## Tanzania



Demographic and Health Survey

# Tanzania <br> Demographic and Health Survey 2004-2005 

National Bureau of Statistics<br>Dar es Salaam, Tanzania

## ORC Macro

Calverton, Maryland, USA


This report summarizes the findings of the 2004-05 Tanzania Demographic and Health Survey (2004-05 TDHS), which was conducted by the National Bureau of Statistics of the United Republic of Tanzania. ORC Macro provided technical assistance. The 2004-05 TDHS is part of the worldwide Demographic and Health Surveys (DHS) programme which assists countries in the collection of data to monitor and evaluate population, health, and nutrition programmes. Funding for technical assistance and equipment was provided by the United States Agency for International Development (USAID). Local costs of the survey were financed completely by the pooled funds of the Poverty Eradication Division (PED) in the Vice President's Office. The opinions expressed herein are those of the authors and do not necessarily reflect the views of USAID or the Government of Tanzania.

Additional information about the 2004-05 TDHS may be obtained from the headquarters of the National Bureau of Statistics, Kivukoni Front, P.O. Box 796, Dar es Salaam, Tanzania; Telephone: (255) 22 212-2722/3, Fax: (255) 22 213-0852, E-mail: dg@nbs.go.tz. Additional information about the MEASURE DHS project may be obtained from ORC Macro, 11785 Beltsville Drive, Suite 300, Calverton, MD 20705; Telephone: 301-572-0200, Fax: 301-572-0999, E-mail: reports@orcmacro.com, Internet: www.measuredhs.com.

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## FOREWORD

This report presents the results of the 2004-05 Tanzania Demographic and Health Survey (TDHS) that was carried out from October 2004 through January 2005. The survey, which is the latest in a series of periodic surveys that are conducted by the National Bureau of Statistics, was conducted in collaboration with various stakeholders led by the Ministry of Health.

The main objective of this survey was to measure levels, patterns, and trends in demographic and health indicators in both Tanzania Mainland and Tanzania Zanzibar. For the first time, information on the status of anaemia in women and in children under age five was collected and the indicators presented. Height and weight measurements were taken for the same population. Iodine testing of household salt was conducted, and information on birth registrations was collected.

This survey was designed to produce estimates at the regional level for most indicators. The tables, figures, and text are related to the most important indicators consistent with the objectives of the survey. They are targeted for use by policymakers, planners, and researchers, especially in the health sector.

Cletus P.B. Mkai
Director General
National Bureau of Statistics
Dar es Salaam

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The Tanzania Demographic and Health Survey (TDHS) 2004-05 has been a success story due to efforts from various government ministries, organizations, departments and individuals. We would like to acknowledge their participation and contributions to the successful completion of the survey. The National Bureau of Statistics wishes to extend its sincere gratitude to the Poverty Eradication Division (PED) in the Vice President's Office for fully financing the local costs of the survey through the pooled fund. Also we would wish to thank the Demographic and Health Surveys programme of ORC Macro in Maryland, U.S.A., with funding from USAID, for the provision of technical assistance in all aspects of the survey. Our sincere gratitude is also extended to all organizations which contributed to the questionnaire contents and/or the field staff training, including the Reproductive and Child Health Section-Ministry of Health, the Policy and Planning Department-Ministry of Health, the Tanzania Food and Nutrition Centre as well as development partners and stakeholders.

Likewise, a considerable number of individuals contributed significantly to the successful completion of this survey. We would like to thank Ms. Holly Newby and Ms. Ladys Ortiz from the DHS programme of ORC Macro for their technical assistance in the survey, and Said M. Aboud, the survey manager, Mlemba Abassy, the desk officer of the survey both from the National Bureau of Statistics, as well as Ms. Mayasa M. Mwinyi, and Omary S. Salahi both from the Office of Chief Government Statistician, Zanzibar. Their long days of working overtime served to make this survey successful. Similarly, the nurses from the Ministry of Health who worked as interviewers, and NBS and MoH staff who worked as field supervisors for the survey deserve our heartfelt gratitude. We are even more grateful to the survey respondents who generously contributed part of their time to enable the survey teams gather crucial information for our country.

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Cletus P.B. Mkai
Director General
National Bureau of Statistics
Dar es Salaam

## SUMMARY OF FINDINGS

The 2004-05 Tanzania Demographic and Health Survey (TDHS) is the sixth in a series of Demographic and Health Surveys conducted in Tanzania. The 2004-05 TDHS is a nationally representative survey of 9,735 households selected from 475 sample points throughout Tanzania. All women age 15-49 in these households and all men age 15-49 in a subsample of one-third of the households were individually interviewed. The sample was designed to produce separate estimates on key indicators for the national level, for urban and rural areas, and for seven zones. Some estimates can be calculated at the regional level.

The survey collected information on fertility levels and preferences, marriage, sexual activity, awareness and use of family planning methods, maternal and child health, breastfeeding practices, nutritional and anaemia status of women and young children, childhood mortality, use of bednets and antimalarials, awareness and behaviour regarding HIV/AIDS and other sexually transmitted infections (STIs), female genital cutting (FGC), and adult and maternal mortality.

The National Bureau of Statistics (NBS) conducted the survey, which was in the field from October 2004 to February 2005. Technical assistance was provided by ORC Macro through the MEASURE DHS programme. The local costs of the survey were fully financed through the pooled fund of the Poverty Eradication Division (PED) in the Vice President’s Office. Technical assistance was funded by the United States Agency for International Development (USAID)/Tanzania.

## Fertility

Fertility Levels and Trends. The total fertility rate (TFR) in Tanzania is 5.7 children per women. This means that at current fertility levels, the average Tanzanian woman will give birth to 5.7 children by the end of her lifetime. The 2004-05 TDHS estimate of fertility is statistically at the same level as rates estimated by the 1996 TDHS ( 5.8 births) and the 1999 Tanzania Reproductive and Child Health Survey (TRCHS) ( 5.6 births). Thus, there is no evidence of fertility decline in Tanzania during the past eight years. The fact that 11 percent of all women age 15-49
are pregnant indicates that fertility will continue to be high, at least in the near future.

Fertility Differentials. The TFR differs greatly within Tanzania. The TFR in Mainland rural areas is 6.5 , compared with 3.6 in urban areas. Rural women have, on average, 3 more births than their urban counterparts. The TFR in Zanzibar is 5.3. The TFR ranges from a low of 3.6 in the Eastern zone to a high of 7.3 in the Western zone. Fertility is closely associated with the educational attainment of the mother. While the TFR for women with no education is 6.9, women with secondary education or higher have a TFR of 3.3.

Initiation of Childbearing. One-fourth of women age 15-19 have begun childbearing: 20 percent are already mothers and 7 percent are pregnant with their first child. The percentage of women age 15-19 who have begun childbearing has remained constant over the past 15 years according to the results of the 1991-92, 1996, and 2004-05 TDHS surveys and the 1999 TRCHS.

Median age at first birth is 19.4, meaning that half of women give birth before age 20. Age at first birth differs the most by education, ranging from 18.7 years among women with no education to 23.8 years among women with at least some secondary education.

Fertility Preferences. Although two-thirds of currently married women say that they want more children, 42 percent say they want to wait for two or more years before having their next child. The data indicate that over time, the desire to space births among currently married women may have increased slightly. According to the 1999 TRCHS, 36 percent of married women wanted to wait before having another child compared with 42 percent in the 2004-05 TDHS. However, the desire to limit births has changed little.

Unplanned Fertility. Reflecting the gap between desired and actual fertility, many births in Tanzania are wanted later or not at all. The proportion of births that are mistimed is 18 percent. Five percent of births are unwanted. The proportion of wanted births has changed little since the

1999 TRCHS. However, the proportion of births not wanted at all has decreased, and the proportion of births wanted later has increased.

## Family Planning

Knowledge of Contraception. Knowledge of contraception is widespread in Tanzania. Ninety-six percent of women and 97 percent of men know at least one modern method. This is an increase from 91 percent of women and 92 percent of men in the 1999 TRCHS. The most commonly known methods among both men and women are the birth control pill, injectables, and male condoms.

Use of Contraception. Approximately onefourth of married women ( 26 percent) are currently using any method of contraception, including 20 percent who are using a modern method. Injectables are the leading method, used by 8 percent of married women. The pill and traditional methods (both 6 percent) are also common.

Current contraceptive use is higher among sexually active unmarried women than among married women (41 and 26 percent, respectively). The male condom is favoured among sexually active unmarried women ( 15 percent).

Trends in Contraceptive Use. The percentage of married women using any method of contraception has changed little since the 1999 TRCHS; however, there has been a small shift from traditional to modern methods. Modern method use has increased from 17 percent in 1999 to 20 percent in 2004-05. The most notable change in the mix of modern methods used by married women has been a slight increase in the proportion using injectables.

Differentials in Contraceptive Use. There are significant differences in contraceptive use by background characteristics. Married women in urban areas are almost twice as likely to use a family planning method as their rural counterparts (42 and 22 percent, respectively). Current use of any method increases with education. Slightly more than half of married women with secondary education are currently using contraception compared with 13 percent of women with no education. Women in the Lake and Western zones are least likely to be using contraception (13 percent each).

Source of Modern Methods. Government or parastatal facilities are the most common sources of contraceptives, serving as the point of distribution for more than two-thirds of modern method users. Among these facilities, dispensaries are the level of facility most commonly used as the source for reversible methods of contraception, and district hospitals are the primary source for sterilisation. Private pharmacies and shops are the most important sources for male condoms.

Discontinuation Rates. Data from the 200405 TDHS show that 38 percent of contraceptive users discontinued use of a method within 12 months of starting its use. The most common reason for discontinuation is switching to another method ( 9 percent of users), followed by a desire to become pregnant (8 percent), concerns about health or side effects ( 8 percent), and failure of the method resulting in unintended pregnancy (4 percent). Male condom is the method with the highest rate of discontinuation ( 45 percent of users) and periodic abstinence has the lowest ( 31 percent).

Unmet Need for Family Planning and Future Use. The total demand for family planning among currently married women is 50 percent, and more than half of that demand ( 56 percent) is satisfied. The demand for spacing purposes is almost twice as high as the demand for limiting purposes (32 and 18 percent, respectively). Twenty-two percent of currently married women have an unmet need for family planning: 15 percent have unmet need for spacing and 7 percent for limiting.

Among currently married nonusers who intend to use in the future, the preferred method is injectables (46 percent), followed by the pill ( 26 percent). Method preference among women under age 30 and those over 30 is similar. However, almost one-fifth of older women who intend to use a method in the future (18 percent) reported female sterilisation as their preferred method.

Almost one-third of women who are not using family planning (31 percent) reported visiting a health facility but not speaking with staff about family planning during the visit. This is an indication of missed opportunities for increasing family planning acceptance and use.

## Child Health

Childhood Mortality. The 2004-05 TDHS estimates infant mortality to be 68 per 1,000 live
births for the 5 years preceding the survey. The overall under-five mortality rate for the period is 112 per 1,000. The 2004-05 TDHS data indicate a recent, rapid decline in mortality. Infant mortality estimates show a decline from 100 in the period 5-9 years preceding the survey (approximately 1995-1999) to 68 during the 2000-2004 period. It is notable that the 2004-05 TDHS estimate for the period 5-9 years preceding the survey is almost identical to the 1999 TRCHS rate of 99 deaths per 1,000 births for the same period (i.e., 0-4 years before). Thus, the comparison of the two separate surveys-the 1999 TRCHS and the 2004-05 TDHS—as well as the 2004-05 TDHS data itself, indicate a significant decrease in infant and child mortality rates in recent years.

Shorter birth intervals are associated with higher mortality, both during and after infancy. In terms of under-five mortality, births following an interval of at least three years are at almost half the risk of death as births occurring within two years of a preceding birth.

Childhood Vaccination Coverage. Findings from the 2004-05 TDHS show that 71 percent of children age 12-23 months are fully immunised according to vaccination cards or mother's report. Childhood immunisation remains at a similar level to that measured in the 1999 TRCHS (68 percent). With the exception of measles, virtually all the reported vaccinations were received by 12 months of age as recommended. Only 4 percent of children have not received any vaccination at all.

Childhood Illness and Treatment. According to mothers' reports, 8 percent of children under age 5 had symptoms of acute respiratory infection (ARI), 24 percent had fever, and 13 percent had diarrhoea in the two weeks preceding the survey. More than half of the children with ARI or fever (57 percent) were taken to a health facility. Among children with diarrhoea, almost half (47 percent) were taken to a health care provider. Seven in ten were given oral rehydration salt packets, recommended home fluids, or increased fluids. Although 36 percent of mothers said they gave their sick child more liquid than usual to drink, one-third of mothers said they curtailed fluid intake.

## Nutrition

Breastfeeding Practices and Complementary Feeding. Almost all children in Tanzania are breastfed (96 percent). Placing the child to the
breast during the first day is also very common (92 percent). However, only 59 percent of children are breastfed within the first hour after birth. These figures show little change since the 1996 TDHS. The median duration of breastfeeding in the 2004-05 TDHS is 21 months.

Although WHO recommends exclusive breastfeeding for six months, complementary feeding in Tanzania starts early. One-fourth of children age 2-3 months receive liquids other than breast milk and one-third receive complementary foods. Among all children less than 6 months, 41 percent are exclusively breastfed. This is an increase from 32 percent in the 1999 TRCHS. Nine in 10 children age 6-9 months are fed complementary foods. Foods made from grains constitute the majority of their diet.

Intake of Vitamin A. About half of children under age 3 ate fruits and vegetables rich in vitamin A during the day and night before the interview (54 percent). Forty-six percent of children age 6 months to 5 years received a vitamin A supplement in the six months before the survey, a three-fold increase over the 14 percent estimated in the 1999 TRCHS.

Prevalence of Anaemia. Anaemia contributes to several serious health problems for women and children. The 2004-05 TDHS tested the haemoglobin of children 6-59 months and women 15-49 years. The data show that 72 percent of children have some level of anaemia. One-fourth of children have mild anaemia, 43 percent have moderate anaemia, and 4 percent have severe anaemia.

Anaemia is less prevalent among women. Almost half of women (48 percent) have some level of anaemia, with 33 percent mildly anaemic, 15 percent moderately anaemic, and 1 percent severely anaemic.

Nutritional Status of Children. The 2004-05 TDHS measured three anthropometric indicators of nutritional status in children: height-for-age, weight-for-height, and weight-for-age. At the national level, 38 percent of children under 5 have low height-for-age or are stunted, 3 percent have low weight-for-height or are wasted, and 22 percent have low weight-for-age, which reflects both chronic and acute undernutrition. These results reflect an improvement in nutritional status from the 1999 TRCHS when these indicators were measured at 44, 5, and 29 percent, respectively.

The children of the Southern zone are particularly disadvantaged-half are stunted, which reflects long-term undernutrition in the area.

Nutritional Status of Women. A body mass index (BMI) of less than 18.5 is considered undernourished. In the 2004-05 TDHS, 10 percent of women were found to fall below this cutoff, comparable with the 9 percent measured in the 1996 TDHS. Almost one-fifth of Tanzanian women weigh more than they should, 13 percent are overweight and 4 percent are obese.

## Maternal Health

Antenatal Care. Almost all women (94 percent) who gave birth in the five years preceding the survey received antenatal care (ANC) from a health professional at least once. A lower proportion of women received the recommended 4+ ANC visits (62 percent), and only 14 percent received their first ANC visit during the first trimester of pregnancy. Nurses and midwives are the attendants that provide most ANC.

In terms of the components of ANC, most women were weighed during an antenatal visit (94 percent), about two-thirds had their blood pressure measured, more than half had a blood sample taken, and less than half had a urine sample taken. Half of women were informed of the signs of pregnancy complications. Most women (56 percent) received at least two tetanus toxoid injections during pregnancy.

Care During Childbirth. A skilled attendant at birth with the proper equipment and environment can reduce the incidence and severity of obstetric and newborn complications. In the 2004-05 TDHS, 47 percent of births occur in health facilities, compared with 44 percent in the 1999 TRCHS. Nearly all institutional births take place in public sector facilities.

Almost half of births (46 percent) are assisted by health professionals. Nurses and midwives are the most common birth attendants, assisting 37 percent of births. Doctors/AMOs attend 4 percent of births. Nineteen percent of births are assisted by trained or traditional birth attendants, and 30 percent of births are attended by relatives or other untrained people. Three percent of births are delivered by caesarean section, roughly the same percentage as was observed in the 1999 TRCHS.

Care after Childbirth. Postnatal care is important both for the mother and the child to treat complications arising from the delivery, and to provide the mother with important information on how to care for herself and her child. The postnatal period is defined as the time between the delivery of the placenta and 42 days ( 6 weeks) following the delivery. The 2004-05 TDHS results show that a large proportion of women whose last live birth occurred outside a health facility did not receive a postnatal checkup (83 percent). Just 13 percent were examined within 2 days of delivering, as recommended.

Female Genital Cutting. Fifteen percent of women in Tanzania are circumcised. The 2003-04 Tanzania HIV/AIDS Indicator Survey (THIS) and the 1996 TDHS measured the prevalence of FGC at 18 percent. Younger women in the 2004-05 TDHS are less likely to be circumcised, especially those age $15-19$. Female genital cutting is common in the Northern and Central zones (more than 40 percent). It is much less common (less than 10 percent) in the rest of the country. More than 80 percent of women in Manyara region have been circumcised.

Almost all women and men (approximately nine in ten) say that they favour the discontinuation of the practice of FGC. Even among women who are circumcised themselves, 78 percent believe that FGC should be discontinued.

Maternal Mortality. The 2004-05 TDHS included questions on survival of siblings to measure adult and maternal mortality. The estimate of the maternal mortality ratio (MMR) for the 10-year period preceding the survey is 578 maternal deaths per 100,000 live births. Although this estimate is higher than the 1996 TDHS estimate of 529, the difference between the two estimates is not statistically significant, and it is not possible to conclude that there has been any change in maternal mortality.

Mortality rates at age $15-49$ are slightly higher among females than males (6.6 and 6.2 deaths per 1,000 years of exposure, respectively). A comparison of the 2004-05 TDHS and the 1996 TDHS rates indicates substantially higher adult mortality rates for both males and females at all ages in the later survey, with the exception of men age $15-24$. The summary measure of mortality for age group 15-49 shows an increase of 68 percent in female mortality rates and 24 percent in male
mortality rates from the 1996 TDHS rates. However, the 1996 TDHS report indicates the possibility of underreporting of deceased siblings. Thus, it is not possible to conclude that adult mortality has increased.

## Malaria

Nets. Forty-six percent of households own at least one mosquito net, but only 23 percent own an insecticide-treated net (ITN). Urban households are much more likely to own both types of nets than rural households.

One in three children under age five slept under a net the night before the interview, and 16 percent slept under an ITN. Similar net use was observed among pregnant women.

Net use is most common for children under one year, and decreases slightly with each year up to age five. There is no difference in net use by sex of the child, but urban children have more access to nets than rural children.

Antimalarials. Approximately half of pregnant women (52 percent) reported receiving at least one dose of $\mathrm{SP} /$ Fansidar during an antenatal care visit. However, just one-fifth ( 22 percent) of pregnant women received complete intermittent preventative treatment, or 2+ doses of SP/Fansidar during ANC visits.

Among children with fever, 58 percent received an antimalarial drug, and the vast majority of these received the medication on the day the fever started or the day after.

## HIV/AIDS and Other STIs

Awareness of AIDS. Knowledge of AIDS is widespread, with 99 percent of respondents having heard of AIDS. At least 95 percent of all respondents, regardless of background characteristics, have heard of the epidemic. An in-depth understanding of AIDS, however, is less common. Comprehensive knowledge of HIV/AIDS is defined as 1) knowing that both consistent condom use and limiting sex to one uninfected partner are HIV prevention methods, 2) being aware that a healthy-looking person can have HIV, and 3) rejecting the two most common local misconcep-tions-that HIV/AIDS can be transmitted through mosquito bites and by sharing food with someone who has AIDS. Less than half of the respondents have comprehensive knowledge of HIV/AIDS
transmission and prevention methods: 47 percent of women and 44 percent of men. Comprehensive knowledge is slightly lower among young people age 15-24.

HIV Testing and Counselling. In Tanzania, only 14 percent of the respondents have ever been tested for HIV. Twelve percent of women and men have been tested at some time and received the results of their HIV test, and 6 percent of women and 7 percent of men were tested during the year preceding the survey. HIV testing is far more common among the most educated and wealthy respondents. Respondents in urban areas are more likely than those in rural areas to have been tested. Regional variations are substantial, and differ among women and men. Among women, the prevalence of HIV testing in the past 12 months ranges from a low of 1 percent in Pemba North and Zanzibar North to a high of 16 percent in Dar es Salaam city. Among men, rates vary from 2 percent in Rukwa and Kagera, to 17 percent in Town West.

Although 27 percent of women who delivered a baby in the two years before the survey were counselled about HIV/AIDS, only 13 percent had an HIV test and received the results. The percentage of women who received information or counselling during an antenatal care visit rises steadily with increasing education and wealth, and is two times higher in urban than rural areas (45 and 22 percent, respectively).

HIV-Related Behavioural Indicators. Among those who reported having sex in the 12 months preceding the survey, a larger proportion of men than women reported having had more than one sexual partner ( 30 percent for men and 4 percent for women) and higher-risk sex, defined as sex with a nonmarital, noncohabiting partner ( 45 and 24 percent, respectively), at some time in the past 12 months. Twenty-two percent of men who are currently married or cohabiting reported having had sex with a nonmarital, noncohabiting partner in the past 12 months, compared with 9 percent of women. Just over half of men and onefourth of women reported using a condom the last time they had sex with a nonmarital, noncohabiting partner.

Paid sex is considered a special category of higher-risk sex. Eleven percent of men had commercial sex in the year before the survey. This is a much higher proportion than estimated in the 2003-04 THIS, but it should be noted that the
question was worded differently. Six in ten men reported condom use during the most recent time they paid for sex.

The period between the initiation of sexual activity and marriage is often a time of sexual experimentation and may involve risky behaviours. Twelve percent of young women age 15-24 and 9 percent of young men had had sex by age 15 . The data indicate that Tanzanian young people are waiting longer before initiating sexual activity.

For example, among women age 15-19, 15 percent had had sex by the age of 15 in the 1999 TRCHS compared with 11 percent in the 2004-05 TDHS. Among men age 15-19, the decrease was even more striking, from 24 to 13 percent. Among sexually active youth age $15-24,34$ percent of
women and 83 percent of men engaged in higherrisk sexual activity in the last 12 months. Onethird of these women and almost half of these men reported condom use in their last high-risk encounter.

Orphanhood. One percent of children under age 18 have lost both parents. However, 10 percent of children have lost one or both parents. The percentage of children under age 18 with one or both parents dead is slightly higher in urban areas (13 percent) than in rural areas ( 9 percent). Thirteen percent of children in the Southern highlands have lost one or both parents-the highest zonal prevalence in the country and the same as in Dar es Salaam city. A majority of children live with both parents ( 61 percent), but 16 percent live with neither parent.

## TANZANIA



## INTRODUCTION

### 1.1 Geography, History, and the Economy

## Geography

The United Republic of Tanzania is the largest country in East Africa, covering 940,000 square kilometres, 60,000 of which are inland water. Tanzania lies south of the equator and shares borders with eight countries: Kenya and Uganda to the north; Rwanda, Burundi, Democratic Republic of Congo, and Zambia to the west; and Malawi and Mozambique to the south.

Tanzania has an abundance of inland water, with several lakes and rivers. Lake Tanganyika runs along the western border and is Africa's deepest and longest freshwater lake and the world's second deepest lake. Lake Victoria is the world's second largest lake and drains into the Nile River and then to the Mediterranean Sea. The Rufiji River is Tanzania’s largest river and drains into the Indian Ocean south of Dar es Salaam. Although there are many rivers, only the Rufiji and Kagera are navigable by anything larger than a canoe.

One of Tanzania's most distinctive geological features is the Great Rift Valley, which was caused by geological faulting throughout eastern Africa and is associated with volcanic activity in the northeastern regions of the country. Two branches of the Great Rift Valley run through Tanzania. The western branch holds Lakes Tanganyika, Rukwa, and Nyasa, while the eastern branch ends in northern Tanzania and includes Lakes Natron, Manyara, and Eyasi.

Except for a narrow belt of 900 square kilometres along the coast, most of Tanzania lies 200 metres or more above sea level and much of the country is higher than 1,000 metres. In the north, Mount Kilimanjaro rises to 5,895 metres-the highest point in Africa.

The main climatic feature for most of the country is the long dry spell from May to October, followed by a period of rainfall between November and April. The main rainy season along the coast and the areas around Mount Kilimanjaro is from March to May, with short rains between October and December. In the western part of the country, around Lake Victoria, rainfall is well distributed throughout the year, with the peak period between March and May.

## History

Tanzania (then Tanganyika) became independent of British colonial rule in December 1961. One year later, on December 9, 1962, it became a republic, severing all links with the British crown except for its membership in the Commonwealth. The off-shore island of Zanzibar became independent on January 12, 1964, after the overthrow of the rule of the Sultanate. On April 26, 1964, Tanganyika and Zanzibar joined to form the United Republic of Tanzania.

Tanzania is currently operating under a multi-party democratic system of government with the president and National Assembly members elected every five years. Tanzania's president can hold office for a maximum of two five-year terms. For administrative purposes, the Mainland of Tanzania is divided into 21 regions ${ }^{1}$ and Zanzibar into 5 regions. Each region is subdivided into several districts.

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## Economy

Tanzania has a mixed economy in which agriculture plays a key role. Agriculture, which comprises crop, animal husbandry, forestry, fishery, and hunting subsectors, contributes the largest share of any sector to the gross domestic product (GDP). Major exports include coffee, cotton, tea, tobacco, cashew nuts, and sisal.

The GDP increased by 6.7 percent in 2004 according to the constant 1992 prices, compared with 5.7 percent in 2003. This increase is mainly attributed to growth in a number of subsectors, including agriculture; trade, hotels, and restaurants (including tourism); transport and communication; and financial and business services (President's Office, Planning and Privatization, 2005).

The growth of the GDP is considered to be the result of government initiatives to achieve sustainable economic growth and reduce nationwide poverty. For example, the government has initiated programmes to promote private sector participation in the economy. Such programmes are undertaken in line with the National Strategy for Growth and Reduction of Poverty (NSGRP)which in Kiswahili is known as MKUKUTA—and the Millennium Development Goals (MDG).

### 1.2 Population

Tanzania has so far undertaken four population censuses since independence in 1961. The first census in 1967 reported a total population of 12.3 million whereas, according to the 2002 census, the population has increased to 34.4 million (see Table 1.1). While the population of Tanzania has nearly trebled in the last four decades, the country is still sparsely populated, though population density is high in some parts of the country and has been increasing over time. In 1967, the average population density was 14 persons per square kilometre; by 2002, it had increased to 39 persons per square kilometre.

| Table 1.1 Basic demographic indicators |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Selected demographic indicators for Tanzania, 1967, 1978, 1988, 2002 |  |  |  |  |
|  |  |  |  |  |
| Indicator | 1967 | 1978 | 1988 | 2002 |
| Population (millions) | 12.3 | 17.5 | 23.1 | 34.4 |
| Intercensal growth rate (percent) | 2.6 | 3.2 | 2.8 | 2.9 |
| Sex ratio | 95.2 | 96.2 | 94.2 | 96.0 |
| Crude birth rate | 47 | 49 | 46 | 43 |
| Total fertility rate | 6.6 | 6.9 | 6.5 | 6.3 |
| Crude death rate | 24 | 19 | 15 | 14 |
| Infant mortality rate | 155 | 137 | 115 | 95 |
| Percent urban | 6.4 | 13.8 | 18.3 | 23.1 |
| Density (pop./km²) | 14 | 20 | 26 | 39 |
| Life expectancy at birth (years) | 42 | 44 | 50 | 51 |
| Source: Bureau of Statistics, 1967; 1978; 1988; National Bureau of Statistics, 2002 |  |  |  |  |

The high growth rate of the population in Tanzania is brought about by high fertility and declining mortality levels. According to the 2002 Population and Housing Census, the life expectancy at birth for Tanzanians is 51 years. The population of Tanzania has continued to be predominantly rural despite the fact that the proportion of urban residents has been increasing over time. The proportion of urban residents was just 6 percent in 1967, compared with 18 percent in 1988, and 23 percent in 2002.

### 1.3 Population, Family Planning, and HiV Policies and Programmes

## National Population Policy

The National Population Policy was adopted in 1992 to reinforce national development by improving the quality of life of Tanzanians (President's Office, the Planning Commission, 1992). Special emphasis is placed on regulating the population growth rate, enhancing population quality, and improving the health and welfare of women and children.

The policy provides guidelines for integrating population variables in the preparation and implementation of socioeconomic development plans. In this way, it acts as a critical guide to enable the government to monitor and evaluate national development plans more accurately and efficiently.

Other policy goals include the following:

- Improve the standard of living and the quality of life of the people through protection and improvement in the provision of basic human needs in such areas as health, nutrition, clean and safe water, housing, and environment
- Promote improvement in the health and welfare of the mother and child through the prevention of illness and premature deaths
- Strengthen family planning services to promote the health and welfare of the family, community, and nation and eventually reduce the rate of population growth
- Promote sustainable relationships between the population, resources, and environment
- Promote a more harmonious relationship between rural, urban, and regional development to achieve spatial distribution of the population conducive to the optimal use of the nation's resources
- Promote and strengthen proper youth upbringing and growth, including the creation of an environment that will allow optimal development of their various talents
- Urge the society at all levels to ensure that the elderly and the disabled are accorded due respect, care, and assistance in securing reliable means of sustaining their lives.


## Reproductive and Child Health Strategies

Reproductive and child health strategies aim to address key interventions as stipulated in the National Package of Reproductive and Child Health (RCH) Interventions (MOH, 1999; MOH, 2005). In line with the guiding principles of WHO Africa Region and the Tanzania Health Sector Reform, the RCH strategy also links and relates to a number of existing strategies. These include the following:

- The second health sector strategic plan July 2003-June 2008
- National malaria medium term strategic plan 2003-2007
- Health sector HIV/AIDS strategic plan July 2003-June 2007
- National plan of action for prevention of female genital mutilation and other harmful traditional practices 2001-2015
- National reproductive and child health communication strategy 2005-2010
- Expanded Programme on Immunisation strategic plan 2002-2007
- Integrated Management of Childhood Illness strategy 1998-2003
- Community-based RCH strategy
- National Adolescent Health and Development Strategy 2004-2008.

The vision of the RCH strategy is a healthy and well-informed Tanzanian population with access to high quality reproductive and child health services that are accessible, affordable, and sustainable, and which are provided through an efficient and effective support system. The mission of the strategy is to promote, facilitate, and support in an integrated manner the provision of reproductive and child health services to men, women, adolescents, and children in Tanzania. Such services include obstetrics and gynaecological care; safe motherhood programmes; diagnosis, treatment and prevention of sexually transmitted infections (STIs) and HIV/AIDS; family planning; integrated management of childhood illnesses (IMCI); immunisation; and prevention and treatment of nutritional deficiencies.

The goal of the RCH strategy is to reduce morbidity and mortality among men, women, adolescents, and children resulting from reproductive and child health problems by promoting and facilitating planning, implementation, monitoring, and evaluation of priority interventions at all levels of service delivery. To address the aforementioned goal, several key categories of care have been identified for implementation, including 1) maternal health, 2) child health, 3) family planning, 4) adolescent reproductive health, 5) male involvement and participation in reproductive health, and 6) elderly reproductive health.

## The National Policy on HIV/AIDS

As the HIV/AIDS epidemic affects all sectors, its control demands a well coordinated response. It is necessary to have policies that provide a framework, direction, and general principles for the national response, including prevention, care, and support to those infected and affected by the epidemic, and mitigation of its impact.

The National Policy on HIV/AIDS was adopted in November 2001 with the goal of providing a framework for leadership and coordination of the national multisectoral response to the HIV/AIDS epidemic. This includes formulation by all sectors of appropriate interventions to prevent the transmission of HIV/AIDS and other STIs, to protect and support vulnerable groups, and mitigate the social and economic impact of HIV/AIDS. It also provides a framework for strengthening the capacity of institutions, communities, and individuals in all sectors to stop the spread of the epidemic.

The Tanzania Commission for AIDS (TACAIDS) provides strategic leadership and coordination of multisectoral responses, including monitoring and evaluation, research, resource mobilisation, and advocacy. The National Policy on HIV/AIDS and the National Multisectoral Strategic Framework are tools to guide the implementation of national multisectoral responses.

### 1.4 Objectives and Organisation of the Survey

The 2004-05 Tanzania Demographic and Health Survey (TDHS) is the sixth in a series of national sample surveys conducted in Tanzania to measure levels, patterns, and trends in demographic and health indicators. The first one was the 1991-92 TDHS, which was followed by the Tanzania Knowledge, Attitudes, and Practices Survey (TKAPS) in 1994, the 1996 TDHS, the 1999 Tanzania Reproductive and Child Health Survey (TRCHS), and the 2003-04 Tanzania HIV/AIDS Indicator Survey (THIS).

The principal objective of the 2004-05 TDHS was to collect data on household characteristics, fertility levels and preferences, awareness and use of family planning methods, childhood mortality, maternal and child health, breastfeeding practices, antenatal care, childhood immunisation and diseases, nutritional status of young children and women, malaria prevention and treatment, women's status, female circumcision, sexual activity, and knowledge and behaviour regarding HIV/AIDS and other STIs.

The 2004-05 TDHS was implemented by the National Bureau of Statistics (NBS) in collaboration with the Office of the Chief Government Statistician-Zanzibar; the Reproductive and Child Health Section and the Policy and Planning Department of the Ministry of Health; and the Safe Motherhood Initiatives at the Ministry of Health and Social Welfare—Zanzibar. A Task Force Team
composed of members from the above institutions was formed to oversee all technical issues related to the survey.

Local costs pertaining to the survey were fully funded by the Poverty Eradication Division (PED) in the Vice President's Office through the Poverty Eradication pooled fund arrangement. Technical assistance was provided by ORC Macro through the MEASURE DHS programme and funded by USAID. ORC Macro also provided anthropometric equipment and haemoglobin testing supplies.

## Sample Design

The sample for the 2004-05 TDHS was designed to provide estimates for the entire country, for urban and rural areas of the Mainland, and for Zanzibar. Additionally, the sample design allowed for specific indicators, such as contraceptive use, to be calculated for each of the 26 regions.

To estimate geographic differentials for certain demographic indicators, this report collapses the regions of mainland Tanzania into seven geographic zones. Although these are not official administrative zones, this classification is used by the Reproductive and Child Health Section, Ministry of Health. The reason for using zones is that each geographic area will have a relatively large number of cases and sampling error will thus be reduced. It should be noted that the zones, which are defined below, are slightly different from the zones used in the 1991-92 and 1996 TDHS reports-

Western: Tabora, Shinyanga, Kigoma<br>Northern: Kilimanjaro, Tanga, Arusha, Manyara<br>Central: Dodoma, Singida<br>Southern Highlands: Mbeya, Iringa, Rukwa<br>Lake: Kagera, Mwanza, Mara<br>Eastern: Dar es Salaam, Pwani, Morogoro<br>Southern: Lindi, Mtwara, Ruvuma<br>Zanzibar: Zanzibar North, Zanzibar South, Town West, Pemba North, Pemba South

A representative probability sample of 10,312 households was selected for the 2004-05 TDHS sample to provide an expected sample of 10,000 eligible women. The sample was selected in two stages. In the first stage, 475 clusters were selected from a list of enumeration areas from the 2002 Population and Housing Census. Eighteen clusters were selected in each region except Dar es Salaam, where 25 clusters were selected.

In the second stage, a complete household listing exercise was carried out between June and August 2004 within all the selected clusters. Households were then systematically selected for participation in the survey. Twenty-two households were selected from each of the clusters in all regions except for Dar es Salaam where 16 households were selected.

All women age 15-49 who were either permanent residents of the households in the 2004-05 TDHS sample or visitors present in the household on the night before the survey were eligible to be interviewed. In a subsample of one-third of all the households selected for the survey, all men age 1549 were eligible to be interviewed if they were either permanent residents or visitors present in the household on the night before the survey.

Tables pertaining to the sample implementation are presented in Appendix A.

## Questionnaires

Three questionnaires were used for the 2004-05 TDHS: the Household Questionnaire, the Women's Questionnaire, and the Men's Questionnaire. The content of these questionnaires was based on the model questionnaires developed by the MEASURE DHS programme. To reflect relevant issues in population and health in Tanzania, the questionnaires were adapted during a series of technical
meetings with various stakeholders from government ministries and agencies, nongovernmental organisations, and international donors. The final draft of the questionnaire was discussed at a large stakeholders’ meeting organised by the NBS. The adapted questionnaires were translated from English into Kiswahili and pretested during July and August 2004. The final versions of the English questionnaires are attached in Appendix E.

The Household Questionnaire was used to list all the usual members and visitors in the selected households. Some basic information was collected on the characteristics of each person listed, including age, sex, education, and relationship to the head of the household. For children under 18, survival status of the parents was determined. The main purpose of the Household Questionnaire was to identify women and men who were eligible for the individual interview. The Household Questionnaire also collected information on characteristics of the household's dwelling unit, such as the source of water, type of toilet facilities, materials used for the floor of the house, ownership of various durable goods, and ownership and use of mosquito nets.

The Household Questionnaire was also used to record height, weight, and haemoglobin measurements of women age 15-49 and children under age 6, and to record whether a household used cooking salt fortified with iodine.

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

- Background characteristics (e.g., education, residential history, media exposure)
- Birth history and childhood mortality
- Knowledge and use of family planning methods
- Fertility preferences
- Antenatal and delivery care
- Breastfeeding and infant feeding practices
- Vaccinations and childhood illnesses
- Marriage and sexual activity
- Woman's work and husband's background characteristics
- Awareness and behaviour regarding AIDS and other STIs
- Female genital cutting
- Maternal mortality.

The Men's Questionnaire was administered to all men age 15-49 living in every third household in the 2004-05 TDHS sample. The Men's Questionnaire collected much of the same information found in the Women's Questionnaire, but was shorter because it did not contain a detailed reproductive history or questions on maternal and child health or nutrition.

## Training of Field Staff

More than 100 people were recruited by the NBS to serve as supervisors, field editors, male and female interviewers, quality control personnel, and reserves. As in the previous surveys, the Ministry of Health was requested to secure the service of trained nurses to work as field staff. They all participated in the main interviewer training, which began on September 13, 2004 in Moshi and lasted for three weeks. Staff from the NBS and invited experts led the training, which was conducted mainly in Kiswahili and included lectures, presentations, practical demonstrations, and practice interviewing in small groups. The training included two days of field practice. The participants also received training on height and weight measurements and haemoglobin testing. Two experts from the Tanzanian Food and Nutrition Centre led those training sessions. A series of lectures was also held
specifically for the group comprising supervisors, field editors, quality control personnel, and field coordinators.

## Fieldwork

Data collection began on October 7, 2004 and was completed in mid-February 2005. There was a total of 14 data collection teams, each consisting of 4 female interviewers, 1 male interviewer, a supervisor, a field editor, and a driver. The field editor and supervisor were responsible for reviewing all questionnaires for quality and consistency before the team's departure from the cluster. Fieldwork supervision was also coordinated at NBS headquarters. Four officers periodically visited teams to review their work and monitor data quality. Quality control personnel also independently reinterviewed certain households after the departure of the teams. Close contact between NBS headquarters and the data collection teams was maintained using cell phones. ORC Macro staff participated in field supervision of interviews, height and weight measurements, and haemoglobin testing.

## Data Processing

The processing of the 2004-05 TDHS results began shortly after the fieldwork commenced. Completed questionnaires were returned periodically from the field to NBS headquarters, where they were entered and edited by data processing personnel who were specially trained for this task. The data processing personnel included a supervisor, a questionnaire administrator who ensured that the expected number of questionnaires from all clusters were received, three office editors, ten data entry operators, and a secondary editor. Data were entered using the computer package CSPro. All data were entered twice ( 100 percent verification). The concurrent processing of the data was an advantage because NBS was able to advise field teams of problems detected during the data entry. In particular, tables were generated to check various data quality parameters. As a result, specific feedback was given to the teams to improve performance. The data entry and editing phase of the survey was completed in April 2005.

## Response Rates

Table 1.2 shows household and individual response rates for the 2004-05 TDHS. Response rates are important because high nonresponse may affect the reliability of the results. A total of 10,312 households were selected for the sample, of which 9,852 were found to be occupied during data collection. The shortfall was largely the result of structures that were found to be vacant or destroyed. Of the 9,852 existing households, 9,735 were successfully interviewed, yielding a household response rate of 99 percent.

In these households, 10,611 women were identified as eligible for the individual interview. Interviews were completed with 97 percent of them. Of the 2,871 eligible men identified in the subsample of households selected, 92 percent were successfully interviewed.

The principal reason for nonresponse among both eligible women and men was the failure to find them at home despite repeated visits to the household. The lower response rate for men reflects the more frequent and longer absences of men from the household.

Table 1.2 Results of the household and individual interviews
Number of households, number of interviews, and response rates, according to residence, Tanzania 2004-05

| Result | Residence |  |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Mainland |  |  | Zanzibar |  |
|  | Urban | Rural | Total |  |  |
| Household interviews |  |  |  |  |  |
| Households selected | 1,952 | 6,370 | 8,322 | 1,990 | 10,312 |
| Households occupied | 1,818 | 6,114 | 7,932 | 1,920 | 9,852 |
| Households interviewed | 1,783 | 6,064 | 7,847 | 1,888 | 9,735 |
| Household response rate | 98.1 | 99.2 | 98.9 | 98.3 | 98.8 |
| Interviews with women |  |  |  |  |  |
| Number of eligible women | 2,044 | 6,303 | 8,347 | 2,264 | 10,611 |
| Number of eligible women interviewed | 1,985 | 6,132 | 8,117 | 2,212 | 10,329 |
| Eligible woman response rate | 97.1 | 97.3 | 97.2 | 97.7 | 97.3 |
| Interviews with men |  |  |  |  |  |
| Number of eligible men | 528 | 1,751 | 2,279 | 592 | 2,871 |
| Number of eligible men interviewed | 475 | 1,621 | 2,096 | 539 | 2,635 |
| Eligible man response rate | 90.0 | 92.6 | 92.0 | 91.0 | 91.8 |

## HOUSEHOLD POPULATION AND HOUSING CHARACTERISTICS

The purpose of this chapter is to provide a descriptive summary of some demographic and socioeconomic characteristics of the population in the households sampled in the 2004-05 TDHS. Also examined are environmental conditions, such as housing facilities and household characteristics. The information provided is intended to facilitate interpretation of the key demographic, socioeconomic, and health indices. It is further intended to assist in the assessment of the representativeness of the survey.

For the purpose of the 2004-05 TDHS, a household was defined as a person or a group of persons, related or unrelated, who live together and share a common source of food. The Household Questionnaire (see Appendix E) was used to collect information on all usual residents and visitors who spent the night preceding the interview in the household. This method of data collection allows the analysis of either de jure (usual residents) or de facto (those who are there at the time of the survey) populations.

The wealth index, which is used as a background characteristic in many tables, has been tested in a number of countries in relation to inequities in household income, use of health services, and health outcomes (Rutstein and Johnson, 2004; Rutstein et al., 2000). It is an indicator of the level of wealth that is consistent with expenditure and income measures (Rutstein, 1999). The wealth index was constructed using household asset data and principal components analysis. Asset information was collected in the 2004-05 TDHS Household Questionnaire and covers information on household ownership of a number of consumer items ranging from a television to a bicycle or car, as well as dwelling characteristics such as source of drinking water, type of sanitation facilities, and type of materials used in dwelling construction.

Each asset was assigned a weight (factor score) generated through principal component analysis, and the resulting asset scores were standardized in relation to a standard normal distribution with a mean of zero and standard deviation of one (Gwatkin et al., 2000). Each household was then assigned a score for each asset, and the scores were summed for each household. Individuals were ranked according to the total score of the household in which they resided. The sample was then divided into quintiles from one (lowest) to five (highest).

### 2.1 Population by Age and Sex

Age and sex are important demographic variables and are the primary basis of demographic classification in vital statistics, censuses, and surveys. They are also very important variables in the study of mortality, fertility, and marriage. The distribution of the de facto household population in the 2004-05 TDHS is shown in Table 2.1 by five-year age groups, according to sex and residence.

Because of relatively high levels of fertility in the past, Tanzania has a larger proportion of its population in the younger age groups than in the older age groups. Table 2.1 indicates that just less than half ( 47 percent) of the population is under age 15 , with most of the other half ( 49 percent) age 15 to 64 ; the remaining 4 percent is age 65 and above. With only about half of the population in the economically productive age range (15-64), a substantial burden is placed on persons age 15-64 to support older and younger household members. The age dependency ratio, an indicator of the dependency responsibility of adults in their productive years, is 104 in Tanzania, indicating that there are 104 dependents for every 100 persons in the productive age group (15-64). This pattern is similar to that found in the 1996 TDHS and the 1999 TRCHS.

Table 2.1 Household population by age, sex, and residence
Percent distribution of the de facto household population by five-year age groups, according to sex and residence, Tanzania 2004-05

| Age | Mainland urban |  |  | Mainland rural |  |  | Zanzibar |  |  | Total |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male | Female | Total | Male | Female | Total | Male | Female | Total | Male | Female | Total |
| <5 | 16.0 | 14.2 | 15.1 | 19.7 | 18.7 | 19.2 | 16.8 | 15.4 | 16.0 | 18.8 | 17.5 | 18.2 |
| 5-9 | 13.3 | 12.0 | 12.6 | 16.7 | 14.7 | 15.7 | 16.3 | 14.2 | 15.2 | 15.9 | 14.0 | 15.0 |
| 10-14 | 12.5 | 12.5 | 12.5 | 14.9 | 13.3 | 14.1 | 14.7 | 13.5 | 14.1 | 14.4 | 13.1 | 13.7 |
| 15-19 | 10.9 | 12.2 | 11.6 | 9.4 | 9.0 | 9.2 | 11.2 | 11.3 | 11.3 | 9.8 | 9.8 | 9.8 |
| 20-24 | 9.7 | 11.1 | 10.4 | 6.7 | 7.9 | 7.4 | 7.7 | 9.0 | 8.4 | 7.4 | 8.7 | 8.1 |
| 25-29 | 8.9 | 10.6 | 9.8 | 6.2 | 7.2 | 6.7 | 6.4 | 7.6 | 7.0 | 6.8 | 8.0 | 7.4 |
| 30-34 | 7.0 | 8.1 | 7.6 | 5.3 | 6.2 | 5.8 | 5.0 | 6.1 | 5.6 | 5.7 | 6.7 | 6.2 |
| 35-39 | 5.3 | 4.5 | 4.9 | 4.0 | 4.4 | 4.2 | 4.5 | 5.0 | 4.8 | 4.3 | 4.4 | 4.4 |
| 40-44 | 4.0 | 3.2 | 3.6 | 3.9 | 3.6 | 3.7 | 4.5 | 4.4 | 4.5 | 4.0 | 3.5 | 3.7 |
| 45-49 | 2.8 | 3.1 | 3.0 | 2.5 | 3.3 | 2.9 | 3.0 | 2.8 | 2.9 | 2.6 | 3.2 | 2.9 |
| 50-54 | 2.9 | 2.7 | 2.8 | 2.3 | 3.0 | 2.6 | 2.3 | 3.5 | 2.9 | 2.4 | 2.9 | 2.7 |
| 55-59 | 2.3 | 1.7 | 2.0 | 2.0 | 2.4 | 2.2 | 2.1 | 2.0 | 2.0 | 2.1 | 2.2 | 2.1 |
| 60-64 | 1.6 | 1.0 | 1.3 | 1.7 | 1.7 | 1.7 | 1.9 | 1.8 | 1.8 | 1.7 | 1.6 | 1.6 |
| 65-69 | 1.3 | 1.2 | 1.2 | 1.3 | 1.6 | 1.4 | 1.0 | 1.2 | 1.1 | 1.3 | 1.5 | 1.4 |
| 70-74 | 0.7 | 0.6 | 0.7 | 1.5 | 1.4 | 1.5 | 1.2 | 1.2 | 1.2 | 1.3 | 1.2 | 1.3 |
| 75-79 | 0.3 | 0.4 | 0.4 | 0.7 | 0.8 | 0.7 | 0.6 | 0.4 | 0.5 | 0.6 | 0.7 | 0.6 |
| $80+$ | 0.5 | 0.7 | 0.6 | 0.9 | 1.1 | 1.0 | 0.7 | 0.5 | 0.6 | 0.8 | 1.0 | 0.9 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Number | 5,044 | 5,459 | 10,502 | 16,617 | 17,711 | 34,328 | 634 | 693 | 1,326 | 22,294 | 23,863 | 46,156 |

Figure 2.1 illustrates the age structure of the household population in a population pyramid. The wide base of the pyramid reflects the young age structure of the Tanzanian population and is an indication of high fertility. This pattern is similar to but smoother than the ones observed in the 1996 TDHS, 1999 TRCHS, and 2002 Population and Housing Census.

Figure 2.1 Population Pyramid


TDHS 2004-05

### 2.2 Household Composition

Information about the composition of households by sex of the head of the household and size of the household is presented in Table 2.2. These characteristics are important because they are associated with aspects of household welfare. Female-headed households are, for example, typically
poorer than male-headed households. Larger households are generally associated with greater crowding in the dwelling, as well as poverty and unfavourable health conditions.

Table 2.2 shows that women head one-quarter of Tanzanian households, similar to the level observed in the 1999 TRCHS. The average household size is 4.9 persons, with the average number of members lower on the Mainland (4.8) than in Zanzibar (5.6).

Households with 9 or more members account for 7 percent of Mainland urban households, compared with 10 percent of Mainland rural households and 14 percent of households in Zanzibar. Conversely, the proportion of single-person households is higher in Mainland urban households (14 percent) than in Mainland rural households (7 percent) or Zanzibar (5 percent).

Table 2.2 Household composition
Percent distribution of households by sex of head of household and by household size, according to residence, Tanzania 2004-05

|  | Residence |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
|  | Mainland |  |  |  |  |
| Characteristic | Urban | Rural | Total | Zanzibar | Total |
| Sex of head of household |  |  |  |  |  |
| Male | 77.2 | 74.9 | 75.5 | 77.1 | 75.5 |
| Female | 22.8 | 25.1 | 24.5 | 22.9 | 24.5 |
|  |  |  |  |  |  |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
|  |  |  |  |  |  |
| Number of usual members |  |  |  |  |  |
| 1 | 13.9 | 7.2 | 8.9 | 4.6 | 8.8 |
| 2 | 13.2 | 10.7 | 11.4 | 8.6 | 11.3 |
| 3 | 16.8 | 15.0 | 15.5 | 13.1 | 15.4 |
| 4 | 15.3 | 15.6 | 15.5 | 13.1 | 15.5 |
| 5 | 12.8 | 15.0 | 14.5 | 13.9 | 14.4 |
| 6 | 9.4 | 12.2 | 11.5 | 12.1 | 11.5 |
| 7 | 6.5 | 8.3 | 7.9 | 12.3 | 8.0 |
| 8 | 5.0 | 5.5 | 5.4 | 8.4 | 5.5 |
| $9+$ | 7.0 | 10.3 | 9.4 | 13.9 | 9.5 |
|  |  |  |  |  |  |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Number of households | 2,492 | 6,990 | 9,483 | 252 | 9,735 |
| Mean size | 4.3 | 5.0 | 4.8 | 5.6 | 4.9 |

Note: Table is based on de jure members (i.e., usual residents).

### 2.3 Children's Living Arrangements and Parental Survival

Table 2.3 presents data on the prevalence of orphanhood in Tanzania. The table shows that 61 percent of children under age 18 are living with both parents, 19 percent live with their mothers but not their fathers; 5 percent live with their fathers but not their mothers; and 15 percent live with neither of their natural parents.

Not surprisingly, the proportion of children living with both parents decreases with age. That is, younger children are more likely than older children to live with both natural parents. Among children under age 18, urban children are more likely not to live with either parent than rural children (20 and 14 percent, respectively).

Table 2.3 also provides data on the extent of orphanhood, or the proportion of children whose natural fathers or mothers have died. The data reveal that 3 percent of children under age 18 have lost at least one natural parent, and 1 percent have lost both natural parents.

| Percent distribution of de jure children under age 18 by children's living arrangements and survival status of parents, according to background characteristics, Tanzania 2004-05 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Living with both parents | Living with mother but not father |  | Living with father but not mother |  | Not living with either parent |  |  |  | Missing information on father/ mother | Percentage orphaned $^{1}$ | Total | Number of children |
| Background characteristic |  | Father alive | Father dead | Mother alive | Mother dead | Both alive | Only father alive | Only mother alive | Both dead |  |  |  |  |
| Age |  |  |  |  |  |  |  |  |  |  |  |  |  |
| <2 | 77.6 | 19.7 | 1.1 | 0.1 | 0.0 | 0.9 | 0.2 | 0.0 | 0.0 | 0.3 | 1.4 | 100.0 | 3,447 |
| 2-4 | 69.0 | 17.1 | 2.2 | 2.0 | 0.3 | 7.6 | 0.5 | 0.5 | 0.2 | 0.6 | 3.8 | 100.0 | 4,896 |
| 5-9 | 61.5 | 13.9 | 4.5 | 4.4 | 1.2 | 10.7 | 0.9 | 1.4 | 0.7 | 0.9 | 8.7 | 100.0 | 7,012 |
| 10-14 | 52.2 | 12.0 | 5.6 | 6.1 | 2.0 | 13.1 | 2.5 | 3.2 | 2.2 | 1.0 | 15.8 | 100.0 | 6,409 |
| 15-17 | 41.5 | 11.8 | 6.8 | 4.3 | 2.5 | 19.5 | 2.9 | 4.4 | 3.4 | 2.9 | 20.4 | 100.0 | 2,858 |
| Sex |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Male | 61.2 | 14.8 | 4.2 | 4.0 | 1.4 | 9.0 | 1.3 | 1.9 | 1.1 | 1.1 | 10.0 | 100.0 | 12,441 |
| Female | 59.7 | 14.5 | 4.0 | 3.5 | 1.0 | 11.7 | 1.5 | 1.8 | 1.3 | 1.0 | 9.8 | 100.0 | 12,180 |
| Residence |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Urban | 54.7 | 14.6 | 4.1 | 4.2 | 1.4 | 12.8 | 1.6 | 2.7 | 2.6 | 1.3 | 12.5 | 100.0 | 5,130 |
| Rural | 62.0 | 14.6 | 4.1 | 3.6 | 1.2 | 9.7 | 1.3 | 1.6 | 0.9 | 1.0 | 9.2 | 100.0 | 19,491 |
| Mainland/Zanzibar |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Mainland | 60.3 | 14.7 | 4.2 | 3.8 | 1.3 | 10.2 | 1.4 | 1.8 | 1.2 | 1.0 | 10.0 | 100.0 | 23,913 |
| Total urban | 54.3 | 14.6 | 4.2 | 4.6 | 1.4 | 12.5 | 1.7 | 2.6 | 2.7 | 1.3 | 12.8 | 100.0 | 5,030 |
| Dar es Salaam city | 53.8 | 11.9 | 2.5 | 6.2 | 1.5 | 14.3 | 2.6 | 2.5 | 4.2 | 0.7 | 13.3 | 100.0 | 1,362 |
| Other urban | 54.5 | 15.7 | 4.9 | 3.9 | 1.4 | 11.9 | 1.4 | 2.7 | 2.1 | 1.5 | 12.6 | 100.0 | 3,668 |
| Total rural | 62.0 | 14.8 | 4.1 | 3.6 | 1.2 | 9.6 | 1.3 | 1.6 | 0.9 | 1.0 | 9.3 | 100.0 | 18,883 |
| Zanzibar | 64.9 | 10.6 | 2.7 | 3.2 | 0.4 | 13.9 | 1.4 | 2.2 | 0.4 | 0.4 | 7.0 | 100.0 | 708 |
| Unguja | 61.5 | 11.5 | 2.3 | 3.9 | 0.2 | 16.0 | 1.5 | 2.4 | 0.3 | 0.4 | 6.8 | 100.0 | 443 |
| Pemba | 70.7 | 9.2 | 3.3 | 2.0 | 0.7 | 10.4 | 1.2 | 1.7 | 0.5 | 0.3 | 7.4 | 100.0 | 265 |
| Zone |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Western | 65.3 | 12.5 | 3.3 | 4.3 | 1.4 | 9.2 | 1.4 | 1.6 | 0.5 | 0.5 | 8.1 | 100.0 | 4,989 |
| Northern | 58.8 | 16.9 | 5.1 | 2.5 | 0.8 | 11.1 | 1.1 | 1.4 | 1.1 | 1.1 | 9.7 | 100.0 | 3,482 |
| Central | 61.5 | 13.8 | 4.3 | 2.9 | 1.8 | 10.2 | 1.6 | 0.9 | 1.2 | 1.8 | 10.0 | 100.0 | 2,102 |
| Southern highlands | 62.7 | 14.3 | 5.9 | 2.3 | 1.3 | 7.1 | 1.6 | 2.1 | 1.9 | 0.8 | 12.9 | 100.0 | 3,621 |
| Lake | 59.5 | 15.9 | 4.3 | 3.6 | 1.2 | 10.7 | 0.8 | 2.0 | 0.8 | 1.2 | 9.3 | 100.0 | 4,831 |
| Eastern | 56.4 | 13.8 | 2.7 | 5.3 | 1.4 | 12.8 | 2.0 | 2.0 | 2.6 | 1.0 | 11.0 | 100.0 | 3,050 |
| Southern | 52.6 | 17.1 | 3.0 | 6.7 | 1.2 | 12.1 | 1.5 | 2.9 | 1.5 | 1.5 | 10.2 | 100.0 | 1,838 |
| Region 6 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Dodoma | 60.5 | 12.6 | 5.4 | 2.4 | 2.3 | 11.1 | 2.0 | 0.7 | 1.5 | 1.5 | 11.9 | 100.0 | 1,258 |
| Arusha | 63.6 | 13.7 | 5.3 | 2.4 | 0.3 | 10.6 | 0.7 | 1.1 | 1.5 | 0.8 | 9.0 | 100.0 | 828 |
| Kilimanjaro | 60.0 | 11.7 | 5.2 | 1.9 | 1.5 | 13.8 | 1.1 | 2.1 | 1.1 | 1.6 | 11.1 | 100.0 | 926 |
| Tanga | 49.2 | 25.2 | 6.0 | 3.6 | 0.5 | 9.3 | 1.4 | 1.8 | 1.3 | 1.6 | 11.4 | 100.0 | 945 |
| Morogoro | 60.5 | 13.9 | 1.6 | 4.8 | 1.4 | 11.8 | 1.3 | 2.0 | 1.5 | 1.4 | 8.1 | 100.0 | 1,108 |
| Pwani | 54.9 | 18.1 | 5.5 | 3.9 | 1.1 | 11.3 | 2.2 | 1.1 | 1.0 | 0.8 | 11.3 | 100.0 | 581 |
| Dar es Salaam | 53.8 | 11.9 | 2.5 | 6.2 | 1.5 | 14.3 | 2.6 | 2.5 | 4.2 | 0.7 | 13.3 | 100.0 | 1,362 |
| Lindi | 50.5 | 18.5 | 3.2 | 6.4 | 1.3 | 12.4 | 3.4 | 3.5 | 0.3 | 0.5 | 11.7 | 100.0 | 437 |
| Mtwara | 50.4 | 19.8 | 3.4 | 7.5 | 1.3 | 12.3 | 1.1 | 2.6 | 0.7 | 1.0 | 9.3 | 100.0 | 721 |
| Ruvuma | 56.3 | 13.4 | 2.3 | 6.0 | 1.1 | 11.6 | 0.6 | 2.9 | 3.1 | 2.7 | 10.2 | 100.0 | 680 |
| Iringa | 56.1 | 14.2 | 9.4 | 1.4 | 1.8 | 7.0 | 3.3 | 3.0 | 3.1 | 1.0 | 20.7 | 100.0 | 973 |
| Mbeya | 62.8 | 15.8 | 4.2 | 2.8 | 0.5 | 8.2 | 1.3 | 2.0 | 1.4 | 1.0 | 9.4 | 100.0 | 1,773 |
| Singida | 63.1 | 15.5 | 2.7 | 3.7 | 1.1 | 8.8 | 1.2 | 1.2 | 0.6 | 2.2 | 7.1 | 100.0 | 843 |
| Tabora | 62.7 | 11.5 | 3.1 | 5.8 | 1.4 | 10.7 | 1.6 | 2.1 | 0.3 | 0.8 | 8.6 | 100.0 | 1,270 |
| Rukwa | 69.8 | 11.3 | 5.5 | 2.3 | 2.5 | 5.2 | 0.6 | 1.2 | 1.5 | 0.2 | 11.3 | 100.0 | 875 |
| Kigoma | 74.1 | 11.0 | 4.7 | 1.8 | 0.9 | 4.3 | 1.6 | 0.9 | 0.6 | 0.2 | 8.6 | 100.0 | 1,339 |
| Shinyanga | 61.7 | 14.0 | 2.5 | 5.0 | 1.6 | 11.2 | 1.2 | 1.7 | 0.5 | 0.6 | 7.6 | 100.0 | 2,380 |
| Kagera | 65.3 | 13.7 | 5.7 | 3.4 | 0.6 | 7.0 | 0.5 | 1.9 | 1.5 | 0.3 | 10.5 | 100.0 | 1,465 |
| Mwanza | 58.5 | 15.1 | 2.4 | 3.8 | 1.5 | 13.5 | 0.9 | 2.2 | 0.5 | 1.7 | 7.6 | 100.0 | 2,392 |
| Mara | 53.4 | 20.9 | 6.9 | 3.5 | 1.3 | 9.5 | 0.8 | 1.8 | 0.6 | 1.4 | 11.5 | 100.0 | 975 |
| Manyara | 63.7 | 16.6 | 3.8 | 1.9 | 0.7 | 10.5 | 1.2 | 0.5 | 0.4 | 0.5 | 6.7 | 100.0 | 783 |
| Zanzibar North | 72.5 | 6.6 | 1.8 | 2.6 | 0.0 | 14.0 | 0.9 | 1.4 | 0.0 | 0.3 | 4.2 | 100.0 | 121 |
| Zanzibar South | 54.6 | 11.1 | 2.7 | 4.8 | 0.2 | 21.3 | 0.9 | 3.1 | 0.3 | 0.9 | 7.5 | 100.0 | 65 |
| Town West | 58.1 | 13.8 | 2.5 | 4.2 | 0.3 | 15.6 | 1.9 | 2.7 | 0.5 | 0.3 | 7.9 | 100.0 | 257 |
| Pemba North | 71.7 | 8.4 | 4.3 | 1.5 | 0.5 | 11.0 | 0.8 | 1.4 | 0.3 | 0.2 | 7.3 | 100.0 | 141 |
| Pemba South | 69.5 | 10.1 | 2.2 | 2.7 | 0.8 | 9.7 | 1.6 | 2.0 | 0.8 | 0.5 | 7.6 | 100.0 | 124 |
| Wealth quintile |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Lowest | 60.1 | 17.4 | 5.9 | 3.1 | 1.2 | 8.2 | 1.1 | 1.5 | 0.6 | 0.8 | 10.4 | 100.0 | 5,273 |
| Second | 64.0 | 13.8 | 4.3 | 4.0 | 1.0 | 8.7 | 1.2 | 1.5 | 0.5 | 1.1 | 8.6 | 100.0 | 5,014 |
| Middle | 61.7 | 14.0 | 4.2 | 2.7 | 1.2 | 10.4 | 1.4 | 2.0 | 1.1 | 1.2 | 10.1 | 100.0 | 5,085 |
| Fourth | 59.7 | 15.2 | 3.3 | 4.1 | 1.2 | 10.9 | 1.4 | 1.7 | 1.4 | 0.9 | 9.2 | 100.0 | 5,018 |
| Highest | 56.3 | 12.1 | 2.6 | 5.1 | 1.4 | 14.3 | 1.8 | 2.7 | 2.8 | 1.0 | 11.4 | 100.0 | 4,232 |
| Total $<15$ | 63.0 | 15.0 | 3.8 | 3.7 | 1.1 | 9.1 | 1.2 | 1.5 | 0.9 | 0.8 | 8.5 | 100.0 | 21,763 |
| Total $<18$ | 60.5 | 14.6 | 4.1 | 3.8 | 1.2 | 10.3 | 1.4 | 1.8 | 1.2 | 1.0 | 9.9 | 100.0 | 24,621 |

### 2.4 Education of the Household Population

Education is a key determinant of the lifestyle and status an individual enjoys in a society. Studies have consistently shown that educational attainment has a strong effect on reproductive behaviour, contraceptive use, fertility, infant and child mortality, morbidity, and attitudes and awareness related to family health and hygiene. Results from the 2004-05 TDHS can be used to look at educational attainment among household members and school attendance, repetition, and drop-out rates among youth.

It is worth noting that calculating education indicators is particularly challenging for Tanzania, given the differences in the formal education system between the Mainland and Zanzibar, as well changes in the different systems over time. For the purposes of the analysis presented below, all education indicators have been calculated using the following assumptions: the official age for entry into the primary level is age seven; the official primary level of schooling consists of seven standards; those with at least some post-primary training are assumed to have completed the primary level; and the number of years assumed for completion of secondary school is six.

## Educational Attainment

Tables 2.4.1 and 2.4.2 present data on educational attainment of household members age six and older for each sex. The results confirm that there is a gap in educational attainment between males and females. Although the majority of the household population age 6 and older has some education, 25 percent of males have never attended school, compared with 33 percent of females. The median number of years of schooling for males is 3.2, which is nearly 1 year more than the median number of years of schooling for females (2.4).

Urban residents are more likely to have attended school and to have remained in school for a longer period than rural residents. The median number of years of schooling is 6.1 years among both urban males and females, compared with just 2.5 and 1.5 years of schooling for rural males and females, respectively.

Educational attainment also differs significantly among regions. For example, the highest proportions of the population who have never been to school are in Tabora ( 44 percent for males and 55 percent for females) and Pemba North ( 37 percent for males and 47 percent for females). The regions with the lowest proportions of household members who have never attended school are Dar es Salaam ( 12 percent for males and 14 percent for females) and Kilimanjaro ( 12 percent for males and 15 percent for females).

The most extreme variation in educational attainment among household members is evident across wealth quintiles. Among males, just 9 percent of those from the wealthiest households have never been to school, compared with 42 percent of those from the poorest households. A similar pattern applies to the female household population, though the wealth disparity is even wider for females than males. More than half of females ( 53 percent) from the poorest households have never been to school, compared with 13 percent from the wealthiest households.

| Percent distribution of the de facto female household population age six and over by highest level of education attended or completed, according to background characteristics, Tanzania 2004-05 |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Background characteristic | No education/ preprimary | Some primary | Completed primary ${ }^{1}$ | Secondary+ | Don't know/ missing | Total | Number | Median number of years |
| $\begin{array}{llllllll}\text { Age } & & \\ 6-9 & 53.0 & 46.5 & 0.0 & 0.0 & 0.5 & 100.0 & 2.689\end{array}$ |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| 10-14 | 11.9 | 83.8 | 3.7 | 0.6 | 0.1 | 100.0 | 3,126 | 2.3 |
| 15-19 | 21.4 | 27.9 | 39.9 | 10.8 | 0.0 | 100.0 | 2,341 | 6.0 |
| 20-24 | 22.2 | 16.3 | 51.1 | 10.5 | 0.0 | 100.0 | 2,071 | 6.2 |
| 25-29 | 18.5 | 15.7 | 56.4 | 9.2 | 0.2 | 100.0 | 1,915 | 6.3 |
| 30-34 | 19.4 | 16.1 | 55.3 | 8.9 | 0.3 | 100.0 | 1,587 | 6.3 |
| 35-39 | 23.1 | 15.6 | 55.2 | 6.0 | 0.1 | 100.0 | 1,056 | 6.2 |
| 40-44 | 34.4 | 19.1 | 41.7 | 4.7 | 0.1 | 100.0 | 837 | 5.5 |
| 45-49 | 53.9 | 23.2 | 18.6 | 4.0 | 0.2 | 100.0 | 771 | 0.0 |
| 50-54 | 60.7 | 24.5 | 12.1 | 2.3 | 0.4 | 100.0 | 696 | 0.0 |
| 55-59 | 66.7 | 25.7 | 6.5 | 0.6 | 0.5 | 100.0 | 526 | 0.0 |
| 60-64 | 79.1 | 18.6 | 1.7 | 0.6 | 0.0 | 100.0 | 373 | 0.0 |
| $65+$ | 86.8 | 12.0 | 0.9 | 0.0 | 0.4 | 100.0 | 1,029 | 0.0 |
| Residence 0 |  |  |  |  |  |  |  |  |
| Urban | 17.7 | 32.0 | 35.4 | 14.6 | 0.2 | 100.0 | 4,758 | 6.1 |
| Rural | 38.5 | 34.3 | 25.2 | 1.8 | 0.2 | 100.0 | 14,259 | 1.5 |
| Mainland/Zanzibar |  |  |  |  |  |  |  |  |
| Mainland | 33.3 | 33.8 | 28.2 | 4.5 | 0.2 | 100.0 | 18,450 | 2.4 |
| Total urban | 17.7 | 32.2 | 36.4 | 13.5 | 0.2 | 100.0 | 4,666 | 6.0 |
| Dar es Salaam city | 14.4 | 27.6 | 39.7 | 18.4 | 0.0 | 100.0 | 1,448 | 6.3 |
| Other urban | 19.3 | 34.3 | 35.0 | 11.2 | 0.2 | 100.0 | 3,218 | 5.1 |
| Total rural | 38.6 | 34.4 | 25.4 | 1.4 | 0.2 | 100.0 | 13,784 | 1.5 |
| Zanzibar | 31.5 | 32.0 | 12.1 | 24.3 | 0.1 | 100.0 | 567 | 3.3 |
| Unguja | 26.0 | 31.1 | 14.2 | 28.6 | 0.1 | 100.0 | 378 | 4.6 |
| Pemba | 42.4 | 33.8 | 8.1 | 15.5 | 0.2 | 100.0 | 189 | 0.9 |
| Zone |  |  |  |  |  |  |  |  |
| Western | 41.3 | 32.1 | 24.8 | 1.5 | 0.4 | 100.0 | 3,492 | 1.1 |
| Northern | 27.7 | 35.5 | 29.8 | 6.8 | 0.2 | 100.0 | 2,817 | 3.3 |
| Central | 40.0 | 32.9 | 25.2 | 1.9 | 0.1 | 100.0 | 1,608 | 1.4 |
| Southern highlands | 38.5 | 33.1 | 25.5 | 2.8 | 0.1 | 100.0 | 2,669 | 1.2 |
| Lake | 31.1 | 36.8 | 29.1 | 3.0 | 0.1 | 100.0 | 3,435 | 2.5 |
| Eastern | 23.8 | 30.8 | 34.3 | 11.1 | 0.1 | 100.0 | 2,835 | 4.5 |
| Southern | 32.2 | 35.8 | 28.0 | 3.6 | 0.4 | 100.0 | 1,595 | 2.6 |
| Region |  |  |  |  |  |  |  |  |
| Dodoma | 40.8 | 32.3 | 25.3 | 1.5 | 0.2 | 100.0 | 956 | 1.1 |
| Arusha | 27.8 | 31.1 | 30.6 | 10.5 | 0.0 | 100.0 | 674 | 4.3 |
| Kilimanjaro | 15.0 | 43.6 | 32.5 | 8.5 | 0.5 | 100.0 | 802 | 4.5 |
| Tanga | 31.6 | 35.1 | 28.0 | 5.2 | 0.1 | 100.0 | 792 | 2.2 |
| Morogoro | 31.1 | 36.8 | 27.5 | 4.3 | 0.2 | 100.0 | 880 | 2.2 |
| Pwani | 38.3 | 29.2 | 30.4 | 2.0 | 0.0 | 100.0 | 507 | 2.4 |
| Dar es Salaam | 14.4 | 27.6 | 39.7 | 18.4 | 0.0 | 100.0 | 1,448 | 6.3 |
| Lindi | 39.3 | 31.5 | 26.1 | 2.7 | 0.4 | 100.0 | 418 | 1.5 |
| Mtwara | 39.7 | 33.1 | 25.4 | 1.3 | 0.5 | 100.0 | 631 | 1.3 |
| Ruvuma | 18.2 | 42.2 | 32.5 | 7.0 | 0.2 | 100.0 | 546 | 3.7 |
| Iringa | 28.8 | 36.1 | 31.7 | 3.3 | 0.2 | 100.0 | 766 | 2.7 |
| Mbeya | 41.2 | 30.7 | 25.4 | 2.6 | 0.1 | 100.0 | 1,304 | 0.8 |
| Singida | 38.8 | 33.7 | 25.1 | 2.5 | 0.0 | 100.0 | 652 | 1.9 |
| Tabora | 54.5 | 23.6 | 20.1 | 1.4 | 0.5 | 100.0 | 930 | 0.0 |
| Rukwa | 44.9 | 34.5 | 17.7 | 2.7 | 0.2 | 100.0 | 599 | 0.1 |
| Kigoma | 33.9 | 35.0 | 29.0 | 2.0 | 0.1 | 100.0 | 894 | 2.2 |
| Shinyanga | 37.9 | 35.3 | 25.1 | 1.3 | 0.5 | 100.0 | 1,668 | 1.4 |
| Kagera | 32.3 | 38.2 | 28.4 | 1.0 | 0.0 | 100.0 | 1,062 | 2.4 |
| Mwanza | 31.2 | 36.5 | 28.4 | 3.6 | 0.2 | 100.0 | 1,679 | 2.5 |
| Mara | 28.8 | 35.1 | 31.5 | 4.4 | 0.2 | 100.0 | 693 | 2.8 |
| Manyara | 40.7 | 29.9 | 27.4 | 2.0 | 0.0 | 100.0 | 550 | 0.7 |
| Zanzibar North | 41.0 | 34.1 | 8.1 | 16.7 | 0.1 | 100.0 | 90 | 0.7 |
| Zanzibar South | 22.0 | 40.6 | 12.4 | 24.9 | 0.0 | 100.0 | 48 | 4.4 |
| Town West | 21.2 | 28.0 | 16.8 | 33.9 | 0.1 | 100.0 | 239 | 6.1 |
| Pemba North | 47.4 | 30.1 | 7.7 | 14.6 | 0.2 | 100.0 | 100 | 0.0 |
| Pemba South | 36.7 | 38.0 | 8.5 | 16.5 | 0.3 | 100.0 | 89 | 1.7 |
| Wealth quintile |  |  |  |  |  |  |  |  |
| Lowest | 52.6 | 29.7 | 17.0 | 0.3 | 0.3 | 100.0 | 3,689 | 0.0 |
| Second | 45.3 | 32.8 | 21.5 | 0.3 | 0.1 | 100.0 | 3,759 | 0.4 |
| Middle | 35.2 | 35.9 | 27.6 | 1.0 | 0.3 | 100.0 | 3,740 | 1.8 |
| Fourth | 22.5 | 39.8 | 33.9 | 3.6 | 0.1 | 100.0 | 3,706 | 3.5 |
| Highest | 13.0 | 30.8 | 37.5 | 18.5 | 0.2 | 100.0 | 4,123 | 6.2 |
| Total | 33.3 | 33.8 | 27.7 | 5.0 | 0.2 | 100.0 | 19,017 | 2.4 |
| Note: Totals include a small number of cases missing information. ${ }^{1}$ Completed Standard 7 or 8 |  |  |  |  |  |  |  |  |


| Table 2.4.2 Educational attainment of household population: male |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percent distribution of the de facto male household population age six and over by highest level of education attended or completed, according to background characteristics, Tanzania 2004-05 |  |  |  |  |  |  |  |  |
| Background characteristic | No education/ preprimary | Some primary | Completed primary ${ }^{1}$ | Secondary+ | Don't know/ missing | Total | Number | Median number of years |
| Age |  |  |  |  |  |  |  |  |
| $6-9$ | 60.4 | 39.3 | 0.0 | 0.0 | 0.2 | 100.0 | 2,830 | 0.0 |
| 10-14 | 13.1 | 84.3 | 2.2 | 0.3 | 0.1 | 100.0 | 3,199 | 1.8 |
| 15-19 | 12.3 | 45.8 | 33.2 | 8.8 | 0.0 | 100.0 | 2,182 | 5.0 |
| 20-24 | 16.2 | 19.0 | 51.5 | 13.2 | 0.1 | 100.0 | 1,659 | 6.3 |
| 25-29 | 12.8 | 17.6 | 57.2 | 12.3 | 0.1 | 100.0 | 1,518 | 6.4 |
| 30-34 | 13.2 | 15.2 | 59.9 | 11.4 | 0.3 | 100.0 | 1,273 | 6.4 |
| 35-39 | 10.3 | 14.3 | 65.3 | 10.0 | 0.1 | 100.0 | 968 | 6.4 |
| 40-44 | 13.2 | 16.4 | 57.9 | 12.0 | 0.5 | 100.0 | 885 | 6.4 |
| 45-49 | 19.2 | 26.8 | 43.4 | 10.6 | 0.0 | 100.0 | 580 | 6.2 |
| 50-54 | 25.8 | 32.5 | 31.9 | 9.8 | 0.0 | 100.0 | 540 | 3.9 |
| 55-59 | 34.1 | 37.4 | 19.6 | 8.5 | 0.4 | 100.0 | 462 | 3.4 |
| 60-64 | 34.7 | 46.7 | 11.4 | 7.2 | 0.0 | 100.0 | 385 | 3.1 |
| 65+ | 56.2 | 35.5 | 6.0 | 2.3 | 0.0 | 100.0 | 895 | 0.0 |
| Residence |  |  |  |  |  |  |  |  |
| Urban | 12.3 | 35.7 | 34.2 | 17.5 | 0.2 | 100.0 | 4,255 | 6.1 |
| Rural | 28.7 | 40.8 | 27.3 | 3.2 | 0.1 | 100.0 | 13,123 | 2.5 |
| Mainland/Zanzibar |  |  |  |  |  |  |  |  |
| Mainland | 24.7 | 39.5 | 29.5 | 6.1 | 0.1 | 100.0 | 16,872 | 3.2 |
| Total urban | 13.1 | 35.3 | 35.0 | 16.4 | 0.2 | 100.0 | 4,208 | 6.1 |
| Dar es Salaam city | 12.1 | 27.5 | 38.2 | 22.0 | 0.1 | 100.0 | 1,423 | 6.4 |
| Other urban | 13.6 | 39.2 | 33.4 | 13.5 | 0.2 | 100.0 | 2,786 | 5.8 |
| Total rural | 28.6 | 41.0 | 27.7 | 2.7 | 0.1 | 100.0 | 12,664 | 2.5 |
| Zanzibar | 22.9 | 39.7 | 12.6 | 24.6 | 0.2 | 100.0 | 505 | 3.9 |
| Unguja | 18.0 | 38.7 | 14.2 | 29.0 | 0.2 | 100.0 | 338 | 4.9 |
| Pemba | 32.9 | 41.8 | 9.3 | 15.8 | 0.3 | 100.0 | 168 | 2.1 |
| Zone |  |  |  |  |  |  |  |  |
| Western | 30.7 | 39.1 | 27.3 | 2.8 | 0.1 | 100.0 | 3,154 | 2.4 |
| Northern | 20.4 | 45.1 | 27.5 | 6.9 | 0.1 | 100.0 | 2,580 | 3.3 |
| Central | 33.1 | 35.5 | 28.4 | 2.9 | 0.1 | 100.0 | 1,413 | 2.4 |
| Southern highlands | 29.1 | 38.1 | 28.3 | 4.4 | 0.1 | 100.0 | 2,368 | 2.5 |
| Lake | 23.3 | 42.7 | 28.9 | 4.9 | 0.1 | 100.0 | 3,161 | 3.1 |
| Eastern | 17.6 | 32.7 | 35.5 | 14.2 | 0.1 | 100.0 | 2,713 | 6.1 |
| Southern | 20.7 | 42.8 | 31.1 | 5.3 | 0.1 | 100.0 | 1,484 | 3.4 |
| Region |  |  |  |  |  |  |  |  |
| Dodoma | 34.8 | 34.1 | 27.8 | 3.1 | 0.2 | 100.0 | 804 | 1.7 |
| Arusha | 24.4 | 36.1 | 29.9 | 9.3 | 0.3 | 100.0 | 566 | 3.7 |
| Kilimanjaro | 11.6 | 49.0 | 30.1 | 9.1 | 0.3 | 100.0 | 755 | 4.6 |
| Tanga | 18.1 | 49.7 | 25.7 | 6.4 | 0.0 | 100.0 | 703 | 3.0 |
| Morogoro | 21.3 | 39.4 | 32.8 | 6.4 | 0.1 | 100.0 | 828 | 3.6 |
| Pwani | 27.8 | 36.5 | 31.8 | 3.9 | 0.0 | 100.0 | 461 | 3.0 |
| Dar es Salaam | 12.1 | 27.5 | 38.2 | 22.0 | 0.1 | 100.0 | 1,423 | 6.4 |
| Lindi | 25.7 | 39.5 | 28.7 | 5.9 | 0.2 | 100.0 | 389 | 3.0 |
| Mtwara | 24.1 | 45.5 | 27.9 | 2.3 | 0.2 | 100.0 | 584 | 2.7 |
| Ruvuma | 12.9 | 42.1 | 36.7 | 8.4 | 0.0 | 100.0 | 510 | 4.8 |
| Iringa | 21.6 | 40.3 | 32.8 | 5.3 | 0.0 | 100.0 | 638 | 3.3 |
| Mbeya | 31.9 | 36.7 | 27.1 | 4.2 | 0.2 | 100.0 | 1,171 | 2.1 |
| Singida | 30.9 | 37.3 | 29.2 | 2.5 | 0.1 | 100.0 | 609 | 3.3 |
| Tabora | 44.1 | 31.3 | 21.5 | 3.1 | 0.1 | 100.0 | 850 | 0.7 |
| Rukwa | 31.7 | 38.6 | 25.6 | 4.1 | 0.0 | 100.0 | 559 | 2.0 |
| Kigoma | 21.0 | 50.2 | 24.7 | 4.2 | 0.0 | 100.0 | 819 | 2.8 |
| Shinyanga | 28.3 | 37.5 | 32.0 | 2.0 | 0.2 | 100.0 | 1,485 | 2.9 |
| Kagera | 24.4 | 40.5 | 31.8 | 3.1 | 0.2 | 100.0 | , 903 | 3.3 |
| Mwanza | 25.8 | 41.8 | 26.1 | 6.1 | 0.2 | 100.0 | 1,643 | 2.8 |
| Mara | 15.0 | 48.5 | 31.9 | 4.6 | 0.0 | 100.0 | 615 | 3.3 |
| Manyara | 31.1 | 43.0 | 23.7 | 2.3 | 0.0 | 100.0 | 556 | 1.6 |
| Zanzibar North | 29.6 | 49.1 | 6.7 | 14.7 | 0.0 | 100.0 | 78 | 1.9 |
| Zanzibar South | 17.8 | 46.6 | 12.1 | 23.6 | 0.0 | 100.0 | 49 | 4.2 |
| Town West | 13.8 | 33.0 | 17.5 | 35.5 | 0.3 | 100.0 | 211 | 6.3 |
| Pemba North | 36.7 | 39.1 | 7.7 | 16.3 | 0.2 | 100.0 | 88 | 1.7 |
| Pemba South | 28.6 | 44.8 | 11.0 | 15.2 | 0.3 | 100.0 | 79 | 2.5 |
| Wealth quintile |  |  |  |  |  |  |  |  |
| Lowest | 41.6 | 38.3 | 19.4 | 0.4 | 0.2 | 100.0 | 3,285 | 0.8 |
| Second | 32.0 | 40.4 | 26.8 | 0.8 | 0.0 | 100.0 | 3,490 | 2.1 |
| Middle | 25.7 | 42.7 | 29.0 | 2.5 | 0.1 | 100.0 | 3,398 | 2.7 |
| Fourth | 16.7 | 44.0 | 33.7 | 5.5 | 0.1 | 100.0 | 3,576 | 3.8 |
| Highest | 9.2 | 32.4 | 35.2 | 23.0 | 0.2 | 100.0 | 3,628 | 6.4 |
| Total | 24.7 | 39.6 | 29.0 | 6.7 | 0.1 | 100.0 | 17,377 | 3.2 |
| Note: Totals include a small number of cases missing information. ${ }^{1}$ Completed Standard 7 or 8 |  |  |  |  |  |  |  |  |

## School Attendance Rates

Tables 2.5 .1 and 2.5.2 present primary school and secondary school net and gross attendance ratios (NAR and GAR) for the school year that started in 2004 by household residence and zones. The NAR for primary school is the percentage of the primary-school-age (7-13 years) population that is attending primary school. The NAR for secondary school is the percentage of the secondary-schoolage (14-19 years) population that is attending secondary school. By definition, the NAR cannot exceed 100 percent. The GAR for primary school is the total number of primary school students, of any age, expressed as a percentage of the official primary-school-age population. The GAR for secondary school is the total number of secondary school students, of any age, expressed as a percentage of the official secondary-school-age population. If there are significant numbers of overage and under-age students at a given level of schooling, the GAR can exceed 100 percent. Youth are considered to be attending school currently if they attended formal academic school at any point during the given school year. The gender parity index (GPI) measures the sex-related differences in school attendance rates and is calculated by dividing the GAR for females by the GAR for males. A GPI of 1 indicates parity or equality between the rates of participation for males and females. The closer the GPI is to 0 , the greater is the gender disparity in favour of males, meaning that a higher proportion of males than females attends that level of schooling. A GPI greater than 1 indicates a gender disparity in favour of females.

As illustrated in Table 2.5.1, 73 percent of the primary-school-age children (age 7-13) in Tanzania attend primary school. Females age $7-13$ are slightly more likely than males to attend primary school ( 75 and 71 percent, respectively). There is a sizable urban-rural difference in the net attendance ratio: 85 percent of children in urban areas attend primary school, compared with 70 percent in rural areas. School-age children from the wealthiest households are also far more likely to attend primary school than those in the least wealthy households (88 and 58 percent, respectively).

In Tanzania, a substantial proportion of primary school pupils fall outside the official age range for primary schooling: whereas the primary school NAR is 73 percent, the GAR is 102, indicating that for every 73 pupils age $7-13$, there are 29 primary school pupils who are either younger than age 7 or older than age 13 . The male GAR (104) slightly exceeds the female GAR (101), producing a GPI of 0.97 .

Regional differences in both net and gross attendance ratios are substantial. The primary school NAR ranges from a high of 90 percent in Kilimanjaro to a low of 47 percent in Tabora. A similar pattern exists for the primary school GAR, with the highest GAR in Kilimanjaro (122 percent) and the lowest in Tabora (65 percent).

The NAR and GAR are extremely low at the secondary school level. Table 2.5.2 indicates that only 7 percent of the secondary-school-age population in Tanzania attend secondary school and just 9 percent of youth of any age attend secondary school. There is little difference between the NAR for secondary-school-age males and females ( 7 and 8 percent, respectively). The secondary school GPI is 0.98 , indicating near gender parity at the secondary level (GAR of 9 for both males and females). Secondary-school-age youth in urban areas, however, are substantially more likely than their counterparts in rural areas to attend secondary school (19 and 3 percent, respectively).

Perhaps most striking are the differences in the secondary school NAR across wealth quintiles. The secondary school NAR in the wealthiest households ( 23 percent) far exceeds that in the least wealthy households ( 0.4 percent), as well as households in the second, third, and fourth wealth quintiles (NAR of 1,2 , and 7 percent, respectively), suggesting that only youth from the most advantaged households have meaningful access to secondary schooling.

Table 2.5.1 School attendance ratios: primary school
Primary school net attendance ratios (NAR) and gross attendance ratios (GAR) for the de jure household population by sex, according to background characteristics, Tanzania 2004-05

| Background characteristic | Net attendance ratio ${ }^{1}$ |  |  | Gross attendance ratio ${ }^{2}$ |  |  | Gender parity index ${ }^{3}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male | Female | Total | Male | Female | Total |  |
| Residence |  |  |  |  |  |  |  |
| Urban | 84.8 | 85.7 | 85.2 | 115.8 | 110.4 | 113.0 | 0.95 |
| Rural | 67.4 | 72.4 | 69.8 | 100.9 | 98.0 | 99.5 | 0.97 |
| Mainland/Zanzibar |  |  |  |  |  |  |  |
| Mainland | 71.0 | 75.4 | 73.2 | 103.8 | 100.6 | 102.2 | 0.97 |
| Total urban | 84.0 | 86.0 | 85.0 | 114.2 | 110.9 | 112.5 | 0.97 |
| Dar es Salaam city | 84.2 | 87.4 | 85.8 | 105.9 | 114.9 | 110.5 | 1.09 |
| Other urban | 83.9 | 85.5 | 84.7 | 117.4 | 109.4 | 113.2 | 0.93 |
| Total rural | 67.6 | 72.3 | 69.9 | 101.1 | 97.6 | 99.4 | 0.97 |
| Zanzibar | 68.8 | 74.1 | 71.4 | 105.8 | 107.5 | 106.6 | 1.02 |
| Unguja | 71.5 | 79.5 | 75.3 | 107.6 | 113.8 | 110.6 | 1.06 |
| Pemba | 63.8 | 65.0 | 64.4 | 102.6 | 96.8 | 99.7 | 0.94 |
| Zone |  |  |  |  |  |  |  |
| Western | 62.0 | 65.0 | 63.5 | 97.6 | 91.6 | 94.7 | 0.94 |
| Northern | 79.7 | 82.1 | 80.8 | 111.4 | 108.0 | 109.8 | 0.97 |
| Central | 64.0 | 71.8 | 68.1 | 97.6 | 95.6 | 96.6 | 0.98 |
| Southern highlands | 67.8 | 71.6 | 69.7 | 94.2 | 94.7 | 94.5 | 1.01 |
| Lake | 71.9 | 79.0 | 75.4 | 107.2 | 105.9 | 106.6 | 0.99 |
| Eastern | 79.9 | 84.8 | 82.5 | 110.5 | 107.4 | 108.9 | 0.97 |
| Southern | 72.9 | 75.7 | 74.3 | 110.0 | 101.9 | 106.1 | 0.93 |
| Region |  |  |  |  |  |  |  |
| Dodoma | 63.1 | 70.6 | 66.9 | 87.5 | 93.9 | 90.8 | 1.07 |
| Arusha | 72.0 | 76.9 | 74.4 | 97.5 | 97.6 | 97.5 | 1.00 |
| Kilimanjaro | 88.1 | 91.0 | 89.6 | 125.1 | 119.1 | 122.1 | 0.95 |
| Tanga | 85.1 | 85.3 | 85.1 | 118.1 | 112.0 | 115.5 | 0.95 |
| Morogoro | 77.7 | 83.9 | 81.1 | 112.8 | 102.3 | 106.9 | 0.91 |
| Pwani | 74.1 | 80.9 | 77.5 | 116.6 | 101.2 | 108.8 | 0.87 |
| Dar es Salaam | 84.2 | 87.4 | 85.8 | 105.9 | 114.9 | 110.5 | 1.09 |
| Lindi | 71.5 | 70.6 | 71.0 | 106.1 | 98.6 | 102.3 | 0.93 |
| Mtwara | 71.1 | 72.0 | 71.5 | 106.8 | 101.5 | 104.4 | 0.95 |
| Ruvuma | 76.1 | 82.2 | 79.3 | 116.5 | 104.4 | 110.2 | 0.90 |
| Iringa | 78.4 | 88.7 | 83.4 | 105.3 | 120.9 | 112.9 | 1.15 |
| Mbeya | 64.1 | 64.2 | 64.1 | 85.2 | 86.4 | 85.8 | 1.01 |
| Singida | 65.6 | 73.8 | 70.0 | 115.7 | 98.3 | 106.3 | 0.85 |
| Tabora | 50.4 | 44.1 | 47.4 | 72.6 | 57.0 | 65.1 | 0.79 |
| Rukwa | 62.0 | 66.7 | 64.5 | 99.6 | 81.3 | 89.8 | 0.82 |
| Kigoma | 75.0 | 72.9 | 74.0 | 117.9 | 111.2 | 114.8 | 0.94 |
| Shinyanga | 60.4 | 71.0 | 65.9 | 98.8 | 98.5 | 98.6 | 1.00 |
| Kagera | 66.9 | 76.0 | 72.1 | 103.5 | 101.0 | 102.1 | 0.98 |
| Mwanza | 69.7 | 79.9 | 74.2 | 103.9 | 111.3 | 107.2 | 1.07 |
| Mara | 83.8 | 82.6 | 83.2 | 120.5 | 102.4 | 112.1 | 0.85 |
| Manyara | 70.5 | 70.4 | 70.4 | 100.4 | 98.4 | 99.5 | 0.98 |
| Zanzibar North | 63.8 | 72.6 | 67.9 | 98.5 | 112.9 | 105.2 | 1.15 |
| Zanzibar South | 77.3 | 87.6 | 82.0 | 115.0 | 123.2 | 118.7 | 1.07 |
| Town West | 74.0 | 80.7 | 77.3 | 110.4 | 111.9 | 111.2 | 1.01 |
| Pemba North | 62.1 | 60.3 | 61.2 | 97.3 | 85.9 | 91.4 | 0.88 |
| Pemba South | 65.7 | 70.6 | 68.1 | 108.4 | 109.7 | 109.0 | 1.01 |
| Wealth quintile |  |  |  |  |  |  |  |
| Lowest | 58.1 | 58.6 | 58.3 | 86.2 | 78.2 | 82.3 | 0.91 |
| Second | 62.6 | 69.1 | 65.7 | 97.7 | 93.8 | 95.8 | 0.96 |
| Middle | 71.3 | 75.5 | 73.3 | 107.3 | 104.4 | 105.9 | 0.97 |
| Fourth | 78.8 | 84.8 | 81.8 | 115.1 | 112.1 | 113.6 | 0.97 |
| Highest | 87.0 | 89.4 | 88.3 | 115.4 | 116.1 | 115.8 | 1.01 |
| Total | 70.9 | 75.4 | 73.1 | 103.9 | 100.8 | 102.3 | 0.97 |

${ }^{1}$ The NAR for primary school is the percentage of the primary-school-age ( $7-13$ years) population that is attending primary school. By definition the NAR cannot exceed 100 percent.
${ }^{2}$ The GAR for primary school is the total number of primary school students, expressed as a percentage of the official primary-school-age population. If there are significant numbers of overage and underage students at a given level of schooling, the GAR can exceed 100 percent.
The gender parity index for primary school is the ratio of the primary school GAR for females to the GAR for males.

| Table 2.5.2 School attendance ratios: secondary school |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Secondary school net attendance ratios (NAR) and gross attendance ratios (GAR) for the de jure household population by sex, according to background characteristics, Tanzania 2004-05 |  |  |  |  |  |  |  |
| Background characteristic | Net attendance ratio ${ }^{1}$ |  |  | Gross attendance ratio ${ }^{2}$ |  |  | Gender parity index ${ }^{3}$ |
|  | Male | Female | Total | Male | Female | Total |  |
| Residence |  |  |  |  |  |  |  |
| Urban | 20.3 | 17.8 | 18.9 | 26.2 | 21.9 | 23.8 | 0.83 |
| Rural | 2.6 | 3.6 | 3.1 | 4.2 | 4.3 | 4.3 | 1.04 |
| Mainland/Zanzibar |  |  |  |  |  |  |  |
| Mainland | 6.2 | 6.8 | 6.5 | 8.6 | 8.3 | 8.4 | 0.97 |
| Total urban | 19.4 | 16.5 | 17.8 | 25.0 | 20.2 | 22.3 | 0.81 |
| Dar es Salaam city | 27.0 | 14.3 | 19.8 | 30.3 | 21.4 | 25.3 | 0.71 |
| Other urban | 16.5 | 17.5 | 17.0 | 22.9 | 19.6 | 21.1 | 0.86 |
| Total rural | 2.2 | 3.1 | 2.7 | 3.6 | 3.7 | 3.6 | 1.04 |
| Zanzibar | 22.7 | 26.1 | 24.4 | 31.5 | 34.8 | 33.2 | 1.11 |
| Unguja | 25.6 | 30.4 | 28.0 | 36.0 | 39.9 | 38.0 | 1.11 |
| Pemba | 17.8 | 18.2 | 18.0 | 23.7 | 25.5 | 24.6 | 1.08 |
| Zone |  |  |  |  |  |  |  |
| Western | 2.4 | 1.6 | 2.0 | 4.5 | 2.3 | 3.4 | 0.51 |
| Northern | 8.1 | 14.4 | 11.2 | 9.3 | 16.9 | 13.1 | 1.83 |
| Central | 2.8 | 3.0 | 2.9 | 5.0 | 3.3 | 4.2 | 0.67 |
| Southern highlands | 6.0 | 7.5 | 6.8 | 8.0 | 7.9 | 7.9 | 0.99 |
| Lake | 3.8 | 4.8 | 4.3 | 8.0 | 5.1 | 6.5 | 0.64 |
| Eastern | 16.3 | 11.3 | 13.6 | 17.9 | 15.6 | 16.7 | 0.87 |
| Southern | 6.0 | 6.5 | 6.2 | 8.9 | 8.0 | 8.5 | 0.90 |
| Region |  |  |  |  |  |  |  |
| Dodoma | 2.1 | 3.4 | 2.8 | 4.7 | 3.4 | 4.1 | 0.73 |
| Arusha | 8.1 | 12.2 | 10.5 | 8.1 | 14.1 | 11.6 | 1.74 |
| Kilimanjaro | 10.8 | 23.8 | 17.1 | 14.6 | 26.9 | 20.6 | 1.85 |
| Tanga | 9.6 | 14.3 | 11.9 | 9.6 | 19.0 | 14.1 | 1.97 |
| Morogoro | 6.7 | 7.7 | 7.2 | 6.7 | 7.7 | 7.2 | 1.14 |
| Pwani | 4.4 | 6.4 | 5.3 | 4.4 | 7.9 | 6.0 | 1.81 |
| Dar es Salaam | 27.0 | 14.3 | 19.8 | 30.3 | 21.4 | 25.3 | 0.71 |
| Lindi | 6.1 | 5.7 | 5.9 | 8.7 | 6.9 | 7.8 | 0.79 |
| Mtwara | 2.4 | 2.5 | 2.5 | 4.6 | 2.5 | 3.6 | 0.56 |
| Ruvuma | 9.1 | 11.2 | 10.0 | 12.8 | 14.6 | 13.6 | 1.14 |
| Iringa | 13.5 | 11.4 | 12.4 | 13.5 | 11.4 | 12.4 | 0.85 |
| Mbeya | 3.8 | 7.1 | 5.5 | 7.5 | 8.0 | 7.8 | 1.06 |
| Singida | 3.6 | 2.4 | 3.1 | 5.3 | 3.2 | 4.3 | 0.61 |
| Tabora | 0.7 | 0.0 | 0.3 | 3.0 | 0.0 | 1.4 | 0.00 |
| Rukwa | 2.4 | 3.0 | 2.7 | 3.2 | 3.0 | 3.1 | 0.95 |
| Kigoma | 7.5 | 4.3 | 5.9 | 9.5 | 5.5 | 7.5 | 0.58 |
| Shinyanga | 0.0 | 0.8 | 0.4 | 2.2 | 1.6 | 1.9 | 0.76 |
| Kagera | 2.0 | 0.0 | 1.0 | 6.4 | 1.3 | 3.8 | 0.20 |
| Mwanza | 5.2 | 6.1 | 5.7 | 9.7 | 6.1 | 7.8 | 0.63 |
| Mara | 3.0 | 7.8 | 5.3 | 6.2 | 7.8 | 6.9 | 1.25 |
| Manyara | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 0.96 |
| Zanzibar North | 8.0 | 22.7 | 15.8 | 16.0 | 32.6 | 24.8 | 2.04 |
| Zanzibar South | 26.1 | 30.9 | 28.3 | 34.2 | 31.8 | 33.1 | 0.93 |
| Town West | 33.2 | 33.8 | 33.5 | 45.3 | 45.2 | 45.2 | 1.00 |
| Pemba North | 22.5 | 20.0 | 21.2 | 28.5 | 25.3 | 26.9 | 0.89 |
| Pemba South | 12.4 | 15.8 | 14.0 | 18.2 | 25.9 | 21.8 | 1.42 |
| Wealth quintile |  |  |  |  |  |  |  |
| Lowest | 0.5 | 0.3 | 0.4 | 0.6 | 0.3 | 0.5 | 0.53 |
| Second | 1.2 | 0.9 | 1.1 | 1.4 | 1.1 | 1.3 | 0.80 |
| Middle | 2.0 | 2.6 | 2.3 | 4.4 | 3.3 | 3.9 | 0.76 |
| Fourth | 5.9 | 7.6 | 6.7 | 8.5 | 8.4 | 8.5 | 0.98 |
| Highest | 25.1 | 20.9 | 22.7 | 32.9 | 26.1 | 28.9 | 0.79 |
| Total | 6.8 | 7.5 | 7.1 | 9.3 | 9.1 | 9.2 | 0.98 |
| ${ }^{1}$ The NAR for secondary school is the percentage of the secondary-school-age (14-19 years) population that is attending secondary school. By definition the NAR cannot exceed 100 percent. <br> ${ }^{2}$ 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 percent. <br> ${ }^{3}$ The gender parity index for secondary school is the ratio of the secondary school GAR for females to the GAR for males. |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |

Figure 2.2 illustrates age-specific attendance rates (i.e., the percentage of a given age cohort who attend school, regardless of the level attended [primary, secondary, or higher]). The figure shows a greater proportion of female than male youth attending school from age 6-9, roughly the same proportion of male and female youth age 10-13 attending school, and a higher proportion of male youth attending than female youth from age 14 onward. Attendance rates peak around age 11, with nearly 9 in 10 males and females attending school at that age.

Figure 2.2 Age-Specific Attendance Rates


TDHS 2004-05

## Grade Repetition and Dropout Rates

Repetition and dropout rates describe the flow of pupils through the system at the primary level. The repetition rates produced using data from the 2004-05 TDHS indicate the percentage of pupils who attended a particular grade during the school year that started in 2003, who again attended that same class during the following school year. The dropout rates show the percentage of pupils in a grade during the school year that started in 2003 who no longer attended school the following school year. Tables 2.6.1 and 2.6.2 present repetition and dropout rates by primary school class, according to pupils' background characteristics.

Tanzania is a country with an automatic promotion policy, where students are nearly always promoted to the next grade at the end of a given school year. Accordingly, the 2004-05 TDHS reveals the existence of few repeaters in primary school. Table 2.6 .1 shows that the highest repetition rate is in Standard 1, with 5 percent of pupils repeating. Repetition rates in the remaining classes are less than 2 percent. There is no clear pattern of gender differences in repetition rates, nor is there a clear pattern by urban-rural residence.

With the exception of standard 7, the dropout rate is extremely low in Tanzania, ranging from less than 1 to 3 percent in Standards 1 through 6. In Standard 7, the final year of the primary cycle, 64 percent of the pupils attending in the academic year starting in 2003 dropped out of school before the start of the following school year. It should be noted, however, that "dropout" is perhaps not the most accurate term for leaving school at the end of the primary school cycle, as some pupils leaving school likely would stay in school if offered a place at secondary school.

| Table 2.6.1 Grade repetition and dropout rates: repetition rates |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Repetition rates for the de jure household population age 5-24 years by school grade, according to background characteristics, Tanzania 2004-05 |  |  |  |  |  |  |  |
| Background | Standard |  |  |  |  |  |  |
| characteristic | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Sex |  |  |  |  |  |  |  |
| Male | 4.7 | 1.6 | 1.5 | 0.6 | 0.9 | 1.1 | 1.3 |
| Female | 5.8 | 1.2 | 1.3 | 1.3 | 0.8 | 0.5 | 0.3 |
| Residence |  |  |  |  |  |  |  |
| Urban | 6.1 | 1.3 | 1.0 | 1.8 | 0.5 | 1.9 | 0.0 |
| Rural | 5.0 | 1.4 | 1.5 | 0.6 | 0.9 | 0.2 | 1.3 |
| Mainland/Zanzibar |  |  |  |  |  |  |  |
| Mainland | 5.2 | 1.4 | 1.4 | 0.9 | 0.8 | 0.8 | 0.8 |
| Total urban | 7.5 | 1.3 | 1.0 | 1.8 | 0.5 | 2.0 | 0.0 |
| Dar es Salaam city | (13.0) | (3.8) | (1.7) | (0.0) | * | (2.2) | (0.0) |
| Other urban | 5.8 | 0.3 | 0.8 | 2.4 | 0.7 | 1.9 | 0.0 |
| Total rural | 4.6 | 1.4 | 1.5 | 0.6 | 0.9 | 0.2 | 1.4 |
| Zanzibar | 4.3 | 1.0 | 0.8 | 1.4 | 1.2 | 1.1 | 0.3 |
| Unguja | 5.8 | 1.5 | 0.7 | 1.6 | 1.4 | 0.6 | 0.0 |
| Pemba | 1.7 | 0.0 | 0.8 | 0.9 | 0.8 | 2.4 | 1.2 |
| Zone |  |  |  |  |  |  |  |
| Western | 5.0 | 0.6 | 0.0 | 0.0 | 0.0 | 0.9 | 0.0 |
| Northern | 6.3 | 3.3 | 3.6 | 1.5 | 2.2 | 0.8 | 2.0 |
| Central | 4.9 | 2.6 | 2.6 | 0.8 | 2.4 | 0.0 | (0.0) |
| Southern highlands | 5.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | (2.0) |
| Lake | 2.2 | 0.2 | 0.3 | 0.0 | 1.0 | 1.2 | 0.9 |
| Eastern | 10.4 | 2.8 | 2.1 | 1.1 | 0.0 | 1.5 | 0.0 |
| Southern | 3.4 | 1.2 | 2.1 | 4.8 | 0.0 | 0.0 | 0.0 |
| Wealth quintile |  |  |  |  |  |  |  |
| Lowest | 4.8 | 1.4 | 1.5 | 1.0 | 0.0 | 0.0 | 2.6 |
| Second | 6.1 | 0.8 | 2.0 | 0.8 | 0.7 | 0.8 | 1.7 |
| Middle | 4.0 | 2.6 | 1.1 | 0.0 | 1.2 | 0.1 | 0.0 |
| Fourth | 6.0 | 0.8 | 1.0 | 1.4 | 0.7 | 0.1 | 0.6 |
| Highest | 5.0 | 1.7 | 1.5 | 1.4 | 1.0 | 1.9 | 0.4 |
| Total | 5.2 | 1.4 | 1.4 | 1.0 | 0.8 | 0.8 | 0.8 |
| Note: The repetition rate is the percentage of students in a given grade in the previous school year who are repeating that grade in the current school year. 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. |  |  |  |  |  |  |  |

Females are slightly more likely to drop out in Standard 7 than their male classmates (66 and 62 percent, respectively). About half of pupils in urban areas drop out of Standard 7 compared with three-fourths of pupils in rural areas. Most notably, nearly all pupils ( 92 percent) from the least wealthy households drop out during Standard 7 compared with less than half (48 percent) from the wealthiest households.

| Dropout rates for the de jure household population age 5-24 years by school grade, according to background characteristics, Tanzania 2004-05 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Background | Standard |  |  |  |  |  |  |
| characteristic | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Sex |  |  |  |  |  |  |  |
| Male | 0.3 | 0.6 | 1.4 | 1.2 | 2.9 | 2.8 | 61.7 |
| Female | 0.6 | 0.8 | 1.2 | 2.2 | 2.5 | 2.0 | 66.2 |
| Residence |  |  |  |  |  |  |  |
| Urban | 0.2 | 0.9 | 0.6 | 0.7 | 2.2 | 0.7 | 48.9 |
| Rural | 0.5 | 0.6 | 1.5 | 2.1 | 2.8 | 3.2 | 74.2 |
| Mainland/Zanzibar |  |  |  |  |  |  |  |
| Mainland | 0.4 | 0.7 | 1.3 | 1.8 | 2.8 | 2.4 | 66.6 |
| Total urban | 0.1 | 0.9 | 0.6 | 0.8 | 2.2 | 0.6 | 52.0 |
| Dar es Salaam city | (0.0) | (0.0) | (0.0) | (3.0) | * | (0.0) | 68.2 |
| Other urban | 0.2 | 1.2 | 0.8 | 0.0 | 1.6 | 1.0 | 45.1 |
| Total rural | 0.5 | 0.6 | 1.5 | 2.2 | 2.9 | 3.2 | 77.0 |
| Zanzibar | 0.8 | 0.6 | 0.6 | 0.6 | 0.7 | 2.6 | 3.9 |
| Unguja | 1.3 | 1.0 | 0.9 | 0.0 | 1.1 | 3.2 | 4.9 |
| Pemba | 0.0 | 0.0 | 0.0 | 1.8 | 0.0 | 1.1 | 1.6 |
| Zone |  |  |  |  |  |  |  |
| Western | 0.8 | 1.0 | 1.4 | 2.0 | 3.1 | 1.6 | 78.3 |
| Northern | 0.7 | 0.4 | 2.4 | 0.4 | 2.1 | 4.5 | 56.5 |
| Central | 0.0 | 0.5 | 1.3 | 0.8 | 3.8 | 4.8 | (89.7) |
| Southern highlands | 0.8 | 0.9 | 1.5 | 3.9 | 1.7 | 2.2 | (64.7) |
| Lake | 0.0 | 0.7 | 0.9 | 0.9 | 2.0 | 1.3 | 57.7 |
| Eastern | 0.0 | 0.0 | 0.7 | 1.7 | 3.2 | 1.4 | 68.5 |
| Southern | 0.0 | 1.8 | 0.7 | 3.3 | 5.0 | 3.2 | 64.8 |
| Wealth quintile |  |  |  |  |  |  |  |
| Lowest | 0.4 | 0.9 | 1.8 | 3.5 | 1.9 | 7.4 | 91.5 |
| Second | 0.6 | 1.0 | 0.9 | 1.2 | 3.1 | 2.2 | 87.6 |
| Middle | 0.4 | 1.0 | 1.6 | 1.5 | 4.7 | 4.1 | 72.4 |
| Fourth | 0.5 | 0.5 | 2.2 | 2.1 | 2.9 | 2.1 | 63.9 |
| Highest | 0.2 | 0.0 | 0.1 | 0.9 | 1.0 | 0.1 | 47.9 |
| Total | 0.4 | 0.7 | 1.3 | 1.7 | 2.7 | 2.4 | 64.0 |
| Note: The dropout rate is the percentage of students in a given grade in the previous school year who are not attending school. 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. |  |  |  |  |  |  |  |

### 2.5 Household Environment

## Housing Characteristics

The physical characteristics of households are important determinants of the health status of household members, especially children. They can also be used as indicators of the socioeconomic status of households. The 2004-05 TDHS respondents were asked about their household environment, including questions on access to electricity, the source of drinking water, type of sanitation facility, type of flooring, walls, and roof, and number of rooms in the dwelling. This information is summarized in Table 2.7.

Only 11 percent of Tanzanian households have electricity, with a very large disparity between Mainland urban and rural households. On the Mainland, 38 percent of urban households have electricity, compared with just 1 percent of those in rural areas. In Zanzibar, 24 percent of households have electricity.

| Table 2.7 Household characteristics |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Percent distribution of households by household characteristics, according to residence, Tanzania 2004-05 |  |  |  |  |  |
| Household characteristic | Residence |  |  |  | Total |
|  | Mainland |  |  | Zanzibar |  |
|  | Urban | Rural | Total |  |  |
| Electricity |  |  |  |  |  |
| Yes | 38.4 | 1.3 | 11.1 | 23.6 | 11.4 |
| No | 61.5 | 98.4 | 88.7 | 76.3 | 88.4 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Source of drinking water |  |  |  |  |  |
| Piped into dwelling/yard/plot | 18.6 | 2.1 | 6.4 | 36.2 | 7.2 |
| Public tap | 15.5 | 16.8 | 16.5 | 34.1 | 16.9 |
| Neighbor's tap | 32.8 | 3.5 | 11.2 | 9.5 | 11.2 |
| Open well in dwelling/yard/plot | 1.0 | 0.6 | 0.7 | 0.8 | 0.7 |
| Open public well | 5.2 | 28.5 | 22.4 | 15.9 | 22.2 |
| Neighbor's open well | 2.0 | 1.2 | 1.4 | 0.5 | 1.4 |
| Protected well in dwelling/yard/plot | 0.5 | 0.1 | 0.2 | 0.7 | 0.2 |
| Protected public well | 6.3 | 14.4 | 12.2 | 1.0 | 12.0 |
| Neighbor's borehole | 3.3 | 0.2 | 1.0 | 0.5 | 1.0 |
| Spring | 1.6 | 8.2 | 6.5 | 0.1 | 6.3 |
| River, stream | 1.6 | 17.7 | 13.5 | 0.0 | 13.1 |
| Pond/lake/dam | 3.1 | 5.8 | 5.1 | 0.1 | 4.9 |
| Tanker truck | 3.2 | 0.5 | 1.2 | 0.4 | 1.2 |
| Water vendor | 4.0 | 0.3 | 1.3 | 0.1 | 1.2 |
| Other | 1.5 | 0.1 | 0.5 | 0.0 | 0.5 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Time to water source |  |  |  |  |  |
| Percentage < 15 minutes | 67.5 | 28.5 | 38.8 | 78.9 | 39.8 |
| Median time to source | 5.9 | 27.1 | 19.4 | 4.4 | 19.2 |
| Sanitation facility |  |  |  |  |  |
| Flush toilet | 8.8 | 0.4 | 2.6 | 8.4 | 2.7 |
| Traditional pit toilet | 76.7 | 82.0 | 80.6 | 51.6 | 79.9 |
| Ventilated improved pit latrine | 12.1 | 0.9 | 3.8 | 7.9 | 3.9 |
| No facility, bush, field | 2.4 | 16.7 | 12.9 | 32.0 | 13.4 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Flooring material |  |  |  |  |  |
| Earth, sand | 28.7 | 89.1 | 73.2 | 43.0 | 72.4 |
| Dung | 0.2 | 0.6 | 0.5 | 0.3 | 0.5 |
| Cement | 69.8 | 10.1 | 25.8 | 56.0 | 26.6 |
| Other | 1.3 | 0.3 | 0.6 | 0.6 | 0.6 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Wall material |  |  |  |  |  |
| Grass | 0.2 | 1.3 | 1.0 | 0.7 | 1.0 |
| Poles and mud | 14.7 | 39.9 | 33.3 | 39.1 | 33.4 |
| Sun dried bricks | 19.3 | 36.4 | 31.9 | 1.6 | 31.1 |
| Baked bricks | 14.1 | 17.8 | 16.8 | 1.2 | 16.4 |
| Cement bricks | 50.8 | 3.0 | 15.6 | 37.3 | 16.1 |
| Other | 0.9 | 1.6 | 1.4 | 20.0 | 1.9 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Roof material |  |  |  |  |  |
| Grass/leaves/mud | 10.5 | 63.3 | 49.4 | 30.9 | 49.0 |
| Iron sheets | 86.9 | 36.3 | 49.6 | 65.9 | 50.0 |
| Tiles/concrete/asbestos | 2.4 | 0.1 | 0.7 | 3.2 | 0.8 |
| Other | 0.1 | 0.2 | 0.2 | 0.1 | 0.2 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Rooms for sleeping |  |  |  |  |  |
| 1 room | 41.3 | 26.8 | 30.6 | 19.4 | 30.3 |
| 2 rooms | 29.0 | 40.1 | 37.2 | 36.3 | 37.1 |
| 3 rooms | 19.2 | 19.5 | 19.4 | 32.1 | 19.8 |
| 4 rooms | 6.4 | 8.6 | 8.0 | 7.9 | 8.0 |
| $5+$ rooms | 4.2 | 4.9 | 4.7 | 4.3 | 4.7 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Number of households | 2,492 | 6,990 | 9,483 | 252 | 9,735 |
| Note: Percentages for electricity, source of drinking water, sanitation facility, roof material, and rooms for sleeping may not add to 100 because of missing cases (no more that 0.2 percent of cases in any category). |  |  |  |  |  |

The source of drinking water is important because waterborne diseases including diarrhoea and dysentery are prevalent in Tanzania. Sources of water expected to be relatively free of these diseases are piped water, protected wells, and protected springs. Other sources such as unprotected wells, rivers or streams, ponds, lakes, or dams are more likely to carry disease-causing agents. Table 2.7 indicates that a majority of Tanzanian households have access to clean water sources ( 35 percent from piped water, 13 percent from a protected well, and 6 percent from a spring). Households in Zanzibar are more likely than those on the Mainland to have access to clean water. For example, 80 percent of households in Zanzibar use piped water compared with 34 percent in the Mainland. Forty percent of Tanzanian households are within 15 minutes of a water source, with the median time to a source of drinking water about 20 minutes.

With regard to sanitation facilities, Table 2.7 shows that 80 percent of Tanzanian households are still using traditional pit toilets and only 3 percent use a modern flush toilet. In Zanzibar, one-third of households have no sanitation facilities at all, compared with 17 percent of households in rural areas and just 2 percent of households in urban areas on the Mainland.

The type of material used for housing construction is an indicator of the economic status of the household as well as potential exposure to disease-causing agents. The most commonly used flooring materials are earth or sand ( 72 percent) or cement ( 27 percent). The predominant materials used for constructing walls in Tanzanian dwellings are poles and mud (33 percent) and sundried bricks (31 percent). About half of households use iron sheeting for roofing, while about half use grass, leaves, or mud.

Crowded living conditions may affect health as well as the quality of life. Most Tanzanians live in dwellings with one or two rooms for sleeping ( 30 and 37 percent, respectively), though the number of bedrooms varies by place of residence. On the Mainland, about four in ten urban households have just one room for sleeping, compared with about one-quarter of rural Mainland households and one-fifth of Zanzibari households.

## Household Possessions

The availability of durable consumer goods is a good indicator of a household's socioeconomic status. Moreover, particular goods have specific benefits. For instance, having access to a radio or a television exposes household members to innovative ideas; a refrigerator prolongs the wholesomeness of foods; and a means of transport allows greater access to many services away from the local area. Table 2.8 shows the availability of selected consumer goods by residence.

Nationally, the most commonly owned items are radios ( 58 percent), paraffin lamps (39 percent), and bicycles ( 38 percent). Only 9 percent of Tanzanian households own a telephone, 6 percent own a television, and just 4 percent own a refrigerator. On the Mainland, urban households are more likely than rural households to own each of the items with the exception of a bicycle. The vast majority of households in Zanzibar own a radio ( 80 percent) and more than half own a bicycle.

Ownership of agricultural land is common in Tanzania, with nearly eight in ten households possessing land. Not surprisingly, rural households on the Mainland are much more likely than urban households to own agricultural land (93 and 42 percent, respectively). Almost half (48 percent) of households in Zanzibar report ownership of agricultural land.

| Table 2.8 Household possessions |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Percentage of households possessing various durable consumer goods and agricultural land, by residence, Tanzania 2004-05 |  |  |  |  |  |
| Type of possession | Residence |  |  |  | Total |
|  | Mainland |  |  | Zanzibar |  |
|  | Urban | Rural | Total |  |  |
| Household effects |  |  |  |  |  |
| Radio | 75.5 | 51.6 | 57.8 | 80.4 | 58.4 |
| Television | 19.9 | 0.7 | 5.7 | 20.1 | 6.1 |
| Telephone | 27.5 | 2.3 | 8.9 | 23.2 | 9.3 |
| Refrigerator | 12.5 | 0.3 | 3.5 | 14.7 | 3.8 |
| Paraffin lamp | 63.0 | 30.3 | 38.9 | 45.3 | 39.0 |
| Iron | 45.6 | 14.7 | 22.8 | 26.3 | 22.9 |
| Means of transport |  |  |  |  |  |
| Bicycle | 26.6 | 41.9 | 37.9 | 53.4 | 38.3 |
| Motorcycle | 1.9 | 0.5 | 0.9 | 8.7 | 1.1 |
| Car/truck | 4.6 | 0.5 | 1.6 | 2.0 | 1.6 |
| Ownership of agricultural land | 42.0 | 93.0 | 79.6 | 48.4 | 78.8 |
| Number of households | 2,492 | 6,990 | 9,483 | 252 | 9,735 |

## Household Food Security

The 2004-05 TDHS also included several questions related to household food security. The questions concerned the number of meals the household usually takes each day, the number of days in the week preceding the survey in which the household consumed meat, and how often the household had problems satisfying food needs in the year before the survey. Results are shown in Table 2.9.

The data show that nearly two-thirds of households (64 percent) report usually having at least three meals per day, although a sizeable proportion ( 34 percent) have only two meals per day. The national averages are very close to those in both the Mainland and Zanzibar. However, on the Mainland, urban households are far more likely than those in rural areas to have three or more meals a day (81 and 58 percent, respectively).

Meat consumption is not common in Tanzania. Half of the households interviewed reported that they had consumed no meat in the previous week, 20 percent took meat once, 16 percent took it twice, and only 13 percent had meat three or more times. A larger proportion of households in Zanzibar ( 65 percent) did not consume meat at all in the week preceding the survey, compared with rural and urban households on the Mainland (56 and 32 percent, respectively).

When asked how often they have problems in meeting the food needs of the household, 42 percent of the households reported never having a problem in the year before the survey and just 4 percent reported always having a problem meeting their food needs. Eighteen percent of households say they often have a problem, 19 percent say they sometimes have a problem, and 17 percent say they seldom have a problem meeting the food needs of the household.

## Table 2.9 Household food security

Percentage of households by usual number of meals per day, number of days that meat was consumed during the last week, and frequency of problems satisfying food needs in the past year, according to residence, Tanzania 2004-05

| Food security characteristic | Residence |  |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Mainland |  |  | Zanzibar |  |
|  | Urban | Rural | Total |  |  |
| Usual number of meals per day |  |  |  |  |  |
| 1 meal | 1.2 | 2.2 | 1.9 | 0.6 | 1.9 |
| 2 meals | 17.9 | 39.7 | 34.0 | 32.9 | 33.9 |
| $3+$ meals | 80.8 | 58.0 | 64.0 | 66.5 | 64.1 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Number of days consumed meat in past week |  |  |  |  |  |
| 0 | 32.4 | 56.2 | 50.0 | 65.0 | 50.3 |
| 1 | 20.2 | 20.5 | 20.4 | 18.4 | 20.4 |
| 2 | 21.9 | 13.7 | 15.8 | 10.2 | 15.7 |
| 3 | 12.2 | 6.1 | 7.7 | 3.2 | 7.6 |
| 4 | 4.9 | 1.8 | 2.6 | 1.5 | 2.5 |
| 5 | 1.7 | 0.5 | 0.8 | 0.4 | 0.8 |
| 6 | 0.9 | 0.3 | 0.5 | 0.2 | 0.5 |
| 7 | 5.7 | 0.5 | 1.9 | 0.8 | 1.9 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Frequency of problems satisfying food needs in past year |  |  |  |  |  |
| Never | 54.7 | 36.8 | 41.5 | 62.7 | 42.1 |
| Seldom | 15.0 | 17.4 | 16.7 | 13.1 | 16.6 |
| Sometimes | 14.6 | 20.5 | 19.0 | 13.9 | 18.8 |
| Often | 13.4 | 19.9 | 18.2 | 9.8 | 18.0 |
| Always | 2.3 | 5.2 | 4.4 | 0.5 | 4.3 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Number of households | 2,492 | 6,990 | 9,483 | 252 | 9,735 |

Note: Totals may not add to 100 because of a small number of missing cases.

## CHARACTERISTICS OF RESPONDENTS AND THE STATUS OF WOMEN

The objective of this chapter is to provide a descriptive summary of the demographic and socioeconomic profile of respondents in the 2004-05 TDHS. This basic information on the characteristics of women and men interviewed in the survey is essential for the interpretation of findings presented later in the report and can provide an approximate indication of the representativeness of the survey.

The chapter begins by describing basic background characteristics, including age, marital status, residential characteristics, and educational levels. Next, more detailed information on education, literacy, and exposure to mass media are provided. Data are then presented on employment, decisionmaking in households, and attitudes related to women's status.

### 3.1 Characteristics of Survey Respondents

Table 3.1 presents the distributions of interviewed women age $15-49$ and men age $15-49$ by key background characteristics-age, marital status, and residence. Other characteristics presented are the distribution of these populations by region, education level, and religion.

A total of 10,329 women and 2,635 men were interviewed. The composition of population for both sexes decreases with increasing age, reflecting, in part, the young age structure of the population of Tanzania. About 6 in 10 women and 5 in 10 men are currently married, and an additional 9 percent of women and 5 percent of men are in 'informal' unions. The proportion never married stands at only 23 percent among all women compared with 42 percent of men. The difference can be attributed to the older age at first marriage among males compared with females. Ten percent of women and 5 percent of men are divorced, separated, or widowed.

The regional distribution of population shows no marked differences between sexes, with 28 percent of women and 27 percent of men reported to be living in urban areas. Ninety-seven percent of the nationally representative sample, for either sex, is from the Mainland. Nine percent of women and 10 percent of men reside in the capital city of Dar es Salaam. A sizable proportion of respondents are observed in Dar es Salaam, Mwanza, and Shinyanga regions, which are also the leading regions in population size as observed in the 2002 Population Census. Equally true, the low proportions of respondents in Zanzibar reflect the size of administrative areas in the Islands.

About half of all respondents have completed primary education only. An additional one-fifth of all respondents have some basic (but incomplete) primary education. Only one in ten respondents ( 9 percent of women and 11 percent of men) have attained at least a secondary education. Women are more disadvantaged in terms of educational attainment, with more than twice as many women as men having no education.

About three in ten respondents fall into each of the three main religious groups in Tanzania: Islam, Catholicism, and Protestantism. Only about one in ten Tanzanians report no religious affiliation.

| Table 3.1 Background characteristics of respondents |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percent distribution of women and men by selected background characteristics, Tanzania 2004-05 |  |  |  |  |  |  |
| Background characteristic | Weighted percent | Number of women |  | Weighted percent | Number of men |  |
|  |  | Weighted | Unweighted |  | Weighted | Unweighted |
| Age |  |  |  |  |  |  |
| 15-19 | 21.7 | 2,245 | 2,297 | 24.2 | 637 | 675 |
| 20-24 | 19.4 | 2,007 | 1,958 | 18.7 | 493 | 461 |
| 25-29 | 18.3 | 1,885 | 1,832 | 15.4 | 405 | 395 |
| 30-34 | 14.9 | 1,542 | 1,487 | 14.7 | 387 | 372 |
| 35-39 | 10.2 | 1,053 | 1,100 | 10.5 | 278 | 284 |
| 40-44 | 8.1 | 834 | 904 | 10.1 | 265 | 275 |
| 45-49 | 7.4 | 763 | 751 | 6.5 | 170 | 173 |
| Marital status |  |  |  |  |  |  |
| Never married | 23.0 | 2,371 | 2,524 | 41.7 | 1,100 | 1,131 |
| Married | 58.5 | 6,041 | 6,042 | 48.0 | 1,264 | 1,264 |
| Living together | 8.8 | 910 | , 744 | 5.2 | 136 | 115 |
| Divorced/separated | 7.2 | 740 | 766 | 4.7 | 124 | 113 |
| Widowed | 2.6 | 267 | 253 | 0.4 | 11 | 12 |
| Residence |  |  |  |  |  |  |
| Urban | 28.4 | 2,935 | 2,513 | 27.2 | 716 | 601 |
| Rural | 71.6 | 7,394 | 7,816 | 72.8 | 1,919 | 2,034 |
| Mainland/Zanzibar |  |  |  |  |  |  |
| Mainland | 97.0 | 10,016 | 8,117 | 97.0 | 2,556 | 2,096 |
| Total urban | 27.9 | 2,885 | 2,011 | 27.2 | 716 | 486 |
| Dar es Salaam city | 9.4 | 2,969 | 2,412 | 10.1 | 267 | 110 |
| Other urban | 18.6 | 1,916 | 1,599 | 17.1 | +450 | 376 |
| Total rural | 69.0 | 7,131 | 6,106 | 69.8 | 1,840 | 1,610 |
| Zanzibar | 3.0 | 313 | 2,212 | 3.0 | 79 | 539 |
| Unguja | 2.1 | 216 | 1,365 | 2.0 | 53 | 319 |
| Pemba | 0.9 | 97 | 847 | 1.0 | 26 | 220 |
| Zone |  |  |  |  |  |  |
| Western | 18.2 | 1,880 | 1,376 | 17.8 | 468 | 337 |
| Northern | 14.5 | 1,496 | 1,494 | 13.7 | 362 | 354 |
| Central | 7.7 | 799 | , 784 | 8.0 | 212 | 227 |
| Southern highlands | 13.9 | 1,440 | 1,136 | 13.6 | 358 | 293 |
| Lake | 18.1 | 1,865 | 1,226 | 17.0 | 448 | 292 |
| Eastern | 16.2 | 1,670 | 1,071 | 17.5 | 462 | 289 |
| Southern | 8.4 | 866 | 1,030 | 9.3 | 245 | 304 |
| Region |  |  |  |  |  |  |
| Dodoma | 4.5 | 468 | 351 | 4.3 | 113 | 92 |
| Arusha | 3.8 | 391 | 402 | 3.1 | 82 | 86 |
| Kilimanjaro | 3.7 | 380 | 349 | 3.9 | 104 | 90 |
| Tanga | 4.2 | 431 | 358 | 3.6 | 94 | 76 |
| Morogoro | 4.3 | 449 | 325 | 4.8 | 127 | 93 |
| Pwani | 2.4 | 253 | 334 | 2.6 | 68 | 86 |
| Dar es Salaam | 9.4 | 969 | 412 | 10.1 | 267 | 110 |
| Lindi | 2.1 | 221 | 324 | 2.5 | 65 | 103 |
| Mtwara | 3.4 | 346 | 344 | 3.7 | 98 | 96 |
| Ruvuma | 2.9 | 299 | 362 | 3.1 | 83 | 105 |
| Iringa | 4.0 | 412 | 331 | 3.9 | 102 | 80 |
| Mbeya | 6.9 | 712 | 402 | 6.4 | 170 | 96 |
| Singida | 3.2 | 331 | 433 | 3.8 | 99 | 135 |
| Tabora | 5.0 | 520 | 485 | 4.8 | 127 | 122 |
| Rukwa | 3.1 | 316 | 403 | 3.3 | 87 | 117 |
| Kigoma | 4.8 | 499 | 414 | 4.8 | 127 | 95 |
| Shinyanga | 8.3 | 861 | 477 | 8.1 | 215 | 120 |
| Kagera | 5.3 | 545 | 376 | 4.6 | 122 | 82 |
| Mwanza | 9.1 | 939 | 435 | 8.7 | 229 | 105 |
| Mara | 3.7 | 381 | 415 | 3.7 | 98 | 105 |
| Manyara | 2.8 | 293 | 385 | 3.1 | 83 | 102 |
| Zanzibar North | 0.5 | 48 | 441 | 0.4 | 11 | 97 |
| Zanzibar South | 0.3 | 26 | 387 | 0.2 | 6 | 93 |
| Town West | 1.4 | 143 | 537 | 1.4 | 36 | 129 |
| Pemba North | 0.5 | 52 | 433 | 0.5 | 13 | 108 |
| Pemba South | 0.4 | 45 | 414 | 0.5 | 12 | 112 |
| Education ${ }^{1}$ |  |  |  |  |  |  |
| No education | 24.2 | 2,503 | 2,532 | 11.8 | 312 | 325 |
| Primary incomplete | 18.0 | 1,855 | 1,940 | 24.5 | 646 | 692 |
| Primary complete | 49.2 | 5,086 | 4,440 | 52.4 | 1,381 | 1,226 |
| Secondary+ | 8.6 | 585 | 1,417 | 11.2 | , 296 | + 392 |
| Religion 30.0 |  |  |  |  |  |  |
| Muslim | 30.0 | 3,095 | 4,578 | 30.3 | 798 | 1,161 |
| Catholic | 28.5 | 2,944 | 2,445 | 28.7 | 755 | 639 |
| Protestant | 29.0 | 3,000 | 2,373 | 28.0 | 739 | 580 |
| None | 12.4 | 1,284 | -929 | 13.0 | 342 | 254 |
| Other | 0.0 | - 3 | 2 | 0.0 | 1 | 1 |
| Total | 100.0 | 10,329 | 10,329 | 100.0 | 2,635 | 2,635 |
| Note: The total includes two women for whom information on religion is missing. <br> ${ }^{1}$ Primary complete includes those who attended post-primary training. Secondary+ includes those who attended or completed secondary in addition to those with higher levels of education. |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |

### 3.2 Educational Attainment

Education provides people with the knowledge and skills that can lead them to a better quality of life. Education is correlated with the health of mothers and their children, and with reproductive behaviour. Tables 3.2.1 and 3.2.2 provide an overview of the relationship between the respondent's level of education and other background characteristics.

Fifty-eight percent of women and 64 percent of men have completed primary school. These proportions are slightly higher than those estimated from the 1996 TDHS and the 1999 TRCHS, but slightly lower than in the THIS. Increasing age is generally associated with lower levels of education, particularly for women. Most disadvantaged are the oldest women (age 45-59), of whom more than half have no education.

Educational differentials are also found by residence. The rural-urban differentials, as expected, show wide variation. Among urban women, 9 percent have had no education, compared with 30 percent among rural women. Among urban men, negligible proportions (3 percent) have had no education, compared with 15 percent among rural men. More than one-fifth of urban women and more than a quarter of urban men have attended secondary education, compared with less than 6 percent of men and 3 percent of women in rural areas (this may, in part, reflect the predominantly urban locations of secondary and tertiary learning institutions). Though 33 percent of men and 24 percent of women in Dar es Salaam city have attended at least some secondary education, approximately 4 in 10 of both women and men living in the Islands of Zanzibar have some secondary education. There are also significant differentials among administrative regions.

The median years of schooling, indicating the number of years spent in school by half the population, shows no great variations among regions. Differences are found in few regions, namely Tabora and for women, Rukwa, reflecting the high proportions with no education. As expected, for both men and women, educational attainment increases with economic status as reflected by wealth quintiles.

## Literacy

The ability to read and write is an important personal asset, allowing women and men increased opportunities in life. Knowing the distribution of the literate population can help program managers, especially for health and family planning, know how to reach women and men with their messages. In the 2004-05 TDHS, information on the ability to read was collected from each individual who had less than post-primary training or a secondary education. The respondents were asked to read from a card containing sentences such as the following:

1 Children should go to school.
2 Today is a sunny day.
3 Birds fly in the sky.
4 The child is reading a book.
$5 \quad$ The rains came late this year.
These sentences were translated into Kiswahili to test respondents on their reading proficiency. A person was defined as literate if-
$1 \quad \mathrm{He} /$ she had some post-primary training or secondary education.
2 He/she was able to read all or part of a sentence in Kiswahili, English, or both.

Table 3.2.1 Educational attainment by background characteristics: women
Percent distribution of women by highest level of schooling attended or completed, and median number of years of schooling, according to background characteristics, Tanzania 2004-05

| Background characteristic | Highest level of schooling attended or completed |  |  |  | Total | Number of women | Median years of schooling |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} \hline \text { No } \\ \text { education } \end{gathered}$ | $\begin{gathered} \text { Some } \\ \text { primary } \end{gathered}$ | Completed primary | Secondary+ |  |  |  |
| Age |  |  |  |  |  |  |  |
| 15-19 | 20.7 | 26.4 | 41.5 | 11.4 | 100.0 | 2,245 | 6.1 |
| 20-24 | 23.0 | 15.3 | 51.7 | 10.1 | 100.0 | 2,007 | 6.2 |
| 25-29 | 18.2 | 14.2 | 58.4 | 9.2 | 100.0 | 1,885 | 6.3 |
| 30-34 | 19.3 | 14.7 | 57.3 | 8.7 | 100.0 | 1,542 | 6.3 |
| 35-39 | 22.7 | 14.5 | 57.7 | 5.2 | 100.0 | 1,053 | 6.2 |
| 40-44 | 34.1 | 16.4 | 44.6 | 4.9 | 100.0 | 834 | 5.8 |
| 45-49 | 54.4 | 22.5 | 20.1 | 3.0 | 100.0 | 763 | 0.0 |
| Residence |  |  |  |  |  |  |  |
| Urban | 9.3 | 14.3 | 54.9 | 21.5 | 100.0 | 2,935 | 6.5 |
| Rural | 30.2 | 19.4 | 47.0 | 3.4 | 100.0 | 7,394 | 6.0 |
| Mainland/Zanzibar |  |  |  |  |  |  |  |
| Mainland | 24.3 | 17.9 | 50.2 | 7.5 | 100.0 | 10,016 | 6.2 |
| Total urban | 9.5 | 14.4 | 56.6 | 19.6 | 100.0 | 2,885 | 6.5 |
| Dar es Salaam city | 7.6 | 12.0 | 56.9 | 23.6 | 100.0 | 969 | 6.6 |
| Other urban | 10.4 | 15.6 | 56.4 | 17.6 | 100.0 | 1,916 | 6.4 |
| Total rural | 30.4 | 19.4 | 47.7 | 2.6 | 100.0 | 7,131 | 6.0 |
| Zanzibar | 20.9 | 19.0 | 17.6 | 42.5 | 100.0 | 313 | 6.8 |
| Unguja | 15.7 | 16.6 | 19.4 | 48.2 | 100.0 | 216 | 7.5 |
| Pemba | 32.4 | 24.1 | 13.6 | 29.8 | 100.0 | 97 | 4.9 |
| Zone |  |  |  |  |  |  |  |
| Western | 33.0 | 19.6 | 44.6 | 2.8 | 100.0 | 1,880 | 5.2 |
| Northern | 19.1 | 15.1 | 54.0 | 11.8 | 100.0 | 1,496 | 6.3 |
| Central | 29.0 | 17.5 | 49.8 | 3.8 | 100.0 | 799 | 6.1 |
| Southern highlands | 30.4 | 18.5 | 45.8 | 5.3 | 100.0 | 1,440 | 6.0 |
| Lake | 22.8 | 19.7 | 52.5 | 5.0 | 100.0 | 1,865 | 6.1 |
| Eastern | 14.7 | 13.8 | 55.2 | 16.3 | 100.0 | 1,670 | 6.4 |
| Southern | 22.0 | 22.9 | 49.2 | 5.9 | 100.0 | 866 | 6.1 |
| Region |  |  |  |  |  |  |  |
| Dodoma | 29.6 | 16.6 | 50.7 | 3.1 | 100.0 | 468 | 6.1 |
| Arusha | 18.8 | 10.0 | 54.2 | 17.0 | 100.0 | 391 | 6.4 |
| Kilimanjaro | 3.9 | 15.0 | 64.9 | 16.2 | 100.0 | 380 | 6.5 |
| Tanga | 24.1 | 19.6 | 47.6 | 8.7 | 100.0 | 431 | 6.1 |
| Morogoro | 24.6 | 17.3 | 50.3 | 7.8 | 100.0 | 449 | 6.2 |
| Pwani | 24.6 | 14.4 | 57.7 | 3.3 | 100.0 | 253 | 6.2 |
| Dar es Salaam | 7.6 | 12.0 | 56.9 | 23.6 | 100.0 | 969 | 6.6 |
| Lindi | 25.4 | 21.8 | 48.2 | 4.5 | 100.0 | 221 | 6.1 |
| Mtwara | 28.5 | 26.1 | 42.9 | 2.5 | 100.0 | 346 | 5.3 |
| Ruvuma | 12.1 | 19.9 | 57.2 | 10.8 | 100.0 | 299 | 6.3 |
| Iringa | 18.4 | 17.4 | 57.5 | 6.6 | 100.0 | 412 | 6.3 |
| Mbeya | 30.9 | 19.1 | 45.4 | 4.6 | 100.0 | 712 | 6.0 |
| Singida | 28.1 | 18.8 | 48.5 | 4.6 | 100.0 | 331 | 6.1 |
| Tabora | 43.7 | 18.6 | 34.9 | 2.7 | 100.0 | 520 | 2.7 |
| Rukwa | 45.0 | 18.5 | 31.4 | 5.1 | 100.0 | 316 | 2.1 |
| Kigoma | 24.5 | 21.7 | 50.0 | 3.8 | 100.0 | 499 | 6.1 |
| Shinyanga | 31.5 | 19.0 | 47.2 | 2.3 | 100.0 | 861 | 5.9 |
| Kagera | 26.5 | 17.0 | 54.3 | 2.2 | 100.0 | 545 | 6.1 |
| Mwanza | 23.1 | 21.0 | 50.4 | 5.5 | 100.0 | 939 | 6.1 |
| Mara | 16.8 | 20.3 | 54.9 | 8.0 | 100.0 | 381 | 6.2 |
| Manyara | 31.8 | 15.1 | 49.3 | 3.8 | 100.0 | 293 | 6.1 |
| Zanzibar North | 34.0 | 21.2 | 13.5 | 31.4 | 100.0 | 48 | 5.2 |
| Zanzibar South | 12.4 | 24.2 | 20.8 | 42.6 | 100.0 | 26 | 7.0 |
| Town West | 10.2 | 13.7 | 21.2 | 54.9 | 100.0 | 143 | 9.0 |
| Pemba North | 39.6 | 20.2 | 12.6 | 27.6 | 100.0 | 52 | 4.3 |
| Pemba South | 24.2 | 28.6 | 14.8 | 32.4 | 100.0 | 45 | 5.5 |
| Wealth quintile |  |  |  |  |  |  |  |
| Lowest | 45.6 | 20.6 | 33.1 | 0.6 | 100.0 | 1,840 | 1.9 |
| Second | 37.4 | 21.4 | 40.7 | 0.4 | 100.0 | 1,944 | 3.7 |
| Middle | 26.3 | 20.2 | 51.4 | 2.1 | 100.0 | 1,943 | 6.1 |
| Fourth | 13.7 | 19.3 | 60.9 | 6.1 | 100.0 | 2,004 | 6.3 |
| Highest | 5.8 | 10.8 | 56.4 | 27.0 | 100.0 | 2,597 | 6.6 |
| Total | 24.2 | 18.0 | 49.2 | 8.6 | 100.0 | 10,329 | 6.2 |

${ }^{1}$ Completed Standard 7 at the primary level and/or attended post-primary training

| Percent distribution of men by highest level of schooling attended or completed, and median number of years of schooling, according to background characteristics, Tanzania 2004-05 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Highest level of schooling attended or completed |  |  |  |  |  |  |  |
| Background characteristic | No education | Some primary | Completed primary | Secondary+ | Total | Number of men | Median years of schooling |
| Age 19 - 9.8 - 100.0 |  |  |  |  |  |  |  |
| 15-19 | 9.8 | 43.5 | 36.5 | 10.2 | 100.0 | 637 | 5.5 |
| 20-24 | 12.0 | 20.9 | 55.0 | 12.1 | 100.0 | 493 | 6.3 |
| 25-29 | 14.2 | 15.1 | 57.8 | 12.8 | 100.0 | 405 | 6.4 |
| 30-34 | 11.6 | 20.3 | 58.7 | 9.4 | 100.0 | 387 | 6.3 |
| 35-39 | 8.7 | 12.3 | 62.9 | 16.1 | 100.0 | 278 | 6.5 |
| 40-44 | 12.1 | 17.8 | 62.5 | 7.7 | 100.0 | 265 | 6.3 |
| 45-49 | 18.5 | 26.6 | 44.3 | 10.6 | 100.0 | 170 | 6.1 |
| Residence |  |  |  |  |  |  |  |
| Urban | 3.0 | 16.7 | 53.6 | 26.6 | 100.0 | 716 | 6.6 |
| Rural | 15.1 | 27.4 | 51.9 | 5.5 | 100.0 | 1,919 | 6.1 |
| Mainland/Zanzibar |  |  |  |  |  |  |  |
| Mainland | 11.9 | 24.4 | 53.3 | 10.3 | 100.0 | 2,556 | 6.3 |
| Total urban | 2.9 | 16.3 | 55.5 | 25.4 | 100.0 | 716 | 6.6 |
| Dar es Salaam city | 0.7 | 11.6 | 54.3 | 33.3 | 100.0 | 267 | 6.7 |
| Other urban | 4.1 | 19.0 | 56.2 | 20.7 | 100.0 | 450 | 6.5 |
| Total rural | 15.5 | 27.6 | 52.5 | 4.5 | 100.0 | 1,840 | 6.1 |
| Zanzibar | 9.1 | 27.9 | 22.5 | 40.5 | 100.0 | 79 | 6.5 |
| Unguja | 5.8 | 20.9 | 27.2 | 46.1 | 100.0 | 53 | 6.8 |
| Pemba | 15.8 | 42.3 | 13.0 | 28.9 | 100.0 | 26 | 4.9 |
| Zone |  |  |  |  |  |  |  |
| Western | 17.6 | 27.7 | 50.6 | 4.2 | 100.0 | 468 | 6.1 |
| Northern | 9.8 | 20.6 | 56.9 | 12.7 | 100.0 | 362 | 6.4 |
| Central | 17.2 | 24.9 | 55.0 | 2.9 | 100.0 | 212 | 6.1 |
| Southern highlands | 14.1 | 20.4 | 57.1 | 8.5 | 100.0 | 358 | 6.3 |
| Lake | 9.9 | 32.3 | 50.1 | 7.6 | 100.0 | 448 | 6.1 |
| Eastern | 6.3 | 16.3 | 54.5 | 22.9 | 100.0 | 462 | 6.5 |
| Southern | 11.1 | 30.0 | 49.9 | 9.0 | 100.0 | 245 | 6.2 |
| Region |  |  |  |  |  |  |  |
| Dodoma | 17.3 | 26.5 | 54.5 | 1.7 | 100.0 | 113 | 6.1 |
| Arusha | 15.5 | 10.9 | 59.2 | 14.3 | 100.0 | 82 | 6.4 |
| Kilimanjaro | 2.4 | 9.9 | 69.5 | 18.2 | 100.0 | 104 | 6.6 |
| Tanga | 13.1 | 27.9 | 45.7 | 13.3 | 100.0 | 94 | 6.2 |
| Morogoro | 11.1 | 21.7 | 57.5 | 9.7 | 100.0 | 127 | 6.3 |
| Pwani | 18.9 | 24.5 | 49.8 | 6.8 | 100.0 | 68 | 6.1 |
| Dar es Salaam | 0.7 | 11.6 | 54.3 | 33.3 | 100.0 | 267 | 6.7 |
| Lindi | 16.2 | 28.6 | 46.4 | 8.8 | 100.0 | 65 | 6.1 |
| Mtwara | 14.0 | 37.9 | 45.2 | 3.0 | 100.0 | 98 | 5.3 |
| Ruvuma | 3.7 | 21.7 | 58.3 | 16.3 | 100.0 | 83 | 6.4 |
| Iringa | 8.0 | 17.5 | 66.8 | 7.7 | 100.0 | 102 | 6.4 |
| Mbeya | 18.2 | 16.5 | 57.8 | 7.5 | 100.0 | 170 | 6.3 |
| Singida | 17.0 | 23.2 | 55.5 | 4.3 | 100.0 | 99 | 6.2 |
| Tabora | 36.6 | 26.3 | 31.0 | 6.2 | 100.0 | 127 | 2.9 |
| Rukwa | 13.1 | 31.4 | 44.3 | 11.2 | 100.0 | 87 | 6.1 |
| Kigoma | 8.9 | 41.6 | 46.9 | 2.5 | 100.0 | 127 | 6.0 |
| Shinyanga | 11.4 | 20.2 | 64.4 | 3.9 | 100.0 | 215 | 6.3 |
| Kagera | 16.6 | 25.3 | 53.3 | 4.8 | 100.0 | 122 | 6.2 |
| Mwanza | 8.1 | 38.1 | 43.9 | 9.8 | 100.0 | 229 | 6.1 |
| Mara | 5.9 | 27.6 | 60.6 | 6.0 | 100.0 | 98 | 6.3 |
| Manyara | 9.4 | 35.5 | 51.7 | 3.4 | 100.0 | 83 | 6.1 |
| Zanzibar North | 15.4 | 46.8 | 16.9 | 21.0 | 100.0 | 11 | 4.9 |
| Zanzibar South | 4.1 | 19.4 | 27.1 | 49.4 | 100.0 | 6 | 6.7 |
| Town West | 3.2 | 13.1 | 30.4 | 53.3 | 100.0 | 36 | 7.2 |
| Pemba North | 18.5 | 36.0 | 15.7 | 29.9 | 100.0 | 13 | 5.5 |
| Pemba South | 12.9 | 49.2 | 10.1 | 27.8 | 100.0 | 12 | 4.7 |
| Wealth quintile |  |  |  |  |  |  |  |
| Lowest | 28.0 | 34.4 | 36.7 | 1.0 | 100.0 | 484 | 3.6 |
| Second | 16.5 | 31.1 | 51.1 | 1.3 | 100.0 | 504 | 6.0 |
| Middle | 9.2 | 29.0 | 57.7 | 4.2 | 100.0 | 516 | 6.2 |
| Fourth | 7.4 | 20.1 | 63.2 | 9.3 | 100.0 | 517 | 6.4 |
| Highest | 1.3 | 11.4 | 52.4 | 35.0 | 100.0 | 615 | 6.7 |
| Total | 11.8 | 24.5 | 52.4 | 11.2 | 100.0 | 2,635 | 6.3 |

Tables 3.3.1 and 3.3.2 show the literacy levels by background characteristics of respondents. Two-thirds of women and 80 percent of men are reported to be literate. These rates have not changed since the last assessment of literacy in the 1999 TRCHS, which registered 64 percent literacy among women and 78 percent among men. Illiteracy, expressed as the proportion of those who cannot read at all, is observed to increase directly with age among women age 30 and older. The association between age and literacy for men is not as strong.

| Percent distribution of women by level of schooling attended and by level of literacy, and percent literate, according to background characteristics, Tanzania 2004-05 |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Background characteristic | Postprimary, secondary school, or higher | No schooling or primary school |  |  |  |  |  | Number of women | Percent literate ${ }^{1}$ |
|  |  | Can <br> read a whole sentence | Can <br> read part of a sentence | $\begin{gathered} \text { Cannot } \\ \text { read } \\ \text { at all } \end{gathered}$ | No card with required language/ blind | Missing | Total |  |  |
| Age |  |  |  |  |  |  |  |  |  |
| $15-19$ | 12.7 | 53.4 | 4.5 | 29.4 | 0.0 | 0.1 | 100.0 | 2,245 | 70.5 |
| 20-24 | 11.1 | 51.3 | 4.2 | 33.2 | 0.1 | 0.1 | 100.0 | 2,007 | 66.6 |
| 25-29 | 10.6 | 57.2 | 4.6 | 27.5 | 0.0 | 0.2 | 100.0 | 1,885 | 72.4 |
| 30-34 | 9.6 | 55.3 | 6.2 | 28.9 | 0.0 | 0.0 | 100.0 | 1,542 | 71.1 |
| 35-39 | 6.3 | 57.8 | 5.5 | 30.1 | 0.3 | 0.0 | 100.0 | 1,053 | 69.6 |
| 40-44 | 7.4 | 45.9 | 7.2 | 39.5 | 0.0 | 0.0 | 100.0 | 834 | 60.5 |
| 45-49 | 4.8 | 33.0 | 5.5 | 56.4 | 0.3 | 0.0 | 100.0 | 763 | 43.3 |
| Residence |  |  |  |  |  |  |  |  |  |
| Urban | 24.2 | 56.7 | 4.0 | 15.0 | 0.0 | 0.1 | 100.0 | 2,935 | 84.9 |
| Rural | 4.2 | 50.6 | 5.6 | 39.6 | 0.1 | 0.0 | 100.0 | 7,394 | 60.3 |
| Mainland/Zanzibar |  |  |  |  |  |  |  |  |  |
| Mainland | 8.8 | 53.0 | 5.1 | 32.9 | 0.1 | 0.1 | 100.0 | 10,016 | 67.0 |
| Total urban | 22.4 | 58.2 | 4.0 | 15.3 | 0.0 | 0.1 | 100.0 | 2,885 | 84.6 |
| Dar es Salaam city | 26.6 | 56.9 | 3.9 | 12.6 | 0.0 | 0.0 | 100.0 | 969 | 87.4 |
| Other urban | 20.2 | 58.8 | 4.1 | 16.7 | 0.0 | 0.1 | 100.0 | 1,916 | 83.2 |
| Total rural | 3.4 | 50.9 | 5.5 | 40.0 | 0.1 | 0.0 | 100.0 | 7,131 | 59.8 |
| Zanzibar | 42.6 | 29.1 | 5.2 | 22.9 | 0.0 | 0.2 | 100.0 | 313 | 76.8 |
| Unguja | 48.3 | 30.0 | 5.0 | 16.5 | 0.0 | 0.2 | 100.0 | 216 | 83.2 |
| Pemba | 29.9 | 27.1 | 5.5 | 37.3 | 0.0 | 0.2 | 100.0 | 97 | 62.5 |
| Zone |  |  |  |  |  |  |  |  |  |
| Western | 2.9 | 48.5 | 3.9 | 44.7 | 0.0 | 0.1 | 100.0 | 1,880 | 55.2 |
| Northern | 15.5 | 56.5 | 3.3 | 24.6 | 0.1 | 0.1 | 100.0 | 1,496 | 75.2 |
| Central | 5.1 | 54.3 | 5.1 | 35.3 | 0.2 | 0.0 | 100.0 | 799 | 64.5 |
| Southern highlands | 5.9 | 48.2 | 6.4 | 39.3 | 0.0 | 0.2 | 100.0 | 1,440 | 60.5 |
| Lake | 5.8 | 54.1 | 7.4 | 32.5 | 0.2 | 0.0 | 100.0 | 1,865 | 67.3 |
| Eastern | 18.5 | 55.9 | 5.4 | 20.2 | 0.0 | 0.0 | 100.0 | 1,670 | 79.8 |
| Southern | 6.9 | 55.7 | 3.2 | 34.3 | 0.0 | 0.0 | 100.0 | 866 | 65.7 |
| Region |  |  |  |  |  |  |  |  |  |
| Dodoma | 4.5 | 55.3 | 6.4 | 33.5 | 0.3 | 0.0 | 100.0 | 468 | 66.2 |
| Arusha | 23.3 | 51.4 | 1.1 | 24.1 | 0.0 | 0.0 | 100.0 | 391 | 75.9 |
| Kilimanjaro | 21.2 | 68.7 | 1.7 | 8.1 | 0.3 | 0.0 | 100.0 | 380 | 91.6 |
| Tanga | 10.1 | 53.3 | 4.5 | 31.8 | 0.0 | 0.3 | 100.0 | 431 | 67.9 |
| Morogoro | 9.5 | 51.4 | 6.6 | 32.5 | 0.0 | 0.0 | 100.0 | 449 | 67.5 |
| Pwani | 3.6 | 59.8 | 9.0 | 27.5 | 0.0 | 0.0 | 100.0 | 253 | 72.5 |
| Dar es Salaam | 26.6 | 56.9 | 3.9 | 12.6 | 0.0 | 0.0 | 100.0 | 969 | 87.4 |
| Lindi | 6.0 | 56.8 | 2.4 | 34.8 | 0.0 | 0.0 | 100.0 | 221 | 65.2 |
| Mtwara | 2.5 | 51.9 | 4.3 | 41.3 | 0.0 | 0.0 | 100.0 | 346 | 58.7 |
| Ruvuma | 12.5 | 59.2 | 2.5 | 25.7 | 0.0 | 0.0 | 100.0 | 299 | 74.3 |
| Iringa | 7.9 | 59.2 | 3.5 | 28.7 | 0.0 | 0.8 | 100.0 | 412 | 70.5 |
| Mbeya | 4.8 | 46.3 | 9.4 | 39.5 | 0.0 | 0.0 | 100.0 | 712 | 60.5 |
| Singida | 5.8 | 53.0 | 3.2 | 38.0 | 0.0 | 0.0 | 100.0 | 331 | 62.0 |
| Tabora | 2.7 | 38.9 | 4.9 | 53.5 | 0.0 | 0.0 | 100.0 | 520 | 46.5 |
| Rukwa | 5.5 | 38.4 | 3.5 | 52.6 | 0.0 | 0.0 | 100.0 | 316 | 47.4 |
| Kigoma | 4.0 | 55.0 | 5.8 | 35.2 | 0.0 | 0.0 | 100.0 | 499 | 64.8 |
| Shinyanga | 2.3 | 50.5 | 2.2 | 44.8 | 0.0 | 0.2 | 100.0 | 861 | 55.0 |
| Kagera | 3.1 | 56.3 | 7.2 | 33.4 | 0.0 | 0.0 | 100.0 | 545 | 66.6 |
| Mwanza | 6.2 | 54.7 | 7.2 | 31.6 | 0.3 | 0.0 | 100.0 | 939 | 68.1 |
| Mara | 8.6 | 49.4 | 8.2 | 33.5 | 0.3 | 0.0 | 100.0 | 381 | 66.2 |
| Manyara | 5.5 | 52.1 | 6.3 | 36.1 | 0.0 | 0.0 | 100.0 | 293 | 63.9 |
| Zanzibar North | 31.4 | 27.4 | 4.8 | 36.0 | 0.2 | 0.2 | 100.0 | 48 | 63.6 |
| Zanzibar South | 42.9 | 30.6 | 8.1 | 17.9 | 0.0 | 0.5 | 100.0 | 26 | 81.6 |
| Town West | 54.9 | 30.7 | 4.5 | 9.8 | 0.0 | 0.2 | 100.0 | 143 | 90.0 |
| Pemba North | 27.8 | 23.5 | 4.6 | 43.8 | 0.0 | 0.3 | 100.0 | 52 | 55.9 |
| Pemba South | 32.4 | 31.2 | 6.6 | 29.9 | 0.0 | 0.0 | 100.0 | 45 | 70.1 |
| Wealth quintile |  |  |  |  |  |  |  |  |  |
| Lowest | 0.8 | 36.5 | 5.8 | 56.8 | 0.1 | 0.0 | 100.0 | 1,840 | 43.1 |
| Second | 0.6 | 45.0 | 6.6 | 47.8 | 0.0 | 0.0 | 100.0 | 1,944 | 52.2 |
| Middle | 2.6 | 56.1 | 5.3 | 35.6 | 0.2 | 0.2 | 100.0 | 1,943 | 64.0 |
| Fourth | 7.5 | 66.2 | 5.2 | 21.1 | 0.1 | 0.0 | 100.0 | 2,004 | 78.9 |
| Highest | 30.5 | 55.4 | 3.3 | 10.7 | 0.0 | 0.1 | 100.0 | 2,597 | 89.2 |
| Total | 9.9 | 52.3 | 5.1 | 32.6 | 0.1 | 0.1 | 100.0 | 10,329 | 67.3 |

[^1]| Percent distribution of men by level of schooling attended and by level of literacy, and percent literate, according to background characteristics, Tanzania 2004-05 |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | No sc | chooling or | primary | chool |  |  |  |
| Background characteristic | Postprimary, secondary school, or higher | Can <br> read a whole sentence | Can <br> read part of a sentence | $\begin{gathered} \text { Cannot } \\ \text { read } \\ \text { at all } \\ \hline \end{gathered}$ | No card with required language/ blind | Total | Number of men | Percent literate ${ }^{1}$ |
| Age |  |  |  |  |  |  |  |  |
| 15-19 | 11.0 | 66.3 | 4.8 | 17.9 | 0.0 | 100.0 | 637 | 82.1 |
| 20-24 | 14.0 | 57.3 | 5.7 | 23.0 | 0.0 | 100.0 | 493 | 77.0 |
| 25-29 | 16.1 | 57.8 | 3.4 | 22.4 | 0.3 | 100.0 | 405 | 77.3 |
| 30-34 | 14.4 | 59.2 | 5.5 | 20.9 | 0.0 | 100.0 | 387 | 79.1 |
| 35-39 | 21.6 | 59.1 | 1.2 | 18.1 | 0.0 | 100.0 | 278 | 81.9 |
| 40-44 | 12.6 | 66.0 | 1.4 | 20.0 | 0.0 | 100.0 | 265 | 80.0 |
| 45-49 | 13.1 | 68.0 | 6.0 | 12.9 | 0.0 | 100.0 | 170 | 87.1 |
| Residence |  |  |  |  |  |  |  |  |
| Urban | 32.5 | 57.2 | 2.4 | 7.9 | 0.0 | 100.0 | 716 | 92.1 |
| Rural | 7.4 | 63.2 | 4.9 | 24.4 | 0.1 | 100.0 | 1,919 | 75.5 |
| Mainland/Zanzibar |  |  |  |  |  |  |  |  |
| Mainland | 13.4 | 62.2 | 4.2 | 20.1 | 0.1 | 100.0 | 2,556 | 79.9 |
| Total urban | 31.3 | 58.3 | 2.3 | 8.1 | 0.0 | 100.0 | 716 | 91.9 |
| Dar es Salaam city | 40.1 | 52.9 | 1.6 | 5.5 | 0.0 | 100.0 | 267 | 94.5 |
| Other urban | 26.0 | 61.6 | 2.8 | 9.6 | 0.0 | 100.0 | 450 | 90.4 |
| Total rural | 6.5 | 63.8 | 4.9 | 24.8 | 0.1 | 100.0 | 1,840 | 75.2 |
| Zanzibar | 40.9 | 40.5 | 4.6 | 14.0 | 0.0 | 100.0 | 79 | 86.0 |
| Unguja | 46.7 | 41.7 | 0.4 | 11.2 | 0.0 | 100.0 | 53 | 88.8 |
| Pemba | 28.9 | 38.1 | 13.3 | 19.7 | 0.0 | 100.0 | 26 | 80.3 |
| Zone |  |  |  |  |  |  |  |  |
| Western | 5.6 | 65.4 | 4.4 | 24.7 | 0.0 | 100.0 | 468 | 75.3 |
| Northern | 19.0 | 59.5 | 6.5 | 14.6 | 0.4 | 100.0 | 362 | 85.0 |
| Central | 5.0 | 61.4 | 15.4 | 18.2 | 0.0 | 100.0 | 212 | 81.8 |
| Southern highlands | 11.2 | 64.8 | 3.8 | 20.1 | 0.0 | 100.0 | 358 | 79.9 |
| Lake | 8.5 | 62.2 | 0.6 | 28.8 | 0.0 | 100.0 | 448 | 71.2 |
| Eastern | 27.3 | 61.2 | 1.8 | 9.7 | 0.0 | 100.0 | 462 | 90.3 |
| Southern | 13.6 | 59.4 | 2.2 | 24.8 | 0.0 | 100.0 | 245 | 75.2 |
| Region |  |  |  |  |  |  |  |  |
| Dodoma | 3.6 | 65.3 | 13.1 | 18.0 | 0.0 | 100.0 | 113 | 82.0 |
| Arusha | 24.4 | 59.5 | 0.0 | 16.0 | 0.0 | 100.0 | 82 | 84.0 |
| Kilimanjaro | 26.0 | 57.5 | 10.3 | 6.1 | 0.0 | 100.0 | 104 | 93.9 |
| Tanga | 17.1 | 54.5 | 13.1 | 13.9 | 1.4 | 100.0 | 94 | 84.7 |
| Morogoro | 11.6 | 76.5 | 1.2 | 10.7 | 0.0 | 100.0 | 127 | 89.3 |
| Pwani | 6.8 | 64.9 | 4.0 | 24.3 | 0.0 | 100.0 | 68 | 75.7 |
| Dar es Salaam | 40.1 | 52.9 | 1.6 | 5.5 | 0.0 | 100.0 | 267 | 94.5 |
| Lindi | 17.3 | 51.0 | 2.9 | 28.8 | 0.0 | 100.0 | 65 | 71.2 |
| Mtwara | 6.0 | 59.2 | 3.2 | 31.6 | 0.0 | 100.0 | 98 | 68.4 |
| Ruvuma | 19.6 | 66.3 | 0.5 | 13.5 | 0.0 | 100.0 | 83 | 86.5 |
| Iringa | 8.9 | 77.8 | 2.5 | 10.9 | 0.0 | 100.0 | 102 | 89.1 |
| Mbeya | 11.1 | 57.8 | 5.7 | 25.3 | 0.0 | 100.0 | 170 | 74.7 |
| Singida | 6.5 | 57.1 | 18.1 | 18.3 | 0.0 | 100.0 | 99 | 81.7 |
| Tabora | 6.2 | 56.1 | 1.6 | 36.2 | 0.0 | 100.0 | 127 | 63.8 |
| Rukwa | 14.1 | 63.3 | 1.8 | 20.8 | 0.0 | 100.0 | 87 | 79.2 |
| Kigoma | 4.9 | 66.3 | 4.8 | 24.1 | 0.0 | 100.0 | 127 | 75.9 |
| Shinyanga | 5.7 | 70.3 | 5.8 | 18.2 | 0.0 | 100.0 | 215 | 81.8 |
| Kagera | 6.2 | 59.0 | 0.0 | 34.8 | 0.0 | 100.0 | 122 | 65.2 |
| Mwanza | 9.8 | 62.8 | 0.0 | 27.3 | 0.0 | 100.0 | 229 | 72.7 |
| Mara | 8.0 | 64.7 | 2.8 | 24.6 | 0.0 | 100.0 | 98 | 75.4 |
| Manyara | 6.8 | 67.6 | 0.9 | 24.7 | 0.0 | 100.0 | 83 | 75.3 |
| Zanzibar North | 21.0 | 52.8 | 0.9 | 25.3 | 0.0 | 100.0 | 11 | 74.7 |
| Zanzibar South | 49.4 | 39.1 | 2.2 | 9.4 | 0.0 | 100.0 | 6 | 90.6 |
| Town West | 54.1 | 38.7 | 0.0 | 7.2 | 0.0 | 100.0 | 36 | 92.8 |
| Pemba North | 29.9 | 36.5 | 12.7 | 21.0 | 0.0 | 100.0 | 13 | 79.0 |
| Pemba South | 27.8 | 39.8 | 14.0 | 18.4 | 0.0 | 100.0 | 12 | 81.6 |
| Wealth quintile |  |  |  |  |  |  |  |  |
| Lowest | 1.9 | 52.9 | 4.5 | 40.3 | 0.3 | 100.0 | 484 | 59.4 |
| Second | 2.2 | 65.8 | 6.2 | 25.8 | 0.0 | 100.0 | 504 | 74.2 |
| Middle | 6.0 | 67.2 | 6.1 | 20.7 | 0.0 | 100.0 | 516 | 79.3 |
| Fourth | 12.7 | 72.7 | 2.4 | 12.2 | 0.0 | 100.0 | 517 | 87.8 |
| Highest | 42.1 | 50.9 | 2.2 | 4.8 | 0.0 | 100.0 | 615 | 95.2 |
| Total | 14.2 | 61.6 | 4.2 | 19.9 | 0.1 | 100.0 | 2,635 | 80.0 |

${ }^{1}$ Refers to men who attended at least post-primary training, secondary school or higher, and men who can read a whole sentence or part of a sentence

Literacy rates for women and men are 85 and 92 percent, respectively, in urban areas compared with 60 and 76 percent, respectively, in rural areas. By administrative regions, Kilimanjaro, Dar es Salaam, Zanzibar South, and Town West have literacy levels exceeding eight in ten for women and nine in ten for men. Literacy increases directly with wealth for both women and men.

### 3.3 Access to Mass Media

The 2004-05 TDHS collected information on the exposure of respondents to various common print and electronic media. Respondents were asked how often they read a newspaper, listen to the radio, or watch television in a week. This information is useful in determining the media channels to use in disseminating health information to targeted audiences.

Findings of the survey, given in Tables 3.4.1 and 3.4.2, indicate that about one-third of women and 17 percent of men are not exposed to any type of media. However, 62 percent of women and 80 percent of men listen to the radio, the most common type of mass media in Tanzania, at least once a week. One-fifth of women read a newspaper, and 17 percent watch television once a week. Respective rates for men are 36 and 25 percent. Nine percent of women and 16 percent of men have exposure to all three media types. This indicates a significant increase in mass media exposure over the last five years. According to the 1999 TRCHS, just 1 percent of women and 4 percent of men had weekly exposure to all three types of media.

As expected, women and men living in urban areas are more likely than those living in rural areas to be exposed to mass media. A quarter of urban women are exposed to all forms of media as are 42 percent of urban men. Respective proportions for rural dwellers are 2 of women and 7 percent of men. The main media source accessed by urban respondents is the radio: 80 percent of urban women and 89 percent of urban men listen to the radio at least once a week. Television is the least popular media, although there are higher proportions of viewers in urban areas than in rural areas. Geographically, exposure to all forms of media is highest in the Eastern zone. There is also a positive relationship between levels of education and wealth and exposure to mass media.

| Table 3.4.1 Exposure to mass media: women |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percentage of women who usually read a newspaper at least once a week, watch television at least once a week, and listen to the radio at least once a week, by background characteristics, Tanzania 2004-05 |  |  |  |  |  |  |
| 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 | All three media | $\begin{gathered} \text { No } \\ \text { media } \end{gathered}$ | $\qquad$ |
| Age |  |  |  |  |  |  |
| 15-19 | 23.8 | 23.2 | 61.1 | 10.5 | 32.3 | 2,245 |
| 20-24 | 21.8 | 19.5 | 65.2 | 10.3 | 30.9 | 2,007 |
| 25-29 | 23.8 | 17.6 | 64.9 | 10.6 | 30.9 | 1,885 |
| 30-34 | 20.0 | 14.5 | 64.2 | 7.7 | 31.4 | 1,542 |
| 35-39 | 16.7 | 13.0 | 60.0 | 7.0 | 37.3 | 1,053 |
| 40-44 | 15.7 | 11.3 | 57.3 | 6.3 | 39.7 | 834 |
| 45-49 | 11.0 | 8.3 | 56.4 | 4.1 | 41.5 | 763 |
| Residence |  |  |  |  |  |  |
| Urban | 42.8 | 45.8 | 80.2 | 25.9 | 12.1 | 2,935 |
| Rural | 11.7 | 5.7 | 55.2 | 2.1 | 41.9 | 7,394 |
| Mainland/Zanzibar |  |  |  |  |  |  |
| Mainland | 20.5 | 16.4 | 61.6 | 8.7 | 34.1 | 10,016 |
| Total urban | 43.2 | 44.4 | 79.8 | 25.8 | 12.7 | 2,885 |
| Dar es Salaam city | 51.5 | 63.3 | 78.6 | 37.2 | 8.8 | , 969 |
| Other urban | 39.0 | 34.9 | 80.4 | 20.0 | 14.7 | 1,916 |
| Total rural | 11.3 | 5.1 | 54.2 | 1.9 | 42.8 | 7,131 |
| Zanzibar | 21.8 | 37.4 | 84.8 | 13.9 | 11.6 | 313 |
| Unguja | 27.3 | 48.9 | 90.0 | 18.6 | 5.5 | 216 |
| Pemba | 9.8 | 11.9 | 73.3 | 3.4 | 25.0 | 97 |
| Zone |  |  |  |  |  |  |
| Western | 13.3 | 8.6 | 55.4 | 3.9 | 40.9 | 1,880 |
| Northern | 26.3 | 18.7 | 68.8 | 9.1 | 26.3 | 1,496 |
| Central | 7.6 | 5.8 | 38.1 | 2.0 | 58.7 | 799 |
| Southern highlands | 21.8 | 12.5 | 55.4 | 6.5 | 39.7 | 1,440 |
| Lake | 15.0 | 8.8 | 64.5 | 4.9 | 33.1 | 1,865 |
| Eastern | 35.3 | 42.5 | 73.8 | 24.2 | 18.8 | 1,670 |
| Southern | 18.9 | 11.7 | 64.6 | 7.1 | 32.9 | 866 |
| Region |  |  |  |  |  |  |
| Dodoma | 10.7 | 6.7 | 42.4 | 2.4 | 53.1 | 468 |
| Arusha | 23.2 | 27.4 | 78.7 | 12.6 | 20.0 | 391 |
| Kilimanjaro | 34.4 | 22.2 | 68.8 | 11.6 | 23.2 | 380 |
| Tanga | 33.0 | 13.8 | 68.2 | 8.0 | 25.1 | 431 |
| Morogoro | 15.8 | 16.9 | 66.9 | 8.1 | 32.4 | 449 |
| Pwani | 7.9 | 8.2 | 67.4 | 3.1 | 32.6 | 253 |
| Dar es Salaam | 51.5 | 63.3 | 78.6 | 37.2 | 8.8 | 969 |
| Lindi | 19.9 | 14.9 | 70.7 | 8.6 | 26.1 | 221 |
| Mtwara | 14.9 | 5.2 | 56.8 | 3.6 | 41.2 | 346 |
| Ruvuma | 22.6 | 17.1 | 69.1 | 9.9 | 28.1 | 299 |
| Iringa | 25.1 | 12.9 | 66.1 | 7.3 | 28.5 | 412 |
| Mbeya | 22.4 | 12.2 | 55.0 | 5.7 | 40.3 | 712 |
| Singida | 3.2 | 4.5 | 32.0 | 1.4 | 66.7 | 331 |
| Tabora | 12.5 | 9.4 | 51.2 | 5.5 | 47.0 | 520 |
| Rukwa | 16.0 | 12.4 | 42.7 | 7.2 | 52.7 | 316 |
| Kigoma | 17.9 | 10.5 | 50.8 | 3.6 | 41.4 | 499 |
| Shinyanga | 11.1 | 7.0 | 60.6 | 3.2 | 37.0 | 861 |
| Kagera | 8.7 | 0.8 | 56.1 | 0.5 | 42.8 | 545 |
| Mwanza | 15.6 | 10.9 | 69.4 | 5.6 | 27.8 | 939 |
| Mara | 22.4 | 15.2 | 64.2 | 9.4 | 32.0 | 381 |
| Manyara | 10.3 | 9.9 | 56.2 | 3.0 | 40.1 | 293 |
| Zanzibar North | 10.8 | 11.2 | 88.0 | 2.4 | 11.8 | 48 |
| Zanzibar South | 19.8 | 33.0 | 93.3 | 9.1 | 5.2 | 26 |
| Town West | 34.1 | 64.3 | 90.0 | 25.8 | 3.5 | 143 |
| Pemba North | 6.4 | 8.3 | 67.4 | 1.8 | 31.0 | 52 |
| Pemba South | 13.6 | 16.0 | 80.2 | 5.3 | 18.2 | 45 |
| Education |  |  |  |  |  |  |
| No education | 0.5 | 3.5 | 44.4 | 0.0 | 55.0 | 2,503 |
| Primary incomplete | 13.2 | 11.7 | 57.8 | 4.1 | 38.3 | 1,855 |
| Primary complete | 26.3 | 18.0 | 68.4 | 9.4 | 26.0 | 5,086 |
| Secondary+ | 59.1 | 60.9 | 86.8 | 41.1 | 4.9 | 885 |
| Wealth quintile |  |  |  |  |  |  |
| Lowest | 4.9 | 1.5 | 26.3 | 0.3 | 71.2 | 1,840 |
| Second | 7.6 | 3.4 | 56.0 | 1.2 | 41.6 | 1,944 |
| Middle | 11.5 | 4.3 | 60.1 | 1.4 | 37.1 | 1,943 |
| Fourth | 23.0 | 10.2 | 74.7 | 4.6 | 20.7 | 2,004 |
| Highest | 46.1 | 53.1 | 84.5 | 29.7 | 7.6 | 2,597 |
| Total | 20.5 | 17.1 | 62.3 | 8.9 | 33.4 | 10,329 |


| Table 3.4.2 Exposure to mass media: men |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percentage of men who usually read a newspaper at least once a week, watch television at least once a week, and listen to the radio at least once a week, by background characteristics, Tanzania 2004-05 |  |  |  |  |  |  |
| 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 | All three media | No media | Number of men |
| Age |  |  |  |  |  |  |
| 15-19 | 33.0 | 26.3 | 75.9 | 14.3 | 18.5 | 637 |
| 20-24 | 38.5 | 26.4 | 78.8 | 16.9 | 18.2 | 493 |
| 25-29 | 38.2 | 30.3 | 86.3 | 20.6 | 11.7 | 405 |
| 30-34 | 38.6 | 24.8 | 83.5 | 16.5 | 13.0 | 387 |
| 35-39 | 37.1 | 24.4 | 79.9 | 18.4 | 17.3 | 278 |
| 40-44 | 32.6 | 19.7 | 73.6 | 11.8 | 20.8 | 265 |
| 45-49 | 32.0 | 18.3 | 83.4 | 13.8 | 15.2 | 170 |
| Residence |  |  |  |  |  |  |
| Urban | 60.5 | 59.6 | 88.9 | 42.4 | 7.0 | 716 |
| Rural | 26.8 | 12.5 | 76.5 | 6.5 | 20.0 | 1,919 |
| Mainland/Zanzibar |  |  |  |  |  |  |
| Mainland | 35.9 | 24.4 | 79.6 | 15.9 | 16.8 | 2,556 |
| Total urban | 59.8 | 57.6 | 88.9 | 41.6 | 7.2 | 716 |
| Dar es Salaam city | 67.9 | 62.4 | 88.1 | 48.0 | 7.4 | 267 |
| Other urban | 55.0 | 54.8 | 89.4 | 37.8 | 7.1 | 450 |
| Total rural | 26.6 | 11.5 | 76.0 | 5.9 | 20.5 | 1,840 |
| Zanzibar | 38.1 | 54.1 | 86.4 | 25.5 | 7.0 | 79 |
| Unguja | 41.8 | 65.5 | 88.9 | 32.0 | 4.3 | 53 |
| Pemba | 30.3 | 30.8 | 81.2 | 12.2 | 12.5 | 26 |
| Zone |  |  |  |  |  |  |
| Western | 26.9 | 14.7 | 81.0 | 9.9 | 18.4 | 468 |
| Northern | 44.1 | 28.5 | 84.3 | 17.0 | 10.9 | 362 |
| Central | 32.0 | 17.9 | 73.2 | 12.5 | 25.4 | 212 |
| Southern highlands | 32.0 | 17.6 | 83.8 | 10.7 | 12.5 | 358 |
| Lake | 39.6 | 18.9 | 76.4 | 13.7 | 17.9 | 448 |
| Eastern | 50.4 | 47.1 | 79.6 | 33.4 | 15.3 | 462 |
| Southern | 16.2 | 20.0 | 75.7 | 7.8 | 21.9 | 245 |
| Region |  |  |  |  |  |  |
| Dodoma | 39.5 | 22.3 | 79.0 | 17.9 | 21.0 | 113 |
| Arusha | 44.5 | 54.1 | 90.7 | 30.2 | 6.8 | 82 |
| Kilimanjaro | 39.1 | 17.5 | 81.4 | 14.0 | 16.1 | 104 |
| Tanga | 52.5 | 21.5 | 80.5 | 13.3 | 12.7 | 94 |
| Morogoro | 33.2 | 32.4 | 74.0 | 18.6 | 19.1 | 127 |
| Pwani | 14.2 | 14.9 | 57.0 | 3.5 | 38.8 | 68 |
| Dar es Salaam | 67.9 | 62.4 | 88.1 | 48.0 | 7.4 | 267 |
| Lindi | 12.2 | 31.9 | 83.7 | 9.6 | 12.1 | 65 |
| Mtwara | 9.0 | 10.2 | 69.9 | 3.1 | 29.0 | 98 |
| Ruvuma | 27.9 | 22.2 | 76.2 | 11.8 | 21.2 | 83 |
| Iringa | 56.3 | 25.7 | 71.0 | 24.4 | 20.5 | 102 |
| Mbeya | 20.1 | 14.6 | 87.2 | 3.9 | 10.8 | 170 |
| Singida | 23.4 | 12.9 | 66.6 | 6.3 | 30.4 | 99 |
| Tabora | 40.4 | 19.2 | 80.3 | 16.7 | 17.4 | 127 |
| Rukwa | 26.8 | 14.0 | 92.2 | 7.9 | 6.4 | 87 |
| Kigoma | 35.0 | 26.5 | 90.9 | 11.2 | 9.1 | 127 |
| Shinyanga | 14.1 | 5.1 | 75.5 | 5.1 | 24.5 | 215 |
| Kagera | 32.6 | 8.2 | 62.7 | 4.6 | 29.3 | 122 |
| Mwanza | 48.0 | 27.8 | 82.4 | 20.9 | 11.4 | 229 |
| Mara | 28.5 | 11.5 | 79.2 | 8.1 | 19.1 | 98 |
| Manyara | 40.4 | 24.8 | 85.8 | 11.8 | 6.5 | 83 |
| Zanzibar North | 15.8 | 43.8 | 94.0 | 9.8 | 3.7 | 11 |
| Zanzibar South | 29.0 | 62.4 | 94.7 | 19.7 | 2.2 | 6 |
| Town West | 52.0 | 72.6 | 86.3 | 40.9 | 4.8 | 36 |
| Pemba North | 26.3 | 24.7 | 82.0 | 8.2 | 13.2 | 13 |
| Pemba South | 34.6 | 37.4 | 80.3 | 16.4 | 11.9 | 12 |
| Education |  |  |  |  |  |  |
| No education | 4.0 | 9.7 | 63.7 | 1.0 | 34.8 | 312 |
| Primary incomplete | 24.9 | 19.3 | 74.4 | 7.8 | 20.9 | 646 |
| Primary complete | 39.3 | 24.1 | 83.3 | 16.0 | 13.2 | 1,381 |
| Secondary+ | 78.3 | 60.5 | 92.6 | 51.7 | 2.8 | 296 |
| Wealth quintile |  |  |  |  |  |  |
| Lowest | 20.0 | 6.1 | 56.1 | 2.0 | 38.2 | 484 |
| Second | 20.9 | 9.3 | 78.3 | 3.5 | 18.7 | 504 |
| Middle | 24.8 | 12.7 | 80.5 | 4.7 | 16.0 | 516 |
| Fourth | 37.2 | 23.8 | 89.8 | 13.7 | 8.8 | 517 |
| Highest | 69.3 | 65.5 | 90.8 | 49.6 | 4.4 | 615 |
| Total | 36.0 | 25.3 | 79.8 | 16.2 | 16.5 | 2,635 |

### 3.4 Employment

Like education, employment can also be a source of empowerment for both women and men. It may be particularly empowering for women if it puts them in control of income. Respondents were asked a number of questions to elicit their employment status at the time of the survey, the continuity of their employment in the 12 months preceding the survey, and, if employed, details about their employment.

Tables 3.5.1 and 3.5.2 present information relating to the respondent's employment status. The employed are those who say that they are currently working and those who worked at any time during the 12 -month period preceding the survey. The level of current employment for women stands at 79 percent, with an additional 4 percent who worked in the 12 months preceding the survey, putting the level of employment at 83 percent. Corresponding proportions for men are similar: 82 percent are currently employed, with almost 2 percent who worked in the last 12 months, putting the level of employment at 83 percent.

The proportions employed are lowest in the age group 15-19 for both sexes, and increase gradually with age. The low participation rate at young ages is expected, for part of the labour force in those ages are students at secondary and higher learning institutions, and therefore not available for work. Teenage girls are much more likely to be working than teenage boys.

