Armenia

Demographic and Health Survey

2010

Armenia Demographic and Health Survey 2010

National Statistical Service
Yerevan, Armenia

Ministry of Health
Yerevan, Armenia

ICF International
Calverton, Maryland USA

April 2012

USAID
FROM THE AMERICAN PEOPLE

National Statistical Service

Ministry of Health

This report summarizes the findings of the 2010 Armenia Demographic and Health Survey (ADHS), which was conducted by the National Statistical Service and the Ministry of Health of the Republic of Armenia. ICF International provided technical assistance and the U.S. Agency for International Development (USAID) provided funding under the terms of contract number GPO-C-00-08-00008-00. Additional support for the 2010 ADHS was received from the United Nations Children's Fund (UNICEF), the United Nations Population Fund (UNFPA), and the Joint United Nations Programme on HIV/AIDS (UNAIDS). The opinions expressed herein are those of the authors and do not necessarily reflect the views of USAID or other donor organizations.

The ADHS is part of the worldwide MEASURE DHS program, which is designed to collect data on fertility, family planning, and maternal and child health. Additional information about the ADHS may be obtained from the National Statistical Service of the Republic of Armenia, Republic Avenue, 3 Government House, 0010, Yerevan, Republic of Armenia; Telephone: 374-10-524-213; Fax: 374-10-521-921; E-mail: info@armstat.am; Internet: http://www.armstat.am.

Information about the MEASURE DHS project may be obtained from ICF International, 11785 Beltsville Drive, Suite 300, Calverton, MD 20705, USA; Telephone: 301-572-0200; Fax: 301-572-0999; E-mail: reports@measuredhs.com; Internet: http://www.measuredhs.com.

Recommended citation:

National Statistical Service [Armenia], Ministry of Health [Armenia], and ICF International. 2012. *Armenia Demographic and Health Survey 2010*. Calverton, Maryland: National Statistical Service, Ministry of Health, and ICF International.

CONTENTS

CHAPTER 5 FERTILITY

CHAPTER 6 FERTILITY PREFERENCES

CHAPTER 7 CONTRACEPTION

CHAPTER 8 ABORTION

CHAPTER 9 INFANT AND CHILD MORTALITY

CHAPTER 10 REPRODUCTIVE HEALTH

CHAPTER 11 CHILD HEALTH

CHAPTER 12 NUTRITION

CHAPTER 13 HIV/AIDS AND SEXUALLY TRANSMITTED INFECTIONS

TABLES AND FIGURES

CHAPTER 4 MARRIAGE AND SEXUAL ACTIVITY

CHAPTER 5 FERTILITY

CHAPTER 6 FERTILITY PREFERENCES

CHAPTER 7 CONTRACEPTION

CHAPTER 8 ABORTION

CHAPTER 9 INFANT AND CHILD MORTALITY

CHAPTER 10 REPRODUCTIVE HEALTH

CHAPTER 11 CHILD HEALTH

CHAPTER 12 NUTRITION

CHAPTER 13 HIV/AIDS AND SEXUALLY TRANSMITTED INFECTIONS

APPENDIX A SAMPLE DESIGN FOR THE 2010 ARMENIA DHS (2010 ADHS)

APPENDIX B ESTIMATES OF SAMPLING ERRORS

APPENDIX C DATA QUALITY TABLES

PREFACE

The 2010 Armenia Demographic and Health Survey (ADHS) is a nationally representative sample survey designed to provide information on population and health issues in Armenia. The ADHS was conducted by the National Statistical Service (NSS) and the Ministry of Health (MOH) of the Republic of Armenia from October 2010 through December 2010. ICF International provided technical support for the survey through the MEASURE DHS project. The MEASURE DHS project is sponsored by the United States Agency for International Development (USAID) to assist countries worldwide in obtaining information on key population and health indicators. USAID/Armenia provided funding for the survey. The United Nations Children's Fund (UNICEF)/Armenia, United Nations Population Fund (UNFPA)/Armenia, and Joint United Nations Program on HIV/AIDS (UNAIDS)/Armenia supported the survey through in-kind contributions.

The purpose of the 2010 ADHS was to collect national and regional data on fertility and contraceptive use, maternal and child health, adult health, and AIDS and other sexually-transmitted diseases. Thus, much of the information collected in the survey represents updated estimates of basic health and demographic indicators first reported in the 2000 ADHS (NSS, MOH, and ORC Macro, 2001) and the 2005 ADHS (NSS, MOH, and ORC Macro, 2006). The survey obtained detailed information on these issues from women of reproductive ages and, on certain topics, from men as well. Data are presented by region (*marz*) when sample size permits. When possible, the 2010 ADHS data are compared with the 2005 and 2000 ADHS data.

The survey findings provide estimates for a variety of demographic indicators. The 2010 ADHS results are intended to provide the information needed to evaluate existing social programs and to design new strategies for improving health and health services for the people of Armenia. The 2010 ADHS also contributes to the growing international database on demographic and health-related indicators.

ACKNOWLEDGMENTS

The National Statistical Service of the Republic of Armenia and the Ministry of Health of the Republic of Armenia wish to express their appreciation to those involved in the implementation of the 2010 Armenia Demographic and Health Survey (2010 ADHS) and the preparation of this report.

Particular thanks go to:

- U.S. Agency for International Development (USAID/Armenia), for providing the funding for organizing and conducting the 2010 ADHS.
- ICF International for providing technical support, training for fieldwork staff, consultations, recommendations, and analyses of the data collected.
- United Nations Children's Fund (UNICEF)/Armenia, Joint United Nations Programme on HIV/AIDS (UNAIDS)/Armenia, and United Nations Population Fund (UNFPA)/Armenia for providing technical and administrative support.
- The technical staff of the ADHS, the input of field staff and data quality teams, and the valuable contribution of all experts and organizations, whose joint efforts ensured the effective implementation of the survey.
- Finally, to 6,700 households, 5,922 women, and 1,584 men, whose honest participation made it possible to obtain the reliable information collected in the 2010 ADHS.

Mr. Gagik Gevorgyan
National Director, ADHS
Member of the State Council on Statistics of RA

Mr. Sergey Khachatryan
National Director for Medical Affairs, ADHS
Deputy Minister of Health

SUMMARY OF FINDINGS

The 2010 Armenia Demographic and Health Survey (2010 ADHS) is a nationally representative survey of 5,922 women and 1,584 men age 15-49. The 2010 ADHS is the third in a series of DHS surveys conducted in Armenia. The 2010 ADHS was undertaken to provide estimates for key population indicators and trends including fertility; abortion; nuptiality; awareness and use of family planning methods; sexual activity; infant and child mortality; childhood immunization levels; maternal and child health; infant and young children feeding practices; nutritional status of young children; and awareness and behavior regarding HIV/AIDS and other sexually transmitted infections. The 2010 ADHS also collected information on a number of health topics related to access and utilization of primary health care services; health care costs; and health insurance coverage for women and men age 15-49. Additionally, in all surveyed households the 2010 ADHS collected information about child labor for children age 5-17 and about child discipline for one randomly selected child age 2-14. Fieldwork for the 2010 ADHS was conducted from October to December 2010. Height and weight measurements were collected for children under age 5 in all households in the survey.

The 2010 ADHS was conducted by the National Statistical Service and the Ministry of Health (MOH) of the republic of Armenia. ICF International provided technical support for the survey through the USAID-sponsored MEASURE DHS Project. The U.S. Agency for International Development (USAID)/Armenia provided funding, and the United Nations Children's Fund (UNICEF)/Armenia, the Joint United Nations Programme on HIV/AIDS (UNAIDS)/Armenia, and the UN Population Fund (UNFPA)/Armenia supported the survey through in-kind contributions.

CHARACTERISTICS OF RESPONDENTS

More than 60 percent of Armenians live in urban areas. Yerevan, the capital, accounts for more than one-third of all respondents. All households in Armenia have electricity and the vast majority of households have water piped into the dwelling/yard/plot, a flush toilet, a finished floor, and a color television. Household ownership of most durable goods has increased during the past five years; in particular, the ownership of computers and mobile phones has increased dramatically. Twenty-nine percent of households had computers in 2010 compared with 9 percent in 2005, and 87 percent of households used mobile phones in 2010 compared with 33 percent in 2005. The proportion of households using natural gas for cooking has nearly doubled during the past five years; eight in ten households relied on natural gas for cooking in 2010 compared with four in ten in 2005.

All but a handful of women and men age 15-49 in the sample have attended school. Approximately four in ten women and five in ten men have reached only secondary school, 28 percent of women and 19 percent of men have reached secondary-special school, and 30 percent each of women and men have attended university. Yerevan residents have a clear educational advantage over the rest of the country: nearly half of women and men in Yerevan have some university education. Thirty-five percent of women and 74 percent of men were employed in the 12 months prior to the survey.

FERTILITY

Fertility rates. A useful index of the level of fertility in a country is the total fertility rate (TFR), which indicates the number of children a woman would have if she passed through the childbearing years at the current age-specific fertility rates. The TFR was 1.7 children per woman for the three years preceding the 2010 ADHS. This is below replacement level.

The TFR is only slightly lower in urban areas (1.6 children per woman) than in rural areas (1.8 children per woman).

Time trends. The total fertility rate of 1.7 is identical to the TFR measured in the 2000 ADHS and the 2005 ADHS for the three years preceding that survey, indicating no recent change has occurred in overall fertility levels.

Age at first birth. Research has shown that childbearing in the teenage years is associated with increased social and health problems for both mother and child. The survey found that only 4 percent of women age 15-19 had given birth. Almost all births to teenage women occurred at ages 18 and 19. The median age at first birth among women age 25-49 is 22.5 years, slightly higher than 22.1 years in 2005 and 21.8 years in 2000; moreover, it seems to be increasing among younger women age 25-29 (24.1 years for this age group in 2010 compared with 22.5 years in 2005 and 21.4 years in 2000).

Birth intervals. Research has shown that children born soon after a previous birth, especially those born within two years of the previous birth, have an increased risk of morbidity and mortality. In Armenia, 28 percent of second and higher order births occur after a birth interval of less than two years. The proportion of closely spaced births declines as education of the mother increases.

Fertility preferences. Among currently married women in the 2010 ADHS, 58 percent reported that they either wanted no more children or were sterilized compared with 71 percent in the 2005 ADHS. Another 25 percent wanted another child, 8 percent were infecund (unable to conceive), and 9 percent were undecided about having another child.

CONTRACEPTION

Knowledge. Knowledge of contraception is widespread in Armenia. Among married women and men, knowledge of at least one method is universal (100 percent). On average, married women reported knowing eight and married men reported knowing seven methods of contraception.

Current use. Over half (55 percent) of married women reported that they were currently using a contraceptive method: 27 percent were using modern methods, and 28 percent were using traditional methods. The most widely used method among currently married women is, by far, withdrawal (25 percent), followed by the male condom (15 percent) and the IUD (10 percent).

The difference in the overall use of contraception among married women in urban and rural areas is not large (58 percent and 51 percent, respectively). Nevertheless, urban women and women with more education show distinctive behavior patterns by relying more on modern methods (in particular, the condom) and less on traditional methods (in particular, withdrawal). There is considerable variation in contraceptive use by region. Yerevan and Lori have the highest rates of use of modern methods (42 percent and 36 percent, respectively) compared with 10 to 11 percent in Tavush and Vayots Dzor.

As expected, contraceptive use, especially the use of modern methods, increases with educational attainment. Women with higher levels of education are twice as likely to use a modern method as women with only secondary or basic education (39 percent compared with 20 to 21 percent). This difference is mainly due to the increased use of the IUD and male condom. Wealth also correlates positively with women's contraceptive use; modern contraceptive use increases markedly as household wealth increases, from 21 percent among married women in the lowest wealth quintile to 38 percent among those in the highest wealth quintile.

Trends in current use. There has been a slight decrease in the use of any method of contraception by currently married women since the 2000 ADHS, when 61 percent of currently married women reported using a contraceptive method compared with 55 percent in 2010. Use of modern contraceptive methods has increased from 22 percent in 2000 to 27 percent in 2010. In particular, the percentage of women using male condoms has increased from 7 percent in 2000 to 15 percent in 2010. The use of traditional methods has decreased over the past 10 years (from 38 percent in 2000 down to 28 percent in 2010). This is particularly true of the use of withdrawal (32 percent in 2000 to 25 percent in 2010).

Method failure. A key concern for the family planning program is the rate at which users discontinue use of contraception and their reasons for stopping. Overall, 23 percent of all women who started using a contraceptive method in the past five years discontinued use within 12 months of adopting the method; 3 percent switched to another method. The first-year discontinuation rate is lowest among users of the IUD (4 percent) and highest among users of withdrawal (28 percent). Approximately 15 percent of users of condoms discontinued using the method during the first year of use. With regard

to the reasons for stopping use, users were more likely to discontinue during the first year of use because of method failure, i.e., becoming pregnant while using a method.

Reasons for using traditional methods. As mentioned earlier, traditional methods account for about half of all contraceptive use and have high failure rates. The most common reason, given by 60 percent of women, was that the traditional method is the husband's or partner's choice, the same percentage as reported in 2005 (59 percent). However, in 2010, 31 percent say that fear of or experience with side effects was a concern, and 20 percent say that the cost of modern methods was a factor in their choice. Fewer women cite these reasons than in 2005 when 47 and 37 percent of women reported fear of side effects or cost, respectively. Similarly, fewer women in 2010 feel that they lack knowledge about modern methods (10 percent) or that they are difficult to find or are not readily available (11 percent), than in 2005 when 20 and 26 percent, respectively, gave these reasons for using a traditional method.

Future use. Among married women who were not using contraception, 23 percent reported that they intended use in the future, a decrease from 29 percent in the 2005 ADHS and 36 percent in the 2000 ADHS.

Source of supply. Most modern method users obtained their methods from the private sector (61 percent), primarily pharmacies (59 percent). Only one-third of users in 2010 (37 percent) received their method from the public sector compared with 53 percent in 2005. However, the public sector is still the primary source for almost all users of the IUD (96 percent), the second most common modern method after the male condom. Among condom and pill users, the vast majority reported obtaining their most recent supply from a pharmacy (96 and 94 percent, respectively).

Induced Abortion

In Armenia, as in all of the former Soviet Union, induced abortion has been a primary means of fertility control for many years.

Abortion rates. The use of abortion can be measured by the total abortion rate (TAR), which indicates the number of abortions a woman would have in her lifetime if she passed through her childbearing years at the current age-specific abortion rates. The survey estimate of the TAR indicates that a woman in Armenia will have an average of 0.8 abortions during her lifetime. This rate is considerably lower than the comparable rates of 1.8 in the 2005 ADHS and 2.6 in the 2000 ADHS. The proportion of pregnancies ending in induced abortion has declined over the past ten years, from 55 percent in 2000 to 45 percent in 2005 and to 29 percent in 2010.

Abortion differentials. In 2010, the TAR for rural women was almost the same as that for urban women (0.9 versus 0.8), while in 2005, the rates were 2.2 and 1.5, respectively.

Contraceptive failure and abortion. When formulating policies designed to improve the reproductive health of women, it is useful to know the contraceptive behavior of women who resort to abortion as a means of fertility control. Almost half (48 percent) of all abortions are to women who use contraception but experience method failure, a large proportion of whom are using withdrawal. Greater access to and use of more reliable methods would reduce the incidence of abortion.

Childhood Mortality

Trends in childhood mortality. Data from the 2010 ADHS indicate that childhood mortality has declined over the past ten years. For example, infant mortality has declined from 24 deaths for the period 2001-2005 to 13 deaths for the period 2006-2010. There has been a similar decline in under-5 mortality, from 27 deaths to 16 deaths per 1,000 births. However, the data show that there was very little change in infant and under-5 mortality rates during the 10-15-year period prior to the survey.

Differentials in infant mortality. The survey found levels of infant mortality to be higher in rural areas than in urban areas. Infant mortality levels are also higher among children of women with lower levels of education than among children of women with higher than secondary-special education.

Maternal and Child Health and Nutrition

Antenatal care. Armenia has a well-developed health care system with an extensive infrastructure of facilities that provide maternal

care services. Overall, the levels of antenatal care and delivery assistance are high. Ninety-nine percent of mothers receive antenatal care from professional health providers, mostly gynecologists. There is very little urban-rural distinction in antenatal care received from doctors. Ninety-three percent of pregnant women make four or more antenatal care visits, which is a much higher percentage than that recorded in the 2005 ADHS (71 percent) and in the 2000 ADHS (65 percent). Although there is some urban-rural differential in the percentage of women making four or more ANC visits in 2010 (96 and 89 percent, respectively), the gap is much smaller than that reported in the 2005 ADHS (82 and 53 percent, respectively) and in the 2000 ADHS (82 and 45 percent, respectively).

In terms of content of care, all women (100 percent) said they were weighed, had their blood pressure tested, and gave blood and urine specimens. Two-thirds of women had their blood taken for HIV testing (67 percent). However, the provision of information about danger signs that women may experience during pregnancy is lagging (57 percent).

Delivery care. All births are delivered under the supervision of a trained medical professional, and 99 percent of births occur at health facilities. Home deliveries are somewhat more common in Gegharkunik region (2 percent).

Childhood vaccinations. The health cards maintained at the health facilities are the primary source of vaccination data. Almost all children age 18-29 months have received vaccinations for BCG, DPT1, and polio 1. Coverage is also high for the second and third doses of both DPT and polio. Overall, 92 percent of children age 18-29 months have received all basic WHO-recommended vaccinations (BCG, measles, and three doses each of DPT and polio). The results of the 2010 ADHS indicate that, in the past five years, there has been a substantial increase in vaccination coverage with all basic WHO-recommended vaccinations. The increase is notable among children age 18-29 months, who were only 78 percent fully immunized by the date of the interview in 2005 but 92 percent immunized by 2010. The same is true for vaccinations recommended by the Ministry of Health (MOH) (all basic vaccinations and three doses of the hepatitis B vaccine): although 74 percent of those age 18-29 months were fully vaccinated by the date of the interview in 2005, this compares with 87 percent in 2010.

Treatment of diarrhea. The 2010 ADHS asked about the treatment of children who suffered from diarrhea during the two weeks preceding the survey. Overall, 90 percent of children under age 5 with diarrhea in the two weeks before the survey were given either oral rehydration salts or increased fluids (oral rehydration therapy). For only 4 percent of children with diarrhea, mothers reported that they engaged in the harmful practice of curtailing fluid intake. Food intake is curtailed more than fluid intake during episodes of diarrhea: 29 percent of children with diarrhea were given somewhat less food than usual, and 15 percent were given much less food than usual. The proportion of children with diarrhea who received more to drink than usual has increased substantially in the past five years, from 43 percent in the 2005 ADHS to 65 percent in the 2010 ADHS. Knowledge of ORS packets has increased, from 70 percent in the 2005 ADHS to 75 percent in 2010. The greatest increase is seen among rural mothers (64 percent of rural mothers knew of ORS in 2005, compared with 76 percent in 2010).

Breastfeeding. Ninety-seven percent of children born in the five years preceding the survey were breastfed at some time. Although the median duration of breastfeeding is 10.9 months, the durations of exclusive and predominant breastfeeding (breastfeeding plus plain water) are short (1.8 months and 4.2 months, respectively).

Nutritional status. In the 2010 ADHS, the height and weight of children under age 5 were measured. The data are used to determine the nutritional status of children, i.e., the percentage of children who are stunted (measured in terms of height-for-age), wasted (weight-for-height), or underweight (weight-for-age). Stunting is a sign of chronic, long-term undernutrition; wasting is a sign of acute, short-term undernutrition; and underweight is a composite measure that takes into account both chronic and acute undernutrition.

In a well-nourished population of children, it is expected that only slightly more than 2 percent of children will be stunted or wasted. In Armenia, however, 19 percent of children under age 5 are stunted, and 4 percent are wasted. Overall, 5 percent of children are underweight.

Conversely, 15 percent of children are overweight (weight-for-height above +2 SD), which is about seven times more than what one would expect in a normally distributed population.

Overall, there has been a slight increase in the percentage of children who are stunted and underweight since 2000.[1] The percentage of children under 5 who are stunted has increased from 17 percent in 2000 to 18 percent in 2005 and then to 19 percent in 2010. The proportion of children under age 5 who are underweight has also increased; from 2 percent in 2000 to 5 percent in 2010. The proportion of children who are wasted went up to 5 percent in 2005 but has dropped, to 4 percent, in 2010. The proportion of children who are overweight has increased in the past five years, from 11 percent in 2005 to 15 percent in 2010.

HIV/AIDS and Other Sexually Transmitted Infections

The currently low level of HIV infection in Armenia provides a unique window of opportunity for early targeted interventions to prevent further spread of the disease.

Knowledge and attitudes. Almost all respondents reported that they have heard of HIV/AIDS. Roughly 70 to 80 percent of women and 80 to 87 percent of men know about the three main ways to reduce its transmission: abstinence, being faithful to one uninfected partner, and using condoms. Nevertheless, only one in five women (20 percent) and one in six men (16 percent) have "comprehensive" knowledge about HIV, i.e., they know that using condoms consistently and having one faithful partner can reduce the chance of getting HIV, that a healthy-looking person can have the AIDS virus, and that HIV cannot be transmitted by mosquito bites or by kissing someone infected with the AIDS virus. Over the past five years, the percentage of women who have comprehensive knowledge about HIV/AIDS has decreased from 26 percent in 2005 to 20 percent in 2010, and the percentage among men has decreased from 24 to 16 percent over the same period.

[1] For comparison purposes, data from the 2000, 2005, and 2010 ADHS surveys were all re-calculated according to the new 2006 WHO Child Growth reference standards, but restricted to children born to women interviewed with the Woman's Questionnaire and living with the mother.

Stigma surrounding AIDS is widespread in Armenia. Both women and men tend to express somewhat more accepting attitudes toward HIV-infected relatives than non-relatives. Fewer than three in ten women (29 percent) and 41 percent of men say that they would not want to keep secret a family member's infection with the AIDS virus, and about half of respondents (49 percent of women and 54 percent of men) say they would be willing to care for a family member with the AIDS virus in their home. Only around one-fifth of respondents say that an HIV-positive teacher should be allowed to continue teaching and only 14 percent of women and 16 percent of men would buy fresh food from a shopkeeper with AIDS. The percentage expressing accepting attitudes on all four measures is low, 1 percent among women and less than 5 percent among men.

Sexual behavior. Only 15 percent of men and a negligible fraction of women reported having had more than one sexual partner in the 12 months before the survey. Among men who had multiple partners during the past 12 months, more than half (53 percent) had concurrent sexual partners during the same period. Sexually active men report having an average of 5.8 lifetime sexual partners, about five times the average number of lifetime sexual partners reported by sexually active women (1.0 partner).

Condom use. Seven in ten men who had more than one sexual partner in the 12 months preceding the survey reported using a condom at the most recent sexual encounter (72 percent). More than seven in ten young women (72 percent) and more than nine in ten young men (93 percent) know a place where a person can get condoms. The percentage of youth who know a condom source has increased slightly, from 69 to 72 percent among women and has increased substantially, from 62 to 93 percent, among men since 2005.

Other Health Issues and Primary Health Care

Primary doctor. In the 2010 ADHS, all respondents age 15-49 were asked whether they have chosen a primary doctor. Overall, more than half of women (58 percent) and more than one-third of men (38 percent) have chosen a primary doctor. Among respondents who have a primary doctor, 70 percent of women and 60 percent of men said that their primary doctor

specialized in internal and general medicine (a *therapevt* in old Soviet terminology). Fifteen percent of women and 17 percent of men have chosen a family doctor as their primary doctor, with smaller percentages of both women and men choosing a pediatrician or other type of doctor. Nine in ten respondents who had a family doctor as their primary doctor stated that their family doctor worked at an outpatient health facility serving the population from their area of residence. In general, both women and men were satisfied with the services they have received from their family doctor during their most recent visit (97 percent and 99 percent, respectively).

Visits to a polyclinic or an ambulatory facility. All respondents age 15-49 were asked about their experiences utilizing primary health care services in the two months preceding the survey. Data show that 76 percent of female respondents and 85 percent of male respondents report that they had no perceived health need that required a visit to a polyclinic or an ambulatory facility in the two months preceding the survey. Only 14 percent of women and 10 percent of men had a perceived health need and went to a polyclinic or an ambulatory facility. The remaining 10 percent of women and 6 percent of men had a perceived health need, but did not go to these facilities. Fifty percent of women and 41 percent of men who had a perceived need but who did not seek care, said that the care was too expensive.

Smoking. The proportion of current cigarette smokers among women and men has not changed much in the past five years. For women, the proportion who are current cigarette smokers has remained at 2 percent since 2005. Among men, the proportion of current cigarette smokers is nearly the same as in 2005 (61 percent in 2005 and 63 percent in 2010) but lower than in 2000 (68 percent).

