHERE HIV CARE AND TREATMENT SERVICES ARE AVAILABLE. SKIP TO 338			

WEIGHT, HEIGHT, HEMOGLOBIN MEASUREMENT AND HIV TESTING FOR MEN AGE 15-[49]

		MAN 1	MAN 2	MAN 3
	NAME FROM COLUMN 2.	NAME _____	NAME _____	NAME _____
336	IF 333 IS NEGATIVE, RESPONDENT IS HIV NEGATIVE: INFORM THE RESPONDENT OF NEGATIVE TEST RESULT, AND CONDUCT POST-TEST COUNSELING. SKIP TO 338			
337	IF 333 IS POSITIVE AND 334 IS NEGATIVE, RESPONDENT'S HIV STATUS IS INDETERMINATE: INFORM THE RESPONDENT OF INDETERMINATE TEST RESULT, AND CONDUCT POST-TEST COUNSELINTG. AS PART OF POST-TEST COUNSELING, RECOMMEND THAT RESPONDENT IS RETESTED IN 14 DAYS AND PROVIDE A REFERRAL TO THE NEAREST HEALTH FACILITY WHERE HIV TESTING CAN BE CONDUCTED.			
338	WHILE TESTING THIS PERSON, WAS ANY RDT INVALID/DID ANY RDT FAIL TO RUN, THAT IS, THE CONTROL BAND DID NOT APPEAR?	RDT CONDUCTED, YES ANY INVALID . . . . . 1 RDT CONDUCTED, NONE INVALID . . . . . 2 NO RDT CONDUCTED . . . . 3 → (SKIP TO 341)	RDT CONDUCTED, YES ANY INVALID . . . . . 1 RDT CONDUCTED, NONE INVALID . . . . . 2 NO RDT CONDUCTED . . . . 3 → (SKIP TO 341)	RDT CONDUCTED, YES ANY INVALID . . . . . 1 RDT CONDUCTED, NONE INVALID . . . . . 2 NO RDT CONDUCTED . . . . 3 → (SKIP TO 341)
339	RECORD NUMBER OF INVALID RESULTS USING "DETERMINE HIV RDT"	☐☐ RECORD NUMBER OF INVALID RESULTS, IF NONE ENTER 00	☐☐ RECORD NUMBER OF INVALID RESULTS, IF NONE ENTER 00	☐☐ RECORD NUMBER OF INVALID RESULTS, IF NONE ENTER 00
340	RECORD NUMBER OF INVALID RESULTS USING "STATPAK HIV RDT" HERE	☐☐ RECORD NUMBER OF INVALID RESULTS, IF NONE ENTER 00	☐☐ RECORD NUMBER OF INVALID RESULTS, IF NONE ENTER 00	☐☐ RECORD NUMBER OF INVALID RESULTS, IF NONE ENTER 00
341	GO BACK TO 302 IN NEXT COLUMN OF THIS QUESTIONNAIRE OR IN THE FIRST COLUMN OF AN ADDITIONAL QUESTIONNAIRE; IF NO MORE MEN, END INTERVIEW.			

FIELDWORKER'S OBSERVATIONS

TO BE FILLED IN AFTER COMPLETING BIOMARKERS

SUPERVISOR'S OBSERVATIONS

EDITOR'S OBSERVATIONS

SIERRA LEONE DEMOGRAPHIC AND HEALTH SURVEY 2019
FIELDWORKER QUESTIONNAIRE

SIERRA LEONE
STATISTICS SIERRA LEONE

LANGUAGE OF QUESTIONNAIRE ENGLISH

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
100	What is your name?	NAME _____	
101	RECORD FIELDWORKER NUMBER	NUMBER . . . . . [ ][ ][ ][ ]	

INSTRUCTIONS

Information on all Sierra Leone DHS field workers is collected as part of the Sierra Leone DHS survey. Please fill out the questions below. The information you provide will be part of the survey data file; however, your name will be removed and will not be part of the data file. Thank you for providing the information needed.