Women who are divorced, separated, or widowed are comparatively more likely to be employed ( 93 percent), as are men who are married or living together with a partner ( 99 percent). Variations in employment are also found with residence. Those in rural areas are more likely to be employed than those in urban areas, with 85 percent of both women and men currently employed. Interestingly, for both men and women, those with the most education and those in the highest wealth quintile are least likely to be currently employed. There is significant regional variation in employment.

| Percent distribution of women by employment status, according to background characteristics, Tanzania 2004-05 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 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 | $\begin{gathered} \text { Not } \\ \text { currently } \\ \text { employed } \end{gathered}$ |  |  |  |
| Age |  |  |  |  |  |
| 15-19 | 57.6 | 3.5 | 38.9 | 100.0 | 2,245 |
| 20-24 | 77.2 | 5.4 | 17.3 | 100.0 | 2,007 |
| 25-29 | 82.5 | 4.5 | 13.0 | 100.0 | 1,885 |
| 30-34 | 86.6 | 4.2 | 9.2 | 100.0 | 1,542 |
| 35-39 | 87.2 | 5.4 | 7.4 | 100.0 | 1,053 |
| 40-44 | 91.3 | 3.1 | 5.5 | 100.0 | 834 |
| 45-49 | 90.4 | 3.5 | 6.0 | 100.0 | 763 |
| Marital status |  |  |  |  |  |
| Never married | 56.6 | 3.6 | 39.7 | 100.0 | 2,371 |
| Married or living together | 84.2 | 4.8 | 11.0 | 100.0 | 6,950 |
| Divorced/separated/widowed | 90.1 | 2.8 | 7.1 | 100.0 | 1,007 |
| Number of living children |  |  |  |  |  |
| 0 | 58.4 | 4.0 | 37.5 | 100.0 | 2,705 |
| 1-2 | 82.1 | 4.3 | 13.6 | 100.0 | 3,348 |
| 3-4 | 86.2 | 4.9 | 8.9 | 100.0 | 2,269 |
| 5+ | 90.7 | 4.2 | 5.2 | 100.0 | 2,007 |
| Residence |  |  |  |  |  |
| Urban | 61.6 | 5.3 | 33.1 | 100.0 | 2,935 |
| Rural | 85.1 | 3.9 | 10.9 | 100.0 | 7,394 |
| Mainland/Zanzibar |  |  |  |  |  |
| Mainland | 79.3 | 4.3 | 16.3 | 100.0 | 10,016 |
| Total urban | 62.0 | 5.5 | 32.5 | 100.0 | 2,885 |
| Dar es Salaam city | 45.3 | 6.1 | 48.5 | 100.0 | 969 |
| Other urban | 70.5 | 5.2 | 24.3 | 100.0 | 1,916 |
| Total rural | 86.3 | 3.9 | 9.8 | 100.0 | 7,131 |
| Zanzibar | 50.2 | 4.2 | 45.6 | 100.0 | 313 |
| Unguja | 53.7 | 5.7 | 40.7 | 100.0 | 216 |
| Pemba | 42.5 | 0.8 | 56.7 | 100.0 | 97 |
| Zone |  |  |  |  |  |
| Western | 82.2 | 5.4 | 12.4 | 100.0 | 1,880 |
| Northern | 72.0 | 5.4 | 22.6 | 100.0 | 1,496 |
| Central | 86.7 | 3.1 | 10.2 | 100.0 | 799 |
| Southern highlands | 86.5 | 3.8 | 9.6 | 100.0 | 1,440 |
| Lake | 86.1 | 3.4 | 10.4 | 100.0 | 1,865 |
| Eastern | 60.0 | 5.8 | 34.2 | 100.0 | 1,670 |
| Southern | 89.7 | 1.3 | 8.9 | 100.0 | 866 |
| Region |  |  |  |  |  |
| Dodoma | 85.7 | 4.9 | 9.4 | 100.0 | 468 |
| Arusha | 65.6 | 6.3 | 28.0 | 100.0 | 391 |
| Kilimanjaro | 75.8 | 0.0 | 24.2 | 100.0 | 380 |
| Tanga | 76.8 | 5.9 | 17.3 | 100.0 | 431 |
| Morogoro | 82.0 | 5.8 | 12.2 | 100.0 | 449 |
| Pwani | 77.0 | 4.3 | 18.6 | 100.0 | 253 |
| Dar es Salaam | 45.3 | 6.1 | 48.5 | 100.0 | 969 |
| Lindi | 88.2 | 2.7 | 9.1 | 100.0 | 221 |
| Mtwara | 92.7 | 0.8 | 6.1 | 100.0 | 346 |
| Ruvuma | 87.4 | 0.7 | 11.9 | 100.0 | 299 |
| Iringa | 80.6 | 6.4 | 13.0 | 100.0 | 412 |
| Mbeya | 86.6 | 4.0 | 9.4 | 100.0 | 712 |
| Singida | 88.1 | 0.6 | 11.3 | 100.0 | 331 |
| Tabora | 75.3 | 8.5 | 16.2 | 100.0 | 520 |
| Rukwa | 94.1 | 0.2 | 5.7 | 100.0 | 316 |
| Kigoma | 77.5 | 10.6 | 11.9 | 100.0 | 499 |
| Shinyanga | 89.1 | 0.6 | 10.3 | 100.0 | 861 |
| Kagera | 91.3 | 0.2 | 8.5 | 100.0 | 545 |
| Mwanza | 83.4 | 6.1 | 10.3 | 100.0 | 939 |
| Mara | 85.3 | 1.2 | 13.5 | 100.0 | 381 |
| Manyara | 68.4 | 10.3 | 21.2 | 100.0 | 293 |
| Zanzibar North | 58.9 | 7.9 | 33.2 | 100.0 | 48 |
| Zanzibar South | 70.6 | 5.1 | 24.4 | 100.0 | 26 |
| Town West | 48.8 | 5.0 | 46.1 | 100.0 | 143 |
| Pemba North | 48.0 | 0.2 | 51.8 | 100.0 | 52 |
| Pemba South | 36.2 | 1.5 | 62.3 | 100.0 | 45 |
| Education |  |  |  |  |  |
| No education | 87.1 | 4.7 | 8.2 | 100.0 | 2,503 |
| Primary incomplete | 70.8 | 5.0 | 24.1 | 100.0 | 1,855 |
| Primary complete | 81.4 | 4.1 | 14.5 | 100.0 | 5,086 |
| Secondary+ | 52.9 | 3.3 | 43.8 | 100.0 | 885 |
| Wealth quintile |  |  |  |  |  |
| Lowest | 85.5 | 5.5 | 9.0 | 100.0 | 1,840 |
| Second | 88.1 | 3.7 | 8.1 | 100.0 | 1,944 |
| Middle | 87.3 | 3.0 | 9.6 | 100.0 | 1,943 |
| Fourth | 81.0 | 4.3 | 14.7 | 100.0 | 2,004 |
| Highest | 57.6 | 4.9 | 37.4 | 100.0 | 2,597 |
| Total | 78.5 | 4.3 | 17.2 | 100.0 | 10,329 |


| Table 3.5.2 Employment status: men |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Percent distribution of men by employment status, according to background characteristics, Tanzania 2004-05 |  |  |  |  |  |
|  | Employed in the 12 months preceding the survey |  | Not employed in the 12 months preceding the survey | Total | Number of men |
| Background characteristic | Currently employed | $\qquad$ |  |  |  |
| Age |  |  |  |  |  |
| 15-19 | 40.6 | 2.2 | 56.3 | 100.0 | 637 |
| 20-24 | 87.7 | 2.6 | 9.7 | 100.0 | 493 |
| 25-29 | 97.0 | 1.7 | 1.3 | 100.0 | 405 |
| 30-34 | 97.3 | 0.3 | 2.4 | 100.0 | 387 |
| 35-39 | 96.6 | 1.3 | 2.2 | 100.0 | 278 |
| 40-44 | 97.7 | 1.6 | 0.7 | 100.0 | 265 |
| 45-49 | 96.6 | 0.5 | 2.9 | 100.0 | 170 |
| Marital status |  |  |  |  |  |
| Never married | 59.7 | 2.7 | 37.1 | 100.0 | 1,100 |
| Married or living together Divorced/separated/ | 98.1 | 0.7 | 1.2 | 100.0 | 1,401 |
| widowed | 90.1 | 3.3 | 6.6 | 100.0 | 135 |
| Number of living children |  |  |  |  |  |
| 0 | 76.7 | 1.6 | 21.3 | 100.0 | 721 |
| 1-2 | 84.5 | 2.4 | 12.9 | 100.0 | 886 |
| 3-4 | 86.9 | 1.1 | 12.0 | 100.0 | 565 |
| $5+$ | 77.7 | 0.9 | 21.3 | 100.0 | 463 |
| Residence |  |  |  |  |  |
| Urban | 73.4 | 3.3 | 23.0 | 100.0 | 716 |
| Rural | 84.8 | 1.0 | 14.1 | 100.0 | 1,919 |
| Mainland/Zanzibar |  |  |  |  |  |
| Mainland | 82.1 | 1.7 | 16.0 | 100.0 | 2,556 |
| Total urban | 73.9 | 3.3 | 22.4 | 100.0 | 2,716 |
| Dar es Salaam city | 72.1 | 2.6 | 24.3 | 100.0 | 267 |
| Other urban | 75.0 | 3.8 | 21.2 | 100.0 | 450 |
| Total rural | 85.3 | 1.0 | 13.5 | 100.0 | 1,840 |
| Zanzibar | 66.5 | 0.4 | 32.9 | 100.0 | 79 |
| Unguja | 69.2 61.0 | 0.0 1.3 | 30.8 37.2 | 100.0 100.0 | 53 26 |
| Zone |  |  |  |  |  |
| Western | 83.3 | 0.9 | 15.5 | 100.0 | 468 |
| Northern | 79.4 | 4.0 | 16.6 | 100.0 | 362 |
| Central | 89.8 | 0.0 | 10.2 | 100.0 | 212 |
| Southern highlands | 87.2 | 0.0 | 12.8 | 100.0 | 358 |
| Lake | 83.8 | 0.7 | 15.5 | 100.0 | 448 |
| Eastern | 74.6 | 3.6 | 21.3 | 100.0 | 462 |
| Southern | 81.2 | 1.8 | 16.3 | 100.0 | 245 |
| Region |  |  |  |  |  |
| Dodoma | 93.7 | 0.0 | 6.3 | 100.0 | 113 |
| Arusha | 84.6 | 3.4 | 12.0 | 100.0 | 82 |
| Kilimanjaro | 70.6 | 6.4 | 23.0 | 100.0 | 104 |
| Tanga | 73.9 | 4.0 | 22.2 | 100.0 | 94 |
| Morogoro | 80.1 | 5.0 | 14.9 | 100.0 | 127 |
| Dar es Salaam | 72.1 | 2.6 | 24.3 | 100.0 | 267 |
| Lindi | 89.4 | 2.6 | 7.9 | 100.0 | 65 |
| Mtwara | 82.5 | 1.1 | 15.6 | 100.0 | 98 |
| Ruvuma | 73.1 | 2.1 | 23.7 | 100.0 | 83 |
| Iringa | 93.7 | 0.0 | 6.3 | 100.0 | 102 |
| Mbeya | 85.7 | 0.0 | 14.3 | 100.0 | 170 |
| Singida | 85.4 | 0.0 | 14.6 | 100.0 | 99 |
| Tabora | 87.8 | 0.0 | 11.4 | 100.0 | 127 |
| Rukwa | 82.3 | 0.0 | 17.7 | 100.0 | 87 |
| Kigoma | 75.3 | 2.3 | 22.4 | 100.0 | 127 |
| Shinyanga | 85.4 | 0.7 | 13.9 | 100.0 | 215 |
| Kagera | 92.9 | 0.0 | 7.1 | 100.0 | 122 |
| Mwanza | 77.3 | 1.4 | 21.3 | 100.0 | 229 |
| Mara | 87.6 | 0.0 | 12.4 | 100.0 | 98 |
| Manyara | 91.6 | 1.5 | 6.9 | 100.0 | 83 |
| Zanzibar North | 70.3 | 0.0 | 29.7 | 100.0 | 11 |
| Zanzibar South | 75.7 | 0.0 0.0 | 24.3 | 100.0 | 6 |
| Town West | 67.7 | 0.0 | 32.3 | 100.0 | 36 |
| Pemba North Pemba South | 61.2 60.7 | 0.0 2.8 | 38.8 35.6 | 100.0 100.0 | 13 12 |
| Education |  |  |  |  |  |
| No education | 96.5 | 1.2 | 2.3 | 100.0 | 312 |
| Primary incomplete | 66.0 | 1.1 | 32.2 | 100.0 | 646 |
| Primary complete | 89.1 | 1.9 | 9.1 | 100.0 | 1,381 |
| Secondary+ | 65.7 | 2.2 | 31.8 | 100.0 | 296 |
| Wealth quintile |  |  |  |  |  |
| Lowest | 84.8 | 0.4 | 14.6 | 100.0 | 484 |
| Second | 84.7 | 1.5 | 13.8 | 100.0 | 504 |
| Middle | 85.8 | 0.9 | 13.0 | 100.0 | 516 |
| Fourth | 81.7 | 1.9 | 16.3 | 100.0 | 517 |
| Highest | 73.3 | 3.1 | 23.2 | 100.0 | 615 |
| Total | 81.7 | 1.6 | 16.5 | 100.0 | 2,635 |
| Note: Total includes five cases (weighted) with missing information. |  |  |  |  |  |

The survey findings indicate that 17 percent of both women and men were not employed during the 12 months preceding the survey (Figure 3.1).

Figure 3.1 Employment Status of Women and Men


## Occupation

Respondents who are currently employed or who were employed during the year preceding the survey were asked to state their principal occupation. Tables 3.6 .1 and 3.6 .2 show the percent distribution of respondents by main occupational category, according to background characteristics.

Tanzania, like many developing countries, is an agrarian economy. The agriculture sector remains the main employer, with 78 percent of women and 71 percent of men in agricultural occupations. Unskilled manual labour is another emerging sector, constituting 11 and 9 percent, respectively, of total employment for women and men. Professional, technical, and managerial occupations engage only 2 percent of women and 4 percent of men.

Residence has great effect on the type of occupation. Most rural women and men are engaged in agriculture, and urban dwellers are mostly found in other occupations. Though Mainland residents are engaged in various occupations, residents of Zanzibar, with limited land, are more likely to be engaged in both the skilled and unskilled occupations, compared with the Mainland. The proportion of respondents in the professional, technical, and managerial occupations is also higher in Zanzibar ( 10 percent of women, and 14 percent of men) than on the Mainland ( 2 percent of women and 3 percent of men).

Analysis by age suggests little association with occupational categories, with the exception of the professional, technical, and managerial occupations, the proportions of which generally increase with age. As expected, those women and men with at least some secondary education are most likely to be employed in a professional, technical, or managerial job. Women in the wealthiest quintile are most likely to be engaged in an unskilled manual occupation, while the corresponding men are most likely to have a skilled manual occupation.

| Table 3.6.1 Occupation: women |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percent distribution of women employed in the 12 months preceding the survey by occupation, according to background characteristics, Tanzania 2004-05 |  |  |  |  |  |  |  |  |  |  |
| Background characteristic | Professional/ technical/ managerial | Clerical | Sales <br> and services | Skilled manual | Unskilled manual | Domestic service | Agriculture | Missing | Total | Number of women |
| Age |  |  |  |  |  |  |  |  |  |  |
| 15-19 | 0.1 | 0.1 | 2.7 | 3.8 | 6.8 | 7.8 | 77.5 | 1.3 | 100.0 | 1,370 |
| 20-24 | 1.0 | 0.3 | 3.1 | 4.0 | 10.3 | 2.9 | 78.2 | 0.2 | 100.0 | 1,659 |
| 25-29 | 2.6 | 1.0 | 4.6 | 3.1 | 13.2 | 1.3 | 74.2 | 0.0 | 100.0 | 1,640 |
| 30-34 | 2.7 | 1.2 | 4.7 | 2.3 | 13.1 | 0.6 | 75.2 | 0.1 | 100.0 | 1,400 |
| 35-39 | 2.3 | 0.2 | 2.8 | 1.7 | 12.5 | 0.4 | 80.2 | 0.0 | 100.0 | 975 |
| 40-44 | 4.7 | 0.8 | 1.0 | 1.3 | 8.8 | 0.2 | 83.1 | 0.0 | 100.0 | 787 |
| 45-49 | 3.4 | 0.3 | 1.9 | 0.7 | 7.4 | 0.0 | 86.3 | 0.0 | 100.0 | 717 |
| Marital status |  |  |  |  |  |  |  |  |  |  |
| Never married | 3.2 | 1.3 | 5.0 | 6.2 | 11.8 | 10.7 | 60.5 | 1.4 | 100.0 | 1,427 |
| Married or living together | 1.9 | 0.4 | 2.7 | 2.0 | 9.3 | 0.4 | 83.1 | 0.1 | 100.0 | 6,187 |
| Divorced/separated/widowed | 1.8 | 0.4 | 4.0 | 2.3 | 17.6 | 1.5 | 72.4 | 0.0 | 100.0 | 936 |
| Number of living children |  |  |  |  |  |  |  |  |  |  |
| 0 | 2.6 | 1.1 | 4.6 | 5.6 | 9.1 | 8.5 | 67.4 | 1.2 | 100.0 | 1,687 |
| 1-2 | 2.4 | 0.6 | 4.4 | 2.9 | 12.5 | 1.2 | 75.9 | 0.1 | 100.0 | 2,893 |
| 3-4 | 2.3 | 0.6 | 2.7 | 1.5 | 11.9 | 0.5 | 80.4 | 0.0 | 100.0 | 2,066 |
| 5+ | 1.0 | 0.1 | 1.0 | 1.2 | 7.8 | 0.1 | 88.8 | 0.0 | 100.0 | 1,904 |
| Residence |  |  |  |  |  |  |  |  |  |  |
| Urban | 6.1 | 2.3 | 11.5 | 7.8 | 31.6 | 7.7 | 32.1 | 0.8 | 100.0 | 1,962 |
| Rural | 0.9 | 0.1 | 0.8 | 1.2 | 4.4 | 0.6 | 91.9 | 0.1 | 100.0 | 6,587 |
| Mainland/Zanzibar |  |  |  |  |  |  |  |  |  |  |
| Mainland | 2.0 | 0.5 | 3.3 | 2.5 | 10.2 | 2.2 | 79.0 | 0.3 | 100.0 | 8,379 |
| Total urban | 5.6 | 2.2 | 11.5 | 7.9 | 31.8 | 7.7 | 32.6 | 0.8 | 100.0 | 1,949 |
| Dar es Salaam city | 6.3 | 6.2 | 16.7 | 11.1 | 44.2 | 13.3 | 2.2 | 0.0 | 100.0 | +498 |
| Other urban | 5.3 | 0.8 | 9.7 | 6.7 | 27.6 | 5.7 | 43.0 | 1.1 | 100.0 | 1,450 |
| Total rural | 0.9 | 0.0 | 0.8 | 0.9 | 3.7 | 0.6 | 93.0 | 0.1 | 100.0 | 6,431 |
| Zanzibar | 9.8 | 2.4 | 3.7 | 13.8 | 29.1 | 2.2 | 38.4 | 0.5 | 100.0 | 170 |
| Unguja | 10.9 | 2.7 | 4.6 | 12.9 | 34.1 | 2.9 | 31.3 | 0.6 | 100.0 | 128 |
| Pemba | 6.8 | 1.7 | 1.0 | 16.5 | 13.6 | 0.0 | 60.4 | 0.0 | 100.0 | 42 |
| Zone |  |  |  |  |  |  |  |  |  |  |
| Western | 0.5 | 0.1 | 1.1 | 1.1 | 6.6 | 0.3 | 89.8 | 0.5 | 100.0 | 1,647 |
| Northern | 3.8 | 0.3 | 4.8 | 3.8 | 11.7 | 4.5 | 70.9 | 0.1 | 100.0 | 1,157 |
| Central | 1.8 | 0.2 | 1.3 | 2.4 | 4.2 | 1.1 | 88.2 | 0.7 | 100.0 | 717 |
| Southern highlands | 0.8 | 0.1 | 1.5 | 1.3 | 8.1 | 1.1 | 87.0 | 0.1 | 100.0 | 1,302 |
| Lake | 1.5 | 0.2 | 3.4 | 2.1 | 10.0 | 1.5 | 81.0 | 0.4 | 100.0 | 1,670 |
| Eastern | 4.4 | 2.9 | 10.2 | 5.8 | 25.1 | 7.0 | 44.6 | 0.0 | 100.0 | 1,098 |
| Southern | 2.1 | 0.3 | 0.2 | 1.6 | 4.6 | 0.9 | 90.4 | 0.0 | 100.0 | 788 |
| Region |  |  |  |  |  |  |  |  |  |  |
| Dodoma | 1.6 | 0.3 | 1.7 | 3.1 | 4.0 | 1.0 | 87.5 | 0.8 | 100.0 | 424 |
| Arusha | 5.8 | 0.0 | 8.6 | 6.5 | 20.9 | 9.1 | 48.8 | 0.4 | 100.0 | 282 |
| Kilimanjaro | 4.0 | 0.8 | 4.7 | 5.6 | 7.9 | 3.9 | 73.1 | 0.0 | 100.0 | 288 |
| Tanga | 2.4 | 0.0 | 2.8 | 2.0 | 10.6 | 3.0 | 79.3 | 0.0 | 100.0 | 356 |
| Morogoro | 4.0 | 0.0 | 5.5 | 1.5 | 6.9 | 2.3 | 79.8 | 0.0 | 100.0 | 394 |
| Pwani | 0.7 | 0.4 | 3.5 | 1.3 | 13.5 | 0.5 | 80.1 | 0.0 | 100.0 | 206 |
| Dar es Salaam | 6.3 | 6.2 | 16.7 | 11.1 | 44.2 | 13.3 | 2.2 | 0.0 | 100.0 | 498 |
| Lindi | 3.2 | 0.3 | 0.4 | 1.0 | 6.3 | 0.7 | 88.1 | 0.0 | 100.0 | 201 |
| Mtwara | 0.0 | 0.3 | 0.0 | 3.0 | 4.9 | 0.3 | 91.5 | 0.0 | 100.0 | 324 |
| Ruvuma | 3.8 | 0.4 | 0.4 | 0.3 | 2.8 | 1.7 | 90.8 | 0.0 | 100.0 | 263 |
| Iringa | 1.1 | 0.4 | 1.5 | 1.1 | 8.0 | 2.6 | 85.0 | 0.4 | 100.0 | 359 |
| Mbeya | 0.6 | 0.0 | 1.4 | 1.9 | 10.1 | 0.3 | 85.7 | 0.0 | 100.0 | 645 |
| Singida | 2.2 | 0.0 | 0.8 | 1.3 | 4.6 | 1.2 | 89.3 | 0.6 | 100.0 | 293 |
| Tabora | 0.5 | 0.5 | 1.7 | 1.5 | 10.1 | 0.5 | 84.4 | 0.7 | 100.0 | 435 |
| Rukwa | 0.9 | 0.0 | 1.9 | 0.3 | 4.0 | 0.8 | 92.1 | 0.0 | 100.0 | 298 |
| Kigoma | 0.9 | 0.0 | 1.1 | 1.7 | 9.9 | 0.2 | 85.0 | 1.2 | 100.0 | 440 |
| Shinyanga | 0.2 | 0.0 | 0.7 | 0.6 | 2.7 | 0.3 | 95.4 | 0.0 | 100.0 | 772 |
| Kagera | 0.0 | 0.0 | 0.6 | 1.2 | 2.6 | 0.3 | 95.3 | 0.0 | 100.0 | 499 |
| Mwanza | 2.2 | 0.3 | 6.1 | 2.9 | 14.3 | 2.7 | 70.9 | 0.7 | 100.0 | 841 |
| Mara | 2.0 | 0.3 | 0.8 | 1.4 | 10.2 | 0.3 | 85.0 | 0.0 | 100.0 | 330 |
| Manyara | 3.2 | 0.3 | 3.6 | 1.2 | 7.1 | 2.0 | 82.4 | 0.3 | 100.0 | 231 |
| Zanzibar North | 3.6 | 0.4 | 2.9 | 7.0 | 21.7 | 0.3 | 64.2 | 0.0 | 100.0 | 32 |
| Zanzibar South | 6.1 | 0.4 | 1.9 | 17.1 | 19.0 | 1.1 | 54.4 | 0.0 | 100.0 | 20 |
| Town West | 15.1 | 4.2 | 6.0 | 14.2 | 43.1 | 4.5 | 11.7 | 1.1 | 100.0 | 77 |
| Pemba North | 3.9 | 0.9 | 0.9 | 7.0 | 12.4 | 0.0 | 75.0 | 0.0 | 100.0 | 25 |
| Pemba South | 11.0 | 3.0 | 1.1 | 30.5 | 15.5 | 0.0 | 39.0 | 0.0 | 100.0 | 17 |
| Education |  |  |  |  |  |  |  |  |  |  |
| No education | 0.3 | 0.0 | 0.4 | 0.4 | 4.2 | 0.9 | 93.8 | 0.0 | 100.0 | 2,297 |
| Primary incomplete | 0.0 | 0.0 | 1.5 | 0.9 | 10.0 | 3.2 | 83.6 | 0.8 | 100.0 | 1,406 |
| Primary complete | 1.0 | 0.3 | 4.1 | 3.8 | 13.1 | 2.7 | 75.0 | 0.1 | 100.0 | 4,350 |
| Secondary+ | 26.4 | 7.6 | 13.7 | 9.3 | 20.5 | 2.0 | 18.9 | 1.7 | 100.0 | +497 |
| Wealth quintile |  |  |  |  |  |  |  |  |  |  |
| Lowest | 0.0 | 0.0 | 0.1 | 0.7 | 2.5 | 0.1 | 96.7 | 0.0 | 100.0 | 1,675 |
| Second | 0.2 | 0.0 | 1.0 | 0.5 | 2.7 | 0.2 | 95.3 | 0.2 | 100.0 | 1,785 |
| Middle | 0.2 | 0.1 | 0.6 | 0.8 | 4.1 | 0.4 | 93.5 | 0.2 | 100.0 | 1,755 |
| Fourth | 1.2 | 0.1 | 2.4 | 2.6 | 13.3 | 0.7 | 79.3 | 0.4 | 100.0 | 1,709 |
| Highest | 9.5 | 2.8 | 12.8 | 9.5 | 31.9 | 10.4 | 22.6 | 0.6 | 100.0 | 1,625 |
| Total | 2.1 | 0.6 | 3.3 | 2.7 | 10.6 | 2.2 | 78.2 | 0.3 | 100.0 | 8,550 |


| Table 3.6.2 Occupation: men |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percent distribution of men employed in the 12 months preceding the survey by occupation, according to background characteristics, Tanzania 2004-05 |  |  |  |  |  |  |  |  |  |  |
| Background characteristic | Professional/ technical/ managerial | Clerical | Sales and services | Skilled manual | Unskilled manual | Domestic service | Agriculture | Missing | Total | Number of men |
| Age |  |  |  |  |  |  |  |  |  |  |
| 15-19 | 0.0 | 0.1 | 3.8 | 8.9 | 5.9 | 1.1 | 79.9 | 0.4 | 100.0 | 273 |
| 20-24 | 1.1 | 0.6 | 6.7 | 10.0 | 11.3 | 0.6 | 69.7 | 0.1 | 100.0 | 445 |
| 25-29 | 3.2 | 0.4 | 3.1 | 11.0 | 13.6 | 0.0 | 68.4 | 0.3 | 100.0 | 400 |
| 30-34 | 4.6 | 0.8 | 4.9 | 10.6 | 11.5 | 1.0 | 65.9 | 0.7 | 100.0 | 378 |
| 35-39 | 7.1 | 1.1 | 2.8 | 12.1 | 7.5 | 0.4 | 68.9 | 0.0 | 100.0 | 272 |
| 40-44 | 4.9 | 0.2 | 4.5 | 11.3 | 3.6 | 0.0 | 75.1 | 0.5 | 100.0 | 263 |
| 45-49 | 5.3 | 0.0 | 3.8 | 9.0 | 4.9 | 0.0 | 77.0 | 0.0 | 100.0 | 165 |
| Marital status |  |  |  |  |  |  |  |  |  |  |
| Never married | 1.9 | 0.6 | 6.4 | 10.2 | 10.6 | 1.2 | 68.8 | 0.3 | 100.0 | 686 |
| Married or living together | 4.1 | 0.4 | 3.2 | 10.0 | 8.0 | 0.1 | 73.9 | 0.2 | 100.0 | 1,383 |
| Divorced/separated/widowed | 4.6 | 0.5 | 6.3 | 16.9 | 15.6 | 0.9 | 54.1 | 1.1 | 100.0 | 126 |
| Number of living children |  |  |  |  |  |  |  |  |  |  |
| 0 | 5.0 | 0.3 | 5.6 | 11.1 | 11.6 | 0.4 | 65.7 | 0.3 | 100.0 | 564 |
| 1-2 | 4.5 | 0.7 | 6.1 | 13.5 | 10.2 | 0.2 | 64.2 | 0.5 | 100.0 | 770 |
| 3-4 | 1.8 | 0.7 | 2.5 | 9.4 | 7.4 | 1.1 | 76.9 | 0.0 | 100.0 | 497 |
| 5+ | 1.0 | 0.0 | 1.6 | 4.7 | 5.8 | 0.3 | 86.5 | 0.1 | 100.0 | 364 |
| Residence |  |  |  |  |  |  |  |  |  |  |
| Urban | 9.5 | 1.1 | 13.4 | 27.5 | 24.0 | 1.0 | 22.5 | 0.9 | 100.0 | 550 |
| Rural | 1.4 | 0.3 | 1.4 | 4.8 | 4.3 | 0.3 | 87.4 | 0.1 | 100.0 | 1,646 |
| Mainland/Zanzibar |  |  |  |  |  |  |  |  |  |  |
| Mainland | 3.2 | 0.5 | 4.3 | 10.2 | 9.0 | 0.5 | 72.0 | 0.2 | 100.0 | 2,143 |
| Total urban | 9.3 | 1.1 | 13.3 | 27.4 | 24.4 | 1.0 | 22.8 | 0.8 | 100.0 | 553 |
| Dar es Salaam city | 13.1 | 2.1 | 16.1 | 34.4 | 29.7 | 1.8 | 2.9 | 0.0 | 100.0 | 199 |
| Other urban | 7.2 | 0.6 | 11.7 | 23.4 | 21.5 | 0.5 | 33.9 | 1.2 | 100.0 | 354 |
| Total rural | 1.1 | 0.3 | 1.2 | 4.2 | 3.7 | 0.3 | 89.2 | 0.0 | 100.0 | 1,589 |
| Zanzibar | 14.3 | 0.4 | 8.2 | 21.8 | 16.9 | 0.0 | 36.3 | 2.2 | 100.0 | 53 |
| Unguja | 16.6 | 0.5 | 9.5 | 23.7 | 20.2 | 0.0 | 26.8 | 2.6 | 100.0 | 37 |
| Pemba | 9.0 | 0.0 | 5.2 | 17.3 | 9.2 | 0.0 | 58.0 | 1.3 | 100.0 | 16 |
| Zone |  |  |  |  |  |  |  |  |  |  |
| Western | 1.1 | 0.0 | 2.5 | 3.5 | 3.6 | 0.3 | 89.1 | 0.0 | 100.0 | 394 |
| Northern | 3.7 | 0.0 | 5.8 | 14.3 | 12.2 | 1.4 | 61.0 | 1.5 | 100.0 | 302 |
| Central | 0.9 | 0.0 | 2.6 | 5.5 | 2.8 | 0.0 | 88.0 | 0.3 | 100.0 | 190 |
| Southern highlands | 2.3 | 0.4 | 2.8 | 8.6 | 10.1 | 0.0 | 75.8 | 0.0 | 100.0 | 312 |
| Lake | 2.0 | 0.4 | 1.8 | 7.3 | 7.2 | 0.0 | 81.3 | 0.0 | 100.0 | 379 |
| Eastern | 8.9 | 2.0 | 10.4 | 23.5 | 19.6 | 1.3 | 34.3 | 0.0 | 100.0 | 361 |
| Southern | 2.1 | 0.3 | 3.4 | 5.8 | 3.6 | 0.3 | 84.5 | 0.0 | 100.0 | 204 |
| Region |  |  |  |  |  |  |  |  |  |  |
| Dodoma | 1.6 | 0.0 | 4.0 | 5.2 | 1.2 | 0.0 | 87.5 | 0.5 | 100.0 | 106 |
| Arusha | 2.8 | 0.0 | 5.9 | 14.7 | 17.0 | 1.4 | 54.8 | 3.3 | 100.0 | 72 |
| Kilimanjaro | 4.0 | 0.0 | 12.5 | 20.1 | 10.5 | 4.0 | 47.1 | 1.8 | 100.0 | 80 |
| Tanga | 7.2 | 0.0 | 3.5 | 14.6 | 15.9 | 0.0 | 58.8 | 0.0 | 100.0 | 73 |
| Morogoro | 3.9 | 2.8 | 2.7 | 10.7 | 4.8 | 1.1 | 74.0 | 0.0 | 100.0 | 108 |
| Pwani | 3.5 | 0.0 | 4.9 | 8.8 | 12.1 | 0.0 | 70.7 | 0.0 | 100.0 | 54 |
| Dar es Salaam | 13.1 | 2.1 | 16.1 | 34.4 | 29.7 | 1.8 | 2.9 | 0.0 | 100.0 | 199 |
| Lindi | 4.3 | 1.0 | 2.2 | 5.1 | 3.3 | 1.0 | 83.1 | 0.0 | 100.0 | 60 |
| Mtwara | 1.3 | 0.0 | 4.8 | 6.1 | 4.9 | 0.0 | 82.9 | 0.0 | 100.0 | 82 |
| Ruvuma | 1.1 | 0.0 | 2.6 | 6.1 | 2.2 | 0.0 | 88.0 | 0.0 | 100.0 | 62 |
| Iringa | 3.0 | 1.4 | 5.1 | 7.1 | 3.1 | 0.0 | 80.2 | 0.0 | 100.0 | 95 |
| Mbeya | 1.1 | 0.0 | 1.1 | 11.4 | 16.5 | 0.0 | 69.9 | 0.0 | 100.0 | 145 |
| Singida | 0.0 | 0.0 | 0.9 | 5.9 | 4.6 | 0.0 | 88.6 | 0.0 | 100.0 | 85 |
| Tabora | 1.9 | 0.0 | 2.9 | 0.0 | 4.1 | 1.0 | 90.1 | 0.0 | 100.0 | 111 |
| Rukwa | 3.8 | 0.0 | 3.1 | 5.0 | 6.2 | 0.0 | 81.9 | 0.0 | 100.0 | 72 |
| Kigoma | 2.1 | 0.0 | 2.8 | 5.8 | 2.4 | 0.0 | 86.9 | 0.0 | 100.0 | 98 |
| Shinyanga | 0.0 | 0.0 | 2.1 | 4.3 | 4.0 | 0.0 | 89.6 | 0.0 | 100.0 | 185 |
| Kagera | 0.0 | 0.0 | 0.0 | 6.7 | 4.2 | 0.0 | 89.1 | 0.0 | 100.0 | 113 |
| Mwanza | 3.7 | 0.8 | 3.2 | 9.0 | 10.0 | 0.0 | 73.3 | 0.0 | 100.0 | 180 |
| Mara | 1.0 | 0.0 | 1.3 | 4.7 | 5.4 | 0.0 | 87.6 | 0.0 | 100.0 | 86 |
| Manyara | 1.0 | 0.0 | 1.0 | 7.8 | 6.1 | 0.0 | 83.2 | 1.0 | 100.0 | 77 |
| Zanzibar North | 6.7 | 0.0 | 12.4 | 15.3 | 7.3 | 0.0 | 56.8 | 1.6 | 100.0 | 8 |
| Zanzibar South | 10.3 | 0.0 | 7.2 | 9.4 | 10.6 | 0.0 | 62.6 | 0.0 | 100.0 | 5 |
| Town West | 21.0 | 0.8 | 9.0 | 29.2 | 26.2 | 0.0 | 10.4 | 3.4 | 100.0 | 24 |
| Pemba North | 9.5 | 0.0 | 3.5 | 9.4 | 9.2 | 0.0 | 67.1 | 1.3 | 100.0 | 8 |
| Pemba South | 8.5 | 0.0 | 7.0 | 25.4 | 9.2 | 0.0 | 48.6 | 1.2 | 100.0 | 8 |
| Education |  |  |  |  |  |  |  |  |  |  |
| No education | 0.0 | 0.0 | 1.9 | 0.9 | 3.4 | 0.7 | 93.0 | 0.0 | 100.0 | 305 |
| Primary incomplete | 0.1 | 0.0 | 1.0 | 6.3 | 8.5 | 1.5 | 82.3 | 0.2 | 100.0 | 434 |
| Primary complete | 1.2 | 0.1 | 5.0 | 13.0 | 9.7 | 0.2 | 70.4 | 0.4 | 100.0 | 1,256 |
| Secondary+ | 30.1 | 4.7 | 11.5 | 18.4 | 16.4 | 0.0 | 18.6 | 0.1 | 100.0 | , 201 |
| Wealth quintile |  |  |  |  |  |  |  |  |  |  |
| Lowest | 0.0 | 0.0 | 1.0 | 2.2 | 1.3 | 0.0 | 95.3 | 0.2 | 100.0 | 412 |
| Second | 0.0 | 0.0 | 0.0 | 2.0 | 3.0 | 0.5 | 94.3 | 0.0 | 100.0 | 435 |
| Middle | 1.1 | 0.0 | 1.0 | 3.1 | 5.4 | 0.2 | 89.1 | 0.0 | 100.0 | 447 |
| Fourth | 1.1 | 0.4 | 3.5 | 13.2 | 11.5 | 0.2 | 69.6 | 0.4 | 100.0 | 432 |
| Highest | 14.0 | 1.9 | 15.4 | 30.1 | 23.4 | 1.4 | 13.0 | 0.8 | 100.0 | 470 |
| Total | 3.5 | 0.5 | 4.4 | 10.5 | 9.2 | 0.5 | 71.2 | 0.3 | 100.0 | 2,195 |

Table 3.7 presents information on women's employment status, the form of earnings, and the continuity of employment. The table takes into account whether women are involved in agricultural or nonagricultural occupations, because all of the employment variables shown in the table are strongly influenced by the sector in which a woman is employed.

The data show that the majority of women employed in agricultural work are not paid (78 percent). Almost all women in this sector report that they are employed by a family member ( 92 percent) and that they work seasonally ( 83 percent). Among women employed in nonagricultural work, 91 percent earn cash only. They are most likely to report that they are self-employed and that they work all year.

| Table 3.7 Type of employment: women |  |  |  |
| :---: | :---: | :---: | :---: |
| Percent distribution of women 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), Tanzania 2004-05 |  |  |  |
| Employment characteristics | Agricultural work | Nonagricultural work | Total |
| Type of earnings |  |  |  |
| Cash only | 5.5 | 91.3 | 24.0 |
| Cash and in-kind | 7.9 | 1.4 | 6.5 |
| In-kind only | 8.8 | 0.4 | 6.9 |
| Not paid | 77.8 | 6.9 | 62.5 |
| Total | 100.0 | 100.0 | 100.0 |
| Type of employer |  |  |  |
| Employed by family member | 91.9 | 28.2 | 78.1 |
| Employed by non-family member | 0.6 | 29.8 | 7.0 |
| Self-employed | 7.5 | 42.0 | 14.9 |
| Total | 100.0 | 100.0 | 100.0 |
| Continuity of employment |  |  |  |
| All year | 14.4 | 70.7 | 26.7 |
| Seasonal | 82.5 | 17.0 | 68.2 |
| Occasional | 2.8 | 12.3 | 4.9 |
| Total | 100.0 | 100.0 | 100.0 |
| Number of respondents | 6,684 | 1,842 | 8,550 |
| Note: Total includes 24 women (weighted) with missing information on type of employment who are not shown separately. Continuity of employment totals do not add to 100 percent because of a small number of missing cases. |  |  |  |

### 3.5 Measures of WOMen's Status

## Control over Women's Earnings and Assets

In the 2004-05 TDHS, employed women who earn cash were asked about who the main decisionmaker is with regard to the use of their earnings. Table 3.8 shows the distributions of 2004-05 TDHS respondents who earn cash for the work they do by the person who decides how those earnings are to be used. Eighty-four percent of women who receive cash earnings report that they themselves or jointly with another person decide how their earnings are used. Only 16 percent of women report that someone else decides how their earnings will be used.

| Table 3.8 Decision on use of earnings |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Percent distribution of women employed in the 12 months preceding the survey receiving cash earnings by person who decides how earnings are to be used, according to background characteristics, Tanzania 2004-05 |  |  |  |  |  |
| Background characteristic | Person who decides how earnings are used |  |  | Total | Number of women |
|  | $\begin{aligned} & \text { Self } \\ & \text { only } \end{aligned}$ | Jointly ${ }^{1}$ | Someone else only ${ }^{2}$ |  |  |
| Age |  |  |  |  |  |
| 15-19 | 64.6 | 14.6 | 20.8 | 100.0 | 369 |
| 20-24 | 63.7 | 19.9 | 16.4 | 100.0 | 490 |
| 25-29 | 60.3 | 27.1 | 12.7 | 100.0 | 578 |
| 30-34 | 60.5 | 23.6 | 15.7 | 100.0 | 473 |
| 35-39 | 60.2 | 21.4 | 18.4 | 100.0 | 291 |
| 40-44 | 59.8 | 26.8 | 13.4 | 100.0 | 224 |
| 45-49 | 60.9 | 25.7 | 13.4 | 100.0 | 184 |
| Marital status |  |  |  |  |  |
| Never married | 82.7 | 7.4 | 10.0 | 100.0 | 593 |
| Married or living together | 47.4 | 31.9 | 20.6 | 100.0 | 1,672 |
| Divorced/separated/widowed | 94.0 | 3.2 | 2.5 | 100.0 | , 343 |
| Number of living children 7509 |  |  |  |  |  |
| 0 | 75.2 | 11.2 | 13.5 | 100.0 | 609 |
| 1-2 | 60.0 56.2 | 23.3 | 16.7 | 100.0 100.0 | 938 |
| $5+$ | 53.6 | 31.2 | 15.3 | 100.0 | 446 |
| Residence |  |  |  |  |  |
| Urban | 78.0 | 14.4 | 7.6 | 100.0 | 1,322 |
| Rural | 44.7 | 31.0 | 24.3 | 100.0 | 1,287 |
| Mainland/Zanzibar |  |  |  |  |  |
| Mainland | 60.1 | 23.5 | 16.4 | 100.0 | 2,484 |
| Total urban | 76.7 | 15.1 | 8.1 | 100.0 | 1,307 |
| Dar es Salaam city | 83.2 | 10.0 | 6.8 | 100.0 | 463 |
| Other urban | 73.2 | 17.9 | 8.8 | 100.0 | 844 |
| Total rural | 41.6 | 32.9 | 25.5 | 100.0 | 1,177 |
| Zanzibar | 90.7 | 4.0 | 5.3 | 100.0 | 125 |
| Pemba | 90.0 95.1 | 4.1 3.7 | 5.9 1.2 | 100.0 100.0 | 107 18 |
| Zone |  |  |  |  |  |
| Western | 51.4 | 14.8 | 33.6 | 100.0 | 409 |
| Northern | 77.0 | 19.3 | 3.7 | 100.0 | 341 |
| Central | 69.6 | 12.2 | 18.2 | 100.0 | 75 |
| Southern highlands | 73.2 | 21.1 | 5.7 | 100.0 | 179 |
| Lake | 45.8 | 45.4 | 8.8 | 100.0 | 542 |
| Eastern | 66.4 | 17.4 | 16.2 | 100.0 | 778 |
| Southern | 44.8 | 18.3 | 36.9 | 100.0 | 159 |
| Region |  |  |  |  |  |
| Dodoma | 67.2 | 12.7 | 20.1 | 100.0 | 48 |
| Arusha | 75.8 | 21.7 | 2.5 | 100.0 | 142 |
| Kilimanjaro | 79.1 | 17.7 | 3.2 | 100.0 | 78 |
| Tanga | 75.3 | 19.1 | 5.7 | 100.0 | 77 |
| Morogoro | 40.0 | 32.2 | 27.7 | 100.0 | 213 |
| Pwani | 44.9 | 20.3 | 34.8 | 100.0 | 102 |
| Dar es Salaam | 83.2 | 10.0 | 6.8 | 100.0 | 463 |
| Lindi | 50.2 | 20.5 | 29.3 | 100.0 | 48 |
| Mtwara | 35.2 | 15.2 | 49.6 | 100.0 | 89 |
| Ruvuma | 71.2 | 25.8 | 3.0 | 100.0 | 22 |
| Iringa | 82.1 | 12.9 | 5.0 | 100.0 | 54 |
| Mbeya | 69.9 | 24.4 | 5.7 | 100.0 | 104 |
| Singida | 73.8 | 11.4 | 14.8 | 100.0 | 27 |
| Tabora | 42.1 | 12.0 | 45.3 | 100.0 | 170 |
| Rukwa | 67.0 | 25.5 | 7.5 | 100.0 | 22 |
| Kigoma | 53.4 | 18.9 | 27.7 | 100.0 | 205 |
| Shinyanga | 84.6 | 4.2 | 11.2 | 100.0 | 35 |
| Kagera | 20.9 | 74.0 | 5.1 | 100.0 | 133 |
| Mwanza | 51.5 | 38.4 | 10.1 | 100.0 | 358 |
| Mara | 70.4 | 19.9 | 9.7 | 100.0 | 51 |
| Manyara | 80.5 | 14.9 | 4.5 | 100.0 | 44 |
| Zanzibar North | 87.4 87.2 | 6.0 6.3 | 6.5 6.5 | 100.0 100.0 | 20 |
| Town West | 91.3 | 3.0 | 5.6 | 100.0 | 70 |
| Pemba North | 100.0 | 0.0 | 0.0 | 100.0 | 7 |
| Pemba South | 92.3 | 5.8 | 1.9 | 100.0 | 11 |
| Education |  |  |  |  |  |
| No education | 44.7 | 29.2 | 26.1 | 100.0 | 374 |
| Primary incomplete | 58.1 | 21.2 | 20.6 | 100.0 | 360 |
| Primary complete | 62.8 | 22.6 | 14.6 | 100.0 | 1,480 |
| Secondary+ | 76.2 | 17.6 | 6.2 | 100.0 | 394 |
| Wealth quintile |  |  |  |  |  |
| Lowest | 34.2 | 29.0 | 36.8 | 100.0 | 312 |
| Second | 34.3 | 39.3 | 26.4 | 100.0 | 292 |
| Middle | 47.5 | 32.6 | 19.9 | 100.0 | 297 |
| Fourth | 61.7 | 23.2 | 14.9 | 100.0 | 501 |
| Highest | 78.6 | 14.2 | 7.2 | 100.0 | 1,207 |
| Total | 61.6 | 22.6 | 15.8 | 100.0 | 2,609 |
| Note: Totals may not add to 100 percent because of a small number of missing cases. <br> ${ }_{2}^{1}$ With husband or someone else <br> ${ }^{2}$ Includes husband |  |  |  |  |  |

Almost all divorced, separated, or widowed women (94 percent) say that they alone are responsible for deciding how to use their earnings. About half ( 47 percent) of the women in the married and living together category report that they alone decide how their earnings are used, and an additional 32 percent say that such decisions are reached jointly with someone else. Similarly, 83 percent of the never-married women report that they alone decide on the way to use their earnings. The proportion of women deciding alone on the way to use their earnings is inversely related to the number of living children she has.

With regard to regional differentials, more urban women than rural have a say in decisions about the way to use their earnings. Three-quarters of the rural women and 92 percent of urban women decide, either alone or jointly, on the use of their earnings. Great differentials are observed with respect to residence and administrative regions.

Women's decisionmaking autonomy regarding the use of their earnings is strongly related to their level of education. More than three-fourths of women with at least a secondary education make their own decision on how to use their earnings compared with 45 percent of women with no education. Decisionmaking also increases with wealth quintile.

Ownership of assets can be another source of empowerment for women. In Tanzania, approximately half of women report that they alone or jointly own land or their current residence (Figure 3.2). Approximately one-quarter of women report that they alone or jointly own another dwelling, jewellery or gems, or livestock. However, even among those women with sole ownership of an asset, sizable minorities (ranging from one-fifth to one-third) report that they could not sell the asset without permission (data not shown).

Figure 3.2 Women's Ownership of Assets


TDHS 2004-05

## Women's Empowerment

The 2004-05 TDHS also collected information from both women and men on other measures of women's status and empowerment. In particular, questions were asked on women's roles in making household decisions, on acceptance of wife beating, and on opinions about when a wife should be able to refuse sex with her husband. These questions are used to define three different indicators of women's empowerment, namely women's participation in decisionmaking, the degree of acceptance of wife beating, and the degree of acceptance of a wife's right to refuse sex with her husband.

The first measure-women's participation in decisionmaking, requires little explanation because the ability to make decisions about one's own life is of obvious importance to practical empowerment. The other two measures derive from the notion that gender equity is essential to empowerment. Responses indicating a view that the beating of wives by husbands is justified reflect an attitude in favour of lower women's status, both absolutely and relative to men. Although such attitudes do not necessarily signify approval of men beating their wives, they do signify acceptance of norms that give men the right to discipline women with force. Similarly, beliefs about whether and when a woman can refuse sex with her husband reflect issues of gender equity regarding sexual rights and bodily integrity. Besides yielding an important measure of empowerment, the information about women's attitudes toward sexual rights will be useful for improving and monitoring reproductive health programs that depend on women's willingness and ability to control their own sexual lives.

## Household Decisionmaking

The ability of women to make decisions that affect the circumstances of their own lives is an essential aspect of empowerment. Table 3.9 shows the percent distribution of women by the person that the woman considers to usually have the final say in making decisions in four areas-

1. The woman's own health care
2. Large household purchases
3. Visits to family/friends
4. How many children to have and when.

The results are presented separately by marital status. Women are considered to participate in decisionmaking if they make decisions alone or jointly with their husband or someone else.

The role women have in decisionmaking varies with the type of decision. A majority of currently married women participate in making decisions about what food to cook each day (79 percent) and on their own health ( 59 percent), but less so in making daily purchases and visits to family or relatives. Only one-third of women have a say in decisionmaking about large purchases, which largely remains the domain of husbands. Women in the "not married" category uniformly report having little in the way of decisionmaking power in any dimension, except with regard to their own health. This is likely a result of the fact that the majority of unmarried women are dependent girls living in their parents' households who play no role in household decisionmaking.

[^2]Table 3.10.1 shows how women's participation, alone or jointly, in five types of decisionmaking varies by background characteristics. Women are considered to participate in decisionmaking if they alone or jointly with a husband or someone else have a final say in that decision. Results indicate that only one-quarter of women (26 percent) participate in all of the specified decisions, and 21 percent of women report that they do not participate in any of the decisions (Figure 3.3). Women's participation in all decisionmaking increases with age, from a low of 8 percent among women age 15-19 to 47 percent among the oldest women (age 45-49). Divorced, separated, and widowed women are more likely to participate in decisionmaking. Sixty-three percent of these women have a say on each decisionmaking item, as opposed to never-married women, of whom only 13 percent have a say in all decisions.

Women who have no children, women who are not employed, and those living in the Western zone show low participation in decisionmaking process. Level of education shows no consistent relationship to participation in decisionmaking. Women who are employed for cash have a higher level of participation in making decisions than women who do not have cash earnings.

Table 3.10.2 indicates that 28 percent of men believe that a wife, alone or jointly, should have a final say in making large household purchases. This corresponds fairly well to the 33 percent of women who say that they do make decisions about large purchases. Although only 44 percent of women say that they alone or jointly have a final say in making daily purchases, 73 percent of men say that women should be able to participate in this kind of decisionmaking.

Men are less likely to say that women should have a say in visits to family or relatives (33 percent) than women are to report actual decisionmaking in this area ( 47 percent). Only 56 percent of men believe that a wife should be able to have a say in how her own earnings are spent, and 54 percent believe she should be able to have a say in how many children to have. The meaning of the latter, however, is unclear, because some of the respondents may believe that only God has a say over how many children a couple might have.

Only 11 percent of men think a wife should have a say in all specified decisions, and 10 percent of men think that a wife should have a say in none.

| Percentage of women who say that they alone or jointly have the final say in specific decisions, by background characteristics, Tanzania 2004-05 |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Background characteristic | Alone or jointly have final say in: |  |  |  |  |  |  | Number of women |
|  | Own health care | $\qquad$ | Making daily purchases | Visits to family or relatives | What food to cook each day | All specified decisions | None of the specified decisions |  |
| Age |  |  |  |  |  |  |  |  |
| 15-19 | 32.5 | 10.0 | 14.1 | 21.1 | 23.5 | 8.4 | 56.8 | 2,245 |
| 20-24 | 52.5 | 27.3 | 37.0 | 42.9 | 62.6 | 20.0 | 20.7 | 2,007 |
| 25-29 | 64.1 | 35.7 | 50.1 | 51.9 | 77.2 | 26.9 | 10.5 | 1,885 |
| 30-34 | 64.2 | 42.2 | 57.6 | 56.2 | 81.0 | 32.9 | 9.3 | 1,542 |
| 35-39 | 65.5 | 46.2 | 59.7 | 59.0 | 85.2 | 36.2 | 7.9 | 1,053 |
| 40-44 | 69.4 | 49.1 | 61.0 | 61.4 | 86.0 | 40.3 | 6.2 | 834 |
| 45-49 | 73.2 | 55.0 | 68.1 | 67.5 | 89.1 | 46.7 | 4.7 | 763 |
| Marital status |  |  |  |  |  |  |  |  |
| Never married | 36.3 | 13.8 | 15.4 | 25.0 | 19.6 | 12.6 | 57.7 | 2,371 |
| Married or living together | 59.4 | 34.6 | 50.0 | 49.8 | 80.1 | 25.1 | 10.5 | 6,950 |
| Divorced/separated/widowed | 81.6 | 67.8 | 70.0 | 77.2 | 74.4 | 63.2 | 10.4 | 1,007 |
|  |  |  |  |  |  |  |  |  |
|  | 35.8 | 13.6 | 17.7 | 25.3 | 26.8 | 11.2 | 52.8 | 2,705 |
| 1-2 | 61.2 | 36.1 | 48.7 | 50.9 | 73.2 | 28.0 | 13.6 | 3,348 |
| 3-4 | 65.2 | 42.0 | 57.4 | 56.9 | 84.1 | 32.9 | 7.7 | 2,269 |
| 5+ | 65.5 | 44.0 | 56.5 | 57.1 | 84.6 | 34.5 | 7.1 | 2,007 |
| Residence |  |  |  |  |  |  |  |  |
| Urban | 59.7 | 37.7 | 49.9 | 50.0 | 64.6 | 29.8 | 23.1 | 2,935 |
| Rural | 54.9 | 31.2 | 41.7 | 45.5 | 66.1 | 24.4 | 20.6 | 7,394 |
| Mainland/Zanzibar |  |  |  |  |  |  |  |  |
| Mainland | 56.7 | 33.6 | 44.8 | 47.1 | 66.2 | 26.4 | 20.8 | 10,016 |
| Total urban | 60.3 | 38.5 | 51.0 | 50.6 | 65.2 | 30.3 | 22.4 | 2,885 |
| Dar es Salaam city | 59.0 | 37.8 | 49.7 | 49.2 | 63.7 | 29.7 | 24.6 | 969 |
| Other urban | 61.0 | 38.9 | 51.6 | 51.3 | 66.0 | 30.5 | 21.2 | 1,916 |
| Total rural | 55.3 | 31.6 | 42.4 | 45.7 | 66.6 | 24.8 | 20.2 | 7,131 |
| Zanzibar | 41.2 | 15.6 | 17.7 | 36.0 | 47.9 | 11.6 | 38.4 | 313 |
| Unguja | 38.4 | 14.0 | 17.0 | 37.1 | 51.6 | 9.6 | 36.1 | 216 |
| Pemba | 47.4 | 19.2 | 19.5 | 33.6 | 39.7 | 16.0 | 43.7 | 97 |
| Zone |  |  |  |  |  |  |  |  |
| Western | 33.3 | 17.9 | 25.9 | 27.5 | 62.2 | 10.6 | 29.1 | 1,880 |
| Northern | 66.5 | 32.5 | 52.4 | 53.0 | 70.9 | 27.3 | 16.5 | 1,496 |
| Central | 50.4 | 38.8 | 54.4 | 39.9 | 69.4 | 27.8 | 24.4 | 799 |
| Southern highlands | 58.1 | 48.5 | 60.1 | 65.7 | 74.2 | 39.5 | 18.3 | 1,440 |
| Lake | 80.8 | 30.7 | 37.5 | 45.2 | 59.3 | 26.3 | 11.7 | 1,865 |
| Eastern | 54.9 | 39.6 | 50.4 | 51.3 | 65.5 | 30.7 | 24.8 | 1,670 |
| Southern | 45.9 | 34.5 | 43.9 | 51.0 | 66.8 | 27.7 | 22.8 | 866 |
| Region |  |  |  |  |  |  |  |  |
| Dodoma | 51.0 | 40.4 | 56.8 | 38.0 | 70.3 | 27.8 | 22.6 | 468 |
| Arusha | 52.8 | 27.1 | 49.7 | 53.7 | 68.5 | 19.4 | 18.7 | 391 |
| Kilimanjaro | 81.5 | 44.9 | 59.7 | 54.3 | 66.5 | 41.1 | 16.2 | 380 |
| Tanga | 73.0 | 27.7 | 50.2 | 45.7 | 74.8 | 26.2 | 15.7 | 431 |
| Morogoro | 50.9 | 42.5 | 53.3 | 55.1 | 67.1 | 31.9 | 25.9 | 449 |
| Pwani | 46.5 | 41.8 | 47.7 | 52.6 | 69.6 | 32.3 | 23.7 | 253 |
| Dar es Salaam | 59.0 | 37.8 | 49.7 | 49.2 | 63.7 | 29.7 | 24.6 | 969 |
| Lindi | 61.5 | 42.7 | 49.1 | 51.8 | 71.6 | 38.5 | 17.8 | 221 |
| Mtwara | 51.9 | 36.7 | 43.3 | 52.1 | 62.9 | 30.8 | 25.7 | 346 |
| Ruvuma | 27.4 | 25.8 | 40.9 | 49.2 | 67.8 | 16.1 | 23.1 | 299 |
| Iringa | 45.8 | 43.2 | 64.6 | 64.4 | 75.6 | 30.4 | 17.6 | 412 |
| Mbeya | 58.6 | 49.6 | 59.3 | 65.7 | 72.8 | 40.0 | 19.6 | 712 |
| Singida | 49.5 | 36.5 | 51.0 | 42.7 | 68.2 | 27.9 | 27.0 | 331 |
| Tabora | 23.7 | 13.7 | 24.2 | 28.2 | 59.1 | 6.2 | 32.1 | 520 |
| Rukwa | 72.9 | 52.9 | 56.0 | 67.6 | 75.4 | 50.3 | 16.0 | 316 |
| Kigoma | 35.2 | 21.8 | 27.2 | 38.9 | 54.9 | 12.5 | 33.2 | 499 |
| Shinyanga | 38.0 | 18.1 | 26.2 | 20.4 | 68.2 | 12.1 | 25.0 | 861 |
| Kagera | 80.0 | 22.1 | 30.3 | 44.5 | 51.9 | 17.8 | 14.6 | 545 |
| Mwanza | 89.5 | 35.2 | 40.6 | 47.4 | 59.0 | 30.5 | 6.2 | 939 |
| Mara | 60.6 | 32.0 | 39.9 | 40.6 | 70.6 | 27.9 | 21.3 | 381 |
| Manyara | 55.9 | 30.9 | 49.6 | 61.1 | 74.4 | 21.7 | 15.4 | 293 |
| Zanzibar North | 34.9 | 8.9 | 11.1 | 31.5 | 43.4 | 6.4 | 39.0 | 48 |
| Zanzibar South | 52.2 | 14.0 | 16.9 | 49.5 | 51.3 | 7.8 | 25.2 | 26 |
| Town West | 37.0 | 15.7 | 18.9 | 36.7 | 54.3 | 11.0 | 37.1 | 143 |
| Pemba North | 40.7 | 20.4 | 20.5 | 33.0 | 43.2 | 18.9 | 48.8 | 52 |
| Pemba South | 55.0 | 17.7 | 18.3 | 34.2 | 35.6 | 12.6 | 37.9 | 45 |
| Education |  |  |  |  |  |  |  |  |
| No education | 53.6 | 31.4 | 40.1 | 44.8 | 68.3 | 25.1 | 19.7 | 2,503 |
| Primary incomplete | 51.3 | 30.0 | 38.4 | 42.7 | 58.5 | 24.2 | 28.8 | 1,855 |
| Primary complete | 59.7 | 35.3 | 48.5 | 49.5 | 69.3 | 27.1 | 17.6 | 5,086 |
| Secondary+ | 54.7 | 31.1 | 41.1 | 45.0 | 52.2 | 25.4 | 31.9 | 885 |
| Employment |  |  |  |  |  |  |  |  |
| Not employed | 41.7 | 19.0 | 29.1 | 33.3 | 47.2 | 13.6 | 39.6 | 2,222 |
| Employed for cash | 69.2 | 42.8 | 55.2 | 61.5 | 72.8 | 35.0 | 13.9 | 2,431 |
| Employed not for cash | 56.4 | 34.4 | 45.1 | 45.7 | 69.8 | 26.9 | 17.4 | 5,672 |
| Wealth quintile $\begin{array}{lllllllll} \\ & 53.3 & 31.7 & 41.9 & 43.9 & 67.2 & 24.8 & 21.3\end{array}$ |  |  |  |  |  |  |  |  |
| Lowest | 53.3 | 31.7 | 41.9 | 43.9 | 67.2 | 24.8 | 21.3 | 1,840 |
| Second | 52.5 | 30.0 | 39.8 | 44.6 | 67.8 | 24.2 | 20.3 | 1,944 |
| Middle | 56.1 | 31.2 | 40.3 | 45.1 | 64.2 | 24.8 | 21.1 | 1,943 |
| Fourth | 56.9 | 35.2 | 48.0 | 50.8 | 66.4 | 26.1 | 20.4 | 2,004 |
| Highest | 60.7 | 36.0 | 48.4 | 48.5 | 63.4 | 28.7 | 23.0 | 2,597 |
| Total | 56.3 | 33.0 | 44.0 | 46.8 | 65.7 | 25.9 | 21.3 | 10,329 |
| Note: Total includes four cases (weighted) with missing information on employment. |  |  |  |  |  |  |  |  |


| Percentage of men who say that the wife alone or jointly should have the final say in specific decisions, by background characteristics, Tanzania 2004-05 |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Background characteristic | Wife alone or jointly should have final say in: |  |  |  |  |  |  | Number of men |
|  | $\qquad$ | Making daily purchases | Visits to family or relatives | What to do with money she earns | How many children to have | All specified decisions | None of the specified decisions |  |
| Age |  |  |  |  |  |  |  |  |
| 15-19 | 22.5 | 68.5 | 28.3 | 51.4 | 46.0 | 6.0 | 10.9 | 637 |
| 20-24 | 23.7 | 73.7 | 26.3 | 50.4 | 54.0 | 7.0 | 10.1 | 493 |
| 25-29 | 32.5 | 73.5 | 33.0 | 58.9 | 56.7 | 15.1 | 9.3 | 405 |
| 30-34 | 28.8 | 77.2 | 34.4 | 58.3 | 58.4 | 14.0 | 9.2 | 387 |
| 35-39 | 29.1 | 75.6 | 40.4 | 62.6 | 56.6 | 11.6 | 8.8 | 278 |
| 40-44 | 32.9 | 73.1 | 34.8 | 57.5 | 54.7 | 10.9 | 10.8 | 265 |
| 45-49 | 33.5 | 75.8 | 44.3 | 60.6 | 55.2 | 18.0 | 9.5 | 170 |
| Marital status |  |  |  |  |  |  |  |  |
| Never married | 25.0 | 71.3 | 30.2 | 53.1 | 52.2 | 8.4 | 9.6 | 1,100 |
| Married or living together | 29.9 | 75.1 | 35.2 | 58.3 | 54.7 | 12.8 | 9.5 | 1,401 |
| Divorced/separated/widowed | 25.9 | 68.4 | 23.2 | 51.0 | 52.4 | 6.5 | 17.6 | 135 |
| Number of living children |  |  |  |  |  |  |  |  |
| 0 | 27.7 | 72.7 | 32.0 | 53.4 | 54.2 | 11.2 | 10.6 | 721 |
| 1-2 | 30.2 | 75.2 | 33.2 | 57.5 | 57.9 | 11.9 | 8.8 | 886 |
| 3-4 | 27.3 | 74.5 | 35.8 | 60.2 | 54.6 | 12.1 | 10.0 | 565 |
| 5+ | 23.0 | 68.6 | 28.0 | 50.8 | 42.9 | 5.6 | 11.0 | 463 |
| Residence |  |  |  |  |  |  |  |  |
| Urban | 36.0 | 82.3 | 40.7 | 66.5 | 67.2 | 17.3 | 3.2 | 716 |
| Rural | 24.5 | 69.8 | 29.5 | 51.8 | 48.4 | 8.2 | 12.5 | 1,919 |
| Mainland/Zanzibar |  |  |  |  |  |  |  |  |
| Mainland | 27.8 | 73.7 | 32.6 | 55.5 | 53.3 | 10.7 | 9.9 | 2,556 |
| Total urban | 36.4 | 82.2 | 40.2 | 66.3 | 65.4 | 17.3 | 3.5 | 716 |
| Dar es Salaam city | 36.9 | 76.5 | 42.9 | 72.8 | 66.6 | 18.4 | 4.2 | 267 |
| Other urban | 36.1 | 85.6 | 38.6 | 62.5 | 64.6 | 16.7 | 3.1 | 450 |
| Total rural | 24.4 | 70.4 | 29.7 | 51.3 | 48.5 | 8.2 | 12.4 | 1,840 |
| Zanzibar | 24.2 | 56.2 | 29.4 | 65.0 | 62.8 | 6.7 | 11.6 | 79 |
| Unguja | 23.3 | 61.5 | 32.0 | 65.1 | 60.7 | 7.9 | 11.1 | 53 |
| Pemba | 26.1 | 45.4 | 24.0 | 64.8 | 67.1 | 4.3 | 12.4 | 26 |
| Zone |  |  |  |  |  |  |  |  |
| Western | 16.7 | 75.4 | 21.6 | 36.3 | 36.1 | 5.4 | 13.3 | 468 |
| Northern | 23.9 | 73.4 | 33.1 | 51.4 | 51.2 | 10.9 | 12.8 | 362 |
| Central | 18.3 | 73.1 | 50.7 | 56.6 | 61.9 | 11.5 | 12.9 | 212 |
| Southern highlands | 22.8 | 76.8 | 29.9 | 66.7 | 56.9 | 9.9 | 6.6 | 358 |
| Lake | 37.6 | 73.4 | 31.7 | 66.7 | 60.3 | 9.8 | 6.4 | 448 |
| Eastern | 38.7 | 78.9 | 41.2 | 62.1 | 62.3 | 18.5 | 5.5 | 462 |
| Southern | 31.3 | 57.7 | 26.9 | 47.7 | 46.4 | 8.4 | 15.8 | 245 |
| Region |  |  |  |  |  |  |  |  |
| Dodoma | 24.3 | 69.2 | 55.2 | 59.6 | 67.1 | 16.5 | 13.9 | 113 |
| Arusha | 35.3 | 69.8 | 39.7 | 53.3 | 48.7 | 14.6 | 13.1 | 82 |
| Kilimanjaro | 29.4 | 91.2 | 48.0 | 64.6 | 64.1 | 18.8 | 4.6 | 104 |
| Tanga | 11.1 | 62.5 | 21.6 | 44.1 | 46.1 | 4.0 | 18.1 | 94 |
| Morogoro | 43.8 | 86.5 | 42.5 | 46.9 | 59.2 | 20.0 | 4.8 | 127 |
| Pwani | 36.4 | 74.2 | 32.1 | 48.5 | 51.1 | 16.1 | 11.8 | 68 |
| Dar es Salaam | 36.9 | 76.5 | 42.9 | 72.8 | 66.6 | 18.4 | 4.2 | 267 |
| Lindi | 36.7 | 57.9 | 30.1 | 44.6 | 42.2 | 10.7 | 16.8 | 65 |
| Mtwara | 36.0 | 40.7 | 17.0 | 40.2 | 46.8 | 7.2 | 21.1 | 98 |
| Ruvuma | 21.5 | 77.7 | 35.9 | 59.0 | 49.2 | 8.0 | 8.7 | 83 |
| Iringa | 25.4 | 85.2 | 34.6 | 61.3 | 63.5 | 11.0 | 5.0 | 102 |
| Mbeya | 25.3 | 70.3 | 31.4 | 78.1 | 55.7 | 10.7 | 7.1 | 170 |
| Singida | 11.5 | 77.4 | 45.7 | 53.3 | 56.0 | 5.7 | 11.8 | 99 |
| Tabora | 11.9 | 69.5 | 18.8 | 32.3 | 34.9 | 2.5 | 13.5 | 127 |
| Rukwa | 14.8 | 79.7 | 21.6 | 50.6 | 51.5 | 6.9 | 7.5 | 87 |
| Kigoma | 18.2 | 75.6 | 24.3 | 41.9 | 49.4 | 5.5 | 9.5 | 127 |
| Shinyanga | 18.7 | 78.8 | 21.7 | 35.4 | 28.9 | 7.0 | 15.5 | 215 |
| Kagera | 56.0 | 61.3 | 44.4 | 82.2 | 74.3 | 11.0 | 1.2 | 122 |
| Mwanza | 35.3 | 84.8 | 33.0 | 68.8 | 62.8 | 11.5 | 2.5 | 229 |
| Mara | 20.2 | 61.8 | 12.5 | 42.5 | 37.0 | 4.5 | 21.9 | 98 |
| Manyara | 20.1 | 67.0 | 20.8 | 41.5 | 43.2 | 5.2 | 17.0 | 83 |
| Zanzibar North | 25.4 | 49.1 | 31.7 | 63.4 | 45.8 | 4.7 | 13.8 | 11 |
| Zanzibar South | 18.1 | 75.3 | 25.8 | 70.7 | 72.3 | 4.0 | 4.5 | 6 |
| Town West | 23.5 | 62.9 | 33.2 | 64.6 | 63.3 | 9.5 | 11.5 | 36 |
| Pemba North | 25.7 | 41.3 | 25.7 | 64.0 | 72.1 | 5.0 | 10.2 | 13 |
| Pemba South | 26.6 | 49.7 | 22.3 | 65.5 | 61.7 | 3.6 | 14.7 | 12 |
| Education |  |  |  |  |  |  |  |  |
| No education | 19.9 | 57.8 | 19.5 | 42.2 | 34.5 | 5.0 | 18.6 | 312 |
| Primary incomplete | 20.9 | 69.1 | 25.4 | 48.4 | 42.7 | 4.5 | 12.1 | , 646 |
| Primary complete | 28.5 | 76.4 | 33.1 | 57.1 | 57.1 | 10.4 | 8.5 | 1,381 |
| Secondary+ | 46.5 | 83.5 | 58.8 | 80.0 | 80.9 | 31.0 | 2.4 | 296 |
| Employment |  |  |  |  |  |  |  |  |
| Not employed | 31.5 | 76.4 | 34.5 | 59.8 | 56.0 | 14.2 | 7.9 | 622 |
| Employed for cash | 36.5 | 77.0 | 41.9 | 63.8 | 64.6 | 16.3 | 6.3 | 575 |
| Employed not for cash | 22.5 | 70.3 | 27.9 | 50.8 | 48.1 | 6.8 | 12.3 | 1,438 |
| Wealth quintile |  |  |  |  |  |  |  |  |
| Lowest | 19.1 | 63.1 | 24.0 | 47.4 | 39.5 | 3.3 | 16.3 | 484 |
| Second | 22.4 | 68.9 | 30.4 | 45.5 | 44.8 | 7.5 | 14.9 | 504 |
| Middle | 24.9 | 71.6 | 26.8 | 49.6 | 49.1 | 7.0 | 10.2 | 516 |
| Fourth | 30.9 | 77.7 | 33.5 | 62.6 | 57.6 | 13.7 | 6.3 | 517 |
| Highest | 38.1 | 82.3 | 44.9 | 70.2 | 72.1 | 19.4 | 3.6 | 615 |
| Total | 27.6 | 73.2 | 32.5 | 55.8 | 53.5 | 10.6 | 9.9 | 2,635 |

Figure 3.3 Number of Decisions in Which Women Participate in the Final Say


TDHS 2004-05

## Attitude towards Wife Beating

Violence against women is receiving considerable attention because it has serious consequences for women's physical and mental well-being, including their reproductive and sexual health (WHO, 1999). The 2004-05 TDHS collected information on the degree of acceptance of wife beating by asking about whether a husband would be justified in beating his wife in each of the following five situations: if she burns the food, if she argues with him, if she goes out with telling him, if she neglects the children, or if she refuses to have sex with her husband.

Tables 3.11.1 and 3.11.2 present the proportions of women and men who agreed that the husband would be justified in hitting his wife in the case of each specific situation. The sixth column in the table includes the percentage of respondents who feel a husband is justified in beating his wife for at least one of the reasons. A high proportion of respondents agreeing that wife beating is acceptable is an indicator that respondents generally accept violence as part of male-female relationships. A low proportion shows that the majority of respondents does not accept such violence and is an indicator that women are more "empowered."

Three in every five women agree that wife beating by the husband is justified in at least one of the specified situations. Almost half of women agree that it is acceptable for a husband to hit a wife if she argues with him ( 46 percent), if she goes out without telling him ( 43 percent), or if she neglects the children ( 47 percent). Women are less likely to find violence from a husband acceptable when a wife refuses sex (29 percent) or burns the food (20 percent).

Marital status and number of children are not associated with women's attitudes towards wife beating. With respect to residence, rural women and those from the Mainland are more inclined to agree with justifications of wife-beating than women living in urban areas and in Zanzibar. Wide variations are observed between administrative regions, with women least likely to agree with wife beating in Pemba North ( 21 percent) and most likely to agree in Kigoma ( 92 percent). Only women with at least secondary education are considerably less likely than less educated women to approve of wife-beating.

| Table 3.11.1 Women's attitude towards wife beating |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percentage of women who agree that a husband is justified in hitting or beating his wife for specific reasons, by background characteristics, Tanzania 2004-05 |  |  |  |  |  |  |  |
|  | Husband is justified in hitting or beating his wife if she: |  |  |  |  | Percentage who agree with at least one specified reason | Number of women |
| Background characteristic | Burns the food | Argues with him | Goes out without telling him | Neglects the children | Refuses to have sex with him |  |  |
| Age |  |  |  |  |  |  |  |
| 15-19 | 21.6 | 45.4 | 43.8 | 48.0 | 25.6 | 60.3 | 2,245 |
| 20-24 | 19.5 | 47.6 | 43.3 | 48.6 | 27.9 | 60.9 | 2,007 |
| 25-29 | 19.3 | 45.4 | 43.7 | 48.1 | 31.3 | 60.6 | 1,885 |
| 30-34 | 18.6 | 43.7 | 41.8 | 45.6 | 29.8 | 57.7 | 1,542 |
| 35-39 | 17.4 | 47.0 | 42.1 | 46.1 | 28.1 | 59.4 | 1,053 |
| 40-44 | 19.6 | 46.7 | 40.8 | 46.4 | 31.6 | 58.3 | 834 |
| 45-49 | 18.8 | 45.7 | 42.1 | 44.4 | 32.8 | 56.8 | 763 |
| Marital status |  |  |  |  |  |  |  |
| Never married | 18.9 | 41.5 | 38.9 | 44.5 | 22.7 | 55.2 | 2,371 |
| Married or living together | 19.6 | 47.6 | 44.5 | 48.2 | 30.7 | 61.4 | 6,950 |
| Divorced/separated widowed | 20.3 | 44.0 | 40.3 | 46.2 | 31.8 | 57.1 | 1,007 |
| Number of living children |  |  |  |  |  |  |  |
| 0 | 18.8 | 41.7 | 39.5 | 44.2 | 23.7 | 55.6 | 2,705 |
| 1-2 | 20.2 | 47.5 | 44.9 | 48.4 | 30.0 | 61.6 | 3,348 |
| 3-4 | 18.8 | 46.3 | 43.3 | 48.5 | 29.9 | 61.1 | 2,269 |
| 5+ | 20.3 | 48.3 | 43.4 | 47.6 | 33.4 | 59.8 | 2,007 |
| Residence |  |  |  |  |  |  |  |
| Urban | 15.7 | 40.3 | 35.4 | 40.8 | 23.4 | 52.2 | 2,935 |
| Rural | 21.1 | 48.1 | 45.8 | 49.7 | 31.2 | 62.5 | 7,394 |
| Mainland/Zanzibar |  |  |  |  |  |  |  |
| Mainland | 19.9 | 46.7 | 43.4 | 48.0 | 29.3 | 60.3 | 10,016 |
| Total urban | 16.2 | 41.0 | 36.0 | 41.8 | 23.9 | 53.0 | 2,885 |
| Dar es Salaam city | 18.4 | 35.7 | 32.4 | 39.0 | 25.1 | 48.9 | , 969 |
| Other urban | 15.1 | 43.7 | 37.8 | 43.2 | 23.3 | 55.1 | 1,916 |
| Zanzibar | 6.8 | 21.2 | 26.0 | 20.6 | 18.0 | 35.9 | ${ }^{7} 313$ |
| Unguja | 6.2 | 22.0 | 26.3 | 22.4 | 17.7 | 38.6 | 216 |
| Pemba | 8.2 | 19.3 | 25.4 | 16.5 | 18.9 | 29.9 | 97 |
| Zone |  |  |  |  |  |  |  |
| Western | 26.9 | 59.2 | 57.7 | 60.9 | 40.0 | 79.3 | 1,880 |
| Northern | 14.3 | 45.9 | 45.6 | 52.5 | 29.0 | 60.6 | 1,496 |
| Central | 27.1 | 51.5 | 46.1 | 52.1 | 34.0 | 62.9 | 799 |
| Southern highlands | 22.6 | 41.8 | 39.3 | 43.1 | 27.3 | 55.1 | 1,440 |
| Lake | 13.4 | 42.4 | 36.9 | 42.5 | 24.1 | 52.1 | 1,865 |
| Eastern | 16.7 | 36.3 | 33.8 | 35.9 | 24.0 | 48.4 | 1,670 |
| Southern | 23.9 | 53.5 | 44.8 | 51.5 | 27.5 | 65.7 | 866 |
| Region |  |  |  |  |  |  |  |
| Dodoma | 25.4 | 51.8 | 46.0 | 51.4 | 34.7 | 61.7 | 468 |
| Arusha | 18.3 | 53.8 | 50.8 | 62.4 | 29.1 | 72.0 | 391 |
| Kilimanjaro | 8.2 | 25.3 | 27.7 | 29.4 | 14.8 | 32.7 | 380 |
| Tanga | 10.7 | 44.9 | 50.3 | 51.3 | 35.8 | 61.3 | 431 |
| Morogoro | 16.0 | 39.5 | 35.7 | 36.9 | 25.0 | 51.1 | 449 |
| Pwani ${ }^{\text {Dar es Salaam }}$ | 11.7 18.4 | 32.8 35.7 | 35.5 32.4 | 22.4 39.0 | 18.0 25.1 | 41.7 48.9 | 253 969 |
| Lindi | 21.7 | 47.3 | 38.7 | 43.4 | 23.5 | 58.5 | 221 |
| Mtwara | 19.8 | 50.6 | 43.2 | 47.1 | 24.2 | 59.3 | 346 |
| Ruvuma | 30.3 | 61.5 | 51.2 | 62.7 | 34.2 | 78.5 | 299 |
| Iringa | 31.1 | 62.8 | 58.4 | 66.1 | 30.3 | 80.1 | 412 |
| Mbeya | 18.1 | 33.2 | 32.1 | 34.1 | 26.7 | 46.5 | 712 |
| Singida | 29.6 | 51.1 | 46.3 | 53.2 | 33.1 | 64.7 | 331 |
| Tabora | 29.1 | 62.3 | 58.8 | 54.7 | 42.4 | 84.4 | 520 |
| Rukwa | 21.5 | 34.0 | 30.4 | 33.4 | 24.6 | 41.8 | 316 |
| Kigoma | 34.2 | 68.5 | 68.9 | 80.5 | 51.8 | 92.2 | 499 |
| Shinyanga | 21.3 | 51.9 | 50.7 | 53.3 | 31.6 | 68.6 | 861 |
| Kagera | 9.4 | 34.0 | 29.0 | 38.2 | 16.2 | 43.6 | 545 |
| Mwanza | 8.2 | 34.3 | 27.3 | 32.4 | 16.4 | 42.7 | 939 |
| Mara | 31.8 | 74.3 | 71.8 | 73.4 | 54.6 | 87.2 | 381 |
| Manyara | 22.4 | 63.6 | 55.0 | 71.1 | 37.2 | 80.9 | 293 |
| Zanzibar North | 9.0 | 22.9 | 30.6 | 25.5 | 20.3 | 42.6 | 48 |
| Zanzibar South | 9.6 | 22.2 | 30.5 | 24.0 | 18.7 | 42.4 | 26 |
| Town West | 4.6 | 21.6 | 24.1 | 21.1 | 16.6 | 36.5 | 143 |
| Pemba North | 4.9 | 11.0 | 17.3 | 10.6 | 11.9 | 21.0 | 52 |
| Pemba South | 12.0 | 28.8 | 34.7 | 23.2 | 26.9 | 40.0 | 45 |
| Education |  |  |  |  |  |  |  |
| No education | 21.8 | 48.1 | 45.0 | 46.7 | 32.9 | 61.1 | 2,503 |
| Primary incomplete | 22.2 | 49.7 | 47.5 | 50.9 | 32.7 | 64.7 | 1,855 |
| Primary complete | 19.3 | 46.7 | 43.6 | 49.2 | 28.6 | 60.9 | 5,086 |
| Secondary+ | 9.1 | 26.5 | 22.6 | 28.6 | 12.2 | 37.0 | 885 |
| Employment |  |  |  |  |  |  |  |
| Not employed | 19.7 | 43.3 | 39.7 | 46.0 | 26.6 | 57.8 | 2,222 |
| Employed for cash | 15.4 | 42.4 | 38.9 | 44.5 | 22.9 | 55.7 | 2,431 |
| Employed not for cash | 21.3 | 48.4 | 45.8 | 48.8 | 32.6 | 61.9 | 5,672 |
| Number of decisions in which woman has final say ${ }^{1}$ |  |  |  |  |  |  |  |
| 0 | 25.0 | 47.6 | 44.6 | 49.1 | 30.9 | 62.3 | 2,204 |
| 1-2 | 19.9 | 46.8 | 43.1 | 46.0 | 30.6 | 60.0 | 3,354 |
| 3-4 | 18.8 | 53.0 | 48.0 | 53.7 | 30.9 | 66.5 | 2,094 |
| 5 | 15.3 | 37.7 | 37.0 | 41.9 | 23.9 | 51.3 | 2,677 |
| Wealth quintile |  |  |  |  |  |  |  |
| Lowest | 24.6 | 50.5 | 47.2 | 50.6 | 35.3 | 65.3 | 1,840 |
| Second | 23.6 | 51.4 | 48.7 | 51.4 | 33.2 | 65.4 | 1,944 |
| Middle | 19.0 | 47.8 | 46.2 | 50.7 | 29.2 | 62.6 | 1,943 |
| Fourth | 18.7 | 45.7 | 42.9 | 46.7 | 29.1 | 59.1 | 2,004 |
| Highest | 14.0 | 37.2 | 32.8 | 39.3 | 21.2 | 49.3 | 2,597 |
| Total | 19.6 | 45.9 | 42.8 | 47.2 | 29.0 | 59.6 | 10,329 |
| Note: Total includes four cases (weighted) with missing information on employment. ${ }^{1}$ Either by herself or jointly with others |  |  |  |  |  |  |  |


| Percentage of men who agree that a husband is justified in hitting or beating his wife for specific reasons, by background characteristics, Tanzania 2004-05 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Husband is justified in hitting or beating his wife if she: |  |  |  |  | Percentage who agree with at least one specified reason | Number of men |
| Background characteristic | Burns the food | Argues with him | $\begin{gathered} \text { Goes out } \\ \text { without } \\ \text { telling him } \\ \hline \end{gathered}$ | $\begin{gathered} \text { Neglects } \\ \text { the } \\ \text { children } \\ \hline \end{gathered}$ | $\begin{aligned} & \text { Refuses to } \\ & \text { have sex } \\ & \text { with him } \\ & \hline \end{aligned}$ |  |  |
| Age |  |  |  |  |  |  |  |
| 15-19 | 14.8 | 32.0 | 34.9 | 36.1 | 21.8 | 53.7 | 637 |
| 20-24 | 11.8 | 25.7 | 26.7 | 28.1 | 17.8 | 46.5 | 493 |
| 25-29 | 10.6 | 21.2 | 25.9 | 29.1 | 14.5 | 41.8 | 405 |
| 30-34 | 9.3 | 20.6 | 23.7 | 27.0 | 10.4 | 36.0 | 387 |
| 35-39 | 5.4 | 15.1 | 21.6 | 18.1 | 10.0 | 31.5 | 278 |
| 40-44 | 7.5 | 16.8 | 24.1 | 25.3 | 10.4 | 32.3 | 265 |
| 45-49 | 10.9 | 13.4 | 23.2 | 21.2 | 11.6 | 32.1 | 170 |
| Marital status |  |  |  |  |  |  |  |
| Never married | 12.7 | 28.4 | 30.0 | 30.9 | 19.5 | 47.7 | 1,100 |
| Married or living together | 9.1 | 19.0 | 25.4 | 26.3 | 11.9 | 37.9 | 1,401 |
| Divorced/separated/widowed | 13.1 | 20.4 | 21.3 | 26.5 | 14.1 | 38.9 | 135 |
| Number of living children |  |  |  |  |  |  |  |
| 0 | 10.5 | 19.4 | 23.3 | 25.3 | 14.2 | 39.8 | 721 |
| 1-2 | 10.3 | 22.8 | 26.7 | 27.4 | 14.8 | 41.5 | 886 |
| $3-4$ $5+$ | 10.9 | 23.0 | 27.4 | 39.4 | 14.1 | 41.8 | 565 |
| Residence |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
| Urban | 5.6 | 17.4 | 19.1 | 21.5 | 10.5 | 32.9 | 716 |
| Rural | 12.8 | 25.1 | 30.0 | 30.7 | 17.0 | 45.5 | 1,919 |
| Mainland/Zanzibar |  |  |  |  |  |  |  |
| Mainland | 10.9 | 23.0 | 27.1 | 28.3 | 15.1 | 42.1 | 2,556 |
| Total urban | 5.3 | 17.8 | 19.4 | 22.3 | 10.1 | 33.2 | 716 |
| Dar es Salaam city | 1.1 | 14.9 | 14.2 | 18.4 | 4.1 | 26.2 | 267 |
| Other urban | 7.8 13.1 | 19.5 25.0 | 22.5 30.1 | 24.6 30.6 | 13.7 | 37.3 45.6 | 450 840 |
| Zanzibar | 7.6 | 23.5 | 26.0 | 26.4 | 20.5 | 38.9 | -79 |
| Unguja | 3.3 | 21.2 | 21.4 | 24.3 | 15.1 | 34.6 | 53 |
| Pemba | 16.4 | 28.3 | 35.6 | 30.8 | 31.7 | 47.7 | 26 |
| Zone |  |  |  |  |  |  |  |
| Western | 18.1 | 30.6 | 37.7 | 39.1 | 21.7 | 52.8 | 468 |
| Northern | 12.3 | 32.6 | 33.1 | 36.5 | 21.1 | 53.6 | 362 |
| Central | 13.7 | 19.8 | 25.7 | 22.9 | 18.0 | 40.1 | 212 |
| Southern highlands | 9.6 | 21.2 | 26.0 | 25.1 | 14.9 | 39.2 | 358 |
| Lake | 9.1 | 17.4 | 25.1 | 26.2 | 11.9 | 44.0 | 448 |
| Eastern | 5.6 | 17.9 | 20.5 | 21.9 | 7.8 | 31.1 | 462 |
| Southern | 7.9 | 19.2 | 16.7 | 20.9 | 10.5 | 28.6 | 245 |
| Region |  |  |  |  |  |  |  |
| Dodoma | 9.5 | 15.6 | 23.8 | 21.6 | 15.8 | 35.7 | 113 |
| Arusha | 7.2 | 35.2 | 34.3 | 44.5 | 22.3 | 53.2 | 82 |
| Kilimanjaro | 12.2 | 28.1 | 31.3 | 31.0 | 15.3 | 50.5 | 104 |
| Tanga | 13.3 | 24.0 | 29.9 | 29.8 | 20.6 | 49.0 | 94 |
| Morogoro | 12.5 | 27.6 | 32.6 | 32.5 | 15.4 | 44.6 | 127 |
| Pwanı ${ }^{\text {Dar es }}$ Salaam | 10.5 1.1 | 11.6 14.9 | 22.8 14.2 | 15.5 18.4 | 8.2 4.1 | 24.6 | 687 |
| Lindi | 8.3 | 25.6 | 17.8 | 24.3 | 14.2 | 36.3 | 65 |
| Mtwara | 7.7 | 13.1 | 12.1 | 14.1 | 7.7 | 14.1 | 98 |
| Ruvuma | 8.0 | 21.5 | 21.2 | 26.2 | 10.8 | 39.6 | 83 |
| Iringa | 0.0 | 10.8 | 13.3 | 16.6 | 4.3 | 24.7 | 102 |
| Mbeya | 12.8 | 24.1 | 25.6 | 20.7 | 23.9 | 39.7 | 170 |
| Singida | 18.5 | 24.6 | 27.9 | 24.4 | 20.5 | 45.2 | 99 |
| Tabora | 24.2 | 36.7 | 51.3 | 53.0 | 20.3 | 69.2 | 127 |
| Rukwa | 14.5 | 27.5 | 41.7 | 43.8 | 9.6 | 55.0 | 87 |
| Kigoma | 26.6 | 37.4 | 46.2 | 51.6 | 29.1 | 68.4 | 127 |
| Shinyanga | 9.3 | 23.1 | 24.7 | 23.5 | 18.3 | 33.9 | 215 |
| Kagera | 2.3 9.9 | 6.2 16.6 | 15.2 | 12.4 25.8 | 5.9 10.6 | 22.3 | 122 |
| Mara | 15.8 | 33.2 | 44.6 | 44.6 | 22.3 | 63.6 | 98 |
| Manyara | 16.4 | 45.4 | 37.7 | 43.0 | 27.8 | 62.7 | 83 |
| Zanzibar North | 2.0 | 23.7 | 25.1 | 25.5 | 20.7 | 35.4 | 11 |
| Zanzibar South | 1.1 | 13.1 | 10.7 | 18.6 | 7.9 | 25.8 | 6 |
| Town West | 4.1 | 21.8 | 22.0 | 24.9 | 14.6 | 35.9 | 36 |
| Pemba North | 15.4 | 29.6 | 39.6 | 33.7 | 38.8 | 56.5 | 13 |
| Pemba South | 17.4 | 27.0 | 31.4 | 27.8 | 24.1 | 38.2 | 12 |
| Education |  |  |  |  |  |  |  |
| No education | 17.6 | 28.4 | 36.0 | 32.4 | 19.2 | 50.6 | 312 |
| Primary incomplete | 15.3 | 26.7 | 32.1 | 35.4 | 18.4 | 49.3 | 646 |
| Primary complete | 8.9 | 21.7 | 25.2 | 26.7 | 14.5 | 40.2 | 1,381 |
| Secondary+ | 3.0 | 15.2 | 15.4 | 15.3 | 7.4 | 25.8 | 296 |
| Employment |  |  |  |  |  |  |  |
| Not employed | 9.4 | 22.2 | 22.8 | 24.8 | 12.0 | 38.0 | 622 |
| Employed for cash | 8.8 12.2 | 20.4 24.3 | 24.3 30.0 | 27.3 30.1 | 14.2 17.0 | 40.3 44.5 | 575 1.438 |
| Number of decisions in which woman should have final say ${ }^{1}$ |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
| $0$ $1-2$ | 10.7 11.4 | 20.9 | 23.5 | 24.9 | 13.9 | 39.4 | 551 |
| 1-2 | 11.4 8.2 | 25.0 20.6 | 31.0 24.2 | 30.3 25.4 | 16.9 13.1 | 43.4 38.2 | 957 495 |
| 5 | 12.0 | 23.6 | 26.4 | 30.2 | 15.4 | 45.3 | 632 |
| Wealth quintile |  |  |  |  |  |  |  |
| Lowest | 16.7 | 26.4 | 31.1 | 33.7 | 17.7 | 47.5 | 484 |
| Second | 16.8 | 25.7 | 32.3 | 29.9 | 20.3 | 46.7 | 504 |
| Middle | 10.0 | 22.6 | 28.1 | 29.8 | 15.9 | 42.8 | 516 |
| Fourth | 8.6 | 23.3 | 27.7 | 28.8 | 14.1 | 45.0 | 517 |
| Highest | 3.8 | 18.2 | 18.2 | 20.8 | 9.4 | 30.8 | 615 |
| Total | 10.8 | 23.0 | 27.1 | 28.2 | 15.2 | 42.0 | 2,635 |
| ${ }^{1}$ Either by herself or jointly with others |  |  |  |  |  |  |  |

Compared with women, men are less likely to report that they find violence against wives justifiable: 42 percent of men agree with at least one of the justifications for a husband to hit or beat his wife. Like women, men are least likely to say that burning the food (11 percent) or refusing to have sex (15 percent) are grounds for a husband to beat his wife. Men are most likely to justify the beating of a wife by her husband if she goes out without telling him ( 27 percent) or neglects the children (28 percent).

## Attitudes towards Refusing Sex

The extent of control women have over when and with whom to have sex has important implications for demographic and health outcomes. To measure agreement with the idea that a woman has the right to refuse to have sex with her husband, the 2004-05 TDHS respondents were asked whether a wife is justified in refusing to have sex with her husband under four circumstances: she knows her husband has a sexually transmitted disease, she knows her husband has sex with women other than herself (or his wives), she has recently given birth, or she is tired or not in the mood.

Tables 3.12.1 and 3.12.2 examine associations between respondents’ attitudes regarding a wife's refusal of sex and demographic and socioeconomic background characteristics. The tables also show the proportion of respondents that agree with all of the specified reasons for refusing sex, and the proportion that agrees with none of them.

The findings indicate that a majority of women agree with each specified reason for refusing to have sex. Women are most likely to agree that a woman can refuse to have sex with her husband if she has recently given birth ( 91 percent) or if the husband has an STI ( 88 percent), but less likely to agree if she is tired or not in the mood ( 79 percent) or if he has sex with another women ( 73 percent). Sixty-three percent agree with all of the specified reasons for refusing sex and only 6 percent agree with none of the specified reasons.

Urban women are somewhat more likely to agree with all of the specified reasons than rural women ( 70 and 60 percent, respectively). There are substantial variations by region-from a low of 33 percent in Pemba South to a high of 79 percent in Kilimanjaro. Regions where women are most likely to agree with wife-beating (e.g., Kigoma) are among the most likely to justify refusal of sex.

Men's attitudes towards women refusing sex with her husband resemble those of women. Men also agree that a woman can refuse to have sex with her husband if a woman has recently given birth (91 percent) or if she knows that the husband has an STI ( 90 percent). A majority of men also agree that a woman is justified in refusing sex to her husband if he has had sex with other women (77 percent), or if she is tired or not in the mood (78 percent).

Table 3.12.1 Women's attitude towards refusing sex with husband
Percentage of women who believe that a wife is justified in refusing to have sex with her husband for specific reasons, by background characteristics, Tanzania 2004-05

| Background characteristic | Wife is justified in refusing sex with husband if she: |  |  |  | Percentage who agree with all of the specified reasons | Percentage who agree with none of the specified reasons | Number of women |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Knows husband has a sexually transmitted disease | Knows husband has sex with other women |  | Is tired or not in the mood |  |  |  |
| Age |  |  |  |  |  |  |  |
| 15-19 | 82.0 | 70.1 | 82.8 | 71.4 | 58.0 | 11.3 | 2,245 |
| 20-24 | 89.8 | 73.0 | 92.6 | 80.2 | 63.3 64.4 | 4.2 | 2,007 |
| 30-34 | 90.6 | 74.4 | 93.8 | 82.1 | 64.4 65.5 | 4.1 | 1,542 |
| 35-39 | 88.7 | 74.1 | 92.7 | 78.8 | 63.4 | 4.8 | 1,053 |
| 40-44 | 89.0 | 75.1 | 93.6 | 80.3 | 67.1 | 5.1 | 834 |
| 45-49 | 88.3 | 73.1 | 92.4 | 79.2 | 60.8 | 5.3 | 763 |
| Marital status |  |  |  |  |  |  |  |
| Never married | 84.4 | 73.1 | 83.7 | 72.0 | 60.5 | 10.8 | 2,371 |
| Married or living together | 88.6 | 72.6 | 93.1 | 80.6 | 62.9 | 4.5 | 6,950 |
| Divorced/separated/widowed | 90.5 | 76.2 | 92.8 | 81.9 | 67.4 | 4.8 | 1,007 |
| Number of living children |  |  |  |  |  |  |  |
|  | 84.3 | 72.7 | 84.5 | 72.4 | 59.9 | 9.8 | 2,705 |
| 1-2 | 89.6 89.1 | 73.5 | 93.2 93.7 | 81.8 80.7 | 64.6 63.0 | 4.3 | 3,348 2,269 |
| $5+$ | 88.0 | 73.1 | 92.4 | 80.1 | 63.5 | 5.4 | 2,007 |
| Residence |  |  |  |  |  |  |  |
| Urban | 91.3 | 80.6 | 92.8 | 81.3 | 69.5 | 4.6 | 2,935 |
| Rural | 86.4 | 70.0 | 90.1 | 77.7 | 60.2 | 6.5 | 7,394 |
| Mainland/Zanzibar |  |  |  |  |  |  |  |
| Mainland | 88.0 | 73.0 | 91.0 | 79.1 | 63.0 | 5.9 | 10,016 |
| Total urban Dar es Salaam city | 91.3 91.8 | 80.7 86.6 | 92.9 93.1 | 81.8 81.7 | 69.9 73.0 | 4.6 | 2,885 |
| Other urban | 91.1 | 77.6 | 92.7 | 81.8 | 68.3 | 4.7 | 1,916 |
| Total rural | 86.7 | 69.9 | 90.3 | 78.0 | 60.2 | 6.4 | 7,131 |
| Zanzibar | 81.2 | 74.7 | 86.7 | 67.6 | 56.1 | 7.9 | 313 |
| Unguja | 88.4 65.3 | 81.1 60.3 | 88.8 82.2 | 72.8 56.1 | 62.6 41.6 | 5.4 13.3 | 216 97 |
| Zone |  |  |  |  |  |  |  |
| Western | 89.4 | 68.3 | 90.6 | 77.8 | 58.2 | 5.4 | 1,880 |
| Northern | 86.7 | 82.1 | 91.5 | 74.5 | 65.0 | 4.7 | 1,496 |
| Central Southern highland | 84.6 | 73.7 | 89.7 | 79.4 69 | 66.1 | 18.4 | 799 1440 |
| Lake | 95.0 | 75.1 | 95.4 | 86.4 | 70.0 | 1.8 | 1,865 |
| Eastern | 92.4 | 78.5 | 94.1 | 80.7 | 66.5 | 3.2 | 1,670 |
| Southern | 91.2 | 74.6 | 96.3 | 86.3 | 64.7 | 1.1 | 866 |
| Region |  |  |  |  |  |  |  |
| Dodoma | 84.5 | 71.4 | 88.1 | 78.5 | 64.0 | 10.7 | 468 |
| Arusha | 78.8 | 73.0 | 91.0 | 73.3 | 56.8 | 5.7 | 391 |
| Tanga ${ }^{\text {Kilimanjaro }}$ | 94.2 | 92.2 88.1 | 91.4 90.8 | 82.5 74.9 | 78.8 70.2 | 3.6 | 380 431 |
| Morogoro | 92.8 | 68.4 | 95.4 | 77.4 | 56.2 | 1.3 | 449 |
| Pwani | 93.9 | 65.3 | 95.6 | 82.9 | 59.5 | 1.9 | 253 |
| Dar es Salaam | 91.8 | 86.6 | 93.1 | 81.7 | 73.0 | 4.5 | 969 |
| Mtwara | 94.6 | 70.5 | 97.0 | 88.0 | 63.2 | 3.4 | 221 |
| Ruvuma | 87.8 | 81.5 | 98.3 | 84.4 | 66.9 | 0.4 | 299 |
| lringa | 62.8 | 52.0 | 69.5 | 56.6 | 41.0 | 26.9 | 412 |
| Mbeya | 73.2 | 53.6 | 78.5 | 68.3 | 47.0 | 17.6 | 712 |
| Singida | 84.6 | 76.8 | 91.8 | 80.6 | 69.0 | 5.2 | 331 |
| Tabora | 95.6 | 70.2 | 95.3 | 80.9 | 60.8 | 2.2 | 520 |
| Kigoma | 94.9 | 81.8 | 93.5 | 86.8 | 58.7 | 2.0 | 316 499 |
| Shinyanga | 82.6 | 64.7 | 86.1 | 76.5 | 56.3 | 9.3 | 861 |
| Kagera | 96.1 | 82.8 | 95.7 | 87.6 | 76.6 | 1.1 | 545 |
| Mwanza | 98.1 | 78.3 | 98.3 | 91.1 | 74.7 | 0.9 | 939 |
| Mara | 85.8 | 56.1 | 87.8 | 73.1 | 49.0 | 4.9 | 381 |
| Manyara Zanzibar North | 80.6 | 72.3 798 | 93.4 87 | 65.2 | 50.4 | 4.9 | 293 |
| Zanzibar South | 71.3 | 60.5 | 74.7 | 63.1 | 44.3 | 16.5 | 26 |
| Town West | 93.1 | 85.3 | 91.8 | 74.9 | 66.4 | 2.7 | 143 |
| Pemba North | 66.1 | 61.9 | 83.4 | 64.9 | 48.8 | 13.8 | 52 |
| Pemba South | 64.4 | 58.5 | 80.9 | 46.0 | 33.4 | 12.7 | 45 |
| Education |  |  |  |  |  |  |  |
| No education | 83.8 | 64.4 | 89.9 | 75.0 | 54.6 | 7.7 | 2,503 |
| Primary incomplete | 85.1 | 69.6 | 87.4 | 73.8 | 58.2 | 8.2 | 1,855 |
| Primary complete | 89.9 | 76.8 | 92.4 | 82.0 | 67.2 | 4.6 | 5,086 |
| Secondary+ | 92.6 | 83.2 | 92.2 | 80.9 | 70.3 | 3.8 | 885 |
| Employment |  |  |  |  |  |  |  |
| Not employed | 86.7 | 74.6 | 87.1 | 76.3 | 63.2 | 8.1 | 2,222 |
| Employed for cash | 91.9 86.4 | 79.2 69.8 | 94.1 91.0 | 83.0 | 68.8 60.0 | 3.5 6.1 | 2,431 5,672 |
| Number of decisions in which woman has final say ${ }^{1}$ |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
| ${ }_{1-2}$ | 82.3 | 69.3 | 85.1 | 72.5 | 58.6 | 10.6 | 2,204 |
| 1-2 | 888.4 | 72.2 72.9 | 91.8 92.2 | 78.6 80.0 | 61.3 62.0 | 4.7 4.7 | 3,354 2,094 |
| 5 | 91.4 | 77.3 | 93.6 | 83.1 | 68.7 | 4.7 | 2,677 |
| Number of reasons wife beating is justified |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
| 0 | 88.5 | 76.7 | 90.3 | 80.7 | 67.8 | 6.7 | 4,176 |
| 1-2 | 89.1 | 71.1 | 91.6 | 79.0 | 60.5 | 5.0 | 2,099 |
| 3-4 | 87.2 | 69.8 | 92.6 | 77.2 | 58.2 | 4.5 | 2,863 |
| 5 | 84.3 | 71.6 | 87.9 | 75.1 | 60.3 | 8.3 | 1,191 |
| Wealth quintile |  |  |  |  |  |  |  |
| Lowest | 84.2 | 65.7 | 88.8 | 74.7 | 55.4 | 7.6 | 1,840 |
| Second | 86.4 | 69.4 | 91.0 | 78.2 | 59.9 | 6.0 | 1,944 |
| Middle | 87.2 | 71.4 | 91.1 | 79.5 | 62.3 | 5.9 | 1',943 |
| Fourth | 87.6 | 72.2 | 90.3 | 78.4 | 62.8 | 6.3 | 2,004 |
| Highest | 92.0 | 82.9 | 92.7 | 81.6 | 70.6 | 4.4 | 2,597 |
| Total | 87.8 | 73.0 | 90.9 | 78.7 | 62.8 | 5.9 | 10,329 |
| Note: Total includes four cases (weighted) with missing information on employment. Either by herself or jointly with others |  |  |  |  |  |  |  |


| Percentage of men who believe that a wife is justified in refusing to have sex with her husband for specific reasons, by background characteristics, Tanzania 2004-05 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Wife is justified in refusing sex with husband if she: |  |  |  | Percentage who agree with all of the specified reasons | Percentage who agree with none of the specified reasons | Number ofmen |
| Background characteristic | Knows husband has a sexually transmitted disease | $\qquad$ | Has recently given birth | Is tired or not in the mood |  |  |  |
| Age |  |  |  |  |  |  |  |
| 15-19 | 81.9 | 68.3 | 82.7 | 64.4 | 49.9 | 9.1 | 637 |
| 20-24 | 89.8 | 75.0 | 91.1 | 82.5 | 60.8 | 2.0 | 493 |
| 25-29 | 90.2 | 76.9 | 93.7 | 80.8 | 63.5 | 2.8 | 405 |
| 30-34 | 93.3 | 84.0 | 94.6 | 80.6 | 69.5 | 1.5 | 387 |
| 35-39 | 96.0 | 83.1 | 97.4 | 83.9 | 69.5 | 0.4 | 278 |
| 40-44 | 92.6 | 83.9 | 95.0 | 81.8 | 69.5 | 2.5 | 265 |
| 45-49 | 94.3 | 82.5 | 94.7 | 80.4 | 70.3 | 2.7 | 170 |
| Marital status |  |  |  |  |  |  |  |
| Never married | 85.4 | 71.1 | 86.8 | 71.8 | 54.5 | 6.0 | 1,100 |
| Married or living together | 92.8 | 81.9 | 94.8 | 82.0 | 68.0 | 2.1 | 1,401 |
| Divorced/separated/widowed | 92.2 | 78.7 | 91.1 | 78.3 | 65.7 | 2.0 | 135 |
| Number of living children |  |  |  |  |  |  |  |
| 0 | 90.7 | 78.0 | 91.7 | 78.8 | 63.9 | 3.1 | 721 |
| 1-2 | 89.9 | 74.8 | 90.7 | 78.9 | 62.0 | 4.1 | 886 |
| 3-4 | 87.5 | 81.1 | 92.5 | 76.9 | 62.2 | 3.8 | 565 |
| $5+$ | 90.4 | 75.7 | 90.1 | 73.7 | 60.3 | 3.7 | 463 |
| Residence |  |  |  |  |  |  |  |
| Urban | 90.3 | 77.1 | 91.8 | 80.0 | 62.8 | 3.5 | 716 |
| Rural | 89.4 | 77.3 | 91.0 | 76.6 | 62.0 | 3.8 | 1,919 |
| Mainland/Zanzibar |  |  |  |  |  |  |  |
| Mainland | 89.9 | 77.5 | 91.5 | 78.2 | 63.0 | 3.6 | 2,556 |
| Total urban | 90.9 | 77.4 | 92.2 | 80.9 | 63.5 | 3.2 | 716 |
| Dar es Salaam city | 87.7 | 73.6 | 94.3 | 82.1 | 59.5 | 2.9 | 267 |
| Other urban | 92.8 | 79.6 | 91.0 | 80.2 | 65.9 | 3.4 | 450 |
| Total rural | 89.5 | 77.6 | 91.3 | 77.1 | 62.8 | 3.8 | 1,840 |
| Zanzibar | 83.9 | 67.3 | 82.2 | 56.4 | 39.0 | 7.0 | 79 |
| Unguja | 87.8 | 72.6 | 85.1 | 57.7 | 39.5 | 4.6 | 53 |
| Pemba | 75.9 | 56.4 | 76.2 | 53.5 | 37.9 | 11.7 | 26 |
| Zone |  |  |  |  |  |  |  |
| Western | 90.6 | 78.5 | 95.6 | 80.0 | 65.9 | 0.8 | 468 |
| Northern | 82.2 | 71.0 | 81.1 | 62.8 | 45.9 | 8.7 | 362 |
| Central | 92.1 | 88.5 | 97.3 | 87.1 | 78.9 | 1.6 | 212 |
| Southern highlands | 92.7 | 70.7 | 90.3 | 69.4 | 55.9 | 5.8 | 358 |
| Lake | 91.7 | 84.7 | 89.9 | 89.6 | 73.4 | 2.4 | 448 |
| Eastern | 88.3 | 71.5 | 92.6 | 78.4 | 57.9 | 3.7 | 462 |
| Southern | 93.3 | 83.9 | 97.1 | 81.4 | 70.0 | 2.1 | 245 |
| Region |  |  |  |  |  |  |  |
| Dodoma | 90.5 | 90.7 | 97.7 | 90.3 | 79.7 | 1.1 | 113 |
| Arusha | 88.4 | 78.8 | 85.9 | 61.4 | 47.5 | 6.4 | 82 |
| Kilimanjaro | 86.7 | 81.4 | 85.5 | 71.4 | 58.6 | 5.9 | 104 |
| Tanga | 68.0 | 49.7 | 69.5 | 49.3 | 24.4 | 16.7 | 94 |
| Morogoro | 89.6 | 62.7 | 89.2 | 72.3 | 51.0 | 4.1 | 127 |
| Pwani | 88.1 | 79.9 | 92.2 | 75.3 | 64.3 | 5.8 | 68 |
| Dar es Salaam | 87.7 | 73.6 | 94.3 | 82.1 | 59.5 | 2.9 | 267 |
| Lindi | 87.1 | 77.8 | 96.0 | 74.6 | 61.7 | 2.9 | 65 |
| Mtwara | 97.7 | 92.7 | 98.8 | 83.9 | 79.7 | 1.2 | 98 |
| Ruvuma | 92.9 | 78.3 | 96.0 | 83.7 | 64.9 | 2.5 | 83 |
| Iringa | 95.3 | 87.7 | 92.4 | 77.6 | 72.2 | 3.5 | 102 |
| Mbeya | 90.1 | 52.6 | 87.1 | 60.8 | 38.3 | 8.9 | 170 |
| Singida | 93.8 | 86.1 | 96.7 | 83.5 | 78.0 | 2.0 | 99 |
| Tabora | 85.9 | 70.6 | 96.6 | 83.5 | 59.5 | 1.8 | 127 |
| Rukwa | 94.8 | 86.2 | 94.2 | 76.4 | 71.0 | 2.4 | 87 |
| Kigoma | 89.1 | 72.7 | 90.3 | 75.6 | 56.8 | 0.0 | 127 |
| Shinyanga | 94.2 | 86.5 | 98.0 | 80.5 | 74.9 | 0.7 | 215 |
| Kagera | 96.2 | 89.9 | 96.2 | 94.0 | 80.1 | 0.0 | 122 |
| Mwanza | 87.8 | 80.3 | 87.2 | 90.4 | 69.1 | 3.5 | 229 |
| Mara | 95.2 | 88.4 | 88.4 | 82.4 | 75.1 | 2.8 | 98 |
| Manyara | 86.7 | 74.2 | 84.0 | 68.6 | 52.7 | 5.3 | 83 |
| Zanzibar North | 86.4 | 73.6 | 84.6 | 68.3 | 52.7 | 3.8 | 11 |
| Zanzibar South | 84.7 | 73.1 | 86.0 | 65.2 | 46.5 | 1.0 | 6 |
| Town West | 88.8 | 72.2 | 85.1 | 53.2 | 34.2 | 5.5 | 36 |
| Pemba North | 85.4 | 61.0 | 77.3 | 55.6 | 41.6 | 9.3 | 13 |
| Pemba South | 65.6 | 51.5 | 75.0 | 51.2 | 33.9 | 14.4 | 12 |
| Education |  |  |  |  |  |  |  |
| No education | 85.7 | 68.1 | 90.1 | 69.5 | 54.0 | 5.7 | 312 |
| Primary incomplete | 84.0 | 75.7 | 87.0 | 69.8 | 57.5 | 5.8 | 646 |
| Primary complete | 92.9 | 80.4 | 92.8 | 81.5 | 66.2 | 2.6 | 1,381 |
| Secondary+ | 91.5 | 75.4 | 94.5 | 84.3 | 63.1 | 2.1 | 296 |
| Employment |  |  |  |  |  |  |  |
| Not employed | 90.7 | 76.5 | 90.9 | 78.5 | 61.4 | 2.9 | 622 |
| Employed for cash | 88.1 | 75.1 | 89.4 | 78.9 | 59.6 | 4.2 | 575 |
| Employed not for cash | 89.9 | 78.3 | 92.2 | 76.6 | 63.7 | 3.8 | 1,438 |
| Number of decisions in which woman should have final say |  |  |  |  |  |  |  |
| 0 | 90.2 | 78.8 | 93.3 | 75.8 | 64.1 | 2.6 | 551 |
| 1-2 | 90.1 | 78.6 | 90.3 | 80.4 | 64.6 | 4.1 | 957 |
| 3-4 | 88.7 | 78.1 | 92.2 | 77.0 | 59.8 | 3.0 | 495 |
| 5 | 89.3 | 73.0 | 90.1 | 75.0 | 59.1 | 4.6 | 632 |
| ${ }^{1}$ Either by herself or jointly with others |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  | Continued... |


| Percentage of men who believe that a wife is justified in refusing to have sex with her husband for specific reasons, by background characteristics, Tanzania 2004-05 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Wife is justified in refusing sex with husband if she: |  |  |  |  |  |  |  |
| Background characteristic | Knows husband has a sexually transmitted disease | Knows husband has sex with other women | Has reçently given birth | Is tired or not in the mood | Percentage who agree with all of the specified reasons | Percentage who agree with none of the specified reasons | Number of men |
| Number of reasons wife beating is justified |  |  |  |  |  |  |  |
| 0 | 89.0 | 74.0 | 91.3 | 78.2 | 60.8 | 4.3 | 1,059 |
| 1-2 | 89.0 | 79.1 | 92.7 | 78.5 | 66.1 | 3.7 | 517 |
| 3-4 | 91.0 | 79.0 | 89.9 | 75.6 | 60.7 | 3.4 | 775 |
| 5 | 89.8 | 80.7 | 92.4 | 78.5 | 65.1 | 1.9 | 284 |
| Wealth quintile |  |  |  |  |  |  |  |
| Lowest | 86.4 | 73.8 | 89.8 | 74.3 | 60.6 | 5.1 | 484 |
| Second | 90.0 | 76.5 | 92.7 | 77.5 | 62.1 | 3.2 | 504 |
| Middle | 90.6 | 79.0 | 91.7 | 79.2 | 64.2 | 3.1 | 516 |
| Fourth | 90.2 | 79.6 | 89.7 | 75.1 | 61.4 | 4.8 | 517 |
| Highest | 90.7 | 76.9 | 92.2 | 80.7 | 62.9 | 2.6 | 615 |
| Total | 89.7 | 77.2 | 91.3 | 77.5 | 62.3 | 3.7 | 2,635 |
| ${ }^{1}$ Either by herself or jointly with others |  |  |  |  |  |  |  |

This chapter presents the 2004-2005 TDHS results on fertility levels, trends, and differentials. The analysis is based on the birth histories collected from women age 15-49 interviewed during the survey. To obtain this information, women were first asked a series of questions to determine the total number of live births that had occurred in their lifetime. Then, for each live birth, information was collected on the name, age, sex, and survival status of the child. For dead children, age at death was recorded. Information from the birth history is used to assess current and completed fertility and to look at other factors related to fertility, including age at first birth, birth intervals, and adolescent childbearing.

The following measures of current fertility are derived from birth history data:

- Age-specific fertility rates (ASFR) are expressed as the number of births per thousand women in the age group and represent a valuable measure for assessing the current age pattern of childbearing. They are defined in terms of the number of live births during a specified period to women in the particular age group divided by the number of womanyears lived in that age group during the specified period.
- The total fertility rate (TFR) is defined as the total number of births a woman would have by the end of her childbearing period if she were to pass through those years bearing children at the currently observed age-specific fertility rates. The TFR is obtained by summing the age-specific fertility rates and multiplying by five.
- The general fertility rate (GFR) is the number of live births occurring during a specified period per 1,000 women of reproductive age.
- The crude birth rate (CBR) is the number of births per 1,000 population during the specified period.

The various measures of current fertility are calculated for the three-year period preceding the survey, which roughly corresponds to the calendar period 2002-2004. This period was chosen because it allows the rates to be calculated based on the most recent information, thus avoiding the problem of omission or displacement of births because of a recall lapse, while obtaining enough cases to reduce sampling error.

### 4.1 Fertility Levels And Trends

## Fertility Levels

Table 4.1 presents information on the current fertility levels for Tanzania as whole, for urban and rural areas on the Mainland, and for Zanzibar. On the basis of the births during the 3 years preceding the survey, the TFR is 5.7 births per woman, which is considered to be among the highest rates in sub-Saharan Africa. The TFR in Mainland rural areas is 6.5 compared with 3.6 in urban areas. Rural women have, on average, 3 more births than their urban counterparts. The TFR in Zanzibar is 5.3.

The CBR in Tanzania is 42.4 births per 1,000 population. Once again, there is a clear differential in this rate by residence. The GFR in Tanzania is 198 live births per 1,000 women of reproductive age, with the rate being higher in Mainland rural areas (225) than urban areas (134).

| Table 4.1 Current fertility |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Age-specific and cumulative fertility rates, the general fertility rate, and the crude birth rate for the three years preceding the survey, by urban-rural residence, Tanzania 2004-05 |  |  |  |  |  |
| Age group | Residence |  |  | Zanzibar | Total |
|  | Mainland |  |  |  |  |
|  | Urban | Rural | Total |  |  |
| 15-19 | 92 | 154 | 135 | 55 | 132 |
| 20-24 | 188 | 317 | 276 | 197 | 274 |
| 25-29 | 162 | 292 | 254 | 252 | 254 |
| 30-34 | 149 | 246 | 217 | 236 | 218 |
| 35-39 | 87 | 173 | 154 | 211 | 156 |
| 40-44 | 38 | 90 | 79 | 85 | 79 |
| 45-49 | (2) | 23 | 18 | 28 | 18 |
| TFR | 3.6 | 6.5 | 5.7 | 5.3 | 5.7 |
| GFR | 134 | 225 | 199 | 168 | 198 |
| CBR | 34.6 | 44.8 | 42.5 | 38.0 | 42.4 |

Note: Rates for age group 45-49 may be slightly biased because of truncation. Rates in parentheses are based on 125 to 249 unweighted woman-years of exposure.
TFR: Total fertility rate for ages 15-49, expressed per woman
GFR: General fertility rate (births divided by the number of women age 15-44), expressed per 1,000 women
CBR: Crude birth rate, expressed per 1,000 population

Fertility reaches its peak among women in their 20s. Age-specific fertility rates rise from 132 births per 1,000 women age 15-19 to 274 births among women age 20-24 and then fall gradually to 18 births among women age 45-49. Figure 4.1 shows that on the Mainland, women experience the highest levels of fertility in their early 20s, regardless of urban-rural residence. On Zanzibar, however, fertility peaks among women age 25-29, and remains high among women in their 30s. A substantial proportion of women continue to bear children in their late reproductive years.

Figure 4.1 Age-Specific Fertility Rates by Residence


Among 12 sub-Saharan countries in which a DHS survey has been conducted since 2000, Nigeria has the same TFR as Tanzania ( 5.7 children per woman) and three countries have higher TFRs than Tanzania (Figure 4.2).

Figure 4.2 Total Fertility Rates in Selected Sub-Saharan Countries


## Differentials in Current and Completed Fertility

Table 4.2 presents differentials in two measures of current fertility, the TFR and the percentage currently pregnant. Fertility ranges from a high of 7.3 in the Western zone to a low of 3.6 in the Eastern zone. The TFRs also vary significantly by education. The total fertility rate is 6.9 births for women with no education. This is 1.3 more births than for women who have primary education ( 5.6 births). Among women who have attended secondary school or higher, the TFR falls to 3.3 births, so the most educated women give birth to less than half the number of children of the least educated women. Fertility differentials are even greater according to household wealth, ranging from a high of 7.3 among women in the lowest quintile to a low of 3.3 among women in highest quintile.

Although the percentage currently pregnant is a useful measure of current fertility, it does not capture all pregnant women because some women may be unaware of, or reluctant to discuss, a pregnancy in its early stages. Eleven percent of women age 15-49 are pregnant.

Table 4.2 also shows the mean number of children ever born for women age 40-49, that is, to women who are at the end of their childbearing years. This is a measure of completed or past fertility and can be compared with the current TFR to assess the extent of fertility change over the last two decades in Tanzania. For all women the mean number of live births is 6.4. The data indicate that although fertility has declined overall, there has been little or no decline among women with no education or women living in rural areas or the Western or Central zones.

| Table 4.2 Fertility by background characteristics |  |  |  |
| :---: | :---: | :---: | :---: |
| Total fertility rate for the three years preceding the survey, percentage of women 15-49 currently pregnant, and mean number of children ever born to women age 40-49 years, by background characteristics, Tanzania 2004-05 |  |  |  |
|  |  |  |  |
|  |  |  |  |
| Background characteristic | Total fertility rate ${ }^{1}$ | Percentage currently pregnant ${ }^{1}$ | Mean number of children ever born to women age 40-49 |
| Residence |  |  |  |
| Urban | 3.6 | 7.2 | 5.5 |
| Rural | 6.5 | 11.8 | 6.6 |
| Mainland/Zanzibar |  |  |  |
| Mainland | 5.7 | 10.6 | 6.4 |
| Total urban | 3.6 | 7.3 | 5.4 |
| Dar es Salaam city | * | 5.7 | 4.3 |
| Other urban | 4.1 | 8.2 | 5.8 |
| Total rural | 6.5 | 11.9 | 6.6 |
| Zanzibar | 5.3 | 9.5 | 6.8 |
| Unguja | 4.5 | 8.9 | 6.3 |
| Pemba | (7.2) | 11.0 | 7.9 |
| Zone |  |  |  |
| Western | 7.3 | 13.8 | 7.3 |
| Northern | 4.9 | 9.4 | 6.0 |
| Central | (6.1) | 11.6 | 6.2 |
| Southern highlands | 5.9 | 10.6 | 6.6 |
| Lake | 6.7 | 12.6 | 7.2 |
| Eastern | 3.6 | 6.2 | 5.0 |
| Southern | 4.8 | 8.6 | 5.5 |
| Education |  |  |  |
| No education | 6.9 | 11.7 | 6.9 |
| Primary incomplete | 5.6 | 10.3 | 6.6 |
| Primary complete | 5.6 | 11.1 | 5.8 |
| Secondary+ | 3.3 | 4.7 | 4.4 |
| Wealth quintile |  |  |  |
| Lowest | 7.3 | 12.8 | 6.9 |
| Second | 6.7 | 12.3 | 6.8 |
| Middle | 6.6 | 11.1 | 6.4 |
| Fourth | 5.3 | 10.9 | 6.5 |
| Highest | 3.3 | 6.9 | 4.9 |
| Total | 5.7 | 10.5 | 6.4 |
| Note: Figures in parentheses are based on 125-249 unweighted woman-years of exposure. An asterisk indicates that a figure is based on fewer than 125 woman-years of exposure and has been suppressed. <br> ${ }^{1}$ Women age $15-49$ years |  |  |  |
|  |  |  |  |
|  |  |  |  |

## Trends in Fertility

Trends in Tanzanian fertility can be assessed in several other ways. Fertility trends can be investigated using retrospective data from the birth histories collected from respondents in a single survey. Table 4.3 shows that fertility was at a high level during the period 15-19 years before the survey (i.e., during the years 1985-1989). The fertility rates show a decrease in all age groups over successive time periods.

Table 4.3 Trends in age-specific fertility rates
Age-specific fertility rates for five-year periods preceding the survey, by mother's age at the time of the birth, Tanzania 2004-05

|  | Number of years <br> preceding survey |  |  |  |
| :--- | :---: | :---: | :---: | :---: |
| Mother's age <br> at birth | $0-4$ | $5-9$ | $10-14$ | $15-19$ |
| $15-19$ | 139 | 144 | 146 | 147 |
| $20-24$ | 266 | 262 | 283 | 290 |
| $25-29$ | 252 | 260 | 288 | 283 |
| $30-34$ | 220 | 233 | 244 | $[270]$ |
| $35-39$ | 157 | 165 | $[215]$ | - |
| $40-44$ | 79 | $[119]$ | - | - |
| $45-49$ | $[21]$ | - | - | - |

Note: Age-specific fertility rates are per 1,000 women. Estimates in brackets are truncated.

Another way to assess fertility trends is by comparison with estimates obtained in earlier surveys, censuses, or vital registration data. Table 4.4 shows fertility rates estimated from a series of surveys conducted in Tanzania since 1991 and the most recent census. These sources include the 1991-92 TDHS, the 1996 TDHS, the 2002 Tanzania Population and Housing Census, the 1999 TRCHS, and the 2004-05 TDHS. The TFR estimated in 1991-92 was 6.3 children per woman. However, the 2004-05 TDHS TFR of 5.7 is statistically at the same level as rates estimated by the 1996 TDHS ( 5.8 births) and the 1999 TRCHS (5.6) births. Thus, there is no evidence of fertility decline in Tanzania over the last eight years. Although the 2002 Population and Housing Census TFR is 6.3, higher than all three DHS surveys since 1996, the Census TFR is calculated using indirect methods and, thus, comparison is difficult.

| Age-specific fertility rates (per 1,000 women) and total fertility rates from selected surveys and censuses: 1991-92 TDHS, 1996 TDHS, 1999 TRCHS, 2002 census, and 2004-05 TDHS |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Age group | $\begin{gathered} \text { 1991-92 } \\ \text { TDHS } \end{gathered}$ | $\begin{gathered} 1996 \\ \text { TDHS } \end{gathered}$ | $\begin{gathered} 2002 \\ \text { census }^{1} \end{gathered}$ | $\begin{gathered} 1999 \\ \text { TRCHS } \end{gathered}$ | $\begin{gathered} \text { 2004-05 } \\ \text { TDHS } \end{gathered}$ |
| 15-19 | 144 | 135 | 113 | 138 | 132 |
| 20-24 | 282 | 260 | 290 | 268 | 274 |
| 25-29 | 270 | 255 | 287 | 240 | 254 |
| 30-34 | 231 | 217 | 248 | 213 | 218 |
| 35-39 | 177 | 167 | 185 | 138 | 156 |
| 40-44 | 108 | 87 | 96 | 78 | 79 |
| 45-49 | 37 | 42 | 34 | 37 | 18 |
| TFR | 6.3 | 5.8 | 6.3 | 5.6 | 5.7 |

Note: Rates refer to the three-year period preceding the survey, except for the 2002 census, which uses a period that varies with the age groups used to make the correction.
${ }^{1}$ Census rates are based on indirect adjustments.

## Children Ever Born and Living

Table 4.5 shows all women and currently married women by number of children ever born. Children ever born is a measure of lifetime fertility. It reflects the accumulation of births over the past 30 years to the women interviewed in the survey and, therefore, its relevance to the current fertility situation is limited. Furthermore, the data are subject to recall error, which is typically greater for older than younger women.

The information on children ever born (or parity) is useful in looking at a number of issues. These results show how average family size varies across age groups. The percentage of women in their forties who have never had children also provides an indicator of the level of primary infertility, ${ }^{1}$ or the inability to bear children. Voluntary childlessness is rare in developing countries like Tanzania so that married women in their late forties with no live births are predominantly those involuntarily so. Comparison of the differences in the mean number of children ever born and surviving reflect the cumulative effects of mortality levels during the period in which women have been bearing children.

Results in Table 4.5 show the number of children ever born for all women and currently married women. Women who are currently married have given birth to an average of 3.7 children, whereas the average number of births for all women is 2.9 .

The mean number of births increases with age, reflecting the natural family growth process. For example, the mean number of births for all women age 25-29 is 2.6 births, for those ages $30-34$ it is 4.0 births, and for those age $35-39$ it is 5.2 births. At age 45-49, the end of the reproductive period, the mean is 6.8 births. The high level of fertility among Tanzanian women is evident from the high percentage of married women in their forties who gave birth to large numbers of children during their reproductive years. The mean number of children ever born for currently married women age 40-44 and 45-49 is 6.2 and 7.1 births, respectively.

Table 4.5 also shows that early childbearing is common in Tanzania. One-fifth of women age 15-19 have given birth to at least one child. Among women age 20-24 years, more than three-fourths have given birth. The proportion of women in their late 40 s who have never given birth is an

[^3]indication of primary (permanent) sterility. In Tanzania, 2 percent of currently married women age 45-49 are childless. Thus, primary sterility in Tanzania is low.

The last column in Table 4.5 shows the mean number of living children for women age 15-49. As expected, the difference between mean number of children ever born and who are still living is small among currently married women under 30 , but increases for those age 30 and above.

| Table 4.5 Children ever born and living |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percent distribution of all women and currently married women by number of children ever born, mean number of children ever born, and mean number of living children, according to age group, Tanzania 2004-05 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Number of children ever born |  |  |  |  |  |  |  |  |  |  | Total | of <br> Number children of ever women born |  | Mean number of living children |
| Age | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10+ |  |  |  |  |
| ALL WOMEN |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 15-19 | 80.4 | 17.6 | 1.8 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 2,245 | 0.22 | 0.20 |
| 20-24 | 22.5 | 32.2 | 29.7 | 11.3 | 3.5 | 0.5 | 0.2 | 0.1 | 0.0 | 0.0 | 0.0 | 100.0 | 2,007 | 1.44 | 1.28 |
| 25-29 | 8.2 | 13.1 | 25.8 | 26.6 | 16.5 | 6.2 | 3.0 | 0.3 | 0.2 | 0.0 | 0.0 | 100.0 | 1,885 | 2.64 | 2.31 |
| 30-34 | 5.3 | 6.7 | 13.4 | 16.4 | 17.6 | 16.8 | 13.1 | 6.5 | 3.2 | 0.6 | 0.3 | 100.0 | 1,542 | 3.95 | 3.43 |
| 35-39 | 2.4 | 5.5 | 6.8 | 11.4 | 14.1 | 14.0 | 15.0 | 12.9 | 8.4 | 4.6 | 4.8 | 100.0 | 1,053 | 5.19 | 4.38 |
| 40-44 | 2.3 | 3.8 | 5.0 | 7.7 | 10.9 | 13.5 | 13.0 | 13.2 | 10.8 | 9.6 | 10.4 | 100.0 | 834 | 6.00 | 4.97 |
| 45-49 | 1.5 | 4.5 | 4.2 | 5.0 | 7.6 | 9.0 | 12.7 | 13.2 | 11.4 | 11.2 | 19.6 | 100.0 | 763 | 6.77 | 5.41 |
| Total | 24.7 | 14.7 | 14.3 | 11.7 | 9.2 | 6.9 | 6.1 | 4.4 | 3.1 | 2.2 | 2.8 | 100.0 | 10,329 | 2.91 | 2.47 |
| CURRENTLY MARRIED WOMEN |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 15-19 | 46.9 | 46.7 | 5.9 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 590 | 0.60 | 0.56 |
| 20-24 | 9.5 | 33.2 | 36.5 | 15.3 | 4.5 | 0.7 | 0.3 | 0.1 | 0.0 | 0.0 | 0.0 | 100.0 | 1,400 | 1.76 | 1.57 |
| 25-29 | 3.6 | 11.3 | 26.4 | 28.6 | 18.4 | 7.5 | 3.5 | 0.4 | 0.2 | 0.1 | 0.0 | 100.0 | 1,511 | 2.87 | 2.52 |
| 30-34 | 3.4 | 5.7 | 11.6 | 16.2 | 19.4 | 17.0 | 14.5 | 7.6 | 3.6 | 0.7 | 0.3 | 100.0 | 1,292 | 4.19 | 3.66 |
| 35-39 | 2.3 | 4.9 | 4.9 | 11.3 | 14.2 | 14.2 | 15.8 | 13.4 | 8.8 | 5.1 | 5.0 | 100.0 | 884 | 5.34 | 4.52 |
| 40-44 | 1.9 | 2.5 | 4.6 | 7.7 | 10.3 | 13.7 | 13.7 | 12.7 | 11.3 | 9.8 | 11.8 | 100.0 | 694 | 6.19 | 5.14 |
| 45-49 | 1.7 | 3.4 | 3.4 | 5.1 | 6.6 | 7.4 | 12.0 | 13.0 | 12.3 | 12.4 | 22.7 | 100.0 | 580 | 7.08 | 5.71 |
| Total | 7.9 | 15.3 | 17.1 | 15.0 | 11.9 | 8.7 | 7.9 | 5.6 | 4.0 | 2.8 | 3.8 | 100.0 | 6,950 | 3.69 | 3.16 |

### 4.2 BIRTH INTERVALS

The term "birth interval" refers to the period of time between two successive live births. Information on the length of birth intervals provides insight into birth spacing patterns. Research has shown that children born too soon after a previous birth are at an increased risk of dying, particularly when the interval between births is less than 24 months. Maternal health is also jeopardized when births are closely spaced.

Table 4.6 shows the distribution of births in the five-year period preceding the survey by the number of months since the previous birth, according to various selected demographic and socioeconomic variables. First births are excluded from the table. Sixteen percent of births in Tanzania have intervals of less than 2 years, and 5 percent are less than 18 months apart. Four in 10 births have an interval of $24-35$ months, and 43 percent are at least 3 years apart. The mean birth interval is 33 months.

There is no significant difference in median birth interval by birth order or sex of the preceding child. For births occurring after the death of the preceding child, the median birth interval is 29 months, compared with 34 months among births preceded by a living child. This is a result, in part,
of the fact that the death of a newborn leads to a shortening of the period of postpartum amenorrhoea, a result of the cessation of breastfeeding.

Looking at urban-rural differentials, the median birth interval in urban areas is about 6 months longer than for rural areas. Forty-four percent of births in urban areas occur at intervals less than 3 years, compared with 60 percent of births in rural areas. Median birth intervals range from a high of 45 months in the Southern and Southern highlands zones to a low of 30 months in the Lake zone.

Birth intervals increase as educational attainment increases. Women who completed at least some secondary education have a longer birth interval ( 38 months) than those women who have never attended school (32 months).

| Table 4.6 Birth intervals |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percent distribution of non-first births in the five years preceding the survey by number of months since preceding birth, according to background characteristics, Tanzania 2004-05 |  |  |  |  |  |  |  |  |
| Background characteristic | Months since preceding birth |  |  |  |  | Total | Number of non-first births | Mediannumber ofmonths sinceprecedingbirth |
|  | 7-17 | 18-23 | 24-35 | 36-47 | 48+ |  |  |  |
| Age |  |  |  |  |  |  |  |  |
| 15-19 | (14.6) | (35.2) | (34.7) | (13.0) | (2.5) | 100.0 | 42 | (24.1) |
| 20-29 | 5.7 | 13.0 | 45.0 | 21.3 | 15.0 | 100.0 | 3,308 | 31.2 |
| 30-39 | 4.3 | 9.7 | 38.7 | 20.1 | 27.3 | 100.0 | 2,773 | 35.0 |
| 40-49 | 3.6 | 5.7 | 29.1 | 23.7 | 37.9 | 100.0 | 659 | 40.4 |
| Birth order |  |  |  |  |  |  |  |  |
| 2-3 | 4.9 | 11.3 | 39.5 | 21.9 | 22.5 | 100.0 | 3,123 | 33.9 |
| 4-6 | 4.7 | 10.9 | 41.6 | 19.7 | 23.1 | 100.0 | 2,464 | 33.2 |
| 7+ | 6.0 | 10.9 | 42.5 | 21.4 | 19.3 | 100.0 | 1,195 | 32.9 |
| Sex of preceding birth |  |  |  |  |  |  |  |  |
| Male | 5.1 | 11.0 | 41.3 | 20.5 | 22.1 | 100.0 | 3,408 | 33.1 |
| Female | 4.9 | 11.2 | 40.3 | 21.5 | 22.3 | 100.0 | 3,374 | 33.7 |
| Survival of preceding birth |  |  |  |  |  |  |  |  |
| Living | 2.8 | 10.7 | 42.3 | 21.6 | 22.7 | 100.0 | 5,877 | 33.9 |
| Dead | 19.0 | 13.7 | 31.3 | 17.0 | 18.9 | 100.0 | 904 | 29.1 |
| Residence |  |  |  |  |  |  |  |  |
| Urban | 4.8 | 8.8 | 30.1 | 19.8 | 36.5 | 100.0 | 1,182 | 38.9 |
| Rural | 5.0 | 11.6 | 43.1 | 21.2 | 19.1 | 100.0 | 5,600 | 32.7 |
| Mainland/Zanzibar |  |  |  |  |  |  |  |  |
| Mainland | 5.0 | 11.0 | 40.9 | 21.0 | 22.1 | 100.0 | 6,601 | 33.4 |
| Total urban | 4.7 | 8.7 | 30.4 | 19.5 | 36.8 | 100.0 | 1,157 | 39.0 |
| Dar es Salaam city | 3.6 | 5.3 | 17.8 | 18.5 | 54.8 | 100.0 | 253 | 55.8 |
| Other urban | 5.0 | 9.7 | 33.9 | 19.8 | 31.7 | 100.0 | 904 | 36.5 |
| Total rural | 5.0 | 11.5 | 43.1 | 21.4 | 18.9 | 100.0 | 5,444 | 32.7 |
| Zanzibar | 5.6 | 12.3 | 38.1 | 18.4 | 25.6 | 100.0 | 180 | 34.0 |
| Unguja | 3.3 | 9.9 | 33.6 | 21.4 | 31.9 | 100.0 | 108 | 37.1 |
| Pemba | 9.0 | 15.9 | 44.9 | 14.0 | 16.2 | 100.0 | 72 | 29.9 |
| Zone |  |  |  |  |  |  |  |  |
| Western | 4.5 | 12.6 | 50.6 | 19.1 | 13.2 | 100.0 | 1,542 | 30.9 |
| Northern | 5.7 | 12.9 | 34.1 | 22.9 | 24.4 | 100.0 | 859 | 35.2 |
| Central | 4.8 | 11.1 | 39.9 | 20.5 | 23.8 | 100.0 | 577 | 34.1 |
| Southern highlands | 4.1 | 9.5 | 40.7 | 26.2 | 19.5 | 100.0 | 1,016 | 34.6 |
| Lake | 7.2 | 13.1 | 46.5 | 18.4 | 14.9 | 100.0 | 1,488 | 30.2 |
| Eastern | 2.7 | 7.2 | 27.7 | 19.5 | 42.9 | 100.0 | 671 | 43.3 |
| Southern | 3.5 | 4.7 | 23.2 | 24.3 | 44.2 | 100.0 | 447 | 44.7 |
| Education |  |  |  |  |  |  |  |  |
| No education | 4.3 | 13.1 | 44.1 | 19.7 | 18.9 | 100.0 | 1,856 | 32.1 |
| Primary incomplete | 5.3 | 12.1 | 41.4 | 22.7 | 18.4 | 100.0 | 1,084 | 32.9 |
| Primary complete | 5.3 | 9.8 | 39.5 | 21.2 | 24.2 | 100.0 | 3,613 | 34.1 |
| Secondary+ | 4.4 | 10.5 | 31.6 | 20.5 | 33.1 | 100.0 | - 229 | 37.6 |
| Wealth quintile |  |  |  |  |  |  |  |  |
| Lowest | 4.8 | 13.5 | 43.2 | 21.0 | 17.4 | 100.0 | 1,625 | 31.8 |
| Second | 5.6 | 9.8 | 44.8 | 21.4 | 18.5 | 100.0 | 1,479 | 32.6 |
| Middle | 5.5 | 12.5 | 43.3 | 21.5 | 17.1 | 100.0 | 1,465 | 32.2 |
| Fourth | 4.6 | 9.6 | 40.6 | 20.8 | 24.4 | 100.0 | 1,326 | 34.2 |
| Highest | 4.1 | 8.6 | 25.9 | 19.5 | 41.8 | 100.0 | 888 | 42.6 |
| Total | 5.0 | 11.1 | 40.8 | 21.0 | 22.2 | 100.0 | 6,782 | 33.4 |

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. Figures in parentheses are based on 25-49 unweighted cases.

### 4.3 Age at First Birth

One of the factors that determines fertility in a population is the average age at first birth. For example, women who marry early are typically exposed to pregnancy for a longer period than women who marry late. Thus, early childbearing generally leads to a large family size. It is also associated with increased health risks for the mother and child. A rise in the median age at first birth is typically a sign of transition to lower fertility levels.

Table 4.7 presents the percentage of women who have given birth by specified ages and the median age at first birth, according to current age. Among women age 15-19, 1 percent gave birth by age 15, and 3 percent of women age 20-24 did so. Among older women age 45-49, 8 percent had their first birth by 15 . The median age at first birth has increased from 18.7 among women age 45-49 to 19.5 among women age 20-24.

| Table 4.7 Age at first birth |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Among all women, percentage who gave birth by specific age, and median age at first birth, by current age, Tanzania 2004-05 |  |  |  |  |  |  |  |  |
| Percentage who gave birth <br> Current by exact age |  |  |  |  |  | Percentage who have never given birth | Number of women | Median <br> age at <br> first birth |
| age | 15 | 18 | 20 | 22 | 25 |  |  |  |
| 15-19 | 1.1 | na | na | na | na | 80.4 | 2,245 | a |
| 20-24 | 2.7 | 29.1 | 56.5 | na | na | 22.5 | 2,007 | 19.5 |
| 25-29 | 3.3 | 25.6 | 56.1 | 74.2 | 88.1 | 8.2 | 1,885 | 19.6 |
| 30-34 | 2.4 | 26.9 | 56.9 | 74.9 | 86.4 | 5.3 | 1,542 | 19.6 |
| 35-39 | 4.6 | 34.2 | 60.8 | 78.0 | 89.5 | 2.4 | 1,053 | 19.1 |
| 40-44 | 4.4 | 33.1 | 58.8 | 76.8 | 89.2 | 2.3 | 834 | 19.3 |
| 45-49 | 7.7 | 41.6 | 65.8 | 80.7 | 91.3 | 1.5 | 763 | 18.7 |
| na $=$ Not applicable <br> $\mathrm{a}=$ Omitted because less than 50 percent of women had a birth before reaching the beginning of the age group |  |  |  |  |  |  |  |  |

Differentials in age at first birth are shown in Table 4.8. Median age at first birth for women age 25-49 is 19.4 years. There is a little variation in age at first birth by background characteristics. In the Northern zone, median age at first birth for women age 25-49 is 20.1 years, or 1 year higher than in the Southern and Lake zones. There is a positive relationship between age at first birth and level of education in all ages.

| Median age at first birth among women age 20 (25)-49 years, by current age and background characteristics, Tanzania 2004-05 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Background characteristic | Current age |  |  |  |  |  | $\begin{gathered} \text { Women } \\ \text { age } \\ 25-49 \\ \hline \end{gathered}$ |
|  | 20-24 | 25-29 | 30-34 | 35-39 | 40-44 | 45-49 |  |
| Residence |  |  |  |  |  |  |  |
| Urban | 20.8 | 20.2 | 20.1 | 19.3 | 19.2 | 18.3 | 19.7 |
| Rural | 19.0 | 19.5 | 19.3 | 19.1 | 19.4 | 18.8 | 19.3 |
| Mainland/Zanzibar |  |  |  |  |  |  |  |
| Mainland | 19.4 | 19.6 | 19.6 | 19.1 | 19.4 | 18.7 | 19.4 |
| Total urban | a | 20.2 | 20.1 | 19.2 | 19.2 | 18.4 | 19.7 |
| Dar es Salaam city | a | 20.4 | 20.9 | (19.4) | * | * | 20.3 |
| Other urban | a | 20.0 | 19.6 | 19.1 | 19.0 | 18.5 | 19.4 |
| Total rural | 19.0 | 19.4 | 19.3 | 19.1 | 19.4 | 18.8 | 19.3 |
| Zanzibar | a | 21.3 | 19.8 | 19.5 | 18.6 | 18.0 | 19.8 |
| Unguja | a | 21.7 | 20.5 | 19.7 | 18.7 | 17.5 | 20.2 |
| Pemba | a | 20.0 | 18.9 | 19.1 | 18.6 | (18.5) | 19.1 |
| Zone |  |  |  |  |  |  |  |
| Western | 18.9 | 19.4 | 19.4 | 18.8 | 19.5 | 18.6 | 19.3 |
| Northern | a | 20.4 | 19.9 | 20.1 | 20.2 | 19.7 | 20.1 |
| Central | 19.6 | 19.2 | 19.2 | 19.0 | 19.7 | 19.3 | 19.3 |
| Southern highlands | 19.1 | 19.5 | 19.3 | 19.7 | 19.3 | 18.2 | 19.4 |
| Lake | 18.8 | 19.4 | 19.4 | 18.8 | 18.6 | 18.6 | 19.1 |
| Eastern | a | 19.7 | 20.4 | 18.7 | 19.6 | 18.4 | 19.6 |
| Southern | 19.0 | 19.8 | 18.7 | 18.8 | 18.6 | 18.3 | 19.0 |
| Education |  |  |  |  |  |  |  |
| No education | 18.2 | 19.2 | 18.8 | 18.5 | 18.2 | 18.6 | 18.7 |
| Primary incomplete | 18.5 | 18.7 | 19.2 | 18.2 | 18.7 | 18.0 | 18.7 |
| Primary complete | 19.7 | 19.6 | 19.5 | 19.3 | 19.9 | 19.2 | 19.6 |
| Secondary+ | a | 24.8 | 23.7 | 23.2 | 22.3 | (21.1) | 23.8 |
| Wealth quintile |  |  |  |  |  |  |  |
| Lowest | 18.6 | 19.5 | 19.2 | 19.1 | 19.2 | 19.2 | 19.3 |
| Second | 19.0 | 19.1 | 18.9 | 18.8 | 19.6 | 18.9 | 19.0 |
| Middle | 19.2 | 19.5 | 19.4 | 18.9 | 19.4 | 18.3 | 19.2 |
| Fourth | 19.3 | 19.4 | 19.5 | 19.5 | 19.0 | 18.5 | 19.3 |
| Highest | a | 20.7 | 20.6 | 19.5 | 19.5 | 18.9 | 20.2 |
| Total | 19.5 | 19.6 | 19.6 | 19.1 | 19.3 | 18.7 | 19.4 |
| 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. $\mathrm{a}=$ Omitted because less than 50 percent of the women had a birth before reaching the beginning of the age group |  |  |  |  |  |  |  |

### 4.4 Adolescent Fertility

Adolescent childbearing has potentially negative demographic and social consequences. Adolescent mothers, especially those under the age of 18 , have been shown to be more likely to suffer from pregnancy and delivery complications than older mothers, resulting in higher morbidity and mortality for both themselves and their children. Early childbearing also limits an adolescent's ability to pursue educational opportunities and can curtail her access to job opportunities.

Table 4.9 and Figure 4.3 show the percentage of adolescent women (age 15-19) who are mothers or pregnant with their first child. A quarter of women age 15-19 have begun childbearing: 20 percent are already mothers and 7 percent are pregnant with their first child. The percentage of women age 15-19 who have begun childbearing has remained constant over the last 15 years according to the results of the 1991-92, 1996, and 2004-05 TDHS surveys and the 1999 TRCHS.

| Table 4.9 Adolesent pregnancy and motherhood |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Percentage of women age 15-19 who are mothers or pregnant with their first child, by background characteristics, Tanzania 2004-05 |  |  |  |  |
|  | Percentage who are: |  | Percentage who have begun childbearing | Number of women |
| Background characteristic | Mothers | Pregnant with first child |  |  |
| Age |  |  |  |  |
| 15 | 1.3 | 2.4 | 3.7 | 448 |
| 16 | 7.1 | 4.2 | 11.3 | 493 |
| 17 | 15.5 | 8.8 | 24.3 | 410 |
| 18 | 31.4 | 10.1 | 41.5 | 487 |
| 19 | 44.7 | 7.0 | 51.7 | 407 |
| Residence |  |  |  |  |
| Urban | 15.2 | 4.4 | 19.6 | 670 |
| Rural | 21.4 | 7.3 | 28.7 | 1,575 |
| Mainland/Zanzibar |  |  |  |  |
| Mainland | 20.0 | 6.6 | 26.6 | 2,168 |
| Total urban | 15.3 | 4.5 | 19.8 | 652 |
| Dar es Salaam city | 12.2 | 2.4 | 14.6 | 204 |
| Other urban | 16.8 | 5.4 | 22.2 | 448 |
| Total rural | 22.0 | 7.5 | 29.5 | 1,516 |
| Zanzibar | 7.4 | 1.9 | 9.3 | 77 |
| Unguja | 6.9 | 1.6 | 8.5 | 51 |
| Pemba | 8.5 | 2.4 | 10.9 | 26 |
| Zone |  |  |  |  |
| Western | 20.2 | 9.7 | 29.9 | 475 |
| Northern | 12.6 | 5.1 | 17.7 | 318 |
| Central | 17.9 | 6.1 | 23.9 | 170 |
| Southern highlands | 19.0 | 6.8 | 25.8 | 308 |
| Lake | 26.1 | 8.5 | 34.7 | 405 |
| Eastern | 16.1 | 2.2 | 18.3 | 326 |
| Southern | 30.5 | 5.0 | 35.5 | 165 |
| Education |  |  |  |  |
| No education | 31.0 | 11.9 | 42.9 | 464 |
| Primary incomplete | 15.8 | 5.3 | 21.1 | 593 |
| Primary complete | 20.8 | 6.1 | 26.8 | 933 |
| Secondary+ | 3.3 | 0.8 | 4.0 | 256 |
| Wealth quintile |  |  |  |  |
| Lowest | 22.7 | 9.4 | 32.0 | 355 |
| Second | 23.8 | 8.9 | 32.6 | 449 |
| Middle | 22.7 | 5.9 | 28.6 | 412 |
| Fourth | 21.5 | 5.2 | 26.7 | 391 |
| Highest | 11.7 | 4.3 | 16.0 | 638 |
| Total | 19.6 | 6.5 | 26.0 | 2,245 |

Figure 4.3 Adolescent Childbearing


The proportion of adolescents who have started childbearing is higher in rural areas (29 percent) than in urban areas ( 20 percent). Adolescent childbearing is least common in the Northern and Eastern zone (18 percent each) and most common in the Lake and Southern zones (35 and 36 percent, respectively).

There is an inverse relationship between early childbearing and level of education among adolescents. Those adolescents with at least some secondary education are less likely to start early childbearing compared with adolescents who have less education. For example, 43 percent of adolescents with no education have begun childbearing compared with 4 percent of adolescents with secondary or higher education. Similarly, adolescents in the lowest and second wealth quintiles are approximately twice as likely to have begun childbearing as adolescents in the highest wealth quintile.

## FERTILITY REGULATION

This chapter presents the 2004-05 TDHS results on contraceptive knowledge, attitudes, and behaviour. Although the focus is on women, some results from the men's survey will also be presented because men play an important role in the realisation of reproductive goals. Comparisons are also made, where feasible, with findings from previous surveys to evaluate trends occurring in Tanzania over the last decade.

### 5.1 Knowledge of Contraceptive Methods

Acquiring knowledge about fertility control is an important step towards gaining access to and then using a suitable contraceptive method in a timely and effective manner. Information on knowledge of contraception was collected in two ways. Respondents were asked to name ways or methods couples can use to prevent or delay pregnancy. If the respondent failed to mention a particular method spontaneously, the interviewer described the method and asked whether the respondent recognised it. Using this approach, information was collected for 12 modern family planning methods: female and male sterilisation, the pill, the IUD, injectables, implants, male and female condoms, the diaphragm, foam/jelly, lactational amenorrhea method (LAM), and emergency contraception. Information was also collected on two traditional methods: periodic abstinence or rhythm, and withdrawal. Any other traditional or "folk" method mentioned spontaneously by the respondent was recorded in the questionnaire. Both prompted and unprompted knowledge are combined in this report.

Tables 5.1.1 and 5.1.2 show the level of knowledge of contraceptive methods among all women and men, currently married women and men, sexually active unmarried women and men, sexually inactive unmarried women and men, and for women and men with no sexual experience, by specific method.

The data indicate that knowledge of contraception is high among both women and men. Almost all respondents know at least one method of contraception. The mean number of methods known is a rough indicator of the breadth of knowledge of family planning methods. On average, currently married and unmarried women who ever had sex know at least seven methods each, while unmarried women who have never had sex know four methods. Modern methods are more widely known than traditional methods. Nine out of every ten women have heard about the pill, injectables, and the male condom.

Men know an average of seven contraceptive methods. Married men have heard of more methods than unmarried men who have ever had sex (8 and 6, respectively). Nine out of every ten men have heard of the pill and male condom. Men are slightly more likely than women to have heard of a traditional method (67 and 62 percent, respectively).

| Percentage of all women, of currently married women, of sexually active unmarried women, of sexually inactive unmarried women, and of women with no sexual experience who know any contraceptive method, by specific method, Tanzania 2004-05 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Unmarri who eve | d women had sex | Unmarried |
| Method | All women | Currently married women | Sexually active ${ }^{1}$ | active ${ }^{2}$ | women who never had sex |
| Any method | 96.1 | 97.9 | 97.8 | 97.1 | 85.2 |
| Any modern method | 95.7 | 97.4 | 97.5 | 96.9 | 85.1 |
| Female sterilisation | 69.3 | 74.1 | 70.1 | 72.4 | 41.3 |
| Male sterilisation | 28.2 | 31.3 | 23.6 | 28.5 | 14.2 |
| Pill | 92.5 | 95.9 | 94.9 | 94.4 | 72.2 |
| IUD | 57.2 | 62.2 | 62.5 | 61.9 | 23.9 |
| Injectables | 90.1 | 94.0 | 92.9 | 93.1 | 65.8 |
| Implants | 54.1 | 58.7 | 62.5 | 58.7 | 21.8 |
| Male condom | 90.4 | 91.9 | 93.6 | 93.0 | 78.4 |
| Female condom | 55.9 | 57.2 | 62.1 | 60.9 | 41.3 |
| Diaphragm | 8.4 | 8.9 | 10.2 | 9.8 | 3.7 |
| Foam/jelly | 13.8 | 15.1 | 16.0 | 16.0 | 3.9 |
| Lactational amenorrhoea method (LAM) | 22.8 | 25.9 | 20.0 | 22.2 | 8.7 |
| Emergency contraception | 9.4 | 10.3 | 11.3 | 10.7 | 2.8 |
| Any traditional method | 62.2 | 67.8 | 64.4 | 63.4 | 30.8 |
| Periodic abstinence | 42.8 | 43.9 | 51.4 | 48.0 | 28.1 |
| Withdrawal | 41.4 | 47.6 | 43.4 | 40.5 | 9.7 |
| Folk method | 25.0 | 29.6 | 26.6 | 22.2 | 3.7 |
| Mean number of methods known | 7.0 | 7.5 | 7.4 | 7.3 | 4.2 |
| Number of women | 10,329 | 6,950 | 652 | 1,377 | 1,350 |
| ${ }^{1}$ Had sexual intercourse in the one month preceding the survey <br> ${ }^{2}$ Did not have sexual intercourse in the month preceding the survey |  |  |  |  |  |


| Table 5.1.2 Knowledge of contraceptive methods: men |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Percentage of all men, of currently married men, of sexually active unmarried men, of sexually inactive unmarried men, and of men with no sexual experience who know any contraceptive method, by specific method, Tanzania 2004-05 |  |  |  |  |  |
|  |  |  | Unmarri ever | men who sex | Unmarried |
| Method | $\begin{gathered} \text { All } \\ \text { men } \end{gathered}$ | Currently married men | Sexually active ${ }^{1}$ | Not sexually active ${ }^{2}$ | men <br> who never had sex |
| Any method | 97.3 | 99.3 | 98.4 | 98.7 | 87.8 |
| Any modern method | 97.1 | 99.0 | 98.4 | 98.7 | 87.8 |
| Female sterilisation | 68.9 | 80.7 | 66.3 | 63.5 | 37.8 |
| Male sterilisation | 31.7 | 41.2 | 24.1 | 25.1 | 13.5 |
| Pill | 89.6 | 95.9 | 90.4 | 89.6 | 67.6 |
| IUD | 40.3 | 51.4 | 36.1 | 33.9 | 14.4 |
| Injectables | 80.4 | 89.7 | 77.9 | 77.4 | 54.4 |
| Implants | 34.0 | 45.8 | 33.1 | 20.1 | 13.3 |
| Male condom | 95.2 | 97.6 | 97.1 | 98.1 | 82.0 |
| Female condom | 66.8 | 75.8 | 63.2 | 67.2 | 38.1 |
| Diaphragm | 11.1 | 14.1 | 9.3 | 8.3 | 6.1 |
| Foam/jelly | 11.5 | 13.7 | 11.3 | 12.2 | 3.5 |
| Lactational amenorrhoea method (LAM) | 21.3 | 28.2 | 15.2 | 18.3 | 5.8 |
| Emergency contraception | 11.6 | 13.6 | 16.2 | 8.7 | 6.3 |
| Any traditional method | 67.4 | 81.1 | 67.6 | 62.6 | 27.7 |
| Periodic abstinence | 51.1 | 62.1 | 46.9 | 48.7 | 19.7 |
| Withdrawal | 51.0 | 63.4 | 53.5 | 44.4 | 16.8 |
| Folk method | 14.7 | 21.5 | 8.7 | 9.4 | 3.0 |
| Mean number of methods known | 6.8 | 7.9 | 6.5 | 6.2 | 3.8 |
| Number of men | 2,635 | 1,401 | 253 | 568 | 414 |
| ${ }^{1} \mathrm{Had}$ sexual intercourse in the one month preceding the survey <br> ${ }^{2}$ Did not have sexual intercourse in the month preceding the survey |  |  |  |  |  |

### 5.2 Ever Use of Contraception

All women interviewed in the 2004-05 TDHS who said that they had heard of a method of family planning were asked whether they had ever used that method. Table 5.2 shows the percentage of all women, currently married women, and sexually active unmarried women who have ever used specific methods of family planning, by age.

Half of all currently married women have used a contraceptive method: 43 percent have used a modern method, and 20 percent have used a traditional method. The methods most commonly used by married women are injectables ( 25 percent), the pill ( 23 percent), the male condom ( 10 percent), withdrawal ( 13 percent), and periodic abstinence ( 7 percent). Ever use of other methods does not exceed 3 percent.

Ever use of any method is highest among sexually active unmarried women, 58 percent of whom have used a method at some time. Sexually active unmarried women are most likely to have used the male condom ( 30 percent).

Table 5.2 Ever use of contraception: women
Percentage of all women, of currently married women, and of sexually active unmarried women who have ever used any contraceptive method, by specific method and age, Tanzania 2004-05

|  |  | Modern method |  |  |  |  |  |  |  |  |  | Traditional method |  |  |  | Number <br> of <br> women |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Age | Any method | Any modern method | Female sterilisation | Pill | IUD | Injectables | Implants | Male condom | Female condom | LAM | Emergency contraception | $\begin{gathered} \hline \text { Any } \\ \text { tradi- } \\ \text { tional } \\ \text { method } \\ \hline \end{gathered}$ | Periodic abstinence | Withdrawal | Folk method |  |
| ALL WOMEN |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 15-19 | 12.4 | 10.7 | 0.0 | 2.6 | 0.0 | 2.3 | 0.1 | 6.7 | 0.2 | 0.4 | 0.0 | 3.6 | 2.0 | 1.7 | 0.3 | 2,245 |
| 20-24 | 44.5 | 38.2 | 0.0 | 16.0 | 0.1 | 19.0 | 0.8 | 16.3 | 0.2 | 1.0 | 0.2 | 15.2 | 5.2 | 9.9 | 2.1 | 2,007 |
| 25-29 | 59.4 | 52.1 | 0.6 | 28.2 | 0.7 | 31.0 | 0.8 | 16.7 | 0.3 | 2.2 | 0.5 | 21.4 | 8.3 | 13.3 | 3.5 | 1,885 |
| 30-34 | 57.3 | 48.2 | 1.8 | 30.1 | 2.1 | 28.0 | 1.3 | 10.7 | 0.4 | 1.9 | 0.2 | 22.4 | 9.3 | 13.1 | 4.2 | 1,542 |
| 35-39 | 55.9 | 46.6 | 3.5 | 24.9 | 2.2 | 27.8 | 1.0 | 8.0 | 0.5 | 3.1 | 0.2 | 23.3 | 8.8 | 13.8 | 5.5 | 1,053 |
| 40-44 | 49.2 | 42.3 | 7.3 | 24.0 | 3.8 | 25.4 | 0.6 | 5.5 | 0.1 | 3.4 | 0.3 | 17.7 | 8.2 | 8.1 | 4.5 | 834 |
| 45-49 | 43.4 | 33.3 | 9.9 | 16.1 | 2.1 | 15.6 | 0.4 | 3.1 | 0.4 | 2.3 | 0.1 | 19.4 | 5.1 | 12.5 | 6.0 | 763 |
| Total | 43.6 | 37.1 | 2.1 | 19.0 | 1.2 | 20.1 | 0.7 | 10.8 | 0.3 | 1.7 | 0.2 | 16.2 | 6.3 | 9.7 | 3.1 | 10,329 |
| CURRENTLY MARRIED WOMEN |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 15-19 | 20.4 | 16.0 | 0.0 | 6.8 | 0.0 | 5.2 | 0.1 | 6.9 | 0.0 | 1.1 | 0.0 | 8.0 | 2.7 | 5.5 | 0.8 | 590 |
| 20-24 | 48.2 | 40.0 | 0.0 | 19.2 | 0.1 | 22.2 | 1.0 | 13.7 | 0.2 | 1.2 | 0.3 | 18.3 | 5.2 | 12.8 | 2.9 | 1,400 |
| 25-29 | 59.9 | 51.7 | 0.6 | 27.7 | 0.8 | 31.8 | 0.8 | 13.6 | 0.1 | 2.3 | 0.6 | 21.9 | 7.6 | 14.5 | 3.6 | 1,511 |
| 30-34 | 57.3 | 47.9 | 1.9 | 30.7 | 2.3 | 28.8 | 1.5 | 8.7 | 0.2 | 1.9 | 0.1 | 23.0 | 8.9 | 14.3 | 4.1 | 1,292 |
| 35-39 | 56.9 | 47.5 | 3.3 | 24.9 | 2.2 | 29.2 | 1.2 | 7.2 | 0.5 | 3.5 | 0.2 | 24.1 | 9.1 | 14.4 | 5.4 | 884 |
| 40-44 | 49.0 | 41.7 | 7.3 | 22.9 | 3.6 | 25.2 | 0.8 | 3.9 | 0.0 | 3.5 | 0.2 | 18.2 | 8.3 | 8.1 | 4.7 | 694 |
| 45-49 | 44.5 | 34.1 | 11.4 | 15.9 | 2.5 | 17.0 | 0.5 | 3.2 | 0.6 | 1.6 | 0.2 | 19.9 | 5.2 | 12.2 | 6.5 | 580 |
| Total | 51.0 | 42.6 | 2.6 | 23.0 | 1.5 | 24.8 | 0.9 | 9.5 | 0.2 | 2.1 | 0.3 | 19.9 | 7.0 | 12.5 | 3.9 | 6,950 |
| SEXUALLY ACTIVE UNMARRIED WOMEN ${ }^{1}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 15-19 | 38.1 | 36.0 | 0.0 | 6.7 | 0.4 | 6.6 | 0.0 | 26.2 | 0.6 | 0.8 | 0.0 | 8.1 | 6.9 | 1.8 | 0.0 | 166 |
| 20-24 | 66.6 | 62.9 | 0.0 | 18.1 | 0.0 | 29.2 | 1.0 | 37.6 | 0.0 | 0.0 | 0.0 | 15.6 | 9.7 | 7.5 | 0.0 | 152 |
| 25-49 | 63.1 | 58.0 | 2.9 | 32.7 | 2.8 | 31.0 | 1.0 | 28.4 | 2.2 | 1.9 | 0.8 | 21.0 | 11.6 | 11.2 | 2.5 | 334 |
| Total | 57.6 | 53.5 | 1.5 | 22.7 | 1.5 | 24.4 | 0.8 | 30.0 | 1.3 | 1.2 | 0.4 | 16.5 | 10.0 | 7.9 | 1.3 | 652 |

Note: Any modern method includes 3 women (weighted) who reported ever use of male sterilisation, 2 who reported ever use of diaphragm, and 12 who reported ever use of foam/jelly.
LAM = Lactational amenorrhoea method
${ }^{1}$ Women who had sexual intercourse in the month preceding the survey

In the 2004-05 TDHS, men were only asked about ever use of male-oriented contraceptive methods, so the data are not comparable to women's data. Approximately seven in ten currently married men and sexually active unmarried men reported using of a male-oriented method at some time (Table 5.3). The most common method is the male condom. Half of married men have used a condom, as have 68 percent of sexually active unmarried men.

| Table 5.3 Ever use of contraception: men |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percentage of all men, of currently married men, and of sexually active unmarried men who have ever used any male-controlled contraceptive method, by specific method and age, Tanzania 2004-05 |  |  |  |  |  |  |
| Age | Any method | Modern method |  | Traditional method |  | Number of men |
|  |  | Male sterilisation | Male condom | Periodic abstinence | With- <br> drawal |  |
| ALL MEN |  |  |  |  |  |  |
| 15-19 | 19.3 | 0.2 | 18.2 | 1.2 | 2.5 | 637 |
| 20-24 | 60.7 | 0.0 | 55.8 | 14.8 | 18.8 | 493 |
| 25-29 | 70.4 | 0.0 | 58.3 | 25.7 | 27.1 | 405 |
| 30-34 | 73.4 | 0.0 | 56.4 | 30.8 | 34.9 | 387 |
| 35-39 | 71.9 | 0.0 | 48.8 | 38.8 | 36.0 | 278 |
| 40-44 | 63.2 | 0.0 | 40.1 | 32.2 | 33.3 | 265 |
| 45-49 | 57.7 | 0.0 | 34.0 | 32.8 | 30.9 | 170 |
| Total | 55.3 | 0.0 | 43.5 | 21.0 | 22.6 | 2,635 |
| CURRENTLY MARRIED MEN |  |  |  |  |  |  |
| 15-19 | * | * | * | * | * | 7 |
| 20-24 | 65.5 | 0.1 | 61.1 | 17.7 | 20.1 | 146 |
| 25-29 | 71.3 | 0.0 | 56.9 | 28.7 | 29.2 | 283 |
| 30-34 | 73.9 | 0.0 | 54.7 | 33.6 | 38.5 | 326 |
| 35-39 | 71.9 | 0.0 | 47.7 | 39.8 | 38.6 | 249 |
| 40-44 | 63.3 | 0.0 | 39.9 | 33.6 | 33.3 | 239 |
| 45-49 | 56.2 | 0.0 | 30.9 | 34.8 | 30.0 | 151 |
| Total | 68.3 | 0.0 | 49.4 | 32.1 | 32.8 | 1,401 |
| SEXUALLY ACTIVE UNMARRIED MEN ${ }^{1}$ |  |  |  |  |  |  |
| 15-19 | 51.1 | 0.0 | 48.7 | 4.2 | 9.0 | 83 |
| 20-24 | 77.8 | 0.0 | 75.1 | 17.2 | 22.2 | 104 |
| 25-49 | 84.8 | 0.0 | 81.0 | 15.7 | 31.8 | 66 |
| Total | 70.9 | 0.0 | 68.0 | 12.5 | 20.4 | 253 |
| Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed. <br> ${ }^{1}$ Men who had sexual intercourse in the month preceding the survey |  |  |  |  |  |  |

### 5.3 Current Use of Contraceptive Methods

The level of current use of contraceptive methods is one of the indicators most frequently used to assess the success of family planning programme activities. It is also widely used as a measure in analysing the determinants of fertility. This section focuses on the levels and differentials in current use of family planning. Trends in contraceptive use in Tanzania are also discussed.

The percentage of currently married women age 15-49 who are using any method of family planning is known as the contraceptive prevalence rate (CPR). As shown in Table 5.4, the CPR for Tanzania is 26 percent. Most currently married women use modern methods ( 20 percent) while 6 percent use a traditional method.

Table 5.4 Current use of contraception
Percent distribution of all women, of currently married women, and of sexually active unmarried women by contraceptive method currently used, according to age, Tanzania 2004-05

| Age | Any method | Any modern method | Modern method |  |  |  |  |  |  | Traditional method |  |  |  | Not currently using | Total | Number of women |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Female sterilisation | Pill | IUD | Injectables | Implants | Male condom | LAM | Any traditional method | Periodic abstinence | Withdrawal | Folk method |  |  |  |
| ALL WOMEN |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 15-19 | 6.6 | 5.5 | 0.0 | 0.8 | 0.0 | 1.7 | 0.1 | 2.7 | 0.1 | 1.1 | 0.5 | 0.5 | 0.1 | 93.4 | 100.0 | 2,245 |
| 20-24 | 24.2 | 19.0 | 0.0 | 4.9 | 0.0 | 7.7 | 0.7 | 5.6 | 0.1 | 5.2 | 1.5 | 2.6 | 1.1 | 75.8 | 100.0 | 2,007 |
| 25-29 | 30.7 | 23.9 | 0.6 | 7.6 | 0.2 | 10.5 | 0.4 | 4.0 | 0.6 | 6.8 | 2.5 | 3.2 | 1.1 | 69.3 | 100.0 | 1,885 |
| 30-34 | 30.3 | 23.6 | 1.8 | 8.5 | 0.5 | 9.5 | 0.8 | 2.1 | 0.5 | 6.7 | 2.7 | 3.0 | 1.0 | 69.7 | 100.0 | 1,542 |
| 35-39 | 29.4 | 22.3 | 3.5 | 5.3 | 0.1 | 10.3 | 0.0 | 1.7 | 1.2 | 7.1 | 2.7 | 2.9 | 1.5 | 70.6 | 100.0 | 1,053 |
| 40-44 | 22.2 | 17.8 | 7.3 | 3.3 | 0.1 | 5.2 | 0.5 | 1.0 | 0.3 | 4.4 | 2.3 | 0.8 | 1.3 | 77.8 | 100.0 | 834 |
| 45-49 | 19.2 | 15.1 | 9.9 | 0.9 | 0.0 | 3.4 | 0.0 | 0.8 | 0.1 | 4.1 | 1.3 | 1.3 | 1.4 | 80.8 | 100.0 | 763 |
| Total | 22.5 | 17.6 | 2.1 | 4.6 | 0.1 | 6.9 | 0.4 | 3.0 | 0.4 | 4.9 | 1.8 | 2.1 | 1.0 | 77.5 | 100.0 | 10,329 |
| CURRENTLY MARRIED WOMEN |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 15-19 | 9.6 | 6.9 | 0.0 | 1.9 | 0.0 | 3.8 | 0.1 | 0.8 | 0.3 | 2.7 | 0.3 | 1.8 | 0.5 | 90.4 | 100.0 | 590 |
| 20-24 | 25.5 | 19.0 | 0.0 | 6.0 | 0.0 | 8.7 | 1.0 | 3.2 | 0.2 | 6.5 | 1.4 | 3.6 | 1.5 | 74.5 | 100.0 | 1,400 |
| 25-29 | 31.2 | 23.8 | 0.6 | 7.9 | 0.2 | 10.9 | 0.3 | 3.1 | 0.7 | 7.4 | 2.2 | 3.8 | 1.4 | 68.8 | 100.0 | 1,511 |
| 30-34 | 30.6 | 23.5 | 1.9 | 9.0 | 0.6 | 9.2 | 0.9 | 1.3 | 0.6 | 7.0 | 2.5 | 3.4 | 1.1 | 69.4 | 100.0 | 1,292 |
| 35-39 | 29.9 | 22.1 | 3.3 | 5.6 | 0.1 | 10.3 | 0.0 | 1.3 | 1.2 | 7.8 | 3.0 | 3.2 | 1.6 | 70.1 | 100.0 | 884 |
| 40-44 | 23.4 | 18.4 | 7.3 | 3.6 | 0.1 | 5.4 | 0.6 | 1.0 | 0.4 | 5.0 | 2.5 | 1.0 | 1.4 | 76.6 | 100.0 | 694 |
| 45-49 | 21.8 | 16.6 | 11.4 | 1.1 | 0.0 | 3.3 | 0.0 | 0.6 | 0.2 | 5.3 | 1.8 | 1.7 | 1.8 | 78.2 | 100.0 | 580 |
| Total | 26.4 | 20.0 | 2.6 | 5.9 | 0.2 | 8.3 | 0.5 | 2.0 | 0.5 | 6.4 | 2.0 | 3.0 | 1.3 | 73.6 | 100.0 | 6,950 |
| SEXUALLY ACTIVE UNMARRIED WOMEN ${ }^{1}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 15-19 | 31.8 | 30.0 | 0.0 | 3.3 | 0.0 | 4.9 | 0.0 | 21.8 | 0.0 | 1.8 | 1.8 | 0.0 | 0.0 | 68.2 | 100.0 | 166 |
| 20-24 | 47.3 | 41.9 | 0.0 | 5.0 | 0.0 | 15.8 | 0.5 | 20.5 | 0.0 | 5.4 | 4.5 | 0.9 | 0.0 | 52.7 | 100.0 | 152 |
| 25-49 | 41.8 | 35.8 | 2.9 | 8.8 | 0.0 | 13.6 | 0.7 | 9.8 | 0.0 | 6.0 | 4.6 | 1.0 | 0.4 | 58.2 | 100.0 | 334 |
| Total | 40.5 | 35.7 | 1.5 | 6.5 | 0.0 | 11.9 | 0.5 | 15.4 | 0.0 | 4.8 | 3.9 | 0.7 | 0.2 | 59.5 | 100.0 | 652 |

Note: If more than one method is used, only the most effective method is considered in this tabulation. Any modern method includes 2 women (weighted) using male sterilisation and 1 using the diaphragm.
LAM = Lactational amenorrhoea method
${ }^{1}$ Women who have had sexual intercourse in the one month preceding the survey

The most commonly used methods among currently married women are injectables (8 percent), the pill (6 percent), and withdrawal (3 percent). The use of modern contraceptive methods varies by age. Current use of any modern method is 7 percent among currently married women age $15-19$, rising to 24 percent among women age 25-34, and then dropping to 17 percent among the oldest women. Most of the women who are sterilised are age 40 or older, while younger women are more likely to use injectables and pills.

Current contraceptive use is higher among sexually active unmarried women than among married women (41 and 26 percent, respectively). The male condom is favoured among sexually active unmarried women ( 15 percent).

## Time Trends

Figure 5.1 shows that during the last 15 years, there has been a gradual increase in contraceptive use among currently married women. In particular, use of modern methods increased from 7 percent of currently married women in 1991-92 to 20 percent in 2004-05. However, there has been only a slight increase-3 percentage points-in modern contraceptive use since 1999. In terms
of specific methods, the percentage of married women using injectables, which are the most common method among married women in Tanzania today, rose from less than 1 percent in 1991-92 to 8 percent in 2004-05 (data not shown).

Sexually active unmarried women are more likely than currently married women to use a method of contraception. The percentage of sexually active unmarried women using a method of contraception has tripled since 1991-92, from 12 percent to 36 percent. The condom is the most common method among sexually active unmarried women and use increased from 3 percent in 199192 to 15 percent in the 2004-05 TDHS (data not shown).

Figure 5.1 Contraceptive Use among Currently Married Women, Tanzania 1991-2005


Figure 5.1 does not present data from the 2003-04 THIS, which estimated that 28 percent of currently married women use any method of contraception and 23 percent use a modern method. Although these proportions are slightly higher than the estimates from the 2004-05 TDHS, the difference is not statistically significant. However, it should be noted that Tanzania experienced a shortage in contraceptive supply during 2004, which may have resulted in a slight decrease in use at the time of the survey fieldwork.

## Current Use of Contraception by Background Characteristics

Table 5.5 and Figure 5.2 show that there is substantial variation in the current use of contraceptive methods by background characteristics. Contraceptive use varies by the place of residence, level of education, number of living children, and economic status of the household. Married women in urban areas are almost twice as likely to use a family planning method as their rural counterparts ( 42 and 22 percent, respectively). The same pattern is evident for current use of any modern method (34 percent urban and 16 percent rural). Similarly, married women on the Mainland are almost twice as likely as those on Zanzibar to use a method (27 and 15 percent, respectively).