Breast examinations. Seventy-eight percent of Armenian women do not know about breast self-examinations (BSE) according to the current survey; this compares with 81 percent in 2005 and 85 percent in 2000. At the same time, only 3 percent of women in 2000 performed BSEs in the three months before the survey, compared with 10 percent in 2005 and 11 percent in 2010. One in six women age 15-49 (15 percent) reported that a health care provider had given them a breast examination (10 percent were given a manual breast examination, 4 percent received a mammogram, and 1 percent a sonogram).

Pap smear testing. Coverage is very low. Fewer than one in ten Armenian women age 15-49 (9 percent) ever had a Pap smear, and 7 percent had the test in the three months preceding the survey. These estimates are only slightly higher among women age 30-49 who are recommended under the MOH regulations to undertake a Pap smear test on a regular basis: 13 percent have ever had the test, and 9 percent had the test in the past three months.

CHILD PROTECTION

In 2003, the government of Armenia adopted the National Plan of Action for Protection of Children's Rights, which is an integral part of the country's child welfare reforms. The 2010 ADHS Household Questionnaire asked a number of questions to obtain information about child discipline and the prevalence of child labor in Armenia.

Child Discipline. The manner in which parents and caretakers discipline children can have long-term consequences for their physical and psychological development and well-being. In an effort to identify the types of child discipline methods used in Armenia, the 2010 ADHS included questions on this topic. The questions on child discipline were asked about one randomly selected child age 2-14 in each household.

Data show that seven in ten children age 2-14 experienced some form of psychological or physical punishment during the 30 days preceding the survey. Approximately one-fifth of children (22 percent) experienced only non-violent discipline, and two-thirds of children (66 percent) experienced psychological aggression. Forty-two percent of children experienced any physical punishment and 4 percent experienced severe physical punishment. Despite the fact that physical punishment is common, overall, only 3 percent of Armenian mothers or the most knowledgeable caretakers interviewed in the ADHS believe that in order to bring up a child properly, the child needs to be physically punished.

Child Labor. The 2010 ADHS Household Questionnaire asked a set of questions to obtain information about the prevalence of child labor in Armenia. Child labor is defined as the involvement of children age 5-14 in labor activi-

ties: (1) children age 5-11 who during the past week did at least one hour of economic activity or at least 28 hours of domestic chores and (2) children age 12-14 who during the past week did at least 14 hours of economic activity or at least 28 hours of domestic chores. Overall, 4 percent of Armenian children age 5-14 are involved in child labor. Most of these children work in family businesses; overall, 3 percent of children age 5-14 worked for a family business during the week preceding the survey. Children living in Aragatsotn and Shirak were more likely to be involved in child labor during the reference period than children in any other region (8 and 7 percent, respectively).

MILLENNIUM DEVELOPMENT GOAL INDICATORS

Goals and Indicators		Value		
		Male	Female	Total
1.	**Eradicate extreme poverty and hunger**			
1.8	Prevalence of underweight children under age 5[1]	4.3	5.1	4.7
2.	**Achieve universal primary education**			
2.1	Net enrollment ratio in primary education[2]	97.3	97.0	97.2
3.	**Promote gender equality and empower women**			
3.1a	Ratio of girls to boys in primary education[3]	na	na	1.0
3.1b	Ratio of girls to boys in secondary education[3]	na	na	1.2
3.1c	Ratio of girls to boys in tertiary education[3]	na	na	1.0
4.	**Reduce child mortality**			
4.1	Under-5 mortality rate (per 1000 live births)[4]	21	22	16
4.2	Infant mortality rate (per 1000 live births)[4]	17	20	13
4.3	Proportion of 1-year-old children immunized against measles[5]	86.5	93.1	89.8
5.	**Improve maternal health**			
5.2	Proportion of births attended by skilled health personnel[6]	na	na	99.5
5.3	Contraceptive prevalence rate[7]	na	54.9	na
5.4	Adolescent birth rate[8]	na	27.8	na
5.5a	Antenatal care coverage: at least one visit by skilled health professional	na	99.1	na
5.5b	Antenatal care coverage: at least four visits by any provider	na	92.8	na
5.6	Unmet need for family planning	na	21.3	na
6.	**Combat HIV/AIDS, malaria and other diseases**			
6.2	Condom use at last high-risk sex: youth age 15-24[9]	87.1	*	na
6.3	Percentage of population age 15-24 with comprehensive knowledge of HIV/AIDS[10]	8.9	15.8	na
6.4	Ratio of school attendance of orphans to school attendance of non-orphans age 10-14[11]	1.0	nc[11]	1.0
7.	**Ensure environmental sustainability**			
7.8	Percentage of population using an improved drinking water source[12]	98.7	88.1	94.6
7.9	Percentage of population with access to improved sanitation[13]	97.0	49.4	78.9

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
na = Not applicable

[1] Proportion of children age 0-59 months who are below -2 standard deviations (SD) from the median of the WHO Child Growth Standards in weight-for-age

[2] Based on reported attendance, not enrollment

[3] Based on reported net attendance, not gross enrollment

[4] Expressed in terms of deaths per 1,000 live births. Mortality rates by sex refer to a 10-year period before the survey. Total mortality rates refer to a 5-year period before the survey.

[5] In Armenia, the measles vaccinations are given at the age of 12 months. The values presented in the table are for children age 12-23 months who have been vaccinated at any time before the survey against measles.

[6] Among births in the 5-year period before the survey

[7] Use of any contraceptive method among married or in-union women age 15-49

[8] Age-specific fertility rates for women age 15-19 corresponding to the 3-year period before the survey

[9] High-risk sex is defined as sexual intercourse with a non-marital, non-cohabiting partner. It is expressed as a percentage of men and women age 15-24 who had high-risk sex in the past 12 months.

[10] A person is considered to have comprehensive knowledge about HIV/AIDS when s/he knows that consistent use of a condom during sexual intercourse and having just one HIV-negative and faithful partner can reduce the chances of getting HIV, knows that a healthy-looking person can have HIV, and rejects the two most common misconceptions about HIV, i.e., that HIV can be transmitted by mosquito bites and that a person can get HIV by kissing someone who has HIV.

[11] There are no cases of female orphans age 10-14.

[12] Percentage of de-jure population whose main source of drinking water is a household connection (piped), public standpipe, borehole, protected dug well or spring, or rainwater collection

[13] Percentage of de-jure population with access to flush toilet, ventilated improved pit latrine, traditional pit latrine with a slab, or composting toilet

ARMENIA


N
Lori
Tavush
Shirak
Kotayk
Lake Sevan
Aragatsotn
Yerevan
Armavir
Gegharkunik
Ararat
Vayots Dzor
Syunik
Kilometers
0
25
50
100

INTRODUCTION 1

1.1 GEOGRAPHY, POPULATION, HISTORY, AND ECONOMY

Geography

The republic of Armenia is a small, landlocked mountainous country located in the southern Caucasus Mountains in southwestern Asia. The country borders on Turkey to the west, Georgia to the north, Azerbaijan to the east, and Iran to the south. The area of the country is 29,743 square km, approximately 71 percent of which is agricultural land, 12 percent is forested, 8 percent is special protected territories, and 9 percent is uncategorized. In Armenia, the largest lake is Lake Sevan, which has a surface area of 1,271 square km. The longest rivers are the Akhuryan (186 km) and the Araks (158 km). The highest point in the country is the peak of Aragats (4,090 meters); the lowest point is the Debet River (375 m). The longest distance between the northwest and the southeast is 360 km, and the longest distance between west and east is 200 km. Armenia has a highland continental climate with cold winters and hot summers. The country is subdivided into 11 regions (marz), including the region of Yerevan, which is the capital city of Armenia (NSS, 2011c).

Population

The 2001 population census was the most recent official census to be conducted prior to the 2010 Armenia Demographic and Health Survey; it revealed a population of 3,212,900. The second census in Armenia took place after independence was implemented in October 2011, and data is currently being analyzed. Based on the 2001 population census quarterly updates, the current estimate of the de jure (resident) population as of the end of 2010 was 3,262,600, with an annual growth rate of 0.4 percent in 2009-2010. In 2010, 51.5 percent of the population was female, and 48.5 percent was male. The proportion of the population that lives in urban areas is 64 percent. The population density in the country as a whole is 110 people per sq km, with approximately 1.1 million inhabitants living in Yerevan. In 2010, life expectancy at birth was 77.2 years for females and 70.6 years for males. According to the National Statistical Service (NSS) of Armenia, in 2010 the average size of the Armenian household was 4.1 persons for the de jure population and 3.8 persons for the de facto (current) population. Literacy among women and men age 15-49 is universal, and 21 percent of males and 23 percent of females age 25-49 have attained higher education. Approximately one-third of the Armenian population lives below the poverty line. The global economic crisis had a serious impact on poverty incidence in Armenia; according to the NSS, poverty increased in Armenia from 28 percent of the population in 2008 to 34 percent in 2009 and 36 percent in 2010 (NSS, 2011b, and NSS, 2011c).

An Armenian diaspora has existed throughout the nation's history, with approximately two-thirds of ethnic Armenians living outside the country. The exodus of Armenians began during World War I, when the territory of Armenia was divided between the warring Ottoman and Russian Empires. The most recent large-scale migrations occurred as a result of interethnic fighting, the Karabakh crisis, a devastating earthquake centerd in the north of the country, and post-Soviet political, social, and economic transitions. Since 2007, about 11 percent of household members age 15 and older have been internal or external migrants. The main reasons for leaving the country have been work related. Since 2007, nearly three quarters of household outmigrants age 15 and older have left for the Russian Federation. In recent years, however, large-scale labor emigration has declined. By 2010, the net migration rates had declined by more than 4 times compared with the 2000 rates and had declined by 33 percent compared with the 2009 rates (NSS, 2011b).

History

The republic of Armenia lies in the Armenian highlands surrounding the biblical Mount Ararat. Although currently located in Turkey, the snow-covered peak of Ararat dominates the skyline of Yerevan, the capital city of Armenia. Ararat is regarded as a symbol of Armenia and is a centerpiece of the Armenian Coat of Arms.

The Armenian nation is one of the oldest in the world and has long been famous for its cultural and spiritual heritage. Its history dates back almost 5,000 years. The original Armenian name for the country was Hayk, currently Hayastan. In the ninth through the sixth centuries B.C., the Urartu (Ararat) Kingdom flourished in the Armenian highlands. At its height, under Tigran the Great (95-55 BC), Armenia extended its rule from "sea to sea" (the Caspian to the Mediterranean Seas). In AD 301, Armenia became the first country to adopt Christianity as a state religion. Throughout history, Armenia changed its territorial size many times, and between the 4th and 19th centuries it passed under the rule of Greeks, Romans, Persians, Byzantines, Mongols, Arabs, Ottoman Turks, and Russians. After World War I, the independent Democratic Republic of Armenia was established on May 28, 1918. That republic, which endured only two and a half years, was annexed by the Red Army on November 29, 1920. In 1922, the newly proclaimed Armenian Soviet Socialist Republic became part of the Soviet Union as one of three republics comprising the Trans-Caucasian Soviet Federative Socialist Republic. In 1936, after reorganization, the Armenian Soviet Socialist Republic became a separate constituent republic of the Soviet Union. On September 21, 1991, the Supreme Council of the Republic of Armenia declared independence from the Soviet Union.

Armenia is a sovereign, democratic country. The new constitution was approved in the July 1995 referendum, and the most recent amendments were made in November 2005. The president of Armenia is the head of state and is elected by the citizens for a five-year term of office. The most recent presidential election was held in 2008, and the next election is scheduled for 2013. State authority is implemented according to the constitution and laws and is based on the principle of distinguishing the legislative, administrative, and judicial authorities.

Economy

Since 2000, and particularly during 2001-2008, Armenia has experienced rapid economic growth (13 percent, on average), and its gross domestic product (GDP) per capita has tripled. Armenia has a lower middle-income economy; however, the country's economy still relies on foreign investment, targeted grants, and support from Armenians working abroad. Economic growth and prudent fiscal policies have translated to stable employment, an increase in nominal wages, an increase in spending in social sectors, and a reduction in poverty in the past decade. Almost all sectors of the economy have contributed to economic growth, but the growth in construction has been particularly strong; in 2007-2008 its share of the GDP reached 25 percent. However, the recent global economic crisis had a strong negative impact on economic growth in Armenia, with a 14 percent decline in GDP observed in 2009, followed by only a 2 percent growth in GDP in 2010; this contrasts with the double-digit average growth rates during the early 2000s (NSS, 2011b).

The main economic activities in Armenia are manufacturing machinery of tools, chemicals, textiles, and jewellery; diamond processing; construction and mining (copper, gold, molybdenum, aluminium); agriculture; cognac (Armenian brandy) and wine factories; food processing; trade; sales; machinery repair; tourism and hospitality; real estate; and information technology. The structure of economic activities in Armenia recently has shifted from mostly heavy industrial production to other activities, particularly activities in the service and agricultural sectors that became substantial contributors to GDP and employment structures (NSS, 2011b).

In 2010, the main items exported abroad were ores; ferrous metals; copper, aluminium, and articles made of them; precious and semiprecious stones; alcoholic and non-alcoholic beverages; bituminous substances; and mineral waxes. The amount of imported goods, however, considerably exceeds that of exported goods ($3.75 billion versus $1.04 billion). The main items imported in 2010

were nuclear reactors, boiler machinery and mechanical appliances, electrical machinery and equipment, vehicles, natural gas and other mineral fuels, mineral oils and products of its distillation, foodstuffs, chemicals, pharmaceuticals, and tobacco products. Major trade partners in 2010 were Russia, Bulgaria, Germany, Netherlands, USA, Iran, Belgium, Georgia, Turkey, Ukraine, UAE, China, and Canada (NSS, 2011c).

Armenia is a member of more than 40 international organizations, including the United Nations, the Council of Europe, the Asian Development Bank, the Commonwealth of Independent States, the World Trade Organization, the World Customs Organization, the Organization of the Black Sea Economic Cooperation, and others.

1.2 Systems for Collecting Demographic and Health Data

The NSS of Armenia is responsible for conducting censuses and for using data from the national registration system to provide information about the current population. The 2001 census results were published in 2002-2004. The 2011 census is currently being completed; the results will be published in 2012-2014. Births, deaths, marriages, and divorces are registered at the local administrative level by the civil registry departments of the Ministry of Justice, while population migration within the country and abroad is registered by the relevant subdivisions of the Armenian police, and aggregated statistics are forwarded through territorial offices of the Armenian police to the territorial statistical offices and then to the NSS. The NSS compiles and analyzes these data and issues annual reports entitled, *Population of Armenia*, *Women and Men in Armenia*, and *Statistical Yearbook* among others.

Health information is collected by the Ministry of Health (MOH) through special forms provided by the health facilities. Collected information is passed directly to the NSS. The NSS compiles and analyzes data for the country as a whole and issues annual reports as well as various analyses. Based on compiled health data, the Ministry of Health issues annual thematic reports and a bi-annual report entitled *Health Indicators of the Population and Usage of Health Care Resources in Armenia*. The national data are available at the WHO Website as part of the Health for All Database.

1.3 Health Care System Updates in Armenia

Armenia began to reform the health care sector soon after attaining independence. Recognizing health and health care as fundamental human rights, the country's strategy identified the major components of health care reform: (1) a reorientation of health services towards a balanced partnership between primary and hospital care; (2) the promotion of health and prevention of disease through tackling the determinants of health; and (3) a shift from the narrow biomedical model towards a social, multiprofessional, and multisectoral approach to health and health care.

The main directions of health sector development in Armenia arose from the basic provisions of the government's Action Plan and the document *Health for All in the 21st Century*, which was adopted by the World Health Organization. The main tasks of the health system reforms are—given available resources and potential—to ensure citizens' constitutional right to health care, to improve access to state-guaranteed free medical care; and to initiate targeted balancing of the social and market values.

The government of Armenia approved the first strategy for primary health care (PHC) development in 1997. It identified PHC service delivery in Armenia as inefficient and poor in quality. As a result, the government decided to reorient the health care system towards PHC and to introduce family medicine as a strategic component to improve the quality of and access to PHC services. The government approved the follow-up PHC development strategy to scale up and complete the PHC reforms. Long-term objectives include integration of outpatient specialist services with hospitals; implementation of polyclinic reform; and creation of new cadres of physicians trained in family medicine and nurses trained in family and community nursing. The strategy also recognizes the need

for better integration of primary health care and social care services. It is estimated that 1,654 family doctors and 1,770 family nurses graduated by September 2011.

To improve access to essential services in rural areas, the government has run a Primary Health Care Development Program that was built on the successful Armenia Social Investment Fund experience. By mobilizing communities to develop their plans to improve local health care and to raise their own revenues to share service improvement costs, the program has improved PHC infrastructure in the villages. The program was closely linked with PHC training programs to ensure that the outfitted rural facilities were staffed with qualified individuals.

In January 2006, free access to polyclinic services for all Armenians was introduced. In 2007, the principle of free enrollment was incorporated into primary care. Also, regulations on establishment of independent solo and group family medicine practices were adopted by government decree. Criteria for conducting preventive health care visits by PHC doctors were developed and adopted by the government. On July 1, 2008, the government introduced vouchers that entitled pregnant women to receive free delivery care services. Additional financial resources from the government allowed the salaries of medical personnel to be increased.

The health care delivery system is divided between outpatient and inpatient care. Inpatient care is provided by multi- and single-service hospitals. There are separate hospitals for maternity care and for children's care. Outpatient care is provided by urban polyclinics, rural health centers/ambulatories, and feldsher-accoucher health posts.[1] At the end of 2010, there were about 140 ambulatory-polyclinic facilities in urban areas, 255 rural ambulatories, and 617 health posts in Armenia. Polyclinics provide primary care services through district internists and pediatricians, as well as outpatient specialist services, resulting in no clear separation between primary and secondary care services.

The prioritized rights of mother and child are set forth in the constitution of Armenia as well as in other laws. In particular, maternal and child health issues and future strategies of the main provisions were established in *Maternal and Child Health Strategy:2003-2015*. In addition, in the main strategic planning document of the country (known as the *Program of Sustainable Development)*, maternal and child health represents a priority program area.

During recent years, mother and child health issues have become a priority for the government of Armenia. For example, the government has approved *National Strategy, Program and Actions Timeframe on Reproductive Health Improvement for 2007-2015*, as well as *National Strategy for Child and Adolescent Health and Development and Thereof Plan of Actions for 2010-2015*. These documents reflect reproductive, maternal, and child health problems associated with the current situation in the country and define goals and strategies aimed at improving women's and children's health and nutrition while reducing infant and maternal mortality. The maternal and child health protection plans of action are high priorities of the MOH.

Health Care Financing

Historically, the state budget was the primary funding source for health care. Currently, the health system is financed both from local and from international sources. The main local sources are the state budget and direct out-of-pocket payments by the population. International financing sources are general humanitarian donations and project-specific support.

Grants and credit projects financed by foreign governments and international and multilateral organizations are now the most substantial form of external support in areas of immunization,

[1] A feldsher is a health professional trained in nursing and midwifery with extended training in clinical diagnosis and pharmacology. Feldshers are authorized to provide basic treatment and to prescribe a restricted number of drugs at feldsher-accoucher posts (FAPs) with no assigned doctor.

maternal and child health, reproductive health, adolescent health, iodine deficiency, and HIV/AIDS prevention (with emphasis on prevention of mother-to-child transmission of HIV).

The state budget remains the main formal source of financing. State funds are derived from general tax revenues. State expenditures for health care are not sufficient to support the core system and to meet the health needs of the population.

Each year Armenia increases its donations to the health sector. In coming years, the government's most valuable and important project will be obligatory health insurance, which will improve the quality of health services as well as the health of the population.

Family Planning Policies

The main objectives of family planning programs in Armenia are to ensure safe motherhood among women of reproductive age, to decrease health risks during pregnancy, and to reduce reliance upon abortion as a method of family planning while promoting more modern and effective methods of contraception. Currently, abortion is legal during the first 12 weeks of pregnancy. In some cases, an abortion may be performed until 22 weeks of gestation if there is a medical or social justification.

In the programs related to the improvement of reproductive health, contraceptive methods are provided free of charge, but before 2006, there was a fee for the necessary examinations. After implementing PHC in 2006, the gynecological services were included among the free services.

For many years, oral contraceptives were not commonly available in Armenia due to an directive titled "Side Effects and Complications of Oral Contraceptives," enacted by the MOH of the former Soviet Union in 1974. Today, in Armenia there is no barrier to contraceptive use because in 2002, a new law allowed oral contraceptive use. Moreover, in 2005, the government of Armenia adopted new regulations for performing abortions.

1.4 OBJECTIVES AND ORGANIZATION OF THE SURVEY

The 2010 Armenia Demographic and Health Survey (2010 ADHS) is the third in a series of nationally representative sample surveys designed to provide information on population and health issues. It is conducted in Armenia under the worldwide Demographic and Health Surveys program. Specifically, the 2010 ADHS has a primary objective of providing current and reliable information on fertility levels, marriage, sexual activity, fertility preferences, awareness and use of family planning methods, breastfeeding practices, nutritional status of young children, childhood mortality, maternal and child health, and awareness and behavior regarding AIDS and other sexually transmitted infections (STIs). The survey obtained detailed information on these issues from women of reproductive age and, for certain topics, from men as well.

The 2010 ADHS results are intended to provide information needed to evaluate existing social programs and to design new strategies to improve health of and health services for the people of Armenia. Data are presented by region (marz) wherever sample size permits. The information collected in the 2010 ADHS will provide updated estimates of basic demographic and health indicators covered in the 2000 and 2005 surveys.

The long-term objective of the survey includes strengthening the technical capacity of major government institutions, including the NSS. The 2010 ADHS also provides comparable data for long-term trend analysis in Armenia because the 2000, 2005, and 2010 surveys were implemented by the same organisation and used similar data collection procedures. It also adds to the international database of demographic and health–related information for research purposes.

The 2010 ADHS was conducted by the National Statistical Service (NSS) and the MOH of Armenia from October 5 through December 25, 2010. ICF International provided technical support for the survey through the MEASURE DHS project. MEASURE DHS is a worldwide project,

sponsored by the United States Agency for International Development (USAID), with a mandate to assist countries in obtaining information on key population and health indicators. USAID/Armenia provided funding for the survey, while the United Nations Children's Fund (UNICEF)/Armenia, the Joint United Nations Programme on AIDS (UNAIDS)/Armenia, and the United Nations Population Fund (UNFPA)/Armenia supported the survey through in-kind contributions.

Sample Design and Implementation

The sample was designed to permit detailed analysis—including the estimation of rates of fertility, infant/child mortality, and abortion—at the national level, for Yerevan, and for total urban and total rural areas separately. Many indicators can also be estimated at the regional (marz) level.

A representative probability sample of 7,580 households was selected for the 2010 ADHS sample. The sample was selected in two stages. In the first stage, 308 clusters were selected from a list of enumeration areas in a subsample of a master sample derived from the 2001 Population Census frame. In the second stage, a complete listing of households was carried out in each selected cluster. Households were then systematically selected for participation in the survey.

All women age 15-49 who were either permanent residents of the households in the 2010 ADHS sample or visitors present in the household on the night before the survey were eligible to be interviewed. Interviews were completed with 5,922 women. In addition, in a subsample of one-third of all of the households selected for the survey, all men age 15-49 were eligible to be interviewed if they were either permanent residents or visitors present in the household on the night before the survey. Interviews were completed with 1,584 men. Appendix A provides additional information on the sample design of the 2010 Armenia DHS.

Questionnaires

Three questionnaires were used in the ADHS: a Household Questionnaire, a Woman's Questionnaire, and a Man's Questionnaire. The Household Questionnaire and the individual questionnaires were based on model survey instruments developed in the MEASURE DHS program and questionnaires used in the previous 2005 ADHS. The model questionnaires were adapted for use by NSS and MOH. Suggestions were also sought from a number of nongovernmental organizations (NGOs). The questionnaires were developed in English and translated into Armenian. They were pretested in July 2010.

The Household Questionnaire was used to list all usual members of and visitors to the selected households and to collect information on the socioeconomic status of the household. The first part of the Household Questionnaire collected for each household member or visitor information on their age, sex, educational attainment, and relationship to the head of household. This information provided basic demographic data for Armenian households. It also was used to identify the women and men who were eligible for an individual interview (i.e., women and men age 15-49). In the second part of the Household Questionnaire, there were questions on housing characteristics (e.g., the flooring material, the source of water, and the type of toilet facilities), on ownership of a variety of consumer goods, and on other aspects of the socioeconomic status of the household. In addition, the Household Questionnaire was used to obtain information on each child's birth registration, ask questions about child discipline and child labor, and record height and weight measurements of children under age 5.