102	In what province do you live?	EASTERN PROVINCE . . . . . 01 NORTHERN PROVINCE . . . . . 02 SOUTHERN PROVINCE . . . . . 03 NORTH WEST PROVINCE 04 WESTERN AREA . . . . . 05 OUTSIDE OFSIERRA LEONE 96	
103	Do you live in a city, town, or rural area?	CITY . . . . . 1 TOWN . . . . . 2 RURAL 3	
104	How old are you? RECORD AGE IN COMPLETED YEARS.	AGE . . . . . [ ][ ]	
105	Are you male or female?	MALE . . . . . 1 FEMALE 2	
106	What is your current marital status?	CURRENTLY MARRIED . . . . . 1 LIVING WITH A MAN/WOMAN . . . . . 2 WIDOWED . . . . . 3 DIVORCED . . . . . 4 SEPARATED . . . . . 5 NEVER MARRIED OR LIVED WITH A MAN/WOMAN 6	
107	How many living children do you have? INCLUDE ONLY CHILDREN WHO ARE YOUR BIOLOGICAL CHILDREN.	LIVING CHILDREN . . . . . [ ][ ]	
108	Have you ever had a child who died?	YES . . . . . 1 NO 2	
109	What is the highest level of school you attended: primary, secondary, or higher?	PRIMARY . . . . . 1 SECONDARY . . . . . 2 HIGHER 3	
110	What is the highest class/year you completed at that level? IF COMPLETED LESS THAN ONE YEAR AT THAT LEVEL, RECORD '00'.	CLASS/YEAR . . . . . [ ][ ]	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
111	What is your religion?	CHRISTIAN . . . . . 01 ISLAM . . . . . 02 BAHAI . . . . . 03 TRADITIONAL . . . . . 04 NONE . . . . . 95 OTHER _____ 96 (SPECIFY)	
112	What is your ethnicity?	ETHNICITY _____	
113	What languages can you speak? RECORD ALL LANGUAGES YOU CAN SPEAK.	ENGLISH . . . . . A HAUSA . . . . . B CREOLE . . . . . C FULLAH . . . . . D KONO . . . . . E LIMBA . . . . . F MANDINGO . . . . . G MENDE . . . . . H SHERBRO . . . . . I TEMNE . . . . . J OTHER _____ X (SPECIFY)	
114	What is your mother tongue/native language (language spoken at home growing up)?	ENGLISH . . . . . 01 HAUSA . . . . . 02 CREOLE . . . . . 03 FULLAH . . . . . 04 KONO . . . . . 05 LIMBA . . . . . 06 MANDINGO . . . . . 07 MENDE . . . . . 08 SHERBRO . . . . . 09 TEMNE . . . . . 10 OTHER _____ 96 (SPECIFY)	
115	Have you ever worked on a DHS survey prior to this one?	YES . . . . . 1 NO 2	
116	Have you ever worked on any other survey prior to this one (not a DHS)?	YES . . . . . 1 NO 2	
117	Were you already working for the Statistics Sierra Leone at the time you were employed to work on this DHS?	YES . . . . . 1 NO 2	→ 119
118	Are you a permanent or temporary employee of the Statistics Sierra Leone?	PERMANENT . . . . . 1 TEMPORARY 2	
119	If you have comments, please write them here.		

ADDITIONAL DHS PROGRAM RESOURCES

The DHS Program Website – Download free DHS reports, standard documentation, key indicator data, and training tools, and view announcements.	DHSprogram.com	
STATcompiler – Build custom tables, graphs, and maps with data from 90 countries and thousands of indicators.	Statcompiler.com	
DHS Program Mobile App – Access key DHS indicators for 90 countries on your mobile device (Apple, Android, or Windows).	Search DHS Program in your iTunes or Google Play store	
DHS Program User Forum – Post questions about DHS data, and search our archive of FAQs.	userforum.DHSprogram.com	
Tutorial Videos – Watch interviews with experts and learn DHS basics, such as sampling and weighting, downloading datasets, and how to read DHS tables.	www.youtube.com/DHSProgram	
Datasets – Download DHS datasets for analysis.	DHSprogram.com/Data	
Spatial Data Repository – Download geographically-linked health and demographic data for mapping in a geographic information system (GIS).	spatialdata.DHSprogram.com	

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Twitter www.twitter.com/DHSprogram			