Contraceptive use varies significantly by region, from a high of 50 percent in Kilimanjaro to a low of 7 percent in Pemba North. Use of specific methods also varies by region. For example, women in Mbeya are most likely to rely on withdrawal ( 17 percent) while in Kilimanjaro, injectables and sterilisation are most common (17 and 10 percent, respectively). In Lindi, almost one-fifth of currently married women (18 percent) use the pill.

| Percent distribution of currently married women by contraceptive method currently used, according to background characteristics, Tanzania 2004-05 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Modern method |  |  |  |  |  |  |  | Traditional method |  |  |  | Not currently using | Total | Number of women |
| Background characteristic | Any method | Any modern method | Female sterilisation | Pill | IUD | Injectables | Implants | Male condom | LAM | Any traditional method | Periodic abstinence | Withdrawal | Folk method |  |  |  |
| Residence |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Urban | 41.8 | 34.3 | 4.9 | 11.9 | 0.6 | 12.6 | 1.3 | 2.5 | 0.3 | 7.6 | 4.4 | 2.7 | 0.4 | 58.2 | 100.0 | 1,647 |
| Rural | 21.6 | 15.5 | 1.8 | 4.1 | 0.1 | 6.9 | 0.2 | 1.8 | 0.6 | 6.0 | 1.3 | 3.1 | 1.6 | 78.4 | 100.0 | 5,303 |
| Mainland/Zanzibar |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Mainland | 26.7 | 20.3 | 2.6 | 6.0 | 0.2 | 8.4 | 0.5 | 2.0 | 0.5 | 6.4 | 2.0 | 3.0 | 1.4 | 73.3 | 100.0 | 6,769 |
| Total urban | 41.9 | 34.5 | 4.9 | 11.7 | 0.6 | 13.0 | 1.3 | 2.6 | 0.3 | 7.4 | 4.4 | 2.6 | 0.4 | 58.1 | 100.0 | 1,644 |
| Dar es Salaam | 44.6 | 34.8 | 3.7 | 11.6 | 0.9 | 13.7 | 1.5 | 3.4 | 0.0 | 9.8 | 6.5 | 3.0 | 0.3 | 55.4 | 100.0 | 541 |
| Other urban | 40.6 | 34.3 | 5.4 | 11.8 | 0.5 | 12.6 | 1.2 | 2.3 | 0.5 | 6.3 | 3.3 | 2.5 | 0.5 | 59.4 | 100.0 | 1,103 |
| Total rural | 21.8 | 15.7 | 1.9 | 4.1 | 0.1 | 6.9 | 0.2 | 1.8 | 0.6 | 6.1 | 1.2 | 3.1 | 1.7 | 78.2 | 100.0 | 5,125 |
| Zanzibar | 15.3 | 9.4 | 1.0 | 4.5 | 0.1 | 3.3 | 0.1 | 0.3 | 0.1 | 5.9 | 3.4 | 2.3 | 0.3 | 84.7 | 100.0 | 182 |
| Unguja | 18.7 | 10.6 | 1.1 | 5.9 | 0.0 | 2.8 | 0.2 | 0.4 | 0.1 | 8.1 | 4.4 | 3.4 | 0.4 | 81.3 | 100.0 | 123 |
| Pemba | 8.2 | 6.9 | 0.8 | 1.7 | 0.2 | 4.2 | 0.0 | 0.0 | 0.0 | 1.3 | 1.3 | 0.0 | 0.0 | 91.8 | 100.0 | 58 |
| Zone |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Western | 12.8 | 8.7 | 1.8 | 1.4 | 0.1 | 3.7 | 0.2 | 1.2 | 0.2 | 4.1 | 1.6 | 1.2 | 1.4 | 87.2 | 100.0 | 1,341 |
| Northern | 41.5 | 30.1 | 3.5 | 7.2 | 0.6 | 13.8 | 0.8 | 2.6 | 1.5 | 11.5 | 3.9 | 5.3 | 2.3 | 58.5 | 100.0 | 951 |
| Central | 21.6 | 20.1 | 1.5 | 8.1 | 0.1 | 8.9 | 0.0 | 1.4 | 0.0 | 1.5 | 0.9 | 0.3 | 0.3 | 78.4 | 100.0 | 552 |
| Southern highlands | 36.4 | 21.8 | 2.0 | 6.4 | 0.1 | 8.6 | 0.5 | 3.1 | 1.2 | 14.6 | 1.4 | 10.4 | 2.8 | 63.6 | 100.0 | 1,013 |
| Lake | 12.8 | 11.3 | 2.5 | 2.2 | 0.0 | 5.2 | 0.2 | 0.8 | 0.4 | 1.5 | 0.6 | 0.2 | 0.7 | 87.2 | 100.0 | 1,300 |
| Eastern | 37.7 | 30.7 | 3.5 | 10.1 | 0.5 | 12.2 | 1.2 | 3.0 | 0.2 | 7.1 | 4.2 | 2.1 | 0.7 | 62.3 | 100.0 | 1,027 |
| Southern | 33.5 | 29.9 | 3.8 | 12.9 | 0.0 | 10.1 | 0.5 | 2.6 | 0.0 | 3.5 | 1.3 | 1.1 | 1.1 | 66.5 | 100.0 | 584 |
| Region |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Dodoma | 23.8 | 22.2 | 1.0 | 9.5 | 0.0 | 9.8 | 0.0 | 2.0 | 0.0 | 1.5 | 1.5 | 0.0 | 0.0 | 76.2 | 100.0 | 333 |
| Arusha | 48.6 | 34.7 | 1.8 | 11.2 | 0.8 | 15.5 | 0.8 | 3.0 | 1.6 | 13.9 | 4.5 | 3.8 | 5.6 | 51.4 | 100.0 | 243 |
| Kilimanjaro | 49.5 | 38.3 | 10.2 | 6.8 | 1.0 | 17.2 | 1.6 | 1.5 | 0.0 | 11.2 | 5.1 | 4.7 | 1.4 | 50.5 | 100.0 | 214 |
| Tanga | 40.2 | 29.0 | 1.8 | 6.3 | 0.5 | 15.5 | 0.9 | 4.0 | 0.0 | 11.2 | 2.5 | 8.7 | 0.0 | 59.8 | 100.0 | 291 |
| Morogoro | 34.6 | 29.9 | 4.5 | 10.6 | 0.0 | 11.2 | 0.5 | 2.6 | 0.6 | 4.7 | 1.4 | 1.5 | 1.9 | 65.4 | 100.0 | 311 |
| Pwani | 22.2 | 19.3 | 1.4 | 4.4 | 0.0 | 9.6 | 1.6 | 2.3 | 0.0 | 2.9 | 2.2 | 0.7 | 0.0 | 77.8 | 100.0 | 176 |
| Dar es Salaam | 44.6 | 34.8 | 3.7 | 11.6 | 0.9 | 13.7 | 1.5 | 3.4 | 0.0 | 9.8 | 6.5 | 3.0 | 0.3 | 55.4 | 100.0 | 541 |
| Lindi | 33.5 | 30.1 | 3.5 | 18.3 | 0.0 | 6.1 | 0.4 | 1.8 | 0.0 | 3.4 | 0.8 | 0.4 | 2.2 | 66.5 | 100.0 | 156 |
| Mtwara | 26.8 | 25.9 | 2.2 | 13.6 | 0.0 | 9.2 | 0.0 | 0.9 | 0.0 | 0.9 | 0.0 | 0.0 | 0.9 | 73.2 | 100.0 | 235 |
| Ruvuma | 41.6 | 34.8 | 6.1 | 7.7 | 0.0 | 14.5 | 1.3 | 5.2 | 0.0 | 6.8 | 3.2 | 3.1 | 0.5 | 58.4 | 100.0 | 193 |
| Iringa | 35.1 | 26.4 | 3.4 | 7.8 | 0.0 | 10.4 | 0.0 | 4.4 | 0.5 | 8.6 | 3.9 | 4.3 | 0.4 | 64.9 | 100.0 | 254 |
| Mbeya | 45.1 | 23.5 | 2.0 | 7.0 | 0.0 | 9.2 | 1.0 | 2.2 | 2.0 | 21.6 | 0.3 | 16.5 | 4.8 | 54.9 | 100.0 | 526 |
| Singida | 18.3 | 16.9 | 2.3 | 6.1 | 0.3 | 7.6 | 0.0 | 0.6 | 0.0 | 1.4 | 0.0 | 0.7 | 0.7 | 81.7 | 100.0 | 219 |
| Tabora | 10.3 | 7.8 | 1.2 | 0.5 | 0.0 | 4.5 | 0.3 | 1.3 | 0.0 | 2.5 | 0.9 | 0.6 | 1.0 | 89.7 | 100.0 | 395 |
| Rukwa | 18.1 | 13.1 | 0.3 | 3.5 | 0.5 | 5.1 | 0.0 | 3.6 | 0.0 | 5.0 | 0.9 | 3.4 | 0.7 | 81.9 | 100.0 | 233 |
| Kigoma | 19.8 | 12.2 | 2.5 | 1.4 | 0.3 | 5.8 | 0.0 | 0.6 | 1.0 | 7.5 | 3.1 | 3.7 | 0.8 | 80.2 | 100.0 | 312 |
| Shinyanga | 10.9 | 7.5 | 1.9 | 1.9 | 0.0 | 2.1 | 0.2 | 1.5 | 0.0 | 3.4 | 1.2 | 0.3 | 1.9 | 89.1 | 100.0 | 634 |
| Kagera | 15.7 | 15.0 | 3.4 | 3.0 | 0.0 | 7.5 | 0.0 | 1.1 | 0.0 | 0.7 | 0.0 | 0.3 | 0.4 | 84.3 | 100.0 | 403 |
| Mwanza | 11.0 | 9.2 | 2.2 | 2.2 | 0.0 | 3.2 | 0.3 | 0.6 | 0.7 | 1.7 | 0.6 | 0.0 | 1.1 | 89.0 | 100.0 | 645 |
| Mara | 13.0 | 10.8 | 1.8 | 1.1 | 0.0 | 6.7 | 0.3 | 0.6 | 0.3 | 2.3 | 1.6 | 0.4 | 0.3 | 87.0 | 100.0 | 252 |
| Manyara | 26.5 | 17.3 | 0.9 | 3.9 | 0.0 | 5.9 | 0.0 | 1.4 | 5.2 | 9.2 | 3.9 | 2.9 | 2.4 | 73.5 | 100.0 | 203 |
| Zanzibar North | 7.8 | 5.4 | 0.8 | 2.5 | 0.0 | 1.4 | 0.0 | 0.7 | 0.0 | 2.4 | 0.3 | 1.2 | 0.9 | 92.2 | 100.0 | 28 |
| Zanzibar South | 21.0 | 16.5 | 0.3 | 12.9 | 0.0 | 2.2 | 0.0 | 0.3 | 0.7 | 4.5 | 2.5 | 0.7 | 1.2 | 79.0 | 100.0 | 17 |
| Town West | 22.2 | 11.2 | 1.4 | 5.6 | 0.0 | 3.5 | 0.3 | 0.4 | 0.0 | 11.0 | 6.2 | 4.8 | 0.0 | 77.8 | 100.0 | 78 |
| Pemba North | 7.2 | 6.3 | 0.8 | 1.4 | 0.0 | 4.1 | 0.0 | 0.0 | 0.0 | 0.9 | 0.9 | 0.0 | 0.0 | 92.8 | 100.0 | 31 |
| Pemba South | 9.4 | 7.5 | 0.8 | 2.0 | 0.4 | 4.4 | 0.0 | 0.0 | 0.0 | 1.8 | 1.8 | 0.0 | 0.0 | 90.6 | 100.0 | 27 |
| Education |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| No education | 13.4 | 8.3 | 1.5 | 1.9 | 0.0 | 3.6 | 0.1 | 0.7 | 0.5 | 5.1 | 0.5 | 2.6 | 2.1 | 86.6 | 100.0 | 1,994 |
| Primary incomplete | 21.8 | 16.5 | 3.0 | 3.7 | 0.0 | 7.6 | 0.2 | 1.5 | 0.6 | 5.3 | 1.1 | 2.9 | 1.3 | 78.2 | 100.0 | 1,070 |
| Primary complete | 32.5 | 25.7 | 2.8 | 8.1 | 0.1 | 10.9 | 0.6 | 2.6 | 0.6 | 6.8 | 2.5 | 3.2 | 1.1 | 67.5 | 100.0 | 3,512 |
| Secondary+ | 50.6 | 38.2 | 4.8 | 13.8 | 2.5 | 10.5 | 2.5 | 4.2 | 0.0 | 12.4 | 9.1 | 3.3 | 0.1 | 49.4 | 100.0 | 375 |
| Number of living children |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 0 | 2.3 | 1.1 | 0.0 | 0.3 | 0.0 | 0.0 | 0.2 | 0.6 | 0.0 | 1.2 | 0.4 | 0.6 | 0.1 | 97.7 | 100.0 | 650 |
| 1-2 | 28.3 | 22.0 | 0.5 | 7.9 | 0.3 | 9.3 | 0.7 | 3.1 | 0.3 | 6.2 | 2.0 | 3.1 | 1.1 | 71.7 | 100.0 | 2,571 |
| 3-4 | 31.8 | 24.4 | 3.0 | 7.3 | 0.2 | 10.5 | 0.7 | 2.1 | 0.6 | 7.4 | 2.5 | 3.4 | 1.5 | 68.2 | 100.0 | 1,960 |
| $5+$ | 26.4 | 19.0 | 6.1 | 3.7 | 0.0 | 7.3 | 0.1 | 0.8 | 1.0 | 7.4 | 2.1 | 3.3 | 1.9 | 73.6 | 100.0 | 1,770 |
| Wealth quintile |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Lowest | 15.6 | 10.7 | 1.1 | 2.9 | 0.0 | 5.1 | 0.1 | 0.8 | 0.7 | 4.9 | 0.5 | 2.3 | 2.0 | 84.4 | 100.0 | 1,341 |
| Second | 18.9 | 12.8 | 1.0 | 4.0 | 0.0 | 5.5 | 0.1 | 1.6 | 0.6 | 6.1 | 1.2 | 3.6 | 1.3 | 81.1 | 100.0 | 1,424 |
| Middle | 21.4 | 15.6 | 2.1 | 3.5 | 0.0 | 7.3 | 0.3 | 2.0 | 0.3 | 5.8 | 1.0 | 3.3 | 1.5 | 78.6 | 100.0 | 1,380 |
| Fourth | 29.8 | 24.1 | 3.4 | 7.1 | 0.1 | 10.1 | 0.2 | 2.5 | 0.6 | 5.8 | 1.5 | 2.9 | 1.3 | 70.2 | 100.0 | 1,365 |
| Highest | 45.2 | 36.0 | 5.2 | 11.9 | 0.8 | 13.1 | 1.7 | 2.9 | 0.3 | 9.2 | 5.7 | 2.9 | 0.6 | 54.8 | 100.0 | 1,440 |
| Total | 26.4 | 20.0 | 2.6 | 5.9 | 0.2 | 8.3 | 0.5 | 2.0 | 0.5 | 6.4 | 2.0 | 3.0 | 1.3 | 73.6 | 100.0 | 6,950 |

Figure 5.2 Current Use of Any Contraceptive Method among Currently Married Women Age 15-49, by Background Characteristics


TDHS 2004-05

Although contraceptive use has increased among women of all educational levels since the 1999 TRCHS, there is significant variation by educational attainment. Use of any method increases from 13 percent among currently married women with no education to 51 percent among women with at least some secondary education. Interestingly, use of any traditional method also increases with the level of education, from 5 percent of currently married women with no education to 12 percent of the most educated women.

Women with no children are unlikely to use contraception. Just 2 percent of women with no children use a method compared with 28 percent of women with 1-2 children, 32 percent of women with 3-4 children, and 26 percent of women with 5 or more children.

The wealth index measures the economic status of the household (see Chapter 2). Data from the 2004-05 TDHS show that currently married women living in households in the highest (most economically advantaged) quintile of the wealth index are three times as likely to use a method of contraception as those in the lowest (least advantaged) quintile (45 and 16 percent, respectively).

## Current Use of Contraceptives by Women's Status

A woman's desire and ability to control her fertility and her choice of contraceptive method are in part affected by her status in the household and her own sense of empowerment. A woman who feels that she is unable to control her life may be less likely to feel she can make and carry out decisions about her fertility. She may also feel the need to choose methods that are less likely to be revealed or which do not depend on her husband's cooperation. Table 5.6 shows the distribution of currently married women by contraceptive use, according to women's status indicators.

The number of decisions in which a woman has the final say is positively related to women's empowerment and reflects the degree of decisionmaking control women are able to exercise in areas that affect their lives and environments. The number of reasons for which it is believed a wife justifiably can refuse sex with her husband reflects perceptions of sexual roles and women's rights over their bodies and relates positively to women's sense of self-empowerment. A lower score on the "number of reasons wife beating is justified" reflects a greater sense of entitlement, self-esteem, and status of women, and this indicator, therefore, has a negative association with women's empowerment.

| Percent distribution of currently married women by contraceptive method currently used, according to selected indicators of women's status, Tanzania 2004-05 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Modern method |  |  |  |  |  |  |  | Traditional method |  |  |  | Not currently using | Total | Number of women |
| Background characteristic | Any method | Any modern method | Female sterilisation | Pill | IUD | Inject- <br> ables | Implants | Male <br> con- <br> dom | LAM | Any traditional method | Periodic abstinence | Withdrawal | Folk method |  |  |  |
| Number of decisions in which woman has final say ${ }^{1}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 0 | 17.0 | 14.7 | 1.3 | 4.1 | 0.0 | 6.2 | 0.5 | 1.2 | 1.4 | 2.3 | 0.3 | 1.4 | 0.5 | 83.0 | 100.0 | 730 |
| 1-2 | 20.3 | 15.7 | 2.2 | 3.9 | 0.3 | 7.4 | 0.4 | 1.4 | 0.2 | 4.7 | 1.3 | 2.0 | 1.4 | 79.7 | 100.0 | 2,565 |
| 3-4 | 31.2 | 23.1 | 2.7 | 6.9 | 0.2 | 9.1 | 0.6 | 2.9 | 0.8 | 8.1 | 3.1 | 3.7 | 1.3 | 68.8 | 100.0 | 1,914 |
| 5 | 33.9 | 25.1 | 3.6 | 8.6 | 0.2 | 9.6 | 0.6 | 2.1 | 0.4 | 8.8 | 2.7 | 4.4 | 1.7 | 66.1 | 100.0 | 1,742 |
| Number of reasons to refuse sex with husband |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 0 | 30.9 | 23.3 | 1.7 | 5.9 | 0.5 | 10.3 | 0.9 | 1.2 | 2.7 | 7.6 | 0.9 | 4.5 | 2.2 | 69.1 | 100.0 | 309 |
| 1-2 | 23.1 | 15.3 | 1.5 | 4.1 | 0.4 | 6.5 | 0.6 | 1.6 | 0.6 | 7.8 | 1.9 | 3.6 | 2.3 | 76.9 | 100.0 | 802 |
| 3-4 | 26.6 | 20.5 | 2.8 | 6.2 | 0.2 | 8.4 | 0.5 | 2.0 | 0.4 | 6.1 | 2.1 | 2.8 | 1.2 | 73.4 | 100.0 | 5,839 |
| Number of reasons wife beating is justified |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 0 | 28.5 | 21.6 | 2.6 | 6.4 | 0.4 | 8.8 | 0.8 | 2.0 | 0.6 | 6.9 | 2.2 | 3.7 | 1.0 | 71.5 | 100.0 | 2,681 |
| 1-2 | 26.8 | 20.9 | 2.3 | 6.7 | 0.1 | 8.9 | 0.5 | 1.8 | 0.5 | 5.9 | 2.2 | 2.5 | 1.2 | 73.2 | 100.0 | 1,444 |
| 3-4 | 24.2 | 18.1 | 2.6 | 5.0 | 0.1 | 7.4 | 0.2 | 2.1 | 0.5 | 6.1 | 2.0 | 2.4 | 1.7 | 75.8 | 100.0 | 2,007 |
| 5 | 23.8 | 17.7 | 2.9 | 5.1 | 0.0 | 7.5 | 0.1 | 1.6 | 0.5 | 6.1 | 1.6 | 3.0 | 1.5 | 76.2 | 100.0 | 818 |
| Total | 26.4 | 20.0 | 2.6 | 5.9 | 0.2 | 8.3 | 0.5 | 2.0 | 0.5 | 6.4 | 2.0 | 3.0 | 1.3 | 73.6 | 100.0 | 6,950 |
| Note: If more than one method is used, only the most effective method is considered in this tabulation. LAM $=$ Lactational amenorrhoea method <br> ${ }^{1}$ Either by herself or jointly with others |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

The data indicate that in Tanzania, there is a correlation between women's status and their use of a contraceptive method. For example, the number of decisions in which a woman has a final say has a positive relationship to contraceptive use. Current use of a modern contraceptive method increases with the number of decisions in which a woman has a final say, from 15 percent among married women with no say in any decision to 25 percent among women who participate in all 5 decisions.

Similarly, the data indicate that women who do not believe that there is any reason to justify wife beating are more likely to be current users of a modern contraceptive method than those who feel that wife beating is justified. Current use of modern contraceptives decreases from 22 percent among women who do not believe in any reason to justify wife beating to 18 percent among women who report five reasons for which wife beating is justified.

The relationship between the number of reasons to refuse sex and contraceptive use is less clear.

### 5.4 Number of Children at First Use of Contraception

Family planning may be used to either limit family size or delay the next birth. Couples using family planning as a means to control family size (i.e., to stop having children) adopt contraception when they have already had the number of children they want. When contraception is used to space births, couples may start to use family planning earlier with an intention to delay a possible pregnancy. This may be done even before a couple has had their desired number of children. In a culture where smaller family size is becoming a norm, young women adopt family planning at an earlier age than their older counterparts.

Women interviewed in the 2004-05 TDHS were asked how many children they had at the time they first used a method of family planning. Table 5.7 shows the percent distribution of women by number of living children at the time of first use of contraception, according to current age.

The data show that it is most common to begin using a method after the birth of at least one child. Just 5 percent of all women age 15-49 report that they starting using contraception before they began having children, compared with 17 percent of women who began using after having one child. However, early use of family planning is more common among younger women. For example, 8 percent of all women age 15-19 and 10 percent of women age 20-24 began using contraception before the birth of their first child compared with less than 1 percent of women age 35 and older. This pattern suggests that younger women are increasingly adopting family planning to delay or space births, while older women are adopting family planning to limit births.

Table 5.7 Number of children at first use of contraception
Percent distribution of women by number of living children at the time of first use of contraception, according to current age, Tanzania 2004-05

| Age | Never used | Number of living children at time of first use of contraception |  |  |  |  | Total | Number |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 0 | 1 | 2 | 3 | 4+ |  |  |
| 15-19 | 87.6 | 7.5 | 4.5 | 0.4 | 0.0 | 0.0 | 100.0 | 2,245 |
| 20-24 | 55.5 | 9.7 | 25.9 | 6.8 | 1.6 | 0.4 | 100.0 | 2,007 |
| 25-29 | 40.6 | 5.3 | 27.6 | 15.6 | 7.5 | 3.5 | 100.0 | 1,885 |
| 30-34 | 42.7 | 3.1 | 20.7 | 15.2 | 7.5 | 10.4 | 100.0 | 1,542 |
| 35-39 | 44.1 | 0.8 | 15.8 | 12.0 | 8.2 | 19.0 | 100.0 | 1,053 |
| 40-44 | 50.8 | 0.7 | 8.1 | 8.6 | 6.9 | 25.0 | 100.0 | 834 |
| 45-49 | 56.6 | 0.2 | 11.7 | 6.7 | 4.7 | 19.7 | 100.0 | 763 |
| Total | 56.4 | 5.1 | 17.3 | 8.9 | 4.5 | 7.7 | 100.0 | 10,329 |

Note: Totals may not add to 100 percent because of a small number of missing cases.

### 5.5 Knowledge of Fertile Period

The successful use of natural family planning methods depends largely on an understanding of when during the menstrual cycle a woman is most likely to conceive. An elementary knowledge of reproductive physiology provides background for the successful practice of coitus-associated methods such as withdrawal. Such knowledge is especially critical for the practice of periodic abstinence (the calendar method).

The 2004-05 TDHS asked respondents about their knowledge of a woman's fertile period. Table 5.8 provides the results for all women users and nonusers of periodic abstinence, as well as for all men. Only one-fourth ( 26 percent) of women and 9 percent of men reported the correct timing of the fertile period, that is, halfway through her menstrual cycle. Even among users of periodic abstinence, only half know the correct timing of the fertile period. It is clear that knowledge of the fertile period is minimal among women, which has implications regarding use of periodic abstinence as an effective means of pregnancy prevention.

## Table 5.8 Knowledge of fertile period

Percent distribution of women and men by knowledge of the fertile period during the ovulatory cycle, according to current use/nonuse of periodic abstinence (women),
Tanzania 2004-05

|  | Users of <br> periodic <br> abstinence | Nonusers of <br> periodic <br> abstinence | All women | All men |
| :--- | :---: | :---: | :---: | ---: |
| Perceived fertile period | 3.0 | 4.2 | 4.1 | 9.2 |
| Just before her period begins | 1.7 | 0.8 | 0.8 | 3.9 |
| During her period | 37.8 | 34.3 | 34.3 | 39.3 |
| Right after her period has ended | 48.1 | 26.0 | 26.4 | 8.5 |
| Halfway between two periods | 0.0 | 0.0 | 0.0 | 0.1 |
| Other | 4.6 | 10.7 | 10.6 | 14.3 |
| No specific time | 4.8 | 24.0 | 23.6 | 24.6 |
| Don't know | 100.0 | 100.0 | 100.0 | 100.0 |
| Total | 188 | 10,141 | 10,329 | 2,635 |
| Number of respondents |  |  |  |  |

Note: Totals may not add to 100 percent because of a small number of missing cases.

### 5.6 Source of Supply

Information on where women obtain their contraceptive methods is important for family planning programme managers. All current users of modern contraceptive methods were asked the most recent source of their method. The results are shown in Table 5.9.

The table shows that the major source of modern family planning methods in Tanzania is the government/parastatal or public sector, accounting for 68 percent of supply. The dominance of the public sector has not changed since 1999. The TRCHS also reported that two-thirds of women obtained their contraceptive from a public source. In the 2004-05 TDHS, 8 percent of users of modern contraception obtained their method from the religious/voluntary sector, 5 percent from the private medical sector, and 18 percent from some other private source.

The public sector is the source most commonly reported by users of female sterilisation ( 67 percent), the pill ( 78 percent), injectables ( 84 percent), and implants ( 76 percent). Seventy-seven percent of male condom users report the private sector as their source, specifically pharmacies (36 percent) and shops or kiosks (37 percent).

| Table 5.9 Source of contraception |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percent distribution of current users of modern contraceptive methods by most recent source of method, according to specific method, Tanzania 2004-05 |  |  |  |  |  |  |
| Source | Female sterilisation | Pill | Injectables | Implants | Male condom | Total |
| Government/parastatal | 66.6 | 78.4 | 83.6 | (75.9) | 20.3 | 68.4 |
| Referral/spec. hospital | 13.0 | 0.6 | 0.2 | (3.1) | 0.4 | 1.9 |
| Regional hospital | 20.3 | 2.7 | 2.8 | (16.5) | 0.8 | 4.9 |
| District hospital | 28.1 | 11.5 | 9.7 | (28.6) | 1.2 | 11.3 |
| Health centre | 2.7 | 21.1 | 22.9 | (15.5) | 4.7 | 16.6 |
| Dispensary | 2.5 | 35.9 | 47.3 | (12.2) | 12.2 | 31.5 |
| Village health post | 0.0 | 0.8 | 0.6 | (0.0) | 1.0 | 0.6 |
| CBD worker | 0.0 | 5.8 | 0.0 | (0.0) | 0.0 | 1.6 |
| Religious/voluntary | 25.9 | 4.6 | 6.9 | (2.0) | 1.7 | 7.7 |
| Referral/spec. hospital | 10.4 | 1.2 | 1.5 | (0.0) | 0.3 | 2.4 |
| District hospital | 14.5 | 0.5 | 1.6 | (2.0) | 0.4 | 2.6 |
| Govt. health centre | 0.5 | 2.0 | 2.0 | (0.0) | 0.0 | 1.5 |
| Dispensary | 0.5 | 0.9 | 1.8 | (0.0) | 0.9 | 1.2 |
| Private medical | 4.8 | 2.3 | 7.8 | (12.1) | 0.9 | 5.0 |
| Specialised hospital | 4.3 | 0.0 | 0.3 | (0.0) | 0.0 | 0.6 |
| Health centre | 0.0 | 0.3 | 1.5 | (4.7) | 0.0 | 0.8 |
| Dispensary | 0.5 | 2.0 | 6.0 | (7.4) | 0.9 | 3.6 |
| Other private | 0.0 | 14.7 | 1.3 | (9.9) | 77.1 | 18.4 |
| Pharmacy | 0.0 | 12.2 | 1.0 | (0.0) | 35.9 | 10.0 |
| NGO | 0.0 | 0.3 | 0.0 | (9.9) | 0.8 | 0.4 |
| VCT centre | 0.0 | 0.2 | 0.0 | (0.0) | 0.0 | 0.1 |
| Shop/kiosk | 0.0 | 1.3 | 0.0 | (0.0) | 36.8 | 6.9 |
| Friend/relative/neighbour | 0.0 | 0.7 | 0.3 | (0.0) | 3.5 | 0.9 |
| Other | 1.1 | 0.0 | 0.4 | (0.0) | 0.0 | 0.3 |
| Missing | 1.6 | 0.0 | 0.0 | (0.0) | 0.0 | 0.2 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Number of women | 213 | 479 | 716 | 39 | 315 | 1,779 |
| Note: Table excludes lactational amenorrhoea method (LAM). Figures in parentheses are based on 25-49 unweighted cases. |  |  |  |  |  |  |

### 5.7 Informed Choice

Informed choice is an important aspect of the delivery of family planning services. It is required that all family planning providers inform method users of the potential side effects and what they should do if they encounter such side effects. This information is to assist the user in coping with side effects and thus decrease discontinuations of temporary methods. Contraceptive users should also be informed of the choices they have with respect to other methods. Table 5.10 shows the percentage of current users of modern methods who were informed about side effects or problems of the method used and informed of other methods they could use at the time they first began using the method. These are broken down by method type, initial source, and background characteristics.

A majority of users were given information about each of the three issues considered to be essential parts of informed choice. Seventy-one percent were informed about potential side effects of their method and almost all of these women were told what to do if they experience side effects ( 69 percent). Eight in ten users were given information about other family planning method options. Women who were sterilised were the least likely of all specified methods to be informed of other methods that could be used. However, almost all women (88 percent) who were sterilised during the five-year period preceding the survey were informed that they would not be able to have any more children (data not shown).

| Table 5.10 Informed choice |  |  |  |
| :---: | :---: | :---: | :---: |
| Among current users of modern contraceptive methods who adopted the current method in the five years preceding the survey, percentage who were informed about the side effects of the method used, percentage who were informed what to do if side effects were experienced, and percentage who were informed of other methods that could be used for contraception, by specific method, initial source of method, and background characteristics, Tanzania 2004-05 |  |  |  |
| Method/source/ background characteristic | Informed about side effects or problems of method used ${ }^{1}$ | Informed what to do if experienced side effects ${ }^{1}$ | Informed of other methods that could be used ${ }^{2}$ |
| Method |  |  |  |
| Female sterilisation | 70.2 | 67.8 | 68.1 |
| Pill | 68.0 | 67.1 | 82.0 |
| IUD | * | * | * |
| Injectables | 73.5 | 70.3 | 81.2 |
| Implants | (72.1) | (72.1) | (91.4) |
| Other ${ }^{3}$ | na | na | (36.9) |
| Initial source of method ${ }^{4}$ |  |  |  |
| Public | 71.0 | 69.0 | 81.4 |
| Religious/voluntary | 78.8 | 76.3 | 81.8 |
| Private medical | 69.0 | 69.0 | 81.9 |
| Other private | 69.9 | 61.5 | 59.3 |
| Residence |  |  |  |
| Urban | 75.4 | 73.3 | 83.7 |
| Rural | 68.4 | 65.9 | 76.4 |
| Mainland/Zanzibar |  |  |  |
| Mainland | 71.5 | 69.2 | 79.6 |
| Total urban | 75.9 | 73.9 | 84.1 |
| Dar es Salaam city | 82.6 | 81.3 | 93.2 |
| Other urban | 72.9 | 70.6 | 80.2 |
| Total rural | 68.1 | 65.5 | 76.2 |
| Zanzibar | * | * | * |
| Unguja | * | * | * |
| Pemba | * | * | * |
| Zone |  |  |  |
| Western | 74.1 | 69.5 | 80.4 |
| Northern | 50.4 | 48.2 | 63.2 |
| Central | 57.5 | 56.8 | 73.9 |
| Southern highlands | 71.4 | 67.8 | 69.4 |
| Lake | 90.5 | 86.8 | 89.7 |
| Eastern | 80.7 | 79.4 | 92.2 |
| Southern | 76.9 | 75.4 | 87.1 |
| Education |  |  |  |
| No education | 74.8 | 72.3 | 74.3 |
| Primary incomplete | 69.8 | 67.3 | 75.2 |
| Primary complete | 70.5 | 68.5 | 80.4 |
| Secondary+ | 75.8 | 72.0 | 84.6 |
| Wealth quintile |  |  |  |
| Lowest | 65.7 | 62.5 | 73.0 |
| Second | 71.8 | 70.5 | 76.7 |
| Middle | 70.8 | 67.8 | 78.5 |
| Fourth | 67.8 | 65.6 | 77.1 |
| Highest | 75.4 | 73.2 | 84.3 |
| Total | 71.4 | 69.1 | 79.4 |

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
${ }^{1}$ Among users of female sterilisation, pill, IUD, injectables, and implants
${ }^{2}$ Among users of female sterilisation, pill, IUD, Injectables, implants, female condom, diaphragm, foam or jelly, and lactational amenorrhoea method (LAM)
${ }^{3}$ Female condom, diaphragm, foam, jelly, and (LAM)
${ }^{4}$ Source at start of current episode of use

The data indicate that users of modern contraception living in the Northern zone are disadvantaged in terms of informed choice. Just half report that they were informed about side effects and less than two-thirds were told about other methods, the lowest proportions of women in any zone.

### 5.8 Contraceptive Discontinuation

Couples can realize their reproductive goals only when they use contraceptive methods continuously. A prominent concern for managers of family planning programmes is the discontinuation of methods. In the TDHS "calendar" section, all segments of contraceptive use between January 1999 and the date of interview were recorded, along with reasons for any discontinuation. One-year contraceptive discontinuation rates based on the calendar data are presented in Table 5.11. ${ }^{1}$

The data show that more than one-third ( 38 percent) of family planning users in Tanzania discontinue using the method within 12 months of starting its use. Four percent of users stop using as a result of method failure (i.e., unintended pregnancy), 8 percent discontinue because of a desire to become pregnant, and 9 percent switch to another method. Discontinuation rates are highest for condom users (45 percent) and pill and withdrawal users (41 percent each), and lowest for users of periodic abstinence (31 percent). Condom users are the most likely to switch to another method, while method failure is highest for users of withdrawal. Pill and injectable users are most likely to cite health concerns or fear of side effects.

| Table 5.11 First-year contraceptive discontinuation rates |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percentage of contraceptive users who discontinued use of a method within 12 months after beginning its use, by reason for discontinuation and specific method, Tanzania 2004-05 |  |  |  |  |  |  |
| Method | Method failure | Desire to become pregnant | Switched to another method $^{1}$ | Health concern/ side effects | Other reason | Tota |
| Pill | 3.9 | 8.7 | 9.5 | 11.1 | 7.3 | 40.5 |
| Injectables | 0.9 | 5.5 | 8.0 | 14.4 | 7.6 | 36.5 |
| Male condom | 1.8 | 10.5 | 12.4 | 1.6 | 18.7 | 45.0 |
| Periodic abstinence | 5.8 | 8.2 | 9.4 | 0.0 | 7.5 | 30.9 |
| Withdrawal | 10.6 | 13.9 | 10.4 | 0.2 | 5.5 | 40.6 |
| Other | 10.7 | 11.1 | 8.3 | 0.0 | 7.0 | 37.0 |
| All methods | 3.9 | 8.4 | 9.4 | 7.7 | 8.4 | 37.8 |
| Note: Table is based on episodes of contraceptive use that began 3-59 months before the survey. ${ }^{1}$ Used a different method in the month following discontinuation or said they wanted a more effective method and started another method within two months of discontinuation |  |  |  |  |  |  |

Table 5.12 also presents reasons for contraceptive discontinuation, but from a different perspective. All of the 3,725 contraceptive discontinuations occurring in the five years preceding the survey, regardless of duration of use, are distributed by the main reason for discontinuation, according to method. The desire to become pregnant is the most prominent reason for discontinuation (38 percent), followed by side effects ( 21 percent).

[^4]
## Table 5.12 Reasons for discontinuation

Percent distribution of discontinuations of contraceptive methods in the five years preceding the survey by main reason for discontinuation, according to specific method, Tanzania 2004-05

| Reason | Pill | Injection | Male condom | LAM | Periodic abstinence | Withdrawal | Other | All methods |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Became pregnant while using | 8.2 | 2.1 | 5.8 | 20.0 | 24.1 | 23.7 | 23.9 | 10.4 |
| Wanted to become pregnant | 37.0 | 34.1 | 33.1 | 39.9 | 42.6 | 43.8 | 47.7 | 37.5 |
| Husband disapproved | 2.7 | 2.6 | 12.0 | 1.8 | 1.6 | 3.8 | 6.0 | 3.9 |
| Side effects | 31.0 | 38.6 | 3.2 | 0.0 | 0.3 | 0.0 | 0.8 | 21.4 |
| Health concerns | 1.2 | 2.2 | 0.3 | 0.0 | 0.2 | 0.5 | 0.0 | 1.1 |
| Access/availability | 4.5 | 7.8 | 2.4 | 0.0 | 0.4 | 0.0 | 0.9 | 4.0 |
| Wanted a more effective method | 4.3 | 2.2 | 14.2 | 15.8 | 15.1 | 16.7 | 7.0 | 7.8 |
| Inconvenient to use | 3.4 | 0.7 | 4.3 | 6.7 | 5.8 | 3.5 | 1.2 | 2.8 |
| Infrequent sex/husband away | 2.6 | 4.7 | 10.9 | 5.8 | 5.1 | 2.5 | 2.7 | 4.5 |
| Cost too much | 0.4 | 0.3 | 0.9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.3 |
| Difficult to get pregnant/menopausal | 0.1 | 0.2 | 0.3 | 0.0 | 1.0 | 0.0 | 0.5 | 0.2 |
| Marital dissolution/separation | 1.3 | 1.0 | 0.3 | 0.0 | 0.7 | 1.9 | 0.4 | 1.1 |
| Other | 2.2 | 3.0 | 10.8 | 9.9 | 1.6 | 2.3 | 4.5 | 3.9 |
| Missing | 1.1 | 0.5 | 1.5 | 0.0 | 1.5 | 1.3 | 4.3 | 1.1 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Number of discontinuations | 1,071 | 1,111 | 430 | 102 | 271 | 509 | 188 | 3,725 |
| LAM = Lactational amenorrhoea method |  |  |  |  |  |  |  |  |

### 5.9 Future Use of Contraception

Intention to use a method of contraception is an important indicator of the potential demand for family planning services. Currently married women who were not using contraceptives at the time of the survey were asked about their intention to use family planning in the future. The results are shown in Table 5.13.

More than half (56 percent) of currently married women nonusers intend to use family planning in the future, compared with 39 percent who do not intend to use a method. This reflects a significant increase from the 1999 TRCHS, in which just one-third ( 35 percent) of currently married women reported intention to use a method in the future. Women with at least one living child are significantly more likely than those with no children to say they intend to use a method.

| Table 5.13 Future use of contraception |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percent distribution of currently married women who are not using a contraceptive method by intention to use in the future, according to number of living children, Tanzania 2004-05 |  |  |  |  |  |  |
|  |  | Num | of living | ildren ${ }^{1}$ |  |  |
| Intention | 0 | 1 | 2 | 3 | $4+$ | Total |
| Intends to use | 44.4 | 59.3 | 60.2 | 59.3 | 54.0 | 56.1 |
| Unsure | 9.6 | 6.6 | 5.7 | 5.2 | 3.3 | 5.2 |
| Does not intend to use | 45.8 | 33.9 | 34.0 | 35.4 | 42.7 | 38.6 |
| Missing | 0.3 | 0.1 | 0.1 | 0.0 | 0.0 | 0.1 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Number of women | 442 | 943 | 896 | 854 | 1,982 | 5,118 |
| ${ }^{1}$ Includes current pregnancy |  |  |  |  |  |  |

## Reasons for Not Intending to Use Contraception

The reasons given by respondents who do not intend to use a contraceptive method in the future are important to the family planning programme because they identify areas for potential interventions.

Table 5.14 presents the distribution of currently married nonusers who do not intend to use family planning in the future by the main reason for not intending to use. One-third (34 percent) of nonusers gave a fertility-related reason for not planning to use contraception. In particular, 16 percent cited desire for as many children as possible as the main reason. Another third (31 percent) of nonusers cited methodrelated reasons for not intending to use. Specifically, 36 percent of younger women and 21 percent of older women cited a fear of side effects. One-fourth of respondents reported opposition to use as their reason for not intending to use. A majority of these women said that they themselves are opposed (16 percent), although a significant proportion cited the opposition of their husband/partner (7 percent). Only 3 percent cited lack of knowledge as their reason for not intending to use in the future.

## Preferred Method of Contraception for Future Use

Future demand for specific methods of family planning was assessed by asking current nonusers which method they intend to use in the future. Table 5.15 shows that among currently married nonusers who intend to use in the future, the preferred method is injectables (46 percent), followed by the pill (26 percent). Method preference among women under 30 years of age and those over 30 is similar. However, almost one-fifth of older women who intend to use a method in the future (18 percent) reported female sterilisation as their preferred method.

| Table 5.14 Reason for not intending to use contraception |  |  |  |
| :---: | :---: | :---: | :---: |
| Percent distribution of currently married women who are not using a contraceptive method and who do not intend to use in the future by main reason for not intending to use, according to age, Tanzania 2004-05 |  |  |  |
|  | Age |  | Total |
| Reason | 15-29 | 30-49 |  |
| Fertility-related reasons | 19.1 | 42.2 | 34.0 |
| Infrequent sex/no sex | 0.7 | 4.4 | 3.1 |
| Menopausal/had hysterectomy | 0.6 | 9.8 | 6.5 |
| Subfecund/infecund | 1.4 | 12.9 | 8.7 |
| Wants as many children as possible | 16.5 | 15.2 | 15.6 |
| Opposition to use | 29.0 | 23.1 | 25.2 |
| Respondent opposed | 17.3 | 14.5 | 15.5 |
| Husband/partner opposed | 9.5 | 6.3 | 7.4 |
| Religious prohibition | 2.2 | 2.2 | 2.2 |
| Lack of knowledge | 4.9 | 1.7 | 2.9 |
| Knows no method | 3.6 | 0.7 | 1.8 |
| Knows no source | 1.3 | 1.0 | 1.1 |
| Method-related reasons | 41.0 | 26.0 | 31.4 |
| Health concerns | 1.8 | 2.6 | 2.3 |
| Fear of side effects | 36.1 | 20.5 | 26.1 |
| Lack of access/too far | 0.3 | 0.2 | 0.3 |
| Costs too much | 0.1 | 0.0 | 0.0 |
| Inconvenient to use | 0.7 | 0.1 | 0.3 |
| Interferes with body's normal processes | 2.1 | 2.6 | 2.4 |
| Other | 3.8 | 6.5 | 5.6 |
| Don't know | 2.2 | 0.4 | 1.0 |
| Total | 100.0 | 100.0 | 100.0 |
| Number of women | 709 | 1,268 | 1,977 |


| Table 5.15 Preferred method of contraception |  |  |  |
| :--- | ---: | ---: | ---: |
| for future use |  |  |  |
| Percent distribution of currently married women |  |  |  |
| who are not using a contraceptive method but |  |  |  |
| who intend to use in the future by preferred |  |  |  |
| method, according to age, Tanzania 2004-05 |  |  |  |
| Age |  |  |  |
|  | $15-29$ | $30-49$ | Total |
| Method | 1.6 | 18.0 | 8.1 |
| Female sterilisation | 0.1 | 0.1 | 0.1 |
| Male sterilisation | 28.3 | 22.1 | 25.9 |
| Pill | 1.9 | 2.1 | 1.9 |
| IUD | 49.8 | 39.3 | 45.6 |
| Injectables | 3.0 | 3.3 | 3.1 |
| Implants | 2.5 | 2.8 | 2.6 |
| Condom | 0.1 | 0.1 | 0.1 |
| Female condom | 0.4 | 0.6 | 0.5 |
| LAM | 3.0 | 2.9 | 3.0 |
| Periodic abstinence | 1.3 | 2.1 | 1.6 |
| Withdrawal | 2.5 | 2.0 | 2.3 |
| Other | 5.6 | 4.6 | 5.2 |
| Unsure |  |  |  |
| Total | 100.0 | 100.0 | 100.0 |
| Number of women | 1,735 | 1,137 | 2,872 |

### 5.10 Exposure to Family Planning Messages on Radio and Television

The media can be a major source of family planning messages. Information about public exposure to messages on a particular type of media allows policymakers to ensure the use of the most effective means of communication for various target groups in the population. To assess the effectiveness of electronic, print, and local sources on the dissemination of family planning information, respondents in the 2004-05 TDHS were asked if during the six months preceding the survey they had heard or seen family planning messages on the radio or television; read a family planning message in a newspaper, magazine, poster, or billboard; or heard a family planning message at a community event or a live drama. The results are shown in Tables 5.16.1 and 5.16.2.

Among women, radio is the most common source of family planning messages ( 55 percent). Other common sources include billboard (34 percent), poster (29 percent), newspapers/magazines (25 percent), live dramas (21 percent), and community events (19 percent). Television is the least common source (16 percent).

Exposure to family planning messages is found to be significantly higher in urban areas than rural areas for all sources of messages. The source with the maximum urban-rural difference is television ( 42 percent of urban women and 6 percent of rural women).

Men's exposure to family planning messages is similar to women's except that they are more likely than women to have been exposed to a message from every source.

One-third ( 34 percent) of women and 15 percent of men were not exposed to family planning messages from any source during the six months preceding the survey. There are significant differences in exposure by background characteristics. Those respondents residing in rural areas or in households lower on the wealth index or those with less education are less likely than others to have been exposed to family planning messages. There is considerable variation by region.

| Table 5.16.1 Exposure to family planning messages: women |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percentage of women who heard or saw a family planning message in the mass media or from a community source in the past six months, according to background characteristics, Tanzania 2004-05 |  |  |  |  |  |  |  |  |  |
| Background characteristic | Radio | Television | Newspaper/ magazine | Poster | Billboard | Community event | Live drama | None of these media sources | Number of women |
| Age |  |  |  |  |  |  |  |  |  |
| 15-19 | 47.8 | 16.9 | 24.4 | 26.0 | 29.2 | 15.0 | 21.2 | 40.5 | 2.245 |
| 20-24 | 59.0 | 18.8 | 27.6 | 30.2 | 36.5 | 19.5 | 21.9 | 31.2 | 2,007 |
| 25-29 | 61.7 | 19.2 | 28.6 | 34.8 | 39.0 | 21.7 | 23.5 | 27.7 | 1,885 |
| 30-34 | 59.7 | 16.9 | 25.6 | 32.2 | 39.0 | 21.6 | 22.6 | 30.3 | 1.542 |
| 35-39 | 54.9 | 13.1 | 22.4 | 27.1 | 35.0 | 17.9 | 19.0 | 34.0 | 1,053 |
| 40-44 | 53.0 | 12.0 | 20.7 | 25.7 | 31.8 | 19.7 | 20.0 | 39.0 | 834 |
| 45-49 | 46.4 | 8.8 | 14.4 | 22.8 | 23.2 | 13.6 | 13.9 | 45.0 | 763 |
| Residence |  |  |  |  |  |  |  |  |  |
| Urban | 75.1 | 42.2 | 47.4 | 51.1 | 58.3 | 32.1 | 41.2 | 13.6 | 2,935 |
| Rural | 47.5 | 6.0 | 15.7 | 20.5 | 24.7 | 13.3 | 13.1 | 42.6 | 7,394 |
| Mainland/Zanzibar |  |  |  |  |  |  |  |  |  |
| Mainland | 54.8 | 15.9 | 25.0 | 29.0 | 34.3 | 18.5 | 20.4 | 34.8 | 10.016 |
| Total urban | 75.0 | 41.7 | 48.3 | 51.7 | 59.1 | 32.6 | 41.1 | 13.7 | 2.885 |
| Dar es Salaam city | 76.4 | 62.9 | 58.3 | 69.3 | 78.5 | 48.3 | 61.1 | 6.8 | . 969 |
| Other urban | 74.3 | 30.9 | 43.2 | 42.8 | 49.3 | 24.7 | 31.1 | 17.1 | 1,916 |
| Total rural | 46.7 | 5.5 | 15.6 | 19.9 | 24.3 | 12.8 | 12.1 | 43.3 | 7,131 |
| Zanzibar | 71.1 | 28.8 | 15.0 | 34.5 | 31.6 | 22.3 | 42.0 | 21.1 | 313 |
| Unguja | 75.6 | 38.0 | 19.8 | 46.0 | 41.1 | 24.7 | 53.4 | 14.7 | 216 |
| Pemba | 61.2 | 8.3 | 4.3 | 8.9 | 10.3 | 16.9 | 16.7 | 35.3 | 97 |
| Zone |  |  |  |  |  |  |  |  |  |
| Western | 53.5 | 8.4 | 21.8 | 33.0 | 35.1 | 21.0 | 11.7 | 29.7 | 1.880 |
| Northern | 60.6 | 19.8 | 30.1 | 26.3 | 35.1 | 15.3 | 25.1 | 33.9 | 1.496 |
| Central | 46.8 | 9.9 | 17.6 | 21.8 | 18.3 | 11.6 | 15.6 | 47.8 | 799 |
| Southern highlands | 50.5 | 8.3 | 18.2 | 25.3 | 29.2 | 11.0 | 14.7 | 40.3 | 1,440 |
| Lake | 45.8 | 7.4 | 17.4 | 16.7 | 20.7 | 17.7 | 11.9 | 49.1 | 1,865 |
| Eastern | 70.6 | 43.3 | 43.4 | 47.8 | 55.5 | 31.3 | 42.8 | 16.4 | 1.670 |
| Southern | 51.4 | 9.2 | 22.5 | 28.4 | 43.2 | 15.2 | 20.8 | 30.5 | 866 |
| Region |  |  |  |  |  |  |  |  |  |
| Dodoma | 53.4 | 11.7 | 18.5 | 25.0 | 20.9 | 13.8 | 16.1 | 41.6 | 468 |
| Arusha | 68.6 | 28.9 | 35.2 | 37.4 | 44.8 | 30.0 | 37.4 | 25.4 | 391 |
| Kilimanjaro | 65.7 | 20.1 | 35.4 | 27.0 | 47.7 | 8.5 | 23.2 | 29.0 | 380 |
| Tanga | 60.2 | 15.9 | 28.7 | 21.0 | 24.5 | 7.8 | 16.7 | 35.1 | 431 |
| Morogoro | 66.0 | 18.2 | 24.9 | 18.1 | 21.5 | 8.0 | 14.3 | 27.9 | 449 |
| Pwani | 56.7 | 12.8 | 18.8 | 18.3 | 27.6 | 7.3 | 23.3 | 32.4 | 253 |
| Dar es Salaam | 76.4 | 62.9 | 58.3 | 69.3 | 78.5 | 48.3 | 61.1 | 6.8 | 969 |
| Lindi | 66.0 | 18.9 | 32.2 | 35.7 | 43.9 | 19.0 | 28.8 | 22.5 | 221 |
| Mtwara | 40.1 | 4.6 | 15.8 | 22.0 | 40.8 | 13.1 | 17.5 | 38.8 | 346 |
| Ruvuma | 53.9 | 7.3 | 23.1 | 30.4 | 45.4 | 14.9 | 18.8 | 26.9 | 299 |
| Iringa | 53.8 | 10.2 | 25.9 | 40.3 | 46.8 | 22.3 | 26.7 | 27.4 | 412 |
| Mbeya | 57.1 | 7.8 | 17.9 | 21.8 | 22.7 | 8.1 | 12.6 | 39.3 | 712 |
| Singida | 37.5 | 7.4 | 16.2 | 17.3 | 14.6 | 8.4 | 14.7 | 56.6 | 331 |
| Tabora | 53.2 | 11.0 | 26.7 | 40.6 | 33.6 | 21.1 | 18.7 | 27.7 | 520 |
| Rukwa | 31.3 | 6.7 | 8.9 | 13.6 | 20.8 | 2.5 | 3.6 | 59.5 | 316 |
| Kigoma | 51.1 | 8.1 | 25.8 | 47.9 | 44.3 | 25.2 | 17.6 | 23.6 | 499 |
| Shinyanga | 55.0 | 7.0 | 16.6 | 19.7 | 30.7 | 18.4 | 4.2 | 34.5 | 861 |
| Kagera | 25.2 | 0.8 | 4.0 | 5.0 | 14.4 | 21.5 | 9.4 | 64.5 | 545 |
| Mwanza | 48.0 | 8.1 | 19.1 | 16.6 | 18.4 | 14.7 | 13.7 | 49.9 | 939 |
| Mara | 69.7 | 15.3 | 32.4 | 33.8 | 35.5 | 19.5 | 11.1 | 25.3 | 381 |
| Manyara | 43.8 | 13.2 | 18.6 | 18.2 | 21.6 | 15.3 | 23.5 | 49.9 | 293 |
| Zanzibar North | 74.3 | 11.9 | 7.0 | 34.9 | 23.2 | 26.4 | 49.0 | 17.5 | 48 |
| Zanzibar South | 83.5 | 30.5 | 17.6 | 40.4 | 46.8 | 35.9 | 51.1 | 9.5 | 26 |
| Town West | 74.6 | 48.1 | 24.5 | 50.7 | 46.1 | 22.1 | 55.3 | 14.7 | 143 |
| Pemba North | 64.6 | 7.5 | 2.8 | 7.0 | 13.4 | 26.7 | 20.8 | 30.9 | 52 |
| Pemba South | 57.2 | 9.1 | 6.1 | 11.1 | 6.8 | 5.6 | 12.1 | 40.3 | 45 |
| Education |  |  |  |  |  |  |  |  |  |
| No education | 35.7 | 3.1 | 3.4 | 12.1 | 10.4 | 10.5 | 7.0 | 56.4 | 2,503 |
| Primary incomplete | 51.5 | 10.4 | 17.7 | 24.0 | 25.9 | 15.6 | 15.4 | 38.1 | 1,855 |
| Primary complete | 62.0 | 18.2 | 31.3 | 33.7 | 43.1 | 20.6 | 24.7 | 26.7 | 5,086 |
| Secondary+ | 80.3 | 55.5 | 61.9 | 62.3 | 68.6 | 37.0 | 51.9 | 8.5 | 885 |
| Wealth quintile |  |  |  |  |  |  |  |  |  |
| Lowest | 28.3 | 2.5 | 8.6 | 13.0 | 16.9 | 9.4 | 7.9 | 58.5 | 1,840 |
| Second | 44.0 | 3.8 | 11.8 | 17.3 | 19.5 | 11.3 | 10.0 | 45.7 | 1,944 |
| Middle | 49.1 | 5.0 | 15.8 | 20.1 | 24.8 | 14.6 | 12.9 | 41.6 | 1,943 |
| Fourth | 67.5 | 11.1 | 25.3 | 30.7 | 36.1 | 18.5 | 21.0 | 24.3 | 2,004 |
| Highest | 78.3 | 47.9 | 52.0 | 55.3 | 63.2 | 33.9 | 45.0 | 11.1 | 2,597 |
| Total | 55.3 | 16.3 | 24.7 | 29.2 | 34.2 | 18.6 | 21.1 | 34.4 | 10,329 |


| Table 5.16.2 Exposure to family planning messages: men |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percentage of men who heard or saw a family planning message in the mass media or from a community source in the past six months, according to background characteristics, Tanzania 2004-05 |  |  |  |  |  |  |  |  |  |
| Background characteristic | Radio | Television | Newspaper/ magazine | Poster | Billboard | Community event | Live drama | None of these media sources | Number of men |
| Age |  |  |  |  |  |  |  |  |  |
| 15-19 | 59.6 | 25.6 | 37.6 | 35.6 | 38.1 | 21.3 | 38.3 | 24.2 | 637 |
| 20-24 | 75.0 | 33.3 | 53.2 | 53.2 | 50.4 | 37.2 | 47.8 | 14.1 | 493 |
| 25-29 | 82.7 | 39.5 | 56.7 | 56.7 | 56.1 | 46.4 | 52.1 | 9.1 | 405 |
| 30-34 | 81.5 | 34.9 | 53.1 | 53.2 | 56.6 | 40.3 | 47.3 | 9.5 | 387 |
| 35-39 | 79.4 | 31.4 | 58.4 | 56.1 | 55.1 | 40.6 | 44.5 | 10.2 | 278 |
| 40-44 | 78.8 | 28.5 | 50.2 | 57.7 | 55.1 | 41.9 | 40.2 | 12.6 | 265 |
| 45-49 | 78.6 | 32.5 | 54.3 | 56.5 | 53.8 | 46.3 | 42.0 | 13.5 | 170 |
| Residence |  |  |  |  |  |  |  |  |  |
| Urban | 85.9 | 62.5 | 73.5 | 65.3 | 69.9 | 43.3 | 64.4 | 4.4 | 716 |
| Rural | 70.2 | 20.5 | 41.6 | 44.9 | 43.1 | 34.2 | 37.2 | 18.3 | 1,919 |
| Mainland/Zanzibar |  |  |  |  |  |  |  |  |  |
| Mainland | 74.5 | 31.4 | 50.7 | 50.6 | 50.6 | 36.9 | 44.5 | 14.4 | 2.556 |
| Total urban | 85.0 | 61.4 | 73.9 | 66.2 | 69.9 | 42.5 | 64.4 | 4.6 | 716 |
| Dar es Salaam city | 85.7 | 71.1 | 79.7 | 72.1 | 73.5 | 40.8 | 78.6 | 3.8 | 267 |
| Other urban | 84.6 | 55.6 | 70.5 | 62.7 | 67.8 | 43.5 | 56.0 | 5.1 | 450 |
| Total rural | 70.5 | 19.7 | 41.7 | 44.5 | 43.1 | 34.7 | 36.8 | 18.2 | 1,840 |
| Zanzibar | 73.0 | 47.6 | 36.0 | 45.1 | 42.2 | 28.1 | 46.2 | 16.6 | 79 |
| Unguja | 71.5 | 56.3 | 41.2 | 53.9 | 48.6 | 31.4 | 57.5 | 14.0 | 53 |
| Pemba | 75.9 | 29.7 | 25.5 | 27.0 | 28.9 | 21.2 | 22.9 | 22.0 | 26 |
| Zone |  |  |  |  |  |  |  |  |  |
| Western | 74.4 | 17.7 | 44.2 | 57.1 | 45.5 | 52.6 | 43.7 | 15.8 | 468 |
| Northern | 71.7 | 32.6 | 51.4 | 47.8 | 46.7 | 29.8 | 30.2 | 17.1 | 362 |
| Central | 60.0 | 25.5 | 34.7 | 30.7 | 44.6 | 24.9 | 34.4 | 30.7 | 212 |
| Southern highlands | 72.1 | 19.1 | 45.6 | 28.5 | 48.8 | 17.9 | 47.5 | 11.2 | 358 |
| Lake | 79.5 | 33.7 | 55.9 | 57.5 | 47.2 | 42.9 | 31.5 | 9.7 | 448 |
| Eastern | 86.1 | 63.1 | 73.0 | 71.6 | 71.9 | 48.4 | 73.4 | 6.0 | 462 |
| Southern | 64.4 | 14.8 | 32.2 | 39.6 | 40.2 | 22.9 | 41.4 | 23.1 | 245 |
| Region |  |  |  |  |  |  |  |  |  |
| Dodoma | 69.1 | 37.5 | 43.7 | 38.7 | 50.4 | 34.6 | 44.5 | 24.5 | 113 |
| Arusha . | 67.3 | 51.3 | 49.1 | 51.6 | 44.3 | 29.7 | 34.5 | 19.1 | 82 |
| Kilimanjaro | 83.1 | 32.4 | 59.4 | 56.4 | 47.2 | 26.8 | 30.8 | 12.3 | 104 |
| Tanga | 72.4 | 26.5 | 56.5 | 35.4 | 49.6 | 29.7 | 25.7 | 20.4 | 94 |
| Morogoro | 87.6 | 48.8 | 60.2 | 67.4 | 64.5 | 55.5 | 61.1 | 8.6 | 127 |
| Pwani | 84.5 | 58.5 | 70.6 | 77.4 | 79.4 | 64.8 | 75.8 | 9.8 | 68 |
| Dar es Salaam | 85.7 | 71.1 | 79.7 | 72.1 | 73.5 | 40.8 | 78.6 | 3.8 | 267 |
| Lindi | 72.9 | 20.6 | 26.9 | 40.6 | 37.8 | 31.5 | 51.0 | 16.2 | 65 |
| Mtwara | 53.5 | 8.1 | 24.0 | 18.3 | 27.3 | 14.8 | 47.7 | 30.2 | 98 |
| Ruvuma | 70.5 | 18.0 | 46.1 | 63.9 | 57.4 | 25.8 | 26.3 | 20.0 | 83 |
| Iringa | 70.9 | 20.5 | 61.8 | 64.6 | 43.7 | 10.1 | 20.6 | 19.4 | 102 |
| Mbeya | 73.4 | 18.7 | 41.3 | 8.7 | 49.0 | 19.1 | 46.8 | 9.4 | 170 |
| Singida | 49.7 | 11.8 | 24.5 | 21.5 | 38.0 | 13.9 | 22.9 | 37.9 | 99 |
| Tabora | 69.9 | 20.3 | 51.6 | 56.6 | 36.1 | 55.8 | 34.8 | 13.7 | 127 |
| Rukwa | 71.0 | 18.3 | 35.2 | 24.7 | 54.4 | 24.7 | 80.2 | 5.1 | 87 |
| Kigoma | 73.0 | 26.1 | 49.2 | 61.2 | 41.0 | 56.8 | 49.9 | 8.6 | 127 |
| Shinyanga | 77.9 | 11.1 | 36.8 | 55.1 | 53.8 | 48.1 | 45.2 | 21.3 | 215 |
| Kagera | 79.0 | 18.7 | 54.2 | 50.7 | 36.8 | 52.8 | 17.0 | 8.4 | 122 |
| Mwanza | 80.1 | 41.0 | 59.1 | 62.8 | 52.6 | 35.3 | 32.2 | 6.9 | 229 |
| Mara | 78.7 | 35.4 | 50.2 | 53.6 | 47.6 | 48.5 | 48.0 | 17.8 | 98 |
| Manyara | 60.9 | 21.3 | 37.9 | 47.4 | 45.3 | 33.6 | 30.2 | 17.5 | 83 |
| Zanzibar North | 68.6 | 39.0 | 28.3 | 48.1 | 39.8 | 34.6 | 51.2 | 12.8 | 11 |
| Zanzibar South | 74.9 | 50.4 | 26.6 | 63.6 | 42.9 | 38.0 | 62.7 | 7.0 | 6 |
| Town West | 71.8 | 62.6 | 47.6 | 54.0 | 52.3 | 29.4 | 58.5 | 15.6 | 36 |
| Pemba North | 83.4 | 19.8 | 16.9 | 36.0 | 40.3 | 29.5 | 31.0 | 15.1 | 13 |
| Pemba South | 68.0 | 40.4 | 34.7 | 17.4 | 16.7 | 12.3 | 14.3 | 29.3 | 12 |
| Education |  |  |  |  |  |  |  |  |  |
| No education | 59.3 | 14.3 | 14.9 | 29.7 | 15.8 | 21.8 | 26.8 | 32.2 | 312 |
| Primary incomplete | 62.2 | 23.7 | 34.9 | 39.6 | 36.3 | 28.9 | 36.2 | 23.1 | 646 |
| Primary complete | 80.3 | 32.9 | 58.9 | 55.1 | 58.3 | 40.6 | 46.7 | 9.0 | 1,381 |
| Secondary+ | 90.2 | 63.5 | 80.8 | 74.2 | 80.9 | 50.6 | 71.9 | 2.5 | 296 |
| Wealth quintile |  |  |  |  |  |  |  |  |  |
| Lowest | 56.9 | 12.0 | 28.5 | 32.0 | 29.1 | 29.8 | 28.6 | 29.8 | 484 |
| Second | 71.6 | 18.8 | 38.3 | 44.3 | 40.5 | 33.5 | 40.8 | 16.1 | 504 |
| Middle | 77.1 | 20.7 | 47.6 | 50.3 | 48.8 | 35.7 | 34.1 | 13.7 | 516 |
| Fourth | 77.9 | 34.5 | 55.0 | 52.4 | 54.7 | 37.1 | 45.2 | 11.3 | 517 |
| Highest | 85.6 | 65.5 | 75.5 | 68.5 | 72.9 | 45.0 | 68.5 | 4.4 | 615 |
| Total | 74.5 | 31.9 | 50.3 | 50.4 | 50.4 | 36.6 | 44.6 | 14.5 | 2,635 |

## Family Planning Dramas

Beginning in 1993, Radio Tanzania Dar es Salaam, the national radio station, started airing two radio soap operas carrying family planning messages. Since then these programmes, Twende na Wakati and Zinduka!, have been improved and other radio dramas carrying reproductive health messages, including family planning and HIV/ AIDS, have been developed and aired.

Tables 5.17 .1 and 5.17 .2 show that in general more men than women listen to these radio dramas. In the six months preceding the survey, 30 percent of women and 43 percent of men had listened to Zinduka! During the same period, 35 percent of women and 56 percent of men had listened to Twende na Wakati. In comparison with data from the 1999 TRCHS, listenership of Zinduka! seems to have dropped off slightly, but more respondents, especially men, report listening to Twenda na Wakati.

Respondents living in urban areas, those with more education, and those living in wealthier households are more likely to have listened to these reproductive health dramas than their counterparts. The differentials for women, however, are much greater than for men.

| Table 5.17.1 Exposure to family planning dramas: women |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Percentage of all women who listened to specific family planning and health programmes on the radio during the six months preceding the interview, by selected background characteristics, Tanzania 2004-05 |  |  |  |  |
| Background characteristic | Zinduka | Twende na Wakati | Other | Number of women |
| Age |  |  |  |  |
| 15-19 | 24.0 | 30.5 | 21.3 | 2,245 |
| 20-24 | 32.1 | 36.6 | 23.2 | 2,007 |
| 25-29 | 35.2 | 40.7 | 25.5 | 1,885 |
| 30-34 | 35.5 | 40.2 | 24.1 | 1,542 |
| 35-39 | 29.9 | 35.3 | 24.1 | 1,053 |
| 40-44 | 29.8 | 32.5 | 21.3 | 834 |
| 45-49 | 23.8 | 28.0 | 17.1 | 763 |
| Residence |  |  |  |  |
| Urban | 45.4 | 49.4 | 31.8 | 2,935 |
| Rural | 24.4 | 29.9 | 19.3 | 7,394 |
| Mainland/Zanzibar |  |  |  |  |
| Mainland | 30.3 | 34.4 | 22.3 | 10,016 |
| Total urban | 46.0 | 49.0 | 31.0 | 2,885 |
| Dar es Salaam city | 44.4 | 48.2 | 21.5 | 969 |
| Other urban | 46.8 | 49.4 | 35.7 | 1,916 |
| Total rural | 23.9 | 28.4 | 18.8 | 7,131 |
| Zanzibar | 33.7 | 70.1 | 39.2 | 313 |
| Unguja | 36.8 | 77.0 | 48.9 | 216 |
| Pemba | 26.8 | 54.6 | 17.4 | 97 |
| Zone |  |  |  |  |
| Western | 18.6 | 23.5 | 20.5 | 1,880 |
| Northern | 35.2 | 41.1 | 27.6 | 1,496 |
| Central | 34.4 | 38.3 | 12.6 | 799 |
| Southern highlands | 28.8 | 33.3 | 18.5 | 1,440 |
| Lake | 22.0 | 24.3 | 23.7 | 1,865 |
| Eastern | 41.7 | 43.9 | 26.7 | 1,670 |
| Southern | 41.9 | 47.8 | 21.0 | 866 |
| Region |  |  |  |  |
| Dodoma | 40.7 | 46.0 | 11.4 | 468 |
| Arusha | 42.8 | 49.0 | 38.3 | 391 |
| Kilimanjaro | 24.7 | 31.7 | 23.0 | 380 |
| Tanga | 40.6 | 46.8 | 25.3 | 431 |
| Morogoro | 37.3 | 37.1 | 30.6 | 449 |
| Pwani | 39.0 | 39.2 | 39.9 | 253 |
| Dar es Salaam | 44.4 | 48.2 | 21.5 | 969 |
| Lindi | 60.7 | 65.0 | 17.6 | 221 |
| Mtwara | 37.9 | 44.8 | 20.5 | 346 |
| Ruvuma | 32.7 | 38.5 | 24.1 | 299 |
| Iringa | 35.5 | 46.1 | 12.6 | 412 |
| Mbeya | 32.5 | 34.9 | 20.0 | 712 |
| Singida | 25.4 | 27.3 | 14.4 | 331 |
| Tabora | 21.0 | 26.6 | 14.9 | 520 |
| Rukwa | 11.7 | 13.2 | 22.8 | 316 |
| Kigoma | 27.9 | 31.5 | 19.9 | 499 |
| Shinyanga | 11.6 | 16.9 | 24.3 | 861 |
| Kagera | 12.4 | 15.8 | 15.4 | 545 |
| Mwanza | 29.4 | 29.4 | 29.8 | 939 |
| Mara | 17.3 | 24.1 | 20.3 | 381 |
| Manyara | 30.7 | 34.3 | 22.9 | 293 |
| Zanzibar North | 27.3 | 83.1 | 52.9 | 48 |
| Zanzibar South | 40.9 | 85.4 | 42.4 | 26 |
| Town West | 39.2 | 73.5 | 48.8 | 143 |
| Pemba North | 27.4 | 54.0 | 19.5 | 52 |
| Pemba South | 26.2 | 55.4 | 15.0 | 45 |
| Education |  |  |  |  |
| No education | 15.4 | 18.1 | 11.1 | 2,503 |
| Primary incomplete | 26.2 | 31.9 | 19.2 | 1,855 |
| Primary complete | 35.9 | 41.2 | 26.7 | 5,086 |
| Secondary+ | 49.8 | 58.7 | 41.4 | 885 |
| Wealth quintile |  |  |  |  |
| Lowest | 12.9 | 15.3 | 9.3 | 1,840 |
| Second | 22.0 | 27.2 | 17.1 | 1,944 |
| Middle | 25.1 | 30.8 | 20.7 | 1,943 |
| Fourth | 38.0 | 45.3 | 28.1 | 2,004 |
| Highest | 47.2 | 51.8 | 34.2 | 2,597 |
| Total | 30.4 | 35.4 | 22.8 | 10,329 |


| Table 5.17.2 Exposure to family planning dramas: men |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Percentage of all men who listened to specific family planning and health programmes on the radio during the six months preceding the interview, by selected background characteristics, Tanzania 2004-05 |  |  |  |  |
| Background characteristic | Zinduka | Twende na Wakati | Other | Number of men |
| Age |  |  |  |  |
| 15-19 | 26.9 | 41.6 | 45.5 | 637 |
| 20-24 | 40.2 | 51.3 | 55.4 | 493 |
| 25-29 | 54.5 | 64.4 | 65.9 | 405 |
| 30-34 | 51.1 | 59.8 | 64.0 | 387 |
| 35-39 | 53.6 | 63.0 | 60.7 | 278 |
| 40-44 | 45.6 | 63.7 | 66.3 | 265 |
| 45-49 | 50.7 | 66.9 | 64.1 | 170 |
| Residence |  |  |  |  |
| Urban | 50.3 | 57.3 | 70.5 | 716 |
| Rural | 40.9 | 55.1 | 53.5 | 1,919 |
| Mainland/Zanzibar |  |  |  |  |
| Mainland | 43.4 | 55.3 | 57.8 | 2,556 |
| Total urban | 50.9 | 57.2 | 70.0 | 716 |
| Dar es Salaam city | 48.9 | 50.0 | 76.1 | 267 |
| Other urban | 52.1 | 61.5 | 66.4 | 450 |
| Total rural | 40.5 | 54.6 | 53.0 | 1,840 |
| Zanzibar | 42.9 | 66.9 | 69.2 | 79 |
| Unguja | 46.7 | 63.2 | 72.4 | 53 |
| Pemba | 35.0 | 74.6 | 62.6 | 26 |
| Zone |  |  |  |  |
| Western | 33.2 | 49.5 | 50.2 | 468 |
| Northern | 35.9 | 42.9 | 38.0 | 362 |
| Central | 41.3 | 54.3 | 34.2 | 212 |
| Southern highlands | 44.8 | 55.6 | 83.5 | 358 |
| Lake | 45.9 | 64.2 | 55.6 | 448 |
| Eastern | 53.7 | 55.5 | 71.5 | 462 |
| Southern | 50.1 | 68.9 | 62.2 | 245 |
| Region |  |  |  |  |
| Dodoma | 51.0 | 64.8 | 44.5 | 113 |
| Arusha | 21.5 | 32.0 | 29.7 | 82 |
| Kilimanjaro | 33.8 | 35.8 | 51.4 | 104 |
| Tanga | 44.2 | 46.5 | 37.4 | 94 |
| Morogoro | 59.8 | 62.1 | 65.1 | 127 |
| Pwani | 61.1 | 64.5 | 65.5 | 68 |
| Dar es Salaam | 48.9 | 50.0 | 76.1 | 267 |
| Lindi | 63.2 | 78.0 | 60.5 | 65 |
| Mtwara | 39.8 | 56.9 | 53.5 | 98 |
| Ruvuma | 51.9 | 76.0 | 73.9 | 83 |
| Iringa | 40.8 | 65.6 | 73.3 | 102 |
| Mbeya | 51.9 | 57.3 | 83.2 | 170 |
| Singida | 30.3 | 42.4 | 22.5 | 99 |
| Tabora | 26.4 | 53.4 | 52.2 | 127 |
| Rukwa | 35.6 | 40.6 | 96.2 | 87 |
| Kigoma | 49.9 | 69.5 | 57.7 | 127 |
| Shinyanga | 27.3 | 35.3 | 44.6 | 215 |
| Kagera | 54.8 | 71.1 | 68.5 | 122 |
| Mwanza | 46.6 | 66.1 | 51.5 | 229 |
| Mara | 33.2 | 51.4 | 49.1 | 98 |
| Manyara | 43.4 | 58.5 | 30.1 | 83 |
| Zanzibar North | 48.8 | 68.1 | 68.2 | 11 |
| Zanzibar South | 48.0 | 70.4 | 77.7 | 6 |
| Town West | 45.8 | 60.4 | 72.7 | 36 |
| Pemba North | 32.2 | 76.7 | 75.5 | 13 |
| Pemba South | 37.9 | 72.4 | 48.6 | 12 |
| Education |  |  |  |  |
| No education | 27.6 | 39.4 | 39.8 | 312 |
| Primary incomplete | 33.9 | 46.9 | 50.0 | 646 |
| Primary complete | 47.9 | 61.3 | 62.1 | 1,381 |
| Secondary+ | 59.9 | 65.5 | 76.3 | 296 |
| Wealth quintile |  |  |  |  |
| Lowest | 23.0 | 36.6 | 37.3 | 484 |
| Second | 47.1 | 60.1 | 53.9 | 504 |
| Middle | 46.4 | 65.3 | 60.9 | 516 |
| Fourth | 45.9 | 60.6 | 64.4 | 517 |
| Highest | 51.9 | 54.9 | 70.3 | 615 |
| Total | 43.4 | 55.7 | 58.1 | 2,635 |

## Mama Ushauri

Mama Ushauri was created to become a new element in the family planning campaign in Tanzania. A witty and wise woman who has the social position to give advice on modern family planning methods, Mama Ushauri can be heard on radio and television spots as well as other forms of media. Table 5.18 shows that three in ten women ( 29 percent) heard a Mama Ushauri message in the six months preceding the survey, the majority from the radio. In terms of background characteristics, exposure to a Mama Ushauri message follows a similar pattern as previous tables on family planning messages.

| Percentage of women who had seen or heard a message about Mama Ushauri in the six months preceding the survey, and of those, the percentage who cited various sources where they heard about Mama Ushauri, by selected background characteristics, Tanzania 2004-05 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Background characteristic | Heard Mama Ushauri message | Number of women | Source of knowledge for women who heard Mama Ushauri message |  |  |  | Number of women |
|  |  |  | Radio | TV | Newspaper | Other |  |
| Age |  |  |  |  |  |  |  |
| 15-19 | 27.5 | 2,245 | 85.9 | 28.0 | 9.4 | 7.8 | 618 |
| 20-24 | 31.8 | 2,007 | 85.5 | 16.7 | 7.4 | 15.8 | 639 |
| 25-29 | 32.1 | 1,885 | 79.4 | 18.8 | 6.1 | 20.8 | 605 |
| 30-34 | 32.8 | 1,542 | 84.0 | 16.7 | 4.1 | 16.9 | 506 |
| 35-39 | 27.7 | 1,053 | 86.1 | 15.8 | 4.6 | 16.3 | 291 |
| 40-44 | 27.1 | 834 | 84.1 | 17.3 | 5.6 | 15.8 | 226 |
| 45-49 | 18.7 | 763 | 84.0 | 12.7 | 0.6 | 10.7 | 143 |
| Residence |  |  |  |  |  |  |  |
| Urban | 46.9 | 2,935 | 79.6 | 36.5 | 9.9 | 15.1 | 1,375 |
| Rural | 22.3 | 7,394 | 87.6 | 4.9 | 3.2 | 15.2 | 1,653 |
| Mainland/Zanzibar |  |  |  |  |  |  |  |
| Mainland | 29.2 | 10,016 | 84.7 | 18.2 | 6.4 | 15.5 | 2,921 |
| Total urban | 46.7 | 2,885 | 81.0 | 35.3 | 10.0 | 15.9 | 1,348 |
| Dar es Salaam city | 49.1 | 969 | 72.0 | 58.4 | 10.8 | 24.0 | 476 |
| Other urban | 45.5 | 1,916 | 85.9 | 22.6 | 9.6 | 11.4 | 872 |
| Total rural | 22.1 | 7,131 | 87.9 | 3.6 | 3.3 | 15.2 | 1,573 |
| Zanzibar | 34.0 | 313 | 64.5 | 47.0 | 2.1 | 4.9 | 107 |
| Unguja | 42.7 | 216 | 61.4 | 51.0 | 2.4 | 5.4 | 92 |
| Pemba | 14.8 | 97 | 84.5 | 20.7 | 0.0 | 1.4 | 14 |
| Zone |  |  |  |  |  |  |  |
| Western | 26.4 | 1,880 | 77.7 | 8.0 | 3.5 | 21.9 | 497 |
| Northern | 30.8 | 1,496 | 89.6 | 15.2 | 4.1 | 9.9 | 461 |
| Central | 23.8 | 799 | 78.9 | 12.7 | 4.7 | 30.4 | 190 |
| Southern highlands | 19.5 | 1,440 | 88.0 | 6.9 | 5.4 | 13.4 | 281 |
| Lake | 34.6 | 1,865 | 97.6 | 4.9 | 9.4 | 3.2 | 646 |
| Eastern | 38.6 | 1,670 | 75.9 | 49.2 | 8.2 | 20.4 | 644 |
| Southern | 23.4 | 866 | 78.2 | 14.5 | 6.9 | 25.4 | 203 |
| Region |  |  |  |  |  |  |  |
| Dodoma | 26.4 | 468 | 86.2 | 14.4 | 4.8 | 23.7 | 124 |
| Arusha | 42.0 | 391 | 87.4 | 26.3 | 5.9 | 9.2 | 164 |
| Kilimanjaro | 32.5 | 380 | 91.4 | 11.3 | 4.9 | 5.5 | 124 |
| Tanga | 24.7 | 431 | 91.0 | 7.7 | 2.2 | 16.4 | 107 |
| Morogoro | 23.4 | 449 | 85.4 | 30.1 | 1.3 | 11.9 | 105 |
| Pwani | 25.0 | 253 | 89.6 | 12.5 | 0.0 | 7.6 | 63 |
| Dar es Salaam | 49.1 | 969 | 72.0 | 58.4 | 10.8 | 24.0 | 476 |
| Lindi | 33.9 | 221 | 83.5 | 28.3 | 9.1 | 15.6 | 75 |
| Mtwara | 18.8 | 346 | 86.2 | 9.1 | 4.4 | 18.2 | 65 |
| Ruvuma | 21.0 | 299 | 63.6 | 3.7 | 7.0 | 44.4 | 63 |
| Iringa | 21.8 | 412 | 84.7 | 8.9 | 12.8 | 29.6 | 90 |
| Mbeya | 22.2 | 712 | 91.3 | 4.4 | 1.8 | 5.7 | 158 |
| Singida | 20.0 | 331 | 65.1 | 9.5 | 4.4 | 43.0 | 66 |
| Tabora | 19.2 | 520 | 65.7 | 8.9 | 7.2 | 34.4 | 100 |
| Rukwa | 10.5 | 316 | (81.8) | (13.8) | (2.4) | (6.3) | 33 |
| Kigoma | 14.8 | 499 | 48.3 | 8.2 | 3.2 | 51.0 | 74 |
| Shinyanga | 37.5 | 861 | 88.1 | 7.7 | 2.5 | 11.4 | 323 |
| Kagera | 23.1 | 545 | 97.8 | 0.0 | 4.4 | 2.2 | 126 |
| Mwanza | 40.9 | 939 | 100.0 | 3.5 | 12.3 | 0.9 | 384 |
| Mara | 35.5 | 381 | 90.7 | 13.4 | 5.7 | 10.5 | 136 |
| Manyara | 22.6 | 293 | 89.6 | 7.2 | 1.2 | 9.7 | 66 |
| Zanzibar North | 28.5 | 48 | 88.8 | 13.6 | 0.0 | 11.1 | 14 |
| Zanzibar South | 42.3 | 26 | 87.3 | 30.4 | 1.8 | 5.1 | 11 |
| Town West | 47.5 | 143 | 51.8 | 61.9 | 3.0 | 4.3 | 68 |
| Pemba North | 18.1 | 52 | 88.2 | 18.5 | 0.0 | 0.9 | 9 |
| Pemba South | 10.9 | 45 | (77.6) | (25.0) | (0.0) | (2.4) | 5 |
| Continued... |  |  |  |  |  |  |  |


| Table 5.18-Continued |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percentage of women who had seen or heard a message about Mama Ushauri in the six months preceding the survey, and of those, the percentage who cited various sources where they heard about Mama Ushauri, by selected background characteristics, Tanzania 2004-05 |  |  |  |  |  |  |  |
| Background characteristic | Heard Mama Ushauri message | Number of women | Source of knowledge for women who heard$\qquad$ Mama Ushauri message |  |  |  | Number of women |
|  |  |  | Radio | TV | Newspaper | Other |  |
| Education |  |  |  |  |  |  |  |
| No education | 14.5 | 2,503 | 86.5 | 4.7 | 1.3 | 15.4 | 363 |
| Primary incomplete | 24.5 | 1,855 | 84.9 | 11.9 | 5.0 | 12.9 | 455 |
| Primary complete | 33.6 | 5,086 | 85.1 | 16.2 | 6.2 | 16.7 | 1,710 |
| Secondary+ | 56.5 | 885 | 77.6 | 46.7 | 11.2 | 11.7 | 500 |
| Number of living children |  |  |  |  |  |  |  |
| 0 | 31.0 | 2,705 | 82.2 | 32.6 | 10.0 | 8.4 | 839 |
| 1-2 | 31.8 | 3,348 | 84.3 | 16.8 | 5.5 | 18.2 | 1,066 |
| 3-4 | 29.0 | 2,269 | 85.3 | 15.2 | 5.5 | 16.2 | 658 |
| $5+$ | 23.2 | 2,007 | 84.6 | 6.5 | 2.4 | 18.9 | 465 |
| Wealth quintile |  |  |  |  |  |  |  |
| Lowest | 10.6 | 1,840 | 76.9 | 4.5 | 1.4 | 25.6 | 194 |
| Second | 19.4 | 1,944 | 87.5 | 2.6 | 3.8 | 14.1 | 378 |
| Middle | 24.8 | 1,943 | 88.8 | 3.3 | 2.2 | 14.8 | 482 |
| Fourth | 33.2 | 2,004 | 88.5 | 4.7 | 3.8 | 14.9 | 665 |
| Highest | 50.4 | 2,597 | 79.9 | 39.5 | 10.5 | 14.2 | 1,309 |
| Total | 29.3 | 10,329 | 84.0 | 19.2 | 6.3 | 15.1 | 3,028 |
| Note: Figures in parentheses are based on 25-49 unweighted cases. |  |  |  |  |  |  |  |

### 5.11 Contact of Nonusers with Family Planning Providers

In the 2004-05 TDHS survey, women who were not using contraception were asked whether a family planning worker had visited and talked to them in the past 12 months. They were also asked whether they had attended a health facility during the past year, and if so, whether a staff person at that facility spoke to them about family planning methods. This information is presented in Table 5.19 and it is important for determining whether family planning initiatives in Tanzania are reaching nonusers of family planning.

Table 5.19 shows that one-fifth of women who are nonusers had contacts with health workers who discussed family planning. Seventeen percent of nonusers visited a health facility and discussed family planning with a provider, but only 3 percent of nonusers reported that they were visited by a family planning service provider at home. Almost one-third of women (31 percent) reported visiting a health facility but not speaking with staff about family planning during the visit. This is an indication of missed opportunities for increasing family planning acceptance and use.

Surprisingly, educational attainment and a higher score on the wealth index are not correlated with greater exposure to family planning providers. Furthermore, there is little variation by residence.

| Table 5.19 Contact of nonusers with family planning providers |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Percentage of women who are not using contraception who were visited by a fieldworker who discussed family planning, who visited a health facility and discussed family planning, and who visited a health facility but did not discuss family planning, in the 12 months preceding the survey, by background characteristics, Tanzania 2004-05 |  |  |  |  |  |
| Background characteristic | Visited by fieldworker who discussed family planning | Visited health facility and discussed family planning | Visited health facility didn't discuss family planning | Did not discuss family planning with fieldworker or at a health facility | Number of women |
| Age |  |  |  |  |  |
| 15-19 | 1.2 | 6.7 | 22.5 | 92.4 | 2,098 |
| 20-24 | 3.8 | 21.9 | 35.2 | 76.2 | 1,522 |
| 25-29 | 2.2 | 25.9 | 35.8 | 73.2 | 1,307 |
| 30-34 | 3.0 | 22.1 | 40.2 | 76.5 | 1,075 |
| 35-39 | 2.6 | 22.4 | 33.6 | 76.6 | 744 |
| 40-44 | 4.7 | 18.2 | 31.4 | 79.7 | 649 |
| 45-49 | 2.1 | 10.3 | 22.2 | 88.9 | 617 |
| Residence |  |  |  |  |  |
| Urban | 3.1 | 15.6 | 33.3 | 82.6 | 1,952 |
| Rural | 2.4 | 18.0 | 30.5 | 80.9 | 6,058 |
| Mainland/Zanzibar |  |  |  |  |  |
| Mainland | 2.5 | 17.5 | 30.8 | 81.3 | 7,730 |
| Total urban | 3.0 | 15.9 | 32.6 | 82.5 | 1,905 |
| Dar es Salaam city | 2.0 | 9.5 | 32.7 | 88.5 | 618 |
| Other urban | 3.4 | 19.0 | 32.5 | 79.6 | 1,287 |
| Total rural | 2.4 | 18.0 | 30.3 | 80.9 | 5,825 |
| Zanzibar | 3.9 | 15.6 | 40.6 | 81.9 | 280 |
| Unguja | 5.3 | 18.2 | 44.3 | 78.5 | 188 |
| Pemba | 1.1 | 10.4 | 33.3 | 88.9 | 92 |
| Zone |  |  |  |  |  |
| Western | 2.6 | 19.7 | 32.0 | 78.7 | 1,672 |
| Northern | 2.5 | 9.7 | 38.0 | 88.9 | 1,001 |
| Central | 2.7 | 23.6 | 26.1 | 75.6 | 652 |
| Southern highlands | 2.4 | 12.3 | 21.4 | 86.6 | 1,029 |
| Lake | 2.6 | 18.0 | 28.1 | 81.4 | 1,643 |
| Eastern | 2.3 | 18.1 | 30.7 | 80.3 | 1,130 |
| Southern | 2.3 | 24.1 | 44.8 | 74.3 | 603 |
| Region |  |  |  |  |  |
| Dodoma | 3.4 | 29.0 | 22.2 | 70.2 | 376 |
| Arusha | 1.5 | 9.0 | 31.2 | 89.8 | 254 |
| Kilimanjaro | 2.9 | 8.6 | 44.0 | 90.1 | 249 |
| Tanga | 4.0 | 12.1 | 43.4 | 86.1 | 275 |
| Morogoro | 2.1 | 27.6 | 25.9 | 71.1 | 315 |
| Pwani | 3.3 | 30.1 | 32.3 | 69.1 | 198 |
| Dar es Salaam | 2.0 | 9.5 | 32.7 | 88.5 | 618 |
| Lindi | 1.8 | 23.9 | 41.0 | 75.3 | 152 |
| Mtwara | 2.4 | 25.9 | 46.8 | 72.1 | 264 |
| Ruvuma | 2.6 | 21.8 | 45.0 | 76.5 | 186 |
| Iringa | 4.3 | 25.1 | 31.6 | 73.7 | 297 |
| Mbeya | 2.1 | 6.2 | 14.6 | 92.6 | 461 |
| Singida | 1.9 | 16.2 | 31.3 | 82.8 | 276 |
| Tabora | 2.2 | 17.7 | 24.0 | 80.7 | 471 |
| Rukwa | 0.9 | 8.7 | 21.7 | 90.7 | 271 |
| Kigoma | 2.3 | 23.3 | 30.4 | 75.7 | 427 |
| Shinyanga | 3.1 | 18.9 | 37.7 | 79.2 | 774 |
| Kagera | 2.0 | 22.7 | 23.0 | 76.7 | 468 |
| Mwanza | 2.9 | 16.9 | 28.2 | 82.7 | 835 |
| Mara | 2.8 | 14.1 | 34.9 | 84.4 | 340 |
| Manyara | 1.3 | 8.9 | 32.4 | 90.1 | 223 |
| Zanzibar North | 3.4 | 22.0 | 38.8 | 76.3 | 45 |
| Zanzibar South | 8.1 | 13.3 | 39.3 | 81.3 | 22 |
| Town West | 5.5 | 17.6 | 47.2 | 78.8 | 121 |
| Pemba North | 0.7 | 13.2 | 36.4 | 86.8 | 49 |
| Pemba South | 1.5 | 7.1 | 29.6 | 91.4 | 43 |
| Education |  |  |  |  |  |
| No education | 1.8 | 15.6 | 26.7 | 83.5 | 2,200 |
| Primary incomplete | 2.1 | 13.5 | 29.3 | 85.4 | 1,548 |
| Primary complete | 3.1 | 20.7 | 33.4 | 77.9 | 3,659 |
| Secondary+ | 3.6 | 14.2 | 38.8 | 83.4 | 603 |
| Wealth quintile |  |  |  |  |  |
| Lowest | 2.1 | 17.0 | 28.1 | 82.1 | 1,589 |
| Second | 1.6 | 17.1 | 31.6 | 81.9 | 1,632 |
| Middle | 2.4 | 19.4 | 29.9 | 79.5 | 1,580 |
| Fourth | 3.6 | 20.2 | 32.5 | 78.1 | 1,520 |
| Highest | 3.3 | 13.8 | 33.7 | 84.5 | 1,689 |
| Total | 2.6 | 17.4 | 31.2 | 81.3 | 8,010 |

### 5.12 Discussion about Family Planning with Husband

Although discussion between couples about contraceptive use is not a precondition for adoption of contraception, its absence may be an impediment to use. Interspousal communication is thus an important intermediate step along the path to eventual adoption and especially continuation of contraceptive use. Lack of discussion may reflect a lack of personal interest, hostility to the subject, or customary reticence in talking about sex-related matters. To explore this subject, married women interviewed in the 2004-05 TDHS survey were asked about the number of times family planning was discussed with their husband in the 12 months preceding the survey.

Table 5.20 presents information on currently married women who know a contraceptive method by the number of times they discussed family planning with their husbands in the past year, according to age. The majority ( 65 percent) reported at least one discussion. This is higher than the 1999 TRCHS, in which 57 percent reported having had a discussion. Women in their prime childbearing years were the most likely to have had multiple discussions about family planning with their husbands. One-third of women reported that they never discussed family planning with their husbands. The youngest and the oldest women were the least likely to have had a discussion about family planning.

| Percent distribution of currently married women who know a contraceptive method by the number of times they discussed family planning with their husband in the past year, according to current age, Tanzania 2004-05 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | er of time scussed | amily plan husband |  |  | Number |
| Age | Never | One or two | Three or more | Missing | Total | of women |
| 15-19 | 49.6 | 31.4 | 18.0 | 1.0 | 100.0 | 548 |
| 20-24 | 32.0 | 31.8 | 35.0 | 1.2 | 100.0 | 1,361 |
| 25-29 | 25.5 | 30.9 | 42.5 | 1.2 | 100.0 | 1,498 |
| 30-34 | 29.3 | 25.8 | 43.9 | 0.9 | 100.0 | 1,279 |
| 35-39 | 36.1 | 25.4 | 37.6 | 0.9 | 100.0 | 877 |
| 40-44 | 39.6 | 23.0 | 36.8 | 0.5 | 100.0 | 678 |
| 45-49 | 47.9 | 20.8 | 31.0 | 0.2 | 100.0 | 560 |
| Total | 34.1 | 27.8 | 37.2 | 0.9 | 100.0 | 6,801 |

### 5.13 Attitudes towards Family Planning

When couples have a positive attitude towards family planning, they are more likely to adopt a family planning method. In the 2004-05 TDHS, married women were asked whether they approved of family planning and what they perceived as their husband's attitude towards family planning. This information is shown in Table 5.21 and it is important in the formulation of family planning policies because it indicates the extent to which further education and publicity are needed to increase acceptance of family planning.

More than 8 in 10 married women ( 86 percent) who know of a contraceptive method approve of family planning. The majority of those who approve, which is 60 percent of all respondents, reported that their husbands also approve of family planning. However, 16 percent of women who themselves approve say that their husbands disapprove. Among the 12 percent of those interviewed who disapprove of family planning, almost all reported that their husbands also disapprove of family planning.

Education plays a significant role in approval of family planning. Eighty-four percent of women with at least some secondary education reported that both they and their husbands approve of family planning. This is two times the proportion of women with no education (41 percent). Approval of family planning is also higher among those living in wealthier households.

As expected, those respondents living in urban areas are more likely than those in rural areas to report approval. There is significant regional variation in approval of family planning. The proportion of women reporting that both they and their husbands approve of family planning ranges from a high of 81 percent in Ruvuma to a low of 28 percent in Pemba South.

| Table 5.21 Attitudes towards family planning |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percent distribution of currently married women who know of a method of family planning (FP), by approval of family planning and their perception of their husband's attitude towards family planning, according to background characteristics, Tanzania 2004-05 |  |  |  |  |  |  |  |  |  |
|  | Respondent approves of family planning |  |  | Respondent disapproves of family planning |  |  | Respondent unsure ${ }^{1}$ | Total | Number of women |
| Background characteristic | Husband approves | Husband disapproves | $\begin{gathered} \text { Husband's } \\ \text { attitude } \\ \text { unknown/ } \\ \text { missing } \\ \hline \end{gathered}$ | Husband approves | Husband disapproves | Husband's attitude unknown/ missing |  |  |  |
| Age |  |  |  |  |  |  |  |  |  |
| 15-19 | 52.5 | 12.8 | 19.6 | 1.2 | 6.4 | 4.0 | 3.5 | 100.0 | 548 |
| 20-24 | 62.7 | 15.3 | 9.8 | 0.8 | 7.2 | 1.9 | 2.2 | 100.0 | 1,361 |
| 25-29 | 68.7 | 14.9 | 6.9 | 1.0 | 6.1 | 1.3 | 1.1 | 100.0 | 1,498 |
| 30-34 | 63.4 | 15.7 | 7.6 | 1.4 | 8.9 | 1.6 | 1.4 | 100.0 | 1,279 |
| 35-39 | 55.2 | 17.7 | 11.5 | 1.0 | 8.4 | 2.0 | 4.2 | 100.0 | 877 |
| 40-44 | 52.3 | 17.4 | 11.4 | 1.1 | 12.8 | 2.6 | 2.3 | 100.0 | 678 |
| 45-49 | 44.6 | 18.5 | 13.7 | 1.0 | 14.9 | 2.2 | 5.1 | 100.0 | 560 |
| Residence |  |  |  |  |  |  |  |  |  |
| Urban | 74.3 | 11.5 | 7.1 | 1.0 | 4.0 | 0.6 | 1.4 | 100.0 | 1,642 |
| Rural | 55.2 | 17.3 | 11.2 | 1.1 | 10.0 | 2.4 | 2.7 | 100.0 | 5,159 |
| Mainland/Zanzibar |  |  |  |  |  |  |  |  |  |
| Mainland | 60.1 | 15.8 | 10.2 | 1.1 | 8.5 | 2.0 | 2.4 | 100.0 | 6,622 |
| Total urban | 74.1 | 11.6 | 6.9 | 1.0 | 4.5 | 0.6 | 1.3 | 100.0 | 1,639 |
| Dar es Salaam city | 74.6 | 13.1 | 5.7 | 0.8 | 3.9 | 1.1 | 0.8 | 100.0 | 538 |
| Other urban | 73.8 | 10.8 | 7.5 | 1.1 | 4.8 | 0.4 | 1.6 | 100.0 | 1,101 |
| Total rural | 55.5 | 17.1 | 11.2 | 1.1 | 9.8 | 2.4 | 2.8 | 100.0 | 4,983 |
| Zanzibar | 49.4 | 20.3 | 12.8 | 1.9 | 10.2 | 3.3 | 2.1 | 100.0 | 179 |
| Unguja | 56.1 | 18.8 | 11.7 | 1.1 | 7.3 | 3.2 | 1.9 | 100.0 | 123 |
| Pemba | 34.7 | 23.7 | 15.2 | 3.6 | 16.6 | 3.4 | 2.8 | 100.0 | 56 |
| Zone |  |  |  |  |  |  |  |  |  |
| Western | 46.5 | 15.6 | 17.4 | 1.7 | 10.4 | 3.9 | 4.5 | 100.0 | 1,297 |
| Northern | 64.8 | 12.0 | 9.7 | 0.9 | 7.5 | 2.2 | 2.8 | 100.0 | 933 |
| Central | 52.9 | 19.2 | 7.5 | 1.1 | 14.6 | 3.8 | 0.9 | 100.0 | 531 |
| Southern highlands | 64.0 | 14.1 | 5.5 | 0.8 | 10.7 | 1.7 | 3.1 | 100.0 | 992 |
| Lake | 60.5 | 21.3 | 9.7 | 0.9 | 4.8 | 0.7 | 2.1 | 100.0 | 1,263 |
| Eastern | 67.0 | 13.3 | 8.9 | 1.2 | 7.6 | 0.9 | 1.1 | 100.0 | 1,024 |
| Southern | 69.7 | 14.1 | 8.1 | 0.2 | 6.4 | 0.7 | 0.7 | 100.0 | 581 |
| Region |  |  |  |  |  |  |  |  |  |
| Dodoma | 58.9 | 19.5 | 6.2 | 0.8 | 12.2 | 1.9 | 0.4 | 100.0 | 330 |
| Arusha | 72.1 | 8.9 | 8.7 | 1.3 | 5.6 | 2.1 | 1.4 | 100.0 | 231 |
| Kilimanjaro | 71.2 | 6.1 | 10.2 | 0.0 | 7.4 | 2.4 | 2.7 | 100.0 | 214 |
| Tanga | 62.2 | 13.8 | 9.7 | 1.8 | 8.8 | 1.3 | 2.4 | 100.0 | 290 |
| Morogoro | 61.3 | 13.5 | 11.0 | 0.9 | 11.5 | 1.0 | 0.9 | 100.0 | 310 |
| Pwani | 53.5 | 13.8 | 15.1 | 2.8 | 12.1 | 0.3 | 2.3 | 100.0 | 176 |
| Dar es Salaam | 74.6 | 13.1 | 5.7 | 0.8 | 3.9 | 1.1 | 0.8 | 100.0 | 538 |
| Lindi | 70.6 | 12.4 | 7.7 | 0.8 | 7.7 | 0.8 | 0.0 | 100.0 | 154 |
| Mtwara | 60.1 | 21.4 | 11.9 | 0.0 | 4.8 | 0.4 | 1.3 | 100.0 | 234 |
| Ruvuma | 80.7 | 6.7 | 3.9 | 0.0 | 7.3 | 0.9 | 0.5 | 100.0 | 193 |
| Iringa | 62.7 | 10.0 | 6.1 | 1.4 | 17.5 | 1.8 | 0.4 | 100.0 | 251 |
| Mbeya | 68.6 | 15.0 | 4.2 | 0.4 | 5.7 | 1.8 | 4.2 | 100.0 | 519 |
| Singida | 43.0 | 18.7 | 9.7 | 1.5 | 18.6 | 6.7 | 1.8 | 100.0 | 202 |
| Tabora | 41.4 | 20.4 | 11.6 | 1.1 | 17.7 | 3.4 | 4.4 | 100.0 | 384 |
| Rukwa | 54.8 | 16.3 | 7.8 | 1.3 | 14.9 | 1.6 | 3.4 | 100.0 | 223 |
| Kigoma | 54.6 | 16.7 | 10.4 | 2.3 | 10.5 | 2.7 | 2.9 | 100.0 | 312 |
| Shinyanga | 45.5 | 12.0 | 24.7 | 1.9 | 5.6 | 4.9 | 5.3 | 100.0 | 601 |
| Kagera | 77.6 | 9.8 | 9.2 | 0.7 | 1.2 | 0.0 | 1.6 | 100.0 | 387 |
| Mwanza | 56.9 | 29.4 | 6.4 | 0.6 | 5.0 | 0.0 | 1.6 | 100.0 | 628 |
| Mara | 43.1 | 18.7 | 18.8 | 2.0 | 9.9 | 3.4 | 4.1 | 100.0 | 248 |
| Manyara | 53.4 | 19.4 | 10.4 | 0.0 | 8.2 | 3.4 | 5.1 | 100.0 | 197 |
| Zanzibar North | 40.8 | 17.4 | 16.0 | 1.2 | 15.5 | 6.8 | 2.3 | 100.0 | 28 |
| Zanzibar South | 64.0 | 18.8 | 6.6 | 1.8 | 5.0 | 2.0 | 1.8 | 100.0 | 17 |
| Town West | 60.0 | 19.3 | 11.2 | 1.0 | 4.8 | 2.1 | 1.7 | 100.0 | 78 |
| Pemba North | 40.6 | 22.0 | 19.3 | 3.2 | 8.9 | 4.5 | 1.6 | 100.0 | 31 |
| Pemba South | 27.5 | 25.8 | 10.2 | 4.1 | 26.0 | 2.1 | 4.2 | 100.0 | 25 |
|  |  |  |  |  |  |  |  |  | ontinued... |

## Table 5.21-Continued

Percent distribution of currently married women who know of a method of family planning (FP), by approval of family planning and their perception of their husband's attitude towards family planning, according to background characteristics, Tanzania 2004-05

| Background characteristic | Respondent approves of family planning |  |  | Respondent disapproves of family planning |  |  | Respondent unsure ${ }^{1}$ | Total | $\begin{gathered} \text { Number } \\ \text { of } \\ \text { women } \\ \hline \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Husband approves | Husband disapproves | Husband's attitude unknown/ missing | Husband approves | Husband disapproves | Husband's attitude unknown/ missing |  |  |  |
| Education |  |  |  |  |  |  |  |  |  |
| No education | 40.5 | 20.4 | 15.6 | 1.0 | 14.8 | 3.6 | 4.1 | 100.0 | 1,873 |
| Primary incomplete | 56.5 | 17.1 | 10.6 | 1.4 | 8.1 | 2.5 | 3.7 | 100.0 | 1,054 |
| Primary complete | 68.6 | 14.0 | 7.9 | 1.0 | 6.0 | 1.2 | 1.3 | 100.0 | 3,500 |
| Secondary+ | 83.5 | 6.8 | 4.3 | 1.1 | 3.1 | 0.5 | 0.7 | 100.0 | 374 |
| Wealth quintile |  |  |  |  |  |  |  |  |  |
| Lowest | 42.0 | 21.1 | 12.5 | 1.1 | 14.9 | 3.6 | 4.9 | 100.0 | 1,280 |
| Second | 51.8 | 18.5 | 12.5 | 1.5 | 10.1 | 2.7 | 2.8 | 100.0 | 1,372 |
| Middle | 59.5 | 15.9 | 11.7 | 1.0 | 7.9 | 1.6 | 2.3 | 100.0 | 1,352 |
| Fourth | 65.1 | 15.4 | 8.8 | 0.9 | 6.5 | 1.5 | 1.7 | 100.0 | 1,359 |
| Highest | 78.6 | 9.1 | 6.0 | 0.9 | 4.0 | 0.7 | 0.7 | 100.0 | 1,438 |
| Total | 59.8 | 15.9 | 10.2 | 1.1 | 8.6 | 2.0 | 2.4 | 100.0 | 6,801 |
| ${ }^{1}$ Includes missing |  |  |  |  |  |  |  |  |  |

This chapter addresses the principal factors, other than contraception, which affect a woman's risk of becoming pregnant. These factors include marriage, polygyny, sexual activity, postpartum amenorrhoea, abstinence from sexual activity, and onset of menopause. Direct measures of the beginning of exposure to pregnancy and the level of exposure are also measured in this chapter.

### 6.1 Current Marital Status

Marriage is a primary indication of the regular exposure of women to the risk of pregnancy and therefore is important for the understanding of fertility. Populations in which age at first marriage is low tend to have early childbearing and high fertility.

Table 6.1 presents the percent distribution of women by marital status, according to age. The term "married" refers to legal or formal marriage, while "living together" designates an informal union in which a man and a woman live together, even if a formal civil or religious ceremony has not occurred. In later tables that do not list "living together" as a separate category, these women are included in the "currently married" group. Respondents who are currently married, widowed, divorced, or separated are referred to as "ever married."

| Table 6.1 Current marital status |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percent distribution of women and men by current marital status, according to age, Tanzania 2004-05 |  |  |  |  |  |  |  |  |
|  | Marital status |  |  |  |  |  |  |  |
| Age | Never married | Married | Living together | Divorced | Separated | Widowed | Total | Number of women/men |
| WOMEN |  |  |  |  |  |  |  |  |
| 15-19 | 72.1 | 21.9 | 4.3 | 0.6 | 1.0 | 0.0 | 100.0 | 2,245 |
| 20-24 | 23.8 | 59.6 | 10.2 | 3.0 | 3.0 | 0.4 | 100.0 | 2,007 |
| 25-29 | 9.0 | 68.1 | 12.1 | 5.3 | 4.0 | 1.6 | 100.0 | 1,885 |
| 30-34 | 4.2 | 75.9 | 7.9 | 5.4 | 3.6 | 3.0 | 100.0 | 1,542 |
| 35-39 | 1.5 | 72.4 | 11.6 | 5.4 | 4.2 | 5.0 | 100.0 | 1,053 |
| 40-44 | 0.8 | 74.4 | 8.8 | 6.7 | 4.6 | 4.8 | 100.0 | 834 |
| 45-49 | 2.4 | 67.6 | 8.4 | 7.4 | 2.5 | 11.7 | 100.0 | 763 |
| Total | 23.0 | 58.5 | 8.8 | 4.1 | 3.1 | 2.6 | 100.0 | 10,329 |
| MEN |  |  |  |  |  |  |  |  |
| 15-19 | 98.7 | 0.9 | 0.2 | 0.0 | 0.2 | 0.0 | 100.0 | 637 |
| 20-24 | 65.4 | 26.1 | 3.5 | 0.5 | 4.3 | 0.2 | 100.0 | 493 |
| 25-29 | 25.0 | 61.4 | 8.5 | 0.5 | 4.7 | 0.0 | 100.0 | 405 |
| 30-34 | 8.7 | 73.8 | 10.3 | 0.6 | 6.0 | 0.6 | 100.0 | 387 |
| 35-39 | 3.4 | 82.6 | 7.2 | 0.6 | 5.1 | 1.3 | 100.0 | 278 |
| 40-44 | 1.4 | 83.9 | 6.4 | 2.5 | 5.1 | 0.8 | 100.0 | 265 |
| 45-49 | 0.0 | 84.4 | 4.4 | 1.5 | 8.3 | 1.4 | 100.0 | 170 |
| Total | 41.7 | 48.0 | 5.2 | 0.7 | 4.0 | 0.4 | 100.0 | 2,635 |

A total of 23 percent of women age 15-49 have never married, 59 percent are married, 9 percent are living together, 4 percent are divorced, and 3 percent each are separated or widowed. Onequarter of women age 15-19 are married or living together. Almost 2 percent of women age 15-19 are divorced or separated. The proportion of women who are currently married or living together increases with age up to 84 percent in the 30-34 age group and then decreases to 76 percent of women age 45-49. As expected, the proportion of women who are widowed or divorced increases with age.

A review of the results from the 1999 TRCHS and the 2003-04 THIS shows there has been little change in current marital status between the surveys.

Figure 6.1 shows that compared with women, men are more likely to have never married ( 42 percent of men and 23 percent of women). This difference is largely explained by the tendency of men to marry at later ages. For example, 70 percent of women between the ages of 20 and 24 are in union, compared with only 30 percent of men of the same age. However, men age 35 and over are more likely to be currently married than women in the same age group.

Figure 6.1 Marital Status of Respondents


Note: Totals may not add to 100 percent because of rounding.
TDHS 2004-05

### 6.2 Polygyny

Polygyny (having more than one wife) is common in Africa and has implications for frequency of sexual activity and fertility. Table 6.2 shows the percent distribution of currently married women by number of cowives according to the background characteristics. Polygyny was measured by asking all currently married female respondents whether their husbands or partners had other wives, and if so, how many. About one-fourth of currently married women are in polygynous unions, representing a slight decline since the 1996 TDHS when 29 percent were in polygynous unions.

The level of polygyny increases with age. For example, 12 percent of currently married women age 15-19 are in a polygynous union compared with 35 percent of those age 45-49. Rural women, women with less education, and those from lower wealth quintiles are more likely than other women to be in polygynous unions. Regional differences are marked: 34 percent of married women in Zanzibar North and Mara regions are in polygynous unions, compared with less than 8 percent of women in Dar es Salaam.

Data on polygynous unions among currently married men are also given in Table 6.2. One in ten men age 15-49 are in polygynous unions. This proportion varies by background characteristics. Similar to women, older men, those living in rural areas, and those with less education are more likely to be in polygynous unions. Men in Zanzibar are more likely to be in a polygynous union (18 percent) than men in the Mainland (10 percent).

| Table 6.2 Number of cowives and wives |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percent distribution of currently married women by number of cowives, and percent distribution of currently married men by number of wives, according to background characteristics, Tanzania 2004-05-05 |  |  |  |  |  |  |  |  |  |  |  |
| Background characteristic | Women |  |  |  |  |  |  |  | Men |  |  |
|  | Number of cowives |  |  |  | Total | Number of women | Number of wives |  |  | Total | Number of men |
|  | 0 | 1 | $2+$ | Missing |  |  | 1 | $2+$ | Missing |  |  |
| Age |  |  |  |  |  |  |  |  |  |  |  |
| 15-19 | 86.5 | 9.2 | 2.4 | 1.9 | 100.0 | 590 | * | * | * | 100.0 | 7 |
| 20-24 | 84.3 | 11.9 | 2.8 | 1.0 | 100.0 | 1,400 | 97.1 | 2.9 | 0.0 | 100.0 | 146 |
| 25-29 | 78.5 | 17.7 | 3.0 | 0.8 | 100.0 | 1,511 | 95.6 | 4.0 | 0.4 | 100.0 | 283 |
| 30-34 | 76.2 | 17.2 | 5.7 | 0.9 | 100.0 | 1,292 | 86.9 | 13.1 | 0.0 | 100.0 | 326 |
| 35-39 | 66.8 | 24.8 | 7.4 | 1.0 | 100.0 | 884 | 88.5 | 10.8 | 0.8 | 100.0 | 249 |
| 40-44 | 67.6 | 22.2 | 9.3 | 1.0 | 100.0 | 694 | 81.8 | 14.7 | 3.5 | 100.0 | 239 |
| 45-49 | 64.0 | 25.5 | 9.9 | 0.6 | 100.0 | 580 | 84.4 | 13.1 | 2.5 | 100.0 | 151 |
| Residence |  |  |  |  |  |  |  |  |  |  |  |
| Urban | 84.8 | 11.6 | 1.8 | 1.8 | 100.0 | 1,647 | 97.2 | 2.8 | 0.0 | 100.0 | 322 |
| Rural | 73.5 | 19.6 | 6.2 | 0.7 | 100.0 | 5,303 | 86.5 | 12.1 | 1.4 | 100.0 | 1,078 |
| Mainland/Zanzibar |  |  |  |  |  |  |  |  |  |  |  |
| Mainland | 76.3 | 17.6 | 5.2 | 1.0 | 100.0 | 6,769 | 89.1 | 9.8 | 1.1 | 100.0 | 1,365 |
| Total urban | 85.4 | 11.0 | 1.7 | 1.9 | 100.0 | 1,644 | 97.9 | 2.1 | 0.0 | 100.0 | 323 |
| Dar es Salaam city | 88.0 | 6.5 | 1.2 | 4.3 | 100.0 | 541 | (100.0) | (0.0) | (0.0) | 100.0 | 106 |
| Other urban | 84.0 | 13.3 | 1.9 | 0.8 | 100.0 | 1,103 | 96.9 | 3.1 | 0.0 | 100.0 | 217 |
| Total rural | 73.4 | 19.6 | 6.3 | 0.7 | 100.0 | 5,125 | 86.4 | 12.2 | 1.4 | 100.0 | 1,043 |
| Zanzibar | 71.3 | 24.4 | 3.8 | 0.5 | 100.0 | 182 | 81.0 | 18.0 | 0.9 | 100.0 | 35 |
| Unguja | 71.4 | 24.8 | 3.0 | 0.7 | 100.0 | 123 | 81.0 | 19.0 | 0.0 | 100.0 | 23 |
| Pemba | 70.9 | 23.6 | 5.3 | 0.2 | 100.0 | 58 | 81.1 | 16.2 | 2.7 | 100.0 | 12 |
| Zone |  |  |  |  |  |  |  |  |  |  |  |
| Western | 70.4 | 21.2 | 7.5 | 0.8 | 100.0 | 1,341 | 86.5 | 10.7 | 2.7 | 100.0 | 259 |
| Northern | 79.0 | 12.8 | 7.0 | 1.3 | 100.0 | 951 | 90.8 | 8.1 | 1.0 | 100.0 | 198 |
| Central | 77.4 | 17.7 | 4.0 | 0.9 | 100.0 | 552 | 88.5 | 11.5 | 0.0 | 100.0 | 117 |
| Southern highlands | 73.4 | 20.6 | 5.5 | 0.5 | 100.0 | 1,013 | 83.9 | 15.3 | 0.8 | 100.0 | 203 |
| Lake | 73.2 | 21.5 | 4.9 | 0.4 | 100.0 | 1,300 | 88.0 | 10.9 | 1.2 | 100.0 | 263 |
| Eastern | 85.7 | 10.4 | 1.6 | 2.3 | 100.0 | 1,027 | 96.3 | 3.7 | 0.0 | 100.0 | 198 |
| Southern | 79.7 | 15.2 | 4.4 | 0.7 | 100.0 | 584 | 91.9 | 7.3 | 0.8 | 100.0 | 128 |
| Region |  |  |  |  |  |  |  |  |  |  |  |
| Dodoma | 80.0 | 14.9 | 4.3 | 0.8 | 100.0 | 333 | 94.6 | 5.4 | 0.0 | 100.0 | 66 |
| Arusha | 79.1 | 7.8 | 12.0 | 1.1 | 100.0 | 243 | 91.3 | 4.7 | 4.0 | 100.0 | 50 |
| Kilimanjaro | 88.6 | 6.9 | 2.7 | 1.8 | 100.0 | 214 | (97.6) | (2.4) | (0.0) | 100.0 | 46 |
| Tanga | 75.2 | 20.9 | 2.1 | 1.8 | 100.0 | 291 | (80.3) | (19.7) | (0.0) | 100.0 | 56 |
| Morogoro | 84.4 | 13.7 | 1.9 | 0.0 | 100.0 | 311 | (95.5) | (4.5) | (0.0) | 100.0 | 54 |
| Pwani | 80.4 | 16.9 | 2.6 | 0.0 | 100.0 | 176 | 87.5 | 12.5 | 0.0 | 100.0 | 38 |
| Dar es Salaam | 88.0 | 6.5 | 1.2 | 4.3 | 100.0 | 541 | (100.0) | (0.0) | (0.0) | 100.0 | 106 |
| Lindi | 82.3 | 13.5 | 3.0 | 1.3 | 100.0 | 156 | 94.8 | 5.2 | 0.0 | 100.0 | 34 |
| Mtwara | 72.9 | 19.2 | 7.1 | 0.9 | 100.0 | 235 | 88.2 | 10.1 | 1.6 | 100.0 | 58 |
| Ruvuma | 85.9 | 11.9 | 2.2 | 0.0 | 100.0 | 193 | (95.2) | (4.8) | (0.0) | 100.0 | 35 |
| Iringa | 80.4 | 13.7 | 5.0 | 1.0 | 100.0 | 254 | 94.2 | 5.8 | 0.0 | 100.0 | 65 |
| Mbeya | 69.1 | 23.2 | 7.4 | 0.3 | 100.0 | 526 | 75.3 | 22.9 | 1.8 | 100.0 | 94 |
| Singida | 73.5 | 21.9 | 3.5 | 1.1 | 100.0 | 219 | 80.7 | 19.3 | 0.0 | 100.0 | 51 |
| Tabora | 71.2 | 23.6 | 5.0 | 0.2 | 100.0 | 395 | 87.4 | 10.0 | 2.6 | 100.0 | 72 |
| Rukwa | 75.6 | 22.4 | 1.7 | 0.3 | 100.0 | 233 | 87.3 | 12.7 | 0.0 | 100.0 | 44 |
| Kigoma | 79.4 | 12.2 | 8.1 | 0.3 | 100.0 | 312 | (94.6) | (5.4) | (0.0) | 100.0 | 58 |
| Shinyanga | 65.4 | 24.3 | 8.9 | 1.5 | 100.0 | 634 | 82.4 | 13.5 | 4.1 | 100.0 | 129 |
| Kagera | 75.3 | 20.6 | 4.1 | 0.0 | 100.0 | 403 | 93.6 | 6.4 | 0.0 | 100.0 | 89 |
| Mwanza | 75.0 | 21.6 | 2.9 | 0.5 | 100.0 | 645 | 88.4 | 11.6 | 0.0 | 100.0 | 125 |
| Mara | 65.3 | 22.6 | 11.5 | 0.7 | 100.0 | 252 | 76.4 | 17.3 | 6.3 | 100.0 | 49 |
| Manyara | 74.1 | 13.1 | 12.5 | 0.3 | 100.0 | 203 | 96.6 | 3.4 | 0.0 | 100.0 | 46 |
| Zanzibar North | 65.0 | 30.8 | 3.5 | 0.7 | 100.0 | 28 | 82.7 | 17.3 | 0.0 | 100.0 | 5 |
| Zanzibar South | 72.3 | 23.9 | 1.7 | 2.1 | 100.0 | 17 | (76.4) | (23.6) | (0.0) | 100.0 | 3 |
| Town West | 73.6 | 22.9 | 3.2 | 0.3 | 100.0 | 78 | 81.3 | 18.7 | 0.0 | 100.0 | 15 |
| Pemba North | 69.7 | 25.0 | 5.3 | 0.0 | 100.0 | 31 | 82.1 | 14.5 | 3.4 | 100.0 | 6 |
| Pemba South | 72.2 | 22.0 | 5.3 | 0.4 | 100.0 | 27 | 80.0 | 18.1 | 1.9 | 100.0 | 6 |
| Education |  |  |  |  |  |  |  |  |  |  |  |
| No education | 69.4 | 21.1 | 8.5 | 1.0 | 100.0 | 1,994 | 86.7 | 11.7 | 1.7 | 100.0 | 193 |
| Primary incomplete | 73.4 | 20.6 | 5.4 | 0.6 | 100.0 | 1,070 | 86.3 | 11.7 | 2.0 | 100.0 | 266 |
| Primary complete | 79.6 | 15.8 | 3.6 | 1.0 | 100.0 | 3,512 | 89.6 | 9.6 | 0.8 | 100.0 | 820 |
| Secondary+ | 87.9 | 9.8 | 1.0 | 1.3 | 100.0 | 375 | 93.8 | 6.1 | 0.1 | 100.0 | 122 |
| Wealth quintile |  |  |  |  |  |  |  |  |  |  |  |
| Lowest | 72.1 | 19.7 | 7.8 | 0.4 | 100.0 | 1,341 | 88.3 | 9.9 | 1.8 | 100.0 | 281 |
| Second | 74.9 | 19.8 | 4.8 | 0.5 | 100.0 | 1,424 | 88.4 | 10.7 | 1.0 | 100.0 | 294 |
| Middle | 71.3 | 20.7 | 7.1 | 0.9 | 100.0 | 1,380 | 84.1 | 14.4 | 1.5 | 100.0 | 292 |
| Fourth | 77.7 | 17.0 | 4.6 | 0.7 | 100.0 | 1,365 | 89.2 | 9.7 | 1.1 | 100.0 | 261 |
| Highest | 84.3 | 11.6 | 1.8 | 2.2 | 100.0 | 1,440 | 95.1 | 4.9 | 0.0 | 100.0 | 272 |
| Total | 76.2 | 17.7 | 5.2 | 1.0 | 100.0 | 6,950 | 88.9 | 10.0 | 1.1 | 100.0 | 1,401 |

### 6.3 Age at First Marriage

In Tanzania, marriage is highly associated with fertility because it is correlated with exposure to risk of conception. The duration of exposure to the risk of pregnancy depends primarily on the age at which women first marry. Women who marry earlier, on average, have their first child earlier and give birth to more children, contributing to higher fertility rates.

As shown in Table 6.3, the median age at first marriage for women 25-49 is 18.6 years. The median age at first marriage for women in Tanzania has risen from 17.6 years among women age 4549 to 18.7 years among women age 20-24. The proportion of women married by age 15 declined from 16 percent among women age 45-49 to 5 percent among women age 15-19 years. The percentage of women age 15-19 married by age 15 in the 1999 TRCHS was 4 percent.

| Table 6.3 Age at first marriage |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percentage of women and men who were first married by specific exact ages and median age at first marriage, according to current age, Tanzania 2004-05 |  |  |  |  |  |  |  |  |
| Currentage |  | ntage | marri | by exac |  | Percentage never |  | Median age at first |
|  | 15 | 18 | 20 | 22 | 25 | married | Number | marriage |
| WOMEN |  |  |  |  |  |  |  |  |
| 15-19 | 4.6 | na | na | na | na | 72.1 | 2,245 | a |
| 20-24 | 6.4 | 41.1 | 62.4 | na | na | 23.8 | 2,007 | 18.7 |
| 25-29 | 7.3 | 36.2 | 61.5 | 77.3 | 87.4 | 9.0 | 1,885 | 19.0 |
| 30-34 | 8.0 | 42.0 | 63.8 | 78.0 | 87.4 | 4.2 | 1,542 | 18.7 |
| 35-39 | 8.3 | 45.7 | 67.9 | 80.9 | 89.1 | 1.5 | 1,053 | 18.4 |
| 40-44 | 11.0 | 45.2 | 66.7 | 80.2 | 91.3 | 0.8 | 834 | 18.5 |
| 45-49 | 15.5 | 56.2 | 71.2 | 82.2 | 90.5 | 2.4 | 763 | 17.6 |
| 20-49 | 8.5 | 42.6 | 64.5 | 77.7 | 85.5 | 9.3 | 8,084 | 18.6 |
| 25-49 | 9.2 | 43.1 | 65.2 | 79.1 | 88.6 | 4.5 | 6,077 | 18.6 |
| MEN |  |  |  |  |  |  |  |  |
| 15-19 | 0.0 | na | na | na | na | 98.7 | 637 | a |
| 20-24 | 0.0 | 2.2 | 12.3 | na | na | 65.4 | 493 | a |
| 25-29 | 0.5 | 4.5 | 15.1 | 32.4 | 62.7 | 25.0 | 405 | 23.6 |
| 30-34 | 0.5 | 4.2 | 13.9 | 29.9 | 53.8 | 8.7 | 387 | 24.6 |
| 35-39 | 0.7 | 4.1 | 12.5 | 29.0 | 55.0 | 3.4 | 278 | 24.4 |
| 40-44 | 0.6 | 10.0 | 18.6 | 28.7 | 59.1 | 1.4 | 265 | 24.2 |
| 45-49 | 0.4 | 8.2 | 16.2 | 32.7 | 53.1 | 0.0 | 170 | 24.6 |
| 20-49 | 0.4 | 4.9 | 14.4 | 29.5 | 51.7 | 23.6 | 1,998 | a |
| 25-49 | 0.6 | 5.7 | 15.1 | 30.5 | 57.3 | 9.8 | 1,505 | 24.2 |
| na $=$ Not applicable <br> $\mathrm{a}=$ Omitted because less than 50 percent of the respondents married for the first time before reaching the beginning of the age group |  |  |  |  |  |  |  |  |

Men, on average, marry five to six years later than women. Table 6.3 shows that the median age at first marriage for men 25-49 is 24.2 years compared with 18.6 years for women.

Table 6.4 shows the median age at first marriage for women age 20-49 and 25-49 and men 30-49 by background characteristics. Because of the small number of married respondents interviewed, data for women age 15-19 and for men age 15-29 have been omitted.

Among women age 20-49, those living in urban areas marry a year and a half later than rural women (19.8 compared with 18.3). The median age at first marriage increases with level of education and wealth quintile. This pattern is also true for men.

| Table 6.4 Median age at first marriage |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Median age at first marriage among women age 20-49 and men age 30-49, by current age and background characteristics, Tanzania 2004-05 |  |  |  |  |  |  |  |  |  |
| Background characteristic | Current age |  |  |  |  |  |  |  | Men age 30-49 |
|  | 20-24 | 25-29 | 30-34 | 35-39 | 40-44 | 45-49 |  |  |  |
| Residence |  |  |  |  |  |  |  |  |  |
| Urban | a | 20.2 | 19.9 | 19.0 | 18.5 | 17.5 | 19.8 | 19.4 | 26.2 |
| Rural | 18.1 | 18.7 | 18.3 | 18.2 | 18.4 | 17.6 | 18.3 | 18.3 | 24.0 |
| Mainland/Zanzibar |  |  |  |  |  |  |  |  |  |
| Mainland | 18.7 | 18.9 | 18.7 | 18.4 | 18.5 | 17.6 | 18.6 | 18.6 | 24.4 |
| Total urban | a | 20.0 | 19.8 | 18.9 | 18.6 | 17.6 | 19.7 | 19.3 | 26.1 |
| Dar es Salaam city | a | 21.1 | 21.2 | (17.9) | * | * | a | 20.4 | 26.2 |
| Other urban | a | 19.5 | 18.9 | 19.0 | 18.3 | 17.7 | 19.2 | 18.9 | 26.0 |
| Total rural | 18.1 | 18.7 | 18.3 | 18.3 | 18.5 | 17.6 | 18.3 | 18.4 | 24.0 |
| Zanzibar | a | 19.8 | 18.5 | 17.8 | 16.9 | 16.3 | 18.8 | 18.1 | 25.3 |
| Unguja | a | 20.3 | 18.9 | 18.0 | 16.7 | 16.0 | 19.1 | 18.4 | 26.1 |
| Pemba | a | 18.6 | 17.5 | 17.5 | 17.2 | (16.9) | 18.3 | 17.6 | 23.5 |
| Zones |  |  |  |  |  |  |  |  |  |
| Western | 17.8 | 18.3 | 18.0 | 17.6 | 18.3 | 17.4 | 17.9 | 18.0 | 23.4 |
| Northern | 20.0 | 20.0 | 19.6 | 19.5 | 19.7 | 18.7 | 19.7 | 19.6 | 26.5 |
| Central | 19.2 | 18.4 | 18.2 | 18.8 | 18.3 | 18.0 | 18.6 | 18.4 | (24.9) |
| Southern highlands | 18.0 | 19.0 | 18.1 | 18.4 | 18.4 | 17.2 | 18.3 | 18.4 | 23.6 |
| Lake | 18.0 | 18.6 | 18.5 | 18.0 | 17.6 | 17.6 | 18.2 | 18.2 | 24.3 |
| Eastern | a | 19.9 | 20.3 | 18.2 | 20.3 | 17.4 | 19.7 | 19.5 | 25.9 |
| Southern | 18.6 | 19.1 | 18.4 | 18.3 | 18.2 | 17.4 | 18.5 | 18.4 | 23.2 |
| Education |  |  |  |  |  |  |  |  |  |
| No education | 17.1 | 18.1 | 17.4 | 17.6 | 17.2 | 17.3 | 17.4 | 17.5 | 24.3 |
| Primary incomplete | 17.9 | 18.1 | 18.4 | 17.6 | 17.9 | 16.9 | 17.8 | 17.8 | 23.2 |
| Primary complete | 19.2 | 19.0 | 18.6 | 18.5 | 19.3 | 19.0 | 18.9 | 18.8 | 24.3 |
| Secondary+ | a | 24.9 | 23.4 | 23.0 | 21.8 | (20.6) | a | 23.6 | 27.9 |
| Wealth quintile |  |  |  |  |  |  |  |  |  |
| Lowest | 17.4 | 18.6 | 17.9 | 18.0 | 18.4 | 18.3 | 18.0 | 18.3 | 23.9 |
| Second | 17.9 | 18.2 | 18.0 | 18.0 | 18.2 | 17.4 | 18.0 | 18.0 | 23.9 |
| Middle | 18.3 | 18.9 | 17.9 | 18.0 | 18.3 | 17.3 | 18.2 | 18.2 | 23.1 |
| Fourth | 19.0 | 18.8 | 18.8 | 18.9 | 18.6 | 17.4 | 18.7 | 18.7 | 24.4 |
| Highest | a | 20.8 | 20.4 | 18.8 | 18.8 | 18.0 | a | 19.9 | 26.8 |
| Total | 18.7 | 19.0 | 18.7 | 18.4 | 18.5 | 17.6 | 18.6 | 18.6 | 24.4 |
| Note: Figures in parentheses are based on 25 to 49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed. $\mathrm{a}=$ Omitted because less than 50 percent of the women married for the first time before reaching the beginning of the age group |  |  |  |  |  |  |  |  |  |

### 6.4 Age at First Sexual Intercourse

While age at first marriage is often used as a proxy for first exposure to intercourse, the two events do not necessarily occur at the same time. Women and men sometimes engage in sexual relations before marriage. In the 2004-05 TDHS, women and men were asked how old they were when they first had sexual intercourse.

Table 6.5 shows that the median age at first intercourse for women age 20-49 is 17 years. Half of women age 15-19 have never had sexual intercourse. However, this proportion falls dramatically to 8 percent among women $20-24$, and by age $30-34$ almost all women have been sexually active. Median age at first intercourse has remained roughly the same over the various age groups of women. However, the percentage of women age 15-19 who had first sexual intercourse before age 15 seems to have declined slightly between the 1999 and 2004-05 surveys, from 15 to 11 percent.

| Table 6.5 Age at first sexual intercourse |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percentage of women and men who had first sexual intercourse by specific exact ages and median age at first intercourse, according to current age, Tanzania 2004-05 |  |  |  |  |  |  |  |  |
| Current age |  | age wh | ad firs exact | al int |  | Percentage who never had |  | Median age at first |
|  | 15 | 18 | 20 | 22 | 25 | intercourse | Number | intercourse |
| WOMEN |  |  |  |  |  |  |  |  |
| 15-19 | 11.4 | na | na | na | na | 50.6 | 2,245 | a |
| 20-24 | 13.5 | 62.5 | 82.8 | na | na | 8.3 | 2,007 | 17.1 |
| 25-29 | 14.7 | 59.3 | 80.0 | 89.4 | 93.4 | 1.8 | 1,885 | 17.3 |
| 30-34 | 13.3 | 62.1 | 81.3 | 89.3 | 92.8 | 0.6 | 1,542 | 17.0 |
| 35-39 | 14.0 | 64.6 | 82.6 | 90.3 | 93.9 | 0.2 | 1,053 | 17.0 |
| 40-44 | 15.3 | 60.8 | 80.2 | 88.3 | 93.4 | 0.1 | 834 | 17.1 |
| 45-49 | 21.5 | 70.2 | 81.0 | 90.0 | 93.7 | 0.0 | 763 | 16.6 |
| 20-49 | 14.8 | 62.5 | 81.4 | 89.4 | 92.6 | 2.6 | 8,084 | 17.0 |
| 25-49 | 15.2 | 62.5 | 81.0 | 89.4 | 93.4 | 0.8 | 6,077 | 17.0 |
| MEN |  |  |  |  |  |  |  |  |
| 15-19 | 13.0 | na | na | na | na | 52.3 | 637 | a |
| 20-24 | 4.8 | 43.2 | 76.2 | na | na | 11.4 | 493 | 18.3 |
| 25-29 | 9.2 | 46.0 | 76.4 | 89.5 | 95.5 | 3.0 | 405 | 18.2 |
| 30-34 | 6.0 | 44.2 | 67.4 | 83.1 | 91.5 | 2.0 | 387 | 18.4 |
| 35-39 | 5.4 | 34.5 | 63.3 | 76.9 | 85.4 | 0.8 | 278 | 18.7 |
| 40-44 | 3.7 | 39.6 | 64.6 | 78.3 | 89.4 | 0.6 | 265 | 18.7 |
| 45-49 | 6.3 | 33.5 | 58.7 | 70.7 | 85.4 | 0.0 | 170 | 18.8 |
| 20-49 | 6.0 | 41.4 | 69.7 | 82.6 | 89.9 | 4.0 | 1,998 | 18.4 |
| 25-49 | 6.4 | 40.9 | 67.6 | 81.4 | 90.4 | 1.6 | 1,505 | 18.5 |
| na $=$ Not applicable <br> $\mathrm{a}=$ Omitted because less than 50 percent of the respondents had intercourse for the first time before reaching the beginning of the age group |  |  |  |  |  |  |  |  |

As observed with age at first marriage, on average, men initiate sexual activity later than women. The median age at first sex for men age 20-49 is 18.4 years, more than one year later than women. The median age at first intercourse drops very slightly across the age groups from 18.8 years among men 45-49 to 18.3 among men 20-24.

Differentials in age at first sex by background characteristics are shown in Table 6.6. Urban women have their first sexual experience at slightly older ages than their rural counterparts, while there is no significant difference between urban men and rural men. Median age at first intercourse is higher by one and a half years for women age 20-49 in Zanzibar than those in the Mainland.

| Table 6.6 Median age at first intercourse |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Median age at first sexual intercourse among women age 20-49 and men age 25-49, by current age and background characteristics, Tanzania 2004-05 |  |  |  |  |  |  |  |  |  |
|  | Current age |  |  |  |  |  |  |  | Men age 25-49 |
| characteristic | 20-24 | 25-29 | 30-34 | 35-39 | 40-44 | 45-49 |  |  |  |
| Residence |  |  |  |  |  |  |  |  |  |
| Urban | 18.0 | 17.6 | 17.9 | 17.5 | 17.4 | 16.4 | 17.6 | 17.5 | 18.6 |
| Rural | 16.8 | 17.2 | 16.7 | 16.8 | 17.0 | 16.6 | 16.9 | 16.9 | 18.5 |
| Mainland/Zanzibar |  |  |  |  |  |  |  |  |  |
| Mainland | 17.0 | 17.3 | 17.0 | 17.0 | 17.1 | 16.6 | 17.0 | 17.0 | 18.4 |
| Total urban | 17.9 | 17.5 | 17.9 | 17.3 | 17.4 | 16.5 | 17.5 | 17.4 | 18.5 |
| Dar es Salaam city | 18.5 | 17.3 | 18.2 | (17.3) | * | * | 17.8 | 17.5 | 18.4 |
| Other urban | 17.5 | 17.6 | 17.6 | 17.3 | 17.5 | 16.5 | 17.4 | 17.4 | 18.6 |
| Total rural | 16.7 | 17.2 | 16.7 | 16.8 | 17.0 | 16.6 | 16.8 | 16.9 | 18.4 |
| Zanzibar | a | 19.4 | 18.3 | 18.2 | 16.8 | 16.2 | 18.6 | 18.0 | 22.5 |
| Unguja | a | 19.9 | 18.8 | 18.3 | 16.6 | 15.9 | 18.7 | 18.2 | 22.4 |
| Pemba | a | 18.4 | 17.5 | 18.0 | 17.4 | (16.7) | 18.4 | 17.8 | 22.6 |
| Zone |  |  |  |  |  |  |  |  |  |
| Western | 16.6 | 17.4 | 16.7 | 16.7 | 16.7 | 16.4 | 16.8 | 16.9 | 18.3 |
| Northern | 18.2 | 18.5 | 18.1 | 17.7 | 19.1 | 18.0 | 18.3 | 18.4 | 18.5 |
| Central | 16.7 | 16.4 | 16.5 | 16.3 | 15.8 | 15.3 | 16.3 | 16.1 | (18.5) |
| Southern highlands | 17.5 | 17.9 | 17.3 | 17.7 | 17.9 | 16.6 | 17.5 | 17.5 | 19.0 |
| Lake | 16.3 | 16.9 | 16.7 | 16.7 | 16.6 | 16.6 | 16.7 | 16.7 | 18.4 |
| Eastern | 17.8 | 17.1 | 17.9 | 17.2 | 17.6 | 16.8 | 17.5 | 17.3 | 18.4 |
| Southern | 16.5 | 16.4 | 16.0 | 16.2 | 16.0 | 15.9 | 16.3 | 16.2 | 17.9 |
| Education |  |  |  |  |  |  |  |  |  |
| No education | 15.9 | 16.5 | 16.0 | 16.1 | 16.3 | 16.4 | 16.2 | 16.3 | 18.6 |
| Primary incomplete | 16.6 | 16.5 | 16.2 | 16.0 | 16.6 | 16.1 | 16.4 | 16.3 | 18.3 |
| Primary complete | 17.5 | 17.5 | 17.2 | 17.3 | 17.8 | 17.1 | 17.4 | 17.4 | 18.4 |
| Secondary+ | 19.5 | 20.1 | 20.6 | 20.2 | 20.5 | (19.0) | a | 20.3 | 19.7 |
| Wealth quintile |  |  |  |  |  |  |  |  |  |
| Lowest | 16.3 | 16.9 | 16.5 | 16.7 | 16.7 | 16.4 | 16.6 | 16.6 | 18.4 |
| Second | 16.5 | 17.1 | 16.2 | 16.7 | 16.9 | 16.5 | 16.6 | 16.7 | 18.2 |
| Middle | 16.9 | 17.1 | 16.6 | 16.5 | 16.8 | 16.5 | 16.8 | 16.7 | 18.5 |
| Fourth | 17.5 | 17.5 | 17.5 | 17.6 | 17.5 | 16.6 | 17.4 | 17.4 | 18.7 |
| Highest | 18.3 | 17.8 | 18.2 | 17.6 | 17.8 | 17.3 | 18.0 | 17.8 | 18.8 |
| Total | 17.1 | 17.3 | 17.0 | 17.0 | 17.1 | 16.6 | 17.0 | 17.0 | 18.5 |

Note: Figures in parentheses are based on 25 to 49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed. $\mathrm{a}=$ Omitted because less than 50 percent of the women had intercourse for the first time before reaching the beginning of the age group

### 6.5 Recent Sexual Activity

In the absence of contraception, the probability of pregnancy is related to the frequency of intercourse. Thus, information on sexual activity can be used to refine measures of exposure to pregnancy. Survey results are shown in Table 6.7.

In the 4 weeks before the survey, 58 percent of women age $15-49$ years were sexually active, 20 percent had been sexually active in the previous year but not in the previous month, and 7 percent had sexual intercourse one or more years before the survey. An additional 13 percent of women reported they had never had sex.

| Table 6.7.1 Recent sexual activity: women |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percent distribution of women by timing of last sexual intercourse, according to background characteristics, Tanzania 2004-05 |  |  |  |  |  |  |  |
| Timing of last sexual intercourse |  |  |  |  |  |  |  |
| Background characteristic | Within the past 4 weeks | Within 1 year $^{1}$ | One or more years ago | Missing | Never had sexual intercourse | Total | Number of women |
| Age |  |  |  |  |  |  |  |
| 15-19 | 27.0 | 16.3 | 5.3 | 0.7 | 50.6 | 100.0 | 2,245 |
| 20-24 | 58.7 | 24.0 | 6.7 | 2.4 | 8.3 | 100.0 | 2,007 |
| 25-29 | 69.3 | 21.5 | 4.8 | 2.6 | 1.8 | 100.0 | 1,885 |
| 30-34 | 70.7 | 20.8 | 5.9 | 2.0 | 0.6 | 100.0 | 1,542 |
| 35-39 | 68.4 | 19.7 | 9.1 | 2.6 | 0.2 | 100.0 | 1,053 |
| 40-44 | 70.1 | 17.9 | 10.7 | 1.1 | 0.1 | 100.0 | 834 |
| 45-49 | 63.9 | 17.1 | 17.5 | 1.5 | 0.0 | 100.0 | 763 |
| Marital status |  |  |  |  |  |  |  |
| Never married | 14.2 | 18.7 | 9.3 | 0.9 | 56.9 | 100.0 | 2,371 |
| Married or living together | 76.6 | 18.0 | 3.6 | 1.9 | 0.0 | 100.0 | 6,950 |
| Divorced/separated/ widowed | 31.3 | 36.5 | 28.1 | 4.1 | 0.0 | 100.0 | 1,007 |
| Marital duration ${ }^{2}$ |  |  |  |  |  |  |  |
| Married only once |  |  |  |  |  |  |  |
| $0-4$ years | 74.8 | 20.8 | 2.2 | 2.2 | 0.0 | 100.0 | 1,584 |
| 5-9 years | 77.8 | 17.0 | 3.3 | 1.9 | 0.0 | 100.0 | 1,306 |
| 10-14 years | 75.9 | 18.1 | 3.9 | 2.1 | 0.0 | 100.0 | 930 |
| 15-19 years | 74.1 | 19.8 | 4.5 | 1.7 | 0.0 | 100.0 | 766 |
| 20-24 years | 74.1 | 19.0 | 5.7 | 1.2 | 0.0 | 100.0 | 464 |
| $25+$ years | 75.0 | 14.8 | 9.0 | 1.1 | 0.0 | 100.0 | 485 |
| Married more than once | 80.5 | 15.5 | 2.2 | 1.8 | 0.0 | 100.0 | 1,415 |
| Residence |  |  |  |  |  |  |  |
| Urban | 55.1 | 20.7 | 7.6 | 1.3 | 15.4 | 100.0 | 2,935 |
| Rural | 58.9 | 19.7 | 7.2 | 2.1 | 12.1 | 100.0 | 7,394 |
| Mainland/Zanzibar |  |  |  |  |  |  |  |
| Mainland | 58.1 | 20.1 | 7.3 | 1.9 | 12.5 | 100.0 | 10,016 |
| Total urban | 56.2 | 20.6 | 7.4 | 1.3 | 14.5 | 100.0 | 2,885 |
| Dar es Salaam city | 61.1 | 17.4 | 5.9 | 0.5 | 15.0 | 100.0 | 969 |
| Other urban | 53.7 | 22.2 | 8.2 | 1.6 | 14.3 | 100.0 | 1,916 |
| Total rural | 58.9 | 19.9 | 7.3 | 2.1 | 11.7 | 100.0 | 7,131 |
| Zanzibar | 47.6 | 14.7 | 6.1 | 0.8 | 30.8 | 100.0 | 313 |
| Unguja | 45.5 | 17.0 | 6.4 | 0.8 | 30.3 | 100.0 | 216 |
| Pemba | 52.2 | 9.5 | 5.7 | 0.8 | 31.8 | 100.0 | 97 |
| Zone |  |  |  |  |  |  |  |
| Western | 58.0 | 20.2 | 5.2 | 2.4 | 14.2 | 100.0 | 1,880 |
| Northern | 51.4 | 21.9 | 9.5 | 1.6 | 15.5 | 100.0 | 1,496 |
| Central | 56.8 | 21.3 | 7.5 | 1.8 | 12.6 | 100.0 | 799 |
| Southern highlands | 52.8 | 21.5 | 10.3 | 2.1 | 13.3 | 100.0 | 1,440 |
| Lake | 64.9 | 17.7 | 4.8 | 2.6 | 10.0 | 100.0 | 1,865 |
| Eastern | 62.8 | 17.9 | 5.5 | 0.9 | 12.9 | 100.0 | 1,670 |
| Southern | 56.9 | 22.9 | 12.2 | 1.5 | 6.6 | 100.0 | 866 |
| Region |  |  |  |  |  |  |  |
| Dodoma | 57.9 | 21.4 | 7.7 | 2.2 | 10.9 | 100.0 | 468 |
| Arusha | 44.8 | 22.8 | 12.0 | 1.7 | 18.7 | 100.0 | 391 |
| Kilimanjaro | 46.9 | 22.1 | 9.9 | 1.0 | 20.0 | 100.0 | 380 |
| Tanga | 61.4 | 23.5 | 4.9 | 0.5 | 9.7 | 100.0 | 431 |
| Morogoro | 65.1 | 19.0 | 4.0 | 1.3 | 10.7 | 100.0 | 449 |
| Pwani | 65.0 | 18.1 | 6.6 | 1.4 | 8.9 | 100.0 | 253 |
| Dar es Salaam | 61.1 | 17.4 | 5.9 | 0.5 | 15.0 | 100.0 | 969 |
| Lindi | 61.1 | 20.2 | 10.0 | 2.5 | 6.2 | 100.0 | 221 |
| Mtwara | 53.9 | 23.6 | 15.0 | 1.0 | 6.5 | 100.0 | 346 |
| Ruvuma | 57.2 | 24.1 | 10.6 | 1.3 | 6.9 | 100.0 | 299 |
| Iringa | 48.3 | 21.1 | 16.3 | 1.5 | 12.7 | 100.0 | 412 |
| Mbeya | 54.0 | 21.5 | 8.5 | 2.6 | 13.4 | 100.0 | 712 |
| Singida | 55.2 | 21.1 | 7.3 | 1.3 | 15.1 | 100.0 | 331 |
| Tabora | 62.1 | 22.8 | 4.6 | 2.9 | 7.6 | 100.0 | 520 |
| Rukwa | 56.0 | 21.8 | 6.5 | 1.7 | 13.9 | 100.0 | 316 |
| Kigoma | 52.0 | 15.1 | 6.0 | 1.7 | 25.2 | 100.0 | 499 |
| Shinyanga | 58.9 | 21.6 | 5.1 | 2.5 | 11.9 | 100.0 | 861 |
| Kagera | 68.9 | 12.3 | 3.9 | 1.2 | 13.8 | 100.0 | 545 |
| Mwanza | 68.1 | 16.3 | 4.6 | 3.1 | 8.0 | 100.0 | 939 |
| Mara | 51.4 | 28.9 | 6.6 | 3.3 | 9.8 | 100.0 | 381 |
| Manyara | 51.4 | 18.2 | 12.4 | 3.7 | 14.2 | 100.0 | 293 |
| Zanzibar North | 44.8 | 15.1 | 6.6 | 1.1 | 32.4 | 100.0 | 48 |
| Zanzibar South | 53.6 | 18.1 | 5.8 | 0.7 | 21.8 | 100.0 | 26 |
| Town West | 44.3 | 17.4 | 6.4 | 0.7 | 31.2 | 100.0 | 143 |
| Pemba North | 53.1 | 8.2 | 7.0 | 0.8 | 30.8 | 100.0 | 52 |
| Pemba South | 51.1 | 11.0 | 4.1 | 0.9 | 32.9 | 100.0 | 45 |
| Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed. ${ }^{1}$ Excludes women who had sexual intercourse within the past 4 weeks <br> ${ }^{2}$ Excludes women who are not currently married |  |  |  |  |  |  |  |
|  |  |  |  |  |  | Continued... |  |


| Percent distribution of women by timing of last sexual intercourse, according to background characteristics, Tanzania 2004-05 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Timing of last sexual intercourse |  |  |  |  |  |  |  |
| Background characteristic | Within the past 4 weeks | Within <br> 1 year ${ }^{1}$ | One or more years ago | Missing | Never had sexual intercourse | Total | Number of women |
| Education |  |  |  |  |  |  |  |
| No education | 62.5 | 19.4 | 9.1 | 2.5 | 6.5 | 100.0 | 2,503 |
| Primary incomplete | 51.8 | 19.4 | 7.0 | 1.7 | 20.1 | 100.0 | 1,855 |
| Primary complete | 60.4 | 20.6 | 6.4 | 1.8 | 10.9 | 100.0 | 5,086 |
| Secondary+ | 42.7 | 18.9 | 7.8 | 0.9 | 29.8 | 100.0 | 885 |
| Current contraceptive method |  |  |  |  |  |  |  |
| Female sterilization | 75.3 | 15.9 | 8.0 | 0.9 | 0.0 | 100.0 | 213 |
| Pill | 89.2 | 10.0 | 0.4 | 0.4 | 0.0 | 100.0 | 479 |
| IUD | * | * | * | * | * | * | 13 |
| Condom | 71.8 | 26.8 | 0.9 | 0.4 | 0.0 | 100.0 | 315 |
| Periodic abstinence | 80.3 | 17.4 | 2.4 | 0.0 | 0.0 | 100.0 | 188 |
| Other method | 80.5 | 15.0 | 2.9 | 1.6 | 0.0 | 100.0 | 1,111 |
| No method | 51.2 | 21.1 | 8.7 | 2.1 | 16.8 | 100.0 | 8,010 |
| Wealth quintile |  |  |  |  |  |  |  |
| Lowest | 56.5 | 22.9 | 8.7 | 2.8 | 9.1 | 100.0 | 1,840 |
| Second | 61.5 | 18.0 | 7.1 | 2.3 | 11.2 | 100.0 | 1,944 |
| Middle | 58.5 | 20.0 | 7.1 | 1.9 | 12.6 | 100.0 | 1,943 |
| Fourth | 58.0 | 20.6 | 7.2 | 1.5 | 12.7 | 100.0 | 2,004 |
| Highest | 55.5 | 18.9 | 6.6 | 1.1 | 17.9 | 100.0 | 2,597 |
| Total | 57.8 | 20.0 | 7.3 | 1.9 | 13.1 | 100.0 | 10,329 |
| Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed. ${ }^{1}$ Excludes women who had sexual intercourse within the past 4 weeks <br> ${ }^{2}$ Excludes women who are not currently married |  |  |  |  |  |  |  |

The proportion of women who were sexually active in the four weeks before the survey increases with age to more than two-thirds of women age 25-44 years. Women age 15-19 were least likely to have been sexually active ( 27 percent). As expected, women who are currently married or living with a man are more likely to be sexually active ( 77 percent) than women who have never married (14 percent) and who are formerly married ( 31 percent). The proportion sexually active in the past four weeks stays remarkably stable through the duration of marriage.

Women in urban areas are slightly less likely to have been sexually active in the four weeks preceding the survey ( 55 percent) than those in rural areas ( 59 percent). The proportion of women who are sexually active is highest in Kagera ( 69 percent) and lowest in Town West ( 44 percent). As expected, women who are using a contraceptive method are more likely to be sexually active than women who are not using any method.

Levels of sexual activity among men are comparable to those of women, although they are slightly less likely to have had sex in the past year, and slightly more likely to have never had sex. Fifty-eight percent had sexual intercourse in the four weeks before the survey, 17 percent had sexual intercourse in the past year, but not in the previous four weeks, 9 percent had sex one or more years ago, and 16 percent have never had sexual intercourse. Men's sexual activity increases with age. Among men age 45-49, 83 percent had sex in the month preceding the interview, compared with 18 percent of the youngest men age 15-19.

As is the case with women, men who are currently married or living with a woman are most likely to have had sex in the four weeks before the survey: 86 percent compared with 25 percent of men who have never married and 43 percent of men who are formerly married. Recent sexual activity is roughly the same throughout the duration of marriage.

| Table 6.7.2 Recent sexual activity: men |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percent distribution of men by timing of last sexual intercourse, according to background characteristics, Tanzania 2004-05 |  |  |  |  |  |  |  |
|  | Timing of last sexual intercourse |  |  |  | Never had sexual intercourse | Total | Number of men |
| Background characteristic | Within the past 4 weeks | Within 1 year $^{1}$ | One or more years ago | Missing |  |  |  |
| Age |  |  |  |  |  |  |  |
| 15-19 | 18.2 | 15.4 | 14.0 | 0.0 | 52.3 | 100.0 | 637 |
| 20-24 | 52.0 | 23.2 | 13.3 | 0.0 | 11.4 | 100.0 | 493 |
| 25-29 | 71.5 | 17.9 | 7.1 | 0.4 | 3.0 | 100.0 | 405 |
| 30-34 | 78.4 | 12.5 | 6.5 | 0.6 | 2.0 | 100.0 | 387 |
| 35-39 | 81.5 | 14.2 | 3.5 | 0.0 | 0.8 | 100.0 | 278 |
| 40-44 | 77.0 | 16.7 | 5.0 | 0.6 | 0.6 | 100.0 | 265 |
| 45-49 | 83.4 | 11.3 | 4.7 | 0.6 | 0.0 | 100.0 | 170 |
| Marital status |  |  |  |  |  |  |  |
| Never married | 24.6 | 20.1 | 17.7 | 0.0 | 37.6 | 100.0 | 1,100 |
| Married or living together | 86.4 | 11.7 | 1.4 | 0.5 | 0.0 | 100.0 | 1,401 |
| Divorced/separated/ widowed | 42.6 | 38.3 | 19.1 | 0.0 | 0.0 | 100.0 | 135 |
| Marital duration |  |  |  |  |  |  |  |
| Married only once |  |  |  |  |  |  |  |
| 0-4 years | 82.3 | 15.5 | 1.8 | 0.4 | 0.0 | 100.0 | 324 |
| 5-9 years | 87.2 | 12.6 | 0.3 | 0.0 | 0.0 | 100.0 | 294 |
| 10-14 years | 91.5 | 7.9 | 0.6 | 0.0 | 0.0 | 100.0 | 180 |
| 15-19 years | 82.5 | 16.2 | 0.1 | 1.2 | 0.0 | 100.0 | 145 |
| 20-24 years | 85.9 | 12.2 | 1.9 | 0.0 | 0.0 | 100.0 | 82 |
| 25+ years | (93.0) | (3.5) | (3.5) | (0.0) | (0.0) | (100.0) | 41 |
| Married more than once | 87.9 | 8.3 | 2.8 | 1.0 | 0.0 | 100.0 | 335 |
| Residence |  |  |  |  |  |  |  |
| Urban | 53.2 | 20.5 | 9.8 | 0.3 | 16.2 | 100.0 | 716 |
| Rural | 60.3 | 15.1 | 8.9 | 0.2 | 15.5 | 100.0 | 1,919 |
| Mainland/Zanzibar |  |  |  |  |  |  |  |
| Mainland | 58.9 | 16.8 | 9.2 | 0.3 | 14.9 | 100.0 | 2,556 |
| Total urban | 53.7 | 20.6 | 10.1 | 0.3 | 15.3 | 100.0 | 716 |
| Dar es Salaam city | 52.7 | 24.9 | 8.0 | 0.0 | 14.3 | 100.0 | 267 |
| Other urban | 54.3 | 18.0 | 11.3 | 0.5 | 15.9 | 100.0 | 450 |
| Total rural | 60.9 | 15.4 | 8.8 | 0.2 | 14.7 | 100.0 | 1,840 |
| Zanzibar | 42.8 | 7.8 | 7.6 | 0.1 | 41.6 | 100.0 | 79 |
| Unguja | 41.2 | 10.4 | 8.9 | 0.0 | 39.5 | 100.0 | 53 |
| Pemba | 46.3 | 2.4 | 5.0 | 0.3 | 46.0 | 100.0 | 26 |
| Zone |  |  |  |  |  |  |  |
| Western | 58.7 | 18.3 | 9.4 | 0.0 | 13.7 | 100.0 | 468 |
| Northern | 58.0 | 12.9 | 12.3 | 1.0 | 15.9 | 100.0 | 362 |
| Central | 64.5 | 15.6 | 7.0 | 0.0 | 12.9 | 100.0 | 212 |
| Southern highlands | 59.2 | 12.6 | 8.4 | 0.7 | 19.1 | 100.0 | 358 |
| Lake | 63.9 | 13.7 | 9.1 | 0.0 | 13.3 | 100.0 | 448 |
| Eastern | 51.0 | 23.9 | 9.1 | 0.0 | 16.0 | 100.0 | 462 |
| Southern | 60.7 | 19.7 | 7.5 | 0.3 | 12.0 | 100.0 | 245 |
| Region |  |  |  |  |  |  |  |
| Dodoma | 68.9 | 15.1 | 4.3 | 0.0 | 11.7 | 100.0 | 113 |
| Arusha | 63.4 | 12.9 | 8.5 | 0.0 | 15.2 | 100.0 | 82 |
| Kilimanjaro | 45.7 | 15.2 | 15.3 | 2.4 | 21.3 | 100.0 | 104 |
| Tanga | 65.8 | 8.7 | 14.0 | 1.1 | 10.4 | 100.0 | 94 |
| Morogoro | 44.2 | 24.8 | 14.2 | 0.0 | 16.7 | 100.0 | 127 |
| Pwani | 56.7 | 18.3 | 3.6 | 0.0 | 21.4 | 100.0 | 68 |
| Dar Es Salaam | 52.7 | 24.9 | 8.0 | 0.0 | 14.3 | 100.0 | 267 |
| Lindi | 60.1 | 21.2 | 12.8 | 1.0 | 4.9 | 100.0 | 65 |
| Mtwara | 63.4 | 18.8 | 6.5 | 0.0 | 11.3 | 100.0 | 98 |
| Ruvuma | 57.9 | 19.4 | 4.5 | 0.0 | 18.2 | 100.0 | 83 |
| Iringa | 61.5 | 11.5 | 13.2 | 0.0 | 13.8 | 100.0 | 102 |
| Mbeya | 59.1 | 10.3 | 6.9 | 1.5 | 22.3 | 100.0 | 170 |
| Singida | 59.5 | 16.2 | 10.1 | 0.0 | 14.2 | 100.0 | 99 |
| Tabora | 68.6 | 19.2 | 7.2 | 0.0 | 5.0 | 100.0 | 127 |
| Rukwa | 56.8 | 18.5 | 5.6 | 0.0 | 19.1 | 100.0 | 87 |
| Kigoma | 41.4 | 16.0 | 19.3 | 0.0 | 23.3 | 100.0 | 127 |
| Shinyanga | 63.0 | 19.0 | 4.9 | 0.0 | 13.2 | 100.0 | 215 |
| Kagera | 69.5 | 12.3 | 8.5 | 0.0 | 9.7 | 100.0 | 122 |
| Mwanza | 60.9 | 13.0 | 11.6 | 0.0 | 14.5 | 100.0 | 229 |
| Mara | 64.0 | 17.1 | 3.7 | 0.0 | 15.2 | 100.0 | 98 |
| Manyara | 59.2 | 14.6 | 10.1 | 0.0 | 16.0 | 100.0 | 83 |
| Zanzibar North | 48.5 | 6.1 | 4.4 | 0.0 | 40.9 | 100.0 | 11 |
| Zanzibar South | 46.6 | 13.3 | 7.8 | 0.0 | 32.3 | 100.0 | 6 |
| Town West | 38.0 | 11.3 | 10.4 | 0.0 | 40.3 | 100.0 | 36 |
| Pemba North | 46.2 | 2.3 | 5.6 | 0.0 | 45.9 | 100.0 | 13 |
| Pemba South | 46.3 | 2.6 | 4.3 | 0.7 | 46.1 | 100.0 | 12 |
| Note: Figures in parentheses are based on 25 to 49 unweighted cases. <br> ${ }^{1}$ Excludes women who had sexual intercourse within the past 4 weeks <br> ${ }^{2}$ Excludes women who are not currently married |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  | ntinued... |


| Table 6.7.2-Continued |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percent distribution of men by timing of last sexual intercourse, according to background characteristics, Tanzania 2004-05 |  |  |  |  |  |  |  |
| Background characteristic | Timing of last sexual intercourse |  |  |  | Never had sexual intercourse | Total | Number of men |
|  | Within the past 4 weeks | Within <br> 1 year ${ }^{1}$ | One or more years ago | Missing |  |  |  |
| Education |  |  |  |  |  |  |  |
| No education | 63.7 | 12.0 | 7.1 | 0.3 | 16.9 | 100.0 | 312 |
| Primary incomplete | 50.7 | 12.4 | 10.1 | 0.0 | 26.7 | 100.0 | 646 |
| Primary complete | 62.8 | 18.9 | 8.5 | 0.2 | 9.6 | 100.0 | 1,381 |
| Secondary+ | 48.9 | 19.7 | 11.7 | 0.9 | 18.8 | 100.0 | 296 |
| Wealth quintile |  |  |  |  |  |  |  |
| Lowest | 61.7 | 12.0 | 9.5 | 0.0 | 16.8 | 100.0 | 484 |
| Second | 62.1 | 14.6 | 6.8 | 0.0 | 16.5 | 100.0 | 504 |
| Middle | 60.8 | 15.5 | 8.6 | 0.7 | 14.5 | 100.0 | 516 |
| Fourth | 55.7 | 17.6 | 10.8 | 0.0 | 15.9 | 100.0 | 517 |
| Highest | 52.9 | 21.8 | 9.7 | 0.5 | 15.0 | 100.0 | 615 |
| Total | 58.4 | 16.6 | 9.1 | 0.3 | 15.7 | 100.0 | 2,635 |
| Note: Figures in parentheses are based on 25 to 49 unweighted cases. <br> ${ }^{1}$ Excludes men who had sexual intercourse within the past four weeks <br> ${ }^{2}$ Excludes men who are not currently married |  |  |  |  |  |  |  |

Recent sexual activity is more common among men living in poorer households. For example, 62 percent of men in the lowest and second wealth quintiles had sexual intercourse in the four weeks before the survey compared with 53 percent of men in the highest wealth quintile. Variations in sexual activity are observed at the regional level. The proportion of men who had sex in the past four weeks ranges from 38 percent in Town West to 70 percent in Kagera, matching the data for women.

### 6.6 Postpartum Amenorrhoea, Abstinence, and Insusceptibility

Postpartum amenorrhoea refers to the interval between childbirth and the return 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. Delaying the resumption of sexual relations can also prolong protection. Women are considered to be insusceptible to pregnancy if they are not exposed to the risk of conception either because their menstrual period has not resumed since a birth or because they are abstaining from intercourse after childbirth.

As shown in Table 6.8, the median duration of amenorrhoea among women who gave birth in the three years preceding the survey is 11.5 months. The median duration of postpartum abstinence is much shorter-less than 4 months. Examining these two factors together shows that the median duration of postpartum insusceptibility to pregnancy is 13 months. During the first two months after childbirth, almost all women are insusceptible to pregnancy. Both amenorrhoea and abstinence play important roles in insusceptibility. From two months to the end of the third month after birth, nine in ten women are still insusceptible to conception, but the percentage of women receiving protection from postpartum abstinence drops to 58 percent. By 12-13 months after birth, 46 percent of women remain amenorrhoeic and 53 percent are insusceptible to pregnancy, but only 18 percent are abstaining from sexual relations.

A comparison of data with the 1999 TRCHS survey indicates that there have been slight decreases in the median durations of postpartum amenorrhoea and abstinence, resulting in a decline in the median duration of insusceptibility from 14.7 months in the 1999 TRCHS to 13 months in the 2004-05 TDHS.

| Table 6.8 Postpartum amenorrhoea, abstinence, and insusceptibility |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Percentage of births in the three years preceding the survey for which mothers are postpartum amenorrhoeic, abstaining, and insusceptible, by number of months since birth, and median and mean durations, Tanzania 2004-05 |  |  |  |  |
| Months sincePercentage of births for which <br> the mother is: |  |  |  | Number of births |
| birth | Amenorrhoeic | Abstaining | Insusceptible |  |
| <2 | 99.2 | 90.4 | 99.5 | 269 |
| 2-3 | 84.6 | 57.6 | 92.3 | 314 |
| 4-5 | 79.9 | 45.3 | 87.1 | 285 |
| 6-7 | 72.6 | 31.0 | 77.3 | 313 |
| 8-9 | 64.2 | 30.6 | 71.9 | 314 |
| 10-11 | 55.2 | 22.7 | 61.4 | 311 |
| 12-13 | 46.1 | 17.9 | 53.4 | 316 |
| 14-15 | 33.2 | 14.3 | 41.2 | 279 |
| 16-17 | 28.3 | 15.4 | 36.1 | 339 |
| 18-19 | 21.6 | 12.9 | 29.7 | 278 |
| 20-21 | 14.0 | 8.2 | 18.5 | 270 |
| 22-23 | 8.6 | 8.3 | 15.6 | 288 |
| 24-25 | 6.4 | 3.6 | 8.5 | 293 |
| 26-27 | 1.6 | 5.3 | 6.3 | 283 |
| 28-29 | 3.4 | 2.0 | 5.3 | 288 |
| 30-31 | 1.9 | 6.1 | 6.5 | 285 |
| 32-33 | 2.0 | 2.8 | 4.7 | 310 |
| 34-35 | 2.1 | 2.3 | 4.3 | 270 |
| Total | 35.2 | 20.9 | 40.5 | 5,305 |
| Median | 11.5 | 3.9 | 13.0 | na |
| Mean | 12.7 | 7.8 | 14.6 | na |
| Note: Estimates are based on status at the time of the survey. na $=$ Not applicable |  |  |  |  |

Table 6.9 shows the median durations of postpartum amenorrhoea, abstinence, and insusceptibility by background characteristics. The duration of amenorrhoea is substantially longer among women age $30-49$ ( 13.6 months) than women age 15-29 ( 10.5 months). The duration of postpartum abstinence, on the other hand, is slightly longer among the younger women. The median length of postpartum insusceptibility is longer for the older age group than the younger age group ( 14.8 months compared with 11.9 months). Rural women have a longer period of amenorrhoea than urban women ( 12.0 and 9.4 months, respectively), a shorter period of postpartum abstinence ( 3.8 and 4.4 months, respectively), and a longer median period of insusceptibility ( 13.7 and 10.2 months, respectively).

Significant regional variations are seen in postpartum amenorrhoea, abstinence, and insusceptibility. The median duration of postpartum amenorrhoea ranges from 5.3 months in Zanzibar South to 16.6 months in Rukwa, and postpartum abstinence ranges from one month in Kagera to 21 months in Mtwara. Insusceptibility ranges from 7.5 months in Kilimanjaro and Town West to 21 months in Mtwara. Postpartum insusceptibility is longer among women with less education and women in the lower wealth quintile.

| Median number of months of postpartum amenorrhoea, postpartum abstinence, and postpartum insusceptibility following births in the three years preceding the survey, by background characteristics, Tanzania 2004-05 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Background characteristic | Postpartum amenorrhoea | Postpartum abstinence | Postpartum insusceptibility | Number of births |
| Age |  |  |  |  |
| 15-29 | 10.5 | 4.2 | 11.9 | 3,371 |
| 30-49 | 13.6 | 3.5 | 14.8 | 1,934 |
| Residence |  |  |  |  |
| Urban | 9.4 | 4.4 | 10.2 | 1,026 |
| Rural | 12.0 | 3.8 | 13.7 | 4,279 |
| Mainland/Zanzibar |  |  |  |  |
| Mainland | 11.6 | 4.0 | 13.1 | 5,171 |
| Total urban | 9.3 | 4.6 | 10.2 | 1,008 |
| Dar es Salaam city | 6.9 | 5.8 | 8.1 | 260 |
| Other urban | 9.9 | 4.4 | 10.8 | 748 |
| Total rural | 12.1 | 3.8 | 13.8 | 4,163 |
| Zanzibar | 9.2 | 2.3 | 9.7 | 134 |
| Unguja | 7.5 | 2.9 | 8.6 | 82 |
| Pemba | 10.8 | 1.7 | 11.0 | 52 |
| Zone |  |  |  |  |
| Western | 12.5 | 3.6 | 13.5 | 1,190 |
| Northern | 8.5 | 3.4 | 12.4 | 658 |
| Central | 11.7 | 6.9 | 12.9 | 443 |
| Southern highlands | 12.6 | 4.1 | 13.5 | 776 |
| Lake | 11.4 | 2.2 | 12.3 | 1,152 |
| Eastern | 8.9 | 6.9 | 10.5 | 575 |
| Southern | 11.9 | 15.3 | 17.9 | 379 |
| Region |  |  |  |  |
| Dodoma | 10.7 | 7.1 | 11.7 | 268 |
| Arusha | 8.4 | 4.5 | 13.5 | 175 |
| Kilimanjaro | 6.1 | 4.2 | 7.5 | 114 |
| Tanga | 9.5 | 2.3 | 9.9 | 200 |
| Morogoro | 9.3 | 6.9 | 10.8 | 198 |
| Pwani | 12.2 | 8.4 | 14.7 | 117 |
| Dar es Salaam | 6.9 | 5.8 | 8.1 | 260 |
| Lindi | 11.9 | 14.3 | 16.6 | 85 |
| Mtwara | 12.4 | 21.0 | 21.0 | 148 |
| Ruvuma | 11.5 | 12.3 | 15.1 | 146 |
| Iringa | 11.0 | 8.6 | 12.0 | 181 |
| Mbeya | 13.2 | 3.2 | 13.3 | 404 |
| Singida | 14.2 | 6.5 | 14.8 | 174 |
| Tabora | 12.8 | 5.9 | 13.9 | 326 |
| Rukwa | 16.6 | 3.5 | 17.2 | 191 |
| Kigoma | 13.6 | 2.7 | 14.1 | 297 |
| Shinyanga | 11.8 | 3.1 | 12.9 | 567 |
| Kagera | 14.0 | 1.1 | 14.1 | 361 |
| Mwanza | 11.0 | 2.4 | 11.7 | 548 |
| Mara | 10.3 | 2.7 | 11.4 | 243 |
| Manyara | 13.3 | 4.3 | 14.7 | 168 |
| Zanzibar North | 9.3 | 2.7 | 9.9 | 21 |
| Zanzibar South | 5.3 | 3.0 | 14.5 | 11 |
| Town West | 7.0 | 3.1 | 7.5 | 50 |
| Pemba North | 11.0 | 1.6 | 11.2 | 27 |
| Pemba South | 10.7 | 1.9 | 10.7 | 24 |
| Education |  |  |  |  |
| No education | 13.9 | 3.9 | 15.1 | 1,410 |
| Primary incomplete | 11.7 | 4.1 | 13.7 | 832 |
| Primary complete | 10.8 | 3.9 | 11.9 | 2,809 |
| Secondary+ | 6.1 | 3.8 | 7.7 | 253 |
| Wealth quintile |  |  |  |  |
| Lowest | 14.9 | 4.2 | 16.1 | 1,175 |
| Second | 12.5 | 3.9 | 14.1 | 1,149 |
| Middle | 11.5 | 3.5 | 12.5 | 1,153 |
| Fourth | 11.2 | 3.9 | 13.2 | 1,003 |
| Highest | 6.8 | 4.5 | 7.9 | 824 |
| Total | 11.5 | 3.9 | 13.0 | 5,305 |
| Note: Medians are based on current status. |  |  |  |  |

### 6.7 Menopause

Another factor influencing the risk of pregnancy among women is menopause. In the context of the available survey data, women are considered menopausal if they are neither pregnant nor postpartum amenorrhoeic, but have not had a menstrual period in the six months preceding the survey (Table 6.10). As expected, the proportion of women who are menopausal increases with age. Less than 3 percent of women under age 40 are menopausal. Among women who are $40-43$, the percentage menopausal is between 5 and 6 . A large increase is then observed among women 44-45, 20 percent of whom are menopausal. By the 48-49 age group, the percentage of women who are menopausal increases to 43 percent.

| Table 6.10 Menopause |  |  |
| :---: | :---: | :---: |
| Percentage of women age 30-49 who are menopausal, by age, Tanzania 2004-05 |  |  |
| Age | Percentage menopausal ${ }^{1}$ | Number of women |
| 30-34 | 2.1 | 1,542 |
| 35-39 | 2.8 | 1,053 |
| 40-41 | 5.7 | 369 |
| 42-43 | 5.1 | 322 |
| 44-45 | 20.1 | 359 |
| 46-47 | 27.4 | 261 |
| 48-49 | 43.0 | 287 |
| Total | 8.7 | 4,192 |
| ${ }^{1}$ Percentage of all women who are not pregnant and not postpartum amenorrhoeic whose last menstrual period occurred six or more months preceding the survey |  |  |

## FERTILITY PREFERENCES AND NEED FOR FAMILY PLANNING

Information on fertility preferences provides family planning programmes with an understanding of the potential "demand" for fertility control in a given population. In the 2004-05 TDHS, women and men were asked a series of questions to ascertain their fertility preferences, including the desire to have another child, the length of time they would like to wait before having another child, and what they consider to be the ideal number of children. Interpretation of responses to these questions is subject to some degree of error because respondents' reported preferences are, in most cases, hypothetical and thus subject to change and rationalisation. Nevertheless, these data have been shown to be useful in assessing future fertility trends. In combination with data on contraceptive use, they also allow estimation of the need for family planning, both for spacing and limiting births.

### 7.1 Desire for More Children

Table 7.1 and Figure 7.1 present data concerning future reproductive preferences among married women according to the number of living children. The inclusion of women who are currently pregnant complicates the measurement of views on future childbearing. For these women, the question on desire for more children was rephrased to refer to desire for another child after the one that they are expecting. To take into account the way in which the preference variable is defined for pregnant women, the results are classified by number of living children, including the current pregnancy as equivalent to a living child.

Table 7.1 Fertility preferences by number of living children
Percent distribution of currently married women by desire for children, according to number of living children, Tanzania 2004-05

| Desire for children | Number of living children ${ }^{1}$ |  |  |  |  |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 0 | 1 | 2 | 3 | 4 | 5 | $6+$ |  |
| Have another soon ${ }^{2}$ | 89.6 | 33.2 | 23.8 | 18.7 | 16.1 | 10.0 | 6.1 | 23.6 |
| Have another later ${ }^{3}$ | 3.9 | 59.4 | 59.5 | 51.1 | 37.4 | 27.9 | 20.0 | 41.8 |
| Have another, undecided when | 0.3 | 0.9 | 0.4 | 0.6 | 0.4 | 0.3 | 0.4 | 0.5 |
| Undecided | 0.6 | 0.9 | 1.7 | 2.9 | 2.8 | 3.6 | 2.7 | 2.2 |
| Want no more | 0.7 | 3.7 | 12.8 | 22.8 | 37.5 | 51.4 | 59.3 | 26.9 |
| Sterilised ${ }^{4}$ | 0.0 | 0.3 | 0.7 | 2.0 | 4.0 | 4.4 | 6.6 | 2.6 |
| Declared infecund | 4.5 | 1.5 | 1.1 | 1.9 | 1.8 | 2.4 | 4.9 | 2.4 |
| Missing | 0.3 | 0.1 | 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 | 100.0 |
| Number of women | 457 | 1,247 | 1,320 | 1,189 | 866 | 662 | 1,211 | 6,950 |

${ }^{1}$ Includes 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

Figure 7.1 Desire for More Children among Currently Married Women


TDHS 2004-05

Although two-thirds of women say that they want more children, 42 percent say they want to wait for two or more years before having their next child. These women can be considered potential contraceptive users for the purpose of spacing.

Twenty-four percent of women say they want another child soon, while 1 percent want another child but are undecided on the timing of the next birth. Two percent are unsure of whether they want another child. Three in ten women either want no more children or have already been sterilised. Two percent of women consider themselves to be infecund.

The desire for more children is related to the number of living children women already have. Virtually all currently married women with no children want to have a child, with nine in ten expressing the desire to have a child soon. As the number of living children increases, the desire to have another child decreases. A majority of women with at least one child say that they want to delay their next birth or stop childbearing altogether.

The data indicate that over time, the desire to space births among currently married women may have increased slightly. According to the 1999 TRCHS, 36 percent of women wanted to wait before having another child compared with 42 percent in the 2004-05 TDHS. However, the desire to limit births has changed little, from 29 percent in 1999 to 30 percent in 2004-05.

### 7.2 Desire to Limit Childbearing

Table 7.2 presents the percentage of currently married women who want no more children (or are sterilised) by number of living children and background characteristics. This table provides information about variations in the potential demand for fertility control.

The data show that the desire to limit childbearing is higher in urban areas than rural areas (35 and 28 percent, respectively) and varies with the number of living children. For example, more than twice as many urban women as rural women with four children say that they want to stop childbearing (70 and 34 percent, respectively).

There is significant zonal variation in the desire to limit childbearing ranging from a low of 23 percent in the Western zone to a high of 36 percent in the Northern zone. There is also significant variation by education, particularly among women with two, three, or four living children.

| Table 7.2 Desire to limit childbearing |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percentage of currently married women who want no more children, by number of living children and background characteristics, Tanzania 2004-05 |  |  |  |  |  |  |  |  |
| Background characteristic | Number of living children ${ }^{1}$ |  |  |  |  |  |  | Total |
|  | 0 | 1 | 2 | 3 | 4 | 5 | $6+$ |  |
| Residence |  |  |  |  |  |  |  |  |
| Urban | 0.8 | 7.1 | 21.4 | 37.5 | 70.3 | 69.7 | 80.6 | 34.6 |
| Rural | 0.7 | 2.7 | 10.5 | 20.4 | 33.7 | 52.6 | 63.6 | 28.0 |
| Mainland/Zanzibar |  |  |  |  |  |  |  |  |
| Mainland | 0.7 | 3.9 | 13.5 | 25.0 | 42.0 | 56.3 | 66.5 | 29.6 |
| Total urban | 0.8 | 6.8 | 20.5 | 37.5 | 69.2 | 71.1 | 81.3 | 33.9 |
| Dar es Salaam city | * | 11.6 | 20.6 | (48.8) | * | * | * | 29.9 |
| Other urban | 1.5 | 3.5 | 20.5 | 32.5 | 71.4 | 70.9 | 80.8 | 35.9 |
| Total rural | 0.7 | 2.6 | 10.6 | 20.5 | 34.4 | 53.0 | 64.2 | 28.2 |
| Zanzibar | 0.9 | 7.8 | 15.3 | 18.0 | 19.0 | 38.9 | 52.8 | 26.5 |
| Unguja | 0.0 | 4.6 | 12.1 | 18.4 | 18.4 | 46.1 | 58.4 | 25.5 |
| Pemba | * | 15.5 | 22.8 | 16.8 | (20.3) | 25.7 | 45.4 | 28.6 |
| Zone |  |  |  |  |  |  |  |  |
| Western | 0.0 | 2.0 | 6.8 | 13.7 | 16.0 | 38.4 | 58.0 | 22.9 |
| Northern | (3.2) | 2.3 | 16.6 | 32.6 | 52.5 | 59.4 | 75.6 | 35.8 |
| Central | (0.0) | 3.0 | 15.9 | 19.3 | 37.1 | (63.8) | 63.7 | 29.7 |
| Southern highlands | (0.0) | 5.3 | 12.0 | 20.1 | 44.9 | 61.6 | 62.9 | 30.8 |
| Lake | 0.0 | 0.8 | 15.9 | 27.8 | 52.8 | 65.8 | 69.9 | 34.6 |
| Eastern | 0.0 | 9.3 | 15.3 | 36.0 | 46.6 | * | 70.3 | 26.5 |
| Southern | 4.2 | 4.0 | 11.4 | 23.8 | 48.7 | 53.6 | 81.8 | 27.4 |
| Education |  |  |  |  |  |  |  |  |
| No education | 1.5 | 4.0 | 10.2 | 17.7 | 30.2 | 44.4 | 62.3 | 27.9 |
| Primary incomplete | 0.0 | 3.7 | 11.2 | 24.8 | 39.8 | 54.1 | 67.0 | 30.9 |
| Primary complete | 0.5 | 3.4 | 13.4 | 25.1 | 45.2 | 62.2 | 69.0 | 29.7 |
| Secondary+ | 0.0 | 7.5 | 31.6 | 50.0 | 75.7 | 69.6 | 70.1 | 32.3 |
| Wealth quintile |  |  |  |  |  |  |  |  |
| Lowest | 1.1 | 2.2 | 10.1 | 16.7 | 30.6 | 41.7 | 61.0 | 26.7 |
| Second | 1.3 | 1.2 | 8.1 | 14.7 | 22.4 | 44.9 | 59.8 | 22.8 |
| Middle | 0.1 | 4.8 | 11.6 | 25.5 | 41.8 | 64.3 | 62.9 | 31.9 |
| Fourth | 1.4 | 1.0 | 13.9 | 24.5 | 52.2 | 56.1 | 75.5 | 33.4 |
| Highest | 0.0 | 8.2 | 20.6 | 39.9 | 61.1 | 80.1 | 81.3 | 33.0 |
| Total | 0.8 | 4.0 | 13.5 | 24.8 | 41.5 | 55.8 | 65.9 | 29.5 |

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.
${ }^{1}$ Includes current pregnancy

### 7.3 Unmet Need for Family Planning

Women who say either that they do not want any more children or that they want to wait two or more years before having another child, but are not using contraception, are considered to have an unmet need for family planning. Women who are using family planning methods are said to have a met need for family planning. Women with unmet need and met need together constitute the total demand for family planning, which can be categorized based on whether the need is for spacing or limiting births.

Table 7.3 presents estimates for unmet need, met need, and total demand for family planning among currently married Tanzanian women by background characteristics. The total demand for family planning among currently married women is 50 percent and more than half of that demand (56 percent) is satisfied. The demand for spacing purposes is almost twice as high as the demand for limiting purposes ( 32 and 18 percent, respectively). Twenty-two percent of currently married women have an unmet need for family planning: 15 percent have unmet need for spacing and 7 percent for limiting.

| Table 7.3 Need for family planning |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percentage of currently married women with unmet need for family planning and with met need for family planning, and the total demand for family planning, along with percentage of demand satisfied, by background characteristics, Tanzania 2004-05 |  |  |  |  |  |  |  |  |  |  |  |
|  | Unmet need for family planning ${ }^{1}$ |  |  | Met need for family planning (currently using) ${ }^{2}$ |  |  | Total demand for family planning ${ }^{3}$ |  |  | Percentage of demand satisfied | Number of women |
| Background characteristic | For spacing | For limiting | Total | For spacing | For limiting | Total | For spacing | For limiting | Total |  |  |
| Age |  |  |  |  |  |  |  |  |  |  |  |
| 15-19 | 17.7 | 0.9 | 18.6 | 9.4 | 0.1 | 9.6 | 27.8 | 1.2 | 29.0 | 35.9 | 590 |
| 20-24 | 21.9 | 1.3 | 23.2 | 23.1 | 2.4 | 25.5 | 46.6 | 3.8 | 50.4 | 54.0 | 1,400 |
| 25-29 | 19.2 | 3.0 | 22.2 | 23.8 | 7.4 | 31.2 | 45.1 | 10.5 | 55.5 | 60.1 | 1,511 |
| 30-34 | 16.0 | 7.0 | 23.1 | 17.9 | 12.7 | 30.6 | 34.4 | 19.9 | 54.3 | 57.5 | 1,292 |
| 35-39 | 11.0 | 12.3 | 23.4 | 9.6 | 20.2 | 29.9 | 22.0 | 33.4 | 55.3 | 57.8 | 884 |
| 40-44 | 5.6 | 18.8 | 24.4 | 2.3 | 21.1 | 23.4 | 7.9 | 40.3 | 48.2 | 49.4 | 694 |
| 45-49 | 1.2 | 11.8 | 13.0 | 1.0 | 20.8 | 21.8 | 2.2 | 32.6 | 34.8 | 62.7 | 580 |
| Residence |  |  |  |  |  |  |  |  |  |  |  |
| Urban | 10.2 | 6.3 | 16.6 | 23.0 | 18.8 | 41.8 | 34.6 | 25.2 | 59.9 | 72.3 | 1,647 |
| Rural | 16.6 | 6.8 | 23.5 | 13.2 | 8.4 | 21.6 | 30.8 | 15.5 | 46.3 | 49.3 | 5,303 |
| Mainland/Zanzibar |  |  |  |  |  |  |  |  |  |  |  |
| Mainland | 14.9 | 6.7 | 21.6 | 15.6 | 11.0 | 26.7 | 31.7 | 17.9 | 49.6 | 56.5 | 6,769 |
| Total urban | 10.0 | 6.0 | 16.0 | 23.2 | 18.7 | 41.9 | 34.6 | 24.8 | 59.4 | 73.1 | 1,644 |
| Dar es Salaam city | 8.3 | 4.2 | 12.5 | 26.5 | 18.1 | 44.6 | 37.3 | 22.3 | 59.6 | 79.1 | 541 |
| Other urban | 10.8 | 6.9 | 17.7 | 21.6 | 19.0 | 40.6 | 33.3 | 26.0 | 59.3 | 70.2 | 1,103 |
| Total rural | 16.5 | 6.9 | 23.4 | 13.2 | 8.5 | 21.8 | 30.7 | 15.7 | 46.4 | 49.6 | 5,125 |
| Zanzibar | 22.0 | 9.4 | 31.3 | 9.8 | 5.5 | 15.3 | 32.6 | 14.9 | 47.5 | 34.0 | 182 |
| Unguja | 20.4 | 9.4 | 29.8 | 12.5 | 6.2 | 18.7 | 34.0 | 15.6 | 49.6 | 39.9 | 123 |
| Pemba | 25.3 | 9.4 | 34.7 | 4.2 | 4.0 | 8.2 | 29.7 | 13.4 | 43.1 | 19.5 | 58 |
| Zones |  |  |  |  |  |  |  |  |  |  |  |
| Western | 21.4 | 7.2 | 28.6 | 6.5 | 6.3 | 12.8 | 28.9 | 13.8 | 42.7 | 32.9 | 1,341 |
| Northern | 12.4 | 6.8 | 19.2 | 23.5 | 18.1 | 41.5 | 37.5 | 25.1 | 62.6 | 69.3 | 951 |
| Central | 16.9 | 9.7 | 26.6 | 13.0 | 8.6 | 21.6 | 30.5 | 18.3 | 48.8 | 45.5 | 552 |
| Southern highlands | 10.3 | 3.6 | 13.9 | 23.4 | 13.0 | 36.4 | 34.6 | 17.1 | 51.6 | 73.2 | 1,013 |
| Lake | 16.9 | 8.7 | 25.6 | 5.4 | 7.4 | 12.8 | 23.2 | 16.3 | 39.5 | 35.3 | 1,300 |
| Eastern | 10.8 | 4.7 | 15.5 | 23.6 | 14.2 | 37.7 | 35.6 | 18.9 | 54.5 | 71.6 | 1,027 |
| Southern | 13.5 | 6.4 | 19.9 | 21.8 | 11.7 | 33.5 | 36.7 | 18.4 | 55.1 | 63.9 | 584 |
| Region |  |  |  |  |  |  |  |  |  |  |  |
| Dodoma | 16.5 | 11.1 | 27.6 | 14.2 | 9.6 | 23.8 | 31.5 | 20.7 | 52.2 | 47.1 | 333 |
| Arusha | 10.3 | 4.2 | 14.5 | 35.4 | 13.2 | 48.6 | 48.1 | 17.4 | 65.6 | 77.9 | 243 |
| Kilimanjaro | 7.7 | 10.4 | 18.1 | 16.1 | 33.4 | 49.5 | 24.8 | 44.8 | 69.5 | 74.0 | 214 |
| Tanga | 15.7 | 4.4 | 20.1 | 23.7 | 16.5 | 40.2 | 39.7 | 20.9 | 60.6 | 66.9 | 291 |
| Morogoro | 10.0 | 5.6 | 15.6 | 20.7 | 13.9 | 34.6 | 30.7 | 19.5 | 50.2 | 68.9 | 311 |
| Pwani | 19.7 | 4.9 | 24.6 | 19.5 | 2.7 | 22.2 | 39.2 | 7.6 | 46.8 | 47.4 | 176 |
| Dar es Salaam | 8.3 | 4.2 | 12.5 | 26.5 | 18.1 | 44.6 | 37.3 | 22.3 | 59.6 | 79.1 | 541 |
| Lindi | 13.7 | 7.6 | 21.3 | 20.9 | 12.6 | 33.5 | 35.0 | 20.2 | 55.3 | 61.5 | 156 |
| Mtwara | 15.6 | 8.0 | 23.6 | 16.5 | 10.3 | 26.8 | 33.0 | 18.3 | 51.3 | 54.0 | 235 |
| Ruvuma | 10.6 | 3.6 | 14.3 | 28.9 | 12.7 | 41.6 | 42.4 | 17.2 | 59.6 | 76.0 | 193 |
| Iringa | 13.9 | 3.6 | 17.5 | 21.7 | 13.4 | 35.1 | 37.3 | 17.5 | 54.8 | 68.1 | 254 |
| Mbeya | 7.2 | 3.6 | 10.8 | 29.0 | 16.2 | 45.1 | 37.0 | 20.5 | 57.4 | 81.2 | 526 |
| Singida | 17.5 | 7.5 | 25.0 | 11.2 | 7.1 | 18.3 | 28.9 | 14.6 | 43.6 | 42.6 | 219 |
| Tabora | 15.7 | 7.7 | 23.4 | 4.6 | 5.7 | 10.3 | 20.9 | 13.9 | 34.8 | 32.8 | 395 |
| Rukwa | 13.4 | 3.5 | 16.8 | 12.7 | 5.4 | 18.1 | 26.3 | 8.9 | 35.3 | 52.2 | 233 |
| Kigoma | 25.3 | 5.1 | 30.4 | 11.6 | 8.2 | 19.8 | 38.7 | 14.1 | 52.8 | 42.4 | 312 |
| Shinyanga | 23.1 | 7.9 | 31.0 | 5.2 | 5.7 | 10.9 | 29.0 | 13.6 | 42.6 | 27.3 | 634 |
| Kagera | 14.8 | 7.3 | 22.1 | 5.9 | 9.7 | 15.7 | 21.4 | 17.4 | 38.8 | 43.1 | 403 |
| Mwanza | 17.7 | 9.0 | 26.7 | 4.5 | 6.5 | 11.0 | 23.2 | 15.7 | 38.9 | 31.3 | 645 |
| Mara | 18.1 | 10.1 | 28.2 | 6.9 | 6.1 | 13.0 | 26.1 | 16.3 | 42.3 | 33.3 | 252 |
| Manyara | 15.1 | 9.7 | 24.8 | 16.6 | 10.0 | 26.5 | 34.8 | 19.7 | 54.4 | 54.5 | 203 |
| Zanzibar North | 28.4 | 13.1 | 41.5 | 3.5 | 4.3 | 7.8 | 32.3 | 17.4 | 49.7 | 16.5 | 28 |
| Zanzibar South | 17.7 | 7.9 | 25.6 | 16.7 | 4.3 | 21.0 | 35.2 | 12.1 | 47.3 | 45.9 | 17 |
| Town West | 18.1 | 8.3 | 26.4 | 14.9 | 7.3 | 22.2 | 34.4 | 15.6 | 50.0 | 47.2 | 78 |
| Pemba North | 25.6 | 9.1 | 34.6 | 3.1 | 4.0 | 7.2 | 28.7 | 13.1 | 41.8 | 17.1 | 31 |
| Pemba South | 24.9 | 9.9 | 34.8 | 5.4 | 3.9 | 9.4 | 30.8 | 13.8 | 44.6 | 22.0 | 27 |
| Education |  |  |  |  |  |  |  |  |  |  |  |
| No education | 13.9 | 8.2 | 22.0 | 8.2 | 5.2 | 13.4 | 22.6 | 13.5 | 36.1 | 39.0 | 1,994 |
| Primary incomplete | 14.9 | 8.0 | 22.9 | 12.5 | 9.3 | 21.8 | 28.3 | 17.4 | 45.6 | 49.8 | 1,070 |
| Primary complete | 16.8 | 5.8 | 22.6 | 19.1 | 13.4 | 32.5 | 37.5 | 19.5 | 57.1 | 60.3 | 3,512 |
| Secondary+ | 6.4 | 4.0 | 10.4 | 28.8 | 21.7 | 50.6 | 35.4 | 26.0 | 61.4 | 83.1 | 375 |
|  |  |  |  |  |  |  |  |  |  |  | ntinued... |


| Table 7.3-Continued |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Background characteristic | Unmet need for family planning ${ }^{1}$ |  |  | Met need for family planning (currently using) ${ }^{2}$ |  |  | Total demand for family planning ${ }^{3}$ |  |  | Percentage of demand satisfied | Number of women |
|  | For spacing | For limiting | Total | For spacing | For limiting | Total | For spacing | $\begin{gathered} \text { For } \\ \text { limiting } \end{gathered}$ | Total |  |  |
| Wealth quintile |  |  |  |  |  |  |  |  |  |  |  |
| Lowest | 16.0 | 7.8 | 23.9 | 9.5 | 6.1 | 15.6 | 26.4 | 14.0 | 40.4 | 41.0 | 1,341 |
| Second | 15.9 | 6.1 | 22.0 | 14.1 | 4.8 | 18.9 | 30.8 | 11.1 | 41.9 | 47.4 | 1,424 |
| Middle | 17.4 | 8.3 | 25.8 | 12.2 | 9.1 | 21.4 | 30.6 | 17.9 | 48.5 | 46.9 | 1,380 |
| Fourth | 15.9 | 6.6 | 22.5 | 16.5 | 13.3 | 29.8 | 33.8 | 20.2 | 54.0 | 58.3 | 1,365 |
| Highest | 10.5 | 4.9 | 15.4 | 24.5 | 20.7 | 45.2 | 36.5 | 25.8 | 62.3 | 75.3 | 1,440 |
| Currently married women | 15.1 | 6.7 | 21.8 | 15.5 | 10.9 | 26.4 | 31.7 | 17.8 | 49.5 | 55.9 | 6,950 |
| Unmarried women | 4.4 | 1.5 | 5.9 | 9.4 | 5.1 | 14.4 | 14.2 | 6.7 | 21.0 | 71.8 | 3,379 |
| All women | 11.6 | 5.0 | 16.6 | 13.5 | 9.0 | 22.5 | 26.0 | 14.2 | 40.2 | 58.6 | 10,329 |
| ${ }^{1}$ Unmet need for spacing includes pregnant women whose pregnancy was mistimed, amenorrhoeic women who are not using family planning and whose last birth was mistimed, and fecund women who are neither pregnant nor amenorrhoeic and who are not using any method of family planning and say they want to wait two or more years for their next birth. Also included in unmet need for spacing are fecund women who are not using any method of family planning and say they are unsure whether they want another child or who want another child but are unsure when to have the birth (unless they say it would not be a problem if they discovered they were pregnant in the next few weeks). Unmet need for limiting refers to pregnant women whose pregnancy was unwanted, amenorrhoeic women whose last child was unwanted, and fecund women who are neither pregnant nor amenorrhoeic and who are not using any method of family planning and who want no more children. Excluded from the unmet need category are pregnant and amenorrhoeic women who became pregnant while using a method (these women are in need of a better method of contraception). <br> ${ }^{2}$ Using for spacing is defined as women who are using some method of family planning and say they want to have another child or are undecided whether to have another. Using for limiting is defined as women who are using and who want no more children. Note that the specific methods used are not taken into account here. <br> ${ }^{3}$ Nonusers who are pregnant or amenorrhoeic whose pregnancy was the result of a contraceptive failure are not included in the category of unmet need, but are included in total demand for contraception (because they would have been using had their method not failed). |  |  |  |  |  |  |  |  |  |  |  |

Unmet need does not vary much by age except for the youngest and oldest women, who have the lowest percentage of unmet need. Up to age 34, most of unmet need for family planning is for spacing purposes. After age 35 , and particularly after age 40 , most of unmet need for family planning is for limiting childbearing. Total unmet need for family planning is highest in Zanzibar North (42 percent) and lowest in Mbeya (11 percent).