The Woman's Questionnaire obtained information from women age 15-49 on the following topics:

- Background characteristics
- Pregnancy history
- Antenatal, delivery, and postnatal care
- Knowledge, attitudes, and use of contraception

- Reproductive and adult health
- Childhood mortality
- Health and health care utilization
- Vaccinations of children under age 5
- Episodes of diarrhea and respiratory illness of children under age 5
- Breastfeeding and weaning practices
- Marriage and recent sexual activity
- Fertility preferences
- Knowledge of and attitudes toward AIDS and other sexually transmitted diseases
- Woman's work and husband's background characteristics

The Man's Questionnaire, administered to men age 15-49, focused on the following topics:

- Background characteristics
- Health and health care utilization
- Marriage and recent sexual activity
- Attitudes toward and use of condoms
- Knowledge of and attitudes toward AIDS and other sexually transmitted diseases
- Attitudes toward women's status

Training of Field Staff

The main survey training, which was conducted by NSS, MOH, and ICF International staff, was held during a three-week period in September and was attended by all supervisors, field editors, interviewers, and quality control personnel, a total of 104 people (83 females and 21 males). The training included lectures, demonstrations, practice interviews in small groups, and examinations. All field staff received training in anthropometric measurement and participated in two days of field practice.

Fieldwork and Data Processing

Thirteen teams collected the survey data; each team consisted of four female interviewers, a male interviewer, a field editor, and a team supervisor. Fieldwork began in early October 2010 and was completed by December 25, 2010. Senior ADHS technical staff visited teams regularly to review the work and monitor data quality. MOH, UNICEF/Armenia, UNFPA/Armenia, and USAID/Armenia representatives also visited teams to monitor data collection on child discipline and child labor modules and to observe the height and weight measurements of children under age 5.

The processing of the ADHS results began shortly after fieldwork commenced. Completed questionnaires were returned regularly from the field to NSS headquarters in Yerevan, 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 was received), several office editors, 12 data entry operators, and a secondary editor. The concurrent processing of the data was an advantage because the senior DHS technical staff were 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 March 2011.

1.5 RESPONSE RATES

Table 1.1 shows response rates for the 2010 ADHS. A total of 7,580 households were selected in the sample, of which 7,043 were occupied at the time of the fieldwork. The main reason for the difference is that some of the dwelling units that were occupied during the household listing operation were either vacant or the household was away for an extended period at the time of interviewing. The number of occupied households successfully interviewed was 6,700, yielding a household response rate of 95 percent. The household response rate in urban areas (94 percent) was slightly lower than in rural areas (97 percent).

Table 1.1 Results of the household and individual interviews

Number of households, number of interviews, and response rates, according to residence (unweighted), Armenia 2010

Result	Residence		Total
	Urban	Rural	
Household interviews			
Households selected	5,461	2,119	7,580
Households occupied	5,033	2,010	7,043
Households interviewed	4,753	1,947	6,700
Household response rate[1]	94.4	96.9	95.1
Interviews with women age 15-49			
Number of eligible women	4,073	1,986	6,059
Number of eligible women interviewed	3,966	1,956	5,922
Eligible women response rate[2]	97.4	98.5	97.7
Interviews with men age 15-49			
Number of eligible men	1,105	536	1,641
Number of eligible men interviewed	1,063	521	1,584
Eligible men response rate[2]	96.2	97.2	96.5

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

In these households, a total of 6,059 eligible women were identified; interviews were completed with 5,922 of these women, yielding a response rate of 98 percent. In one-third of the households, a total of 1,641 eligible men were identified, and interviews were completed with 1,584 of these men, yielding a response rate of 97 percent. Response rates are slightly lower in urban areas (97 percent for women and 96 percent for men) than in rural areas where rates were 99 and 97 percent, respectively.

HOUSING CHARACTERISTICS AND HOUSEHOLD POPULATION 2

This chapter summarizes the demographic and socioeconomic characteristics of the household population in the 2010 ADHS, including age, sex, place of residence, educational status, and household characteristics. Information on child birth registration, child labor, and child discipline is also presented. Knowledge about he characteristics of respondents and their households helps in understanding and interpreting the findings of the survey and also indicates the representativeness of the survey.

A household is defined as a person or group of related and unrelated persons who live together in the same dwelling unit(s) or on connected premises, who acknowledge one adult member as head of the household, and who have common arrangements for cooking and eating their food. The questionnaire for the 2010 ADHS distinguishes between the de jure population (persons who usually live in the household) and the de facto population (persons who stayed the night before the interview in the household). According to the 2010 ADHS data, the differences between these populations are small. Tabulations for the household data presented in this chapter are based primarily on the de facto population.

Because of the way the sample was designed, the number of cases in some regions may appear small; this is because they are weighted to make the regional distribution nationally representative. Throughout this report, numbers in the tables reflect weighted numbers. To ensure statistical reliability, percentages based on 25 to 49 unweighted cases are shown within parentheses, and percentages based on fewer than 25 unweighted cases are suppressed.

2.1 HOUSING CHARACTERISTICS

There is a strong correlation between the socioeconomic condition of a household and the vulnerability of its members, especially children, to common diseases. The amenities and assets available to households are important in determining the general socioeconomic status of the population. To assess the socioeconomic conditions under which the population lives, respondents were asked to give specific information about their household environment. The 2010 ADHS included questions about the household's access to electricity, type of water source, sanitation facilities, floor material, and ownership of durable goods. Tables 2.1 through 2.6 present major housing characteristics by urban-rural residence.

Drinking Water

The source of drinking water is an indicator of whether it is suitable for drinking. Table 2.1 provides information on the source of drinking water, the amount of time it takes to obtain the water, and the type of treatment of water used for drinking. The table presents the percentage of households as well as the percentage of the de jure population living in those households.

Nine in ten households in Armenia have their drinking water piped directly into the dwelling, yard, or plot (Table 2.1). Urban households are more likely than rural households to have piped water in their house, yard, or plot (97 percent compared with 80 percent). In rural areas, about 3 percent of households have a public tap or standpipe and 4 percent obtain water from a protected spring. Overall, 95 percent of Armenian households have access to an improved source of drinking water.

The majority of households use water that is available on the premises; therefore, only 6 percent of Armenian households have to go outside to get drinking water. In households with no water in the house, 13 percent of rural households spent less than 30 minutes on a trip to obtain water and 1 percent of rural households spent 30 minutes or longer to fetch water.

Because households may use more than one method to treat water to make it safer to drink, water treatment is given as the percentage of households using the treatment method and the percentage of the de jure population (usual residents) of those households, rather than a percent distribution. Data in Table 2.1 show that water is not treated in 91 percent of households. The most frequently used treatment for water is boiling (6 percent). Overall, 8 percent of households use an appropriate treatment method, i.e., boiling, bleaching, straining, filtering or solar disinfecting.

Table 2.1 Household drinking water

Percent distribution of households and de jure population by source of drinking water, time to obtain drinking water, and treatment of drinking water, according to residence, Armenia 2010

	Households			Population		
Characteristic	Urban	Rural	Total	Urban	Rural	Total
Source of drinking water						
Improved source						
Piped water into dwelling/yard/plot	97.1	79.8	91.0	97.3	79.5	90.5
Public tap/standpipe	0.8	2.9	1.5	0.5	2.9	1.4
Pipe into dwelling (own artesian)	0.0	0.8	0.3	0.0	1.0	0.4
Tubewell/ borehole	0.3	0.5	0.4	0.3	0.4	0.4
Protected dug well	0.1	0.8	0.3	0.1	0.9	0.4
Protected spring	0.3	3.5	1.5	0.3	3.3	1.5
Bottled water	0.2	0.0	0.1	0.1	0.0	0.1
Non-improved source						
Unprotected spring	0.0	0.7	0.2	0.0	0.6	0.2
Tanker truck/cart with drum	1.2	10.4	4.4	1.2	10.7	4.9
Surface water	0.0	0.0	0.0	0.0	0.0	0.0
Other sources	0.0	0.3	0.1	0.0	0.4	0.1
Missing	0.1	0.2	0.1	0.0	0.2	0.1
Total	100.0	100.0	100.0	100.0	100.0	100.0
Percentage using any improved source of drinking water	98.7	88.4	95.1	98.7	88.1	94.6
Time to obtain drinking water (round trip)						
Water on premises	98.2	86.2	94.0	98.2	86.3	93.7
Less than 30 minutes	1.5	12.6	5.4	1.5	12.4	5.6
30 minutes or longer	0.2	0.9	0.4	0.2	0.9	0.4
Don't know/missing	0.1	0.3	0.2	0.1	0.4	0.2
Total	100.0	100.0	100.0	100.0	100.0	100.0
Water treatment prior to drinking[1]						
Boiled	7.2	3.1	5.7	8.4	3.7	6.6
Strained through cloth	0.3	0.6	0.4	0.3	0.5	0.4
Ceramic, sand or other filter	2.1	0.6	1.6	2.3	0.6	1.7
Other	1.0	0.9	0.9	1.0	1.0	1.0
No treatment	89.5	94.7	91.3	88.1	94.2	90.4
Percentage using an appropriate treatment method[2]	9.5	4.1	7.6	11.0	4.6	8.5
Number	4,341	2,359	6,700	14,721	9,065	23,787

[1] Respondents may report multiple treatment methods, so the sum of treatment may exceed 100 percent.
[2] Appropriate water treatment methods include boiling, bleaching, straining, filtering, and solar disinfecting.

Sanitation Facility

A household's toilet/latrine facility is classified as hygienic if it is used only by household members (i.e., not shared) and if the type of facility effectively separates human waste from human contact. The types of facilities that are most likely to accomplish this are flush or pour flush into a piped sewer system/septic tank/pit latrine, and pit latrine with a slab. A household's sanitation facility is classified as unhygienic if it is shared with other households or if it does not effectively separate human waste from human contact. Table 2.2 shows the proportion of households and of the de jure

population with access to hygienic sanitation facilities (that is, those with access to improved, unshared facilities), shared facilities and non-improved facilities.

Most households in Armenia use improved sanitation facilities that are not shared with another household (Table 2.2). Seven in ten households in Armenia use a flush toilet connected to piped sewer system, and 8 percent of households use a pit latrine with a slab. Flush toilets are widespread in urban areas, while pit latrines with a slab are more prevalent in rural areas. It should be noted that the 2010 ADHS questionnaire categorized sanitation facilities differently than the 2005 ADHS questionnaire, and thus it is difficult to compare data from the two surveys. Two in ten households use a non-improved source.

Table 2.2 Household sanitation facilities

Percent distribution of households and de jure population by type of toilet/latrine facilities, according to residence, Armenia 2010

	Households			Population		
Type of toilet/latrine facility	Urban	Rural	Total	Urban	Rural	Total
Improved, not shared facility	**96.7**	**47.8**	**79.5**	**97.0**	**49.3**	**78.9**
Flush/pour flush to piped sewer system	94.7	22.8	69.4	94.9	24.6	68.1
Flush/pour flush to septic tank	0.1	1.2	0.5	0.1	1.3	0.6
Flush/pour flush to a pit latrine	0.6	4.4	1.9	0.6	4.4	2.1
Pit latrine with a slab	1.3	19.4	7.7	1.4	19.0	8.1
Shared facility[1]	**0.9**	**1.3**	**1.1**	**1.1**	**0.8**	**0.9**
Flush/pour flush to piped sewer system	0.7	0.1	0.5	0.9	0.0	0.5
Flush/pour flush to a pit latrine	0.1	0.1	0.1	0.1	0.1	0.1
Pit latrine with a slab	0.1	1.1	0.5	0.1	0.7	0.3
Non-improved facility	**2.2**	**50.8**	**19.5**	**2.0**	**49.7**	**20.2**
Flush/pour flush not to sewer/septic tank/pit latrine	0.3	0.2	0.3	0.3	0.1	0.2
Pit latrine without slab/open pit	1.7	50.4	18.8	1.5	49.6	19.8
Bucket	0.1	0.0	0.1	0.1	0.0	0.1
Public toilet	0.0	0.1	0.1	0.0	0.0	0.0
No facility/bush/field	0.0	0.1	0.1	0.0	0.0	0.0
Missing	0.1	0.0	0.1	0.1	0.0	0.1
Total	100.0	100.0	100.0	100.0	100.0	100.0
Number	4,341	2,359	6,700	14,721	9,065	23,787

[1] Shared facility of an otherwise improved type

Hand Washing

Washing hands with soap and water is the most hygienic practice. However, hand washing with a non-soap cleaning agent such as ash or sand is an improvement over not using any cleansing agent. In the 2010 ADHS all household respondents were asked to show the interviewer where household members wash their hands. Table 2.3 shows the proportion of households where the interviewer observed the hand washing station in the house for availability of water, soap, and a non-soap cleaning agent.

A hand washing station was observed in 88 percent of households in Armenia (Table 2.3). The proportion of households with an observed hand washing station varies according to household residence, region, and wealth quintile. Urban households were more likely than rural households to have a place where hand washing was observed (94 percent and 78 percent, respectively). Households in Aragatsotn and those from the lowest wealth quintile are the least likely to have their hand washing stations observed (57 percent and 63 percent) compared with households from other regions and wealth status.

Table 2.3 Hand washing

Percentage of households in which the place most often used for washing hands was observed, and among households in which the place for hand washing was observed, percent distribution by availability of water, soap, and other cleansing agents, Armenia 2010

Background characteristic	Percentage of households where place for washing hands was observed	Number of households	Among households where place for hand washing was observed							
			Soap and water[1]	Water and cleansing agent[2] other than soap only	Water only	Soap but no water[3]	Cleansing agent other than soap only[2]	No water, no soap, no other cleansing agent	Total	Number of households with place for hand washing observed
Residence										
Urban	94.3	4,341	96.5	0.1	0.6	2.5	0.0	0.3	100.0	4,095
Rural	77.6	2,359	93.4	0.1	1.9	3.3	0.0	1.3	100.0	1,830
Region										
Yerevan	94.3	2,444	95.3	0.1	0.5	3.7	0.0	0.4	100.0	2,306
Aragatsotn	57.1	259	97.4	0.0	0.0	2.5	0.0	0.0	100.0	148
Ararat	86.0	543	93.6	0.0	1.5	1.2	0.0	3.7	100.0	468
Armavir	75.5	539	95.5	0.5	1.3	2.6	0.0	0.0	100.0	407
Gegharkunik	97.5	447	99.8	0.0	0.1	0.1	0.0	0.0	100.0	436
Lori	87.2	611	99.0	0.0	0.4	0.6	0.0	0.0	100.0	533
Kotayk	94.2	537	93.4	0.2	4.6	1.3	0.0	0.5	100.0	506
Shirak	80.0	553	95.1	0.2	0.4	3.1	0.3	0.8	100.0	442
Syunik	100.0	317	96.8	0.0	0.1	3.0	0.0	0.0	100.0	317
Vayots Dzor	84.3	142	81.4	0.0	1.4	15.2	0.0	1.9	100.0	120
Tavush	79.1	308	95.5	0.0	1.1	3.3	0.0	0.1	100.0	244
Wealth quintile										
Lowest	62.9	1,326	86.0	0.1	3.9	7.1	0.0	2.9	100.0	834
Second	90.7	1,346	96.0	0.2	0.8	2.3	0.0	0.6	100.0	1,220
Middle	95.8	1,427	95.9	0.1	0.4	3.5	0.1	0.0	100.0	1,367
Fourth	95.7	1,327	97.8	0.0	0.3	1.7	0.0	0.2	100.0	1,270
Highest	96.8	1,274	99.0	0.0	0.4	0.6	0.0	0.0	100.0	1,233
Total	88.4	6,700	95.6	0.1	1.0	2.8	0.0	0.6	100.0	5,925

[1] Soap includes soap or detergent in bar, liquid, powder, or paste form. This column includes households with soap and water only as well as those that had soap and water and another cleansing agent.
[2] Cleansing agents other than soap include locally available materials such as ash, mud, or sand.
[3] Includes households with soap only as well as those with soap and another cleansing agent

Among households where a place for hand washing was observed, 96 percent had soap and water available at the time of interview. Availability of soap and water is somewhat lower in Vayots Dzor region (81 percent) and in households from the lowest wealth quintile (86 percent) compared with 93 percent or higher in households from other regions and wealth status. Only 3 percent of households in Armenia had soap alone, and less than 1 percent had no water, no soap, and no other cleansing agent available. In contrast, in Vayots Dzor, 15 percent of observed households had soap but no water available. In Ararat, about 4 percent of observed households had no water, no soap, and no other cleansing agent available at the time of the interview.

Household Characteristics

Table 2.4 presents the distribution of households by household characteristics, according to residence. All households in Armenia have electricity (Table 2.4). The majority of households have a finished floor, use natural gas for cooking, and have a specific place for cooking inside the house. Parquet or polished wood floors are most common in urban areas (71 percent). In rural areas, 49 percent of households have wooden plank floors, 36 percent have parquet or polished wood floors, and 8 percent of households have a cement floor. Almost half of all households (45 percent) have two rooms used for sleeping.

Most rural households (93 percent) and half of urban households (52 percent) have stone walls with lime or cement. Forty-one percent of urban households have cement blocks for walls. Shingles are the preferred roofing material in both urban and rural areas (52 and 79 percent, respectively), while taule roofing is used only in urban areas (29 percent). Urban and rural households show a similar preference for metal roofing (17 and 20 percent, respectively).

Cooking fuel appears to have changed dramatically since 2000. Natural gas is, by far, the most often used fuel: eight in ten households in Armenia rely on natural gas for cooking in 2010 compared with four in ten in 2005. The proportion of households using electricity for cooking has declined from 37 percent in 2000 to 16 percent in 2005 to 5 percent in 2010. Use of LPG has also declined; for example, in 2005, more than one-third of households relied on LPG (37 percent) compared with only 13 percent in 2010. Conversely, use of natural gas has nearly doubled in the same time period, with a more rapid increase having occurred in urban areas (43 percent in 2005 and 85 percent in 2010) than in rural areas (41 percent in 2005 and 70 percent in 2010). Less than 2 percent of households use solid fuel for cooking in 2010 compared with 5 percent in 2005. Expanded access could account for some of the apparent shifts. For example, according to NSS, just a few regions in Armenia had access to natural gas in 2000, while in 2010 the gas system network covered 92 percent of urban areas and 55 percent of rural areas (NSS, 2011a).

Table 2.4 Household characteristics

Percent distribution of households by housing characteristics, percentage using solid fuel for cooking; and percent distribution by frequency of smoking in the home, according to residence, Armenia 2010

Housing characteristic	Residence		Total
	Urban	Rural	
Electricity			
Yes	99.7	99.8	99.8
No	0.2	0.2	0.2
Total	100.0	100.0	100.0
Flooring material			
Earth, sand	0.2	0.3	0.2
Wood planks	14.8	49.4	27.0
Parquet, polished wood/ laminate	70.5	36.2	58.4
Vinyl or linoleum	5.0	2.5	4.1
Ceramic/marble tiles	3.3	2.3	2.9
Cement	2.7	7.7	4.5
Carpet	2.6	0.1	1.7
Other	0.8	1.6	1.1
Missing	0.1	0.1	0.1
Total	100.0	100.0	100.0
Wall material			
Stone with mud	0.4	1.0	0.6
Cement	2.7	0.3	1.8
Stone with lime/cement	51.5	92.7	66.0
Bricks	3.1	4.1	3.5
Cement blocks	41.1	0.5	26.8
Other	1.1	1.5	1.2
Missing	0.2	0.0	0.1
Total	100.0	100.0	100.0
Roof material			
Metal	17.3	19.9	18.2
Roofing shingles	51.8	79.4	61.6
Taule (tarred roofing paper)	29.2	0.1	19.0
Other	1.5	0.6	1.2
Missing	0.2	0.0	0.1
Total	100.0	100.0	100.0
Rooms used for sleeping			
One	34.0	26.5	31.3
Two	45.8	42.0	44.5
Three or more	19.6	31.3	23.7
Missing	0.6	0.2	0.4
Total	100.0	100.0	100.0
Place for cooking			
In the house	99.1	95.6	97.9
In a separate building	0.6	3.7	1.7
Outdoors	0.0	0.6	0.2
Other	0.0	0.0	0.0
Missing	0.2	0.0	0.2
Total	100.0	100.0	100.0
Cooking fuel			
Electricity	5.1	6.0	5.4
LPG	9.3	20.2	13.1
Natural gas	85.4	69.5	79.8
Kerosene	0.0	0.0	0.0
Charcoal	0.0	0.0	0.0
Wood	0.0	3.7	1.3
Animal dung	0.0	0.6	0.2
No food cooked in house	0.1	0.0	0.1
Total	100.0	100.0	100.0
Percentage using solid fuel for cooking[1]	0.1	4.3	1.5
Frequency of smoking in the home			
Daily	52.6	58.7	54.8
Weekly	4.0	3.1	3.7
Monthly	0.7	0.6	0.7
Less than monthly	2.3	3.8	2.8
Never	40.2	33.8	37.9
Missing	0.1	0.0	0.1
Total	100.0	100.0	100.0
Number	4,341	2,359	6,700

LPG = Liquid petroleum gas
[1] Includes coal/lignite, charcoal, wood, and animal dung

Secondhand Smoke Exposure

Secondhand smoke (SHS) causes health risks in children and adults who do not smoke. Pregnant women exposed to SHS have a higher risk of giving birth to a low-birth weight baby (Windham et al., 1999). Children who are exposed to SHS are at increased risk for respiratory and ear infections and poor lung development (US Department of Health and Human Services, 2006). The 2010 ADHS collected information on smoking inside the home to assess the percentage of households in which there is exposure to secondhand smoke. The last panel in Table 2.4 shows percent distribution of households by frequency of smoking inside the home. A high proportion of households in Armenia are exposing their members to secondhand smoke. In over half of the households in Armenia (55 percent), a household member smokes inside the house on a daily basis, compared with 38 percent of households where household members never smoke inside their house. Members of rural households (59 percent) are slightly more likely to smoke inside the house on a daily basis and less likely to never smoke inside the house (34 percent) than those in urban households (53 and 40 percent, respectively).

Household Possessions

The availability of durable goods is a proximate measure of household socioeconomic status. Moreover, particular goods have specific benefits: 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 transportation allows greater access to many services away from the local area. Table 2.5 provides information on household ownership of durable goods (e.g., radios, televisions, telephones, computers, refrigerators) and means of transportation (e.g., bicycles, motorcycles, automobiles).

Table 2.5 shows that urban households are more likely than rural households to own durable and electronic goods, while rural households are slightly more likely to own a means of transportation. Overall, 98 percent of Armenian households have color televisions, 92 percent have refrigerators, and 81 percent have a washing machine. Eighty-seven percent of households have a mobile telephone, and 78 percent have a land line (non-mobile) telephone.

Table 2.5 Household possessions

Percentage of households possessing various household effects, agricultural land, and livestock/farm animals by residence, Armenia 2010

Possession	Residence		Total
	Urban	Rural	
Household effects			
Radio	15.5	5.2	11.8
Black and white television	2.2	2.0	2.2
Color television	97.9	97.3	97.7
Washing machine	84.2	76.1	81.4
Vacuum cleaner	75.5	50.3	66.6
Computer	37.8	11.7	28.6
Mobile telephone	87.6	85.7	86.9
Non-mobile telephone	89.9	55.9	77.9
Refrigerator	93.7	88.0	91.7
Digital camera	37.9	20.5	31.8
Video camera/camcorder	16.4	5.4	12.5
Table	99.4	99.8	99.5
Chair	99.6	99.7	99.6
Sofa/divan	98.3	96.5	97.7
Bed	99.4	99.7	99.5
Buffet/curio cabinet/wall unit	93.6	94.3	93.8
Air conditioner	8.0	2.9	6.2
DVD player	60.2	52.0	57.3
Satellite antenna/dish	16.1	19.9	17.5
Freezer	5.0	3.1	4.3
Electric fan	70.3	53.5	64.4
Sewing machine	50.6	48.4	49.8
Carpet	90.0	88.6	89.5
Means of transport			
Bicycle	2.4	6.9	4.0
Animal drawn cart	0.1	0.2	0.1
Motorcycle/scooter	0.2	0.3	0.2
Car/truck	27.4	33.3	29.5
Boat with a motor	0.4	0.3	0.4
Ownership of agricultural land	16.2	90.4	42.3
Ownership of farm animals[1]	3.8	56.1	22.2
Number	4,341	2,359	6,700

[1] Cattle, cows, bulls, horses, donkeys, goats, sheep, pigs, rabbits, fur animals, chickens, or bees

Household ownership of most durable goods has increased during the past five years; in particular the ownership of computers and mobile phones has increased dramatically since 2005. Twenty-nine percent of households have computers in 2010 compared with 9 percent in 2005. Computers are much more common in urban than in rural areas (38 percent and 12 percent, respectively). The proportion of households using mobile phones has increased from 33 percent in 2005 to 87 percent in 2010, with little difference seen by residence. Non-mobile telephones are still much more common in urban areas than in rural areas. Although 90 percent of urban households have a non-mobile telephone, the corresponding proportion in the rural areas is 56 percent. Conversely, the proportions owning radios or black and white televisions have declined in the same time period. Two percent of households own a black and white television and just 12 percent have radios in 2010; this compares with 14 percent and 29 percent, respectively in 2005.

Thirty percent of households in Armenia have a car or truck, while only 4 percent have a bicycle. Rural households are slightly more likely than urban households to own a car or truck (33 percent and 27 percent, respectively). Bicycles are also more common in rural areas than in urban areas (7 percent and 2 percent, respectively).

Forty-two percent of Armenian households own agricultural land; as expected, the proportion is higher in rural than urban areas (90 percent versus 16 percent). Twenty-two percent of Armenian households own farm animals, which, similar to ownership of agricultural land, is higher in rural than urban areas.

2.2 WEALTH QUINTILES

The wealth index is a measure that has been tested in a number of countries in relation to inequities in household income, use of health services, and health outcomes (Rutstein et al., 2000, Rutstein and Johnston, 2004). The wealth index is constructed by assigning a weight or factor score to each household asset through principal components analysis. These scores were summed by

household, and individuals were ranked according to the total score of the household in which they resided. The sample was then divided into population quintiles—five groups with the same number of individuals in each. At the national level, approximately 20 percent of the population is in each wealth quintile.

Table 2.6 shows the distribution of the population across the five wealth quintiles, by urban and rural areas and by region. These distributions indicate the degree to which wealth is evenly (or unevenly) distributed by geographic areas. For example, 81 percent of the rural population is in the lowest and second-lowest wealth quintiles. In comparison, approximately six in ten urban residents (60 percent) are in the two highest wealth quintiles.

Table 2.6 also shows the Gini coefficient of wealth in Armenia, which indicates the concentration of wealth, with 0 representing an exactly equal distribution (everyone having the same amount of wealth) and 1 representing a totally unequal distribution (one person having all the wealth). The overall Gini coefficient is 0.22. It is much lower in urban areas (0.06) than in rural areas (0.32), indicating a more unequal distribution of wealth in the rural population than in the urban population. The lowest Gini coefficient is seen in Yerevan (0.02) where nearly half of the population (46 percent) is in the highest wealth quintile. The highest Gini coefficients—that is, the least equitable distributions of wealth—are observed in Aragatsotn (0.46) and Vayots Dzor (0.38).

Table 2.6 Wealth quintiles

Percent distribution of the de jure population by wealth quintiles, and the Gini Coefficient, according to residence and region, Armenia 2010

Residence/region	Wealth quintile					Total	Number of population	Gini coefficient
	Lowest	Second	Middle	Fourth	Highest			
Residence								
Urban	2.4	12.2	25.0	28.7	31.7	100.0	14,721	0.06
Rural	48.7	32.7	11.9	5.5	1.2	100.0	9,065	0.32
Region								
Yerevan	0.5	6.6	18.3	28.8	45.7	100.0	8,321	0.02
Aragatsotn	61.1	23.2	10.8	4.3	0.7	100.0	954	0.46
Ararat	44.5	24.2	9.5	11.0	10.7	100.0	1,904	0.32
Armavir	46.8	29.3	11.7	9.3	2.8	100.0	2,104	0.33
Gegharkunik	24.4	42.9	20.2	10.9	1.6	100.0	1,608	0.23
Lori	13.6	22.8	34.4	20.3	8.9	100.0	2,074	0.16
Kotayk	11.0	27.2	21.7	25.1	15.0	100.0	2,069	0.15
Shirak	28.8	24.3	30.1	15.2	1.6	100.0	2,120	0.26
Syunik	13.6	20.5	30.8	26.1	9.0	100.0	967	0.17
Vayots Dzor	46.5	21.8	14.8	10.8	6.1	100.0	546	0.38
Tavush	36.1	31.0	17.6	12.5	2.8	100.0	1,120	0.28
Total	20.0	20.0	20.0	19.9	20.1	100.0	23,787	0.22

2.3 HOUSEHOLD POPULATION BY AGE AND SEX

Age and sex are important demographic variables and form the primary basis of demographic classification in vital statistics, censuses, and surveys. They are also important variables in the study of mortality, fertility, and nuptiality. Table 2.7 and Figure 2.1 present the distribution of the de facto household population in the 2010 ADHS by five-year age groups, according to urban-rural residence and sex.

The total de facto population was 23,672. The data show that in Armenia there are more women than men; 54 percent of the population is female. The gender disparity is more pronounced in urban areas than in rural areas (82 and 90 men per 100 women, respectively). Among the youngest age groups, however, there are more males than females. It is not until the 15-19 age cohort that women outnumber men in rural areas and not until the 40-44 age cohort that they outnumber men in urban areas. Overall, this imbalance in the sex ratio among the working age population suggests that the outmigration from Armenia has been primarily composed of men.

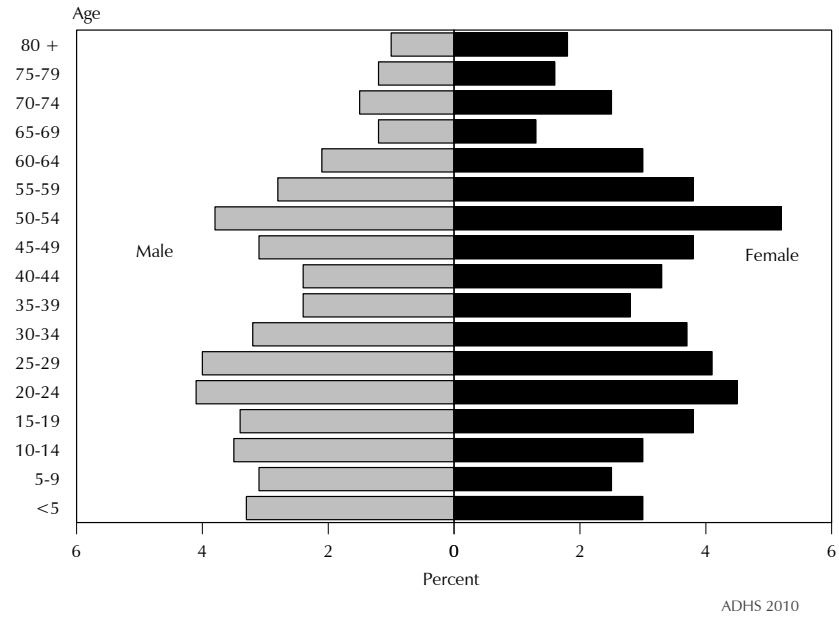
Table 2.7 Household population by age, sex, and residence

Percent distribution of the de facto household population by five-year age groups, according to sex and residence, Armenia 2010

	Urban			Rural			Total		
Age	Male	Female	Total	Male	Female	Total	Male	Female	Total
<5	6.7	5.2	5.9	7.6	6.1	6.8	7.1	5.5	6.3
5-9	6.6	4.9	5.6	7.2	4.4	5.7	6.8	4.7	5.7
10-14	7.2	5.1	6.0	8.4	6.5	7.4	7.7	5.6	6.6
15-19	7.1	6.7	6.9	7.7	7.7	7.7	7.3	7.0	7.2
20-24	8.5	7.4	7.9	9.4	10.0	9.7	8.8	8.4	8.6
25-29	8.7	7.8	8.2	8.9	7.3	8.1	8.8	7.6	8.1
30-34	7.5	7.3	7.4	6.1	6.0	6.0	6.9	6.8	6.9
35-39	5.6	5.5	5.6	4.4	4.8	4.6	5.1	5.3	5.2
40-44	5.3	5.9	5.7	4.9	6.6	5.8	5.2	6.2	5.7
45-49	6.3	6.7	6.5	7.7	7.8	7.7	6.8	7.1	7.0
50-54	8.1	9.9	9.1	8.5	9.3	8.9	8.2	9.7	9.0
55-59	6.6	7.9	7.3	5.1	5.4	5.2	6.0	7.0	6.5
60-64	5.4	6.7	6.1	3.4	3.7	3.5	4.6	5.6	5.1
65-69	3.0	2.5	2.7	1.9	2.4	2.1	2.5	2.5	2.5
70-74	3.5	4.6	4.1	3.1	4.7	4.0	3.3	4.7	4.1
75-79	2.4	2.8	2.6	3.0	3.2	3.1	2.6	3.0	2.8
80 +	1.6	2.9	2.3	2.8	4.1	3.5	2.1	3.3	2.8
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number	6,598	8,015	14,613	4,287	4,773	9,060	10,885	12,787	23,672

The age structure is typical of an older population characterized by low fertility. Over two-thirds of the population is in the 15-64 age group, also referred to as the economically active population. The proportion of the population falling within this age group is slightly higher in urban areas (71 percent) than in rural areas (67 percent). This difference may be largely attributed to high levels of rural-urban migration for work among the 30-39, 55-59, and 60-64-year-old cohorts. The disproportionately low percentage of the population in the 65-69 age group is probably due to low levels of fertility during World War II (Figure 2.1).

Figure 2.1 Population Pyramid



The data further indicate that 19 percent of the population is under 15 years of age. The proportion under 15 is slightly larger in the rural areas than in the urban areas (20 and18 percent, respectively). This is evidence of higher fertility in rural areas (see Chapter 5). The percentages of the 15-19 and 20-24 year-old cohorts are larger than younger age cohorts, which may largely be due to the fertility peaks following the earthquake of 1988. The percentages of the 45-49 and 50-54 year-old

cohorts are also larger than younger age cohorts, which may be attributed to the fertility peaks of the post World War II baby boom that lasted through the mid 1960s.

2.4 HOUSEHOLD COMPOSITION

Table 2.8 presents the percent distribution of households in the 2010 ADHS sample by sex of the head of the household and by mean household size. These characteristics are important because they are often associated with differences in household socioeconomic levels. For example, female-headed households are frequently poorer than households headed by males. In addition, the size and composition of the household affects the allocation of financial and other resources among household members, which in turn influences the overall well-being of these individuals. Household size is also associated with crowding in the dwelling, which can lead to unfavorable health conditions.

In general, households in Armenia are headed by males (63 percent), while over one-third (37 percent) are headed by females. The percentage of male-headed households is lower than that recorded in the 2000 ADHS (71 percent) but is similar to that in the 2005 ADHS (64 percent). Households in urban areas are more likely than those in rural areas to be headed by a woman (39 percent compared with 33 percent). The average household size in Armenia is 3.6 persons, compared with 3.8 persons in 2005 and 4.3 persons in 2000. The average household size in rural areas is slightly larger than in urban areas (3.8 compared with 3.4 members). The decrease in household size over time is more noticeable in rural areas where it has declined from 4.7 persons in 2000, to 4.2 in 2005, and to 3.8 members in 2010. The average household size in urban areas has also gotten smaller, with the main decline occurring between 2000 and 2005 (from 4.1 to 3.5 persons). There has been virtually no change in the past five years (3.5 versus 3.4 members). The increase over time in the proportion of female-headed households and the decrease in the average household size are consistent with continued outmigration, particularly of men.

Table 2.8 Household composition

Percent distribution of households by sex of head of household and by household size; mean size of household, and percentage of households with orphans and foster children under 18 years of age, according to residence, Armenia 2010

Characteristic	Residence		Total
	Urban	Rural	
Household headship			
Male	60.7	66.7	62.9
Female	39.3	33.3	37.1
Total	100.0	100.0	100.0
Number of usual members			
0	0.2	0.3	0.2
1	16.2	13.5	15.2
2	19.9	16.5	18.7
3	18.0	14.1	16.6
4	19.8	17.6	19.0
5	13.3	16.9	14.6
6	8.1	11.9	9.5
7	2.9	6.2	4.1
8	0.9	1.5	1.1
9+	0.7	1.4	1.0
Total	100.0	100.0	100.0
Mean size of households	3.4	3.8	3.6
Percentage of households with orphans and foster children under 18 years of age			
Foster children[1]	1.0	1.0	1.0
Double orphans	0.0	0.0	0.0
Single orphans[2]	1.5	2.2	1.7
Foster and/or orphan children	2.3	3.0	2.5
Number of households	4,341	2,359	6,700

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

Birth Registration

In Armenia, birth registration is recognized as a child's right. The registration of births is the inscription of the facts of the birth into an official log kept at the registrar's office. A birth certificate is issued at the time of registration or later as proof of the registration of the birth. In the 2010 ADHS, for all children age 0-4 years, mothers were asked if their child had been registered. Table 2.9 gives the percentage of children under age 5 whose births were officially registered and the percentage who had a birth certificate at the time of the survey. Not all children who are registered may have a birth certificate because some certificates may have been lost or were never issued. However, all children with a certificate have been registered.

Birth registration is universal in Armenia, with 100 percent of births in the five years preceding the survey registered, with practically all of these births having a certificate. Small variations are found across subgroups of children; in particular, children in Lori region are somewhat less likely to have a birth certificate (97 percent) compared with children from all other regions.

Table 2.9 Birth registration of children under age 5

Percentage of de jure children under age 5 whose births are registered with the civil authorities, according to background characteristics, Armenia 2010

Background characteristic	Children whose births are registered			Number of children
	Percentage who had birth certificate	Percentage who did not have birth certificate	Percentage registered	
Age				
<2	99.1	0.3	99.5	638
2-4	99.6	0.1	99.7	842
Sex				
Male	99.9	0.1	100.0	773
Female	98.8	0.3	99.1	706
Residence				
Urban	99.3	0.0	99.3	863
Rural	99.5	0.5	100.0	616
Region				
Yerevan	100.0	0.0	100.0	472
Aragatsotn	100.0	0.0	100.0	59
Ararat	100.0	0.0	100.0	106
Armavir	99.4	0.0	99.4	140
Gegharkunik	100.0	0.0	100.0	115
Lori	96.9	1.6	98.6	115
Kotayk	98.5	0.0	98.5	150
Shirak	98.5	0.7	99.3	160
Syunik	100.0	0.0	100.0	53
Vayots Dzor	100.0	0.0	100.0	42
Tavush	99.6	0.0	99.6	69
Wealth quintile				
Lowest	99.6	0.4	100.0	295
Second	99.7	0.3	100.0	308
Middle	99.0	0.0	99.0	300
Fourth	99.0	0.3	99.3	298
Highest	99.6	0.0	99.6	277
Total	99.4	0.2	99.6	1,479

Children's Living Arrangements and Orphanhood

Information on households with foster children and orphans was collected in the 2010 ADHS. Foster children are defined here as children under age 18 living in households with neither their mother nor their father present; orphans are children with one or both parents dead. Table 2.10 shows the distribution of children under 18 years of age by living arrangements and orphanhood status, according to background characteristics. Of the 5,402 children under age 18 recorded in the 2010 ADHS, four in five live with both parents, 15 percent live with their mother only, 1 percent live with their father only, and 1 percent live with neither of their biological parents.

Table 2.10 Children's living arrangements and orphanhood

Percent distribution of de jure children under 18 years of age by living arrangements and survival status of parents, the percentage of children not living with a biological parent, and the percentage of children with one or both parents dead, according to background characteristics, Armenia 2010

Background characteristic	Living with both parents	Living with mother but not with father		Living with father but not with mother		Not living with either parent					Total	Percentage not living with a biological parent	Percentage with one or both parents dead[1]	Number of children
		Father alive	Father dead	Mother alive	Mother dead	Both alive	Only father alive	Only mother alive	Both dead	Missing information on father/ mother				
Age														
0-4	88.3	10.8	0.3	0.3	0.1	0.1	0.0	0.0	0.0	0.0	100.0	0.1	0.4	1,479
<2	89.2	10.4	0.0	0.2	0.0	0.1	0.0	0.0	0.0	0.0	100.0	0.1	0.0	638
2-4	87.6	11.2	0.5	0.4	0.2	0.1	0.0	0.0	0.0	0.1	100.0	0.1	0.6	842
5-9	85.9	10.5	1.9	0.9	0.2	0.5	0.1	0.0	0.0	0.1	100.0	0.6	2.1	1,345
10-14	79.3	13.9	3.2	0.7	0.7	1.1	0.1	0.2	0.1	0.7	100.0	1.4	4.3	1,553
15-17	74.8	15.1	4.7	0.3	1.1	2.8	0.3	0.3	0.0	0.7	100.0	3.4	6.4	1,025
Sex														
Male	83.1	11.9	2.4	0.7	0.4	0.9	0.1	0.2	0.0	0.3	100.0	1.2	3.1	2,929
Female	81.9	13.1	2.3	0.4	0.6	1.1	0.1	0.1	0.0	0.5	100.0	1.3	3.0	2,473
Residence														
Urban	84.0	11.2	2.1	0.5	0.4	1.2	0.0	0.2	0.0	0.4	100.0	1.4	2.8	3,149
Rural	80.6	14.3	2.7	0.6	0.6	0.8	0.2	0.0	0.0	0.2	100.0	1.0	3.5	2,253
Region														
Yerevan	85.5	10.1	1.7	0.6	0.5	1.1	0.0	0.2	0.0	0.5	100.0	1.2	2.3	1,753
Aragatsotn	85.7	11.3	1.5	0.2	0.0	0.1	1.2	0.0	0.0	0.0	100.0	1.3	2.7	229
Ararat	83.2	7.9	5.1	0.2	2.3	1.0	0.0	0.2	0.0	0.0	100.0	1.2	7.6	406
Armavir	84.4	10.8	2.6	0.1	0.0	1.3	0.0	0.0	0.0	0.7	100.0	1.3	2.6	518
Gegharkunik	76.4	18.4	2.1	0.7	1.0	0.7	0.6	0.0	0.0	0.1	100.0	1.3	3.7	427
Lori	79.3	15.3	2.2	0.0	0.2	1.0	0.1	0.5	0.3	1.2	100.0	1.8	3.2	478
Kotayk	85.7	10.1	2.1	1.7	0.2	0.3	0.0	0.0	0.0	0.0	100.0	0.3	2.3	481
Shirak	66.8	28.3	2.5	0.5	0.0	1.8	0.0	0.0	0.0	0.0	100.0	1.8	2.5	544
Syunik	92.6	2.0	2.6	0.0	0.7	1.9	0.0	0.0	0.0	0.3	100.0	1.9	3.6	181
Vayots Dzor	82.5	12.5	2.9	1.3	0.1	0.7	0.0	0.0	0.0	0.0	100.0	0.7	3.0	130
Tavush	92.0	3.4	3.0	0.5	0.4	0.6	0.0	0.0	0.0	0.1	100.0	0.6	3.4	254
Wealth quintile														
Lowest	80.8	12.7	4.0	0.2	0.7	0.8	0.4	0.1	0.0	0.4	100.0	1.3	5.2	1,199
Second	78.9	17.1	2.4	0.5	0.1	0.5	0.0	0.2	0.1	0.1	100.0	0.8	2.8	1,113
Middle	79.1	15.5	2.1	0.4	0.5	1.9	0.1	0.0	0.0	0.4	100.0	1.9	2.7	1,076
Fourth	85.4	9.8	1.9	0.4	1.0	1.1	0.0	0.0	0.0	0.3	100.0	1.1	2.9	977
Highest	89.4	6.5	1.0	1.2	0.1	0.9	0.0	0.3	0.0	0.6	100.0	1.2	1.4	1,038
Total <15	84.4	11.8	1.8	0.6	0.3	0.6	0.1	0.1	0.0	0.3	100.0	0.8	2.3	4,377
Total <18	82.6	12.5	2.3	0.5	0.5	1.0	0.1	0.1	0.0	0.4	100.0	1.3	3.1	5,402

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

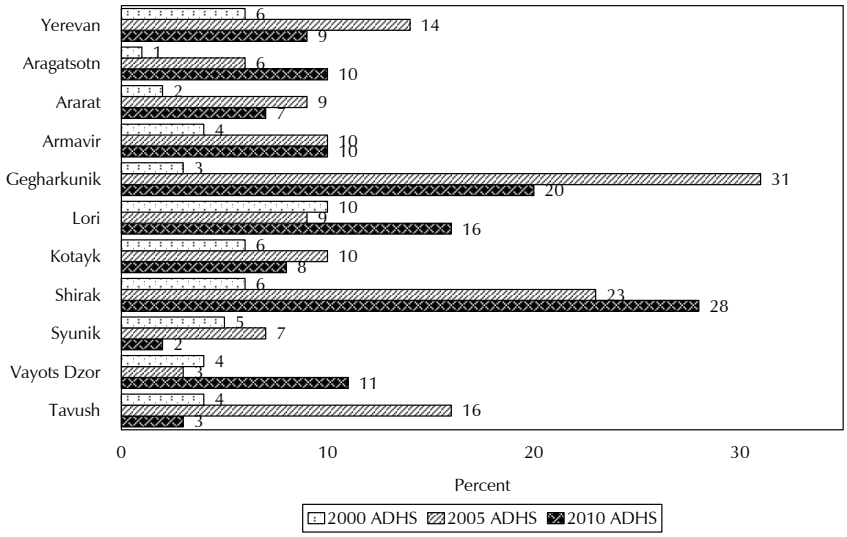
The table also provides data on the extent of orphanhood, that is, the proportion of children who have lost one or both parents. Three percent of children under age 18 have lost one or both parents. Two percent of children under age 18 have lost their fathers and less than 1 percent have lost their mothers. Extremely few children under age 18 are reported to have lost both parents.

Differentials in fosterhood and orphanhood by background characteristics are not large. As expected, older children are more likely than younger children to be fostered and orphaned. For example, older children are less likely than younger children to live with both parents and are more likely than younger children to have lost one or both parents. Small differences in living arrangements are found between rural and urban children. Syunik and Tavush have found the highest proportions of children living with both parents (93 percent and 92 percent, respectively), while Shirak has the lowest (67 percent). Shirak also reports the highest proportion of children who live only with their mothers but whose fathers are alive (28 percent) compared with the national average of 13 percent for children under age 18. This is possibly due to high levels of male migration away from home in search of employment. Table 2.10 shows that children from the two highest wealth quintiles are more likely to live with both parents, although the difference between wealth quintiles is not large.

The proportion of orphanhood among children under age 15 can be compared with data from the 2000 ADHS at national level. Overall, the proportion of children under age 15 living with both parents has declined from 90 percent in 2000 to 84 percent in 2010. This is due to a substantial increase in the proportion of children who live only with their mothers but whose fathers are alive (from 5 percent in 2000 to 12 percent in 2010).

Regional level comparisons between the surveys in Figure 2.2 show that over the past ten years, among children under age 15, there has been a steady increase in the proportion of children who live only with their mothers but whose fathers are alive in Shirak (28 percent in 2010 versus 23 percent in 2005 and 6 percent in 2000) and in Aragatsotn (10 percent in 2010 compared with 6 percent in 2005 and 1 percent in 2000). The opposite trend is noticeable in Gegharkunik, Syunik, Yerevan, Tavush, Ararat, and Kotayk where the proportion of children under age 15 who live only with their mothers, but whose fathers are alive, has declined during the past five years (Figure 2.2).

Figure 2.2 **Percentage of Children under Age 15 Who Live Only with Their Mother but Whose Father is Alive, Armenia 2000, 2005, and 2010**



2.5 EDUCATIONAL ATTAINMENT OF HOUSEHOLD MEMBERS

Education is important because it helps individuals make informed decisions that impact their health and well-being. Armenia's educational system has undergone several stages of restructuring over the past five years, making the analysis of education data across a wide range of ages challenging.[1] The current school system in Armenia has been in place since 2007, when definition of basic school changed from grades 1-8 to grades 1-9 and definition of high school changed from grades 9-10 to grades 10-12. The current school system consists of primary school (grades 1 through 4 for students' age 6-10), middle school (grades 5 through 9 for students' age 10-14), and high school (grades 10 through 12 for student's age 15-17). Primary and middle school (grades 1 through 9) together constitute what is referred to as basic education. In the constitution of Armenia basic education is declared to be mandatory. Primary, middle, and high school together (or grades 1 through 12) constitute what is referred to as a standard school or secondary education. In this report, respondents who have attended or completed grades 1 through 9 are presented as having attained basic education, and those who in addition to basic school have attended or completed high school are presented as having attained secondary education.

Students who have completed a minimum of nine grades may enroll in specialized secondary education, which provides training for careers that require mid-level qualifications, such as nurses,

[1] The Armenian educational system in 2000-2005 consisted of primary school (grades 1-3, age 7-9), middle school (grades 4-8, age 10-14), and high school (grades 9-10, ages 15-16). Education of at least 8 grades was compulsory. Students who had completed at least 8 grades were eligible for secondary-special education. Since 2005, age 6 years and 6 months has become the mandatory age of school enrollment. Before 2005, children were allowed to enter school at age 6 or 7; the majority of children would start school at age 7.

midwives, musicians, technicians, and others. The course of study for specialized secondary education can be completed in one to three years depending on the number of grades completed by a student. Upon graduation students receive a secondary-special education degree, a level that is somewhat higher than secondary education but lower than higher education. University and postgraduate education provides training for a higher level of specialists. Students who have completed secondary education or secondary-special education may enroll in a university.