There are significant differences in the percentage of demand satisfied by background characteristics. As expected, a higher percentage of demand is satisfied among urban women, those living in wealthier households, and those with more education than among their less advantaged counterparts.

Since the 1999 TRCHS there has been no significant change either in unmet need or the total demand for family planning among currently married women. More importantly, the percentage of demand satisfied remains unchanged.

### 7.4 IDEAL FAMILY SIZE

This section discusses responses of women and men to inquiries about what they consider to be the ideal number of children. Respondents who had no children were asked how many children they would like to have if they could choose the number of children to have in their whole life. Those who had living children were asked about the number of children they would choose if they could start their childbearing again. Responses provide an indicator of future fertility, while the information supplied by the latter group also provides a measure of unwanted fertility.

Table 7.4 shows the distribution of respondents by ideal number of children and mean ideal number of children according to the actual number of living children for all women and for all men. In general, Tanzanians, irrespective of their number of living children, consider a large number of children ideal.

The ideal number of children is 5.0 for all women and 5.4 for currently married women. Three-fourths of all women consider four or more children to be ideal. Only 8 percent of women think two or fewer children is ideal. Among all women, the mean ideal number of children increases with the number of living children, from 4.2 for those without any children to 6.8 among those with six or more children.

| Percent distribution of all women and all men by ideal number of children, and mean ideal number of children for all women and for all men and for currently married women and for currently married men, according to number of living children, Tanzania 2004-05 |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Numb | of livin | ildren ${ }^{1}$ |  |  |  |
| Desire for children | 0 | 1 | 2 | 3 | 4 | 5 | $6+$ | Total |
| WOMEN |  |  |  |  |  |  |  |  |
| 0 | 0.9 | 0.2 | 0.2 | 0.0 | 0.0 | 0.4 | 0.1 | 0.3 |
| 1 | 0.9 | 1.2 | 0.1 | 0.0 | 0.1 | 0.0 | 0.1 | 0.4 |
| 2 | 15.7 | 11.0 | 6.6 | 1.8 | 3.0 | 1.6 | 2.1 | 7.6 |
| 3 | 22.9 | 22.9 | 15.0 | 9.4 | 3.5 | 5.3 | 3.9 | 14.2 |
| 4 | 25.7 | 28.8 | 37.5 | 30.6 | 28.0 | 17.0 | 15.2 | 26.9 |
| 5 | 13.8 | 14.8 | 18.2 | 22.3 | 17.4 | 20.6 | 10.7 | 16.2 |
| 6+ | 17.6 | 20.2 | 21.5 | 34.8 | 46.1 | 54.0 | 64.3 | 32.5 |
| Non-numeric responses | 2.5 | 0.9 | 0.9 | 1.1 | 1.9 | 1.2 | 3.5 | 1.8 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Number of respondents | 2,454 | 1,767 | 1,621 | 1,362 | 1,011 | 756 | 1,358 | 10,329 |
| Mean ideal number of children for: ${ }^{2}$ |  |  |  |  |  |  |  |  |
| All women | 4.2 | 4.4 | 4.6 | 5.2 | 5.5 | 6.0 | 6.8 | 5.0 |
| Number | 2,393 | 1,750 | 1,607 | 1,346 | 992 | 747 | 1,310 | 10,146 |
| Currently married women | 5.0 | 4.7 | 4.7 | 5.3 | 5.5 | 6.0 | 6.8 | 5.4 |
| Number | 452 | 1,233 | 1,308 | 1,175 | 850 | 653 | 1,167 | 6,839 |
| MEN |  |  |  |  |  |  |  |  |
| 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 1 | 0.9 | 1.0 | 0.0 | 0.2 | 0.0 | 0.0 | 0.0 | 0.6 |
| 2 | 12.0 | 12.5 | 3.7 | 4.3 | 1.0 | 2.4 | 1.0 | 8.2 |
| 3 | 22.1 | 27.5 | 10.9 | 8.6 | 6.3 | 6.8 | 3.7 | 16.8 |
| 4 | 25.0 | 25.1 | 39.3 | 25.0 | 28.0 | 14.6 | 17.0 | 25.4 |
| 5 | 16.1 | 14.7 | 18.1 | 25.5 | 17.7 | 16.1 | 7.2 | 16.2 |
| 6+ | 21.5 | 18.1 | 25.5 | 35.8 | 42.0 | 54.6 | 63.8 | 29.9 |
| Non-numeric responses | 2.6 | 1.2 | 2.4 | 0.7 | 5.0 | 5.7 | 7.4 | 3.0 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Number of men | 1,239 | 315 | 285 | 235 | 172 | 124 | 264 | 2,634 |
| Mean ideal number of children for: ${ }^{2}$ |  |  |  |  |  |  |  |  |
| All men | 4.6 | 4.5 | 4.8 | 5.6 | 5.8 | 6.5 | 8.6 | 5.3 |
| Number | 1,208 | 311 | 278 | 233 | 163 | 117 | 244 | 2,555 |
| Currently married men | 5.0 | 4.6 | 4.9 | 5.6 | 5.8 | 6.6 | 8.7 | 5.9 |
| Number | 128 | 251 | 246 | 218 | 158 | 109 | 239 | 1,350 |
| ${ }^{1}$ Includes current pregnancy <br> ${ }^{2}$ Means are calculated excluding the women giving non-numeric responses. |  |  |  |  |  |  |  |  |

Tanzanian men, on average, want even more children than Tanzanian women. The more living children, the greater the disparity between women's and men's preferences. For example, although currently married women and men with no children both consider five children to be ideal, among those respondents with six or more children, men report a mean ideal number of children that is two more than the ideal of women (8.7 and 6.8, respectively).

Figure 7.2 shows that there has been a gradual decline in family size preference over time. The mean ideal number of children has declined by more than one child since the 1991-92 TDHS, from 6.1 to 5.0 among women and 6.5 to 5.3 among men.

Figure 7.2 Trends in Mean Ideal Family Size among Women and Men, 1991-2005


### 7.5 Ideal Number of Children by Background Characteristics

There are significant variations in mean ideal number of children by background characteristics (Table 7.5). The older the respondent, the more children they consider ideal; this is true across most background characteristics. However, even the youngest women (age 15-19) think the ideal family size is more than four children (4.3). Rural women want one and a half more children than urban women ( 5.4 and 4.0 , respectively). Women in Zanzibar also report a larger ideal family size than women on the Mainland ( 6.2 and 5.0, respectively).

The ideal number of children declines as level of education and wealth quintile increase. For example, the mean ideal number of children is 3.6 among women with at least some secondary education, compared with 6.2 for women with no education. These findings are similar to those of the 1999 TRCHS, which showed that ideal family size has a strong negative correlation with level of education. Similarly, women in households in the lowest wealth quintile want 6.0 children, compared with 3.8 children for women living in households in the highest wealth quintile, a difference of more than 2 children.

Table 7.5 also presents the findings for men. Similar to women, the ideal family size among urban men is lower than among rural men ( 3.9 and 5.8 , respectively). The magnitude of difference is more pronounced for men than for women. Furthermore, men in Zanzibar want two more children than men in the Mainland (7.3 and 5.2, respectively). Men from Pemba have the largest ideal family size among all the subgroups in the sample (8.5). Men's ideal number of children decreases as level of education and wealth quintile increase. For example, men without education want twice as many children as men with at least some secondary education ( 7.9 and 3.8 , respectively).

| Table 7.5 Mean ideal number of children by background characteristics |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Mean ideal number of children for all women and men, by age (women) and background characteristics, Tanzania 2004-05 |  |  |  |  |  |  |  |  |  |
| Background characteristic | Age |  |  |  |  |  |  | All women | All men |
|  | 15-19 | 20-24 | 25-29 | 30-34 | 35-39 | 40-44 | 45-49 |  |  |
| Residence |  |  |  |  |  |  |  |  |  |
| Urban | 3.4 | 3.5 | 3.8 | 4.0 | 4.8 | 5.2 | 5.4 | 4.0 | 3.9 |
| Rural | 4.7 | 5.0 | 5.3 | 5.8 | 6.0 | 6.3 | 6.7 | 5.4 | 5.8 |
| Mainland/Zanzibar |  |  |  |  |  |  |  |  |  |
| Mainland | 4.3 | 4.5 | 4.8 | 5.2 | 5.7 | 6.0 | 6.4 | 5.0 | 5.2 |
| Total urban | 3.3 | 3.5 | 3.9 | 4.0 | 4.7 | 5.1 | 5.4 | 3.9 | 3.8 |
| Dar es Salaam city | 2.9 | 3.3 | 3.8 | 3.8 | (4.9) | * | * | 3.6 | 3.6 |
| Other urban | 3.6 | 3.6 | 3.9 | 4.1 | 4.6 | 5.4 | 5.6 | 4.1 | 3.9 |
| Total rural | 4.7 | 5.0 | 5.2 | 5.7 | 6.0 | 6.3 | 6.6 | 5.4 | 5.8 |
| Zanzibar | 5.6 | 5.9 | 6.2 | 6.4 | 6.9 | 6.8 | 7.4 | 6.2 | 7.3 |
| Unguja | 5.0 | 5.3 | 5.7 | 5.6 | 6.3 | 5.7 | 6.2 | 5.6 | 6.7 |
| Pemba | 6.7 | 7.2 | 7.5 | 8.6 | 8.3 | 8.6 | (9.9) | 7.7 | 8.5 |
| Zone |  |  |  |  |  |  |  |  |  |
| Western | 5.3 | 5.6 | 5.8 | 6.6 | 6.6 | 6.6 | 7.0 | 6.0 | 6.3 |
| Northern | 3.7 | 4.0 | 4.1 | 4.7 | 5.0 | 5.4 | 5.9 | 4.4 | 4.4 |
| Central | 4.3 | 4.6 | 4.9 | 5.1 | 5.4 | 5.7 | 5.9 | 4.9 | 5.4 |
| Southern highlands | 4.4 | 4.8 | 4.8 | 5.1 | 5.6 | 6.0 | 5.9 | 5.0 | 5.8 |
| Lake | 4.4 | 4.7 | 5.0 | 5.6 | 5.9 | 6.2 | 6.8 | 5.2 | 5.8 |
| Eastern | 3.3 | 3.7 | 4.2 | 4.4 | 5.4 | 5.7 | 6.5 | 4.3 | 4.1 |
| Southern | 3.7 | 3.9 | 4.5 | 4.8 | 5.2 | 6.1 | 6.6 | 4.7 | 4.3 |
| Education |  |  |  |  |  |  |  |  |  |
| No education | 5.5 | 5.7 | 5.9 | 6.4 | 6.9 | 6.8 | 6.8 | 6.2 | 7.9 |
| Primary incomplete | 4.4 | 4.8 | 5.2 | 5.5 | 5.8 | 6.2 | 6.6 | 5.2 | 5.6 |
| Primary complete | 4.0 | 4.1 | 4.6 | 5.1 | 5.4 | 5.6 | 5.3 | 4.7 | 4.9 |
| Secondary+ | 3.3 | 3.4 | 3.6 | 3.7 | 4.0 | 4.3 | (4.6) | 3.6 | 3.8 |
| Wealth quintile |  |  |  |  |  |  |  |  |  |
| Lowest | 5.3 | 5.5 | 5.9 | 6.1 | 6.6 | 6.9 | 7.2 | 6.0 | 6.8 |
| Second | 5.0 | 5.4 | 5.3 | 6.0 | 6.2 | 6.5 | 6.5 | 5.6 | 5.7 |
| Middle | 4.6 | 4.8 | 5.2 | 5.9 | 6.2 | 6.2 | 6.9 | 5.4 | 5.6 |
| Fourth | 4.0 | 4.2 | 4.6 | 5.0 | 5.3 | 5.6 | 6.0 | 4.7 | 5.0 |
| Highest | 3.3 | 3.4 | 3.8 | 3.9 | 4.6 | 4.7 | 5.2 | 3.8 | 3.7 |
| Total | 4.3 | 4.5 | 4.8 | 5.3 | 5.7 | 6.0 | 6.4 | 5.0 | 5.3 |

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.

### 7.6 Wanted and Unwanted Fertility

There are two main ways of looking at the issue of unwanted fertility. In the first approach, responses to a question about children born in the five years preceding the survey (and any current pregnancy) are used to determine whether the pregnancy was planned (wanted then), mistimed (wanted but at a later time), or unwanted (not wanted at all). These results provide some insight into the degree to which couples are able to control fertility.

Table 7.6 shows the percent distribution of births (including current pregnancy) in the five years preceding the survey by fertility planning status, according to birth order and mother's age at birth. The data show that three out of every four pregnancies in the five years preceding the survey were wanted at the time, 18 percent were wanted later, and 5 percent were unwanted. The proportion of births wanted then declines with increasing birth order and the age of the mother.

| Table 7.6 Fertility planning status |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percent distribution of births in the five years preceding the survey (including current pregnancies), by fertility planning status, according to birth order and mother's age at birth, Tanzania 2004-05 |  |  |  |  |  |  |
| Birth order and mother's age at birth | Planning status of birth |  |  |  | Total | Number of births |
|  | Wanted then | Wanted later | Wanted no more | Missing |  |  |
| Birth order |  |  |  |  |  |  |
| 1 | 83.8 | 12.0 | 4.0 | 0.2 | 100.0 | 2,139 |
| 2 | 79.1 | 19.8 | 1.1 | 0.1 | 100.0 | 1,972 |
| 3 | 77.6 | 20.6 | 1.7 | 0.1 | 100.0 | 1,581 |
| 4+ | 70.7 | 19.9 | 9.2 | 0.2 | 100.0 | 4,120 |
| Age at birth |  |  |  |  |  |  |
| <20 | 80.5 | 14.9 | 4.5 | 0.1 | 100.0 | 1,679 |
| 20-24 | 78.1 | 19.6 | 2.2 | 0.2 | 100.0 | 2,857 |
| 25-29 | 76.4 | 20.6 | 3.0 | 0.0 | 100.0 | 2,442 |
| 30-34 | 75.2 | 18.3 | 6.0 | 0.4 | 100.0 | 1,586 |
| 35-39 | 69.6 | 17.0 | 13.4 | 0.0 | 100.0 | 839 |
| 40-44 | 66.9 | 12.6 | 20.4 | 0.0 | 100.0 | 360 |
| 45-49 | 56.0 | 3.2 | 40.8 | 0.0 | 100.0 | 50 |
| Total | 76.4 | 18.3 | 5.2 | 0.1 | 100.0 | 9,813 |

Compared with the data from the 1999 TRCHS, approximately the same proportion of births overall were wanted. However, whereas the TRCHS indicated that mistimed and unwanted births were equally common, the 2004-05 TDHS findings indicate a greater proportion that are mistimed (wanted later).

Table 7.7 shows the total wanted fertility rates and total actual fertility rates for the three years preceding the survey, by selected background characteristics. The wanted fertility rate is calculated in the same manner as the total fertility rate, but unwanted births are excluded from the numerator. For this purpose, unwanted births are defined as those that exceed the number considered ideal by the respondent. (Women who did not report a numeric ideal family size were assumed to want all their births.) The rate represents the level of fertility that would have prevailed in the three years preceding the survey if all unwanted births were prevented. A comparison of the total wanted fertility and actual total fertility rate suggests the potential demographic impact of the elimination of unwanted births.

The total wanted fertility rate is 4.9 , which is 0.8 births less than the total fertility rate of 5.7. Neither the total wanted fertility rate nor the TFR has changed significantly since the 1999 TRCHS.

The difference between the wanted and actual fertility rates is almost one child in rural areas and 0.4 in urban areas. Education has an inverse relationship with wanted fertility rates in Tanzania. Furthermore, the higher the level of education, the smaller the gap between wanted and actual fertility. A similar relationship can be seen between wealth quintile and wanted fertility.

| Table 7.7 Wanted fertility rates |  |  |
| :---: | :---: | :---: |
| Total wanted fertility rates and total fertility rates for the three years preceding the survey, by background characteristics, Tanzania 2004-05 |  |  |
| Background characteristic | Total wanted fertility rates | Total fertility rate |
| Residence |  |  |
| Urban | 3.1 | 3.6 |
| Rural | 5.6 | 6.5 |
| Mainland/Zanzibar |  |  |
| Mainland | 4.9 | 5.7 |
| Total urban | 3.1 | 3.6 |
| Dar es Salaam city | * | * |
| Other urban | 3.5 | 4.1 |
| Total rural | 5.7 | 6.5 |
| Zanzibar | 4.6 | 5.3 |
| Unguja | 3.8 | 4.5 |
| Pemba | (6.6) | (7.2) |
| Zone |  |  |
| Western | 6.2 | 7.3 |
| Northern | 4.1 | 4.9 |
| Central | (5.0) | (6.1) |
| Southern highlands | 5.0 | 5.9 |
| Lake | 6.1 | 6.7 |
| Eastern | 3.3 | 3.6 |
| Southern | 4.5 | 4.8 |
| Education |  |  |
| No education | 6.2 | 6.9 |
| Primary incomplete | 4.8 | 5.6 |
| Primary complete | 4.8 | 5.6 |
| Secondary+ | 3.0 | 3.3 |
| Wealth quintile |  |  |
| Lowest | 6.4 | 7.3 |
| Second | 5.9 | 6.7 |
| Middle | 5.7 | 6.6 |
| Fourth | 4.6 | 5.3 |
| Highest | 2.8 | 3.3 |
| Total | 4.9 | 5.7 |
| 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 4.2. Rates in parentheses are based on 125 to 249 unweighted woman-years of exposure. An asterisk indicates that a rate is based on less than 125 unweighted woman-years of exposure and has been suppressed. |  |  |
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### 7.7 Ideal Family Size and Unmet Need by Women's Status

The ability of women to effectively make decisions has important implications on their fertility preferences and practice of family planning. Table 7.8 shows the mean ideal number of children and unmet need for family planning by women's status indicators.

The mean ideal number of children is found to decrease with the increasing number of decisions in which a woman has a final say. Similarly, the number of children a woman wants increases with the number of reasons she believes wife-beating is justified. Thus, the data suggest that the more empowered the woman, the fewer children she desires. However, there is no clear relationship between mean ideal number of children and the number of reasons to refuse sex with the husband.

There is no clear relationship between the women's status indicators and unmet need for family planning although the proportion of women with a need for limiting increases with the number of decisions a woman makes and decreases with the number of reasons wife beating is justified.

Table 7.8 Ideal number of children and unmet need by women's status
Among currently married women, mean ideal number of children and unmet need for spacing and limiting, by women's status indicators, Tanzania 2004-05

| Women's status indicator | Mean ideal number of children ${ }^{1}$ | Number | Unmet need for family planning ${ }^{2}$ |  |  | Number of women |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | For spacing | For limiting | Total |  |
| Number of decisions in which woman has final say ${ }^{3}$ |  |  |  |  |  |  |
| 0 | 6.1 | 717 | 15.3 | 5.4 | 20.7 | 730 |
| 1-2 | 5.7 | 2,523 | 17.8 | 6.0 | 23.8 | 2,565 |
| 3-4 | 5.1 | 1,892 | 13.8 | 7.1 | 20.9 | 1,914 |
| 5 | 5.0 | 1,707 | 12.5 | 7.9 | 20.5 | 1,742 |
| Number of reasons to refuse sex with husband |  |  |  |  |  |  |
| 0 | 5.6 | 299 | 10.1 | 9.6 | 19.7 | 309 |
| 1-2 | 6.0 | 785 | 14.3 | 6.1 | 20.3 | 802 |
| 3-4 | 5.3 | 5,754 | 15.5 | 6.7 | 22.2 | 5,839 |


| Number of reasons wife <br> beating is justified |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| 0 | 5.3 | 2,648 | 12.6 | 7.5 | 20.1 | 2,681 |
| $1-2$ | 5.3 | 1,422 | 15.8 | 7.0 | 22.8 | 1,444 |
| $3-4$ | 5.5 | 1,969 | 17.3 | 5.9 | 23.2 | 2,007 |
| 5 | 5.7 | 800 | 16.6 | 5.8 | 22.5 | 818 |
| Total | 5.4 | 6,839 | 15.1 | 6.7 | 21.8 | 6,950 |

[^5]
## INFANT AND CHILD MORTALITY

This chapter presents levels, trends, and differentials in neonatal, postneonatal, infant, child, and perinatal mortality. The information is relevant both for understanding population trends-for example, the mortality rates can be used in population projections-and for the planning and evaluation of health policies and programs. Information on child mortality serves the needs of the health sector by identifying population groups that are at high risk. Because the government of Tanzania through the Ministry of Health, is undertaking a number of interventions aimed at reducing child mortality in the country, the analysis in this report provides an opportunity to evaluate the performance of such programs. Furthermore, mortality indicators are useful in assessing the National Strategy for Growth and Reduction of Poverty (NSGRP), as they reflect socioeconomic development and quality of life.

The data for mortality estimation were collected in the birth history section of the Women's Questionnaire. The birth history section began with questions about the respondent's experience with childbearing (i.e., the number of sons and daughters living with the mother, the number who live elsewhere, and the number who have died). These questions were followed by a retrospective birth history in which each respondent was asked to list each of her births, starting with the first birth. For each birth, data were obtained on sex, month and year of birth, survivorship status, and current age, or if the child was dead, age at death. This information is used to directly estimate mortality.

Age-specific mortality rates are categorised and defined as follows:

| Neonatal mortality $(\mathrm{NN}):$ | the probability of dying within the first month of life |
| :--- | :--- |
| Postneonatal mortality $(\mathrm{PNN}):$ | the difference between infant and neonatal mortality |
| Infant mortality $\left({ }_{1} \mathrm{q}_{0}\right):$ | the probability of dying before the first birthday |
| Child mortality $\left({ }_{4} \mathrm{q}_{1}\right):$ | the probability of dying between the first and <br> fifth birthday |
| Under-five mortality $\left({ }_{5} \mathrm{q}_{0}\right):$ | the probability of dying between birth and <br> fifth birthday. |

All rates are expressed per 1,000 live births, except for child mortality, which is expressed per 1,000 children surviving to 12 months of age.

### 8.1 Levels and Trends in Infant and Child Mortality

Table 8.1 shows neonatal, postneonatal, infant, child, and under-five mortality rates for successive five-year periods before the survey. For the five years immediately preceding the survey (approximately calendar years 2000-2004), the infant mortality rate is 68 per 1,000 live births. The estimate of child mortality (age 1-4) is lower. The under-five mortality rate for the period is 112 per 1,000 . Thus, one out of nine Tanzanian children dies before the fifth birthday.

| Table 8.1 Early childhood mortality rates |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Neonatal, postneonatal, infant, child, and under-five mortality rates for fiveyear periods preceding the survey, Tanzania 2004-05 |  |  |  |  |  |
| Years preceding the survey | Neonatal mortality (NN) | Postneonatal mortality ${ }^{1}$ (PNN) | Infant mortality $\left({ }_{1} q_{0}\right)$ | Child mortality $\left({ }_{4} q_{1}\right)$ | Under-five mortality ${ }_{5} \mathrm{q}_{0}$ ) |
| 0-4 | 32 | 36 | 68 | 47 | 112 |
| 5-9 | 36 | 64 | 100 | 63 | 156 |
| 10-14 | 35 | 59 | 94 | 74 | 161 |
| ${ }^{1}$ Computed as the difference between the infant and neonatal mortality rates |  |  |  |  |  |

The 2004-05 TDHS data indicate a recent, rapid decline in mortality. Infant mortality estimates show a decline from 100 in the 5-9 year period preceding the survey (approximately 19951999) to 68 during the 2000-2004 period. The 2004-05 TDHS estimate for the 5-9 year period preceding the survey is almost identical to the 1999 TRCHS rate of 99 deaths per 1,000 births for the same period (i.e., 0-4 years preceding the survey). Thus, the comparison of the two separate surveys-the 1999 TRCHS and the 2004-05 TDHS-as well as the 2004-05 TDHS data itself, indicate a significant decrease in infant and child mortality rates in recent years. The largest decline has occurred in the postneonatal period.

To gain more insight into the decline in mortality, rates can be calculated for two-and-a-half year periods instead of five-year periods. Figure 8.1 shows the under-five mortality rates for the 10 years preceding the survey by 30 -month intervals, according to residence. Although these rates are based on a smaller number of cases and thus expected to be less reliable, the data indicate that although the overall drop in mortality between the late 1990s and early 2000s is large, the decline has actually been taking place gradually over the past ten years.

Figure 8.1 Trends in Under-Five Mortality


### 8.2 Data Quality

Because of the dramatic decline in infant and child mortality, a thorough review of the 2004-05 TDHS data was conducted. The quality of mortality estimates calculated from retrospective birth histories depends upon the completeness with which births and deaths are reported and recorded. The data show strong internal consistency and support the conclusion that there was a very substantial decline in under-five mortality in Tanzania over the five-year period between the TRCHS and the TDHS. This section highlights selected data quality parameters.

One factor that affects childhood mortality estimates is the quality of reporting of age at death, which may distort the age pattern of mortality. If age at death is misreported, it will bias the estimates, especially if the net effect of the age misreporting results in transference from one age bracket to another. For example, a net transfer of deaths from under one month to a higher age, will affect the estimates of neonatal and postneonatal mortality. To minimise errors in reporting of age at death, interviewers were instructed to record age at death in days if the death took place in the month following the birth, in months if the child died before age two, and in years if the child was at least two years of age. They also were asked to probe for deaths reported at one year to determine a more precise age at death in terms of months. Despite the emphasis during interviewer training and fieldwork monitoring on probing for accurate age at death, Appendix Table C. 6 shows that for the five years preceding the survey, the number of reported deaths at age 12 months or one year of age is twice the number reported at 13 months and many times the number reported at 11 months. It is likely then that some of these deaths actually occurred before one year of age but are not included in the infant mortality rate. Of course, the excess deaths reported at 12 months and one year of age have no effect on estimates of overall under-five mortality rates.

Another potential data quality problem is the selective omission from the birth histories of births who did not survive, which can lead to underestimation of mortality rates. When selective omission of childhood deaths occurs, it is usually more severe for deaths occurring early in infancy. One way such omissions can be detected is by examining the proportion of neonatal deaths to infant deaths. Generally, if there is substantial underreporting of deaths, the result is an abnormally low ratio of neonatal deaths to infant deaths. However, the proportion of neonatal deaths occurring in the first week of life is high: 73 percent in the period $0-4$ years preceding the survey. Furthermore, it appears that early infant deaths among births that occurred longer before the survey have not been severely underreported. More than seven in ten neonatal deaths in the 15 years preceding the survey were early neonatal deaths. The proportion is lower ( 65 percent) for deaths occurring 15-19 years before the survey, which is not surprising given the greater likelihood of recall errors.

Another potential data quality problem includes displacement of birth dates, which may cause a distortion of mortality trends. This can occur if an interviewer knowingly records a death as occurring in a different year, which would happen if an interviewer is trying to cut down on their overall work, because live births occurring during the five years preceding the interview are the subject of a lengthy set of additional questions. In the 2004-05 TDHS questionnaire, the cutoff year for these questions was 1999. Appendix Table C. 4 shows substantial year-of-birth transference for deceased children from 1999 to earlier years. However, this should have little effect on the estimated mortality rates for the standard five-year DHS mortality period, the calculation of which, unlike the questionnaire, does not conform to calendar years. Because the survey fieldwork began in October 2004, the start of the rolling cut-off for the five year period preceding the survey is October 1999. Thus, most transference occurring during 1999 would not, in fact, be transference from the 0-4 year period preceding the survey into the 5-9 year period preceding the survey.

It is also possible to substantiate the current mortality levels using information from other sources. For example, the 2004-05 TDHS and the 2003-04 THIS estimated the same number of children ever born for women age 15-49 (2.9). Unlike the TDHS, the THIS did not ask additional questions about live births in the five years preceding the survey, thus eliminating the incentive for an interviewer to cheat and decrease her workload. Although the TDHS estimated a slightly lower
proportion of children dead ( 15 and 16 percent, respectively), the results of the two surveys are remarkably close.

Other data sources, such as the Demographic and Surveillance Sentinel sites, also show a steep decline since approximately the mid- to late 1990s. Furthermore, the results of the 2002 Housing and Population Census also indicate that mortality has been declining.

### 8.3 Socioeconomic Differentials in Infant and Child Mortality

Mortality differentials by place of residence, province, educational level of the mother, and household wealth are presented in Table 8.2. For a sufficient number of births to study mortality differentials across population subgroups, period-specific rates are presented for the ten-year period preceding the survey (approximately 1995 to 2004). As expected, infant mortality rates are generally lower in urban than in rural areas ( 73 and 85 deaths per 1,000 live births, respectively). The difference is attributed to a significantly higher postneonatal rate in rural areas. Infant mortality ranges from a low of 67 in the Northern zone to a high of 121 in the Southern zone.

| Table 8.2 Early childhood mortality rates by background characteristics |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Neonatal, postneonatal, infant, child, and under-five mortality rates for the 10-year period preceding the survey, by background characteristics, Tanzania 2004-05 |  |  |  |  |  |
| Background characteristic | Neonatal mortality (NN) | Postneonatal mortality ${ }^{1}$ (PNN) | Infant mortality $\left({ }_{1} q_{0}\right)$ | Child mortality $\left({ }_{4} q_{1}\right)$ | Under-five mortality $\left({ }_{5} \mathrm{q}_{0}\right)$ |
| Residence |  |  |  |  |  |
| Urban | 37 | 36 | 73 | 38 | 108 |
| Rural | 33 | 52 | 85 | 58 | 138 |
| Mainland/Zanzibar |  |  |  |  |  |
| Mainland | 34 | 49 | 83 | 55 | 133 |
| Total urban | 36 | 36 | 72 | 38 | 108 |
| Dar es Salaam city | 43 | 34 | 77 | 36 | 110 |
| Other urban | 34 | 37 | 70 | 39 | 107 |
| Total rural | 33 | 52 | 86 | 59 | 139 |
| Zanzibar | (29) | (33) | (61) | (42) | (101) |
| Unguja | (29) | * | * | * | * |
| Pemba | * | * | * | * | * |
| Zone |  |  |  |  |  |
| Western | 23 | 53 | 76 | 67 | 138 |
| Northern | 26 | 42 | 67 | 40 | 105 |
| Central | 38 | 37 | 75 | 59 | 130 |
| Southern highlands | 38 | 44 | 82 | 59 | 136 |
| Lake | 36 | 54 | 90 | 57 | 142 |
| Eastern | 44 | 40 | 84 | 46 | 126 |
| Southern | 47 | 74 | 121 | 36 | 153 |
| Mother's education |  |  |  |  |  |
| No education | 41 | 60 | 101 | 66 | 160 |
| Primary incomplete | 33 | 51 | 84 | 61 | 139 |
| Primary complete | 30 | 45 | 75 | 49 | 120 |
| Secondary+ | 40 | 16 | 56 | (21) | (76) |
| Wealth quintile |  |  |  |  |  |
| Lowest | 33 | 55 | 88 | 54 | 137 |
| Second | 39 | 58 | 97 | 65 | 156 |
| Middle | 32 | 55 | 88 | 65 | 147 |
| Fourth | 33 | 37 | 70 | 51 | 117 |
| Highest | 31 | 33 | 64 | 31 | 93 |

Note: Rates based on 250 to 499 exposed persons are in parentheses. An asterisk indicates that a rate is based on fewer than 250 exposed persons and has been suppressed.
${ }^{1}$ Computed as the difference between the infant and neonatal mortality rates

Higher levels of educational attainment are generally associated with lower mortality rates, because education exposes mothers to information about better nutrition, use of contraceptives to space births, and knowledge about childhood illness and treatment. Table 8.2 shows that mother's education has an inverse relationship with infant and under-five mortality. Infant mortality ranges from a high of 101 among children born to women with no education to a low of 56 among those with mothers with at least some secondary education. The association between infant and child mortality and wealth quintile is less clear, although the mortality risk is substantially lower among the fourth and highest quintiles than less wealthy households.

### 8.4 Demographic Differentials in Infant and Child Mortality

The demographic characteristics of both mother and child have been found to play an important role in the survival probability of children. Table 8.3 presents early childhood mortality rates by demographic characteristics (i.e., sex of child, mother’s age at birth, birth order, previous birth interval, and birth size).

Table 8.3 Early childhood mortality rates by demographic characteristics
Neonatal, postneonatal, infant, child, and under-five mortality rates for the 10-year period preceding the survey, by demographic characteristics, Tanzania 2004-05

| Demographic characteristic | Neonatal mortality (NN) | Postneonatal mortality ${ }^{1}$ (PNN) | Infant mortality $\left({ }_{1} q_{0}\right)$ | Child mortality $\left.{ }_{4} q_{1}\right)$ | Under-five mortality $\left({ }_{5} \mathrm{q}_{0}\right)$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Child's sex |  |  |  |  |  |
| Male | 39 | 44 | 83 | 56 | 135 |
| Female | 29 | 53 | 82 | 52 | 130 |
| Mother's age at birth |  |  |  |  |  |
| <20 | 45 | 55 | 101 | 62 | 157 |
| 20-29 | 29 | 46 | 75 | 49 | 120 |
| 30-39 | 33 | 52 | 85 | 59 | 139 |
| 40-49 | 45 | (37) | (82) | * | * |
| Birth order |  |  |  |  |  |
| 1 | 42 | 47 | 89 | 54 | 139 |
| 2-3 | 27 | 47 | 74 | 51 | 121 |
| 4-6 | 32 | 51 | 82 | 54 | 132 |
| 7+ | 42 | 52 | 94 | 63 | 151 |
| Previous birth interval ${ }^{2}$ |  |  |  |  |  |
| $<2$ years | 63 | 80 | 143 | 64 | 198 |
| 2 years | 22 | 50 | 72 | 57 | 124 |
| 3 years | 21 | 34 | 55 | 48 | 101 |
| 4+ years | 29 | 33 | 62 | 44 | 103 |
| Birth size ${ }^{3}$ |  |  |  |  |  |
| Small/very small | 86 | 44 | 131 | na | na |
| Average or larger | 26 | 35 | 60 | na | na |

Note: Rates based on 250 to 499 exposed persons are in parentheses. An asterisk indicates that a rate is based on fewer than 250 exposed persons and has been suppressed.
na $=$ Not applicable
${ }^{1}$ Computed as the difference between the infant and neonatal mortality rates
${ }^{2}$ Excludes first-order births
${ }^{3}$ Rates for the five-year period before the survey

As expected, mortality rates are generally higher for boys than for girls. However, girls are more likely than boys to die during the postneonatal period ( 53 and 44 , respectively). There are significant differences in mortality risks associated with mother's age and birth order. The largest differentials are in the neonatal period. Shorter birth intervals are associated with higher mortality,
both during and after infancy. In terms of the length of the preceding birth interval, mortality rates are markedly lower for intervals of at least two years than for shorter birth intervals. A further decrease after a three-year birth interval can be seen in the postneonatal period. In terms of under-five mortality, births following an interval of at least three years are at almost half the risk of death as births occurring within two years of a preceding birth.

Studies have shown that a child's weight at birth is an important indicator of his or her chances of survival. Because only half of mothers had information on their child's exact weight at birth, they were asked instead whether their child was very large, larger than average, average, smaller than average, or small at birth. This has been found to be a good proxy for children's weight. Children reported to be small or very small are more than twice as likely to die by age one as children reported to be average or larger.

### 8.5 Differentials in Infant and Child Mortality by Women's Status

The ability of women to access information, make decisions, and act effectively in their own interest, or the interest of those who depend on them, are essential aspects of the empowerment of women. If women, the primary caretakers of children, are empowered, the health and survival of their infants will be enhanced. In fact, mother's empowerment fits into Mosley and Chen’s framework on child survival as an individual-level variable that affects child survival through the proximate determinants (Mosley and Chen, 1984).

Table 8.4 presents mortality rates by three indicators of women's status: participation in household decisionmaking, attitude towards a wife refusing to have sex with her husband, and attitude towards wife beating. These indicators are described in Chapter 3.

| Table 8.4 Early childhood mortality rates by women's status |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Neonatal, postneonatal, infant, child, and under-five mortality rates for the 10-year period preceding the survey, by women's status indicators, Tanzania 2004-05 |  |  |  |  |  |
| Women's status indicators | Neonatal mortality ( NN ) | $\begin{gathered} \text { Postneonatal } \\ \text { mortality }{ }^{1} \\ (\mathrm{PNN}) \\ \hline \end{gathered}$ | $\begin{gathered} \text { Infant } \\ \text { mortality } \\ \left(1 q_{0}\right) \end{gathered}$ | Child mortality $\left({ }_{4} q_{1}\right)$ | Underfive mortality $\left({ }_{5} \mathrm{q}_{0}\right)$ |
| Number of decisions in which woman has final say ${ }^{2}$ |  |  |  |  |  |
| 0 | 37 | 55 | 91 | 70 | 155 |
| 1-2 | 30 | 48 | 77 | 63 | 136 |
| 3-4 | 37 | 49 | 86 | 48 | 130 |
| 5 | 35 | 48 | 83 | 44 | 124 |
| Number of reasons to refuse sex with husband |  |  |  |  |  |
| 0 | 36 | 41 | 77 | 35 | 109 |
| 1-2 | 39 | 61 | 101 | 56 | 151 |
| 3-4 | 33 | 47 | 80 | 55 | 131 |
| Number of reasons wife beating is justified |  |  |  |  |  |
| 0 | 36 | 41 | 78 | 55 | 128 |
| 1-2 | 35 | 50 | 85 | 47 | 128 |
| 3-4 | 29 | 52 | 81 | 56 | 132 |
| 5 | 36 | 60 | 96 | 61 | 151 |
| ${ }^{1}$ Computed as the difference between the infant and neonatal mortality rates <br> ${ }^{2}$ Either by herself or jointly with others |  |  |  |  |  |

Two of the indicators suggest that there is an association between increasing women's status and decreasing levels of mortality. In particular, household decisionmaking is most strongly associated with under-five mortality. Among children born to women who have no final say in any decision, 155 per 1,000 die before their fifth birthday, compared with 124 per 1,000 children born to women who participate in all specified household decisions. Similarly, levels of infant and child mortality are highest among those women who are least empowered on the wife beating indicator (i.e., those
women who agreed with all specified justifications for a man beating his wife). There is no consistent pattern in mortality rates by the number of reasons to refuse sex with the husband.

### 8.6 Perinatal Mortality

Pregnancy losses occurring after seven completed months of gestation (stillbirths) plus deaths to live births within the first seven days of life (early neonatal deaths) constitute perinatal deaths. The distinction between a stillbirth and an early neonatal death may be a fine one, often depending on observing and then remembering sometimes faint signs of life after delivery. The causes of stillbirths and early neonatal deaths are closely linked, and examining just one or the other can understate the true level of mortality around delivery. For this reason deaths around delivery are combined into the perinatal mortality rate. When the number of perinatal deaths is divided by the total number of pregnancies reaching seven months of gestation, the perinatal mortality rate is derived.

Table 8.5 presents the number of stillbirths and early neonatal deaths, and the perinatal mortality rate for the five-year period preceding the survey. The results indicate that the perinatal mortality rate for the entire country is 42 deaths per 1,000 pregnancies. Because of a small number of cases in some groups, comparisons are difficult to make among some background characteristics.

There are more perinatal deaths in urban than rural areas ( 56 and 38 per 1,000, respectively). Although the higher levels of mortality would be expected in rural areas, this may be partly the result of recall problems. The same counterintuitive pattern is seen among women by education and wealth quintile.

Assessing perinatal mortality between Mainland Tanzania and Zanzibar, Zanzibar has higher perinatal mortality (56 deaths per 1,000 pregnancies) than Tanzania Mainland (41 deaths per 1,000 pregnancies). Pregnancies in Unguja are at higher risk than those in Pemba.

### 8.7 High-Risk Fertility Behaviour

Findings from scientific studies have confirmed that there is a strong relationship between children's chances of dying and certain fertility behaviours. Typically, the probability of dying in early childhood is much greater if children are born to mothers who are too young or too old, if they are born after a short preceding birth interval, or if they are high parity births. Very young mothers may experience difficult pregnancies

| Table 8.5 Perinatal mortality |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Number of stillbirths and early neonatal deaths, and the perinatal mortality rate for the five-year period preceding the survey, by background characteristics, Tanzania 2004-05 |  |  |  |  |
| Background characteristic | $\begin{aligned} & \text { Number } \\ & \text { of } \\ & \text { stillbirths }{ }^{1} \end{aligned}$ | Number of early neonatal deaths | Perinatal mortality rate (per 1,000 pregnancies) ${ }^{3}$ | Number of pregnancies of $7+$ months duration |
| Mother's age at birth |  |  |  |  |
|  | 38 | 49 | 56 | 1,540 |
| 20-29 | 88 | 102 | 39 | 4,812 |
| 30-39 | 26 | 43 | 32 | 2,174 |
| 40-49 | 13 | 13 | (70) | 364 |
| Previous pregnancy interval in months |  |  |  |  |
| First pregnancy | 50 | 59 | 59 | 1,850 |
| <15 | 14 | 17 | (79) | 401 |
| 15-26 | 26 | 55 | 40 | 2,039 |
| 27-38 | 31 | 33 | 27 | 2,410 |
| 39+ | 43 | 42 | 39 | 2,190 |
| Residence |  |  |  |  |
| Urban | 41 | 56 | 56 | 1,732 |
| Rural | 124 | 151 | 38 | 7,157 |
| Mainland/Zanzibar |  |  |  |  |
| Mainland | 157 | 202 | 41 | 8,663 |
| Total urban | 38 | 55 | 54 | 1,707 |
| Dar es Salaam city | 2 | 18 | * | 430 |
| Other urban | 36 | 37 | 57 | 1,277 |
| Total rural | 119 | 147 | 38 | 6,955 |
| Zanzibar | 8 | 5 | 56 | 227 |
| Unguja | 6 | 3 | 64 | 138 |
| Pemba | 2 | 2 | 43 | 88 |
| Zone |  |  |  |  |
| Western | 30 | 25 | 28 | 1,942 |
| Northern | 30 | 27 | 50 | 1,151 |
| Central | 17 | 17 | 46 | 733 |
| Southern highlands | 23 | 30 | 41 | 1,306 |
| Lake | 20 | 45 | 34 | 1,888 |
| Eastern | 15 | 36 | 52 | 984 |
| Southern | 22 | 22 | 67 | 659 |
| Mother's education |  |  |  |  |
| No education | 41 | 64 | 45 | 2,359 |
| Primary incomplete | 17 | 34 | 37 | 1,395 |
| Primary complete | 97 | 99 | 41 | 4,739 |
| Secondary+ | 9 | 10 | 49 | 396 |
| Wealth quintile |  |  |  |  |
| Lowest | 24 | 37 | 31 | 1,998 |
| Second | 41 | 55 | 51 | 1,898 |
| Middle | 23 | 37 | 32 | 1,889 |
| Fourth | 39 | 42 | 47 | 1,719 |
| Highest | 38 | 36 | 53 | 1,386 |
| Total | 165 | 207 | 42 | 8,889 |
| Note: Rates based on 250 to 499 pregnancies are in parentheses. An asterisk indicates that a rate is based on fewer than 250 pregnancies and has been suppressed. <br> ${ }^{1}$ Stillbirths are foetal deaths in pregnancies lasting seven or more months. <br> ${ }^{2}$ Early neonatal deaths are deaths at age 0-6 days among live-born children. <br> ${ }^{3}$ The sum of the number of stillbirths and early neonatal deaths divided by the number of pregnancies of seven or more months' duration. |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

and deliveries because of their physical immaturity. Older women may also experience age-related problems during pregnancies and delivery. In this analysis, a mother is considered to be "too young" if she is less than 18 years and "too old" if she is above 34 years at the time of delivery. A "short birth interval" is a birth occurring within 24 months of a previous birth.

Table 8.6 shows the distribution of children born in the five years preceding the survey by risk category. While first births to women age 18-34 are considered an unavoidable risk, they are included in the analysis and are shown as a separate risk category. Column 1 shows that in the fiveyear period before the survey, 37 percent of births were in a single high-risk category and 18 percent were in a multiple high-risk category. Only 29 percent of births were not in any high-risk category.

Column 2 shows risk ratios for births in various high-risk categories relative to births not having any high-risk characteristics. The risk ratio for children in any avoidable high-risk category (1.03) is just slightly higher (3 percent) than for children not in any high-risk category. In terms of births in a single high-risk category, the risk ratio is .98 , meaning that children in a single high-risk category are not necessarily more likely to die than children not in any high-risk category. However, births in multiple high-risk categories are 13 percent more likely to die than births not in any high-risk category.

The last column in Table 8.6 looks to the future and addresses the question of how many currently married women have the potential for having a high-risk birth. The results were obtained by simulating the risk category into which a birth to a currently married women would fall if she were to become pregnant at the time of the survey. For example, a woman who was 37 years old at the time of the survey and had three previous births, the last of which occurred three years earlier, would be classified in the multiple high-risk category for being too old ( 35 or older) and at risk of having a high-order birth (more than three previous births). Twenty-three percent of currently married women would fall into this category. Seven in ten married women have the potential to give birth to a child with an elevated risk of dying. Four in ten married women (42 percent) have the potential to give birth to children in the multiple high-risk categories.

## Table 8.6 High-risk fertility behaviour

Percent distribution of children born in the five 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, Tanzania 2004-05

| 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 | 29.4 | 1.00 | $21.8{ }^{\text {a }}$ |

Unavoidable risk category
First-order births between ages

| Single high-risk category |  |  |  |
| :--- | ---: | :---: | ---: |
| $\quad$ Mother's age $<18$ | 6.5 | 1.28 | 1.3 |
| Mother's age $>34$ | 0.6 | $(0.80)$ | 3.4 |
| Birth interval $<24$ months | 5.4 | 0.95 | 9.8 |
| Birth order $>3$ | 24.6 | 0.92 | 16.1 |
| Subtotal | 37.1 | 0.98 | 30.7 |

Subtotal
-

Age $<18$ and birth interval $<24$ months $^{12}$
Age >34 and birth interval $<24$ months
Age $>34$ and birth order >3
Age $>34$ and birth interval $<24$ months and birth order >3 Birth interval $<24$ months and birth order $>3$
Subtotal
In any avoidable high-risk category

| Total | 100,0 |
| :--- | :--- |
| Number of births | 8,7 |

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. 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
${ }^{1}$ 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 $>3$
${ }^{\text {a }}$ Includes sterilised women

This chapter presents findings from several areas of importance to maternal and child health, including information on antenatal, delivery and postnatal care, characteristics of the neonate, vaccinations, and common childhood illnesses and their treatment. Information on other factors important to the welfare of both women and children, including information on the provision of vitamin A to women and children, is presented in subsequent chapters.

The information provided by the 2004-05 TDHS is important as it provides a critical look into the performance of maternal and child health service provision in Tanzania. These services support a key health policy objective, namely, the reduction of infant and maternal morbidity and mortality. Therefore, the survey results provide an opportunity to identify critical issues affecting the situation of women and children in Tanzania. The information will assist policymakers, planners, and other collaborators in the health sector to formulate appropriate strategies and intervention to improve reproductive and child health care.

### 9.1 Antenatal Care

Early and regular checkups by trained medical providers are very important in assessing the physical status of women during pregnancy and intervening in a timely manner if any problems are detected. The 2004-05 TDHS obtained information from women on both coverage of antenatal care (ANC) and coverage of key elements of the care received for the last birth during the five-year period before the survey.

## Coverage of Antenatal Care

Table 9.1 shows the percentage of women who had a live birth in the five years preceding the survey by the source of antenatal care. To obtain the information on source of ANC, interviewers recorded all persons a woman had consulted for antenatal care. However, for cases where more than one person was seen, only the provider with the highest qualifications is considered in the table.

The results show that 94 percent of women who gave birth in five years preceding the survey received antenatal care from a health professional at least once. As expected, nurses and midwives are more likely than other health professionals to provide ANC ( 72 percent). Women also go to MCH aides ( 16 percent), doctors ( 2 percent), and clinical officers ( 4 percent) for ANC services. Three percent of women receive some kind of antenatal care from people who are not medical professionals, such as trained and traditional birth attendants, relatives, and village health workers. Three percent of women received no antenatal care at all.

The 2004-05 TDHS findings show no great variation in antenatal care from medically qualified professionals between rural and urban areas. With the exception of a few regions (Mbeya and Arusha), nine out of ten women reported that they received care from a health care professional at least once, regardless of background characteristics.

Educated mothers are more likely to receive antenatal care from medical professionals than mothers with less education. There is also a positive relationship between increasing wealth quintile and receiving antenatal care from a health professional.

| Table 9.1 Antenatal care |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percent distribution of women who had a live birth in the five years preceding the survey by antenatal care (ANC) provider during pregnancy for the most recent birth, according to background characteristics, Tanzania 2004-05 |  |  |  |  |  |  |  |  |  |  |
| Background characteristic | Doctor/ <br> AMO | Clinical officer/ Assist. clinical officer | Nurse/ midwife | MCH aide | ```Traditional birth attendant``` | Relative/ village health worker/ other | No one | Missing | Total | Number of women |
| Age at birth |  |  |  |  |  |  |  |  |  |  |
| <20 | 2.3 | 4.8 | 68.9 | 17.9 | 0.0 | 2.9 | 3.1 | 0.1 | 100.0 | 906 |
| 20-34 | 2.1 | 3.5 | 73.3 | 15.7 | 0.0 | 2.4 | 2.9 | 0.1 | 100.0 | 4,013 |
| 35-49 | 2.1 | 4.8 | 70.6 | 16.1 | 0.7 | 2.4 | 3.4 | 0.0 | 100.0 | 853 |
| Birth order |  |  |  |  |  |  |  |  |  |  |
| 1 | 2.9 | 3.9 | 71.5 | 17.5 | 0.0 | 2.1 | 2.1 | 0.1 | 100.0 | 1,178 |
| 2-3 | 2.0 | 3.9 | 74.5 | 14.9 | 0.2 | 2.3 | 2.1 | 0.0 | 100.0 | 2,097 |
| 4-5 | 2.5 | 4.0 | 71.0 | 15.4 | 0.0 | 2.4 | 4.5 | 0.1 | 100.0 | 1,204 |
| $6+$ | 1.3 | 3.6 | 70.2 | 17.3 | 0.2 | 3.2 | 3.9 | 0.2 | 100.0 | 1,293 |
| Residence |  |  |  |  |  |  |  |  |  |  |
| Urban | 4.4 | 2.1 | 77.3 | 12.9 | 0.1 | 0.3 | 2.7 | 0.1 | 100.0 | 1,277 |
| Rural | 1.5 | 4.4 | 70.7 | 17.0 | 0.1 | 3.1 | 3.1 | 0.1 | 100.0 | 4,496 |
| Mainland/Zanzibar |  |  |  |  |  |  |  |  |  |  |
| Mainland | 2.1 | 4.0 | 72.9 | 15.2 | 0.1 | 2.5 | 3.1 | 0.1 | 100.0 | 5,628 |
| Total urban | 4.4 | 2.9 | 77.5 | 12.0 | 0.1 | 0.3 | 2.7 | 0.1 | 100.0 | 1,269 |
| Dar es Salaam city | 6.4 | 5.5 | 68.9 | 19.2 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 369 |
| Other urban | 3.5 | 1.8 | 81.1 | 9.0 | 0.2 | 0.5 | 3.8 | 0.1 | 100.0 | 900 |
| Total rural | 1.5 | 4.3 | 71.5 | 16.2 | 0.1 | 3.2 | 3.2 | 0.1 | 100.0 | 4,359 |
| Zanzibar | 2.7 | 0.5 | 45.6 | 50.0 | 0.2 | 0.3 | 0.7 | 0.0 | 100.0 | 144 |
| Unguja | 4.1 | 0.8 | 62.1 | 33.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 93 |
| Pemba | 0.3 | 0.0 | 15.4 | 81.0 | 0.4 | 0.9 | 2.1 | 0.0 | 100.0 | 51 |
| Zone |  |  |  |  |  |  |  |  |  |  |
| Western | 0.6 | 7.1 | 60.6 | 22.1 | 0.0 | 7.5 | 2.0 | 0.1 | 100.0 | 1,143 |
| Northern | 1.6 | 2.0 | 79.1 | 9.8 | 0.0 | 0.9 | 6.6 | 0.0 | 100.0 | 774 |
| Central | 2.3 | 3.4 | 84.0 | 8.4 | 0.0 | 1.2 | 0.7 | 0.0 | 100.0 | 473 |
| Southern highlands | 4.5 | 3.4 | 60.4 | 21.4 | 0.3 | 3.3 | 6.6 | 0.0 | 100.0 | 844 |
| Lake | 1.4 | 1.2 | 85.2 | 8.3 | 0.0 | 0.5 | 3.2 | 0.2 | 100.0 | 1,126 |
| Eastern | 3.5 | 4.6 | 74.8 | 14.8 | 0.7 | 1.2 | 0.4 | 0.1 | 100.0 | 766 |
| Southern | 1.7 | 6.5 | 71.3 | 20.2 | 0.0 | 0.3 | 0.1 | 0.0 | 100.0 | 503 |
| Region |  |  |  |  |  |  |  |  |  |  |
| Dodoma | 2.6 | 4.3 | 86.3 | 4.5 | 0.0 | 1.7 | 0.6 | 0.0 | 100.0 | 277 |
| Arusha | 2.0 | 1.4 | 67.9 | 13.2 | 0.0 | 1.9 | 13.6 | 0.0 | 100.0 | 205 |
| Kilimanjaro | 2.3 | 4.4 | 89.0 | 3.5 | 0.0 | 0.0 | 0.8 | 0.0 | 100.0 | 145 |
| Tanga | 1.6 | 0.9 | 87.2 | 8.0 | 0.0 | 0.0 | 2.3 | 0.0 | 100.0 | 250 |
| Morogoro | 1.4 | 3.3 | 79.6 | 9.7 | 2.0 | 2.8 | 1.2 | 0.0 | 100.0 | 253 |
| Pwani | 0.0 | 4.2 | 81.3 | 12.5 | 0.0 | 1.3 | 0.0 | 0.6 | 100.0 | 144 |
| Dar es Salaam | 6.4 | 5.5 | 68.9 | 19.2 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 369 |
| Lindi | 1.7 | 9.5 | 60.3 | 26.7 | 0.0 | 1.2 | 0.6 | 0.0 | 100.0 | 117 |
| Mtwara | 0.5 | 2.2 | 62.4 | 34.9 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 201 |
| Ruvuma | 3.0 | 9.2 | 87.8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 185 |
| Iringa | 7.6 | 6.3 | 83.5 | 2.6 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 216 |
| Mbeya | 4.6 | 3.2 | 50.8 | 26.3 | 0.4 | 2.6 | 12.2 | 0.0 | 100.0 | 425 |
| Singida | 1.7 | 2.1 | 80.8 | 14.0 | 0.0 | 0.6 | 0.8 | 0.0 | 100.0 | 196 |
| Tabora | 1.0 | 9.3 | 45.5 | 36.9 | 0.0 | 5.9 | 1.5 | 0.0 | 100.0 | 311 |
| Rukwa | 1.1 | 0.8 | 56.1 | 31.3 | 0.4 | 8.4 | 1.9 | 0.0 | 100.0 | 203 |
| Kigoma | 1.2 | 10.8 | 72.7 | 8.0 | 0.0 | 6.9 | 0.4 | 0.0 | 100.0 | 282 |
| Shinyanga | 0.0 | 3.9 | 62.9 | 21.0 | 0.0 | 8.7 | 3.2 | 0.3 | 100.0 | 550 |
| Kagera | 0.0 | 0.4 | 96.8 | 1.2 | 0.0 | 0.4 | 1.2 | 0.0 | 100.0 | 351 |
| Mwanza | 1.6 | 0.3 | 91.0 | 1.6 | 0.0 | 0.0 | 4.9 | 0.5 | 100.0 | 546 |
| Mara | 3.2 | 4.7 | 53.4 | 34.9 | 0.0 | 1.8 | 2.0 | 0.0 | 100.0 | 229 |
| Manyara | 0.4 | 2.3 | 72.3 | 13.6 | 0.0 | 1.8 | 9.6 | 0.0 | 100.0 | 173 |
| Zanzibar North | 0.9 | 0.9 | 44.7 | 53.5 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 21 |
| Zanzibar South | 10.1 | 0.4 | 60.0 | 29.5 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 13 |
| Town West | 3.9 | 0.9 | 68.8 | 26.4 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 59 |
| Pemba North | 0.0 | 0.0 | 9.6 | 90.0 | 0.4 | 0.0 | 0.0 | 0.0 | 100.0 | 27 |
| Pemba South | 0.5 | 0.0 | 21.9 | 70.8 | 0.5 | 1.8 | 4.5 | 0.0 | 100.0 | 24 |
|  |  |  |  |  |  |  |  |  |  | Continued... |


| Table 9.1-Continued |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percent distribution of women who had a live birth in the five years preceding the survey by antenatal care (ANC) provider during pregnancy for the most recent birth, according to background characteristics, Tanzania 2004-05 |  |  |  |  |  |  |  |  |  |  |
| Background characteristic | Doctor/ AMO | Clinical officer/ Assist. clinical officer | Nurse/ midwife | MCH aide | Traditional birth attendant | Relative/ village health worker/ other | No one | Missing | Total | Number of women |
| Education |  |  |  |  |  |  |  |  |  |  |
| No education | 0.5 | 3.3 | 65.7 | 21.1 | 0.3 | 3.7 | 5.4 | 0.1 | 100.0 | 1,466 |
| Primary incomplete | 1.6 | 5.7 | 68.8 | 18.8 | 0.0 | 1.7 | 3.3 | 0.1 | 100.0 | 910 |
| Primary complete | 2.8 | 3.6 | 76.3 | 12.7 | 0.1 | 2.3 | 2.1 | 0.1 | 100.0 | 3,094 |
| Secondary + | 5.2 | 3.8 | 71.7 | 18.5 | 0.0 | 0.8 | 0.0 | 0.0 | 100.0 | 302 |
| Wealth quintile |  |  |  |  |  |  |  |  |  |  |
| Lowest | 1.1 | 4.2 | 63.0 | 22.3 | 0.1 | 3.9 | 5.3 | 0.0 | 100.0 | 1,226 |
| Second | 1.3 | 3.6 | 72.7 | 16.3 | 0.1 | 3.6 | 2.3 | 0.1 | 100.0 | 1,187 |
| Middle | 1.3 | 4.6 | 77.1 | 12.4 | 0.4 | 2.5 | 1.7 | 0.0 | 100.0 | 1,166 |
| Fourth | 2.1 | 3.8 | 73.4 | 16.0 | 0.0 | 1.3 | 3.3 | 0.1 | 100.0 | 1,129 |
| Highest | 5.2 | 3.1 | 75.6 | 12.8 | 0.0 | 0.7 | 2.3 | 0.2 | 100.0 | 1,065 |
| Total | 2.1 | 3.9 | 72.2 | 16.1 | 0.1 | 2.5 | 3.0 | 0.1 | 100.0 | 5,772 |

Note: If more than one source of ANC was mentioned, only the provider with the highest qualifications is considered in this tabulation.
$\mathrm{AMO}=$ Assistant medical officer

## Number and Timing of Antenatal Visits

Antenatal care can be more effective in avoiding adverse pregnancy outcomes when it is sought early in the pregnancy and continues through to delivery. In Tanzania, pregnant women are advised to start attending antenatal clinics before the 16th week of gestation so that their general baseline health can be assessed and monitored regularly. Under normal circumstances, WHO recommends that a pregnant woman without complications have at least four ANC visits to provide sufficient care. It is possible during these visits to detect reproductive health risk factors. In the event of any complication, more frequent visits are advisable and admission to a hospital may become necessary. Table 9.2 presents data on the number of antenatal visits made by pregnant mothers and the stage of pregnancy at the first visit.

Sixty-two percent of women whose last birth occurred in the five years before the survey made four or more ANC visits. The number of pregnant mothers in Tanzania making four or more ANC visits appears to have declined slightly from 70 percent, according to the 1999 TRCHS (Figure 9.1). There is marked variation between urban and rural areas. Women in Mainland urban areas are more likely to make at least four visits (71 percent) than their counterpart Mainland rural women (59 percent).

Although the majority of Tanzanian women are making the recommended number of ANC visits, more than eight in ten women are making their first visit later than recommended. The median number of months that women are pregnant at their first visit is 5.4. One-third of women do not seek ANC until their sixth month or later. There is little urban-rural variation in terms of number of months pregnant at the time of the first visit.

Table 9.2 Number of antenatal care visits and timing of first visit
Percent distribution of women who had a live birth in the five years preceding the survey by number of antenatal care (ANC) visits for the most recent birth, and by the timing of the first visit, according to Mainland/Zanzibar residence, Tanzania 2004-05

|  | Mainland |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Number and timing of ANC visits | Urban | Rural | Total | Zanzibar | Total |

Number of ANC visits

| None | 2.8 | 3.2 | 3.1 | 0.7 | 3.0 |
| :--- | ---: | ---: | ---: | ---: | ---: |
| 1 | 0.6 | 2.1 | 1.8 | 1.0 | 1.7 |
| $2-3$ | 25.1 | 35.9 | 33.5 | 28.8 | 33.4 |
| $4+$ | 71.4 | 58.5 | 61.3 | 68.0 | 61.5 |
| Don't know/missing | 0.1 | 0.4 | 0.4 | 1.4 | 0.4 |


| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| :--- | :--- | :--- | :--- | :--- | :--- |

Number of months pregnant at
time of first ANC visit

| No antenatal care | 2.8 | 3.2 | 3.1 | 0.7 | 3.0 |
| :--- | ---: | ---: | ---: | ---: | ---: |
| $<4$ | 17.2 | 13.2 | 14.1 | 12.4 | 14.1 |
| $4-5$ | 49.0 | 50.4 | 50.1 | 45.3 | 50.0 |
| $6-7$ | 29.4 | 31.2 | 30.8 | 40.2 | 31.1 |
| $8+$ | 1.6 | 1.8 | 1.8 | 1.3 | 1.7 |
| Don't know/missing | 0.0 | 0.2 | 0.1 | 0.2 | 0.1 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Median months pregnant at first visit <br> (for those with ANC) | 5.3 | 5.5 | 5.4 | 5.6 | 5.4 |
| Number of women | 1,233 | 4,395 | 5,628 | 144 | 5,772 |

Figure 9.1 Trends in Number of Antenatal Care Visits


## Components of Antenatal Care

The content of antenatal care is important in judging its quality. Certain items of care have been selected and included in the questionnaire to indicate the level of the care received. Pregnancy complications are an important source of maternal and child mortality and morbidity. Thus, information on the signs of complications and tests for complications should be routinely included in all antenatal care. In the 2004-05 TDHS, respondents were asked whether they had received each of the following services at least once during antenatal care: information on pregnancy complications, weight measurement, blood pressure measurement, and urine and blood sample collection.

Some caution should be exercised in considering the information on the content of ANC care. First, the information is dependent on the woman's understanding of the questions (e.g., her understanding of what blood pressure measurement involves). It is also dependent on her recall of events during antenatal visits that may have taken place several years before the interview. Nonetheless, the results are useful in providing insights into the content of the care Tanzanian women receive during pregnancy.

Table 9.3 shows the findings on various components of antenatal care. Measuring weight was the most common component of ANC reported. Almost all women with a live birth in the five years preceding the survey had their weight measured ( 94 percent). However, weight is also likely to be the least important aspect of ANC, because there is unlikely to be a baseline (pre-pregnancy) weight on record for comparison purposes. Other components of ANC are much less likely to be reported. Twothirds of women report their blood pressure was measured and 54 percent say a blood sample was taken. Less than half, however, reported being informed about pregnancy complications or having given a urine sample.

There are substantial variations by background characteristics. For example, the proportion of women told about pregnancy complications varies greatly from a low of 15 percent in Rukwa to a high of 68 in Dar es Salaam. Little more than one-third of women in the Northern and Central zones of Tanzania reported that they had been provided information about signs of pregnancy complications, compared with two-thirds of women in the Eastern zone. Women living in urban areas, in wealthier households, and women with higher levels of educational attainment are more likely than others to have received each component of ANC.

Information on iron supplements and antimalarial drugs was collected and reported for the most recent birth in the five years preceding the survey, regardless of whether the respondent received ANC. Six in ten women who gave birth during the five years preceding the survey received iron supplementation and half of women received an antimalarial drug. Antimalarial drugs will be discussed further in Chapter 10.

| Table 9.3 Components of antenatal care |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Among women with a live birth in the five years preceding the survey who received ANC for the most recent birth, percentage who received specific services during ANC and percentage of women with a live birth in the five years preceding the survey who received iron tablets or syrup or anti-malarial drugs for the most recent birth, according to background characteristics, Tanzania 2004-05 |  |  |  |  |  |  |  |  |  |
|  | Among women who received antenatal care |  |  |  |  |  | Received iron tablets or syrup | Received anti- <br> malarial drugs | Number of women |
| Background characteristic | Informed of signs of pregnancy complications | Weight measured | Blood pressure measured | Urine sample taken | Blood sample taken | Number of women |  |  |  |
| Age at birth |  |  |  |  |  |  |  |  |  |
| <20 | 44.5 | 94.0 | 66.4 | 44.4 | 58.3 | 878 | 66.2 | 49.0 | 906 |
| 20-34 | 47.1 | 94.5 | 65.8 | 41.8 | 54.2 | 3,892 | 60.7 | 51.5 | 4,013 |
| 35-49 | 50.8 | 93.7 | 66.5 | 39.6 | 50.1 | 823 | 57.4 | 44.1 | 853 |
| Birth order |  |  |  |  |  |  |  |  |  |
| 1 | 48.2 | 94.9 | 69.6 | 49.8 | 63.0 | 1,153 | 66.2 | 52.0 | 1,178 |
| 2-3 | 47.9 | 94.9 | 69.5 | 45.4 | 57.7 | 2,052 | 61.6 | 52.7 | 2,097 |
| 4-5 | 44.7 | 94.0 | 62.3 | 37.2 | 50.3 | 1,148 | 60.5 | 49.3 | 1,204 |
| 6+ | 47.6 | 92.9 | 60.1 | 33.1 | 44.1 | 1,240 | 56.3 | 44.4 | 1,293 |
| Residence |  |  |  |  |  |  |  |  |  |
| Urban | 60.7 | 97.6 | 91.2 | 77.7 | 87.3 | 1,242 | 63.4 | 57.7 | 1,277 |
| Rural | 43.4 | 93.3 | 58.8 | 31.7 | 44.8 | 4,351 | 60.4 | 47.8 | 4,496 |
| Mainland/Zanzibar |  |  |  |  |  |  |  |  |  |
| Mainland | 47.4 | 94.3 | 65.5 | 41.2 | 54.0 | 5,450 | 61.2 | 50.7 | 5,628 |
| Total urban | 61.9 | 97.7 | 91.4 | 77.4 | 87.9 | 1,234 | 64.0 | 58.7 | 1,269 |
| Dar es Salaam city | 67.7 | 100.0 | 97.8 | 89.8 | 97.6 | 369 | 73.0 | 55.0 | 369 |
| Other urban | 59.4 | 96.7 | 88.7 | 72.1 | 83.8 | 865 | 60.3 | 60.2 | 900 |
| Total rural | 43.2 | 93.3 | 58.0 | 30.6 | 44.1 | 4,216 | 60.4 | 48.4 | 4,359 |
| Zanzibar | 40.7 | 92.7 | 82.2 | 69.5 | 62.2 | 143 | 56.2 | 23.0 | 144 |
| Unguja | 51.4 | 95.4 | 94.8 | 93.1 | 78.8 | 93 | 60.2 | 28.8 | 93 |
| Pemba | 20.9 | 87.7 | 58.6 | 25.4 | 31.2 | 50 | 48.8 | 12.3 | 51 |
| Zone |  |  |  |  |  |  |  |  |  |
| Western | 41.9 | 93.7 | 56.7 | 34.2 | 40.9 | 1,118 | 59.1 | 50.1 | 1,143 |
| Northern | 34.5 | 94.3 | 71.3 | 48.4 | 58.8 | 722 | 56.6 | 53.2 | 774 |
| Central | 36.9 | 86.4 | 57.1 | 28.6 | 35.9 | 469 | 67.4 | 50.9 | 473 |
| Southern highlands | 39.3 | 91.3 | 57.1 | 28.8 | 52.8 | 788 | 61.7 | 36.2 | 844 |
| Lake | 59.7 | 96.6 | 57.6 | 34.5 | 50.9 | 1,088 | 58.0 | 60.3 | 1,126 |
| Eastern | 65.4 | 98.5 | 87.9 | 68.1 | 82.5 | 763 | 56.7 | 46.6 | 766 |
| Southern | 46.9 | 96.6 | 81.4 | 51.2 | 58.8 | 502 | 80.8 | 57.0 | 503 |
| Region |  |  |  |  |  |  |  |  |  |
| Dodoma | 35.3 | 81.3 | 46.3 | 23.2 | 33.3 | 275 | 59.7 | 55.2 | 277 |
| Arusha | 52.1 | 93.9 | 79.2 | 59.0 | 63.5 | 177 | 38.5 | 50.6 | 205 |
| Kilimanjaro | 35.0 | 100.0 | 81.8 | 55.4 | 62.4 | 144 | 63.1 | 55.5 | 145 |
| Tanga | 26.3 | 95.7 | 70.8 | 54.5 | 70.3 | 244 | 67.1 | 61.5 | 250 |
| Morogoro | 62.5 | 99.1 | 81.9 | 52.5 | 68.3 | 251 | 40.0 | 37.7 | 253 |
| Pwani | 64.8 | 93.7 | 73.2 | 39.5 | 68.7 | 143 | 44.2 | 40.8 | 144 |
| Dar es Salaam | 67.7 | 100.0 | 97.8 | 89.8 | 97.6 | 369 | 73.0 | 55.0 | 369 |
| Lindi | 49.2 | 96.1 | 76.6 | 54.7 | 56.4 | 116 | 88.6 | 58.1 | 117 |
| Mtwara | 50.2 | 94.8 | 76.1 | 36.8 | 47.6 | 201 | 88.7 | 58.5 | 201 |
| Ruvuma | 42.0 | 99.0 | 90.1 | 64.7 | 72.5 | 185 | 67.3 | 54.7 | 185 |
| Iringa | 49.6 | 92.8 | 72.1 | 32.6 | 55.9 | 216 | 54.5 | 48.3 | 216 |
| Mbeya | 46.4 | 92.7 | 56.9 | 33.8 | 66.8 | 373 | 67.3 | 32.4 | 425 |
| Singida | 39.3 | 93.5 | 72.4 | 36.3 | 39.5 | 194 | 78.2 | 44.7 | 196 |
| Tabora | 34.8 | 94.0 | 55.9 | 38.2 | 41.3 | 307 | 62.3 | 47.3 | 311 |
| Rukwa | 14.9 | 87.0 | 41.1 | 15.3 | 23.4 | 199 | 58.0 | 31.2 | 203 |
| Kigoma | 38.2 | 92.3 | 63.2 | 34.7 | 39.0 | 280 | 54.8 | 58.7 | 282 |
| Shinyanga | 48.0 | 94.2 | 53.8 | 31.6 | 41.5 | 531 | 59.4 | 47.3 | 550 |
| Kagera | 66.1 | 96.7 | 52.1 | 20.8 | 34.6 | 347 | 57.7 | 66.1 | 351 |
| Mwanza | 60.1 | 97.8 | 64.7 | 44.8 | 64.6 | 517 | 55.7 | 62.5 | 546 |
| Mara | 48.7 | 94.0 | 49.6 | 31.9 | 44.5 | 224 | 63.8 | 46.5 | 229 |
| Manyara | 27.1 | 87.2 | 53.4 | 20.5 | 32.0 | 157 | 57.3 | 42.5 | 173 |
| Zanzibar North | 40.0 | 89.3 | 86.8 | 84.3 | 71.8 | 21 | 72.7 | 29.7 | 21 |
| Zanzibar South | 47.1 | 97.0 | 96.5 | 94.6 | 79.7 | 13 | 75.3 | 26.4 | 13 |
| Town West | 56.4 | 97.3 | 97.2 | 95.9 | 81.1 | 59 | 52.4 | 29.0 | 59 |
| Pemba North | 16.7 | 88.9 | 63.7 | 25.5 | 31.7 | 27 | 41.7 | 13.2 | 27 |
| Pemba South | 25.9 | 86.2 | 52.6 | 25.3 | 30.7 | 23 | 56.9 | 11.2 | 24 |
|  |  |  |  |  |  |  |  |  | Continued... |

Table 9.3-Continued
Among women with a live birth in the five years preceding the survey who received ANC for the most recent birth, percentage who received specific services during ANC and percentage of women with a live birth in the five years preceding the survey who received iron tablets or syrup or anti-malarial drugs for the most recent birth, according to background characteristics, Tanzania 2004-05

| Background characteristic | Among women who received antenatal care |  |  |  |  |  | Received iron tablets or syrup | Received antimalarial drugs | Number of women |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Informed of signs of pregnancy complications | Weight measured | Blood pressure measured | Urine sample taken | Blood sample taken | Number of women |  |  |  |
| Education |  |  |  |  |  |  |  |  |  |
| No education | 36.4 | 91.0 | 53.1 | 26.0 | 39.7 | 1,385 | 57.4 | 39.7 | 1,466 |
| Primary incomplete | 41.9 | 93.6 | 61.4 | 39.0 | 52.0 | 879 | 65.1 | 45.3 | 910 |
| Primary complete | 52.0 | 95.7 | 70.5 | 45.8 | 58.2 | 3,027 | 61.9 | 55.4 | 3,094 |
| Secondary+ | 65.7 | 97.1 | 92.9 | 84.1 | 87.9 | 302 | 58.9 | 58.2 | 302 |
| Wealth quintile |  |  |  |  |  |  |  |  |  |
| Lowest | 41.9 | 91.9 | 54.9 | 28.2 | 39.7 | 1,161 | 59.3 | 45.5 | 1,226 |
| Second | 40.1 | 92.7 | 59.6 | 29.6 | 44.2 | 1,158 | 64.3 | 45.7 | 1,187 |
| Middle | 44.0 | 95.2 | 56.5 | 28.4 | 42.9 | 1,146 | 58.5 | 47.0 | 1,166 |
| Fourth | 48.4 | 93.6 | 69.2 | 46.0 | 60.5 | 1,090 | 59.5 | 54.8 | 1,129 |
| Highest | 63.6 | 98.4 | 92.6 | 81.6 | 87.7 | 1,038 | 64.1 | 58.3 | 1,065 |
| Total | 47.3 | 94.3 | 66.0 | 41.9 | 54.2 | 5,593 | 61.1 | 50.0 | 5,772 |

## Tetanus Toxoid Vaccination

Tetanus toxoid injections are given during pregnancy for the prevention of neonatal tetanus, a cause of deaths among infants around the world. To address this problem, the Ministry of Health requires all women of reproductive age to be vaccinated with tetanus toxoid when they become pregnant. A baby is considered protected if the mother receives two doses of tetanus toxoid during pregnancy, with the second at least two weeks before delivery. However, if a woman was vaccinated during a previous pregnancy, she only requires one dose for the current pregnancy. Five doses are considered adequate to provide lifetime protection. To assess the status of tetanus vaccination coverage, women who gave birth during the five years before the survey were asked if they had received tetanus toxoid injections during the pregnancy for their most recent birth, and if so how many. The results are presented in Table 9.4.

Eight in ten women who had a live birth in the five years preceding the survey received at least one tetanus toxoid injection during pregnancy for the most recent birth: 24 percent received one dose and 56 percent of women received two or more doses of vaccine. This is approximately the same as the results from the 1999 TRCHS, which found that 83 percent received at least one dose, although a slightly higher proportion received 2 doses in 1999 (61 percent).

Younger mothers and women pregnant with their first birth are more likely than other women to receive two or more doses of tetanus toxoid. Urban women are also more likely than rural women to receive two or more doses of tetanus toxoid during pregnancy. The data imply that a substantial proportion of births in rural areas ( 47 percent) may not be protected against tetanus.

Pregnant women on the Mainland are substantially more likely than those on Zanzibar to receive two or more doses of tetanus toxoid (56 and 41 percent, respectively). Pregnant women in Dar es Salaam and Tanga are more likely than those in other regions to receive two or more doses. As expected, the proportion of pregnant women with two or more doses of tetanus toxoid increases with education.

| Table 9.4 Tetanus toxoid injections |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percent distribution of women who had a live birth in the five years preceding the survey by number of tetanus toxoid injections received during pregnancy for the most recent birth, according to background characteristics, Tanzania 2004-05 |  |  |  |  |  |  |
| Background characteristic | None | One injection | Two or more injections | Don't know/ missing | Total | Number of women |
| Age at birth |  |  |  |  |  |  |
| <20 | 8.3 | 18.5 | 72.9 | 0.3 | 100.0 | 906 |
| 20-34 | 20.5 | 24.8 | 54.3 | 0.4 | 100.0 | 4,013 |
| 35-49 | 29.1 | 24.5 | 45.7 | 0.7 | 100.0 | 853 |
| Birth order |  |  |  |  |  |  |
| 1 | 6.8 | 17.8 | 75.1 | 0.3 | 100.0 | 1,178 |
| 2-3 | 15.1 | 25.4 | 59.1 | 0.4 | 100.0 | 2,097 |
| 4-5 | 26.8 | 25.9 | 46.9 | 0.4 | 100.0 | 1,204 |
| 6+ | 32.9 | 24.6 | 41.7 | 0.7 | 100.0 | 1,293 |
| Residence |  |  |  |  |  |  |
| Urban | 13.5 | 19.9 | 66.2 | 0.4 | 100.0 | 1,277 |
| Rural | 21.6 | 24.9 | 53.0 | 0.5 | 100.0 | 4,496 |
| Mainland/Zanzibar |  |  |  |  |  |  |
| Mainland | 19.7 | 23.6 | 56.3 | 0.4 | 100.0 | 5,628 |
| Total urban | 13.1 | 19.2 | 67.4 | 0.3 | 100.0 | 1,269 |
| Dar es Salaam city | 9.4 | 11.4 | 79.3 | 0.0 | 100.0 | 369 |
| Other urban | 14.6 | 22.4 | 62.6 | 0.4 | 100.0 | 900 |
| Total rural | 21.6 | 24.8 | 53.1 | 0.5 | 100.0 | 4,359 |
| Zanzibar | 26.0 | 32.4 | 40.8 | 0.8 | 100.0 | 144 |
| Unguja | 27.3 | 28.4 | 43.4 | 0.9 | 100.0 | 93 |
| Pemba | 23.7 | 39.5 | 36.1 | 0.7 | 100.0 | 51 |
| Zone |  |  |  |  |  |  |
| Western | 26.7 | 32.6 | 40.4 | 0.4 | 100.0 | 1,143 |
| Northern | 17.2 | 20.7 | 61.4 | 0.6 | 100.0 | 774 |
| Central | 19.7 | 30.7 | 49.0 | 0.6 | 100.0 | 473 |
| Southern highlands | 20.3 | 24.4 | 55.0 | 0.2 | 100.0 | 844 |
| Lake | 19.6 | 19.0 | 60.7 | 0.7 | 100.0 | 1,126 |
| Eastern | 14.1 | 13.6 | 72.1 | 0.2 | 100.0 | 766 |
| Southern | 15.3 | 24.8 | 59.8 | 0.2 | 100.0 | 503 |
| Region |  |  |  |  |  |  |
| Dodoma | 19.4 | 30.2 | 49.9 | 0.5 | 100.0 | 277 |
| Arusha | 18.4 | 21.7 | 59.4 | 0.4 | 100.0 | 205 |
| Kilimanjaro | 19.0 | 24.3 | 56.1 | 0.7 | 100.0 | 145 |
| Tanga | 9.5 | 12.6 | 77.1 | 0.8 | 100.0 | 250 |
| Morogoro | 16.9 | 13.6 | 68.9 | 0.6 | 100.0 | 253 |
| Pwani | 21.1 | 19.5 | 59.3 | 0.0 | 100.0 | 144 |
| Dar es Salaam | 9.4 | 11.4 | 79.3 | 0.0 | 100.0 | 369 |
| Lindi | 19.3 | 21.9 | 58.7 | 0.0 | 100.0 | 117 |
| Mtwara | 12.9 | 21.1 | 66.0 | 0.0 | 100.0 | 201 |
| Ruvuma | 15.4 | 30.5 | 53.7 | 0.4 | 100.0 | 185 |
| Iringa | 13.4 | 19.2 | 66.9 | 0.5 | 100.0 | 216 |
| Mbeya | 23.5 | 27.1 | 49.4 | 0.0 | 100.0 | 425 |
| Singida | 20.0 | 31.5 | 47.6 | 0.9 | 100.0 | 196 |
| Tabora | 17.3 | 34.6 | 48.2 | 0.0 | 100.0 | 311 |
| Rukwa | 20.9 | 24.5 | 54.2 | 0.4 | 100.0 | 203 |
| Kigoma | 38.0 | 25.9 | 36.1 | 0.0 | 100.0 | 282 |
| Shinyanga | 26.2 | 34.8 | 38.1 | 0.8 | 100.0 | 550 |
| Kagera | 23.6 | 15.0 | 61.4 | 0.0 | 100.0 | 351 |
| Mwanza | 17.7 | 19.8 | 61.7 | 0.8 | 100.0 | 546 |
| Mara | 17.9 | 23.1 | 57.4 | 1.7 | 100.0 | 229 |
| Manyara | 25.5 | 28.2 | 45.8 | 0.5 | 100.0 | 173 |
| Zanzibar North | 39.0 | 33.7 | 27.4 | 0.0 | 100.0 | 21 |
| Zanzibar South | 37.9 | 15.7 | 46.4 | 0.0 | 100.0 | 13 |
| Town West | 20.8 | 29.3 | 48.5 | 1.4 | 100.0 | 59 |
| Pemba North | 21.2 | 39.7 | 39.0 | 0.0 | 100.0 | 27 |
| Pemba South | 26.5 | 39.3 | 32.7 | 1.5 | 100.0 | 24 |
| Education |  |  |  |  |  |  |
| No education | 21.7 | 25.5 | 52.4 | 0.4 | 100.0 | 1,466 |
| Primary incomplete | 19.1 | 22.8 | 57.5 | 0.6 | 100.0 | 910 |
| Primary complete | 19.6 | 23.8 | 56.2 | 0.4 | 100.0 | 3,094 |
| Secondary+ | 15.4 | 18.3 | 65.7 | 0.6 | 100.0 | 302 |
| Wealth quintile |  |  |  |  |  |  |
| Lowest | 21.8 | 23.7 | 54.3 | 0.2 | 100.0 | 1,226 |
| Second | 21.0 | 26.0 | 52.5 | 0.5 | 100.0 | 1,187 |
| Middle | 24.4 | 24.5 | 50.7 | 0.4 | 100.0 | 1,166 |
| Fourth | 18.1 | 25.9 | 55.6 | 0.4 | 100.0 | 1,129 |
| Highest | 13.1 | 18.4 | 67.6 | 0.8 | 100.0 | 1,065 |
| Total | 19.8 | 23.8 | 55.9 | 0.4 | 100.0 | 5,772 |

### 9.2 Delivery Care

Proper medical attention and hygienic conditions during delivery can reduce the risk of complications and infections that can cause the death or serious illness of the mother and/or the newborn baby. Thus, another important component of efforts to reduce health risks to mothers and children is increasing the proportion of babies that are delivered in facilities. The 2004-05 TDHS obtained information on both the place of delivery and person assisting with the delivery. Tables 9.5 and 9.6 present this information for all live births in the five years preceding the survey.

## Place of Delivery

Forty-seven percent of births in Tanzania are delivered at a health facility, while 53 percent are delivered at home. This is approximately the same proportion of facility deliveries as observed in the 1999 TRCHS (44 percent).

The proportion of births that take place at health facilities differs according to characteristics of mother and child. Births to younger women and urban women as well as first births are much more likely than others to take place in a health facility. About half of births both on the Mainland and on Zanzibar are delivered in health facilities. There are marked variations among regions. In Zanzibar North, less than one-fourth of children are delivered in health facilities, whereas children born to women in Dar es Salaam and those living in Town West are the most likely to have been delivered at a health facility ( 90 and 73 percent, respectively). As expected, births to mothers with at least some secondary education are more likely than others to take place in health facilities, as are births to wealthier women, compared with their less advantaged counterparts.

| Table 9.5 Place of delivery |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percent distribution of live births in the five years preceding the survey by place of delivery, according to background characteristics, Tanzania 2004-05 |  |  |  |  |  |  |  |
| Background characteristic | Health facility |  |  |  | Other/ missing | Total | Number of births |
|  | Public sector | Voluntary/ religious | Private sector | Home |  |  |  |
| Mother's age at birth |  |  |  |  |  |  |  |
| <20 | 40.8 | 3.7 | 6.4 | 48.7 | 0.3 | 100.0 | 1,502 |
| 20-34 | 38.5 | 2.8 | 6.4 | 52.1 | 0.1 | 100.0 | 6,153 |
| 35-49 | 29.5 | 2.8 | 5.6 | 61.8 | 0.2 | 100.0 | 1,070 |
| Birth order |  |  |  |  |  |  |  |
| 1 | 49.7 | 4.4 | 8.7 | 36.9 | 0.3 | 100.0 | 1,922 |
| 2-3 | 39.5 | 3.4 | 6.2 | 50.8 | 0.1 | 100.0 | 3,145 |
| 4-5 | 31.5 | 2.4 | 6.2 | 59.7 | 0.2 | 100.0 | 1,820 |
| $6+$ | 28.6 | 1.5 | 4.0 | 65.5 | 0.4 | 100.0 | 1,838 |
| Residence |  |  |  |  |  |  |  |
| Urban | 71.5 | 4.0 | 5.5 | 18.9 | 0.1 | 100.0 | 1,691 |
| Rural | 29.7 | 2.8 | 6.5 | 60.9 | 0.2 | 100.0 | 7,034 |
| Mainland/Zanzibar |  |  |  |  |  |  |  |
| Mainland | 37.5 | 3.1 | 6.4 | 52.8 | 0.2 | 100.0 | 8,506 |
| Total urban | 71.0 | 4.1 | 5.7 | 19.1 | 0.1 | 100.0 | 1,670 |
| Dar es Salaam city | 82.4 | 5.1 | 2.9 | 9.1 | 0.5 | 100.0 | 428 |
| Other urban | 67.0 | 3.8 | 6.7 | 22.5 | 0.0 | 100.0 | 1,241 |
| Total rural | 29.4 | 2.8 | 6.6 | 61.0 | 0.2 | 100.0 | 6,836 |
| Zanzibar | 48.2 | 0.2 | 0.3 | 51.1 | 0.2 | 100.0 | 219 |
| Unguja | 57.7 | 0.2 | 0.3 | 41.8 | 0.0 | 100.0 | 133 |
| Pemba | 33.6 | 0.2 | 0.2 | 65.4 | 0.5 | 100.0 | 86 |
| Zone |  |  |  |  |  |  |  |
| Western | 37.5 | 5.2 | 2.8 | 54.2 | 0.2 | 100.0 | 1,912 |
| Northern | 36.7 | 3.3 | 7.4 | 52.5 | 0.1 | 100.0 | 1,122 |
| Central | 33.4 | 1.1 | 3.6 | 61.4 | 0.5 | 100.0 | 716 |
| Southern highlands | 32.9 | 1.1 | 13.3 | 52.6 | 0.2 | 100.0 | 1,283 |
| Lake | 33.2 | 2.2 | 3.9 | 60.4 | 0.2 | 100.0 | 1,868 |
| Eastern | 55.8 | 4.7 | 4.6 | 34.7 | 0.2 | 100.0 | 969 |
| Southern | 37.8 | 2.5 | 15.4 | 44.3 | 0.0 | 100.0 | 637 |
| Region |  |  |  |  |  |  |  |
| Dodoma | 32.2 | 1.2 | 3.1 | 63.5 | 0.0 | 100.0 | 413 |
| Arusha | 41.0 | 3.9 | 5.8 | 49.2 | 0.0 | 100.0 | 288 |
| Kilimanjaro | 49.2 | 8.4 | 12.5 | 29.3 | 0.5 | 100.0 | 210 |
| Tanga | 38.4 | 0.7 | 2.1 | 58.9 | 0.0 | 100.0 | 355 |
| Morogoro | 32.5 | 5.0 | 8.5 | 54.0 | 0.0 | 100.0 | 349 |
| Pwani | 38.7 | 3.0 | 1.3 | 57.0 | 0.0 | 100.0 | 191 |
| Dar es Salaam | 82.4 | 5.1 | 2.9 | 9.1 | 0.5 | 100.0 | 428 |
| Lindi | 42.0 | 3.5 | 1.6 | 52.9 | 0.0 | 100.0 | 147 |
| Mtwara | 32.0 | 3.6 | 1.7 | 62.8 | 0.0 | 100.0 | 247 |
| Ruvuma | 41.2 | 0.8 | 37.5 | 20.4 | 0.0 | 100.0 | 244 |
| Iringa | 39.1 | 0.9 | 31.8 | 27.3 | 0.9 | 100.0 | 294 |
| Mbeya | 29.7 | 1.1 | 10.3 | 58.9 | 0.0 | 100.0 | 662 |
| Singida | 35.0 | 0.8 | 4.3 | 58.6 | 1.3 | 100.0 | 303 |
| Tabora | 47.3 | 2.7 | 3.8 | 46.3 | 0.0 | 100.0 | 508 |
| Rukwa | 33.6 | 1.2 | 2.6 | 62.5 | 0.0 | 100.0 | 326 |
| Kigoma | 32.4 | 2.7 | 3.9 | 61.1 | 0.0 | 100.0 | 484 |
| Shinyanga | 34.9 | 8.0 | 1.8 | 55.0 | 0.3 | 100.0 | 919 |
| Kagera | 25.0 | 2.5 | 4.8 | 67.5 | 0.2 | 100.0 | 574 |
| Mwanza | 42.3 | 2.1 | 3.0 | 52.4 | 0.3 | 100.0 | 899 |
| Mara | 24.5 | 2.3 | 4.7 | 68.5 | 0.0 | 100.0 | 395 |
| Manyara | 20.2 | 2.1 | 12.0 | 65.7 | 0.0 | 100.0 | 269 |
| Zanzibar North | 23.2 | 0.0 | 0.0 | 76.8 | 0.0 | 100.0 | 33 |
| Zanzibar South | 53.9 | 0.0 | 0.7 | 45.4 | 0.0 | 100.0 | 19 |
| Town West | 72.8 | 0.3 | 0.3 | 26.6 | 0.0 | 100.0 | 81 |
| Pemba North | 28.6 | 0.0 | 0.3 | 70.9 | 0.3 | 100.0 | 44 |
| Pemba South | 38.8 | 0.5 | 0.2 | 59.7 | 0.8 | 100.0 | 42 |


| Table 9.5-Continued |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percent distribution of live births in the five years preceding the survey by place of delivery, according to background characteristics, Tanzania 2004-05 |  |  |  |  |  |  |  |
| Background characteristic | Health facility |  |  |  | Other/ missing | Total | Number of births |
|  | Public sector | Voluntary/ religious | Private sector | Home |  |  |  |
| Mother's education |  |  |  |  |  |  |  |
| No education | 26.6 | 1.7 | 3.8 | 67.5 | 0.4 | 100.0 | 2,318 |
| Primary incomplete | 35.2 | 1.9 | 4.9 | 57.8 | 0.2 | 100.0 | 1,378 |
| Primary complete | 41.4 | 3.7 | 7.8 | 47.0 | 0.1 | 100.0 | 4,642 |
| Secondary+ | 71.3 | 6.3 | 7.3 | 14.9 | 0.3 | 100.0 | 387 |
| Antenatal care visits ${ }^{1}$ |  |  |  |  |  |  |  |
| None | 17.1 | 2.4 | 1.0 | 79.5 | 0.0 | 100.0 | 174 |
| 1-3 | 34.7 | 2.2 | 6.5 | 56.4 | 0.1 | 100.0 | 2,028 |
| 4+ | 45.0 | 4.0 | 6.6 | 44.3 | 0.1 | 100.0 | 3,548 |
| Wealth quintile |  |  |  |  |  |  |  |
| Lowest | 25.6 | 2.1 | 4.4 | 67.5 | 0.4 | 100.0 | 1,974 |
| Second | 30.1 | 2.2 | 4.5 | 63.1 | 0.2 | 100.0 | 1,857 |
| Middle | 28.7 | 3.2 | 7.0 | 61.1 | 0.0 | 100.0 | 1,866 |
| Fourth | 42.6 | 1.9 | 9.4 | 46.1 | 0.1 | 100.0 | 1,681 |
| Highest | 73.0 | 6.6 | 6.8 | 13.3 | 0.4 | 100.0 | 1,347 |
| Total | 37.8 | 3.0 | 6.3 | 52.7 | 0.2 | 100.0 | 8,725 |
| ${ }^{1}$ Includes only the most recent birth in the five years preceding the survey |  |  |  |  |  |  |  |

## Assistance during Delivery

The type of assistance a woman receives during childbirth has important health consequences for both mother and child. Therefore, besides collecting information on the place of delivery, the 2004-05 TDHS collected data on the type of personnel who assisted during delivery. Table 9.6 shows the percent distribution of births in the five years preceding the survey by type of assistance during delivery, according to background characteristics. It should be noted that interviewers were instructed to record all persons attending the delivery. However, if more than one person was in attendance, only the provider with the highest qualifications is considered.

Almost half (46 percent) of births are assisted by health professionals (doctors, clinical officers, nurses, midwives, and MCH aides). Trained and traditional birth attendants assist one-fifth (19 percent) of deliveries, and relatives or other untrained people assist 31 percent of births. Three percent of births are delivered without assistance.

Births in urban areas are more likely to be assisted by health professionals than rural births. Children born to women living in the Eastern zone are more likely than women in other zones to receive professional assistance during delivery. Regional differences in delivery assistance are also prominent. Regions with least professional assistance during delivery are Zanzibar North and Pemba North (25 and 30 percent, respectively).

As expected, a mother's education is associated with the type of delivery assistance. The percentage of births assisted by health professionals increases from 31 percent of births to women with no education to 84 percent of births to women with some secondary education. Similarly, births to women in the highest wealth quintile are more likely to be assisted by medically-trained caregivers (87 percent) than births to women in the lowest quintile (31 percent).


## Delivery Characteristics

The 2004-05 TDHS obtained information on a number of delivery characteristics including caesarean sections and birth weight. In countries where the proportion of facility deliveries is comparatively low, such as Tanzania, the caesarean section rate provides a proxy for women's access to care for complicated deliveries. The Safe Motherhood Interagency Working Group, composed of agencies including UNICEF, UNFPA, the World Bank, the World Health Organisation, the International Planned Parenthood Foundation, and the Population Council, established an indicator for sufficient and appropriate availability and use of caesarean section: the national coverage of use of caesarean section techniques should not be less than 5 percent, nor in excess of 15 percent (FCI, 1998).

Table 9.7 shows that only 3 percent of babies born in Tanzania are delivered by caesarean section, the same proportion estimated by the 1999 TRCHS. This indicates that Tanzanian mothers have insufficient access to essential maternal health services, because the C-section rate is below the 5 percent threshold. Moreover, access to such services is not uniform. Women living in urban areas, the Eastern zone, those women with at least secondary education, and those in the wealthiest households are more likely than others to have had a C-section.

Birth weight is a major determinant of infant and child health and mortality. Birth weight of less than 2.5 kilograms is considered low. For all births during the five-year period preceding the survey, mothers were asked about their perception of the child's size at birth. They were then asked to report the actual weight in kilograms if the child had been weighed after delivery. It is not surprising that with more than half of deliveries occurring at home, 50 percent of newborns were not weighed at birth. Among births for which the birth weight was known, only 7 percent were classified as low birth weight (i.e., the infant weighed less than 2.5 kg at birth).

According to the respondent's own assessment of her infant's size, the majority of births (89 percent) are classified as average or large. Just one in ten births were reported to be either smaller than average ( 9 percent) or very small ( 2 percent).

| Table 9.7 Delivery characteristics |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percentage of live births in the five years preceding the survey delivered by caesarean section, and percent distribution by birth weight and by mother's estimate of baby's size at birth, according to background characteristics, Tanzania 2004-05 |  |  |  |  |  |  |  |  |  |  |  |  |
| Background characteristic | Delivery by C-section | Birth weight |  |  |  | Total | Sex of child at birth |  |  |  | Total | Number of births |
|  |  | Not weighed | Less than 2.5 kg | 2.5 kg <br> or more | Don't know/ missing |  | Very small | Smaller than average | Average or larger | Don't know/ missing |  |  |
| Age |  |  |  |  |  |  |  |  |  |  |  |  |
| $<20$ | 4.0 | 46.9 | 6.3 | 45.7 | 1.1 | 100.0 | 2.9 | 10.8 | 86.0 | 0.3 | 100.0 | 1,502 |
| 20-34 | 3.1 | 48.5 | 3.2 | 47.5 | 0.8 | 100.0 | 2.2 | 7.6 | 89.8 | 0.3 | 100.0 | 6,153 |
| 35-49 | 2.7 | 58.7 | 3.2 | 37.5 | 0.6 | 100.0 | 2.6 | 10.5 | 86.8 | 0.0 | 100.0 | 1,070 |
| Birth order |  |  |  |  |  |  |  |  |  |  |  |  |
| 1 | 5.1 | 35.3 | 6.8 | 56.7 | 1.2 | 100.0 | 2.8 | 11.3 | 85.4 | 0.5 | 100.0 | 1,922 |
| 2-3 | 3.8 | 47.7 | 3.5 | 48.0 | 0.8 | 100.0 | 2.4 | 7.5 | 90.0 | 0.1 | 100.0 | 3,145 |
| 4-5 | 1.7 | 55.5 | 2.3 | 41.9 | 0.4 | 100.0 | 1.6 | 7.2 | 90.9 | 0.3 | 100.0 | 1,820 |
| $6+$ | 1.7 | 61.5 | 2.4 | 35.2 | 0.9 | 100.0 | 2.8 | 8.7 | 88.2 | 0.3 | 100.0 | 1,838 |
| Residence |  |  |  |  |  |  |  |  |  |  |  |  |
| Urban | 7.8 | 15.8 | 6.8 | 76.6 | 0.8 | 100.0 | 2.8 | 8.1 | 88.7 | 0.3 | 100.0 | 1,691 |
| Rural | 2.1 | 57.6 | 3.0 | 38.6 | 0.8 | 100.0 | 2.3 | 8.6 | 88.8 | 0.3 | 100.0 | 7,034 |
| Mainland/Zanzibar |  |  |  |  |  |  |  |  |  |  |  |  |
| Mainland | 3.3 | 49.5 | 3.7 | 46.0 | 0.8 | 100.0 | 2.3 | 8.4 | 89.0 | 0.3 | 100.0 | 8,506 |
| Total urban | 7.9 | 15.9 | 6.7 | 76.7 | 0.7 | 100.0 | 2.7 | 7.8 | 89.2 | 0.3 | 100.0 | 1,670 |
| Dar es Salaam city | 7.7 | 5.3 | 8.1 | 86.2 | 0.5 | 100.0 | 3.8 | 5.6 | 90.1 | 0.5 | 100.0 | , 428 |
| Other urban | 8.0 | 19.5 | 6.2 | 73.5 | 0.8 | 100.0 | 2.4 | 8.5 | 88.8 | 0.3 | 100.0 | 1,241 |
| Total rural | 2.1 | 57.8 | 3.0 | 38.4 | 0.8 | 100.0 | 2.2 | 8.6 | 89.0 | 0.3 | 100.0 | 6,836 |
| Zanzibar | 1.9 | 48.6 | 5.0 | 44.5 | 1.9 | 100.0 | 6.9 | 11.8 | 80.9 | 0.4 | 100.0 | 219 |
| Unguia | 2.3 | 37.9 | 5.3 | 55.7 | 1.0 | 100.0 | 3.0 | 13.1 | 83.6 | 0.2 | 100.0 | 133 |
| Pemba | 1.3 | 65.0 | 4.5 | 27.2 | 3.3 | 100.0 | 12.9 | 9.7 | 76.6 | 0.8 | 100.0 | 86 |
| Zone |  |  |  |  |  |  |  |  |  |  |  |  |
| Western | 1.8 | 47.9 | 3.0 | 48.6 | 0.6 | 100.0 | 2.9 | 11.6 | 85.4 | 0.2 | 100.0 | 1,912 |
| Northern | 3.7 | 45.5 | 4.2 | 48.9 | 1.4 | 100.0 | 3.4 | 7.4 | 89.1 | 0.1 | 100.0 | 1,122 |
| Central | 1.7 | 63.3 | 2.5 | 33.5 | 0.7 | 100.0 | 2.7 | 6.3 | 91.0 | 0.0 | 100.0 | 716 |
| Southern highlands | 2.4 | 54.2 | 2.9 | 42.4 | 0.5 | 100.0 | 1.3 | 5.0 | 93.2 | 0.5 | 100.0 | 1,283 |
| Lake | 3.5 | 59.4 | 2.7 | 37.1 | 0.9 | 100.0 | 1.2 | 9.6 | 88.7 | 0.5 | 100.0 | 1,868 |
| Eastern | 7.0 | 29.4 | 6.1 | 63.7 | 0.8 | 100.0 | 2.5 | 6.3 | 90.9 | 0.2 | 100.0 | 969 |
| Southern | 4.0 | 38.7 | 7.5 | 53.2 | 0.5 | 100.0 | 2.6 | 9.8 | 87.5 | 0.1 | 100.0 | 637 |
| Region |  |  |  |  |  |  |  |  |  |  |  |  |
| Dodoma | 0.6 | 65.7 | 2.6 | 31.4 | 0.4 | 100.0 | 3.7 | 7.0 | 89.2 | 0.0 | 100.0 | 413 |
| Arusha | 3.7 | 40.8 | 5.6 | 53.2 | 0.4 | 100.0 | 3.7 | 12.4 | 83.9 | 0.0 | 100.0 | 288 |
| Kilimanjaro | 7.2 | 26.0 | 5.6 | 66.7 | 1.8 | 100.0 | 6.2 | 2.6 | 90.7 | 0.5 | 100.0 | 210 |
| Tanga | 2.7 | 50.7 | 2.7 | 44.3 | 2.3 | 100.0 | 1.2 | 5.6 | 93.2 | 0.0 | 100.0 | 355 |
| Morogoro | 8.9 | 45.8 | 4.2 | 48.9 | 1.1 | 100.0 | 1.7 | 5.7 | 92.6 | 0.0 | 100.0 | 349 |
| Pwani | 1.6 | 53.4 | 5.1 | 40.6 | 0.9 | 100.0 | 1.3 | 9.2 | 89.6 | 0.0 | 100.0 | 191 |
| Dar es Salaam | 7.7 | 5.3 | 8.1 | 86.2 | 0.5 | 100.0 | 3.8 | 5.6 | 90.1 | 0.5 | 100.0 | 428 |
| Lindi | 4.7 | 50.8 | 4.3 | 44.8 | 0.0 | 100.0 | 5.0 | 9.6 | 85.0 | 0.5 | 100.0 | 147 |
| Mtwara | 2.4 | 54.9 | 4.3 | 40.0 | 0.8 | 100.0 | 0.0 | 8.2 | 91.8 | 0.0 | 100.0 | 247 |
| Ruvuma | 5.0 | 15.0 | 12.7 | 71.7 | 0.6 | 100.0 | 3.9 | 11.6 | 84.6 | 0.0 | 100.0 | 244 |
| Iringa | 6.6 | 26.0 | 4.5 | 67.8 | 1.7 | 100.0 | 4.1 | 7.7 | 87.3 | 0.9 | 100.0 | 294 |
| Mbeya | 1.5 | 59.6 | 2.4 | 37.7 | 0.3 | 100.0 | 0.7 | 4.4 | 94.3 | 0.5 | 100.0 | 662 |
| Singida | 3.1 | 60.1 | 2.5 | 36.3 | 1.1 | 100.0 | 1.3 | 5.2 | 93.5 | 0.0 | 100.0 | 303 |
| Tabora | 2.3 | 40.1 | 3.0 | 56.0 | 0.8 | 100.0 | 2.0 | 12.4 | 85.5 | 0.0 | 100.0 | 508 |
| Rukwa | 0.5 | 68.6 | 2.3 | 29.1 | 0.0 | 100.0 | 0.0 | 3.6 | 96.1 | 0.3 | 100.0 | 326 |
| Kigoma | 1.9 | 39.2 | 4.2 | 56.1 | 0.4 | 100.0 | 3.6 | 12.3 | 83.8 | 0.3 | 100.0 | 484 |
| Shinyanga | 1.5 | 56.7 | 2.3 | 40.5 | 0.5 | 100.0 | 3.0 | 10.8 | 86.1 | 0.2 | 100.0 | 919 |
| Kagera | 3.8 | 67.7 | 1.0 | 30.7 | 0.5 | 100.0 | 0.5 | 9.5 | 90.0 | 0.0 | 100.0 | 574 |
| Mwanza | 4.6 | 50.6 | 4.0 | 44.5 | 0.9 | 100.0 | 1.3 | 11.0 | 87.0 | 0.7 | 100.0 | 899 |
| Mara | 0.6 | 67.1 | 2.1 | 29.2 | 1.6 | 100.0 | 1.9 | 6.6 | 90.4 | 1.0 | 100.0 | 395 |
| Manyara | 2.4 | 58.9 | 3.6 | 36.5 | 1.1 | 100.0 | 3.7 | 8.2 | 88.0 | 0.0 | 100.0 | 269 |
| Zanzibar North | 0.5 | 75.1 | 2.1 | 22.2 | 0.6 | 100.0 | 6.4 | 16.2 | 77.4 | 0.0 | 100.0 | 33 |
| Zanzibar South | 1.8 | 30.6 | 8.6 | 58.6 | 2.2 | 100.0 | 6.2 | 12.4 | 81.4 | 0.0 | 100.0 | 19 |
| Town West | 3.1 | 24.3 | 5.8 | 68.9 | 1.0 | 100.0 | 0.9 | 12.1 | 86.7 | 0.3 | 100.0 | 81 |
| Pemba North | 1.4 | 71.4 | 3.3 | 22.0 | 3.2 | 100.0 | 15.2 | 7.2 | 76.8 | 0.8 | 100.0 | 44 |
| Pemba South | 1.3 | 58.2 | 5.8 | 32.5 | 3.4 | 100.0 | 10.5 | 12.3 | 76.4 | 0.8 | 100.0 | 42 |
| Mother's education |  |  |  |  |  |  |  |  |  |  |  |  |
| No education | 1.1 | 65.9 | 2.7 | 30.5 | 0.9 | 100.0 | 2.9 | 9.7 | 86.9 | 0.5 | 100.0 | 2,318 |
| Primary incomplete | 3.6 | 54.8 | 3.2 | 41.1 | 0.9 | 100.0 | 2.3 | 8.1 | 89.4 | 0.2 | 100.0 | 1,378 |
| Primary complete | 3.4 | 42.8 | 4.3 | 52.2 | 0.7 | 100.0 | 2.2 | 8.0 | 89.6 | 0.2 | 100.0 | 4,642 |
| Secondary + | 12.6 | 13.1 | 5.3 | 80.7 | 0.9 | 100.0 | 1.6 | 8.9 | 89.2 | 0.4 | 100.0 | 387 |
| Wealth quintile |  |  |  |  |  |  |  |  |  |  |  |  |
| Lowest | 1.0 | 65.2 | 2.4 | 31.4 | 1.0 | 100.0 | 2.4 | 9.0 | 88.2 | 0.4 | 100.0 | 1,974 |
| Second | 2.3 | 59.4 | 3.4 | 36.5 | 0.7 | 100.0 | 2.4 | 8.5 | 89.0 | 0.1 | 100.0 | 1,857 |
| Middle | 3.0 | 57.9 | 3.7 | 37.8 | 0.6 | 100.0 | 2.4 | 9.0 | 88.4 | 0.2 | 100.0 | 1,866 |
| Fourth | 2.8 | 42.2 | 3.5 | 53.3 | 1.1 | 100.0 | 2.3 | 7.5 | 89.8 | 0.3 | 100.0 | 1,681 |
| Highest | 8.7 | 10.4 | 6.6 | 82.2 | 0.8 | 100.0 | 2.5 | 8.4 | 88.8 | 0.4 | 100.0 | 1,347 |
| Total | 3.2 | 49.5 | 3.7 | 45.9 | 0.8 | 100.0 | 2.4 | 8.5 | 88.8 | 0.3 | 100.0 | 8,725 |

### 9.3 Postnatal Care

Postnatal care is important both for the mother and the child to treat complications arising from the delivery, as well as to provide the mother with important information on how to care for herself and her child. The postnatal period is defined as the time between the delivery of the placenta and 42 days ( 6 weeks) following the delivery. The timing of postnatal care is important. The first two days after delivery are critical, because most maternal and neonatal deaths occur during this period. Table 9.8 measures postnatal care for births that occurred outside a health facility in the five years preceding the survey. If a woman had more than one live birth in the preceding five years, only the most recent birth is considered.

The data show that in Tanzania, a large proportion of women whose last live birth occurred outside a health facility did not receive a postnatal checkup ( 83 percent). Just 13 percent were examined within two days of delivering, as recommended.

There is great variation by zone and region. For example, women in the Southern zone were more than three times as likely as those in the Central zone to receive timely postnatal care. The wealthiest women are considerably more likely to receive timely postnatal care than women in the lowest through fourth quintiles.

| Table 9.8 Postnatal care by background characteristics |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percent distribution of women whose last live birth in the five years preceding the survey occurred outside a health facility by timing of postnatal care, according to background characteristics, Tanzania 2004-05 |  |  |  |  |  |  |  |
|  | Timing of first postnatal checkup |  |  |  | Did not |  |  |
| Background characteristic | $\begin{gathered} \hline \text { 0-2 days } \\ \text { after } \\ \text { delivery } \\ \hline \end{gathered}$ | $\begin{gathered} \hline \text { 3-6 days } \\ \text { after } \\ \text { delivery } \\ \hline \end{gathered}$ | ```7-41 days after delivery``` | Don't know/ missing | receive postnatal checkup ${ }^{1}$ | Total | Number of women |
| Age at birth |  |  |  |  |  |  |  |
| <20 | 14.7 | 2.0 | 2.2 | 0.0 | 81.1 | 100.0 | 407 |
| 20-34 | 13.7 | 1.9 | 2.1 | 0.1 | 82.2 | 100.0 | 1,964 |
| 35-49 | 11.5 | 0.3 | 2.9 | 0.0 | 85.3 | 100.0 | 503 |
| Birth order |  |  |  |  |  |  |  |
| 1 | 15.5 | 2.0 | 2.7 | 0.2 | 79.6 | 100.0 | 385 |
| 2-3 | 15.8 | 2.0 | 2.9 | 0.1 | 79.2 | 100.0 | 969 |
| 4-5 | 11.7 | 1.7 | 2.1 | 0.0 | 84.5 | 100.0 | 694 |
| $6+$ | 11.2 | 0.9 | 1.4 | 0.0 | 86.5 | 100.0 | 825 |
| Residence |  |  |  |  |  |  |  |
| Urban | 21.9 | 3.8 | 3.0 | 0.0 | 71.3 | 100.0 | 219 |
| Rural | 12.7 | 1.5 | 2.2 | 0.1 | 83.6 | 100.0 | 2,654 |
| Mainland/Zanzibar |  |  |  |  |  |  |  |
| Mainland | 13.6 | 1.7 | 2.3 | 0.1 | 82.4 | 100.0 | 2,805 |
| Total urban | 23.4 | 3.7 | 4.5 | 0.0 | 68.4 | 100.0 | 223 |
| Dar es Salaam city |  |  |  |  |  |  | 30 |
| Other urban | 21.6 | 1.1 | 3.3 | 0.0 | 74.0 | 100.0 | 193 |
| Total rural | 12.8 | 1.5 | 2.1 | 0.1 | 83.6 | 100.0 | 2,583 |
| Zanzibar | 5.8 | 0.7 | 1.0 | 0.2 | 92.3 | 100.0 | 68 |
| Unguja | 8.4 | 1.3 | 2.0 | 0.0 | 88.3 | 100.0 | 35 |
| Pemba | 3.2 | 0.0 | 0.0 | 0.4 | 96.5 | 100.0 | 33 |
| Zone |  |  |  |  |  |  |  |
| Western | 13.5 | 2.5 | 1.8 | 0.0 | 82.2 | 100.0 | 597 |
| Northern | 12.6 | 1.3 | 1.8 | 0.0 | 84.3 | 100.0 | 397 |
| Central | 7.8 | 0.5 | 0.3 | 0.3 | 91.2 | 100.0 | 284 |
| Southern highlands | 12.3 | 1.2 | 4.9 | 0.0 | 81.6 | 100.0 | 439 |
| Lake | 9.3 | 0.3 | 0.8 | 0.0 | 89.6 | 100.0 | 636 |
| Eastern | 24.5 | 3.4 | 5.4 | 0.0 | 66.7 | 100.0 | 230 |
| Southern | 27.2 | 4.4 | 2.7 | 0.3 | 65.4 | 100.0 | 223 |
| Region |  |  |  |  |  |  |  |
| Dodoma | 8.3 | 0.8 | 0.0 | 0.0 | 90.9 | 100.0 | 172 |
| Arusha | 23.0 | 2.5 | 4.8 | 0.0 | 69.7 | 100.0 | 102 |
| Kilimanjaro | (3.3) | (0.0) | (0.0) | (0.0) | (96.7) | 100.0 | 43 |
| Tanga | 6.5 | 1.8 | 0.0 | 0.0 | 91.7 | 100.0 | 138 |
| Morogoro | 25.3 | 1.1 | 5.7 | 0.0 | 68.0 | 100.0 | 121 |
| Pwani | 19.2 | 0.7 | 2.5 | 0.0 | 77.6 | 100.0 | 79 |
| Dar es Salaam | 13.7 | * | * | * | * | * | 30 |
| Lindi | 13.7 | 3.4 | 6.7 | 0.0 | 76.2 | 100.0 | 60 |
| Mtwara | 29.8 | 4.9 | 0.9 | 0.0 | 64.4 | 100.0 | 126 |
| Ruvuma | (40.1) | (4.4) | (2.3) | (1.9) | (51.3) | (100.0) | 37 |
| Iringa | (33.0) | (6.4) | (2.2) | (0.0) | (58.3) | (100.0) | 57 |
| Mbeya | 12.1 | 0.0 | 7.2 | 0.0 | 80.8 | 100.0 | 260 |
| Singida | 7.1 | 0.0 | 0.7 | 0.7 | 91.6 | 100.0 | 112 |
| Tabora | 18.1 | 6.0 | 3.9 | 0.0 | 72.0 | 100.0 | 140 |
| Rukwa | 3.1 | 1.3 | 1.4 | 0.0 | 94.2 | 100.0 | 122 |
| Kigoma | 30.1 | 4.1 | 3.3 | 0.0 | 62.5 | 100.0 | 165 |
| Shinyanga | 1.9 | 0.0 | 0.0 | 0.0 | 98.1 | 100.0 | 292 |
| Kagera | 12.8 | 0.0 | 0.0 | 0.0 | 87.2 | 100.0 | 213 |
| Mwanza | 9.6 | 0.0 | 1.0 | 0.0 | 89.5 | 100.0 | 271 |
| Mara | 3.7 | 1.2 | 1.7 | 0.0 | 93.3 | 100.0 | 152 |
| Manyara | 14.3 | 0.0 | 1.8 | 0.0 | 83.8 | 100.0 | 113 |
| Zanzibar North | 5.7 | 0.8 | 2.2 | 0.0 | 91.3 | 100.0 | 16 |
| Zanzibar South | 10.8 | 1.4 | 1.4 | 0.0 | 86.4 | 100.0 | 6 |
| Town West | 10.4 | 2.0 | 2.0 | 0.0 | 85.7 | 100.0 | 14 |
| Pemba North | 1.7 | 0.0 | 0.0 | 0.0 | 98.3 | 100.0 | 19 |
| Pemba South | 5.2 | 0.0 | 0.0 | 0.9 | 93.9 | 100.0 | 14 |
| Education |  |  |  |  |  |  |  |
| No education | 10.0 | 1.5 | 1.7 | 0.0 | 86.7 | 100.0 | 985 |
| Primary incomplete | 12.1 | 1.2 | 2.0 | 0.0 | 84.7 | 100.0 | 506 |
| Primary complete | 16.5 | 1.9 | 2.8 | 0.1 | 78.7 | 100.0 | 1,339 |
| Secondary+ | 12.3 | 0.0 | 0.3 | 0.0 | 87.4 | 100.0 | 42 |
| Wealth quintile |  |  |  |  |  |  |  |
| Lowest | 10.9 | 1.7 | 1.1 | 0.0 | 86.2 | 100.0 | 838 |
| Second | 12.1 | 1.2 | 2.3 | 0.1 | 84.3 | 100.0 | 731 |
| Middle | 12.6 | 1.5 | 2.0 | 0.0 | 84.0 | 100.0 | 672 |
| Fourth | 16.6 | 1.4 | 3.8 | 0.0 | 78.2 | 100.0 | 496 |
| Highest | 29.2 | 4.7 | 4.3 | 0.5 | 61.2 | 100.0 | 137 |
| Total | 13.4 | 1.6 | 2.2 | 0.1 | 82.6 | 100.0 | 2,873 |
| 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. <br> ${ }^{1}$ Includes women who received the first postnatal checkup after 41 days |  |  |  |  |  |  |  |

### 9.4 Reproductive Health Care by Women’s Status

Table 9.9 shows women's use of antenatal, delivery, and postnatal care services by three indicators of women's status defined in Chapter 3. In societies where health care is widespread, women's status may not affect their access to reproductive health care services. In other societies, however, increased empowerment of women is likely to be associated with increased ability to seek out and use health services to better meet their reproductive health needs.

The first women's status indicator in Table 9.9 is positively related to women's empowerment and reflects the degree of decisionmaking control women are able to exercise in areas that affect their lives and environments. The second indicator reflects women's perception of sexual roles and women's rights over their bodies, and relates positively to women's sense of self and empowerment. The final indicator, which reflects women's perception of gender roles, is negatively related to women's level of empowerment. A higher value for this indicator (the number of reasons a woman believes wife beating is justified) is interpreted as indicating lower empowerment.

Table 9.9 indicates that women's status is correlated with reproductive health care. The more empowered a woman, the more likely she is to receive ANC and delivery care from a medical professional. The pattern is less clear regarding the relationship between women's status and postnatal care, although those women who think that wife beating is not justified under any circumstances or those who agree with just one or two justifications are more likely to have received postnatal care than women agreeing with more justifications.

| Table 9.9 Reproductive health care by women's status |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Percentage of women with a live birth in the five years preceding the survey who received antenatal and postnatal care from a health professional for the most recent birth, and percentage of births in the five years preceding the survey for which mothers received professional delivery care, by women's status indicators, Tanzania 2004-05 |  |  |  |  |  |
| Women's status indicator | Percentage with antenatal care from a health professional ${ }^{1}$ | Percentage who received postnatal care within first two days of delivery ${ }^{2}$ | Number of women | Percentage delivered by a health professional ${ }^{1}$ | Number of births |
| Number of decisions in which woman has final say ${ }^{3}$ |  |  |  |  |  |
| 0 | 89.7 | 55.4 | 666 | 42.2 | 985 |
| 1-2 | 93.4 | 53.0 | 2,107 | 42.7 | 3,316 |
| 3-4 | 95.4 | 60.6 | 1,444 | 50.1 | 2,173 |
| 5 | 96.4 | 59.5 | 1,555 | 49.8 | 2,251 |
| Number of reasons to refuse sex with husband |  |  |  |  |  |
| 0 | 91.1 | 53.6 | 273 | 40.3 | 415 |
| 1-2 | 92.5 | 48.7 | 640 | 37.7 | 990 |
| 3-4 | 94.7 | 58.2 | 4,860 | 47.8 | 7,319 |
| Number of reasons wife beating is justified |  |  |  |  |  |
| 0 | 96.3 | 59.2 | 2,193 | 50.4 | 3,278 |
| 1-2 | 93.7 | 60.0 | 1,168 | 48.5 | 1,762 |
| 3-4 | 92.5 | 54.8 | 1,706 | 42.8 | 2,614 |
| 5 | 93.2 | 50.0 | 706 | 39.0 | 1,071 |
| Total | 94.3 | 56.9 | 5,772 | 46.3 | 8,725 |
| ${ }^{1}$ Doctor/AMO, clinical officer, assistant clinical officer, nurse/midwife, or MCH aide <br> ${ }^{2}$ Includes mothers who delivered in a health facility <br> ${ }^{3}$ Either by herself or jointly with others |  |  |  |  |  |

### 9.5 Birth Registration

Tanzania is a signatory to the Convention of the Rights of the Child and has an Act of Parliament on the Rights of the Child, both of which firmly establish birth registration as a fundamental right of children. To assess the extent of birth registration, in the 200405 TDHS the mothers of children born in the five-year period before the survey were asked if they had received a birth notification form for the baby. Those who were not given a form at the facility where the birth took place and those who did not deliver in a facility were asked if they obtained a birth notification form from another source. All mothers were asked if their children had a birth certificate.

Table 9.10 shows that a notification form was received for 19 percent of births and almost all notification forms were received from health facilities. In Tanzania, less than one in ten children born in the preceding five years had a birth certificate. Zanzibari mothers were more likely than mothers on the Mainland to report receiving a notification form or birth certificate. There is considerable variation in birth certificate ownership by region, ranging from a low of less than 1 percent in Dodoma and Kagera to a high of more than seven in ten in Zanzibar South and Town West. Household wealth has a strong association with birth registration. Women in the wealthiest households (highest quintile) are three times as likely as those in the fourth quintile and ten times as likely as those in the lowest quintile to have a birth certificate for their child.

| Percentage of births in the five years preceding the survey with a birth notification on form from a health facility or elsewhere and percentage with a birth certificate, according to background characteristics, Tanzania 2004-05 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Background characteristic | Notification form |  | Has birth certificate | Number of children |
|  | From a health facility | $\begin{aligned} & \hline \text { From any } \\ & \text { other } \\ & \text { place } \\ & \hline \end{aligned}$ |  |  |
| Age at birth |  |  |  |  |
| <20 | 16.6 | 1.1 | 5.8 | 1,502 |
| 20-34 | 17.4 | 2.2 | 7.5 | 6,153 |
| 35-49 | 14.1 | 2.9 | 6.5 | 1,070 |
| Birth order |  |  |  |  |
| 1 | 23.7 | 1.3 | 9.3 | 1,922 |
| 2-3 | 19.5 | 2.2 | 7.7 | 3,145 |
| 4-5 | 13.1 | 2.2 | 6.1 | 1,820 |
| 6+ | 9.1 | 2.7 | 4.8 | 1,838 |
| Residence |  |  |  |  |
| Urban | 47.0 | 3.3 | 20.0 | 1,691 |
| Rural | 9.6 | 1.8 | 4.0 | 7,034 |
| Mainland/Zanzibar |  |  |  |  |
| Mainland | 16.1 | 1.5 | 5.7 | 8,506 |
| Total urban | 46.0 | 2.8 | 17.8 | 1,670 |
| Dar es Salaam city | 72.5 | 5.0 | 24.8 | 428 |
| Other urban | 36.8 | 2.0 | 15.4 | 1,241 |
| Total rural | 8.9 | 1.2 | 2.7 | 6,836 |
| Zanzibar | 45.1 | 24.3 | 63.2 | 219 |
| Unguja | 54.7 | 24.2 | 68.2 | 133 |
| Pemba | 30.2 | 24.6 | 55.4 | 86 |
| Zone |  |  |  |  |
| Western | 8.7 | 0.8 | 1.9 | 1,912 |
| Northern | 19.4 | 2.4 | 7.8 | 1,122 |
| Central | 9.1 | 1.4 | 1.6 | 716 |
| Southern highlands | 10.7 | 1.1 | 3.2 | 1,283 |
| Lake | 16.3 | 1.0 | 4.2 | 1,868 |
| Eastern | 43.1 | 4.5 | 14.3 | 969 |
| Southern | 10.2 | 0.4 | 14.1 | 637 |
| Region |  |  |  |  |
| Dodoma | 7.1 | 1.6 | 0.7 | 413 |
| Arusha | 19.7 | 2.4 | 11.7 | 288 |
| Kilimanjaro | 35.7 | 5.2 | 8.8 | 210 |
| Tanga | 16.4 | 1.5 | 6.5 | 355 |
| Morogoro | 17.8 | 5.5 | 6.0 | 349 |
| Pwani | 23.8 | 1.6 | 5.9 | 191 |
| Dar es Salaam | 72.5 | 5.0 | 24.8 | 428 |
| Lindi | 9.9 | 0.5 | 19.9 | 147 |
| Mtwara | 6.6 | 0.4 | 23.0 | 247 |
| Ruvuma | 14.0 | 0.3 | 1.6 | 244 |
| Iringa | 26.5 | 1.3 | 3.9 | 294 |
| Mbeya | 5.1 | 1.5 | 3.7 | 662 |
| Singida | 11.8 | 1.2 | 2.7 | 303 |
| Tabora | 8.3 | 1.6 | 2.5 | 508 |
| Rukwa | 8.1 | 0.2 | 1.6 | 326 |
| Kigoma | 13.8 | 1.0 | 2.3 | 484 |
| Shinyanga | 6.2 | 0.2 | 1.4 | 919 |
| Kagera | 8.8 | 0.3 | 0.3 | 574 |
| Mwanza | 22.2 | 1.6 | 6.1 | 899 |
| Mara | 13.6 | 0.7 | 5.6 | 395 |
| Manyara | 10.2 | 1.4 | 4.5 | 269 |
| Zanzibar North | 21.1 | 38.0 | 53.8 | 33 |
| Zanzibar South | 49.5 | 21.8 | 71.5 | 19 |
| Town West | 69.7 | 19.0 | 73.4 | 81 |
| Pemba North | 25.4 | 23.9 | 54.4 | 44 |
| Pemba South | 35.2 | 25.3 | 56.4 | 42 |
| Wealth quintile |  |  |  |  |
| Lowest | 5.5 | 0.9 | 2.7 | 1,974 |
| Second | 8.9 | 1.4 | 2.3 | 1,857 |
| Middle | 8.6 | 1.6 | 2.9 | 1,866 |
| Fourth | 17.3 | 2.5 | 7.1 | 1,681 |
| Highest | 55.4 | 5.0 | 26.0 | 1,347 |
| Total | 16.9 | 2.1 | 7.1 | 8,725 |

### 9.6 Women’s Perceptions of Problems in Obtaining Health Care

The 2004-05 TDHS included a series of questions designed to obtain information on the problems women perceive that they face in obtaining health care for themselves. This information is particularly important in understanding and addressing the barriers women may face in seeking care during pregnancy and, particularly, at delivery. To obtain this information, women age 15-49 were asked whether each of the following factors would be a big problem or not a big problem for them in obtaining health services: knowing where to go, getting permission to go, getting money for treatment, the distance to the health facility, having to take transportation, not wanting to go alone, and concern that there may not be a female provider or that the provider will be unfriendly. Table 9.11 shows the percentages of respondents who consider the individual factors to be a big problem, and the percentage reporting at least one of the specified items to be a big problem, according to background characteristics.

A majority of women (62 percent) reported at least one issue or circumstance as a big problem. The major perceived barriers to women's access to health services are lack of money ( 40 percent), the distance to a health facility ( 38 percent), and having to take transport ( 37 percent).

Women also report barriers to obtaining health care that are associated with quality of care: 14 percent of women report that unfriendly providers are a big problem and 8 percent cite the concern that there may not be a female provider. Personal reasons can also affect women's access to health care. Nearly a quarter of women cite not wanting to go alone to the health facility as a big problem for them in getting the health care they need, while 6 percent of all women cite obtaining permission and knowing where to go as big problems.

Problems in accessing health care are felt most acutely by rural women; older women; women with larger families; divorced, separated, or widowed women; and women not working for cash. Women in Singida are the most likely to think that any of the specified issues are big problems in terms of accessing health care ( 83 percent) and women in Lindi and Mwanza are the least likely (41 percent).

| Table 9.11 Problems in accessing health care |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percentage of women who reported they have big problems in accessing health care for themselves when they are sick, by type of problem and background characteristics, Tanzania 2004-05 |  |  |  |  |  |  |  |  |  |  |
|  | Problems in accessing health care |  |  |  |  |  |  |  |  | Number of women |
| Background characteristic | Knowing where to go for treatment | Getting permission to go for treatment | Getting money for treatment | Distance to health facility | Having to take transport | Not wanting to go alone | Concern there may not be a female provider | Unfriendly provider | Any of the specified problems |  |
| Age |  |  |  |  |  |  |  |  |  |  |
| 15-19 | 10.0 | 9.1 | 38.6 | 36.3 | 35.0 | 29.5 | 9.5 | 14.2 | 62.4 | 2,245 |
| 20-29 | 6.5 | 5.6 | 35.6 | 35.0 | 34.7 | 22.2 | 7.3 | 14.9 | 59.4 | 3,892 |
| 30-39 | 4.5 | 3.7 | 42.3 | 39.1 | 39.4 | 22.8 | 7.0 | 13.4 | 63.4 | 2,595 |
| 40-49 | 3.8 | 2.9 | 48.1 | 43.0 | 43.1 | 25.4 | 7.4 | 14.5 | 66.2 | 1,597 |
| Number of living children |  |  |  |  |  |  |  |  |  |  |
| 0 | 9.3 | 8.3 | 36.5 | 32.7 | 32.7 | 28.3 | 10.0 | 16.8 | 61.1 | 2,705 |
| 1-2 | 6.5 | 4.8 | 37.1 | 35.8 | 35.3 | 22.4 | 7.3 | 14.2 | 59.6 | 3,348 |
| 3-4 | 4.8 | 4.3 | 41.6 | 38.2 | 39.8 | 23.7 | 7.3 | 13.8 | 62.9 | 2,269 |
| 5+ | 3.8 | 3.9 | 47.1 | 46.2 | 43.5 | 23.6 | 5.8 | 11.5 | 66.6 | 2,007 |
| Marital status |  |  |  |  |  |  |  |  |  |  |
| Never married | 9.3 | 8.0 | 38.4 | 31.1 | 32.5 | 27.8 | 10.3 | 16.8 | 60.6 | 2,371 |
| Married or living together | 5.6 | 5.0 | 38.5 | 39.9 | 38.5 | 23.5 | 6.8 | 13.2 | 62.0 | 6,950 |
| Divorced/separated/widowed | 4.5 | 2.4 | 52.9 | 36.5 | 39.0 | 23.0 | 8.0 | 15.8 | 66.0 | 1,007 |
| Residence |  |  |  |  |  |  |  |  |  |  |
| Urban | 5.6 | 4.0 | 28.3 | 15.9 | 18.8 | 15.2 | 9.5 | 18.1 | 48.7 | 2,935 |
| Rural | 6.6 | 6.0 | 44.4 | 46.2 | 44.5 | 28.1 | 7.0 | 12.8 | 67.4 | 7,394 |
| Mainland/Zanzibar |  |  |  |  |  |  |  |  |  |  |
| Mainland | 6.4 | 5.5 | 40.0 | 38.0 | 37.7 | 24.6 | 7.4 | 13.9 | 62.1 | 10,016 |
| Total urban | 5.7 | 4.0 | 28.5 | 16.3 | 19.2 | 15.3 | 9.5 | 18.1 | 48.5 | 2,885 |
| Dar es Salaam city | 9.0 | 5.1 | 20.2 | 17.5 | 20.4 | 19.3 | 18.9 | 27.7 | 48.5 | 969 |
| Other urban | 4.1 | 3.4 | 32.8 | 15.6 | 18.6 | 13.3 | 4.8 | 13.2 | 48.5 | 1,916 |
| Total rural | 6.6 | 6.0 | 44.6 | 46.8 | 45.1 | 28.3 | 6.5 | 12.1 | 67.5 | 7,131 |
| Zanzibar | 5.9 | 5.5 | 35.6 | 23.9 | 22.8 | 20.7 | 17.7 | 28.6 | 63.2 | 313 |
| Unguja | 3.2 | 1.7 | 27.7 | 21.5 | 19.3 | 20.0 | 19.9 | 27.0 | 60.6 | 216 |
| Pemba | 11.9 | 13.9 | 53.0 | 29.2 | 30.5 | 22.4 | 12.7 | 32.1 | 69.0 | 97 |
| Zone |  |  |  |  |  |  |  |  |  |  |
| Western | 6.1 | 7.1 | 39.7 | 39.6 | 37.9 | 25.0 | 6.5 | 12.0 | 65.9 | 1,880 |
| Northern | 5.8 | 4.8 | 46.1 | 43.8 | 45.3 | 33.9 | 3.6 | 16.9 | 69.9 | 1,496 |
| Central | 10.3 | 8.1 | 59.8 | 48.9 | 48.8 | 39.4 | 22.5 | 30.6 | 80.7 | 799 |
| Southern highlands | 4.6 | 2.8 | 39.4 | 45.2 | 44.1 | 25.8 | 5.4 | 8.8 | 67.6 | 1,440 |
| Lake | 6.2 | 8.9 | 35.3 | 30.7 | 28.2 | 11.2 | 2.0 | 6.0 | 46.7 | 1,865 |
| Eastern | 9.2 | 3.9 | 31.6 | 29.7 | 30.5 | 23.0 | 12.6 | 19.3 | 57.2 | 1,670 |
| Southern | 2.0 | 0.6 | 39.2 | 34.2 | 37.1 | 23.4 | 6.5 | 12.2 | 56.3 | 866 |
| Region |  |  |  |  |  |  |  |  |  |  |
| Dodoma | 13.0 | 8.0 | 56.5 | 44.0 | 44.4 | 37.2 | 26.3 | 32.3 | 78.9 | 468 |
| Arusha | 9.1 | 10.1 | 34.7 | 35.0 | 35.5 | 29.8 | 3.6 | 6.3 | 53.8 | 391 |
| Kilimanjaro | 1.1 | 0.9 | 59.0 | 50.5 | 52.0 | 36.2 | 1.6 | 25.9 | 77.8 | 380 |
| Tanga | 4.2 | 2.2 | 46.4 | 40.7 | 45.3 | 24.3 | 5.6 | 25.5 | 71.6 | 431 |
| Morogoro | 6.0 | 1.8 | 46.2 | 42.5 | 41.6 | 29.3 | 3.2 | 4.9 | 67.1 | 449 |
| Pwani | 15.5 | 3.0 | 49.5 | 53.6 | 49.4 | 26.0 | 5.1 | 12.2 | 72.9 | 253 |
| Dar es Salaam | 9.0 | 5.1 | 20.2 | 17.5 | 20.4 | 19.3 | 18.9 | 27.7 | 48.5 | 969 |
| Lindi | 0.0 | 0.0 | 26.0 | 26.8 | 26.9 | 10.7 | 1.6 | 5.0 | 40.5 | 221 |
| Mtwara | 0.6 | 0.9 | 39.8 | 25.3 | 28.0 | 14.2 | 2.1 | 9.4 | 51.7 | 346 |
| Ruvuma | 5.0 | 0.6 | 48.3 | 50.1 | 55.2 | 43.4 | 15.3 | 20.8 | 73.2 | 299 |
| Iringa | 11.8 | 7.9 | 45.6 | 47.9 | 51.9 | 43.2 | 14.0 | 19.0 | 72.9 | 412 |
| Mbeya | 2.0 | 1.0 | 35.7 | 54.0 | 49.4 | 20.5 | 2.7 | 5.4 | 72.0 | 712 |
| Singida | 6.5 | 8.1 | 64.3 | 55.9 | 55.1 | 42.5 | 17.2 | 28.2 | 83.2 | 331 |
| Tabora | 12.0 | 17.0 | 41.4 | 46.1 | 42.8 | 41.3 | 7.3 | 15.4 | 73.6 | 520 |
| Rukwa | 1.0 | 0.3 | 39.5 | 22.1 | 21.9 | 15.3 | 0.3 | 3.2 | 50.8 | 316 |
| Kigoma | 8.4 | 6.6 | 51.6 | 37.1 | 45.0 | 34.8 | 13.8 | 20.0 | 76.0 | 499 |
| Shinyanga | 1.2 | 1.3 | 31.7 | 37.0 | 30.9 | 9.5 | 1.8 | 5.3 | 55.3 | 861 |
| Kagera | 5.4 | 7.4 | 34.8 | 32.9 | 32.4 | 16.9 | 1.9 | 6.4 | 45.1 | 545 |
| Mwanza | 7.1 | 11.3 | 33.1 | 24.6 | 22.9 | 8.6 | 1.8 | 4.1 | 40.7 | 939 |
| Mara | 5.3 | 5.3 | 41.5 | 42.5 | 35.2 | 9.5 | 2.8 | 9.9 | 63.6 | 381 |
| Manyara | 9.7 | 6.4 | 44.0 | 51.5 | 49.7 | 50.2 | 3.5 | 6.8 | 78.7 | 293 |
| Zanzibar North | 4.1 | 1.8 | 41.5 | 24.4 | 25.3 | 24.9 | 25.2 | 30.2 | 68.4 | 48 |
| Zanzibar South | 3.8 | 4.7 | 31.7 | 25.9 | 23.5 | 21.5 | 20.7 | 35.0 | 70.7 | 26 |
| Town West | 2.8 | 1.2 | 22.4 | 19.7 | 16.5 | 18.1 | 18.0 | 24.4 | 56.1 | 143 |
| Pemba North | 6.5 | 7.1 | 43.7 | 20.0 | 22.1 | 17.7 | 13.1 | 35.8 | 61.3 | 52 |
| Pemba South | 18.2 | 21.7 | 63.7 | 39.8 | 40.1 | 27.8 | 12.3 | 27.9 | 77.8 | 45 |
| Education |  |  |  |  |  |  |  |  |  |  |
| No education | 7.0 | 7.8 | 47.2 | 49.6 | 45.9 | 29.2 | 6.5 | 10.3 | 69.1 | 2,503 |
| Primary incomplete | 7.4 | 7.0 | 45.1 | 41.0 | 41.7 | 28.0 | 9.6 | 14.7 | 67.2 | 1,855 |
| Primary complete | 6.0 | 4.0 | 37.5 | 33.8 | 34.1 | 22.3 | 7.4 | 14.9 | 59.0 | 5,086 |
| Secondary+ | 4.6 | 3.8 | 22.0 | 17.8 | 21.0 | 15.7 | 8.8 | 21.1 | 49.2 | 5,885 |
| Employment |  |  |  |  |  |  |  |  |  |  |
| Not employed | 9.0 | 8.4 | 35.5 | 29.4 | 29.2 | 27.5 | 12.5 | 18.7 | 58.9 | 1,779 |
| Working for cash | 7.6 | 6.9 | 33.6 | 27.8 | 29.7 | 19.7 | 7.5 | 16.2 | 55.9 | 2,609 |
| Not working for cash | 5.0 | 3.9 | 43.9 | 44.3 | 42.9 | 25.6 | 6.3 | 12.2 | 65.8 | 5,941 |
| Wealth quintile |  |  |  |  |  |  |  |  |  |  |
| Lowest | 8.8 | 8.5 | 50.9 | 51.9 | 50.4 | 32.9 | 6.8 | 9.8 | 72.6 | 1,840 |
| Second | 7.6 | 6.6 | 48.9 | 48.9 | 46.0 | 27.3 | 7.4 | 13.4 | 70.2 | 1,944 |
| Middle | 5.2 | 5.0 | 43.6 | 43.5 | 42.1 | 25.0 | 5.7 | 11.4 | 65.2 | 1,943 |
| Fourth | 5.0 | 4.3 | 40.0 | 34.8 | 36.7 | 24.8 | 7.2 | 15.3 | 62.6 | 2,004 |
| Highest | 5.6 | 3.7 | 22.5 | 16.6 | 18.0 | 15.6 | 10.5 | 19.6 | 45.8 | 2,597 |
| Total | 6.3 | 5.5 | 39.9 | 37.6 | 37.2 | 24.4 | 7.7 | 14.3 | 62.1 | 10,329 |

### 9.7 Child Immunisation

The 2004-05 TDHS collected information on immunisation coverage for all children born in the five years before the survey. The Government of Tanzania has adopted the World Health Organisation (WHO) guidelines for vaccinating children. The immunisation programme in Tanzania is implemented by Ministry of Health through the Expanded Programme on Immunisation (EPI), which started in 1975 and was established throughout the country in 1996. According to those guidelines, to be considered fully vaccinated a child should receive the following vaccinations: one dose of BCG, three doses each of DPT-HB and polio vaccine, and one dose of measles vaccine. BCG, which protects against tuberculosis, should be given at birth or at first clinic contact. DPT-HB protects against diphtheria, pertussis (whooping cough), tetanus, and hepatitis B. DPT-HB and polio vaccine guidelines require three vaccinations at approximately 4,8 , and 12 weeks of age. More recently, a dose of polio vaccine at birth has been added to the schedule. The measles vaccine should be given at nine months of age. It is recommended that children receive the complete schedule of vaccinations before 12 months of age and that the vaccinations be recorded on a health card given to the parents or caretaker.

## Vaccinations by Background Characteristics

Information on vaccination coverage was obtained in two ways-from health cards and from mothers' verbal reports. All mothers were asked to show the interviewer the health cards on which the child's immunisation record was recorded. If the card was available, the interviewer copied the dates on which each vaccination was received. If a vaccination was not recorded on the card, the mother was asked to recall whether that particular vaccination had been given. If the mother was not able to present a card for a child at all, she was asked to recall whether the child had received BCG, polio, DPT-HB, and measles. If she indicated that the child had received the polio or DPT-HB vaccines, she was asked about the number of doses that the child received. The information collected covered all children under age five, although most data presented here are restricted to children age 12-23 months to better reflect children who have reached the age by which they should be fully vaccinated.

Information on vaccination coverage among children age 12-23 months is shown in Table 9.12 by source of information used to determine coverage (i.e., vaccination record or mother's report). The third row of the table shows the proportion of children who were immunised at any age up to the time of the survey, while the last row shows the proportion who were vaccinated by age 12 months, the age at which vaccination coverage should be complete.

At the time of interview, 71 percent of children age 12-23 months were fully immunised, approximately the same proportion as estimated in the 1999 TRCHS ( 68 percent). At least nine out of ten received BCG, DPT-HB 1 and 2, and Polio 1 and 2. However, the proportion of children receiving the third dose of DPT-HB and polio is lower (86 and 84 percent, respectively), as is the proportion receiving measles ( 80 percent). The decrease in vaccination coverage between the first and third doses of DPT-HB and polio are 7 and 11 percentage points, respectively. Only 4 percent of children have not received any vaccination at all. With the exception of measles, virtually all the reported vaccinations were received by 12 months of age, as recommended.

## Table 9.12 Vaccinations by source of information

Percentage of children age 12-23 months who received specific vaccines at any time before the survey, by source of information (vaccination card or mother's report), and percentage vaccinated by 12 months of age, Tanzania 2004-05

| Source of information | BCG | DPT-HB |  |  | Polio ${ }^{1}$ |  |  |  | Measles | $\mathrm{All}^{2}$ | No vaccinations | Number of children |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 1 | 2 | 3 | 0 | 1 | 2 | 3 |  |  |  |  |
| Vaccinated at any time before survey |  |  |  |  |  |  |  |  |  |  |  |  |
| Vaccination card | 75.3 | 77.3 | 74.7 | 72.6 | 38.3 | 77.5 | 74.8 | 71.9 | 65.8 | 61.0 | 0.0 | 1,307 |
| Mother's report | 16.1 | 16.1 | 14.9 | 13.3 | 5.9 | 16.7 | 15.6 | 11.7 | 14.1 | 10.1 | 4.3 | 352 |
| Either source | 91.4 | 93.3 | 89.7 | 85.9 | 44.2 | 94.2 | 90.3 | 83.6 | 79.9 | 71.1 | 4.3 | 1,658 |
| Vaccinated by 12 months of age ${ }^{3}$ | 91.1 | 92.6 | 89.2 | 83.7 | 44.2 | 93.5 | 89.6 | 82.0 | 70.2 | 61.9 | 4.6 | 1,658 |

${ }^{1}$ Polio 0 is the polio vaccination given at birth.
${ }^{2}$ BCG, measles, and three doses each of DPT-HB and polio vaccine (excluding polio vaccine given at birth)
${ }^{3}$ For children whose information was based on the mother's report, the proportion of vaccinations given during the first year of life was assumed to be the same as for children with a written record of vaccination.

Table 9.13 presents information on vaccinations by background characteristics (according to information from both health cards and mothers' reports) among children age 12-23 months by selected background characteristics. Vaccination status does not differ significantly by sex of the child. The proportion fully vaccinated is lower for children of birth order 6 or higher than for children at lower parities. There is significant variation by residence: 82 percent of urban children are fully immunised compared with 69 percent of rural children; coverage is higher on Zanzibar than on the Mainland.

As expected, full vaccination coverage varies significantly by mother's education, from 56 percent among children of mothers with no education to 79 percent among children of mothers with primary complete or secondary education. Children born to mothers in the lowest wealth quintile are considerably less likely to have been fully vaccinated than children born to mothers in the highest wealth quintile.

| Percentage of children age 12-23 months who received specific vaccines at any time before the survey (according to a vaccination card or the mothers report), and percentage with a vaccination card, by background characteristics, Tanzania 2004-05 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Background characteristic | BCG | DPT-HB |  |  | Polio ${ }^{1}$ |  |  |  | Measles | $\mathrm{All}^{2}$ | No vaccinations | Percentage with a vaccination card seen | Number of children |
|  |  | 1 | 2 | 3 | 0 | 1 | 2 | 3 |  |  |  |  |  |
| Sex |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Male | 92.0 | 93.3 | 90.0 | 86.0 | 45.3 | 93.7 | 90.2 | 83.0 | 79.8 | 70.1 | 4.5 | 78.1 | 842 |
| Female | 90.8 | 93.3 | 89.4 | 85.9 | 43.1 | 94.8 | 90.5 | 84.2 | 80.0 | 72.1 | 4.2 | 79.5 | 817 |
| Birth order |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1 | 92.0 | 95.1 | 91.5 | 87.9 | 51.9 | 94.9 | 90.8 | 83.1 | 82.5 | 72.2 | 4.1 | 80.9 | 378 |
| 2-3 | 92.8 | 93.3 | 91.1 | 88.3 | 49.9 | 94.6 | 92.0 | 86.8 | 83.6 | 76.5 | 4.1 | 79.4 | 602 |
| 4-5 | 91.8 | 94.9 | 91.1 | 87.3 | 36.7 | 94.9 | 91.5 | 84.5 | 79.0 | 70.0 | 3.4 | 76.5 | 328 |
| 6+ | 87.9 | 90.0 | 84.0 | 78.4 | 33.3 | 92.4 | 86.0 | 77.7 | 71.7 | 61.7 | 6.0 | 77.5 | 351 |
| Residence |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Urban | 96.0 | 96.9 | 96.9 | 94.3 | 72.6 | 94.6 | 94.6 | 88.4 | 89.7 | 81.5 | 3.1 | 79.4 | 303 |
| Rural | 90.3 | 92.5 | 88.1 | 84.0 | 37.9 | 94.2 | 89.4 | 82.5 | 77.7 | 68.8 | 4.6 | 78.7 | 1,355 |
| Mainland/Zanzibar |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Mainland | 91.3 | 93.3 | 89.6 | 85.8 | 44.4 | 94.3 | 90.3 | 83.6 | 79.9 | 71.0 | 4.4 | 78.7 | 1,620 |
| Total urban | 96.0 | 96.9 | 96.9 | 94.4 | 73.5 | 94.0 | 94.0 | 87.8 | 89.8 | 81.0 | 3.1 | 79.4 | 294 |
| Dar es Salaam city | (92.5) | (92.5) | (92.5) | (89.6) | (81.4) | (81.2) | (81.2) | (74.5) | (88.3) | (70.4) | (7.5) | (67.4) | 76 |
| Other urban | 97.3 | 98.5 | 98.5 | 96.1 | 70.8 | 98.5 | 98.5 | 92.5 | 90.3 | 84.7 | 1.5 | 83.5 | 219 |
| Total rural | 90.2 | 92.5 | 87.9 | 83.9 | 37.9 | 94.3 | 89.5 | 82.6 | 77.6 | 68.8 | 4.6 | 78.5 | 1,326 |
| Zanzibar | 94.9 | 95.5 | 94.0 | 88.6 | 36.1 | 93.3 | 91.6 | 84.3 | 82.0 | 74.7 | 3.9 | 83.4 | 38 |
| Unguja | 97.9 | 98.8 | 98.8 | 94.1 | 50.2 | 97.4 | 96.1 | 92.9 | 91.1 | 85.8 | 1.2 | 86.8 | 22 |
| Pemba | 91.1 | 91.2 | 87.7 | 81.3 | 17.4 | 87.8 | 85.7 | 72.7 | 69.8 | 59.9 | 7.5 | 78.8 | 17 |
| Zone |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Western | 87.5 | 87.5 | 80.3 | 73.6 | 34.1 | 90.5 | 83.0 | 74.2 | 63.4 | 56.6 | 8.1 | 78.3 | 381 |
| Northern | 89.9 | 92.8 | 91.1 | 86.6 | 49.4 | 95.6 | 91.8 | 84.5 | 85.5 | 72.5 | 4.4 | 75.3 | 208 |
| Central | 94.4 | 96.3 | 93.4 | 91.9 | 47.1 | 96.3 | 93.4 | 90.0 | 86.4 | 81.1 | 2.1 | 85.8 | 141 |
| Southern highlands | 86.4 | 94.2 | 87.8 | 84.3 | 35.4 | 95.4 | 87.9 | 78.0 | 77.9 | 61.8 | 3.1 | 77.6 | 232 |
| Lake | 94.1 | 94.6 | 92.0 | 89.6 | 39.4 | 95.8 | 94.2 | 89.5 | 84.8 | 79.8 | 3.7 | 76.3 | 380 |
| Eastern | 95.1 | 95.6 | 95.6 | 93.7 | 68.1 | 89.9 | 89.9 | 85.5 | 87.8 | 77.1 | 3.8 | 78.5 | 150 |
| Southern | 97.4 | 99.4 | 99.4 | 96.5 | 67.2 | 99.4 | 99.4 | 92.6 | 91.9 | 83.6 | 0.6 | 86.9 | 128 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Dodoma | 95.6 | 100.0 | 100.0 | 98.2 | 48.9 | 100.0 | 100.0 | 96.6 | 93.4 | 85.6 | 0.0 | 85.9 | 76 |
| Arusha | 88.2 | 88.2 | 88.2 | 86.2 | 55.6 | 90.2 | 86.2 | 84.7 | 82.1 | 80.1 | 9.8 | 66.6 | 53 |
| Kilimanjaro | (100.0) | (100.0) | (100.0) | (100.0) | (89.5) | (100.0) | (100.0) | (89.4) | (100.0) | (89.4) | (0.0) | (74.1) | 30 |
| Tanga | 84.5 | 89.2 | 84.2 | 74.8 | 37.9 | 96.3 | 89.7 | 78.9 | 84.1 | 57.7 | 3.7 | 79.3 | 69 |
| Morogoro | (96.5) | (100.0) | (100.0) | (100.0) | (51.6) | (100.0) | (100.0) | (100.0) | (93.4) | (89.9) | (0.0) | (97.1) | 47 |
| Pwani | (100.0) | (96.9) | (96.9) | (94.5) | (59.3) | (96.9) | (96.9) | (91.2) | (77.2) | (73.9) | (0.0) | (77.5) | 28 |
| Dar es Salaam | (92.5) | (92.5) | (92.5) | (89.6) | (81.4) | (81.2) | (81.2) | (74.5) | (88.3) | (70.4) | (7.5) | (67.4) | 76 |
| Lindi | (94.9) | (97.4) | (97.4) | (92.1) | (66.6) | (97.4) | (97.4) | (89.7) | (86.3) | (73.4) | (2.6) | (82.2) | 28 |
| Mtwara | (96.1) | (100.0) | (100.0) | (100.0) | (69.6) | (100.0) | (100.0) | (95.6) | (92.4) | (84.1) | (0.0) | (85.9) | 50 |
| Ruvuma | 100.0 | 100.0 | 100.0 | 95.4 | 65.2 | 100.0 | 100.0 | 91.3 | 94.6 | 88.6 | 0.0 | 90.3 | 51 |
| Iringa | (97.8) | (100.0) | (100.0) | (98.3) | (67.3) | (100.0) | (100.0) | (88.5) | (96.7) | (83.1) | (0.0) | (92.6) | 51 |
| Mbeya | 80.7 | 90.5 | 83.5 | 80.6 | 31.8 | 92.0 | 82.2 | 73.7 | 70.0 | 50.4 | 5.2 | 69.2 | 124 |
| Singida | 92.9 | 92.1 | 85.9 | 84.6 | 45.0 | 92.1 | 85.9 | 82.3 | 78.4 | 76.0 | 4.6 | 85.7 | 65 |
| Tabora | 81.1 | 79.7 | 66.4 | 58.7 | 38.7 | 86.5 | 71.0 | 58.4 | 46.5 | 36.7 | 9.0 | 75.2 | 116 |
| Rukwa | 88.6 | 96.8 | 86.4 | 80.0 | 15.4 | 98.5 | 89.4 | 78.1 | 78.6 | 67.9 | 1.5 | 82.7 | 58 |
| Kigoma | 96.2 | 98.1 | 96.2 | 96.2 | 69.4 | 98.1 | 98.1 | 94.5 | 90.0 | 86.4 | 1.9 | 89.5 | 85 |
| Shinyanga | 87.6 | 87.5 | 81.7 | 72.4 | 14.3 | 89.5 | 83.7 | 74.8 | 61.7 | 55.3 | 10.5 | 74.9 | 179 |
| Kagera | 95.0 | 94.4 | 90.0 | 87.7 | 40.7 | 96.7 | 92.2 | 88.7 | 86.6 | 79.2 | 2.2 | 77.4 | 120 |
| Mwanza | 97.2 | 98.2 | 98.2 | 96.7 | 39.5 | 98.2 | 98.2 | 95.7 | 91.5 | 88.0 | 1.8 | 75.6 | 183 |
| Mara | 85.4 | 86.6 | 80.4 | 76.1 | 37.4 | 88.8 | 87.7 | 76.2 | 66.2 | 61.6 | 10.2 | 76.2 | 78 |
| Manyara | 92.8 | 97.6 | 97.6 | 94.3 | 36.4 | 97.6 | 95.2 | 88.7 | 82.6 | 74.6 | 2.4 | 79.3 | 57 |
| Zanzibar North | 96.6 | 100.0 | 100.0 | 100.0 | 25.5 | 94.9 | 93.1 | 93.1 | 98.4 | 88.2 | 0.0 | 90.1 | 6 |
| Zanzibar South | (100.0) | (100.0) | (100.0) | (98.1) | (63.5) | (100.0) | (100.0) | (95.8) | (88.0) | (85.7) | (0.0) | (94.1) | 3 |
| Town West | 97.9 | 97.9 | 97.9 | 90.5 | 58.1 | 97.9 | 96.5 | 92.2 | 88.5 | 84.7 | 2.1 | 83.6 | 13 |
| Pemba North | 96.8 | 94.1 | 88.2 | 82.0 | 7.5 | 89.7 | 85.2 | 65.3 | 73.0 | 54.9 | 3.2 | 72.3 | 8 |
| Pemba South | 85.8 | 88.5 | 87.2 | 80.5 | 26.4 | 86.1 | 86.1 | 79.4 | 67.0 | 64.3 | 11.5 | 84.7 | 9 |
| Education |  |  |  |  |  |  |  |  |  |  |  |  |  |
| No education | 84.3 | 85.9 | 77.5 | 73.8 | 32.0 | 89.5 | 80.6 | 72.0 | 64.6 | 55.6 | 8.1 | 73.2 | 426 |
| Primary incomplete | 89.1 | 93.8 | 90.2 | 86.7 | 39.6 | 94.7 | 90.0 | 82.0 | 78.4 | 67.9 | 4.5 | 79.5 | 261 |
| Primary complete | 95.1 | 96.6 | 94.8 | 91.0 | 49.2 | 96.5 | 94.9 | 89.6 | 86.8 | 78.7 | 2.5 | 81.3 | 898 |
| Secondary + | 95.1 | 95.0 | 94.8 | 90.7 | 70.7 | 92.1 | 91.8 | 82.9 | 89.8 | 79.2 | 4.9 | 78.4 | 74 |
| Wealth quintile |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Lowest | 87.0 | 87.6 | 78.6 | 75.2 | 31.4 | 91.0 | 82.3 | 74.3 | 65.2 | 58.3 | 7.3 | 75.2 | 409 |
| Second | 90.5 | 91.8 | 88.9 | 82.7 | 36.4 | 93.1 | 88.7 | 80.9 | 79.0 | 70.8 | 5.1 | 76.8 | 352 |
| Middle | 91.3 | 95.8 | 92.5 | 88.1 | 40.2 | 96.2 | 93.2 | 87.7 | 81.4 | 70.8 | 3.5 | 80.3 | 328 |
| Fourth | 93.8 | 96.5 | 95.6 | 93.4 | 50.2 | 97.7 | 96.5 | 91.0 | 89.7 | 80.6 | 2.2 | 84.8 | 327 |
| Highest | 96.9 | 97.6 | 97.6 | 95.6 | 74.5 | 94.0 | 94.0 | 87.5 | 90.9 | 80.7 | 2.4 | 77.6 | 243 |
| Total | 91.4 | 93.3 | 89.7 | 85.9 | 44.2 | 94.2 | 90.3 | 83.6 | 79.9 | 71.1 | 4.3 | 78.8 | 1,658 |
| Note: Figures in parentheses are based on 25-49 unweighted cases. <br> ${ }^{1}$ Polio 0 is the polio vaccination given at birth. <br> ${ }^{2}$ BCG, measles, and three doses each of DPT-HB and polio vaccine (excluding polio vaccine given at birth) |  |  |  |  |  |  |  |  |  |  |  |  |  |

## Vaccination in the First Year of Life

Table 9.14 shows the percentage of children age 12-59 months who received specific vaccinations during the first year of life, according to age cohort. The data indicate that the proportion of children fully vaccinated by 12 months of age has increased over the last several years from 53 percent of children ages 36-47 and 48-59 months to more than six in ten children age 12-23 and 24-35 months.

| Percentage of children under five years of age at the time of the survey who received specific vaccines by 12 months of age, and percentage with a vaccination card, by current age of child, Tanzania 2004-05 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| nt age |  | DPT-HB |  |  | Polio ${ }^{1}$ |  |  |  | Measles | $\mathrm{All}^{2}$ | No vaccinations | Percentage with a vaccination card seen | Number of children |
| child in months | BCG | 1 | 2 | 3 | 0 | 1 | 2 | 3 |  |  |  |  |  |
| 12-23 | 91.1 | 92.6 | 89.2 | 83.7 | 44.2 | 93.5 | 89.6 | 82.0 | 70.2 | 61.9 | 4.6 | 78.8 | 1,658 |
| 24-35 | 91.0 | 91.6 | 87.9 | 81.5 | 47.0 | 92.1 | 88.1 | 78.7 | 70.1 | 60.2 | 5.9 | 72.0 | 1,611 |
| 36-47 | 92.6 | 91.8 | 87.1 | 79.9 | 36.5 | 92.8 | 87.0 | 72.6 | 67.2 | 52.9 | 5.1 | 63.0 | 1,510 |
| 48-59 | 91.1 | 90.5 | 87.1 | 77.5 | 37.1 | 89.7 | 85.5 | 68.4 | 68.1 | 52.9 | 6.6 | 56.3 | 1,434 |
| Total | 91.5 | 91.8 | 88.0 | 81.0 | 41.4 | 92.2 | 87.8 | 76.1 | 69.4 | 57.6 | 5.4 | 68.0 | 6,214 |

Note: Information was obtained from the vaccination card or if there was no written record, from the mother. For children whose information was based on the mother's report, the proportion of vaccinations given during the first year of life was assumed to be the same as for children with a written record of vaccinations.
${ }^{1}$ Polio 0 is the polio vaccination given at birth.
${ }^{2}$ BCG, measles and three doses each of DPT-HB and polio vaccine (excluding polio vaccine given at birth)

### 9.8 Acute Respiratory Infection and Fever

Acute respiratory infection (ARI) is among the leading causes of morbidity and mortality in Tanzania. Of acute respiratory diseases, pneumonia is the most serious for young children. Early diagnosis and treatment with antibiotics can prevent a large proportion of deaths resulting from pneumonia. The prevalence of ARI was estimated by asking mothers whether their children under age five had been ill with a cough accompanied by short, rapid breathing in the two weeks preceding the survey. It should be borne in mind that these data are subjective (i.e., mother's perception of illness) and not validated by a medical examination.

Table 9.15 shows that in the two weeks preceding the survey, 8 percent of children experienced symptoms of ARI and one-fourth had a fever. Prevalence of respiratory illness varies by age of the child, rising to a peak at 6-11 months of age (13 percent) then falling slowly to a low at 4859 months of age ( 5 percent). Prevalence of fever peaks at the same age, with more than one-third of children age 6-11 months sick with fever.

Fifty-seven percent of children who had symptoms of ARI and/or fever were taken to a health facility. Children from urban areas were more likely to be taken to a health facility than those in rural areas, as were the children of more educated mothers and mothers who live in households that are in the higher wealth quintiles. There is significant variation by region.

| Table 9.15 Prevalence and treatment of symptoms of ARI and fever |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Percentage of children under five years who had a cough accompanied by short, rapid breathing (symptoms of ARI) and percentage of children who had fever in the two weeks preceding the |  |  |  |  |  |
|  |  |  |  |  |  |
| survey, and percentage | f children with | symptoms of A | RI and/or | fever for whom tre | preatment was |
| sought from a health facility or provider, by background characteristics, Tanzania 2004-05 |  |  |  |  |  |
|  |  |  |  | Among children |  |
|  |  |  |  | with symptoms |  |
|  |  |  |  | of ARI and/or |  |
|  |  |  |  | fever, percentage |  |
|  | Percentage of |  |  | treatment was |  |
|  | children with | Percentage of children with | Number | sought from a health |  |
| characteristic | of ARI | fever | children | facility/provider ${ }^{1}$ | of children |
| Age in months |  |  |  |  |  |
| <6 | 6.1 | 16.8 | 845 | 51.5 | 167 |
| 6-11 | 13.1 | 36.2 | 916 | 65.1 | 354 |
| 12-23 | 10.5 | 34.2 | 1,658 | 62.1 | 600 |
| 24-35 | 7.7 | 25.2 | 1,611 | 54.1 | 445 |
| 36-47 | 7.0 | 19.2 | 1,510 | 51.1 | 325 |
| 48-59 | 5.0 | 14.8 | 1,434 | 45.8 | 239 |
| Sex |  |  |  |  |  |
| Male | 8.5 | 25.3 | 3,983 | 58.5 | 1,098 |
| Female | 7.7 | 23.6 | 3,993 | 54.6 | 1,031 |
| Residence |  |  |  |  |  |
| Urban | 6.9 | 22.5 | 1,558 | 70.4 | 392 |
| Rural | 8.4 | 24.9 | 6,417 | 53.5 | 1,737 |
| Mainland/Zanzibar |  |  |  |  |  |
| Mainland | 8.1 | 24.2 | 7,771 | 56.3 | 2,057 |
| Total urban | 7.1 | 22.3 | 1,539 | 69.5 | 386 |
| Dar es Salaam city | 11.9 | 25.6 | 400 | 64.9 | 120 |
| Other urban | 5.4 | 21.1 | 1,140 | 71.5 | 266 |
| Total rural | 8.4 | 24.7 | 6,232 | 53.2 | 1,671 |
| Zanzibar | 8.4 | 32.7 | 204 | 66.2 | 72 |
| Unguja | 9.6 | 29.4 | 126 | 68.0 | 41 |
| Pemba | 6.6 | 38.1 | 79 | 63.7 | 31 |
| Zone |  |  |  |  |  |
| Western | 10.6 | 34.1 | 1,749 | 46.1 | 644 |
| Northern | 6.4 | 17.0 | 1,042 | 69.8 | 203 |
| Central | 9.6 | 25.6 | 663 | 64.4 | 182 |
| Southern highlands | 9.7 | 17.4 | 1,175 | 53.3 | 246 |
| Lake | 3.4 | 16.8 | 1,680 | 50.5 | 294 |
| Eastern | 9.7 | 28.6 | 890 | 67.5 | 277 |
| Southern | 9.8 | 34.9 | 572 | 64.0 | 211 |
| Region |  |  |  |  |  |
| Dodoma | 10.7 | 27.9 | 380 | 68.2 | 113 |
| Arusha | 5.2 | 17.4 | 276 | 53.4 | 51 |
| Kilimanjaro | 4.0 | 14.2 | 198 | (89.3) | 33 |
| Tanga | 9.1 | 20.4 | 317 | 83.9 | 75 |
| Morogoro | 6.2 | 25.9 | 313 | 67.2 | 84 |
| Pwani | 11.2 | 40.3 | 177 | 72.2 | 73 |
| Dar es Salaam | 11.9 | 25.6 | 400 | 64.9 | 120 |
| Lindi | 11.6 | 32.9 | 133 | 71.6 | 50 |
| Mtwara | 8.3 | 37.5 | 229 | 66.5 | 88 |
| Ruvuma | 10.4 | 33.3 | 210 | 55.8 | 73 |
| Iringa | 17.0 | 26.4 | 265 | 44.0 | 84 |
| Mbeya | 10.1 | 15.3 | 608 | 60.8 | 115 |
| Singida | 8.1 | 22.5 | 284 | 58.2 | 69 |
| Tabora | 10.9 | 22.9 | 466 | 47.1 | 127 |
| Rukwa | 2.6 | 13.5 | 302 | 51.7 | 47 |
| Kigoma | 23.2 | 51.6 | 435 | 47.0 | 247 |
| Shinyanga | 3.9 | 31.2 | 847 | 44.8 | 271 |
| Kagera | 3.4 | 14.2 | 512 | 62.2 | 76 |
| Mwanza | 1.5 | 9.8 | 816 | (61.0) | 86 |
| Mara | 7.9 | 36.8 | 352 | 37.0 | 132 |
| Manyara | 6.3 | 14.4 | 251 | 49.9 | 44 |
| Zanzibar North | 13.4 | 29.3 | 30 | 85.8 | 10 |
| Zanzibar South | 13.4 | 27.0 | 17 | 86.4 | 5 |
| Town West | 7.2 | 29.9 | 78 | 56.8 | 25 |
| Pemba North | 5.5 | 44.3 | 40 | 69.2 | 18 |
| Pemba South | 7.9 | 31.8 | 39 | 56.3 | 13 |
| Education |  |  |  |  |  |
| No education | 7.5 | 23.4 | 2,085 | 51.3 | 538 |
| Primary incomplete | 7.6 | 24.5 | 1,262 | 58.2 | 337 |
| Primary complete | 8.6 | 24.8 | 4,264 | 57.0 | 1,145 |
| Secondary+ | 8.2 | 25.5 | 364 | 73.6 | 109 |
| Wealth quintile |  |  |  |  |  |
| Lowest | 8.9 | 25.8 | 1,812 | 50.0 | 513 |
| Second | 7.5 | 25.7 | 1,664 | 59.6 | 452 |
| Middle | 8.3 | 23.5 | 1,688 | 53.5 | 438 |
| Fourth | 8.3 | 24.1 | 1,561 | 53.1 | 410 |
| Highest | 7.3 | 22.5 | 1,252 | 71.8 | 317 |
| Total | 8.1 | 24.4 | 7,976 | 56.6 | 2,129 |
| Note: Figures in parentheses are based on 25-49 unweighted cases. $\mathrm{ARI}=$ Acute respiratory infection <br> ${ }^{1}$ Excludes pharmacy, shop, and traditional practitioner |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |

### 9.9 Diarrhoeal Disease

Dehydration caused by severe diarrhoea is a major cause of morbidity and mortality among young children in Tanzania. Exposure to diarrhoeal disease-causing agents is frequently a result of the use of contaminated water and unhygienic practices related to food preparation and excreta disposal.

## Disposal of Children's Stools

The proper disposal of children's faeces is extremely important in preventing the spread of disease. If faeces are left uncontained, disease may be spread by direct contact or through animal contact. Table 9.16 presents information on the disposal of faecal matter of children under age five, by background characteristics. Three-fourths of children's stools are usually contained. Children's stools are more likely to be contained in urban than rural areas ( 90 and 71 percent, respectively). There is a positive relationship between containment of children's stools and both mothers' education and household wealth quintile.

| Table 9.16 Disposal of children's stools |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percent distribution of mothers whose youngest child under five years is living with her, by way in which child's faecal matter is disposed of, according to background characteristics and type of toilet facilities in household, Tanzania 2004-05 |  |  |  |  |  |  |  |  |  |  |  |
| Stools contained |  |  |  | Stools uncontained |  |  | Use diapers |  | Other/ missing | Total | Number of mothers |
|  | Child always uses toilet/ latrine | Thrown into toilet/ latrine | Buried in yard |  |  |  |  |  |  |  |  |
| Background characteristic |  |  |  | Thrown outside dwelling | Thrown outside yard | Rinsed away | $\begin{aligned} & \text { Use di } \\ & \begin{array}{c} \text { Dispos- } \\ \text { able } \end{array} \end{aligned}$ | pers <br> Washable |  |  |  |
| Residence |  |  |  |  |  |  |  |  |  |  |  |
| Urban | 13.4 | 74.3 | 2.2 | 1.2 | 2.6 | 1.7 | 0.3 | 4.0 | 0.3 | 100.0 | 1,155 |
| Rural | 7.4 | 56.6 | 6.5 | 4.1 | 19.9 | 2.7 | 0.0 | 2.1 | 0.6 | 100.0 | 4,253 |
| Mainland/Zanzibar |  |  |  |  |  |  |  |  |  |  |  |
| Mainland | 8.7 | 60.8 | 5.3 | 3.4 | 16.1 | 2.6 | 0.1 | 2.5 | 0.6 | 100.0 | 5,272 |
| Total urban | 14.1 | 73.6 | 1.9 | 1.2 | 2.7 | 1.9 | 0.2 | 4.0 | 0.3 | 100.0 | 1,146 |
| Dar es Salaam city | 25.1 | 70.8 | 0.0 | 0.0 | 0.6 | 0.6 | 0.6 | 1.7 | 0.7 | 100.0 | 318 |
| Other urban | 9.9 | 74.7 | 2.7 | 1.6 | 3.5 | 2.3 | 0.1 | 4.9 | 0.2 | 100.0 | 828 |
| Total rural | 7.1 | 57.2 | 6.2 | 4.1 | 19.8 | 2.8 | 0.0 | 2.1 | 0.6 | 100.0 | 4,125 |
| Zanzibar | 8.0 | 45.3 | 16.1 | 5.1 | 23.5 | 0.7 | 0.9 | 0.0 | 0.4 | 100.0 | 136 |
| Unguja | 9.7 | 60.9 | 12.3 | 2.4 | 12.4 | 1.1 | 1.4 | 0.0 | 0.0 | 100.0 | 87 |
| Pemba | 5.0 | 17.8 | 22.8 | 9.9 | 43.2 | 0.2 | 0.0 | 0.0 | 1.2 | 100.0 | 49 |
| Zone |  |  |  |  |  |  |  |  |  |  |  |
| Western | 4.3 | 53.7 | 7.5 | 4.1 | 27.1 | 1.8 | 0.0 | 1.2 | 0.3 | 100.0 | 1,094 |
| Northern | 2.3 | 74.0 | 2.2 | 3.8 | 13.0 | 0.2 | 0.1 | 4.1 | 0.3 | 100.0 | 729 |
| Central | 3.2 | 70.0 | 1.6 | 9.0 | 12.4 | 0.7 | 0.0 | 1.2 | 1.9 | 100.0 | 450 |
| Southern highlands | 11.4 | 67.6 | 2.2 | 3.2 | 11.3 | 1.3 | 0.0 | 2.3 | 0.6 | 100.0 | 800 |
| Lake | 7.7 | 35.3 | 13.0 | 3.1 | 25.4 | 8.9 | 0.0 | 5.9 | 0.4 | 100.0 | 1,045 |
| Eastern | 18.3 | 75.1 | 0.6 | 0.5 | 3.9 | 0.3 | 0.3 | 0.8 | 0.3 | 100.0 | 696 |
| Southern | 17.3 | 71.7 | 3.6 | 1.3 | 3.7 | 1.1 | 0.0 | 0.2 | 1.2 | 100.0 | 457 |
| Region |  |  |  |  |  |  |  |  |  |  |  |
| Dodoma | 2.0 | 74.1 | 1.5 | 7.4 | 12.7 | 0.5 | 0.0 | 0.7 | 1.0 | 100.0 | 266 |
| Arusha | 4.8 | 52.5 | 0.6 | 7.7 | 23.4 | 0.0 | 0.4 | 9.3 | 1.3 | 100.0 | 194 |
| Kilimanjaro | 1.4 | 97.0 | 0.8 | 0.8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 144 |
| Tanga | 1.7 | 85.4 | 4.6 | 2.7 | 4.5 | 0.0 | 0.0 | 1.1 | 0.0 | 100.0 | 226 |
| Morogoro | 12.1 | 80.3 | 1.0 | 0.5 | 6.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 241 |
| Pwani | 13.4 | 75.8 | 1.5 | 1.5 | 7.9 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 138 |
| Dar es Salaam | 25.1 | 70.8 | 0.0 | 0.0 | 0.6 | 0.6 | 0.6 | 1.7 | 0.7 | 100.0 | 318 |
| Lindi | 11.1 | 79.3 | 6.5 | 0.7 | 1.8 | 0.7 | 0.0 | 0.0 | 0.0 | 100.0 | 107 |
| Mtwara | 24.9 | 66.4 | 4.1 | 1.8 | 2.3 | 0.5 | 0.0 | 0.0 | 0.0 | 100.0 | 179 |
| Ruvuma | 13.1 | 72.4 | 1.2 | 1.2 | 6.5 | 2.0 | 0.0 | 0.4 | 3.2 | 100.0 | 171 |
| Iringa | 7.1 | 79.6 | 1.3 | 3.7 | 6.3 | 0.0 | 0.0 | 1.4 | 0.6 | 100.0 | 200 |
| Mbeya | 12.7 | 62.9 | 1.3 | 3.8 | 15.2 | 1.8 | 0.0 | 1.6 | 0.7 | 100.0 | 403 |
| Singida | 4.9 | 64.2 | 1.7 | 11.4 | 11.9 | 0.8 | 0.0 | 1.9 | 3.1 | 100.0 | 184 |
| Tabora | 5.3 | 42.5 | 5.4 | 1.4 | 42.7 | 0.7 | 0.0 | 1.7 | 0.3 | 100.0 | 292 |
| Rukwa | 12.9 | 65.1 | 5.1 | 1.7 | 8.4 | 1.8 | 0.0 | 4.7 | 0.4 | 100.0 | 197 |
| Kigoma | 5.1 | 70.0 | 8.6 | 2.5 | 7.1 | 4.4 | 0.0 | 2.3 | 0.0 | 100.0 | 278 |
| Shinyanga | 3.4 | 51.3 | 8.1 | 6.4 | 29.0 | 1.1 | 0.0 | 0.3 | 0.5 | 100.0 | 524 |
| Kagera | 3.9 | 33.6 | 20.2 | 0.4 | 22.2 | 12.6 | 0.0 | 7.1 | 0.0 | 100.0 | 332 |
| Mwanza | 13.1 | 33.6 | 9.2 | 3.7 | 21.8 | 10.2 | 0.0 | 7.5 | 0.5 | 100.0 | 498 |
| Mara | 1.3 | 42.0 | 10.7 | 6.1 | 38.6 | 0.4 | 0.0 | 0.0 | 1.0 | 100.0 | 215 |
| Manyara | 0.9 | 63.6 | 2.1 | 3.3 | 23.6 | 0.9 | 0.0 | 5.6 | 0.0 | 100.0 | 165 |
| Zanzibar North | 6.4 | 27.4 | 17.7 | 6.8 | 38.1 | 3.1 | 0.5 | 0.0 | 0.0 | 100.0 | 19 |
| Zanzibar South | 7.7 | 55.3 | 13.5 | 6.4 | 16.0 | 1.1 | 0.0 | 0.0 | 0.0 | 100.0 | 11 |
| Town West | 11.2 | 73.6 | 10.2 | 0.0 | 2.7 | 0.3 | 1.9 | 0.0 | 0.0 | 100.0 | 56 |
| Pemba North | 4.2 | 17.2 | 23.9 | 7.9 | 45.5 | 0.0 | 0.0 | 0.0 | 1.4 | 100.0 | 26 |
| Pemba South | 5.9 | 18.5 | 21.6 | 12.2 | 40.6 | 0.4 | 0.0 | 0.0 | 1.0 | 100.0 | 23 |
| Education |  |  |  |  |  |  |  |  |  |  |  |
| No education | 6.9 | 46.1 | 7.1 | 5.2 | 29.5 | 2.9 | 0.0 | 1.6 | 0.8 | 100.0 | 1,372 |
| Primary incomplete | 9.5 | 57.6 | 5.2 | 4.3 | 18.9 | 2.2 | 0.0 | 2.2 | 0.1 | 100.0 | 839 |
| Primary complete | 8.8 | 66.7 | 5.3 | 2.6 | 10.6 | 2.6 | 0.0 | 2.8 | 0.6 | 100.0 | 2,912 |
| Secondary+ | 13.1 | 72.9 | 2.2 | 1.8 | 3.1 | 0.7 | 1.2 | 4.0 | 0.8 | 100.0 | 2,984 |
| Toilet facilities |  |  |  |  |  |  |  |  |  |  |  |
| None | 2.9 | 11.4 | 15.6 | 8.7 | 55.2 | 3.9 | 0.0 | 1.0 | 1.1 | 100.0 | 876 |
| Pit latrine | 9.1 | 70.0 | 3.8 | 2.6 | 9.1 | 2.2 | 0.0 | 2.7 | 0.5 | 100.0 | 4,249 |
| Improved latrine | 17.9 | 64.0 | 1.8 | 1.4 | 2.3 | 5.2 | 1.6 | 4.5 | 1.4 | 100.0 | 169 |
| Flush toilet | 21.5 | 72.8 | 0.3 | 0.0 | 3.4 | 0.0 | 1.0 | 1.0 | 0.0 | 100.0 | 110 |
| Wealth quintile |  |  |  |  |  |  |  |  |  |  |  |
| Lowest | 7.8 | 40.0 | 9.0 | 7.5 | 31.1 | 2.7 | 0.0 | 1.2 | 0.7 | 100.0 | 1,171 |
| Second | 6.8 | 58.0 | 6.0 | 3.8 | 21.0 | 2.1 | 0.0 | 1.5 | 0.8 | 100.0 | 1,102 |
| Middle | 6.2 | 59.8 | 6.1 | 3.3 | 17.4 | 3.4 | 0.0 | 3.4 | 0.5 | 100.0 | 1,111 |
| Fourth | 8.1 | 72.1 | 4.7 | 1.4 | 7.0 | 2.6 | 0.0 | 3.7 | 0.4 | 100.0 | 1,065 |
| Highest | 15.2 | 75.6 | 1.2 | 0.8 | 1.7 | 1.6 | 0.4 | 2.8 | 0.6 | 100.0 | +959 |
| Total | 8.6 | 60.4 | 5.6 | 3.5 | 16.2 | 2.5 | 0.1 | 2.5 | 0.6 | 100.0 | 5,408 |
| Note: There are 115 unweighted cases where the mother reported disposing of the child's faeces in a toilet/latrine but there is not a toilet facility in the house. Totals include 4 cases with missing information on toilet facilities. |  |  |  |  |  |  |  |  |  |  |  |

## Prevalence of Diarrhoea

In the 2004-05 TDHS, mothers were asked whether any of their children under five years of age had had diarrhoea at any time during the two-week period preceding the survey. If the child had had diarrhoea, the mother was asked about feeding practices during the diarrhoeal episode and about what actions were taken to treat the diarrhoea.