Tables 2.11 and 2.12 present information on the educational attainment of the Armenian population age 6 and older. Virtually all Armenians have gone to school. The median number of years of schooling by sex is 9.9 years for women and 9.6 years for men. The proportions of the female and male populations with no education are low (less than 1 percent each), with the highest levels being among those age 6 to 9 (reflecting some who have not yet started school) and those age 65 and older. Individuals residing in urban areas have substantially higher levels of secondary-special and higher education than those in rural areas. One in three respondents living in the capital city of Yerevan has higher education compared with one in ten in Aragatsotn, Ararart, or Gegharkunik. Wealth status has a strong positive relationship with education; 40 percent of women in the highest wealth quintile have at least some higher education compared with 8 percent of women in the lowest quintile. The corresponding proportions for men are 37 percent and 6 percent, respectively.

Table 2.11 Educational attainment of the female household population

Percent distribution of the de facto female household populations age 6 and older by highest level of schooling attended or completed and median years completed, according to background characteristics, Armenia 2010

Background characteristic	No education	Some primary	Completed primary[1]	Some secondary	Completed secondary[2]	Secondary special	Higher	Total	Number	Median years completed
Age										
6-9	5.2	92.9	1.8	0.0	0.0	0.0	0.0	100.0	488	0.9
10-14	0.0	5.7	9.2	84.2	0.0	0.3	0.4	100.0	719	5.5
15-19	0.2	0.0	0.0	30.0	21.7	15.5	32.6	100.0	899	9.6
20-24	0.2	0.0	0.0	3.7	31.5	24.9	39.7	100.0	1,076	12.1
25-29	0.4	0.0	0.0	4.6	34.2	28.3	32.5	100.0	975	11.8
30-34	0.5	0.0	0.0	6.7	32.5	31.4	28.9	100.0	873	11.7
35-39	0.4	0.0	0.0	3.8	36.0	34.5	25.4	100.0	674	11.4
40-44	0.1	0.1	0.0	3.2	40.8	33.4	22.3	100.0	792	11.1
45-49	0.1	0.0	0.2	3.4	41.5	34.1	20.8	100.0	910	11.2
50-54	0.0	0.2	0.2	4.9	43.7	30.8	20.1	100.0	1,239	10.2
55-59	0.2	0.0	0.0	5.6	37.6	33.8	22.8	100.0	893	11.3
60-64	0.1	0.4	0.2	9.4	32.8	27.5	29.6	100.0	710	11.6
65+	2.3	4.4	6.4	31.6	28.1	14.6	12.6	100.0	1,722	9.2
Residence										
Urban	0.5	4.6	0.9	12.7	24.5	27.2	29.7	100.0	7,520	11.2
Rural	1.1	5.2	2.8	19.6	41.5	19.1	10.7	100.0	4,448	9.5
Region										
Yerevan	0.3	4.3	0.7	10.9	20.5	26.3	36.9	100.0	4,280	11.7
Aragatsotn	0.1	4.9	1.5	14.4	54.2	13.4	11.6	100.0	461	9.5
Ararat	0.8	6.7	2.2	18.5	44.6	16.2	11.0	100.0	928	9.5
Armavir	1.8	4.1	1.2	19.5	33.8	25.4	14.2	100.0	1,016	9.7
Gegharkunik	1.7	5.9	3.4	18.3	43.2	16.6	10.8	100.0	842	9.5
Lori	0.7	3.8	2.0	15.6	37.7	22.7	17.5	100.0	1,026	9.7
Kotayk	0.8	6.3	1.7	16.7	30.8	25.1	18.6	100.0	1,026	9.8
Shirak	0.8	4.7	1.6	18.9	30.5	27.8	15.6	100.0	1,104	9.8
Syunik	0.2	2.8	2.0	16.5	29.3	32.2	17.0	100.0	469	10.0
Vayots Dzor	0.4	5.9	3.3	12.2	40.3	24.8	13.1	100.0	270	9.7
Tavush	0.9	5.9	3.1	21.0	28.3	26.0	14.7	100.0	545	9.7
Wealth quintile										
Lowest	1.5	4.9	3.2	21.9	44.6	16.1	7.9	100.0	2,340	9.4
Second	0.8	5.4	2.1	20.1	37.3	21.6	12.7	100.0	2,443	9.6
Middle	0.6	5.0	1.1	14.8	29.8	27.9	20.6	100.0	2,432	9.9
Fourth	0.5	3.8	0.9	10.6	24.5	28.0	31.6	100.0	2,381	11.4
Highest	0.1	4.9	0.7	8.8	17.9	27.2	40.4	100.0	2,373	12.1
Total	0.7	4.8	1.6	15.2	30.8	24.2	22.6	100.0	11,969	9.9

[1] Completed grade 4 at the primary level
[2] Completed grade 12 at the secondary level or completed grade 10 or grade 11 at the secondary level and has a secondary school diploma/attestat

Table 2.12 Educational attainment of the male household population

Percent distribution of the de facto male household population age 6 and older by highest level of schooling attended or completed and median years completed, according to background characteristics, Armenia 2010

Background characteristic	No education	Some primary	Completed primary[1]	Some secondary	Completed secondary[2]	Secondary special	Higher	Total	Number	Median years completed
Age										
6-9	3.3	94.1	2.2	0.3	0.0	0.0	0.0	100.0	593	0.8
10-14	0.1	3.6	8.5	86.0	0.0	1.7	0.0	100.0	834	5.3
15-19	0.7	0.0	0.0	43.0	19.3	12.8	24.2	100.0	800	9.2
20-24	0.2	0.0	0.2	11.4	41.1	14.3	32.6	100.0	961	9.9
25-29	0.8	0.7	0.0	11.7	43.6	11.4	31.8	100.0	953	9.8
30-34	0.1	0.0	0.5	12.8	45.9	15.0	25.6	100.0	756	9.8
35-39	0.0	0.1	0.2	7.7	43.3	20.1	28.6	100.0	560	10.0
40-44	0.4	0.2	0.0	6.6	36.2	31.3	25.3	100.0	561	11.1
45-49	0.1	0.0	0.0	6.4	41.5	28.7	23.3	100.0	744	10.4
50-54	0.2	0.3	0.0	8.2	42.2	28.1	21.1	100.0	897	10.0
55-59	0.2	0.6	0.0	7.8	35.1	33.8	22.5	100.0	651	11.3
60-64	0.0	0.0	0.0	9.4	29.7	31.8	29.1	100.0	500	11.5
65+	1.6	3.5	5.3	27.1	29.9	15.2	17.4	100.0	1,153	9.5
Residence										
Urban	0.4	5.9	1.1	16.9	26.4	20.1	29.2	100.0	6,062	9.9
Rural	1.0	7.3	2.1	24.8	40.2	14.5	10.1	100.0	3,901	9.4
Region										
Yerevan	0.4	6.1	1.1	14.8	22.1	19.4	35.9	100.0	3,381	10.8
Aragatsotn	1.2	7.3	1.0	18.1	55.3	6.9	10.3	100.0	426	9.4
Ararat	0.5	7.0	1.2	20.7	48.4	11.4	10.8	100.0	850	9.4
Armavir	1.4	6.2	2.3	25.1	31.0	19.2	14.8	100.0	923	9.5
Gegharkunik	1.2	8.9	2.0	22.8	43.0	12.9	9.3	100.0	651	9.3
Lori	0.3	5.8	1.7	25.2	37.1	15.0	14.7	100.0	902	9.5
Kotayk	0.5	5.7	1.3	23.0	30.7	21.5	17.2	100.0	859	9.6
Shirak	0.4	7.0	1.9	22.5	27.9	21.6	18.8	100.0	830	9.6
Syunik	0.8	5.3	1.8	17.6	31.8	25.0	17.7	100.0	440	9.8
Vayots Dzor	0.5	6.3	2.8	14.6	38.7	23.7	13.3	100.0	223	9.7
Tavush	0.4	7.2	2.1	28.7	31.1	16.1	14.3	100.0	479	9.4
Wealth quintile										
Lowest	1.3	7.2	2.5	28.5	41.8	12.3	6.4	100.0	2,056	9.3
Second	0.8	7.1	1.8	24.6	38.8	16.6	10.5	100.0	1,937	9.4
Middle	0.5	7.1	1.7	20.5	31.4	19.7	19.2	100.0	1,985	9.6
Fourth	0.3	4.9	1.0	13.9	24.1	20.0	35.8	100.0	1,974	10.8
Highest	0.1	6.0	0.7	12.4	22.8	21.1	36.7	100.0	2,011	11.2
Total	0.6	6.5	1.5	20.0	31.8	17.9	21.7	100.0	9,963	9.6

[1] Completed grade 4 at the primary level
[2] Completed grade 12 at the secondary level or completed grade 10 or grade 11 at the secondary level and has a secondary school diploma/attestat

Data on net attendance ratios (NARs) and gross attendance ratios (GARs) by school level, sex, residence, region, and wealth quintile are shown in Table 2.13. The NAR indicates participation in basic education (primary and middle school) for the population age 6-14 and high school for the population age 15-17. The GAR measures participation at each level of schooling among those of any age from 6 to 24. The GAR is nearly always higher than the NAR for the same level because the GAR includes participation by those who may be older or younger than the official age range for that level.[2] A NAR of 100 percent would indicate that all children in the official age range for the level are attending education at that level. The GAR can exceed 100 percent if there is significant over age or under age participation at a given level of schooling.

[2] Students who are over age for a given level of schooling may have started school over age, may have repeated one or more grades in school, or may have dropped out of school and later returned.

Table 2.13 School attendance ratios

Net attendance ratios (NAR) and gross attendance ratios (GAR) for the de facto household population by sex and level of schooling; and the Gender Parity Index (GPI), according to background characteristics, Armenia 2010

Background characteristic	Net attendance ratio[1]				Gross attendance ratio[2]			
	Male	Female	Total	Gender Parity Index[3]	Male	Female	Total	Gender Parity Index[3]
				BASIC SCHOOL				
Residence								
Urban	91.6	93.5	92.5	1.02	94.4	94.3	94.4	1.00
Rural	91.6	91.5	91.6	1.00	93.7	94.0	93.8	1.00
Region								
Yerevan	91.4	94.2	92.7	1.03	95.8	94.7	95.3	0.99
Aragatsotn	93.8	96.1	94.7	1.02	93.8	96.3	94.9	1.03
Ararat	83.9	83.1	83.5	0.99	85.7	83.4	84.6	0.97
Armavir	94.3	91.9	93.3	0.97	96.6	95.6	96.2	0.99
Gegharkunik	93.2	93.4	93.3	1.00	93.8	99.3	96.3	1.06
Lori	92.3	90.1	91.5	0.98	96.4	95.4	96.0	0.99
Kotayk	88.8	94.4	91.7	1.06	89.3	94.4	91.9	1.06
Shirak	94.5	93.9	94.2	0.99	95.3	93.9	94.7	0.99
Syunik	92.2	95.3	93.6	1.03	95.3	95.3	95.3	1.00
Vayots Dzor	94.8	98.7	96.8	1.04	94.8	100.2	97.6	1.06
Tavush	90.7	89.9	90.3	0.99	93.0	90.3	91.8	0.97
Wealth quintile								
Lowest	90.6	91.7	91.1	1.01	92.9	94.4	93.6	1.02
Second	95.1	92.1	93.7	0.97	96.3	93.9	95.2	0.97
Middle	92.1	93.6	92.7	1.02	95.7	94.9	95.3	0.99
Fourth	86.2	93.6	89.8	1.09	89.9	93.8	91.8	1.04
Highest	92.9	92.9	92.9	1.00	95.1	93.7	94.5	0.99
Total	91.6	92.7	92.1	1.01	94.1	94.2	94.1	1.00
				HIGH SCHOOL				
Residence								
Urban	35.4	47.1	40.7	1.33	51.8	57.3	54.3	1.10
Rural	50.4	52.3	51.2	1.04	63.0	66.8	64.6	1.06
Region								
Yerevan	30.4	44.7	36.8	1.47	46.0	52.1	48.7	1.13
Aragatsotn	66.2	72.2	68.3	1.09	67.2	80.3	71.9	1.20
Ararat	61.0	45.9	54.1	0.75	99.9	76.0	88.9	0.76
Armavir	39.2	48.4	42.3	1.23	45.9	65.8	52.4	1.43
Gegharkunik	42.2	38.7	40.5	0.92	64.3	44.3	54.2	0.69
Lori	41.1	50.6	45.3	1.23	52.7	64.5	57.9	1.22
Kotayk	37.4	49.0	42.7	1.31	49.3	58.4	53.5	1.18
Shirak	51.0	57.5	54.2	1.13	64.1	67.7	65.9	1.06
Syunik	54.9	70.5	60.6	1.28	64.3	80.8	70.4	1.26
Vayots Dzor	52.1	63.0	57.5	1.21	66.1	68.5	67.3	1.04
Tavush	54.3	45.5	50.1	0.84	84.1	76.3	80.4	0.91
Wealth quintile								
Lowest	44.0	46.9	45.1	1.07	56.2	60.0	57.7	1.07
Second	47.9	51.1	49.4	1.07	56.7	62.8	59.6	1.11
Middle	38.3	53.9	44.1	1.41	53.7	65.9	58.3	1.23
Fourth	40.8	57.5	48.6	1.41	63.9	69.5	66.5	1.09
Highest	38.0	38.4	38.2	1.01	54.8	49.2	52.0	0.90
Total	42.2	49.3	45.3	1.17	56.9	61.2	58.8	1.08

[1] The NAR for basic school is the percentage of the basic school age (6-14 years) population that is attending basic school (primary and middle school, grades 1-9). The NAR for high school is the percentage of the high-school age (15-17 years) population that is attending high school, grades 10-12. By definition the NAR cannot exceed 100 percent.
[2] The GAR for basic school is the total number of basic school students, expressed as a percentage of the official basic school-age population. The GAR for high school is the total number of high school students, expressed as a percentage of the official high-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.
[3] The Gender Parity Index for basic school is the ratio of the basic school NAR (GAR) for females to the NAR (GAR) for males. The Gender Parity Index for high school is the ratio of the high school NAR (GAR) for females to the NAR (GAR) for males.

In Armenia, school attendance among school-age household members is high. The overall NAR for basic education is 92 and the GAR is 94. This means that among children who should be attending basic education, 92 percent are currently doing so. A comparison of the NAR and GAR indicates that approximately 2 percent of students are either under age or over age for their grade level. With the exception of the Ararat region, attendance ratios are greater than 90 percent by sex, region, and urban-rural residence. In the past five years the NAR has decreased by two percentage points, 94 percent of children who should have been attending basic education were doing so in 2005.

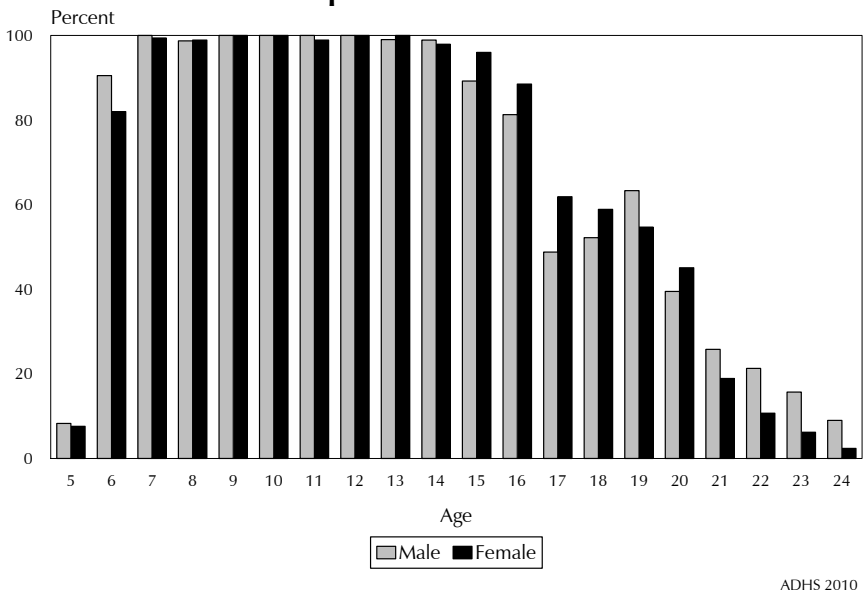
The NAR and GAR are much lower at the high school level: only 45 percent of students age 15-17 who should be attending high school are in school (NAR). The GAR for high school is 59 percent. A comparison of the NAR and GAR indicates that approximately 14 percent of students are either under age or over age for their grade level.

Attendance ratios for high school are slightly higher among females than males. Surprisingly, both the NAR and GAR at the high school level are higher among students living in rural areas than among those living in urban areas. The NAR and GAR are much lower in Yerevan (37 and 49 percent, respectively) compared with high-school-age students from other regions. A comparison of the NAR and GAR indicates that Ararat and Tavush have the highest proportions of high school age students who are either under age or over age for their grade level (35 percent in Ararat and 30 percent in Tavush).

The gender parity index (GPI), or the ratio of the female to the male NAR or GAR at the basic and high school levels, is an indicator of the magnitude of the gender gap in attendance ratios. If there is no gender difference, the GPI will equal one. The GPI will be closer to zero if the disparity is in favor of males. If the gender gap favors females, the GPI will exceed one. Table 2.13 shows the GAR GPI is 1.00 for the basic level and 1.08 for the high school level, which indicates that there is no gender gap at the basic level, while there is a gender gap in favor of females at the high school level. In Ararat, Gegharkunik, and Tavush, the disparity is in favor of males: the gender parity indexes at the high school level for the NAR are 0.75, 0.92, and 0.84 respectively; and for the GAR are 0.76, 0.69 and 0.91, respectively.

Figure 2.3 presents the age-specific attendance rates (ASAR) for the population age 5-24, by sex. The ASAR indicates that almost all youths of basic school age (6-14) attend school, with no significant differences by gender. Among the high-school-age population (15-17), attendance ratios begin to decline, particularly among males. It should be noted that among young people age 17, a considerably higher proportion of females than males are attending school. One possible explanation is that a substantial proportion of young men age 15-19 temporarily join the labor force (particularly in the agricultural sector) after completing compulsory basic education and before they are required to serve in the military at age 18. For example, 53 percent of men age 15-19 work in agriculture compared with 33 percent of the same-age women (see Chapter 3, Tables 3.5.1 and 3.5.2).

Figure 2.3 **Age-specific Attendance Rates of the De Facto Population 5 to 24 Years**



ADHS 2010

2.6 CHILD PROTECTION

The prevention of exploitation, abuse, and violence against children is a high priority for Armenia and many other international organizations. According to UNICEF, in 2006 an estimated 158 million children age 5 to 14 were engaged in child labor; and between 500 million and 1.5 billion children worldwide experience violence on an annual basis (UNICEF, 2011). In 1989 Armenia became a signatory to the Convention on the Rights of the Child, a document that recognizes that all children have the right to be protected from any harm, including abuse, neglect, and economic exploitation (UN, 1989). Armenia ratified the Convention on the Rights of the Child in 1992. In 2003, the Armenia adopted the National Plan of Action for Protection of Children's Rights, which is an integral part of the country's child welfare reforms. The 2010 ADHS Household Questionnaire asked a number of questions to obtain information about child discipline and the prevalence of child labor in Armenia.

Child Discipline

The manner in which parents and caretakers discipline children can have long-term consequences on their physical and psychological development and well-being. In an effort to identify the types of child discipline methods used in Armenia, the 2010 ADHS included questions on this topic. The questions on child discipline were asked about one randomly selected child age 2-14 in each household.[3] The questions were asked to the mother/caretaker of the child, and in instances where the mother/caretaker was not present, to the most knowledgeable adult. Questions asked referred to practices that may have been used to discipline the child during the 30 days prior to the interview. Specifically, questions were asked about whether anyone in the household had taken away the child's privileges; forbade something the child liked, or did not allow the child to leave the house; explained why some behavior was wrong; shook the child; shouted, yelled, or screamed at the child; gave the child something else to do; spanked, hit, or slapped on the bottom with a bare hand; hit on the bottom or elsewhere on the body with something like a belt, hairbrush, or stick; called the child dumb, lazy, or a similar name; hit or slapped on the face, head, or ears; hit or slapped on the hand, arm, or leg; or beat the child with an implement. Finally, caretakers were directly asked if they believe that in order to bring up the child properly, they need to physically punish him/her.

Table 2.14 shows that seven in ten children age 2-14 experienced some form of psychological or physical punishment during the 30 days preceding the survey. Approximately one-fifth of children (22 percent) experienced only non-violent discipline,[4] and two-thirds of children (66 percent) experienced psychological aggression.[5] Forty-two percent of children experienced physical punishment, and 4 percent experienced severe physical punishment. Boys tend to experience violence more often than girls. Urban children (46 percent) are more likely than rural children (38 percent) to experience any physical punishment. Children from Syunik are the least likely to have experienced physical punishment or any violent disciplinary method compared with other children. In contrast, over half of the children in Shirak, Armavir, and Yerevan have experienced any physical punishment. The highest proportions of children that have experienced severe physical punishment are from Shirak (8 percent), Tavush (6 percent), Kotayk, and Armavir (5 percent each).

[3] If several children age 2-14 were listed in the household schedule, only one child per household was randomly selected for administration of the questions on child discipline. If one child age 2-14 was listed in the household schedule, the questions on child discipline were administered about this child. If none of the children listed in the household schedule were age 2-14, the questions on child discipline were not administered.

[4] Only non-violent discipline: 1) providing an affirmative answer for the following: took away child's privileges, forbade something the child liked, did not allow the child to leave the house or explained why some behavior was wrong, or gave the child something else to do; and 2) providing a negative answer to: shook the child, shouted, yelled, or screamed at the child; spanked, hit, or slapped on the bottom with a bare hand; hit on the bottom or elsewhere on the body with something like a belt, hairbrush, stick, or other; called the child dumb, lazy, or similar name; hit or slapped the child on the face, head, or ears; hit or slapped the child on the hand, arm, or leg; beat the child with an implement.

[5] Psychological aggression: an affirmative answer for the following: shouted, yelled, or screamed at the child or called the child dumb, lazy, or similar name.

Table 2.14 Child discipline

Percentage of children age 2-14 according to method of disciplining the child, by background characteristics, Armenia 2010

Background characteristic	Percentage of children 2-14 years of age who experience					Number of children age 12-14 years[5]	Respondent believes that the child needs to be physically punished	Respondents to the child discipline module
	Only non-violent discipline[1]	Psychological aggression[2]	Physical punishment		Any violent discipline method[4]			
			Any	Severe[3]				
Age								
2-4	22.2	61.8	48.1	3.9	67.2	830	3.6	537
5-9	20.5	68.7	47.3	3.4	72.8	1,346	2.9	745
10-14	23.4	65.3	35.0	4.0	68.1	1,548	3.6	998
Sex								
Male	19.8	68.2	45.0	3.9	72.0	1,988	3.8	1,190
Female	24.7	62.9	39.3	3.6	66.9	1,736	2.9	1,089
Residence								
Urban	21.9	64.7	45.5	4.4	69.9	2,202	2.8	1,384
Rural	22.4	67.2	37.8	2.8	69.2	1,522	4.3	896
Region								
Yerevan	21.7	66.8	51.4	4.2	72.1	1,233	3.0	769
Aragatsotn	45.8	47.9	21.2	0.5	49.8	147	3.4	94
Ararat	13.6	73.4	33.1	1.4	74.1	287	1.8	175
Armavir	21.3	70.4	51.0	5.0	71.6	349	2.8	216
Gegharkunik	14.6	70.1	36.6	1.0	72.2	301	3.3	168
Lori	39.9	48.2	23.1	1.8	52.9	306	1.1	193
Kotayk	17.8	74.6	37.4	4.7	77.4	335	6.1	207
Shirak	16.4	71.6	56.5	8.0	80.1	361	3.9	214
Syunik	39.8	11.9	7.1	0.4	15.0	128	5.2	83
Vayots Dzor	6.8	78.8	48.1	2.3	79.8	95	5.4	55
Tavush	18.2	77.1	41.0	5.7	79.9	183	5.5	107
Mother's education								
Basic	23.7	66.3	38.7	6.8	67.9	242	4.1	128
Secondary	17.6	69.4	43.6	4.3	73.3	1,528	4.0	898
Secondary special	24.0	63.9	42.8	3.6	68.6	1,148	2.7	726
Higher	27.4	61.2	40.5	2.0	64.7	806	3.0	528
Wealth quintile								
Lowest	22.3	68.3	40.0	4.3	70.5	815	4.6	469
Second	16.9	69.7	38.8	4.5	72.6	739	3.6	449
Middle	24.4	62.5	42.1	4.0	67.2	785	2.5	491
Fourth	21.6	63.0	41.9	2.4	67.7	646	3.6	410
Highest	25.0	64.8	49.2	3.5	69.8	739	2.7	460
Total	22.1	65.7	42.4	3.8	69.6	3,724	3.4	2,279

[1] Only non-violent discipline: (1) providing an affirmative answer for the following: took away child's privileges, forbade something the child liked, did not allow the child to leave the house or explained why some behavior was wrong , or gave the child something else to do; and (2) providing a negative answer to the following: shook the child; shouted, yelled, or screamed at the child; spanked, hit, or slapped on the bottom with bare hand; hit on the bottom or elsewhere on the body with something like a belt, hairbrush, stick, or other; called the child dumb, lazy, or a similar name; hit or slapped the child on the face, head, or ears; hit or slapped the child on the hand, arm, or leg; beat the child with an implement.