Table 9.17 shows the proportion of children reported by their mothers to have suffered from diarrhoea during the two-week period before the survey. Thirteen percent of children under five were reported to have had diarrhoea. As with ARI and fever, children age 6-11 months were more likely than other age groups to suffer from diarrhoea. Prevalence is 3 to 4 times higher among these children than among the youngest children or oldest children (age 48-59 months). There is no significant difference among children of mothers with varying levels of education and little difference by household wealth. There is, however, significant difference by region, with Kigoma showing the highest prevalence (27 percent).

| Table 9.17 Prevalence of diarrhoea |  |  |
| :---: | :---: | :---: |
| Percentage of children under five years with diarrhoea in the two weeks preceding the survey, by background characteristics, Tanzania 2004-05 |  |  |
|  |  |  |
| Background characteristic | Diarrhoea in the two weeks preceding the survey | Number of children |
| Age in months |  |  |
|  | 7.4 | 845 |
| 6-11 | 25.4 | 916 |
| 12-23 | 22.3 | 1,658 |
| 24-35 | 10.4 | 1,611 |
| 36-47 | 6.9 | 1,510 |
| 48-59 | 4.8 | 1,434 |
| Sex |  |  |
| Male | 13.5 | 3,983 |
| Female | 11.7 | 3,993 |
| Residence |  |  |
| Urban | 10.0 | 1,558 |
| Rural | 13.2 | 6,417 |
| Mainland/Zanzibar |  |  |
| Mainland | 12.6 | 7,771 |
| Total urban | 9.6 | 1,539 |
| Dar es Salaam city | 7.4 | 400 |
| Other urban | 10.3 | 1,140 |
| Total rural | 13.3 | 6,232 |
| Zanzibar | 13.6 | 204 |
| Unguja | 13.7 | 126 |
| Pemba | 13.6 | 79 |
| Zone |  |  |
| Western | 15.6 | 1,749 |
| Northern | 10.3 | 1,042 |
| Central | 17.6 | 663 |
| Southern highlands | 13.0 | 1,175 |
| Lake | 8.9 | 1,680 |
| Eastern | 9.3 | - 890 |
| Southern | 16.6 | 572 |
| Region |  |  |
| Dodoma | 19.1 | 380 |
| Arusha | 10.8 | 276 |
| Kilimanjaro | 7.7 | 198 |
| Tanga | 11.0 | 317 |
| Morogoro | 12.1 | 313 |
| Pwani | 8.8 | 177 |
| Dar es Salaam | 7.4 | 400 |
| Lindi | 16.3 | 133 |
| Mtwara | 16.1 | 229 |
| Ruvuma | 17.4 | 210 |
| Iringa | 18.3 | 265 |
| Mbeya | 12.3 | 608 |
| Singida | 15.6 | 284 |
| Tabora | 12.9 | 466 |
| Rukwa | 9.9 | 302 |
| Kigoma | 26.9 | 435 |
| Shinyanga | 11.2 | 847 |
| Kagera | 7.4 | 512 |
| Mwanza | 7.3 | 816 |
| Mara | 14.7 | 352 |
| Manyara | 11.0 | 251 |
| Zanzibar North | 10.5 | 30 |
| Zanzibar South | 10.8 | 17 |
| Town West | 15.5 | 78 |
| Pemba North | 12.8 | 40 |
| Pemba South | 14.4 | 39 |
| Mother's education |  |  |
| No education | 13.1 | 2,085 |
| Primary incomplete | 13.9 | 1,262 |
| Primary complete | 11.9 | 4,264 |
| Secondary+ | 12.8 | 364 |
| Source of drinking |  |  |
| water |  |  |
| Piped | 11.5 | 2,241 |
| Protected well | 13.7 | 1,085 |
| Open well | 12.1 | 2,276 |
| Surface | 14.1 | 2,032 |
| Other/missing | 10.6 | 342 |
| Wealth quintile |  |  |
| Lowest | 13.3 | 1,812 |
| Second | 14.2 | 1,664 |
| Middle | 12.1 | 1,688 |
| Fourth | 13.2 | 1,561 |
| Highest | 9.4 | 1,252 |
| Total | 12.6 | 7,976 |

## Knowledge of ORS Packets

A simple and effective response to dehydration caused by diarrhoea is a prompt increase in the child's fluid intake through some form of oral rehydration therapy (ORT). ORT may include the use of a solution prepared from commercially produced packets of oral rehydration salts (ORS); a homemade mixture usually prepared from sugar, salt, and water; any kind of thin, nutritious fluids such as rice water, coconut milk, or watery soup; or simply increased fluids. Table 9.18 shows that almost all women with children under five years of age know about ORS packets ( 96 percent). There are only small variations by background characteristics.

## Treatment of Diarrhoea

Mothers of children who had diarrhoea were asked about what was done to treat the illness. Table 9.19 shows what the mothers reported. The 2004-05 TDHS findings indicate that almost half of sick children (47 percent) were taken to see a health care provider. The data indicate, however, that treatment at home is also common. Seventy percent of sick children were given some form of ORT, and 54 percent were given a solution prepared from an ORS packet. Forty percent of children received pills or syrup.

Children of mothers with no education are less likely to have been given some form of ORT than children of mothers with at least some secondary education (66 and 85 percent, respectively). Similarly, children living in the wealthiest households are more likely than poorer children to receive ORT.

There are significant regional differentials in treatment practice. Children living in the Northern zone and Zanzibar are the least likely to have received any treatment.

| Table 9.18 Knowledge of ORS packets |  |  |
| :---: | :---: | :---: |
| Percentage of mothers with births in the five years preceding the survey who know about ORS packets for treatment of diarrhoea, by background characteristics, Tanzania 2004-05 |  |  |
| Background characteristic | Percentage of mothers who know about ORS packets | Number of mothers |
| Age |  |  |
| 15-19 | 93.0 | 437 |
| 20-24 | 93.8 | 1,505 |
| 25-29 | 96.2 | 1,498 |
| 30-34 | 97.2 | 1,145 |
| 35-49 | 96.1 | 1,188 |
| Residence |  |  |
| Urban | 97.8 | 1,277 |
| Rural | 94.9 | 4,496 |
| Mainland/Zanzibar |  |  |
| Mainland | 95.5 | 5,628 |
| Total urban | 97.7 | 1,269 |
| Dar es Salaam city | 97.3 | 369 |
| Other urban | 97.8 | 900 |
| Total rural | 94.9 | 4,359 |
| Zanzibar | 96.0 | 144 |
| Unguja | 97.6 | 93 |
| Pemba | 93.0 | 51 |
| Zone |  |  |
| Western | 96.1 | 1,143 |
| Northern | 93.2 | 774 |
| Central | 93.7 | 473 |
| Southern highlands | 91.7 | 844 |
| Lake | 98.5 | 1,126 |
| Eastern | 95.8 | 766 |
| Southern | 98.7 | 503 |
| Region |  |  |
| Dodoma | 93.8 | 277 |
| Arusha | 87.8 | 205 |
| Kilimanjaro | 99.3 | 145 |
| Tanga | 95.5 | 250 |
| Morogoro | 94.0 | 253 |
| Pwani | 95.3 | 144 |
| Dar es Salaam | 97.3 | 369 |
| Lindi | 98.2 | 117 |
| Mtwara | 100.0 | 201 |
| Ruvuma | 97.7 | 185 |
| Iringa | 94.8 | 216 |
| Mbeya | 91.6 | 425 |
| Singida | 93.6 | 196 |
| Tabora | 93.9 | 311 |
| Rukwa | 88.5 | 203 |
| Kigoma | 95.7 | 282 |
| Shinyanga | 97.4 | 550 |
| Kagera | 98.0 | 351 |
| Mwanza | 99.7 | 546 |
| Mara | 96.3 | 229 |
| Manyara | 91.2 | 173 |
| Zanzibar North | 96.7 | 21 |
| Zanzibar South | 97.9 | 13 |
| Town West | 97.8 | 59 |
| Pemba North | 94.5 | 27 |
| Pemba South | 91.3 | 24 |
| Education |  |  |
| No education | 89.7 | 1,466 |
| Primary incomplete | 96.2 | 910 |
| Primary complete | 97.8 | 3,094 |
| Secondary+ | 98.5 | 302 |
| Wealth quintile |  |  |
| Lowest | 91.4 | 1,226 |
| Second | 94.3 | 1,187 |
| Middle | 97.4 | 1,166 |
| Fourth | 97.0 | 1,129 |
| Highest | 98.1 | 1,065 |
| Total | 95.5 | 5,772 |
| ORS = Oral rehydration salts |  |  |

Table 9.19 Diarrhoea treatment
Percentage of children under five years who had diarrhoea in the two weeks preceding the survey taken for treatment to a health provider, percentage who received oral rehydration therapy (ORT), and percentage given other treatments, according to background characteristics,
Tanzania 2004-05

| Background characteristic | Percentage taken to a health provider ${ }^{1}$ | Oral rehydration therapy (ORT) |  |  |  |  | Other treatments |  |  |  | No treatment |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | ORS packets | RHF | Either <br> ORS or <br> RHF | In- creased fluids | ORS, RHF, or increased fluids | $\begin{aligned} & \text { Pill/ } \\ & \text { syrup } \end{aligned}$ | Injection | Intravenous solution | Home remedy/ other |  |  |
| Age in months |  |  |  |  |  |  |  |  |  |  |  |  |
| <6 | 44.3 | 43.6 | 17.4 | 51.7 | 27.5 | 53.5 | 39.2 | 1.1 | 0.0 | 9.2 | 25.5 | 62 |
| 6-11 | 47.4 | 51.5 | 16.4 | 57.1 | 32.2 | 61.6 | 33.0 | 0.9 | 1.5 | 10.1 | 24.2 | 232 |
| 12-23 | 50.1 | 58.5 | 23.9 | 66.6 | 38.7 | 74.9 | 43.6 | 0.0 | 1.3 | 8.9 | 11.4 | 370 |
| 24-35 | 38.8 | 55.2 | 14.9 | 64.4 | 40.4 | 74.7 | 43.3 | 0.6 | 0.0 | 6.4 | 14.2 | 168 |
| 36-47 | 53.8 | 49.0 | 21.9 | 60.2 | 38.9 | 72.1 | 42.3 | 0.0 | 0.0 | 12.2 | 12.6 | 103 |
| 48-59 | 41.5 | 50.2 | 20.0 | 62.8 | 31.9 | 72.8 | 33.7 | 0.0 | 0.0 | 6.9 | 18.0 | 68 |
| Sex |  |  |  |  |  |  |  |  |  |  |  |  |
| Male | 49.0 | 54.1 | 19.7 | 62.4 | 37.4 | 71.2 | 43.5 | 0.1 | 1.4 | 8.2 | 14.0 | 538 |
| Female | 44.7 | 53.6 | 19.8 | 62.0 | 35.2 | 68.7 | 36.0 | 0.7 | 0.2 | 10.0 | 19.0 | 466 |
| Residence |  |  |  |  |  |  |  |  |  |  |  |  |
| Urban | 46.6 | 51.2 | 29.4 | 65.4 | 48.8 | 78.0 | 47.7 | 0.4 | 0.6 | 3.2 | 11.7 | 156 |
| Rural | 47.1 | 54.3 | 18.0 | 61.6 | 34.1 | 68.6 | 38.6 | 0.4 | 0.9 | 10.1 | 17.1 | 848 |
| Mainland/Zanzibar |  |  |  |  |  |  |  |  |  |  |  |  |
| Mainland | 47.1 | 54.4 | 20.1 | 62.9 | 36.2 | 70.3 | 40.3 | 0.4 | 0.8 | 8.9 | 16.0 | 977 |
| Total urban | 46.7 | 52.2 | 30.6 | 66.6 | 48.5 | 78.1 | 48.0 | 0.5 | 0.6 | 2.9 | 11.1 | 148 |
| Dar es Salaam city | * | * | * | * | * | * | * | * | * | * | * | 30 |
| Other urban | 44.8 | 52.0 | 31.8 | 65.6 | 47.2 | 75.3 | 51.7 | 0.6 | 0.8 | 3.6 | 11.3 | 118 |
| Total rural | 47.1 | 54.9 | 18.3 | 62.2 | 34.0 | 69.0 | 38.9 | 0.4 | 0.9 | 10.0 | 16.9 | 829 |
| Zanzibar | 45.7 | 33.3 | 6.7 | 39.1 | 41.6 | 59.7 | 30.4 | 0.4 | 0.0 | 12.4 | 26.9 | 28 |
| Unguja | 53.2 | 38.5 | 8.4 | 45.9 | 43.9 | 65.5 | 37.7 | 0.7 | 0.0 | 11.7 | 23.4 | 17 |
| Pemba | 33.7 | 24.9 | 4.0 | 28.2 | 37.8 | 50.4 | 18.6 | 0.0 | 0.0 | 13.4 | 32.6 | 11 |
| Zone |  |  |  |  |  |  |  |  |  |  |  |  |
| Western | 37.7 | 46.4 | 10.9 | 52.2 | 27.1 | 59.0 | 53.3 | 0.0 | 0.0 | 11.7 | 14.3 | 272 |
| Northern | 43.3 | 43.8 | 18.8 | 53.1 | 29.4 | 61.5 | 22.5 | 1.0 | 0.0 | 8.3 | 26.9 | 108 |
| Central | 52.9 | 60.9 | 17.4 | 65.5 | 29.0 | 70.7 | 30.3 | 0.5 | 0.0 | 1.8 | 21.0 | 117 |
| Southern highlands | 45.7 | 53.8 | 22.7 | 61.3 | 39.6 | 71.2 | 30.9 | 0.0 | 0.0 | 6.5 | 16.9 | 153 |
| Lake | 52.0 | 60.1 | 41.0 | 76.2 | 44.1 | 81.7 | 53.8 | 1.0 | 1.3 | 19.1 | 10.2 | 149 |
| Eastern | 64.3 | 70.4 | 18.1 | 79.1 | 58.6 | 90.2 | 42.8 | 0.0 | 2.8 | 0.0 | 8.6 | 83 |
| Southern | 50.3 | 60.0 | 16.5 | 68.5 | 41.5 | 75.8 | 27.1 | 0.7 | 4.2 | 6.2 | 16.3 | 95 |
| Mother's education |  |  |  |  |  |  |  |  |  |  |  |  |
| No education | 49.0 | 55.9 | 10.8 | 60.1 | 29.3 | 66.0 | 36.5 | 0.3 | 0.4 | 9.1 | 19.7 | 273 |
| Primary incomplete | 44.9 | 58.3 | 21.1 | 64.4 | 41.9 | 73.0 | 38.3 | 0.0 | 0.6 | 13.4 | 15.5 | 175 |
| Primary complete | 46.3 | 51.6 | 23.7 | 61.9 | 35.5 | 69.8 | 42.3 | 0.6 | 1.2 | 7.5 | 15.1 | 509 |
| Secondary+ | 51.4 | 49.6 | 24.8 | 69.3 | 66.4 | 85.1 | 41.8 | 0.0 | 0.0 | 8.5 | 12.5 | 47 |
| Wealth quintile |  |  |  |  |  |  |  |  |  |  |  |  |
| Lowest | 45.3 | 53.9 | 15.0 | 59.9 | 27.5 | 65.6 | 40.4 | 0.0 | 0.5 | 10.5 | 18.6 | 241 |
| Second | 52.8 | 58.3 | 16.8 | 63.8 | 37.1 | 70.6 | 40.1 | 0.2 | 0.9 | 8.6 | 15.9 | 236 |
| Middle | 47.8 | 56.2 | 25.3 | 66.1 | 32.7 | 71.4 | 36.8 | 1.0 | 0.4 | 7.4 | 16.5 | 204 |
| Fourth | 37.1 | 45.4 | 13.8 | 54.2 | 40.5 | 67.5 | 40.2 | 0.5 | 1.2 | 12.6 | 16.3 | 206 |
| Highest | 54.9 | 55.6 | 36.3 | 70.9 | 52.2 | 80.1 | 44.4 | 0.0 | 1.5 | 3.1 | 11.9 | 118 |
| Total | 47.0 | 53.9 | 19.8 | 62.2 | 36.4 | 70.0 | 40.0 | 0.4 | 0.8 | 9.0 | 16.3 | 1,004 |

[^6]
## Feeding Practices during Diarrhoea

Mothers are encouraged to continue feeding children normally when they suffer from diarrhoeal illnesses and to increase the fluids children are given. These practices help to reduce the likelihood the child will become dehydrated and also minimise the adverse consequences of diarrhoea on the child's nutritional status. Mothers were specifically asked whether they gave the child more or less fluids and food than usual when their child had diarrhoea.

Table 9.20 presents data on feeding practices when a child has diarrhoea. Just 36 percent of children are given more fluids than usual, as recommended. Three in ten children are given the same amount of fluids as usual. However, a significant proportion of children are offered less fluid than usual: 16 percent are offered somewhat less and 8 percent are offered much less. Nine percent of children were offered no fluid at all. These findings suggest that one-third of mothers still engage in the dangerous practice of curtailing fluid intake when their children have diarrhoea. Figure 9.2 shows that there has been little change since the 1999 TRCHS.

Table 9.20 shows that 49 percent of the children with diarrhoea were given somewhat less or much less than the usual amount of food, or no food at all, which could exacerbate the child's illness.

| Table 9.20 Feeding practices duringdiarrhoea |  |
| :---: | :---: |
| Percent distribution of children under five years who had diarrhoea in the two weeks preceding the survey by amount of liquids and food offered compared with normal practice, Tanzania 2004-05 |  |
|  | Percent |
| Amount of liquids offered |  |
| Same as usual | 30.4 |
| More | 36.4 |
| Somewhat less | 16.3 |
| Much less | 8.2 |
| None | 8.7 |
| Don't know/missing | 0.1 |
| Total | 100.0 |
| Amount of food offered |  |
| Same as usual | 37.1 |
| More | 8.6 |
| Somewhat less | 30.7 |
| Much less | 14.5 |
| None | 3.9 |
| Never gave food | 4.9 |
| Don't know/missing | 0.2 |
| Total | 100.0 |
| Number of children | 1,004 |

Figure 9.2 Trends in Feeding Practices during Diarrhoea


### 9.10 Children's Health Care by Women's Status

Status and self respect can be major determinants of a mother's ability to obtain adequate health care for her children. Table 9.21 shows data on utilisation of child health care services by the mother's level of empowerment, as measured by the three indicators of women's status defined in Chapter 3.

| Table 9.21 Children's health care by women's status |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percentage of children age 12-23 months who were fully vaccinated, and percentage of children under five years who were ill with a fever and/or had symptoms of ARI and/or diarrhoea in the past two weeks and were taken to a health provider for treatment, by women's status indicators, Tanzania 2004-05 |  |  |  |  |  |  |
| Women's status indicator | Percentage of children 12-23 months fully vaccinated ${ }^{1}$ | Number of children | Percentage of children with fever and/or symptoms of ARI taken to a health provider ${ }^{2}$ | Number of children | Percentage of children with diarrhoea taken to a health provider ${ }^{3}$ | Number of children |
| Number of decisions in which woman has final say ${ }^{3}$ |  |  |  |  |  |  |
| 0 | 60.9 | 195 | 58.4 | 268 | 46.0 | 121 |
| 1-2 | 68.7 | 655 | 55.3 | 862 | 45.8 | 417 |
| 3-4 | 75.7 | 379 | 60.8 | 536 | 44.5 | 260 |
| 5 | 75.4 | 431 | 53.2 | 463 | 47.1 | 206 |
| Number of reasons to refuse sex with husband |  |  |  |  |  |  |
| 0 | 49.3 | 92 | 57.8 | 115 | 42.9 | 66 |
| 1-2 | 64.6 | 183 | 53.3 | 242 | 36.3 | 132 |
| 3-4 | 73.4 | 1,384 | 57.0 | 1,772 | 47.6 | 806 |
| Number of reasons wife beating is justified |  |  |  |  |  |  |
| 0 | 74.4 | 615 | 61.6 | 623 | 51.9 | 314 |
| 1-2 | 70.2 | 345 | 58.3 | 449 | 45.5 | 209 |
| 3-4 | 70.9 | 498 | 52.6 | 728 | 38.8 | 329 |
| 5 | 62.9 | 201 | 53.8 | 330 | 48.5 | 152 |
| Total | 71.1 | 1,658 | 56.6 | 2,129 | 45.8 | 1,004 |
| ${ }^{1}$ Those who have received BCG, measles, and three doses each of DPT-HB and polio vaccine (excluding polio vaccine given at birth) <br> ${ }^{2}$ Excludes pharmacy, shop, and traditional practitioner <br> ${ }^{3}$ Either by herself or jointly with others |  |  |  |  |  |  |

The data indicate that the more empowered a woman, the more likely her child is to be fully vaccinated. There is no clear pattern, however, in the relationship between sick children being taken to a health care provider and the three indices of women's status.

### 9.11 Smoking

To measure the extent of smoking among Tanzanian adults, women and men who were interviewed in the 2004-05 TDHS were asked if they currently smoked cigarettes or used tobacco. Less than 2 percent of women said that they used tobacco of any kind and less than 1 percent said they smoked cigarettes. Almost one-fourth of men use tobacco products, with 21 percent saying they smoke cigarettes. Rural men are more likely to smoke than urban men.

Table 9.22 Use of smoking tobacco
Percentage of women and men who smoke cigarettes or tobacco, according to urban-rural residence, Tanzania 2004-05

| Residence | Uses tobacco |  |  | Does not use tobacco | Number of respondents |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Cigarettes | Pipe | Other tobacco |  |  |
| WOMEN |  |  |  |  |  |
| Urban | 0.6 | 0.0 | 0.1 | 99.1 | 2,935 |
| Rural | 0.5 | 0.1 | 1.2 | 98.2 | 7,394 |
| Total | 0.5 | 0.1 | 0.9 | 98.5 | 10,329 |
| MEN |  |  |  |  |  |
| Urban | 18.5 | 0.0 | 0.4 | 81.1 | 716 |
| Rural | 21.9 | 0.5 | 1.2 | 76.8 | 1,919 |
| Total | 21.0 | 0.4 | 1.0 | 78.0 | 2,635 |

Malaria is still a major public health concern in Tanzania, especially among pregnant women and children under five years of age. It is a leading cause of morbidity and mortality in Tanzania in both outpatient attendance and inpatient admissions, accounting for around 40 percent of overall outpatient attendances (MOH, 2002). Most parts of the country including uplands have reported malaria transmission throughout the year, though it increases during and soon after the rainy season.

Malaria is caused by four species of parasites that are transmitted by Anopheles mosquitoes. Plasmodium falciparum is the most common of these parasites. It causes the most severe form of malaria, which often leads to death if not properly managed. However, the most severe cases are typically limited to those who have impaired immune function or who have developed little or no immunity to malaria through previous exposure. The population group most at risk, therefore, is children under five years of age. Also at particular risk are pregnant women, who are vulnerable because of their reduced natural immunity. Pregnant women are four times more likely to suffer from complications of malaria than nonpregnant women. Malaria is a cause of pregnancy loss, low birth weight, and neonatal mortality (Jamison et al., 1993).

Malaria continues to pose a high burden in both societal and economic terms in Tanzania, ranging from school absenteeism to low productivity at workplaces. This affects agricultural production and outputs from other economic sectors.

Internationally, the Roll Back Malaria Initiative works to reduce the malaria burden among groups at risk. The primary objective of the Roll Back Malaria Initiative is to increase access to the most suitable and affordable protective measures, such as use of insecticide-treated mosquito nets (ITNs), and to increase coverage of prompt and effective treatment for malaria. The Initiative also promotes the use of intermittent preventive treatment (IPT) of malaria among pregnant women. Within Tanzania, the recommendations of the Initiative are implemented through the National Malaria Policy and Strategy. The National Malaria Strategy also includes vector control and epidemic prevention and control.

The government of Tanzania is committed to the control and prevention of malaria. A considerable amount of its limited health budget is allocated to address malaria and malaria-related disabilities. Household expenditure related to malaria is high and mainly spent on malaria treatment. The cost is expected to rise enormously after the introduction of Artemisin-based Combination Therapy (ACT). ACT is a response to the emerging resistance of malaria parasites to mono-therapy using antimalarial drugs like Sulphadoxine Pyrimethamine (SP), the first-line treatment drug in Tanzania at the time of the survey.

### 10.1 Mosquito Nets

The use of insecticide-treated mosquito nets, or ITNs, is a primary health intervention to reduce malaria transmission in Tanzania. It is anticipated that widespread use of ITNs would reduce mosquito density and biting intensities. ITNs are being promoted through three main channels: 1) the public sector as community-based projects, 2) public/private partnerships implemented by nongovernmental organisations directly to the community, and 3) the private sector's social marketing initiatives such as those assisted by Population Services International (PSI).

This section presents 2004-05 TDHS findings on household possession of mosquito nets and use and treatment of bed nets by household members. Although the 1999 TRCHS included questions
about household mosquito net possession and usage, the questions were formulated differently, so comparison between the two surveys is difficult and will not be discussed in this chapter.

## Ownership of Mosquito Nets

All households in the 2004-05 TDHS were asked whether they owned a mosquito net, and if so, how many. Table 10.1 shows the household ownership of nets by degree of protection offered by the net and by selected background characteristics.

Table 10.1 and Figure 10.1 show that almost half ( 46 percent) of all households own at least one mosquito net. However, ownership of ITNs is lower, with only 23 percent having at least one ITN. Although ownership of mosquito nets is as high as 74 and 36 percent for urban and rural households, respectively, only 47 percent of urban households and 14 percent of rural households report owning at least one ITN.

Ownership of ITNs is slightly higher in Zanzibar (28 percent) than on the Mainland (23 percent). The region with the highest percentage of households that own at least one ITN is Dar es Salaam (61 percent). Manyara and Iringa have lower ITN ownership than other regions ( 8 and 7 percent, respectively). Reasons for the variations are not well known, although differences in mosquito density and biting intensity attributable to geographical variations could be factors. This topic merits further study. Households in the higher wealth quintiles are more likely to report owning a mosquito net. More than half ( 56 percent) of the households in the highest wealth quintile have at least one ITN, compared with 6 percent of households in the lowest wealth quintile.

A net that has ever been treated with insecticide repels and kills mosquitoes with somewhat greater effectiveness than a net that has never been treated, but not as effectively as a net that was treated within the last 12 months or was made with long-lasting insecticide. Table 10.1 and Figure 10.1 show ownership of ever-treated nets separately. A greater proportion of households own at least one ever-treated net ( 29 percent) as compared with an ITN ( 23 percent). This indicates that some households do not re-treat their nets as often as recommended. The percentage of households that report having at least one ever-treated net is higher than the percentage of households that own an ITN across all regions. Differences are particularly large in Morogoro, Tabora, Zanzibar South, and Pemba South.

| Table 10.1 Household possession of mosquito nets |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percentage of households with at least one and more than one mosquito net (treated or untreated), ever-treated mosquito net, and insecticide-treated net (ITN), and the average number of nets per household, by background characteristics, Tanzania 2004-05 |  |  |  |  |  |  |  |  |  |  |
|  | Any type mosquito net |  |  | Ever-treated mosquito net ${ }^{1}$ |  |  | Insecticide-treated mosquito net (ITN) ${ }^{2}$ |  |  | Number of households |
| Background characteristic | Percentage with at least one | Percentage with more than one | Average number of nets per household | Percentage with at least one | Percentage with more than one | Average number of evertreated nets per household | Percentage with at least one | Percentage with more than one | Average number of ITNs per household |  |
| Residence |  |  |  |  |  |  |  |  |  |  |
| Urban | 74.1 | 45.1 | 1.6 | 54.0 | 30.8 | 1.1 | 47.3 | 25.2 | 0.9 | 2,569 |
| Rural | 36.4 | 20.2 | 0.7 | 19.6 | 9.8 | 0.4 | 13.8 | 6.9 | 0.2 | 7,166 |
| Mainland/Zanzibar |  |  |  |  |  |  |  |  |  |  |
| Mainland | 45.9 | 26.2 | 0.9 | 28.5 | 15.2 | 0.5 | 22.5 | 11.6 | 0.4 | 9,483 |
| Total urban | 73.9 | 44.6 | 1.6 | 54.3 | 30.9 | 1.1 | 47.6 | 25.4 | 0.9 | 2,492 |
| Dar es Salaam city | 85.7 | 47.6 | 1.8 | 66.2 | 35.3 | 1.3 | 62.9 | 31.9 | 1.2 | 796 |
| Other urban | 68.4 | 43.2 | 1.5 | 48.7 | 28.9 | 1.0 | 40.4 | 22.3 | 0.8 | 1,697 |
| Total rural | 35.8 | 19.7 | 0.7 | 19.3 | 9.6 | 0.3 | 13.5 | 6.7 | 0.2 | 6,990 |
| Zanzibar | 64.9 | 47.0 | 1.6 | 35.7 | 20.8 | 0.7 | 28.0 | 15.4 | 0.5 | 252 |
| Unguja | 71.1 | 52.7 | 1.8 | 41.4 | 24.8 | 0.9 | 33.5 | 19.5 | 0.7 | 167 |
| Pemba | 52.8 | 35.6 | 1.2 | 24.7 | 13.0 | 0.5 | 17.2 | 7.4 | 0.3 | 85 |
| Zone |  |  |  |  |  |  |  |  |  |  |
| Western | 49.9 | 30.0 | 1.0 | 28.9 | 16.8 | 0.6 | 20.7 | 11.6 | 0.4 | 1,474 |
| Northern | 30.5 | 16.4 | 0.6 | 19.0 | 9.3 | 0.4 | 15.9 | 7.7 | 0.3 | 1,486 |
| Central | 25.8 | 13.0 | 0.5 | 19.8 | 9.9 | 0.4 | 13.0 | 6.1 | 0.2 | 820 |
| Southern highlands | 25.7 | 14.2 | 0.5 | 15.9 | 8.6 | 0.3 | 11.5 | 5.8 | 0.2 | 1,424 |
| Lake | 55.0 | 32.8 | 1.1 | 29.4 | 15.9 | 0.6 | 22.8 | 12.0 | 0.5 | 1,684 |
| Eastern | 73.1 | 42.1 | 1.5 | 52.5 | 27.5 | 1.0 | 45.6 | 23.1 | 0.9 | 1,665 |
| Southern | 47.3 | 25.7 | 0.9 | 25.3 | 13.4 | 0.5 | 19.1 | 10.4 | 0.4 | 930 |
| Region |  |  |  |  |  |  |  |  |  |  |
| Dodoma | 27.6 | 14.4 | 0.5 | 21.5 | 11.2 | 0.4 | 13.4 | 7.5 | 0.3 | 520 |
| Arusha | 38.5 | 17.1 | 0.7 | 27.1 | 11.2 | 0.4 | 23.7 | 9.6 | 0.4 | 349 |
| Kilimanjaro | 26.1 | 14.2 | 0.5 | 15.7 | 8.5 | 0.3 | 13.1 | 6.7 | 0.3 | 408 |
| Tanga | 34.3 | 20.0 | 0.7 | 20.5 | 11.0 | 0.4 | 17.3 | 9.3 | 0.3 | 438 |
| Morogoro | 64.7 | 37.6 | 1.4 | 44.9 | 24.0 | 0.9 | 32.6 | 16.8 | 0.7 | 514 |
| Pwani | 53.5 | 31.9 | 1.1 | 28.4 | 12.2 | 0.5 | 22.4 | 10.5 | 0.4 | 283 |
| Dar es Salaam | 84.5 | 48.0 | 1.7 | 64.9 | 34.6 | 1.3 | 60.8 | 31.0 | 1.2 | 868 |
| Lindi | 45.0 | 23.7 | 0.8 | 20.8 | 11.5 | 0.4 | 16.0 | 9.2 | 0.3 | 247 |
| Mtwara | 47.7 | 26.4 | 0.9 | 21.9 | 11.3 | 0.4 | 15.8 | 8.4 | 0.3 | 379 |
| Ruvuma | 48.6 | 26.2 | 1.0 | 33.2 | 17.8 | 0.6 | 25.7 | 13.8 | 0.5 | 304 |
| Iringa | 17.2 | 8.7 | 0.3 | 11.0 | 6.3 | 0.2 | 7.4 | 3.8 | 0.1 | 479 |
| Mbeya | 28.8 | 16.2 | 0.6 | 18.4 | 9.8 | 0.3 | 13.6 | 6.9 | 0.2 | 664 |
| Singida | 22.6 | 10.6 | 0.4 | 16.9 | 7.6 | 0.3 | 12.2 | 3.8 | 0.2 | 300 |
| Tabora | 53.0 | 29.4 | 1.1 | 31.0 | 15.0 | 0.5 | 18.4 | 8.4 | 0.3 | 390 |
| Rukwa | 32.9 | 19.1 | 0.7 | 18.1 | 9.5 | 0.3 | 13.4 | 6.8 | 0.2 | 280 |
| Kigoma | 29.6 | 16.6 | 0.6 | 18.3 | 10.0 | 0.3 | 13.5 | 5.6 | 0.2 | 441 |
| Shinyanga | 61.9 | 39.5 | 1.3 | 34.9 | 22.6 | 0.7 | 27.0 | 17.7 | 0.5 | 644 |
| Kagera | 31.3 | 15.0 | 0.5 | 18.2 | 8.7 | 0.3 | 13.9 | 6.6 | 0.3 | 560 |
| Mwanza | 69.7 | 43.9 | 1.5 | 35.9 | 19.9 | 0.7 | 28.1 | 15.1 | 0.6 | 778 |
| Mara | 60.1 | 36.5 | 1.2 | 32.9 | 18.6 | 0.6 | 25.3 | 13.7 | 0.5 | 345 |
| Manyara | 21.4 | 13.4 | 0.4 | 11.9 | 5.5 | 0.2 | 8.1 | 4.3 | 0.2 | 291 |
| Zanzibar North | 55.0 | 33.5 | 1.2 | 25.2 | 13.9 | 0.5 | 17.7 | 9.4 | 0.3 | 43 |
| Zanzibar South | 66.0 | 45.7 | 1.4 | 42.0 | 24.8 | 0.8 | 30.3 | 17.5 | 0.6 | 26 |
| Town West | 79.4 | 62.9 | 2.2 | 48.2 | 29.6 | 1.0 | 41.2 | 24.3 | 0.8 | 99 |
| Pemba North | 43.7 | 29.1 | 1.0 | 20.3 | 9.6 | 0.4 | 15.6 | 6.3 | 0.3 | 45 |
| Pemba South | 63.1 | 43.0 | 1.5 | 29.6 | 16.8 | 0.6 | 18.9 | 8.6 | 0.3 | 40 |
| Wealth quintile |  |  |  |  |  |  |  |  |  |  |
| Lowest | 26.7 | 12.5 | 0.5 | 10.4 | 3.9 | 0.2 | 5.9 | 2.2 | 0.1 | 1,837 |
| Second | 31.5 | 15.0 | 0.6 | 15.5 | 6.9 | 0.2 | 10.1 | 4.0 | 0.2 | 1,928 |
| Middle | 37.0 | 19.6 | 0.7 | 20.9 | 9.8 | 0.4 | 15.0 | 6.6 | 0.3 | 1,920 |
| Fourth | 50.1 | 31.1 | 1.0 | 29.9 | 15.9 | 0.5 | 21.9 | 11.2 | 0.4 | 1,914 |
| Highest | 81.8 | 52.3 | 1.9 | 62.2 | 37.3 | 1.3 | 55.8 | 31.9 | 1.2 | 2,135 |
| Total | 46.3 | 26.8 | 0.9 | 28.7 | 15.3 | 0.6 | 22.6 | 11.7 | 0.4 | 9,735 |
| ${ }^{1}$ An ever-treated net is 1 ) a pretreated net or 2 ) a nonpretreated net that has subsequently been soaked with insecticide at any time. <br> ${ }^{2}$ An insecticide-treated net (ITN) is 1) a factory-treated net that does not require any further treatment, 2) a pretreated net obtained within the past 12 months, or 3) a net that has been soaked with insecticide within the past 12 months. |  |  |  |  |  |  |  |  |  |  |

Figure 10.1 Ownership of Mosquito Nets by Residence


## Use of Mosquito Nets

The 2004-05 TDHS asked about the use of mosquito nets by household members during the night before the survey. The National Health Policy in Tanzania recognises children under age five and pregnant women as high-risk groups that should sleep under ITNs.

Because the prevalence of malaria-carrying mosquitoes varies seasonally, with a peak during and immediately following periods of rain, use of mosquito nets may be expected to follow a similar seasonal pattern. Despite the geographical variations in altitude, seasonality, and humidity, malaria is endemic to all of Tanzania, with most of the country being holoendemic. The highest rainfall is experienced between October and March, which coincides with much of the fieldwork for this survey.

Tables 10.2 and 10.3 show the percentage of children under five and women who slept under a mosquito net the night before the survey. Roughly one-third of children under five slept under a mosquito net the night before the survey. However, only 16 percent slept under an ITN. Use of any mosquito net or ITN is associated with the age of the child. Younger children are more likely to have slept under a mosquito net than those closer to their fifth birthday. There is no gender preference between male and female children under five pertaining to net use.

The proportion of women who slept under a mosquito net is similar to that of children under five (Table 10.3). Eighteen percent of all women and 16 percent of pregnant women slept under an ITN the night before the survey.

| Table 10.2 Use of mosquito nets by children |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Percentage of children under five years of age who slept under a mosquito net (treated or untreated), an ever-treated mosquito net, ${ }^{1}$ and an insecticide-treated net $(\text { ITN })^{2}$ the night before the survey, by background characteristics, Tanzania 200405 |  |  |  |  |
| Background characteristic | Percentage who slept under any net the preceding night | Percentage who slept under an evertreated net ${ }^{1}$ the preceding night | Percentage who slept under an ITN ${ }^{2}$ the preceding night | Number of children |
| Age in months |  |  |  |  |
| < 12 | 34.6 | 22.4 | 17.5 | 1,817 |
| 12-23 | 31.8 | 20.4 | 17.5 | 1,698 |
| 24-35 | 31.0 | 18.2 | 14.5 | 1,687 |
| 36-47 | 30.9 | 20.3 | 16.6 | 1,601 |
| 48-59 | 28.3 | 16.8 | 13.7 | 1,576 |
| Sex |  |  |  |  |
| Male | 31.9 | 19.7 | 15.9 | 4,193 |
| Female | 31.0 | 19.7 | 16.1 | 4,186 |
| Residence |  |  |  |  |
| Urban | 62.8 | 46.0 | 40.4 | 1,643 |
| Rural | 23.8 | 13.3 | 10.1 | 6,736 |
| Mainland/Zanzibar |  |  |  |  |
| Mainland | 30.8 | 19.5 | 15.9 | 8,166 |
| Total urban | 62.6 | 46.5 | 40.9 | 1,583 |
| Dar es Salaam city | 82.9 | 68.5 | 65.5 | 388 |
| Other urban | 56.0 | 39.3 | 32.9 | 1,195 |
| Total rural | 23.2 | 13.0 | 9.8 | 6,583 |
| Zanzibar | 54.7 | 28.4 | 21.7 | 213 |
| Unguja | 61.6 | 34.2 | 27.8 | 132 |
| Pemba | 43.6 | 19.0 | 11.8 | 81 |
| Zone |  |  |  |  |
| Western | 31.0 | 18.7 | 14.1 | 1,818 |
| Northern | 21.9 | 14.0 | 12.8 | 1,062 |
| Central | 15.1 | 11.1 | 6.8 | 703 |
| Southern highlands | 14.2 | 8.4 | 6.3 | 1,212 |
| Lake | 35.7 | 20.4 | 16.6 | 1,804 |
| Eastern | 64.8 | 47.5 | 41.3 | 954 |
| Southern | 29.5 | 16.3 | 13.7 | 613 |
| Region |  |  |  |  |
| Dodoma | 12.6 | 9.3 | 5.6 | 405 |
| Arusha | 28.2 | 21.2 | 19.0 | 273 |
| Kilimanjaro | 23.9 | 15.5 | 14.0 | 219 |
| Tanga | 24.1 | 13.8 | 13.6 | 303 |
| Morogoro | 55.7 | 37.6 | 27.4 | 342 |
| Pwani | 42.2 | 23.5 | 18.5 | 185 |
| Dar es Salaam | 82.0 | 66.0 | 62.5 | 426 |
| Lindi | 17.3 | 9.9 | 7.5 | 144 |
| Mtwara | 32.7 | 13.8 | 11.1 | 242 |
| Ruvuma | 33.8 | 23.0 | 20.5 | 227 |
| Iringa | 7.2 | 4.3 | 2.5 | 280 |
| Mbeya | 13.1 | 9.4 | 6.9 | 623 |
| Singida | 18.6 | 13.6 | 8.4 | 298 |
| Tabora | 10.7 | 6.6 | 5.3 | 488 |
| Rukwa | 22.8 | 10.4 | 8.4 | 309 |
| Kigoma | 20.2 | 12.8 | 8.1 | 454 |
| Shinyanga | 47.8 | 28.5 | 22.2 | 876 |
| Kagera | 24.6 | 15.9 | 13.1 | 545 |
| Mwanza | 44.8 | 25.5 | 21.1 | 881 |
| Mara | 30.3 | 15.3 | 11.0 | 377 |
| Manyara | 11.4 | 5.5 | 4.7 | 267 |
| Zanzibar North | 35.7 | 15.8 | 11.8 | 32 |
| Zanzibar South | 51.8 | 32.4 | 22.1 | 18 |
| Town West | 74.0 | 41.7 | 35.4 | 82 |
| Pemba North | 36.9 | 16.2 | 11.8 | 42 |
| Pemba South | 50.6 | 22.0 | 11.8 | 39 |
| Wealth quintile |  |  |  |  |
| Lowest | 14.9 | 5.9 | 3.6 | 1,900 |
| Second | 21.0 | 10.1 | 6.2 | 1,731 |
| Middle | 25.3 | 15.7 | 12.2 | 1,784 |
| Fourth | 36.8 | 22.4 | 18.7 | 1,651 |
| Highest | 70.6 | 54.7 | 48.7 | 1,313 |
| Total | 31.4 | 19.7 | 16.0 | 8,379 |

${ }^{1}$ An ever-treated net is 1) a pretreated net or 2 ) a nonpretreated net that has subsequently been soaked with insecticide at any time.
${ }^{2}$ An insecticide-treated net (ITN) is 1) a factory-treated net that does not require any further treatment, 2) a pretreated net obtained within the past 12 months, or 3) a net that has been soaked with insecticide within the past 12 months.

| Table 10.3 Use of mosquito nets by women |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percentage of all women age 15-49 and pregnant women age 15-49 who slept under a mosquito net (treated or untreated), an ever-treated mosquito net, ${ }^{\text {, }}$ and an insecticide-treated net (ITN) ${ }^{2}$ the night before the survey, by background characteristics, Tanzania 2004-05 |  |  |  |  |  |  |  |  |
|  | Percentage of all women who: |  |  |  | Percentage of pregnant women who: |  |  |  |
| Background characteristic | Slept under any net the preceding night | Slept under an evertreated net ${ }^{1}$ the preceding night | Slept under an ITN ${ }^{2}$ the preceding night | Number of women | Slept under any net the preceding night | Slept under an evertreated net ${ }^{1}$ the preceding night | Slept under an ITN ${ }^{2}$ the preceding night | Number of women |
| Residence |  |  |  |  |  |  |  |  |
| Urban | 62.5 | 45.6 | 39.8 | 3,005 | 66.5 | 47.0 | 39.1 | 208 |
| Rural | 23.2 | 12.7 | 9.6 | 7,573 | 23.6 | 13.1 | 9.9 | 859 |
| Mainland/Zanzibar |  |  |  |  |  |  |  |  |
| Mainland | 33.9 | 22.0 | 18.2 | 10,257 | 31.6 | 19.5 | 15.4 | 1,038 |
| Total urban | 62.8 | 46.4 | 40.6 | 2,889 | 67.2 | 47.7 | 39.6 | 200 |
| Dar es Salaam city | 75.7 | 58.3 | 55.0 | 925 | * | * | * | 48 |
| Other urban | 56.7 | 40.8 | 33.8 | 1,964 | 62.5 | 43.1 | 34.1 | 152 |
| Total rural | 22.6 | 12.4 | 9.4 | 7,368 | 23.1 | 12.7 | 9.7 | 838 |
| Zanzibar | 46.9 | 23.7 | 18.0 | 321 | 46.1 | 26.3 | 19.6 | 29 |
| Unguja | 51.6 | 26.8 | 21.2 | 222 | 49.9 | 30.5 | 21.7 | 19 |
| Pemba | 36.3 | 16.7 | 10.8 | 99 | 38.9 | 18.6 | 15.8 | 10 |
| Zone |  |  |  |  |  |  |  |  |
| Western | 30.3 | 17.2 | 13.1 | 1,923 | 32.8 | 18.9 | 14.2 | 247 |
| Northern | 24.3 | 15.8 | 13.8 | 1,532 | 21.9 | 12.8 | 11.1 | 138 |
| Central | 16.1 | 12.6 | 8.7 | 818 | 14.9 | 12.4 | 4.5 | 92 |
| Southern highlands | 14.2 | 9.1 | 7.1 | 1,475 | 17.8 | 10.6 | 7.9 | 150 |
| Lake | 37.6 | 22.9 | 18.6 | 1,913 | 35.3 | 20.3 | 16.1 | 234 |
| Eastern | 66.9 | 48.1 | 42.2 | 1,709 | 70.6 | 50.1 | 43.0 | 103 |
| Southern | 36.3 | 21.0 | 17.2 | 887 | 28.1 | 16.6 | 16.1 | 74 |
| Region |  |  |  |  |  |  |  |  |
| Dodoma | 14.4 | 11.8 | 8.5 | 479 | (12.7) | (10.3) | (3.0) | 56 |
| Arusha | 30.9 | 23.0 | 19.8 | 401 | (28.2) | (23.8) | (20.4) | 42 |
| Kilimanjaro | 19.5 | 13.7 | 11.5 | 391 | * | * | * | 23 |
| Tanga | 29.2 | 16.5 | 14.6 | 440 | (23.5) | (8.0) | (6.2) | 41 |
| Morogoro | 58.3 | 40.2 | 29.0 | 460 | * | * | * | 32 |
| Pwani | 49.9 | 27.7 | 22.4 | 259 | * | * | * | 16 |
| Dar es Salaam | 75.3 | 57.1 | 53.5 | 990 | * | * | * | 55 |
| Lindi | 25.9 | 14.9 | 12.8 | 226 | (13.8) | (6.8) | (7.0) | 22 |
| Mtwara | 37.9 | 17.5 | 13.5 | 355 | (28.4) | (13.5) | (13.5) | 26 |
| Ruvuma | 42.1 | 29.5 | 24.6 | 306 | (39.6) | (27.9) | (26.2) | 26 |
| Iringa | 9.0 | 7.1 | 4.8 | 422 | (2.9) | (2.9) | (2.9) | 35 |
| Mbeya | 12.5 | 9.0 | 7.2 | 729 | (16.5) | (10.7) | (5.5) | 67 |
| Singida | 18.4 | 13.7 | 8.9 | 339 | (18.1) | (15.6) | (6.8) | 37 |
| Tabora | 14.5 | 10.0 | 8.0 | 532 | 19.4 | 11.7 | 10.0 | 73 |
| Rukwa | 24.9 | 11.8 | 10.0 | 324 | 30.6 | 16.1 | 15.0 | 47 |
| Kigoma | 19.7 | 12.9 | 9.1 | 510 | (23.7) | (13.7) | (10.6) | 58 |
| Shinyanga | 46.1 | 24.1 | 18.6 | 881 | 45.9 | 25.8 | 18.6 | 116 |
| Kagera | 22.2 | 13.6 | 11.2 | 558 | (25.4) | (16.8) | (12.6) | 69 |
| Mwanza | 47.0 | 29.6 | 23.9 | 964 | 43.5 | 24.0 | 18.3 | 111 |
| Mara | 36.6 | 19.6 | 16.1 | 391 | 30.9 | 17.4 | 16.1 | 54 |
| Manyara | 14.4 | 8.1 | 7.4 | 300 | (11.9) | (6.4) | (6.4) | 32 |
| Zanzibar North | 28.8 | 13.7 | 10.3 | 49 | (24.8) | (9.8) | (7.5) | 4 |
| Zanzibar South | 40.1 | 24.2 | 17.4 | 27 | (33.9) | )24.3) | (13.0) | 2 |
| Town West | 61.3 | 31.7 | 25.5 | 146 | (61.2) | (38.3) | (28.0) | 12 |
| Pemba North | 29.7 | 14.1 | 11.0 | 53 | (36.1) | (22.4) | (18.1) | 6 |
| Pemba South | 43.9 | 19.5 | 10.6 | 46 | (42.6) | (14.1) | (12.7) | 4 |
| Education |  |  |  |  |  |  |  |  |
| No education | 26.0 | 14.4 | 11.8 | 2,475 | 26.2 | 11.4 | 9.2 | 295 |
| Primary incomplete | 33.5 | 20.5 | 15.4 | 2,026 | 30.3 | 20.1 | 16.4 | 195 |
| Primary complete | 35.7 | 24.3 | 20.4 | 5,329 | 33.7 | 22.6 | 17.9 | 529 |
| Secondary+ | 54.4 | 35.0 | 31.2 | 748 | 55.1 | 37.0 | 24.7 | 49 |
| Wealth quintile |  |  |  |  |  |  |  |  |
| Lowest | 14.1 | 5.2 | 3.1 | 1,884 | 12.8 | 4.5 | 3.5 | 234 |
| Second | 20.5 | 10.1 | 6.8 | 2,003 | 20.2 | 10.4 | 7.2 | 234 |
| Middle | 24.6 | 14.1 | 10.6 | 1,989 | 25.6 | 16.7 | 12.0 | 208 |
| Fourth | 34.2 | 20.4 | 16.2 | 2,034 | 39.3 | 20.3 | 15.6 | 215 |
| Highest | 66.4 | 50.0 | 44.7 | 2,668 | 71.8 | 55.1 | 46.9 | 176 |
| Total | 34.3 | 22.0 | 18.2 | 10,578 | 32.0 | 19.7 | 15.6 | 1,067 |
| 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. <br> ${ }^{1}$ An ever-treated net is 1) a pretreated net or 2 ) a nonpretreated net that has subsequently been soaked with insecticide at any time. <br> ${ }^{2}$ An insecticide-treated net (ITN) is 1) a factory-treated net that does not require any further treatment, 2) a pretreated net obtained within the past 12 months, or 3) a net that has been soaked with insecticide within the past 12 months. |  |  |  |  |  |  |  |  |

Higher rates of net use are reported in urban households than rural households for both children and women. Approximately one in four children, women, and pregnant women in rural areas slept under a mosquito net compared with more than 60 percent of their urban counterparts. There are also marked differences in net use by region, with the most net use in Dar es Salaam and the lowest in Iringa. For example, whereas 63 percent of children in the Dar es Salaam region slept under an ITN the night preceding the survey, only 3 percent of children in Iringa region slept under an ITN.

### 10.2 Use of Antimalarial Drugs during Pregnancy

Malaria during pregnancy is extremely common among women living in countries that are malaria-endemic. It is a major contributor to low birth weight, infant mortality, maternal anaemia, spontaneous abortion, and stillbirth. As a protective measure, it is recommended that all pregnant women in Tanzania receive Intermittent Preventive Treatment (IPT) with Sulphadoxine Pyrimethamine (SP) twice or more during the second and third trimester of pregnancy.

In reference to the pregnancy leading to their last live birth, women in the 2004-05 TDHS were asked whether they took any antimalarial medications during the pregnancy to keep them from getting malaria and, if so, which drugs were taken. They were also asked whether the drugs they received were received as part of an antenatal care visit. It should be noted that obtaining information about drugs can be difficult, and some respondents may not know or remember the name or even the type of drug that they received.

Table 10.4 presents the percentage of women who had a live birth in the two years preceding the survey who took any antimalarial drug during the pregnancy resulting in their most recent live birth, and those who received IPT with SP. More than half ( 53 percent) of pregnant women report having taken at least one dose of SP during their pregnancy for prevention of malaria. However, only 22 percent received two or more doses. The percentage of pregnant women in Zanzibar who received two or more doses of SP is even lower than on the Mainland (15 and 22 percent, respectively).

IPT with SP should be integrated into routine antenatal care. The fourth and fifth columns in Table 10.4 assess the extent to which women who took SP received it during an ANC visit. Fifty-three percent of women said they took at least one dose of SP to prevent malaria during their last pregnancy, and 52 percent received any dose of SP during an ANC visit. This indicates that almost all women who take SP receive it during antenatal care. Few of the women who take SP during pregnancy to prevent malaria obtain this drug outside of the ANC setting.

There are significant differentials in the percentage of women who received complete IPT by background characteristics. Women in urban areas are more likely ( 29 percent) to receive IPT than women in rural areas ( 20 percent). By region, the percentage ranges from a low of 6 percent in North and South Pemba to 39 percent in Mtwara. Women who live in households in the higher wealth quintiles and those with higher levels of education are more likely to receive complete IPT than women in households in the lower wealth quintiles or who have little or no education.

| Percentage of women who took any antimalarial drugs for prevention, who took SP/Fansidar, and who received intermittent preventive treatment (IPT) during the pregnancy for their last live birth in the two years preceding the survey, by background characteristics, Tanzania 2004-05 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Background characteristic | Percentage who took any antimalarial drug | SP/Fansidar |  | Intermittent preventive treatment |  | Number of women |
|  |  |  |  | Percentage who | Percentage who received $2+$ |  |
|  |  | Percentage who took any SP/Fansidar | Percentage who took $2+$ doses | any SP/Fansidar during an ANC visit | doses, at least one during an ANC visit |  |
| Residence |  |  |  |  |  |  |
| Urban | 68.7 | 64.0 | 28.8 | 63.5 | 28.5 | 669 |
| Rural | 55.0 | 50.8 | 20.7 | 49.4 | 20.0 | 2,832 |
| Mainland/Zanzibar |  |  |  |  |  |  |
| Mainland | 58.4 | 54.0 | 22.4 | 52.8 | 21.9 | 3,415 |
| Total urban | 70.1 | 65.4 | 29.3 | 65.0 | 29.1 | 644 |
| Dar es Salaam city | 73.4 | 60.6 | 32.5 | 59.4 | 32.5 | 150 |
| Other urban | 69.1 | 66.9 | 28.3 | 66.7 | 28.1 | 494 |
| Total rural | 55.6 | 51.3 | 20.9 | 50.0 | 20.2 | 2,771 |
| Zanzibar | 28.9 | 26.8 | 14.7 | 24.7 | 13.8 | 85 |
| Unguja | 38.1 | 35.3 | 20.4 | 31.9 | 18.9 | 52 |
| Pemba | 14.4 | 13.4 | 5.8 | 13.4 | 5.8 | 33 |
| Zone |  |  |  |  |  |  |
| Western | 57.6 | 54.0 | 20.9 | 52.6 | 20.4 | 778 |
| Northern | 59.7 | 54.9 | 26.6 | 53.3 | 25.8 | 419 |
| Central | 59.0 | 55.2 | 24.7 | 53.5 | 23.9 | 296 |
| Southern highlands | 39.8 | 32.2 | 15.3 | 31.2 | 14.6 | 515 |
| Lake | 64.3 | 61.5 | 18.8 | 60.1 | 18.0 | 781 |
| Eastern | 61.8 | 56.2 | 26.7 | 55.7 | 26.7 | 366 |
| Southern | 71.9 | 68.6 | 36.8 | 68.4 | 36.6 | 260 |
| Region |  |  |  |  |  |  |
| Dodoma | 65.2 | 63.3 | 24.5 | 60.3 | 23.0 | 169 |
| Arusha | 56.4 | 53.0 | 21.4 | 52.3 | 21.4 | 110 |
| Kilimanjaro | 68.5 | 62.4 | 25.3 | 61.0 | 25.3 | 72 |
| Tanga | 66.5 | 61.9 | 38.3 | 60.1 | 36.5 | 134 |
| Morogoro | 51.6 | 50.7 | 22.6 | 50.7 | 22.6 | 137 |
| Pwani | 54.9 | 54.9 | 23.2 | 54.9 | 23.2 | 71 |
| Dar es Salaam | 73.7 | 61.6 | 31.9 | 60.4 | 31.9 | 158 |
| Lindi | 72.2 | 67.2 | 34.1 | 66.4 | 33.3 | 57 |
| Mtwara | 76.5 | 75.3 | 39.3 | 75.3 | 39.3 | 95 |
| Ruvuma | 67.7 | 63.4 | 36.1 | 63.4 | 36.1 | 108 |
| Iringa | 58.9 | 49.2 | 22.1 | 45.1 | 19.0 | 120 |
| Mbeya | 33.2 | 25.1 | 13.9 | 25.1 | 13.9 | 274 |
| Singida | 50.8 | 44.5 | 25.0 | 44.5 | 25.0 | 127 |
| Tabora | 51.1 | 48.4 | 15.5 | 46.9 | 15.5 | 211 |
| Rukwa | 35.9 | 31.4 | 12.0 | 31.4 | 12.0 | 122 |
| Kigoma | 67.6 | 65.4 | 27.3 | 63.2 | 27.3 | 192 |
| Shinyanga | 56.2 | 51.4 | 20.6 | 50.5 | 19.6 | 375 |
| Kagera | 71.6 | 69.4 | 20.0 | 69.4 | 20.0 | 242 |
| Mwanza | 65.6 | 63.2 | 17.4 | 62.5 | 16.7 | 382 |
| Mara | 49.9 | 45.1 | 20.3 | 39.9 | 17.9 | 156 |
| Manyara | 48.3 | 42.3 | 17.8 | 40.3 | 17.1 | 103 |
| Zanzibar North | 40.5 | 40.5 | 22.2 | 40.5 | 22.2 | 13 |
| Zanzibar South | 40.2 | 36.9 | 15.5 | 31.2 | 12.3 | 6 |
| Town West | 36.7 | 32.8 | 20.6 | 28.4 | 18.8 | 32 |
| Pemba North | 14.4 | 13.7 | 5.9 | 13.7 | 5.9 | 17 |
| Pemba South | 14.4 | 13.1 | 5.6 | 13.1 | 5.6 | 16 |
| Education |  |  |  |  |  |  |
| No education | 45.8 | 41.0 | 16.1 | 40.2 | 15.7 | 921 |
| Primary incomplete | 52.3 | 47.5 | 18.7 | 45.7 | 17.4 | 542 |
| Primary complete | 64.3 | 60.4 | 25.7 | 59.3 | 25.2 | 1,873 |
| Secondary+ | 66.2 | 60.9 | 29.4 | 58.3 | 28.5 | 164 |
| Wealth quintile |  |  |  |  |  |  |
| Lowest | 51.8 | 47.7 | 18.8 | 46.6 | 18.2 | 790 |
| Second | 49.9 | 46.8 | 21.2 | 45.5 | 20.5 | 761 |
| Middle | 55.2 | 49.2 | 18.5 | 48.1 | 18.0 | 748 |
| Fourth | 64.5 | 61.7 | 25.6 | 60.0 | 24.8 | 672 |
| Highest | 72.3 | 66.3 | 30.1 | 65.5 | 29.8 | 529 |
| Total | 57.7 | 53.3 | 22.3 | 52.1 | 21.7 | 3,500 |

### 10.3 Treatment of Children with Fever

Because the major manifestation of malaria is fever, mothers were asked whether their children under the age of five years had had a fever in the two weeks preceding the survey. If a fever was reported, the mother was asked whether treatment was sought and what medication the child was given, if any.

Table 10.5 shows the percentage of children under five who had a fever in the two weeks preceding the survey, the percentage who received antimalarial drugs among those sick with fever, and the percentage who received treatment soon after the onset of illness, by selected background characteristics.

One-fourth of children under age five had a fever in the two weeks preceding the survey. Among those sick with fever, 58 percent received antimalarial drugs, and 51 percent of the sick children received the drugs the same day or the day after the fever started.

There are striking differences in both morbidity and treatment by background characteristics. Children in Kigoma region were the most likely to have been ill with fever during the past two weeks ( 52 percent), and children in Mwanza region were the least likely (10 percent). Among children with a fever, those living in urban areas were more likely to receive antimalarial drugs ( 65 percent) than children in rural areas ( 57 percent), and urban children were more likely to receive treatment promptly.

The probability of having a fever in the two weeks preceding the survey does not differ much by wealth quintile or educational attainment of the mother. However, children with fever whose mothers have more years of education as well as those from households in the higher wealth quintiles were more likely to receive antimalarial drugs, and more likely to receive them quickly (Figure 10.2).

| Table 10.5 Prevalence and prompt treatment of children with fever |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Percentage of children under age five with fever in the two weeks preceding the survey, and among children with fever, the percentage who received antimalarial drugs and the percentage who received the drugs the same or next day following the onset of fever, by background characteristics, Tanzania 2004-05 |  |  |  |  |  |
|  | Children under age five |  | Children under age five with fever |  |  |
| Background characteristic | Percentage with fever in the past two weeks | Number of children | Percentage who took antimalarial drugs | Percentage who took antimalarial drugs same or next day | Number of children |
| Age in months |  |  |  |  |  |
| < 6 | 16.8 | 845 | 41.0 | 35.6 | 142 |
| 6-11 | 36.2 | 916 | 63.6 | 56.4 | 332 |
| 12-23 | 34.2 | 1,658 | 59.6 | 53.2 | 568 |
| 24-35 | 25.2 | 1,611 | 58.8 | 51.1 | 406 |
| 36-47 | 19.2 | 1,510 | 53.3 | 45.2 | 290 |
| 48-59 | 14.8 | 1,434 | 63.5 | 55.0 | 212 |
| Residence |  |  |  |  |  |
| Urban | 22.5 | 1,558 | 64.6 | 56.7 | 351 |
| Rural | 24.9 | 6,417 | 56.9 | 49.8 | 1,598 |
| Mainland/Zanzibar |  |  |  |  |  |
| Mainland | 24.2 | 7,771 | 58.2 | 51.1 | 1,882 |
| Total urban | 22.3 | 1,502 | 64.7 | 57.0 | 335 |
| Dar es Salaam city | 26.1 | 362 | (53.2) | (41.2) | 95 |
| Other urban | 21.1 | 1,140 | 69.2 | 63.2 | 240 |
| Total rural | 24.7 | 6,269 | 56.7 | 49.8 | 1,547 |
| Zanzibar | 32.7 | 204 | 60.8 | 48.3 | 67 |
| Unguja | 29.4 | 126 | 62.3 | 52.7 | 37 |
| Pemba | 38.1 | 79 | 58.8 | 43.0 | 30 |
| Zone |  |  |  |  |  |
| Western | 34.1 | 1,749 | 63.5 | 57.5 | 595 |
| Northern | 17.0 | 1,042 | 48.2 | 44.6 | 177 |
| Central | 25.6 | 663 | 47.0 | 36.5 | 170 |
| Southern highlands | 17.4 | 1,175 | 46.9 | 35.7 | 204 |
| Lake | 16.8 | 1,680 | 53.6 | 51.0 | 282 |
| Eastern | 28.6 | 890 | 67.3 | 59.8 | 255 |
| Southern | 34.9 | 572 | 66.9 | 54.9 | 200 |
| Region |  |  |  |  |  |
| Dodoma | 27.9 | 380 | 45.9 | 36.2 | 106 |
| Arusha | 17.4 | 276 | 23.3 | 20.2 | 48 |
| Kilimanjaro | 14.2 | 198 | (71.5) | (71.5) | 28 |
| Tanga | 20.4 | 317 | 62.9 | 60.9 | 65 |
| Morogoro | 25.9 | 313 | 88.6 | 82.7 | 81 |
| Pwani | 40.3 | 177 | 60.9 | 60.9 | 71 |
| Dar es Salaam | 25.6 | 400 | (55.0) | (41.0) | 102 |
| Lindi | 32.9 | 133 | 59.5 | 47.2 | 44 |
| Mtwara | 37.5 | 229 | 59.7 | 48.3 | 86 |
| Ruvuma | 33.3 | 210 | 80.4 | 68.0 | 70 |
| Iringa | 26.4 | 265 | 41.9 | 29.7 | 70 |
| Mbeya | 15.3 | 608 | 47.4 | 34.9 | 93 |
| Singida | 22.5 | 284 | 48.9 | 37.0 | 64 |
| Tabora | 22.9 | 466 | 57.0 | 49.5 | 107 |
| Rukwa | 13.5 | 302 | 54.4 | 48.0 | 41 |
| Kigoma | 51.6 | 435 | 85.2 | 75.3 | 224 |
| Shinyanga | 31.2 | 847 | 47.6 | 45.7 | 265 |
| Kagera | 14.2 | 512 | 71.8 | 68.2 | 73 |
| Mwanza | 9.8 | 816 | (63.9) | (60.7) | 80 |
| Mara | 36.8 | 352 | 36.9 | 35.3 | 129 |
| Manyara | 14.4 | 251 | (37.0) | (27.1) | 36 |
| Zanzibar North | 29.3 | 30 | 56.9 | 44.4 | 9 |
| Zanzibar South | 27.0 | 17 | 59.6 | 53.5 | 5 |
| Town West | 29.9 | 78 | 64.9 | 55.6 | 23 |
| Pemba North | 44.3 | 40 | 63.8 | 45.6 | 18 |
| Pemba South | 31.8 | 39 | 51.7 | 39.3 | 12 |
| Education |  |  |  |  |  |
| No education | 23.4 | 2,085 | 49.4 | 45.2 | 488 |
| Primary incomplete | 24.5 | 1,262 | 54.8 | 49.2 | 309 |
| Primary complete | 24.8 | 4,264 | 62.8 | 54.1 | 1,059 |
| Secondary+ | 25.5 | 364 | 63.6 | 52.9 | 93 |
| Wealth quintile |  |  |  |  |  |
| Lowest | 25.8 | 1,812 | 48.0 | 42.6 | 467 |
| Second | 25.7 | 1,664 | 61.2 | 54.2 | 428 |
| Middle | 23.5 | 1,688 | 57.3 | 51.4 | 396 |
| Fourth | 24.1 | 1,561 | 62.3 | 54.3 | 377 |
| Highest | 22.5 | 1,252 | 66.5 | 55.3 | 281 |
| Total | 24.4 | 7,976 | 58.2 | 51.0 | 1,949 |

Figure 10.2 Treatment of Children under Five Years with Fever by Mother's Education


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## Type and Timing of Antimalarial Drugs

Table 10.6 shows the different antimalarial drugs that were received by children under five years of age with fever in the two weeks preceding the survey. SP, the first-line drug in Tanzania at the time of the survey, was the most often used antimalarial. It was received by 24 percent of children with fever. Only a slightly lower percentage of children (22 percent) took amodiaquine, the secondline antimalarial drug at the time of the survey. Twelve percent of children received quinine, and less than 2 percent received chloroquine or a combination with artemisinin.

Children under six months of age are less likely to be treated with SP than older children. Amodiaquine was received more often by children age 6-23 months than those under 6 months and two years of age or older. While there is little variation in drug choice by urban and rural residence, children with fever in the Mainland are much more likely than those in Zanzibar to be treated with SP, and children in Zanzibar are more likely than those in the Mainland to be treated with amodiaquine and artemisinin. At the regional level, there is substantial variation in the antimalarial drugs used.

Children of women with more years of education were more likely to receive SP than children whose mothers had less education. However, use of amodiaquine was not associated with education level of the mother. Almost 9 percent of children with fever whose mothers attended secondary school or higher received a combination with artemisinin, compared with 1-2 percent of children whose mothers had less education. A combination with artemisinin is also more commonly given to children in households in the higher wealth quintiles. Use of quinine also increases with wealth quintile, but use of SP and amodiaquine show no strong association with economic level.

| Table 10.6 Type and timing of antimalarial drugs received by children with fever |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Among children under age five with fever in the two weeks preceding the survey, the percentage who received specific antimalarial drugs and the percentage who received each type of drug the same or next day after developing the fever, by background characteristics, Tanzania 2004-05 |  |  |  |  |  |  |  |  |  |  |  |
|  | Percentage of children who received drug |  |  |  |  | Percentage of children who received drug the same or next day |  |  |  |  | Number of children with fever |
| Background characteristic | SP/ <br> Fansidar | Chloroquine | Amodiaquine | Quinine | Combi- <br> nation <br> with <br> artemi- <br> $\operatorname{sinin}$ | SP/ <br> Fansidar | Chloroquine | Amodiaquine | Quinine | Combi- <br> nation with artemisinin |  |
| Age in months |  |  |  |  |  |  |  |  |  |  |  |
| < 6 | 17.5 | 3.1 | 14.1 | 6.2 | 0.4 | 15.6 | 3.1 | 11.8 | 5.1 | 0.0 | 142 |
| 6-11 | 23.1 | 1.5 | 27.2 | 13.0 | 2.2 | 20.9 | 1.5 | 23.7 | 10.4 | 0.0 | 332 |
| 12-23 | 22.1 | 1.6 | 24.1 | 12.7 | 1.2 | 20.6 | 1.6 | 21.4 | 9.9 | 0.1 | 568 |
| 24-35 | 25.6 | 1.2 | 22.6 | 11.8 | 2.0 | 22.4 | 1.2 | 19.4 | 8.7 | 0.0 | 406 |
| 36-47 | 24.3 | 1.2 | 15.5 | 13.5 | 1.4 | 20.1 | 0.9 | 14.6 | 10.5 | 0.0 | 290 |
| 48-59 | 28.4 | 3.2 | 22.2 | 9.9 | 1.7 | 24.0 | 3.2 | 19.3 | 8.6 | 0.0 | 212 |
| Residence |  |  |  |  |  |  |  |  |  |  |  |
| Urban | 24.0 | 1.6 | 23.3 | 14.8 | 2.7 | 22.0 | 1.6 | 21.8 | 11.7 | 0.0 | 351 |
| Rural | 23.6 | 1.8 | 21.8 | 11.3 | 1.3 | 20.7 | 1.7 | 18.9 | 8.8 | 0.0 | 1,598 |
| Mainland/Zanzibar |  |  |  |  |  |  |  |  |  |  |  |
| Mainland | 24.1 | 1.8 | 21.5 | 12.2 | 0.3 | 21.4 | 1.7 | 18.9 | 9.5 | 0.0 | 1,882 |
| Total urban | 24.2 | 1.5 | 22.9 | 15.3 | 1.6 | 22.3 | 1.5 | 21.4 | 12.0 | 0.0 | 335 |
| Dar es Salaam city | 20.7 | 3.3 | 15.3 | 11.7 | 2.1 | 18.4 | 3.3 | 12.5 | 6.9 | 0.0 | 95 |
| Other urban | 25.6 | 0.8 | 25.9 | 16.7 | 1.3 | 23.8 | 0.8 | 24.9 | 14.0 | 0.0 | 240 |
| Total rural | 24.1 | 1.8 | 21.2 | 11.5 | 0.0 | 21.2 | 1.8 | 18.4 | 9.0 | 0.0 | 1,547 |
| Zanzibar | 11.5 | 1.3 | 38.2 | 4.5 | 36.4 | 10.1 | 1.3 | 33.4 | 4.1 | 0.0 | 67 |
| Unguja | 17.8 | 1.7 | 32.9 | 5.9 | 29.9 | 16.9 | 1.7 | 29.6 | 5.6 | 0.0 | 37 |
| Pemba | 3.8 | 0.8 | 44.7 | 2.7 | 44.4 | 1.8 | 0.8 | 38.1 | 2.3 | 0.0 | 30 |
| Zone |  |  |  |  |  |  |  |  |  |  |  |
| Western | 19.6 | 2.4 | 27.3 | 16.7 | 0.0 | 16.6 | 2.4 | 25.0 | 14.1 | 0.0 | 595 |
| Northern | 26.6 | 1.2 | 15.8 | 5.2 | 0.0 | 24.7 | 1.2 | 14.7 | 4.1 | 0.0 | 177 |
| Central | 23.1 | 4.2 | 14.4 | 5.8 | 0.0 | 21.2 | 3.8 | 7.8 | 3.7 | 0.0 | 170 |
| Southern highlands | 18.6 | 1.8 | 19.9 | 7.3 | 0.0 | 13.8 | 1.8 | 15.7 | 4.4 | 0.0 | 204 |
| Lake | 27.1 | 1.0 | 17.2 | 9.5 | 0.0 | 25.6 | 1.0 | 16.1 | 8.3 | 0.0 | 282 |
| Eastern | 30.3 | 1.2 | 19.5 | 15.2 | 2.2 | 28.2 | 1.2 | 18.4 | 12.8 | 0.2 | 255 |
| Southern | 30.0 | 0.0 | 25.8 | 15.1 | 0.0 | 25.5 | 0.0 | 22.0 | 8.3 | 0.0 | 200 |
| Region |  |  |  |  |  |  |  |  |  |  |  |
| Dodoma | 23.7 | 3.9 | 12.9 | 5.3 | 0.0 | 22.5 | 3.9 | 7.1 | 2.7 | 0.0 | 106 |
| Arusha | (13.7) | (1.7) | (4.7) | (3.2) | (0.0) | (11.6) | (1.7) | (4.7) | (2.1) | (0.0) | 48 |
| Kilimanjaro | (47.7) | (0.0) | (23.8) | (0.0) | (0.0) | (47.7) | (0.0) | (23.8) | (0.0) | (0.0) | 28 |
| Tanga | 34.0 | 1.9 | 19.5 | 7.5 | 0.0 | 34.0 | 1.9 | 17.4 | 7.5 | 0.0 | 65 |
| Morogoro | 33.8 | 0.0 | 29.3 | 23.5 | 3.9 | 33.8 | 0.0 | 29.3 | 21.4 | 0.0 | 81 |
| Pwani | 38.1 | 0.0 | 11.7 | 12.1 | 0.7 | 38.1 | 0.0 | 11.7 | 12.1 | 0.7 | 71 |
| Dar es Salaam | (22.0) | (3.0) | (17.1) | (10.8) | (2.0) | (17.0) | (3.0) | (14.5) | (6.4) | (0.0) | 102 |
| Lindi | 28.1 | 0.0 | 24.2 | 7.1 | 0.0 | 24.6 | 0.0 | 21.0 | 1.6 | 0.0 | 44 |
| Mtwara | 31.3 | 0.0 | 26.4 | 2.0 | 0.0 | 25.7 | 0.0 | 21.7 | 0.8 | 0.0 | 86 |
| Ruvuma | 29.5 | 0.0 | 26.0 | 36.3 | 0.0 | 25.9 | 0.0 | 22.9 | 21.6 | 0.0 | 70 |
| Iringa | 18.7 | 1.7 | 14.4 | 8.9 | 0.0 | 10.2 | 1.7 | 14.4 | 3.4 | 0.0 | 70 |
| Mbeya | 22.8 | 1.9 | 18.2 | 4.5 | 0.0 | 20.6 | 1.9 | 10.2 | 2.3 | 0.0 | 93 |
| Singida | 22.0 | 4.8 | 16.8 | 6.5 | 0.0 | 19.0 | 3.6 | 9.1 | 5.3 | 0.0 | 64 |
| Tabora | 18.5 | 2.1 | 18.6 | 19.6 | 0.0 | 15.6 | 2.1 | 15.0 | 16.8 | 0.0 | 107 |
| Rukwa | 8.7 | 1.6 | 33.0 | 11.2 | 0.0 | 4.7 | 1.6 | 30.6 | 11.2 | 0.0 | 41 |
| Kigoma | 27.9 | 0.0 | 36.0 | 27.0 | 0.0 | 21.4 | 0.0 | 33.1 | 22.2 | 0.0 | 224 |
| Shinyanga | 12.9 | 4.5 | 23.4 | 6.8 | 0.0 | 12.9 | 4.5 | 22.1 | 6.2 | 0.0 | 265 |
| Kagera | 35.8 | 0.0 | 32.8 | 7.8 | 0.0 | 33.8 | 0.0 | 28.6 | 5.7 | 0.0 | 73 |
| Mwanza | (37.2) | (0.0) | (15.0) | (11.7) | (0.0) | (33.9) | (0.0) | (15.0) | (11.7) | (0.0) | 80 |
| Mara | 15.9 | 2.2 | 9.7 | 9.2 | 0.0 | 15.9 | 2.2 | 9.7 | 7.6 | 0.0 | 129 |
| Manyara | (14.1) | (0.0) | (17.8) | (7.7) | (0.0) | (7.5) | (0.0) | (15.8) | (3.8) | (0.0) | 36 |
| Zanzibar North | 5.6 | 0.0 | 36.7 | 5.8 | 40.8 | 5.6 | 0.0 | 35.4 | 4.6 | 0.0 | 9 |
| Zanzibar South | 10.9 | 2.7 | 28.0 | 13.5 | 24.0 | 9.4 | 2.7 | 28.0 | 13.5 | 0.0 | 5 |
| Town West | 23.8 | 2.1 | 32.5 | 4.4 | 27.0 | 22.6 | 2.1 | 27.8 | 4.4 | 0.0 | 23 |
| Pemba North | 5.7 | 0.7 | 43.2 | 4.6 | 50.0 | 3.1 | 0.7 | 37.9 | 3.8 | 0.0 | 18 |
| Pemba South | 0.9 | 1.0 | 46.9 | 0.0 | 36.3 | 0.0 | 1.0 | 38.3 | 0.0 | 0.0 | 12 |
| Education |  |  |  |  |  |  |  |  |  |  |  |
| No education | 18.5 | 1.7 | 20.3 | 9.8 | 2.0 | 17.1 | 1.5 | 19.0 | 8.0 | 0.0 | 488 |
| Primary incomplete | 19.6 | 2.6 | 22.3 | 10.5 | 1.7 | 18.5 | 2.6 | 20.2 | 8.3 | 0.0 | 309 |
| Primary complete | 26.8 | 1.5 | 22.7 | 13.5 | 0.7 | 22.9 | 1.5 | 19.6 | 10.3 | 0.0 | 1,059 |
| Secondary+ | 28.2 | 1.5 | 23.3 | 9.3 | 8.5 | 26.9 | 1.5 | 17.1 | 8.4 | 0.0 | 93 |
| Wealth quintile |  |  |  |  |  |  |  |  |  |  |  |
| Lowest | 23.2 | 0.8 | 16.6 | 7.9 | 0.7 | 20.5 | 0.8 | 14.6 | 7.1 | 0.1 | 467 |
| Second | 26.9 | 0.8 | 22.0 | 13.4 | 0.7 | 23.7 | 0.6 | 19.4 | 10.9 | 0.0 | 428 |
| Middle | 20.8 | 2.6 | 24.6 | 11.1 | 1.1 | 19.7 | 2.6 | 21.5 | 7.9 | 0.0 | 396 |
| Fourth | 19.9 | 2.6 | 28.6 | 12.8 | 2.1 | 17.0 | 2.6 | 25.4 | 9.5 | 0.0 | 377 |
| Highest | 28.7 | 2.4 | 19.0 | 16.3 | 4.1 | 24.7 | 2.4 | 16.5 | 12.4 | 0.0 | 281 |
| Total | 23.7 | 1.7 | 22.1 | 11.9 | 1.5 | 21.0 | 1.7 | 19.4 | 9.3 | 0.0 | 1,949 |

Among those children who received antimalarials, a small proportion received a drug that was already available at home (Table 10.7). The drug was available at home for 3 percent of children who received SP/Fansidar, the first-line drug, and 2 percent each of children who received amodiaquine and quinine. Chloroquine, which less than 2 percent of children received for fever, was the antimalarial most commonly available at home (9 percent).

| Table 10.7 | Availability at home of antimalarial drugs |
| :--- | :--- |
| received by children |  |
| Among children under five years of age with fever in the |  |
| two weeks preceding the survey who received a specific |  |
| antimalarial drug, percentage for whom the drug was at |  |
| home when the child became ill with fever, by type of |  |
| drug, Tanzania 2004-05 |  |

## CHILDREN AND WOMEN'S NUTRITION

A woman's nutritional status is important both before and during pregnancy. Good nutritional status is necessary for proper intrauterine development of the foetus and for protection of the mother against maternal morbidity and mortality. Child nutrition including initiation, intensity, and duration of breastfeeding and use of complementary foods directly affects health status. Inadequate or inappropriate feeding leads to malnutrition and child morbidity and mortality. This chapter covers the following related topics: feeding of infants and young children; anaemia; micronutrient supplementation; and anthropometric assessment of the nutritional status of children under age five and women age 15-49.

### 11.1 Breastfeeding and Supplementation

Infant feeding affects both the mother and the child. Feeding practices affect the child's nutritional status, which in turn affects the risk of death. The duration and intensity of breastfeeding affect the mother's period of postpartum infertility, and hence the length of the birth interval, fertility levels, and iron status.

## Initiation of Breastfeeding

Early initiation of breastfeeding is important for both the mother and the child. Early suckling stimulates the release of prolactin, which helps in the production of milk, and oxytocin, which is responsible for ejection of milk. It also stimulates the contraction of the uterus after childbirth. The first liquid to come from the breast, known as colostrum, is produced in the first few days after delivery and provides natural immunity to the infant. It is recommended that children be fed colostrum immediately after birth and continue to be exclusively breastfed even if the regular breast milk has not yet let down. Table 11.1 shows the percentage of children who were ever breastfed, who were breastfed in the first hour and the first day after birth, and who were fed anything other than breast milk before breast milk was regularly given (also known as prelacteal feeding).

Table 11.1 shows that 96 percent of children are breastfed for some period of time, and there is no difference by sex. Differentials by assistance at childbirth, background characteristics of the mother, urban or rural residence, or region are small. Nonetheless, infants in Tabora and Dodoma are less likely to have been breastfed than infants in other regions ( 85 and 89 percent, respectively).

More than half of children ( 59 percent) are breastfed within one hour after birth, while 92 percent are breastfed within one day. These figures are comparable to those from the 1996 TDHS, in which 59 percent were breastfed within one hour of birth and 88 percent were breastfed within one day.

Initiation of breastfeeding in the first hour and first 24 hours after birth both vary by background characteristics. However, the differences for breastfeeding within the first hour are much greater. Children of mothers assisted at delivery by health professionals are more likely to initiate breastfeeding within one hour after birth ( 66 percent) than those whose mothers were assisted by a traditional birth attendant, other attendant, or no one ( 55 percent and lower). The likelihood that a child is breastfed in the first hour after birth increases notably with mother's educational status and wealth quintile.

| Table 11.1 Initial breastfeeding |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percentage of children born in the five years preceding the survey who were ever breastfed, and among children ever breastfed, percentage who started breastfeeding within one hour and within one day of birth and percentage who received a prelacteal feed, by background characteristics, Tanzania 2004-05 |  |  |  |  |  |  |
|  |  |  | Percentage who started breastfeeding: |  | Percentage who received a prelacteal feed | Number of children ever breastfed |
| Background characteristic | Percentage ever breastfed | Number of children | Within 1 hour of birth | Within 1 day of birth ${ }^{1}$ |  |  |
| Sex |  |  |  |  |  |  |
| Male | 96.3 | 4,377 | 58.4 | 91.3 | 36.1 | 4,213 |
| Female | 96.6 | 4,347 | 60.2 | 92.6 | 34.3 | 4,199 |
| Residence |  |  |  |  |  |  |
| Urban | 95.8 | 1,691 | 66.9 | 93.0 | 29.4 | 1,620 |
| Rural | 96.6 | 7,034 | 57.5 | 91.7 | 36.6 | 6,792 |
| Mainland/Zanzibar |  |  |  |  |  |  |
| Mainland | 96.4 | 8,506 | 59.5 | 91.9 | 35.2 | 8,197 |
| Total urban | 95.8 | 1,670 | 66.9 | 92.9 | 29.4 | 1,600 |
| Dar es Salaam city | 96.4 | 428 | 73.8 | 92.1 | 30.7 | 413 |
| Other urban | 95.6 | 1,241 | 64.6 | 93.2 | 28.9 | 1,187 |
| Total rural | 96.5 | 6,836 | 57.6 | 91.7 | 36.7 | 6,597 |
| Zanzibar | 98.4 | 219 | 53.8 | 94.0 | 33.1 | 216 |
| Unguja | 98.1 | 133 | 60.8 | 93.8 | 31.5 | 130 |
| Pemba | 98.9 | 86 | 43.1 | 94.4 | 35.6 | 85 |
| Zone |  |  |  |  |  |  |
| Western | 94.8 | 1,912 | 37.2 | 86.5 | 47.2 | 1,812 |
| Northern | 97.6 | 1,122 | 61.9 | 91.2 | 45.1 | 1,095 |
| Central | 93.1 | 716 | 66.6 | 94.8 | 27.9 | 667 |
| Southern highlands | 96.0 | 1,283 | 46.8 | 88.9 | 43.7 | 1,232 |
| Lake | 98.3 | 1,868 | 79.6 | 95.1 | 18.0 | 1,835 |
| Eastern | 97.0 | 969 | 77.1 | 95.8 | 18.4 | 940 |
| Southern | 96.8 | 637 | 51.4 | 96.5 | 50.9 | 617 |
| Region |  |  |  |  |  |  |
| Dodoma | 89.1 | 413 | 74.9 | 96.1 | 31.3 | 368 |
| Arusha | 98.3 | 288 | 66.6 | 97.4 | 43.8 | 283 |
| Kilimanjaro | 98.4 | 210 | 76.2 | 95.5 | 23.1 | 206 |
| Tanga | 96.9 | 355 | 55.5 | 78.4 | 67.0 | 344 |
| Morogoro | 96.2 | 349 | 77.3 | 98.7 | 8.9 | 336 |
| Pwani | 99.5 | 191 | 83.8 | 98.8 | 8.7 | 190 |
| Dar es Salaam | 96.4 | 428 | 73.8 | 92.1 | 30.7 | 413 |
| Lindi | 97.6 | 147 | 53.4 | 91.6 | 53.3 | 143 |
| Mtwara | 98.2 | 247 | 46.5 | 99.2 | 60.4 | 242 |
| Ruvuma | 95.0 | 244 | 55.4 | 96.6 | 39.3 | 231 |
| Iringa | 96.7 | 294 | 61.5 | 95.2 | 19.0 | 285 |
| Mbeya | 94.1 | 662 | 42.0 | 85.4 | 40.9 | 623 |
| Singida | 98.6 | 303 | 56.4 | 93.1 | 23.7 | 299 |
| Tabora | 85.0 | 508 | 41.5 | 85.4 | 56.9 | 432 |
| Rukwa | 99.3 | 326 | 43.1 | 90.0 | 70.5 | 324 |
| Kigoma | 95.8 | 484 | 50.3 | 91.7 | 36.4 | 464 |
| Shinyanga | 99.7 | 919 | 28.5 | 84.5 | 48.1 | 916 |
| Kagera | 99.3 | 574 | 94.6 | 97.8 | 7.4 | 570 |
| Mwanza | 97.8 | 899 | 95.4 | 97.6 | 5.4 | 878 |
| Mara | 98.0 | 395 | 21.8 | 85.5 | 62.0 | 387 |
| Manyara | 97.3 | 269 | 54.1 | 97.8 | 35.1 | 262 |
| Zanzibar North | 97.0 | 33 | 41.9 | 89.9 | 30.9 | 32 |
| Zanzibar South | 97.3 | 19 | 65.1 | 94.9 | 29.3 | 18 |
| Town West | 98.8 | 81 | 67.5 | 95.2 | 32.2 | 80 |
| Pemba North | 98.9 | 44 | 27.4 | 94.5 | 37.4 | 44 |
| Pemba South | 99.0 | 42 | 59.5 | 94.3 | 33.7 | 41 |
| Mother's education |  |  |  |  |  |  |
| No education | 95.2 | 2,318 | 55.7 | 91.3 | 41.7 | 2,206 |
| Primary incomplete | 95.4 | 1,378 | 54.1 | 90.3 | 40.1 | 1,314 |
| Primary complete | 97.2 | 4,642 | 61.9 | 92.7 | 30.7 | 4,513 |
| Secondary+ | 97.9 | 387 | 67.3 | 92.4 | 34.1 | 379 |
|  |  |  |  |  | Continued... |  |

## Table 11.1-Continued

Percentage of children born in the five years preceding the survey who were ever breastfed, and among children ever breastfed, percentage who started breastfeeding within one hour and within one day of birth and percentage who received a prelacteal feed, by background characteristics, Tanzania 2004-05

| Background characteristic | Percentage ever breastfed | Number of children | Percentage who started breastfeeding: |  | Percentage who received a prelacteal feed | Number of children ever breastfed |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Within 1 hour of birth | Within 1 day of birth |  |  |
| Assistance at delivery |  |  |  |  |  |  |
| Health professional ${ }^{3}$ | 96.4 | 4,042 | 65.8 | 93.7 | 29.7 | 3,896 |
| Traditional birth attendant | 95.9 | 1,642 | 54.8 | 93.0 | 40.5 | 1,575 |
| Other | 96.7 | 2,738 | 54.0 | 89.3 | 40.3 | 2,646 |
| No one | 97.1 | 285 | 44.7 | 89.5 | 34.2 | 277 |
| Place of delivery |  |  |  |  |  |  |
| Health facility | 96.3 | 4,108 | 65.3 | 93.5 | 30.0 | 3,957 |
| At home | 96.5 | 4,599 | 54.0 | 90.7 | 39.9 | 4,439 |
| Other | * | 7 | * | * | * | 7 |
| Wealth quintile |  |  |  |  |  |  |
| Lowest | 95.0 | 1,974 | 54.3 | 90.8 | 42.5 | 1,876 |
| Second | 96.5 | 1,857 | 54.6 | 91.0 | 39.2 | 1,791 |
| Middle | 97.5 | 1,866 | 59.3 | 92.7 | 31.2 | 1,820 |
| Fourth | 96.3 | 1,681 | 62.0 | 93.0 | 32.0 | 1,618 |
| Highest | 97.1 | 1,347 | 69.7 | 92.7 | 28.7 | 1,308 |
| Total | 96.4 | 8,725 | 59.3 | 92.0 | 35.2 | 8,413 |

Note: Table is based on all births whether the children are living or dead at the time of interview. Total includes 16 cases (unweighted) with missing information on assistance at delivery and 10 cases (unweighted) with missing information on place of delivery. 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 one hour of birth.
${ }^{2}$ Children given something other than breast milk during the first three days of life before the mother started breastfeeding regularly.
${ }^{3}$ Doctor/AMO, clinical officer, assistant clinical officer, nurse/midwife, or MCH aide.

Breastfeeding within one hour after birth was more common in urban areas ( 67 percent) than rural areas ( 58 percent). There is considerable variation in initiation of breastfeeding within one hour of birth by region. Less than three in ten children in Mara, Pemba North, and Shinyanga were breastfed within one hour after birth. Initiation of breastfeeding within one hour is highest in Mwanza and Kagera regions (95 percent).

The practice of giving prelacteal feeds is discouraged because it limits the frequency of suckling by the infant and exposes the baby to the risk of infection. The data show that 35 percent of infants are given prelacteal feeds. Prelacteal feeding is more common in rural areas ( 37 percent) than urban areas ( 29 percent), and it also varies by region. In Rukwa, 71 percent of children received prelacteal feeding. Less than 10 percent of children received prelacteal feeds in Mwanza, Kagera, Pwani, and Morogoro.

Children whose mothers were assisted during childbirth by a traditional birth attendant were most likely to receive prelacteal feeds ( 41 percent), while children whose mothers were assisted by a health professional are least likely ( 30 percent). The practice of prelacteal feeding decreases as wealth quintile increases. More than four in ten children of mothers in the lowest quintile receive prelacteal feeds compared with less than three in ten children of mothers in the highest wealth quintile.

## Breastfeeding Status by Age

UNICEF and WHO recommend that children be exclusively breastfed (no other liquid, solid food, or plain water) during the first six months of life (World Health Assembly, 2001). Introducing breast milk substitutes to infants before six months can contribute to breastfeeding failure. Substitutes such as formula, other kinds of milk, and porridge are also often watered down and provide too few calories. Furthermore, possible contamination of these substitutes exposes the infant to the risk of illness. After six months, a child requires adequate complementary foods for normal growth. Lack of appropriate complementation may lead to malnutrition and frequent illnesses, which may lead to death. However, even with complementation the child should continue to be breastfed for two years and beyond.

Table 11.2 and Figure 11.1 show breastfeeding status by age. In Tanzania, exclusive breastfeeding for the first six months is not widely practiced. The data show that only 41 percent of infants below 6 months of age are exclusively breastfed. Among children under 6 months, younger children are more likely to be exclusively breastfed. Seventy percent of infants under 2 months receive breast milk only, compared with just 14 percent of infants 4-5 months of age. However, these data show an improvement in exclusive breastfeeding for children under 6 months from 29 percent in the 1996 TDHS and 32 percent in 1999.

| Table 11.2 Breastfeeding status by age |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percent distribution of youngest children under three years living with the mother by breastfeeding status and percentage of children under three years using a bottle with a nipple, according to age in months, Tanzania 2004-05 |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | tfeeding | cons | ng: |  |  |  |  |
| Age in months | Not breastfeeding | Exclusively breastfed | Plain water only | Waterbased liquids/ juice | Other milk | Complementary foods | Total | Number of children | Percentage using a bottle with a nipple ${ }^{1}$ |  |
| $<2$ | 2.4 | 70.0 | 18.4 | 0.5 | 1.5 | 7.2 | 100.0 | 256 | 0.4 | 259 |
| 2-3 | 0.3 | 42.4 | 19.9 | 2.2 | 3.1 | 32.1 | 100.0 | 304 | 5.6 | 308 |
| 4-5 | 3.8 | 13.5 | 16.4 | 3.0 | 5.4 | 57.9 | 100.0 | 277 | 7.2 | 279 |
| 6-7 | 2.0 | 1.7 | 4.6 | 2.4 | 0.8 | 88.5 | 100.0 | 305 | 6.1 | 307 |
| 8-9 | 1.9 | 0.9 | 2.6 | 0.6 | 0.7 | 93.3 | 100.0 | 300 | 3.4 | 305 |
| 10-11 | 3.7 | 0.4 | 0.6 | 0.6 | 0.5 | 94.3 | 100.0 | 299 | 4.1 | 304 |
| 12-15 | 9.0 | 0.0 | 1.5 | 0.4 | 0.0 | 89.0 | 100.0 | 545 | 3.4 | 559 |
| 16-19 | 16.6 | 0.9 | 0.4 | 0.0 | 0.2 | 82.0 | 100.0 | 556 | 3.8 | 579 |
| 20-23 | 44.6 | 0.0 | 0.5 | 0.0 | 0.0 | 54.9 | 100.0 | 482 | 2.0 | 520 |
| 24-27 | 81.7 | 0.0 | 0.0 | 0.0 | 0.0 | 18.3 | 100.0 | 410 | 2.0 | 530 |
| 28-31 | 90.0 | 0.2 | 0.0 | 0.0 | 0.0 | 9.8 | 100.0 | 347 | 1.1 | 549 |
| 32-35 | 94.5 | 0.0 | 0.0 | 0.0 | 0.0 | 5.5 | 100.0 | 298 | 0.9 | 532 |
| <6 | 2.1 | 41.3 | 18.3 | 2.0 | 3.4 | 33.0 | 100.0 | 837 | 4.5 | 845 |
| 6-9 | 2.0 | 1.3 | 3.6 | 1.5 | 0.7 | 90.9 | 100.0 | 606 | 4.7 | 612 |
| Note: Breastfeeding status refers to a " 24 -hour" period (yesterday and last night). Children classified as breastfeeding and consuming plain water only consume no supplements. The categories of not breastfeeding, exclusively breastfed, breastfeeding and consuming plain water, water-based liquids/juice, other milk, and complementary foods (solids and semisolids) are hierarchical and mutually exclusive, and their percentages add to 100 percent. Thus, children who receive breast milk and water-based liquids and who do not receive complementary foods are classified in the waterbased 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. <br> ${ }^{1}$ Based on all children under three years |  |  |  |  |  |  |  |  |  |  |

In Tanzania, complementary feeding starts early. Seven percent of children below 2 months, 32 percent of children 2-3 months, and 58 percent of children 4-5 months are given complementary foods. Although many children receive complementary foods too early, others receive them too late. All children 6-9 months should receive complementary foods, but Table 11.2 shows that only 91 percent of children in this age group are actually consuming complementary foods.

Figure 11.1 Feeding Practices among Children Age 0-23 Months


The regulations regarding breast milk substitutes in Tanzania discourage the use of bottles with nipples. The use of a bottle with a nipple, regardless of the contents (breast milk, formula, or any other liquid), requires hygienic handling to avoid contamination that may cause infection to the infant. According to Table 11.2, only 5 percent of infants are fed with a bottle with a nipple.

## Duration and Frequency of Breastfeeding

Table 11.3 provides information on median duration of breastfeeding among children born in the three years preceding the survey and frequency of breastfeeding for children under six months by background characteristics.

The median duration of any breastfeeding in Tanzania is 21 months. This duration does not change much by sex of the child, educational attainment of the mother, household wealth, or residence. The median duration of exclusive breastfeeding at the national level is 1.8 months and there is little significant difference by background characteristics.

Table 11.3 also shows the median duration of predominant breastfeeding, which is defined as exclusive breastfeeding or breastfeeding in combination with plain water, water-based liquids, or juices. The median length of predominant breastfeeding is 3.2 months. There is little variation by background characteristics.

It is important for an infant to breastfeed frequently as this improves milk production. Almost all breastfeeding children less than six months of age ( 97 percent) were breastfed at least six times during the 24 hours preceding the survey, which meets the WHO/UNICEF recommendations for optimal breastfeeding. The mean number of daytime feeds is 7.4 , while the mean number of nighttime feeds is 5.7. These results are comparable to those of the 1999 TRCHS and the 1996 TDHS.

| Table 11.3 Median duration and frequency of breastfeeding |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Median duration of any breastfeeding, exclusive breastfeeding, and predominant breastfeeding among children born in the three years preceding the survey, percentage of breastfeeding children under six months living with the mother who were breastfed six or more times in the 24 hours preceding the survey, and mean number of feeds (day/night), by background characteristics, Tanzania 2004-05 |  |  |  |  |  |  |  |  |
|  | Median duration (months) of breastfeeding ${ }^{1}$ |  |  |  | Breastfeeding children under six months ${ }^{2}$ |  |  |  |
| Background characteristic | Any breastfeeding | Exclusive breastfeeding | Predomi- <br> nant breastfeeding ${ }^{3}$ |  | breastfed $6+$ times in last 24 hours | Mean number of day feeds | Mean number of night feeds |  |
| Child's sex |  |  |  |  |  |  |  |  |
| Male | 21.4 | 1.8 | 3.1 | 2,679 | 98.5 | 7.7 | 5.9 | 395 |
| Female | 20.7 | 1.7 | 3.3 | 2,714 | 94.8 | 7.1 | 5.6 | 431 |
| Residence |  |  |  |  |  |  |  |  |
| Urban | 20.7 | (1.5) | 2.9 | 1,038 | 98.0 | 7.6 | 5.9 | 157 |
| Rural | 21.2 | 1.8 | 3.3 | 4,355 | 96.3 | 7.3 | 5.7 | 669 |
| Mainland/Zanzibar |  |  |  |  |  |  |  |  |
| Mainland | 21.1 | 1.8 | 3.2 | 5,255 | 96.5 | 7.3 | 5.7 | 802 |
| Total urban | 20.8 | (1.5) | 3.0 | 1,019 | 98.1 | 7.6 | 5.8 | 154 |
| Dar es Salaam city | 20.5 | * | * | 265 | * | * | * | 38 |
| Other urban | 20.9 | (1.6) | 3.1 | 755 | 97.5 | 7.7 | 5.6 | 116 |
| Total rural | 21.2 | 1.9 | 3.3 | 4,236 | 96.1 | 7.3 | 5.6 | 648 |
| Zanzibar | 20.7 | * | 2.1 | 138 | 98.9 | 8.9 | 8.9 | 23 |
| Unguja | 20.5 | * | 2.1 | 84 | 98.4 | 8.9 | 9.2 | 17 |
| Pemba | 21.1 | * | (2.1) | 54 | 100.0 | 8.9 | 8.2 | 7 |
| Zone |  |  |  |  |  |  |  |  |
| Western | 19.7 | 1.7 | 4.5 | 1,212 | 92.0 | 6.3 | 4.2 | 193 |
| Northern | 22.1 | (1.1) | 2.2 | 669 | 96.8 | 6.8 | 5.4 | 100 |
| Central | 22.7 | (2.1) | (2.3) | 450 | 98.8 | 8.2 | 6.3 | 71 |
| Southern highlands | 21.8 | (1.8) | 2.6 | 783 | 98.0 | 7.6 | 5.7 | 106 |
| Lake | 18.7 | 3.1 | 4.4 | 1,172 | 97.9 | 8.2 | 6.9 | 181 |
| Eastern | 21.0 | * | (2.4) | 583 | 98.3 | 7.0 | 6.0 | 97 |
| Southern | 23.7 | * | (1.9) | 387 | 98.1 | 8.6 | 5.7 | 54 |
| Mother's education |  |  |  |  |  |  |  |  |
| No education | 21.5 | 1.0 | 3.1 | 1,438 | 96.7 | 7.5 | 6.1 | 195 |
| Primary incomplete | 20.0 | (1.5) | 3.0 | 842 | 92.6 | 6.8 | 5.5 | 133 |
| Primary complete | 21.2 | 2.0 | 3.3 | 2,857 | 97.8 | 7.6 | 5.7 | 455 |
| Secondary+ | 21.6 | * | (3.1) | 256 | 95.2 | 6.3 | 5.6 | 43 |
| Wealth quintile |  |  |  |  |  |  |  |  |
| Lowest | 21.7 | 2.0 | 3.1 | 1,192 | 97.6 | 7.5 | 5.7 | 182 |
| Second | 20.7 | 1.6 | 3.2 | 1,168 | 95.9 | 7.1 | 5.9 | 152 |
| Middle | 21.0 | 1.5 | 3.4 | 1,180 | 94.5 | 7.3 | 5.5 | 204 |
| Fourth | 21.5 | 2.0 | 3.2 | 1,016 | 96.9 | 7.7 | 5.8 | 151 |
| Highest | 20.2 | 1.9 | 2.9 | 836 | 98.7 | 7.3 | 5.9 | 136 |
| Total | 21.1 | 1.8 | 3.2 | 5,393 | 96.6 | 7.4 | 5.7 | 826 |
| Mean for all children | 20.5 | 3.0 | 4.4 | na | na | na | na | na |
| Note: Median and mean durations are based on current status. 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. <br> na $=$ Not applicable <br> ${ }^{1}$ It is assumed that non-last-born children and last born children not living with the mother are not currently breastfeeding <br> ${ }^{2}$ Excludes children who do not have a valid answer on the number of times breastfed <br> ${ }^{3}$ Either exclusively breastfed or received breast milk and plain water, water-based liquids, and/or juice only (excludes other milk) |  |  |  |  |  |  |  |  |

## Complementary Feeding

Because children need foods other than breast milk to meet their dietary needs starting from age 6 months, the 2004-05 TDHS collected data on foods eaten in the 24 hours preceding the survey by breastfeeding and nonbreastfeeding children under three years. Data in Table 11.4 show that less than 1 percent of breastfeeding children below the age of six months consume infant formula. About one-third of breastfeeding children under six months eat solid or semisolid foods. The complementary foods most commonly consumed by breastfeeding children under six months are foods made from grains ( 30 percent) and milk products other than breast milk ( 12 percent). Three percent of children of this age eat fruits and vegetables rich in vitamin A. From age 6-9 months, the variety of foods fed to breastfeeding children expands. Although foods made from grains are still the most common foods ( 89 percent), 45 percent of children eat fruits and vegetables (including 42 percent who eat fruits and vegetables high in vitamin A), 31 percent drink liquids other than breast milk, formula, and water, and 28 percent eat cheese or other milk products. Consumption of meat, fish, poultry, and other foods high in protein becomes more common after 10 months of age.

Table 11.4 Foods consumed by children in the day or night preceding the interview
Percentage of youngest children under three years of age living with the mother who consumed specific foods in the day or night preceding the interview, by breastfeeding status and age, Tanzania 2004-05

| Age in months | Infant formula | Other <br> milk/ <br> cheese/ <br> yogurt | Other liquids ${ }^{1}$ | Food made from grains | Fruits/ egetables ${ }^{2}$ | Food made from roots/ tubers | Food <br> made <br> from <br> legumes | Meat/ fish/ shellfish/ poultry/ eggs | Food made with oil/fat/ butter | Fruits and vegetables rich in vitamin $\mathrm{A}^{3}$ | Any solid or semisolid food | Number <br> of <br> children |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |


| BREASTFEEDING CHILDREN |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $<2$ | 0.1 | 3.5 | 1.2 | 5.4 | 0.3 | 0.0 | 0.0 | 0.0 | 0.4 | 0.3 | 8.2 | 250 |
| 2-3 | 0.4 | 10.9 | 8.8 | 26.3 | 1.2 | 0.1 | 0.9 | 0.5 | 1.6 | 0.8 | 34.1 | 303 |
| 4-5 | 2.0 | 22.5 | 18.4 | 56.5 | 12.1 | 2.3 | 4.7 | 2.9 | 8.8 | 8.6 | 63.0 | 267 |
| 6-7 | 5.3 | 29.6 | 30.7 | 85.1 | 34.7 | 8.4 | 12.5 | 17.0 | 16.1 | 32.7 | 91.7 | 299 |
| 8-9 | 3.1 | 26.6 | 30.9 | 92.2 | 55.4 | 15.3 | 22.4 | 22.9 | 21.3 | 51.5 | 96.3 | 295 |
| 10-11 | 4.0 | 31.3 | 36.5 | 94.1 | 67.2 | 22.4 | 26.0 | 35.5 | 27.9 | 60.3 | 99.1 | 288 |
| 12-15 | 4.7 | 28.2 | 34.4 | 96.3 | 70.2 | 19.4 | 29.5 | 31.5 | 24.3 | 65.1 | 99.5 | 495 |
| 16-19 | 3.7 | 24.9 | 37.5 | 95.7 | 78.6 | 26.0 | 31.4 | 35.9 | 29.9 | 72.8 | 99.2 | 463 |
| 20-23 | 3.2 | 26.1 | 31.8 | 98.6 | 77.7 | 20.8 | 32.0 | 31.5 | 31.5 | 72.6 | 99.6 | 267 |
| 24-35 | 4.6 | 25.2 | 32.4 | 98.5 | 79.1 | 17.5 | 36.7 | 24.9 | 42.1 | 74.5 | 99.4 | 126 |
| $<6$ | 0.8 | 12.4 | 9.6 | 29.8 | 4.5 | 0.8 | 1.9 | 1.2 | 3.6 | 3.2 | 35.6 | 819 |
| 6-9 | 4.2 | 28.1 | 30.8 | 88.6 | 45.0 | 11.8 | 17.4 | 19.9 | 18.7 | 42.0 | 94.0 | 594 |


| NONBREASTFEEDING CHILDREN |  |  |  |  |  |  |  |  |  |  |  |  |
| :--- | :---: | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $12-15$ | $(3.8)$ | $(49.0)$ | $(36.1)$ | $(97.9)$ | $(70.2)$ | $(22.3)$ | $(22.7)$ | $(47.8)$ | $(23.2)$ | $(67.4)$ | $(97.9)$ | 49 |
| $16-19$ | 4.7 | 38.3 | 39.9 | 95.1 | 72.0 | 19.0 | 24.0 | 40.2 | 16.8 | 67.4 | 97.8 | 92 |
| $20-23$ | 5.3 | 33.6 | 38.3 | 94.9 | 76.0 | 20.9 | 26.6 | 41.4 | 25.2 | 73.2 | 98.4 | 215 |
| $24-35$ | 3.2 | 28.4 | 37.8 | 96.2 | 79.2 | 25.1 | 32.4 | 35.0 | 35.7 | 74.2 | 98.4 | 930 |

Note: Breastfeeding status and food consumed refer to a " 24 -hour" period (yesterday and last night). Figures in parentheses are based on 25-49 unweighted cases.
${ }^{1}$ Does not include plain water
${ }^{2}$ Includes fruits and vegetables rich in vitamin A
${ }^{3}$ Includes pumpkin, red or yellow yams or squash, carrots, red sweet potatoes, green leafy vegetables, mangoes, papayas, and other locally grown fruits and vegetables that are rich in vitamin A

Table 11.5 presents the frequency of consumption of complementary foods by children less than three years of age in the day or night preceding the interview. Breastfeeding children age 6-9 months consume foods made from grains on average 2.2 times per day. All other foods are consumed less than one time a day. The frequency of consuming foods made from grains increases with age. By age 24-35 months, the frequency is 2.6 times a day.

| Mean number of times specific foods were consumed in the day or night preceding the interview by youngest children under three years of age living with the mother, according to breastfeeding status and age, Tanzania 2004-05 |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Age in months | Infant formula | Other milk/ cheese/ yogurt | Other liquids ${ }^{1}$ | Food made from grains | Fruits/ vegetables ${ }^{2}$ | Food <br> made <br> from <br> roots/ <br> tubers | Food made from legumes | Meat/ fish/ shellfish/ poultry/ eggs | Food made with oil/ fat/ butter | Fruits and vegetables rich in vitamin $\mathrm{A}^{3}$ | Number of children |
| BREASTFEEDING CHILDREN |  |  |  |  |  |  |  |  |  |  |  |
| <2 | 0.0 | 0.2 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 250 |
| 2-3 | 0.0 | 0.4 | 0.2 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 303 |
| 4-5 | 0.0 | 0.6 | 0.3 | 1.2 | 0.2 | 0.0 | 0.1 | 0.0 | 0.1 | 0.1 | 267 |
| 6-7 | 0.1 | 0.7 | 0.6 | 2.1 | 0.7 | 0.1 | 0.2 | 0.2 | 0.2 | 0.6 | 299 |
| 8-9 | 0.1 | 0.7 | 0.5 | 2.2 | 1.1 | 0.2 | 0.3 | 0.3 | 0.3 | 0.9 | 295 |
| 10-11 | 0.1 | 0.9 | 0.7 | 2.4 | 1.5 | 0.3 | 0.3 | 0.5 | 0.5 | 1.2 | 288 |
| 12-15 | 0.1 | 0.7 | 0.6 | 2.5 | 1.7 | 0.2 | 0.4 | 0.4 | 0.4 | 1.4 | 495 |
| 16-19 | 0.1 | 0.7 | 0.6 | 2.5 | 2.0 | 0.3 | 0.4 | 0.4 | 0.5 | 1.6 | 463 |
| 20-23 | 0.1 | 0.6 | 0.6 | 2.7 | 1.9 | 0.3 | 0.5 | 0.4 | 0.5 | 1.6 | 267 |
| 24-35 | 0.1 | 0.7 | 0.6 | 2.6 | 2.0 | 0.2 | 0.5 | 0.3 | 0.7 | 1.7 | 126 |
| <6 | 0.0 | 0.4 | 0.2 | 0.6 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 819 |
| 6-9 | 0.1 | 0.7 | 0.5 | 2.2 | 0.9 | 0.2 | 0.2 | 0.3 | 0.3 | 0.7 | 594 |
| NONBREASTFEEDING CHILDREN |  |  |  |  |  |  |  |  |  |  |  |
| 12-15 | (0.1) | (1.5) | (0.7) | (2.7) | (1.5) | (0.3) | (0.3) | (0.7) | (0.4) | (1.4) | 49 |
| 16-19 | 0.1 | 1.2 | 0.6 | 2.7 | 1.7 | 0.2 | 0.3 | 0.6 | 0.3 | 1.4 | 92 |
| 20-23 | 0.1 | 0.8 | 0.7 | 2.6 | 1.9 | 0.3 | 0.4 | 0.7 | 0.5 | 1.7 | 215 |
| 24-35 | 0.1 | 0.7 | 0.7 | 2.6 | 2.2 | 0.3 | 0.5 | 0.5 | 0.6 | 1.8 | 930 |
| Note: Breastfeeding status and food consumed refer to a "24-hour" period (yesterday and last night). Figures in parentheses are based on 25-49 unweighted cases. <br> ${ }^{1}$ Does not include plain water <br> ${ }^{2}$ Includes fruits and vegetables rich in vitamin A <br> ${ }^{3}$ Includes pumpkin, red or yellow yams or squash, carrots, red sweet potatoes, green leafy vegetables, mangoes, papayas, and other locally grown fruits and vegetables rich in vitamin A |  |  |  |  |  |  |  |  |  |  |  |

### 11.2 Micronutrient Intake

Micronutrient deficiencies are a major contributor to childhood morbidity and mortality. Micronutrient deficiencies result from inadequate intake of micronutrient-rich foods and inadequate utilisation of available micronutrients because of infections, parasitic infestations, or other factors in the diet such as phytates and tannins. Measures of micronutrient fortification (iodised household cooking salt), micronutrient supplementation (iron and vitamin A), and micronutrient status (anaemia and nightblindness) are included in the survey.

## Iodisation of Household Salt

Iodine deficiency has serious effects on normal body growth and intellectual development. Disorders arising from iodine deficiency range from simple goitre to mental and neurological disorders. Deficiency of iodine also causes abortions, stillbirths, low birth weight infants, and premature births. The principal cause of iodine deficiency disorders is inadequate iodine in foods. Since iodine cannot be stored for long periods by the body, tiny amounts are needed regularly ( 100 to 150 micrograms per day per person). Where crops and grazing animals do not provide sufficient dietary iodine to the population, food fortification and supplementation have proven to be highly successful and sustainable interventions. The fortification of salt with iodine is the most common method of preventing iodine deficiency. Fortified salt that contains 15 parts per million (ppm) of iodine is considered adequate for the prevention of iodine deficiency.

To assess the use of adequately iodised salt in Tanzania, the 2004-05 TDHS included a component in which interviewers asked respondents to provide a teaspoon of salt used for cooking, which they then subjected to a simple rapid test for potassium iodate. Table 11.6 shows that salt was tested for iodine in 93 percent of households. Forty-three percent of households tested use salt that is adequately iodised. The percentage of households using adequately iodised salt in urban areas ( 72 percent) is twice that in rural areas ( 34 percent). The percentage of households with adequately iodised salt is much higher in the Mainland (44 percent) than Zanzibar (18 percent). Lindi and Pemba North regions have the highest proportion of households using salt with no iodine ( 80 percent). Regions with a high percentage of households using adequately iodised salt include Arusha (93 percent), Dar es Salaam (87 percent), and Kilimanjaro (80 percent). Households in the higher wealth quintiles are more likely to use salt that is adequately iodised.

Although only 44 percent of households on the Mainland were found to use adequately iodised salt, 74 percent were found to have at least some iodine. An Iodine Deficiency Disorders evaluation survey conducted by the Tanzania Food and Nutrition Centre (TFNC) in Mainland Tanzania in 2004 found and estimated prevalence of 84 percent of households with iodised salt (TFNC, 2004a). Thus, the results from the two studies do not differ substantially when sampling variation and test kit accuracy are taken into consideration. Furthermore, the two studies have similar findings in terms of regional differentials. For example, the Lindi region in both reports has the lowest prevalence of households using iodised salt, and Arusha, Dar es Salaam, and Kilimanjaro are among the regions with high prevalence of households using iodised salt.

| Table 11.6 lodisation of household salt |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percent distribution of households with salt tested for iodine content by level of iodine (parts per million), percentage of households tested, and percentage of households with no salt, according to background characteristics, Tanzania 2004-05 |  |  |  |  |  |  |  |  |
|  | lodine content among households tested: |  |  |  | Number of households | Percentage of households tested | Percentage of households with no salt | Number of households |
| Background characteristic | $\begin{gathered} \hline \text { None } \\ (0 \mathrm{ppm}) \end{gathered}$ | Inadequate ( $<15 \mathrm{ppm}$ ) | Adequate $(15+\mathrm{ppm})$ | Total |  |  |  |  |
| Residence |  |  |  |  |  |  |  |  |
| Urban | 11.6 | 16.6 | 71.7 | 100.0 | 2,326 | 90.5 | 7.9 | 2,569 |
| Rural | 32.1 | 34.3 | 33.5 | 100.0 | 6,700 | 93.5 | 5.8 | 7,166 |
| Mainland/Zanzibar |  |  |  |  |  |  |  |  |
| Mainland | 26.2 | 29.8 | 44.1 | 100.0 | 8,790 | 92.7 | 6.4 | 9,483 |
| Total urban | 10.6 | 16.2 | 73.2 | 100.0 | 2,320 | 90.4 | 7.9 | 2,565 |
| Dar es Salaam city | 2.4 | 10.3 | 87.3 | 100.0 | 757 | 87.2 | 9.7 | 868 |
| Other urban | 14.6 | 19.0 | 66.4 | 100.0 | 1,563 | 92.1 | 7.0 | 1,697 |
| Total rural | 31.8 | 34.6 | 33.6 | 100.0 | 6,470 | 93.5 | 5.8 | 6,918 |
| Zanzibar | 51.8 | 29.9 | 18.3 | 100.0 | 237 | 93.8 | 5.4 | 252 |
| Unguja | 45.3 | 33.6 | 21.1 | 100.0 | 157 | 93.9 | 5.8 | 167 |
| Pemba | 64.7 | 22.7 | 12.6 | 100.0 | 80 | 93.8 | 4.8 | 85 |
| Zone |  |  |  |  |  |  |  |  |
| Western | 15.9 | 44.4 | 39.7 | 100.0 | 1,380 | 93.6 | 5.4 | 1,474 |
| Northern | 30.1 | 7.8 | 62.1 | 100.0 | 1,327 | 89.3 | 10.0 | 1,486 |
| Central | 49.1 | 31.7 | 19.2 | 100.0 | 771 | 94.0 | 5.3 | 820 |
| Southern highlands | 31.9 | 29.4 | 38.8 | 100.0 | 1,305 | 91.7 | 6.8 | 1,424 |
| Lake | 15.1 | 34.8 | 50.1 | 100.0 | 1,603 | 95.2 | 4.5 | 1,684 |
| Eastern | 8.0 | 29.2 | 62.7 | 100.0 | 1,513 | 90.9 | 7.5 | 1,665 |
| Southern | 58.8 | 30.7 | 10.6 | 100.0 | 890 | 95.7 | 3.6 | 930 |
| Region |  |  |  |  |  |  |  |  |
| Dodoma | 38.5 | 38.3 | 23.2 | 100.0 | 483 | 92.8 | 6.4 | 520 |
| Arusha | 6.0 | 0.7 | 93.3 | 100.0 | 281 | 80.6 | 18.5 | 349 |
| Kilimanjaro | 13.8 | 5.9 | 80.3 | 100.0 | 380 | 93.2 | 6.0 | 408 |
| Tanga | 51.0 | 15.1 | 33.8 | 100.0 | 404 | 92.1 | 7.4 | 438 |
| Morogoro | 9.5 | 52.1 | 38.4 | 100.0 | 488 | 95.1 | 4.9 | 514 |
| Pwani | 21.4 | 40.9 | 37.8 | 100.0 | 268 | 94.6 | 5.4 | 283 |
| Dar es Salaam | 2.4 | 10.3 | 87.3 | 100.0 | 757 | 87.2 | 9.7 | 868 |
| Lindi | 79.6 | 10.0 | 10.3 | 100.0 | 237 | 96.1 | 2.7 | 247 |
| Mtwara | 58.7 | 36.7 | 4.6 | 100.0 | 365 | 96.5 | 2.5 | 379 |
| Ruvuma | 41.8 | 40.0 | 18.3 | 100.0 | 287 | 94.4 | 5.6 | 304 |
| Iringa | 57.6 | 28.2 | 14.2 | 100.0 | 474 | 99.0 | 1.0 | 479 |
| Mbeya | 16.3 | 28.0 | 55.7 | 100.0 | 587 | 88.5 | 9.1 | 664 |
| Singida | 66.8 | 20.5 | 12.7 | 100.0 | 289 | 96.0 | 3.6 | 300 |
| Tabora | 17.1 | 50.9 | 32.0 | 100.0 | 370 | 95.0 | 4.4 | 390 |
| Rukwa | 19.3 | 35.0 | 45.7 | 100.0 | 244 | 86.8 | 11.2 | 280 |
| Kigoma | 9.8 | 41.0 | 49.2 | 100.0 | 398 | 90.4 | 9.2 | 441 |
| Shinyanga | 19.1 | 42.6 | 38.3 | 100.0 | 612 | 95.1 | 3.4 | 644 |
| Kagera | 25.0 | 36.7 | 38.3 | 100.0 | 518 | 92.4 | 7.0 | 560 |
| Mwanza | 11.4 | 40.2 | 48.3 | 100.0 | 761 | 97.7 | 1.9 | 778 |
| Mara | 8.0 | 18.8 | 73.2 | 100.0 | 324 | 93.8 | 6.2 | 345 |
| Manyara | 47.4 | 7.0 | 45.6 | 100.0 | 263 | 90.3 | 9.2 | 291 |
| Zanzibar North | 53.6 | 27.2 | 19.2 | 100.0 | 39 | 91.4 | 8.1 | 43 |
| Zanzibar South | 47.6 | 34.8 | 17.5 | 100.0 | 25 | 94.4 | 5.6 | 26 |
| Town West | 41.2 | 35.9 | 22.9 | 100.0 | 93 | 94.8 | 4.9 | 99 |
| Pemba North | 80.4 | 14.8 | 4.8 | 100.0 | 42 | 93.9 | 5.1 | 45 |
| Pemba South | 47.0 | 31.6 | 21.3 | 100.0 | 38 | 93.8 | 4.3 | 40 |
| Wealth quintile |  |  |  |  |  |  |  |  |
| Lowest | 39.9 | 35.3 | 24.9 | 100.0 | 1,697 | 92.4 | 7.2 | 1,837 |
| Second | 34.6 | 36.8 | 28.6 | 100.0 | 1,785 | 92.6 | 6.5 | 1,928 |
| Middle | 32.3 | 34.4 | 33.3 | 100.0 | 1,789 | 93.2 | 6.3 | 1,920 |
| Fourth | 21.6 | 30.1 | 48.3 | 100.0 | 1,800 | 94.0 | 5.0 | 1,914 |
| Highest | 8.3 | 14.0 | 77.7 | 100.0 | 1,955 | 91.5 | 6.7 | 2,135 |
| Total | 26.9 | 29.8 | 43.4 | 100.0 | 9,027 | 92.7 | 6.3 | 9,735 |

## Micronutrient Intake among Children

Vitamin A is an essential micronutrient for 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 (xerophthalmia) and is the leading cause of childhood blindness. VAD also increases severity of infections such as measles and diarrhoeal diseases in children and slows recovery from illness. VAD is common in dry environments where fresh fruits and vegetables are not readily available. Vitamin A is found in breast milk, other milks, liver, eggs, fish, butter, red palm oil, mangoes, papayas, carrots, pumpkins, and dark green leafy vegetables. Vitamin A is a fat-soluble vitamin, which means that consumption of oils or fats are necessary for its absorption into the body. The liver can store an adequate amount of the vitamin for four to six months. Periodic dosing (every six months) with vitamin A supplements is a rapid, low-cost method of ensuring children at risk do not develop VAD.

Table 11.7 shows the percentage of youngest children less than three years of age who consumed fruits and vegetables rich in vitamin $A$, the proportion of children 6-59 months who received vitamin A supplementation, and the proportion of children under age five who live in households that use adequately iodised salt.

More than half ( 54 percent) of children ate fruits and vegetables rich in vitamin A in the day or night preceding the interview. The consumption of fruits and vegetables rich in vitamin A differs by age of the child and by breastfeeding status. As expected, nonbreastfeeding children are more likely to have consumed vitamin A rich fruits and vegetables (72 percent) than breastfeeding children ( 46 percent). Children below six months do not need to receive any foods other than breast milk. However, three percent of these children receive fruits and vegetables rich in vitamin A. By the age of six months, all children should be receiving some complementary foods rich in vitamin A. The percentage of children consuming fruits and vegetables rich in vitamin A in the day or night preceding the survey increases steadily with age from 42 percent among children 6-9 months to 74 percent of children 24-35 months.

Children born to mothers with secondary school education or higher are more likely to have received fruits and vegetables rich in vitamin A in the day or night preceding the interview ( 67 percent) than those born to mothers with no education ( 51 percent). More than half of children in rural areas consumed fruits and vegetables rich in vitamin A ( 52 percent) compared with 61 percent of children in urban areas. By region, consumption of fruits and vegetables rich in vitamin A by children under age three ranges from 71 percent in Mtwara to 32 percent in Pemba South.

About half of children age six months to five years ( 46 percent) received a vitamin A supplement in the six months preceding the survey; this is a three-fold increase over the 14 percent estimated in the 1999 TRCHS. The proportion of children age 6-9 months who received a vitamin A supplement ( 27 percent) is much lower than that of children age 10-11 months ( 50 percent).

Vitamin A supplementation is less common in Zanzibar, especially Pemba, than in the Mainland. Vitamin A supplementation ranges from a low of less than two in ten children in Pemba North, Pemba South, and Rukwa to a high of more than six in ten in Dodoma, Kigoma, and Shinyanga. The likelihood of having received a vitamin A supplement is higher in urban areas and among children of mothers with higher educational attainment and wealth. For example, vitamin A supplementation ranges from 33 percent of children with mothers with no education to 53 percent of children with mothers with at least some secondary education.

| Percentage of youngest children under age three living with the mother who consumed fruits and vegetables rich in vitamin $A$ in the day or night preceding the interview, percentage of children age 6-59 months who received vitamin A supplements in the six months preceding the survey, and percentage of children under five living in households using adequately iodised salt, by background characteristics, Tanzania 2004-05 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Background characteristic | Consumed fruits and vegetables rich in vitamin $\mathrm{A}^{1}$ | Number of children | Consumed vitamin A supplements | Number of children | Percentage living in households using adequately iodised salt ${ }^{2}$ | Number of children |
| Age in months |  |  |  |  |  |  |
| <6 | 3.3 | 837 | na | na | 38.2 | 811 |
| 6-9 | 42.2 | 606 | 27.4 | 612 | 42.4 | 582 |
| 10-11 | 59.2 | 299 | 49.8 | 304 | 36.4 | 282 |
| 12-23 | 69.9 | 1,582 | 49.1 | 1,658 | 39.2 | 1,596 |
| 24-35 | 74.3 | 1,056 | 49.8 | 1,611 | 42.1 | 1,542 |
| 36-47 | na | na | 46.8 | 1,510 | 42.3 | 1,431 |
| 48-59 | na | na | 41.9 | 1,434 | 37.5 | 1,371 |
| Sex |  |  |  |  |  |  |
| Male | 52.2 | 2,155 | 44.2 | 3,579 | 39.6 | 3,788 |
| Female | 55.1 | 2,225 | 46.8 | 3,552 | 40.6 | 3,827 |
| Birth order |  |  |  |  |  |  |
| 1 | 55.3 | 912 | 45.0 | 1,584 | 46.3 | 1,663 |
| 2-3 | 54.8 | 1,573 | 48.5 | 2,582 | 41.5 | 2,756 |
| 4-5 | 50.3 | 932 | 46.0 | 1,484 | 39.1 | 1,584 |
| 6+ | 53.4 | 962 | 40.1 | 1,480 | 32.3 | 1,612 |
| Breastfeeding status |  |  |  |  |  |  |
| Breastfeeding | 45.8 | 3,053 | 44.5 | 2,277 | 38.6 | 2,967 |
| Not breastfeeding | 71.9 | 1,321 | 45.9 | 4,824 | 41.0 | 4,620 |
| Residence |  |  |  |  |  |  |
| Urban | 60.8 | 865 | 54.0 | 1,398 | 67.3 | 1,491 |
| Rural | 51.9 | 3,514 | 43.4 | 5,732 | 33.5 | 6,124 |
| Mainland/Zanzibar |  |  |  |  |  |  |
| Mainland | 53.9 | 4,267 | 46.1 | 6,949 | 40.7 | 7,420 |
| Total urban | 61.6 | 851 | 54.4 | 1,382 | 69.0 | 1,471 |
| Dar es Salaam city | 68.3 | 223 | 54.9 | 361 | 82.4 | 383 |
| Other urban | 59.2 | 629 | 54.3 | 1,021 | 64.4 | 1,088 |
| Total rural | 52.0 | 3,415 | 44.0 | 5,567 | 33.7 | 5,949 |
| Zanzibar | 46.1 | 113 | 22.4 | 181 | 18.3 | 195 |
| Unguja | 50.2 | 71 | 27.4 | 109 | 23.4 | 120 |
| Pemba | 39.2 | 42 | 14.8 | 72 | 10.3 | 75 |
| Zone |  |  |  |  |  |  |
| Western | 50.3 | 948 | 52.7 | 1,548 | 36.5 | 1,686 |
| Northern | 52.4 | 561 | 46.2 | 940 | 56.6 | 939 |
| Central | 56.9 | 372 | 63.7 | 588 | 17.6 | 635 |
| Southern highlands | 58.0 | 654 | 31.4 | 1,066 | 36.4 | 1,100 |
| Lake | 43.3 | 905 | 41.1 | 1,497 | 49.3 | 1,640 |
| Eastern | 64.4 | 491 | 52.2 | 792 | 57.7 | 865 |
| Southern | 68.2 | 335 | 41.2 | 518 | 9.4 | 555 |
| Continued... |  |  |  |  |  |  |


| Table 11.7-Continued |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percentage of youngest children under age three living with the mother who consumed fruits and vegetables rich in vitamin A in the day or night preceding the interview, percentage of children age 6-59 months who received vitamin A supplements in the six months preceding the survey, and percentage of children under five living in households using adequately iodised salt, by background characteristics, Tanzania 2004-05 |  |  |  |  |  |  |
| Background characteristic | Consumed fruits and vegetables rich in vitamin $\mathrm{A}^{1}$ | Number of children | Consumed vitamin A supplements | Number of children | Percentage living in households using adequately iodised salt ${ }^{2}$ | Number of children |
| Region |  |  |  |  |  |  |
| Dodoma | 51.7 | 224 | 67.0 | 334 | 22.3 | 360 |
| Arusha | 54.0 | 151 | 58.1 | 249 | 91.6 | 224 |
| Kilimanjaro | 46.3 | 103 | 59.4 | 174 | 74.0 | 183 |
| Tanga | 54.1 | 171 | 30.3 | 285 | 31.4 | 293 |
| Morogoro | 56.5 | 164 | 44.4 | 271 | 38.0 | 306 |
| Pwani | 68.7 | 105 | 59.4 | 159 | 38.3 | 176 |
| Dar es Salaam | 68.3 | 223 | 54.9 | 361 | 82.4 | 383 |
| Lindi | 59.7 | 78 | 38.2 | 123 | 7.2 | 127 |
| Mtwara | 71.3 | 130 | 41.5 | 207 | 4.8 | 227 |
| Ruvuma | 70.4 | 127 | 42.9 | 188 | 16.1 | 201 |
| Iringa | 56.8 | 152 | 54.1 | 237 | 9.7 | 264 |
| Mbeya | 61.3 | 340 | 28.5 | 554 | 47.0 | 565 |
| Singida | 64.8 | 148 | 59.4 | 253 | 11.4 | 274 |
| Tabora | 63.6 | 265 | 25.2 | 410 | 28.2 | 450 |
| Rukwa | 52.0 | 162 | 17.8 | 275 | 40.2 | 271 |
| Kigoma | 44.7 | 241 | 64.1 | 385 | 49.1 | 407 |
| Shinyanga | 45.3 | 442 | 61.9 | 753 | 34.7 | 829 |
| Kagera | 37.2 | 286 | 41.8 | 454 | 38.3 | 482 |
| Mwanza | 46.0 | 430 | 39.4 | 735 | 45.7 | 816 |
| Mara | 46.5 | 188 | 44.2 | 308 | 73.3 | 342 |
| Manyara | 53.0 | 137 | 42.9 | 232 | 41.4 | 239 |
| Zanzibar North | 60.4 | 16 | 29.0 | 26 | 17.9 | 29 |
| Zanzibar South | 41.7 | 9 | 26.9 | 15 | 18.6 | 17 |
| Town West | 48.3 | 45 | 26.9 | 68 | 26.6 | 74 |
| Pemba North | 45.6 | 23 | 12.5 | 36 | 2.4 | 38 |
| Pemba South | 32.1 | 20 | 17.1 | 36 | 18.4 | 37 |
| Mother's education |  |  |  |  |  |  |
| No education | 50.6 | 1,130 | 32.5 | 1,882 | 29.5 | 1,977 |
| Primary incomplete | 51.3 | 668 | 40.2 | 1,127 | 37.4 | 1,195 |
| Primary complete | 54.6 | 2,361 | 52.9 | 3,801 | 44.2 | 4,088 |
| Secondary+ | 66.8 | 221 | 53.2 | 321 | 60.8 | 356 |
| Mother's age at birth |  |  |  |  |  |  |
| <20 | 54.7 | 692 | 42.2 | 1,234 | 43.0 | 1,278 |
| 20-24 | 52.5 | 1,257 | 45.8 | 2,114 | 41.8 | 2,246 |
| 25-29 | 54.4 | 1,086 | 49.6 | 1,780 | 39.5 | 1,899 |
| 30-34 | 52.2 | 761 | 46.0 | 1,139 | 40.3 | 1,255 |
| 35-49 | 55.5 | 583 | 40.5 | 863 | 33.0 | 937 |
| Wealth quintile |  |  |  |  |  |  |
| Lowest | 54.7 | 964 | 36.1 | 1,625 | 26.6 | 1,703 |
| Second | 56.5 | 925 | 42.0 | 1,506 | 30.5 | 1,588 |
| Middle | 45.5 | 930 | 44.7 | 1,480 | 32.9 | 1,614 |
| Fourth | 52.1 | 860 | 52.2 | 1,404 | 48.0 | 1,499 |
| Highest | 61.3 | 701 | 56.4 | 1,115 | 71.5 | 1,211 |
| Total | 53.7 | 4,380 | 45.5 | 7,130 | 40.1 | 7,615 |

Note: Information on vitamin A supplements is based on mother's recall. Total includes 28 children with missing information on breastfeeding status.
na $=$ Not applicable
${ }^{1}$ Includes pumpkin, red or yellow yams or squash, carrots, red sweet potatoes, green leafy vegetables, mangoes, papayas, and other locally grown fruits and vegetables that are rich in vitamin A ${ }^{2}$ Salt containing 15 ppm of iodine or more. Excludes children in households in which salt was not tested

These results differ from the findings of other recent investigations into the coverage of vitamin A supplementation for children. Although the 2004-05 TDHS data suggest a large increase over the results of the 1999 TRCHS, other recent data indicate that the coverage of vitamin A supplementation may be even higher (TFNC, 2004a; Ndossi, 2004). A TFNC report based on health facility data showed nine in ten children receiving vitamin A supplements. A population-based assessment by Helen Keller International also reported that eight in ten children on the Mainland are
covered. A thorough investigation into the reasons for the discrepancies among these findings is beyond the scope of this report. However, some potential causes of the differences could include: the wording of the question; the implementation of the question (e.g., whether samples of vitamin A capsules are shown to the respondent, and if so, which samples, and whether source of data is a health card or mother's memory); training of interviewers; sample design; and timing of the data collection with respect to program interventions.

Table 11.7 also shows that four in ten children live in households that use adequately iodised salt. Consumption of iodised salt varies substantially by wealth quintile of the household, education of the mother, residence, and zone. One in four children in the lowest wealth quintile live in a household with adequately iodised salt, compared with 72 percent of children in the highest wealth quintile. Twice as many children in urban areas live in households with adequately iodised salt (67 percent) than children in rural areas ( 34 percent). The consumption of iodised salt is high in the Northern and Eastern zones (57 and 58 percent, respectively) and low in the Southern zone (9 percent).

## Micronutrient Intake among Women

In the 2004-05 TDHS, women were asked if they suffered from night blindness during their last pregnancy. Night blindness is an indicator of severe vitamin A deficiency, from which pregnant women are especially prone to suffer. A single postpartum dose of vitamin A (200,000 IU) given to women within eight weeks of childbirth treats night blindness and increases the vitamin A content of breast milk, which reduces the risk of VAD among breastfed children. Because of the risk of adverse effects (birth defects) resulting from high doses of vitamin A during pregnancy, a standard vitamin A supplement cannot be given to pregnant women. The Ministry of Health policy regarding vitamin A supplementation of postpartum women is to provide a high-dose vitamin A capsule within the first four weeks after delivery.

Table 11.8 shows that only 20 percent of women who gave birth in the five years preceding the survey received vitamin A supplementation within two months after childbirth. Vitamin A supplementation varies with background characteristics, including the age of the mother, level of mother's education, parity, residence, and region.

Supplementation with vitamin A is slightly higher among younger women and women with fewer births. Women with at least some secondary education are almost four times as likely to have received a vitamin A supplement within two months after childbirth as mothers with no education (41 and 11 percent, respectively). A similar relationship is observed between vitamin A supplementation and wealth quintile. Vitamin A supplementation is more common in urban than rural areas. One in three women in urban settings received a vitamin A supplement, compared with 16 percent of rural women. There is also a variation in supplementation by region. Iringa is the highest with 43 percent of women having received a vitamin A supplement, while Rukwa is the lowest (3 percent).

Table 11.8 shows that 3 percent of women with a recent birth reported that they experienced night blindness. After adjusting for women who also reported vision problems during the day, an estimated 1 percent of women suffered from night blindness. Differences by background characteristics are minimal.

Nutritional deficiencies like anaemia are often exacerbated during pregnancy because of the additional nutrient demands associated with foetal growth. Iron status can be improved by means of iron supplements for women along with improved diets and control of parasites and malaria. Iron supplementation is necessary for pregnant women because their needs are usually too high to be met solely by food intake. Taking iron tablets daily for at least 90 days is now recommended for pregnant women.

## Table 11.8 Micronutrient intake among mothers

Percentage of women with a birth in the five years preceding the survey who received a vitamin A dose in the first two months after delivery, percentage who suffered from night blindness during pregnancy, percentage who took iron tablets or syrup for specific number of days, and percentage who live in households using adequately iodised salt, by background characteristics, Tanzania 2004-05

| Background characteristic | Received vitamin A dose post partum ${ }^{1}$ | Night blindness reported | Night blindness adjusted $^{2}$ | Number of days iron tablets/syrup taken during pregnancy |  |  |  |  | $\begin{gathered} \text { Number } \\ \text { of } \\ \text { women } \\ \hline \end{gathered}$ | Percentage living in households using adequately iodised salt ${ }^{3}$ | $\begin{aligned} & \text { Number } \\ & \text { of } \\ & \text { women } \\ & \hline \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | None | $<60$ | 60-89 | 90+ | Don't know/ missing |  |  |  |
| Age at birth |  |  |  |  |  |  |  |  |  |  |  |
| <20 | 21.0 | 2.4 | 0.5 | 33.1 | 45.5 | 7.2 | 11.7 | 2.6 | 906 | 43.5 | 859 |
| 20-24 | 21.7 | 2.4 | 0.9 | 38.9 | 43.3 | 5.0 | 10.9 | 1.9 | 1,624 | 43.7 | 1,550 |
| 25-29 | 21.2 | 2.1 | 0.8 | 38.8 | 44.6 | 6.7 | 7.8 | 2.0 | 1,391 | 41.6 | 1,320 |
| 30-34 | 18.6 | 2.6 | 0.8 | 38.5 | 41.8 | 6.7 | 9.9 | 3.1 | 998 | 41.5 | 963 |
| 35-49 | 16.4 | 4.8 | 1.4 | 41.6 | 41.4 | 5.2 | 8.9 | 3.0 | 853 | 33.6 | 818 |
| Number of children ever born |  |  |  |  |  |  |  |  |  |  |  |
| 1 | 24.3 | 1.7 | 0.3 | 33.2 | 45.0 | 6.6 | 12.4 | 2.8 | 1,178 | 46.0 | 1,127 |
| 2-3 | 23.4 | 2.5 | 1.0 | 38.1 | 43.5 | 6.2 | 10.3 | 1.8 | 2,097 | 44.7 | 2,010 |
| 4-5 | 17.4 | 2.5 | 0.9 | 39.0 | 42.1 | 6.6 | 9.6 | 2.7 | 1,204 | 39.6 | 1,127 |
| 6+ | 13.7 | 4.1 | 1.2 | 42.6 | 43.0 | 4.9 | 6.8 | 2.7 | 1,293 | 33.0 | 1,245 |
| Residence |  |  |  |  |  |  |  |  |  |  |  |
| Urban | 34.2 | 1.6 | 0.5 | 36.6 | 43.2 | 6.8 | 11.7 | 1.8 | 1,277 | 67.9 | 1,227 |
| Rural | 16.2 | 3.0 | 1.0 | 38.8 | 43.4 | 5.9 | 9.3 | 2.6 | 4,496 | 33.6 | 4,282 |
| Mainland/Zanzibar |  |  |  |  |  |  |  |  |  |  |  |
| Mainland | 20.3 | 2.7 | 0.9 | 38.2 | 43.5 | 6.1 | 9.8 | 2.4 | 5,628 | 41.9 | 5,371 |
| Total urban | 34.1 | 1.6 | 0.5 | 35.9 | 43.5 | 6.9 | 11.9 | 1.7 | 1,269 | 69.6 | 1,217 |
| Dar es Salaam city | 32.2 | 0.8 | 0.0 | 27.0 | 45.6 | 11.1 | 15.8 | 0.5 | 369 | 83.7 | 357 |
| Other urban | 34.9 | 1.9 | 0.7 | 39.6 | 42.7 | 5.2 | 10.3 | 2.2 | 900 | 63.7 | 860 |
| Total rural | 16.3 | 3.0 | 1.0 | 38.8 | 43.5 | 5.9 | 9.2 | 2.6 | 4,359 | 33.7 | 4,154 |
| Zanzibar | 13.0 | 2.4 | 0.5 | 43.7 | 39.0 | 6.0 | 9.1 | 2.1 | 144 | 18.4 | 138 |
| Unguja | 13.9 | 2.2 | 0.8 | 39.8 | 35.0 | 8.8 | 13.8 | 2.6 | 93 | 22.4 | 89 |
| Pemba | 11.5 | 2.7 | 0.0 | 50.9 | 46.2 | 0.9 | 0.7 | 1.3 | 51 | 11.0 | 49 |
| Zone |  |  |  |  |  |  |  |  |  |  |  |
| Western | 18.3 | 5.1 | 0.8 | 40.6 | 46.8 | 4.2 | 7.3 | 1.1 | 1,143 | 37.6 | 1,098 |
| Northern | 23.3 | 2.8 | 0.9 | 43.4 | 47.5 | 2.9 | 1.9 | 4.3 | 774 | 58.3 | 698 |
| Central | 16.1 | 2.5 | 1.6 | 32.3 | 48.8 | 7.9 | 8.1 | 2.9 | 473 | 17.9 | 452 |
| Southern highlands | 17.6 | 2.1 | 0.9 | 37.7 | 39.0 | 8.0 | 12.6 | 2.8 | 844 | 37.0 | 793 |
| Lake | 20.3 | 2.2 | 1.1 | 39.8 | 51.3 | 3.7 | 1.9 | 3.3 | 1,126 | 50.9 | 1,098 |
| Eastern | 25.4 | 0.4 | 0.0 | 43.3 | 35.9 | 7.7 | 11.2 | 1.8 | 766 | 59.8 | 748 |
| Southern | 21.3 | 3.0 | 1.4 | 19.2 | 26.6 | 13.4 | 40.4 | 0.4 | 503 | 10.0 | 485 |
| Region |  |  |  |  |  |  |  |  |  |  |  |
| Dodoma | 17.4 | 2.6 | 1.6 | 40.1 | 42.6 | 7.9 | 7.6 | 1.9 | 277 | 22.0 | 263 |
| Arusha | 29.0 | 4.4 | 1.2 | 61.5 | 33.3 | 1.5 | 1.9 | 1.9 | 205 | 92.9 | 167 |
| Kilimanjaro | 25.0 | 1.7 | 0.0 | 36.9 | 48.0 | 6.0 | 0.7 | 8.4 | 145 | 75.6 | 138 |
| Tanga | 20.1 | 0.9 | 0.5 | 32.9 | 57.2 | 2.7 | 1.9 | 5.2 | 250 | 31.0 | 230 |
| Morogoro | 19.9 | 0.0 | 0.0 | 60.0 | 25.5 | 4.1 | 5.7 | 4.7 | 253 | 37.8 | 248 |
| Pwani | 17.6 | 0.0 | 0.0 | 55.8 | 29.6 | 5.5 | 9.1 | 0.0 | 144 | 38.6 | 143 |
| Dar es Salaam | 32.2 | 0.8 | 0.0 | 27.0 | 45.6 | 11.1 | 15.8 | 0.5 | 369 | 83.7 | 357 |
| Lindi | 17.3 | 1.2 | 0.0 | 11.4 | 24.7 | 17.6 | 46.3 | 0.0 | 117 | 8.8 | 111 |
| Mtwara | 15.8 | 2.9 | 1.0 | 11.3 | 12.4 | 12.5 | 63.8 | 0.0 | 201 | 5.4 | 198 |
| Ruvuma | 29.8 | 4.3 | 2.6 | 32.7 | 43.3 | 11.8 | 11.2 | 1.0 | 185 | 15.9 | 176 |
| Iringa | 42.6 | 3.9 | 2.2 | 44.9 | 35.5 | 6.7 | 12.3 | 0.6 | 216 | 11.3 | 215 |
| Mbeya | 11.8 | 1.8 | 0.4 | 31.9 | 42.2 | 7.8 | 14.1 | 4.1 | 425 | 48.2 | 397 |
| Singida | 14.3 | 2.4 | 1.5 | 21.4 | 57.4 | 8.0 | 8.9 | 4.3 | 196 | 12.3 | 189 |
| Tabora | 13.9 | 8.5 | 1.3 | 37.2 | 58.9 | 1.6 | 0.7 | 1.5 | 311 | 29.9 | 299 |
| Rukwa | 3.2 | 0.8 | 0.4 | 42.0 | 36.1 | 9.7 | 9.8 | 2.4 | 203 | 42.7 | 181 |
| Kigoma | 25.2 | 2.8 | 0.4 | 45.2 | 47.2 | 3.7 | 3.5 | 0.4 | 282 | 50.5 | 265 |
| Shinyanga | 17.2 | 4.4 | 0.7 | 40.3 | 39.7 | 5.8 | 12.9 | 1.2 | 550 | 35.6 | 533 |
| Kagera | 18.8 | 0.0 | 0.0 | 42.3 | 48.8 | 4.7 | 1.6 | 2.6 | 351 | 39.4 | 329 |
| Mwanza | 23.6 | 2.0 | 1.7 | 39.7 | 54.7 | 0.3 | 0.7 | 4.6 | 546 | 48.3 | 545 |
| Mara | 14.6 | 5.9 | 1.5 | 36.2 | 46.9 | 10.3 | 5.4 | 1.2 | 229 | 74.1 | 224 |
| Manyara | 19.8 | 4.6 | 1.8 | 42.7 | 49.9 | 1.9 | 2.8 | 2.6 | 173 | 46.8 | 164 |
| Zanzibar North | 8.4 | 3.6 | 2.3 | 27.3 | 45.0 | 9.9 | 16.5 | 1.4 | 21 | 16.9 | 20 |
| Zanzibar South | 12.8 | 1.5 | 0.0 | 24.7 | 39.3 | 9.0 | 20.6 | 6.4 | 13 | 19.1 | 13 |
| Town West | 16.0 | 1.8 | 0.5 | 47.6 | 30.6 | 8.4 | 11.3 | 2.2 | 59 | 25.1 | 56 |
| Pemba North | 9.9 | 2.6 | 0.0 | 58.3 | 40.2 | 1.2 | 0.3 | 0.0 | 27 | 3.5 | 26 |
| Pemba South | 13.3 | 2.8 | 0.0 | 42.6 | 53.0 | 0.5 | 1.0 | 2.8 | 24 | 19.6 | 23 |
|  |  |  |  |  |  |  |  |  |  |  | tinued... |


| Table 11.8-Continued |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percentage of women with a birth in the five years preceding the survey who received a vitamin A dose in the first two months after delivery, percentage who suffered from night blindness during pregnancy, percentage who took iron tablets or syrup for specific number of days, and percentage who live in households using adequately iodised salt, by background characteristics, Tanzania 2004-05 |  |  |  |  |  |  |  |  |  |  |  |
|  | Received vitamin A dose postpartum ${ }^{1}$ | Night blindness reported | Night blindness adjusted $^{2}$ | Number of days iron tablets/syrup taken during pregnancy |  |  |  |  | Number of women | Percentage living in households using adequately iodised salt ${ }^{3}$ | Number of women |
| Background characteristic |  |  |  | None | $<60$ | 60-89 | 90+ | $\begin{gathered} \hline \text { Don't } \\ \text { know/ } \\ \text { missing } \\ \hline \end{gathered}$ |  |  |  |
| Education |  |  |  |  |  |  |  |  |  |  |  |
| No education | 11.0 | 3.6 | 1.1 | 41.2 | 42.0 | 5.2 | 8.8 | 2.9 | 1,466 | 29.5 | 1,385 |
| Primary incomplete | 16.8 | 2.5 | 0.6 | 34.7 | 46.6 | 7.0 | 10.4 | 1.3 | 910 | 36.8 | 859 |
| Primary complete | 23.5 | 2.6 | 0.9 | 37.7 | 43.5 | 6.5 | 9.9 | 2.4 | 3,094 | 45.8 | 2,967 |
| Secondary+ | 40.5 | 0.4 | 0.0 | 41.1 | 39.8 | 4.0 | 11.8 | 3.3 | 302 | 63.6 | 297 |
| Wealth quintile |  |  |  |  |  |  |  |  |  |  |  |
| Lowest | 11.3 | 2.8 | 0.8 | 39.9 | 42.5 | 4.8 | 10.3 | 2.5 | 1,226 | 26.1 | 1,147 |
| Second | 14.4 | 3.1 | 1.2 | 34.8 | 46.8 | 5.9 | 10.1 | 2.4 | 1,187 | 30.8 | 1,129 |
| Middle | 16.2 | 3.1 | 0.5 | 40.8 | 41.8 | 6.6 | 8.0 | 2.9 | 1,166 | 32.4 | 1,112 |
| Fourth | 24.0 | 2.6 | 1.1 | 40.2 | 43.0 | 6.3 | 8.4 | 2.1 | 1,129 | 46.7 | 1,087 |
| Highest | 36.9 | 1.9 | 0.9 | 35.6 | 43.0 | 6.9 | 12.3 | 2.1 | 1,065 | 73.5 | 1,034 |
| Total | 20.1 | 2.7 | 0.9 | 38.3 | 43.4 | 6.1 | 9.8 | 2.4 | 5,772 | 41.3 | 5,509 |

Note: For women with two or more live births in the five-year period, data refer to the most recent birth.
${ }^{1}$ In the first two months after delivery
${ }^{2}$ Women who reported night blindness but did not report difficulty with vision during the day
${ }^{3}$ Salt containing 15 ppm of iodine or more. Excludes women in households in which salt was not tested

In Tanzania, 10 percent of pregnant women take iron tablets for at least 90 days (Table 11.8). The majority of women who take iron supplements during pregnancy take them for less than 60 days, and 38 percent of pregnant women do not take iron supplements at all. The proportion of pregnant women who took iron supplements for at least 90 days is higher among younger women and those with fewer children. There is no strong relationship between taking iron supplements during pregnancy and level of education or wealth quintile.

Women in urban areas are slightly more likely to take iron supplements for at least 90 days during pregnancy (12 percent) than women in rural areas ( 9 percent). Iron supplementation varies greatly by region. Iron supplementation during pregnancy is highest in Mtwara and Lindi regions where 64 and 46 percent of women, respectively, took iron supplements for at least 90 days during their last pregnancy. One percent or less of pregnant women took iron supplements for the recommended period in Kilimanjaro, Tabora, Mwanza, Pemba North, and Pemba South.

## Prevalence of Anaemia in Children

Anaemia, characterised by a low level of haemoglobin in the blood, is a major health problem in Tanzania, especially among young children and pregnant women. Anaemia may be the underlying cause of maternal mortality, spontaneous abortions, premature births, and low birth weight. The most common cause of anaemia is nutritional anaemia resulting from inadequate dietary intake of nutrients necessary for synthesis of haemoglobin, such as iron, folate, vitamin B12, or other nutrients. Anaemia also results from sickle cell disease, malaria, or parasitic infections. A number of interventions have been put in place to address anaemia in children. These include promotion of use of ITNs by children under five and deworming of children age two to five years every six months.

The 2004-05 TDHS measured haemoglobin to determine anaemia levels among women and children under age five. To date, little was known about the prevalence of anaemia in the population of children and women in Tanzania. Table 11.9 presents anaemia levels among children six months to five years of age, according to selected background characteristics. Of the 7,506 eligible children (age 6-59 months), haemoglobin was measured in 7,300 (97 percent).

| Percentage of children age 6-59 months classified as having anaemia, by background characteristics, Tanzania 2004-05 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Background characteristic | Anaemia status of child |  |  |  | Number of children |
|  | Any anaemia | Mild $(10.0-$ $10.9 \mathrm{~g} / \mathrm{dl})$ | $\begin{gathered} \text { Moderate } \\ (7.0- \\ 9.9 \mathrm{~g} / \mathrm{dl}) \\ \hline \end{gathered}$ | $\begin{gathered} \text { Severe } \\ \text { (below } \\ 7.0 \mathrm{~g} / \mathrm{dl} \text { ) } \\ \hline \end{gathered}$ |  |
| Age in months |  |  |  |  |  |
| 6-9 | 83.3 | 20.4 | 58.7 | 4.2 | 604 |
| 10-11 | 87.5 | 19.6 | 56.6 | 11.3 | 304 |
| 12-23 | 82.6 | 23.3 | 51.4 | 7.9 | 1,669 |
| 24-35 | 75.0 | 25.0 | 46.2 | 3.8 | 1,658 |
| 36-47 | 63.1 | 25.3 | 35.1 | 2.7 | 1,546 |
| 48-59 | 57.8 | 27.5 | 29.5 | 0.8 | 1,520 |
| Sex |  |  |  |  |  |
| Male | 72.1 | 23.4 | 44.1 | 4.6 | 3,673 |
| Female | 71.6 | 25.8 | 42.0 | 3.8 | 3,628 |
| Birth order ${ }^{1}$ |  |  |  |  |  |
| 1 | 72.0 | 26.0 | 41.5 | 4.5 | 1,356 |
| 2-3 | 71.0 | 23.1 | 43.6 | 4.3 | 2,328 |
| 4-5 | 73.0 | 24.2 | 44.4 | 4.4 | 1,399 |
| 6+ | 74.1 | 25.5 | 44.8 | 3.9 | 1,409 |
| Birth interval in months ${ }^{1}$ |  |  |  |  |  |
| First birth ${ }^{2}$ | 72.0 | 25.7 | 41.8 | 4.6 | 1,371 |
| $<24$ | 72.5 | 22.2 | 44.2 | 6.1 | 797 |
| 24-47 | 73.3 | 24.2 | 45.0 | 4.1 | 3,186 |
| 48+ | 69.8 | 25.4 | 41.3 | 3.1 | 1,138 |
| Residence |  |  |  |  |  |
| Urban | 66.8 | 28.0 | 35.6 | 3.2 | 1,399 |
| Rural | 73.0 | 23.8 | 44.8 | 4.5 | 5,902 |
| Mainland/Zanzibar |  |  |  |  |  |
| Mainland | 71.8 | 24.4 | 43.1 | 4.3 | 7,121 |
| Total urban | 66.1 | 27.8 | 35.2 | 3.2 | 1,381 |
| Dar es Salaam city | 69.0 | 29.8 | 34.1 | 5.1 | 358 |
| Other urban | 65.1 | 27.1 | 35.5 | 2.5 | 1,023 |
| Total rural | 73.1 | 23.6 | 45.0 | 4.5 | 5,740 |
| Zanzibar | 75.1 | 30.7 | 42.5 | 1.9 | 180 |
| Unguja | 74.6 | 33.6 | 39.6 | 1.4 | 111 |
| Pemba | 75.9 | 26.0 | 47.2 | 2.7 | 69 |
| Zone |  |  |  |  |  |
| Western | 77.6 | 23.1 | 50.0 | 4.5 | 1,552 |
| Northern | 56.7 | 24.8 | 30.3 | 1.6 | 936 |
| Central | 68.8 | 25.9 | 39.6 | 3.2 | 615 |
| Southern highlands | 62.5 | 24.3 | 36.6 | 1.5 | 1,080 |
| Lake | 78.5 | 21.6 | 48.7 | 8.2 | 1,583 |
| Eastern | 73.5 | 29.7 | 39.6 | 4.2 | 810 |
| Southern | 80.7 | 26.6 | 50.7 | 3.4 | 545 |
| Region |  |  |  |  |  |
| Dodoma | 66.4 | 26.1 | 37.8 | 2.5 | 350 |
| Arusha | 52.1 | 21.3 | 29.3 | 1.5 | 236 |
| Kilimanjaro | 51.3 | 24.8 | 25.4 | 1.1 | 187 |
| Tanga | 65.6 | 27.4 | 36.3 | 2.0 | 268 |
| Morogoro | 77.3 | 29.0 | 45.3 | 2.9 | 288 |
| Pwani | 76.6 | 30.5 | 41.5 | 4.7 | 164 |
| Dar es Salaam | 69.0 | 29.8 | 34.1 | 5.1 | 358 |
| Lindi | 88.2 | 26.4 | 59.0 | 2.9 | 128 |
| Mtwara | 79.3 | 28.0 | 48.5 | 2.8 | 218 |
| Ruvuma | 77.3 | 25.2 | 47.8 | 4.3 | 200 |
| Iringa | 46.6 | 25.1 | 21.5 | 0.0 | 250 |
| Mbeya | 66.9 | 24.9 | 40.5 | 1.4 | 560 |
| Singida | 71.9 | 25.7 | 42.0 | 4.2 | 265 |
| Tabora | 75.1 | 24.6 | 46.8 | 3.7 | 402 |
| Rukwa | 68.0 | 22.3 | 42.5 | 3.1 | 270 |
| Kigoma | 76.3 | 26.1 | 45.8 | 4.4 | 396 |
| Shinyanga | 79.5 | 20.6 | 53.9 | 5.0 | 754 |
| Kagera | 71.2 | 20.3 | 43.5 | 7.3 | 482 |
| Mwanza | 82.8 | 22.5 | 51.1 | 9.2 | 779 |
| Mara | 79.2 | 21.4 | 50.6 | 7.3 | 321 |
| Manyara | 55.6 | 25.4 | 28.6 | 1.7 | 246 |
| Zanzibar North | 76.7 | 30.3 | 44.6 | 1.8 | 27 |
| Zanzibar South | 70.9 | 30.5 | 40.0 | 0.4 | 16 |
| Town West | 74.7 | 35.7 | 37.5 | 1.5 | 68 |
| Pemba North | 77.4 | 22.9 | 51.8 | 2.7 | 36 |
| Pemba South | 74.2 | 29.2 | 42.3 | 2.7 | 33 |
| Continued... |  |  |  |  |  |


| Table 11.9-Continued |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Percentage of children age 6-59 months classified as having anaemia, by background characteristics, Tanzania 2004-05 |  |  |  |  |  |
|  | Anaemia status of child |  |  |  |  |
| Background characteristic | Any anaemia | $\begin{gathered} \hline \text { Mild } \\ (10.0- \\ 10.9 \mathrm{~g} / \mathrm{dl}) \\ \hline \end{gathered}$ | $\begin{gathered} \hline \text { Moderate } \\ (7.0- \\ 9.9 \mathrm{~g} / \mathrm{dl}) \\ \hline \end{gathered}$ | $\begin{gathered} \text { Severe } \\ \text { (below } \\ 7.0 \mathrm{~g} / \mathrm{dl} \text { ) } \end{gathered}$ | Number of children |
| Mother's education ${ }^{3}$ |  |  |  |  |  |
| No education | 76.2 | 23.5 | 47.1 | 5.6 | 1,781 |
| Primary incomplete | 74.8 | 26.1 | 43.9 | 4.8 | 1,045 |
| Primary complete | 69.9 | 24.1 | 42.2 | 3.7 | 3,556 |
| Secondary+ | 69.3 | 29.2 | 37.9 | 2.2 | 295 |
| Mother's age ${ }^{3}$ |  |  |  |  |  |
| 15-19 | 77.3 | 17.4 | 51.2 | 8.7 | 327 |
| 20-24 | 76.3 | 25.7 | 45.1 | 5.4 | 1,659 |
| 25-29 | 70.0 | 23.0 | 43.5 | 3.6 | 1,847 |
| 30-34 | 70.6 | 23.5 | 43.7 | 3.4 | 1,462 |
| 35-49 | 71.3 | 27.6 | 39.8 | 3.8 | 1,382 |
| Mother's status |  |  |  |  |  |
| Mother interviewed | 72.3 | 24.5 | 43.6 | 4.3 | 6,491 |
| Mother not interviewed but in household | 73.1 | 25.0 | 42.9 | 5.2 | 185 |
| Mother not interviewed and not in the household ${ }^{4}$ | 66.6 | 25.8 | 37.5 | 3.3 | 623 |
| Wealth quintile |  |  |  |  |  |
| Lowest | 77.5 | 21.8 | 50.3 | 5.4 | 1,665 |
| Second | 75.0 | 25.1 | 45.1 | 4.8 | 1,532 |
| Middle | 72.9 | 22.8 | 45.3 | 4.8 | 1,547 |
| Fourth | 67.6 | 26.7 | 37.9 | 3.0 | 1,456 |
| Highest | 62.9 | 27.6 | 32.8 | 2.5 | 1,101 |
| Total | 71.8 | 24.6 | 43.0 | 4.2 | 7,300 |
| Note: Table is based on children who stayed in the household the night before the interview. Prevalence is adjusted for altitude using CDC formulas (CDC, 1989). $\mathrm{g} / \mathrm{dl}=$ grams per deciliter <br> ${ }^{1}$ Excludes children whose mothers were not interviewed <br> ${ }^{2}$ First born twins (triplets, etc.) are counted as first births because they do not have a previous birth interval. <br> ${ }^{3}$ For women who are not interviewed, information is taken from the Household Questionnaire. Excludes children whose mothers are not listed in the household schedules <br> ${ }^{4}$ Includes children whose mothers are deceased |  |  |  |  |  |
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Seven in ten children have anaemia. One-fourth have mild anaemia, 43 percent have moderate anaemia, and 4 percent have severe anaemia. Younger children age 6-23 months are affected more by anaemia (eight in ten) than older children. Severe anaemia, which has a serious effect on the health of an individual, is highest among children 10-11 months (11 percent). There is no difference in the prevalence of anaemia by sex, birth order, or birth interval. Children in rural areas are slightly more likely to be anaemic ( 73 percent) than children in urban areas ( 67 percent). Anaemia prevalence in children varies across regions, ranging from 47 percent in Iringa to 88 percent in Lindi region. Mwanza has the highest proportion of children with severe anaemia (9 percent).

A child's anaemia status is also associated with the mother's age, education, and wealth quintile. Children of mothers under age 25 are more likely to have anaemia than children of mothers who are 25 and over. With regard to education and wealth, the percentage of children with any anaemia, moderate anaemia, and severe anaemia decreases as mother's education and wealth quintile increase.

## Prevalence of Anaemia in Women

Table 11.10 shows that 48 percent of women age $15-49$ are anaemic, with 1 percent being severely anaemic. Pregnancy has an association with anaemia. Pregnant women are more likely to be anaemic ( 58 percent) than women who are breastfeeding ( 48 percent) and women who are neither pregnant nor breastfeeding ( 47 percent). This could be a result of the high demand of iron and folate during pregnancy.

| Percentage of women age 15-49 with anaemia, by background characteristics, Tanzania 2004-05 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Anaem | ia status |  |  |
| Background characteristic | Any anaemia | Mild anaemia | Moderate anaemia | Severe anaemia | Number of women |
| Age ${ }^{1}$ |  |  |  |  |  |
| 15-19 | 49.0 | 33.6 | 14.6 | 0.8 | 2,207 |
| 20-24 | 48.7 | 32.6 | 15.3 | 0.8 | 1,962 |
| 25-29 | 48.6 | 33.5 | 13.9 | 1.3 | 1,846 |
| 30-34 | 44.5 | 27.9 | 15.0 | 1.7 | 1,515 |
| 35-39 | 49.4 | 35.1 | 12.9 | 1.4 | 1,038 |
| 40-44 | 50.1 | 32.5 | 16.3 | 1.3 | 822 |
| 45-49 | 49.3 | 34.2 | 13.5 | 1.6 | 749 |
| Number of children ever born ${ }^{2}$ |  |  |  |  |  |
| None | 47.7 | 32.1 | 14.7 | 1.0 | 2,501 |
| 1 | 50.6 | 34.6 | 14.8 | 1.1 | 1,482 |
| 2-3 | 47.8 | 31.8 | 14.5 | 1.5 | 2,626 |
| 4-5 | 45.8 | 30.7 | 14.2 | 0.9 | 1,650 |
| 6+ | 50.5 | 34.8 | 14.4 | 1.3 | 1,879 |
| Pregnancy/breastfeeding status ${ }^{2}$ |  |  |  |  |  |
| Pregnant | 58.2 | 22.7 | 32.8 | 2.7 | 1,075 |
| Breastfeeding | 47.7 | 35.9 | 11.1 | 0.7 | 3,008 |
| Neither | 46.9 | 32.8 | 13.0 | 1.2 | 6,057 |
| Residence |  |  |  |  |  |
| Urban | 46.5 | 30.2 | 15.1 | 1.2 | 2,830 |
| Rural | 49.1 | 33.6 | 14.3 | 1.2 | 7,309 |
| Mainland/Zanzibar |  |  |  |  |  |
| Mainland | 47.9 | 32.3 | 14.5 | 1.2 | 9,833 |
| Total urban | 46.2 | 30.0 | 15.1 | 1.1 | 2,782 |
| Dar es Salaam city | 53.6 | 31.1 | 21.6 | 1.0 | 914 |
| Other urban | 42.6 | 29.5 | 12.0 | 1.2 | 1,868 |
| Total rural | 48.6 | 33.2 | 14.2 | 1.2 | 7,051 |
| Zanzibar | 62.8 | 43.5 | 17.4 | 1.9 | 305 |
| Unguja | 62.8 | 42.4 | 18.0 | 2.5 | 214 |
| Pemba | 62.9 | 46.0 | 16.2 | 0.6 | 92 |
| Zone |  |  |  |  |  |
| Western | 56.0 | 37.3 | 17.7 | 1.0 | 1,843 |
| Northern | 37.8 | 24.8 | 11.4 | 1.6 | 1,459 |
| Central | 44.6 | 31.6 | 11.0 | 2.0 | 788 |
| Southern highlands | 33.7 | 25.6 | 7.4 | 0.7 | 1,432 |
| Lake | 55.5 | 36.3 | 17.9 | 1.3 | 1,843 |
| Eastern | 54.9 | 34.1 | 19.6 | 1.2 | 1,609 |
| Southern | 44.9 | 34.1 | 10.5 | 0.3 | 860 |
| Region |  |  |  |  |  |
| Dodoma | 38.8 | 26.8 | 9.8 | 2.2 | 459 |
| Arusha | 27.7 | 19.8 | 7.4 | 0.4 | 369 |
| Kilimanjaro | 30.0 | 21.5 | 8.2 | 0.3 | 376 |
| Tanga | 54.7 | 32.6 | 17.8 | 4.3 | 425 |
| Morogoro | 56.2 | 35.8 | 18.8 | 1.6 | 445 |
| Pwani | 57.2 | 42.3 | 13.8 | 1.1 | 250 |
| Dar es Salaam | 53.6 | 31.1 | 21.6 | 1.0 | 914 |
| Lindi | 46.3 | 36.4 | 9.3 | 0.6 | 217 |
| Mtwara | 47.6 | 37.3 | 10.3 | 0.0 | 344 |
| Ruvuma | 40.8 | 28.7 | 11.6 | 0.5 | 298 |
| Iringa | 21.6 | 16.1 | 4.4 | 1.1 | 410 |
| Mbeya | 36.1 | 27.9 | 7.9 | 0.3 | 708 |
| Singida | 52.7 | 38.2 | 12.6 | 1.9 | 329 |
| Tabora | 53.5 | 39.4 | 13.2 | 0.9 | 510 |
| Rukwa | 44.3 | 32.9 | 10.3 | 1.1 | 314 |
| Kigoma | 43.5 | 31.7 | 11.1 | 0.7 | 497 |
| Shinyanga | 65.0 | 39.3 | 24.4 | 1.2 | 836 |
| Kagera | 41.0 | 29.5 | 10.9 | 0.5 | 542 |
| Mwanza | 62.0 | 39.8 | 20.5 | 1.7 | 933 |
| Mara | 60.5 | 37.3 | 21.5 | 1.7 | 367 |
| Manyara | 36.2 | 24.0 | 11.0 | 1.1 | 289 |
| Zanzibar North | 66.2 | 45.4 | 18.0 | 2.7 | 47 |
| Zanzibar South | 50.8 | 37.8 | 12.7 | 0.2 | 26 |
| Town West | 63.9 | 42.2 | 18.9 | 2.8 | 141 |
| Pemba North | 65.1 | 46.9 | 17.2 | 1.0 | 50 |
| Pemba South | 60.3 | 45.1 | 15.0 | 0.3 | 41 |
|  |  |  |  |  | Continued... |


| Percentage of women age 15-49 with anaemia, by background characteristics, Tanzania 2004-05 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Anaem | ia status |  |  |
| Background characteristic | Any anaemia | Mild anaemia | Moderate anaemia | Severe anaemia | Number of women |
| Education ${ }^{1}$ |  |  |  |  |  |
| No education | 54.9 | 36.9 | 16.5 | 1.5 | 2,461 |
| Primary incomplete | 48.3 | 32.2 | 14.9 | 1.1 | 1,816 |
| Primary complete | 46.3 | 31.2 | 14.0 | 1.0 | 5,001 |
| Secondary+ | 41.4 | 29.3 | 10.9 | 1.3 | 861 |
| Wealth quintile |  |  |  |  |  |
| Lowest | 53.4 | 37.3 | 14.5 | 1.6 | 1,815 |
| Second | 52.2 | 35.5 | 15.2 | 1.5 | 1,928 |
| Middle | 47.6 | 32.8 | 13.8 | 1.0 | 1,913 |
| Fourth | 42.9 | 29.1 | 13.1 | 0.7 | 1,983 |
| Highest | 46.7 | 29.7 | 15.8 | 1.2 | 2,500 |
| Smoking status ${ }^{2}$ |  |  |  |  |  |
| Smokes cigarettes/tobacco | 43.3 | 31.0 | 10.7 | 1.6 | 139 |
| Does not smoke cigarettes/tobacco | 48.5 | 32.6 | 14.7 | 1.2 | 9,782 |
| Total | 48.4 | 32.6 | 14.5 | 1.2 | 10,139 |
| Note: Table is based on women who stayed in the household the night before the interview. Prevalence is adjusted for altitude and for smoking status if known, using CDC formulas (CDC, 1989). Women with $<7.0 \mathrm{~g} / \mathrm{dl}$ of haemoglobin have severe anaemia, women with $7.0-9.9 \mathrm{~g} / \mathrm{dl}$ have moderate anaemia, and pregnant women with $10.0-10.9 \mathrm{~g} / \mathrm{dl}$ and nonpregnant women with $10.0-11.9 \mathrm{~g} / \mathrm{dl}$ have mild anaemia. Total includes five cases with missing information on mother's smoking status. <br> ${ }^{1}$ For women who are not interviewed, information is taken from the Household Questionnaire. <br> ${ }^{2}$ Excludes women who were not interviewed |  |  |  |  |  |
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Anaemia also varies by residence and education. While there is little difference in anaemia between women in urban and rural areas, the disparity between women in the Mainland and Zanzibar is particularly large ( 48 and 63 percent, respectively). Women with no education are more likely to have anaemia ( 55 percent) than those with at least some secondary education ( 41 percent). Although scientific evidence has identified an association between smoking and anaemia, these figures show little difference between smokers and nonsmokers.

### 11.3 Nutritional Status of Children Under Five

Protein Energy Malnutrition (PEM) is the most widespread and leading nutritional disorder in Tanzania. Children less than five years of age are the most affected. PEM often results from consuming inadequate food and is frequently aggravated by infections. Some studies have shown that PEM among children is an outcome of maternal nutrition. Malnutrition among children increases their risk of morbidity and mortality and is related to impaired mental development.

In addition to questions about infant and young children's feeding practices, the 2004-05 TDHS included an anthropometric component, in which all children under five years of age were both weighed and measured. Each interviewing team carried a scale and measuring board. The scales were lightweight, bathroom-type scales with a digital screen designed and manufactured under the authority of UNICEF. The measuring boards were specially produced by Shorr Productions for use in survey settings. Children younger than 24 months were measured lying down on the board (recumbent length), and standing height was measured for older children. All children born in the five years preceding the survey and listed in the Household Questionnaire were eligible for measurement.

Measuring the height and weight of young children complements the information presented regarding feeding practices and provides a fuller measure of children's nutritional status. The height and weight data are used to compute three nutritional status indices: height-for-age, weight-for-height, and weight-for-age. These three indices are expressed as standard deviation (SD) units from the median for the international reference population (U.S National Centre for Health Statistics) recommended by the World Health Organisation.

Children who fall more than two standard deviations (-2 SD) below the reference median are considered undernourished, while those who fall more than three standard deviations (-3 SD) below the reference median are considered severely undernourished. Table 11.11 shows the percentage of children under five years classified as undernourished according to height-for-age, weight-for-height, and weight-for-age. A total of 8,357 (weighted) children under age five were eligible to be weighed and measured. Data are presented for 96 percent of these children: 2 percent were not measured, 2 percent had invalid values for height and weight, and 0.4 percent had incomplete age information.

## Height-for-Age

A child who is below -2 SD from the median of the reference population in terms of height-for-age is considered stunted or short for his/her age. Stunting reflects failure to receive adequate nutrition over a number of years and is frequently associated with poor overall economic conditions, chronic or repeated infections, and consistently inadequate nutrient intake. According to Table 11.11, 38 percent of children are stunted, and 13 percent are severely stunted.