[2] Psychological aggression: providing an affirmative answer for the following: shouted, yelled, or screamed at the child or called the child dumb, lazy, or a similar name.

[3] Hit or slapped on the face, head, or ears or beaten with an implement during the past 30 days

[4] MICS IV 8.5 indicator; MICS III indicator 74 (Any psychological or physical punishment)

[5] Table is based on children age 2-14 years randomly selected during fieldwork (one child selected per household, if any children in the age range) about whom the questions on child discipline were administered

Lack of education tends to be positively associated with severe physical punishment, although the differences are small. Seven percent of children whose mothers had only a basic education were severely physically punished during the month before the survey compared with 2 percent of children whose mothers had a higher education. Children of better educated and wealthier parents and those from Aragatsotn, Lori, and Syunik are more likely to receive only non-violent discipline compared with other children.

Overall, only 3 percent of the respondents to the child discipline module (i.e., the child's mother or the most knowledgeable caretaker) believe that in order to bring up a child properly, the child needs to be physically punished.

Child Labor

The ADHS Household Questionnaire asked a set of questions (based on the questions asked about child labor in the UNICEF MICS III survey) to obtain information about the prevalence of child labor in Armenia. Child labor is defined as the involvement of children age 5-14 in labor activities.[6] In this report, a child is considered to be involved in child labor activities if he or she meets the following criteria:

- Children age 5-11: at least one hour of economic work or 28 hours of domestic work during the week preceding the survey
- Children age 12-14: at least 14 hours of economic work or 28 hours of domestic work during the week preceding the survey

These definitions are consistent with UNICEF MICS–III child labor indicators, which make it possible to differentiate child labor from child work, which in turn allows organizations working in child protection to identify and advocate for the types of work that should be eliminated if the rights of the children are to be preserved. The discussion below provides a minimum estimate of the prevalence of child labor in Armenia. It is important to remember that some children may be involved in other labor activities that constitute child labor for a smaller number of hours than the criteria specified above and so will not be represented in the prevalence estimate.

Table 2.15 shows that 4 percent of children age 5-14 are involved in child labor. Of these children, none of those who worked outside of their household in the past week received payment for their work. Overall, 3 percent of children worked for a family business during the week preceding the survey. No children age 5-14 were reported to be involved in domestic work for 28 hours or longer during the week preceding the survey (data not shown separately).

The small number of children involved in child labor makes analysis by background characteristics challenging. Nevertheless, small variations in child labor activities are observed by age, sex, urban-rural residence, regions, school attendance, and wealth index. Surprisingly, children age 5-11 are more likely than children age 12-14 to be involved in child labor (5 and 2 percent, respectively). Children living in Aragatsotn and Shirak were more likely to be involved in child labor during the reference period than any other regions (8 and 7 percent, respectively). Children from the wealthier households and children whose mothers have higher education are the least likely to be involved in child labor. Differences by sex and orphanhood are negligible.

[6] Legislation in Armenia permits children age 16 and older to work, and in certain cases, with the agreement of the parent/guardian, children age 14 are allowed to work.

Table 2.15 Child labor

Percentage of children age 5-14 years who were involved in child labor activities in the past week, by type of work, Armenia 2010

Background characteristic	Worked outside household in the past week[1]		Worked for family business in the past week[1]	Total child labor[2]	Number of children age 5-14
	Paid work	Unpaid work			
Age					
5-11	0.0	1.1	4.0	4.9	1,917
12-14	0.1	0.0	1.8	1.8	978
Sex					
Male	0.1	0.7	4.0	4.7	1,578
Female	0.0	0.7	2.4	2.9	1,317
Residence					
Urban	0.0	1.0	1.6	2.4	1,704
Rural	0.1	0.3	5.6	6.0	1,191
Region					
Yerevan	0.0	1.7	2.0	3.3	949
Aragatsotn	0.0	0.0	7.7	7.7	115
Ararat	0.0	0.2	2.9	3.1	229
Armavir	0.0	0.8	5.1	5.9	259
Gegharkunik	0.0	0.0	1.8	1.8	238
Lori	0.0	1.3	0.7	1.9	248
Kotayk	0.3	0.0	5.2	5.5	262
Shirak	0.0	0.0	7.0	7.0	276
Syunik	0.0	0.0	2.5	2.5	99
Vayots Dzor	0.0	0.0	0.0	0.0	73
Tavush	0.0	0.0	3.3	3.3	146
Orphan (mother and/or father deceased)					
Yes	0.0	0.0	4.4	4.4	96
No	0.0	0.8	3.2	3.9	2,799
School participation					
Yes	0.0	0.7	3.6	4.2	2,601
No	0.0	0.7	0.5	1.1	294
Mother's education					
Basic	0.0	0.0	3.5	3.5	170
Secondary	0.1	0.9	4.6	5.5	1,174
Secondary special	0.0	1.3	2.6	3.5	865
Higher	0.0	0.0	1.9	1.9	612
Mother not in household	0.0	0.0	0.5	0.5	74
Wealth quintile					
Lowest	0.0	0.0	6.9	6.9	648
Second	0.1	0.3	3.6	4.1	578
Middle	0.0	1.0	2.1	3.2	591
Fourth	0.0	1.7	1.4	2.4	500
Highest	0.0	0.8	1.6	2.4	578
Total	0.0	0.7	3.2	3.9	2,895

[1] Defined as any such work for children age 5-11 and 14 hours or more of such work for those age 12-14
[2] Equivalent to UNICEF MICS III Indicator 71.The numerator for the child labor estimate includes: (a) children age 5-11 who during the past week did at least 1 hour of economic activity or at least 28 hours of domestic chores and (b) children age 12-14 who during the past week did at least 14 hours of economic activity or at least 28 hours of domestic chores.

One of the negative consequences of child labor is its effect on a child's schooling. Table 2.16 shows the percentage of children who are involved in child labor, the percentage of children who are attending school, and the percentage of children who are both attending school and also involved in child labor. Among those children who are involved in child labor, 97 percent are attending school. Among children age 5-14 who are attending school, 4 percent are involved in child labor.

Table 2.16 Child labor and school attendance

Among children age 5-14, the percentage of children who are involved in child labor and the percentage of children who are attending school; among children age 5-14 involved in child labor, the percentage of child laborers who are attending school; and among children age 5-14 attending school, the percentage who are involved in child labor, according to background characteristics, Armenia 2010

Background characteristic	Percentage of children involved in child labor[1]	Percentage of children attending school[2]	Number of children 5-14 years of age	Percentage of child laborers who are attending school[3]	Number of children aged 5-14 involved in child labor	Percentage of children attending school who are involved in child labor[4]	Number of children age 5-14 attending school
Age							
5-11	4.9	85.1	1,917	96.5	95	5.6	1,631
12-14	1.8	99.2	978	*	18	1.8	970
Sex							
Male	4.7	89.7	1,578	95.5	74.9	5.1	1,416
Female	2.9	90.0	1,317	100.0	37.6	3.2	1,185
Residence							
Urban	2.4	89.6	1,704	(93.8)	41	2.5	1,526
Rural	6.0	90.3	1,191	98.9	72	6.6	1,075
Region							
Yerevan	3.3	88.1	949	*	31	3.5	836
Aragatsotn	7.7	90.0	115	*	9	8.5	104
Ararat	3.1	88.8	229	*	7	3.5	204
Armavir	5.9	92.2	259	*	15	6.4	238
Gegharkunik	1.8	90.5	238	*	4	2.0	215
Lori	1.9	90.1	248	*	5	1.9	224
Kotayk	5.5	90.4	262	*	15	5.8	237
Shirak	7.0	91.2	276	*	19	7.6	252
Syunik	2.5	93.1	99	*	2	2.7	92
Vayots Dzor	0.0	88.9	73	*	0	0.0	65
Tavush	3.3	92.3	146	*	5	3.6	135
Orphan (mother and/or father deceased)							
Yes	4.4	100.0	96	*	4	4.4	96
No	3.9	89.5	2,799	96.9	108	4.2	2,506
Mother's education							
Basic	3.5	91.1	170	*	5	3.8	155
Secondary	5.5	88.7	1,174	94.9	65	5.9	1,041
Secondary special	3.5	89.3	865	(100.0)	30	3.9	772
Higher	1.9	91.7	612	*	11	2.0	562
Mother not in household	0.5	96.2	74	*	0	0.5	71
Wealth quintile							
Lowest	6.9	89.9	648	(98.2)	45	7.5	582
Second	4.1	93.1	578	*	23	4.4	538
Middle	3.2	87.6	591	*	19	3.1	518
Fourth	2.4	88.2	500	*	12	2.7	441
Highest	2.4	90.3	578	*	14	2.7	521
Total	3.9	89.9	2,895	97.0	112	4.2	2,601

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] The table is based on the responses to a series of questions in the child labor module which is administered to the caretaker of each child in the household 5-14 years of age. The numerator to estimate the child labor percentage includes: (a) children 5-11 years of age that during the week preceding the survey did at least one hour of economic activity or at least 28 hours of domestic chores, and (b) children 12-14 years of age that during the week preceding the survey did at least 14 hours of economic activity or at least 28 hours of domestic chores.

[2] Percentage of children 5-14 years of age attending school

[3] MICS-III indicator 72. Laborer students: Number of children 5-14 years of age involved in child labor activities that are also attending school divided by the total number of children 5-14 years of age involved in child labor activities.

[4] MICS-III indicator 73. Student laborers: Number of children 5-14 years of age attending school that are also involved in child labor activities divided by the total number of children 5-14 attending school

Since 2004 a few surveys on child labor have been conducted in Armenia, among them the 2004 Labor Force and Child Labor Survey conducted by the National Statistical Service (NSS, 2005) and the 2008 Child Labor survey conducted by the "Harmonic Society" Social Workers' Association, an NGO funded by UNICEF (UNICEF, 2008).According to the NSS survey, 5 percent of children age 7-17 worked in the *three years* preceding the survey. According to the 2008 UNICEF survey, 5 percent of children age 7-18 were working *last year*.

It should be noted that data on child labor in the 2010 ADHS are not directly comparable to the data collected in the 2004 NSS and the 2008 UNICEF surveys for a number of reasons. For example, there are differences in sampling and survey methodology, the survey population, and the wording of questions and the time frame references in all three surveys. Moreover, definitions of child labor employed for data analysis differ in each of the three surveys.

BACKGROUND CHARACTERISTICS OF RESPONDENTS

3

This chapter gives a demographic and socioeconomic profile of respondents in the 2010 ADHS sample. Information on the basic characteristics of women and men interviewed in the survey is essential to interpret findings within the context of reproduction, health, and women's status. The percent distribution of respondents by the various demographic and socioeconomic characteristics can be used as an approximate indicator of the representativeness of the survey sample to the general population. The main background characteristics, described in detail here and used in subsequent chapters on reproduction and health, are as follows: age at the time of the survey, marital status, residence, education, and wealth quintile. This chapter also includes information on exposure to mass media, employment and earnings, employment abroad, and use of tobacco.

3.1 BACKGROUND CHARACTERISTICS OF RESPONDENTS

Table 3.1 presents the distribution of interviewed women and men age 15-49 by selected background characteristics that include age, marital status, educational level, place of residence, and region. As noted in Chapter 1, all women age 15-49 who were usual residents or present in the household on the night before the interviewer's visit were eligible to be interviewed in the 2010 ADHS. Men age 15-49 were interviewed in every third household.[1] In order not to double count respondents, the tables in this report in most cases are based on the de facto population, that is, those who stayed in the household the previous night.

The age distribution shows that around half of the women (48 percent) and men (51 percent) are under age 30. In general, there are higher proportions of women and men in their twenties, and lower proportions of women and men in their late thirties and early forties, compared with older and younger age groups. This distribution likely reflects higher rates of emigration among the working age population in Armenia. Nearly two-thirds of the women (61 percent) and more than half of the men (54 percent) are married or living together. Because men tend to marry later in life than women, more men age 15-49 (45 percent) have never married compared with women age 15-49 (32 percent). Seven percent of women are divorced, separated, or widowed as opposed to 1 percent of men. The proportion of women who are married or living together has changed little over the past 10 years (64 percent in 2000 and 61 percent in 2010), while the proportion of men who are married or living together has declined considerably (from 68 percent in 2000 down to 54 percent in 2010). Consequently, the proportion of never-married men has increased considerably over the past ten years, from 31 percent in 2000 to 45 percent in 2010. Corresponding proportions of never-married women are 29 and 32 percent, respectively. There are few, if any, differences observed in the past five years.

Three-fifths of the population lives in urban areas, with the majority of people living in Yerevan. Outside of Yerevan, the distribution by region shows that around two in five respondents are from the Kotayk, Shirak, Armavir, and Lori regions. The regions with the smallest proportions of respondents are the Syunik, Tavush, Vayots Dzor, and Aragatsotn regions. Women and men in Armenia are universally well educated, with 94 percent of women and 88 percent of men having at least some secondary education. Thirty percent each of women and men have some higher education.

[1] In the 2000 ADHS, men age 15-54 in every third household were included in the survey.

Table 3.1 Background characteristics of respondents

Percent distribution of women and men age 15-49 by selected background characteristics, Armenia 2010

Background characteristic	Women			Men		
	Weighted percent	Weighted number	Unweighted number	Weighted percent	Weighted number	Unweighted number
Age						
15-19	14.5	861	844	14.4	229	237
20-24	17.4	1,032	1,054	18.8	298	299
25-29	16.0	950	927	18.0	285	279
30-34	14.1	838	801	14.5	229	226
35-39	10.9	643	662	10.2	162	164
40-44	12.5	742	739	10.3	164	170
45-49	14.5	857	895	13.7	217	209
Marital status						
Never married	32.3	1,911	1,831	44.7	707	701
Married	60.7	3,597	3,679	51.1	809	811
Living together	0.5	28	27	2.9	46	47
Divorced/separated	4.0	236	221	1.2	19	22
Widowed	2.5	149	164	0.2	3	3
Residence						
Urban	61.5	3,641	3,966	62.1	984	1,063
Rural	38.5	2,281	1,956	37.9	600	521
Region						
Yerevan	34.9	2,069	987	37.5	593	283
Aragatsotn	4.4	260	485	4.4	70	148
Ararat	6.4	379	476	7.9	125	136
Armavir	9.0	535	504	9.3	148	145
Gegharkunik	7.7	459	564	5.3	83	134
Lori	8.7	513	453	8.2	130	107
Kotayk	9.2	543	584	9.4	148	158
Shirak	10.1	598	632	8.3	131	135
Syunik	3.3	198	379	4.0	63	123
Vayots Dzor	2.2	131	397	1.5	24	87
Tavush	4.0	238	461	4.3	68	128
Education						
Basic	5.9	347	346	11.9	188	179
Secondary	36.1	2,137	2,228	39.0	619	660
Secondary special	28.4	1,681	1,749	19.0	301	300
Higher	29.7	1,757	1,599	30.1	477	445
Wealth quintile						
Lowest	19.4	1,151	1,066	21.0	332	312
Second	20.5	1,211	1,305	18.0	285	314
Middle	19.2	1,139	1,332	19.7	312	346
Fourth	19.3	1,146	1,284	21.0	332	362
Highest	21.5	1,275	935	20.4	323	250
Total	100.0	5,922	5,922	100.0	1,584	1,584

Note: Education categories refer to the highest level of education attended, whether or not that level was completed.

3.2 EDUCATIONAL ATTAINMENT OF RESPONDENTS

Education provides people with the knowledge and skills that can lead to a better quality of life. Level of education has been found to be closely associated with the health of women and children as well as with the reproductive health behaviors of women and men. As discussed in Chapter 2, Armenia's educational system has undergone several stages of restructuring over the past five years.[2] Tables 3.2.1 and 3.2.2 show the distribution of women and men by highest level of schooling attended or completed and the median number of years of schooling, according to background characteristics.

[2] Basic education consists of grades 1-9 instead of grades 1-8 as in the previous system; high school consists of grades 10-12 instead of grades 9-10 as in the previous system. The two levels together (basic education and high school) are referred to as secondary education (grades 1 through 12 in the new system versus grades 1 through 10 in the old system). All other categories are similar to those in the 2005 ADHS.

Education has been almost universal in Armenia for some time; the median number of years of schooling completed for women is 11.2 years (Table 3.2.1) and for men is 9.9 years (Table 3.2.2). Women age 15-19, those in the poorest households, and those in rural areas have less education than other women. Women in Yerevan and Syunik are better educated than women in other regions; the median years of schooling completed for women in these regions are 12.3 and 12.1 years, respectively. Women from the wealthiest households have, on average, an additional 2.8 years of schooling compared with women from the poorest households (12.5 years versus 9.7 years).

Although virtually all female respondents have attended secondary school, differences are seen in attendance at higher levels of education. For example, 39 percent of urban women have some higher education compared with only 15 percent of rural women. There also is considerable variation by region: the largest proportion of highly educated women lives in Yerevan (47 percent), and the smallest proportions live in Gegharkunik (14 percent), Ararat (15 percent), and Aragatsotn (16 percent). Attainment of higher education is closely related to wealth status; half of the women in the highest wealth quintile have some university education compared with one in ten women in the lowest quintile.

Table 3.2.1 Educational attainment: Women

Percent distribution of women age 15-49 by highest level of schooling attended or completed, and median years completed, according to background characteristics, Armenia 2010

Background characteristic	Highest level of schooling							Total	Median years completed	Number of women
	No education	Some primary	Completed primary[1]	Some secondary	Completed secondary[2]	Secondary special	Higher			
Age										
15-24	0.1	0.0	0.0	15.1	27.6	21.1	36.2	100.0	10.1	1,893
15-19	0.0	0.0	0.0	28.7	22.7	15.9	32.7	100.0	9.6	861
20-24	0.1	0.0	0.0	3.7	31.7	25.3	39.1	100.0	12.1	1,032
25-29	0.1	0.0	0.0	4.7	34.0	28.0	33.2	100.0	11.9	950
30-34	0.0	0.0	0.0	6.8	32.5	32.1	28.6	100.0	11.7	838
35-39	0.4	0.0	0.0	3.6	36.1	35.0	24.9	100.0	11.4	643
40-44	0.0	0.1	0.0	3.7	41.8	31.8	22.6	100.0	11.1	742
45-49	0.0	0.1	0.0	3.5	40.9	33.4	22.1	100.0	11.2	857
Residence										
Urban	0.1	0.0	0.0	6.2	23.9	30.9	38.9	100.0	11.9	3,641
Rural	0.1	0.1	0.0	10.6	50.0	24.3	14.9	100.0	9.8	2,281
Region										
Yerevan	0.1	0.0	0.0	5.5	18.7	28.3	47.3	100.0	12.3	2,069
Aragatsotn	0.0	0.0	0.0	5.3	65.4	13.6	15.7	100.0	9.7	260
Ararat	0.0	0.0	0.0	8.9	52.3	23.9	14.9	100.0	9.8	379
Armavir	0.0	0.0	0.0	10.9	38.3	31.6	19.2	100.0	10.0	535
Gegharkunik	0.0	0.3	0.0	12.0	51.7	22.2	13.9	100.0	9.7	459
Lori	0.0	0.2	0.0	9.0	43.6	25.3	22.0	100.0	9.9	513
Kotayk	0.0	0.0	0.0	9.2	35.1	30.3	25.4	100.0	10.8	543
Shirak	0.2	0.0	0.0	8.1	34.5	35.1	22.1	100.0	11.0	598
Syunik	0.0	0.0	0.0	6.6	27.8	39.9	25.7	100.0	12.1	198
Vayots Dzor	0.4	0.0	0.0	7.1	45.0	29.3	18.2	100.0	9.9	131
Tavush	0.1	0.0	0.0	11.0	33.2	32.5	23.2	100.0	11.1	238
Wealth quintile										
Lowest	0.2	0.0	0.0	12.9	54.2	21.9	10.8	100.0	9.7	1,151
Second	0.0	0.1	0.0	9.9	44.8	28.3	16.9	100.0	9.8	1,211
Middle	0.0	0.1	0.0	7.9	31.5	33.2	27.3	100.0	11.3	1,139
Fourth	0.2	0.0	0.0	5.4	22.5	31.0	41.0	100.0	12.1	1,146
Highest	0.0	0.0	0.0	3.8	17.8	27.6	50.8	100.0	12.5	1,275
Total	0.1	0.0	0.0	7.9	33.9	28.4	29.7	100.0	11.2	5,922

[1] Completed grade 4 at the primary level
[2] Completed grade 12 at the secondary level or completed grade 10-11 at secondary level and has a secondary school diploma/attestat

Table 3.2.2 Educational attainment: Men

Percent distribution of men age 15-49 by highest level of schooling attended or completed, and median years completed, according to background characteristics, Armenia 2010

Background characteristic	Highest level of schooling						Total	Median years completed	Number of men
	Some primary	Completed primary[1]	Some secondary	Completed secondary[2]	Secondary special	Higher			
Age									
15-24	0.0	0.4	22.7	31.7	14.8	30.5	100.0	9.7	527
15-19	0.0	0.0	38.9	19.9	16.3	24.9	100.0	9.3	229
20-24	0.0	0.6	10.3	40.7	13.6	34.8	100.0	9.9	298
25-29	1.4	0.0	13.7	41.2	12.7	30.9	100.0	9.8	285
30-34	0.0	0.9	13.5	44.1	17.1	24.5	100.0	9.8	229
35-39	0.3	0.0	6.6	35.6	25.2	32.3	100.0	10.9	162
40-44	0.2	0.0	3.6	35.4	27.5	33.3	100.0	11.2	164
45-49	0.0	0.0	6.0	35.5	28.5	30.0	100.0	11.2	217
Residence									
Urban	0.4	0.2	9.4	27.8	20.8	41.4	100.0	10.9	984
Rural	0.2	0.3	21.2	50.7	16.1	11.5	100.0	9.5	600
Region									
Yerevan	0.5	0.3	8.6	22.0	19.3	49.3	100.0	11.5	593
Aragatsotn	1.4	0.0	14.4	64.3	7.9	12.0	100.0	9.5	70
Ararat	0.0	0.0	12.9	63.1	14.2	9.7	100.0	9.6	125
Armavir	0.0	0.0	23.0	41.6	18.4	17.0	100.0	9.6	148
Gegharkunik	0.3	0.0	12.1	56.5	22.9	8.1	100.0	9.6	83
Lori	0.0	0.0	22.4	38.2	20.3	19.1	100.0	9.7	130
Kotayk	0.0	0.0	24.2	33.5	24.6	17.8	100.0	9.8	148
Shirak	0.0	0.9	10.7	36.7	23.0	28.6	100.0	9.9	131
Syunik	0.8	0.0	12.6	34.7	21.5	30.5	100.0	9.9	63
Vayots Dzor	0.0	0.0	7.2	48.5	17.6	26.7	100.0	9.8	24
Tavush	0.0	1.0	14.0	50.1	8.9	26.1	100.0	9.7	68
Wealth quintile									
Lowest	0.3	0.6	21.2	55.3	14.2	8.4	100.0	9.5	332
Second	1.1	0.0	21.1	48.3	18.9	10.5	100.0	9.6	285
Middle	0.0	0.6	11.4	34.4	25.2	28.3	100.0	9.9	312
Fourth	0.1	0.0	9.7	23.8	17.8	48.7	100.0	11.5	332
Highest	0.1	0.0	6.5	21.9	19.2	52.2	100.0	11.8	323
Total	0.3	0.2	13.9	36.5	19.0	30.1	100.0	9.9	1,584

[1] Completed grade 4 at the primary level
[2] Completed grade 12 at the secondary level or completed grade 10-11 at secondary level and has a secondary school diploma/attestat

The pattern of educational attainment among men is similar to that of women (Table 3.2.2). Younger men and men in rural areas generally have lower levels of education compared with their counterparts. Forty-one percent of urban men have some higher education compared with 12 percent of rural men. As with women, there is considerable variation by region. Yerevan residents have a clear educational advantage over the rest of the country: nearly half of the men in Yerevan (49 percent) have some university education compared with 10 percent or less of the men in Ararat and Gegharkunik. Wealth status is positively associated with education; 52 percent of men in the highest wealth quintile have some higher education compared with 8 percent of men in the lowest wealth quintile.

The proportion of respondents with some higher education has substantially increased in the past ten years, from 19 percent of women and 22 percent of men in the 2000 ADHS to 24 percent each in the 2005 ADHS to 30 percent of women and men in the 2010 ADHS.

3.3 EXPOSURE TO MASS MEDIA

Access to information is essential to increase people's knowledge and awareness of what is taking place around them. In the 2010 ADHS, information was collected on respondents' exposure to both broadcast and print media. This information is important because it can help program managers plan the dissemination of information on health, family planning, nutrition, and other programs. In the survey, exposure to media was assessed by asking how often a respondent reads a newspaper, watches television, or listens to the radio. The results are presented in Tables 3.3.1 and 3.3.2.