Stunting is evident among children as young as six months (8 percent) and increases with the age of the child during the first year of life (Figure 11.2). Deterioration of nutritional status after six months can be explained, in part, by the introduction of complementary foods to young children. There is no marked difference between males and females in the levels of stunting. Size at birth, however, is associated with stunting. More than half ( 59 percent) of children who were very small at birth are stunted, compared with 40 percent of children who were small and 36 percent of children who were average size or larger at birth.

| Table 11.11 Nutritional status of children |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percentage of children under five years classified as malnourished according to three anthropometric indices of nutritional status: height-for-age, weight-for-height, and weight-for-age, by background characteristics, Tanzania 2004-05 |  |  |  |  |  |  |  |  |  |  |
| Background characteristic | Height-for-age |  |  | Weight-for-height |  |  | Weight-for-age |  |  | Number of children |
|  | Percentage below -3 SD | Percentage below -2 SD $^{1}$ | Mean <br> Z-score (SD) | Percentage below -3 SD | Percentage below -2 SD $^{1}$ | Mean Z-score (SD) | $\begin{gathered} \text { Percentage } \\ \text { below } \\ -3 \text { SD } \\ \hline \end{gathered}$ | Percentage below -2 SD $^{1}$ | Mean Z-score (SD) |  |
| Age in months |  |  |  |  |  |  |  |  |  |  |
| <6 | 1.4 | 8.0 | (0.5) | 0.0 | 1.2 | 0.7 | 0.2 | 2.4 | 0.2 | 758 |
| 6-9 | 3.9 | 18.9 | (1.1) | 0.4 | 2.3 | 0.1 | 2.1 | 14.8 | (0.8) | 599 |
| 10-11 | 7.1 | 33.5 | (1.4) | 0.3 | 3.5 | (0.2) | 5.7 | 29.5 | (1.3) | 300 |
| 12-23 | 15.4 | 45.2 | (1.8) | 0.9 | 6.3 | (0.4) | 6.0 | 29.0 | (1.4) | 1,662 |
| 24-35 | 13.8 | 39.2 | (1.7) | 0.1 | 3.1 | (0.3) | 3.8 | 24.5 | (1.3) | 1,653 |
| 36-47 | 16.4 | 45.2 | (1.8) | 0.2 | 1.4 | (0.2) | 3.6 | 22.1 | (1.3) | 1,520 |
| 48-59 | 15.6 | 43.3 | (1.8) | 0.4 | 1.9 | (0.2) | 3.2 | 21.5 | (1.3) | 1,496 |
| Sex ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |
| Male | 13.6 | 38.6 | (1.7) | 0.4 | 3.3 | (0.2) | 3.9 | 22.1 | (1.2) | 3,988 |
| Female | 12.0 | 36.8 | (1.5) | 0.3 | 2.7 | (0.1) | 3.5 | 21.5 | (1.1) | 4,001 |
| Birth order ${ }^{2}$ |  |  |  |  |  |  |  |  |  |  |
| 1 | 12.0 | 38.9 | (1.7) | 0.6 | 2.9 | (0.2) | 3.7 | 23.2 | (1.2) | 1,469 |
| 2-3 | 12.0 | 36.7 | (1.6) | 0.3 | 2.9 | (0.1) | 3.3 | 20.8 | (1.1) | 2,592 |
| 4-5 | 10.2 | 34.6 | (1.5) | 0.4 | 3.7 | (0.2) | 4.3 | 21.0 | (1.1) | 1,566 |
| 6+ | 15.0 | 38.5 | (1.6) | 0.3 | 3.2 | (0.1) | 3.8 | 22.2 | (1.1) | 1,584 |
| Birth interval in months ${ }^{2}$ |  |  |  |  |  |  |  |  |  |  |
| First birth ${ }^{3}$ | 12.2 | 39.2 | (1.7) | 0.6 | 2.9 | (0.2) | 3.9 | 23.4 | (1.2) | 1,483 |
| $<24$ | 13.8 | 37.5 | (1.7) | 0.5 | 3.4 | (0.1) | 3.9 | 22.7 | (1.1) | 888 |
| 24-47 | 12.9 | 38.2 | (1.6) | 0.3 | 3.1 | (0.2) | 3.9 | 22.1 | (1.1) | 3,566 |
| 48+ | 9.5 | 31.4 | (1.4) | 0.2 | 3.2 | (0.1) | 2.7 | 17.4 | (0.9) | 1,273 |
| Size at birth ${ }^{2}$ |  |  |  |  |  |  |  |  |  |  |
| Very small | 27.2 | 58.5 | (2.3) | 1.1 | 4.3 | (0.5) | 17.1 | 43.3 | (1.9) | 136 |
| Small | 17.0 | 40.3 | (1.8) | 0.3 | 5.3 | (0.4) | 6.0 | 33.1 | (1.4) | 599 |
| Average or larger | 11.5 | 36.4 | (1.6) | 0.4 | 2.9 | (0.1) | 3.2 | 20.1 | (1.1) | 6,457 |
| Residence |  |  |  |  |  |  |  |  |  |  |
| Urban | 7.4 | 25.8 | (1.2) | 0.4 | 2.8 | (0.2) | 2.1 | 17.0 | (0.9) | 1,536 |
| Rural | 14.1 | 40.5 | (1.7) | 0.4 | 3.0 | (0.1) | 4.1 | 22.9 | (1.2) | 6,453 |
| Mainland/Zanzibar |  |  |  |  |  |  |  |  |  |  |
| Mainland | 12.9 | 38.0 | (1.6) | 0.3 | 2.9 | (0.1) | 3.7 | 21.9 | (1.1) | 7,792 |
| Total urban | 7.3 | 26.0 | (1.2) | 0.4 | 2.9 | (0.2) | 2.0 | 17.3 | (0.9) | 1,514 |
| Dar es Salaam city | 1.9 | 16.9 | (0.8) | 0.5 | 4.1 | (0.2) | 0.9 | 14.3 | (0.7) | +381 |
| Other urban | 9.1 | 29.1 | (1.4) | 0.3 | 2.4 | (0.2) | 2.4 | 18.3 | (1.0) | 1,133 |
| Total rural | 14.3 | 40.9 | (1.7) | 0.3 | 2.9 | (0.1) | 4.1 | 23.0 | (1.2) | 6,278 |
| Zanzibar | 7.0 | 23.1 | (1.1) | 0.7 | 6.1 | (0.5) | 3.1 | 19.0 | (1.1) | 6,197 |
| Unguja | 4.6 | 18.0 | (0.9) | 0.7 | 6.7 | (0.6) | 2.7 | 17.0 | (1.0) | 125 |
| Pemba | 11.1 | 32.1 | (1.4) | 0.8 | 4.9 | (0.4) | 3.8 | 22.5 | (1.2) | 72 |
| Zone |  |  |  |  |  |  |  |  |  |  |
| Western | 15.4 | 39.7 | (1.7) | 0.7 | 2.6 | (0.1) | 5.0 | 23.2 | (1.2) | 1,720 |
| Northern | 11.7 | 34.2 | (1.5) | 0.7 | 5.0 | (0.4) | 3.8 | 26.0 | (1.2) | 1,019 |
| Central | 16.1 | 42.3 | (1.7) | 0.3 | 4.4 | (0.3) | 7.6 | 28.7 | (1.3) | 685 |
| Southern highlands | 14.6 | 42.6 | (1.8) | 0.1 | 1.5 | 0.0 | 2.8 | 20.1 | (1.1) | 1,159 |
| Lake | 10.2 | 34.3 | (1.5) | 0.2 | 2.4 | (0.1) | 2.8 | 17.4 | (1.0) | 1,737 |
| Eastern | 7.2 | 27.8 | (1.2) | 0.2 | 4.0 | (0.1) | 1.8 | 17.3 | (0.9) | 879 |
| Southern | 17.5 | 52.2 | (2.0) | 0.0 | 1.5 | (0.1) | 2.7 | 26.2 | (1.3) | 593 |
| Region 16.6 |  |  |  |  |  |  |  |  |  |  |
| Dodoma | 16.6 | 44.4 | (1.8) | 0.3 | 3.9 | (0.3) | 8.1 | 30.4 | (1.4) | 400 |
| Arusha | 9.7 | 27.2 | (1.3) | 0.6 | 3.4 | (0.4) | 2.9 | 20.0 | (1.1) | 261 |
| Kilimanjaro | 5.0 | 23.4 | (1.1) | 1.3 | 5.2 | (0.4) | 3.1 | 19.4 | (1.0) | 205 |
| Tanga | 15.9 | 43.3 | (1.7) | 0.3 | 6.5 | (0.3) | 5.5 | 31.8 | (1.3) | 289 |
| Morogoro | 10.6 | 35.8 | (1.5) | 0.0 | 2.2 | 0.0 | 1.0 | 15.6 | (0.9) | 320 |
| Pwani | 12.5 | 36.8 | (1.6) | 0.0 | 6.8 | (0.4) | 4.9 | 26.8 | (1.3) | 178 |
| Dar es Salaam | 1.9 | 16.9 | (0.8) | 0.5 | 4.1 | (0.2) | 0.9 | 14.3 | (0.7) | 381 |
| Lindi | 14.7 | 54.0 | (1.9) | 0.0 | 2.6 | (0.2) | 4.3 | 23.7 | (1.3) | 137 |
| Mtwara | 20.1 | 52.7 | (2.0) | 0.0 | 1.8 | (0.2) | 3.1 | 29.1 | (1.4) | 238 |
| Ruvuma | 16.3 | 50.4 | (2.0) | 0.0 | 0.4 | 0.1 | 1.3 | 24.7 | (1.2) | 217 |
| Iringa | 20.9 | 50.5 | (2.1) | 0.0 | 1.4 | (0.0) | 3.7 | 25.9 | (1.3) | 275 |
| Mbeya | 11.0 | 37.6 | (1.6) | 0.0 | 1.5 | 0.1 | 1.0 | 15.1 | (1.0) | 590 |
| Singida | 15.2 | 39.2 | (1.7) | 0.3 | 5.2 | (0.3) | 6.8 | 26.3 | (1.3) | 286 |
| Tabora | 12.9 | 34.0 | (1.5) | 1.1 | 2.6 | (0.1) | 3.1 | 19.9 | (1.0) | 462 |
| Rukwa | 16.2 | 45.1 | (1.8) | 0.2 | 1.7 | (0.1) | 5.4 | 24.5 | (1.2) | 294 |
| Kigoma | 20.5 | 50.1 | (2.0) | 0.5 | 3.7 | (0.3) | 9.1 | 34.2 | (1.5) | 435 |
| Shinyanga | 14.2 | 37.4 | (1.7) | 0.5 | 1.9 | (0.0) | 4.0 | 19.3 | (1.1) | 823 |
| Kagera | 11.7 | 37.3 | (1.7) | 0.3 | 3.6 | (0.3) | 4.1 | 25.4 | (1.3) | 527 |
| Mwanza | 6.5 | 30.6 | (1.3) | 0.3 | 2.3 | (0.0) | 1.9 | 12.8 | (0.8) | 850 |
| Mara | 16.5 | 38.7 | (1.7) | 0.0 | 0.8 | 0.2 | 3.2 | 16.7 | (0.9) | 360 |
| Manyara | 14.3 | 39.6 | (1.8) | 0.6 | 4.6 | (0.4) | 3.4 | 30.6 | (1.4) | 264 |
| Zanzibar North | 7.9 | 27.5 | (1.2) | 1.7 | 6.7 | (0.6) | 6.2 | 22.7 | (1.3) | 31 |
| Zanzibar South | 3.3 | 16.6 | (0.9) | 0.4 | 10.3 | (0.6) | 2.6 | 20.8 | (1.1) | 17 |
| Town West | 3.6 | 14.5 | (0.8) | 0.3 | 5.9 | (0.5) | 1.4 | 13.9 | (1.0) | 78 |
| Pemba North | 13.7 | 36.6 | (1.5) | 1.0 | 5.3 | (0.3) | 4.4 | 24.8 | (1.2) | 37 |
| Pemba South | 8.4 | 27.4 | (1.3) | 0.6 | 4.5 | (0.5) | 3.1 | 20.2 | (1.1) | 35 |
|  |  |  |  |  |  |  |  |  |  | ontinued... |

## Table 11.11-Continued

Percentage of children under five years classified as malnourished according to three anthropometric indices of nutritional status: height-for-age, weight-for-height, and weight-for-age, by background characteristics, Tanzania 2004-05

| Background characteristic | Height-for-age |  |  | Weight-for-height |  |  | Weight-for-age |  |  | Number of children |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Percentage below -3 SD | Percentage below -2 SD $^{1}$ | $\begin{gathered} \text { Mean } \\ \text { Z-score } \\ \text { (SD) } \\ \hline \end{gathered}$ | Percentage below -3 SD | Percentage below -2 SD $^{1}$ | $\begin{gathered} \text { Mean } \\ \text { Z-score } \\ \text { (SD) } \\ \hline \end{gathered}$ | Percentage below -3 SD | Percentage below -2 SD $^{1}$ | $\begin{gathered} \text { Mean } \\ \text { Z-score } \\ \text { (SD) } \\ \hline \end{gathered}$ |  |
| Mother's education ${ }^{4}$ |  |  |  |  |  |  |  |  |  |  |
| No education | 14.8 | 41.2 | (1.7) | 0.3 | 3.2 | (0.2) | 4.5 | 24.9 | (1.2) | 1,949 |
| Primary incomplete | 14.6 | 42.9 | (1.7) | 0.5 | 3.1 | (0.1) | 4.9 | 22.4 | (1.2) | 1,158 |
| Primary complete | 11.1 | 35.1 | (1.6) | 0.4 | 3.2 | (0.1) | 3.2 | 20.7 | (1.1) | 3,963 |
| Secondary+ | 4.4 | 19.1 | (0.8) | 0.1 | 1.5 | (0.0) | 0.6 | 12.4 | (0.6) | 326 |
| Mother's age ${ }^{4}$ |  |  |  |  |  |  |  |  |  |  |
| 15-19 | 12.7 | 35.2 | (1.6) | 1.5 | 5.1 | (0.1) | 5.4 | 26.3 | (1.1) | 411 |
| 20-24 | 12.4 | 39.1 | (1.6) | 0.2 | 2.9 | (0.1) | 3.6 | 22.2 | (1.1) | 1,854 |
| 25-29 | 10.6 | 34.2 | (1.5) | 0.3 | 2.6 | (0.1) | 2.9 | 20.2 | (1.1) | 2,034 |
| 30-34 | 11.7 | 36.2 | (1.6) | 0.3 | 2.8 | (0.1) | 4.4 | 20.8 | (1.1) | 1,618 |
| 35-49 | 15.3 | 40.7 | (1.7) | 0.4 | 3.6 | (0.2) | 3.5 | 22.8 | (1.2) | 1,479 |
| Mother's status |  |  |  |  |  |  |  |  |  |  |
| Mother interviewed | 12.3 | 37.1 | (1.6) | 0.4 | 3.1 | (0.1) | 3.7 | 21.6 | (1.1) | 7,210 |
| Mother not interviewed but in household | 14.5 | 41.6 | (1.6) | 0.0 | 1.1 | (0.1) | 1.8 | 23.9 | (1.1) | 185 |
| Mother not interviewed and not in the household ${ }^{5}$ | 18.6 | 43.3 | (1.7) | 0.2 | 2.0 | (0.2) | 4.3 | 23.1 | (1.2) | 593 |
| Wealth quintile |  |  |  |  |  |  |  |  |  |  |
| Lowest | 17.6 | 44.9 | (1.8) | 0.5 | 3.1 | (0.2) | 4.9 | 24.8 | (1.2) | 1,818 |
| Second | 15.6 | 42.8 | (1.8) | 0.3 | 3.5 | (0.2) | 4.7 | 25.8 | (1.2) | 1,635 |
| Middle | 13.6 | 40.9 | (1.7) | 0.3 | 2.5 | (0.2) | 4.3 | 23.3 | (1.2) | 1,728 |
| Fourth | 10.3 | 37.5 | (1.6) | 0.5 | 2.9 | (0.1) | 3.0 | 20.0 | (1.1) | 1,592 |
| Highest | 3.9 | 15.7 | (0.9) | 0.2 | 2.9 | (0.1) | 0.6 | 12.2 | (0.7) | 1,217 |
| Total | 12.8 | 37.7 | (1.6) | 0.4 | 3.0 | (0.1) | 3.7 | 21.8 | (1.1) | 7,989 |

Note: Table is based on children who stayed in the household the night before the interview. Each of the indices is expressed in standard deviation units (SD) from the median of the NCHS/CDC/WHO International Reference Population. The percentage of children who are more than three or more than two standard deviations below the median of the International Reference Population ( -3 SD and -2 SD) are shown according to background characteristics. Table is based on children with valid dates of birth (month and year) and valid measurement of both height and weight. Total includes 8 cases with missing information on size at birth
${ }^{1}$ Includes children who are below -3 standard deviations (SD) from the International Reference Population median
${ }^{2}$ Excludes children whose mothers were not interviewed
3 First-born twins (triplets, etc.) are counted as first births because they do not have a previous birth interval.
${ }^{4}$ For women who are not interviewed, information is taken from the Household Questionnaire. Excludes children whose mothers are not listed in the household schedule.
${ }^{5}$ Includes children whose mothers are deceased

Figure 11.2 Trends in the Nutritional Status of Children under Five Years


The percentage of rural children who are stunted (41 percent) is remarkably higher than the percent of urban children ( 26 percent). Children in Mainland Tanzania are more likely to be stunted (38 percent) than those in Zanzibar ( 23 percent). Regions in the Southern zone have the highest percentage of stunted children ( 52 percent), while those in the Eastern zone have the lowest percentage ( 28 percent). Mother's education is associated with the nutritional status of children. More than twice as many children of mothers with no education or incomplete education are stunted as those whose mothers have at least some secondary education.

## Weight-for-Height

Children whose weight-for-height is below -2 SD from the median of the reference population are considered wasted or thin, a condition reflecting acute malnutrition. Wasting represents the failure to receive adequate nutrition in the period immediately preceding the survey and may be the result of inadequate food intake or recent episodes of illness causing loss of weight. Three percent of children under five are wasted and less than 1 percent are severely wasted. These figures are only slightly higher than what is expected according to the reference population ( 2.3 percent and 0.1 percent).

Wasting varies by age and is most common in children age 12-23 months ( 6 percent). There is no difference in the prevalence of wasting by birth order, birth interval, or urban-rural residence. Unlike stunting, children in Zanzibar are more likely to be wasted (6 percent) than children in Mainland (3 percent). At 10 percent, Zanzibar South is the region with the highest percentage of wasted children.

## Weight-for-Age

Children whose weight-for-age is below -2 SD from the median of the reference population are considered underweight. This index reflects the effects of both acute (wasting) and chronic (stunting) under nutrition. Weight-for-age is a useful tool in clinical settings for continuous assessment of nutritional progress and growth. One in five children under five is underweight, with 4 percent severely underweight. As with stunting, underweight increases steadily up to one year of age. Unlike stunting, however, underweight decreases between the ages of two and five years. There is no difference in the prevalence of underweight by sex or birth order.

Like stunting, the prevalence of underweight children varies by urban-rural residence, region, mother's education, and wealth quintile. However, the differentials tend to be smaller. Children in rural areas are more likely to be underweight than those in urban areas ( 23 and 17 percent, respectively). The prevalence of underweight children decreases from 25 percent among those whose mothers have no education to 12 percent among children whose mothers have at least some secondary education, and the same pattern is observed by wealth quintile. By region, prevalence ranges from 13 percent in Mwanza to 34 percent in Kigoma.

Figure 11.2 shows trends in DHS measurements of malnutrition in children over time. The data show no change in height-for-age and weight-for-age between 1992 and 1999 and then a small improvement in both measurements between the 1999 and 2004-05 surveys. The percentage of children who are wasted has declined in each survey since the 1996 TDHS.

### 11.4 Nutritional Status of Women

Nutritional status of women can be assessed using several measurements such as mid upper arm circumference, body fat, height, weight, and body mass index (BMI). In the 2004-05 TDHS report, two indices are presented: height and BMI.

Maternal height is associated with socioeconomic and nutritional status during childhood and adolescence. Short stature is associated with small pelvis size, which increases the likelihood of difficulty during delivery and the risk of bearing low birth weight babies. The cut off point below which a woman can be identified as at risk is 145 centimetres.

The 2004-05 TDHS took height and weight measurements of all nonpregnant women excluding those who gave birth two months preceding the survey. Table 11.12 shows that the mean height of mothers is 156 cm . Three percent of women are shorter than 145 cm . These results are similar to the 1996 TDHS survey.

Apart from height, the other commonly used index is BMI, which is derived by dividing weight in kilograms by the square of the height in metres $\left(\mathrm{kg} / \mathrm{m}^{2}\right)$. BMI is used to assess thinness or obesity. A cut off point of 18.5 has been recommended for defining acute malnutrition, while a level below 16 classifies severe malnutrition, which is usually associated with increased mortality. Data from the 2004 TDHS show that the mean BMI among nonpregnant women is 22 . Ten percent of women have BMI below the 18.5 cut-off (comparable with the 9 percent measured in the 1996 TDHS), and 1 percent have a BMI below 16 or are considered severely thin.

According to Table 11.12, acute malnutrition ( $\mathrm{BMI}<18.5$ ) is highest in women age 15 to 19 (19 percent), women with no education or with incomplete primary education (11 and 16 percent, respectively), and women in the lower wealth quintiles. The percentage of women with BMI below 18.5 is higher in rural areas ( 12 percent) than in urban areas ( 8 percent). By region, the percentage of women with BMI below 18.5 ranges from 5 percent in Mbeya and Morogoro regions to 22 percent in Singida region.

Eighteen percent of women are overweight or obese with 4 percent being obese. The data also show that the prevalence of overweight and obesity increases with age to approximately one-fourth of all women age 30 and over. This does not differ greatly from the 1996 TDHS results. Women in urban areas are more than twice as likely to be overweight or obese as women in rural areas ( 33 and 12 percent, respectively). Women with higher levels of educational attainment and those in higher wealth quintiles are more likely to be overweight or obese. Overweight and obesity also vary by region, ranging from 7 percent in Kagera to 37 percent in Dar es Salaam and 40 percent in Town West.

| Table 11.12 Nutritional status of women by background characteristics |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Among women age 15-49, mean height, percentage under 145 cm , mean body mass index ( BMI ), and percentage with specific BMI levels, by background characteristics, Tanzania 2004-05 |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Height |  | Number of women | $\mathrm{BMI}^{1}\left(\mathrm{~kg} / \mathrm{m}^{2}\right)$ |  |  |  |  |  |  |  |  |  |
|  |  |  | Mean | Normal <br>  <br> $18.5-$ <br> 24.9 <br> (normal) | $\begin{aligned} & <18.5 \\ & \text { (thin) } \end{aligned}$ | Thin |  | $\begin{gathered} <16.0 \\ \text { (severely } \\ \text { thin) } \\ \hline \end{gathered}$ | Overweight/obese |  |  | Number of women |
| Background characteristic | Mean height in cm | $\begin{gathered} \text { Percent- } \\ \text { age } \\ \text { below } \\ 145 \mathrm{~cm} \\ \hline \end{gathered}$ |  |  |  | $\begin{gathered} 17.0- \\ 18.4 \\ \text { (mildly } \\ \text { thin) } \end{gathered}$ | $\begin{gathered} 16.0- \\ 16.9 \\ \text { (moderately } \\ \text { thin) } \\ \hline \end{gathered}$ |  | $\geq 25.0$ <br> (over- <br> weight or obese) | $\begin{gathered} 25.0- \\ 29.9 \\ \text { (over- } \\ \text { weight) } \\ \hline \end{gathered}$ | $\begin{gathered} \geq 30.0 \\ \text { (obese) } \end{gathered}$ |  |
| Age |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 15-19 | 155.0 | 5.1 | 2,224 | 20.9 | 74.3 | 18.7 | 12.4 | 3.9 | 2.4 | 7.0 | 6.5 | 0.5 | 1,997 |
| 20-24 | 156.2 | 4.1 | 1,982 | 22.2 | 77.8 | 6.9 | 5.4 | 0.9 | 0.6 | 15.3 | 13.1 | 2.2 | 1,614 |
| 25-29 | 157.2 | 2.6 | 1,877 | 22.5 | 74.4 | 8.0 | 6.5 | 0.9 | 0.6 | 17.5 | 13.5 | 4.0 | 1,534 |
| 30-34 | 157.2 | 2.0 | 1,529 | 23.1 | 67.7 | 8.0 | 6.3 | 1.0 | 0.8 | 24.3 | 16.8 | 7.5 | 1,321 |
| 35-39 | 157.2 | 2.8 | 1,042 | 23.3 | 68.4 | 6.0 | 4.7 | 0.7 | 0.6 | 25.6 | 17.8 | 7.8 | 913 |
| 40-44 | 156.5 | 1.8 | 830 | 23.1 | 63.8 | 10.3 | 8.5 | 1.2 | 0.6 | 25.8 | 16.5 | 9.4 | 766 |
| 45-49 | 155.9 | 4.0 | 757 | 22.7 | 67.0 | 10.5 | 6.8 | 3.0 | 0.7 | 22.5 | 16.7 | 5.8 | 743 |
| Residence |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Urban | 156.3 | 3.5 | 2,895 | 23.8 | 59.6 | 7.9 | 6.0 | 1.0 | 0.9 | 32.5 | 21.6 | 10.9 | 2,638 |
| Rural | 156.4 | 3.3 | 7,346 | 21.7 | 77.0 | 11.5 | 8.3 | 2.1 | 1.1 | 11.5 | 9.8 | 1.7 | 6,249 |
| Mainland/Zanzibar |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Mainland | 156.4 | 3.4 | 9,931 | 22.3 | 72.4 | 10.2 | 7.5 | 1.7 | 1.0 | 17.4 | 13.2 | 4.2 | 8,612 |
| Total urban | 156.3 | 3.5 | 2,846 | 23.8 | 59.9 | 7.6 | 5.8 | 0.9 | 0.9 | 32.5 | 21.9 | 10.6 | 2,591 |
| Dar es Salaam city | 155.6 | 3.5 | 953 | 24.2 | 54.1 | 8.8 | 6.9 | 1.1 | 0.8 | 37.1 | 23.5 | 13.6 | 887 |
| Other urban | 156.6 | 3.4 | 1,893 | 23.6 | 62.9 | 7.0 | 5.3 | 0.9 | 0.9 | 30.1 | 21.0 | 9.1 | 1,704 |
| Total rural | 156.5 | 3.4 | 7,085 | 21.6 | 77.7 | 11.3 | 8.2 | 2.1 | 1.1 | 11.0 | 9.4 | 1.5 | 6,021 |
| Zanzibar | 155.5 | 3.4 | 310 | 22.9 | 56.0 | 17.1 | 12.1 | 3.3 | 1.7 | 26.9 | 17.3 | 9.6 | 275 |
| Unguja | 155.7 | 2.9 | 215 | 23.4 | 51.5 | 16.2 | 11.5 | 3.2 | 1.4 | 32.3 | 20.8 | 11.6 | 192 |
| Pemba | 155.2 | 4.7 | 94 | 21.8 | 66.5 | 19.1 | 13.4 | 3.4 | 2.3 | 14.4 | 9.3 | 5.0 | 83 |
| Zone |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Western | 157.6 | 1.7 | 1,862 | 21.6 | 79.2 | 9.8 | 7.3 | 1.5 | 1.1 | 11.0 | 9.6 | 1.4 | 1,531 |
| Northern | 156.4 | 3.7 | 1,477 | 22.4 | 67.2 | 12.6 | 8.4 | 2.4 | 1.8 | 20.3 | 15.2 | 5.0 | 1,316 |
| Central | 156.5 | 1.8 | 796 | 21.3 | 72.4 | 16.8 | 10.6 | 4.2 | 2.0 | 10.9 | 9.0 | 1.9 | 675 |
| Southern highlands | 156.2 | 2.9 | 1,436 | 22.6 | 75.3 | 7.2 | 5.2 | 1.3 | 0.7 | 17.5 | 13.3 | 4.2 | 1,241 |
| Lake | 158.4 | 2.2 | 1,852 | 22.0 | 77.2 | 8.9 | 6.7 | 1.5 | 0.8 | 13.9 | 11.3 | 2.6 | 1,556 |
| Eastern | 154.8 | 4.3 | 1,647 | 23.6 | 61.0 | 8.4 | 6.6 | 1.1 | 0.7 | 30.6 | 20.4 | 10.3 | 1,520 |
| Southern | 152.9 | 9.6 | 863 | 21.6 | 75.7 | 12.1 | 10.5 | 1.2 | 0.3 | 12.2 | 10.0 | 2.2 | 773 |
| Region |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Dodoma | 155.8 | 2.1 | 468 | 21.7 | 74.2 | 13.4 | 10.0 | 2.3 | 1.1 | 12.5 | 10.3 | 2.1 | 396 |
| Arusha | 159.1 | 1.5 | 383 | 22.6 | 66.9 | 11.4 | 8.5 | 1.7 | 1.3 | 21.7 | 16.2 | 5.5 | 337 |
| Kilimanjaro | 156.9 | 2.0 | 378 | 23.2 | 59.6 | 12.1 | 6.9 | 3.1 | 2.0 | 28.3 | 21.4 | 6.9 | 350 |
| Tanga | 153.0 | 8.3 | 426 | 22.0 | 70.7 | 12.3 | 8.0 | 2.5 | 1.7 | 17.1 | 12.9 | 4.2 | 377 |
| Morogoro | 154.0 | 5.0 | 445 | 23.3 | 70.5 | 5.4 | 5.0 | 0.4 | 0.0 | 24.1 | 18.1 | 6.0 | 401 |
| Pwani | 153.0 | 5.8 | 249 | 22.1 | 70.8 | 12.2 | 8.1 | 2.4 | 1.7 | 17.1 | 12.1 | 4.9 | 231 |
| Dar es Salaam | 155.6 | 3.5 | 953 | 24.2 | 54.1 | 8.8 | 6.9 | 1.1 | 0.8 | 37.1 | 23.5 | 13.6 | 887 |
| Lindi | 153.2 | 8.1 | 219 | 22.0 | 75.4 | 11.0 | 10.0 | 0.6 | 0.3 | 13.7 | 9.4 | 4.3 | 195 |
| Mtwara | 153.0 | 10.7 | 344 | 21.0 | 73.1 | 17.3 | 14.9 | 2.0 | 0.4 | 9.6 | 8.7 | 0.9 | 313 |
| Ruvuma | 152.6 | 9.4 | 299 | 22.1 | 79.0 | 6.8 | 5.7 | 0.8 | 0.3 | 14.2 | 12.0 | 2.2 | 265 |
| Iringa | 154.1 | 3.8 | 412 | 22.4 | 79.0 | 6.9 | 4.5 | 1.3 | 1.0 | 14.1 | 11.0 | 3.1 | 367 |
| Mbeya | 157.1 | 2.8 | 710 | 23.2 | 72.5 | 4.8 | 3.4 | 1.1 | 0.3 | 22.6 | 17.0 | 5.6 | 615 |
| Singida | 157.6 | 1.4 | 328 | 20.7 | 69.7 | 21.6 | 11.5 | 6.9 | 3.3 | 8.7 | 7.2 | 1.4 | 279 |
| Tabora | 157.9 | 1.3 | 517 | 22.1 | 80.4 | 7.3 | 6.0 | 0.5 | 0.9 | 12.3 | 10.1 | 2.2 | 421 |
| Rukwa | 156.7 | 2.0 | 313 | 21.5 | 76.5 | 13.2 | 10.5 | 1.8 | 0.9 | 10.3 | 7.8 | 2.5 | 259 |
| Kigoma | 155.1 | 4.8 | 494 | 21.2 | 78.2 | 13.6 | 9.5 | 2.2 | 1.9 | 8.2 | 6.2 | 2.0 | 427 |
| Shinyanga | 158.9 | 0.2 | 851 | 21.7 | 79.0 | 9.0 | 6.7 | 1.6 | 0.8 | 12.0 | 11.4 | 0.5 | 683 |
| Kagera | 156.9 | 2.9 | 545 | 21.3 | 82.3 | 10.4 | 8.6 | 1.2 | 0.6 | 7.3 | 6.9 | 0.3 | 457 |
| Mwanza | 158.7 | 2.2 | 933 | 22.6 | 73.7 | 7.1 | 4.8 | 1.6 | 0.8 | 19.2 | 15.1 | 4.0 | 790 |
| Mara | 160.0 | 1.2 | 374 | 21.7 | 78.5 | 11.4 | 8.7 | 1.8 | 0.9 | 10.1 | 7.9 | 2.2 | 308 |
| Manyara | 156.9 | 2.3 | 290 | 21.6 | 72.7 | 15.2 | 10.9 | 2.2 | 2.1 | 12.1 | 8.9 | 3.2 | 253 |
| Zanzibar North | 154.6 | 4.9 | 47 | 21.6 | 63.8 | 20.1 | 14.9 | 3.2 | 2.0 | 16.1 | 12.5 | 3.7 | 42 |
| Zanzibar South | 155.6 | 4.3 | 26 | 22.1 | 59.0 | 19.0 | 12.0 | 5.5 | 1.5 | 22.0 | 15.5 | 6.5 | 23 |
| Town West | 156.1 | 1.9 | 142 | 24.2 | 46.0 | 14.4 | 10.3 | 2.8 | 1.3 | 39.6 | 24.5 | 15.1 | 127 |
| Pemba North | 155.0 | 5.1 | 51 | 21.5 | 66.3 | 20.5 | 15.1 | 3.9 | 1.5 | 13.3 | 9.9 | 3.3 | 45 |
| Pemba South | 155.4 | 4.2 | 43 | 22.1 | 66.8 | 17.6 | 11.4 | 2.9 | 3.3 | 15.7 | 8.6 | 7.1 | 39 |
| Education |  |  |  |  |  |  |  |  |  |  |  |  |  |
| No education | 156.2 | 3.9 | 2,483 | 21.8 | 76.0 | 11.3 | 8.4 | 1.8 | 1.0 | 12.7 | 10.5 | 2.2 | 2,126 |
| Primary incomplete | 155.1 | 5.3 | 1,836 | 21.5 | 72.3 | 15.8 | 10.9 | 3.0 | 2.0 | 11.9 | 9.4 | 2.5 | 1,597 |
| Primary complete | 156.8 | 2.6 | 5,045 | 22.6 | 72.4 | 8.1 | 5.9 | 1.5 | 0.7 | 19.5 | 15.0 | 4.5 | 4,337 |
| Secondary+ | 157.3 | 2.2 | 877 | 23.9 | 57.5 | 9.9 | 8.3 | 0.9 | 0.8 | 32.6 | 19.4 | 13.2 | 827 |
| Wealth quintile |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Lowest | 156.6 | 3.4 | 1,822 | 21.3 | 79.6 | 12.6 | 9.0 | 2.4 | 1.2 | 7.8 | 7.1 | 0.8 | 1,534 |
| Second | 156.0 | 3.9 | 1,930 | 21.3 | 79.2 | 12.4 | 8.7 | 2.3 | 1.4 | 8.5 | 7.5 | 1.0 | 1,628 |
| Middle | 156.2 | 3.7 | 1,933 | 21.7 | 77.0 | 11.2 | 8.4 | 2.3 | 0.6 | 11.7 | 9.9 | 1.9 | 1,643 |
| Fourth | 156.3 | 3.3 | 1,988 | 22.3 | 73.6 | 9.9 | 7.1 | 1.6 | 1.3 | 16.5 | 13.2 | 3.3 | 1,723 |
| Highest | 156.7 | 2.8 | 2,568 | 24.1 | 56.9 | 7.4 | 5.8 | 0.9 | 0.8 | 35.6 | 23.9 | 11.8 | 2,361 |
| Total | 156.4 | 3.4 | 10,241 | 22.3 | 71.8 | 10.4 | 7.6 | 1.8 | 1.0 | 17.7 | 13.3 | 4.4 | 8,888 |
| ${ }^{1}$ Excludes pregnant women and women with a birth in the past two months |  |  |  |  |  |  |  |  |  |  |  |  |  |

## HIV/AIDS-RELATED KNOWLEDGE, ATTITUDES, AND BEHAVIOUR

## INTRODUCTION

Acquired immunodeficiency syndrome (AIDS) is one of the most serious public health and development challenges in sub-Saharan Africa. According to the 2003-04 Tanzania HIV Indicator Survey (THIS), which covered Mainland Tanzania, 7 percent of adults age 15-49 were infected with the human immunodeficiency virus (HIV), the virus that causes AIDS. HIV transmission through heterosexual contact accounts for most HIV infections in the country.

The impact of AIDS is now affecting all sectors of Tanzanian society. In response to the HIV/AIDS epidemic, the Government of Tanzania, with technical assistance from the World Health Organisation's Global Programme on AIDS (WHO-GPA), formed the National HIV/AIDS Control Programme (NACP) under the Ministry of Health. NACP formulated a short-term plan (1985-1986) and three 5-year medium-term plans (1987-1991, 1992-1996, and 1998-2002). The national response consisted of developing strategies to prevent, control, and mitigate the effect of the HIV/AIDS epidemic, through health education, multisectoral response, and community participation. Furthermore, the Tanzania Commission for AIDS (TACAIDS), established in 2001, was mandated to provide strategic leadership and to coordinate multisectoral responses. TACAIDS is also designed to monitor and evaluate progress, to mobilise resources, and undertake advocacy. The National Policy on HIV/AIDS and the National Multisectoral Strategic Framework guide the implementation of TACAIDS activities, providing the framework, direction, and general principles for intervention, care, and support for those infected and affected by the epidemic, as well as mitigation of the effect of HIV/AIDS.

The main objective of this chapter is to establish the prevalence of relevant knowledge, perceptions, and behaviours at the national level and within geographic and socioeconomic subgroups of the population, using data from the 2004-05 TDHS. The chapter presents findings on current levels of HIV/AIDS knowledge, attitudes, and related behaviours for the general adult population and specifically, for youth. The chapter concludes with information on knowledge and patterns of sexual activity among young people, as they are the main target of many HIV prevention efforts. Based on findings from this chapter, AIDS control programmes can target particular groups of people most in need of information and services and most vulnerable to the risk of HIV infection.

Findings presented in this chapter can also be compared with the findings from the 2003-04 THIS. However, there are several key differences between the two surveys. While the 2004-05 TDHS included Zanzibar, the 2003-04 THIS did not. Furthermore, the wording of certain questions was modified based on the recommendations of a validation study of the THIS survey instruments (Yoder and Nyblade, 2004). Thus, there is not always exact comparability of the questions upon which certain tables are based.

In Tanzania, knowledge of AIDS is widespread, with 99 percent of respondents having heard of AIDS (Table 12.1). At least 95 percent of all respondents, regardless of background characteristics, have heard of the epidemic.

| Percentage of women and men who have heard of AIDS, by background characteristics, Tanzania 2004-05 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Women |  | Men |  |
| Background characteristic | $\begin{gathered} \hline \text { Has heard } \\ \text { of AIDS } \\ \hline \end{gathered}$ | Number of women | Has heard of AIDS | Number of men |
| Age |  |  |  |  |
| 15-19 | 97.8 | 2,245 | 97.5 | 637 |
| 20-24 | 98.9 | 2,007 | 98.8 | 493 |
| 25-29 | 99.6 | 1,885 | 100.0 | 405 |
| 30-39 | 99.3 | 2,595 | 99.8 | 665 |
| 40-49 | 99.0 | 1,597 | 100.0 | 435 |
| 15-24 | 98.4 | 4,252 | 98.1 | 1,130 |
| Marital status |  |  |  |  |
| Never married | 98.4 | 2,371 | 98.0 | 1,100 |
| Ever had sex | 99.2 | 1,022 | 98.7 | 686 |
| Never had sex | 97.8 | 1,350 | 96.9 | 414 |
| Married/living together | 99.0 | 6,950 | 99.9 | 1,401 |
| Divorced/separated/ widowed | 99.2 | 1,007 | 100.0 | 135 |
| Residence |  |  |  |  |
| Urban | 99.8 | 2,935 | 99.6 | 716 |
| Rural | 98.6 | 7,394 | 99.0 | 1,919 |
| Mainland/Zanzibar |  |  |  |  |
| Mainland | 98.9 | 10,016 | 99.1 | 2,556 |
| Total urban | 99.8 | 2,885 | 99.6 | 716 |
| Dar es Salaam city | 100.0 | 969 | 98.9 | 267 |
| Other urban | 99.7 | 1,916 | 100.0 | 450 |
| Total rural | 98.5 | 7,131 | 99.0 | 1,840 |
| Zanzibar | 99.8 | 313 | 98.7 | 79 |
| Unguja | 99.9 | 216 | 100.0 | 53 |
| Pemba | 99.6 | 97 | 96.1 | 26 |
| Zone |  |  |  |  |
| Western | 98.6 | 1,880 | 99.4 | 468 |
| Northern | 98.3 | 1,496 | 98.8 | 362 |
| Central | 94.9 | 799 | 96.6 | 212 |
| Southern highlands | 98.8 | 1,440 | 99.8 | 358 |
| Lake | 99.9 | 1,865 | 99.2 | 448 |
| Eastern | 100.0 | 1,670 | 99.3 | 462 |
| Southern | 100.0 | 866 | 100.0 | 245 |
| Education |  |  |  |  |
| No education | 96.2 | 2,503 | 95.9 | 312 |
| Primary incomplete | 99.5 | 1,855 | 99.0 | 646 |
| Primary complete | 99.8 | 5,086 | 99.7 | 1,381 |
| Secondary+ | 100.0 | 885 | 100.0 | 296 |
| Wealth quintile |  |  |  |  |
| Lowest | 97.5 | 1,840 | 97.6 | 484 |
| Second | 98.1 | 1,944 | 99.5 | 504 |
| Middle | 99.0 | 1,943 | 99.9 | 516 |
| Fourth | 99.7 | 2,004 | 99.0 | 517 |
| Highest | 99.9 | 2,597 | 99.5 | 615 |
| Total | 98.9 | 10,329 | 99.1 | 2,635 |

### 12.1 Knowledge of HIV/AIDS Transmission and Prevention Methods

AIDS prevention programmes focus their messages and efforts on three important aspects of behaviour: delaying sexual debut in young persons (abstinence), limiting the number of sexual partners/staying faithful to one partner, and use of condoms, (the ABC message). To ascertain whether programmes have effectively communicated these messages, respondents were prompted with specific questions about whether it is possible to reduce the chance of getting the AIDS virus by having just one faithful sexual partner, using a condom at every sexual encounter, and abstaining from sex.

Table 12.2 provides results on levels of knowledge of HIV/AIDS prevention methods, which is widespread. Approximately nine in ten respondents ( 91 percent of women and 86 percent of men) indicate that the chances of getting the AIDS virus can be reduced by limiting sex to one uninfected partner who has no other partners. Eight in ten women and men know that condoms can reduce the risk of contracting the HIV virus during sexual intercourse.

Knowledge of both these means of avoiding HIV transmission is also high, with more than seven in ten citing both as ways of reducing the risk of getting the AIDS virus. The percentage of both women and men who know that abstaining from sex reduces the chances of getting the AIDS virus is the highest among all prevention methods- 93 percent of women and 89 percent of men. These proportions are higher than those estimated in the 2003-04 Tanzania HIV/AIDS Indicator Survey. For example, the proportion of women who say that they know about using condoms is 11 percentage points higher and the proportion of men is 5 percentage points higher. However, the wording of questions on abstinence and condom use were slightly modified between the two surveys.

As shown in Table 12.2, across respondents, there are notable differences in knowledge of HIV/AIDS prevention. While age differentials are inconsistent, youth age 15-24 appear to have lower levels of knowledge than those in older age groups. As expected, women and men with higher levels of schooling are more likely than those with less schooling to be aware of various preventive methods, although men with secondary schooling or higher are not more likely than those with complete primary to be aware of various methods. Also as expected, women and men in higher wealth quintiles are more likely than those in lower quintiles to be aware of prevention methods.

Knowledge of HIV prevention methods is lower among those who have never had sex than among the rest of the population. Among women in particular, levels of knowledge of preventive methods are higher in urban than in rural areas. Respondents on the Mainland are more likely than those in Zanzibar to be aware of various methods, especially among men. For instance, 75 percent of women on the Mainland and 60 percent in Zanzibar, and 73 percent of men on the Mainland and 33 percent in Zanzibar, are aware that both condom use and limiting sex to one partner reduces the risk of contracting HIV/AIDS. Variation by region is particularly striking, especially among men.

| Table 12.2 Knowledge of HIV prevention methods |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percentage of women and men who, in response to prompted questions, say that people can reduce the risk of getting the AIDS virus by using condoms, by having sex with just one partner who is not infected and who has no other partners, and by abstaining, by background characteristics, Tanzania 2004-05 |  |  |  |  |  |  |  |  |  |  |
| Background characteristic | Women |  |  |  |  | Men |  |  |  |  |
|  | Using condoms |  | Using condoms and |  |  |  |  | $\begin{aligned} & \text { Using } \\ & \text { condoms } \\ & \text { and } \end{aligned}$ |  |  |
|  |  | Limiting | limiting |  |  |  | Limiting | limiting |  |  |
|  |  | uninfected partner | uninfected partner | Abstaining from sex | of <br> women | Using condoms | uninfected partner | uninfected partner | Abstaining from sex | $\qquad$ |
| Age |  |  |  |  |  |  |  |  |  |  |
| 15-19 | 73.1 | 87.9 | 68.9 | 89.4 | 2,245 | 75.2 | 77.6 | 62.7 | 84.6 | 637 |
| 20-24 | 81.6 | 90.3 | 76.9 | 92.5 | 2,007 | 83.6 | 85.7 | 75.7 | 89.2 | 493 |
| 25-29 | 82.3 | 92.8 | 78.4 | 94.2 | 1,885 | 81.1 | 91.5 | 76.0 | 89.7 | 405 |
| 30-39 | 81.1 | 93.0 | 77.6 | 93.0 | 2,595 | 83.9 | 90.7 | 76.9 | 90.8 | 665 |
| 40-49 | 73.4 | 92.2 | 70.6 | 94.0 | 1,597 | 78.0 | 87.4 | 70.5 | 90.8 | 435 |
| 15-24 | 77.1 | 89.1 | 72.7 | 90.8 | 4,252 | 78.8 | 81.1 | 68.4 | 86.6 | 1,130 |
| Marital status |  |  |  |  |  |  |  |  |  |  |
| Never married | 74.4 | 89.1 | 70.4 | 91.6 | 2,371 | 76.7 | 81.4 | 66.9 | 86.1 | 1,100 |
| Ever had sex | 85.6 | 92.6 | 81.5 | 94.9 | 1,022 | 84.0 | 87.3 | 76.3 | 88.8 | 686 |
| Never had sex | 65.9 | 86.4 | 62.1 | 89.1 | 1,350 | 64.6 | 71.7 | 51.2 | 81.7 | 414 |
| Married/living together | 79.2 | 91.8 | 75.4 | 92.4 | 6,950 | 82.3 | 89.5 | 75.4 | 90.8 | 1,401 |
| Divorced/separated/ widowed | 82.9 | 92.3 | 79.1 | 95.0 | 1,007 | 88.5 | 90.2 | 79.5 | 90.5 | 135 |
| Residence |  |  |  |  |  |  |  |  |  |  |
| Urban | 82.8 | 94.3 | 79.7 | 94.8 | 2,935 | 79.8 | 90.0 | 73.8 | 91.3 | 716 |
| Rural | 76.8 | 90.0 | 72.6 | 91.6 | 7,394 | 80.5 | 84.7 | 71.4 | 87.9 | 1,919 |
| Mainland/Zanzibar |  |  |  |  |  |  |  |  |  |  |
| Mainland | 78.9 | 91.3 | 75.1 | 92.7 | 10,016 | 81.6 | 86.7 | 73.3 | 89.5 | 2,556 |
| Total urban | 83.4 | 94.3 | 80.0 | 95.1 | 2,885 | 80.3 | 90.3 | 74.0 | 92.3 | 716 |
| Dar es Salaam city | 82.1 | 92.4 | 77.5 | 96.0 | 969 | 80.7 | 85.9 | 71.3 | 91.2 | 267 |
| Other urban | 84.0 | 95.2 | 81.3 | 94.7 | 1,916 | 80.0 | 92.9 | 75.6 | 92.9 | 450 |
| Total rural | 77.1 | 90.1 | 73.1 | 91.7 | 7,131 | 82.2 | 85.3 | 73.0 | 88.4 | 1,840 |
| Zanzibar | 64.8 | 88.2 | 59.8 | 86.2 | 313 | 37.4 | 70.2 | 32.7 | 67.5 | 79 |
| Unguja | 66.9 | 89.3 | 62.1 | 88.4 | 216 | 43.1 | 78.2 | 38.6 | 85.9 | 53 |
| Pemba | 59.9 | 85.9 | 54.5 | 81.4 | 97 | 25.9 | 53.9 | 20.6 | 29.6 | 26 |
| Zone |  |  |  |  |  |  |  |  |  |  |
| Western | 74.0 | 88.4 | 68.5 | 89.0 | 1,880 | 87.9 | 86.3 | 77.6 | 87.3 | 468 |
| Northern | 76.1 | 91.0 | 73.9 | 92.2 | 1,496 | 69.8 | 78.5 | 60.0 | 84.4 | 362 |
| Central | 65.4 | 79.0 | 59.5 | 86.0 | 799 | 79.9 | 88.9 | 75.6 | 86.0 | 212 |
| Southern highlands | 75.6 | 92.5 | 72.2 | 92.8 | 1,440 | 78.9 | 96.7 | 76.7 | 96.9 | 358 |
| Lake | 89.5 | 94.8 | 86.5 | 96.1 | 1,865 | 86.1 | 75.7 | 68.6 | 87.0 | 448 |
| Eastern | 79.6 | 93.9 | 75.8 | 95.3 | 1,670 | 77.0 | 90.2 | 71.1 | 90.5 | 462 |
| Southern | 88.3 | 94.9 | 85.2 | 95.2 | 866 | 93.4 | 96.3 | 90.0 | 96.2 | 245 |
| Region |  |  |  |  |  |  |  |  |  |  |
| Dodoma | 70.7 | 82.5 | 65.3 | 86.6 | 468 | 82.0 | 94.9 | 82.0 | 88.1 | 113 |
| Arusha | 66.6 | 85.3 | 64.0 | 88.3 | 391 | 75.6 | 80.7 | 69.7 | 84.3 | 82 |
| Kilimanjaro | 88.8 | 96.9 | 87.2 | 96.8 | 380 | 65.6 | 80.2 | 56.7 | 83.1 | 104 |
| Tanga | 88.7 | 97.7 | 87.8 | 96.8 | 431 | 67.5 | 79.6 | 59.6 | 82.4 | 94 |
| Morogoro | 74.5 | 94.8 | 70.9 | 92.4 | 449 | 67.5 | 96.7 | 67.5 | 86.9 | 127 |
| Pwani | 78.9 | 97.9 | 77.8 | 97.9 | 253 | 80.2 | 94.8 | 77.5 | 94.2 | 68 |
| Dar es Salaam | 82.1 | 92.4 | 77.5 | 96.0 | 969 | 80.7 | 85.9 | 71.3 | 91.2 | 267 |
| Lindi | 87.4 | 94.8 | 83.8 | 93.4 | 221 | 92.3 | 95.1 | 87.4 | 91.3 | 65 |
| Mtwara | 88.1 | 93.7 | 85.1 | 95.0 | 346 | 94.8 | 97.2 | 92.0 | 99.0 | 98 |
| Ruvuma | 89.2 | 96.4 | 86.4 | 96.8 | 299 | 92.5 | 96.1 | 89.6 | 96.8 | 83 |
| Iringa | 79.2 | 95.7 | 76.3 | 94.0 | 412 | 81.2 | 100.0 | 81.2 | 96.2 | 102 |
| Mbeya | 74.2 | 89.7 | 69.6 | 90.9 | 712 | 76.5 | 94.7 | 72.2 | 97.3 | 170 |
| Singida | 58.0 | 74.1 | 51.3 | 85.1 | 331 | 77.5 | 82.1 | 68.3 | 83.5 | 99 |
| Tabora | 87.4 | 93.9 | 83.4 | 90.9 | 520 | 87.2 | 82.7 | 74.7 | 92.9 | 127 |
| Rukwa | 74.1 | 94.5 | 72.7 | 95.4 | 316 | 81.1 | 96.8 | 80.2 | 96.9 | 87 |
| Kigoma | 78.0 | 99.0 | 77.7 | 95.0 | 499 | 79.0 | 95.6 | 77.3 | 98.2 | 127 |
| Shinyanga | 63.5 | 78.9 | 54.1 | 84.2 | 861 | 93.5 | 82.9 | 79.5 | 77.5 | 215 |
| Kagera | 90.9 | 99.5 | 90.9 | 99.5 | 545 | 80.5 | 76.0 | 65.1 | 88.9 | 122 |
| Mwanza | 95.3 | 98.3 | 93.8 | 97.1 | 939 | 85.0 | 69.7 | 62.3 | 84.9 | 229 |
| Mara | 73.4 | 79.5 | 62.0 | 88.6 | 381 | 95.5 | 89.5 | 87.8 | 89.3 | 98 |
| Manyara | 53.8 | 81.1 | 49.4 | 84.6 | 293 | 71.8 | 72.8 | 55.0 | 88.5 | 83 |
| Zanzibar North | 61.0 | 85.5 | 55.2 | 83.8 | 48 | 36.4 | 82.4 | 33.2 | 85.1 | 11 |
| Zanzibar South | 73.5 | 87.1 | 66.9 | 86.1 | 26 | 70.8 | 86.5 | 61.2 | 89.3 | 6 |
| Town West | 67.7 | 90.9 | 63.6 | 90.3 | 143 | 40.3 | 75.5 | 36.3 | 85.6 | 36 |
| Pemba North | 57.7 | 85.8 | 51.6 | 80.1 | 52 | 24.4 | 69.7 | 21.5 | 32.0 | 13 |
| Pemba South | 62.5 | 86.1 | 57.9 | 82.8 | 45 | 27.5 | 37.0 | 19.5 | 26.9 | 12 |
| Education |  |  |  |  |  |  |  |  |  |  |
| No education | 66.8 | 85.3 | 62.8 | 87.1 | 2,503 | 68.0 | 75.2 | 56.3 | 84.4 | 312 |
| Primary incomplete | 77.8 | 90.0 | 73.0 | 93.2 | 1,855 | 77.7 | 80.7 | 66.6 | 85.9 | 646 |
| Primary complete | 83.4 | 93.4 | 79.6 | 94.3 | 5,086 | 84.7 | 90.9 | 78.4 | 90.8 | 1,381 |
| Secondary+ | 84.6 | 97.6 | 83.4 | 96.1 | 885 | 78.6 | 87.7 | 70.9 | 91.1 | 296 |
| Wealth quintile |  |  |  |  |  |  |  |  |  |  |
| Lowest | 70.2 | 87.2 | 66.7 | 88.1 | 1,840 | 78.0 | 81.6 | 68.1 | 84.6 | 484 |
| Second | 75.7 | 88.9 | 71.3 | 90.7 | 1,944 | 80.1 | 85.1 | 70.4 | 88.0 | 504 |
| Middle | 78.9 | 91.7 | 75.2 | 92.8 | 1,943 | 85.1 | 86.2 | 74.5 | 89.8 | 516 |
| Fourth | 82.1 | 93.0 | 77.9 | 94.7 | 2,004 | 79.4 | 89.4 | 75.2 | 89.8 | 517 |
| Highest | 83.4 | 94.0 | 80.0 | 95.0 | 2,597 | 79.0 | 88.0 | 71.7 | 91.2 | 615 |
| Total | 78.5 | 91.2 | 74.6 | 92.5 | 10,329 | 80.3 | 86.2 | 72.0 | 88.8 | 2,635 |

## Knowledge about Transmission

The 2004-05 TDHS also asked about common misconceptions about AIDS and HIV transmission. Respondents were asked whether they think it is possible for a healthy-looking person to have the AIDS virus. Results for women and men are presented in Tables 12.3.1 and 12.3.2. The tables also present the percentage of the population who know that the common misconceptions about transmission of AIDS are not true. Respondents were asked whether a person can get AIDS from mosquito bites, from supernatural means, or from eating from the same plate as a person who has AIDS.

The vast majority of Tanzanian adults know that people infected with HIV do not necessarily show signs of infection. Eighty-one percent of women and 84 percent of men know that a healthylooking person can have the virus that causes AIDS. There are minimal gender differences in misconceptions about HIV/AIDS transmission: 75 percent of women and 73 percent of men understand that AIDS cannot be transmitted by mosquito bites, and 84 percent of women and 88 percent of men know that AIDS cannot be transmitted by supernatural means. Similarly, approximately eight in ten respondents know that a person cannot become infected with the AIDS virus by sharing food with a person who has AIDS. A majority of adults ( 57 percent of women and men) understand that the two most common misconceptions about HIV/AIDS transmission are incorrect and also know that a healthy-looking person can have the AIDS virus. The 2003-04 THIS in Mainland Tanzania and the 2004-05 DHS found similar results in the level of each of the misconceptions.

Comprehensive knowledge of HIV/AIDS is defined as 1) knowing that both condom use and limiting sex partners to one uninfected partner are HIV prevention methods, 2) being aware that a healthy-looking person can have HIV, and 3) rejecting the two most common local misconceptionsthat HIV/AIDS can be transmitted through mosquito bites and by sharing food. Less than half of the respondents have comprehensive knowledge of HIV/AIDS transmission and prevention methods: 47 percent of women and 44 percent of men. Age, education, wealth, and residence are correlated with comprehensive knowledge. The youngest (age 15-19) and the oldest (age 40-49) respondents are least likely to have comprehensive knowledge of HIV/AIDS transmission and prevention methods. As expected, women and men with higher levels of schooling, those from the wealthier quintiles, and those in urban areas are more likely than other respondents to have comprehensive knowledge of HIV/AIDS.

Unlike with the HIV prevention methods, both women and men in Zanzibar are more likely than those in Mainland Tanzania to say that a healthy-looking person can have HIV/AIDS, and to reject the two most common misperceptions about transmission (respectively, 68 and 56 percent for women; 71 and 57 percent for men).

| Table 12.3.1 Beliefs about AIDS: women |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percentage of women age 15-49 who say that a healthy-looking person can have the AIDS virus and who, in response to prompted questions, correctly reject local misconceptions about AIDS transmission or prevention, and the percentage with comprehensive knowledge about AIDS by background characteristics, Tanzania 2004-05 |  |  |  |  |  |  |  |
| Percentage of respondents who know that: |  |  |  |  |  |  |  |
| Background characteristic | A healthylooking person can have the AIDS virus | AIDS cannot be transmitted by mosquito bites | AIDS cannot be transmitted by supernatural means | A person cannot become infected by eating from the same plate as a person who has AIDS | Percentage who say that a healthy-looking person can have the AIDS virus and who reject the two most common local misconceptions ${ }^{1}$ | Percentage with comprehensive knowledge about AIDS ${ }^{2}$ | Number of women |
| Age |  |  |  |  |  |  |  |
| 15-19 | 74.8 | 76.1 | 82.3 | 75.2 | 51.5 | 40.9 | 2,245 |
| 20-24 | 81.5 | 77.8 | 85.6 | 81.8 | 59.1 | 50.1 | 2,007 |
| 25-29 | 85.4 | 77.1 | 86.1 | 83.7 | 62.0 | 52.1 | 1,885 |
| 30-39 | 84.2 | 75.2 | 84.4 | 78.2 | 58.1 | 49.6 | 2,595 |
| 40-49 | 81.5 | 68.3 | 80.1 | 75.3 | 51.2 | 41.3 | 1,597 |
| 15-24 | 78.0 | 76.9 | 83.9 | 78.3 | 55.1 | 45.2 | 4,252 |
| Marital status |  |  |  |  |  |  |  |
| Never married | 79.3 | 78.6 | 85.1 | 78.4 | 57.1 | 45.7 | 2,371 |
| Ever had sex | 84.0 | 78.7 | 85.2 | 82.1 | 60.6 | 53.8 | 1,022 |
| Never had sex | 75.7 | 78.5 | 85.1 | 75.5 | 54.5 | 39.6 | 1,350 |
| Married/living together | 81.4 | 74.2 | 84.0 | 78.7 | 55.9 | 46.6 | 6,950 |
| Divorced/separated/ widowed | 86.7 | 74.4 | 79.9 | 80.6 | 59.3 | 52.2 | 1,007 |
| Residence |  |  |  |  |  |  |  |
| Urban | 92.8 | 82.4 | 87.3 | 87.8 | 71.0 | 59.2 | 2,935 |
| Rural | 76.9 | 72.3 | 82.5 | 75.3 | 50.8 | 42.1 | 7,394 |
| Mainland/Zanzibar |  |  |  |  |  |  |  |
| Mainland | 81.2 | 75.0 | 83.9 | 78.5 | 56.1 | 47.0 | 10,016 |
| Total urban | 92.8 | 82.3 | 87.4 | 87.7 | 70.6 | 59.1 | 2,885 |
| Dar es Salaam city | 94.0 | 81.7 | 86.5 | 89.7 | 71.9 | 58.0 | 969 |
| Other urban | 92.3 | 82.6 | 87.8 | 86.6 | 70.0 | 59.6 | 1,916 |
| Total rural | 76.5 | 72.1 | 82.4 | 74.8 | 50.3 | 42.2 | 7,131 |
| Zanzibar | 89.6 | 79.6 | 83.7 | 88.8 | 68.2 | 44.6 | 313 |
| Unguja | 91.1 | 81.9 | 84.1 | 90.7 | 71.4 | 47.2 | 216 |
| Pemba | 86.3 | 74.6 | 82.9 | 84.7 | 61.0 | 38.6 | 97 |
| Zone |  |  |  |  |  |  |  |
| Western | 71.0 | 75.2 | 80.8 | 73.7 | 45.6 | 35.8 | 1,880 |
| Northern | 81.4 | 75.1 | 87.7 | 77.2 | 57.9 | 49.7 | 1,496 |
| Central | 70.3 | 65.4 | 80.1 | 66.7 | 43.5 | 32.3 | 799 |
| Southern highlands | 78.6 | 68.4 | 80.4 | 75.1 | 48.8 | 39.6 | 1,440 |
| Lake | 86.8 | 81.1 | 87.3 | 86.0 | 67.1 | 60.6 | 1,865 |
| Eastern | 90.0 | 77.5 | 84.3 | 82.7 | 63.4 | 51.1 | 1,670 |
| Southern | 88.0 | 76.8 | 84.7 | 83.4 | 62.3 | 55.7 | 866 |
| Education |  |  |  |  |  |  |  |
| No education | 65.3 | 60.8 | 72.1 | 65.2 | 36.8 | 29.5 | 2,503 |
| Primary incomplete | 77.4 | 72.4 | 83.2 | 75.5 | 48.2 | 39.0 | 1,855 |
| Primary complete | 88.2 | 80.6 | 88.3 | 84.3 | 64.7 | 54.5 | 5,086 |
| Secondary+ | 96.4 | 90.6 | 92.6 | 92.7 | 82.4 | 69.6 | 885 |
| Wealth quintile |  |  |  |  |  |  |  |
| Lowest | 69.3 | 67.4 | 78.6 | 68.5 | 43.1 | 34.8 | 1,840 |
| Second | 73.1 | 70.1 | 81.2 | 73.7 | 46.6 | 39.5 | 1,944 |
| Middle | 79.2 | 73.4 | 83.1 | 77.0 | 52.3 | 44.2 | 1,943 |
| Fourth | 86.9 | 76.7 | 85.2 | 83.0 | 60.9 | 49.9 | 2,004 |
| Highest | 93.8 | 84.6 | 89.0 | 88.0 | 73.2 | 61.1 | 2,597 |
| Total | 81.4 | 75.2 | 83.8 | 78.8 | 56.5 | 47.0 | 10,329 |

${ }^{1}$ Two most common local misconceptions involve: "People get the AIDS virus from mosquito bites" and "People can be infected with the AIDS virus by eating from the same plate as someone who is sick with AIDS." ${ }^{2}$ Respondents with a comprehensive knowledge say that use of condom for every sexual intercourse and having just one uninfected and faithful partner can reduce the chance of getting the AIDS virus, say that a healthy-looking person can have the AIDS virus, and reject the two most common local misconceptions

| Table 12.3.2 Beliefs about AIDS: men |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percentage of men age 15-49 who say that a healthy-looking person can have the AIDS virus and who, in response to prompted questions, correctly reject local misconceptions about AIDS transmission or prevention, and the percentage with comprehensive knowledge about AIDS by background characteristics, Tanzania 2004-05 |  |  |  |  |  |  |  |
| Percentage of respondents who know that: |  |  |  |  | ```Percentage who say that a healthy-looking Percentage person can have with the AIDS virus compre- and who reject hensive the two most knowledge common local about misconceptions \({ }^{1} \quad\) AIDS \(^{2}\)``` |  | Number of men |
| Background characteristic | A healthylooking person can have the AIDS virus | AIDS cannot be transmitted by mosquito bites | AIDS cannot be transmitted by supernatural means | A person cannot become infected by eating from the same plate as a person who has AIDS |  |  |  |
| Age |  |  |  |  |  |  |  |
| 15-19 | 77.1 | 73.8 | 85.3 | 76.0 | 51.8 | 33.3 | 637 |
| 20-24 | 81.7 | 72.6 | 90.4 | 84.0 | 56.6 | 49.4 | 493 |
| 25-29 | 88.3 | 71.6 | 84.7 | 84.2 | 59.5 | 46.9 | 405 |
| 30-39 | 89.6 | 74.2 | 91.0 | 82.6 | 60.8 | 47.7 | 665 |
| 40-49 | 84.3 | 71.9 | 87.5 | 79.2 | 56.7 | 44.7 | 435 |
| 15-24 | 79.1 | 73.3 | 87.5 | 79.5 | 53.9 | 40.3 | 1,130 |
| Marital status |  |  |  |  |  |  |  |
| Never married | 81.5 | 75.0 | 87.0 | 80.6 | 56.7 | 41.1 | 1,100 |
| Ever had sex | 84.7 | 75.9 | 88.7 | 83.6 | 59.1 | 49.4 | 686 |
| Never had sex | 76.2 | 73.4 | 84.3 | 75.7 | 52.6 | 27.2 | 414 |
| Married/living together | 85.7 | 71.2 | 89.2 | 81.2 | 56.2 | 45.0 | 1,401 |
| Divorced/separated/ widowed | 87.0 | 76.1 | 83.2 | 81.6 | 66.6 | 56.8 | 135 |
| Residence |  |  |  |  |  |  |  |
| Urban | 92.9 | 80.9 | 91.6 | 89.1 | 70.8 | 53.9 | 716 |
| Rural | 80.7 | 70.1 | 86.6 | 77.9 | 51.8 | 40.2 | 1,919 |
| Mainland/Zanzibar |  |  |  |  |  |  |  |
| Mainland | 83.7 | 72.8 | 88.0 | 80.7 | 56.5 | 44.6 | 2,556 |
| Total urban | 92.6 | 80.4 | 90.4 | 89.0 | 70.7 | 54.5 | 716 |
| Dar es Salaam city | 92.3 | 82.5 | 90.2 | 91.2 | 75.8 | 59.8 | 267 |
| Other urban | 92.7 | 79.2 | 90.6 | 87.7 | 67.7 | 51.3 | 450 |
| Total rural | 80.3 | 69.9 | 87.0 | 77.5 | 51.0 | 40.7 | 1,840 |
| Zanzibar | 93.3 | 79.9 | 87.0 | 88.9 | 70.7 | 23.2 | 79 |
| Unguja | 95.4 | 83.8 | 88.7 | 91.9 | 74.6 | 30.0 | 53 |
| Pemba | 89.0 | 71.9 | 83.4 | 82.6 | 62.8 | 9.3 | 26 |
| Zone |  |  |  |  |  |  |  |
| Western | 78.3 | 67.4 | 86.6 | 78.0 | 46.7 | 38.6 | 468 |
| Northern | 80.9 | 72.6 | 85.3 | 77.8 | 53.1 | 36.4 | 362 |
| Central | 67.2 | 70.3 | 88.3 | 67.3 | 44.6 | 39.3 | 212 |
| Southern highlands | 90.9 | 73.1 | 94.1 | 82.2 | 61.4 | 50.2 | 358 |
| Lake | 81.0 | 77.6 | 88.8 | 84.9 | 59.2 | 43.0 | 448 |
| Eastern | 90.7 | 78.8 | 88.4 | 86.8 | 68.5 | 53.3 | 462 |
| Southern | 94.1 | 65.5 | 83.1 | 80.5 | 56.1 | 50.8 | 245 |
| Education |  |  |  |  |  |  |  |
| No education | 68.2 | 52.0 | 76.9 | 64.9 | 31.5 | 18.7 | 312 |
| Primary incomplete | 75.1 | 65.9 | 84.8 | 71.5 | 42.8 | 31.0 | 646 |
| Primary complete | 88.8 | 78.0 | 90.7 | 86.3 | 63.9 | 52.0 | 1,381 |
| Secondary+ | 97.7 | 87.7 | 94.0 | 93.7 | 82.3 | 60.9 | 296 |
| Wealth quintile |  |  |  |  |  |  |  |
| Lowest | 72.3 | 61.3 | 81.6 | 65.6 | 39.0 | 30.4 | 484 |
| Second | 78.1 | 68.3 | 83.7 | 78.6 | 48.6 | 35.4 | 504 |
| Middle | 84.8 | 73.8 | 90.6 | 83.2 | 57.1 | 45.1 | 516 |
| Fourth | 88.8 | 75.9 | 91.4 | 85.8 | 62.3 | 49.1 | 517 |
| Highest | 93.5 | 83.0 | 91.3 | 89.0 | 73.3 | 56.2 | 615 |
| Total | 84.0 | 73.0 | 88.0 | 81.0 | 57.0 | 43.9 | 2,635 |

${ }^{1}$ Two most common local misconceptions involve: "People get the AIDS virus from mosquito bites" and "People can be infected with the AIDS virus by eating from the same plate as someone who is sick with AIDS." ${ }^{2}$ Respondents with a comprehensive knowledge say that use of condom for every sexual intercourse and having just one uninfected and faithful partner can reduce the chance of getting the AIDS virus, say that a healthy-looking person can have the AIDS virus, and reject the two most common local misconceptions

## Knowledge about Mother-to-Child Transmission

Increasing the level of general knowledge of transmission of HIV from mother to child and reducing the risk of transmission using antiretroviral drugs is critical to reducing mother-to-child transmission (MTCT) during pregnancy, delivery, and through breastfeeding. Respondents in the 2004-05 TDHS were asked if the virus that causes AIDS can be transmitted from a mother to a child during breastfeeding and whether a mother with HIV can reduce the risk of transmission to the baby by taking certain drugs during pregnancy (see Table 12.4).

Although 79 percent of women and 74 percent of men know that HIV can be transmitted by breastfeeding, less than half those proportions know that the risk of MTCT can be reduced through the use of antiretroviral drugs during pregnancy. The proportion of respondents who know both is less than one-third. There are notable differences in knowledge among women and men by educational attainment and wealth. For instance, just 12 percent of women with no schooling are aware of how to reduce MTCT, compared with 57 percent of women with secondary schooling or higher. There are similar differences among men, according to educational attainment. Twelve percent of women (and 18 percent of men) in the lowest wealth quintile are aware of these methods to reduce the risk of MTCT, more than half of the women (and 45 percent of men) in the wealthiest quintile know of these methods.

There are substantial urban-rural differences in knowledge of preventing MTCT. Women in urban areas are more than twice as likely as those in rural areas to know of methods to prevent MTCT ( 30 and 20 percent, respectively). There is a sizeable, if smaller, urban-rural gap among men (42 and 26 percent, respectively). Zonal variation in knowledge is substantial, especially among women.

## Table 12.4 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 by breastfeeding and that risk of mother-to-child transmission (MTCT) of HIV can be reduced by mother taking special drugs during pregnancy, by background characteristics, Tanzania 2004-05

| Background characteristic | Women |  |  |  | Men |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | HIV <br> can be transmitted by breastfeeding | Risk of MTCT can be reduced by mother taking special drugs during pregnancy | HIV can be transmitted by breastfeeding and risk of MTCT can be reduced by mother taking special drugs during pregnancy | Number of women | HIV <br> can be transmitted by breastfeeding | Risk of MTCT can be reduced by mother taking special drugs during pregnancy | HIV can be transmitted by breastfeeding and risk of MTCT can be reduced by mother taking special drugs during pregnancy | Number of men |
| Age |  |  |  |  |  |  |  |  |
| 15-19 | 70.0 | 27.7 | 25.4 | 2,245 | 67.7 | 31.2 | 25.4 | 637 |
| 20-24 | 79.7 | 34.9 | 32.7 | 2,007 | 69.1 | 38.8 | 30.5 | 493 |
| 25-29 | 84.5 | 36.2 | 33.7 | 1,885 | 78.3 | 38.3 | 32.9 | 405 |
| 30-39 | 82.5 | 31.2 | 29.1 | 2,595 | 79.2 | 39.0 | 33.8 | 665 |
| 40-49 | 79.5 | 23.0 | 21.5 | 1,597 | 75.9 | 35.3 | 29.1 | 435 |
| 15-24 | 74.6 | 31.1 | 28.9 | 4,252 | 68.3 | 34.5 | 27.6 | 1,130 |
| Marital status |  |  |  |  |  |  |  |  |
| Never married | 74.4 | 32.8 | 30.6 | 2,371 | 69.4 | 35.5 | 29.2 | 1,100 |
| Ever had sex | 81.1 | 41.1 | 38.4 | 1,022 | 74.0 | 38.0 | 31.9 | 686 |
| Never had sex | 69.4 | 26.6 | 24.8 | 1,350 | 61.7 | 31.4 | 24.8 | 414 |
| Married/living together | 80.3 | 30.5 | 28.3 | 6,950 | 77.2 | 36.4 | 30.7 | 1,401 |
| Divorced/separated/ widowed | 82.2 | 28.5 | 26.4 | 1,007 | 75.9 | 42.6 | 33.4 | 135 |
| Residence |  |  |  |  |  |  |  |  |
| Urban | 87.8 | 53.4 | 50.4 | 2,935 | 78.1 | 48.7 | 41.6 | 716 |
| Rural | 75.7 | 21.8 | 20.0 | 7,394 | 72.3 | 31.7 | 26.0 | 1,919 |
| Mainland/Zanzibar |  |  |  |  |  |  |  |  |
| Mainland | 78.8 | 30.7 | 28.6 | 10,016 | 73.4 | 36.7 | 30.4 | 2,556 |
| Total urban | 87.8 | 54.0 | 51.0 | 2,885 | 77.3 | 49.0 | 41.8 | 716 |
| Dar es Salaam city | 92.2 | 71.1 | 68.3 | 969 | 78.3 | 48.8 | 40.4 | 267 |
| Other urban | 85.5 | 45.3 | 42.2 | 1,916 | 76.7 | 49.1 | 42.7 | 450 |
| Total rural | 75.1 | 21.3 | 19.5 | 7,131 | 71.8 | 31.9 | 26.0 | 1,840 |
| Zanzibar | 90.8 | 33.4 | 31.9 | 313 | 90.3 | 25.0 | 24.3 | 79 |
| Unguja | 92.2 | 42.6 | 40.5 | 216 | 93.4 | 31.7 | 30.7 | 53 |
| Pemba | 87.7 | 13.0 | 12.6 | 97 | 83.9 | 11.2 | 11.2 | 26 |
| Zone |  |  |  |  |  |  |  |  |
| Western | 77.0 | 24.3 | 22.0 | 1,880 | 67.3 | 32.0 | 23.0 | 468 |
| Northern | 83.6 | 32.7 | 30.8 | 1,496 | 80.3 | 46.9 | 41.9 | 362 |
| Central | 68.6 | 19.4 | 17.2 | 799 | 62.4 | 27.7 | 23.8 | 212 |
| Southern highlands | 76.1 | 26.7 | 23.1 | 1,440 | 61.2 | 32.2 | 23.8 | 358 |
| Lake | 70.8 | 25.7 | 24.0 | 1,865 | 76.8 | 35.4 | 30.2 | 448 |
| Eastern | 86.1 | 54.1 | 51.6 | 1,670 | 79.4 | 46.8 | 40.1 | 462 |
| Southern | 91.1 | 24.3 | 23.7 | 866 | 84.2 | 28.5 | 25.1 | 245 |
| Education |  |  |  |  |  |  |  |  |
| No education | 66.1 | 13.2 | 11.9 | 2,503 | 65.3 | 16.8 | 15.4 | 312 |
| Primary incomplete | 78.2 | 23.9 | 22.3 | 1,855 | 67.5 | 25.0 | 19.3 | 646 |
| Primary complete | 84.0 | 36.8 | 34.2 | 5,086 | 76.8 | 41.8 | 34.8 | 1,381 |
| Secondary+ | 89.7 | 60.9 | 57.4 | 885 | 83.0 | 56.4 | 48.3 | 296 |
| Wealth quintile |  |  |  |  |  |  |  |  |
| Lowest | 71.3 | 13.1 | 11.9 | 1,840 | 65.8 | 21.6 | 18.1 | 484 |
| Second | 71.5 | 17.0 | 15.6 | 1,944 | 72.6 | 30.9 | 26.4 | 504 |
| Middle | 78.1 | 21.5 | 19.8 | 1,943 | 73.3 | 34.6 | 26.4 | 516 |
| Fourth | 83.8 | 34.4 | 32.1 | 2,004 | 75.6 | 39.0 | 31.5 | 517 |
| Highest | 87.6 | 57.9 | 54.3 | 2,597 | 80.2 | 51.7 | 45.0 | 615 |
| Total | 79.1 | 30.8 | 28.7 | 10,329 | 73.9 | 36.4 | 30.2 | 2,635 |

### 12.2 Stigma Associated with AIDS and Attitudes Related to HIV/AIDS

Knowledge and beliefs about AIDS affect how people treat those they know to be living with HIV. In the 2004-05 TDHS, women and men who had heard of AIDS were asked questions to assess the level of stigma associated with HIV/AIDS.

Results, shown in Tables 12.5 .1 and 12.5.2, indicate that most women and men would be willing to care at home for a relative with AIDS (nine in ten respondents), and believe that an HIVpositive female teacher should be allowed to continue teaching (seven in ten women and men). About half of respondents would buy fresh food from a shopkeeper with AIDS. While there are minimal gender differences on the other three indicators, women are less likely than men to believe that the HIV-positive status of a family member does not need to remain a secret (53 and 62 percent, respectively). Only 22 percent of women and 27 percent of men report acceptance on all four indicators: they would care for an HIV-positive family member in their own home, buy fresh food from a shopkeeper with AIDS, allow an HIV-positive teacher to continue teaching, and would not keep the HIV-positive status of a family member a secret.

Education, wealth, and residence are correlated with positive attitudes towards those who are HIV positive. Among both women and men, the higher the educational attainment and the wealthier the household, the more likely respondents are to show acceptance on all four indicators. Respondents in urban areas are about twice as likely as those in rural areas to show acceptance on all four indicators.

In terms of acceptance of all four indicators of tolerance, there are minimal differences between Mainland Tanzania and Zanzibar. Among women, the highest rate of acceptance across the four indicators was in the Lake zone (four in ten), while for men, the lowest rates were in the Lake and Central zones (less than two in ten).

As previously noted, caution should be exercised when comparing the 2004-05 TDHS with the 2003-04 THIS. For example, in the THIS question about buying fresh vegetables from a HIVpositive shopkeeper, only the individuals' HIV status was mentioned. This is the internationally recognized formulation for this question. The TDHS, however, asked about willingness to buy fresh food from a shopkeeper in two different situations: specifying that the shopkeeper is HIV positive but not ill versus ill. The TDHS analysis above is based on questions specifying that the shopkeeper is not ill. As expected, the proportion of respondents indicating that they would be willing to make purchases from an ill shopkeeper is dramatically lower than those willing to buy from an HIV-positive shopkeeper who is not sick.

Despite differences in wording of specific questions, the overall results on all four indicators of tolerance are similar, particularly among women. According to the 2004-05 TDHS, 22 percent of women and 27 percent of men expressed acceptance of all four measures, compared with the THIS estimates of 27 percent of women and 37 percent of men.

Table 12.5.1 Accepting attitudes towards those living with HIV: women
Among women who have heard of HIV/AIDS, percentage expressing specific accepting attitudes towards people with HIV, by background characteristics, Tanzania 2004-05

| Background characteristic | Percentage of respondents who: |  |  |  | Percentage expressing acceptance on all 4 measures | Number of women who have heard of HIV/AIDS |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Are willing to care for family member with HIV at home | Would buy fresh food from shopkeeper with AIDS | Believe HIVpositive female teacher should be allowed to teach | Would not want HIV+ status of family member to remain secret |  |  |
| Age |  |  |  |  |  |  |
| 15-19 | 84.9 | 43.6 | 70.2 | 49.5 | 17.9 | 2,197 |
| 20-24 | 90.2 | 45.9 | 73.6 | 50.1 | 21.9 | 1,986 |
| 25-29 | 90.8 | 49.8 | 75.2 | 55.5 | 24.9 | 1,877 |
| 30-39 | 90.1 | 45.3 | 71.2 | 54.1 | 23.8 | 2,576 |
| 40-49 | 92.5 | 41.1 | 68.0 | 54.8 | 19.3 | 1,581 |
| 15-24 | 87.4 | 44.7 | 71.8 | 49.8 | 19.8 | 4,182 |
| Marital status |  |  |  |  |  |  |
| Never married | 88.8 | 46.9 | 75.1 | 52.2 | 21.6 | 2,334 |
| Ever had sex | 93.3 | 51.4 | 78.8 | 53.6 | 26.3 | 1,014 |
| Never had sex | 85.3 | 43.5 | 72.3 | 51.1 | 18.0 | 1,321 |
| Married/living together | 89.5 | 44.6 | 70.1 | 53.3 | 21.8 | 6,883 |
| Divorced/separated/ widowed | 90.9 | 45.4 | 74.3 | 49.7 | 20.7 | 999 |
| Residence |  |  |  |  |  |  |
| Urban | 96.5 | 59.1 | 87.2 | 53.2 | 29.7 | 2,929 |
| Rural | 86.7 | 39.7 | 65.4 | 52.5 | 18.5 | 7,287 |
| Mainland/Zanzibar |  |  |  |  |  |  |
| Mainland | 89.4 | 45.2 | 71.4 | 52.8 | 21.7 | 9,903 |
| Total urban | 96.6 | 58.9 | 87.3 | 53.1 | 29.4 | 2,878 |
| Dar es Salaam city | 97.6 | 58.1 | 91.3 | 51.7 | 27.0 | 969 |
| Other urban | 96.1 | 59.3 | 85.2 | 53.9 | 30.7 | 1,910 |
| Total rural | 86.4 | 39.5 | 64.9 | 52.6 | 18.5 | 7,025 |
| Zanzibar | 92.8 | 46.8 | 80.2 | 50.1 | 22.1 | 313 |
| Unguja | 94.3 | 53.6 | 86.9 | 50.8 | 26.7 | 216 |
| Pemba | 89.4 | 31.5 | 65.4 | 48.5 | 11.9 | 97 |
| Zone |  |  |  |  |  |  |
| Western | 79.2 | 35.1 | 61.1 | 44.9 | 10.0 | 1,853 |
| Northern | 89.7 | 36.3 | 74.7 | 44.8 | 16.6 | 1,470 |
| Central | 83.7 | 37.2 | 60.1 | 58.3 | 16.4 | 758 |
| Southern highlands | 89.8 | 32.5 | 62.9 | 53.3 | 14.5 | 1,424 |
| Lake | 94.5 | 62.8 | 82.0 | 64.3 | 39.7 | 1,863 |
| Eastern | 93.0 | 53.2 | 79.0 | 52.0 | 24.6 | 1,670 |
| Southern | 97.1 | 56.1 | 74.3 | 54.3 | 27.3 | 866 |
| Education |  |  |  |  |  |  |
| No education | 81.8 | 30.9 | 57.3 | 50.3 | 13.5 | 2,408 |
| Primary incomplete | 87.2 | 39.5 | 66.2 | 49.6 | 16.8 | 1,845 |
| Primary complete | 92.6 | 50.2 | 77.0 | 54.3 | 24.6 | 5,078 |
| Secondary+ | 97.2 | 67.5 | 92.0 | 56.6 | 37.4 | 885 |
| Wealth quintile |  |  |  |  |  |  |
| Lowest | 81.9 | 33.4 | 58.9 | 51.2 | 13.6 | 1,794 |
| Second | 84.4 | 35.9 | 61.4 | 53.1 | 16.2 | 1,907 |
| Middle | 87.6 | 43.4 | 66.9 | 52.9 | 21.5 | 1,923 |
| Fourth | 93.2 | 47.0 | 75.2 | 52.9 | 22.6 | 1,998 |
| Highest | 97.1 | 60.2 | 88.9 | 53.2 | 30.7 | 2,594 |
| Total | 89.5 | 45.2 | 71.7 | 52.7 | 21.7 | 10,216 |

Table 12.5.2 Accepting attitudes towards those living with HIV: men
Among men who have heard of HIV/AIDS, percentage expressing specific accepting attitudes towards people with HIV, by background characteristics, Tanzania 2004-05

| Background characteristic | Percentage of respondents who: |  |  |  | Percentage expressing acceptance on all 4 measures | Number of men who have heard of HIV/AIDS |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Willing to care for family member with HIV at home | Would buy fresh food from shopkeeper with AIDS | Believe HIVpositive teacher should be allowed to teach | Would not want HIV+ status of family member to remain secret |  |  |
| Age |  |  |  |  |  |  |
| 15-19 | 86.2 | 40.0 | 63.6 | 52.9 | 17.9 | 621 |
| 20-24 | 88.1 | 54.4 | 70.3 | 65.6 | 33.2 | 487 |
| 25-29 | 91.7 | 52.5 | 70.0 | 64.4 | 28.8 | 405 |
| 30-39 | 93.7 | 53.0 | 69.6 | 64.5 | 28.8 | 664 |
| 40-49 | 89.1 | 48.1 | 67.0 | 66.4 | 29.0 | 435 |
| 15-24 | 87.0 | 46.3 | 66.5 | 58.5 | 24.6 | 1,108 |
| Marital status |  |  |  |  |  |  |
| Never married | 88.6 | 47.6 | 68.2 | 57.4 | 25.8 | 1,078 |
| Ever had sex | 91.8 | 51.9 | 71.7 | 60.7 | 30.9 | 677 |
| Never had sex | 83.3 | 40.3 | 62.2 | 51.9 | 17.1 | 401 |
| Married/living together | 90.3 | 49.6 | 67.5 | 65.3 | 27.2 | 1,400 |
| Divorced/separated/ widowed | 93.9 | 59.3 | 70.2 | 69.1 | 36.1 | 135 |
| Residence |  |  |  |  |  |  |
| Urban | 97.5 | 65.3 | 81.9 | 68.9 | 42.3 | 713 |
| Rural | 86.9 | 43.2 | 62.7 | 59.8 | 21.4 | 1,899 |
| Mainland/Zanzibar |  |  |  |  |  |  |
| Mainland | 89.7 | 49.1 | 67.6 | 62.4 | 27.1 | 2,534 |
| Total urban | 97.6 | 65.9 | 82.1 | 68.8 | 42.5 | 713 |
| Dar es Salaam city | 100.0 | 71.5 | 84.6 | 72.2 | 51.7 | 264 |
| Other urban | 96.2 | 62.6 | 80.7 | 66.8 | 37.2 | 450 |
| Total rural | 86.6 | 42.5 | 62.0 | 59.9 | 21.0 | 1,821 |
| Zanzibar | 93.8 | 55.4 | 77.5 | 56.9 | 26.4 | 78 |
| Unguja | 97.5 | 60.3 | 85.2 | 59.1 | 32.6 | 53 |
| Pemba | 85.8 | 44.8 | 60.9 | 52.1 | 12.9 | 25 |
| Zone |  |  |  |  |  |  |
| Western | 86.6 | 43.6 | 59.9 | 63.2 | 23.4 | 465 |
| Northern | 89.3 | 42.9 | 68.7 | 67.0 | 23.4 | 358 |
| Central | 88.6 | 43.3 | 68.3 | 49.6 | 16.9 | 205 |
| Southern highlands | 92.0 | 46.7 | 66.1 | 71.8 | 29.9 | 358 |
| Lake | 81.4 | 48.1 | 58.4 | 55.0 | 19.8 | 445 |
| Eastern | 96.5 | 60.9 | 81.4 | 67.6 | 42.3 | 459 |
| Southern | 95.7 | 56.4 | 73.5 | 54.9 | 28.7 | 245 |
| Education |  |  |  |  |  |  |
| No education | 78.9 | 24.4 | 47.8 | 54.8 | 10.7 | 299 |
| Primary incomplete | 84.0 | 35.1 | 55.5 | 57.3 | 15.5 | 640 |
| Primary complete | 92.9 | 55.6 | 73.5 | 64.5 | 31.1 | 1,377 |
| Secondary+ | 98.7 | 75.4 | 89.2 | 70.1 | 49.7 | 296 |
| Wealth quintile |  |  |  |  |  |  |
| Lowest | 79.4 | 30.3 | 53.6 | 58.2 | 13.7 | 472 |
| Second | 85.7 | 41.6 | 59.5 | 55.5 | 18.3 | 502 |
| Middle | 89.5 | 46.8 | 64.5 | 60.5 | 23.6 | 515 |
| Fourth | 93.2 | 55.0 | 71.3 | 65.1 | 29.7 | 512 |
| Highest | 98.5 | 67.5 | 86.0 | 70.0 | 45.3 | 612 |
| Total | 89.8 | 49.3 | 67.9 | 62.3 | 27.1 | 2,612 |

## Negotiating Safer Sex

Knowledge about HIV transmission and ways to prevent it are of little use if people feel powerless to negotiate safer sex practices with their partners. In an effort to assess the ability of women to negotiate safer sex with a spouse who has an STI, respondents were asked two attitudinal questions: if a wife is justified in refusing to have sex with her husband when she knows he has a disease that can be transmitted through sexual contact, and if a woman in the same circumstances is justified in asking her husband to use a condom.

Ninety-four percent of women and 96 percent of men believe that a woman may either refuse to have sex with her husband or ask him to wear a condom if she knows he has an STI (Table 12.6). About nine in ten women and men say that a woman can refuse to have sex, and 75 percent of women and 83 percent of men say that she can propose using a condom. The higher a respondent's educational attainment, the more likely he or she is to say that a woman can refuse sex or propose using a condom. Women living in wealthier households are more likely than those from poorer households to support women's negotiating rights. This difference is less pronounced among men. In Zanzibar, people score slightly lower on this indicator than those in Mainland. Notably, in Mainland Tanzania the estimates from the 2004-05 TDHS are higher than the 2003-04 THIS (94 percent of women and 96 percent of men in 2004-05 compared with 88 percent of women and 89 of men in 2003-04).

Respondents age 18-49 were asked whether they support teaching children age 12-14 about using condoms to avoid HIV/AIDS. Results are presented in Table 12.7. The survey found that about seven in ten adults agree that children age 12-14 should be taught about condom use to avoid AIDS. Tanzanians who have never had sex are less likely than other respondents to agree that children should be taught about condom use.

Patterns by some background characteristics are atypical. For instance, while women with no schooling are least likely to favour teaching about condom use ( 55 percent), those with incomplete primary are most likely to approve ( 72 percent). Among men, those with secondary schooling or higher are least likely to approve ( 64 percent), and those with incomplete primary are most likely to approve ( 77 percent). There are similar patterns among women and men by wealth quintile. Respondents in Mainland Tanzania are twice as likely as those in Zanzibar to support educating children to use condoms to prevent HIV/AIDS (seven in ten compared with three in ten). There is relatively little variation among women and men by religious affiliation.

| Table 12.6 Attitudes towards negotiating safer sex with husband |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percentage of women and men who believe that, if a husband has a sexually transmitted infection, his wife is justified either refusing to have sex with him or proposing condom use, by background characteristics, Tanzania 2004-05 |  |  |  |  |  |  |  |  |
|  | Women |  |  |  | Men |  |  |  |
| Background characteristic | Refuse sex | Propose condom use | Refuse sex or propose condom use | Number of women | Refuse sex | Propose condom use | Refuse sex or propose condom use | Number of men |
| Age |  |  |  |  |  |  |  |  |
| 15-19 | 82.0 | 69.8 | 89.0 | 2,245 | 81.9 | 77.2 | 91.9 | 637 |
| 20-24 | 89.8 | 77.5 | 95.9 | 2,007 | 89.8 | 83.3 | 95.6 | 493 |
| 25-29 | 89.1 | 80.0 | 95.7 | 1,885 | 90.2 | 83.9 | 97.8 | 405 |
| 30-39 | 89.8 | 76.7 | 95.2 | 2,595 | 94.4 | 87.9 | 97.9 | 665 |
| 40-49 | 88.6 | 69.1 | 94.2 | 1,597 | 93.2 | 80.2 | 98.4 | 435 |
| 15-24 | 85.7 | 73.5 | 92.3 | 4,252 | 85.3 | 79.9 | 93.5 | 1,130 |
| Marital status |  |  |  |  |  |  |  |  |
| Never married | 84.4 | 72.4 | 90.4 | 2,371 | 85.4 | 79.7 | 93.5 | 1,100 |
| Ever had sex | 89.9 | 84.6 | 96.3 | 1,022 | 88.7 | 85.6 | 96.2 | 686 |
| Never had sex | 80.2 | 63.2 | 86.0 | 1,350 | 79.8 | 69.8 | 89.1 | 414 |
| Married/living together | 88.6 | 74.6 | 94.8 | 6,950 | 92.8 | 84.6 | 97.9 | 1,401 |
| Divorced/separated/ widowed | 90.5 | 81.1 | 96.1 | 1,007 | 92.2 | 84.5 | 97.9 | 135 |
| Residence |  |  |  |  |  |  |  |  |
| Urban | 91.3 | 84.8 | 97.1 | 2,935 | 90.3 | 85.7 | 95.4 | 716 |
| Rural | 86.4 | 70.8 | 92.7 | 7,394 | 89.4 | 81.4 | 96.4 | 1,919 |
| Mainland/Zanzibar |  |  |  |  |  |  |  |  |
| Mainland | 88.0 | 74.7 | 94.0 | 10,016 | 89.9 | 83.2 | 96.2 | 2,556 |
| Total urban | 91.3 | 84.9 | 97.2 | 2,885 | 90.9 | 86.1 | 95.6 | 716 |
| Dar es Salaam city | 91.8 | 86.1 | 97.9 | 969 | 87.7 | 82.0 | 92.1 | 267 |
| Other urban | 91.1 | 84.4 | 96.9 | 1,916 | 92.8 | 88.5 | 97.7 | 450 |
| Total rural | 86.7 | 70.6 | 92.7 | 7,131 | 89.5 | 82.0 | 96.5 | 1,840 |
| Zanzibar | 81.2 | 75.8 | 91.1 | 313 | 83.9 | 63.0 | 92.0 | 79 |
| Unguja | 88.4 | 80.7 | 95.5 | 216 | 87.8 | 65.9 | 95.5 | 53 |
| Pemba | 65.3 | 64.9 | 81.2 | 97 | 75.9 | 56.9 | 84.9 | 26 |
| Zone |  |  |  |  |  |  |  |  |
| Western | 89.4 | 71.8 | 93.6 | 1,880 | 90.6 | 74.5 | 94.5 | 468 |
| Northern | 86.7 | 72.0 | 92.7 | 1,496 | 82.2 | 81.8 | 94.8 | 362 |
| Central | 84.6 | 60.1 | 89.5 | 799 | 92.1 | 88.1 | 96.9 | 212 |
| Southern highlands | 73.4 | 70.8 | 87.3 | 1,440 | 92.7 | 94.6 | 99.1 | 358 |
| Lake | 95.0 | 81.4 | 97.9 | 1,865 | 91.7 | 83.9 | 97.8 | 448 |
| Eastern | 92.4 | 77.7 | 97.4 | 1,670 | 88.3 | 80.9 | 94.3 | 462 |
| Southern | 91.2 | 85.6 | 97.5 | 866 | 93.3 | 83.6 | 97.6 | 245 |
| Region |  |  |  |  |  |  |  |  |
| Dodoma | 84.5 | 62.5 | 90.6 | 468 | 90.5 | 86.4 | 96.6 | 113 |
| Arusha | 78.8 | 62.3 | 88.5 | 391 | 88.4 | 76.7 | 93.8 | 82 |
| Kilimanjaro | 94.2 | 84.1 | 96.6 | 380 | 86.7 | 81.4 | 96.9 | 104 |
| Tanga | 91.5 | 84.0 | 96.1 | 431 | 68.0 | 87.4 | 92.1 | 94 |
| Morogoro | 92.8 | 65.1 | 96.7 | 449 | 89.6 | 76.5 | 98.0 | 127 |
| Pwani | 93.9 | 67.9 | 97.0 | 253 | 88.1 | 84.4 | 95.9 | 68 |
| Dar es Salaam | 91.8 | 86.1 | 97.9 | 969 | 87.7 | 82.0 | 92.1 | 267 |
| Lindi | 90.3 | 89.5 | 96.3 | 221 | 87.1 | 73.3 | 94.5 | 65 |
| Mtwara | 94.6 | 83.2 | 98.1 | 346 | 97.7 | 85.7 | 100.0 | 98 |
| Ruvuma | 87.8 | 85.4 | 97.6 | 299 | 92.9 | 89.3 | 97.2 | 83 |
| Iringa | 62.8 | 68.4 | 80.7 | 412 | 95.3 | 86.7 | 98.8 | 102 |
| Mbeya | 73.2 | 72.8 | 89.3 | 712 | 90.1 | 99.0 | 100.0 | 170 |
| Singida | 84.6 | 56.7 | 88.1 | 331 | 93.8 | 90.1 | 97.3 | 99 |
| Tabora | 95.6 | 81.4 | 99.6 | 520 | 85.9 | 71.3 | 90.8 | 127 |
| Rukwa | 87.5 | 69.5 | 91.5 | 316 | 94.8 | 95.1 | 97.6 | 87 |
| Kigoma | 94.9 | 76.7 | 98.0 | 499 | 89.1 | 72.0 | 96.1 | 127 |
| Shinyanga | 82.6 | 63.3 | 87.4 | 861 | 94.2 | 78.0 | 95.8 | 215 |
| Kagera | 96.1 | 75.7 | 98.4 | 545 | 96.2 | 90.3 | 100.0 | 122 |
| Mwanza | 98.1 | 86.8 | 99.5 | 939 | 87.8 | 80.9 | 96.5 | 229 |
| Mara | 85.8 | 76.4 | 93.4 | 381 | 95.2 | 83.2 | 98.0 | 98 |
| Manyara | 80.6 | 51.9 | 88.1 | 293 | 86.7 | 81.0 | 96.4 | 83 |
| Zanzibar North | 83.7 | 70.1 | 92.0 | 48 | 86.4 | 55.4 | 93.7 | 11 |
| Zanzibar South | 71.3 | 84.4 | 93.9 | 26 | 84.7 | 84.1 | 96.0 | 6 |
| Town West | 93.1 | 83.5 | 97.0 | 143 | 88.8 | 66.1 | 95.9 | 36 |
| Pemba North | 66.1 | 57.5 | 79.4 | 52 | 85.4 | 59.8 | 92.1 | 13 |
| Pemba South | 64.4 | 73.3 | 83.2 | 45 | 65.6 | 53.8 | 77.2 | 12 |
| Education |  |  |  |  |  |  |  |  |
| No education | 83.8 | 59.2 | 89.4 | 2,503 | 85.7 | 69.1 | 92.3 | 312 |
| Primary incomplete | 85.1 | 73.9 | 93.2 | 1,855 | 84.0 | 76.7 | 92.5 | 646 |
| Primary complete | 89.9 | 80.6 | 95.8 | 5,086 | 92.9 | 87.3 | 98.5 | 1,381 |
| Secondary+ | 92.6 | 86.9 | 97.6 | 885 | 91.5 | 87.1 | 96.6 | 296 |
| Wealth quintile |  |  |  |  |  |  |  |  |
| Lowest | 84.2 | 63.1 | 91.1 | 1,840 | 86.4 | 73.8 | 92.2 | 484 |
| Second | 86.4 | 69.5 | 92.1 | 1,944 | 90.0 | 81.3 | 97.2 | 504 |
| Middle | 87.2 | 71.4 | 93.2 | 1,943 | 90.6 | 85.1 | 97.8 | 516 |
| Fourth | 87.6 | 80.1 | 94.8 | 2,004 | 90.2 | 86.1 | 98.1 | 517 |
| Highest | 92.0 | 85.4 | 97.1 | 2,597 | 90.7 | 85.4 | 95.1 | 615 |
| Total | 87.8 | 74.8 | 93.9 | 10,329 | 89.7 | 82.6 | 96.1 | 2,635 |


| Table 12.7 Adult support for education about condom use to prevent |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| AIDS |  |  |  |  |
| Percentage of women and men age 18-49 who agree that children age 12-14 years should be taught about using a condom to avoid AIDS, by background characteristics, Tanzania 2004-05 |  |  |  |  |
| Background characteristic | Women |  | Men |  |
|  | Percentage | Number | Percentage | Number |
| Age |  |  |  |  |
| 18-19 | 65.7 | 894 | 71.1 | 239 |
| 20-24 | 69.3 | 2,007 | 75.0 | 493 |
| 25-29 | 66.8 | 1,885 | 77.1 | 405 |
| 30-39 | 64.7 | 2,595 | 70.5 | 665 |
| 40-49 | 58.3 | 1,597 | 68.1 | 435 |
| Marital status |  |  |  |  |
| Never married | 65.1 | 1,219 | 70.6 | 702 |
| Ever had sex | 72.4 | 747 | 75.7 | 537 |
| Never had sex | 53.4 | 472 | 54.3 | 164 |
| Married/living together | 64.8 | 6,761 | 73.9 | 1,401 |
| Divorced/separated/ widowed | 67.6 | 997 | 63.6 | 134 |
| Residence |  |  |  |  |
| Mainland | 66.2 | 8,709 | 73.3 | 2,173 |
| Zanzibar | 32.5 | 268 | 35.7 | 63 |
| Mainland/Zanzibar |  |  |  |  |
| Mainland | 66.2 | 8,709 | 73.3 | 2,173 |
| Total urban | 69.5 | 2,502 | 67.0 | 617 |
| Dar es Salaam city | 72.5 | 851 | 63.7 | 238 |
| Other urban | 68.0 | 1,651 | 69.1 | 379 |
| Total rural | 64.8 | 6,207 | 75.8 | 1,556 |
| Zanzibar | 32.5 | 268 | 35.7 | 63 |
| Unguja | 37.0 | 188 | 29.1 | 42 |
| Pemba | 22.0 | 81 | 49.3 | 21 |
| Zone |  |  |  |  |
| Western | 63.4 | 1,587 | 73.4 | 392 |
| Northern | 66.5 | 1,318 | 64.2 | 313 |
| Central | 58.8 | 692 | 75.2 | 183 |
| Southern highlands | 52.0 | 1,247 | 77.0 | 308 |
| Lake | 80.3 | 1,628 | 81.9 | 382 |
| Eastern | 62.2 | 1,476 | 67.6 | 397 |
| Southern | 78.7 | 760 | 75.1 | 199 |
| Education |  |  |  |  |
| No education | 54.9 | 2,238 | 70.7 | 272 |
| Primary incomplete | 71.8 | 1,399 | 77.3 | 439 |
| Primary complete | 68.7 | 4,586 | 72.7 | 1,257 |
| Secondary+ | 62.0 | 755 | 63.9 | 269 |
| Religion |  |  |  |  |
| Muslim | 67.4 | 2,719 | 68.3 | 674 |
| Catholic | 69.5 | 2,553 | 75.1 | 626 |
| Protestant | 64.6 | 2,589 | 72.2 | 640 |
| None | 50.9 | 1,115 | 75.8 | 295 |
| Wealth quintile |  |  |  |  |
| Lowest | 58.0 | 1,610 | 76.1 | 400 |
| Second | 62.4 | 1,680 | 77.6 | 418 |
| Middle | 70.0 | 1,701 | 76.2 | 446 |
| Fourth | 67.3 | 1,761 | 71.3 | 431 |
| Highest | 67.1 | 2,226 | 62.9 | 541 |
| Total | 65.2 | 8,978 | 72.3 | 2,236 |
| Note: Total includes 2 women and one man with "other" religion. |  |  |  |  |

### 12.3 Higher-Risk Sex

Given that most HIV infections in Tanzania are contracted through heterosexual contact, information on sexual behaviour is important in designing and monitoring intervention programmes to control the spread of the epidemic. In the context of HIV/AIDS/STI prevention, limiting the number sexual partners and having protected sex are crucial to the fight against the epidemic.

Figure 12.1 presents findings on perceptions and beliefs about abstinence and faithfulness, and shows that there is little differentiation by gender. It is clear that while both women and men believe in practicing abstinence before marriage and faithfulness in the course of marriage, very few of them believe that the people they know practice these virtues.

Figure 12.1 Perceptions and Beliefs about Abstinence and Faithfulness


The 2004-05 TDHS included questions on respondents' sexual partners during their lifetimes and over the 12 months preceding the survey. For male respondents, an additional question was asked on whether they paid for sex during the 12 months preceding the interview. Information on the use of condoms at the last sexual encounter with each type of partner also was collected.

Tables 12.8 .1 and 12.8.2 show, among all women and men who reported having sex at some time in the 12 months preceding the survey, the percentages of women and men who had sex with someone other than a spouse or live-in partner, and the extent of multiple sexual partners. Those who had engaged in sex with a nonmarital, noncohabiting partner (the definition of "higher-risk sex") were then asked whether they used a condom the last time they engaged in sex with such a partner. The mean number of lifetime sexual partners was also calculated for men. This question was not asked of women.

Among those who reported having sex in the 12 months preceding the survey, a larger proportion of men than women reported having had more than one sexual partner ( 30 percent for men and 4 percent for women) and higher-risk sex ( 45 and 24 percent, respectively) at some time in the past 12 months. Twenty-two percent of men who are currently married or cohabiting report having had sex with a nonmarital, noncohabiting partner in the past 12 months, compared with 9 percent of women.

Table 12.8.1 Multiple sexual partners and higher-risk sexual intercourse in the past 12 months: women

Among women age 15-49 who had sexual intercourse in the past 12 months, the percentage who had intercourse with more than one partner and the percentage who had higher-risk sexual intercourse ${ }^{1}$ in the past 12 months, and among those having higher-risk intercourse in the past 12 months, the percentage reporting that a condom was used at last higher-risk intercourse, Tanzania 2004-05

| Background characteristic | Women who had sexual intercourse in the past 12 months |  |  | Women who had higher-risk intercourse ${ }^{1}$ in the past 12 months |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Percentage who had 2+ partners in the past 12 months | Percentage who had higher-risk intercourse ${ }^{1}$ in the past 12 months | Number of women | Percentage who reported using a condom at last higher-risk intercourse ${ }^{1}$ | $\begin{gathered} \text { Number } \\ \text { of } \\ \text { women } \\ \hline \end{gathered}$ |
| Age |  |  |  |  |  |
| 15-19 | 4.8 | 46.3 | 963 | 36.4 | 446 |
| 20-24 | 5.0 | 26.8 | 1,661 | 31.1 | 445 |
| 25-29 | 4.3 | 21.1 | 1,720 | 29.6 | 362 |
| 30-39 | 4.0 | 17.2 | 2,339 | 20.7 | 401 |
| 40-49 | 3.2 | 18.2 | 1,354 | 13.0 | 247 |
| 15-24 | 5.0 | 34.0 | 2,624 | 33.8 | 891 |
| Marital status |  |  |  |  |  |
| Never married | 7.8 | 99.5 | 762 | 37.9 | 758 |
| Married or living together | 2.7 | 8.8 | 6,599 | 16.7 | 581 |
| Divorced/separated/ widowed | 15.0 | 83.1 | 677 | 24.7 | 563 |
| Residence |  |  |  |  |  |
| Urban | 5.2 | 34.5 | 2,233 | 41.3 | 771 |
| Rural | 3.9 | 19.5 | 5,805 | 18.1 | 1,131 |
| Mainland/Zanzibar |  |  |  |  |  |
| Mainland | 4.3 | 24.0 | 7,843 | 27.4 | 1,886 |
| Total urban | 5.4 | 34.8 | 2,225 | 41.3 | 775 |
| Dar es Salaam city | 6.1 | 39.3 | 759 | 39.7 | 298 |
| Other urban | 5.0 | 32.5 | 1,466 | 42.4 | 477 |
| Total rural | 3.9 | 19.8 | 5,618 | 17.7 | 1,111 |
| Zanzibar | 0.9 | 8.4 | 195 | 34.5 | 16 |
| Unguja | 1.2 | 11.4 | 135 | 36.1 | 15 |
| Pemba | 0.2 | 1.6 | 60 | * | 1 |
| Zone |  |  |  |  |  |
| Western | 3.8 | 14.4 | 1,488 | 27.6 | 214 |
| Northern | 2.3 | 24.2 | 1,093 | 31.9 | 265 |
| Central | 8.3 | 25.1 | 610 | 21.5 | 153 |
| Southern highlands | 1.8 | 11.4 | 1,054 | 36.6 | 121 |
| Lake | 4.0 | 23.1 | 1,577 | 26.3 | 364 |
| Eastern | 4.7 | 37.2 | 1,344 | 28.0 | 500 |
| Southern | 9.4 | 39.8 | 678 | 22.9 | 270 |
| Education |  |  |  |  |  |
| No education | 3.9 | 16.2 | 2,051 | 13.8 | 332 |
| Primary incomplete | 6.7 | 29.9 | 1,320 | 23.8 | 394 |
| Primary complete | 4.0 | 23.6 | 4,118 | 28.7 | 973 |
| Secondary+ | 1.6 | 37.1 | 549 | 51.2 | 204 |
| Wealth quintile |  |  |  |  |  |
| Lowest | 4.3 | 21.2 | 1,464 | 11.4 | 310 |
| Second | 4.3 | 18.1 | 1,539 | 18.6 | 278 |
| Middle | 4.2 | 20.6 | 1,521 | 18.8 | 313 |
| Fourth | 3.4 | 21.8 | 1,571 | 24.5 | 343 |
| Highest | 5.0 | 33.9 | 1,943 | 44.5 | 658 |
| Total | 4.3 | 23.7 | 8,038 | 27.5 | 1,902 |

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
${ }^{1}$ Sexual intercourse with a partner who was neither a spouse nor who lived with the respondent

| Table 12.8.2 Multiple sexual partners and higher-risk sexual intercourse in the past 12 months: men |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Among men age 15-49 who had sexual intercourse in the past 12 months, the percentage who had intercourse with more than one partner and the percentage who had higher-risk sexual intercourse ${ }^{1}$ in the past 12 months, and among those having higher-risk intercourse in the past 12 months, the percentage reporting that a condom was used at last higher-risk intercourse, and the mean number of sexual partners during lifetime for men who ever had sexual intercourse, by background characteristics, Tanzania 2004-05 |  |  |  |  |  |  |  |
|  | Men who had sexual intercourse in the past 12 months |  |  | Men who had higherrisk intercourse ${ }^{1}$ in the past 12 months |  | Men who ever had sexual intercourse |  |
| Background characteristic | Percentage who had 2+ partners in the past 12 months | Percentage who had higher-risk intercourse ${ }^{1}$ in the past 12 months | Number of men | Percentage who reported using a <br> condom at last higher-risk intercourse ${ }^{1}$ | Number of men | Mean number of sexual partners in lifetime | Number of men |
| Age |  |  |  |  |  |  |  |
| 15-19 | 26.5 | 98.1 | 215 | 39.0 | 210 | 2.7 | 304 |
| 20-24 | 37.1 | 73.9 | 371 | 50.5 | 274 | 5.0 | 437 |
| 25-29 | 33.0 | 43.8 | 362 | 58.2 | 159 | 5.6 | 391 |
| 30-39 | 29.7 | 28.2 | 618 | 57.4 | 174 | 6.5 | 655 |
| 40-49 | 23.6 | 18.5 | 410 | 56.6 | 76 | 7.5 | 433 |
| 15-24 | 33.2 | 82.8 | 585 | 45.5 | 484 | 4.0 | 740 |
| Marital status |  |  |  |  |  |  |  |
| Never married | 34.4 | 100.0 | 492 | 48.6 | 492 | 3.5 | 686 |
| Married or living together Divorced/separated/ | 28.6 | 22.4 | 1,374 | 52.2 | 308 | 6.5 | 1,398 |
| widowed | 28.9 | 85.5 | 109 | 60.2 | 93 | 8.9 | 135 |
| Residence |  |  |  |  |  |  |  |
| Urban | 22.5 | 48.6 | 528 | 69.2 | 256 | 5.3 | 599 |
| Rural | 32.8 | 44.0 | 1,447 | 43.7 | 636 | 5.9 | 1,620 |
| Mainland/Zanzibar |  |  |  |  |  |  |  |
| Mainland | 30.3 | 45.9 | 1,935 | 51.1 | 888 | 5.8 | 2,173 |
| Total urban | 21.9 | 48.3 | 532 | 68.7 | 257 | 5.3 | 605 |
| Dar es Salaam city | 19.0 | 53.0 | 207 | (63.8) | 110 | 4.7 | 228 |
| Other urban | 23.8 | 45.2 | 325 | 72.4 | 147 | 5.6 | 377 |
| Total rural | 33.5 | 45.0 | 1,403 | 44.0 | 631 | 6.0 | 1,568 |
| Zanzibar | 18.4 | 13.0 | 40 | (33.8) | 5 | 2.6 | 46 |
| Unguja | 18.5 | 17.5 | 27 | (34.7) | 5 | 3.1 | 32 |
| Pemba | 18.3 | 3.1 | 13 | * | 0 | 1.6 | 14 |
| Zone |  |  |  |  |  |  |  |
| Western | 32.6 | 46.9 | 360 | 42.6 | 169 | 6.3 | 404 |
| Northern | 24.2 | 35.5 | 257 | 54.0 | 91 | 5.1 | 303 |
| Central | 14.4 | 43.3 | 170 | 46.0 | 73 | 4.8 | 185 |
| Southern highlands | 43.3 | 44.9 | 257 | 54.4 | 115 | 5.4 | 290 |
| Lake | 34.5 | 44.4 | 348 | 53.3 | 154 | 6.5 | 389 |
| Eastern | 20.8 | 49.7 | 346 | 57.5 | 172 | 4.9 | 388 |
| Southern | 40.0 | 57.1 | 197 | 48.7 | 112 | 7.2 | 215 |
| Education |  |  |  |  |  |  |  |
| No education | 30.2 | 35.9 | 236 | 33.1 | 85 | 6.1 | 259 |
| Primary incomplete | 35.9 | 52.3 | 408 | 34.1 | 213 | 5.8 | 473 |
| Primary complete | 28.8 | 43.6 | 1,127 | 55.9 | 492 | 5.9 | 1,248 |
| Secondary+ | 25.5 | 50.8 | 203 | 77.6 | 103 | 4.3 | 239 |
| Wealth quintile |  |  |  |  |  |  |  |
| Lowest | 29.3 | 38.2 | 356 | 29.6 | 136 | 5.8 | 401 |
| Second | 29.7 | 44.2 | 387 | 34.7 | 171 | 6.6 | 421 |
| Middle | 35.1 | 42.7 | 393 | 55.2 | 168 | 5.7 | 441 |
| Fourth | 33.3 | 48.8 | 379 | 53.7 | 185 | 6.1 | 435 |
| Highest | 24.0 | 50.7 | 460 | 70.5 | 233 | 4.7 | 521 |
| Total | 30.1 | 45.2 | 1,975 | 51.0 | 893 | 5.7 | 2,219 |

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.
${ }^{1}$ Sexual intercourse with a partner who was neither a spouse nor who lived with the respondent

Sexual behaviours differ by residence, with women in urban areas almost twice as likely as those in rural areas to have had sex with a nonmarital, noncohabiting partner during the 12 months before the interview ( 35 and 20 percent, respectively). There is little difference by urban-rural residence in the likelihood of men having had sex with a nonmarital, noncohabiting partner during the 12 months before the interview, though men in rural areas are more likely to have had two or more partners ( 33 percent in rural areas and 23 percent in urban areas). More educated and wealthier women and men are more likely than other respondents to engage in higher-risk sexual behaviours and to use condoms in those sexual encounters. There is considerable zonal variation.

Just over half of men and a fourth of women reported using a condom the last time they had sex with a nonmarital, noncohabiting partner. While married and cohabiting men have almost the same level of condom use as never-married men (roughly 50 percent), never-married women are twice as likely as those married or cohabiting to report condom use in high-risk sex ( 38 and 17 percent, respectively).

On average, men have had 5.7 sexual partners over their lifetimes. The mean number of sexual partners varies by education, with a lower mean number of partners among men with more education. The mean number of sexual partners is nearly three times higher among divorced, separated, or widowed men (8.9) than among never-married men (3.5).

Paid sex is considered a special category of higher-risk sex. Male respondents in the 2004-05 TDHS were asked whether they had paid money in exchange for sex in the past 12 months or if any of their last three partners in the past 12 months was a commercial sex worker. They were also asked about condom use at these sexual encounters.

Eleven percent of men had commercial sex in the year before the survey (Table 12.9). Men age 20-29 are more likely than younger or older men to have paid for sex. Men who are divorced, separated, or widowed are substantially more likely than other men to have paid for sex. There are minimal differences in the incidence of paid sex by educational attainment, wealth, and residence. According to the data, paid sex is far less common in Zanzibar than in Mainland Tanzania, with just 1 percent of men having had commercial sex in the last year (data not shown).

On the Mainland, men in the 2004-05 TDHS were significantly more likely than those in the 2003-04 THIS to report heaving paid for sex (11 and 2 percent, respectively). However, whereas the TDHS asked the respondent if he had paid anyone in exchange for sex, the THIS asked if he had sex with a prostitute.

Six in ten men reported condom use the most recent time they paid for sex. Because the number of men who reported having sex with prostitutes is so small, it is not possible to interpret with confidence the differentials in condom use by social and demographic characteristics. However, men in urban areas are more likely than those in rural areas to have used condoms in these encounters (79 and 51 percent, respectively).

| Table 12.9 Payment for sexual intercourse by men and condom use at last paid |
| :--- | :--- | :--- | :--- |
| sexual intercourse |

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 men who reported having a prostitute as at least one of their last three sexual partners in the past 12 months

### 12.4 Testing for HIV

Knowledge of HIV status helps HIV-negative individuals make specific decisions to reduce risk and increase safer sex practices so they can remain disease free. For those who are HIV infected, knowledge of their status allows them to take action to protect their sexual partners, to access treatment, and to plan for the future. Respondents were asked whether they had ever been tested for HIV. If they said that they had, respondents were asked whether they had received the results of their last test.

Table 12.10 shows that in Tanzania, only 14 percent of the respondents have ever been tested for HIV. Twelve percent of women and men have been tested at some time and received the results of their HIV test, and 6 percent of women and 7 percent of men were tested during the year preceding the survey. Women age 20-29 were more likely than respondents other ages to have been tested, which is partly explained by the fact that a pregnant woman receiving antenatal care at a clinic is likely to be tested for HIV. Men age 25 and older were more likely to have been tested than

| Table 12.10 Prior HIV testing |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percent distribution of women and men by prior HIV testing status and whether or not test results were received, and the percentage who received their test results the last time they were tested for HIV in the past 12 months, according to background characteristics, Tanzania 2004-05 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Background characteristic | Women |  |  |  |  |  |  | Men |  |  |  |  |  |  |
|  | Tested |  | Not tested | Don't know/ missing | Total | Percentage who received results from HIV test taken in the past 12 months | Number of respondents | Tested |  | $\begin{gathered} \text { Not } \\ \text { tested } \end{gathered}$ | Don't know/ missing | Total | Percentage who received results from HIV test taken in the past 12 months | Number of respondents |
|  | Received results | $\begin{gathered} \text { Results } \\ \text { not } \\ \text { received } \end{gathered}$ |  |  |  |  |  | Received results | Results not received |  |  |  |  |  |
| Age |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 15-19 | 7.2 | 0.7 | 89.9 | 2.2 | 100.0 | 5.0 | 2,245 | 2.6 | 0.3 | 94.6 | 2.5 | 100.0 | 2.0 | 637 |
| 20-24 | 16.0 | 2.0 | 80.8 | 1.2 | 100.0 | 8.3 | 2,007 | 11.4 | 1.0 | 86.5 | 1.2 | 100.0 | 7.4 | 493 |
| 25-29 | 16.3 | 2.6 | 80.6 | 0.5 | 100.0 | 8.0 | 1,885 | 18.4 | 1.8 | 79.6 | 0.3 | 100.0 | 9.8 | 405 |
| 30-39 | 12.8 | 1.7 | 84.5 | 1.0 | 100.0 | 5.9 | 2,595 | 16.4 | 2.1 | 81.3 | 0.2 | 100.0 | 8.1 | 665 |
| 40-49 | 7.9 | 0.8 | 90.3 | 1.0 | 100.0 | 3.9 | 1,597 | 15.3 | 1.8 | 82.9 | 0.0 | 100.0 | 6.7 | 435 |
| 15-24 | 11.4 | 1.3 | 85.6 | 1.7 | 100.0 | 6.5 | 4,252 | 6.4 | 0.6 | 91.0 | 1.9 | 100.0 | 4.4 | 1,130 |
| Marital status |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Never married | 8.7 | 0.7 | 89.0 | 1.6 | 100.0 | 5.6 | 2,371 | 7.4 | 1.0 | 89.6 | 2.0 | 100.0 | 4.9 | 1,100 |
| Ever had sex | 16.0 | 1.1 | 81.9 | 0.9 | 100.0 | 10.2 | 1,022 | 10.4 | 1.5 | 86.7 | 1.3 | 100.0 | 7.0 | 686 |
| Never had sex | 3.1 | 0.5 | 94.3 | 2.2 | 100.0 | 2.1 | 1,350 | 2.3 | 0.1 | 94.5 | 3.1 | 100.0 | 1.3 | 414 |
| Married/living together | 12.8 | 1.9 | 84.2 | 1.1 | 100.0 | 6.2 | 6,950 | 15.5 | 1.6 | 82.8 | 0.1 | 100.0 | 7.7 | 1,401 |
| Divorced/separated/ widowed | 15.1 | 1.6 | 82.4 | 0.9 | 100.0 | 6.2 7.8 | 1,007 | 18.7 | 2.0 | 79.3 | 0.0 | 100.0 | 7.4 | 135 |
| Residence |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Urban | 24.7 | 2.0 | 72.7 | 0.5 | 100.0 | 12.2 | 2,935 | 19.1 | 1.0 | 79.5 | 0.4 | 100.0 | 9.3 | 716 |
| Rural | 7.1 | 1.4 | 90.1 | 1.5 | 100.0 | 3.9 | 7,394 | 9.7 | 1.5 | 87.7 | 1.1 | 100.0 | 5.5 | 1,919 |
| Mainland/Zanzibar |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Mainland | 12.2 | 1.6 | 85.0 | 1.2 | 100.0 | 6.3 | 10,016 | 12.0 | 1.3 | 85.7 | 0.9 | 100.0 | 6.4 | 2,556 |
| Total urban | 25.0 | 2.1 | 72.4 | 0.5 | 100.0 | 12.3 | 2,885 | 19.2 | 1.0 | 79.4 | 0.4 | 100.0 | 8.6 | 716 |
| Dar es Salaam city | 33.2 | 2.0 | 64.3 | 0.4 | 100.0 | 15.5 | 969 | 20.2 | 0.7 | 77.9 | 1.1 | 100.0 | 4.2 | 267 |
| Other urban | 20.9 | 2.1 | 76.4 | 0.5 | 100.0 | 10.8 | 1,916 | 18.5 | 1.1 | 80.4 | 0.0 | 100.0 | 11.2 | 450 |
| Total rural | 7.0 | 1.4 | 90.1 | 1.5 | 100.0 | 3.9 | 7,131 | 9.3 | 1.5 | 88.1 | 1.1 | 100.0 | 5.5 | 1,840 |
| Zanzibar | 8.6 | 1.0 | 90.1 | 0.2 | 100.0 | 3.5 | 313 | 18.9 | 2.1 | 77.7 | 1.3 | 100.0 | 11.7 | 79 |
| Unguja | 11.0 | 1.3 | 87.7 | 0.1 | 100.0 | 4.4 | 216 | 18.1 | 1.4 | 80.6 | 0.0 | 100.0 | 13.7 | 53 |
| Pemba | 3.5 | 0.4 | 95.5 | 0.6 | 100.0 | 1.5 | 97 | 20.6 | 3.7 | 71.7 | 3.9 | 100.0 | 7.7 | 26 |
| Zone |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Western | 6.5 | 1.6 | 90.3 | 1.6 | 100.0 | 4.0 | 1,880 | 10.6 | 1.0 | 87.8 | 0.6 | 100.0 | 7.6 | 468 |
| Northern | 13.4 | 1.8 | 82.9 | 1.9 | 100.0 | 7.0 | 1,496 | 12.2 | 1.6 | 85.0 | 1.2 | 100.0 | 5.8 | 362 |
| Central | 7.7 | 0.8 | 86.4 | 5.1 | 100.0 | 4.6 | 799 | 9.4 | 2.5 | 84.7 | 3.4 | 100.0 | 6.4 | 212 |
| Southern highlands | 10.9 | 1.3 | 86.5 | 1.3 | 100.0 | 5.2 | 1,440 | 10.7 | 1.5 | 87.6 | 0.2 | 100.0 | 5.6 | 358 |
| Lake | 9.5 | 1.4 | 89.0 | 0.1 | 100.0 | 4.8 | 1,865 | 11.1 | 1.3 | 86.8 | 0.8 | 100.0 | 5.8 | 448 |
| Eastern | 24.6 | 2.2 | 73.0 | 0.3 | 100.0 | 12.1 | 1,670 | 15.8 | 0.8 | 82.5 | 0.9 | 100.0 | 4.8 | 462 |
| Southern | 10.7 | 1.8 | 87.4 | 0.1 | 100.0 | 5.6 | 866 | 13.5 | 1.5 | 85.0 | 0.0 | 100.0 | 10.0 | 245 |
| Region |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Dodoma | 5.2 | 1.0 | 88.5 | 5.3 | 100.0 | 3.2 | 468 | 9.1 | 2.3 | 86.4 | 2.3 | 100.0 | 6.9 | 113 |
| Arusha | 17.0 | 2.2 | 75.9 | 4.9 | 100.0 | 10.2 | 391 | 19.4 | 0.0 | 78.1 | 2.5 | 100.0 | 9.5 | 82 |
| Kilimanjaro | 16.4 | 1.0 | 82.5 | 0.0 | 100.0 | 7.0 | 380 | 7.5 | 2.1 | 90.3 | 0.0 | 100.0 | 4.6 | 104 |
| Tanga | 10.2 | 2.2 | 87.3 | 0.3 | 100.0 | 4.6 | 431 | 13.4 | 1.5 | 82.6 | 2.6 | 100.0 | 6.8 | 94 |
| Morogoro | 11.5 | 2.0 | 86.4 | 0.0 | 100.0 | 8.8 | 449 | 8.4 | 1.3 | 89.3 | 1.0 | 100.0 | 4.6 | 127 |
| Pwani | 14.6 | 3.0 | 82.4 | 0.0 | 100.0 | 5.3 | 253 | 12.2 | 0.0 | 87.8 | 0.0 | 100.0 | 7.5 | 68 |
| Dar es Salaam | 33.2 | 2.0 | 64.3 | 0.4 | 100.0 | 15.5 | 969 | 20.2 | 0.7 | 77.9 | 1.1 | 100.0 | 4.2 | 267 |
| Lindi | 8.9 | 2.9 | 88.2 | 0.0 | 100.0 | 3.5 | 221 | 15.1 | 0.0 | 84.9 | 0.0 | 100.0 | 10.1 | 65 |
| Mtwara | 5.1 | 1.4 | 93.4 | 0.0 | 100.0 | 2.4 | 346 | 7.1 | 2.0 | 90.9 | 0.0 | 100.0 | 4.9 | 98 |
| Ruvuma | 18.4 | 1.4 | 79.9 | 0.3 | 100.0 | 10.8 | 299 | 19.8 | 2.0 | 78.2 | 0.0 | 100.0 | 16.0 | 83 |
| Iringa | 10.4 | 2.1 | 86.8 | 0.7 | 100.0 | 6.2 | 412 | 8.1 | 0.0 | 91.9 | 0.0 | 100.0 | 4.3 | 102 |
| Mbeya | 13.8 | 1.2 | 83.8 | 1.2 | 100.0 | 5.6 | 712 | 15.0 | 3.1 | 81.9 | 0.0 | 100.0 | 8.3 | 170 |
| Singida | 11.2 | 0.6 | 83.4 | 4.8 | 100.0 | 6.4 | 331 | 9.7 | 2.8 | 82.8 | 4.7 | 100.0 | 5.9 | 99 |
| Tabora | 8.0 | 1.6 | 88.3 | 2.1 | 100.0 | 4.2 | 520 | 11.6 | 1.5 | 84.6 | 2.3 | 100.0 | 7.3 | 127 |
| Rukwa | 5.1 | 0.5 | 92.4 | 2.0 | 100.0 | 3.1 | 316 | 5.5 | 0.0 | 93.8 | 0.7 | 100.0 | 1.8 | 87 |
| Kigoma | 11.3 | 1.7 | 87.1 | 0.0 | 100.0 | 7.2 | 499 | 14.2 | 1.2 | 84.6 | 0.0 | 100.0 | 9.2 | 127 |
| Shinyanga | 2.9 | 1.5 | 93.5 | 2.1 | 100.0 | 2.1 | 861 | 7.7 | 0.7 | 91.6 | 0.0 | 100.0 | 6.9 | 215 |
| Kagera | 4.9 | 0.3 | 94.9 | 0.0 | 100.0 | 1.6 | 545 | 7.0 | 1.0 | 92.0 | 0.0 | 100.0 | 2.3 | 122 |
| Mwanza | 13.2 | 1.5 | 85.1 | 0.2 | 100.0 | 6.9 | 939 | 11.3 | 1.7 | 85.8 | 1.2 | 100.0 | 7.1 | 229 |
| Mara | 7.2 | 2.6 | 90.2 | 0.0 | 100.0 | 4.2 | 381 | 15.8 | 0.8 | 82.6 | 0.8 | 100.0 | 6.8 | 98 |
| Manyara | 9.3 | 1.6 | 86.4 | 2.6 | 100.0 | 6.0 | 293 | 9.6 | 2.8 | 87.7 | 0.0 | 100.0 | 2.5 | 83 |
| Zanzibar North | 2.4 | 0.8 | 96.4 | 0.4 | 100.0 | 0.9 | 48 | 5.1 | 1.9 | 93.1 | 0.0 | 100.0 | 5.1 | 11 |
| Zanzibar South | 6.4 | 0.5 | 93.1 | 0.0 | 100.0 | 3.8 | 26 | 14.8 | 0.0 | 85.2 | 0.0 | 100.0 | 8.2 | 6 |
| Town West | 14.6 | 1.6 | 83.8 | 0.0 | 100.0 | 5.7 | 143 | 22.6 | 1.4 | 76.0 | 0.0 | 100.0 | 17.3 | 36 |
| Pemba North | 2.5 | 0.0 | 97.5 | 0.0 | 100.0 | 1.1 | 52 | 22.1 | 3.7 | 74.2 | 0.0 | 100.0 | 5.3 | 13 |
| Pemba South | 4.6 | 0.9 | 93.2 | 1.3 | 100.0 | 2.0 | 45 | 19.0 | 3.7 | 69.1 | 8.1 | 100.0 | 10.2 | 12 |
| Education |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| No education | 3.8 | 0.6 | 91.8 | 3.8 | 100.0 | 2.2 | 2,503 | 5.4 | 0.0 | 90.5 | 4.1 | 100.0 | 3.0 | 312 |
| Primary incomplete | 7.5 | 1.3 | 90.5 | 0.6 | 100.0 | 3.6 | 1,855 | 7.3 | 1.5 | 90.0 | 1.2 | 100.0 | 3.7 | 646 |
| Primary complete | 15.0 | 1.9 | 82.8 | 0.3 | 100.0 | 7.7 | 5,086 | 12.7 | 1.7 | 85.3 | 0.3 | 100.0 | 7.4 | 1,381 |
| Secondary+ | 28.4 | 3.0 | 68.4 | 0.2 | 100.0 | 14.6 | 885 | 28.0 | 0.9 | 71.2 | 0.0 | 100.0 | 12.4 | 296 |
| Wealth quintile |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Lowest | 4.7 | 1.0 | 91.7 | 2.6 | 100.0 | 2.6 | 1,840 | 6.9 | 1.2 | 89.5 | 2.4 | 100.0 | 3.1 | 484 |
| Second | 5.6 | 0.8 | 91.6 | 1.9 | 100.0 | 2.9 | 1,944 | 6.8 | 1.4 | 91.0 | 0.8 | 100.0 | 4.9 | 504 |
| Middle | 6.5 | 1.5 | 90.9 | 1.1 | 100.0 | 3.6 | 1,943 | 9.8 | 1.0 | 89.0 | 0.1 | 100.0 | 5.9 | 516 |
| Fourth | 11.3 | 1.8 | 86.5 | 0.4 | 100.0 | 6.2 | 2,004 | 12.3 | 2.3 | 84.5 | 1.0 | 100.0 | 8.0 | 517 |
| Highest | 27.0 | 2.4 | 70.2 | 0.4 | 100.0 | 13.2 | 2,597 | 22.9 | 1.0 | 75.6 | 0.5 | 100.0 | 9.9 | 615 |
| Total | 12.1 | 1.6 | 85.1 | 1.2 | 100.0 | 6.2 | 10,329 | 12.3 | 1.4 | 85.5 | 0.9 | 100.0 | 6.5 | 2,635 |

younger men. HIV testing is far more common among the most educated and wealthy respondents. Approximately three in ten women and men with secondary schooling or higher have been tested for HIV at some time, compared with one in twenty respondents with no schooling. There were similar differences between respondents in the highest and lowest wealth quintiles. Respondents in urban areas are more likely than those in rural areas to have been tested. Women and men who have never been married and who have never had sex, are less likely than other respondents to have been tested.

Patterns are similar for women and men who have been tested and received their results in the last 12 months. Regional variations are substantial, and differ among women and men. Among women, the prevalence of HIV testing in the past 12 months ranges from a low of 1 percent in Pemba North and Zanzibar North to a high of 16 percent in Dar es Salaam. Among men, rates vary from 2 percent in Rukwa and Kagera, to 17 percent in Town West.

Data on HIV counselling and HIV testing among pregnant women who gave birth in the two years preceding the survey is presented in Table 12.11. Table 12.10 illustrated that there are no substantial variations in HIV-testing rates among women and men, even though women who become pregnant can receive counselling when they attend antenatal clinics and have an opportunity-and sometimes are required-to be tested and find out their status. Table 12.11 shows that while 27 percent of women who delivered a baby in the two years before the survey were counselled about HIV/AIDS, only 13 percent had an HIV test and received the results. The percentage of women who received information or counselling during an antenatal care visit rises steadily with increasing education and wealth, and is two times higher in urban than rural areas (45 and 22 percent, respectively).

The pattern is similar for counselling and testing combined, with the most educated being about ten times more likely than those with no education to have received both counselling and testing, and the wealthiest being nine times more likely than the poorest to have received both services. In urban areas, one in four women received both services, compared with one in twenty in rural areas. Less than one in ten women received HIV counselling, were offered and accepted an HIV test, and received the results. This ranges from a low of 2 percent in the Western zone to 29 percent in the Eastern zone.

Table 12.11 Pregnant women counselled and tested for HIV
Among all women who gave birth in the two years preceding the survey, the percentage who received HIV counselling ${ }^{1}$ during antenatal care for their most recent birth, and percentage who accepted an offer of HIV testing ${ }^{2}$ by whether they received their test results, by background characteristics, Tanzania 2004-05

| Background characteristic | Percentage who received HIV counselling during antenatal care | Percentage who were offered and accepted an HIV test during antenatal care and who: |  | Percentage who were counselled, were offered and who accepted an HIV test, and who received results | Number of women who gave birth in the past 2 years $^{3}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Received results | Did not receive results |  |  |
| Age |  |  |  |  |  |
| 15-19 | 23.6 | 16.4 | 1.6 | 9.0 | 378 |
| 20-24 | 27.1 | 13.4 | 2.3 | 7.9 | 1,029 |
| 25-29 | 28.8 | 13.4 | 3.6 | 9.1 | 874 |
| 30-39 | 27.5 | 11.6 | 1.3 | 8.7 | 1,021 |
| 40-49 | 16.0 | 7.3 | 2.8 | 5.6 | 198 |
| 15-24 | 26.2 | 14.2 | 2.1 | 8.2 | 1,407 |
| Marital status |  |  |  |  |  |
| Never married | 27.3 | 18.7 | 1.1 | 11.9 | 220 |
| Married or living together | 25.9 | 11.9 | 2.5 | 7.8 | 3,031 |
| Divorced/separated/ widowed | 34.7 | 19.3 | 1.5 | 13.2 | 249 |
| Residence |  |  |  |  |  |
| Urban | 45.1 | 32.9 | 3.2 | 24.7 | 669 |
| Rural | 22.2 | 8.1 | 2.1 | 4.6 | 2,832 |
| Mainland/Zanzibar |  |  |  |  |  |
| Mainland | 26.8 | 13.0 | 2.3 | 8.6 | 3,415 |
| Total urban | 46.1 | 33.9 | 3.1 | 25.6 | 652 |
| Dar es Salaam city | 65.9 | 57.5 | 3.1 | 45.7 | 158 |
| Other urban | 39.8 | 26.3 | 3.1 | 19.1 | 494 |
| Total rural | 22.3 | 8.1 | 2.1 | 4.6 | 2,763 |
| Zanzibar | 18.2 | 6.8 | 1.5 | 3.5 | 85 |
| Unguja | 24.6 | 9.0 | 2.2 | 5.1 | 52 |
| Pemba | 8.2 | 3.4 | 0.3 | 0.9 | 33 |
| Zone |  |  |  |  |  |
| Western | 17.1 | 5.1 | 2.6 | 2.3 | 778 |
| Northern | 24.8 | 18.2 | 2.3 | 11.3 | 419 |
| Central | 24.8 | 6.9 | 0.2 | 3.9 | 296 |
| Southern highlands | 28.9 | 12.3 | 2.1 | 6.7 | 515 |
| Lake | 24.1 | 8.8 | 2.2 | 6.9 | 781 |
| Eastern | 53.3 | 37.0 | 3.9 | 29.0 | 366 |
| Southern | 28.2 | 15.3 | 2.5 | 8.2 | 260 |
| Education |  |  |  |  |  |
| No education | 15.6 | 5.2 | 0.6 | 3.1 | 921 |
| Primary incomplete | 24.0 | 8.7 | 2.6 | 6.1 | 542 |
| Primary complete | 30.9 | 15.8 | 3.0 | 10.0 | 1,873 |
| Secondary+ | 48.7 | 35.9 | 3.2 | 29.0 | 164 |
| Wealth quintile |  |  |  |  |  |
| Lowest | 16.1 | 5.6 | 2.0 | 3.1 | 790 |
| Second | 23.3 | 6.6 | 1.0 | 3.9 | 761 |
| Middle | 23.2 | 7.2 | 2.2 | 4.0 | 748 |
| Fourth | 28.9 | 14.4 | 2.6 | 10.1 | 672 |
| Highest | 49.1 | 38.6 | 4.4 | 27.2 | 529 |
| Total | 26.6 | 12.9 | 2.3 | 8.5 | 3,500 |

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.
${ }^{1}$ In this context, "counselled" means that someone talked with them about all three of the following topics: 1) babies getting the AIDS virus from their mother, 2) preventing the virus, and 3) getting tested for the virus.
${ }^{2}$ Only women who were offered the test are included here, and women who were either required or asked for the test are excluded from this measure.
${ }^{3}$ Denominator for percentages includes women who did not receive antenatal care for their last birth in the past two years.

### 12.5 Reports of Recent Sexually Transmitted Infections

Information about the incidence of sexually transmitted infections (STIs) is not only useful as a marker of unprotected sexual intercourse but also as a cofactor for HIV transmission. The 2004-05 TDHS asked respondents who had ever had sex whether they had had an STI in the past 12 months. They were also asked whether, in the past year, they had experienced a genital sore or ulcer and whether they had any genital discharge. These symptoms have been shown useful in identifying STIs in men. They are less easily interpreted in women because women are likely to experience more nonSTI conditions of the reproductive tract that produce a discharge.

Table 12.12 shows that 2 percent of women and 3 percent of men in Tanzania reported an STI in the past 12 months. Four percent of women and 2 percent of men reported having had an abnormal genital discharge, and 2 and 3 percent of women and men, respectively, reported having had a genital sore or ulcer in the 12 months before the survey. Only 5 percent of women and 6 percent of men reported having either an STI, an abnormal discharge, or a genital sore. These numbers, however, may be underestimates, because respondents may be embarrassed or ashamed to admit having STIs. Given the low levels of incidence of STIs, variation across subgroups is limited.

It is important for people experiencing symptoms of STIs to be able to recognise them and seek appropriate treatment. If respondents reported an STI or an STI symptom (i.e., discharge or sore or ulcer) in the past 12 months, they were asked questions about what they did about the illness or symptom. Figure 12.2 presents information on women and men who sought care from any source. A total of 462 women and 125 men reported having STIs or symptoms of STIs in the 12 months before the survey. Of those respondents, six in ten sought care for the STIs and/or symptoms of STIs from a clinic, hospital, or from a health professional.

| Table 12.12 Self-reporting of sexually transmitted infection (STI) and STI symptoms |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Among women and men age 15-49 who ever had sexual intercourse, the percentage reporting having had an STI and/or symptoms of an STI in the past 12 months, by background characteristics, Tanzania 2004-05 |  |  |  |  |  |  |  |  |  |  |
|  | Women |  |  |  |  | Men |  |  |  |  |
| Background characteristic | Percentage with STI | Percentage with abnormal genital discharge | Percentage with genital sore/ulcer | Percentage with STI/ discharge/ genital sore/ulcer | Number of women who ever had sex | Percentage with STI | Percentage with abnormal genital discharge | Percentage with genital sore/ulcer | Percentage with STI/ discharge/ genital sore/ulcer | Number of men who ever had sex |
| Age |  |  |  |  |  |  |  |  |  |  |
| 15-19 | 1.0 | 2.8 | 1.6 | 3.5 | 1,108 | 2.9 | 3.9 | 2.8 | 6.8 | 304 |
| 20-24 | 1.1 | 3.0 | 1.9 | 4.7 | 1,841 | 3.8 | 3.4 | 3.6 | 7.0 | 437 |
| 25-29 | 2.6 | 4.6 | 2.3 | 6.2 | 1,852 | 2.0 | 0.4 | 3.8 | 4.8 | 392 |
| 30-39 | 1.8 | 4.3 | 2.1 | 5.7 | 2,583 | 3.6 | 2.5 | 3.4 | 5.7 | 655 |
| 40-49 | 2.0 | 3.5 | 1.9 | 4.6 | 1,596 | 2.0 | 2.2 | 2.9 | 4.1 | 434 |
| Marital status |  |  |  |  |  |  |  |  |  |  |
| Never married | 1.0 | 2.3 | 1.3 | 3.0 | 1,022 | 2.7 | 3.3 | 3.0 | 6.5 | 686 |
| Married or living together | 1.8 | 3.9 | 2.2 | 5.3 | 6,950 | 3.0 | 1.9 | 3.5 | 5.1 | 1,401 |
| Divorced/separated/ widowed | 2.1 | 4.9 | 1.7 | 6.2 | 1,007 | 3.7 | 3.9 | 2.8 | 6.2 | 135 |
| Residence |  |  |  |  |  |  |  |  |  |  |
| Urban | 2.1 | 5.1 | 1.7 | 6.1 | 2,483 | 2.1 | 1.3 | 2.1 | 3.9 | 600 |
| Rural | 1.6 | 3.3 | 2.2 | 4.8 | 6,497 | 3.2 | 2.9 | 3.8 | 6.2 | 1,621 |
| Mainland/Zanzibar |  |  |  |  |  |  |  |  |  |  |
| Mainland | 1.8 | 3.8 | 2.1 | 5.2 | 8,762 | 3.0 | 2.5 | 3.4 | 5.7 | 2,175 |
| Total urban | 2.1 | 5.0 | 1.7 | 6.2 | 2,466 | 2.1 | 1.3 | 2.0 | 3.8 | 607 |
| Dar es Salaam city | 1.4 | 5.7 | 2.1 | 7.6 | 823 | 0.9 | 0.0 | 1.0 | 2.0 | 228 |
| Other urban | 2.5 | 4.7 | 1.5 | 5.5 | 1,643 | 2.7 | 2.1 | 2.7 | 5.0 | 378 |
| Total rural | 1.7 | 3.4 | 2.2 | 4.8 | 6,297 | 3.3 | 3.0 | 3.9 | 6.4 | 1,569 |
| Zanzibar | 0.3 | 1.8 | 0.9 | 2.3 | 217 | 0.7 | 0.3 | 0.0 | 1.0 | 46 |
| Unguja | 0.2 | 2.3 | 1.2 | 3.0 | 151 | 1.0 | 0.5 | 0.0 | 1.4 | 32 |
| Pemba | 0.5 | 0.8 | 0.2 | 0.8 | 66 | 0.0 | 0.0 | 0.0 | 0.0 | 14 |
| Zone |  |  |  |  |  |  |  |  |  |  |
| Western | 2.8 | 6.0 | 3.6 | 8.2 | 1,612 | 2.0 | 0.9 | 1.5 | 3.4 | 404 |
| Northern | 0.8 | 3.8 | 1.8 | 5.1 | 1,263 | 1.3 | 2.2 | 1.1 | 3.6 | 305 |
| Central | 1.4 | 5.5 | 3.4 | 7.7 | 698 | 5.0 | 1.1 | 4.6 | 6.8 | 185 |
| Southern highlands | 1.8 | 2.0 | 1.7 | 3.2 | 1,249 | 5.1 | 5.9 | 8.0 | 12.5 | 290 |
| Lake | 2.5 | 3.1 | 1.3 | 3.7 | 1,678 | 4.7 | 4.4 | 6.5 | 8.9 | 389 |
| Eastern | 1.2 | 3.7 | 1.3 | 4.7 | 1,454 | 0.7 | 0.6 | 0.8 | 1.7 | 388 |
| Southern | 1.6 | 2.7 | 1.6 | 4.6 | 809 | 3.5 | 2.5 | 2.0 | 4.5 | 216 |
| Education |  |  |  |  |  |  |  |  |  |  |
| No education | 1.7 | 3.3 | 2.1 | 4.6 | 2,342 | 3.6 | 2.3 | 3.3 | 5.3 | 259 |
| Primary incomplete | 1.7 | 4.2 | 2.2 | 5.7 | 1,482 | 3.4 | 3.2 | 4.5 | 7.9 | 474 |
| Primary complete | 1.9 | 4.0 | 2.2 | 5.5 | 4,534 | 2.9 | 2.7 | 3.3 | 5.4 | 1,248 |
| Secondary+ | 1.2 | 2.7 | 0.4 | 3.0 | 621 | 1.3 | 0.0 | 1.4 | 2.3 | 240 |
| Wealth quintile |  |  |  |  |  |  |  |  |  |  |
| Lowest | 1.5 | 3.6 | 2.1 | 4.6 | 1,673 | 2.9 | 2.0 | 2.2 | 4.4 | 402 |
| Second | 1.4 | 2.9 | 2.2 | 4.6 | 1,727 | 3.7 | 3.3 | 2.9 | 5.7 | 421 |
| Middle | 1.9 | 3.7 | 1.9 | 5.0 | 1,699 | 2.2 | 1.8 | 5.5 | 6.4 | 441 |
| Fourth | 1.9 | 3.8 | 2.1 | 5.1 | 1,750 | 4.1 | 4.5 | 4.9 | 9.3 | 435 |
| Highest | 2.0 | 4.6 | 1.9 | 6.1 | 2,131 | 2.0 | 1.0 | 1.4 | 2.8 | 522 |
| Total | 1.8 | 3.8 | 2.0 | 5.1 | 8,979 | 2.9 | 2.4 | 3.3 | 5.6 | 2,221 |

Figure 12.2 Treatment-seeking among Women and Men Who Reported Having an STI in the Past 12 Months


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### 12.6 InJections

Injection overuse in a health care setting can contribute to the transmission of blood-borne pathogens because it amplifies the effect of unsafe practices, such as reuse of injection equipment. As a consequence, the proportion of injections given with reused injection equipment is an important prevention indicator in an initiative to prevent and control HIV/AIDS. Table 12.13 presents data on the prevalence of injections among respondents. Respondents were asked if they had had any injections given by a health worker in the six months preceding the survey, and if so, they were then asked if their last injection was given with a syringe from a new, unopened package. It should be noted that medical injections can be self-administered (e.g., insulin for diabetes). These injections were not included in the calculation.

Women are more likely than men to report receiving injections (21 and 14 percent, respectively). Gender differences are greatest among respondents age 20-39, most likely because of injections given in antenatal care or family planning settings. Both women and men with no schooling are less likely than other respondents to have had a recent injection, and those in rural areas are less likely than those in urban areas to have had injections within the past six months. Women who live in wealthier households are more likely than those who live in less wealthy households to have had injections, and the same is true among men, although the difference is smaller. Women in the Northern and Southern zones are most likely, and those in the Southern highlands are least likely, to have had an injection (26 and 15 percent, respectively). Among men, there is less zonal variation.

The vast majority of recent injections (98 percent among women and 97 percent among men) were given with a syringe taken from a newly opened package. Variation by sociodemographic characteristics is minimal.

| Table 12.13 Prevalence of injections |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percentage of women and men age 15-49 who received at least one injection from a health worker ${ }^{1}$ in the past 6 months, the average number of medical injections ${ }^{1}$ per person, and among those who received an injection, the percentage whose health worker took the syringe and needle from a new and unopened package for the last injection, by background characteristics, Tanzania 2004-05 |  |  |  |  |  |  |  |  |  |  |
|  | Women |  |  |  |  | Men |  |  |  |  |
| Background characteristic | Percentage who received an injection from a health worker in the past 6 months | Average number of medical injections in past 6 months | Number of women |  | Number of women receiving injections from a health worker in the past 6 months | Percent age who received an injection from a health worker in the past 6 months | Average number of medical injections in past 6 months | Number of men | Last injection, syringe and needle taken from newly opened package | Number of men receiving injections from a health worker in the past 6 months |
| Age |  |  |  |  |  |  |  |  |  |  |
| 15-19 | 19.4 | 0.5 | 2,245 | 96.2 | 436 | 19.2 | 0.6 | 637 | 93.7 | 123 |
| 20-24 | 22.9 | 0.6 | 2,007 | 98.0 | 460 | 11.4 | 0.4 | 493 | 98.0 | 56 |
| 25-29 | 21.1 | 0.6 | 1,885 | 98.2 | 399 | 13.8 | 0.4 | 405 | 98.0 | 56 |
| 30-39 | 21.0 | 0.7 | 2,595 | 97.5 | 544 | 12.9 | 0.5 | 665 | 97.3 | 86 |
| 40-49 | 17.4 | 0.6 | 1,597 | 98.0 | 277 | 13.0 | 0.5 | 435 | 98.1 | 57 |
| 15-24 | 21.1 | 0.5 | 4,252 | 97.1 | 896 | 15.8 | 0.5 | 1,130 | 95.1 | 179 |
| Marital status |  |  |  |  |  |  |  |  |  |  |
| Never married | 16.4 | 0.4 | 2,371 | 97.5 | 388 | 16.2 | 0.5 | 1,100 | 94.8 | 179 |
| Ever had sex | 17.8 | 0.5 | 1,022 | 97.1 | 182 | 14.9 | 0.4 | 686 | 96.4 | 102 |
| Never had sex | 15.2 | 0.4 | 1,350 | 97.8 | 206 | 18.5 | 0.6 | 414 | 92.7 | 76 |
| Married/living together | 21.8 | 0.6 | 6,950 | 97.4 | 1,515 | 11.9 | 0.4 | 1,401 | 98.3 | 166 |
| Divorced/separated/ widowed | 21.3 | 0.7 | 1,007 | 98.4 | 214 | 24.2 | 1.0 | 135 | * | 33 |
| Residence |  |  |  |  |  |  |  |  |  |  |
| Urban | 23.7 | 0.7 | 2,935 | 99.0 | 695 | 17.2 | 0.6 | 716 | 97.3 | 124 |
| Rural | 19.2 | 0.5 | 7,394 | 96.8 | 1,422 | 13.2 | 0.5 | 1,919 | 96.0 | 254 |
| Mainland/Zanzibar |  |  |  |  |  |  |  |  |  |  |
| Mainland | 20.5 | 0.6 | 10,016 | 97.5 | 2,055 | 14.3 | 0.5 | 2,556 | 96.4 | 366 |
| Total urban | 23.9 | 0.7 | 2,885 | 99.0 | 690 | 17.4 | 0.6 | 716 | 97.3 | 125 |
| Dar es Salaam city | 22.3 | 0.6 | 969 | 98.8 | 216 | 20.0 | 0.7 | 267 | * | 53 |
| Other urban | 24.7 | 0.7 | 1,916 | 99.1 | 474 | 15.9 | 0.5 | 450 | 98.5 | 71 |
| Total rural | 19.1 | 0.5 | 7,131 | 96.7 | 1,365 | 13.1 | 0.4 | 1,840 | 95.9 | 241 |
| Zanzibar | 19.7 | 0.6 | 313 | 98.8 | 62 | 14.1 | 0.5 | 79 | 98.9 | 11 |
| Unguja | 21.9 | 0.7 | 216 | 98.5 | 47 | 12.2 | 0.4 | 53 | (100.0) | 6 |
| Pemba | 14.7 | 0.4 | 97 | 100.0 | 14 | 18.1 | 0.7 | 26 | (97.4) | 5 |
| Zone |  |  |  |  |  |  |  |  |  |  |
| Western | 18.7 | 0.6 | 1,880 | 96.3 | 351 | 11.3 | 0.3 | 468 | (100.0) | 53 |
| Northern | 26.4 | 0.7 | 1,496 | 96.3 | 395 | 14.0 | 0.5 | 362 | (96.5) | 51 |
| Central | 19.5 | 0.5 | 799 | 97.6 | 156 | 16.6 | 0.6 | 212 | (95.4) | 35 |
| Southern highlands | 15.1 | 0.5 | 1,440 | 96.9 | 218 | 17.0 | 0.6 | 358 | 93.0 | 61 |
| Lake | 16.4 | 0.5 | 1,865 | 98.5 | 307 | 10.6 | 0.4 | 448 | (95.6) | 47 |
| Eastern | 24.2 | 0.7 | 1,670 | 99.4 | 404 | 16.8 | 0.5 | 462 | (97.1) | 78 |
| Southern | 26.0 | 0.6 | 866 | 97.1 | 225 | 16.9 | 0.6 | 245 | 96.9 | 41 |
| Education |  |  |  |  |  |  |  |  |  |  |
| No education | 15.0 | 0.4 | 2,503 | 94.8 | 376 | 9.4 | 0.3 | 312 | (92.4) | 29 |
| Primary incomplete | 19.6 | 0.5 | 1,855 | 96.4 | 364 | 16.8 | 0.6 | 646 | 93.6 | 108 |
| Primary complete | 22.8 | 0.7 | 5,086 | 98.5 | 1,158 | 14.1 | 0.5 | 1,381 | 97.8 | 195 |
| Secondary+ | 24.8 | 0.8 | 885 | 98.7 | 219 | 15.0 | 0.5 | 296 | 100.0 | 44 |
| Religion |  |  |  |  |  |  |  |  |  |  |
| Muslim | 24.2 | 0.7 | 3,095 | 99.1 | 750 | 16.9 | 0.6 | 798 | 96.9 | 135 |
| Catholic | 18.8 | 0.6 | 2,944 | 96.8 | 555 | 13.3 | 0.5 | 755 | 96.0 | 101 |
| Protestant | 21.5 | 0.6 | 3,000 | 97.4 | 644 | 14.8 | 0.5 | 739 | 95.8 | 109 |
| None | 12.8 | 0.3 | 1,284 | 94.1 | 165 | 9.6 | 0.3 | 342 | 98.5 | 33 |
| Wealth quintile |  |  |  |  |  |  |  |  |  |  |
| Lowest | 15.8 | 0.4 | 1,840 | 96.5 | 291 | 12.9 | 0.5 | 484 | 93.6 | 63 |
| Second | 17.4 | 0.5 | 1,944 | 96.5 | 339 | 11.9 | 0.4 | 504 | 95.9 | 60 |
| Middle | 20.5 | 0.6 | 1,943 | 96.2 | 398 | 13.1 | 0.5 | 516 | 97.3 | 67 |
| Fourth | 22.2 | 0.6 | 2,004 | 98.3 | 444 | 15.5 | 0.5 | 517 | 97.0 | 80 |
| Highest | 24.8 | 0.7 | 2,597 | 98.8 | 644 | 17.5 | 0.6 | 615 | 97.5 | 108 |
| Total | 20.5 | 0.6 | 10,329 | 97.5 | 2,117 | 14.3 | 0.5 | 2,635 | 96.5 | 377 |
| 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. Total includes 3 women and one man with "other" religion ${ }^{1}$ Includes injections given by a doctor, nurse, pharmacist, dentist, or other health worker |  |  |  |  |  |  |  |  |  |  |

### 12.7 HIV/AIDS-Related Knowledge and Behaviour among Youth

This section addresses knowledge of HIV/AIDS issues and related sexual behaviour among youth age $15-24$, who are of particular interest because HIV is transmitted mainly through sexual contact. The period between the initiation of sexual activity and marriage is often a time of sexual experimentation and may involve risky behaviours. Comprehensive knowledge of HIV/AIDS transmission and prevention as well as knowledge of where to obtain condoms is analysed below. Issues such as abstinence, age at sexual debut, age differences between partners, and condom use are also covered in this section.

## Knowledge about HIV/AIDS and Source for Condoms

Knowledge of how HIV is transmitted is crucial to enabling people to avoid HIV, especially for young people, who are often at greater risk because they may have shorter relationships with more partners or engage in other risky behaviours. Young respondents in the 2004-05 TDHS were asked the same set of questions as older respondents about whether condom use and limiting partners to one uninfected partner can help protect against HIV, and whether a healthy-looking person can have HIV (see Tables 12.3.1 and 12.3.2).

Table 12.14 shows the level of comprehensive knowledge among young people, namely, the proportion who, in response to prompted questions, 1) agree that people can reduce their chances of getting the AIDS virus by having sex with only one uninfected, faithful partner and by using condoms consistently; 2) know that a healthy-looking person can have the AIDS virus; and 3) know that HIV cannot be transmitted by mosquito bites or by sharing food with a person who has AIDS. Forty-five percent of women and 40 percent of men age 15-24 know all of these facts about HIV/AIDS.

Among both women and men, those age 20-24 are considerably more likely than those age 15-19 to have comprehensive knowledge. Knowledge also increases with educational attainment: youth with secondary schooling or higher are twice as likely (among women) and four times as likely (among men) as those with no schooling to have comprehensive knowledge of HIV/AIDS. The higher the wealth quintile, the more likely youth are to have comprehensive knowledge. Youth in urban areas are more likely than those in rural areas to have comprehensive HIV/AIDS knowledge. Women in Mainland Tanzania and Zanzibar are equally likely to have comprehensive knowledge, while men in Mainland Tanzania are twice as likely as those in Zanzibar to have comprehensive knowledge ( 41 and 20 percent, respectively). There is significant regional variation.

The 2004-05 TDHS and the 2003-04 THIS found similar levels of comprehensive knowledge among young women, but the 2004-05 estimates for young men are consistently lower. As noted above, several of the questions on which comprehensive knowledge is based were worded differently in the two surveys.

Because of the important role that condoms play in combating the transmission of HIV, respondents were asked if they know where condoms could be obtained. Only responses about "formal" sources were counted, so that friends and family and other similar sources, were not included. As shown in Table 12.14, young men are more likely than young women to know where to obtain a condom (87 and 77 percent, respectively). Consistent with trends for other indicators, respondents who are better educated and wealthier are more likely than other respondents to know a source of condoms. Among young women and men, those in Mainland Tanzania are more likely than those in Zanzibar to know a source, and those in urban areas are more likely than those in rural areas to know of a condom source. Among men and women, knowledge of a source is highest in the Southern zone (more than nine in ten). The greatest gender gap is in the Southern highlands, with 66 percent of women and 92 percent of men knowing where to obtain a condom.

Table 12.14 Comprehensive knowledge about AIDS and of a source of condoms among youth
Percentage of young women and men age 15-24 with comprehensive knowledge about AIDS and percentage who know of a source for condoms, by background characteristics, Tanzania 2004-05

| Background characteristic | Women |  |  | Men |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Percentage with comprehensive knowledge of AIDS ${ }^{1}$ | Percentage who know a source for male condoms ${ }^{2}$ | Number of women age 15-24 | Percentage with comprehensive knowledge of AIDS ${ }^{1}$ | Percentage who know a source for male condoms ${ }^{2}$ | Number of men age 15-24 |
| Age |  |  |  |  |  |  |
| 15-19 | 40.9 | 70.0 | 2,245 | 33.3 | 84.5 | 637 |
| 20-24 | 50.1 | 84.5 | 2,007 | 49.4 | 90.3 | 493 |
| Marital status |  |  |  |  |  |  |
| Never married | 46.0 | 80.5 | 2,156 | 41.8 | 89.4 | 179 |
| Married or living together | 45.2 | 79.7 | 1,990 | 38.0 | 90.5 | 153 |
| Divorced/separated/ widowed | 56.2 | 89.6 | 166 | 64.0 | * | 26 |
| Residence |  |  |  |  |  |  |
| Urban | 57.0 | 90.8 | 1,271 | 51.4 | 96.1 | 317 |
| Rural | 40.2 | 70.9 | 2,981 | 36.0 | 83.5 | 813 |
| Mainland/Zanzibar |  |  |  |  |  |  |
| Mainland | 45.3 | 77.4 | 4,118 | 41.0 | 87.7 | 1,094 |
| Total urban | 56.9 | 91.6 | 1,246 | 51.4 | 94.6 | 314 |
| Dar es Salaam city | 58.3 | 92.8 | 434 | (49.3) | (92.0) | 115 |
| Other urban | 56.1 | 91.0 | 812 | 52.7 | 96.1 | 199 |
| Total rural | 40.2 | 71.3 | 2,872 | 36.8 | 84.9 | 780 |
| Zanzibar | 43.7 | 59.3 | 134 | 19.5 | 67.0 | 36 |
| Unguja | 45.7 | 69.4 | 89 | 25.4 | 94.9 | 23 |
| Pemba | 39.6 | 39.1 | 45 | 8.9 | 16.5 | 13 |
| Zone |  |  |  |  |  |  |
| Western | 33.8 | 71.5 | 831 | 37.1 | 82.0 | 211 |
| Northern | 47.1 | 76.2 | 595 | 27.5 | 90.5 | 140 |
| Central | 31.8 | 67.5 | 319 | 35.2 | 69.6 | 95 |
| Southern highlands | 40.8 | 65.6 | 579 | 46.5 | 92.4 | 155 |
| Lake | 56.4 | 79.2 | 753 | 43.9 | 89.7 | 194 |
| Eastern | 50.5 | 90.6 | 699 | 46.7 | 90.6 | 197 |
| Southern | 54.9 | 92.5 | 342 | 48.4 | 95.7 | 103 |
| Education |  |  |  |  |  |  |
| No education | 26.8 | 58.4 | 925 | 13.5 | 64.6 | 122 |
| Primary incomplete | 37.6 | 71.1 | 900 | 33.0 | 84.4 | 380 |
| Primary complete | 52.8 | 84.3 | 1,969 | 47.8 | 92.0 | 504 |
| Secondary+ | 64.9 | 93.7 | 458 | 59.0 | 96.5 | 124 |
| Wealth quintile |  |  |  |  |  |  |
| Lowest | 34.6 | 59.6 | 712 | 27.1 | 78.9 | 220 |
| Second | 36.3 | 68.2 | 816 | 31.7 | 81.4 | 210 |
| Middle | 41.1 | 75.6 | 781 | 42.3 | 89.3 | 209 |
| Fourth | 49.8 | 81.5 | 763 | 44.1 | 89.9 | 221 |
| Highest | 57.6 | 91.2 | 1,180 | 53.2 | 93.8 | 270 |
| Total 15-24 | 45.2 | 76.9 | 4,252 | 40.3 | 87.0 | 1,130 |

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.
${ }^{1}$ Comprehensive knowledge means knowing that use of condoms and having just one uninfected, faithful partner can reduce the chances of getting the AIDS virus, knowing that a healthy-looking person can have the AIDS virus, and rejecting the two most common local misconceptions regarding HIV transmission: "People get the AIDS virus from mosquito bites" and "People can be infected with the AIDS virus by eating from the same plate as someone who is sick with AIDS."
${ }^{2}$ Friends, family members, and home are not considered sources for condoms.

## First Sex

The discussion below deals with age at first sex, premarital and other higher-risk sex, and condom use among young women and men. Table 12.15 shows the proportion of women and men age $15-24$ who had sex before age 15 and age 18 . Twelve percent of young women and 9 percent of young men had had sex by age 15 . Young women with no schooling are considerably more likely than those with at least some secondary education to have had sex by age 15 ( 22 and 4 percent, respectively). Differences by educational attainment are smaller among men. The higher the wealth quintile, the less likely a young woman is to have had sex by age 15 . This pattern does not hold among men, however. Men and women in rural areas are more likely than those in urban areas to have had sex by age 15. Early sexual debut is several times more likely in Mainland Tanzania than in Zanzibar.

Figure 12.3 shows trends in the age at first sex from the 1999 TRCHS and the 2004-05 TDHS. The data indicate that for women and men, the age of sexual initiation has declined. Among women age 15-19, 15 percent had had sex by age 15 in 1999 compared with 11 percent by 2004-05. Among men age 15-19, the decrease was even more striking, from 24 to 13 percent. Among young women and men age 18-19, there were also decreases in the percentages having sex before age 18.

## Table 12.15 Age at first sex among young women and men

Percentage of young women and men age 15-24 who have had sexual intercourse by exact age 15 and 18, by background characteristics, Tanzania 2004-05

| Background characteristic | Women |  |  |  | Men |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Percentage who have had sexual intercourse before exact age 15 | Number of women 15-24 | Percentage who have had sexual intercourse before exact age 18 | Number of women 18-24 | Percentage who have had sexual intercourse before exact age 15 | Number of men 15-24 | Percentage who have had sexual intercourse before exact age 18 | $\begin{gathered} \text { Number } \\ \text { of } \\ \text { men } \\ 18-24 \\ \hline \end{gathered}$ |
| Age |  |  |  |  |  |  |  |  |
| 15-17 | 11.6 | 1,351 | na | na | 13.7 | 399 | na | na |
| 18-19 | 11.1 | 894 | 61.1 | 894 | 11.7 | 239 | 55.0 | 239 |
| 15-19 | 11.4 | 2,245 | na | na | 13.0 | 637 | na | na |
| 20-22 | 13.5 | 1,308 | 64.5 | 1,308 | 6.2 | 302 | 47.7 | 302 |
| 23-24 | 13.7 | 699 | 58.9 | 699 | 2.5 | 191 | 36.1 | 191 |
| 20-24 | 13.5 | 2,007 | 62.5 | 2,007 | 4.8 | 493 | 43.2 | 493 |
| Marital status |  |  |  |  |  |  |  |  |
| Never married | 7.8 | 2,096 | 35.9 | 944 | 10.1 | 951 | 48.2 | 554 |
| Ever married | 16.9 | 2,156 | 74.7 | 1,957 | 5.9 | 179 | 43.6 | 178 |
| Residence |  |  |  |  |  |  |  |  |
| Urban | 10.3 | 1,271 | 51.1 | 877 | 6.4 | 317 | 45.1 | 214 |
| Rural | 13.3 | 2,981 | 66.8 | 2,024 | 10.6 | 813 | 47.9 | 518 |
| Mainland/Zanzibar |  |  |  |  |  |  |  |  |
| Mainland | 12.7 | 4,118 | 63.3 | 2,811 | 9.6 | 1,094 | 47.9 | 711 |
| Total urban | 10.5 | 1,246 | 52.3 | 864 | 6.4 | 314 | 44.7 | 215 |
| Dar es Salaam city | 10.4 | 434 | 47.1 | 317 | 2.1 | 115 | 38.3 | 87 |
| Other urban | 10.6 | 812 | 55.3 | 547 | 8.9 | 199 | 49.0 | 128 |
| Total rural | 13.6 | 2,872 | 68.1 | 1,948 | 10.9 | 780 | 49.3 | 496 |
| Zanzibar | 4.1 | 134 | 25.3 | 89 | 2.3 | 36 | 16.9 | 20 |
| Unguja | 5.2 | 89 | 25.7 | 61 | 0.2 | 23 | 19.5 | 13 |
| Pemba | 2.0 | 45 | 24.3 | 28 | 6.0 | 13 | 12.8 | 8 |
| Zone |  |  |  |  |  |  |  |  |
| Western | 10.7 | 831 | 67.7 | 538 | 14.6 | 211 | 61.2 | 134 |
| Northern | 11.0 | 595 | 44.5 | 417 | 11.0 | 140 | 53.8 | 91 |
| Central | 19.3 | 319 | 67.0 | 213 | 16.3 | 95 | 53.7 | 66 |
| Southern highlands | 9.4 | 579 | 59.4 | 386 | 3.4 | 155 | 32.2 | 105 |
| Lake | 15.7 | 753 | 76.5 | 515 | 7.0 | 194 | 39.4 | 127 |
| Eastern | 9.6 | 699 | 54.3 | 506 | 3.7 | 197 | 44.7 | 131 |
| Southern | 19.3 | 342 | 79.7 | 236 | 17.2 | 103 | 56.1 | 57 |
| Education | 22.4 | 925 | 78.7 | 660 | 6.4 | 122 | 44.2 | 82 |
| No education | 14.6 | 900 | 73.8 | 444 | 12.7 | 380 | 51.8 | 173 |
| Primary incomplete | 8.7 | 1,969 | 58.8 | 1,469 | 8.7 | 504 | 48.5 | 380 |
| Primary complete | 3.7 | 458 | 27.5 | 328 | 5.1 | 124 | 35.3 | 97 |
| Secondary+ |  |  |  |  |  |  |  |  |
| Know condom source ${ }^{1}$ |  |  |  |  |  |  |  |  |
| Yes | 12.7 | 3,268 | 62.0 | 2,412 | 9.7 | 983 | 48.6 | 655 |
| No | 11.2 | 983 | 62.6 | 489 | 7.3 | 147 | 34.0 | 77 |
| Wealth index |  |  |  |  |  |  |  |  |
| Lowest | 19.6 | 712 | 75.1 | 482 | 8.1 | 220 | 44.2 | 136 |
| Second | 15.7 | 816 | 71.8 | 552 | 9.5 | 210 | 51.5 | 124 |
| Middle | 11.4 | 781 | 65.4 | 539 | 11.4 | 209 | 52.5 | 140 |
| Fourth | 9.9 | 763 | 59.7 | 520 | 12.8 | 221 | 45.1 | 135 |
| Highest | 8.1 | 1,180 | 47.0 | 809 | 6.0 | 270 | 43.7 | 196 |
| Total 15-24 | 12.4 | 4,252 | na | 2,901 | 9.4 | 1,130 | na | 732 |

${ }^{1}$ Friends, family members, and home are not considered sources for condoms.
na $=$ Not applicable

Figure 12.3 Trends in Age at First Sex
Tanzania 1999-2005


To assess the extent of condom use from the beginning of sexual exposure, respondents age $15-24$ were asked whether they had used condoms the first time they had sex. Table 12.16 shows that only 14 percent of young women and 20 percent of young men used condoms during their first sexual encounter. Never-married women were more than four times as likely as ever-married young women to have used a condom, while the difference among young men was considerably smaller (21 percent among never-married and 14 percent among ever-married). Young women and men with higher levels of educational attainment, greater wealth, and those in urban areas were more likely than other respondents to have used condoms. Among both women and men, knowledge of a source for condoms is correlated with use of a condom during first sex, with virtually none of the respondents without knowledge, and about one in five with knowledge, using condoms during their first sexual encounter.

Table 12.16 Condom use at first sex among young women and men
Among women and men age 15-24 who have ever had sex, percentage who used a condom the first time they ever had sex, by background characteristics, Tanzania 2004-05

| Background characteristic | Women |  | Men |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Used a condom at first sex | Number of women 15-24 who have ever had sex | Used a condom at first sex | Number of men 15-24 who have ever had sex |
| Age |  |  |  |  |
| 15-19 | 20.2 | 1,108 | 18.2 | 304 |
| 20-24 | 10.1 | 1,841 | 20.6 | 437 |
| Marital status |  |  |  |  |
| Never married | 31.8 | 793 | 21.3 | 562 |
| Ever married | 7.4 | 2,156 | 14.3 | 179 |
| Residence |  |  |  |  |
| Urban | 31.3 | 844 | 31.2 | 209 |
| Rural | 6.9 | 2,105 | 15.1 | 531 |
| Mainland/Zanzibar |  |  |  |  |
| Mainland | 14.1 | 2,903 | 19.6 | 733 |
| Total urban | 31.4 | 847 | 30.2 | 210 |
| Dar es Salaam city | 36.7 | 302 | (31.6) | 77 |
| Other urban | 28.6 | 546 | 29.4 | 133 |
| Total rural | 6.9 | 2,056 | 15.3 | 523 |
| Zanzibar | 5.3 | 46 | 24.0 | 8 |
| Unguja | 7.4 | 30 | (33.0) | 6 |
| Pemba | 1.4 | 16 | * | 2 |
| Zone |  |  |  |  |
| Western | 8.1 | 572 | 14.0 | 150 |
| Northern | 12.0 | 370 | 18.5 | 87 |
| Central | 9.9 | 220 | (17.2) | 69 |
| Southern highlands | 10.6 | 392 | 23.9 | 91 |
| Lake | 12.8 | 567 | 17.0 | 138 |
| Eastern | 26.6 | 496 | (27.0) | 124 |
| Southern | 17.2 | 287 | * | 74 |
| Education |  |  |  |  |
| No education | 4.1 | 767 | 2.9 | 77 |
| Primary incomplete | 11.5 | 530 | 14.5 | 209 |
| Primary complete | 16.2 | 1,432 | 22.1 | 383 |
| Secondary+ | 39.2 | 220 | 39.6 | 72 |


| Know condom source ${ }^{1}$ |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: |
| Yes | 16.5 | 2,441 | 21.6 | 672 |
| No | 1.6 | 508 | 0.0 | 68 |
|  |  |  |  |  |
| Wealth quintile | 4.9 | 548 | 10.8 | 141 |
| Lowest | 5.3 | 602 | 13.1 | 135 |
| Second | 8.9 | 543 | 17.1 | 136 |
| Middle | 12.5 | 516 | 16.0 | 143 |
| Fourth | 32.3 | 740 | 35.7 | 186 |
| Highest | 13.9 | 2,949 | 19.6 | 740 |
| Total 15-24 |  |  |  |  |

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.
${ }^{1}$ Friends, family members, and home are not considered sources for condoms.

### 12.8 Recent Sexual Activity among Young Women and Men

The period between age at first sex and age at marriage is often a time of sexual experimentation. Unfortunately, in the era of HIV/AIDS, it can also be a risky time. Table 12.17 presents data on the percentage of never-married young women and men age 15-24 who have not yet engaged in sex, the percentage who had sex in the 12 months preceding the survey, and the percentage who used condoms during most recent sex. Sixty-two percent of never-married young women reported that they had never had sex, compared with 41 percent of men. Though the percentage of unmarried youth who have never had sex declines rapidly from age 15-19 to 20-24, 35 percent of women and 18 percent of men in their early 20s reported that they had not yet had sex. There are no clear differences by educational attainment and minimal differences by wealth. Respondents who do not know a condom source are more likely than other respondents never to have had sex. Among both women and men, abstinence rates are considerably higher in Zanzibar than in the Mainland (94 compared with 61 percent for women, and 84 compared with 39 percent for men).

Table 12.17 also presents data on never-married youth who used a condom the last time they had sex. Twenty-nine percent of never-married women and 43 percent of never-married men had sex in the past 12 months. More than one-third of these women and almost half of these men reported using a condom during their last sexual intercourse. As educational attainment and wealth increase, so do the likelihood of condom use. Young women in urban areas are more likely than those in rural areas to have had sex within the last year, and are twice as likely to have used a condom in the encounter (50 and 24 percent, respectively). Among young men, there is no urban-rural difference in the incidence of sex, but men in urban areas are more likely to have used condoms the last time they had sex (66 and 38 percent, respectively).

Comparing the results of the 2003-04 THIS and 2004-05 TDHS, the abstinence rate among young never-married respondents in Mainland Tanzania was the same for women (around six in ten), and slightly lower for men in 2004-05 (from 46 to 39 percent). The rate of condom use in 2004-05 was slightly lower for women ( 37 and 44 percent, respectively) and the same for men ( 47 percent).

Table 12.17 Premarital sexual intercourse and condom use during premarital sexual intercourse among youth
Among never-married women and men age 15-24, the percentage who have never had sexual intercourse, the percentage who have had sex intercourse in the past 12 months, and among those who have had premarital sexual intercourse in the past 12 months, the percentage who used a condom at the last sexual intercourse, by background characteristics, Tanzania 2004-05

| Background characteristic | Women |  |  |  |  | Men |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Never had sex | Had sex in past 12 months | Number of nevermarried women 15-24 | Used condom at last sex | Number of women 15-24 sexually active in past 12 months | Never had sex | Had sex in past 12 months | Number of nevermarried men 15-24 | Used condom at last sex | Number of men 15-24 sexually active in past 12 months |
| Age |  |  |  |  |  |  |  |  |  |  |
| 15-19 | 70.3 | 22.5 | 1,618 | 38.2 | 364 | 53.0 | 32.8 | 629 | 39.3 | 206 |
| 20-24 | 34.8 | 51.1 | 478 | 35.0 | 244 | 17.5 | 63.4 | 322 | 53.5 | 204 |
| Residence |  |  |  |  |  |  |  |  |  |  |
| Urban | 52.7 | 37.7 | 809 | 49.6 | 305 | 39.1 | 42.9 | 276 | 66.2 | 119 |
| Rural | 68.1 | 23.6 | 1,287 | 24.1 | 304 | 41.7 | 43.3 | 675 | 38.3 | 292 |
| Mainland/Zanzibar |  |  |  |  |  |  |  |  |  |  |
| Mainland | 60.7 | 30.2 | 2,002 | 36.8 | 605 | 39.4 | 44.5 | 917 | 46.6 | 408 |
| Total urban | 51.3 | 38.9 | 778 | 49.5 | 302 | 38.4 | 43.2 | 271 | 66.9 | 117 |
| Dar es Salaam city | 47.3 | 42.7 | 280 | 50.5 | 120 | 37.6 | 49.0 | 102 | * | 50 |
| Other urban | 53.4 | 36.7 | 498 | 48.9 | 183 | 38.9 | 39.7 | 169 | 73.2 | 67 |
| Total rural | 66.6 | 24.7 | 1,225 | 24.1 | 303 | 39.8 | 45.1 | 646 | 38.4 | 291 |
| Zanzibar | 94.4 | 4.0 | 94 | * | 4 | 84.1 | 7.1 | 34 | * | 2 |
| Unguja | 92.2 | 5.6 | 64 | * | 4 | 81.1 | 10.1 | 22 | * | 2 |
| Pemba | 99.2 | 0.3 | 30 | * | 0 | 89.4 | 1.8 | 12 | * | 0 |
| Zone |  |  |  |  |  |  |  |  |  |  |
| Western | 73.3 | 18.9 | 353 | 34.4 | 67 | 34.7 | 48.7 | 174 | 28.6 | 85 |
| Northern | 64.9 | 25.6 | 346 | 34.3 | 88 | 43.0 | 34.5 | 123 | (51.0) | 42 |
| Central | 62.0 | 30.3 | 160 | (27.1) | 48 | 34.4 | 53.9 | 77 | (37.3) | 42 |
| Southern highlands | 72.0 | 17.2 | 261 | (43.8) | 45 | 48.4 | 39.3 | 133 | (58.3) | 52 |
| Lake | 57.8 | 36.2 | 322 | 29.1 | 116 | 37.7 | 39.5 | 148 | (54.2) | 59 |
| Eastern | 51.1 | 40.2 | 398 | 45.7 | 160 | 41.2 | 43.9 | 175 | (54.7) | 77 |
| Southern | 33.9 | 49.2 | 164 | 37.2 | 81 | 33.2 | 60.1 | 86 | 47.1 | 52 |
| Education |  |  |  |  |  |  |  |  |  |  |
| No education | 60.9 | 30.5 | 260 | 19.0 | 79 | 48.5 | 39.4 | 92 | (34.0) | 36 |
| Primary incomplete | 68.3 | 24.0 | 541 | 23.0 | 130 | 49.8 | 34.8 | 344 | 33.4 | 120 |
| Primary complete | 58.7 | 32.3 | 915 | 39.4 | 295 | 30.5 | 53.5 | 398 | 49.5 | 213 |
| Secondary+ | 62.6 | 27.4 | 380 | 60.7 | 104 | 44.7 | 35.8 | 118 | (78.0) | 42 |
| Know condom source ${ }^{1}$ |  |  |  |  |  |  |  |  |  |  |
| Yes | 54.0 | 36.3 | 1,533 | 39.6 | 556 | 37.7 | 45.6 | 823 | 50.8 | 375 |
| No | 84.5 | 9.3 | 563 | (7.5) | 52 | 61.6 | 27.9 | 128 | (0.0) | 36 |
| Wealth quintile |  |  |  |  |  |  |  |  |  |  |
| Lowest | 61.7 | 29.5 | 267 | 14.4 | 79 | 45.1 | 38.1 | 176 | 21.1 | 67 |
| Second | 68.4 | 22.3 | 312 | 22.6 | 69 | 45.5 | 41.5 | 165 | 28.2 | 68 |
| Middle | 69.3 | 23.6 | 344 | 26.7 | 81 | 41.5 | 45.2 | 177 | 47.5 | 80 |
| Fourth | 63.3 | 26.9 | 390 | 29.4 | 105 | 39.5 | 42.3 | 197 | 47.1 | 83 |
| Highest | 56.1 | 35.0 | 783 | 52.8 | 274 | 35.6 | 47.4 | 237 | 71.2 | 112 |
| Total 15-24 | 62.2 | 29.0 | 2,096 | 36.9 | 609 | 41.0 | 43.2 | 951 | 46.4 | 411 |

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.
${ }^{1}$ Friends, family members, and home are not considered sources for condoms.

## Higher-Risk Sex

The most common means of transmission of HIV in Tanzania is through unprotected sex with an infected person. To prevent HIV/AIDS transmission, it is important that young people practice safe sex through the most advocated ABC methods (abstinence, being faithful to one uninfected partner, and condom use). Table 12.18 presents data on the percentages of young people engaging in higherrisk sex (sex with nonmarital, noncohabiting partners) in the 12-month period preceding the survey, and the rate of condom use in these higher-risk sexual encounters. Among sexually active youth age $15-24,34$ percent of women and 83 percent of men engaged in higher-risk sexual activity in the last 12 months. One-third of these women and almost half of these men reported condom use in their last high-risk encounter.

Among women there are significant differences in the prevalence of higher-risk sex and condom use by background characteristics. Women with secondary schooling or higher are more than three times as likely as those with no schooling to have engaged in higher-risk sex, and women in the highest wealth quintile are twice as likely as those in the lowest quintile to have done so. Women in urban areas are twice as likely as those in rural areas to have engaged in risky sexual behaviour. While these relationships hold for men as well, the differences are smaller, in part because the majority of men have engaged in higher-risk behaviours.

By definition, sexually active women and men who have never married engage in higher-risk sex. Those who have never married are somewhat more likely to use condoms during higher-risk sexual activity than ever-married women and men. Consistent with findings in the previous table, almost four in ten women who know a condom source used a condom in their last sexual encounter, compared with one in ten of those unaware of a condom source.

Among women, there are striking differences by zone in the prevalence of higher-risk sex, ranging from 16 percent in the Southern highlands to 59 percent in the Southern zone. For men, the range is narrower, from 70 percent in the Lake zone to 94 percent in the Southern zone. Among those having higher-risk sex, women in the Southern highlands are the most likely to use condoms, while those in the Central zone are the least likely.

Table 12.18 Higher-risk sex and condom use at last higher-risk sex in the past year among young women and men
Among sexually active young women and men age 15-24, percentage who have had sexual relations with nonmarital, noncohabiting partner in the past 12 months, and among women and men age 15-24 who have had higher-risk sex in the past 12 months, percentage who say they used a condom the last time they had sex with a nonmarital, noncohabiting partner, by background characteristics, Tanzania 2004-05

| Background characteristic | Women |  |  |  | Men |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Percentage engaging in higher-risk sex in past 12 months | Number of women sexually active in past 12 months | Percentage who used condom at last higherrisk sex | Number of women 15-24 who had higher-risk sex in past 12 months | Percentage engaging in higher-risk sex in past 12 months | Number of men sexually active in past 12 months | Percentage who used condom at last higherrisk sex | Number of men 15-24 who had higher-risk sex in past 12 months |
| Age |  |  |  |  |  |  |  |  |
| 15-19 | 46.3 | 963 | 36.4 | 446 | 98.1 | 215 | 39.0 | 210 |
| 20-24 | 26.8 | 1,661 | 31.1 | 445 | 73.9 | 371 | 50.5 | 274 |
| Marital status |  |  |  |  |  |  |  |  |
| Never married | 99.4 | 609 | 37.1 | 605 | 100.0 | 411 | 46.4 | 411 |
| Ever married | 14.2 | 2,016 | 26.8 | 286 | 42.2 | 175 | 40.6 | 74 |
| Residence |  |  |  |  |  |  |  |  |
| Urban | 53.9 | 748 | 46.2 | 403 | 84.3 | 158 | 68.5 | 134 |
| Rural | 26.0 | 1,876 | 23.5 | 488 | 82.2 | 427 | 36.8 | 351 |
| Mainland/Zanzibar |  |  |  |  |  |  |  |  |
| Mainland | 34.3 | 2,583 | 33.7 | 885 | 82.9 | 581 | 45.7 | 482 |
| Total urban | 53.3 | 753 | 46.5 | 401 | 82.7 | 159 | 69.3 | 132 |
| Dar es Salaam city | 54.2 | 272 | 49.8 | 147 | (86.5) | 64 | * | 55 |
| Other urban | 52.8 | 481 | 44.7 | 254 | 80.1 | 96 | 74.2 | 77 |
| Total rural | 26.5 | 1,830 | 23.1 | 484 | 83.0 | 422 | 36.8 | 350 |
| Zanzibar | 14.1 | 41 | (44.5) | 6 | (63.1) | 4 | * | 3 |
| Unguja | 20.8 | 27 | (46.2) | 6 | * | 3 | * | 3 |
| Pemba | 1.5 | 14 | * | 0 | * | 1 | * | 0 |
| Zone |  |  |  |  |  |  |  |  |
| Western | 18.2 | 522 | 37.5 | 95 | 83.6 | 120 | 30.3 | 100 |
| Northern | 39.1 | 311 | 34.4 | 122 | 81.4 | 59 | (49.2) | 48 |
| Central | 33.5 | 191 | 25.8 | 64 | 85.1 | 58 | 38.6 | 50 |
| Southern highlands | 15.5 | 338 | 47.7 | 52 | 81.9 | 74 | 55.3 | 61 |
| Lake | 32.7 | 537 | 30.8 | 175 | 69.7 | 104 | 48.7 | 72 |
| Eastern | 52.9 | 453 | 35.8 | 240 | 89.0 | 98 | 57.6 | 87 |
| Southern | 59.4 | 231 | 28.9 | 137 | 93.8 | 67 | 43.7 | 63 |
| Education |  |  |  |  |  |  |  |  |
| No education | 20.8 | 693 | 21.2 | 145 | 72.2 | 64 | (32.6) | 46 |
| Primary incomplete | 43.7 | 461 | 25.9 | 201 | 87.8 | 155 | 30.0 | 136 |
| Primary complete | 32.7 | 1,292 | 35.2 | 423 | 81.4 | 317 | 50.3 | 258 |
| Secondary+ | 68.9 | 177 | 56.8 | 122 | 89.7 | 49 | (78.8) | 44 |
| Know condom source ${ }^{1}$ |  |  |  |  |  |  |  |  |
| Yes | 37.6 | 2,186 | 35.7 | 821 | 83.0 | 532 | 49.9 | 442 |
| No | 16.1 | 438 | 11.5 | 70 | 80.0 | 54 | (0.0) | 43 |
| Wealth quintile |  |  |  |  |  |  |  |  |
| Lowest | 26.6 | 489 | 12.8 | 130 | 77.4 | 110 | 23.5 | 85 |
| Second | 21.6 | 537 | 22.5 | 116 | 81.3 | 113 | 26.1 | 92 |
| Middle | 29.7 | 487 | 24.2 | 145 | 83.4 | 111 | 47.4 | 92 |
| Fourth | 33.7 | 455 | 30.6 | 153 | 86.1 | 106 | 46.3 | 92 |
| Highest | 52.9 | 657 | 50.8 | 348 | 85.0 | 145 | 73.2 | 123 |
| Total 15-24 | 34.0 | 2,624 | 33.8 | 891 | 82.8 | 585 | 45.5 | 484 |

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.
${ }^{1}$ For the purposes of this table, the following are not considered as knowing a source for condoms: friends, family members, and home.

Figure 12.4 summarises data from the 1999 TRCHS and the 2004-05 TDHS on the proportion of young people who fall into various categories of risk for HIV. For example, according to the figure, women age 20-24 are at the greatest risk. Although the majority reported sex with only one partner during the past 12 months, no condom was used. However, it appears that across all age groups, the proportions of young people practicing the ABCs has increased since 1999.

Figure 12.4 Scale of Risk for Young Women and Men: Abstinence, Being Faithful, and Using Condoms (ABC) among Young Women and Men, Tanzania 1999-2005


Note: Data are for partners in the 12 months preceding the survey;
condom use refers to most recent sexual encounter.