At least once a week, 93 percent of Armenian women watch television, nearly half (45 percent) read a newspaper, and one-fifth (20 percent) listen to the radio (Table 3.3.1). Sixteen percent of women access all three media at least once a week, while 6 percent are not regularly exposed to any mass media. Younger women are more likely than older women to listen to the radio and access the three types of media at least once a week. Exposure to media has a strong positive association with education and wealth. For example, while 22 percent of women in the highest wealth quintile access all three media at least once a week, the corresponding proportion for women in the lowest wealth quintile is only 7 percent. Urban women are about twice as likely to be exposed to mass media as their rural counterparts (20 percent compared with 9 percent). Overall, women from Shirak and Yerevan are the most likely to be exposed to all three media at least once a week (40 percent and 23 percent, respectively). Aragatsotn, Syunik, and Vayots Dzor regions have the lowest proportions of women who access all three media at least once a week.

Table 3.3.1 Exposure to mass media: Women

Percentage of women age 15-49 who are exposed to specific media on a weekly basis by background characteristics, Armenia 2010

Background characteristic	Reads a newspaper at least once a week	Watches television at least once a week	Listens to radio at least once a week	Accesses all three media at least once a week	Accesses none of the three media at least once a week	Number of women
Age						
15-19	48.4	91.1	24.6	17.5	8.4	861
20-24	47.0	94.0	21.8	17.5	5.6	1,032
25-29	46.2	91.2	21.7	14.9	6.7	950
30-34	45.8	94.0	21.0	17.2	4.1	838
35-39	48.9	93.5	19.4	14.9	5.6	643
40-44	39.1	90.7	14.3	12.7	8.2	742
45-49	41.2	93.2	17.8	13.3	6.2	857
Residence						
Urban	52.6	90.9	26.1	19.7	7.6	3,641
Rural	33.7	95.2	10.9	8.9	4.4	2,281
Region						
Yerevan	53.0	88.0	31.8	23.4	9.9	2,069
Aragatsotn	11.0	99.9	2.3	1.4	0.0	260
Ararat	34.8	99.8	13.5	13.0	0.1	379
Armavir	16.4	76.5	6.1	3.8	23.4	535
Gegharkunik	28.8	99.6	3.2	2.1	0.4	459
Lori	63.9	98.5	10.1	8.5	1.3	513
Kotayk	36.3	97.3	13.6	11.4	2.0	543
Shirak	59.6	93.9	50.4	39.9	4.0	598
Syunik	68.4	98.5	1.4	1.4	1.3	198
Vayots Dzor	48.3	99.6	1.9	1.5	0.3	131
Tavush	52.1	98.9	2.1	2.1	0.9	238
Education						
Basic	16.2	86.7	7.2	2.7	12.6	347
Secondary	30.1	93.9	12.0	8.3	4.8	2,137
Secondary special	46.5	92.0	21.7	15.5	6.8	1,681
Higher	68.4	92.5	31.6	26.9	6.7	1,757
Wealth quintile						
Lowest	27.2	92.5	9.7	7.2	6.9	1,151
Second	37.1	94.9	12.9	10.6	4.6	1,211
Middle	49.5	94.9	21.9	17.3	3.8	1,139
Fourth	56.9	93.5	26.8	19.9	5.7	1,146
Highest	55.1	87.5	29.5	22.2	10.6	1,275
Total	45.3	92.5	20.3	15.5	6.4	5,922

There has been a noticeable decrease in the past five years in the proportion of women exposed to each specific medium at least once a week: reading a newspaper has decreased from 53 percent in 2005 to 45 percent in 2010, television watching has decreased from 97 percent in 2005 to 93 percent in 2010, and listening to the radio has decreased from 33 percent in 2005 to 20 percent in 2010. Overall, the proportion of women exposed to all three media is smaller in 2010 than that observed in 2005 (16 and 23 percent, respectively). Slight changes in the wording of the questions between the two surveys may account for some of the trends. Dramatic increases in ownership of home computers and decreases in radio ownership over the past five years may also have contributed

to this decline. Ownership of computers has tripled in Armenia in the past five years (growing from 9 to 29 percent), while ownership of radios has decreased by more than half its level during the same time period (from 29 percent in 2005 to 12 percent in 2010) (NSS et al., 2006; chapter 2, Table 2.5).

In general, men report a lower level of exposure to all types of media than women (Table 3.3.2). Almost all men (96 percent) watch television, 30 percent read a newspaper, and 18 percent listen to the radio at least once a week. Less than 10 percent are exposed to all three types of media on a weekly basis. Three percent of men are not regularly exposed to any of the three media types.

Table 3.3.2 shows that, for men, the relationships between exposure to mass media and background characteristics are generally similar to those observed among women. However, media exposure by age differs among men; younger men are less likely than older men to be exposed to all three media at least once a week. At the regional level, exposure to the three media at least once a week ranges from 16 percent in Yerevan to 1 percent or less for men in Gegharkunik, Ararat, Lori, and Syunik. In fact, in Syunik, no men reported accessing all three media at least once a week, an observation attributable to the fact that only 1 percent of men in Syunik report listening to the radio at least once a week. As with women, the proportion of men with access to all three media at least once a week has decreased over the past five years, declining from 22 percent in 2005 to 9 percent in 2010).

Table 3.3.2 Exposure to mass media: Men

Percentage of men age 15-49 who are exposed to specific media on a weekly basis by background characteristics, Armenia 2010

Background characteristic	Reads a newspaper at least once a week	Watches television at least once a week	Listens to radio at least once a week	Accesses all three media at least once a week	Accesses none of the three media at least once a week	Number of men
Age						
15-19	20.6	94.2	15.3	7.2	5.8	229
20-24	35.2	98.3	16.9	9.1	0.9	298
25-29	28.1	96.2	16.8	6.7	3.7	285
30-34	30.5	96.0	18.0	10.5	3.4	229
35-39	29.4	96.1	26.0	11.1	1.6	162
40-44	37.0	93.5	21.8	15.9	5.1	164
45-49	29.6	95.6	13.6	6.8	4.4	217
Residence						
Urban	39.6	94.7	23.1	13.1	4.5	984
Rural	14.2	97.9	9.1	2.8	1.7	600
Region						
Yerevan	40.7	92.8	28.9	16.2	6.4	593
Aragatsotn	8.1	95.5	9.7	7.0	4.5	70
Ararat	4.4	98.2	3.2	0.5	1.8	125
Armavir	7.1	100.0	23.9	3.6	0.0	148
Gegharkunik	3.2	99.2	7.7	1.2	0.4	83
Lori	63.3	99.0	0.8	0.8	1.0	130
Kotayk	26.5	99.2	15.3	8.6	0.8	148
Shirak	37.8	93.2	12.7	10.2	4.8	131
Syunik	32.0	97.0	1.0	0.0	1.3	63
Vayots Dzor	16.1	94.6	16.7	11.1	5.0	24
Tavush	19.7	98.2	18.8	11.0	0.0	68
Education						
Basic	7.4	94.0	6.5	2.4	6.0	188
Secondary	17.8	97.6	12.6	4.7	2.0	619
Secondary special	32.0	96.8	20.9	8.5	1.8	301
Higher	53.4	93.9	27.0	18.2	5.3	477
Wealth quintile						
Lowest	8.9	98.3	7.7	1.5	1.6	332
Second	16.5	94.9	12.2	4.0	4.7	285
Middle	38.7	96.5	19.0	9.4	2.3	312
Fourth	41.5	95.5	22.0	13.4	3.8	332
Highest	43.2	94.2	27.7	17.1	5.0	323
Total	30.0	95.9	17.8	9.2	3.4	1,584

3.4 EMPLOYMENT

As with education, employment can be a source of empowerment for women. In the 2010 ADHS, respondents were asked a number of questions to determine their employment status at the time of the survey as well as continuity of employment in the 12 months prior to the survey. The measurement of women's employment is difficult because some of the activities that women do, especially work on family farms, family businesses, or in the informal sector, are often not perceived by women themselves as employment and hence are not reported as such.

To avoid underestimating employment, respondents were asked several questions to probe for their employment status and to ensure complete coverage of employment in both the formal and informal sectors. Respondents are considered "employed" if they are currently working (i.e., if they have worked in the past seven days) or if they have worked at any time during the 12 months preceding the survey. Additional information is obtained on the type of work women are doing, whether they worked continuously throughout the year, who they worked for, and the form in which they received their earnings (in cash or in kind).

Tables 3.4.1 and 3.4.2 show the percent distribution of female and male respondents by employment status, according to background characteristics. Thirty-two percent of women reported being currently employed, 3 percent were employed in the 12 months preceding the survey but not working at the time of the survey, and 65 percent were not employed in the 12 months preceding the survey (Figure 3.1). Almost twice as many men as women reported being currently employed (66 percent versus 32 percent). Nonetheless, more than one-quarter of men (27 percent) reported that they were not employed during the 12 months preceding the survey. Divorced, separated, or widowed women were substantially more likely than other women to be employed at the time of the survey. Among men, those who were formerly or currently married were more likely to be employed than never-married men.

Figure 3.1 **Women's and Men's Employment Status in the Past 12 Months**

Current employment among women and men generally increases with age, education, and wealth quintile. Differences in current employment between rural and urban residents are not significant; however, among those employed in the 12 months preceding the survey, rural men are more likely not to be currently employed at the time of the survey than urban men (13 percent versus

4 percent, respectively). Current employment among women is highest in Gegharkunik and Syunik (47 and 46 percent, respectively), while in Lori the proportion is only 19 percent. For men, current employment rates range from 75 percent in Armavir to 47 percent in Gegharkunik. Among men employed in the 12 months preceding the survey, men in Gegharkunik (31 percent) are substantially more likely not to be currently employed but to have worked in the 12 months preceding the survey compared with men from other regions. Men with lower levels of education and men living in households in the three lowest wealth quintiles are far more likely to have worked recently but not to be currently employed compared with more educated and wealthier men.

Table 3.4.1 Employment status: Women

Percent distribution of women age 15-49 by employment status, according to background characteristics, Armenia 2010

Background characteristic	Employed in the 12 months preceding the survey: Currently employed[1]	Employed in the 12 months preceding the survey: Not currently employed	Not employed in the 12 months preceding the survey	Total	Number of women
Age					
15-19	7.1	0.8	92.1	100.0	861
20-24	18.2	2.9	78.8	100.0	1,032
25-29	27.2	3.4	69.5	100.0	950
30-34	38.4	5.0	56.5	100.0	838
35-39	43.4	4.7	52.0	100.0	643
40-44	47.5	3.0	49.4	100.0	742
45-49	48.4	3.9	47.8	100.0	857
Marital status					
Never married	25.1	3.0	71.8	100.0	1,911
Married or living together	32.6	3.1	64.3	100.0	3,626
Divorced/separated/widowed	55.1	6.9	38.0	100.0	385
Number of living children					
0	26.7	3.0	70.3	100.0	2,233
1-2	32.5	3.8	63.7	100.0	2,690
3-4	41.3	2.8	55.9	100.0	964
5+	(23.5)	(0.0)	(76.5)	100.0	36
Residence					
Urban	32.1	4.4	63.5	100.0	3,641
Rural	31.0	1.6	67.4	100.0	2,281
Region					
Yerevan	34.5	6.1	59.4	100.0	2,069
Aragatsotn	30.8	1.4	67.8	100.0	260
Ararat	34.5	2.9	62.6	100.0	379
Armavir	29.8	1.8	68.4	100.0	535
Gegharkunik	47.0	0.8	52.2	100.0	459
Lori	18.7	2.6	78.7	100.0	513
Kotayk	28.8	2.1	69.2	100.0	543
Shirak	22.0	1.8	76.2	100.0	598
Syunik	45.9	3.6	50.5	100.0	198
Vayots Dzor	21.8	0.0	78.2	100.0	131
Tavush	30.2	0.2	69.7	100.0	238
Education					
Basic	22.1	5.1	72.8	100.0	347
Secondary	26.3	2.3	71.5	100.0	2,137
Secondary special	32.0	3.5	64.5	100.0	1,681
Higher	39.8	4.0	56.1	100.0	1,757
Wealth quintile					
Lowest	29.0	1.9	69.1	100.0	1,151
Second	30.7	2.4	66.8	100.0	1,211
Middle	28.3	3.4	68.3	100.0	1,139
Fourth	34.2	3.8	62.0	100.0	1,146
Highest	35.7	4.9	59.4	100.0	1,275
Total	31.7	3.3	65.0	100.0	5,922

Note: Figures in parentheses are based on 25-49 unweighted cases.
[1] "Currently employed" is defined as having done work in the past seven days. Includes persons who did not work in the past seven days but who are regularly employed and were absent from work for leave, illness, vacation, or any other such reason.

Table 3.4.2 Employment status: Men

Percent distribution of men age 15-49 by employment status, according to background characteristics, Armenia 2010

Background characteristic	Employed in the 12 months preceding the survey: Currently employed[1]	Employed in the 12 months preceding the survey: Not currently employed	Not employed in the 12 months preceding the survey	Total	Number of men
Age					
15-19	11.9	3.9	83.9	100.0	229
20-24	50.6	10.0	39.4	100.0	298
25-29	72.9	10.8	16.2	100.0	285
30-34	85.1	8.7	6.2	100.0	229
35-39	85.0	6.7	8.2	100.0	162
40-44	90.4	2.2	7.4	100.0	164
45-49	80.6	8.0	11.4	100.0	217
Marital status					
Never married	41.9	8.5	49.5	100.0	707
Married or living together	84.8	7.2	8.0	100.0	855
Divorced/separated/widowed	(91.4)	(0.0)	(8.6)	100.0	22
Number of living children					
0	45.8	8.7	45.4	100.0	787
1-2	86.1	5.6	8.3	100.0	616
3-4	83.1	10.1	6.9	100.0	169
5+	*	*	*	100.0	11
Residence					
Urban	66.6	4.4	28.9	100.0	984
Rural	64.4	13.0	22.6	100.0	600
Region					
Yerevan	66.6	2.9	30.4	100.0	593
Aragatsotn	67.0	3.8	29.1	100.0	70
Ararat	58.4	11.8	29.9	100.0	125
Armavir	74.6	4.6	20.8	100.0	148
Gegharkunik	47.3	31.0	21.7	100.0	83
Lori	55.8	12.3	31.9	100.0	130
Kotayk	73.0	8.2	18.7	100.0	148
Shirak	72.5	9.3	17.7	100.0	131
Syunik	71.8	0.0	28.2	100.0	63
Vayots Dzor	66.7	19.1	14.3	100.0	24
Tavush	57.9	13.3	28.8	100.0	68
Education					
Basic	50.3	11.8	37.9	100.0	188
Secondary	65.1	11.2	23.6	100.0	619
Secondary special	74.9	4.3	20.8	100.0	301
Higher	67.0	3.6	29.5	100.0	477
Wealth quintile					
Lowest	65.1	12.5	22.4	100.0	332
Second	63.2	11.6	25.2	100.0	285
Middle	60.5	9.9	29.4	100.0	312
Fourth	68.2	3.5	28.3	100.0	332
Highest	71.3	1.4	27.2	100.0	323
Total	65.8	7.7	26.5	100.0	1,584

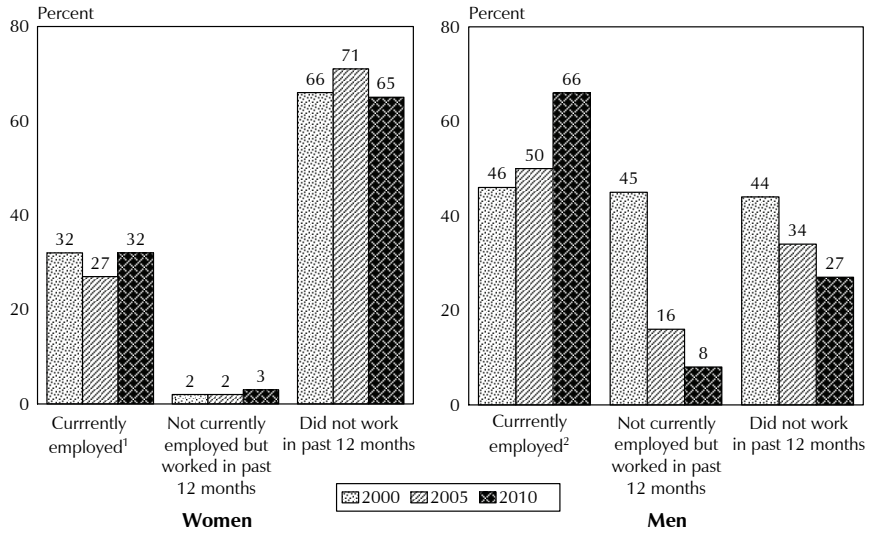
Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

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

Trends in current employment among women and men are shown in Figure 3.2. Among men, the percentage currently employed has increased over the past decade, with the most dramatic increase occurring in the past five years (from 50 percent in 2005 to 66 percent in 2010). The difference in the percentage of men currently employed between 2000 and 2005 is considerably smaller (47 and 50 percent, respectively). It should be noted that slight changes in the wording of the questions and changes in the definition of "currently employed" between the 2000 and 2005 ADHS may account for some of the trends. In the 2000 ADHS women were asked, "*Aside from your own housework, are you currently working*?" But in 2005 and 2010 women were asked, "*Aside from your*

own housework, have you done any work in the last seven days?" Thus, for women, being "currently employed" in 2005 and 2010 was defined as having done work in the past seven days, while in the 2000 ADHS, currently employed was defined as currently working. The current employment question for men also varied across the three surveys. In the 2000 and 2005 surveys, men were asked, "Are you currently working?" In the 2010 ADHS, the current employment question was modified to focus on work in the week preceding the survey ("*Have you done any work in the past 7 days?"*). Thus, in 2010, current employment included men who reported that they had worked in the week before the interview while, in 2000 and 2005, it included men who reported themselves as currently working without a specified time frame.

Figure 3.2 Trends in Employment Status, Armenia 2000-2010



[1] "Currently employed" in the 2010 ADHS and in 2005 ADHS is defined as having done work in the past 7 days. In the 2000 ADHS, "currently employed" is defined as working at the time of interview.

[2] "Currently employed" in the 2010 ADHS is defined as having done work in the past 7 days. In the 2000 ADHS and the 2005 ADHS, "currently employed" is defined as working at the time of interview.

3.5 OCCUPATION

Respondents who indicated that they were currently working were asked about the kind of work that they did. Their responses were recorded verbatim and then coded into occupation groups after questionnaires were sent to the central office. Table 3.5.1 shows the percent distribution of employed women in the 12 months preceding the survey by occupation, according to background characteristics. Information on a woman's occupation not only allows for an evaluation of the woman's source of income but also has implications for her empowerment.

Almost half (45 percent) of employed women are in professional, technical, or managerial positions, 29 percent are employed in sales and services, and 15 percent work in agriculture. Women with specialized secondary or higher education, women living in households in the two highest wealth quintiles, and urban women are more likely to hold professional, technical, or managerial jobs. The opposite is true for women working in the agricultural sector. Women with lower levels of education, women living in households in the two poorest wealth quintiles, and women living in rural areas are more likely to work in agriculture. An agricultural occupation is also more likely as a woman has more children. Professional, technical, or managerial jobs are most common in Gegharkunik, where two-thirds of employed women work in professional positions (66 percent). In regions where agricultural work is scarce, such as Yerevan and Vayots Dzor, about eight in ten employed women work in professional positions or in sales and services. Agricultural jobs are most common in Ararat and Aragatsotn (42 percent and 55 percent, respectively).

Table 3.5.1 Occupation: Women

Percent distribution of women age 15-49 employed in the 12 months preceding the survey by occupation, according to background characteristics, Armenia 2010

Background characteristic	Professional/ technical/ managerial	Clerical	Sales and services	Skilled manual	Unskilled manual	Agriculture	Missing	Total	Number of women
Age									
15-19	21.1	4.9	26.4	0.0	6.2	32.8	8.7	100.0	68
20-24	34.5	3.3	38.7	7.0	4.3	9.5	2.7	100.0	218
25-29	50.9	5.4	25.7	4.6	5.8	7.6	0.0	100.0	290
30-34	49.1	3.6	27.7	3.5	3.7	11.6	0.8	100.0	364
35-39	50.2	0.6	25.3	1.7	2.3	18.7	1.2	100.0	309
40-44	45.4	1.1	30.3	3.0	4.0	15.8	0.2	100.0	375
45-49	44.3	1.3	28.5	1.4	5.1	19.2	0.3	100.0	448
Marital status									
Never married	43.4	7.2	30.9	4.1	4.5	8.2	1.7	100.0	539
Married or living together	48.6	0.6	25.5	2.4	3.6	18.4	0.9	100.0	1,295
Divorced/separated/widowed	32.3	1.8	42.3	4.8	7.5	11.3	0.0	100.0	239
Number of living children									
0	42.9	6.5	31.2	5.1	4.7	7.8	1.8	100.0	663
1-2	48.7	0.7	30.0	2.9	4.5	12.8	0.4	100.0	976
3-4	42.0	0.3	22.5	0.4	3.2	30.5	1.1	100.0	425
5+	*	*	*	*	*	*	*	100.0	8
Residence									
Urban	48.4	3.1	36.1	4.3	5.8	1.3	1.0	100.0	1,328
Rural	40.0	1.3	15.8	1.0	1.6	39.5	0.9	100.0	744
Region									
Yerevan	47.9	4.1	35.6	4.5	6.8	0.4	0.7	100.0	841
Aragatsotn	33.3	0.9	8.9	0.7	0.2	54.6	1.4	100.0	84
Ararat	20.7	1.7	30.2	1.7	3.4	42.4	0.0	100.0	142
Armavir	39.6	2.1	25.0	0.3	3.3	28.9	0.8	100.0	169
Gegharkunik	65.7	0.2	6.9	1.0	0.2	25.4	0.7	100.0	219
Lori	30.7	2.4	44.1	6.3	5.3	8.6	2.6	100.0	109
Kotayk	45.2	0.0	33.2	4.0	6.2	10.9	0.5	100.0	167
Shirak	48.6	0.8	22.8	1.8	0.6	21.3	4.2	100.0	142
Syunik	38.8	1.8	31.4	2.2	0.6	24.6	0.5	100.0	98
Vayots Dzor	60.3	3.3	22.2	2.7	10.4	1.1	0.0	100.0	28
Tavush	49.0	4.8	24.8	1.8	0.0	19.3	0.3	100.0	72
Education									
Basic	23.4	0.0	26.2	0.0	4.7	42.5	3.1	100.0	94
Secondary	18.0	0.5	38.1	1.5	8.3	32.9	0.7	100.0	610
Secondary special	48.3	2.0	33.3	3.1	2.8	10.5	0.1	100.0	597
Higher	67.4	4.7	18.4	4.8	2.2	0.9	1.5	100.0	771
Wealth quintile									
Lowest	31.2	1.3	17.1	0.0	1.2	47.9	1.3	100.0	356
Second	40.0	2.4	24.5	1.5	5.4	25.5	0.7	100.0	402
Middle	42.3	1.9	38.7	3.1	5.4	6.7	1.9	100.0	361
Fourth	52.2	2.5	33.4	4.6	4.3	1.7	1.3	100.0	436
Highest	55.6	3.7	29.6	5.2	4.7	1.1	0.1	100.0	518
Total	45.4	2.5	28.8	3.1	4.3	15.0	1.0	100.0	2,072

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

Table 3.5.2 shows that, among employed men, 21 percent hold professional, technical, or managerial jobs, 39 percent are in sales and services, 8 percent work as skilled manual laborers, 17 percent work as unskilled manual laborers, and 15 percent work in agriculture. Although employment in most sectors increases with age, those age 15-19 are more than three times as likely as men in other age groups to work in agriculture. Men in urban areas are more likely to be working in jobs that require skills (i.e., professional/technical/managerial and sales and services) than men living in rural areas. The converse is true for men in rural areas; they are substantially more likely to be working as an unskilled manual laborer or in agriculture than men in urban areas. Similar patterns by education and wealth are seen among men and women.