## Age-Mixing in Sexual Relationships

In many societies, young women have sexual relationships with men who are considerably older than they are. This practice can contribute to the wider spread of HIV and other STIs, because if a younger, uninfected partner has sex with an older, infected partner, this can introduce the virus into a younger, uninfected cohort. To investigate this practice, in the 2004-05 TDHS women age 15-19 who had sex with a nonmarital, noncohabiting partner in the 12 months preceding the survey were asked whether the man was younger, about the same age, or older than they were. If older, they were asked if they thought he was less than ten years older or ten or more years older. The results in Table 12.19 show that in the previous year, only 6 percent of women age $15-19$ had had higher-risk sex with a man ten or more years older than themselves. Women with no schooling, and those living in rural areas, were less likely than other respondents to engage in these sexual partnerships.

| Table 12.19 Age-mixing in sexual relationships |  |  |
| :---: | :---: | :---: |
| Percentage of women age 15-19 who have had higherrisk sexual intercourse ${ }^{1}$ in the past 12 months with a man who was 10 years or more older than themselves, by background characteristics, Tanzania 2004-05 |  |  |
| Background characteristic | Percentage who had nonmarital sex with a man 10+ years older | Number of women 15-19 having nonmarital sex in past 12 months |
| Age |  |  |
| 15-17 | 4.9 | 248 |
| 18-19 | 7.8 | 198 |
| Marital status |  |  |
| Never married | 5.4 | 361 |
| Ever married | 9.4 | 85 |
| Residence |  |  |
| Urban | 8.6 | 189 |
| Rural | 4.4 | 257 |
| Education |  |  |
| No education | 3.0 | 76 |
| Primary incomplete | 7.9 | 123 |
| Primary complete | 6.2 | 197 |
| Secondary+ | (6.7) | 50 |
| Know condom source ${ }^{2}$ |  |  |
| Yes | 6.3 | 402 |
| No | (5.3) | 44 |
| Wealth quintile |  |  |
| Lowest | 3.5 | 59 |
| Second | 1.2 | 65 |
| Middle | 5.2 | 81 |
| Fourth | 8.1 | 75 |
| Highest | 8.8 | 166 |
| Total 15-19 | 6.2 | 446 |
| Note: Figures in parentheses are based on 25-49 unweighted cases. <br> ${ }^{1}$ Sexual intercourse with a partner who was neither a spouse nor who lived with the respondent <br> ${ }^{2}$ For the purposes of this table, the following are not considered as knowing a source for condoms: friends, family members, and home. |  |  |
|  |  |  |
|  |  |  |

## Drunkenness during Sexual Intercourse

Sexual intercourse when one or both partners is under the influence of alcohol is more likely than otherwise to be unplanned, and couples are therefore less likely to use condoms. Respondents who had had sex during the preceding 12 months were asked if they or their partners drank alcohol the last time they had sex, and if so, whether they or their partners were drunk. Table 12.20 shows the prevalence of sexual intercourse while drunk. The overall prevalence of sex when the respondent is drunk is extremely low, especially for young women (one-tenth of 1 percent for women and 1 percent for men). It is slightly higher when tabulated for sex when either the respondent or her/his partner is drunk (3 percent for women and 2 percent for men). Given the rarity of the phenomenon, differences across groups are minimal.

Table 12.20 Drunkenness during sexual intercourse among youth
Percentage of young women and men 15-24 who had sexual intercourse in the past 12 months while being drunk, by background characteristics, Tanzania 2004

| Background characteristic |  | Women |  |  | Men |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Percentage who had sexual intercourse in the past 12 months when drunk | Percentage who had sexual intercourse in the past 12 months while one or both partners were drunk | Number of women | Percentage who had sexual intercourse in the past 12 months when drunk | Percentage who had sexual intercourse in the past 12 months while one or both partners were drunk | Number of men |
| Age |  |  |  |  |  |  |
| 15-19 | 0.0 | 1.0 | 2,245 | 0.0 | 0.4 | 637 |
| 20-24 | 0.2 | 5.0 | 2,007 | 2.0 | 4.5 | 493 |
| Marital status |  |  |  |  |  |  |
| Never married | 0.0 | 2.0 | 2,096 | 1.0 | 1.8 | 951 |
| Married/Living together | 0.2 | 4.0 | 1,990 | 2.0 | 4.4 | 153 |
| Divorced/separated/widowed | 0.5 | 7.0 | 166 | * | * | 26 |
| Residence |  |  |  |  |  |  |
| Urban | 0.1 | 3.0 | 1,271 | 2.0 | 3.0 | 317 |
| Rural | 0.1 | 3.0 | 2,981 | 1.0 | 1.9 | 813 |
| Education |  |  |  |  |  |  |
| No education | 0.2 | 5.0 | 925 | 1.0 | 2.1 | 122 |
| Primary incomplete | 0.0 | 3.0 | 900 | 2.0 | 2.8 | 380 |
| Primary complete | 0.1 | 3.0 | 1,969 | 0.0 | 1.9 | 504 |
| Secondary+ | 0.0 | 1.0 | 458 | 0.0 | 1.8 | 124 |
| Know condom source ${ }^{1}$ |  |  |  |  |  |  |
| Yes | 0.1 | 4.0 | 3,268 | 1.0 | 2.5 | 983 |
| No | 0.0 | 2.0 | 983 | 1.0 | 0.5 | 147 |
| Wealth quintile |  |  |  |  |  |  |
| Lowest | 0.1 | 4.0 | 712 | 1.0 | 2.0 | 220 |
| Second | 0.0 | 3.0 | 816 | 0.0 | 2.4 | 210 |
| Middle | 0.0 | 4.0 | 781 | 0.0 | 0.0 | 209 |
| Fourth | 0.2 | 3.0 | 763 | 1.0 | 3.3 | 221 |
| Highest | 0.1 | 2.0 | 1,180 | 2.0 | 3.1 | 270 |
| Total 15-24 | 0.1 | 3.1 | 4,252 | 1.0 | 2.2 | 1,130 |

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
${ }^{1}$ For the purposes of this table, the following are not considered as knowing a source for condoms: friends, family members, and home.

## HIV Testing

Young people may believe there are barriers to accessing and using many health services and facilities, particularly for sensitive concerns relating to sexual health, such as sexually transmitted infections like HIV/AIDS. Table 12.21 presents data on the percentage of sexually active youth being tested and receiving the results within the past year. Although the proportions are small, young women and men are about equally likely to have been tested for HIV (6 and 7 percent, respectively).

Table 12.21 Recent HIV test among youth
Among young women and men 15-24 who have had sexual intercourse in the past 12 months, the percentage who have had an HIV test in the past 12 months and received the results of the test, by background characteristics, Tanzania 2004-05

| Background characteristic | Women |  | Men |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Percentage who have been tested and received results in the past 12 months | Number of women age 15-24 who have had sexual intercourse in past 12 months | Percentage who have been tested and received results in the past 12 months | Number of men age 15-24 who have had sexual intercourse in past 12 months |
| Age |  |  |  |  |
| 15-17 | 5.7 | 411 | 1.9 | 104 |
| 18-19 | 7.5 | 552 | 5.1 | 110 |
| 15-19 | 6.7 | 963 | 3.5 | 215 |
| 20-22 | 5.0 | 1,051 | 5.4 | 208 |
| 23-24 | 6.3 | 610 | 12.6 | 163 |
| 20-24 | 5.5 | 1,661 | 8.6 | 371 |
| Marital status |  |  |  |  |
| Never married | 6.4 | 609 | 5.5 | 411 |
| Married/living together | 6.0 | 1,892 | 10.4 | 151 |
| Divorced/separated/ widowed | 3.6 | 123 | * | 24 |
| Residence |  |  |  |  |
| Urban | 8.0 | 748 | 12.6 | 158 |
| Rural | 5.1 | 1,876 | 4.6 | 427 |
| Education |  |  |  |  |
| No education | 4.0 | 693 | 0.0 | 64 |
| Primary incomplete | 7.1 | 461 | 5.9 | 155 |
| Primary complete | 6.9 | 1,292 | 7.6 | 317 |
| Secondary+ | 3.3 | 177 | (12.6) | 49 |
| Know condom source ${ }^{1}$ |  |  |  |  |
| Yes | 6.7 | 2,186 | 7.4 | 532 |
| No | 2.3 | 438 | 0.6 | 54 |
| Wealth quintile |  |  |  |  |
| Lowest | 3.4 | 489 | 3.6 | 110 |
| Second | 6.2 | 537 | 3.6 | 113 |
| Middle | 6.7 | 487 | 3.7 | 111 |
| Fourth | 7.3 | 455 | 8.6 | 106 |
| Highest | 6.2 | 657 | 12.5 | 145 |
| Total 15-24 | 5.9 | 2,624 | 6.7 | 585 |

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.
${ }^{1}$ For the purposes of this table, the following are not considered as knowing a source for
condoms: friends, family members, and home.

Given that HIV testing is uncommon among youth age 15-24, there is comparatively little variation across groups. Male respondents in urban areas, though, are several times more likely than those in rural areas to have been tested and to have received the results. The urban-rural differential is smaller among women. Married and cohabiting men are almost twice as likely as never-married men to report having an HIV test (10 and 6 percent, respectively), but for sexually active women the level is the same among those never-married and those in a marital-cohabiting situation (6 percent).

### 12.9 OrPhans and Vulnerable Children

The repercussions of HIV are not limited to those infected with the virus. The children of infected parents are likely to become orphans in need of new caretakers. When a household takes in a child who has been orphaned, household resources must be spread more thinly. Table 12.22 presents data on the prevalence of orphanhood in Tanzania. One percent of children under the age of 18 have lost both parents. However, 10 percent of children have lost one or both parents. The percentage of children under age 18 with one or both parents dead is slightly higher in urban areas (13 percent) than in rural areas ( 9 percent). Thirteen percent of children in the Southern highlands have lost one or both parents-the highest zonal prevalence in the country and the same as in Dar es Salaam city. A majority of children live with both parents ( 61 percent), but 16 percent live with neither parent.

| $\underline{\text { Table 12.22 Orphanhood and children's living arrangements }}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percent distribution of de jure children under age 18 by survival status of parents and children's living arrangements, by background characteristics, Tanzania 2004-05 |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Orphanhood |  |  |  |  |  | Children's living arrangements |  |  |  |  |  |  |
| Background characteristic | Both parents dead | Only mother dead | Only father dead | Both parents alive | Missing information on father/ mother | Total | Mother, father, or both dead | Not living with either parent | Living only with mother | Living only with father | Living with both parents | Total | Number of children |
| Age |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 0-1 | 0.0 | 0.2 | 1.1 | 98.3 | 0.3 | 100.0 | 1.4 | 1.3 | 21.0 | 0.1 | 77.6 | 100.0 | 3,447 |
| 2-4 | 0.2 | 0.8 | 2.6 | 95.7 | 0.6 | 100.0 | 3.8 | 9.1 | 19.5 | 2.4 | 69.0 | 100.0 | 4,896 |
| 5-9 | 0.7 | 2.1 | 5.9 | 90.4 | 0.9 | 100.0 | 8.7 | 14.2 | 18.6 | 5.6 | 61.5 | 100.0 | 7,012 |
| 10-14 | 2.2 | 4.6 | 8.8 | 83.4 | 1.0 | 100.0 | 15.8 | 21.6 | 18.0 | 8.2 | 52.2 | 100.0 | 6,409 |
| 15-17 | 3.4 | 5.4 | 11.2 | 77.0 | 2.9 | 100.0 | 20.4 | 32.5 | 19.1 | 6.9 | 41.5 | 100.0 | 2,858 |
| 0-14 | 0.9 | 2.2 | 5.3 | 90.8 | 0.8 | 100.0 | 8.5 | 13.2 | 19.0 | 4.8 | 63.0 | 100.0 | 21,763 |
| Sex |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Male | 1.1 | 2.7 | 6.1 | 89.0 | 1.1 | 100.0 | 10.0 | 14.0 | 19.3 | 5.5 | 61.2 | 100.0 | 12,441 |
| Female | 1.3 | 2.5 | 5.8 | 89.4 | 1.0 | 100.0 | 9.8 | 17.0 | 18.7 | 4.6 | 59.7 | 100.0 | 12,180 |
| Residence |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Urban | 2.6 | 3.0 | 6.8 | 86.4 | 1.3 | 100.0 | 12.5 | 20.6 | 19.0 | 5.7 | 54.8 | 100.0 | 5,127 |
| Rural | 0.9 | 2.5 | 5.7 | 89.9 | 1.0 | 100.0 | 9.2 | 14.1 | 19.1 | 4.9 | 62.0 | 100.0 | 19,493 |
| Mainland/Zanzibar |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Mainland | 1.2 | 2.6 | 6.0 | 89.1 | 1.0 | 100.0 | 10.0 | 15.4 | 19.2 | 5.1 | 60.3 | 100.0 | 23,912 |
| Total urban | 2.7 | 3.1 | 6.9 | 86.1 | 1.3 | 100.0 | 12.8 | 20.4 | 19.2 | 6.0 | 54.4 | 100.0 | 5,023 |
| Dar es Salaam city | 4.2 | 4.0 | 4.9 | 86.2 | 0.7 | 100.0 | 13.3 | 23.8 | 14.5 | 7.9 | 53.8 | 100.0 | 1,362 |
| Other urban | 2.1 | 2.8 | 7.6 | 86.0 | 1.5 | 100.0 | 12.6 | 19.2 | 20.9 | 5.3 | 54.6 | 100.0 | 3,661 |
| Total rural | 0.9 | 2.5 | 5.7 | 89.9 | 1.0 | 100.0 | 9.3 | 14.0 | 19.2 | 4.8 | 61.9 | 100.0 | 18,889 |
| Zanzibar | 0.4 | 1.8 | 4.9 | 92.6 | 0.4 | 100.0 | 7.0 | 18.1 | 13.4 | 3.6 | 64.9 | 100.0 | 708 |
| Unguja | 0.3 | 1.7 | 4.8 | 92.8 | 0.4 | 100.0 | 6.8 | 20.6 | 13.8 | 4.1 | 61.5 | 100.0 | 443 |
| Pemba | 0.5 | 1.8 | 5.0 | 92.3 | 0.3 | 100.0 | 7.4 | 13.8 | 12.8 | 2.7 | 70.7 | 100.0 | 265 |
| Zone |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Western | 0.5 | 2.8 | 4.8 | 91.4 | 0.5 | 100.0 | 8.1 | 13.1 | 16.0 | 5.7 | 65.2 | 100.0 | 4,998 |
| Northern | 1.1 | 1.9 | 6.6 | 89.3 | 1.1 | 100.0 | 9.7 | 15.6 | 22.3 | 3.3 | 58.8 | 100.0 | 3,476 |
| Central | 1.2 | 3.4 | 5.2 | 88.4 | 1.8 | 100.0 | 10.0 | 14.7 | 18.9 | 4.8 | 61.6 | 100.0 | 2,098 |
| Southern highlands | 1.9 | 3.0 | 8.0 | 86.4 | 0.8 | 100.0 | 12.9 | 13.2 | 20.5 | 3.7 | 62.7 | 100.0 | 3,621 |
| Lake | 0.8 | 1.9 | 6.3 | 89.7 | 1.2 | 100.0 | 9.3 | 15.4 | 20.3 | 4.8 | 59.5 | 100.0 | 4,831 |
| Eastern | 2.6 | 3.4 | 4.8 | 88.3 | 1.0 | 100.0 | 11.0 | 19.9 | 17.0 | 6.7 | 56.4 | 100.0 | 3,052 |
| Southern | 1.5 | 2.7 | 5.9 | 88.5 | 1.5 | 100.0 | 10.2 | 18.8 | 20.7 | 7.9 | 52.6 | 100.0 | 1,837 |
| Wealth quintile |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Lowest | 0.6 | 2.4 | 7.4 | 88.8 | 0.8 | 100.0 | 10.4 | 11.8 | 23.7 | 4.4 | 60.1 | 100.0 | 5,273 |
| Second | 0.5 | 2.2 | 5.7 | 90.5 | 1.1 | 100.0 | 8.6 | 12.6 | 18.3 | 5.1 | 64.0 | 100.0 | 5,014 |
| Middle | 1.1 | 2.6 | 6.2 | 88.9 | 1.2 | 100.0 | 10.1 | 15.6 | 18.7 | 4.0 | 61.7 | 100.0 | 5,085 |
| Fourth | 1.4 | 2.7 | 5.0 | 89.9 | 0.9 | 100.0 | 9.2 | 16.2 | 18.7 | 5.4 | 59.7 | 100.0 | 5,018 |
| Highest | 2.8 | 3.2 | 5.2 | 87.7 | 1.0 | 100.0 | 11.4 | 22.3 | 14.9 | 6.5 | 56.3 | 100.0 | 4,232 |
| Total | 1.2 | 2.6 | 5.9 | 89.2 | 1.0 | 100.0 | 9.9 | 15.5 | 19.0 | 5.0 | 60.5 | 100.0 | 24,621 |

In families afflicted with HIV／AIDS，children often drop out of school．This can happen for many reasons，such as the inability to pay school fees，stigma，or the need to help with household labour or to stay at home to care for sick parents or younger siblings．Table 12.23 presents data on school attendance rates among children age 10－14，according to orphanhood status．Data on these special subgroups（double orphans and nonorphans living with at least one parent）is critical to the monitoring and evaluation of orphans and vulnerable children（OVC）programmes，and as an indi－ cator of the disadvantage that can result from orphanhood（UNICEF，2005）．Attendance rates differ little among orphans and nonorphans，with about 9 in 10 children age 10－14 attending school at some level．However，this indicator is based on the assumption that orphans are accurately represented in the survey．This may not be true if a sizable proportion of 10－14 year old orphans live on the streets or in institutional settings not captured in the TDHS sample．

| Table 12．23 School attendance by survivorship of parents and by OVC status |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| For children 10－14 years of age，the percentage attending school by parental survival and by OVC status and the ratios of the percentages attending for parental survival and OVC status，according to background characteristics， Tanzania 2004－05 |  |  |  |  |  |
|  | Both parents deceased |  | Both parents alive and living with at least one |  |  |
| Background characteristic | Percentage attending school | $\begin{gathered} \hline \begin{array}{c} \text { Number of } \\ \text { children } \\ 10-19 \\ \hline \end{array} ⿳ ⺈ ⿴ 囗 十 一 ~ \end{gathered}$ | Percentage attending school | $\begin{gathered} \hline \begin{array}{c} \text { Number of } \\ \text { children } \\ 10-14 \\ \hline \end{array} ⿳ ⺈ ⿴ 囗 十 一 ~ \end{gathered}$ | Ratio |
| Sex |  |  |  |  |  |
| Male | 83.0 | 72 | 86.3 | 2，304 | 1.0 |
| Female | 96.9 | 70 | 86.8 | 2，204 | 1.1 |
| Residence |  |  |  |  |  |
| Urban | （95．1） | 59 | 95.9 | 882 | 1.0 |
| Rural | 86.0 | 83 | 84.3 | 3，626 | 1.0 |
| Wealth quintile |  |  |  |  |  |
| Lowest | ＊ | 17 | 74.2 | 967 | 1.0 |
| Second | ＊ | 12 | 81.4 | 970 | 1.0 |
| Middle | ＊ | 26 | 87.1 | 900 | 1.0 |
| Fourth | （84．8） | 32 | 95.3 | 912 | 0.9 |
| Highest | （99．4） | 54 | 97.9 | 758 | 1.0 |
| Total | 89.8 | 142 | 86.6 | 4，508 | 1.0 |
| 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． |  |  |  |  |  |

Property dispossession can make caregivers and their children especially vulnerable．In many countries，widows and their children are often denied an inheritance，whether because of common law or religious laws．In many cases，enforcement of inheritance laws is weak，and relatives take the inheritance even where laws provide for property transfer to widows and children．An increasing number of countries are establishing and harmonising legislation to give women and dependent children inheritance rights when their husbands／fathers die．

The 2004－05 TDHS asked women whether they had ever lost a husband．If they had，they were asked if they had any property taken because of the death．Three percent of women had been widowed，and of these， 46 percent were dispossessed of property（Table 12．24）．Because the number of widowed women is so small，it is not possible to explain with confidence the differentials by social and demographic characteristics．

Table 12.24 Property dispossession
Percentage of women 15-49 who have been widowed, and among them, percentage who have been dispossessed of property, by background characteristics, Tanzania 2004-05

| Background characteristic | Percentage of everwidowed women | Number of women | Percentage of widowed women who were dispossessed of property | Number of widowed women |
| :---: | :---: | :---: | :---: | :---: |
| Residence |  |  |  |  |
| Urban | 2.0 | 2,935 | 58.0 | 60 |
| Rural | 2.8 | 7,394 | 42.4 | 207 |
| Education |  |  |  |  |
| No education | 3.6 | 2,503 | 36.9 | 91 |
| Primary incomplete | 3.2 | 1,855 | 60.1 | 60 |
| Primary complete | 2.1 | 5,086 | 44.0 | 106 |
| Secondary+ | 1.2 | 885 | * | 10 |
| Wealth quintile |  |  |  |  |
| Lowest | 4.2 | 1,840 | 53.8 | 78 |
| Second | 2.5 | 1,944 | (43.0) | 49 |
| Middle | 2.6 | 1,943 | (33.3) | 51 |
| Fourth | 2.7 | 2,004 | 40.7 | 55 |
| Highest | 1.3 | 2,597 | (59.1) | 34 |
| Total | 2.6 | 10,329 | 45.9 | 267 |

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.

## FEMALE GENITAL CUTTING

Female genital cutting (FGC), also known as female circumcision or female genital mutilation (FGM) in Tanzania, is a common practice in many societies in the northern half of sub-Saharan Africa. Nearly universal in a few countries, it is practiced by various groups in at least 25 African countries, in Yemen, and in immigrant African populations in Europe and North America (Yoder et al., 2004). In a few societies, the procedure is routinely carried out when a girl is a few weeks or a few months old (e.g., Eritrea, Yemen), while in most others, it occurs later in childhood or adolescence. In the case of the latter, FGC is typically part of a ritual initiation into womanhood that includes a period of seclusion and education about the rights and duties of a wife.

The Tanzanian Special Provision Act, a 1998 amendment to the penal code, specifically prohibits FGC. However, while the practice has been outlawed, it is still occurring in many areas. FGC is considered compulsory in some communities whereas in other communities, women may have options about being cut.

The 2004-05 TDHS collected data on the practice of female circumcision from women age 15-49. The 1996 TDHS also collected data on female circumcision from women in the same age group. The 2003-04 Tanzania HIV/AIDS Indicator Survey (TACAIDS, NBS, and ORC Macro, 2005) included only one question on circumcision for male and female respondents: whether the respondent was circumcised. In this chapter, topics discussed include knowledge, prevalence, and type; age at circumcision; person who performed the circumcision; and attitudes towards the practice. The terms FGC and female circumcision are used interchangeably in this chapter.

### 13.1 Knowledge of Female Genital Cutting

Table 13.1 presents data on women's and men's knowledge of female circumcision. About three-quarters ( 74 percent) of Tanzanian women have heard of the practice. Although differences by marital status are minimal, there are noticeable variations in knowledge of female circumcision by residence, region, education, and ethnicity. About nine out of every ten women in urban areas have heard of female circumcision, compared with only two-thirds of women in rural areas (91 and 67 percent, respectively). Knowledge of female circumcision among women is higher in Zanzibar than in the Mainland (86 and 73 percent, respectively). Almost all women in the Northern, Central, and Eastern zones have heard of the practice, compared with between half and two-thirds in other zones.

The variations by zone and residence are a reflection of ethnic differentials and advocacy campaigns. In the Northern zone, where the Maasai and Chagga tribes are located, and in the Central zone, where the Gogo and Nyaturu tribes are the primary residents, women have greater knowledge of female circumcision than ethnic groups in the Southern zone. The Eastern zone, which includes the city of Dar es Salaam, has higher awareness compared with the Southern Highlands, Lake, and Western zones because the Eastern zone is more urban and is where most advocacy groups at the national level are based. With regard to education differentials, the table reveals that awareness of the practice is highest ( 97 percent) among women with at least some secondary education, and gradually decreases with level of education to 58 percent among women with no education. Differentials by wealth quintile are very similar to the differentials by education. The percentage of women who are aware of female circumcision ranges from 95 percent for the highest quintile to 59 percent for the lowest quintile. By religion, knowledge of FGC is highest among Muslims ( 85 percent) and lowest among those who report that they have no religion (48 percent).


| Table 13.1-Continued |  |  |  |  |
| :--- | :---: | :--- | :--- | :--- |
|  | Percentage of <br> women who <br> have heard <br> of female <br> circumcision | Number of <br> women | Percentage of <br> men who <br> have heard <br> of female <br> circumcision | Number of <br> men |
| Background <br> characteristic |  |  |  |  |
| Religion | 85.0 | 3,095 | 86.9 | 798 |
| Muslim | 72.1 | 2,944 | 83.2 | 755 |
| Catholic | 74.2 | 3,000 | 87.0 | 739 |
| Protestant | 47.5 | 1,284 | 64.7 | 342 |
| None |  |  |  |  |
| Wealth quintile | 59.0 | 1,840 | 71.2 | 484 |
| Lowest | 62.9 | 1,944 | 78.4 | 504 |
| Second | 65.1 | 1,943 | 80.3 | 516 |
| Middle | 77.8 | 2,004 | 87.5 | 517 |
| Fourth | 94.7 | 2,597 | 94.5 | 615 |
| Highest | 73.5 | 10,329 | 83.0 | 2,635 |
| Total |  |  |  |  |
| Note: Total includes 3 women and 1 man with "other" religion. |  |  |  |  |

Table 13.1 indicates that knowledge of female circumcision is higher among men than women. More than four-fifths of men know about the practice. The differentials by background characteristics for men generally follow the same pattern as noted above for women. Among zones, men in the Western zone are least likely to have heard of female circumcision ( 60 percent). Knowledge of FGC is higher in urban areas than rural areas, and awareness increases with men's educational level and wealth quintile. However, the differentials for men are generally not as pronounced as for women.

### 13.2 Prevalence of Female Genital Cutting

Table 13.2 shows the prevalence of female circumcision by background characteristics. The prevalence of FGC in the country seems to have dropped slightly from 18 percent reported in the 1996 TDHS and the 2003-04 THIS to 15 percent in the 2004-05 TDHS, although the difference is not statistically significant. It is clear that prevalence level and level of knowledge of circumcision are not always related. For example, knowledge is higher among urban women and men but prevalence of FGC is more than double in rural areas than in urban areas. The proportion of women who were circumcised at the time of the survey was the highest in the Northern and Central zones (Manyara, Dodoma, Arusha, and Singida regions). The high prevalence of female circumcision in Manyara (81 percent) and Dodoma ( 68 percent) is largely explained by ethnic differentials in the practice.

Women age 15-19 are less likely to report being circumcised than their older cohorts (Figure 13.1). It is difficult to know the real reason for a lower percentage of younger women circumcised. The differences by age may be the result of a real decline in the practice or may be underreporting of the practice because it is now prohibited by law. Although Arusha region shows a sharp decline in FGC prevalence ( 81 percent in 1996 compared with 55 percent in 2004-05), the data should be interpreted with caution. The region was recently split into Arusha and Manyara, which as the table shows has a prevalence that is similar to that reported in TDHS 1996 for the then Arusha. On the other hand, the two surveys reveal that the prevalence of FGC has remained unchanged in Dodoma region (68 percent) and increased in Singida region from 25 percent in 1996 to 43 percent according to the 2004-05 TDHS.

| Table 13.2 Prevalence of female circumcision and type of circumcision |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percentage of women circumcised, and percent distribution of circumcised women by type of circumcision, according to background characteristics, Tanzania 2004-05 |  |  |  |  |  |  |  |  |
|  |  |  | Type of circumcision |  |  |  |  | Number of circumcised women |
| Background characteristic | Percentage of women circumcised | Number of women | ```Cut, no flesh removed``` | Cut, flesh removed | Sewn closed | Not determined | Total |  |
| Age |  |  |  |  |  |  |  |  |
| 15-19 | 9.1 | 2,245 | 2.3 | 89.8 | 1.2 | 6.7 | 100.0 | 203 |
| 20-24 | 13.7 | 2,007 | 2.6 | 89.7 | 1.8 | 5.9 | 100.0 | 276 |
| 25-29 | 15.2 | 1,885 | 1.0 | 90.2 | 1.6 | 7.2 | 100.0 | 286 |
| 30-34 | 16.0 | 1,542 | 1.8 | 89.7 | 3.9 | 4.7 | 100.0 | 246 |
| 35-39 | 16.0 | 1,053 | 2.2 | 94.7 | 1.4 | 1.7 | 100.0 | 168 |
| 40-44 | 18.8 | 834 | 2.0 | 96.2 | 0.9 | 0.9 | 100.0 | 156 |
| 45-49 | 22.9 | 763 | 1.4 | 92.3 | 2.6 | 3.7 | 100.0 | 175 |
| Residence |  |  |  |  |  |  |  |  |
| Urban | 7.2 | 2,935 | 1.6 | 87.8 | 5.2 | 5.4 | 100.0 | 210 |
| Rural | 17.6 | 7,394 | 1.9 | 91.9 | 1.4 | 4.7 | 100.0 | 1,300 |
| Mainland/Zanzibar |  |  |  |  |  |  |  |  |
| Mainland | 15.1 | 10,016 | 1.9 | 91.4 | 1.9 | 4.8 | 100.0 | 1,509 |
| Total urban | 7.3 | 2,885 | 1.6 | 88.0 | 5.1 | 5.2 | 100.0 | 210 |
| Dar es Salaam city | 3.2 | 969 | * | * | * | * | * | 31 |
| Other urban | 9.3 | 1,916 | 1.9 | 92.5 | 1.9 | 3.7 | 100.0 | 178 |
| Total rural | 18.2 | 7,131 | 1.9 | 91.9 | 1.4 | 4.7 | 100.0 | 1,300 |
| Zanzibar | 0.3 | 313 | * | * | * | * | * | 1 |
| Unguja | 0.4 | 216 | * | * | * | * | * | 1 |
| Pemba | 0.1 | 97 | * | * | * | * | * | 0 |
| Zone |  |  |  |  |  |  |  |  |
| Western | 1.2 | 1,880 | * | * | * | * | * | 23 |
| Northern | 43.2 | 1,496 | 1.5 | 92.1 | 1.0 | 5.5 | 100.0 | 647 |
| Central | 57.6 | 799 | 2.3 | 91.0 | 1.6 | 5.1 | 100.0 | 460 |
| Southern highlands | 6.9 | 1,440 | 3.8 | 91.1 | 3.7 | 1.4 | 100.0 | 100 |
| Lake | 8.3 | 1,865 | 1.8 | 93.4 | 2.4 | 2.5 | 100.0 | 155 |
| Eastern | 7.1 | 1,670 | 1.8 | 87.6 | 6.9 | 3.7 | 100.0 | 119 |
| Southern | 0.8 | 866 | * | * | * | * | * | 7 |
| Region |  |  |  |  |  |  |  |  |
| Dodoma | 67.8 | 468 | 2.3 | 91.7 | 1.7 | 4.2 | 100.0 | 317 |
| Arusha | 54.5 | 391 | 0.9 | 94.9 | 0.5 | 3.7 | 100.0 | 213 |
| Kilimanjaro | 25.4 | 380 | 1.2 | 95.6 | 3.3 | 0.0 | 100.0 | 97 |
| Tanga | 23.0 | 431 | 2.4 | 96.4 | 1.2 | 0.0 | 100.0 | 99 |
| Morogoro | 18.1 | 449 | 1.8 | 98.2 | 0.0 | 0.0 | 100.0 | 81 |
| Pwani | 2.4 | 253 | * | * | * | * | * | 6 |
| Dar es Salaam | 3.2 | 969 | (0.0) | (63.0) | (23.1) | (13.9) | (100.0) | 31 |
| Lindi | 0.6 | 221 | * | * | * | * | * | 1 |
| Mtwara | 0.3 | 346 | * | * | * | * | * | 1 |
| Ruvuma | 1.4 | 299 | * | * | * | * | * | 4 |
| Iringa | 22.7 | 412 | 4.1 | 93.1 | 1.3 | 1.4 | 100.0 | 94 |
| Mbeya | 0.5 | 712 | * | * | * | * | * | 4 |
| Singida | 43.2 | 331 | 2.1 | 89.4 | 1.4 | 7.1 | 100.0 | 143 |
| Tabora | 2.8 | 520 | * | * | * | * | * | 14 |
| Rukwa | 0.7 | 316 | * | * | * | * | * | 2 |
| Kigoma | 0.7 | 499 | * | * | * | * | * | 3 |
| Shinyanga | 0.6 | 861 | * | * | * | * | * | 5 |
| Kagera | 0.0 | 545 | * | * | * | * | * | 0 |
| Mwanza | 1.0 | 939 | * | * | * | * | * | 10 |
| Mara | 38.1 | 381 | 1.9 | 94.1 | 1.3 | 2.6 | 100.0 | 145 |
| Manyara | 81.0 | 293 | 1.7 | 86.4 | 0.3 | 11.6 | 100.0 | 238 |
| Zanzibar North | 0.4 | 48 | * | * | * | * | * | 0 |
| Zanzibar South | 0.2 | 26 | * | * | * | * | * | 0 |
| Town West | 0.4 | 143 | * | * | * | * | * | 1 |
| Pemba North | 0.2 | 52 | * | * | * | * | * | 0 |
| Pemba South | 0.0 | 45 | * | * | * | * | * | 0 |
| Religion |  |  |  |  |  |  |  |  |
| Muslim | 11.3 | 3,095 | 2.3 | 90.9 | 4.3 | 2.6 | 100.0 | 349 |
| Catholic | 14.2 | 2,944 | 1.9 | 91.6 | 1.1 | 5.5 | 100.0 | 417 |
| Protestant | 19.5 | 3,000 | 1.7 | 91.0 | 0.7 | 6.7 | 100.0 | 586 |
| None | 12.3 | 1,284 | 1.9 | 93.2 | 3.8 | 1.1 | 100.0 | 158 |
| Wealth quintile |  |  |  |  |  |  |  |  |
| Lowest | 20.5 | 1,840 | 2.6 | 89.9 | 1.0 | 6.4 | 100.0 | 377 |
| Second | 18.4 | 1,944 | 1.8 | 92.5 | 1.2 | 4.5 | 100.0 | 357 |
| Middle | 16.3 | 1,943 | 1.8 | 92.4 | 1.8 | 4.0 | 100.0 | 317 |
| Fourth | 12.8 | 2,004 | 1.2 | 94.6 | 1.8 | 2.4 | 100.0 | 257 |
| Highest | 7.8 | 2,597 | 1.8 | 86.1 | 5.4 | 6.7 | 100.0 | 203 |
| Total | 14.6 | 10,329 | 1.9 | 91.3 | 2.0 | 4.8 | 100.0 | 1,510 |
| Note: Total includes 1 woman with missing information on whether circumcised and 3 women with "other" religion. Figures in parentheses are based on 25 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed. |  |  |  |  |  |  |  |  |

Questions directed at determining the type of female circumcision were asked of women who reported they had been circumcised. Table 13.2 indicates that for the overwhelming majority of women, circumcision involved cutting and removal of flesh ( 91 percent). Two percent of women reported that their vagina was sewn closed (infibulation) during circumcision, which is the most radical procedure. It is noteworthy that the Northern zone, which has the second largest proportion of women circumcised, has only 1 percent of women who have the severest form of circumcision. On the other hand, in the Eastern and Southern Highlands zones where prevalence of circumcision is rather low ( 7 percent each), a greater proportion of the circumcised women are infibulated ( 7 and 4 percent, respectively).

Figure 13.1 Percentage of Women Circumcised by Age


### 13.3 Age at Circumcision

The percent distribution of women by age at circumcision is presented in Table 13.3. Unlike in Nigeria where female circumcisions occur mostly before the first birthday (NPC and ORC Macro, 2004), in Tanzania female circumcision is done throughout childhood. Whereas 28 percent of women were circumcised by age one, approximately the same proportion were circumcised at age 13 and over. One-third of women were circumcised before age five. The comparative figure for 1996 is only 5 percent (Yoder et al. 2004). However, the question on age at circumcision in the 1996 and 2004-05 TDHS surveys was worded differently. This may explain part of the variations in age at circumcision between the two surveys.

Table 13.3 also reveals that circumcisions at an early age (before age one) decrease with the age of the respondent. This pattern might imply that more women are now subjected to circumcision earlier in their childhood than before. There are marked variations in timing of circumcision by residence, zone, and region. The percentage of women who were circumcised by age one is higher in urban areas ( 34 percent) than in rural areas ( 28 percent) and the corresponding proportions of circumcisions at age 13 or later are 19 and 31 percent, respectively.

| Table 13.3 Age at circumcision |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percent distribution of circumcised women by age at circumcision, according to background characteristics, Tanzania 2004-05 |  |  |  |  |  |  |  |  |  |  |
|  | Age at circumcision (in years) |  |  |  |  |  |  |  | Total | Number of circumcised women |
| Background characteristic | $<1$ | 1-4 | 5-6 | 7-8 | 9-10 | 11-12 | $13+$ | $\begin{gathered} \hline \text { Don't } \\ \text { know/ } \\ \text { missing } \\ \hline \end{gathered}$ |  |  |
| Age |  |  |  |  |  |  |  |  |  |  |
| 15-19 | 35.6 | 7.5 | 6.1 | 6.5 | 9.6 | 6.9 | 24.8 | 3.0 | 100.0 | 203 |
| 20-24 | 38.7 | 7.2 | 5.7 | 7.5 | 8.2 | 6.0 | 24.9 | 1.8 | 100.0 | 276 |
| 25-29 | 30.3 | 5.5 | 8.7 | 8.2 | 11.5 | 8.4 | 26.2 | 1.2 | 100.0 | 286 |
| 30-34 | 27.0 | 11.5 | 7.2 | 11.4 | 7.3 | 8.8 | 24.4 | 2.4 | 100.0 | 246 |
| 35-39 | 21.4 | 4.4 | 6.5 | 8.5 | 12.7 | 11.2 | 32.4 | 2.8 | 100.0 | 168 |
| 40-44 | 21.0 | 0.0 | 9.1 | 5.8 | 15.6 | 10.0 | 38.4 | 0.1 | 100.0 | 156 |
| 45-49 | 16.2 | 2.0 | 3.3 | 11.1 | 12.2 | 11.9 | 42.2 | 1.2 | 100.0 | 175 |
| Marital status |  |  |  |  |  |  |  |  |  |  |
| Never married | 38.4 | 7.6 | 10.8 | 7.5 | 6.0 | 6.1 | 22.1 | 1.6 | 100.0 | 197 |
| Married or living together | 26.3 | 5.9 | 6.0 | 9.0 | 11.3 | 8.8 | 30.7 | 2.0 | 100.0 | 1,179 |
| Divorced, separated, or widowed | 32.2 | 4.1 | 7.4 | 5.2 | 10.8 | 12.0 | 27.5 | 0.8 | 100.0 | 134 |
| Residence |  |  |  |  |  |  |  |  |  |  |
| Urban | 34.4 | 5.6 | 7.2 | 15.4 | 8.3 | 5.7 | 18.8 | 4.7 | 100.0 | 210 |
| Rural | 27.5 | 6.0 | 6.7 | 7.4 | 11.0 | 9.2 | 31.0 | 1.3 | 100.0 | 1,300 |
| Mainland/Zanzibar |  |  |  |  |  |  |  |  |  |  |
| Mainland | 28.4 | 6.0 | 6.8 | 8.5 | 10.6 | 8.7 | 29.3 | 1.8 | 100.0 | 1,509 |
| Total urban | 34.5 | 5.6 | 7.2 | 15.3 | 8.3 | 5.8 | 18.9 | 4.6 | 100.0 | 210 |
| Dar es Salaam city | 21.9 | 0.0 | 18.6 | 33.0 | 6.0 | 0.0 | 14.0 | 6.5 | 100.0 | 31 |
| Other urban | 36.7 | 6.6 | 5.2 | 12.1 | 8.7 | 6.8 | 19.7 | 4.2 | 100.0 | 178 |
| Total rural | 27.5 | 6.0 | 6.7 | 7.4 | 11.0 | 9.2 | 31.0 | 1.3 | 100.0 | 1,300 |
| Zanzibar | * | * | * | * | * | * | * | * | * | 1 |
| Unguja | * | * | * | * | * | * | * | * | * | 1 |
| Pemba | * | * | * | * | * | * | * | * | * | 0 |
| Zone |  |  |  |  |  |  |  |  |  |  |
| Western | * | * | * | * | * | * | * | * | * | 23 |
| Northern | 39.7 | 5.3 | 5.6 | 8.8 | 8.2 | 6.4 | 24.7 | 1.4 | 100.0 | 647 |
| Central | 26.3 | 11.5 | 12.1 | 11.3 | 15.8 | 11.9 | 9.1 | 2.0 | 100.0 | 460 |
| Southern highlands | 10.0 | 0.0 | 0.0 | 2.8 | 5.8 | 9.9 | 71.5 | 0.0 | 100.0 | 100 |
| Lake | 3.4 | 0.7 | 0.5 | 1.7 | 12.2 | 9.5 | 70.7 | 1.3 | 100.0 | 155 |
| Eastern | 25.0 | 1.4 | 4.9 | 8.7 | 6.9 | 6.3 | 43.5 | 3.1 | 100.0 | 119 |
| Southern | * | * | * | * | * | * | * | * | * | 7 |
| Education |  |  |  |  |  |  |  |  |  |  |
| No education | 30.8 | 5.4 | 7.0 | 7.7 | 10.3 | 9.6 | 27.7 | 1.5 | 100.0 | 469 |
| Primary incomplete | 26.7 | 4.1 | 5.6 | 7.1 | 11.2 | 7.8 | 35.4 | 2.0 | 100.0 | 263 |
| Primary complete | 27.8 | 6.8 | 7.1 | 9.1 | 10.7 | 8.8 | 27.9 | 1.9 | 100.0 | 750 |
| Secondary+ | (22.5) | (10.9) | (2.8) | (19.3) | (4.5) | (0.0) | (36.2) | (3.8) | (100.0) | 28 |
| Total | 28.4 | 6.0 | 6.7 | 8.5 | 10.6 | 8.7 | 29.3 | 1.8 | 100.0 | 1,510 |

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.

### 13.4 Circumcision of Daughters

Women interviewed in the 2004-05 TDHS who had daughters were asked if any of their daughters had been circumcised, and if not, whether they intended to have a daughter circumcised. Table 13.4 shows that, among women who have at least one daughter, 4 percent had circumcised a daughter and an additional 2 percent intend to have a daughter circumcised. The proportion of women having had at least one daughter circumcised increases with age but the differences in the total percentage of circumcised plus those expected to be circumcised in the future is minimal for mothers under age 30. However, the likelihood of having at least one daughter circumcised (in the past or in the future) decreases with increasing level of education of mother and level of household wealth. Prevalence of at least one daughter circumcised varies by residence and zone. Women residing in rural areas and those in the Northern and Central zones are most likely to have at least one circumcised daughter. The proportion of older mothers who intend to circumcise a daughter is lower than their younger counterparts because older mothers are more likely to have grown-up daughters and therefore less likely to intend to circumcise a daughter if not already done.

## Table 13.4 Daughter's circumcision experience

Among women with at least one living daughter, percentage with at least one circumcised daughter and percentage who intend to have their daughter circumcised, according to background characteristics, Tanzania 2004-05

| Mother's background characteristic | Percentage of women with at least one daughter circumcised | Percentage of women who intend to have daughter circumcised | Number of women with at least one living daughter |
| :---: | :---: | :---: | :---: |
| Age |  |  |  |
| 15-19 | 0.0 | 4.3 | 222 |
| 20-24 | 0.8 | 3.0 | 991 |
| 25-29 | 1.1 | 2.8 | 1,311 |
| 30-34 | 3.0 | 2.3 | 1,239 |
| 35-39 | 5.0 | 1.6 | 892 |
| 40-44 | 8.7 | 1.2 | 754 |
| 45-49 | 12.4 | 0.9 | 687 |
| Residence |  |  |  |
| Urban | 1.8 | 0.6 | 1,446 |
| Rural | 4.9 | 2.7 | 4,649 |
| Zone |  |  |  |
| Western | 0.2 | 0.5 | 1,137 |
| Northern | 14.5 | 5.8 | 863 |
| Central | 15.9 | 0.9 | 495 |
| Southern highlands | 0.7 | 2.6 | 896 |
| Lake | 2.3 | 3.0 | 1,179 |
| Eastern | 1.7 | 1.6 | 839 |
| Southern | 0.1 | 0.3 | 525 |
| Education |  |  |  |
| No education | 8.0 | 2.8 | 1,674 |
| Primary incomplete | 4.6 | 2.8 | 1,004 |
| Primary complete | 2.3 | 1.9 | 3,121 |
| Secondary+ | 0.7 | 0.0 | 296 |
| Wealth quintile |  |  |  |
| Lowest | 6.8 | 3.9 | 1,232 |
| Second | 6.1 | 2.7 | 1,200 |
| Middle | 3.9 | 2.2 | 1,206 |
| Fourth | 3.1 | 1.6 | 1,245 |
| Highest | 1.0 | 0.6 | 1,212 |
| Total | 4.2 | 2.2 | 6,095 |

Table 13.5 indicates that about one-fourth of the most recently circumcised daughters (23 percent) were circumcised before their first birthday, and 17 percent were circumcised between one and four. The table shows that a majority of most recently circumcisions of daughters were performed on girls age five and over. The results show that traditional circumcisers carried out four of every five circumcisions. Traditional birth attendants performed most of the remaining circumcisions among the recently circumcised daughters. The cutting and removal of flesh is the most common type of circumcision performed on daughters, as was noted for women themselves (data not shown).

| Table 13.5 Aspects of daughter's circumcision |  |
| :---: | :---: |
| Percent distribution of most recently circumcised daughters by the age of the daughter at the time she was circumcised, and the person performing the circumcision, Tanzania 2004-05 |  |
| Aspect | Percent |
| Age of daughter when she was circumcised (in years) |  |
| 0 | 23.2 |
| 1-4 | 17.4 |
| 5-6 | 10.8 |
| 7-8 | 7.4 |
| 9-10 | 7.8 |
| 11-12 | 11.0 |
| 13+ | 21.3 |
| Don't know/missing | 0.9 |
| Person who performed the circumcision |  |
| Traditional circumciser | 81.9 |
| Traditional birth attendant | 14.0 |
| Other traditional | 3.1 |
| Nurse/midwife | 0.7 |
| Other health professional | 0.3 |
| Total | 100.0 |
| Number | 254 |

### 13.5 Attitudes towards Female Circumcision

Women and men who had heard of female circumcision were asked if they thought the practice should be continued or discontinued. Table 13.6.1 indicates that among the Tanzanian women who had heard of female circumcision, nine in ten believe that the practice should be discontinued, while only a small minority (5 percent) believe the practice should be continued. Four percent of women expressed conditional approval or were unsure of their opinion. The proportion of women who say that female circumcision should continue does not vary by age but the continuation of female circumcision finds greater support among rural women than urban women, and among those who are circumcised than those who are not.

The view that female circumcision should be discontinued is almost universal in Zanzibar ( 98 percent) and very high in the Mainland ( 90 percent). The view that it should be continued is highest ( 10 percent) in the Northern zone, and the Manyara and Arusha regions ( 17 and 15 percent, respectively). Opposition to female circumcision is positively related to level of education and wealth quintile.

Table 13.6 .2 shows that men's attitudes towards discontinuation of FGC are generally similar to those of women. Nine out of ten men ( 89 percent) who have heard of female circumcision say that it should be discontinued. However, a higher proportion of men than women favour continuation ( 9 and 5 percent, respectively). Differentials in attitudes towards circumcision by background characteristics among women and men are similar. Men in urban areas, those with higher education, and those living in households in the higher wealth quintiles are less likely to support the continuation of the practice.

| Table 13.6.1 Attitudes towards female circumcision: women |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percent distribution of women who have heard of female circumcision by opinion on whether female circumcision should be continued, according to background characteristics, Tanzania 2004-05 |  |  |  |  |  |  |
| Attitude towards female circumcision |  |  |  |  |  |  |
| Background characteristic | Should be continued | Should be discontinued | Depends/ don't know | Missing | Total | Number of women |
| Age |  |  |  |  |  |  |
| 15-19 | 5.0 | 89.9 | 4.7 | 0.5 | 100.0 | 1,446 |
| 20-24 | 4.7 | 90.5 | 4.7 | 0.1 | 100.0 | 1,482 |
| 25-29 | 4.2 | 91.4 | 4.3 | 0.1 | 100.0 | 1,486 |
| 30-34 | 5.4 | 91.2 | 3.3 | 0.1 | 100.0 | 1,204 |
| 35-39 | 4.8 | 90.2 | 4.8 | 0.2 | 100.0 | 817 |
| 40-44 | 5.0 | 91.2 | 3.2 | 0.5 | 100.0 | 631 |
| 45-49 | 5.5 | 89.7 | 4.6 | 0.2 | 100.0 | 530 |
| Residence |  |  |  |  |  |  |
| Urban | 0.9 | 96.9 | 2.1 | 0.1 | 100.0 | 2,673 |
| Rural | 7.0 | 87.3 | 5.5 | 0.3 | 100.0 | 4,922 |
| Mainland/Zanzibar |  |  |  |  |  |  |
| Mainland | 5.0 | 90.4 | 4.4 | 0.2 | 100.0 | 7,325 |
| Total urban | 0.9 | 96.8 | 2.2 | 0.1 | 100.0 | 2,626 |
| Dar es Salaam city | 0.2 | 98.5 | 1.3 | 0.0 | 100.0 | , 943 |
| Other urban | 1.3 | 95.8 | 2.8 | 0.2 | 100.0 | 1,682 |
| Total rural | 7.3 | 86.8 | 5.6 | 0.3 | 100.0 | 4,699 |
| Zanzibar | 0.5 | 97.6 | 1.7 | 0.1 | 100.0 | 270 |
| Unguja | 0.6 | 97.8 | 1.5 | 0.0 | 100.0 | 202 |
| Pemba | 0.3 | 97.0 | 2.3 | 0.3 | 100.0 | 68 |
| Zone |  |  |  |  |  |  |
| Western | 6.8 | 77.7 | 14.8 | 0.7 | 100.0 | 953 |
| Northern | 9.6 | 87.8 | 2.4 | 0.1 | 100.0 | 1,470 |
| Central | 5.4 | 90.7 | 3.8 | 0.0 | 100.0 | 744 |
| Southern highlands | 5.5 | 90.2 | 3.7 | 0.7 | 100.0 | 797 |
| Lake | 4.7 | 90.8 | 4.4 | 0.1 | 100.0 | 1,192 |
| Eastern | 1.1 | 97.7 | 1.1 | 0.1 | 100.0 | 1,593 |
| Southern | 0.8 | 96.5 | 2.6 | 0.1 | 100.0 | 576 |
| Region |  |  |  |  |  |  |
| Dodoma | 5.3 | 91.5 | 3.2 | 0.0 | 100.0 | 449 |
| Arusha | 15.1 | 82.0 | 2.7 | 0.2 | 100.0 | 386 |
| Kilimanjaro | 0.8 | 96.7 | 2.4 | 0.0 | 100.0 | 375 |
| Tanga | 7.7 | 89.3 | 3.0 | 0.0 | 100.0 | 418 |
| Morogoro | 2.9 | 95.9 | 0.9 | 0.2 | 100.0 | 417 |
| Pwani | 1.4 | 97.7 | 0.9 | 0.0 | 100.0 | 232 |
| Dar es Salaam | 0.2 | 98.5 | 1.3 | 0.0 | 100.0 | 943 |
| Lindi | 0.4 | 98.8 | 0.8 | 0.0 | 100.0 | 173 |
| Mtwara | 0.0 | 95.9 | 4.1 | 0.0 | 100.0 | 233 |
| Ruvuma | 2.4 | 94.9 | 2.3 | 0.4 | 100.0 | 171 |
| Iringa | 12.6 | 85.8 | 1.1 | 0.5 | 100.0 | 331 |
| Mbeya | 0.5 | 93.3 | 5.2 | 0.9 | 100.0 | 377 |
| Singida | 5.7 | 89.5 | 4.8 | 0.0 | 100.0 | 294 |
| Tabora | 7.9 | 88.0 | 2.8 | 1.3 | 100.0 | 266 |
| Rukwa | 0.0 | 93.5 | 6.5 | 0.0 | 100.0 | 89 |
| Kigoma | 7.8 | 85.6 | 6.1 | 0.5 | 100.0 | 198 |
| Shinyanga | 5.7 | 68.9 | 24.9 | 0.4 | 100.0 | 489 |
| Kagera | 0.0 | 90.5 | 9.5 | 0.0 | 100.0 | 174 |
| Mwanza | 0.8 | 97.3 | 1.8 | 0.0 | 100.0 | 641 |
| Mara | 13.3 | 80.0 | 6.5 | 0.2 | 100.0 | 377 |
| Manyara | 16.5 | 81.8 | 1.4 | 0.3 | 100.0 | 292 |
| Zanzibar North | (1.2) | (95.6) | (3.0) | (0.2) | 100.0 | 42 |
| Zanzibar South | 0.8 | 96.7 | 2.4 | 0.0 | 100.0 | 24 |
| Town West | 0.4 | 98.7 | 0.9 | 0.0 | 100.0 | 136 |
| Pemba North | (0.3) | (96.3) | (3.0) | (0.4) | 100.0 | 35 |
| Pemba South | (0.3) | (97.7) | (1.7) | (0.3) | 100.0 | 33 |
| Education |  |  |  |  |  |  |
| No education | 11.0 | 81.4 | 6.8 | 0.7 | 100.0 | 1,444 |
| Primary incomplete | 4.4 | 89.3 | 6.2 | 0.1 | 100.0 | 1,275 |
| Primary complete | 3.8 | 92.6 | 3.5 | 0.1 | 100.0 | 4,021 |
| Secondary+ | 0.1 | 99.0 | 0.9 | 0.0 | 100.0 | 855 |
| Wealth quintile |  |  |  |  |  |  |
| Lowest | 11.6 | 83.3 | 4.9 | 0.2 | 100.0 | 1,086 |
| Second | 7.4 | 85.2 | 7.1 | 0.4 | 100.0 | 1,224 |
| Middle | 6.9 | 86.1 | 6.8 | 0.3 | 100.0 | 1,266 |
| Fourth | 3.3 | 92.8 | 3.6 | 0.4 | 100.0 | 1,559 |
| Highest | 0.6 | 97.6 | 1.7 | 0.0 | 100.0 | 2,460 |
| Circumcision status |  |  |  |  |  |  |
| Not circumcised | 1.6 | 93.8 | 4.3 | 0.2 | 100.0 | 6,085 |
| Circumcised | 18.0 | 77.7 | 4.2 | 0.1 | 100.0 | 1,510 |
| Total | 4.9 | 90.6 | 4.3 | 0.2 | 100.0 | 7,595 |


| Table 13.6.2 Attitudes towards female circumcision: men |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Percent distribution of men who have heard of female circumcision by opinion on whether female circumcision should be continued, according to background characteristics, Tanzania 2004-05 |  |  |  |  |  |
|  | Attitude towards female genital cutting |  |  |  |  |
| Background characteristic | Should be continued | Should be discontinued | Depends, don't know | Total | Number of men |
| Age |  |  |  |  |  |
| 15-19 | 11.8 | 85.9 | 2.3 | 100.0 | 414 |
| 20-24 | 8.3 | 90.5 | 1.2 | 100.0 | 407 |
| 25-29 | 7.7 | 89.4 | 2.9 | 100.0 | 368 |
| 30-34 | 6.7 | 89.4 | 3.9 | 100.0 | 352 |
| 35-39 | 10.4 | 86.1 | 3.5 | 100.0 | 252 |
| 40-44 | 6.1 | 90.8 | 3.1 | 100.0 | 238 |
| 45-49 | 6.7 | 91.8 | 1.4 | 100.0 | 156 |
| Residence |  |  |  |  |  |
| Urban | 3.7 | 94.6 | 1.6 | 100.0 | 677 |
| Rural | 10.6 | 86.3 | 3.1 | 100.0 | 1,510 |
| Mainland/Zanzibar |  |  |  |  |  |
| Mainland | 8.7 | 88.6 | 2.7 | 100.0 | 2,116 |
| Total urban | 3.7 | 94.7 | 1.6 | 100.0 | 669 |
| Dar es Salaam city | 3.9 | 96.1 | 0.0 | 100.0 | 252 |
| Other urban | 3.7 | 93.8 | 2.6 | 100.0 | 417 |
| Total rural | 11.0 | 85.8 | 3.1 | 100.0 | 1,447 |
| Zanzibar | 1.4 | 96.6 | 2.0 | 100.0 | 70 |
| Unguja | 0.8 | 99.1 | 0.1 | 100.0 | 50 |
| Pemba | 2.8 | 90.7 | 6.5 | 100.0 | 21 |
| Zone |  |  |  |  |  |
| Western | 16.6 | 79.0 | 4.5 | 100.0 | 280 |
| Northern | 12.5 | 85.0 | 2.6 | 100.0 | 310 |
| Central | 4.4 | 91.5 | 4.2 | 100.0 | 200 |
| Southern highlands | 3.1 | 90.7 | 6.2 | 100.0 | 290 |
| Lake | 12.6 | 86.2 | 1.2 | 100.0 | 401 |
| Eastern | 4.2 | 95.8 | 0.0 | 100.0 | 430 |
| Southern | 6.5 | 91.2 | 2.2 | 100.0 | 205 |
| Region |  |  |  |  |  |
| Dodoma | 4.0 | 90.9 | 5.1 | 100.0 | 105 |
| Arusha | 10.4 | 88.3 | 1.3 | 100.0 | 78 |
| Kilimanjaro | 7.9 | 88.9 | 3.3 | 100.0 | 82 |
| Tanga | 22.0 | 76.3 | 1.7 | 100.0 | 74 |
| Morogoro | 6.1 | 93.9 | 0.0 | 100.0 | 117 |
| Pwani | 2.2 | 97.8 | 0.0 | 100.0 | 61 |
| Dar es Salaam | 3.9 | 96.1 | 0.0 | 100.0 | 252 |
| Lindi | 8.1 | 90.9 | 1.0 | 100.0 | 56 |
| Mtwara | 4.9 | 95.1 | 0.0 | 100.0 | 86 |
| Ruvuma | 7.5 | 86.2 | 6.4 | 100.0 | 63 |
| Iringa | 4.8 | 88.5 | 6.8 | 100.0 | 70 |
| Mbeya | 1.1 | 92.3 | 6.6 | 100.0 | 155 |
| Singida | 4.8 | 92.0 | 3.2 | 100.0 | 95 |
| Tabora | 11.4 | 83.9 | 4.6 | 100.0 | 70 |
| Rukwa | 6.1 | 89.5 | 4.4 | 100.0 | 65 |
| Kigoma | 8.0 | 90.6 | 1.4 | 100.0 | 71 |
| Shinyanga | 23.5 | 70.6 | 5.9 | 100.0 | 139 |
| Kagera | 8.1 | 88.1 | 3.8 | 100.0 | 110 |
| Mwanza | 15.8 | 84.2 | 0.0 | 100.0 | 197 |
| Mara | 11.2 | 88.0 | 0.8 | 100.0 | 95 |
| Manyara | 10.3 | 85.7 | 3.9 | 100.0 | 77 |
| Zanzibar North | 0.0 | 100.0 | 0.0 | 100.0 | 10 |
| Zanzibar South | 2.3 | 96.7 | 1.0 | 100.0 | 5 |
| Town West | 0.8 | 99.2 | 0.0 | 100.0 | 35 |
| Pemba North | 2.1 | 86.4 | 11.5 | 100.0 | 12 |
| Pemba South | 3.7 | 96.3 | 0.0 | 100.0 | 9 |
| Education |  |  |  |  |  |
| No education | 14.3 | 81.8 | 3.9 | 100.0 | 223 |
| Primary incomplete | 11.1 | 85.0 | 3.9 | 100.0 | 452 |
| Primary complete | 8.0 | 89.5 | 2.5 | 100.0 | 1,221 |
| Secondary+ | 2.1 | 97.5 | 0.4 | 100.0 | 291 |
| Wealth quintile |  |  |  |  |  |
| Lowest | 14.0 | 82.9 | 3.1 | 100.0 | 344 |
| Second | 11.4 | 84.3 | 4.3 | 100.0 | 395 |
| Middle | 10.1 | 87.4 | 2.6 | 100.0 | 414 |
| Fourth | 7.1 | 90.5 | 2.5 | 100.0 | 452 |
| Highest | 3.3 | 95.4 | 1.4 | 100.0 | 581 |
| Total | 8.5 | 88.9 | 2.6 | 100.0 | 2,186 |

## ADULT AND MATERNAL MORTALITY

Maternal mortality continues to be a serious problem in Tanzania, as it is characterised by relatively high fertility, high incidence of infectious diseases, poverty, and poor health services. Such characteristics have led to high mortality in general. The 2004-05 TDHS is only the second nationally representative household survey to collect data on maternal mortality. The first was the 1996 TDHS.

Little is known about maternal and adult mortality in Tanzania when compared to infant and child mortality, for a number of reasons. First, while early childhood mortality can be estimated through the birth history approach, there is no equivalent in adult mortality measurement. Second, death rates are much lower at adult ages than at childhood, and hence estimates for particular age groups are more likely to be distorted by sampling errors. Third, there is usually very limited information about the characteristics of those who have died. While the same can be said about data on childhood mortality, it is reasonable to expect the characteristics of parents to influence directly their children's chances of survival.

This chapter presents information on overall adult mortality and maternal mortality in Tanzania from the 2004-05 TDHS. Mortality levels and trends provide a good measure of the health status of the population and thus an indicator for national development. It should be noted that routine data are collected through the Ministry of Health using a system known as the Health Management Information System (HMIS). Unfortunately, because the system does not include deaths that occur outside health facilities, it does not reflect the mortality picture from a population perspective. On the other hand, although Tanzania’s Demographic Surveillance Sentinel System does collect information that is community-based, it covers only a few districts. Thus, although the data collected are of high quality, like the HMIS it does not reflect the entire population of the country. Thus, the data from the 2004-05 TDHS are critical to understanding adult mortality across the entire population.

### 14.1 Assessment of Data Quality

To estimate adult mortality, the 2004-05 TDHS included a sibling history in the Women's Questionnaire. A series of questions was asked about all of the respondent's biological brothers and sisters and their survival status. These data allow direct estimation of overall adult mortality (by age and sex) and maternal mortality.

Survival of siblings (i.e., biological brothers and sisters) is a useful method for collecting information on adult mortality. Each female respondent was asked to list all children born to her biological mother, including herself. These included all siblings who were still alive and those who had died. For brothers and sisters who were alive, only the age at the last birthday was asked. For brothers who had died, only the number of years since death and age at death were asked. For sisters who had died at age 12 years or older, three questions were asked to determine whether the death was maternity related: "Was [name of sister] pregnant when she died?" and, if negative, "Did she die during childbirth?" and, if negative, "Did she die within two months after the end of a pregnancy or childbirth?" It is intended that this information will not only give an estimate of maternal risk but a complete profile of exposure to the risk of mortality for the adult population of Tanzania.

Adult and maternal mortality estimation requires accurate reporting of the number of siblings the respondent ever had, the number who died and the number of sisters who have died of maternal causes (for maternal mortality). Although there is no definitive procedure for establishing the completeness of retrospective data on sibling survivorship, Table 14.1 presents several indicators that can be used to measure the quality of sibling survivorship data.

| Table 14.1 Data on siblings |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number of siblings reported by survey respondents and completeness of the reported data on age, age at death (AD) and years since death (YSD), Tanzania 2004-05 |  |  |  |  |  |  |
| Sibling status and completeness | Females |  | Males |  | Total |  |
| of reporting | Number | Percentage | Number | Percentage | Number | Percentage |
| All siblings | 32,014 | 100.0 | 32,004 | 100.0 | 64,019 | 100.0 |
| Surviving | 25,675 | 80.2 | 25,164 | 78.6 | 50,839 | 79.4 |
| Deceased | 6,329 | 19.8 | 6,830 | 21.3 | 13,159 | 20.6 |
| Missing information | 11 | 0.0 | 10 | 0.0 | 21 | 0.0 |
| Surviving siblings | 25,675 | 100.0 | 25,164 | 100.0 | 50,839 | 100.0 |
| Age reported | 25,664 | 100.0 | 25,145 | 99.9 | 50,810 | 99.9 |
| Age missing | 11 | 0.0 | 19 | 0.1 | 29 | 0.1 |
| Deceased siblings | 6,329 | 100.0 | 6,830 | 100.0 | 13,159 | 100.0 |
| AD and YSD reported | 6,261 | 98.9 | 6,737 | 98.6 | 12,998 | 98.8 |
| Missing only AD | 21 | 0.3 | 20 | 0.3 | 41 | 0.3 |
| Missing only YSD | 12 | 0.2 | 12 | 0.2 | 24 | 0.2 |
| Missing both | 35 | 0.6 | 61 | 0.9 | 96 | 0.7 |

The data do not show any obvious defects that would indicate poor data quality or significant underreporting. A total of 64,019 siblings were recorded in the maternal mortality section of the 200405 TDHS questionnaires. The sex ratio of the enumerated siblings (the ratio of brothers to sisters) is around 1.00 , possibly indicating a slight underenumeration of brothers. The survival status for only 21 (less than 0.1 percent) of the siblings was not reported. For the surviving siblings, current age was not reported for only 29 (less than 0.1 percent). Among deceased siblings, both the age at death and years since death were missing for less than 1 percent. Rather than exclude the siblings with missing data from further analysis, information on the birth order of siblings in conjunction with other information was used to impute the missing data. ${ }^{1}$ The sibling survivorship data, including cases with imputed values, have been used in the direct estimation of adult and maternal mortality.

### 14.2 Estimates of Adult Mortality

One way to assess the quality of data used to estimate maternal mortality is to evaluate the plausibility and stability of overall adult mortality. It is reasoned that if rates of overall adult mortality are implausible, rates based of a subset on deaths-maternal mortality in particular-are likely to have serious problems. Also, levels and trends in overall adult mortality have important implications in their own right for health and social programmes in Tanzania, especially with regard to the potential impact of the AIDS epidemic.

The direct estimation of adult mortality uses the reported ages at death and years since death of respondents' brothers and sisters. Because of the differentials in exposure to the risk of dying, ageand sex-specific death rates are presented in this report. The results are also compared with rates obtained from the 1996 TDHS. Since the number of deaths on which the rates are based is not very large ( 893 female deaths and 807 male deaths in the 2004-05 TDHS and 501 female deaths and 601

[^7]male deaths in the 1996 TDHS), the estimated age-specific rates are subject to considerable sampling variation.

Table 14.2 presents age-specific mortality rates for women and men age 15-49 for the seven-year period preceding the survey. Generally, the rates show the expected increases for both sexes with increasing age, although women age 45-49 have a slightly lower mortality rate than women age 40-44. Female mortality exceeds male mortality among those younger than 30 years of age, with a greater difference being observed at age group 20-24 and 25-29; the rates are nearly the same at age group 30-34. Above age 35, male mortality exceeds female mortality by greater margins as age advances.

Overall, mortality rates are slightly higher among females than males ( 6.6 and 6.2 deaths per 1,000 years of exposure, respectively), which is unusual since male mortality typically exceeds female mortality during these ages. However, AIDS is now a significant cause of death in Tanzania, and its emergence has altered the age and sex pattern of mortality.

Figure 14.1 shows the age-specific mortality rates for males and females age 15-49 for the seven-year period preceding the 2004-05 TDHS and the nine-year period preceding the 1996 TDHS. Although the 2004-05 TDHS rates at older ages appear somewhat erratic, that is most probably due to sampling variability. A comparison of the 2004-05 TDHS and the 1996 TDHS rates indicates substantially higher adult mortality rates for both males and females at all ages in the later survey, with the exception of men age $15-24$. The summary measure of mortality for age group 15-49 shows an increase of 68 percent in female mortality rates and 24 percent

| Table 14.2 Adult mortality rates |  |  |  |
| :---: | :---: | :---: | :---: |
| Age-specific mortality rates for women and men age 15-49 based on the survivorship of sisters and brothers of survey respondents for the seven-year period preceding the survey, Tanzania 2004-05 |  |  |  |
| Age | Deaths | Exposure | Mortality rates |
| WOMEN |  |  |  |
| 15-19 | 66 | 26,599 | 2.470 |
| 20-24 | 130 | 29,609 | 4.400 |
| 25-29 | 193 | 27,048 | 7.152 |
| 30-34 | 194 | 21,726 | 8.913 |
| 35-39 | 153 | 15,515 | 9.868 |
| 40-44 | 106 | 9,408 | 11.223 |
| 45-49 | 51 | 5,202 | 9.852 |
| 15-49 | 893 | 135,106 | $6.610^{\text {a }}$ |
|  |  | N |  |
| 15-19 | 41 | 24,288 | 1.708 |
| 20-24 | 86 | 27,991 | 3.073 |
| 25-29 | 135 | 26,554 | 5.099 |
| 30-34 | 187 | 21,469 | 8.714 |
| 35-39 | 159 | 15,304 | 10.362 |
| 40-44 | 127 | 9,707 | 13.124 |
| 45-49 | 71 | 5,333 | 13.261 |
| 15-49 | 807 | 130,646 | $6.174^{\text {a }}$ |
| ${ }^{\text {a }}$ Age-standardised |  |  |  | in male mortality rates from the 1996 TDHS rates. It should be noted, however, that the 1996 TDHS report indicates the possibility of underreporting of deceased siblings. Thus, it is not possible to conclude that adult mortality has increased.

Figure 14.1 Trends in Adult Mortality, Tanzania 1988-1996 and 1998-2004


Note: Data refer to the seven-year period preceding the 2004-05 TDHS
and the nine-year period preceding the 1996 TDHS.

### 14.3 Estimates of Maternal Mortality

Two survey methods are generally used to estimate maternal mortality in developing countries: the sisterhood method (Graham et al., 1989) and a direct variant of the sisterhood method (Rutenberg and Sullivan, 1991). In this report, the direct estimation procedure is applied. Age-specific mortality rates are calculated by dividing the number of maternal deaths by woman-years of exposure. To remove the effect of truncation bias (the upper boundary for eligibility for women interviewed in the survey is 49 years), the report standardised the overall rate for women age $15-49$ by the age distribution of the survey respondents. Maternal deaths are defined as any death that occurred during pregnancy, childbirth, or within two months after the birth or termination of a pregnancy. ${ }^{2}$ Estimates of maternal mortality are therefore based solely on the timing of the death in relationship with pregnancy.

[^8]Table 14.3 presents direct estimates of maternal mortality for the ten-year period preceding the survey. The data indicate that the rate of mortality associated with pregnancy and childbearing is 1.1 maternal deaths per 1,000 woman-years of exposure. The estimated age-specific mortality rates display a plausible pattern, being generally higher during the peak childbearing ages than at the younger and older age groups (although there is a slight fluctuation at age 40-44). However, the agespecific pattern should be interpreted with caution because of the small number of events-only 203 maternal deaths for women of all ages. Maternal deaths represent 18 percent of all deaths to women age 15-49 during the ten-year period preceding the survey, (203 maternal deaths /1,109 female deaths), a figure that is two-thirds of the proportion found in the 1996 TDHS ( 27 percent). The low proportion of maternal deaths could be due to an increase in nonmaternal deaths (e.g., AIDS-related deaths), to underreporting of maternal deaths in the 2004-05 TDHS, or to an underreporting of all female deaths in the 1996 TDHS.

| Table 14.3 Maternal mortality |  |  |  |
| :---: | :---: | :---: | :---: |
| Maternal mortality rates for the ten-year period preceding the survey, based on the survivorship of sisters of survey respondents, Tanzania 2004-05 |  |  |  |
| Age | Maternal deaths | Exposure (years) | Mortality rates $(1,000)$ |
| 15-19 | 15 | 39,664 | 0.382 |
| 20-24 | 50 | 41,586 | 1.194 |
| 25-29 | 48 | 36,755 | 1.298 |
| 30-34 | 47 | 28,670 | 1.646 |
| 35-39 | 23 | 19,736 | 1.181 |
| 40-44 | 15 | 11,755 | 1.311 |
| 45-49 | 5 | 6,140 | 0.829 |
| Total 15-49 | 203 | 184,305 | $1.104^{\text {a }}$ |
| General fertility rate ${ }^{1}$ Maternal mortality ratio ${ }^{2}$ |  |  | 0.198 |
|  |  |  | 578 |
|  |  |  |  |
| ${ }^{1}$ Expressed per 1,000 woman-years of |  |  |  |
| ${ }^{2}$ Expressed per 100,000 live births; calculated as maternal mortality rate divided by the general fertility rate |  |  |  |

The maternal mortality rate can be converted to a maternal mortality ratio and expressed per 100,000 live births by dividing the rate by the general fertility rate of 0.198 , which prevailed during the same time period. The advantage of this conversion is that it highlights the obstetric risk, which has great prograrammatic significance. Thus, for Tanzania between 1995-2004, the maternal mortality ratio is estimated as 578 maternal deaths per 100,000 live births. In other words, for every 1,000 live births in Tanzania during this period, almost 6 women died of pregnancy-related causes.

It should be noted that maternal mortality is a difficult indicator to measure because of the large sample sizes required to calculate an accurate estimate. (This is evidenced by the fact that the maternal mortality ratio is expressed per 100,000 live births, demonstrating that it is a relatively rare event.) The maternal mortality estimates are subject to large sampling errors. ${ }^{3}$ Thus, although the 2004-05 TDHS ratio of 578 is higher than the 1996 estimate of 529 , the difference between the two figures is not statistically significant. Thus, it is not possible to conclude that there has been any change in maternal mortality in Tanzania.

[^9]
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Table A. 1 Sample implementation: women
Percent distribution of households and eligible women by results of the household and individual interviews, and household, eligible women and overall response rates, according to residence, Tanzania 2004-05

| Result | Residence |  |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Mainland |  |  | Zanzibar |  |
|  | Urban | rural | Total |  |  |
| Selected households |  |  |  |  |  |
| Completed (C) | 91.3 | 95.2 | 94.3 | 94.9 | 94.4 |
| Household present but no competent respondent at home (HP) | 1.5 | 0.7 | 0.9 | 1.1 | 0.9 |
| Postponed (P) | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 |
| Refused (R) | 0.2 | 0.0 | 0.1 | 0.2 | 0.1 |
| Dwelling not found (DNF) | 0.1 | 0.0 | 0.0 | 0.4 | 0.1 |
| Household absent (HA) | 3.3 | 2.4 | 2.6 | 2.6 | 2.6 |
| Dwelling vacant/address not a dwelling (DV) | 2.5 | 1.2 | 1.5 | 0.6 | 1.3 |
| Dwelling destroy (DD) | 0.8 | 0.2 | 0.4 | 0.3 | 0.3 |
| Other (O) | 0.3 | 0.2 | 0.2 | 0.1 | 0.2 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Number of sampled households | 1,952 | 6,370 | 8,322 | 1,990 | 10,312 |
| Household response rate (HRR) | 98.1 | 99.2 | 98.9 | 98.3 | 98.8 |
| Eligible women |  |  |  |  |  |
| Completed (EWC) | 97.1 | 97.3 | 97.2 | 97.7 | 97.3 |
| Not at home (EWNH) | 1.8 | 1.6 | 1.7 | 1.1 | 1.5 |
| Refused (EWR) | 0.5 | 0.2 | 0.3 | 0.3 | 0.3 |
| Partly completed (EWPC) | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 |
| Incapacitated (EWI) | 0.2 | 0.7 | 0.6 | 0.7 | 0.6 |
| Other (EWO) | 0.2 | 0.0 | 0.1 | 0.0 | 0.1 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Number of women | 2,044 | 6,303 | 8,347 | 2,264 | 10,611 |
| Eligible women response rate (EWRR) | 97.1 | 97.3 | 97.2 | 97.7 | 97.3 |
| Overall response rate (ORR) | 95.2 | 96.5 | 96.2 | 96.1 | 96.2 |

${ }^{1}$ Using the number of households falling into specific response categories, the household response rate (HRR) is calculated as:

$$
\frac{100 * \mathrm{C}}{\mathrm{C}+\mathrm{HP}+\mathrm{P}+\mathrm{R}+\mathrm{DNF}}
$$

${ }^{2}$ Using the number of eligible women falling into specific response categories, the eligible woman response rate (EWRR) is calculated as:

$$
100 \text { * EWC }
$$

$$
\mathrm{EWC}+\mathrm{EWNH}+\mathrm{EWP}+\mathrm{EWR}+\mathrm{EWPC}+\mathrm{EWI}+\mathrm{EWO}
$$

${ }^{3}$ The overall response rate (ORR) is calculated as: ORR $=$ HRR * EWRR/100.

Table A. 2 Sample implementation: men
Percent distribution of households and eligible men by results of the household and individual interviews, and household, eligible men and overall response rates, according to residence, Tanzania 2004-05

| Result | Residence |  |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Mainland |  |  | Zanzibar |  |
|  | Urban | Rural | Total |  |  |
| Selected households |  |  |  |  |  |
| Completed (C) | 90.6 | 95.6 | 94.4 | 95.1 | 94.6 |
| Household present but no competent respondent at home (HP) | 1.5 | 0.4 | 0.7 | 1.1 | 0.8 |
| Postponed (P) | 0.0 | 0.0 | 0.0 | 0.2 | 0.0 |
| Refused (R) | 0.2 | 0.0 | 0.1 | 0.2 | 0.1 |
| Dwelling not found (DNF) | 0.2 | 0.0 | 0.1 | 0.2 | 0.1 |
| Household absent (HA) | 3.2 | 2.4 | 2.6 | 3.0 | 2.7 |
| Dwelling vacant/address not a dwelling (DV) | 3.1 | 0.9 | 1.4 | 0.2 | 1.2 |
| Dwelling destroy (DD) | 1.1 | 0.2 | 0.4 | 0.2 | 0.4 |
| Other (O) | 0.2 | 0.3 | 0.3 | 0.0 | 0.2 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Number of sampled households | 619 | 2,026 | 2,645 | 633 | 3,278 |
| Household response rate (HRR) | 98.1 | 99.4 | 99.1 | 98.4 | 99.0 |
| Eligible men |  |  |  |  |  |
| Completed (EMC) | 90.0 | 92.6 | 92.0 | 91.0 | 91.8 |
| Not at home (EMNH) | 8.3 | 5.6 | 6.2 | 7.8 | 6.5 |
| Refused (EMR) | 1.1 | 0.7 | 0.8 | 0.3 | 0.7 |
| Partly completed (EMPC) | 0.0 | 0.1 | 0.1 | 0.0 | 0.1 |
| Incapacitated (EMI) | 0.6 | 1.0 | 0.9 | 0.8 | 0.9 |
| Other (EMO) | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Number of men | 528 | 1,751 | 2,279 | 592 | 2,871 |
| Eligible men response rate (EMRR) | 90.0 | 92.6 | 92.0 | 91.0 | 91.8 |
| Overall response rate (ORR) | 88.2 | 92.1 | 91.2 | 89.6 | 90.8 |

${ }^{1}$ Using the number of households falling into specific response categories, the household response rate (HRR) is calculated as:

$$
\frac{100 * \mathrm{C}}{\mathrm{C}+\mathrm{HP}+\mathrm{P}+\mathrm{R}+\mathrm{DNF}}
$$

${ }^{2}$ Using the number of eligible men falling into specific response categories, the eligible man response rate (EMRR) is calculated as:

$$
100 \text { * EMC }
$$

$$
\mathrm{EMC}+\mathrm{EMNH}+\mathrm{EMP}+\mathrm{EMR}+\mathrm{EMPC}+\mathrm{EMI}+\mathrm{EMO}
$$

${ }^{3}$ The overall response rate (ORR) is calculated as: $\mathrm{ORR}=\mathrm{HRR} * \mathrm{EMRR} / 100$.

## ESTIMATES OF SAMPLING ERRORS

The estimates from a sample survey are affected by two types of errors: (1) nonsampling errors, and (2) 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 2004-05 Tanzania Demographic and Health Survey (TDHS) to minimize 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 2004-05 TDHS 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 between all possible samples. Although the degree of variability is not known exactly, it can be estimated from the survey results.

A sampling error is 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 percent 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 2004-05 TDHS sample is the result of a multi-stage stratified design, and, consequently, it was necessary to use more complex formulae. The computer software used to calculate sampling errors for the 200405 TDHS is the ISSA Sampling Error Module. This module used the Taylor linearization method of variance estimation for survey estimates that are means or proportions. 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:

$$
S E^{2}(r)=\operatorname{var}(r)=\frac{1-f}{x^{2}} \sum_{h=1}^{H}\left[\frac{m_{h}}{m_{h-1}}\left(\sum_{i=1}^{m_{h}} z_{h i}^{2}-\frac{z_{h}^{2}}{m_{h}}\right)\right]
$$

in which

$$
z_{h i}=y_{h i}-r x_{h i} \text {, and } z_{h}=y_{h}-r x_{h}
$$

is the sum of the weighted number of cases in the $i^{\text {th }}$ cluster in the $h^{\text {th }}$ stratum, and 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 formulae. Each replication considers all but one clusters in the calculation of the estimates. Pseudo-independent replications are thus created. In the 2004-05 TDHS, there were 475 non-empty clusters. Hence, 474 replications were created. The variance of a rate $r$ is calculated as follows:

$$
S E^{2}(r)=\operatorname{var}(r)=\frac{1}{k(k-1)} \sum_{i=1}^{k}\left(r_{i}-r\right)^{2}
$$

in which

$$
r_{i}=k r-(k-1) r_{(i)}
$$

where $r$ is the estimate computed from the full sample of 475 clusters,
$r_{(i)} \quad$ is the estimate computed from the reduced sample of 474 clusters ( $i^{\text {th }}$ cluster excluded), and
$k \quad$ is the total number of clusters.

In addition to the standard error, ISSA computes the design effect (DEFT) for each estimate, which 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. ISSA also computes the relative error and confidence limits for the estimates.

Sampling errors for the 2004-05 TDHS are calculated for selected variables considered to be of primary interest for woman's survey and for man's surveys, respectively. The results are presented in this appendix for the country as a whole, for urban and rural areas, and for each of the seven zones and Zanzibar. For each variable, the type of statistic (mean, proportion, or rate) and the base population are given in Table B.1. Tables B. 2 to B. 12 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 percent confidence limits ( $\mathrm{R} \pm 2 \mathrm{SE}$ ), for each variable. The DEFT is considered undefined when the standard error considering simple random sample is zero (when the estimate is close to 0 or 1 ). In the case of the total fertility rate, the number of unweighted cases is not relevant, as there is no known unweighted value for woman-years of exposure to childbearing.

The confidence interval (e.g., as calculated for children ever born to women aged 40-49) can be interpreted as follows: the overall average from the national sample is 6.367 and its standard error is 0.095 . Therefore, to obtain the 95 percent confidence limits, one adds and subtracts twice the standard error to the sample estimate, i.e., $6.367 \pm 2 \times 0.095$. There is a high probability ( 95 percent) that the true average number of children ever born to all women aged 40 to 49 is between 6.177 and 6.557.

Sampling errors are analyzed for the national woman sample and for two separate groups of estimates: (1) means and proportions, and (2) complex demographic rates. The relative standard errors (SE/R) for the means and proportions range between 0.2 percent and 11.5 , except 34.7 for currently using IUD), which has very few cases. So in general, the relative standard error for most estimates for the country as a whole is small, except for estimates of very small proportions. The relative standard error for the total fertility rate is small, 2.4 percent. However, for the mortality rates, the average relative standard error is higher; for example, the relative standard error for the 0-4 year estimate of infant mortality is 5.4.

There are differentials in the relative standard error for the estimates of subpopulations. For example, for the variable want no more children, the relative standard errors as a percent of the estimated mean for the whole country, and for the urban areas are 3.0 and 4.3 percent, respectively.

For the total sample, the value of the design effect (DEFT), ranged over all variables from 1.112 to 2.805 ; which means that, due to multi-stage clustering of the sample, the standard error is increased by a factor of DEFT over that in an equivalent simple random sample.

## Table B. 1 List of selected variables for sampling errors, Tanzania 2004-05

| Variable | Estimate | Base population |
| :---: | :---: | :---: |
| Urban residence | Proportion | All women |
| Literate | Proportion | All women |
| No education | Proportion | All women and all men |
| Secondary education or higher | Proportion | All women and all men |
| Net attendance ratio for primary school | Ratio | Children 7-12 years |
| Never married | Proportion | All women and all men |
| Currently married/in union | Proportion | All women and all men |
| Married before age 20 | Proportion | Women age 20-49 |
| Currently pregnant | Proportion | All women |
| Children ever born | Mean | All women and all men |
| Children surviving | Mean | All women |
| Children ever born to women age 40-49 | Mean | Women age 40-49 |
| Total fertility rate (3 years) | Rate | All women |
| Know any contraceptive method | Proportion | Currently married women and currently married men |
| Ever used any contraceptive method | Proportion | Currently married women |
| Currently using any contraceptive method | Proportion | Currently married women |
| Currently using a modern method | Proportion | Currently married women |
| Currently using pill | Proportion | Currently married women |
| Currently using IUD | Proportion | Currently married women |
| Currently using female sterilisation | Proportion | Currently married women |
| Currently using periodic abstinence | Proportion | Currently married women |
| Obtained method from public sector source | Proportion | Current users of modern methods |
| Want no more children | Proportion | Currently married women |
| Want to delay birth at least 2 years | Proportion | Currently married women |
| Ideal family size | Mean | All women and all men |
| Neonatal mortality (0-4 years) | Rate | Children exposed to the risk of mortality |
| Post-neonatal mortality (0-4 years) | Rate | Children exposed to the risk of mortality |
| Infant mortality (0-4 years) | Rate | Children exposed to the risk of mortality |
| Infant mortality (5-9 years) | Rate | Children exposed to the risk of mortality |
| Infant mortality (10-14 years) | Rate | Children exposed to the risk of mortality |
| Child mortality (0-4 years) | Rate | Children exposed to the risk of mortality |
| Under-five mortality (0-4 years) | Rate | Children exposed to the risk of mortality |
| Mothers received tetanus injection for last birth | Proportion | Women with at least one live birth in five years before survey |
| Mothers received medical assistance at delivery | Proportion | Births occurring 1-59 months before interview |
| Having diarrhoea in two weeks before survey | Proportion | Children age 0-59 months |
| Treated with oral rehydration salts (ORS) | Proportion | Children with diarrhoea in two weeks before interview |
| Taken to a health provider | Proportion | Children with diarrhoea in two weeks before interview |
| Vaccination card seen | Proportion | Children age 12-23 months |
| Receiving vaccinations: Propor |  |  |
| BCG | Proportion | Children age 12-23 months |
| DPT (3 doses) | Proportion | Children age 12-23 months |
| Polio (3 doses) | Proportion | Children age 12-23 months |
| Measles | Proportion | Children age 12-23 months |
| Fully immunised | Proportion | Children age 12-23 months |
| Height-for-age (below -2SD) | Proportion | Children age 0-59 months |
| Weight-for-height (below -2SD) | Proportion | Children age 0-59 months |
| Weight-for-age (below -2SD) | Proportion | Children age 0-59 months |
| BMI < 18.5 | Proportion | All women |
| Has heard of HIV/AIDS | Proportion | All women and all men |
|  | Proportion | All women |
| Had higher-risk intercourse (with a non-marital, non-cohabitating partner) in past 12 months | Proportion | All women who had sexual intercourse in past 12 months |
| Condom use at last higher-risk intercourse | Proportion | All women who had higher-risk intercourse in past 12 months |
| Sexually active in past 12 months among nevermarried youth | Proportion | Women 15-24 |
| Condom use at last higher-risk intercourse (youth) | Proportion | All women 15-24 who had higher-risk intercourse in past 12 months |
| Abstinence among youth (never had intercourse) | Proportion | Women 15-24 |


| Variable | Value <br> (R) | Standard error (SE) | Number of cases |  | Design effect (DEFT) | Relative error (SE/R) | Confidence limits |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Weight- |  |  |  |  |
|  |  |  | (N) | (WN) |  |  | R-2SE | $R+2 S E$ |
| WOMEN |  |  |  |  |  |  |  |  |
| Urban | 0.284 | 0.011 | 10329 | 10329 | 2.518 | 0.039 | 0.262 | 0.306 |
| Literate | 0.673 | 0.012 | 10329 | 10329 | 2.682 | 0.018 | 0.648 | 0.697 |
| No education | 0.242 | 0.012 | 10329 | 10329 | 2.794 | 0.049 | 0.219 | 0.266 |
| Secondary education | 0.086 | 0.006 | 10329 | 10329 | 2.096 | 0.067 | 0.074 | 0.097 |
| Net attendance ratio | 0.731 | 0.011 | 9640 | 9381 | 2.050 | 0.015 | 0.709 | 0.753 |
| Never married | 0.230 | 0.007 | 10329 | 10329 | 1.607 | 0.029 | 0.216 | 0.243 |
| Currently married | 0.673 | 0.007 | 10329 | 10329 | 1.491 | 0.010 | 0.659 | 0.687 |
| Married before age 20 | 0.645 | 0.008 | 8032 | 8084 | 1.566 | 0.013 | 0.628 | 0.661 |
| Currently pregnant | 0.105 | 0.004 | 10329 | 10329 | 1.249 | 0.036 | 0.098 | 0.113 |
| Children ever born | 2.912 | 0.037 | 10329 | 10329 | 1.365 | 0.013 | 2.837 | 2.987 |
| Total Fertility Rate (3 years) | 5.659 | 0.137 | na | 28842 | 1.827 | 0.024 | 5.385 | 5.933 |
| Children surviving | 2.473 | 0.031 | 10329 | 10329 | 1.312 | 0.012 | 2.412 | 2.535 |
| Children ever born to women age 40-49 | 6.367 | 0.095 | 1655 | 1597 | 1.337 | 0.015 | 6.177 | 6.557 |
| Knows any contraceptive method | 0.979 | 0.003 | 6786 | 6950 | 1.818 | 0.003 | 0.972 | 0.985 |
| Ever using contraceptive method | 0.510 | 0.012 | 6786 | 6950 | 2.023 | 0.024 | 0.485 | 0.534 |
| Currently using any contraceptive method | 0.264 | 0.008 | 6786 | 6950 | 1.517 | 0.031 | 0.247 | 0.280 |
| Currently using a modern method | 0.200 | 0.008 | 6786 | 6950 | 1.648 | 0.040 | 0.184 | 0.216 |
| Currently using pill | 0.059 | 0.004 | 6786 | 6950 | 1.329 | 0.064 | 0.052 | 0.067 |
| Currently using IUD | 0.002 | 0.001 | 6786 | 6950 | 1.249 | 0.347 | 0.001 | 0.003 |
| Currently using condom | 0.020 | 0.002 | 6786 | 6950 | 1.314 | 0.113 | 0.015 | 0.024 |
| Currently using female sterilisation | 0.026 | 0.003 | 6786 | 6950 | 1.344 | 0.100 | 0.021 | 0.031 |
| Currently using periodic abstinence | 0.020 | 0.002 | 6786 | 6950 | 1.363 | 0.115 | 0.016 | 0.025 |
| Public sector source | 0.684 | 0.018 | 1611 | 1779 | 1.532 | 0.026 | 0.648 | 0.719 |
| Want no more children | 0.295 | 0.009 | 6786 | 6950 | 1.588 | 0.030 | 0.278 | 0.313 |
| Want to delay birth at least 2 years | 0.418 | 0.007 | 6786 | 6950 | 1.112 | 0.016 | 0.404 | 0.431 |
| Ideal family size | 5.019 | 0.063 | 10086 | 10145 | 2.805 | 0.013 | 4.892 | 5.146 |
| Neonatal NN mortality (0-4 years) | 32.005 | 2.706 | 8611 | 8768 | 1.300 | 0.085 | 26.593 | 37.417 |
| Postneonatal PNN mortality (0-4 years) | 35.979 | 2.421 | 8637 | 8786 | 1.158 | 0.067 | 31.137 | 40.821 |
| Infant ${ }_{1} q_{0}$ mortality (0-4 years) | 67.984 | 3.660 | 8640 | 8788 | 1.254 | 0.054 | 60.665 | 75.303 |
| Infant ${ }_{1} \mathrm{q}_{0}$ mortality (5-9 years) | 99.738 | 4.898 | 7391 | 7367 | 1.296 | 0.049 | 89.942 | 109.534 |
| Infant ${ }_{1} q_{0}$ mortality (10-14 years) | 93.798 | 5.088 | 5991 | 5822 | 1.194 | 0.054 | 83.622 | 103.975 |
| Child ${ }_{4} \mathrm{q}_{1}$ (0-4 years) | 47.250 | 3.226 | 8744 | 8892 | 1.296 | 0.068 | 40.799 | 53.702 |
| Under $5{ }_{5} \mathrm{q}_{0}$ (0-4 years) 1 | 112.022 | 4.718 | 8776 | 8914 | 1.285 | 0.042 | 102.585 | 121.459 |
| Mothers received tetanus injection for last birth | 0.797 | 0.008 | 5658 | 5772 | 1.438 | 0.010 | 0.782 | 0.812 |
| Mothers received medical assistance at delivery | 0.463 | 0.014 | 8564 | 8725 | 2.211 | 0.030 | 0.435 | 0.491 |
| Had diarrhoea in two weeks before survey | 0.126 | 0.005 | 7852 | 7976 | 1.387 | 0.043 | 0.115 | 0.137 |
| Treated with oral rehydration salts (ORS) | 0.539 | 0.020 | 1017 | 1004 | 1.241 | 0.038 | 0.498 | 0.579 |
| Taken to a health provider | 0.470 | 0.021 | 1017 | 1004 | 1.292 | 0.046 | 0.427 | 0.513 |
| Vaccination card seen | 0.788 | 0.015 | 1613 | 1658 | 1.521 | 0.019 | 0.757 | 0.819 |
| Received BCG | 0.914 | 0.010 | 1613 | 1658 | 1.466 | 0.011 | 0.893 | 0.934 |
| Received DPT (3 doses) | 0.859 | 0.014 | 1613 | 1658 | 1.655 | 0.017 | 0.830 | 0.888 |
| Received polio (3 doses) | 0.836 | 0.015 | 1613 | 1658 | 1.639 | 0.018 | 0.806 | 0.866 |
| Received measles | 0.799 | 0.017 | 1613 | 1658 | 1.748 | 0.022 | 0.764 | 0.834 |
| Fully immunised | 0.711 | 0.018 | 1613 | 1658 | 1.630 | 0.026 | 0.674 | 0.748 |
| Height-for-age (below -2SD) | 0.377 | 0.010 | 7840 | 7989 | 1.597 | 0.025 | 0.358 | 0.396 |
| Weight-for-height (below -2SD) | 0.030 | 0.002 | 7840 | 7989 | 1.198 | 0.078 | 0.025 | 0.035 |
| Weight-for-age (below -2SD) | 0.218 | 0.008 | 7840 | 7989 | 1.631 | 0.037 | 0.202 | 0.234 |
| BMI $<18.5$ | 0.104 | 0.005 | 8916 | 8888 | 1.427 | 0.044 | 0.095 | 0.113 |
| Has heard of HIV/AIDS | 0.989 | 0.002 | 10329 | 10329 | 2.073 | 0.002 | 0.985 | 0.993 |
| Had $2+$ sexual partners in past 12 months | 0.043 | 0.003 | 7705 | 8038 | 1.215 | 0.066 | 0.037 | 0.048 |
| Had higher-risk intercourse in past 12 months | 0.237 | 0.007 | 7705 | 8038 | 1.455 | 0.030 | 0.223 | 0.251 |
| Condom use at last higher-risk intercourse | 0.275 | 0.014 | 1657 | 1902 | 1.273 | 0.051 | 0.247 | 0.303 |
| Sexually active in past 12 months (youth) | 0.290 | 0.015 | 2263 | 2096 | 1.562 | 0.051 | 0.261 | 0.320 |
| Condom use at last higher-risk intercourse (youth) | h) 0.338 | 0.021 | 758 | 891 | 1.234 | 0.063 | 0.295 | 0.380 |
| Abstinence among youth (never had intercourse) | ) 0.622 | 0.016 | 2263 | 2096 | 1.528 | 0.025 | 0.590 | 0.653 |
| MEN |  |  |  |  |  |  |  |  |
| Urban residence | 0.272 | 0.013 | 2635 | 2635 | 1.453 | 0.046 | 0.247 | 0.297 |
| Literate | 0.800 | 0.012 | 2635 | 2635 | 1.488 | 0.014 | 0.777 | 0.824 |
| No education | 0.118 | 0.011 | 2635 | 2635 | 1.772 | 0.094 | 0.096 | 0.141 |
| Secondary education or higher | 0.112 | 0.010 | 2635 | 2635 | 1.652 | 0.091 | 0.092 | 0.133 |
| Never married | 0.417 | 0.012 | 2635 | 2635 | 1.280 | 0.029 | 0.393 | 0.442 |
| Currently married/in union | 0.532 | 0.012 | 2635 | 2635 | 1.285 | 0.024 | 0.507 | 0.557 |
| Knows any contraceptive method | 0.973 | 0.004 | 2635 | 2635 | 1.285 | 0.004 | 0.964 | 0.981 |
| Ideal family size | 5.267 | 0.116 | 2547 | 2555 | 1.657 | 0.022 | 5.035 | 5.499 |
| Has heard of HIV/AIDS | 0.991 | 0.002 | 2635 | 2635 | 1.373 | 0.002 | 0.986 | 0.996 |


| Table B.3 Sampling errors for urban sample, Tanzania $2004-05$ |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |


| Variable | Value <br> (R) | Stand- <br> ard error (SE) | Number of cases |  | Design effect (DEFT) | Relative error (SE/R) | Confidence limits |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Weight- |  |  |  |  |
|  |  |  | (N) | (WN) |  |  | R-2SE | $R+2 S E$ |
| WOMEN |  |  |  |  |  |  |  |  |
| Urban | 0.000 | 0.000 | 7816 | 7394 | na | na | 0.000 | 0.000 |
| Literate | 0.603 | 0.015 | 7816 | 7394 | 2.757 | 0.025 | 0.572 | 0.633 |
| No education | 0.302 | 0.015 | 7816 | 7394 | 2.852 | 0.049 | 0.272 | 0.331 |
| Secondary education | 0.034 | 0.004 | 7816 | 7394 | 1.727 | 0.104 | 0.027 | 0.041 |
| Net attendance ratio | 0.698 | 0.013 | 7871 | 7394 | 2.156 | 0.019 | 0.672 | 0.724 |
| Never married | 0.190 | 0.006 | 7816 | 7394 | 1.335 | 0.031 | 0.178 | 0.202 |
| Currently married | 0.717 | 0.007 | 7816 | 7394 | 1.444 | 0.010 | 0.703 | 0.732 |
| Married before age 20 | 0.694 | 0.009 | 6098 | 5819 | 1.455 | 0.012 | 0.677 | 0.711 |
| Currently pregnant | 0.118 | 0.004 | 7816 | 7394 | 1.140 | 0.035 | 0.110 | 0.127 |
| Children ever born | 3.236 | 0.042 | 7816 | 7394 | 1.276 | 0.013 | 3.153 | 3.320 |
| Total Fertility Rate (3 years) | 6.461 | 0.134 | na | 20630 | 1.686 | 0.021 | 6.192 | 6.730 |
| Children surviving | 2.731 | 0.034 | 7816 | 7394 | 1.226 | 0.012 | 2.663 | 2.799 |
| Children ever born to women age 40-49 | 6.633 | 0.107 | 1323 | 1235 | 1.364 | 0.016 | 6.420 | 6.847 |
| Knows any contraceptive method | 0.973 | 0.004 | 5414 | 5303 | 1.844 | 0.004 | 0.965 | 0.981 |
| Ever using contraceptive method | 0.443 | 0.014 | 5414 | 5303 | 2.067 | 0.031 | 0.415 | 0.471 |
| Currently using any contraceptive method | 0.216 | 0.008 | 5414 | 5303 | 1.466 | 0.038 | 0.199 | 0.232 |
| Currently using a modern method | 0.155 | 0.008 | 5414 | 5303 | 1.643 | 0.052 | 0.139 | 0.172 |
| Currently using pill | 0.041 | 0.004 | 5414 | 5303 | 1.410 | 0.093 | 0.033 | 0.048 |
| Currently using IUD | 0.001 | 0.000 | 5414 | 5303 | 1.042 | 0.578 | 0.000 | 0.001 |
| Currently using condom | 0.018 | 0.002 | 5414 | 5303 | 1.378 | 0.138 | 0.013 | 0.023 |
| Currently using female sterilisation | 0.018 | 0.002 | 5414 | 5303 | 1.339 | 0.133 | 0.014 | 0.023 |
| Currently using periodic abstinence | 0.013 | 0.002 | 5414 | 5303 | 1.319 | 0.155 | 0.009 | 0.017 |
| Public sector source | 0.759 | 0.022 | 974 | 961 | 1.609 | 0.029 | 0.715 | 0.803 |
| Want no more children | 0.280 | 0.010 | 5414 | 5303 | 1.674 | 0.037 | 0.259 | 0.300 |
| Want to delay birth at least 2 years | 0.435 | 0.007 | 5414 | 5303 | 1.081 | 0.017 | 0.420 | 0.449 |
| Ideal family size | 5.443 | 0.076 | 7622 | 7246 | 2.858 | 0.014 | 5.291 | 5.595 |
| Neonatal NN mortality (0-9 years) | 33.140 | 2.247 | 13222 | 12950 | 1.347 | 0.068 | 28.646 | 37.634 |
| Postneonatal PNN mortality (0-9 years) | 51.800 | 2.616 | 13254 | 12977 | 1.254 | 0.050 | 46.569 | 57.032 |
| Infant ${ }_{1} q_{0}$ mortality (0-9 years) | 84.941 | 3.501 | 13257 | 12979 | 1.342 | 0.041 | 77.939 | 91.942 |
| Child ${ }_{4} \mathrm{q}_{1}$ (0-9 years) | 58.280 | 3.019 | 13342 | 13073 | 1.263 | 0.052 | 52.242 | 64.319 |
| Under $5{ }_{5} \mathrm{q}_{0}$ (0-9 years) 1 | 138.270 | 4.668 | 13380 | 13105 | 1.423 | 0.034 | 128.933 | 147.607 |
| Mothers received tetanus injection for last birth | 0.779 | 0.009 | 4560 | 4496 | 1.547 | 0.012 | 0.760 | 0.798 |
| Mothers received medical assistance at delivery | 0.380 | 0.016 | 7092 | 7034 | 2.459 | 0.043 | 0.347 | 0.413 |
| Had diarrhoea in two weeks before survey | 0.132 | 0.006 | 6485 | 6417 | 1.436 | 0.047 | 0.120 | 0.145 |
| Treated with oral rehydration salts (ORS) | 0.543 | 0.022 | 869 | 848 | 1.256 | 0.040 | 0.500 | 0.587 |
| Taken to a health provider | 0.471 | 0.023 | 869 | 848 | 1.329 | 0.050 | 0.424 | 0.518 |
| Vaccination card seen | 0.787 | 0.018 | 1342 | 1355 | 1.619 | 0.022 | 0.751 | 0.822 |
| Received BCG | 0.903 | 0.012 | 1342 | 1355 | 1.516 | 0.013 | 0.879 | 0.927 |
| Received DPT (3 doses) | 0.840 | 0.017 | 1342 | 1355 | 1.730 | 0.020 | 0.806 | 0.874 |
| Received polio (3 doses) | 0.825 | 0.017 | 1342 | 1355 | 1.723 | 0.021 | 0.790 | 0.860 |
| Received measles | 0.777 | 0.021 | 1342 | 1355 | 1.858 | 0.027 | 0.736 | 0.819 |
| Fully immunised | 0.688 | 0.021 | 1342 | 1355 | 1.732 | 0.031 | 0.645 | 0.731 |
| Height-for-age (below -2SD) | 0.405 | 0.011 | 6487 | 6453 | 1.729 | 0.028 | 0.382 | 0.428 |
| Weight-for-height (below-2SD) | 0.030 | 0.003 | 6487 | 6453 | 1.250 | 0.088 | 0.025 | 0.036 |
| Weight-for-age (below -2SD) | 0.229 | 0.010 | 6487 | 6453 | 1.777 | 0.042 | 0.210 | 0.249 |
| BMI $<18.5$ | 0.115 | 0.005 | 6661 | 6249 | 1.291 | 0.044 | 0.105 | 0.125 |
| Has heard of HIV/AIDS | 0.986 | 0.003 | 7816 | 7394 | 2.147 | 0.003 | 0.980 | 0.991 |
| Had $2+$ sexual partners in past 12 months | 0.039 | 0.003 | 5897 | 5805 | 1.255 | 0.081 | 0.032 | 0.045 |
| Had higher-risk intercourse in past 12 months | 0.196 | 0.007 | 5897 | 5805 | 1.398 | 0.037 | 0.181 | 0.210 |
| Condom use at last higher-risk intercourse | 0.181 | 0.014 | 1086 | 1131 | 1.185 | 0.077 | 0.153 | 0.209 |
| Sexually active in past 12 months (youth) | 0.236 | 0.015 | 1546 | 1287 | 1.395 | 0.064 | 0.206 | 0.266 |
| Condom use at last higher-risk intercourse (youth) | ) 0.235 | 0.023 | 461 | 488 | 1.186 | 0.100 | 0.188 | 0.282 |
| Abstinence among youth (never had intercourse) | 0.681 | 0.017 | 1546 | 1287 | 1.439 | 0.025 | 0.647 | 0.715 |
| MEN |  |  |  |  |  |  |  |  |
| Urban residence | 0.000 | 0.000 | 2034 | 1919 | na | na | 0.000 | 0.000 |
| Literate | 0.755 | 0.014 | 2034 | 1919 | 1.521 | 0.019 | 0.726 | 0.784 |
| No education | 0.151 | 0.015 | 2034 | 1919 | 1.842 | 0.097 | 0.122 | 0.181 |
| Secondary education or higher | 0.055 | 0.007 | 2034 | 1919 | 1.309 | 0.121 | 0.042 | 0.068 |
| Never married | 0.396 | 0.012 | 2034 | 1919 | 1.138 | 0.031 | 0.371 | 0.421 |
| Currently married/in union | 0.562 | 0.013 | 2034 | 1919 | 1.160 | 0.023 | 0.537 | 0.588 |
| Knows any contraceptive method | 0.967 | 0.005 | 2034 | 1919 | 1.311 | 0.005 | 0.957 | 0.978 |
| Ideal family size | 5.794 | 0.146 | 1969 | 1859 | 1.687 | 0.025 | 5.502 | 6.086 |
| Has heard of HIV/AIDS | 0.990 | 0.003 | 2034 | 1919 | 1.349 | 0.003 | 0.984 | 0.996 |


| Variable | Value <br> (R) | Stand- <br> ard <br> error <br> (SE) | Number of cases |  | Design effect (DEFT) | Relative error (SE/R) | Confidence limits |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Weight- |  |  |  |  |
|  |  |  | (N) | (WN) |  |  | R-2SE | $\mathrm{R}+2 \mathrm{SE}$ |
| WOMEN |  |  |  |  |  |  |  |  |
| Urban | 0.153 | 0.021 | 1376 | 1880 | 2.209 | 0.140 | 0.110 | 0.195 |
| Literate | 0.552 | 0.026 | 1376 | 1880 | 1.955 | 0.047 | 0.500 | 0.605 |
| No education | 0.330 | 0.024 | 1376 | 1880 | 1.930 | 0.074 | 0.281 | 0.379 |
| Secondary education | 0.028 | 0.009 | 1376 | 1880 | 2.000 | 0.317 | 0.010 | 0.046 |
| Net attendance ratio | 0.635 | 0.026 | 1324 | 1812 | 1.695 | 0.041 | 0.583 | 0.687 |
| Never married | 0.201 | 0.013 | 1376 | 1880 | 1.200 | 0.065 | 0.175 | 0.227 |
| Currently married | 0.714 | 0.015 | 1376 | 1880 | 1.270 | 0.022 | 0.683 | 0.745 |
| Married before age 20 | 0.733 | 0.015 | 1021 | 1404 | 1.112 | 0.021 | 0.702 | 0.764 |
| Currently pregnant | 0.138 | 0.010 | 1376 | 1880 | 1.066 | 0.072 | 0.118 | 0.158 |
| Children ever born | 3.254 | 0.076 | 1376 | 1880 | 0.928 | 0.024 | 3.101 | 3.407 |
| Total Fertility Rate (3 years) | 7.306 | 0.237 | na | 5163 | 1.129 | 0.032 | 6.831 | 7.780 |
| Children surviving | 2.772 | 0.058 | 1376 | 1880 | 0.822 | 0.021 | 2.655 | 2.889 |
| Children ever born to women age 40-49 | 7.278 | 0.255 | 187 | 256 | 1.189 | 0.035 | 6.769 | 7.787 |
| Knows any contraceptive method | 0.967 | 0.007 | 974 | 1341 | 1.306 | 0.008 | 0.952 | 0.982 |
| Ever using contraceptive method | 0.301 | 0.028 | 974 | 1341 | 1.915 | 0.094 | 0.245 | 0.357 |
| Currently using any contraceptive method | 0.128 | 0.016 | 974 | 1341 | 1.500 | 0.126 | 0.096 | 0.160 |
| Currently using a modern method | 0.087 | 0.013 | 974 | 1341 | 1.469 | 0.153 | 0.061 | 0.114 |
| Currently using pill | 0.014 | 0.004 | 974 | 1341 | 1.179 | 0.321 | 0.005 | 0.022 |
| Currently using IUD | 0.001 | 0.001 | 974 | 1341 | 0.798 | 1.005 | 0.000 | 0.002 |
| Currently using condom | 0.012 | 0.004 | 974 | 1341 | 1.062 | 0.308 | 0.005 | 0.020 |
| Currently using female sterilisation | 0.018 | 0.005 | 974 | 1341 | 1.222 | 0.286 | 0.008 | 0.029 |
| Currently using periodic abstinence | 0.016 | 0.004 | 974 | 1341 | 0.987 | 0.252 | 0.008 | 0.023 |
| Public sector source | 0.808 | 0.054 | 111 | 145 | 1.438 | 0.067 | 0.700 | 0.916 |
| Want no more children | 0.229 | 0.014 | 974 | 1341 | 1.010 | 0.059 | 0.202 | 0.257 |
| Want to delay birth at least 2 years | 0.465 | 0.015 | 974 | 1341 | 0.923 | 0.032 | 0.435 | 0.494 |
| Ideal family size | 5.954 | 0.114 | 1351 | 1843 | 1.778 | 0.019 | 5.726 | 6.182 |
| Mothers received tetanus injection for last birth | 0.729 | 0.023 | 828 | 1143 | 1.510 | 0.032 | 0.683 | 0.776 |
| Mothers received medical assistance at delivery | 0.412 | 0.031 | 1382 | 1912 | 1.945 | 0.075 | 0.351 | 0.474 |
| Had diarrhoea in two weeks before survey | 0.156 | 0.013 | 1265 | 1749 | 1.191 | 0.083 | 0.130 | 0.182 |
| Treated with oral rehydration salts (ORS) | 0.464 | 0.044 | 205 | 272 | 1.152 | 0.095 | 0.376 | 0.551 |
| Taken to a health provider | 0.377 | 0.044 | 205 | 272 | 1.182 | 0.118 | 0.288 | 0.466 |
| Vaccination card seen | 0.783 | 0.046 | 275 | 381 | 1.854 | 0.059 | 0.690 | 0.875 |
| Received BCG | 0.875 | 0.032 | 275 | 381 | 1.612 | 0.037 | 0.811 | 0.939 |
| Received DPT (3 doses) | 0.736 | 0.034 | 275 | 381 | 1.294 | 0.047 | 0.667 | 0.805 |
| Received polio (3 doses) | 0.742 | 0.034 | 275 | 381 | 1.275 | 0.045 | 0.675 | 0.810 |
| Received measles | 0.634 | 0.044 | 275 | 381 | 1.486 | 0.069 | 0.547 | 0.721 |
| Fully immunised | 0.566 | 0.039 | 275 | 381 | 1.290 | 0.069 | 0.488 | 0.644 |
| Height-for-age (below-2SD) | 0.397 | 0.022 | 1268 | 1720 | 1.407 | 0.055 | 0.353 | 0.440 |
| Weight-for-height (below-2SD) | 0.026 | 0.005 | 1268 | 1720 | 1.170 | 0.198 | 0.015 | 0.036 |
| Weight-for-age (below -2SD) | 0.232 | 0.019 | 1268 | 1720 | 1.496 | 0.083 | 0.194 | 0.271 |
| BMI $<18.5$ | 0.098 | 0.008 | 1123 | 1531 | 0.898 | 0.081 | 0.082 | 0.114 |
| Has heard of HIV/AIDS | 0.986 | 0.004 | 1376 | 1880 | 1.322 | 0.004 | 0.977 | 0.994 |
| Had 2+ sexual partners in past 12 months | 0.038 | 0.006 | 1088 | 1488 | 1.075 | 0.165 | 0.025 | 0.050 |
| Had higher-risk intercourse in past 12 months | 0.145 | 0.016 | 1088 | 1488 | 1.493 | 0.110 | 0.113 | 0.177 |
| Condom use at last higher-risk intercourse | 0.276 | 0.037 | 165 | 214 | 1.058 | 0.134 | 0.202 | 0.350 |
| Sexually active in past 12 months (youth) | 0.189 | 0.039 | 262 | 353 | 1.628 | 0.209 | 0.110 | 0.267 |
| Condom use at last higher-risk intercourse (youth) | 0.375 | 0.049 | 77 | 95 | 0.882 | 0.130 | 0.277 | 0.473 |
| Abstinence among youth (never had intercourse) | 0.733 | 0.041 | 262 | 353 | 1.511 | 0.057 | 0.650 | 0.815 |
| MEN |  |  |  |  |  |  |  |  |
| Urban residence | 0.121 | 0.029 | 337 | 468 | 1.603 | 0.236 | 0.064 | 0.178 |
| Literate | 0.753 | 0.026 | 337 | 468 | 1.113 | 0.035 | 0.701 | 0.806 |
| No education | 0.176 | 0.027 | 337 | 468 | 1.321 | 0.156 | 0.121 | 0.230 |
| Secondary education or higher | 0.042 | 0.013 | 337 | 468 | 1.235 | 0.323 | 0.015 | 0.068 |
| Never married | 0.423 | 0.032 | 337 | 468 | 1.176 | 0.075 | 0.360 | 0.487 |
| Currently married/in union | 0.553 | 0.033 | 337 | 468 | 1.225 | 0.060 | 0.486 | 0.619 |
| Knows any contraceptive method | 0.950 | 0.009 | 337 | 468 | 0.756 | 0.009 | 0.932 | 0.968 |
| Ideal family size | 6.313 | 0.255 | 328 | 459 | 1.260 | 0.040 | 5.802 | 6.823 |
| Has heard of HIV/AIDS | 0.994 | 0.005 | 337 | 468 | 1.106 | 0.005 | 0.984 | 1.003 |


| Variable | Value <br> (R) | Standard error (SE) | Number of cases |  | Design effect (DEFT) | Relative error (SE/R) | Confidence limits |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Weight- |  |  |  |  |
|  |  |  | (N) | (WN) |  |  | R-2SE | $\mathrm{R}+2 \mathrm{SE}$ |
| WOMEN |  |  |  |  |  |  |  |  |
| Urban | 0.274 | 0.019 | 1494 | 1496 | 1.663 | 0.070 | 0.235 | 0.312 |
| Literate | 0.752 | 0.027 | 1494 | 1496 | 2.389 | 0.035 | 0.699 | 0.806 |
| No education | 0.191 | 0.024 | 1494 | 1496 | 2.328 | 0.124 | 0.144 | 0.238 |
| Secondary education | 0.118 | 0.016 | 1494 | 1496 | 1.959 | 0.138 | 0.086 | 0.151 |
| Net attendance ratio | 0.808 | 0.023 | 1447 | 1416 | 1.987 | 0.029 | 0.762 | 0.854 |
| Never married | 0.266 | 0.014 | 1494 | 1496 | 1.201 | 0.052 | 0.239 | 0.294 |
| Currently married | 0.636 | 0.014 | 1494 | 1496 | 1.137 | 0.022 | 0.607 | 0.664 |
| Married before age 20 | 0.539 | 0.019 | 1170 | 1177 | 1.299 | 0.035 | 0.501 | 0.577 |
| Currently pregnant | 0.094 | 0.007 | 1494 | 1496 | 0.951 | 0.076 | 0.080 | 0.109 |
| Children ever born | 2.748 | 0.086 | 1494 | 1496 | 1.242 | 0.031 | 2.576 | 2.919 |
| Total Fertility Rate (3 years) | 4.855 | 0.226 | na | 4206 | 1.381 | 0.047 | 4.402 | 5.307 |
| Children surviving | 2.420 | 0.072 | 1494 | 1496 | 1.175 | 0.030 | 2.277 | 2.564 |
| Children ever born to women age 40-49 | 5.966 | 0.227 | 240 | 243 | 1.293 | 0.038 | 5.513 | 6.419 |
| Knows any contraceptive method | 0.981 | 0.005 | 946 | 951 | 1.187 | 0.005 | 0.970 | 0.991 |
| Ever using contraceptive method | 0.698 | 0.023 | 946 | 951 | 1.548 | 0.033 | 0.652 | 0.744 |
| Currently using any contraceptive method | 0.415 | 0.020 | 946 | 951 | 1.234 | 0.048 | 0.376 | 0.455 |
| Currently using a modern method | 0.301 | 0.023 | 946 | 951 | 1.547 | 0.077 | 0.254 | 0.347 |
| Currently using pill | 0.072 | 0.010 | 946 | 951 | 1.219 | 0.143 | 0.051 | 0.092 |
| Currently using IUD | 0.006 | 0.003 | 946 | 951 | 1.082 | 0.463 | 0.000 | 0.011 |
| Currently using condom | 0.026 | 0.005 | 946 | 951 | 1.034 | 0.204 | 0.016 | 0.037 |
| Currently using female sterilisation | 0.035 | 0.005 | 946 | 951 | 0.865 | 0.147 | 0.025 | 0.046 |
| Currently using periodic abstinence | 0.039 | 0.009 | 946 | 951 | 1.359 | 0.220 | 0.022 | 0.056 |
| Public sector source | 0.699 | 0.042 | 341 | 354 | 1.676 | 0.060 | 0.615 | 0.782 |
| Want no more children | 0.358 | 0.017 | 946 | 951 | 1.085 | 0.047 | 0.324 | 0.392 |
| Want to delay birth at least 2 years | 0.397 | 0.016 | 946 | 951 | 0.976 | 0.039 | 0.365 | 0.428 |
| Ideal family size | 4.433 | 0.097 | 1476 | 1480 | 1.890 | 0.022 | 4.239 | 4.628 |
| Mothers received tetanus injection for last birth | 0.821 | 0.022 | 777 | 774 | 1.625 | 0.027 | 0.777 | 0.866 |
| Mothers received medical assistance at delivery | 0.489 | 0.030 | 1141 | 1122 | 1.659 | 0.061 | 0.429 | 0.548 |
| Had diarrhoea in two weeks before survey | 0.103 | 0.013 | 1065 | 1042 | 1.311 | 0.127 | 0.077 | 0.129 |
| Treated with oral rehydration salts (ORS) | 0.438 | 0.052 | 109 | 108 | 1.021 | 0.118 | 0.334 | 0.541 |
| Taken to a health provider | 0.433 | 0.068 | 109 | 108 | 1.357 | 0.158 | 0.296 | 0.570 |
| Vaccination card seen | 0.753 | 0.033 | 216 | 208 | 1.098 | 0.044 | 0.687 | 0.819 |
| Received BCG | 0.899 | 0.021 | 216 | 208 | 1.010 | 0.023 | 0.857 | 0.942 |
| Received DPT (3 doses) | 0.866 | 0.030 | 216 | 208 | 1.218 | 0.034 | 0.807 | 0.926 |
| Received polio (3 doses) | 0.845 | 0.034 | 216 | 208 | 1.323 | 0.040 | 0.777 | 0.913 |
| Received measles | 0.855 | 0.035 | 216 | 208 | 1.393 | 0.041 | 0.784 | 0.925 |
| Fully immunised | 0.725 | 0.038 | 216 | 208 | 1.218 | 0.053 | 0.649 | 0.802 |
| Height-for-age (below -2SD) | 0.342 | 0.018 | 1060 | 1019 | 1.141 | 0.052 | 0.306 | 0.378 |
| Weight-for-height (below-2SD) | 0.050 | 0.008 | 1060 | 1019 | 1.170 | 0.169 | 0.033 | 0.066 |
| Weight-for-age (below -2SD) | 0.260 | 0.017 | 1060 | 1019 | 1.180 | 0.066 | 0.225 | 0.294 |
| BMI $<18.5$ | 0.126 | 0.011 | 1309 | 1316 | 1.210 | 0.088 | 0.103 | 0.148 |
| Has heard of HIV/AIDS | 0.983 | 0.008 | 1494 | 1496 | 2.385 | 0.008 | 0.966 | 0.999 |
| Had 2+ sexual partners in past 12 months | 0.023 | 0.006 | 1081 | 1093 | 1.230 | 0.245 | 0.012 | 0.034 |
| Had higher-risk intercourse in past 12 months | 0.243 | 0.017 | 1081 | 1093 | 1.300 | 0.070 | 0.209 | 0.277 |
| Condom use at last higher-risk intercourse | 0.319 | 0.043 | 264 | 265 | 1.486 | 0.134 | 0.233 | 0.404 |
| Sexually active in past 12 months (youth) | 0.256 | 0.031 | 349 | 346 | 1.308 | 0.120 | 0.195 | 0.317 |
| Condom use at last higher-risk intercourse (youth) | 0.344 | 0.050 | 124 | 122 | 1.177 | 0.146 | 0.243 | 0.445 |
| Abstinence among youth (never had intercourse) | 0.649 | 0.034 | 349 | 346 | 1.330 | 0.052 | 0.581 | 0.717 |
| MEN |  |  |  |  |  |  |  |  |
| Urban residence | 0.255 | 0.036 | 354 | 362 | 1.541 | 0.140 | 0.184 | 0.327 |
| Literate | 0.850 | 0.023 | 354 | 362 | 1.193 | 0.027 | 0.805 | 0.895 |
| No education | 0.098 | 0.023 | 354 | 362 | 1.476 | 0.239 | 0.051 | 0.144 |
| Secondary education or higher | 0.127 | 0.026 | 354 | 362 | 1.474 | 0.206 | 0.074 | 0.179 |
| Never married | 0.416 | 0.021 | 354 | 362 | 0.812 | 0.051 | 0.374 | 0.459 |
| Currently married/in union | 0.546 | 0.024 | 354 | 362 | 0.923 | 0.045 | 0.497 | 0.595 |
| Knows any contraceptive method | 0.977 | 0.009 | 354 | 362 | 1.076 | 0.009 | 0.959 | 0.994 |
| Ideal family size | 4.370 | 0.154 | 338 | 344 | 1.049 | 0.035 | 4.063 | 4.677 |
| Has heard of HIV/AIDS | 0.988 | 0.006 | 354 | 362 | 1.064 | 0.006 | 0.975 | 1.000 |

na $=$ Not applicable

| Table B.7 Sampling errors for Central zone, Tanzania $2004-05$ |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
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|  |  |  |  |  |  |  |  |


| Table B.8 Sampling errors for Southern zone, Tanzania $2004-05$ |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |


| Table B.9 Sampling errors for Lake zone, Tanzania | $2004-05$ |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |


| Variable | Value <br> (R) | Stand- <br> ard <br> error <br> (SE) | Number of cases |  | Design effect (DEFT) | Relative error (SE/R) | Confidence limits |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |
|  |  |  | (N) | (WN) |  |  | R-2SE | R+2SE |
| WOMEN |  |  |  |  |  |  |  |  |
| Urban | 0.674 | 0.025 | 1071 | 1670 | 1.723 | 0.037 | 0.624 | 0.723 |
| Literate | 0.798 | 0.023 | 1071 | 1670 | 1.858 | 0.029 | 0.753 | 0.844 |
| No education | 0.147 | 0.022 | 1071 | 1670 | 2.006 | 0.148 | 0.104 | 0.191 |
| Secondary education | 0.163 | 0.017 | 1071 | 1670 | 1.493 | 0.104 | 0.129 | 0.196 |
| Net attendance ratio | 0.825 | 0.015 | 849 | 1196 | 1.071 | 0.019 | 0.794 | 0.855 |
| Never married | 0.297 | 0.020 | 1071 | 1670 | 1.448 | 0.068 | 0.256 | 0.337 |
| Currently married | 0.615 | 0.022 | 1071 | 1670 | 1.457 | 0.035 | 0.572 | 0.659 |
| Married before age 20 | 0.525 | 0.027 | 871 | 1344 | 1.602 | 0.052 | 0.471 | 0.579 |
| Currently pregnant | 0.062 | 0.009 | 1071 | 1670 | 1.274 | 0.151 | 0.043 | 0.081 |
| Children ever born | 2.088 | 0.081 | 1071 | 1670 | 1.189 | 0.039 | 1.926 | 2.250 |
| Total Fertility Rate (3 years) | 3.571 | 0.253 | na | 4732 | 1.193 | 0.071 | 3.066 | 4.077 |
| Children surviving | 1.793 | 0.070 | 1071 | 1670 | 1.214 | 0.039 | 1.653 | 1.934 |
| Children ever born to women age 40-49 | 4.998 | 0.232 | 159 | 218 | 1.067 | 0.046 | 4.535 | 5.462 |
| Knows any contraceptive method | 0.997 | 0.002 | 676 | 1027 | 1.132 | 0.002 | 0.992 | 1.002 |
| Ever using contraceptive method | 0.698 | 0.027 | 676 | 1027 | 1.511 | 0.038 | 0.645 | 0.751 |
| Currently using any contraceptive method | 0.377 | 0.028 | 676 | 1027 | 1.516 | 0.075 | 0.321 | 0.434 |
| Currently using a modern method | 0.307 | 0.026 | 676 | 1027 | 1.491 | 0.086 | 0.254 | 0.359 |
| Currently using pill | 0.101 | 0.014 | 676 | 1027 | 1.230 | 0.142 | 0.072 | 0.129 |
| Currently using IUD | 0.005 | 0.003 | 676 | 1027 | 1.266 | 0.713 | 0.000 | 0.011 |
| Currently using condom | 0.030 | 0.007 | 676 | 1027 | 1.097 | 0.242 | 0.015 | 0.044 |
| Currently using female sterilisation | 0.035 | 0.008 | 676 | 1027 | 1.166 | 0.234 | 0.019 | 0.052 |
| Currently using periodic abstinence | 0.042 | 0.010 | 676 | 1027 | 1.241 | 0.227 | 0.023 | 0.062 |
| Public sector source | 0.506 | 0.039 | 270 | 448 | 1.276 | 0.077 | 0.428 | 0.583 |
| Want no more children | 0.265 | 0.019 | 676 | 1027 | 1.117 | 0.072 | 0.227 | 0.303 |
| Want to delay birth at least 2 years | 0.360 | 0.018 | 676 | 1027 | 0.981 | 0.050 | 0.324 | 0.396 |
| Ideal family size | 4.296 | 0.117 | 1065 | 1658 | 1.726 | 0.027 | 4.062 | 4.530 |
| Mothers received tetanus injection for last birth | 0.857 | 0.015 | 522 | 766 | 0.941 | 0.017 | 0.828 | 0.887 |
| Mothers received medical assistance at delivery | 0.654 | 0.044 | 677 | 969 | 1.977 | 0.068 | 0.565 | 0.742 |
| Had diarrhoea in two weeks before survey | 0.093 | 0.016 | 621 | 890 | 1.284 | 0.171 | 0.061 | 0.125 |
| Treated with oral rehydration salts (ORS) | 0.704 | 0.086 | 58 | 83 | 1.388 | 0.122 | 0.532 | 0.876 |
| Taken to a health provider | 0.643 | 0.103 | 58 | 83 | 1.469 | 0.159 | 0.438 | 0.848 |
| Vaccination card seen | 0.785 | 0.047 | 100 | 150 | 1.112 | 0.059 | 0.692 | 0.878 |
| Received BCG | 0.951 | 0.025 | 100 | 150 | 1.137 | 0.026 | 0.901 | 1.001 |
| Received DPT (3 doses) | 0.937 | 0.028 | 100 | 150 | 1.115 | 0.029 | 0.882 | 0.992 |
| Received polio (3 doses) | 0.855 | 0.044 | 100 | 150 | 1.228 | 0.052 | 0.767 | 0.943 |
| Received measles | 0.878 | 0.031 | 100 | 150 | 0.938 | 0.036 | 0.816 | 0.941 |
| Fully immunised | 0.771 | 0.045 | 100 | 150 | 1.036 | 0.058 | 0.682 | 0.860 |
| Height-for-age (below -2SD) | 0.278 | 0.021 | 616 | 879 | 1.049 | 0.074 | 0.237 | 0.319 |
| Weight-for-height (below-2SD) | 0.040 | 0.008 | 616 | 879 | 0.967 | 0.194 | 0.024 | 0.055 |
| Weight-for-age (below -2SD) | 0.173 | 0.013 | 616 | 879 | 0.867 | 0.078 | 0.146 | 0.200 |
| BMI $<18.5$ | 0.084 | 0.013 | 972 | 1520 | 1.452 | 0.154 | 0.058 | 0.110 |
| Has heard of HIV/AIDS | 1.000 | 0.000 | 1071 | 1670 | na | 0.000 | 1.000 | 1.000 |
| Had 2+ sexual partners in past 12 months | 0.047 | 0.008 | 867 | 1344 | 1.121 | 0.172 | 0.031 | 0.063 |
| Had higher-risk intercourse in past 12 months | 0.372 | 0.020 | 867 | 1344 | 1.203 | 0.053 | 0.333 | 0.412 |
| Condom use at last higher-risk intercourse | 0.280 | 0.033 | 321 | 500 | 1.324 | 0.119 | 0.213 | 0.346 |
| Sexually active in past 12 months (youth) | 0.402 | 0.040 | 235 | 398 | 1.241 | 0.099 | 0.322 | 0.481 |
| Condom use at last higher-risk intercourse (youth) | 0.358 | 0.054 | 149 | 240 | 1.372 | 0.151 | 0.250 | 0.466 |
| Abstinence among youth (never had intercourse) | 0.511 | 0.037 | 235 | 398 | 1.141 | 0.073 | 0.436 | 0.586 |
| MEN |  |  |  |  |  |  |  |  |
| Urban residence | 0.644 | 0.031 | 289 | 462 | 1.097 | 0.048 | 0.582 | 0.706 |
| Literate | 0.903 | 0.018 | 289 | 462 | 1.055 | 0.020 | 0.866 | 0.940 |
| No education | 0.063 | 0.015 | 289 | 462 | 1.030 | 0.235 | 0.033 | 0.092 |
| Secondary education or higher | 0.229 | 0.032 | 289 | 462 | 1.299 | 0.141 | 0.165 | 0.293 |
| Never married | 0.472 | 0.041 | 289 | 462 | 1.410 | 0.088 | 0.389 | 0.555 |
| Currently married/in union | 0.429 | 0.038 | 289 | 462 | 1.312 | 0.089 | 0.352 | 0.505 |
| Knows any contraceptive method | 0.990 | 0.007 | 289 | 462 | 1.162 | 0.007 | 0.976 | 1.003 |
| Ideal family size | 4.072 | 0.149 | 285 | 456 | 1.080 | 0.036 | 3.775 | 4.369 |
| Has heard of HIV/AIDS | 0.993 | 0.006 | 289 | 462 | 1.360 | 0.007 | 0.981 | 1.006 |


| Variable | Value <br> (R) | Standard error (SE) | Number of cases |  | Design effect (DEFT) | Relative error (SE/R) | Confidence limits |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |
|  |  |  | ( N ) | (WN) |  |  | R-2SE | $\mathrm{R}+2 \mathrm{SE}$ |
| WOMEN |  |  |  |  |  |  |  |  |
| Urban | 0.214 | 0.024 | 1030 | 866 | 1.857 | 0.111 | 0.167 | 0.262 |
| Literate | 0.657 | 0.026 | 1030 | 866 | 1.743 | 0.039 | 0.606 | 0.709 |
| No education | 0.220 | 0.021 | 1030 | 866 | 1.650 | 0.097 | 0.178 | 0.263 |
| Secondary education | 0.059 | 0.015 | 1030 | 866 | 2.102 | 0.262 | 0.028 | 0.090 |
| Net attendance ratio | 0.743 | 0.023 | 839 | 703 | 1.453 | 0.032 | 0.696 | 0.790 |
| Never married | 0.208 | 0.017 | 1030 | 866 | 1.354 | 0.082 | 0.174 | 0.242 |
| Currently married | 0.674 | 0.018 | 1030 | 866 | 1.201 | 0.026 | 0.639 | 0.709 |
| Married before age 20 | 0.674 | 0.023 | 830 | 701 | 1.409 | 0.034 | 0.628 | 0.720 |
| Currently pregnant | 0.086 | 0.010 | 1030 | 866 | 1.126 | 0.115 | 0.066 | 0.105 |
| Children ever born | 2.729 | 0.090 | 1030 | 866 | 1.183 | 0.033 | 2.548 | 2.910 |
| Total Fertility Rate (3 years) | 4.778 | 0.212 | na | 2422 | 1.027 | 0.044 | 4.355 | 5.201 |
| Children surviving | 2.209 | 0.068 | 1030 | 866 | 1.096 | 0.031 | 2.074 | 2.345 |
| Children ever born to women age 40-49 | 5.493 | 0.197 | 198 | 170 | 1.058 | 0.036 | 5.099 | 5.888 |
| Knows any contraceptive method | 0.995 | 0.003 | 695 | 584 | 1.162 | 0.003 | 0.988 | 1.001 |
| Ever using contraceptive method | 0.668 | 0.026 | 695 | 584 | 1.431 | 0.038 | 0.617 | 0.719 |
| Currently using any contraceptive method | 0.335 | 0.020 | 695 | 584 | 1.124 | 0.060 | 0.294 | 0.375 |
| Currently using a modern method | 0.299 | 0.020 | 695 | 584 | 1.148 | 0.067 | 0.260 | 0.339 |
| Currently using pill | 0.129 | 0.014 | 695 | 584 | 1.097 | 0.108 | 0.101 | 0.157 |
| Currently using IUD | 0.000 | 0.000 | 695 | 584 | na | na | 0.000 | 0.000 |
| Currently using condom | 0.026 | 0.005 | 695 | 584 | 0.849 | 0.198 | 0.015 | 0.036 |
| Currently using female sterilisation | 0.038 | 0.010 | 695 | 584 | 1.329 | 0.253 | 0.019 | 0.057 |
| Currently using periodic abstinence | 0.013 | 0.004 | 695 | 584 | 0.953 | 0.317 | 0.005 | 0.021 |
| Public sector source | 0.743 | 0.045 | 293 | 239 | 1.757 | 0.060 | 0.654 | 0.833 |
| Want no more children | 0.274 | 0.017 | 695 | 584 | 1.002 | 0.062 | 0.240 | 0.308 |
| Want to delay birth at least 2 years | 0.447 | 0.022 | 695 | 584 | 1.164 | 0.049 | 0.403 | 0.491 |
| Ideal family size | 4.689 | 0.098 | 1027 | 864 | 1.622 | 0.021 | 4.492 | 4.886 |
| Mothers received tetanus injection for last birth | 0.846 | 0.017 | 595 | 503 | 1.124 | 0.020 | 0.812 | 0.879 |
| Mothers received medical assistance at delivery | 0.556 | 0.032 | 756 | 637 | 1.594 | 0.057 | 0.492 | 0.620 |
| Had diarrhoea in two weeks before survey | 0.166 | 0.014 | 676 | 572 | 1.017 | 0.086 | 0.137 | 0.195 |
| Treated with oral rehydration salts (ORS) | 0.600 | 0.054 | 112 | 95 | 1.171 | 0.090 | 0.492 | 0.708 |
| Taken to a health provider | 0.503 | 0.059 | 112 | 95 | 1.246 | 0.117 | 0.386 | 0.620 |
| Vaccination card seen | 0.869 | 0.039 | 150 | 128 | 1.419 | 0.045 | 0.791 | 0.947 |
| Received BCG | 0.974 | 0.017 | 150 | 128 | 1.292 | 0.017 | 0.940 | 1.007 |
| Received DPT (3 doses) | 0.965 | 0.016 | 150 | 128 | 1.096 | 0.017 | 0.932 | 0.998 |
| Received polio (3 doses) | 0.926 | 0.023 | 150 | 128 | 1.084 | 0.025 | 0.880 | 0.972 |
| Received measles | 0.919 | 0.023 | 150 | 128 | 1.033 | 0.025 | 0.874 | 0.965 |
| Fully immunised | 0.836 | 0.034 | 150 | 128 | 1.113 | 0.040 | 0.769 | 0.903 |
| Height-for-age (below -2SD) | 0.522 | 0.018 | 702 | 593 | 0.894 | 0.034 | 0.486 | 0.558 |
| Weight-for-height (below -2SD) | 0.015 | 0.005 | 702 | 593 | 1.111 | 0.342 | 0.005 | 0.025 |
| Weight-for-age (below -2SD) | 0.262 | 0.012 | 702 | 593 | 0.718 | 0.045 | 0.239 | 0.286 |
| BMI $<18.5$ | 0.121 | 0.014 | 919 | 773 | 1.280 | 0.114 | 0.093 | 0.148 |
| Has heard of HIV/AIDS | 1.000 | 0.000 | 1030 | 866 | na | 0.000 | 1.000 | 1.000 |
| Had 2+ sexual partners in past 12 months | 0.094 | 0.011 | 813 | 678 | 1.091 | 0.119 | 0.071 | 0.116 |
| Had higher-risk intercourse in past 12 months | 0.398 | 0.016 | 813 | 678 | 0.926 | 0.040 | 0.366 | 0.430 |
| Condom use at last higher-risk intercourse | 0.229 | 0.029 | 328 | 270 | 1.264 | 0.128 | 0.170 | 0.288 |
| Sexually active in past 12 months (youth) | 0.492 | 0.041 | 194 | 164 | 1.136 | 0.083 | 0.411 | 0.574 |
| Condom use at last higher-risk intercourse (youth) | 0.289 | 0.050 | 168 | 137 | 1.420 | 0.172 | 0.189 | 0.389 |
| Abstinence among youth (never had intercourse) | 0.339 | 0.039 | 194 | 164 | 1.141 | 0.115 | 0.261 | 0.417 |
| MEN |  |  |  |  |  |  |  |  |
| Urban residence | 0.170 | 0.021 | 304 | 245 | 0.958 | 0.121 | 0.129 | 0.212 |
| Literate | 0.752 | 0.029 | 304 | 245 | 1.173 | 0.039 | 0.694 | 0.811 |
| No education | 0.111 | 0.019 | 304 | 245 | 1.063 | 0.173 | 0.073 | 0.149 |
| Secondary education or higher | 0.090 | 0.017 | 304 | 245 | 1.061 | 0.194 | 0.055 | 0.125 |
| Never married | 0.394 | 0.029 | 304 | 245 | 1.046 | 0.075 | 0.335 | 0.452 |
| Currently married/in union | 0.521 | 0.028 | 304 | 245 | 0.986 | 0.054 | 0.464 | 0.578 |
| Knows any contraceptive method | 0.992 | 0.004 | 304 | 245 | 0.873 | 0.004 | 0.983 | 1.001 |
| Ideal family size | 4.308 | 0.181 | 290 | 234 | 1.030 | 0.042 | 3.946 | 4.670 |
| Has heard of HIV/AIDS | 1.000 | 0.000 | 304 | 245 | na | 0.000 | 1.000 | 1.000 |


| Variable | Value <br> (R) | Standard error (SE) | Number of cases |  | Design effect (DEFT) | Relative error (SE/R) | Confidence limits |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Weight- |  |  |  |  |
|  |  |  | (N) | (WN) |  |  | R-2SE | $\mathrm{R}+2 \mathrm{SE}$ |
| WOMEN |  |  |  |  |  |  |  |  |
| Urban | 0.360 | 0.019 | 2212 | 313 | 1.863 | 0.053 | 0.322 | 0.398 |
| Literate | 0.768 | 0.017 | 2212 | 313 | 1.843 | 0.022 | 0.735 | 0.801 |
| No education | 0.209 | 0.017 | 2212 | 313 | 1.984 | 0.082 | 0.175 | 0.243 |
| Secondary education | 0.425 | 0.018 | 2212 | 313 | 1.697 | 0.042 | 0.390 | 0.461 |
| Net attendance ratio | 0.714 | 0.018 | 2105 | 277 | 1.683 | 0.025 | 0.678 | 0.749 |
| Never married | 0.327 | 0.015 | 2212 | 313 | 1.471 | 0.045 | 0.297 | 0.356 |
| Currently married | 0.579 | 0.014 | 2212 | 313 | 1.289 | 0.023 | 0.552 | 0.606 |
| Married before age 20 | 0.591 | 0.016 | 1667 | 237 | 1.333 | 0.027 | 0.559 | 0.623 |
| Currently pregnant | 0.095 | 0.007 | 2212 | 313 | 1.062 | 0.070 | 0.082 | 0.108 |
| Children ever born | 2.800 | 0.082 | 2212 | 313 | 1.219 | 0.029 | 2.635 | 2.965 |
| Total Fertility Rate (3 years) | 5.320 | 0.279 | na | 870 | 1.664 | 0.052 | 4.762 | 5.877 |
| Children surviving | 2.441 | 0.069 | 2212 | 313 | 1.162 | 0.028 | 2.304 | 2.579 |
| Children ever born to women age 40-49 | 6.825 | 0.196 | 366 | 50 | 1.167 | 0.029 | 6.433 | 7.216 |
| Knows any contraceptive method | 0.987 | 0.002 | 1315 | 182 | 0.731 | 0.002 | 0.983 | 0.992 |
| Ever using contraceptive method | 0.418 | 0.019 | 1315 | 182 | 1.397 | 0.045 | 0.380 | 0.456 |
| Currently using any contraceptive method | 0.153 | 0.010 | 1315 | 182 | 1.047 | 0.068 | 0.133 | 0.174 |
| Currently using a modern method | 0.094 | 0.007 | 1315 | 182 | 0.899 | 0.077 | 0.079 | 0.108 |
| Currently using pill | 0.045 | 0.008 | 1315 | 182 | 1.429 | 0.181 | 0.029 | 0.062 |
| Currently using IUD | 0.001 | 0.001 | 1315 | 182 | 0.863 | 1.001 | 0.000 | 0.002 |
| Currently using condom | 0.003 | 0.002 | 1315 | 182 | 1.317 | 0.665 | 0.000 | 0.007 |
| Currently using female sterilisation | 0.010 | 0.003 | 1315 | 182 | 0.955 | 0.261 | 0.005 | 0.015 |
| Currently using periodic abstinence | 0.034 | 0.008 | 1315 | 182 | 1.571 | 0.232 | 0.018 | 0.049 |
| Public sector source | 0.776 | 0.031 | 152 | 22 | 0.912 | 0.040 | 0.714 | 0.838 |
| Want no more children | 0.265 | 0.013 | 1315 | 182 | 1.091 | 0.050 | 0.239 | 0.292 |
| Want to delay birth at least 2 years | 0.401 | 0.010 | 1315 | 182 | 0.764 | 0.026 | 0.381 | 0.422 |
| Ideal family size | 6.227 | 0.095 | 2121 | 298 | 1.645 | 0.015 | 6.038 | 6.417 |
| Mothers received tetanus injection for last birth | 0.731 | 0.019 | 1059 | 144 | 1.397 | 0.027 | 0.693 | 0.770 |
| Mothers received medical assistance at delivery | 0.508 | 0.026 | 1641 | 219 | 1.674 | 0.052 | 0.456 | 0.561 |
| Had diarrhoea in two weeks before survey | 0.136 | 0.012 | 1517 | 204 | 1.308 | 0.090 | 0.112 | 0.161 |
| Treated with oral rehydration salts (ORS) | 0.333 | 0.033 | 194 | 28 | 0.923 | 0.099 | 0.267 | 0.399 |
| Taken to a health provider | 0.457 | 0.040 | 194 | 28 | 1.063 | 0.087 | 0.378 | 0.537 |
| Vaccination card seen | 0.834 | 0.026 | 295 | 38 | 1.162 | 0.032 | 0.781 | 0.887 |
| Received BCG | 0.949 | 0.016 | 295 | 38 | 1.203 | 0.017 | 0.917 | 0.982 |
| Received DPT (3 doses) | 0.886 | 0.021 | 295 | 38 | 1.091 | 0.024 | 0.844 | 0.928 |
| Received polio (3 doses) | 0.843 | 0.024 | 295 | 38 | 1.069 | 0.028 | 0.795 | 0.890 |
| Received measles | 0.820 | 0.031 | 295 | 38 | 1.336 | 0.038 | 0.757 | 0.883 |
| Fully immunised | 0.747 | 0.034 | 295 | 38 | 1.268 | 0.045 | 0.679 | 0.814 |
| Height-for-age (below -2SD) | 0.231 | 0.012 | 1450 | 197 | 1.006 | 0.051 | 0.208 | 0.255 |
| Weight-for-height (below -2SD) | 0.061 | 0.007 | 1450 | 197 | 1.158 | 0.120 | 0.046 | 0.075 |
| Weight-for-age (below -2SD) | 0.190 | 0.011 | 1450 | 197 | 1.004 | 0.057 | 0.169 | 0.212 |
| BMI < 18.5 | 0.171 | 0.009 | 1937 | 275 | 1.107 | 0.055 | 0.152 | 0.190 |
| Has heard of HIV/AIDS | 0.998 | 0.001 | 2212 | 313 | 0.747 | 0.001 | 0.997 | 1.000 |
| Had $2+$ sexual partners in past 12 months | 0.009 | 0.002 | 1395 | 195 | 0.989 | 0.283 | 0.004 | 0.014 |
| Had higher-risk intercourse in past 12 months | 0.084 | 0.013 | 1395 | 195 | 1.768 | 0.156 | 0.058 | 0.110 |
| Condom use at last higher-risk intercourse | 0.345 | 0.050 | 100 | 16 | 1.045 | 0.145 | 0.245 | 0.445 |
| Sexually active in past 12 months (youth) | 0.040 | 0.013 | 648 | 94 | 1.746 | 0.338 | 0.013 | 0.066 |
| Condom use at last higher-risk intercourse (youth) | 0.445 | 0.087 | 33 | 6 | 0.987 | 0.195 | 0.272 | 0.619 |
| Abstinence among youth (never had intercourse) | 0.944 | 0.013 | 648 | 94 | 1.395 | 0.013 | 0.919 | 0.969 |
| MEN |  |  |  |  |  |  |  |  |
| Urban residence | 0.375 | 0.028 | 539 | 79 | 1.358 | 0.076 | 0.318 | 0.432 |
| Literate | 0.860 | 0.015 | 539 | 79 | 0.978 | 0.017 | 0.831 | 0.889 |
| No education | 0.091 | 0.017 | 539 | 79 | 1.342 | 0.183 | 0.058 | 0.124 |
| Secondary education or higher | 0.405 | 0.025 | 539 | 79 | 1.193 | 0.062 | 0.355 | 0.456 |
| Never married | 0.524 | 0.028 | 539 | 79 | 1.312 | 0.054 | 0.467 | 0.580 |
| Currently married/in union | 0.447 | 0.023 | 539 | 79 | 1.089 | 0.052 | 0.400 | 0.494 |
| Knows any contraceptive method | 0.928 | 0.012 | 539 | 79 | 1.035 | 0.012 | 0.905 | 0.951 |
| Ideal family size | 7.307 | 0.291 | 523 | 75 | 1.569 | 0.040 | 6.726 | 7.888 |
| Has heard of HIV/AIDS | 0.987 | 0.006 | 539 | 79 | 1.225 | 0.006 | 0.975 | 0.999 |


| Table C. 1 Household age distribution |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Single-year age distribution of the de facto household population by sex (weighted), Tanzania 2004-05 |  |  |  |  |  |  |  |  |  |
| Age | Women |  | Men |  | Age | Women |  | Men |  |
|  | Number | Percent | Number | Percent |  | Number | Percent | Number | Percent |
| 0 | 829 | 3.5 | 869 | 3.9 | 36 | 246 | 1.0 | 206 | 0.9 |
| 1 | 877 | 3.7 | 810 | 3.6 | 37 | 159 | 0.7 | 136 | 0.6 |
| 2 | 767 | 3.2 | 834 | 3.7 | 38 | 213 | 0.9 | 203 | 0.9 |
| 3 | 776 | 3.3 | 800 | 3.6 | 39 | 145 | 0.6 | 156 | 0.7 |
| 4 | 659 | 2.8 | 724 | 3.2 | 40 | 247 | 1.0 | 296 | 1.3 |
| 5 | 635 | 2.7 | 729 | 3.3 | 41 | 130 | 0.5 | 131 | 0.6 |
| 6 | 708 | 3.0 | 750 | 3.4 | 42 | 175 | 0.7 | 192 | 0.9 |
| 7 | 702 | 2.9 | 669 | 3.0 | 43 | 135 | 0.6 | 131 | 0.6 |
| 8 | 643 | 2.7 | 683 | 3.1 | 44 | 150 | 0.6 | 136 | 0.6 |
| 9 | 620 | 2.6 | 714 | 3.2 | 45 | 230 | 1.0 | 202 | 0.9 |
| 10 | 559 | 2.3 | 571 | 2.6 | 46 | 142 | 0.6 | 90 | 0.4 |
| 11 | 692 | 2.9 | 684 | 3.1 | 47 | 114 | 0.5 | 90 | 0.4 |
| 12 | 632 | 2.6 | 599 | 2.7 | 48 | 151 | 0.6 | 113 | 0.5 |
| 13 | 622 | 2.6 | 631 | 2.8 | 49 | 135 | 0.6 | 85 | 0.4 |
| 14 | 477 | 2.0 | 479 | 2.1 | 50 | 135 | 0.6 | 165 | 0.7 |
| 15 | 494 | 2.1 | 502 | 2.3 | 51 | 124 | 0.5 | 76 | 0.3 |
| 16 | 453 | 1.9 | 433 | 1.9 | 52 | 194 | 0.8 | 115 | 0.5 |
| 17 | 496 | 2.1 | 468 | 2.1 | 53 | 115 | 0.5 | 84 | 0.4 |
| 18 | 421 | 1.8 | 300 | 1.3 | 54 | 127 | 0.5 | 99 | 0.4 |
| 19 | 499 | 2.1 | 460 | 2.1 | 55 | 201 | 0.8 | 155 | 0.7 |
| 20 | 374 | 1.6 | 234 | 1.0 | 56 | 114 | 0.5 | 108 | 0.5 |
| 21 | 450 | 1.9 | 371 | 1.7 | 57 | 60 | 0.3 | 74 | 0.3 |
| 22 | 318 | 1.3 | 234 | 1.0 | 58 | 93 | 0.4 | 68 | 0.3 |
| 23 | 430 | 1.8 | 360 | 1.6 | 59 | 58 | 0.2 | 57 | 0.3 |
| 24 | 452 | 1.9 | 423 | 1.9 | 60 | 168 | 0.7 | 155 | 0.7 |
| 25 | 361 | 1.5 | 268 | 1.2 | 61 | 38 | 0.2 | 28 | 0.1 |
| 26 | 373 | 1.6 | 254 | 1.1 | 62 | 89 | 0.4 | 103 | 0.5 |
| 27 | 392 | 1.6 | 319 | 1.4 | 63 | 34 | 0.1 | 38 | 0.2 |
| 28 | 337 | 1.4 | 255 | 1.1 | 64 | 44 | 0.2 | 62 | 0.3 |
| 29 | 462 | 1.9 | 392 | 1.8 | 65 | 144 | 0.6 | 103 | 0.5 |
| 30 | 257 | 1.1 | 202 | 0.9 | 66 | 45 | 0.2 | 33 | 0.1 |
| 31 | 354 | 1.5 | 281 | 1.3 | 67 | 33 | 0.1 | 38 | 0.2 |
| 32 | 226 | 0.9 | 156 | 0.7 | 68 | 81 | 0.3 | 78 | 0.4 |
| 33 | 288 | 1.2 | 242 | 1.1 | 69 | 45 | 0.2 | 41 | 0.2 |
| 34 | 293 | 1.2 | 266 | 1.2 | 70+ | 680 | 2.9 | 602 | 2.7 |
| 35 |  |  |  |  | Don't know/ missing | 0 | 0.0 | 3 | 0.0 |
|  |  |  |  |  | Total | 23,863 | 100.0 | 22,294 | 100.0 |

## Table C. 2 Age distribution of eligible and interviewed women and men

De facto household population of women age 10-54 and men age 10-54, interviewed women age 15-49 and interviewed men age 15-49, and percentage of eligible women and men who were interviewed (weighted), by five-year age groups, Tanzania 2004-05

| Age group | Household population of women age 10-54 | Interviewed women age 15-49 |  | Percent of women |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Number | Percent |  |
| 10-14 | 3,126 | na | na | na |
| 15-19 | 2,341 | 2,237 | 21.7 | 95.5 |
| 20-24 | 2,071 | 2,014 | 19.6 | 97.2 |
| 25-29 | 1,915 | 1,882 | 18.3 | 98.3 |
| 30-34 | 1,587 | 1,546 | 15.0 | 97.4 |
| 25-39 | 1,056 | 1,036 | 10.1 | 98.1 |
| 40-44 | 837 | 815 | 7.9 | 97.3 |
| 45-49 | 771 | 756 | 7.3 | 97.9 |
| 50-54 | 696 | na | na | na |
| 15-49 | 10,578 | 10,284 | 100.0 | 97.2 |
| Age group | Household population of men age | Interviewed men age 15-49 |  | Percent of men |
|  | 10-54 | Number | Percent |  |
| 10-14 | 1,038 | na | na | na |
| 15-19 | 681 | 631 | 24.1 | 92.6 |
| 20-24 | 539 | 488 | 18.6 | 90.5 |
| 25-29 | 441 | 404 | 15.4 | 91.6 |
| 30-34 | 423 | 389 | 14.8 | 91.9 |
| 25-39 | 313 | 290 | 11.0 | 92.5 |
| 40-44 | 276 | 247 | 9.4 | 89.4 |
| 45-49 | 187 | 172 | 6.6 | 92.1 |
| 50-54 | 167 | na | na | na |
| 15-49 | 2,860 | 2,620 | 100.0 | 91.6 |

Note: The de facto population includes all residents and nonresidents who stayed in the household the night before the interview. Weights for both household population of women and men and interviewed women and men are household weights. Age is based on the household schedule.
na $=$ Not applicable

| Table C. 3 Completeness of reporting |  |  |  |
| :---: | :---: | :---: | :---: |
| Percentage of observations missing information for selected demographic and health questions (weighted), Tanzania 2004-05 |  |  |  |
| Subject | Reference group | Percentage with missing information | Number of cases |
| Birth date | Births in the 15 years preceding the survey |  |  |
| Month only |  | 1.61 | 21,911 |
| Month and year |  | 0.00 | 21,911 |
| Age at death | Deceased children born in the 15 years preceding the survey | 0.11 | 2,871 |
| Age/date at first union ${ }^{1}$ | Ever-married women age 15-49 | 0.08 | 7,958 |
| Respondent's education | All women age 15-49 | 0.00 | 10,329 |
| Diarrhoea in past 2 weeks | Living children age 0-59 months | 3.61 | 7,976 |
| Anthropometry - children | All de facto living children age 0-59 months |  |  |
| Height |  | 1.81 | 8,357 |
| Weight |  | 0.43 | 8,357 |
| Height or weight |  | 1.86 | 8,357 |
| Anthropometry - women | All de facto women age 15-49 |  |  |
| Height |  | 3.13 | 10,578 |
| Weight |  | 3.07 | 10,578 |
| Height or weight |  | 3.20 | 10,578 |
| Anaemia |  |  |  |
| Children | All de facto living children 6-59 months | 2.73 | 7,505 |
| Women | All de facto women age 15-49 | 4.18 | 10,578 |
| ${ }^{1}$ Both year and age missing |  |  |  |


| Table C. 4 B | hs by ca | dar yea |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number of dead (D), an | rths, per total (T) | tage with ildren ( | complete ghted), T | irth date, zania 2 | $\begin{aligned} & \text { sex rati } \\ & 34-05 \end{aligned}$ | birth, | calend | year ratio | by cale | ar year | cording | living (L), |
| Calendar |  | mber of bir |  | Perc | age with birth d | mplete | S | ratio at |  |  | dar ye | $\mathrm{tio}^{3}$ |
| year | L | D | T | L | D | T | L | D | T | L | D | T |
| 2005 | 32 | 2 | 33 | 100.0 | 100.0 | 100.0 | 61.8 | na | 69.6 | na | na | na |
| 2004 | 1,691 | 73 | 1,764 | 100.0 | 100.0 | 100.0 | 94.7 | 139.4 | 96.2 | na | na | na |
| 2003 | 1,669 | 138 | 1,806 | 100.0 | 100.0 | 100.0 | 103.0 | 121.0 | 104.2 | 102.0 | 126.2 | 103.5 |
| 2002 | 1,580 | 145 | 1,725 | 100.0 | 99.4 | 100.0 | 92.4 | 109.1 | 93.7 | 97.9 | 96.6 | 97.8 |
| 2001 | 1,560 | 163 | 1,722 | 100.0 | 100.0 | 100.0 | 105.7 | 112.6 | 106.3 | 103.0 | 87.2 | 101.3 |
| 2000 | 1,447 | 228 | 1,675 | 100.0 | 100.0 | 100.0 | 106.8 | 100.1 | 105.9 | 99.8 | 154.6 | 104.9 |
| 1999 | 1,341 | 132 | 1,473 | 100.0 | 100.0 | 100.0 | 111.2 | 112.8 | 111.3 | 98.2 | 52.5 | 91.1 |
| 1998 | 1,283 | 275 | 1,559 | 97.8 | 91.9 | 96.8 | 106.5 | 108.4 | 106.9 | 97.9 | 139.9 | 103.4 |
| 1997 | 1,281 | 262 | 1,542 | 97.8 | 92.6 | 97.0 | 100.6 | 120.4 | 103.7 | 103.4 | 107.3 | 104.0 |
| 1996 | 1,195 | 212 | 1,407 | 97.6 | 94.8 | 97.2 | 93.2 | 85.4 | 92.0 | 99.4 | 86.4 | 97.2 |
| 2001-2005 | 6,531 | 520 | 7,051 | 100.0 | 99.8 | 100.0 | 98.5 | 117.9 | 99.8 | na | na | na |
| 1996-2000 | 6,548 | 1,109 | 7,657 | 98.7 | 95.3 | 98.2 | 103.8 | 104.9 | 103.9 | na | na | na |
| 1991-1995 | 5,072 | 1,028 | 6,100 | 98.1 | 91.7 | 97.0 | 103.7 | 108.9 | 104.6 | na | na | na |
| 1986-1990 | 3,621 | 817 | 4,438 | 97.4 | 92.7 | 96.5 | 100.9 | 98.0 | 100.4 | na | na | na |
| < 1986 | 3,775 | 1,055 | 4,830 | 96.2 | 92.6 | 95.4 | 101.4 | 106.0 | 102.4 | na | na | na |
| All | 25,547 | 4,529 | 30,076 | 98.4 | 93.9 | 97.7 | 101.6 | 106.2 | 102.3 | na | na | na |
| na $=$ Not applicable |  |  |  |  |  |  |  |  |  |  |  |  |
| ${ }^{1}$ Both year and month of birth given |  |  |  |  |  |  |  |  |  |  |  |  |
| ${ }^{2}(\mathrm{Bm} / \mathrm{Bf}) \times 100$, where Bm and Bf are the numbers of male and female births, respectively |  |  |  |  |  |  |  |  |  |  |  |  |

## Table C. 5 Reporting of age at death in days

Distribution of reported deaths under one month of age by age at death in days and the percentage of neonatal deaths reported to occur at ages 0-6 days, for five-year periods of birth preceding the survey (weighted), Tanzania 2004-05

| Age at death <br> (days) | Number of years preceding the survey |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
|  | $5-9$ | $10-14$ | $15-19$ | Total 0-19 |  |
| 1 | 103 | 86 | 51 | 45 | 285 |
| 2 | 49 | 32 | 43 | 25 | 148 |
| 3 | 27 | 26 | 19 | 8 | 80 |
| 4 | 14 | 30 | 14 | 11 | 69 |
| 5 | 8 | 9 | 5 | 1 | 23 |
| 6 | 1 | 6 | 4 | 4 | 15 |
| 7 | 6 | 6 | 7 | 2 | 21 |
| 8 | 17 | 25 | 22 | 20 | 85 |
| 9 | 5 | 2 | 1 | 1 | 9 |
| 10 | 2 | 1 | 2 | 3 | 7 |
| 12 | 2 | 1 | 2 | 0 | 4 |
| 13 | 0 | 3 | 0 | 0 | 3 |
| 14 | 1 | 0 | 0 | 0 | 1 |
| 15 | 26 | 18 | 17 | 10 | 70 |
| 16 | 2 | 1 | 0 | 4 | 6 |
| 17 | 0 | 0 | 0 | 1 | 1 |
| 20 | 0 | 1 | 0 | 0 | 1 |
| 21 | 0 | 0 | 6 | 0 | 6 |
| 22 | 9 | 9 | 7 | 6 | 31 |
| 24 | 1 | 0 | 0 | 1 | 2 |
| 25 | 2 | 0 | 0 | 0 | 2 |
| 26 | 0 | 1 | 0 | 0 | 2 |
| 27 | 0 | 1 | 0 | 0 | 2 |
| 28 | 0 | 0 | 1 | 0 | 1 |
| 29 | 5 | 5 | 0 | 0 | 9 |
| 30 | 0 | 2 | 1 | 0 | 2 |
| $31+$ | 6 | 4 | 3 | 5 | 18 |
| Total 0-30 | 0 | 3 | 1 | 0 | 4 |
| Percent early neonatal ${ }^{1}$ | 72.7 | 72.9 | 70.2 | 65.2 | 70.9 |

${ }^{1} 0-6$ days / 0-30 days

## Table C. 6 Reporting of age at death in months

Distribution of reported deaths under two years of age by age at death in months and the percentage of infant deaths reported to occur at age under one month, for fiveyear periods of birth preceding the survey, Tanzania 2004-05

| Age at death | Number of years preceding the survey |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| (months) | $0-4$ | $5-9$ | $10-14$ | $15-19$ | Total 0-19 |
| $<^{\text {a }}$ | 286 | 267 | 203 | 149 | 905 |
| 1 | 31 | 35 | 41 | 28 | 136 |
| 2 | 30 | 65 | 49 | 24 | 168 |
| 3 | 32 | 56 | 49 | 31 | 168 |
| 4 | 23 | 43 | 23 | 27 | 116 |
| 5 | 29 | 33 | 24 | 16 | 102 |
| 6 | 38 | 53 | 45 | 38 | 173 |
| 7 | 21 | 38 | 31 | 17 | 107 |
| 8 | 27 | 44 | 27 | 10 | 108 |
| 9 | 21 | 33 | 43 | 19 | 115 |
| 10 | 17 | 15 | 17 | 4 | 53 |
| 11 | 4 | 17 | 10 | 12 | 42 |
| 12 | 28 | 71 | 47 | 29 | 175 |
| 13 | 12 | 7 | 11 | 7 | 36 |
| 14 | 16 | 11 | 11 | 9 | 47 |
| 15 | 9 | 14 | 9 | 4 | 36 |
| 16 | 1 | 6 | 6 | 2 | 14 |
| 17 | 3 | 8 | 11 | 2 | 25 |
| 18 | 13 | 26 | 29 | 10 | 79 |
| 19 | 3 | 5 | 2 | 6 | 15 |
| 20 | 8 | 7 | 11 | 4 | 30 |
| 21 | 1 | 4 | 2 | 2 | 9 |
| 22 | 1 | 1 | 0 | 0 | 2 |
| 23 | 3 | 1 | 2 | 0 | 6 |
| $24+$ | 2 | 3 | 2 | 4 | 11 |
| 1 year | 9 | 23 | 11 | 17 | 60 |
| Percent neonatal ${ }^{1}$ | 51.3 | 38.1 | 36.2 | 39.8 | 41.3 |
|  |  |  |  |  |  |

[^10]
# PERSONS INVOLVED IN THE 2004-05 TANZANIA DEMOGRAPHIC AND HEALTH SURVEY 

# TDHS HEAD OFFICE STAFF 

Project Coordinator<br>Said M. Aboud

Desk Officer
Mlemba Abassy Kamwe
Trainers
Said M. Aboud
Emilian N. Karugendo
Fred E. Matola
Mlemba Abassy Kamwe

Renatus M. Kitwenga

Mr. Laurent Msele
Radegunda Maro

## Task Force

Abrahman A. Kaimu, Director, Population and Social Statistics Directorate-NBS
Said M. Aboud, Manager, Social and Demographic Statistics Department
J.J. Rubona, Head HIMS, Ministry of Health

Mlemba Abassy Kamwe-Statistician, NBS
Albina Chuwa-Prinicipal -Statistician NBS
Mayasa M. Mwinyi, Statistician-OCGS
Rashid K. Khamis, Ministry of Health-Zanzibar
Dr. Catherine Sanga, Programe Manager RCHS, Ministry of Health
Dr. Elias M. Kwesi, Ministry of Health
Dr. Cyprian Mpemba, RCHS, Ministry of Health
Clement Kihinga, RCHS, Ministry of Health

Said M Aboud
Mlemba Abassy Kamwe
Emilian N. Karugendo
Albina Chuwa
Mbwana O. Mbwana

## Authors

Dr. Cyprian Mpemba
Dr. Elias M. Kwesi
J. J. Rubona

Omari Abdallah

# Data Processing Staff 

## Supervisors

Novart Buberwa
William D. Mabusi

Questionnaire Administrator
Vitalis Simon

Secondary Editor
Mlemba Abassy Kamwe
Office Editors
Amon Komba
Sufian Said
Ally Hiba

## Data Entry Operators

Akida Mpamba<br>Adventina Kahesi<br>Rehema Ramadhani<br>Mercy Nanyangwe<br>Moshi Mndanga

Regina J. Ntandu
Saumu A. Kamwe
Reinfrida Chidengi
Iman Karugendo
Juma Lulida

## DATA COLLECTION TEAMS

Fred E. Matola (Supervisor)
Saumu Saidi (Editor)
Elizabeth Massi (Female Interviewer)
Felista Mapunda (Female Interviewer)

## Dar es Salaam

Fatuma Mchome (Female Interviewer)
Zania Ngongi (Female Interviewer)
Phillo Hyera (Male Interviewer)

## Pwani/Morogoro

Moses M. Kahero (Supervisor)
Edith Kijazi (Editor)
Anna Temu (Female Interviewer)
Mary S. Nchimbi (Female Interviewer)
Jacqueline Kimaro (Female Interviewer)
Subira Hussein (Female Interviewer)
Otto Mushi (Male Interviewer)

## Kilimanajaro/Tanga

Neema Cornelio (Supervisor)
Yohana Sehaba (Editor)
Roster Lymo (Female Interviewer)
Grace Chitema (Female Interviewer)
Ernest. E. Mshana (Supervisor)
Hamida Mvunta (Editor)
Restituta Marmo (Female Interviewer)
Theopista Ngalason (Female Interviewer)

## Arusha/Manyara

Fatina Rashid (Female Interviewer)
Nicholous Moshi (Male Interviewer)

Mwanza/Kagera
Joseph Meela (Supervisor)
Scholastica Balige (Editor)
Elizabeth Sangawe (Female Interviewer)
Labbi Magesse (Female Interviewer)
Mercy A. Mamuya (Female Interviewer)
Venossa Haule (Female Interviewer)
Cosmas A. Mwacha (Male Interviewer)

Magdalena Mutayoba (Female Interviewer)
Salama Nzore Haule (Female Interviewer)
Caezar Muchunguzi (Male Interviewer)

## Mara/Shinyanga

Christina Kopwe (Female Interviewer)
Dora Mutasa (Female Interviewer)
Geaz Moyo (Male Interviewer)

## Kigoma/Tabora

Hyasinta Makono (Female Interviewer)
Filigona Bilango (Female Interviewer)
Mathias Malinda (Male Interviewer)

## Dodoma/Singida

William H. Matee (Supervisor)
Monica Masawe (Editor)
Rhobi Kenyunko (Female Interviewer)
Margaret Maki (Female Interviewer)
Zainab Mdimi (Female Interviewer)
Joyce Mjema (Female Interviewer)
Nuru Almasi (Male Interviewer)

## Mbeya/Rukwa

Sylvester Michael (Supervisor)
Eusbasius Mwinuka (Editor)
Juliana Tagalile (Female Interviewer)
Beauty M. Lwesya (Female Interviewer)

Grace Makanta (Female Interviewer)
Anna Komba (Female Interviewer)
Ressy Mashulano (Male Interviewer)

## Iringa/Ruvuma

Godfrey T. Mjatta (Supervisor)
Student Magoma (Editor)
Mary Chambo (Female Interviewer)
Elizabeth Hamisi (Female Interviewer)

Philimon Mwenda (Supervisor)
Anna Ngaiwa (Editor)
Elizabeth Mpanda (Female Interviewer)
Mary Mkama (Female Interviewer)

## Mtwara/Lindi

Tumaile S. Mkwenya (Female Interviewer) Margaret Luhundila (Female Interviewer)
Kelvin Mnali (Male Interviewer)

## Unguja Team 1

Jokha Abdulla (Female Interviewer) Mgeni Mahfoudh (Female Interviewer) Abdulrauf Ramadhani (Male Interviewer)

## Unguja Team 2

Khadija Ali Juma (Female Interviewer)
Mwanakheir Issa (Female Interviewer)
Abdulwahab J. Mohamed (Male Interviewer)

## Pemba

Fatma K. Issa (Female Interviewer)
Fatma S. Ali (Female Interviewer)
Mjaka Z. Kombo (Male Interviewer)
Omari S. Salahi (Supervisor)
Said M. Said (Editor)
Asha Ali Abdi (Female Interviewer)

Zabura M. Juma (Female Interviewer)

## Quality Control Supervisors

Said M. Aboud<br>Radegunda Maro

Devotha Kanani
Fatma Bwanga

Abdallah Maumba
Hassan Mateka
Simon Milanzi
Michael Madembwe
Ahmed Ngao

Mlemba Abassy Kamwe
Emilian N. Karugendo
Quality Control Interviewers
Margaret M. Mtokambali
Beatrice Justine

## Drivers

Joseph Waya
(Unguja1)
(Unguja2)
(Pemba)

## LISTING STAFF

William H. Matee<br>Moses Kahero<br>Neema Cornelio<br>Ernest E. Mshana<br>Francis Changarawe<br>Fabian J. Fundi<br>Omari M. Kafumu

Ally Walle
Jacob G. Masanja
Clarence Joseph
Musa Malenda
Andrew Madembwe
Nickson Pantaleo
Patrick C. Mkai
Amon Komba
Casto Magome
Mbonea Mrango
Andrew Malekela
Ramadhan Mwangia

## Supervisors

James Mwangoka
Sylvester Michael
Godfrey Majatta
Philimon Mwenda
Mayasa M. Mwinyi
Khadija K. Hamad
Omar S. Salahi

## Listers

Muhidin J. Shangwe
Rahel Philipo
Edwin Nestroy
Cosmas Chinunje
Mkamba Ally
Vestina Benedict
Richard Ntakwizile
Idi Mlekwa
Mwanahawa Abdallah
Ismail Mwinshashi
Shaban Ngwilizi
Mahmoud Omary

## ORC MACRO STAFF

Holly Newby
Anne Cross
Ladys Ortiz
Alfredo Aliaga
Laurie Liskin
Erica Nybro
Sidney Moore
Kaye Mitchell

Joy Fishel
Stephanie Gorin
Sushil Kumar
Kiersten Johnson
Jeremiah M. Sullivan
Albert Themme
John Chang
UNITED REPUBLIC OF TANZANIA
TANZANIA DEMOGRAPHIC AND HEALTH SURVEY 2004
NATIONAL BUREAU OF STATISTICS
HOUSEHOLD QUESTIONNAIRE

Last modified: August 3, 2004
CONFIDENTIAL




HOUSEHOLD SCHEDULE
Now we would like some information about the people who usually live in your household or who are staying with you now.

| LINE NO. | USUAL RESIDENTS AND VISITORS | RELATIONSHIP TO HEAD OF HOUSEHOLD | SEX | RESIDENCE |  | AGE | ELIGIBILITY |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 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. | What is the relationship of (NAME) to the head of the household?* | Is <br> (NAME) male or female? | Does <br> (NAME) usually live here? | Did <br> (NAME) <br> stay here last night? | How old is (NAME)? | CIRCLE <br> LINE <br> NUMBER <br> OF ALL <br> WOMEN <br> AGE <br> 15-49 | CIRCLE <br> LINE <br> NUMBER <br> OF ALL <br> MEN <br> AGE <br> 15-49 | CIRCLE <br> LINE <br> NUMBER <br> OF ALL <br> CHILD- <br> REN <br> UNDER <br> AGE 6 |
| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (8a) | (9) |
| 01 |  |  | $\begin{array}{ll} M & F \\ 1 & 2 \end{array}$ | $\begin{array}{cc} \text { YES } & \text { NO } \\ 1 & 2 \end{array}$ | YES NO $12$ | IN YEARS | 01 | 01 | 01 |
| 02 |  |  | 12 | 12 | 12 |  | 02 | 02 | 02 |
| 03 |  |  | 12 | 12 | 12 |  | 03 | 03 | 03 |
| 04 |  |  | 12 | 12 | 12 | $\qquad$ | 04 | 04 | 04 |
| 05 |  |  | 12 | 12 | 12 |  | 05 | 05 | 05 |
| 06 |  |  | 12 | 12 | 12 | $1$ | 06 | 06 | 06 |
| 07 |  |  | 12 | 12 | 12 | $\square$ | 07 | 07 | 07 |
| 08 |  |  | 12 | 12 | 12 |  | 08 | 08 | 08 |
| 09 |  |  | 12 | 12 | 12 | $\qquad$ | 09 | 09 | 09 |
| 10 |  |  | 12 | 12 | 12 |  | 10 | 10 | 10 |

* CODES FOR Q. 3

RELATIONSHIP TO HEAD OF
HOUSEHOLD:
01 = HEAD
$07=$ PARENT-IN-LAW
$08=$ BROTHER OR SISTER
$09=$ CO-WIFE
$10=$ OTHER RELATIVE
$11=$ ADOPTED/FOSTER/STEPCHILD
$12=$ NOT RELATED
98

OR HUSBAND
03 = SON OR DAUGHTER
$04=$ SON-IN-LAW OR DAUGHTER-IN-LAW
$05=$ GRANDCHILD
$06=$ PARENT



| $\begin{array}{\|l\|l\|} \hline \text { LINE } \\ \text { No. } \end{array}$ | PARENTAL SURVIVORSHIP AND RESIDENCE FOR PERSONS LESS THAN 18 YEARS OLD** |  |  |  | EDUCATION |  |  |  |  |  |  | EMPLOYMENT |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Is <br> (NAME)'s natural mother alive? | IF ALIVE | Is (NAME)'s natural father alive? | IF ALIVE | IF AGE 5 YEARS OR OLDER |  | IF AGE 5-24 YEARS |  |  |  |  | IF AGE 5 YEARS OR OLDER |
|  |  | Does (NAME)'s natural mother live in this household? IF YES: What is her name? RECORD MOTHER'S LINE NUMBER |  | Does (NAME)'s natural father live in this household? IF YES: What is his name? RECORD FATHER'S LINE NUMBER | 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?**^ | Is (NAME) currently attending school? | During the academic year that started in 2004, did (NAME) attend school at any time? | During the current school year, what level and grade [is/was] (NAME) attending?*** | During the academic year that started in 2003, did (NAME) attend school at any time? | During that school year, what level and grade did (NAME) attend?*** | During the last 12 months what was (NAME)'s main activity?**** |
|  | (10) | (11) | (12) | (13) | (14) | (15) | (16) | (17) | (18) | (19) | (20) | (20A) |
| 11 | $\begin{array}{ccc} \mathrm{Y} & \mathrm{~N} & \mathrm{DK} \\ & & \\ 1 & 2 & 8 \\ & \downarrow & \downarrow \\ & 12 & 12 \end{array}$ | $1$ | $\begin{array}{lll} Y & N & D K \\ 1 & & \\ 1 & 2 & 8 \\ & \downarrow & \downarrow \\ & 14 & 14 \end{array}$ |  | YES NO |  | $\left\|\begin{array}{cr} \text { YES } & \text { NO } \\ 1 & 2 \\ \downarrow & \\ \text { GO TO } 18 \end{array}\right\|$ | $\left\|\begin{array}{ll} \text { YES } & \text { NO } \\ 1 & 2 \\ & \downarrow \\ \text { GO TO } & 19 \end{array}\right\|$ |  | $\left\|\begin{array}{rr} \text { YES } & \text { NO } \\ & \\ 1 & 2 \\ & \downarrow \\ & 20 \mathrm{~A} \end{array}\right\|$ |  | ACTIVITY |
| 12 | $\begin{array}{lll} 1 & 2 & 8 \\ & \downarrow & \downarrow \\ & 12 & 12 \end{array}$ |  | $\begin{array}{lll} 1 & 2 & 8 \\ & \downarrow & \downarrow \\ & 14 & 14 \end{array}$ | $\ldots$ |  | $\square$ | $\left\|\begin{array}{ll} 1 & 2 \\ \downarrow & \\ \text { GO TO } 18 \end{array}\right\|$ | $\begin{array}{lr}1 & 2 \\ & \downarrow \\ \text { GO TO } & 19\end{array}$ |  | $\begin{array}{\|rr} 1 & 2 \\ & \downarrow \\ & \downarrow \\ & 20 \mathrm{~A} \end{array}$ |  |  |
| 13 | $\begin{array}{lll} 1 & 2 & 8 \\ & \downarrow & \downarrow \\ & 12 & 12 \end{array}$ | $1$ | $\begin{array}{lll} 1 & 2 & 8 \\ & \downarrow & \downarrow \\ & 14 & 14 \end{array}$ | $\ldots$ |  |  |  |  | $\sqrt{\square}$ | $\begin{array}{rr} 1 & 2 \\ & \downarrow \\ & 20 \mathrm{~A} \end{array}$ | $\square \square$ |  |
| 14 | $\begin{array}{lll} 1 & 2 & 8 \\ & \downarrow & \downarrow \\ & 12 & 12 \end{array}$ |  | $\begin{array}{lll} 1 & 2 & 8 \\ & \downarrow & \downarrow \\ & 14 & 14 \end{array}$ | $\ldots$ |  | $ـ$ | $\left\|\begin{array}{ll} 1 & 2 \\ \downarrow & \\ \text { GO TO } 18 \end{array}\right\|$ |  | $\square$ |  |  |  |
| 15 | $\begin{array}{lll} 1 & 2 & 8 \\ & \downarrow & \downarrow \\ & 12 & 12 \end{array}$ | $1$ | $\begin{array}{lll} 1 & 2 & 8 \\ & \downarrow & \downarrow \\ & 14 & 14 \end{array}$ | $1$ |  | $\pm$ |  |  | $\square$ | $\begin{array}{rr} 1 & 2 \\ & \downarrow \\ & 20 \mathrm{~A} \end{array}$ |  |  |
| 16 | $\begin{array}{lll} 1 & 2 & 8 \\ & \downarrow & \downarrow \\ & 12 & 12 \end{array}$ |  | $\begin{array}{lll} 1 & 2 & 8 \\ & \downarrow & \downarrow \\ & 14 & 14 \end{array}$ |  |  | $\square$ | $\left\lvert\, \begin{array}{ll} 1 & 2 \\ \downarrow & \\ \text { GO TO } 18 \end{array}\right.$ | $\left.\begin{array}{lr} 1 & 2 \\ & \downarrow \\ \text { GO TO } & 19 \end{array} \right\rvert\,$ |  |  |  | $\perp$ |
| 17 | $\begin{array}{lll} 1 & 2 & 8 \\ & \downarrow & \downarrow \\ & 12 & 12 \end{array}$ |  |  | $1$ |  | $\square$ |  |  |  | $\left.\begin{array}{\|rr} 1 & 2 \\ & \downarrow \\ & 20 \mathrm{~A} \end{array} \right\rvert\,$ |  |  |
| 18 | $\begin{array}{lll} 1 & 2 & 8 \\ & \downarrow & \downarrow \\ & 12 & 12 \end{array}$ |  | $\begin{array}{lll} 1 & 2 & 8 \\ & \downarrow & \downarrow \\ & 14 & 14 \end{array}$ |  |  | $\square .$ | $\left\lvert\, \begin{array}{ll} 1 & 2 \\ \downarrow & \\ \text { GO TO } 18 \end{array}\right.$ |  | $\pm$ | $\begin{array}{\|rr} 1 & 2 \\ & \downarrow \\ & 20 \mathrm{~A} \end{array}$ |  |  |
| 19 | $\begin{array}{lll} 1 & 2 & 8 \\ & \downarrow & \downarrow \\ & 12 & 12 \end{array}$ | $\qquad$ |  |  |  | $\square$ |  |  |  | $\begin{array}{\|rr\|} 1 & 2 \\ & \downarrow \\ & \vdots 0 \mathrm{~A} \end{array}$ |  |  |
| 20 | $\begin{array}{lll} 1 & 2 & 8 \\ & \downarrow & \downarrow \\ & & 12 \\ & 12 \end{array}$ |  | $\begin{array}{lll} 1 & 2 & 8 \\ & \downarrow & \downarrow \\ & 14 & 14 \\ & \end{array}$ | $1$ |  |  | $\left\lvert\, \begin{array}{ll} 1 & 2 \\ \downarrow & \\ \text { GO TO } 18 \end{array}\right.$ |  |  | $\begin{array}{\|rr} 1 & 2 \\ & \downarrow \\ & \vdots \\ & 20 \mathrm{~A} \end{array}$ |  | $\square$ |


| TICK HERE IF CONTINUATION SHEET USEC $\quad \square$ |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Just to make sure that I have a complete listing: |  |  |  |  |
| 1) | Are there any other persons such as small children or infants that we have not listed? | YES | ENTER EACH In table | NO |
|  | In addition, 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 | ENTER EACH In table | NO |
| 3) | Are there any guests or temporary visitors staying here, or anyone else who slept here last night, who have not been listed? | YES | ENTER EACH IN TABLE | NO |


| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 21 | What is the main source of drinking water for members of your household? |  | $\longrightarrow 23$ $\longrightarrow 23$ <br> $\longrightarrow 23$ <br> $\longrightarrow 23$ <br> $\longrightarrow 23$ <br> $\longrightarrow 23$ <br> $\longrightarrow 23$ <br> $\longrightarrow 23$ |
| 22 | How long does it take you to go there, get water, and come back? | MINUTES ON PREMISES |  |
| 23 | What kind of toilet facilities does your household have? |  | $\rightarrow 25$ |
| 24 | Do you share these facilities with other households? | $\begin{aligned} & \text { YES } \ldots \text {. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . } 1 \\ & \text { NO . . . . . . . . . . . . . . . . . . } \end{aligned}$ |  |
| 25 | Does your household have: <br> a) Electricity? <br> b) A paraffin lamp? <br> c) A radio? <br> d) A television? <br> e) A telephone/mobile? <br> f) An iron (either charcoal or electric)? <br> g) A refrigerator? |  |  |
| 26 | What type of fuel does your household mainly use for cooking? |  |  |


| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 26A | What is the main source of energy for lighting in the household? |  |  |
| 27 | MAIN MATERIAL OF THE FLOOR. RECORD OBSERVATION. |  |  |
| 27A | WALL MATERIALS RECORD OBSERVATION. |  |  |
| 27B | ROOFING MATERIAL RECORD OBSERVATION. | GRASS/LEAVES/MUD $\ldots \ldots \ldots \ldots$ 01 <br> IRON SHEETS $\ldots \ldots \ldots \ldots \ldots \ldots$ 02 <br> TILES $\ldots \ldots \ldots \ldots \ldots \ldots$ 03 <br> CONCRETE $\ldots \ldots \ldots \ldots \ldots \ldots$ 04 <br> ASBESTOS $\ldots \ldots \ldots \ldots \ldots \ldots$  <br> OTHER $\ldots \ldots$  |  |
| 27C | How many rooms in your household are used for sleeping? <br> (INCLUDING ROOMS OUTSIDE THE MAIN DWELLING) | ROOMS ...... $\square$ |  |
| 28 | Does any member of your household own: <br> A bicycle? <br> A motorcycle or motor scooter? <br> A car or truck? <br> A bank account |  |  |
| 28A | How many acres of land for farming/grazing are owned by the household? <br> (PUT '0' IF NONE AND 9999.8 IF DOESN'T KNOW) | ARABLE LAND $\square$ <br> LAND FOR GRAZING <br> $\square$ |  |





CHECK COLUMNS (8) AND (9): RECORD THE LINE NUMBER, NAME AND AGE OF ALL WOMEN AGE 15-49 AND ALL CHILDREN UNDER AGE 6.


* FOR CHILDREN NOT INCLUDED IN ANY BIRTH HISTORY, ASK DAY, MONTH AND YEAR. FOR ALL OTHER CHILDREN, COPY MONTH AND YEAR FROM 215 IN MOTHER'S BIRTH HISTORY AND ASK DAY.


## * CONSENT STATEMENT

As part of this survey, we are studying anemia among women and children. Anemia is a serious health problem that results from poor nutrition. This survey will assist the government to develop programs to prevent and treat anemia.
We request that you (and all children born in 1999 or later) participate in the anemia testing part of this survey and give a few drops of blood from a finger. The test uses disposable sterile instruments that are clean and completely safe. The blood will be analyzed with new equipment and the results of the test will be given to you right after the blood is taken. The results will be kept confidential.
May I now ask that you (and NAME OF CHILD[REN]) participate in the anemia test. However, if you decide not to have the test done, it is your right and we will respect your decision. Now please tell me if you agree to have the test(s) done.

| HEMOGLOBIN MEASUREMENT OF WOMEN 15-49 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| CHECK COLUMN (38): | LINE NO. OF PARENT/ RESPONSIBLE ADULT. RECORD '00' IF NOT LISTED IN HOUSEHOLD SCHEDULE | READ CONSENT STATEMENT TO WOMAN/PARENT/RESPONSIBLE ADULT* <br> CIRCLE CODE (AND SIGN) | HEMOGLOBIN LEVEL (G/DL) | CURRENTLY PREGNANT | RESULT <br> 1 MEASURED <br> 2 NOT PRESENT <br> 3 REFUSED <br> 6 OTHER |
| (44) | (45) | (46) | (47) | (48) | (49) |
| $\begin{gathered} \text { AGE 15-17 AGE } 18-49 \\ 1 \\ \\ \\ \text { GO TO } 46 \text { _ } 46 \end{gathered}$ |  | GRANTED  <br> 1  <br> SIGN REFUSED |  | YES NO/DK <br> 1 <br> 2 |  |
| 1 GO TO 46 |  |  | $1$ | 12 |  |
| 1 GO TO 46 |  | 1 <br> SIGN $\qquad$ NEXT LINE $\stackrel{2}{ـ}$ | $\square$ | 12 | $\square$ |
| 1 GO TO 46 - |  | 1 <br> SIGN $\qquad$ NEXT LINE $\stackrel{2}{4}$ |  | 12 |  |
| 1 GO TO 46 - |  | 1 <br> SIGN $\qquad$ NEXT LINE $\stackrel{2}{4}$ |  | 12 | $\square$ |


| HEMOGLOBIN MEASUREMENT OF CHILDREN BORN IN 1999 OR LATER |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | LINE NO. OF PARENT/ RESPONSIBLE ADULT. RECORD '00' IF NOT LISTED IN HOUSEHOLD SCHEDULE | READ CONSENT STATEMENT TO WOMAN/PARENT/RESPONSIBLE ADULT* <br> CIRCLE CODE (AND SIGN) | HEMOGLOBIN LEVEL (G/DL) | RESULT <br> 1 MEASURED <br> 2 NOT PRESENT <br> 3 REFUSED <br> 6 OTHER |
|  |  | GRANTED  <br> 1  <br> SIGN REFUSED |  |  |
|  |  |  | . | $\pm$ |
|  |  | 1 SIGN $\qquad$ NEXT LINE $\stackrel{2}{4}$ |  | $\square$ |
|  |  |  | $\qquad$ |  |
|  |  |  |  | $1$ |
|  | $1$ |  |  | $\square$ |
|  |  | 1 1 NEXT LINE $\stackrel{2}{ـ}$ |  | $\downarrow$ |

Note: In countries where some enumeration areas are higher than 1,000 meters, altitude information should be collected on a separate form for each enumeration area higher than 1,000 meters so that the anemia estimates can be adjusted appropriately.


[^11]| IDENTIFICATION |  |  |  |
| :---: | :---: | :---: | :---: |
| REGION |  |  |  |
|  |  |  |  |
| DISTRICT |  |  |  |
| WARD |  |  |  |
| ENUMERATION AREA |  |  |  |
| NAME OF HEAD OF HOUSEHOLD |  |  |  |
| TDHS NUMBER |  |  |  |
| HOUSEHOLD NUMBER |  |  |  |
| LARGE CITY/SMALL CITY/TOWN/COUNTRYSIDE (LARGE CITY=1, SMALL CITY=2, TOWN=3, COUNTRYSIDE=4) |  |  |  |
| NAME AND LINE NUMBER OF WOMAN |  |  |  |
| LARGE CITIES ARE; DAR ES SALAAM AND MWANZA. SMALL CITIES ARE; ARUSHA, MOROGORO, DODOMA, MOSHI, TANGA, IRINGA MBEYA, SHINYANGA, TABORA, MIJINI MAGHARIBI - ZANZIBAR. ALL OTHER URBAN AREAS ARE TOWN |  |  |  |




## INFORMED CONSENT

Hello. My name is $\qquad$ and I am working with the National Burea of Statistics. We are conducting a national survey about the health of women and children. We would very much appreciate your participation in this survey. I would like to ask you about your health (and the health of your children). This information will help the government to plan health services. The survey usually does not take too much time. Whatever information you provide will be kept strictly confidential and will not be shown to other persons.

Participation in this survey is voluntary and you can choose not to answer any individual question or all of the questions. However, we hope that you will participate in this survey since your views are important.

At this time, do you want to ask me anything about the survey?
May I begin the interview now?


| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES |  | SKIP |
| :---: | :---: | :---: | :---: | :---: |
| 101 | RECORD THE TIME. | HOUR <br> MINUTES |   <br>   |  |
| 102 | First I would like to ask some questions about you and your household. For most of the time until you were 12 years old, did you live in a D'Salaam/Mwanza, Other urban area or in rural area? | DSM/MWANZA <br> OTHER URBAN AREA <br> RURAL AREA/VILLAGE | $\begin{array}{ll} \ldots & 1 \\ \ldots \ldots & 2 \\ \ldots \ldots . & 3 \end{array}$ |  |
| 103 | How long have you been living continuously in (NAME OF CURRENT PLACE OF RESIDENCE)? <br> IF LESS THAN ONE YEAR, RECORD '00' YEARS. | YEARS <br> ALWAYS <br> VISITOR |   <br>   <br> $\ldots$ 95 <br> $\ldots$. 96 | $\xrightarrow{\longrightarrow} 105$ |
| 104 | Just before you moved here, did you live in D'Salaam/Mwanza, Other urban area or in rural area? | DSM/MWANZA <br> OTHER URBAN AREA <br> RURAL AREA/VILLAGE | $\begin{array}{lll} \ldots & 1 \\ \ldots \ldots & 2 \\ \ldots \ldots . & 3 \end{array}$ |  |
| 105 | In what month and year were you born? | MONTH <br> DON'T KNOW MONTH <br> YEAR $\square$ <br> DON'T KNOW YEAR |   <br>   <br>   |  |
| 106 | How old are you in complete years? <br> COMPARE AND CORRECT 105 AND/OR 106 IF INCONSISTENT. | AGE IN COMPLETED YEARS |  |  |
| 107 | Have you ever attended school? | YES <br> NO | $\begin{array}{lll} \ldots & 1 \\ \ldots . . . & 2 \end{array}$ | $\longrightarrow 111$ |
| 108 | What is the highest level of school you attended: primary, secondary, or higher? | PREPRIMARY <br> PRIMARY <br> POST-PRIMARY TRAINING <br> SECONDARY <br> POST-SECONDARY TRAINING UNIVERSITY |    <br> $\ldots \ldots$ 0  <br> $\ldots \ldots$ 1  <br> $\ldots \ldots$ 2  <br> $\ldots .$. 3  <br> $\ldots .$. 4  <br> $\ldots .$. 5  |  |
| 109 | What is the highest (standard/form/year) you completed at that level? | GRADE |  |  |


| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 110 | CHECK 108: SECONDARY OR HIGHER |  | $\rightarrow 114$ |
| 111 | Now I would like you to read this sentence to me. <br> SHOW CARD TO RESPONDENT. (2) <br> IF RESPONDENT CANNOT READ WHOLE SENTENCE, PROBE: <br> Can you read any part of the sentence to me? |  |  |
| 112 | Have you ever participated in a literacy program or any other program that involves learning to read or write (not including primary school)? | YES . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 2 |  |
| 113 | CHECK 111: |  | $\rightarrow 115$ |
| 114 | Do you read a newspaper or magazine almost every day, at least once a week, less than once a week or not at all? |  |  |
| 115 | Do you listen to the radio almost every day, at least once a week, less than once a week or not at all? |  |  |
| 116 | Do you watch television almost every day, at least once a week, less than once a week or not at all? |  |  |
| 117 | In the last 12 months, on how many separate occasions have you traveled away from your home community and slept away? | NUMBER OF TRIPS <br> NONE <br> 00 | $\longrightarrow 119$ |
| 118 | In the last 12 months, have you been away from your home community for more than one month at a time? |  |  |
| 119 | What is your religion? |  |  |

[^12]```
PARENTS LOVE THEIR CHILDREN.
FARMING IS HARD WORK.
THE CHILD IS READING A BOOK.
CHILDREN WORK HARD AT SCHOOL
Cards should be prepared for every language in which respondents are likely to be literate.
```

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? |  | $\longrightarrow 206$ |
| 202 | Do you have any sons or daughters to whom you have given birth who are now living with you? |  | $\longrightarrow 204$ |
| 203 | How many sons live with you? <br> And how many daughters live with you? <br> IF NONE, RECORD '00'. | SONS AT HOME 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 . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 2 | $\longrightarrow 206$ |
| 205 | How many sons are alive but do not live with you? <br> And how many daughters are alive but do not live with you? <br> IF NONE, RECORD '00'. | SONS ELSEWHERE DAUGHTERS ELSEWHERE |  |
| 206 | Have you ever given birth to a boy or girl who was born alive but later died? <br> IF NO, PROBE: Any baby who cried or showed signs of life but did not survive? | YES . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 2 | $\longrightarrow 208$ |
| 207 | How many boys have died? <br> And how many girls have died? <br> IF NONE, RECORD '00'. | BOYS DEAD <br> GIRLS DEAD |  |
| 208 | SUM ANSWERS TO 203, 205, AND 207, AND ENTER TOTAL. IF NONE, RECORD '00'. | TOTAL |  |
| 209 | CHECK 208: <br> Just to make sure that I have this right: you have had in TOTAL $\qquad$ births during your life. Is that correct? <br> PROBE AND <br> YES CORRECT <br> 201-208 AS <br> NECESSARY. |  |  |
| 210 | CHECK 208: |  | $\rightarrow 226$ |

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 LINES.

| $212$ | 213 |  |  |  |  | $217$ <br> IF ALIVE: | $\begin{aligned} & 218 \\ & \text { IF ALIVE: } \end{aligned}$ | $\begin{aligned} & 219 \\ & \text { IF ALIVE: } \end{aligned}$ | $220$ <br> IF DEAD: | $221$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| What name was given to your (first/next) baby? <br> (NAME) | Were any of these births twins? |  | Is <br> (NAME) <br> a boy or <br> a girl? | In what m and year (NAME) b <br> PROBE: <br> What is hi birthday? | Is <br> (NAME) <br> still <br> alive? | How old was (NAME) at his/her last birthday? <br> RECORD AGE IN COM- <br> PLETED YEARS. | Is (NAME) living with you? | RECORD HOUSEhOLD LINE NUMBER OF CHILD (RECORD '00' IF CHILD NOT LISTED IN HOUSEHOLD). | How old was when he/she <br> IF '1 YR', PR How many m was (NAME)? RECORD DA LESS THAN MONTH; MO LESS THAN YEARS; OR | Were there any other live births between (NAME OF PREVIOUS BIRTH) and (NAME)? |
| 01 | SING <br> MULT | 1 2 | $\begin{array}{ll} \text { BOY } & 1 \\ \text { GIRL } & 2 \end{array}$ |  | YES . . 1 <br> NO . . . 2 <br> 220 | AGE IN YEARS | $\begin{aligned} & \text { YES } \ldots 1 \\ & \text { NO . . . . } 2 \end{aligned}$ | LINE NUMBER <br> (NEXT BIRTH) | DAYS . . . 1 <br> MONTHS 2 <br> YEARS . . 3 |  |
| 02 | SING <br> MULT | 1 2 |  |  | YES . . 1 <br> NO . . . 2 <br> 220 | AGE IN YEARS | $\begin{aligned} & \text { YES . . } 1 \\ & \text { NO . . . } 2 \end{aligned}$ | LINE NUMBER | DAYS ... 1 <br> MONTHS 2 <br> YEARS . . 3 | $\begin{aligned} & \text { YES . . . . } 1 \\ & \text { NO . . . . . } 2 \end{aligned}$ |
| 03 | SING <br> MULT | 2 |  |  | YES . . 1 <br> NO . . . 2 <br> 220 | AGE IN YEARS | $\begin{aligned} & \text { YES . . } 1 \\ & \text { NO . . . } 2 \end{aligned}$ | LINE NUMBER | DAYS ... 1 <br> MONTHS 2 <br> YEARS . . 3 | $\begin{aligned} & \text { YES . . . . } 1 \\ & \text { NO . . . . . } 2 \end{aligned}$ |
| 04 | SING <br> MULT | 1 2 |  | MONTH <br> YEAR | YES . . 1 <br> NO . . . 2 <br> 220 | AGE IN YEARS | $\begin{aligned} & \text { YES . . } 1 \\ & \text { NO . . . } 2 \end{aligned}$ | LINE NUMBER | DAYS ... 1 <br> MONTHS 2 <br> YEARS . . 3 | $\begin{aligned} & \text { YES . . . . } 1 \\ & \text { NO . . . . . } 2 \end{aligned}$ |
| 05 | SING <br> MULT | 1 2 | $\begin{array}{ll} \text { BOY } & 1 \\ \text { GIRL } & 2 \end{array}$ |  | YES . . 1 <br> NO . . . 2 <br> 220 | AGE IN YEARS | $\begin{aligned} & \text { YES ... } 1 \\ & \text { NO . . . } 2 \end{aligned}$ | LINE NUMBER | DAYS ... 1 <br> MONTHS 2 <br> YEARS . . 3 | $\begin{aligned} & \text { YES . . . . } 1 \\ & \text { NO . . . . . } 2 \end{aligned}$ |
| 06 | SING <br> MULT | 2 |  |  | YES . . 1 <br> NO . . . 2 <br> 220 | AGE IN YEARS | $\begin{aligned} & \text { YES . . } 1 \\ & \text { NO . . . } 2 \end{aligned}$ | LINE NUMBER | DAYS ... 1 <br> MONTHS 2 <br> YEARS . . 3 | $\begin{aligned} & \text { YES . . . . } 1 \\ & \text { NO . . . . . } 2 \end{aligned}$ |
| 07 | SING <br> MULT | 2 |  | MONTHYEAR  | $\begin{array}{r} \text { YES . . } 1 \\ \\ \text { NO . . } 2 \\ \downarrow \\ \downarrow \\ 220 \end{array}$ | AGE IN YEARS | $\begin{aligned} & \text { YES . . } 1 \\ & \text { NO . . . } 2 \end{aligned}$ | LINE NUMBER (GO TO 221) | DAYS ... 1 <br> MONTHS 2 <br> YEARS . . 3 | $\begin{aligned} & \text { YES . . . . } 1 \\ & \text { NO . . . . . } 2 \end{aligned}$ |



IF MORE THAN 12 LIVE BIRTHS, GO TO CONTINUATION QUESTIONNAIRE.

| 222 | Have you had any live births since the birth of (NAME OF LAST BIRTH)? | YES NO |  |
| :---: | :---: | :---: | :---: |
| 223 | COMPARE 208 WITH NUMBER OF BIRTHS IN HISTORY ABOVE AND MARK: <br> NUMBERS <br> NUMBERS ARE ARE SAME ARE SAME <br> DIFFERENT <br> (PROBE AND RECONCILE) <br> CHECK: FOR EACH BIRTH: YEAR OF BIRTH IS RECORDED. <br> FOR EACH LIVING CHILD: CURRENT AGE IS RECORDED. <br> FOR EACH DEAD CHILD: AGE AT DEATH IS RECORDED. <br> FOR AGE AT DEATH 12 MONTHS OR 1 YEAR: PROBE TO DETERMINE EXACT NUMBER OF MONTHS. |  |  |
| 224 | CHECK 215 AND ENTER THE NUMBER OF BIRTHS IN 1999 OR IF NONE, RECORD ' 0 '. | ATER. |  |


| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES |  | SKIP |
| :---: | :---: | :---: | :---: | :---: |
| 225 | FOR EACH BIRTH SINCE JANUARY 1999, ENTER 'B' IN THE MO CALENDAR. FOR EACH BIRTH, ASK THE NUMBER OF MONTH 'P' IN EACH OF THE PRECEDING MONTHS ACCORDING TO TH NUMBER OF 'P's MUST BE ONE LESS THAN THE NUMBER OF WRITE THE NAME OF THE CHILD TO THE LEFT OF THE 'B' CO | OF BIRTH IN COLUMN 1 OF THE PREGNANCY LASTED AND REC RATION OF PREGNANCY. (NOTE THS THAT THE PREGNANCY LAS |  |  |
| 226 | Are you pregnant now? | YES <br> NO <br> UNSURE |  | $\xrightarrow{\longrightarrow} 229$ |
| 227 | How many months pregnant are you? <br> RECORD NUMBER OF COMPLETED MONTHS. ENTER 'P's IN COLUMN 1 OF CALENDAR, BEGINNING WITH THE MONTH OF INTERVIEW AND FOR THE TOTAL NUMBER OF COMPLETED MONTHS. | MONTHS |  |  |
| 228 | At the time you became pregnant did you want to become pregnant then, did you want to wait until later, or did you not want to have any (more) children at all? | THEN <br> LATER <br> NOT AT ALL |  |  |
| 229 | Have you ever had a pregnancy that miscarried, was aborted, or ended in a stillbirth? | $\begin{aligned} & \text { YES } \\ & \text { NO } \end{aligned}$ |  | $\longrightarrow 237$ |
| 230 | When did the last such pregnancy end? | MONTH <br> YEAR |  |  |
| 231 | CHECK 230: <br> LAST PREGNANCY <br> LAST PREGNANCY ENDED IN ENDED BEFORE JAN. 1999 OR LATER <br> JAN. 1999 |  |  | $\rightarrow 237$ |
| 232 | How many months pregnant were you when the last such pregnancy ended? <br> RECORD NUMBER OF COMPLETED MONTHS. ENTER 'T' IN COLUMN 1 OF CALENDAR IN THE MONTH THAT THE PREGNANCY TERMINATED AND 'P' FOR THE REMAINING NUMBER OF COMPLETED MONTHS. | MONTHS |  |  |
| 233 | Have you ever had any other pregnancies that did not result in a live birth? | $\begin{aligned} & \text { YES } \\ & \text { NO } \end{aligned}$ |  | $\longrightarrow 237$ |
| 234 | ASK THE DATE AND THE DURATION OF PREGNANCY FOR EA BACK TO JANUARY 1999. <br> ENTER 'T' IN COLUMN 1 OF CALENDAR IN THE MONTH THAT FOR THE REMAINING NUMBER OF COMPLETED MONTHS. | ARLIER NON-LIVE BIRTH PREGNAN <br> PREGNANCY TERMINATED AND 'P |  |  |
| 235 | Did you have any pregnancies that terminated before 1999 that did not result in a live birth? | $\begin{aligned} & \text { YES } \\ & \text { NO } \end{aligned}$ |  | $\longrightarrow 237$ |
| 236 | When did the last such pregnancy that terminated before 1999 end? | MONTH <br> YEAR |  |  |


| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 237 | When did your last menstrual period start? <br> (DATE, IF GIVEN) |  |  |
| 238 | From one menstrual period to the next, are there certain days when a woman is more likely to become pregnant if she has sexual relations? |  | $\longrightarrow 301$ |
| 239 | 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 <br> DURING HER PERIOD <br> RIGHT AFTER HER <br> PERIOD HAS ENDED <br> HALFWAY BETWEEN <br> TWO PERIODS <br> OTHER $\qquad$ (SPECIFY) |  |

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. CIRCLE CODE 1 IN 301 FOR EACH METHOD MENTIONED SPONTANEOUSLY. THEN PROCEED DOWN COLUMN 301, READING THE NAME AND DESCRIPTION OF EACH METHOD NOT MENTIONED SPONTANEOUSLY. CIRCLE CODE 1 IF METHOD IS RECOGNIZED, AND CODE 2 IF NOT RECOGNIZED. THEN, FOR EACH METHOD WITH CODE 1 CIRCLED IN 301, ASK 302.

| 301 | Which ways or methods have you heard about? FOR METHODS NOT MENTIONED SPONTANEOUSLY, ASK: Have you ever heard of (METHOD)? |  | 302 Have you ever used (METHOD)? |
| :---: | :---: | :---: | :---: |
| 01 | FEMALE STERILIZATION Women can have an operation to avoid having any more children. |  | Have you ever had an operation to avoid having any more children? |
| 02 | MALE STERILIZATION Men can have an operation to avoid having any more children. | $\begin{array}{lll} \text { YES } \ldots \ldots \ldots . . . . . & 1 \\ \text { NO } & \ldots . . . . . . . . . . . . . . . . ~ & 2 \end{array}$ | Have you ever had a partner who had an operation to avoid having any more children? |
| 03 | PILL Women can take a pill every day to avoid becoming pregnant. |  |  |
| 04 | IUD Women can have a loop or coil placed inside them by a doctor or a nurse. |  |  |
| 05 | INJECTABLES Women can have an injection by a health provider that stops them from becoming pregnant for three or more months. |  | YES $\ldots \ldots \ldots \ldots \ldots \ldots .$. 1 <br> NO $\ldots \ldots \ldots \ldots \ldots \ldots$. 2 |
| 06 | IMPLANTS Women can have several small rods placed in their upper arm by a doctor or nurse which can prevent pregnancy for one or more years. |  |  |
| 07 | CONDOM Men can put a rubber sheath on their penis before sexual intercourse. | $\begin{array}{lll} \text { YES } \ldots \ldots \ldots \ldots . . . & 1 \\ \text { NO } \ldots \ldots \ldots \ldots . . . & 2 \end{array}$ | YES $\ldots \ldots \ldots \ldots \ldots \ldots .$. 1 <br> NO $\ldots \ldots \ldots \ldots \ldots \ldots .$. 2 |
| 08 | FEMALE CONDOM Women can place a sheath in their vagina before sexual intercourse. |  |  |
| 09 | DIAPHRAGM Women can place a thin flexible disk in their vagina before intercourse. | $\begin{array}{lll} \hline \text { YES } \ldots \ldots \ldots \ldots \ldots & 1 \\ \text { NO } & \ldots \ldots \ldots \ldots \ldots & 2 \end{array}$ | YES $\ldots \ldots \ldots \ldots \ldots \ldots .$. 1 <br> NO $\ldots \ldots \ldots \ldots \ldots \ldots .$. 2 |
| 10 | FOAM OR JELLY Women can place a suppository, jelly, or cream in their vagina before sexual intercourse. | YES $\ldots \ldots . . . . . . .$. 1  <br> NO $\ldots . . . . . . . . . . . .$. 2 |  |
| 11 | LACTATIONAL AMENORRHEA METHOD (LAM) Up to 6 months after childbirth, a woman can use a method that requires that she breastfeeds frequently, day and night, and that her menstrual period has not returned. |  |  |
| 12 | RHYTHM OR PERIODIC ABSTINENCE Every month that a woman is sexually active she can avoid pregnancy by not having sexual intercourse on the days of the month she is most likely to get pregnant. |  |  |
| 13 | WITHDRAWAL Men can be careful and pull out before climax. |  |  |
| 14 | EMERGENCY CONTRACEPTION Women can take pills up to three days after sexual intercourse to avoid becoming pregnant and must take the pills every day for 5 days. |   <br> YES $\ldots \ldots \ldots . . . . . . . . . . . . . . . . . . . . . . . . ~$ 2 |  |
| 15 | Have you heard of any other ways or methods that women or men can use to avoid pregnancy? |  | YES $\ldots \ldots \ldots \ldots \ldots \ldots \ldots$ 1  <br> NO $\ldots \ldots \ldots \ldots \ldots \ldots \ldots$ 2 <br> YES $\ldots \ldots \ldots \ldots \ldots \ldots \ldots$ 1  <br> NO $\ldots \ldots \ldots \ldots \ldots \ldots$ 2  |
| 303 | CHECK 302: <br> NOT A SINGLE <br> AT LEAST ONE <br> "YES" "YES" <br> (NEVER USED) (EVER USED) |  | $\longrightarrow 307$ |


| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 304 | Have you ever used anything or tried in any way to delay or avoid getting pregnant? | YES . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . | $\longrightarrow 306$ |
| 305 | ENTER '0' IN COLUMN 1 OF CALENDAR IN EACH BLANK MONTH. |  | $\longrightarrow 329$ |
| 306 | What have you used or done? <br> CORRECT 302 AND 303 (AND 301 IF NECESSARY). |  |  |
| 307 | Now I would like to ask you about the first time that you did something or used a method to avoid getting pregnant. <br> How many living children did you have at that time, if any? <br> IF NONE, RECORD '00'. | NUMBER OF CHILDREN . . . . . |  |
| 308 | CHECK 302 (01): |  | $\rightarrow 311 \mathrm{~A}$ |
| 309 | CHECK 226: <br> NOT PREGNANT <br> PREGNANT OR UNSURE |  | $\rightarrow 318$ |
| 310 | Are you currently doing something or using any method to delay or avoid getting pregnant? | YES . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 2 | $\longrightarrow 318$ |
| 311 | Which method are you using? <br> IF MORE THAN ONE METHOD MENTIONED, FOLLOW SKIP INSTRUCTION FOR HIGHEST METHOD ON LIST. <br> CIRCLE 'A' FOR FEMALE STERILIZATION. |  | $[316 \mathrm{~A}$ |


| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 313 | In what facility did the sterilization take place? <br> IF SOURCE IS HOSPITAL, HEALTH CENTRE, OR CLINIC, WRITE THE NAME OF THE PLACE. PROBE TO IDENTIFY THE TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE. <br> (NAME OF PLACE) <br> IF BOTH CODE 'A' AND CODE 'B' ARE CIRCLED IN 311, ASK 313-317 ABOUT FEMALE STERILIZATION ONLY. | GOVERNMENT/PARASTATAL <br> REFERAL/SPEC. HOSPITAL <br> REGIONAL HOSPITAL <br> DISTRICT HOSPITAL <br> HEALTH CENTRE <br> DISPENSARY <br> RELIGIOUS/VOLUNTARY <br> REFERAL/SPEC. HOSPITAL <br> DISTRICT HOSPITAL <br> GOVT. HEALTH CENTRE <br> DISPENSARY <br> PRIVATE <br> DISTRICT HOSPITAL <br> HEALTH CENTRE DISPENSARY <br> OTHER |  |
| 314 | CHECK 311: | YES <br> NO <br> DON'T KNOW |  |
| 316 | In what month and year was the sterilization performed? <br> In what month and year did you start using (CURRENT METHOD) continuously? <br> PROBE: For how long have you been using (CURRENT METHOD) now without stopping? | MONTH <br> YEAR |  |
| 316B | CHECK 316/316A, 215 AND 230: <br> ANY BIRTH OR PREGNANCY TERMINATION AFTER MONTH AND YEAR OF START OF USE OF CONTRACEPTION IN 316/316A <br> GO BACK TO 316/316A, PROBE AND RECORD MONTH AND YEAR USE OF CURRENT METHOD (MUST BE AFTER LAST BIRTH OR P | YES <br> START OF CONTINUOUS GNANCY TERMINATION). |  |
| 317 | CHECK 316/316A: <br> YEAR IS 1999 OR LATER <br> ENTER CODE FOR METHOD USED IN MONTH OF INTERVIEW IN COLUMN 1 OF THE CALENDAR AND IN EACH MONTH BACK TO THE DATE STARTED USING. <br> ENTER METHOD SOURCE CODE IN COLUMN 2 OF CALENDAR IN MONTH STARTED USING. <br> THEN CONTINUE WITH 318 | EAR IS 1998 OR EARLIER <br> ER CODE FOR METHOD USED IN ERVIEW IN COLUMN 1 OF THE CAL H MONTH BACK TO JANUARY 1999 <br> N SKIP TO $\qquad$ |  |

\begin{tabular}{|c|c|c|c|}
\hline NO. \& QUESTIONS AND FILTERS \& CODING CATEGORIES \& SKIP \\
\hline 318 \& \begin{tabular}{l}
I would like to ask you some questions about the times you or your partn pregnant during the last few years. \\
USE CALENDAR TO PROBE FOR EARLIER PERIODS OF USE AND USE, BACK TO JANUARY 1999. \\
USE NAMES OF CHILDREN, DATES OF BIRTH, AND PERIODS OF PR \\
IN COLUMN 1, ENTER METHOD USE CODE OR '0' FOR NONUSE IN \\
ILLUSTRATIVE QUESTIONS: \\
COLUMN 1: * When was the last time you used a metho \\
* When did you start using that method? How \\
* How long did you use the method then? \\
IN COLUMN 2, ENTER METHOD SOURCE CODE IN FIRST MONTH \\
ILLUSTRATIVE QUESTIONS: \\
COLUMN 2: * Where did you obtain the method when you \\
* Where did you get advice on how to use \\
IN COLUMN 3, ENTER CODES FOR DISCONTINUATION IN LAST MO NUMBER OF CODES IN COLUMN 3 MUST BE SAME AS NUMBER O COLUMN 1. \\
ASK WHY SHE STOPPED USING THE METHOD. IF A PREGNANCY PREGNANT UNINTENTIONALLY WHILE USING THE METHOD OR D PREGNANT. \\
ILLUSTRATIVE QUESTIONS: \\
COLUMN 3: * Why did you stop using the (METHOD)? \\
* Did you become pregnant while using (ME you stop for some other reason? \\
IF DELIBERATELY STOPPED TO BECOME PREGNANT, ASK: \\
* How many months did it take you to get p AND ENTER '0' IN EACH SUCH MONTH
\end{tabular} \& \begin{tabular}{l}
r may have used a method to avoid getting \\
ONUSE, STARTING WITH MOST RECENT \\
EGNANCY AS REFERENCE POINTS. \\
EACH BLANK MONTH. \\
? Which method was that? \\
long after the birth of (NAME)? \\
EACH USE. \\
started using it? \\
method [for LAM, rhythm, or withdrawal] \\
NTH OF USE. \\
INTERRUPTIONS OF METHOD USE IN \\
OLLOWED, ASK WHETHER SHE BECAME LIBERATELY STOPPED TO GET \\
HOD), or did you stop to get pregnant, or did \\
gnant after you stopped using (METHOD)? N COLUMN 1.
\end{tabular} \& \\
\hline 321 \& \begin{tabular}{l}
CHECK 311/311A: \\
CIRCLE METHOD CODE: \\
IF MORE THAN ONE METHOD CODE CIRCLED IN 311/311A, CIRCLE CODE FOR HIGHEST METHOD IN LIST.
\end{tabular} \&  \& \(\longrightarrow 329\)
\(\longrightarrow 331\)

$\longrightarrow 328$
$\longrightarrow 325$
$\longrightarrow 325$
$\longrightarrow 325$
$\longrightarrow 325$
$\longrightarrow 331$
$\longrightarrow 331$ <br>

\hline 322 \& | You obtained (CURRENT METHOD) from (SOURCE OF METHOD FROM CALENDAR) in (DATE). |
| :--- |
| At that time, were you told about side effects or problems you might have with the method? | \& YES . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 2 \& $\longrightarrow 324$ <br>

\hline 323 \& Were you ever told by a health or family planning worker about side effects or problems you might have with the method? \&  \& $\longrightarrow 325$ <br>
\hline 324 \& Were you told what to do if you experienced side effects or problems? \& YES . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 2 \& <br>
\hline
\end{tabular}

| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 325 | CHECK 322: | YES . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 1 NO . . . . . . . . . . . . . . . . . | $\longrightarrow 327$ |
| 326 | Were you ever told by a health or family planning worker about other methods of family planning that you could use? | YES . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 2 |  |
| 327 | CHECK 311/311A: <br> CIRCLE METHOD CODE: |  | $\begin{array}{\|c} \longrightarrow 331 \\ \\ \longrightarrow 331 \\ \\ \\ \\ \\ \\ \\ \\ \longrightarrow 331 \\ \longrightarrow 331 \\ \longrightarrow 331 \\ \longrightarrow 331 \end{array}$ |
| 328 | Where did you obtain (CURRENT METHOD) the last time? <br> IF SOURCE IS HOSPITAL, HEALTH CENTRE, OR CLINIC, WRITE THE NAME OF THE PLACE. PROBE TO IDENTIFY THE TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE. |  |  |
| 329 | Do you know of a place where a person can obtain a method of family planning? | YES . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 2 | $\xrightarrow{\text { - }} 331$ |


| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 330 | Where is that? <br> IF SOURCE IS HOSPITAL, HEALTH CENTRE, OR CLINIC, WRITE THE NAME OF THE PLACE. PROBE TO IDENTIFY THE TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE. <br> (NAME OF PLACE) <br> Any other place? <br> RECORD ALL PLACES MENTIONED. |  |  |
| 331 | In the last 12 months, were you visited by a fieldworker who talked to you about family planning? |  |  |
| 332 | In the last 12 months, have you visited a health facility for care for yourself (or your children)? |  | $\longrightarrow 334$ |
| 333 | Did any staff member at the health facility speak to you about family planning methods? |  |  |
| 334 | In the past 6 months, have you seen or heard a message about Mama Ushauri? |  | $\rightarrow 401$ |
| 335 | Where did you see or hear the message about Mama Ushauri? <br> RECORD ALL MENTIONED |  |  |

[^13]SECTION 4A. PREGNANCY, POSTNATAL CARE AND BREASTFEEDING

| 401 | CHECK 224: <br> ONE OR MORE BIRTHS <br> IN 1999 <br> OR LATER |  |  | $\rightarrow 487$ |
| :---: | :---: | :---: | :---: | :---: |
| 402 | ENTER IN THE TABLE THE LINE NUMBER, NAME, AND SURVIVAL STATUS OF EACH BIRTH IN 1999 OR LATER. ASK THE QUESTIONS ABOUT ALL OF THESE BIRTHS. BEGIN WITH THE LAST BIRTH. <br> (IF THERE ARE MORE THAN 3 BIRTHS, USE LAST 2 COLUMNS OF ADDITIONAL QUESTIONNAIRES). <br> Now I would like to ask you some questions about the health of all your children born in the last five years. (We will talk about each separately.) |  |  |  |
| 403 | LINE NUMBER FROM 212 | LAST BIRTH <br> LINE NUMBER ... | NEXT-TO-LAST BIRTH <br> LINE <br> NUMBER ... | SECOND-FROM-LAST BIRTH <br> LINE <br> NUMBER ... |
| 404 | FROM 212 AND 216 | NAME <br> LIVING <br> DEAD | NAME $\qquad$ <br> LIVING DEAD | NAME $\qquad$ <br> LIVING <br> DEAD |
| 405 | At the time you became pregnant with (NAME), did you want to become pregnant then, did you want to wait until later, or did you not want to have any (more) children at all? |  |  |  |
| 406 | How much longer would you like to have waited? | MONTHS . <br> YEARS $\square$ <br> DON'T KNOW $\qquad$ 998 | MONTHS . $\text { YEARS . } 2$ <br> DON'T KNOW $998$ | MONTHS . YEARS $\square$ <br> DON'T KNOW 998 |
| 407 | Did you see anyone for antenatal care for this pregnancy? <br> IF YES: Whom did you see? <br> Anyone else? <br> PROBE FOR THE TYPE OF PERSON AND RECORD ALL PERSONS SEEN. | HEALTH PROFESSIONAL  <br> DOCTOR/AMO A <br> CLINICAL  <br> OFFICER ..... B <br> ASST. CLINICAL  <br> OFFICER ..... C <br> NURSE/MIDWIFE. D <br> MCH AIDE ..... E <br> OTHER PERSON  <br> VILLAGE HEALTH  <br> WORKER..... F <br> TRAINED BIRTH  <br> ATTENDANT . G <br> TRADITIONAL  <br> BIRTH ATTEND. H <br> RELATIVE/FRIEND I <br> OTHER  <br> (SPECIFY)  <br> NO ONE ........ Y <br> (SKIP TO 415)  |  |  |
|  |  | LAST BIRTH <br> NAME $\qquad$ | NEXT-TO-LAST BIRTH <br> NAME $\qquad$ | SECOND-FROM-LAST BIRTH <br> NAME $\qquad$ |





|  |  | LAST BIRTH <br> NAME $\qquad$ | NEXT-TO-LAST BIRTH NAME $\qquad$ | SECOND-FROM-LAST BIRTH <br> NAME $\qquad$ |
| :---: | :---: | :---: | :---: | :---: |
| 426 | Who assisted with the delivery of (NAME)? <br> Anyone else? <br> PROBE FOR THE TYPE OF PERSON AND RECORD ALL PERSONS ASSISTING. <br> IF RESPONDENT SAYS NO ONE ASSISTED, PROBE TO DETERMINE WHETHER ANY ADULTS WERE PRESENT AT THE DELIVERY | HEALTH PROFESSIONAL  <br> DOCTOR/AMO A <br> CLINICAL  <br> OFFICER ..... B <br> ASST. CLINICAL  <br> OFFICER...... C <br> NURSE/MIDWIFE. D <br> MCH AIDE ..... E <br> OTHER PERSON  <br> VILLAGE HEALTH  <br> WORKER..... F <br> TRAINED BIRTH  <br> ATTENDANT . G <br> TRADITIONAL  <br> BIRTH ATTEND. H <br> RELATIVE/FRIEND I <br> OTHER  <br> $\overline{\text { OTSPECIFY) }}$  <br> NO ONE ......... Y | HEALTH PROFESSIONAL  <br> DOCTOR/AMO A <br> CLINICAL  <br> OFFICER ...... B <br> ASST. CLINICAL  <br> OFFICER...... C <br> NURSE/MIDWIFE. D <br> MCH AIDE ..... E <br> OTHER PERSON  <br> VILLAGE HEALTH  <br> WORKER..... F <br> TRAINED BIRTH  <br> ATTENDANT . G <br> TRADITIONAL  <br> BIRTH ATTEND. H <br> RELATIVE/FRIEND I <br> OTHER  <br> $\overline{\text { OTPECIFY) }}$  <br> NO ONE ......... Y | HEALTH PROFESSIONAL DOCTOR/AMO A CLINICAL OFFICER..... B ASST. CLINICAL OFFICER..... C NURSE/MIDWIFE. D MCH AIDE ..... E OTHER PERSON VILLAGE HEALTH WORKER. TRAINED BIRTH ATTENDANT TRADITIONAL BIRTH ATTEND. RELATIVE/FRIEND OTHER $\qquad$ (SPECIFY) |
| 427 | Where did you give birth to (NAME)? <br> IF SOURCE IS HOSPITAL, HEALTH CENTRE, OR CLINIC, WRITE THE NAME OF THE FACILITY PROBE TO IDENTIFY THE TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE. |  |  |  |
| 428 | Was (NAME) delivered by caesarean section? |  | $\begin{array}{ll} \text { YES } \ldots . . . . . . . . . . . . . . . . ~ & 1 \\ \text { NO . . . . . . . . . . } & 2 \end{array}$ | $\begin{array}{ll} \text { YES . . . . . . . . . . . . . . } & 1 \\ \text { NO . . . . . . . . . . . } & 2 \end{array}$ |


|  |  | LAST BIRTH <br> NAME | NEXT-TO-LAST BIRTH <br> NAME $\qquad$ | SECOND-FROM-LAST BIRTH <br> NAME $\qquad$ |
| :---: | :---: | :---: | :---: | :---: |
| 428A | After you delivered, did the health facility give you a birth notification form for the baby? |  |  |  |
| 428B | Did you get a birth notification form from any other place? | $\left[\begin{array}{ll}\text { YES } \ldots \ldots \ldots & 1 \\ \text { NO } \ldots \ldots \ldots & 2 \\ \text { DON'T KNOW . . } & 3\end{array}\right] 432 B$ | $\left.\begin{array}{lll}\text { YES } \ldots \ldots . . & 1 \\ \text { NO } \ldots \ldots \ldots & 2 \\ \text { DON'T KNOW . . } & 3\end{array}\right]^{432 B}$ | $\left.\begin{array}{ll}\text { YES } \ldots \ldots . . . & 1 \\ \text { NO ........... } & 2 \rightarrow 432 B \\ \text { DON'T KNOW . } & 3\end{array}\right]$ |
| 429 | After (NAME) was born, did a health professional or a traditional birth attendant check on your health? | YES $\ldots \ldots \ldots \ldots$NO $\ldots \ldots \ldots \ldots$ 1 <br> $($ SKIP TO 432A $) \ldots$ 2 |  |  |
| 430 | How many days or weeks after delivery did the first check take place? <br> RECORD '00' DAYS IF SAME DAY. | DAYS AFTER DEL 1 WEEKS AFTER DEL 2 $\square$ DON'T KNOW $\qquad$ 998 |  |  |
| 431 | Who checked on your health at that time? <br> PROBE FOR MOST QUALIFIED PERSON. | HEALTH PROFESSIONAL  <br> DOCTOR/AMO 11 <br> CLINICAL  <br> OFFICER ..... 12 <br> ASST. CLINICAL  <br> OFFICER ..... 13 <br> NURSE/MIDWIFE 14 <br> MCH AIDE ..... 15 <br> OTHER PERSON  <br> VILLAGE HEALTH  <br> WORKER ... 21 <br> TRAINED BIRTH  <br> ATTENDANT 22 <br> TRADITIONAL  <br> BIRTH ATTEND. 23 <br> RELATIVE/FRIEND 24 <br> OTHER  |  |  |


|  |  | LAST BIRTH <br> NAME $\qquad$ | NEXT-TO-LAST BIRTH <br> NAME $\qquad$ | SECOND-FROM-LAST BIRTH <br> NAME $\qquad$ |
| :---: | :---: | :---: | :---: | :---: |
| 432 | Where did this first check take place? <br> IF SOURCE IS HOSPITAL, HEALTH CENTRE, OR CLINIC, WRITE THE NAME OF THE PLACE. PROBE TO IDENTIFY THE TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE. |  |  |  |
| 432A | After (NAME) was born, did you get a birth notification form? |  |  | YES $\ldots \ldots . . . . . .$. 1 <br> NO $\ldots \ldots . . . .$. 2 <br> DON'T KNOW . . . . . . 8 |
| 432B | Do you have a birth certificate for (NAME)? |  |  |  |
| 433 | In the first two months after delivery, did you receive a vitamin A dose like this? <br> SHOW AMPULE/CAPSULE/ SYRUP. <br> Has your period returned since the birth of (NAME)? |  |  |  |
| 435 | Did your period return between the birth of (NAME) and your next pregnancy? |  | YES $\ldots \ldots \ldots \ldots \ldots$ <br> NO . . . . . . . . . . | YES $\ldots \ldots \ldots \ldots \ldots$ NO $\ldots \ldots \ldots \ldots$ (SKIP TO 439) |


|  |  | LAST BIRTH <br> NAME $\qquad$ | NEXT-TO-LAST BIRTH <br> NAME $\qquad$ | SECOND-FROM-LAST BIRTH <br> NAME $\qquad$ |
| :---: | :---: | :---: | :---: | :---: |
| 436 | For how many months after the birth of (NAME) did you not have a period? | MONTHS ... <br> DON'T KNOW | MONTHS $\square$ <br> DON'T KNOW 98 | MONTHS $\square$ <br> DON'T KNOW |
| 437 | CHECK 226: <br> IS RESPONDENT PREGNANT? | NOT PREGNANT <br> PREGOR $\square$ <br> NANT <br> UNSURE (SKIP TO 439) |  |  |
| 438 | Have you resumed sexual relations since the birth of (NAME)? |  |  |  |
| 439 | For how many months after the birth of (NAME) did you not have sexual relations? | MONTHS <br> DON'T KNOW $98$ | MONTHS <br> DON'T KNOW $98$ | MONTHS . . . $\square$ <br> DON'T KNOW $\qquad$ |
| 440 | Did you ever breastfeed (NAME)? |  | YES $\ldots \ldots \ldots \ldots$ 1 <br> NO $\ldots \ldots \ldots \ldots$ 2 <br> $($ SKIP TO 447$)$  |  |
| 441 | How long after birth did you first put (NAME) to the breast? <br> IF LESS THAN 1 HOUR, RECORD '00' HOURS. IF LESS THAN 24 HOURS, RECORD HOURS. <br> OTHERWISE, RECORD DAYS. | IMMEDIATELY ... 000 <br> HOURS <br> DAYS | IMMEDIATELY ... 000 <br> HOURS <br> DAYS | IMMEDIATELY . . . 000 <br> HOURS <br> DAYS |
| 442 | In the first three days after delivery, before your milk began flowing regularly, was (NAME) given anything to drink other than breast milk? |  | YES $\ldots \ldots \ldots \ldots \ldots$ <br> NO . . . . . . . . . . | YES $\ldots \ldots \ldots \ldots$ <br> NO . . . . . . . . . . . |
| 443 | What was (NAME) given to drink before your milk began flowing regularly? <br> Anything else? <br> RECORD ALL LIQUIDS MENTIONED. |  |  |  |
| 444 | CHECK 404: <br> IS CHILD LIVING? |  | LIVING <br> DEAD <br> (SKIP TO 446) |  |
| 445 | Are you still breastfeeding (NAME)? | $\begin{aligned} & \text { YES . . . . . . . . . . . . } \\ & \begin{array}{l} 1 \\ (\text { SKIP TO 448) } \\ \text { NO . . . . . . . . . . } \end{array} \\ & \hline \end{aligned}$ | ```YES ............... 1 (SKIP TO 448) NO``` | $\begin{aligned} & \text { YES . . . . . . . . . . . . } \\ & \begin{array}{l} 1 \\ (\text { SKIP TO 448) } \end{array} \\ & \text { NO . . . . . . . . . . } \end{aligned}$ |


|  |  | LAST BIRTH <br> NAME | NEXT-TO-LAST BIRTH <br> NAME | SECOND-FROM-LAST BIRTH <br> NAME $\qquad$ |
| :---: | :---: | :---: | :---: | :---: |
| 446 | For how many months did you breastfeed (NAME)? | MONTHS $\square$ <br> DON'T KNOW | MONTHS $\square$ <br> DON'T KNOW | MONTHS $\square$ <br> DON'T KNOW |
| 447 | CHECK 404: <br> IS CHILD LIVING? |  |  |  |
| 448 | How many times did you breastfeed last night between sunset and sunrise? <br> IF ANSWER IS NOT NUMERIC, PROBE FOR APPROXIMATE NUMBER. | NUMBER OF NIGHTTIME FEEDINGS | NUMBER OF NIGHTTIME FEEDINGS | NUMBER OF NIGHTTIME FEEDINGS |
| 449 | How many times did you breastfeed yesterday during the daylight hours? <br> IF ANSWER IS NOT NUMERIC, PROBE FOR APPROXIMATE NUMBER. | NUMBER OF DAYLIGHT FEEDINGS | NUMBER OF DAYLIGHT FEEDINGS | NUMBER OF DAYLIGHT FEEDINGS |
| 450 | Did (NAME) drink anything from a bottle with a nipple yesterday or last night? |  |  | YES $\ldots \ldots \ldots \ldots$ 1 <br> NO $\ldots \ldots \ldots \ldots$ 2 <br> DON'T KNOW .................. 8 |
| 452 | How many times did (NAME) eat solid, semisolid, or soft foods other than liquids yesterday during the day or at night? <br> IF 7 OR MORE TIMES, RECORD ' 7 '. | NUMBER OF TIMES $\square$ <br> DON'T KNOW | NUMBER OF TIMES $\qquad$ $\square$ <br> DON'T KNOW $\qquad$ 8 | NUMBER OF TIMES $\qquad$ $\square$ <br> DON'T KNOW $\qquad$ |
| 453 |  | GO BACK TO 405 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 454. | GO BACK TO 405 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 454. | GO BACK TO 405 IN NEXT-TO-LAST COLUMN OF NEW QUESTIONNAIRE; OR, IF NO MORE BIRTHS, GO TO 454. |



|  |  | LAST BIRTH <br> NAME $\qquad$ | NEXT-TO-LAST BIRTH <br> NAME | SECOND-FROM-LAST BIRTH <br> NAME $\qquad$ |
| :---: | :---: | :---: | :---: | :---: |
| 461 | Has (NAME) received any vaccinations that are not recorded on this card, including vaccinations received in a national immunization day campaign? <br> RECORD 'YES' ONLY IF RESPONDENT MENTIONS BCG, POLIO 0-3, DPT 1-3, AND/OR MEASLES VACCINE(S). (2) | YES .................. 1 <br> (PROBE FOR <br> VACCINATIONS AND <br> WRITE '66' IN THE <br> CORRESPONDING <br> DAY COLUMN IN 460) $\square$ <br> (SKIP TO 464) <br> $\begin{array}{cc}\text { NO } \ldots \ldots \ldots \ldots & 2 \\ \begin{array}{c}\text { (SKIP TO 464) } \\ \text { DON'T KNOW } \ldots \ldots\end{array} & 8\end{array}$ | YES .................. 1 <br> (PROBE FOR <br> VACCINATIONS AND <br> WRITE '66' IN THE <br> CORRESPONDING <br> DAY COLUMN IN 460) $\square$ <br> (SKIP TO 464) <br> $\begin{array}{cc}\text { NO } \ldots \ldots \ldots \ldots & 2 \\ \begin{array}{c}\text { (SKIP TO 464) } \\ \text { DON'T KNOW } \ldots \ldots\end{array} & 8\end{array}$ |  |
| 462 | Did (NAME) ever receive any vaccinations to prevent him/her from getting diseases, including vaccinations received in a national immunization day campaign? |  |  |  |
| 463 463 A | Please tell me if (NAME) received any of the following vaccinations: (3) <br> A BCG vaccination against tuberculosis, that is, an injection in the arm or shoulder that usually causes a scar? (4) | YES $\ldots \ldots \ldots \ldots . . .$. 1 <br> NO ...................... 2 <br> DON'T KNOW ..... 8 |  |  |
| 463B | Polio vaccine, that is, drops in the mouth? |  | YES $\ldots \ldots \ldots \ldots$ 1 <br> NO $\ldots \ldots \ldots \ldots$ 2 <br> (SKIP TO 463E)  <br> DON'T KNOW $\ldots \ldots$   | YES $\ldots \ldots \ldots \ldots \ldots$ 1 <br> NO $\ldots \ldots \ldots \ldots$ 2 <br> (SKIP TO 463E) 1 <br> DON'T KNOW $\ldots \ldots$ |
| 463C | When was the first polio vaccine received, just after birth or later? | $\begin{array}{ll}\text { JUST AFTER BIRTH } & 1 \\ \text { LATER . . . . . . . . . . } & 2\end{array}$ | $\begin{array}{ll}\text { JUST AFTER BIRTH } & 1 \\ \text { LATER . . . . . . . . . . } & 2\end{array}$ | $\begin{array}{ll}\text { JUST AFTER BIRTH } & 1 \\ \text { LATER . . . . . . . . . . } & 2\end{array}$ |
| 463D | How many times was the polio vaccine received? | NUMBER <br> OF TIMES | NUMBER <br> OF TIMES | NUMBER <br> OF TIMES |
| 463E | A DPT-HP vaccination, that is, an injection given in the thigh or buttocks, sometimes at the same time as polio drops? |  | $\begin{array}{ccc}\text { YES } \ldots \ldots \ldots \ldots & 1 \\ \text { NO } \ldots \ldots \ldots \ldots & 2 \\ \begin{array}{ll}\text { (SKIP TO } 463 G) & \ldots \\ \text { DON'T KNOW } \ldots \ldots & 8\end{array}\end{array}$ | YES $\ldots \ldots \ldots \ldots$ 1  <br> NO $\ldots \ldots \ldots \ldots$ 2  <br> (SKIP TO 463G) <br> DON'T KNOW$\ldots$ $\ldots$ .$\ldots$ |
| 463F | How many times? | NUMBER <br> OF TIMES $\square$ | NUMBER <br> OF TIMES $\square$ | NUMBER OF TIMES $\square$ |
| 463G | An injection to prevent measles? | YES $\ldots \ldots \ldots \ldots .$. 1 <br> NO $\ldots \ldots \ldots . .$. 2 <br> DON'T KNOW ................. 8 | YES $\ldots \ldots \ldots \ldots \ldots$ 1 <br> NO $\ldots \ldots \ldots \ldots$ 2 <br> DON'T KNOW $\ldots \ldots$. 8 |  |
| 464 | Were any of the vaccinations (NAME) received during the last two years given as part of a national immunization day campaign? | YES $\ldots \ldots \ldots \ldots . . .$. 1 <br> NO $\ldots \ldots \ldots .$. 2 <br> NO VACCINATION IN  <br> THE LAST 2 YRS. 3 <br> DON'T KNOW $\ldots . .$. 8 | YES $\ldots \ldots \ldots \ldots . .$. 1 <br> NO $\ldots \ldots \ldots .$. 2 <br> NO VACCINATION IN  <br> THE LAST 2 YRS. 3 <br> DON'T KNOW $\ldots . .$. 8 | YES $\ldots \ldots \ldots \ldots . .$. 1 <br> NO $\ldots \ldots \ldots . .$. 2 <br> NO VACCINATION IN  <br> THE LAST 2 YRS. 3 <br> DON'T KNOW $\ldots \ldots$. 8 |


|  |  | LAST BIRTH <br> NAME $\qquad$ | NEXT-TO-LAST BIRTH <br> NAME $\qquad$ | SECOND-FROM-LAST BIRTH <br> NAME $\qquad$ |
| :---: | :---: | :---: | :---: | :---: |
| 466 | Has (NAME) been ill with a fever at any time in the last 2 weeks? | YES $\ldots \ldots \ldots . . .$. 1 <br> NO $\ldots \ldots . . . .$. 2 <br> DON'T KNOW $\ldots .$. 8 | YES $\ldots \ldots \ldots . .$. 1 <br> NO $\ldots \ldots . . . .$. 2 <br> DON'T KNOW $\ldots \ldots$ 8 | YES $\ldots \ldots . . . . . .$. 1 <br> NO $\ldots \ldots . . . .$. 2 <br> DON'T KNOW ....... 8 |
| 467 | Has (NAME) had an illness with a cough at any time in the last 2 weeks? | YES $\ldots \ldots \ldots \ldots$ 1 <br> NO $\ldots \ldots \ldots \ldots$ 2 <br> (SKIP TO 469$)$  <br> DON'T KNOW $\ldots \ldots$  | YES $\ldots \ldots \ldots \ldots$ 1 <br> NO $\ldots \ldots \ldots \ldots$ 2 <br> (SKIP TO 469)${ }^{2} \ldots$ 1 <br> DON'T KNOW $\ldots \ldots$ 8 | YES $\ldots \ldots \ldots \ldots \ldots$ 1 <br> NO $\ldots \ldots \ldots \ldots$ 2 <br> (SKIP TO 469) <br> DON'T KNOW$\ldots_{1} \ldots \ldots$ 8 |
| 468 | When (NAME) had an illness with a cough, did he/she breathe faster than usual with short, rapid breaths? | YES $\ldots \ldots \ldots . . .$. 1 <br> NO $\ldots \ldots \ldots . .$. 2 <br> DON'T KNOW $\ldots .$. 8 | YES $\ldots \ldots \ldots . .$. 1 <br> NO $\ldots \ldots \ldots . .$. 2 <br> DON'T KNOW $\ldots \ldots$ 8 | YES $\ldots \ldots \ldots \ldots$ 1 <br> NO $\ldots \ldots \ldots \ldots$ 2 <br> DON'T KNOW $\ldots \ldots$ 8 |
| 469 | CHECK 466 AND 467: <br> FEVER OR COUGH? | $\begin{aligned} & \text { "YES" IN } 466 \text { OTHER } \\ & \square \text { OR } 467 \\ & \text { (SKIP TO 475) } \end{aligned}$ | $\begin{aligned} & \text { "YES" IN } 466 \quad \text { OTHER } \\ & \square \text { OR } 467 \\ & \text { (SKIP TO 475) } \end{aligned}$ | $\begin{aligned} & \text { "YES" IN } 466 \\ & \begin{array}{l} \square \text { OR } 467 \\ \text { (SKIP TO 475) } \end{array} \end{aligned}$ |
| 470 | Did you seek advice or treatment for the fever/cough? | YES $\ldots \ldots \ldots \ldots \ldots$ NO $\ldots \ldots \ldots \ldots$ $\left.\begin{array}{c}1 \\ (S K I P ~ T O ~ 472) ~ \\ \end{array}\right)$ | YES $\ldots \ldots \ldots \ldots \ldots$ NO $\ldots \ldots \ldots \ldots$ $\left.\begin{array}{c}1 \\ (S K I P ~ T O ~ 472) ~ \\ \end{array}\right)$ | YES $\ldots \ldots \ldots \ldots \ldots$ 1 <br> NO $\ldots \ldots \ldots \ldots \ldots$ 2 <br> $($ SKIP TO 472)  |
| 471 | Where did you seek advice or treatment? <br> Anywhere else? <br> RECORD ALL SOURCES MENTIONED. |  |  |  |
| 472 | CHECK 466: <br> HAD FEVER? | $\begin{array}{ccc} \text { "YES" IN } & \text { "NO" OR "DK" } \\ \square & 466 \quad \text { IN } 466 & \square \\ \square & & \\ & \\ \text { (SKIP TO 475) } & \boxed{ } \end{array}$ | $\begin{array}{ccc} \text { "YES" IN } & \text { "NO" OR "DK" } \\ \square & 466 \quad \text { IN } 466 & \square \\ \square & & \\ & \\ \hline \end{array}$ | $\begin{array}{ccc} \text { "YES" IN } & \text { "NO" OR "DK" } \\ \square & 466 & \text { IN } 466 \end{array}$ |


|  |  | LAST BIRTH <br> NAME | NEXT-TO-LAST BIRTH <br> NAME $\qquad$ | SECOND-FROM-LAST BIRTH <br> NAME $\qquad$ |
| :---: | :---: | :---: | :---: | :---: |
| 472A | Does (NAME) have a fever now? | $\begin{array}{ll}\text { YES } \ldots \ldots \ldots \ldots . . & . \ldots . \\ \text { NO } \ldots \ldots \ldots . . & 2 \\ \text { DON'T KNOW ..... } & 8\end{array}$ | YES $\ldots \ldots \ldots \ldots . .$. 1 <br> NO $\ldots \ldots . . . .$. 2 <br> DON'T KNOW $\ldots .$. 8 | YES $\ldots \ldots \ldots \ldots . . . .$. 1 <br> NO $\ldots \ldots . . .$. 2 <br> DON'T KNOW $\ldots .$. 8 |
| 472B | Has (NAME) been ill with convulsions at any time during the last 2 weeks? |  | YES $\ldots \ldots \ldots . .$. 1 <br> NO $\ldots \ldots . . .$. 2 <br> DON'T KNOW $\ldots . .$. 8 | YES $\ldots \ldots \ldots \ldots$ 1 <br> NO $\ldots \ldots \ldots \ldots$ 2 <br> DON'T KNOW $\ldots \ldots$ 8 |
| 472C | CHECK 466 AND 472B <br> HAD FEVER OR CONVULSIONS? | "YES" IN 466 OTHER OR 472B <br> (SKIP TO 475) | "YES" IN 466 OTHER OR 472B <br> (SKIP TO 475) | "YES" IN 466 OTHER OR 472B <br> (SKIP TO 475) |
| 473 | Was (NAME) given any drugs for the (fever/convulsions)? | YES $\ldots \ldots \ldots \ldots \ldots$ 1 <br> NO $\ldots \ldots \ldots \ldots$ 2 <br> (SKIP 474R)  <br> DON'T KNOW $\ldots \ldots$ 8 | YES $\ldots \ldots \ldots \ldots \ldots$ 1 <br> NO $\ldots \ldots \ldots \ldots$ 2 <br> (SKIP 474R)  <br> DON'T KNOW $\ldots \ldots$ 8 | YES $\ldots \ldots \ldots \ldots$ 1 <br> NO $\ldots \ldots \ldots \ldots$ 2 <br> (SKIP 474R)  <br> DON'T KNOW $\ldots \ldots$ 8 |
| 474 | What drugs did (NAME) take? <br> RECORD ALL MENTIONED. <br> ASK TO SEE DRUG(S) IF TYPE OF DRUG IS NOT KNOWN. IF TYPE OF DRUG IS STILL NOT DETERMINED, SHOW TYPICAL ANTIMALARIAL DRUGS TO RESPONDENT. | ANTI-MALARIAL <br> SP ............... A <br> CHLOROQUINE...... <br> AMODIAQUINE........ <br> QUININE................ <br> ARTESUNATE......... <br> OTHER DRUGS <br> ASPIRIN ............... F <br> IBUPROFEN/ <br> ACETAMINOPHEN/ <br> PANADOL/ <br> PARACETAMOL ... G <br> OTHER $\qquad$ <br> DON'T KNOW. |  |  |
| 474A | Did (NAME) get any injection or suppository for the (fever/ convulsions)? | INJECTION $\ldots . . .$. A  <br> SUPPOSITORY $\ldots$ B <br> NONE $\ldots . . . . . .$. Y  <br> DON'T KNOW $\ldots . .$. Z | INJECTION $\ldots . . .$. A  <br> SUPPOSITORY $\ldots$ B <br> NONE $\ldots . . . . . .$. Y  <br> DON'T KNOW $\ldots . .$. Z | INJECTION $\ldots . . .$. A  <br> SUPPOSITORY $\ldots$ B <br> NONE $\ldots . . . . . .$. Y  <br> DON'T KNOW $\ldots . .$. Z |
| 474B | CHECK 474: <br> WHICH MEDICINES? |  |  |  |
| 474C | How long after the (fever/ convulsions) started did (NAME) first take SP? | SAME DAY $\ldots \ldots .$. 0 <br> NEXT DAY $\ldots \ldots .$. 1 <br> TWO DAYS AFTER  <br> THE FEVER ...... 2 <br> THREE OR MORE  <br> DAYS AFTER THE  <br> FEVER ........ 3 <br> DON'T KNOW ...... 8 | SAME DAY $\ldots \ldots .$. 0 <br> NEXT DAY $\ldots \ldots \ldots$ 1 <br> TWO DAYS AFTER  <br> THE FEVER ...... 2 <br> THREE OR MORE  <br> DAYS AFTER THE  <br> FEVER ........ 3 <br> DON'T KNOW ...... 8 | SAME DAY $\ldots \ldots .$. 0 <br> NEXT DAY $\ldots \ldots .$. 1 <br> TWO DAYS AFTER  <br> THE FEVER ...... 2 <br> THREE OR MORE  <br> DAYS AFTER THE  <br> FEVER ....... 3 <br> DON'T KNOW . . ... 8 |
| 474D | For how many days did (NAME) take the SP? <br> IF 7 OR MORE DAYS, RECORD '7'. | DAYS $\square$ <br> DON'T KNOW $\qquad$ 8 | DAYS $\square$ <br> DON'T KNOW $\qquad$ 8 | DAYS $\square$ <br> DON'T KNOW $\qquad$ 8 |


|  |  | LAST BIRTH <br> NAME $\qquad$ | NEXT-TO-LAST BIRTH <br> NAME | SECOND-FROM-LAST BIRTH <br> NAME $\qquad$ |
| :---: | :---: | :---: | :---: | :---: |
| 474E | Did you have the SP at home or did you get it from somewhere else? <br> IF MORE THAN ONE SOURCE MENTIONED, ASK: <br> Where did you get the SP first? | AT HOME ......... 1 <br> OTHER SOURCE .. 2 <br> DON'T KNOW ...... 8 | AT HOME ......... 1 <br> OTHER SOURCE .. 2 <br> DON'T KNOW ....... 8 | AT HOME $\ldots . . .$. 1  <br> OTHER SOURCE $\ldots$ 2  <br>     <br> DON'T KNOW $\ldots . .$. 8   |
| 474F | CHECK 474: <br> WHICH MEDICINES? |  |  |  |
| 474G | How long after the (fever/ convulsions) started did (NAME) first take chloroquine? | SAME DAY $\ldots \ldots .$. 0 <br> NEXT DAY $\ldots \ldots \ldots$ 1 <br> TWO DAYS AFTER  <br> THE FEVER ...... 2 <br> THREE OR MORE  <br> DAYS AFTER THE  <br> FEVER ....... 3 <br> DON'T KNOW ...... 8 | SAME DAY $\ldots \ldots .$. 0 <br> NEXT DAY $\ldots \ldots \ldots$ 1 <br> TWO DAYS AFTER  <br> THE FEVER ...... 2 <br> THREE OR MORE  <br> DAYS AFTER THE  <br> FEVER $\ldots . . .$. 3 <br> DON'T KNOW ...... 8 | SAME DAY $\ldots \ldots .$. 0 <br> NEXT DAY $\ldots \ldots \ldots$. 1 <br> TWO DAYS AFTER  <br> THE FEVER ...... 2 <br> THREE OR MORE  <br> DAYS AFTER THE  <br> FEVER ....... 3 <br> DON'T KNOW ...... 8 |
| 474H | For how many days did (NAME) take chloroquine? <br> IF 7 OR MORE DAYS, RECORD ' 7 '. | DAYS $\square$ <br> DON'T KNOW $\qquad$ | DAYS $\square$ <br> DON'T KNOW $\square$ 8 | DAYS $\square$ <br> DON'T KNOW |
| 474I | Did you have the chloroquine at home or did you get it from somewhere else? <br> IF MORE THAN ONE SOURCE MENTIONED, ASK: <br> Where did you get the chloroquine first? | AT HOME ......... 1 <br> OTHER SOURCE .. 2 <br> DON'T KNOW ...... 8 | AT HOME ......... 1 <br> OTHER SOURCE .. 2 <br> DON'T KNOW ...... 8 | AT HOME $\ldots . . .$. 1  <br> OTHER SOURCE $\ldots$ 2  <br>     <br> DON'T KNOW $\ldots . .$. 8  |
| 474J | CHECK 474: <br> WHICH MEDICINES? |  |  |  |
| 474K | How long after the (fever/ convulsions) started did (NAME) first take Amodiaquine? | SAME DAY $\ldots \ldots .$. 0 <br> NEXT DAY $\ldots \ldots \ldots$ 1 <br> TWO DAYS AFTER  <br> THE FEVER ...... 2 <br> THREE OR MORE  <br> DAYS AFTER THE  <br> FEVER ....... 3 <br> DON'T KNOW ...... 8 | SAME DAY $\ldots \ldots .$. 0 <br> NEXT DAY $\ldots \ldots \ldots$ 1 <br> TWO DAYS AFTER  <br> THE FEVER ...... 2 <br> THREE OR MORE  <br> DAYS AFTER THE  <br> FEVER ....... 3 <br> DON'T KNOW ...... 8 | SAME DAY $\ldots \ldots .$. 0 <br> NEXT DAY $\ldots \ldots .$. 1 <br> TWO DAYS AFTER   <br> THE FEVER ...... 2  <br> THREE OR MORE   <br> DAYS AFTER THE   <br> FEVER $\ldots . . .$. 3  <br> DON'T KNOW $\ldots .$. 8 |
| 474L | For how many days did (NAME) take Amodiaquine? <br> IF 7 OR MORE DAYS, RECORD '7'. | DAYS $\square$ <br> DON'T KNOW $\qquad$ 8 | DAYS $\square$ <br> DON'T KNOW $\qquad$ | DAYS <br> DON'T KNOW |
| 474M | Did you have the Amodiaquine at home or did you get it from somewhere else? <br> IF MORE THAN ONE SOURCE MENTIONED, ASK: <br> Where did you get the Amodiaquine first? | AT HOME ......... 1 <br> OTHER SOURCE .. 2 <br> DON'T KNOW <br> ...... 8 | AT HOME ......... 1 <br> OTHER SOURCE .. 2 <br> DON'T KNOW ....... 8 |  |


|  |  | LAST BIRTH <br> NAME $\qquad$ | NEXT-TO-LAST BIRTH <br> NAME | SECOND-FROM-LAST BIRTH <br> NAME $\qquad$ |
| :---: | :---: | :---: | :---: | :---: |
| 474N | CHECK 474: <br> WHICH MEDICINES? |  |  |  |
| 4740 | How long after the (fever/ convulsions) started did (NAME) first take Quinine? | SAME DAY $\ldots \ldots .$. 0 <br> NEXT DAY $\ldots \ldots .$. 1 <br> TWO DAYS AFTER  <br> THE FEVER ...... 2 <br> THREE OR MORE  <br> DAYS AFTER THE  <br> FEVER ....... 3 <br> DON'T KNOW ...... 8 | SAME DAY $\ldots \ldots .$. 0 <br> NEXT DAY $\ldots \ldots .$. 1 <br> TWO DAYS AFTER  <br> THE FEVER ...... 2 <br> THREE OR MORE  <br> DAYS AFTER THE  <br> FEVER ....... 3 <br> DON'T KNOW ...... 8 | SAME DAY $\ldots \ldots .$. 0 <br> NEXT DAY $\ldots \ldots .$. 1 <br> TWO DAYS AFTER  <br> THE FEVER ...... 2 <br> THREE OR MORE  <br> DAYS AFTER THE  <br> FEVER ........  <br> DON'T KNOW ...... 8 |
| 474P | For how many days did (NAME) take Quinine? <br> IF 7 OR MORE DAYS, RECORD '7'. | DAYS $\square$ <br> DON'T KNOW $\qquad$ | DAYS $\square$ <br> DON'T KNOW $\qquad$ | DAYS $\square$ <br> DON'T KNOW $8$ |
| 474Q | Did you have the Quinine at home or did you get it from somewhere else? <br> IF MORE THAN ONE SOURCE MENTIONED, ASK: <br> Where did you get the Quinine first? | AT HOME ......... 1 <br> OTHER SOURCE .. 2 <br> DON'T KNOW ...... 8 | AT HOME ......... 1 <br> OTHER SOURCE .. 2 <br> DON'T KNOW ...... 8 | AT HOME $\quad . . . . . .$. 1   <br> OTHER SOURCE $\ldots$ 2  <br>     <br> DON'T KNOW $\ldots . .$. 8  |
| 474R | Was anything else done about (NAME)'s (fever/convulsions)? | YES $\ldots \ldots \ldots \ldots$ 1 <br> NO $\ldots \ldots \ldots \ldots$ 2 <br> (SKIP TO 475)  <br> DON'T KNOW $\ldots \ldots$ 8 | YES $\ldots \ldots \ldots \ldots$ 1  <br> NO $\ldots \ldots \ldots \ldots$ 2  <br> (SKIP TO 475)  1 <br> DON'T KNOW $\ldots \ldots$ 8  |  |
| 474S | What was done about (NAME)'s (fever/convulsions)? |  | $\begin{aligned} & \text { CONSULTED TRAD'L } \\ & \text { HEALER ........ A } \\ & \text { GAVE TEPID } \\ & \text { SPONGING } \ldots \ldots . \text { B } \\ & \text { GAVE HERBS } \ldots \ldots . \text { C } \\ & \text { OTHER } \frac{}{\text { (SPECIFY) }} \end{aligned}$ |  |
| 475 | Has (NAME) had diarrhea in the last 2 weeks? | YES $\ldots \ldots \ldots \ldots \ldots$ 1  <br> NO $\ldots \ldots \ldots \ldots$ 2  <br> (SKIP TO 483) <br> DON'T KNOW $\ldots \ldots$ 8 | YES $\ldots \ldots \ldots \ldots \ldots$ 1 <br> NO $\ldots \ldots \ldots \ldots$ 2 <br> (SKIP TO 483) <br> DON'T KNOW $\ldots \ldots$ 1 <br> DO |  |
| 476 | Now I would like to know how much (NAME) was offered to drink during the diarrhea. Was he/she offered less than usual to drink, about the same amount, or more than usual to drink? <br> IF LESS, PROBE: Was he/she offered much less than usual to drink or somewhat less? | MUCH LESS $\ldots \ldots$ 1  <br> SOMEWHAT LESS . . . 2  <br> ABOUT THE SAME . 3 <br> MORE ............ 4  <br> NOTHING TO DRINK 5  <br> DON'T KNOW ...... 8  | MUCH LESS $\ldots \ldots$ 1  <br> SOMEWHAT LESS . . . 2  <br> ABOUT THE SAME . 3 <br> MORE ........... 4  <br> NOTHING TO DRINK 5  <br> DON'T KNOW ...... 8  | MUCH LESS $\ldots . .$. 1 <br> SOMEWHAT LESS . 2 <br> ABOUT THE SAME . . 3  <br> MORE ........... 4  <br> NOTHING TO DRINK 5  <br> DON'T KNOW . . . . . 8  |
| 477 | When (NAME) had diarrhea, was he/she offered less than usual to eat, about the same amount, more than usual, or nothing to eat? <br> IF LESS, PROBE: Was he/she offered much less than usual to eat or somewhat less? | MUCH LESS ...... 1  <br> SOMEWHAT LESS . 2 <br> ABOUT THE SAME . . 3  <br> MORE .......... 4  <br> STOPPED FOOD . . 5  <br> NEVER GAVE FOOD 6  <br> DON'T KNOW ...... 8  | MUCH LESS ...... 1  <br> SOMEWHAT LESS . 2 <br> ABOUT THE SAME . . 3  <br> MORE .......... 4  <br> STOPPED FOOD . . 5  <br> NEVER GAVE FOOD 6  <br> DON'T KNOW ...... 8  | MUCH LESS $\ldots . . .$. 1  <br> SOMEWHAT LESS . 2 <br> ABOUT THE SAME . . 3  <br> MORE .......... 4  <br> STOPPED FOOD . . 5  <br> NEVER GAVE FOOD 6  <br> DON'T KNOW ...... 8  |


|  |  | LAST BIRTH <br> NAME $\qquad$ | NEXT-TO-LAST BIRTH <br> NAME | SECOND-FROM-LAST BIRTH <br> NAME $\qquad$ |
| :---: | :---: | :---: | :---: | :---: |
| $\begin{array}{rrr}478 & \\ & \text { a } \\ \\ \text { b }\end{array}$ | Was he/she given any of the following to drink: (6) <br> A fluid made from a special packet called [LOCAL NAME FOR ORS PACKET]? <br> A government-recommended homemade fluid? |  YES NO DK <br> FLUID FROM    <br> ORS PKT 1 2 8 <br> HOMEMADE    <br> FLUID 1 2 8    |  |  YES NO DK <br>     <br> FLUID FROM    <br> ORS PKT 1 2 8 <br> HOMEMADE    <br> FLUID 1 2 8 |
| 479 | Was anything (else) given to treat the diarrhea? | YES $\ldots \ldots \ldots \ldots \ldots$ 1  <br> NO $\ldots \ldots \ldots \ldots$ 2  <br> (SKIP TO 481) $\ldots$  <br> DON'T KNOW $\ldots \ldots$ 8  |  |  |
| 480 | What (else) was given to treat the diarrhea? <br> Anything else? <br> RECORD ALL TREATMENTS GIVEN. | $\begin{aligned} & \text { PILL OR SYRUP ... } \\ & \text { A } \\ & \text { INJECTION ....... } \\ & \text { (IV) INTRAVENOUS . } \\ & \text { HOME REMEDIES/ } \\ & \text { HERBAL } \\ & \text { MEDICINES ....... D } \\ & \text { OTHER } \overline{\text { (SPECIFY) }} \end{aligned}$ | $\begin{aligned} & \text { PILL OR SYRUP ... } \\ & \text { A } \\ & \text { INJECTION ....... } \\ & \text { (IV) INTRAVENOUS . } \\ & \text { COME REMEDIES/ } \\ & \text { HERBAL } \\ & \text { MEDICINES ....... D } \\ & \text { OTHER } \overline{\text { OTECIFY) }} \end{aligned}$ | PILL OR SYRUP ... A INJECTION ......... B (IV) INTRAVENOUS . C HOME REMEDIES/ HERBAL <br> MEDICINES ...... D OTHER $\qquad$ X |
| 481 | Did you seek advice or treatment for the diarrhea? | YES $\ldots \ldots \ldots \ldots \ldots$ NO $\ldots \ldots \ldots \ldots$ (SKIP TO 483) | YES $\ldots \ldots \ldots \ldots \ldots$ NO $\ldots \ldots \ldots \ldots$ $\left.\begin{array}{c}1 \\ (\text { SKIP TO 483) }\end{array}\right)$. | YES $\ldots \ldots \ldots \ldots \ldots$NO $\ldots \ldots \ldots \ldots$1 <br> $($ SKIP TO 483)${ }^{2}$. |
| 482 | Where did you seek advice or treatment? <br> IF SOURCE IS A HOSPITAL, HEALTH CENTRE, OR CLINIC, WRITE THE NAME OF THE PLACE. PROBE TO IDENTIFY THE TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE. <br> (NAME OF PLACE) <br> Anywhere else? <br> RECORD ALL PLACES MENTIONED. |  |  |  |
| 483 |  | GO BACK TO 456 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 484. | GO BACK TO 456 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 484. | GO BACK TO 456 IN NEXT-TO-LAST COLUMN OF NEW QUESTIONNAIRE; OR, IF NO MORE BIRTHS, GO TO 484. |


| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 484 | CHECK 215 AND 218, ALL ROWS: <br> NUMBER OF CHILDREN BORN IN 1999 OR LATER LIVING WITH TH <br> ONE OR MORE <br> NONE | RESPONDENT | $\rightarrow 487$ |
| 485 | What is usually done to dispose of your (youngest) child's stools when he/she does not use any toilet facility? |  |  |
| 486 | CHECK 478a, ALL COLUMNS: <br> NO CHILD <br> ANY CHILD RECEIVED FLUID RECEIVED FLUID FROM ORS PACKET FROM ORS PACKET |  | $\rightarrow 488$ |
| 487 | Have you ever heard of a special product called [LOCAL NAME FOR ORS PACKET] you can get for the treatment of diarrhea? |  |  |
| 488 | CHECK 218: <br> HAS ONE OR MORE <br> HAS NO CHILDREN CHILDREN LIVING LIVING WITH HER WITH HER |  | $\rightarrow 490$ |
| 489 | When (your child/one of your children) is seriously ill, can you decide by yourself whether or not the child should be taken for medical treatment? <br> IF SAYS NO CHILD EVER SERIOUSLY ILL, ASK: <br> If (your child/one of your children) became seriously ill, could you decide by yourself whether the child should be taken for medical treatment? |  |  |
| 490 | Now I would like to ask you some questions about medical care for you yourself. <br> 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? <br> Knowing where to go. <br> Getting permission to go. <br> Getting money needed for treatment. <br> The distance to the health facility. <br> Having to take transport. <br> Not wanting to go alone. <br> Concern that there may not be a female health provider. <br> Concern that the health providers will be unfriendly or hostile. |  |  |



| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 496 | Do you currently smoke cigarettes or tobacco? <br> IF YES: What type of tobacco do you smoke? <br> RECORD ALL TYPES MENTIONED. | YES, CIGARETTES . . . . . . . . . . . . . . . . YES, PIPE $\ldots$. . . . . . . . . . . . . . . . . . . B YES, OTHER TOBACCO . . . . . . . . . . . . NO . . . . . . . . . . . . . . . . . . . . . . . . |  |
| 497 | CHECK 496: <br> CODE 'A' CIRCLED | CODE 'A' <br> NOT CIRCLED $\square$ | $\rightarrow 499 B$ |
| 498 | In the last 24 hours, how many cigarettes did you smoke? | CIGARETTES . . . . . . . . . . . |  |
| 499B | Have you had an injection for any reason in the last six months? <br> IF YES: How many injections did you have? <br> IF NUMBER OF INJECTIONS IS GREATER THAN 94, OR DAILY FOR 3 MONTHS OR MORE, RECORD '95'. <br> IF NON-NUMERIC ANSWER, PROBE TO GET AN ESTIMATE. | NUMBER OF INJECTIONS <br> NONE | $\rightarrow 499 \mathrm{~F}$ |
| 499C | Among these injections, how many were administered by a doctor, a nurse, a pharmacist, a dentist, or any other health workers? <br> IF NUMBER OF INJECTIONS IS GREATER THAN 94, OR DAILY FOR 3 MONTHS OR MORE, RECORD '95'. <br> IF NON-NUMERIC ANSWER, PROBE TO GET AN ESTIMATE. | NUMBER OF INJECTIONS <br> NONE $\qquad$ $00$ | $\longrightarrow 499 \mathrm{~F}$ |


| No. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 499D | The last time you had an injection from a health professional, where did you go for the injection to be given? |  |  |
| 499E | The last time you had an injection, did the person who gave you the injection take the syringe and needle from a new, unopened package? |  |  |
| 499F | Have you ever heard of female circumcision? |  | $\longrightarrow 499 \mathrm{H}$ |
| 499 G | In a number of countries, there is a practice in which a girl may have part of her genitals cut. Have you heard about this practice? |  | $\rightarrow 501$ |
| 499H | Have you been circumcised? |  | $\rightarrow 499 \mathrm{~N}$ |
| 4991 | Now I would like to ask you what was done to you at this time. <br> Was any flesh removed from the genital area? | YES $\ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots$ NO $\ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots$ DON'T KNOW $\ldots \ldots \ldots \ldots \ldots \ldots \ldots$ | $\rightarrow 499 \mathrm{~K}$ |
| 499J | Was the genital area just nicked without removing any flesh? |  |  |
| 499K | Was your genital area sewn? |  |  |


| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 499L | How old were you when this occurred? <br> IF THE RESPONDENT DOES NOT KNOW THE EXACT AGE, PROBE TO GET AN ESTIMATE. |  |  |
| 499M | Who cut (or nicked) the genitals? | TRADITIONAL <br> TRAD. "CIRCUMCISER" . . . . . . . . . . 11 <br> TRAD. BIRTH ATTENDANT . . . . . . . . 12 <br> OTHER <br> TRAD. $\qquad$ <br> (SPECIFY) <br> HEALTH PROFESSIONAL <br> DOCTOR ........... 21 <br> TRAINED NURSE/MIDWIFE . . . . . . . . 22 <br> OTHER <br> PROF. $\qquad$ 26 (SPECIFY) |  |
| 499N | CHECK 214 AND 216: <br> HAS AT LEAST ONE <br> HAS NO LIVING DAUGHTER <br> DAU | R | $\rightarrow 499 \mathrm{~W}$ |
| 4990 | Has one of your daughters been circumcised? <br> IF YES: How many? | NUMBER CIRCUMCISED $\square$ <br> NO DAUGHTER CIRCUMCISED ....... 95 | $\rightarrow 499 \mathrm{~V}$ |
| 499P | To which of your daughters did this happen most recently? <br> (DAUGHTER'S NAME) <br> INTERVIEWER: CHECK 212 AND RECORD THE LINE NUMBER FOR THE DAUGHTER. | DAUGHTER'S LINE NUMBER FROM Q212 |  |
| 499Q | Now I would like to ask you what was done to (NAME OF THE DAUGHTER FROM Q499P) at this time. <br> Was any flesh removed from her genital area? | YES . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 8 | $\rightarrow 499 \mathrm{~S}$ |
| 499R | Was her genital area just nicked without removing any flesh? | YES . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 2 <br> NO . . . . . . . . . . . . . . . . . . . . . . . .  |  |
| 499S | Was her genital area sewn? | YES . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 8 |  |
| 499 T | How old was (NAME OF DAUGHTER FROM Q499P) when this occurred? <br> IF THE RESPONDENT DOES NOT KNOW THE AGE, PROBE TO GET AN ESTIMATE. |  |  |


| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 4994 | Who cut (or nicked) the genitals? | TRADITIONAL <br> TRAD. "CIRCUMCISER" . ........... 11 <br> TRAD. BIRTH ATTENDANT . ........ 12 OTHER <br> TRAD. $\qquad$ 16 <br> (SPECIFY) <br> HEALTH PROFESSIONAL <br> DOCTOR ............ 21 <br> TRAINED NURSE/MIDWIFE . . . . . . . . 22 <br> OTHER <br> PROF. $\qquad$ 26 <br> (SPECIFY) <br> DON'T KNOW |  |
| 499V | Do you intend to have any of your daughters circumcised in the future? |  |  |
| 499w | Do you think that this practice should be continued, or should it be discontinued? |  |  |

SECTION 5. MARRIAGE AND SEXUAL ACTIVITY

| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 501 | Are you currently married or living together with a man as if married? | YES, CURRENTLY MARRIED $\ldots . . .$. 1  <br> YES, LIVING WITH A MAN  . 2 <br> NO, NOT IN UNION $\ldots \ldots . . . . . . . .$. 3   | $\longrightarrow 504$ |
| 502 | Have you ever been married or lived together with a man? |  | $\begin{aligned} & \longrightarrow 503 \\ & \longrightarrow 510 \end{aligned}$ |
| 502A | ENTER '0' IN COLUMN 4 OF CALENDAR IN THE MONTH OF INTER JANUARY 1999 $\qquad$ | W, AND IN EACH MONTH BACK TO | $\rightarrow 518$ |
| 503 | What is your marital status now: are you widowed, divorced, or separated? | WIDOWED . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 2 <br> DIVORCED . . . . . . . . . . . . . . . . . . 3 | 510 |
| 504 | Is your husband/partner living with you now or is he staying elsewhere? | LIVING TOGETHER . . . . . . . . . . . . . . . . 1 STAYING ELSEWHERE . . . . . . . . 2 |  |
| 505 | 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 <br> LINE NO. $\square$ |  |
| 507 | Besides yourself, does your husband/partner have other wives or does he live with other women as if married? |  | $\xrightarrow{\longrightarrow} 510$ |
| 508 | Including yourself, how many wives or other partners does your husband live with now? | NUMBER OF WIVES AND LIVE-IN PARTNERS $\square$ DK |  |
| 509 | Are you the first, second, ... wife? | RANK . . . . . . . . . . . . . . . . . |  |
| 510 | Have you been married or lived with a man only once or more than once? |  |  |
| 511 | CHECK 510: | MONTH $\qquad$ <br> DON'T KNOW MONTH <br> 98 <br> YEAR <br> DON'T KNOW YEAR <br> 9998 | $\rightarrow$ 512A |
| 512 | How old were you when you started living with him? | AGE .................... |  |
| 512A | DETERMINE MONTHS MARRIED OR LIVING WITH A MAN SINCE JA OF CALENDAR FOR EACH MONTH MARRIED OR LIVING WITH A M NOT MARRIED/NOT LIVING WITH A MAN, SINCE JANUARY 1999. <br> FOR WOMEN WITH MORE THAN ONE UNION: PROBE FOR DATE APPROPRIATE, FOR STARTING AND TERMINATION DATES OF AN <br> FOR WOMEN NOT CURRENTLY IN UNION: PROBE FOR DATE WH TERMINATION DATE AND, IF APPROPRIATE, FOR THE STARTING PREVIOUS UNIONS. | UARY 1999. ENTER 'X' IN COLUMN 4 N, AND ENTER 'O' FOR EACH MONTH <br> HEN CURRENT UNION STARTED AND, IF PREVIOUS UNIONS. <br> LAST UNION STARTED AND FOR ND TERMINATION DATES OF ANY |  |
| 513 | CHECK 503: IS RESPONDENT CURRENTLY WIDOWED? <br> NOT ASKED OR <br> NOT WIDOWED $\square$ WIDO | D $\square$ | $\rightarrow 516$ |


| 514 | MARRIED MORE CHECK 510. THAN ONCE $\square \quad \begin{array}{r}\text { MA }\end{array}$ | MARRIED ONLY ONCE $\square$ | $\rightarrow 518$ |
| :---: | :---: | :---: | :---: |
| 515 | How did your previous marriage or union end? |  | $\rightarrow 518$ |
| 516 | Who did most of your late husband's property go to? |  | $\longrightarrow 518$ |
| 517 | Did you receive any of your late husband's assets or valuables? | YES . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . |  |
| 518 | CHECK FOR THE PRESENCE OF OTHERS. <br> BEFORE CONTINUING, MAKE EVERY EFFORT TO ENSURE PRIVACY. |  |  |
| 519 | Now I need to ask you some questions about sexual activity in order to gain a better understanding of some family life issues. <br> How old were you when you had sexual intercourse for the very first time? | NEVER ............................... . . 00 <br> AGE IN YEARS $\qquad$ $\square$ <br> 1ST TIME WHEN STARTED LIVING WITH (1ST) HUSBAND/PARTNER . . . 95 | $\begin{array}{r} \longrightarrow 521 \\ \longrightarrow 521 \end{array}$ |
| 520 | Do you intend to wait until you get married to have sexual intercourse for the first time? | YES . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 8 |  |
| 521 | $\begin{array}{lr} \text { CHECK 106: } \begin{array}{r} 15-24 \\ \\ \\ \text { YEARS OLD } \\ \square \end{array} \quad \text { YEARS OLD } \end{array}$ |  | $\rightarrow 526$ |
| 522 | The first time you had sexual intercourse, did either of you use a condom? | YES . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 1  <br> NO . . . . . .  <br> DON'T KNOW/DON'T REMEMBER . . . 8 |  |
| 523 | How old was the person you first had sexual intercourse with? | AGE OF PARTNER ...........  <br> DON'T KNOW ....................... 98  | $\longrightarrow 526$ |
| 524 | Was this person older than you, younger than you, or about the same age as you? |  |  |
| 525 | Would you say this person was ten or more years older than you or less than ten years older than you? | $\begin{array}{lcc} \text { TEN OR MORE YEARS OLDER } & \ldots . . . & 1 \\ \text { LESS THAN TEN YEARS OLDER } & \ldots & 2 \\ \text { OLDER, UNSURE HOW MUCH } & \ldots . . & 3 \end{array}$ |  |
| 526 | When was the last time you had sexual intercourse? <br> IF 12 MONTHS OR MORE, ANSWER MUST BE CONVERTED AND RECORDED IN YEARS. | DAYS AGO <br> WEEKS AGO <br> MONTHS AGO <br> YEARS AGO $\qquad$ | $\longrightarrow 541$ |


|  |  | LAST SEXUAL PARTNER | SECOND-TO-LAST SEXUAL PARTNER | THIRD-TO-LAST SEXUAL PARTNER |
| :---: | :---: | :---: | :---: | :---: |
| 527 | The last time you had sexual intercourse with this (second/third) person, was a condom used? (2) | YES $\ldots \ldots \ldots \ldots \ldots$ NO $\ldots \ldots \ldots \ldots$ $($ SKIP TO 529$) \longleftarrow$ | YES $\ldots \ldots \ldots \ldots \ldots$ NO $\ldots \ldots \ldots \ldots$ $($ SKIP TO 529$) \longleftarrow$ | YES $\ldots \ldots \ldots \ldots \ldots$ NO $\ldots \ldots \ldots \ldots$ $($ SKIP TO 529$)$ |
| 528 | Did you use a condom every time you had sexual intercourse with this person in the last 12 months? | $\begin{array}{ll} \text { YES } \ldots \ldots \\ \text { NO . . . . . . . . . . . . . . . . . . . } & 1 \\ 2 \end{array}$ | $\begin{array}{ll} \text { YES } \ldots \ldots \\ \text { NO . . . . . . . . . . . . . . . . . . } & 1 \\ 2 \end{array}$ |  |
| 529 | The last time you had sexual intercourse with this (second/third) person, did you or this person drink alcohol? |  | YES $\ldots \ldots \ldots \ldots \ldots$ NO $\ldots \ldots \ldots \ldots$ $($ SKIP TO 531$) \longleftarrow$. | YES $\ldots \ldots \ldots \ldots \ldots$ NO $\ldots \ldots \ldots \ldots$ $($ SKIP TO 531$) \longleftarrow$. |
| 530 | Were you or your partner drunk at that time? <br> IF YES: Who was drunk? | RESPONDENT ONLY 1 PARTNER ONLY ... 2 RESPONDENT AND <br> PARTNER BOTH . 3 NEITHER ........... 4 | RESPONDENT ONLY 1 PARTNER ONLY ... 2 RESPONDENT AND <br> PARTNER BOTH . 3 NEITHER........... . 4 | RESPONDENT ONLY 1 PARTNER ONLY ... 2 RESPONDENT AND <br> PARTNER BOTH . 3 NEITHER............ 4 |
| 531 | What was your relationship to this person with whom you had sexual intercourse? <br> IF BOYFRIEND: <br> Were you living together as if married? <br> IF YES, CIRCLE '02' <br> IF NO, CIRCLE '03' |  |  |  |
| 532 | For how long (have you had/did you have) sexual relations with this person? <br> IF ONLY HAD SEXUAL RELATIONS WITH THIS PERSON ONCE, RECORD '01' DAYS. | DAYS <br> MONTHS <br> YEARS | DAYS <br> MONTHS <br> YEARS | DAYS $\ldots$ 1 <br> MONTHS . . 2 <br> YEARS $\ldots$ 3 <br>   |
| 533 | CHECK 106: | 15-24 $25-49$ $\square$ <br> (SKIP TO 537) |  |  |
| 534 | How old is this person? | AGE OF PARTNER (SKIP TO 537) DON'T KNOW | AGE OF PARTNER (SKIP TO 537) DON'T KNOW | AGE OF PARTNER (SKIP TO 538) DON'T KNOW |
| 535 | Is this person older than you, younger than you, or about the same age? | OLDER $\ldots \ldots$. 1  <br> YOUNGER $\ldots .$. 2 <br> SAME AGE $\ldots$. 3 <br> DON'T KNOW $\ldots$ 8 <br>    <br> $($ SKIP TO 537$)$   |  | OLDER $\ldots \ldots .$. 1  <br> YOUNGER $\ldots .$. 2 <br> SAME AGE $\ldots$. 3 <br> DON'T KNOW $\ldots$. 8  <br> (SKIP TO 538) $\boxed{ }$  |
| 536 | Would you say this person is ten or more years older than you or less than ten years older than you? | TEN OR MORE YEARS OLDER LESS THAN TEN YEARS OLDER 2 OLDER, UNSURE HOW MUCH | TEN OR MORE YEARS OLDER LESS THAN TEN YEARS OLDER 2 OLDER, UNSURE HOW MUCH 3 | TEN OR MORE YEARS OLDER LESS THAN TEN YEARS OLDER 2 OLDER, UNSURE HOW MUCH 3 |
| 537 | In addition to [this person/these two people], have you had sexual intercourse with any other person in the last 12 months? |  |  |  |

SECTION 6. FERTILITY PREFERENCES

| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 601 | CHECK 311/311A: <br> NEITHER <br> HE OR SHE <br> STERILIZED STERILIZED |  | $\rightarrow 614$ |
| 602 | CHECK 226: | HAVE (A/ANOTHER) CHILD NO MORE/NONE SAYS SHE CAN'T GET PREGNAN UNDECIDED/DON'T KNOW: <br> AND PREGNANT AND NOT PREGNANT OR UNSURE |  |
| 603 | CHECK 226: <br> NOT PREGNANT OR UNSURE <br> How long would you like to wait from now before the birth of (a/another) child? <br> PREGNANT <br> After the birth of the child you are expecting now, how long would you like to wait before the birth of another child? |  |  |
| 604 | CHECK 226: <br> NOT PREGNANT <br> PREGNANT OR UNSURE |  | $\rightarrow 610$ |
| 605 | CHECK 310: USING A CONTRACEPTIVE METHOD? <br> CUR | $\begin{aligned} & \text { LY } \\ & \text { NG } \end{aligned}$ $\square$ | $\rightarrow 608$ |
| 606 | CHECK 603: | -23 MONTHS 00-01 YEAR | $\rightarrow 610$ |


| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 607 | CHECK 602: <br> WANTS TO HAVE A/ANOTHER CHILD <br> You have said that you do not want (a/another) child soon, but you are not using any method to avoid pregnancy. <br> Would you please tell me why? <br> Any other reason? <br> WANTS NO MORE/ NONE <br> You have said that you do not want any (more) children, but you are not using any method to avoid pregnancy. <br> Would you please tell me why? <br> Any other reason? <br> RECORD ALL REASONS MENTIONED. |  |  |
| 608 | In the next few weeks, if you discovered that you were pregnant, would that be a big problem, a small problem, or no problem for you? |  |  |
| 609 | CHECK 310: USING A CONTRACEPTIVE METHOD? <br> NOT <br> ASKED NOT CURRENTLY USING | YES, <br> NTLY USING | 614 |
| 610 | Do you think you will use a contraceptive method to delay or avoid pregnancy at any time in the future? | YES . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 8 | $\xrightarrow{\longrightarrow} 612$ |
| 611 | Which contraceptive method would you prefer to use? |  |  |


| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 612 | What is the main reason that you think you will not use a contraceptive method at any time in the future? |  | $\rightarrow 614$ |
| 613 | Would you ever use a contraceptive method if you were married? | YES . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 1 NO . . . . . . . . . . . . . . . . . . . 8 |  |
| 614 | CHECK 216: <br> HAS LIVING CHILDREN <br> NO LIVING CHILDREN <br> If you could go back to the time If you could choose exactly the you did not have any children number of children to have in and could choose exactly the your whole life, how many number of children to have in would that be? your whole life, how many would that be? <br> PROBE FOR A NUMERIC RESPONSE. |  | $\longrightarrow 616$ $\longrightarrow 616$ |
| 615 | How many of these children would you like to be boys, how many would you like to be girls and for how many would the sex not matter? |  |  |
| 616 | Would you say that you approve or disapprove of couples using a contraceptive method to avoid getting pregnant? |  |  |


| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 616A | If you wanted to get information on family planning, who would you like to talk to most: |  |  |
| 616B | Is it acceptable or not acceptable to you for information on family planning to be provided: <br> On the radio? <br> On the television? <br> In a newspaper or magazine? |  |  |
| 617 | In the last six months have you heard about family planning: <br> a) On the radio? <br> b) On the television? <br> c) In a newspaper or magazine? <br> d) From a poster? <br> e) From billboards? <br> f) At community events? <br> g) From live drama? <br> h) From a doctor or nurse? <br> i) From a community health worker? |  |  |
| 618 | In the past six months, what drama series have you listened to on the radio? <br> CIRCLE THE SERIES MENTIONED SPONTANEOUSLY. FOR SERIES NOT MENTIONED, ASK: <br> In the last 6 months, have you listened to: <br> a) Zinduka? <br> b) Twende na Wakati? <br> c) Other? |  |  |
| 618A | CHECK 618: <br> LISTENED TO <br> HAS NOT ZINDUKA <br> (CODE '1' OR $\square$ <br> 2' CIRCLED) | D <br> D) | $\rightarrow$ 618E |
| 618B | How often do you listen to Zinduka? |  |  |
| 618C | As a result of listening to Zinduka, did you do anything or take any action related to family planning? |  | $\longrightarrow 618 \mathrm{E}$ |
| 618D | What did you do as a result of listening to Zinduka? <br> RECORD ALL MENTIONED. | TALKED TO PARTNER ............... A <br> TALKED TO A HEALTH WORKER ... B <br> TALKED TO SOMEONE ELSE . . . . . . . . C <br> VISITED A CLINIC FOR FAM. PLAN. . D <br> BEGAN USING A MOD. METHOD ... E <br> CONTINUED USING A MOD. METH. . . . F <br> OTHER $\qquad$ <br> (SPECIFY) |  |



| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 627 | Do you think your husband/partner wants the same number of children that you want, or does he want more or fewer than you want? |  |  |
| 628 | Husbands and wives do not always agree on everything. Please tell me if you think a wife is justified in refusing to have sex with her husband when: <br> a) She knows her husband has a sexually transmitted disease? <br> b) She knows her husband has sex with women other than <br> c) his wife or wives? <br> d) She has recently given birth? <br> e) She is tired or not in the mood? |  YES NO DK  <br> HAS STD $\ldots \ldots \ldots \ldots \ldots$ 1 2 8  <br> OTHER WOMEN $\ldots \ldots \ldots \ldots$ 1 2 8  <br>      <br> RECENT BIRTH $\ldots \ldots \ldots$ 1 2 8  <br> TIRED/NOT IN MOOD $\ldots \ldots$. 1 2 8  |  |
| 629 | When a wife knows her husband has a disease that can be transmitted through sexual contact, is she justified in asking that they use a condom when they have sex? | YES . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 1 NO . . . . . . . . . . . . . . . . . . . . . . . . . . . . 8 |  |
| 630 | CHECK 501: <br> CURRENTLY MARRIED <br> NOT IN UNION OR IN UNION |  | 701 |
| 631 | Can you say no to your husband if you do not want to have sexual intercourse? | YES . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 1 NO . . . . . . . . . . . . . . . . . . . 8 |  |
| 632 | Could you ask your husband to use a condom if you wanted him to? | YES . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 1 NO . . . . . . . . . . . . . . . . . 8 |  |

SECTION 7. HUSBAND'S BACKGROUND AND WOMAN'S WORK




SECTION 8. HIVIAIDS AND OTHER SEXUALLY TRANSMITTED INFECTIONS

\begin{tabular}{|c|c|c|c|c|}
\hline NO. \& QUESTIONS AND FILTERS \& CODING CATEGORIES \& \& SKIP \\
\hline 801 \& Now I would like to talk about something else. Have you ever heard of an illness called AIDS? \& \[
\begin{aligned}
\& \text { YES } \\
\& \text { NO }
\end{aligned}
\] \& 1 \& \(\rightarrow 844\) \\
\hline 802 \& Can people reduce their chances of getting the AIDS virus by having just one sex partner who is not infected and who has no other partners? \& \begin{tabular}{l}
YES \\
NO DON'T KNOW
\end{tabular} \& 1
2
8 \& \\
\hline \begin{tabular}{l}
\[
803
\] \\
(1)
\end{tabular} \& Can people get the AIDS virus from mosquito bites? \& \begin{tabular}{l}
YES \\
NO \\
DON'T KNOW
\end{tabular} \& 1
2
8 \& \\
\hline 804 \& By using condoms each time they have sex, can people reduce their chances of being infected with the AIDS virus? \& \begin{tabular}{l}
YES \\
NO \\
DON'T KNOW
\end{tabular} \& 1
2
8 \& \\
\hline \[
\begin{aligned}
\& 805 \\
\& \text { (1) }
\end{aligned}
\] \& Can people be infected with the AIDS virus by eating from the same plate as someone who is sick with AIDS? \& \begin{tabular}{l}
YES \\
NO DON'T KNOW
\end{tabular} \& 1
2
8 \& \\
\hline 806 \& Can people reduce their chances of being infected with the AIDS virus if they stop having sex altogether? \& \begin{tabular}{l}
YES \\
NO DON'T KNOW
\end{tabular} \& 8 \& \\
\hline \begin{tabular}{l}
\[
807
\] \\
(1)
\end{tabular} \& Can people get the AIDS virus because of witchcraft or other supernatural means? \& \begin{tabular}{l}
YES \\
NO \\
DON'T KNOW
\end{tabular} \& 1
2
8 \& \\
\hline 808 \& \begin{tabular}{l}
What else can a person do in order to avoid or reduce their chances of being infected by the AIDS virus? \\
Anything else? \\
RECORD ALL WAYS MENTIONED.
\end{tabular} \& \begin{tabular}{l}
ABSTAIN FROM SEX USE CONDOMS LIMIT SEX TO ONE PARTNER/STAY \\
FAITHFUL TO ONE PARTNER LIMIT NUMBER OF SEXUAL \\
PARTNERS AVOID SEX WITH PROSTITUTES AVOID SEX WITH PERSONS WHO \\
HAVE MANY PARTNERS \\
AVOID SEX WITH HOMOSEXUALS AVOID SEX WITH PERSONS WHO \\
INJECT DRUGS INTRAVENOUSLY . AVOID BLOOD TRANSFUSIONS . AVOID INJECTIONS AVOID SHARING RAZORS/BLADES AVOID KISSING AVOID MOSQUITO BITES SEEK PROTECTION FROM TRADITIONAL PRACTITIONER OTHER \(\qquad\) (SPECIFY) \\
OTHER \(\qquad\) (SPECIFY) \\
NOTHING ELSE DON'T KNOW
\end{tabular} \& E
F
G
H
I
J
K
L
\(M\)

$N$
W

X
Y \& <br>

\hline 810 \& Is it possible for a healthy-looking person to have the AIDS virus? \& | YES |
| :--- |
| NO |
| DON'T KNOW | \& 2 \& <br>

\hline
\end{tabular}



| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 821 | Where was the test done? <br> IF SOURCE IS HOSPITAL, HEALTH CENTRE, OR CLINIC, WRITE THE NAME OF THE SOURCE. <br> PROBE TO IDENTIFY THE TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE. |  |  |
| 822 | Have you been testea tor the AIDS virus since that tıme you were tested durıng your pregnancy? | YヒS . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 1 <br> NO . . . . . .  | $\rightarrow 8$ ¢ ${ }^{\text {c }}$ |
| 823 | When was the last time you were tested for the AIDS virus? | LESS THAN 12 MONTHS AGO $\ldots .$. 1 <br> $12-23$ MONTHS AGO .................. 2  <br> 2 OR MORE YEARS AGO ...... 3 | $\xrightarrow{\longrightarrow} 831$ |
| 824 | I don't want to know the results, but have you ever been tested to see if you have the AIDS virus? |  | $\rightarrow 829$ |
| 825 | When was the last time you were tested? | LESS THAN 12 MONTHS AGO $\ldots .$. 1 <br> $12-23$ MONTHS AGO . . . . . . . . . . . 2  <br> 2 OR MORE YEARS AGO $\ldots . . . .$. 3 |  |
| 826 | The last time you had the test, did you yourself ask for the test, was it ottered to you and you accepted, or was it required? | ASKED FOR THE TEST .......... 1 <br> OFFERED AND ACCEPTED $\ldots .$. 2 <br> REQUIRED . . . . . . . . . . . . . . . . . . . 3  |  |
| 827 | I don't want to know the results, but did you get the results of the test? | YES $\ldots \ldots \ldots \ldots \ldots$  <br> NO . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 1 <br> 2  |  |
| 828 | Where was the test done? <br> (3) <br> IF SOURCE IS HOSPITAL, HEALTH CENTRE, OR CLINIC, WRITE THE NAME OF THE SOURCE. <br> PROBE TO IDENTIFY THE TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE. <br> (NAME OF PLACE) |  |  |


| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 829 | Do you know of a place where people can go to get tested for the virus that causes AIDS? |  | $\rightarrow 831$ |
| 830 | Where is that? <br> (3) <br> IF SOURCE IS HOSPITAL, HEALTH CENTRE, OR CLINIC, WRITE THE NAME OF THE PLACE. <br> PROBE TO IDENTIFY THE TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE. <br> (NAME OF PLACE) <br> Any other place? <br> RECORD ALL SOURCES MENTIONED. |  |  |
| 831 | If you learn that a fresh food vendor has the AIDS virus, but is not sick, would you buy fresh food from him/her? |  |  |
| 831A | And if she/he is sick? |  |  |
| 832 | If a member of your family has been infected with the AIDS virus, but is not sick, would you want it to remain a secret within the family, or not a secret? |  |  |
| 833 | If a relative of yours became sick with the virus that causes AIDS, would you be willing to care for her or him in your own household? |  |  |
| 834 | In your opinion, if a female teacher has been infected with the AIDS virus, but is not sick, should she continue teaching? | SHOULD CONTINUE $\ldots \ldots \ldots$ $\ldots . .$. 1 <br> SHOULD NOT CONTINUE $\ldots . . . .$. 2 <br> DK/NOT SURE/DEPENDS $\ldots . . .$. 8 |  |
| 834A | In your opinion, if a male teacher has been infected with the AIDS virus, should he continue teaching? | SHOULD CONTINUE $\ldots \ldots \ldots . .$. 1  <br> SHOULD NOT CONTINUE $\ldots \ldots \ldots$ 2 <br> DK/NOT SURE/DEPENDS $\ldots . . . .$. 8 |  |
| 835 | Do you personally know someone who has been denied health services in the last 12 months because he or she is suspected to have the AIDS virus or has the AIDS virus? |  | $\rightarrow 840$ |



| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 848 | Do you believe that married women should only have sex with their husbands? | YES $\ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots$ 1 <br> NO $\ldots \ldots \ldots \ldots \ldots$ $\ldots \ldots \ldots$ <br> DKINOT SURE/DEPENDS $\ldots \ldots .$. 8 |  |
| 849 | Do you think that most women you know have sex only with their husbands? |  |  |
| 850 |  |  | $\rightarrow 853$ |
| 851 | If a man has a sexually transmitted disease, what symptoms might he have? <br> Any others? <br> RECORD ALL SYMPTOMS MENTIONED. |  |  |
| 852 | If a woman has a sexually transmitted disease, what symptoms might she have? <br> Any others? <br> RECORD ALL SYMPTOMS MENTIONED. |  |  |


| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 853 | CHECK 519: <br> HAS HAD SEXUAL <br> HAS NOT HAD SEXUAL INTERCOURSE INTERCOURSE |  | $\rightarrow 901$ |
| 854 | CHECK 850: <br> HEARD ABOUT INFECTION <br> HAS NOT HEARD AB TRANSMITTED THROUGH INFECTION TRANSMI SEXUAL CONTACT THROUGH SEXUAL CON | $\begin{array}{cc} T \\ D & \square \\ T & \end{array}$ | $\rightarrow 856$ |
| 855 | 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 . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 8 |  |
| 856 | Sometimes women experience a bad smelling abnormal genital discharge. <br> During the last 12 months, have you had a bad smelling abnormal genital discharge? | YES . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 2 <br> NO . . . . . .  |  |
| 857 | Sometimes women have a genital sore or ulcer. <br> During the last 12 months, have you had a genital sore or ulcer? | YES . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 8 |  |
| 858 | CHECK 855, 856, AND 857: <br> HAS HAD AN INFECTION (ANY 'YES') $\quad \begin{array}{r}\text { HAS NOT HAD AN } \\ \text { INFECTION OR }\end{array}$ |  | $\rightarrow 901$ |
| 859 | The last time you had (PROBLEM FROM 505/506/507), did you seek any kind of advice or treatment? |  | $\rightarrow 901$ |
| 860 | Where did you go? <br> Any other place? <br> RECORD ALL SOURCES MENTIONED. |  |  |

(1) If 803,805 and/or 807 do not apply to the local context, replace the question using a specific local misconception. At least two questions related to misconceptions are needed.
(2) For fieldwork in 2005 and 2006, the year should be 2003 and 2004, respectively.
(3) Coding categories to be developed locally and revised based on the pretest; however, the broad categories must be maintained.

| NO. | QUESTIONS AND FILTERS | CODING CATE | SKIP |
| :---: | :---: | :---: | :---: |
| 901 | Now I would like to ask you some questions about your brothers and sisters, that is, all of the children born to your natural mother, including those who are living with you, those living elsewhere and those who have died. <br> How many children did your mother give birth to, including you? | NUMBER OF BIRTHS TO NATURAL MOTHER |  |
| 902 | CHECK 901: <br> TWO OR MORE BIRTHS <br> (RESP | ONLY ONE BIRTH (RESPONDENT ONLY) |  |
| 903 | How many of these births did your mother have before you were born? | NUMBER OF PRECEDING BIRTHS |  |


| 904 | What was the name given to your oldest (next oldest) brother or sister? | (1) | (2) | (3) | (4) | (5) | (6) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 905 | Is (NAME) male or female? | $\begin{array}{ll} \text { MALE } & 1 \\ \text { FEMALE } & 2 \end{array}$ | $\begin{array}{ll} \text { MALE } & 1 \\ \text { FEMALE } & 2 \end{array}$ | $\begin{array}{ll} \text { MALE } & 1 \\ \text { FEMALE } & 2 \end{array}$ | $\begin{array}{ll} \text { MALE } & 1 \\ \text { FEMALE } & 2 \end{array}$ | $\begin{array}{ll} \text { MALE } & 1 \\ \text { FEMALE } & 2 \end{array}$ | $\begin{array}{ll} \text { MALE } & 1 \\ \text { FEMALE } & 2 \end{array}$ |
| 906 | Is (NAME) still alive? | $\left.\begin{array}{lll} \text { YES } \ldots . & 1 \\ \text { NO } & \ldots & 2 \\ \text { GO TO } & 908 & \longleftarrow \\ \text { DK } & \ldots & 8 \\ \text { GO TO } & (2) & \boxed{4} \end{array}\right]$ | $\left.\begin{array}{lll} \text { YES } \ldots & 1 \\ \text { NO } & \ldots & 2 \\ \text { GO TO } & 908 & \boxed{4} \\ \text { DK } & \ldots & 8 \\ \text { GO TO } & (3) & \boxed{4} \end{array}\right]$ | $\left.\begin{array}{lll} \text { YES } \ldots . & 1 \\ \text { NO } & \ldots & 2 \\ \text { GO TO } & 908 & 4 \\ \text { DK } & \ldots & 8 \\ \text { GO TO }(4) & \boxed{4} \end{array}\right]$ | $\left.\begin{array}{lll} \text { YES } \ldots . & 1 \\ \text { NO } & \ldots & 2 \\ \text { GO TO } & 908 & 4 \\ \text { DK } & \ldots & 8 \\ \text { GO TO (5) } & \end{array}\right]$ | $\left.\begin{array}{lll} \text { YES } & \ldots & 1 \\ \text { NO } & \ldots & 2 \\ \text { GO TO } & 908 & 4 \\ \text { DK } & \ldots & 8 \\ \text { GO TO (6) } & & \boxed{4} \end{array}\right]$ | $\left.\begin{array}{lll} \text { YES } & \ldots & 1 \\ \text { NO } & \ldots & 2 \\ \text { GO TO } & 908 & \boxed{4} \end{array}\right]$ |
| 907 | How old is (NAME)? |  |  |  |  |  |  |
| 908 | How many years ago did (NAME) die? |  |  |  |  |  |  |
| 909 | How old was (NAME) when he/she died? | IF MALE OR DIED BEFORE 12 YEARS OF AGE GO TO (2) | IF MALE OR DIED BEFORE 12 YEARS OF AGE GO TO (3) | IF MALE OR DIED BEFORE 12 YEARS OF AGE GO TO (4) | IF MALE OR DIED BEFORE 12 YEARS OF AGE GO TO (5) | IF MALE OR DIED BEFORE 12 YEARS OF AGE GO TO (6) | IF MALE OR DIED BEFORE 12 YEARS OF AGE GO TO (7) |
| 910 | Was (NAME) pregnant when she died? | $\left.\begin{array}{l} \text { YES . . } \\ \text { GO TO } 913 \\ \text { NO } \ldots \end{array}\right]$ | $\left.\right]$ | $\left.\begin{array}{ccc} \text { YES } \ldots & 1 \\ \text { GO TO } 913 & \downarrow \\ \text { NO } & \ldots & 2 \end{array}\right]$ | $$ | $\left.\begin{array}{lll} \text { YES } \ldots & 1 \\ \text { GO TO } 913 & 4 \\ \text { NO } & \ldots & 2 \end{array}\right]$ | $\begin{aligned} & \text { YES . . } \\ & \text { GO TO } 9131 \\ & \text { NO } \ldots . \end{aligned}$ |
| 911 | Did (NAME) die during childbirth? | $\left.\begin{array}{l} \text { YES } \ldots \\ \text { GO TO } 913 \\ \text { NO } \ldots \ldots \end{array}\right]$ | $\left.\begin{array}{ccc} \text { YES } \ldots & 1 \\ \text { GO TO } & 913 & \boxed{4} \end{array}\right]$ | $\left.\begin{array}{lll} \text { YES } \ldots . & 1 \\ \text { GO TO } & 913 \\ \text { NO } & \ldots & 2 \end{array}\right]$ | $\left.\begin{array}{lll} \text { YES } \ldots . & 1 \\ \text { GO TO } & 913 \\ \text { NO } & \ldots & 2 \end{array}\right]$ | $\left.\begin{array}{l} \text { YES } \ldots \\ \text { GO TO } 913 \\ \text { NO } \\ \text { NO } \end{array}\right] \quad 2$ | $\left.\begin{array}{l} \text { YES . . . } \\ \text { GO TO } 913 \\ \text { NO } \ldots . \end{array}\right]$ |
| 912 | Did (NAME) die within two months after the end of a pregnancy or childbirth? | $\begin{array}{lll} \text { YES } \ldots & 1 \\ \text { NO } & \ldots & 2 \end{array}$ | $\begin{array}{lll} \text { YES } \ldots & 1 \\ \text { NO } & \ldots & 2 \end{array}$ | $\begin{array}{lll} \text { YES } \ldots & 1 \\ \text { NO } & \ldots & 2 \end{array}$ | $\begin{array}{lll} \text { YES } \ldots & 1 \\ \text { NO } & \ldots & 2 \end{array}$ | $\begin{array}{lll} \text { YES } \ldots & 1 \\ \text { NO } & \ldots & 2 \end{array}$ | $\begin{array}{lll} \text { YES } \ldots & 1 \\ \text { NO } & \ldots & 2 \end{array}$ |
| 913 | How many live born children did (NAME) give birth to during her lifetime (before this pregnancy)? |  |  |  |  |  | $1$ |

IF NO MORE BROTHERS OR SISTERS, GO TO 914.

| NO. | QUESTIONS AND FILTERS |  |  | CODING CATEGORIES |  |  | SKIP |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 904 | What was the name given to your oldest (next oldest) brother or sister? | (7) | (8) | (9) | (10) | (11) | (12) |
| 905 | Is (NAME) male or female? | $\begin{array}{ll} \text { MALE } & 1 \\ \text { FEMALE } & 2 \end{array}$ | $\begin{array}{ll} \text { MALE } & 1 \\ \text { FEMALE } & 2 \end{array}$ | $\begin{array}{ll} \text { MALE } & 1 \\ \text { FEMALE } & 2 \end{array}$ | $\begin{array}{ll} \text { MALE } & 1 \\ \text { FEMALE } & 2 \end{array}$ | $\begin{array}{ll} \text { MALE } & 1 \\ \text { FEMALE } & 2 \end{array}$ | $\begin{array}{ll} \text { MALE } & 1 \\ \text { FEMALE } & 2 \end{array}$ |
| 906 | Is (NAME) still alive? | $\left.\begin{array}{llc}\text { YES } \ldots . . & 1 \\ \text { NO } & \ldots & 2 \\ \text { GO TO } & 908 \\ \text { DK } & \ldots & 8 \\ \text { GO TO (8) } & 4\end{array}\right]$ | $\left.\begin{array}{lll} \text { YES } \ldots & 1 \\ \text { NO } & \ldots & 2 \\ \text { GO TO } & 908 & 4 \\ \text { DK } & \ldots & 8 \\ \text { GO TO } & (9) & \boxed{4}) \end{array}\right]$ | $\left.\begin{array}{lll}\text { YES } \ldots & 1 \\ \text { NO } & \ldots & 2 \\ \text { GO TO } 908 & 4 \\ \text { DK } & \ldots & 8 \\ \text { GO TO } & (10)\end{array}\right]$ | $\left.\left.\begin{array}{lll} \text { YES } \ldots & 1 \\ \text { NO } & \ldots & 2 \\ \text { GO TO } & 908 & 4 \\ \text { DK } & \ldots & 8 \\ \text { GO TO } & (11) \end{array}\right]-4 .\right] ~ .$ | $\left.\begin{array}{llll}\text { YES } & \ldots & 1 \\ \text { NO } & \ldots & 2 & 4 \\ \text { GO TO } & 908 & 4 \\ \text { DK } & \ldots & 8 & 8 \\ \text { GO TO } & (12) & 4\end{array}\right]$ | $\left.\begin{array}{lll} \text { YES } \ldots & 1 \\ \text { NO } & \ldots & 2 \\ \text { GO TO } & 908 & 4 \\ \text { DK } & \ldots & 8 \\ \text { GO TO } & (13) \end{array}\right]$ |
| 907 | How old is (NAME)? |  |  |  |  |  |  |
| 908 | How many years ago did (NAME) die? |  |  |  | $1$ | $1$ |  |
| 909 | How old was (NAME) when he/she died? |  | IF MALE OR DIED BEFORE 12 YEARS OF AGE GO TO (9) | IF MALE OR DIED BEFORE 12 YEARS OF AGE GO TO (10) | IF MALE OR DIED BEFORE 12 YEARS OF AGE GO TO (11) | IF MALE OR DIED BEFORE 12 YEARS OF AGE GO TO (12) | IF MALE OR DIED BEFORE 12 YEARS OF AGE GO TO (13) |
| 910 | Was (NAME) pregnant when she died? |  | $\left.\begin{array}{l} \text { YES . . } \\ \text { GO TO } 913 \\ \text { NO } \ldots \end{array}\right]$ |  | $\left.\begin{array}{lll} \text { YES } \ldots & 1 \\ \text { GO TO } 913 & \leftarrow \\ \text { NO } & \ldots & 2 \end{array}\right]$ |  | $\left.\begin{array}{l} \text { YES . . } \\ \text { GO TO } 913 \\ \text { NO } \ldots \end{array}\right]$ |
| 911 | Did (NAME) die during childbirth? | $\left.\begin{array}{lll} \text { YES } \ldots & 1 \\ \text { GO TO } & 913 \\ \text { NO } & \ldots & 2 \end{array}\right]$ | $$ | $\left.\begin{array}{lll} \text { YES } \ldots & 1 \\ \text { GO TO } 913 \\ \text { NO } & \ldots & 2 \end{array}\right]$ | $\left.\begin{array}{lll} \text { YES } \ldots & 1 \\ \text { GO TO } & 913 \\ \text { NO } & \ldots & 2 \end{array}\right]$ | $\left.\begin{array}{l} \text { YES } \ldots . \\ \text { GO TO } \\ \text { GO } \\ \text { NO } \\ \text { NO } \end{array}\right]$ | $\begin{aligned} & \text { YES . . . } 1 \\ & \text { GO TO } 913 \text { [ } \\ & \text { NO . . } \quad 2 \end{aligned}$ |
| 912 | Did (NAME) die within two months after the end of a pregnancy or childbirth? | $\begin{array}{lll} \text { YES } \ldots & 1 \\ \text { NO } & \ldots & 2 \end{array}$ | $\begin{array}{lll} \text { YES } \ldots & 1 \\ \text { NO } & \ldots & 2 \end{array}$ | $\begin{array}{lll} \text { YES . . } & 1 \\ \text { NO } & \ldots & 2 \end{array}$ | $\begin{array}{lll} \text { YES . . } & 1 \\ \text { NO } & \ldots & 2 \end{array}$ | $\begin{array}{lll} \text { YES } \ldots & 1 \\ \text { NO } & \ldots & 2 \end{array}$ | $\begin{array}{lll} \text { YES } \ldots & 1 \\ \text { NO } & \ldots & 2 \end{array}$ |
| 913 | How many live born children did (NAME) give birth to during her lifetime (before this pregnancy)? |  |  |  |  |  | $\ldots$ |

IF NO MORE BROTHERS OR SISTERS, GO TO 914.

| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |



INSTRUCTIONS:
ONLY ONE CODE SHOULD APPEAR IN ANY BOX.
FOR COLUMNS 1 AND 4, ALL MONTHS SHOULD BE FILLED IN.
INFORMATION TO BE CODED FOR EACH COLUMN
COL. 1: BIRTHS, PREGNANCIES, CONTRACEPTIVE USE

| B | BIRTHS |
| :--- | :--- |
| P | PREGNANCIES |
| T | TERMINATIONS |
| 0 |  |
| 0 | NO METHOD |
| 1 | FEMALE STERILIZATION |
| 2 | MALE STERILIZATION |
| 3 | PILL |
| 4 | IUD |
| 5 | INJECTABLES |
| 6 | IMPLANTS |
| 7 | CONDOM |
| 8 | FEMALE CONDOM |
| 9 | DIAPHRAGM |
| J | FOAM OR JELLY |
| K | LACTATIONAL AMENORRHEA METHOD |
| L | PERIODIC ABSTINENCE |
| M | WITHDRAWAL |
| X | OTHER |

OTHER
(SPECIFY)
COL. 2: SOURCE OF CONTRACEPTION
GOVERNMENT/PARASTATAL REFERAL/SPEC. HOSPITAL REGIONAL HOSPITAL
DISTRICT HOSPITAL
HEALTH CENTRE
DISPENSARY VILLAGE HEALTH POST (WORKER) CBD WORKER
RELIGIOUS/VOLUNTARY REFERAL/SPEC. HOSPITAL DISTRICT (DESIG.) HOSPITAL HEALTH CENTRE DISPENSARY
PRIVATE
SPECIALIZED HOSPITAL HEALTH CENTRE DISPENSARY
OTHER
PHARMACY
NGO
VCT CENTRE
SHOP/KIOSK
BAR
GUEST HOUSE/HOTEL
FRIEND/RELATIVE/NEIGHBOUR
OTHER
(SPECIFY)
COL. 3: 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 HEALTH CONCERNS
SIDE EFFECTS
LACK OF ACCESS/TOO FAR
COSTS TOO MUCH
9 INCONVENIENT TO USE
F FATALISTIC
A DIFFICULT TO GET PREGNANT/MENOPAUSAL
D MARITAL DISSOLUTION/SEPARATION
X OTHER
(SPECIFY)
Z DON'T KNOW

COL. 4: MARRIAGE/UNION
X IN UNION (MARRIED OR LIVING TOGETHER)
0 NOT IN UNION


# TO BE FILLED IN AFTER COMPLETING INTERVIEW 

COMMENTS ABOUT RESPONDENT:
$\qquad$

COMMENTS ON SPECIFIC QUESTIONS:
$\qquad$

ANY OTHER COMMENTS:

## SUPERVISOR'S OBSERVATIONS

$\qquad$
NAME OF THE SUPERVISOR: $\qquad$ DATE:

EDITOR'S OBSERVATIONS
$\qquad$

$\qquad$ $\longrightarrow$

NAME OF EDITOR: $\qquad$ DATE:

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LARGE CITIES ARE; DAR ES SALAAM AND MWANZA. SMALL CITIES ARE; ARUSHA, MOROGORO, DODOMA, MOSHI, TANGA, IRINGA MBEYA, SHINYANGA, TABORA, MJINI MAGHARIBI - ZANZIBAR. ALL OTHER URBAN AREAS ARE TOWN



## INFORMED CONSENT

Hello. My name is $\qquad$ and I am working with the National Bureau of Statistics. We are conducting a national survey about the health of men, women and children. We would very much appreciate your participation in this survey. I would like to ask you some questions related to health. This information will help the government to plan health services. The survey usually does not take too much time. Whatever information you provide will be kept strictly confidential and will not be shown to other persons.

Participation in this survey is voluntary and you can choose not to answer any individual question or all of the questions. However, we hope that you will participate in this survey since your views are important. (1)

At this time, do you want to ask me anything about the survey?
May I begin the interview now?



| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 109 | Have you ever attended school? |  | $\rightarrow 113$ |
| 110 | What is the highest level of school you attended: primary, secondary, or higher? (2) |  |  |
| 111 | What is the highest (grade/form/year) you completed at that level? (2) | GRADE |  |
| 112 | CHECK 110: <br> PRIMARY <br> SECONDARY OR HIGHER |  | $\rightarrow 116$ |
| 113 | Now I would like you to read this sentence to me. <br> SHOW CARD TO RESPONDENT. (3) <br> IF RESPONDENT CANNOT READ WHOLE SENTENCE, PROBE: <br> Can you read any part of the sentence to me? |  |  |
| 114 | Have you ever participated in a literacy program or any other program that involves learning to read or write (not including primary school)? ( | YES . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 2 |  |
| 115 | CHECK 113: <br> CODE '2', '3' <br> CODE '1' OR '5' OR '4' CIRCLED $\square$ CIRCLED |  | $\rightarrow 117$ |
| 116 | Do you read a newspaper or magazine almost every day, at least once a week, less than once a week or not at all? | ALMOST EVERY DAY . . . . . . . . . . . . . . 1  <br> AT LEAST ONCE A WEEK 2  <br> LESS THAN ONCE A WEEK $\ldots . . . .$. 3 <br> NOT AT ALL . . . . . . . . . . . . . . . . . . 4  |  |
| 117 | Do you listen to the radio almost every day, at least once a week, less than once a week or not at all? | ALMOST EVERY DAY . . . . . . . . . . . . . . 1  <br> AT LEAST ONCE A WEEK 2  <br> LESS THAN ONCE A WEEK $\ldots . . . .$. 3 <br> NOT AT ALL . . . . . . . . . . . . . . . . . . 4  |  |
| 118 | Do you watch television almost every day, at least once a week, less than once a week or not at all? | ALMOST EVERY DAY . . . . . . . . . . . . . . 1  <br> AT LEAST ONCE A WEEK 2  <br> LESS THAN ONCE A WEEK $\ldots . . . .$. 3 <br> NOT AT ALL . . . . . . . . . . . . . . . . . . 4  |  |
| 119 | Are you currently working? | YES . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 1 NO . . . . . . . . . . . . . . | $\longrightarrow 122$ |
| 120 | Have you done any work in the last 12 months? | YES . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 1 NO . . . . . . . . . . . . . . . | $\longrightarrow 122$ |
| 121 | What have you been doing for most of the time over the last 12 months? |  |  |


${ }^{1}$ Wording of this paragraph should be modified in countries where participation is legally required.
${ }^{2}$ Revise according to the local education system.
${ }^{3}$ Each card should have four simple sentences appropriate to the country (e.g., "Parents love their children", "Farming is hard work", "The child is reading a book", "Children work hard at school"). Cards should be prepared for every language in which respondents are likely to be literate.
${ }^{4}$ In countries with an interest in measuring participation across a number of literacy programs, an additional multiple-response question may be included for men who participated in a literacy program (for example, "What type of literacy programs have you participated in? PROBE: Any other programs?")

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 only in the children that are biologically yours. Have you ever fathered any children with any woman? | YES <br> NO <br> DON'T KNOW |  | $\xrightarrow{\longrightarrow} 206$ |
| 202 | Do you have any sons or daughters that you have fathered who are now living with you? | $\begin{aligned} & \text { YES } \\ & \text { NO } \end{aligned}$ |  | $\rightarrow 204$ |
| 203 | How many sons live with you? <br> And how many daughters live with you? <br> IF NONE, RECORD '00'. | SONS AT HOME <br> DAUGHTERS AT HOME |  |  |
| 204 | Do you have any sons or daughters you have fathered who are alive but do not live with you? | $\begin{aligned} & \text { YES } \\ & \text { NO } \end{aligned}$ |  | $\rightarrow 206$ |
| 205 | How many sons are alive but do not live with you? <br> And how many daughters are alive but do not live with you? <br> IF NONE, RECORD '00'. | SONS ELSEWHERE <br> DAUGHTERS ELSEWHERE |  |  |
| 206 | Have you ever fathered a son or a daughter who was born alive but later died? <br> IF NO, PROBE: Any baby who cried or showed signs of life but did not survive? | YES <br> NO <br> DON'T KNOW |  | $\xrightarrow{\square} 208$ |
| 207 | How many boys have died? <br> And how many girls have died? <br> IF NONE, RECORD '00'. | BOYS DEAD <br> GIRLS DEAD |  |  |
| 208 | (In addition to the children that you have just told me about), do you have: <br> a) any other living sons or daughters who are biologically your children but who are not legally yours or do not have your last name? <br> b) any other sons or daughters who died who were biologically your children but who were not legally yours or did not have your last name? <br> SUM ANSWERS TO 203, 205, AND 207, AND ENTER TOTAL. <br> IF NONE, RECORD '00'. | TOTAL CHILDREN |  |  |
| 210 | CHECK 209: | AD $\square$ |  | $\begin{aligned} & \longrightarrow 213 \\ & \longrightarrow 301 \end{aligned}$ |
| 211 | Do the children that you have fathered all have the same biological mother? | YES <br> NO |  | $\rightarrow 213$ |
| 212 | In all, how many women have you fathered children with? | NUMBER OF WOMEN |  |  |
| 213 | How old were you when your (first) child was born? | AGE IN YEARS .............. |  |  |

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.
CIRCLE CODE 1 IN 301 FOR EACH METHOD MENTIONED SPONTANEOUSLY. THEN PROCEED DOWN COLUMN 301 ,
READING THE NAME AND DESCRIPTION OF EACH METHOD NOT MENTIONED SPONTANEOUSLY. CIRCLE CODE 1 IF
METHOD IS RECOGNIZED,AND CODE 2 IF NOT RECOGNIZED. THEN, FOR EACH METHOD WITH CODE 1 CIRCLED IN 301,
ASK 302 IF APPLICABLE.

| 301 | Which ways or methods have you heard about? FOR METHODS NOT MENTIONED SPONTANEOUSLY, ASK Have you ever heard of (METHOD)? |  | $302 \begin{aligned} & \text { Have you ever used } \\ & \text { (METHOD)? }\end{aligned}$ |
| :---: | :---: | :---: | :---: |
| 01 | FEMALE STERILIZATION Women can have an operation to avoid having any more children. | YES $\ldots \ldots \ldots \ldots \ldots$ 1  <br> NO $\ldots \ldots \ldots \ldots \ldots$ 2 |  |
| 02 | MALE STERILIZATION Men can have an operation to avoid having any more children. | $\begin{array}{llll} \hline \text { YES } \ldots \ldots \ldots \ldots \ldots & 1 \\ \text { NO } & \ldots \ldots \ldots \ldots \ldots & 2 \end{array}$ | Have you ever had an operation to avoid having any more children? YES <br> NO |
| 03 | PILL Women can take a pill every day to avoid becoming pregnant. | YES $\ldots \ldots \ldots \ldots \ldots$ 1  <br> NO $\ldots \ldots \ldots \ldots \ldots$ 2 |  |
| 04 | IUD Women can have a loop or coil placed inside them by a doctor or a nurse. |  |  |
| 05 | INJECTABLES Women can have an injection by a health provider that stops them from becoming pregnant for one or more months. | YES $\ldots \ldots \ldots \ldots \ldots$ 1 <br> NO $\ldots \ldots \ldots \ldots .$. 2 |  |
| 06 | IMPLANTS Women can have several small rods placed in their upper arm by a doctor or nurse which can prevent pregnancy for one or more years. | $\begin{array}{llll} \hline \text { YES } & \ldots \ldots \ldots \ldots \ldots & 1 \\ \text { NO } & \ldots \ldots \ldots \ldots \ldots & 2 \end{array}$ |  |
| 07 | CONDOM Men can put a rubber sheath on their penis before sexual intercourse. | YES $\ldots \ldots \ldots \ldots \ldots$ NO $\ldots \ldots \ldots \ldots \ldots$ N |   <br> YES $\ldots \ldots \ldots \ldots \ldots \ldots$ 1 <br> NO $\quad \ldots \ldots \ldots \ldots \ldots \ldots \ldots$ 2 |
| 08 | FEMALE CONDOM Women can place a sheath in their vagina before sexual intercourse. | $\begin{array}{llll} \hline \text { YES } \ldots \ldots \ldots \ldots \ldots & 1 \\ \text { NO } & \ldots \ldots \ldots \ldots \ldots & 2 \end{array}$ |  |
| 09 | DIAPHRAGM Women can place a thin flexible disk in their vagina before intercourse. | YES $\ldots \ldots \ldots \ldots \ldots$ 1 <br> NO $\ldots \ldots \ldots \ldots \ldots$ 2 |  |
| 10 | FOAM OR JELLY Women can place a suppository, jelly, or cream in their vagina before sexual intercourse. | $\begin{array}{lll} \hline \text { YES } \ldots \ldots \ldots \ldots \ldots & 1 \\ \text { NO } & \ldots \ldots \ldots \ldots \ldots & 2 \end{array}$ |  |
| 11 | LACTATIONAL AMENORRHEA METHOD (LAM) Up to 6 months after childbirth, a woman can use a method that requires that she breastfeeds frequently, day and night, and that her menstrual period has not returned. | $\begin{array}{llll} \hline \text { YES } \ldots \ldots \ldots \ldots \ldots & 1 \\ \text { NO } & \ldots \ldots \ldots \ldots \ldots & 2 \end{array}$ |  |
| 12 | RHYTHM OR PERIODIC ABSTINENCE Every month that a woman is sexually active she can avoid pregnancy by not having sexual intercourse on the days of the month she is most likely to get pregnant. | YES $\ldots \ldots \ldots \ldots \ldots$ NO $\ldots \ldots \ldots \ldots \ldots$ NO............. |   <br> YES $\ldots \ldots \ldots \ldots \ldots \ldots$ 1 <br> NO $\ldots \ldots \ldots \ldots \ldots \ldots$ 2 <br> DONt' KNOW $\ldots \ldots \ldots .$. 8 |
| 13 | WITHDRAWAL Men can be careful and pull out before climax. | YES $\ldots \ldots \ldots \ldots$ 1 <br> NO $\ldots \ldots \ldots \ldots$. 2 | YES $\ldots \ldots \ldots \ldots \ldots \ldots$ 1 <br> NO $\ldots \ldots \ldots \ldots \ldots \ldots .$. 2 |
| 14 | EMERGENCY CONTRACEPTION Women can take pills up to five days after sexual intercourse to avoid becoming pregnant. | $\begin{array}{llll} \hline \text { YES } & \ldots \ldots \ldots \ldots \ldots & 1 \\ \text { NO } & \ldots \ldots \ldots \ldots \ldots & 2 \end{array}$ |  |
| 15 | Have you heard of any other ways or methods that women or men can use to avoid pregnancy? | YES $\ldots \ldots \ldots \ldots \ldots$ 1 <br>   <br>   <br>   <br>   <br>  (SPECIFY) <br>   <br> NO $\ldots \ldots \ldots \ldots$.  |  |


| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 303 | Now I would like to ask you about a woman's risk of pregnancy. <br> From one menstrual period to the next, are there certain days when a woman is more likely to become pregnant if she has sexual relations? |  | $\longrightarrow 305$ |
| 304 | Is this time just before her period begins, during her period, right after her period has ended, or halfway between two periods? |  |  |
| 305 | Do you think that a woman who is breastfeeding her baby can become pregnant? |  |  |
| 306 | I will now read you some statements about contraception. Please tell me if you agree or disagree with each one. <br> a) Contraception is women's business and a man should not have to worry about it. <br> b) Women who use contraception may become promiscuous. <br> c) A woman is the one who gets pregnant so she should be the one to use contraception. |  AGREE DISAGREE DK <br> a) 1 2 8 <br> b) 1 2 8 <br> c) 1 2 8 |  |
| 307 | CHECK 301(02) AND 302(02): <br> KNOWLEDGE AND USE OF MALE STERILIZATION (1) <br> HAS HEARD OF MALE <br> OTHER <br> STERILIZATION <br> BUT IS NOT <br> STERILIZED |  | $\rightarrow 401$ |
| 308 | Once you have had all the children you want, would you yourself ever consider getting sterilized? (1) |  |  |
| 309 | Why would you never consider getting sterilized? (1) <br> PROBE: Any other reasons? <br> RECORD ALL REASONS MENTIONED. |  |  |

${ }^{1}$ Question may be deleted in countries where male sterilization is not widely known, used, or promoted.

SECTION 4. MARRIAGE AND SEXUAL ACTIVITY (1)

| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 401 | Are you currently married or living with a woman as if married? | YES, CURRENTLY MARRIED . . . . . . . 1 <br> YES, LIVING WITH A WOMAN $\ldots$ 2 <br> NO, NOT IN UNION . . . . . . . . . . . . . . 3  | $\longrightarrow 406$ |
| 401A | Is your wife/partner living with you now or is she staying elsewhere? | LIVING TOGETHER . . . . . . . . . . . . . . . . . . . 1 STAYING ELSEWHERE . . . . . . . 2 |  |
| 401B | CHECK 401: <br> CURRENTLY LIVING WITH A MARRIED WOMAN |  | $\rightarrow 404$ |
| 402 | Do you have one wife or more than one wife? <br> IF ONLY ONE WIFE, RECORD '01' . <br> IF MORE THAN ONE, ASK: <br> How many wives do you currently have? | NUMBER OF WIVES . . . . . . $\quad$ 四 |  |
| 403 | Are there any other women with whom you live as if married? | YES . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 2 | $\longrightarrow 405$ |
| 404 | Are you living with one (other) woman or more than one (other) woman as if married? <br> IF ONLY ONE LIVE-IN PARTNER, RECORD '01'. <br> IF MORE THAN ONE, ASK: <br> How many women are you living with as if married? | NUMBER OF LIVE-IN PARTNERS |  |
| 405 | Apart from the woman/women you have already mentioned, do you currently have any other regular or occasional sexual partners? <br> IF 'YES', PROBE TO IDENTIFY TYPE OF PARTNER. |  |  |
| 406 | Do you currently have any regular sexual partners, occasional sexual partners, or do you have no sexual partner at all? <br> IF 'YES', PROBE TO IDENTIFY TYPE OF PARTNER. |  |  |
| 407 | Have you ever been married or lived with a woman? |  | $\begin{array}{r} \longrightarrow 411 \\ \longrightarrow 416 \end{array}$ |
| 408 | What is your marital status now: are you widowed, divorced, or separated? | WIDOWED . . . . . . . . . . . . . . . . . . . . . . . . . 1 <br> DIVORCED . . . . . . . . . . . . . . . . . . . . 2 | $\xrightarrow{\longrightarrow} 411$ |


| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES |  |  | SKIP |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 409 | WRITE THE LINE NUMBERS FROM THE HOUSEHOLD QUESTIONNAIRE FOR EACH WIFE/PARTNER REPORTED IN QUESTIONS 402 AND 404 ONLY. IF A WIFE/PARTNER IS NOT LISTED IN THE HOUSEHOLD SCHEDULE, RECORD '00' IN THE LINE NUMBER BOXES. THE NUMBER OF LINES FILLED IN MUST BE EQUAL TO THE NUMBER OF WIVES AND PARTNERS. (IF RESPONDENT HAS MORE THAN FIVE WIVES/ PARTNERS USE ADDITIONAL QUESTIONNAIRE(S).) |  |  |  |  |
| 410 | CHECK: 402 AND 404 SUM OF <br> 402 AND $404 ~>~$ <br> SUM OF <br> 402 AND $404=1$  <br> Please tell me the name of <br> your wife/partner. <br> WIFE/ <br> each (wife/partner that you <br> live with as if married), <br> starting with the one you <br> lived with first.  <br> NUMBER  | LINE <br> NUMBER <br> IN HHOLD. QUEST. | STATUS: | 410A <br> How old was your wife/partner on her last birthday? <br> AGE |  |
| 410B | CHECK 410: <br> ONLY ONE WIFE/ <br> MORE THAN ONE PARTNER WIFE/PARTNER |  |  |  | 412 |
| 411 | Have you been married or lived with a woman only once or more than once? | ONC MOR | HAN ONCE | $\begin{array}{ll} \ldots & \\ \ldots & 1 \\ \ldots & . \end{array}$ | $\begin{aligned} & \longrightarrow 414 \\ & \longrightarrow 413 \end{aligned}$ |
| 412 | Have you ever been married to or lived as if married to any woman other than those you have just mentioned? | $\begin{aligned} & \text { YES } \\ & \text { NO } \end{aligned}$ |  | $\begin{aligned} & \text {. . . . . . . . . . . } 1 \\ & \text {. . . . . . } 2 \end{aligned}$ | $\longrightarrow 414$ |
| 413 | In total, how many women have you been married to or lived with as if married in your whole life? | NUM | R OF WOMEN | $\cdots$ |  |
| 414 | CHECK 410 AND 411: <br> ONLY ONE <br> OTHER <br> WIFE/PARTNER <br> AND 411=1 <br> In what month and year <br> Now we will talk about did you start living with your first wife/partner. In your wife/partner? what month and year did you start living with her? | MONT <br> DON'T <br> YEAR <br> DON'T | KNOW MONTH <br> KNOW YEAR |  | $\rightarrow 416$ |
| 415 | How old were you when you started living with her? | AGE |  | . |  |


| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 416 | Now I need to ask you some questions about sexual activity in order to gain a better understanding of some family life issues. <br> How old were you when you first had sexual intercourse? | NEVER . ............................... 00 <br> AGE IN YEARS $\qquad$ <br> FIRST TIME WHEN STARTED LIVING WITH (FIRST) WIFE/PARTNER . . . 95 | $\rightarrow 416 \mathrm{~B}$ |
| 416A | Do you intend to wait until you get married to have sexual intercourse for the first time? | YES . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 1 NO . . . . . . . . . 8 | $\xrightarrow{\square} 440$ |
| 416B | CHECK 108: |  | $\rightarrow 417$ |
| 416C | The first time you had sexual intercourse, was a condom used? (1) | YES . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . |  |
| 416D | How old was the person you first had sexual intercourse with? | AGE OF PARTNER . . . . . . . . . <br> DON'T KNOW . . . . . . . . . . . . . . . . . . 98 |  |
| 417 | When was the last time you had sexual intercourse? <br> RECORD 'YEARS AGO' ONLY IF LAST INTERCOURSE WAS ONE OR MORE YEARS AGO. IF 12 MONTHS OR MORE, ANSWER MUST BE RECORDED IN YEARS. |  | $\rightarrow$ 437A |


|  |  | LAST <br> SEXUAL PARTNER | SECOND-TO-LAST SEXUAL PARTNER | THIRD-TO-LAST SEXUAL PARTNER |
| :---: | :---: | :---: | :---: | :---: |
| 418 | The last time you had sexual intercourse with this (second/third) person, was a condom used? (2) | YES $\ldots \ldots \ldots \ldots \ldots$ NO $\ldots \ldots \ldots \ldots$ $($ SKIP TO 421) | YES $\ldots \ldots \ldots \ldots \ldots$ NO $\ldots \ldots \ldots \ldots$ $($ SKIP TO 421) | YES $\ldots \ldots \ldots \ldots \ldots$ NO $\ldots \ldots \ldots \ldots$ $($ SKIP TO 421) |
| 419 | What was the main reason you used a condom on that occasion? | RESP. WANTED TO <br> PREVENT STD/HIV . 01 RESP. WANTED TO <br> TO PREVENT <br> PREGNANCY $\qquad$ <br> RESP. WANTED TO <br> PREVENT BOTH <br> STD/HIV AND <br> PREGNANCY $\qquad$ DID NOT TRUST PARTNER <br> FELT PARTNER HAD OTHER PARTNERS . 04 PARTNER REQUESTED/ INSISTED .......... 05 OTHER $\qquad$ 96 <br> (SPECIFY) <br> DON'T KNOW $\qquad$ 98 | RESP. WANTED TO <br> PREVENT STD/HIV . 01 RESP. WANTED TO <br> TO PREVENT <br> PREGNANCY $\qquad$ <br> RESP. WANTED TO <br> PREVENT BOTH <br> STD/HIV AND <br> PREGNANCY $\qquad$ DID NOT TRUST PARTNER <br> FELT PARTNER HAD OTHER PARTNERS . 04 PARTNER REQUESTED/ INSISTED .......... 05 OTHER $\qquad$ 96 <br> (SPECIFY) <br> DON'T KNOW $\qquad$ 98 | RESP. WANTED TO <br> PREVENT STD/HIV . 01 RESP. WANTED TO <br> TO PREVENT <br> PREGNANCY $\qquad$ <br> RESP. WANTED TO <br> PREVENT BOTH <br> STD/HIV AND <br> PREGNANCY $\qquad$ DID NOT TRUST PARTNER <br> FELT PARTNER HAD OTHER PARTNERS . 04 PARTNER REQUESTED/ INSISTED .......... 05 OTHER $\qquad$ 96 <br> (SPECIFY) <br> DON'T KNOW $\qquad$ 98 |
| 420 | Did you use a condom every time you had sexual intercourse with this person in the last 12 months? | YES . . . . . . . . . . . . . . . $\quad 1$ NO . . . . . . . . . | YES . . . . . . . . . . . . . . . $\quad 1$ NO . . . . . . . . . | YES . . . . . . . . . . . . . . . $\quad 1$ NO . . . . . . . . . |
| 421 | CHECK 302(2): | RESP.NOTRTERILIZED$\square$ STERILIZED <br> (SKIP TO 426) $\square$ |  | RESP. NOT $\quad$ RESP. $\quad \square$ STERILIZED $\quad$ STERILIZED $\square$ (SKIP TO 426) |
| 422 | The last time you had sexual intercourse with this person, did you or she do something else or use any other method besides a condom to avoid a pregnancy? | YES $\ldots$. 1 <br> NO $\ldots$. 2 <br> DK $\ldots$. $8 \longrightarrow 425$ | YES $\ldots .$. 1 <br> NO $\ldots .$. $2 \longrightarrow 425$ <br> DK $\ldots .$. $8 \longrightarrow 426$ | YES $\ldots \ldots$. 1 <br> NO $\ldots \ldots$ $2 \longrightarrow 425$ <br> DK $\ldots \ldots$. $8 \longrightarrow 426$ |
| 423 | What method was used? |  |  |  |



|  |  | LAST SEXUAL PARTNER | SECOND-TO-LAST SEXUAL PARTNER | THIRD-TO-LAST SEXUAL PARTNER |
| :---: | :---: | :---: | :---: | :---: |
| 427 | Were you or your partner drunk at that time? <br> IF YES: Who was drunk? | $\begin{array}{ll}\text { RESPONDENT ONLY } & 1 \\ \text { PARTNER ONLY ... } & 2 \\ \text { RESPONDENT AND } \\ \text { PARTNER BOTH . } & 3 \\ \text { NEITHER . . . . . . . . } & 4\end{array}$ | $\begin{array}{ll}\text { RESPONDENT ONLY } & 1 \\ \text { PARTNER ONLY . .. } & 2 \\ \text { RESPONDENT AND } \\ \text { PARTNER BOTH . } & 3 \\ \text { NEITHER . . . . . . . . } & 4\end{array}$ | RESPONDENT ONLY 1 PARTNER ONLY ... 2 RESPONDENT AND <br> PARTNER BOTH . 3 <br> NEITHER ............ 4 |
| 428 | What was your relationship to this person with whom you had sexual intercourse? <br> IF GIRLFRIEND: <br> Were you living together as if married? <br> IF YES, CIRCLE '02' <br> IF NO, CIRCLE '03' | HUSBAND/WIFE $\ldots \ldots .01$(SKIP TO 434)$\ldots$LIVE-IN PARTNER $\ldots .02$ |  |  |
| 429 | For how long (have you had/did you have) sexual relations with this person? | DAYS ... 1 $\square$ <br> WEEKS .. 2 $\square$ <br> MONTHS . . 3 $\square$ <br> YEARS .. 4 $\square$ | DAYS ... 1 $\square$ <br> WEEKS .. 2 $\square$ <br> MONTHS . . 3 $\square$ <br> YEARS .. 4 $\square$ |  |
| 431 | How old is this person? | AGE OF PARTNER <br> DON'T KNOW | AGE OF PARTNER <br> DON'T KNOW | AGE OF <br> PARTNER <br> DON'T KNOW |
| 434 | Apart from [this person/these two people], have you had sexual intercourse with any other person in the last 12 months? |  |  |  |



| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 440 | If someone needs a condom, where can they get it? <br> IF SOURCE IS HOSPITAL, HEALTH CENTER OR CLINIC, WRITE THE NAME OF THE PLACE. PROBE TO IDENTIFY THE TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE. <br> (NAME OF PLACE) <br> PROBE: Any other place? <br> RECORD ALL PLACES MENTIONED. |  | $\rightarrow 442$ |
| 441 | If you wanted to, could you yourself get a condom? |  |  |
| 442 | CHECK 302(07), 416C, 418, AND 436B USE OF CONDOMS <br> AT LEAST <br> OTHER ONE 'YES' |  | 447 |
| 443 | How old were you when you used a condom for the first time? | AGE AT FIRST USE $\square$ <br> DOES NOT REMEMBER |  |
| 444 | Why did you use a condom that first time? <br> PROBE: Any other reason? <br> RECORD ALL REASONS MENTIONED. | ```TO AVOID PREGNANCY ............. A TO AVOID GETTING AIDS/HIV ....... B TO AVOID GETTING AN STD ......... C TO AVOID INFECTING PARTNER ... D TO EXPERIMENT/TRY A CONDOM .. E OTHER``` $\qquad$ ```None ``` |  |
| 445 | Have you ever experienced any problems with using condoms? <br> IF YES: What problems have you experienced? <br> PROBE: Any other problems? <br> RECORD ALL PROBLEMS MENTIONED. |  |  |


| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES |  |  | SKIP |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 447 | I will now read you some statements about condom use. Please tell me if you agree or disagree with each. <br> a) Condoms diminish a man's sexual pleasure. <br> b) A condom is very inconvenient to use. <br> c) A condom can be reused. <br> d) A condom protects against disease. <br> e) Buying condoms is embarrassing. <br> f) A woman has no right to ask a man to use a condom. | a) <br> b) <br> c) <br> d) <br> e) <br> f) | DISAGREE $\begin{aligned} & 2 \\ & 2 \\ & 2 \\ & 2 \\ & 2 \\ & 2 \end{aligned}$ | $\begin{gathered} \text { DK } \\ 8 \\ 8 \\ 8 \\ 8 \\ 8 \\ 8 \end{gathered}$ |  |
| 449 | If someone needs a female condom, where can they get it? <br> IF SOURCE IS HOSPITAL, HEALTH CENTER OR CLINIC, WRITE THE NAME OF THE PLACE. PROBE TO IDENTIFY THE TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE. <br> (NAME OF PLACE) <br> PROBE: Any other place? <br> RECORD ALL PLACES MENTIONED. |  | ASTATAL <br> HOSPITAL . <br> ITAL <br> TAL <br> POST (W. <br> TARY <br> HOSPITAL . <br> TAL <br> ENTRE <br> TAL <br> OTEL <br> E/NEIGHBOU <br> PECIFY) | B <br> C <br> D <br> E <br> F <br> G <br> H <br> I J K L <br> M <br> N <br> 0 <br> $P$ <br> Q <br> R <br> S <br> T <br> U <br> V <br> X <br> Z | $\longrightarrow 501$ |
| 460 | If you wanted to, could you yourself get a female condom? (3) | YE <br> NO <br> DO | JRE |  |  |

[^14]| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES |  | SKIP |
| :---: | :---: | :---: | :---: | :---: |
| 501 | CHECK 410: <br> HAS ONE WIFE/ PARTNER <br> HAS MORE THAN ONE WIFE/ PARTNER | QUESTION SKIPPED |  | $\rightarrow 505$ |
| 502 | (Is your wife/partner/Are any of your wives/partners) currently pregnant? | YES <br> NO <br> UNSURE | $\begin{array}{ll} \ldots & 1 \\ \ldots . . & 2 \\ \ldots . . & 3 \end{array}$ |  |
| 503 | CHECK 502: <br> YES, WIFE/WIVES/ PREGNANT <br> Now I have some questions about the future. After the child(ren) your wife/wives/ partner(s) is/are expecting now, would you like to have another child or would you prefer not to have any more children at all? <br> NO WIFE/PARTNER PREGNANT OR UNSURE <br> Now I have some questions the future. Would you like to have (a/another) child, or would you prefer not to have any (more) children at all? | HAVE A/ANOTHER CHILD NO MORE/NONE WIFE/WIVES INFECUND/ STERILIZED <br> UNDECIDED/DON'T KNOW | $\begin{array}{ll} \ldots \ldots & 1 \\ \ldots . & 2 \\ & \\ \ldots \ldots & 3 \\ \ldots . . & 8 \end{array}$ | $\square \rightarrow 505$ |
| 504 | How long would you like to wait from now before the birth of (a/another) child? | MONTHS <br> YEARS <br> SOON/NOW <br> AFTER MARRIAGE $\qquad$ <br> OTHER $\qquad$ (SPECIFY) <br> DON'T KNOW $\qquad$ | .993 $\qquad$ 995 <br> 996 $\qquad$ 998 |  |
| 505 | CHECK 203 AND 205: <br> HAS LIVING CHILDREN <br> 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 <br> NO LIVING <br> CHILDREN <br> If you could choose exactly the number of children to have in your whole life, how many would that be? your whole life, how many would that be? | NONE <br> NUMBER <br> OTHER $\qquad$ (SPECIFY) | $\text { . . . . . . } 00$ <br> 96 |  |
| 506 | How many of these children would you like to be boys, how many would you like to be girls, and for how many would the sex not matter? |  | EITHER |  |
| 507 | Would you say that you approve or disapprove of couples using a contraceptive method to avoid getting pregnant? | APPROVE <br> DISAPPROVE <br> DON'T KNOW/UNSURE | $\begin{array}{ll} \ldots \ldots & 1 \\ \ldots \ldots & 2 \\ \ldots \ldots & 8 \end{array}$ |  |


| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 508 | Is it acceptable or not acceptable to you for information on family planning to be provided: <br> a) On the radio? <br> b) On the television? In a newspaper or magazine? |   YES NO <br>    <br> RADIO $\ldots \ldots \ldots \ldots \ldots \ldots \ldots$ 1 2 <br> TELEVISION $\ldots \ldots \ldots \ldots \ldots$ 1 2 <br> NEWSPAPER OR MAGAZINE $\ldots$ 1 2 |  |
| 508A | In the last six months have you heard about family planning: <br> a) On the radio? <br> b) On the television? <br> c) In a newspaper or magazine? <br> d) From a poster? <br> e) From billboards? <br> f) At community events? <br> g) From live drama? <br> h) From a doctor or nurse? <br> i) From a community health worker? |  |  |
| 509 | In the past six months, what drama series have you listened to on the radio? <br> CIRCLE THE SERIES MENTIONED SPONTANEOUSLY. FOR SERIES NOT MENTIONED, ASK: <br> In the last 6 months, have you listened to: <br> a) Zinduka? <br> b) Twende na Wakati? <br> c) Other? |  |  |
| 509A | CHECK 509: <br> LISTENED TO <br> ZINDUKA <br> HAS NOT LIST TO ZINDUKA | D | $\rightarrow$ 509E |
| 509B | How often do you listen to Zinduka? |  |  |
| 509C | As a result of listening to Zinduka, did you do anything or take any action related to family planning? |  | $\xrightarrow{\longrightarrow} 509 \mathrm{E}$ |
| 509D | What did you do as a result of listening to Zinduka? <br> RECORD ALL MENTIONED. |  |  |
| 509E | CHECK 509: <br> LISTENED TO <br> HAS NOT LISTEN TWENDA NA WAKATI TWENDA NA W | TO <br> KATI | $\rightarrow 510$ |
| 509F | How often do you listen to Twenda na Wakati? |  |  |


| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 510 | In the last few months, have you discussed the practice of family planning with your friends, neighbors, or relatives? | YES . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 2 NO . . . . . . . . . . . . . | $\rightarrow 512$ |
| 511 | With whom? <br> Anyone else? <br> RECORD ALL PERSONS MENTIONED. |  |  |
| 512 | In the last few months, have you discussed the practice of family planning with a health worker or health professional? | $\begin{aligned} & \text { YES . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . } 1 \\ & \text { NO . . . . . . . . . . . . . . } \end{aligned}$ |  |

SECTION 6. PARTICIPATION IN HEALTH CARE


| NO. | QUESTIONS AND FILTERS |  | CODING CATEGORIES |  |
| :---: | :---: | :---: | :---: | :---: |
| 610 | ASK QUESTIONS 610-612 FIRST FOR PREGNANCY, THEN FOR DELIVERY, AND THEN FOR THE SIX WEEKS AFTER DELIVERY. ALL QUESTIONS REFER TO THE LAST BIRTH. |  |  |  |
|  |  | PREGNANCY | DELIVERY | SIX WEEKS AFTER DELIVERY |
|  | Now, think back to the time when (NAME OF CHILD'S MOTHER) was pregnant with (NAME OF CHILD). | 610A: Did (NAME OF CHILD'S MOTHER) receive any antenatal care from a doctor or any health care provider when she was pregnant with (NAME OF CHILD)? | 610B: Did a doctor or any health care provider assist with the delivery of (NAME OF CHILD)? | 610C: Did (NAME OF CHILD'S MOTHER) receive any care for herself from a doctor or any health care provider during the six weeks after this delivery? <br> (SKIP TO 613) |
| 611 | Who mainly provided the money or goods or services to pay for this care? |  |  |  |
| 612 | What was the main reason (NAME OF CHILD'S MOTHER) did not receive any advice or care from a doctor or other health care provider during (pregnancy/ delivery/the six weeks after delivery)? |  |  |  |
| 613 | At any time while (NAME OF with (NAME OF CHILD), did any other health care provid of the pregnancy? | HILD'S MOTHER) was pregnant yourself talk with a doctor or bout the health of the mother or | $\begin{aligned} & \text { YES } \\ & \text { NO } \end{aligned}$ | $\begin{array}{lll} \ldots & 1 \\ \ldots . . & & 1 \end{array}$ |
| 614 | CHECK 602 AND 604: <br> NAME OF (LAST) <br> (LAST) CHILD LIVING | LD $\qquad$ <br> (LAST) CH <br> OR DO | D NOT LIVING T KNOW | $\rightarrow 617$ |


| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 615 | Does (NAME OF CHILD) live with you in your household? | YES . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 2 | $\longrightarrow 617$ |
| 616 | In your household who usually decides what to do if the (NAME OF CHILD) is ill? <br> RECORD ALL PERSONS MENTIONED. |  |  |
| 617 | Now, I want to talk to you about pregnancy and the health of children. <br> Sometimes a pregnancy can have complications that lead to miscarriage or even death. What are some of the signs and symptoms that indicate that a pregnancy may be in danger? <br> PROBE: Any other signs or symptoms? <br> RECORD ALL SIGNS AND SYMPTOMS MENTIONED. | VAGINAL BLEEDING <br> HIGH FEVER <br> ABDOMINAL PAIN <br> SWELLING OF HANDS AND FEET <br> DIFFICULT LABOR FOR MORE <br> THAN 12 HOURS <br> CONVULSIONS <br> OTHER $\qquad$ <br> DON'T KNOW ANY SIGNS OR SYMPTOMS |  |
| 618 | When a child has diarrhea, should he/she be given less to drink than usual, about the same amount, or more than usual? |  |  |
| 619 | Have you ever heard of a special product called [LOCAL NAME FOR ORS PACKET] you can get for the treatment of diarrhea? |  |  |
| 619A | Have you ever heard of female circumcision? | YES . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 2 | 619C |
| 619B | In a number of countries, there is a practice in which a girl may have part of her genitals cut. Have you heard about this practice? |  | $\rightarrow 620$ |
| 619C | Do you think that this practice should be continued, or should it be discontinued? |  |  |
| 620 | Now, please tell me about yourself. <br> Do you currently smoke cigarettes or tobacco? <br> IF YES: What type of tobacco do you smoke? <br> RECORD ALL TYPES MENTIONED. |  |  |
| 621 | CHECK 620: <br> CODE 'A' CIRCLED | T | $\rightarrow 23$ |
| 622 | In the last 24 hours, how many cigarettes did you smoke? | CIGARETTES . |  |


| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 623 | Have you had an injection for any reason in the last six months? <br> IF YES: How many injections did you have? <br> IF NUMBER OF INJECTIONS IS GREATER THAN 94, OR DAILY FOR 3 MONTHS OR MORE, RECORD '95'. <br> IF NON-NUMERIC ANSWER, PROBE TO GET AN ESTIMATE. | NUMBER OF INJECTIONS | $\rightarrow 627$ |
| 624 | Among these injections, how many were administered by a doctor, a nurse, a pharmacist, a dentist, or any other health workers? <br> IF NUMBER OF INJECTIONS IS GREATER THAN 94, OR DAILY FOR 3 MONTHS OR MORE, RECORD '95'. <br> IF NON-NUMERIC ANSWER, PROBE TO GET AN ESTIMATE. | NUMBER OF INJECTIONS <br> NONE | $\rightarrow 627$ |
| 625 | The last time you had an injection, where did you go for the injection to be given? |  |  |
| 626 | The last time you had an injection, did the person who gave you the injection take the syringe and needle from a new, unopened package? | YES . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 1 <br> NO . . . . . . . . . . . . . . . . . . . . . . . . 8 |  |
| 627 | Some ethnic groups circumcise their males and some ethnic ethnic groups do not. <br> Are you circumcised? |  |  |

SECTION 7. HIV/AIDS AND OTHER SEXUALLY TRANSMITTED INFECTIONS

| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 701 | Now I would like to talk about something else. Have you ever heard of an illness called AIDS? | YES NO | $\rightarrow 744$ |
| 702 | Can people reduce their chances of getting the AIDS virus by having just one sex partner who is not infected and who has no other partners? | YES <br> NO <br> DON'T KNOW |  |
| $\begin{aligned} & 703 \\ & \text { (1) } \end{aligned}$ | Can people get the AIDS virus from mosquito bites? | YES <br> NO <br> DON'T KNOW |  |
| 704 | By using condoms each time they have sex, can people reduce their chances of being infected with the AIDS virus? | YES <br> NO <br> DON'T KNOW |  |
| $\begin{aligned} & 705 \\ & \text { (1) } \end{aligned}$ | Can people be infected with the AIDS virus by eating from the same plate as someone who is sick with AIDS? | YES <br> NO <br> DON'T KNOW |  |
| 706 | Can people reduce their chances of being infected with the AIDS virus if they stop having sex altogether? | YES <br> NO DON'T KNOW |  |
| $\begin{aligned} & 707 \\ & (1) \end{aligned}$ | Can people get the AIDS virus because of witchcraft or other supernatural means? | YES <br> NO DON'T KNOW |  |
| 708 | What else can a person do in order to avoid or reduce their chances of being infected by the AIDS virus? <br> Anything else? <br> RECORD ALL WAYS MENTIONED. | ABSTAIN FROM SEX USE CONDOMS LIMIT SEX TO ONE PARTNER/STAY <br> FAITHFUL TO ONE PARTNER <br> LIMIT NUMBER OF SEXUAL <br> PARTNERS <br> AVOID SEX WITH PROSTITUTES <br> AVOID SEX WITH PERSONS WHO <br> HAVE MANY PARTNERS <br> AVOID SEX WITH HOMOSEXUALS <br> AVOID SEX WITH PERSONS WHO <br> INJECT DRUGS INTRAVENOUSLY . <br> AVOID BLOOD TRANSFUSIONS <br> AVOID INJECTIONS <br> AVOID SHARING RAZORS/BLADES <br> AVOID KISSING <br> AVOID MOSQUITO BITES <br> SEEK PROTECTION FROM <br> TRADITIONAL PRACTITIONER <br> OTHER <br> (SPECIFY) <br> OTHER $\qquad$ <br> (SPECIFY) <br> NOTHING ELSE <br> DON'T KNOW |  |
| 710 | Is it possible for a healthy-looking person to have the AIDS virus? | YES <br> NO <br> DON'T KNOW |  |



| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 730 | Where is that? <br> (3) <br> IF SOURCE IS HOSPITAL, HEALTH CENTER, OR CLINIC, WRITE THE NAME OF THE PLACE. PROBE TO IDENTIFY THE TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE. <br> (NAME OF PLACE) <br> Any other place? <br> RECORD ALL SOURCES MENTIONED. |  |  |
| 731 | If you learn that a fresh food vendor has the AIDS virus, but is not sick, would you buy fresh food from him/her? | YES . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 1 <br> NO . . . . . . . . . . . . . . . . . . . . . 8 |  |
| 731A | And if she/he is sick? | YES . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 2 |  |
| 732 | If a member of your family has been infected with the AIDS virus, but is not sick, would you want it to remain a secret within the family, or not a secret? |  |  |
| 733 | If a relative of yours became sick with the virus that causes AIDS, would you be willing to care for her or him in your own household? |  |  |
| 734 | In your opinion, if a female teacher has been infected with the AIDS virus, but is not sick, should she continue teaching? | SHOULD CONTINUE ................ 1  <br> SHOULD NOT CONTINUE $\ldots . . .$. 2 <br> DK/NOT SURE/DEPENDS $\ldots . . .$. 8 |  |
| 734A | In your opinion, if a male teacher has been infected with the AIDS virus, should he continue teaching? | SHOULD CONTINUE $\ldots . . . . . . . .$. 1  <br> SHOULD NOT CONTINUE $\ldots . . .$. 2 <br> DK/NOT SURE/DEPENDS $\ldots . . .$. 8 |  |
| 735 | Do you personally know someone who has been denied health services in the last 12 months because he or she is suspected to have the AIDS virus or has the AIDS virus? |  | $\rightarrow 740$ |
| 736 | Do you personally know someone who has been denied involvement in social events, religious services, or community events in the last 12 months because he or she is suspected to have the AIDS virus or has the AIDS virus? | YES . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 1 <br> NO . . . . . . .  |  |


| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 737 | Do you personally know someone who has been verbally abused or teased in the last 12 months because he or she is suspected to have the AIDS virus or has the AIDS virus? |  |  |
| 738 | CHECK 735, 736, AND 737: <br> OTHER | AST $\square$ | $\rightarrow 740$ |
| 739 | Do you personally know someone who is suspected to have the AIDS virus or who has the AIDS virus? |  |  |
| 740 | Do you agree or disagree with the following statement: People with the AIDS virus should be ashamed of themselves. | AGREE $\ldots \ldots \ldots \ldots \ldots \ldots \ldots . .$. 1 <br> DISAGREE $\ldots \ldots \ldots \ldots \ldots$ 2 <br> DON'T KNOW/NO OPINION $\ldots \ldots .$. 8 |  |
| 741 | Do you agree or disagree with the following statement: People with the AIDS virus should be blamed for bringing the disease into the community. | AGREE $\ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots$ 1 <br> DISAGREE $\ldots \ldots \ldots \ldots \ldots \ldots$ 2 <br> DON'T KNOW/NO OPINION $\ldots \ldots .$. 8 |  |
| 742 | Should children age 12-14 be taught about using a condom to avoid AIDS? | YES $\ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots$ 1 <br> NO $\ldots \ldots \ldots \ldots \ldots$ 2 <br> DK/NOT SURE/DEPENDS $\ldots \ldots \ldots$ 8 |  |
| 743 | Should children age 12-14 be taught to wait until they get married to have sexual intercourse in order to avoid AIDS? |  |  |
| 744 | Do you believe that young men should wait until they are married to have sexual intercourse? | YES $\ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots$ 1 <br> NO $\ldots \ldots \ldots \ldots \ldots$ 2 <br> DK/NOT SURE/DEPENDS $\ldots \ldots .$. 8 |  |
| 745 | Do you believe that young women should wait until they are married to have sexual intercourse? |  |  |
| 746 | Do you believe that married men should only have sex with their wives? | YES $\ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots$ 1 <br> NO $\ldots \ldots \ldots \ldots \ldots \ldots$ 2 <br> DK/NOT SURE/DEPENDS $\ldots \ldots \ldots$ 8 |  |
| 747 | Do you think that most men you know have sex only with their wives? |  |  |
| 747 | Do you believe that married women should only have sex with their husbands? | YES $\ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots$ 1 <br> NO $\ldots \ldots \ldots \ldots \ldots$ 2 <br> DK/NOT SURE/DEPENDS $\ldots \ldots . .$. 8 |  |
| 749 | Do you think that most women you know have sex only with their husbands? | YES $\ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots$ 1 <br> NO $\ldots \ldots \ldots \ldots \ldots$ 2 <br> DK/NOT SURE/DEPENDS $\ldots \ldots .$. 8 |  |
| 750 | CHECK 701: <br> HEARD ABOUT NOT HEARD <br> Apart from AIDS, have you <br> Have you heard about infections heard about other infections that can be transmitted through that can be transmitted sexual contact? through sexual contact? |  | $\longrightarrow 753$ |


| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 751 | If a man has a sexually transmitted disease, what symptoms might he have? <br> Any others? <br> RECORD ALL SYMPTOMS MENTIONED. |  |  |
| 752 | If a woman has a sexually transmitted disease, what symptoms might she have? <br> Any others? <br> RECORD ALL SYMPTOMS MENTIONED. |  |  |


| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 753 | CHECK 416: <br> HAS HAD SEXUAL <br> HAS NOT HAD SEXUAL INTERCOURSE INTERCOURSE |  | $\rightarrow 801$ |
| 754 |  | UT <br> ED $\square$ <br> ACT | $\rightarrow 756$ |
| 755 | 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? |  |  |
| 756 | Sometimes men experience an abnormal discharge from their penis. <br> During the last 12 months, have you had an abnormal discharge from your penis? |  |  |
| 757 | Sometimes men have a sore or ulcer on or near their penis. During the last 12 months, have you had a sore or ulcer on or near your penis? |  |  |
| 758 | ```CHECK 755, 756, AND 757: HAS HAD AN HAS NOT HAD AN INFECTION INFECTION OR (ANY 'YES') DOES NOT KNOW``` |  | $\rightarrow 801$ |
| 759 | The last time you had (PROBLEM FROM 755/756/757), did you seek any kind of advice or treatment? |  | $\rightarrow 801$ |
| 760 | Where did you go? <br> Any other place? <br> RECORD ALL SOURCES MENTIONED. |  |  |

(1) If 703,705 and/or 707 do not apply to the local context, replace the question using a specific local misconception. At least two questions related to misconceptions are needed.
(2) For fieldwork in 2005 and 2006, the year should be 2003 and 2004, respectively.
(3) Coding categories to be developed locally and revised based on the pretest; however, the broad categories must be maintained.


[^15]
## MILLENNIUM DEVLOPMENT GOAL INDICATORS Appendix F

| Millennium Development Goal Indicators, Tanzania 2004-2005 |  |  |
| :---: | :---: | :---: |
| Goal | Indicator | Value |
| 1. Eradicate extreme poverty and hunger | Prevalence of underweight children under five years of age | Male: 22.1 <br> Total: 21.8 <br> Female: 21.5 |
| 2. Achieve universal primary education | Net enrolment ratio in primary education ${ }^{1}$ <br> Proportion of pupils starting grade 1 who reach grade $5^{1}$ <br> Literacy rate of 15-24-year olds ${ }^{2}$ | Male: 70.9 <br> Total: 73.1 <br> Female: 75.4 <br> Male: 96.4 <br> Total: 95.8 <br> Female: 95.2 <br> Male: 74.7 <br> Female: 64.3 |
| 3. Promote gender equality and empower women | Ratio of girls to boys in primary and secondary education <br> Ratio of literate women to men, 15-24 years old Share of women in wage employment in the non-agricultural sector ${ }^{3}$ | Primary education: 0.97 <br> Secondary education: 0.98 <br> Tertiary education: 0.43 |
| 4. Reduce child mortality | Under-five mortality rate (per 1,000 live births) Infant mortality rate (per 1,000 live births) Proportion of 1-year-old children immunised against measles |  112 per 1,000 <br> 68 per 1,000 <br> Male: 70.0 Total: 70.2 <br> Female: 68.5  |
| 5. Improve maternal health | Maternal Mortality Ratio (per 100,000 live births) Proportion of births attended by skilled health personnel ${ }^{4}$ | $\begin{array}{r} 578 \text { per 100,000 } \\ 46.3 \end{array}$ |
| 6. Combat HIV/AIDS, malaria, and other diseases | Percent of current contraceptive users who use condoms (any contraceptive method, currently married women 15-49) Condom use at last high-risk sex (population age 15-24) ${ }^{5}$ <br> Percentage of population age 15-24 years with comprehensive correct knowledge of HIV/AIDS ${ }^{6}$ <br> Contraceptive prevalence rate (any modern method, currently married women age 15-49) <br> Ratio of school attendance of orphans to school attendance of non-orphans age 10-14 years <br> Proportion of population in malaria-risk areas using effective malaria prevention and treatment measures ${ }^{7}$ | Male: 45.5 <br> Female: 33.8 <br> Male: 40.3 <br> Female: 45.2 |
| 7. Ensure environmental sustainability | Proportion of population using solid fuels ${ }^{10}$ <br> Proportion of population with sustainable access to an improved water source ${ }^{11}$ <br> Proportion of population with access to improved sanitation ${ }^{12}$ | Urban: 93.5 Total: 98.3 <br> Rural: 99.9  <br> Urban: 78.3 Total: 46.6 <br> Rural: 36.8 Total: 85.7 <br> Urban: 97.5  <br> Rural: 82.0 $\$$  |
| ${ }^{1}$ Excludes children with paren <br> ${ }^{2}$ Refers to respondents who a <br> ${ }^{3}$ Wage employment includes <br> ${ }^{4}$ Among births in the past 5 y <br> ${ }^{5}$ High risk refers to sexual 12 months preceding the surv ${ }^{6}$ A person is considered to ha and having just one uninfected the AIDS virus, and when the AIDS can be transmitted throu as someone who is infected. <br> ${ }^{7}$ These figures represent Tanz not excluded. <br> ${ }^{8}$ Malaria prevention is measu before the interview. <br> ${ }^{9}$ Malaria treatment is measure interview who received an an onset of fever or the following <br> ${ }^{10}$ Charcoal, firewood, straw, <br> ${ }^{11}$ Proportion whose main sou rainwater collection. <br> ${ }^{12}$ Improved sanitation techno | status missing. TDHS data are based on reported attendance, ended secondary school or higher and women who can read a spondents who received wages in cash or in cash and kind. rs <br> ercourse with a partner who neither was a spouse nor who <br> a comprehensive knowledge about AIDS when they say that and faithful partner can reduce the chance of getting the AIDS reject the two most common local misconceptions. The most com mosquito bites and that a person can become infected with the <br> nia as a whole. The very small proportion of the Tanzanian pop <br> d as the percentage of children ages 0-59 months who slept u <br> as the percentage of children ages 0-59 months who were ill malarial drug. The treatment is considered prompt if the child r ay. <br> ng, or crop waste <br> e of drinking water is a household connection (piped), public <br> gies are: flush toilet, pour flush toilet, traditional pit latrine, or ve | t enrolment. <br> ole sentence <br> lived with the respondent; time frame is <br> e of condoms for every sexual intercourse us, that a healthy-looking person can have mon misconceptions in Tanzania are that AIDS virus by eating from the same plate <br> ation that lives in non-malaria risk areas is er an insecticide-treated bednet the night <br> th a fever in the two weeks preceding the eived the antimalarial the same day as the <br> andpipe, borehole, protected dug well, or tilated improved pit latrine. |


[^0]:    ${ }^{1}$ The Mainland added the 21st region with the recent subdivision of Arusha into two regions: Arusha and Manyara.

[^1]:    ${ }^{1}$ Refers to women who attended at least post-primary training, secondary school or higher, and women who can read a whole sentence or part of a sentence

[^2]:    Table 3.9 Women's participation in decisionmaking by marital status
    Percent distribution of women by person who has the final say in making specific decisions, according to current marital status and type of decision, Tanzania 2004-05

    | Decision | Currently married or living together |  |  |  |  |  |  | Not married ${ }^{1}$ |  |  |  |  |  |
    | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
    |  | $\begin{aligned} & \text { Self } \\ & \text { only } \end{aligned}$ | Jointly <br> with <br> hus- <br> band | Jointly <br> with <br> some- <br> one <br> else | Husband only | Someone else only | Total | Number <br> of <br> women | $\begin{aligned} & \text { Self } \\ & \text { only } \end{aligned}$ | Jointly <br> with <br> some- <br> one <br> else | Some- <br> one <br> else <br> only | Decision not made/ not applicable | Total | Number <br> of <br> women |
    | Own health care | 42.8 | 16.3 | 0.3 | 38.5 | 2.1 | 100.0 | 6,950 | 43.3 | 6.5 | 48.6 | 1.6 | 100.0 | 3,379 |
    | Large household purchases | 10.6 | 23.4 | 0.5 | 61.2 | 3.9 | 100.0 | 6,950 | 24.2 | 5.7 | 66.6 | 3.4 | 100.0 | 3,379 |
    | Daily household purchases | 29.3 | 20.1 | 0.6 | 45.9 | 3.9 | 100.0 | 6,950 | 25.8 | 5.9 | 65.3 | 2.9 | 100.0 | 3,379 |
    | Visits to family or relatives | 12.6 | 36.6 | 0.6 | 47.3 | 2.6 | 100.0 | 6,950 | 30.8 | 9.8 | 56.9 | 2.5 | 100.0 | 3,379 |
    | What food to cook each day | 69.4 | 9.1 | 1.5 | 15.5 | 4.4 | 100.0 | 6,950 | 28.5 | 7.5 | 61.5 | 2.5 | 100.0 | 3,379 |

    Note: Totals may not add to 100 percent because of a small number of missing cases.
    ${ }^{1}$ Never married, divorced, separated or widowed women

[^3]:    ${ }^{1}$ This estimate of primary infertility does not include women who may have had one or more births but who are unable to have more children, a measure of secondary infertility.

[^4]:    ${ }^{1}$ The discontinuation rates presented here include only those segments of contraceptive use that began since January 1999. The rates apply to the period 3-59 months preceding the survey; exposure during the month of the interview and the two months before the interview are excluded to avoid the biases that may be introduced by unrecognised pregnancies. These cumulative discontinuation rates represent the proportion of users discontinuing a method within 12 months after the start of use. The rates are calculated by dividing the number of women discontinuing a method by the number exposed at that duration. The single-month rates are then cumulated to produce a one-year rate. In calculating the rate, the various reasons for discontinuation are treated as competing risks.

[^5]:    ${ }^{1}$ Totals are calculated excluding the women giving non-numeric responses.
    ${ }^{2}$ See Table 7.3 for definition of unmet need for family planning.
    ${ }^{3}$ Either by herself or jointly with others

[^6]:    Note: ORT includes solution prepared from oral rehydration salt (ORS) packets, recommended home fluids (RHF), and increased fluids. Totals may not add to 100 percent because of a small number of missing cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
    ${ }^{1}$ Excludes pharmacy, shop, and traditional practitioner

[^7]:    ${ }^{1}$ The imputation procedure is based on the assumption that the reported birth order of siblings in the history is correct. The first step is to calculate birth dates. For each living sibling with a reported age and each dead sibling with complete information on both age at death and years since death, the birth date was calculated. For a sibling missing these data, a birth date was imputed within the range defined by the birth dates of the bracketing siblings. In the case of living siblings, an age at the time of the survey was then calculated from the imputed birth date. In the case of dead siblings, if either the age at death or years since death was reported, that information was combined with the birth date to produce the missing information. If both pieces of information were missing, the distribution of the ages at death for siblings for whom the years since death was unreported, but age at death was reported, was used as a basis for imputing the age at death.

[^8]:    ${ }^{2}$ This time-dependent definition includes all deaths that occurred during pregnancy and two months after pregnancy, even if the death was due to nonmaternal causes. However, this definition is unlikely to result in overreporting of maternal deaths because most deaths to women during the two-month period are due to maternal causes, and maternal deaths are more likely to be underreported than overreported.

[^9]:    ${ }^{3}$ The 95 percent confidence interval for the 2004-05 rate of 578 is 466-690.

[^10]:    ${ }^{\text {a }}$ Includes deaths under one month reported in days
    ${ }^{1}$ Under one month/under one year

[^11]:    * The cutoff point is $9 \mathrm{~g} / \mathrm{dl}$ for pregnant women and $7 \mathrm{~g} / \mathrm{dl}$ for children and women who are not pregnant (or who don't know if they are pregnant).
    ** If more than one woman or child is below the cutoff point, read the statement in Q. 51 to each woman who is below the cutoff point and to each woman/parent/responsible adult of a child who is below the cutoff point.

[^12]:    ${ }^{1}$ Wording of this paragraph should be modified in countries where participation is legally required.
    ${ }^{2}$ Each card should have four simple sentences appropriate to the country:

[^13]:    ${ }^{1}$ In countries without a social marketing program for pills, pill users skip to 316A.
    ${ }^{2}$ Pill users skip to 316A after last question on social marketing.

[^14]:    ${ }^{1}$ In countries with an active female condom program, a question should be added on use of a female condom.
    ${ }^{2}$ Coding categories to be developed locally and revised based on the pretest; however, the broad categories must be maintained.
    ${ }^{3}$ Question may be deleted in countries where female condoms are not actively promoted.

[^15]:    ${ }^{1}$ In polygynous societies, the phrase 'other women' should be replaced by the phrase 'women other than his wives.'