Table 3.5.2 Occupation: Men

Percent distribution of men age 15-49 employed in the 12 months preceding the survey by occupation, according to background characteristics, Armenia 2010

Background characteristic	Professional/ technical/ managerial	Clerical	Sales and services	Skilled manual	Unskilled manual	Agriculture	Missing	Total	Number of men
Age									
15-19	6.1	0.0	19.4	1.9	17.3	53.4	2.0	100.0	36
20-24	12.3	0.1	40.8	9.9	22.5	13.7	0.7	100.0	181
25-29	21.7	0.4	38.0	7.8	17.2	14.8	0.0	100.0	239
30-34	17.5	0.0	41.5	8.1	19.2	12.3	1.3	100.0	215
35-39	23.6	0.0	41.3	8.6	16.0	10.5	0.0	100.0	148
40-44	28.4	0.0	39.0	7.4	11.0	14.2	0.0	100.0	151
45-49	27.7	0.8	36.9	8.2	12.1	14.2	0.0	100.0	192
Marital status									
Never married	16.7	0.5	37.3	6.0	22.4	16.5	0.6	100.0	357
Married or living together	23.5	0.0	39.0	9.1	14.0	14.1	0.4	100.0	786
Divorced/separated/widowed	*	*	*	*	*	*	*	100.0	20
Number of living children									
0	18.7	0.4	36.6	7.8	20.1	15.8	0.6	100.0	429
1-2	23.9	0.2	43.2	8.3	13.0	11.0	0.4	100.0	565
3-4	18.3	0.1	28.9	7.8	20.3	24.7	0.0	100.0	158
5+	*	*	*	*	*	*	*	100.0	11
Residence									
Urban	28.0	0.0	46.3	10.4	13.3	1.3	0.7	100.0	699
Rural	10.6	0.6	27.7	4.7	21.6	34.8	0.0	100.0	464
Region									
Yerevan	36.3	0.0	42.4	9.4	11.0	0.5	0.5	100.0	413
Aragatsotn	11.1	0.0	5.7	4.0	31.2	48.0	0.0	100.0	50
Ararat	6.5	0.0	32.8	5.9	12.3	42.5	0.0	100.0	87
Armavir	9.9	0.0	38.9	4.8	18.9	27.4	0.0	100.0	117
Gegharkunik	14.1	1.6	35.0	6.7	33.7	8.9	0.0	100.0	65
Lori	16.7	0.0	39.8	1.5	26.0	16.0	0.0	100.0	89
Kotayk	12.4	0.0	42.2	14.4	18.4	12.6	0.0	100.0	120
Shirak	16.1	0.0	34.8	11.5	13.2	21.8	2.5	100.0	108
Syunik	16.0	0.0	44.7	5.6	14.6	19.1	0.0	100.0	45
Vayots Dzor	12.5	3.9	46.1	7.1	13.1	16.8	0.5	100.0	21
Tavush	13.4	2.1	49.7	7.6	17.8	9.4	0.0	100.0	48
Education									
Basic	2.8	0.0	32.0	8.8	26.4	28.3	1.7	100.0	117
Secondary	4.1	0.0	39.9	4.3	29.7	21.8	0.2	100.0	472
Secondary special	14.5	0.0	51.0	17.6	6.4	10.3	0.3	100.0	238
Higher	55.9	0.9	31.2	6.5	2.0	3.0	0.4	100.0	336
Wealth quintile									
Lowest	7.5	0.6	23.9	4.4	24.4	39.3	0.0	100.0	257
Second	9.4	0.0	36.3	7.3	24.9	21.5	0.6	100.0	213
Middle	21.2	0.5	47.3	7.5	14.4	7.6	1.5	100.0	220
Fourth	31.1	0.0	41.4	14.1	10.8	2.5	0.0	100.0	238
Highest	36.4	0.0	47.1	7.5	8.6	0.4	0.0	100.0	235
Total	21.1	0.2	38.9	8.1	16.6	14.6	0.4	100.0	1,163

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

3.6 EMPLOYMENT CHARACTERISTICS

Table 3.6 shows the percent distribution of women who were employed in the 12 months preceding the survey by type of earnings and employer, and continuity of employment, according to type of employment (agricultural or non-agricultural). Overall, 76 percent of employed women earn cash only, 8 percent are paid in cash and in kind, and 10 percent receive no payment. Men are more likely to receive compensation than women—87 percent receive cash, and only 5 percent receive no

payment (data not shown). Four in ten women who work in agriculture do not receive payment, while 87 percent who work in nonagricultural jobs are paid in cash.

The majority of women (72 percent) are employed by a nonrelative, 12 percent are employed by a family member, and 16 percent are self-employed. Self-employment has doubled over the past five years, increasing from 8 percent in 2005 to 16 percent in 2010. The increase is particularly noticeable in the agricultural sector (39 percent in 2010 compared with 19 percent in 2005). According to the 2010 ADHS, women who work in agriculture are mainly either self-employed or employed by a family member (39 and 43 percent, respectively), while the majority of women employed in nonagricultural jobs are employed by nonfamily members (82 percent).

Three-quarters of working women are employed throughout the year, and 18 percent have seasonal jobs. Seasonal jobs are more common among women employed in agriculture than among those in nonagricultural occupations (69 percent compared with 9 percent). Continuity of employment is more assured for women who are engaged in nonagricultural work.

Table 3.6 Type of employment: Women

Percent distribution of women age 15-49 employed in the 12 months preceding the survey by type of earnings, type of employer, and continuity of employment, according to type of employment (agricultural or nonagricultural), Armenia 2010

Employment characteristic	Agricultural work	Nonagricultural work	Total
Type of earnings			
Cash only	16.4	87.4	76.4
Cash and in-kind	23.2	5.1	7.8
In-kind only	20.3	3.2	5.8
Not paid	39.6	3.9	9.7
Missing	0.5	0.4	0.4
Total	100.0	100.0	100.0
Type of employer			
Employed by family member	42.9	6.0	11.7
Employed by nonfamily member	17.2	81.5	71.6
Self-employed	39.4	12.1	16.4
Missing	0.5	0.3	0.3
Total	100.0	100.0	100.0
Continuity of employment			
All year	29.8	86.8	78.3
Seasonal	68.9	9.2	18.1
Occasional	0.8	3.8	3.3
Missing	0.5	0.2	0.3
Total	100.0	100.0	100.0
Number of women employed during the past 12 months	310	1,742	2,072

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

3.7 EMPLOYMENT ABROAD

Armenia is a country that experiences a large outflux of citizens for the purposes of labor migration. Between 2002 and 2007 labor migrants made up 94 percent of all migrants, 3 percent left to permanently reside abroad, and 2 percent intended to study abroad (ILO, 2009). In 2006, the percentage of the population involved in labor migration, also known as the labor migration rate, was 3.4 percent, and the number of labor migrants was between 96,000 and 122,000 (ILO, 2009). Migrants contribute to the economies of both their country of origin and their host country; the World Bank estimates that migrants contributed to 19 percent of Armenia's GDP in 2006.

The majority of Armenian labor migrants are married men age 21-50. The percentage of women who are migrants has decreased in the past 10 years. In 2006 it was estimated that 13 percent of economically active men and around 2 percent of economically active women migrate for work (ILO, 2009). Research indicates that emigration and remigration follows a seasonal pattern, with many migrants leaving in the spring and returning in the fall or winter. The duration of the trip is often 5 to 11 months, with a mean duration of 9 months (ILO, 2009). Migration for such a long period has implications for sexual health, as sometimes prolonged absence can lead to engaging in sexual activities with people other than the usual sexual partner. Engaging in unprotected sexual activity with people other than a usual sexual partner increases the risk of contracting sexually transmitted infections (STIs) including HIV.

The 2010 ADHS collected information about recent employment abroad as a proxy indicator for labor migration. All women and men age 15-49 in the 2010 ADHS were asked whether they had worked abroad during the three years preceding the survey for three or more months at a time. All currently married and formerly married women age 15-49 in the 2010 ADHS were asked whether their husbands were working abroad during the three years preceding the survey for three or more months at a time.

Table 3.7 shows the percentages of women and men age 15-49 who worked abroad during the three years preceding the survey for three or more months at a time, by background characteristics. Three percent of women and 11 percent of men age 15-49 reported that they were working abroad at some point in the three years preceding the survey for three or more months at a time. The likelihood of having recently worked abroad is lowest in the 15-24 age group among both women and men. For men, rural residence and lower educational attainment increase the likelihood of having recently worked abroad. Men in the highest wealth quintile are around half as likely as other men to have recently worked abroad. Men in Lori (33 percent) and Gegharkunik (31 percent) are the most likely to have recently worked abroad, while men in Aragatsotn are the least likely (1 percent).

Table 3.7 Respondent's employment abroad

Percentage of women and men age 15-49 who worked abroad during the three years before the survey for three or more months at a time, by background characteristics, Armenia 2010

Background characteristic	Women		Men	
	Worked abroad[1]	Number of women	Worked abroad[1]	Number of men
Age				
15-24	1.7	1,893	6.9	527
25-29	3.3	950	15.1	285
30-39	3.1	1,481	14.0	391
40-49	3.5	1,598	12.3	381
Marital status				
Never married	2.1	1,911	9.2	707
Ever had sex	*	9	15.3	414
Never had sex	2.1	1,903	0.5	293
Married/living together	3.1	3,626	13.4	855
Divorced/separated/ widowed	3.8	385	(5.8)	22
Residence				
Urban	3.0	3,641	9.6	984
Rural	2.5	2,281	14.4	600
Region				
Yerevan	2.3	2,069	5.7	593
Aragatsotn	0.1	260	0.9	70
Ararat	2.9	379	5.2	125
Armavir	4.2	535	5.0	148
Gegharkunik	3.4	459	30.7	83
Lori	1.4	513	33.0	130
Kotayk	2.7	543	13.4	148
Shirak	6.9	598	12.7	131
Syunik	0.3	198	18.8	63
Vayots Dzor	3.8	131	15.0	24
Tavush	0.2	238	18.1	68
Education				
Basic	2.3	347	12.2	188
Secondary	2.6	2,137	15.1	619
Secondary special	3.0	1,681	9.4	301
Higher	2.9	1,757	7.7	477
Wealth quintile				
Lowest	1.7	1,151	11.1	332
Second	3.0	1,211	13.8	285
Middle	4.3	1,139	15.0	312
Fourth	2.5	1,146	11.8	332
Highest	2.5	1,275	5.8	323
Total	2.8	5,922	11.4	1,584

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] "Employment abroad" refers to working abroad during the three years before the survey for three or more months at a time.

Table 3.8 shows the percentage of ever-married women age 15-49 who said that their husband worked abroad during the three years before the survey for three or more months at a time, by background characteristics. One in four ever-married Armenian women (22 percent of currently married women and 28 percent of formerly married women) reported that their spouse was working abroad during the three years preceding the survey for at least three months at a time. Nearly half of ever-married women in Shirak and Gegharkunik (45 and

44 percent, respectively), one-third of ever-married women in Lori, and one-quarter in Vayots Dzor reported that their husbands were working abroad compared with 1 percent of ever-married women in Syunik. In general, urban women, those with higher education, and those from the wealthiest households are less likely to report that a husband was employed away from home compared with rural, less educated, and less wealthy women.

In Chapter 13 on HIV/AIDS-related knowledge, attitudes, and behavior, both employment abroad and spousal employment abroad among ever-married women are included in tables as background characteristics. This was done to assess how the respondent's or spouse's recent employment abroad may have affected the respondent's knowledge and attitudes towards HIV/AIDS and sexually transmitted infections, condom use, and other factors relevant to the spread of HIV/AIDS.

Table 3.8 Husband's employment abroad

Percentage of ever-married women age 15-49 who said that their husband worked abroad during the past three years before the survey for three or more months at a time, by marital status and background characteristics, Armenia 2010

	Marital status					
	Currently married or living together		Formerly married		Ever-married women	
Background characteristic	Husband worked abroad[1]	Number of women	Husband worked abroad[1]	Number of women	Husband worked abroad[1]	Number of women[2]
Age						
15-24	21.6	518	*	14	21.7	532
15-19	18.5	68	*	4	19.1	72
20-24	22.1	450	*	10	22.1	460
25-29	18.1	641	(29.5)	33	18.6	675
30-39	22.0	1,166	34.2	121	23.1	1,287
40-49	24.8	1,300	24.2	217	24.7	1,517
Residence						
Urban	17.5	2,111	31.0	280	19.1	2,391
Rural	28.8	1,515	19.3	105	28.2	1,620
Region						
Yerevan	12.4	1,126	27.9	168	14.4	1,294
Aragatsotn	15.6	164	(10.5)	9	15.4	173
Ararat	18.2	228	(34.7)	27	19.9	255
Armavir	18.9	373	(24.0)	33	19.4	406
Gegharkunik	45.7	300	(14.2)	17	44.0	317
Lori	30.9	325	(52.9)	32	32.9	357
Kotayk	19.3	344	(17.8)	37	19.2	381
Shirak	46.0	384	(33.9)	33	45.1	417
Syunik	1.1	136	*	11	1.4	147
Vayots Dzor	24.2	90	*	7	23.9	96
Tavush	16.5	156	(24.6)	12	17.1	168
Education						
Basic	28.6	147	23.1	34	27.6	181
Secondary	25.9	1,524	27.0	123	26.0	1,647
Secondary special	20.4	1,139	32.8	142	21.8	1,281
Higher	16.9	816	22.3	86	17.4	902
Wealth quintile						
Lowest	23.0	748	20.9	67	22.8	816
Second	29.6	741	18.1	88	28.3	829
Middle	27.4	725	36.9	87	28.4	811
Fourth	18.1	682	30.8	69	19.3	751
Highest	12.8	730	32.1	73	14.5	804
Total	22.2	3,626	27.8	385	22.8	4,011

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] "Employment abroad" refers to working abroad during the past three years before the survey for three or more months at a time.
[2] In the 2010 ADHS, information on husband's employment abroad was collected from ever-married women age 15-49. Men in the 2010 ADHS were not asked about their wives' employment outside the country.

3.8 USE OF SMOKING TOBACCO

Smoking is a known risk factor for cardiovascular disease. It also causes lung cancer, emphysema, and other respiratory illnesses. Smoking may also have an impact on individuals who are exposed to the smoke second-hand. For example, inhaling second-hand smoke may adversely affect children's growth and cause childhood illness, especially respiratory diseases.

Since the mid-1990s, a number of tobacco control measures have been put into effect in Armenia. Advertising of tobacco products is banned in the mass media; however, there is no control over broadcast of foreign television programs in Armenia. Legislation requires health warnings and tar and nicotine content labeling on cigarette cartons. In addition, the sale of cigarettes to minors under age 18 years has been prohibited, and smoking is restricted in public areas, in government and health facilities, in restaurants and bars, in indoor workplaces and offices, and on public transportation.

To measure the extent of smoking among Armenian adults, women and men who were interviewed in the 2010 ADHS were asked if they currently smoke cigarettes or use other forms of tobacco. Tables 3.9.1 and 3.9.2 show the distribution of women and men who smoke cigarettes or use other tobacco.

Overall, less than 2 percent of women interviewed in the 2010 ADHS reported that they currently smoke cigarettes (Table 3.9.1). It is possible that some female respondents were reluctant to report that they smoke tobacco because of the traditional Armenian prohibition against women smoking. Urban dwellers, women residing in Yerevan, women age 35-49, women with some higher education, and women in the highest wealth quintile are the most likely to smoke (3 to 4 percent). Among women who did report current use of cigarettes, 69 percent reported that they smoked 10 or more cigarettes in the 24 hours preceding the interview (data not shown).

Smoking is considerably more common among men (Table 3.9.2). Three in five men report that they smoke cigarettes (63 percent). Young men age 15-19 are less likely to smoke cigarettes than men in their 30s and 40s. Three-quarters of men age 30-49 smoke cigarettes. There are no significant differences in smoking cigarettes by residence; however, by region men in Kotayk and Lori (70 percent) are more likely to smoke cigarettes than men in other regions. Among current smokers, the vast majority (96 percent) reported that they smoked 10 or more cigarettes in the 24 hours preceding the interview.

The proportion of current cigarette smokers among women and men has not changed much in the past five years. For women, the proportion who currently smoke has remained at 2 percent since 2005. Among men, the proportion of current cigarette smokers is nearly the same as in 2005 (61 percent in 2005 and 63 percent in 2010), but lower than in 2000 (68 percent).

Compared with estimates from Demographic and Health Surveys conducted in other former Soviet Union countries during the past five years, the level of cigarette smoking among women age 15-49 in Armenia (2 percent) is the lowest in the region. The prevalence of smoking among women in Moldova is 7 percent, and it is 15 percent among women in Ukraine. In contrast, cigarette smoking among men age 15-49 in Armenia (63 percent) is the highest in the region compared with 49, 51, and 52 percent, respectively, of men in Azerbaijan, Moldova, and Ukraine (SSC [Azerbaijan] and Macro International Inc., 2008; NCPM [Moldova] and ORC Macro, 2006; (UCSR) [Ukraine] and Macro International Inc., 2008).

Table 3.9.1 Use of tobacco: Women

Percentage of women age 15-49 who smoke cigarettes or use other tobacco products, according to background characteristics and maternity status, Armenia 2010

Background characteristic	Uses tobacco		Does not use tobacco	Number of women
	Cigarettes	Other tobacco		
Age				
15-19	0.0	0.1	99.9	861
20-24	0.5	0.0	99.5	1,032
25-29	1.0	0.2	98.8	950
30-34	1.6	0.3	98.1	838
35-39	2.0	0.0	98.0	643
40-44	2.7	0.5	96.5	742
45-49	4.0	0.3	95.8	857
Maternity status				
Pregnant	0.3	0.0	99.7	178
Breastfeeding (not pregnant)	0.6	0.0	99.4	312
Neither	1.7	0.2	98.0	5,432
Residence				
Urban	2.5	0.3	97.1	3,641
Rural	0.1	0.0	99.9	2,281
Region				
Yerevan	4.0	0.3	95.4	2,069
Aragatsotn	0.0	0.0	100.0	260
Ararat	0.4	0.0	99.6	379
Armavir	0.6	0.0	99.4	535
Gegharkunik	0.0	0.0	100.0	459
Lori	0.0	0.0	100.0	513
Kotayk	0.8	0.8	98.5	543
Shirak	0.2	0.1	99.8	598
Syunik	0.0	0.0	100.0	198
Vayots Dzor	0.1	0.0	99.9	131
Tavush	0.0	0.0	100.0	238
Education				
Basic	1.6	0.0	98.4	347
Secondary	0.3	0.1	99.6	2,137
Secondary special	1.5	0.2	98.4	1,681
Higher	3.2	0.3	96.2	1,757
Wealth quintile				
Lowest	0.2	0.1	99.8	1,151
Second	0.4	0.0	99.6	1,211
Middle	1.3	0.1	98.4	1,139
Fourth	2.3	0.3	97.6	1,146
Highest	3.6	0.5	95.7	1,275
Total	1.6	0.2	98.2	5,922

Table 3.9.2 Use of tobacco: Men

Percentage of men age 15-49 who smoke cigarettes or use other tobacco products and the percent distribution of cigarette smokers by number of cigarettes smoked in preceding 24 hours, according to background characteristics, Armenia 2010

Background characteristic	Uses tobacco: Cigarettes	Uses tobacco: Other tobacco	Does not use tobacco	Number of men	Number of cigarettes in the past 24 hours: 1-2	3-5	6-9	10+	Don't know/ missing	Total	Number of cigarette smokers
Age											
15-19	15.5	0.0	84.0	229	(5.1)	(19.1)	(2.0)	(73.9)	0.0	100.0	36
20-24	59.9	0.7	40.0	298	0.0	3.4	2.4	94.2	0.0	100.0	179
25-29	72.2	1.5	27.8	285	0.0	5.0	0.6	93.4	1.0	100.0	206
30-34	74.7	0.0	25.3	229	0.0	1.2	0.0	98.7	0.1	100.0	171
35-39	74.7	1.9	25.3	162	0.0	2.0	0.6	97.4	0.0	100.0	121
40-44	73.0	1.5	26.5	164	0.0	0.8	0.0	99.2	0.0	100.0	119
45-49	76.3	2.1	23.7	217	0.5	0.5	0.2	98.7	0.1	100.0	166
Residence											
Urban	64.2	1.2	35.7	984	0.4	4.5	0.5	94.6	0.1	100.0	632
Rural	60.9	0.8	38.9	600	0.0	0.3	1.2	98.0	0.5	100.0	366
Region											
Yerevan	65.4	1.1	34.6	593	0.5	5.9	0.0	93.7	0.0	100.0	388
Aragatsotn	61.4	0.0	37.2	70	0.0	0.3	3.1	96.2	0.4	100.0	43
Ararat	57.7	0.0	42.3	125	0.0	0.0	0.4	96.9	2.7	100.0	72
Armavir	53.3	0.0	46.4	148	0.0	2.5	1.6	95.9	0.0	100.0	79
Gegharkunik	57.1	1.7	42.9	83	0.0	1.9	0.4	97.7	0.0	100.0	48
Lori	69.5	1.5	29.9	130	0.0	0.0	0.0	100.0	0.0	100.0	90
Kotayk	70.4	3.0	29.6	148	0.8	2.4	2.7	94.1	0.0	100.0	104
Shirak	56.5	1.3	43.5	131	0.0	0.0	1.2	98.8	0.0	100.0	74
Syunik	67.0	0.0	33.0	63	0.0	0.0	1.3	98.7	0.0	100.0	42
Vayots Dzor	61.3	0.0	38.7	24	0.0	7.1	0.0	91.5	1.4	100.0	15
Tavush	61.8	0.0	38.2	68	0.0	0.0	0.0	100.0	0.0	100.0	42
Education											
Basic	55.3	0.0	44.7	188	0.0	1.9	1.1	96.9	0.0	100.0	104
Secondary	67.4	0.3	32.5	619	0.6	2.6	1.0	95.2	0.5	100.0	417
Secondary special	69.1	1.4	30.8	301	0.0	0.6	0.3	99.1	0.1	100.0	208
Higher	56.4	2.2	43.4	477	0.0	5.7	0.4	93.8	0.1	100.0	269
Wealth quintile											
Lowest	55.8	0.3	44.0	332	0.0	0.6	1.3	98.1	0.0	100.0	185
Second	67.5	1.1	32.5	285	0.4	0.3	1.5	96.8	1.0	100.0	192
Middle	63.6	0.8	36.4	312	0.0	3.5	0.4	96.2	0.0	100.0	199
Fourth	62.8	1.6	37.0	332	0.0	4.8	0.6	94.4	0.2	100.0	209
Highest	66.0	1.4	33.9	323	0.8	5.2	0.0	94.0	0.0	100.0	213
Total	63.0	1.0	36.9	1,584	0.3	2.9	0.7	95.8	0.2	100.0	997

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

MARRIAGE AND SEXUAL ACTIVITY 4

This chapter presents 2010 ADHS data on marriage and sexual activity. If couples have the biological capacity to reproduce, the social environment in which they live largely determines whether they will have children and, if so, how many and how often. In Armenia, sexual activity usually takes place within marriage; therefore, marriage is a primary indicator of a woman's sustained exposure to the risk of pregnancy. More direct measures of exposure are age at first sexual intercourse and the frequency of intercourse. Although postpartum amenorrhea, abstinence, and menopause also influence fertility, their impact is reviewed in the next chapter. None of these determining factors are independent; they interact and influence each other to affect fertility levels and trends. Their contribution varies from person to person, from region to region, and from time to time.

4.1 MARITAL STATUS

Table 4.1 shows the percent distribution of all women and men age 15-49 by current marital status at the time of the survey, according to age. The term "married" refers to legal or formal marriages (civil or religious), while "living together" refers to informal unions. In subsequent tables, these two categories are merged and referred to collectively as "currently married." Persons who are widowed, divorced, or separated are considered to be "formerly married." According to the 2010 ADHS, three-fifths of women (61 percent) and more than half of men (54 percent) are married or living together. Four percent of women and 1 percent of men are either divorced or separated, while nearly 3 percent of women are widowed.

Table 4.1 Current marital status

Percent distribution of women and men age 15-49 by current marital status, according to age, Armenia 2010

Age	Marital status						Total	Percentage of respondents currently in union	Number of respondents
	Never married	Married	Living together	Divorced	Separated	Widowed			
				WOMEN					
15-19	91.7	7.9	0.0	0.3	0.2	0.0	100.0	7.9	861
20-24	55.4	43.3	0.3	0.8	0.1	0.0	100.0	43.6	1,032
25-29	29.0	67.0	0.5	2.6	0.4	0.5	100.0	67.5	950
30-34	16.3	76.7	0.8	4.1	0.8	1.2	100.0	77.5	838
35-39	8.8	79.2	1.1	6.8	0.4	3.6	100.0	80.3	643
40-44	5.8	82.0	0.6	7.0	0.2	4.4	100.0	82.7	742
45-49	4.4	80.0	0.3	6.2	0.0	9.1	100.0	80.2	857
Total	32.3	60.7	0.5	3.7	0.3	2.5	100.0	61.2	5,922
				MEN					
15-19	99.0	0.0	1.0	0.0	0.0	0.0	100.0	1.0	229
20-24	86.0	13.2	0.8	0.0	0.0	0.0	100.0	14.0	298
25-29	47.9	47.3	3.8	1.0	0.0	0.0	100.0	51.1	285
30-34	24.7	71.3	2.1	1.0	0.9	0.0	100.0	73.4	229
35-39	7.7	88.4	2.5	1.3	0.0	0.0	100.0	90.9	162
40-44	5.3	87.2	4.5	2.5	0.5	0.0	100.0	91.7	164
45-49	4.4	85.4	6.5	2.2	0.0	1.4	100.0	92.0	217
Total	44.7	51.1	2.9	1.0	0.2	0.2	100.0	54.0	1,584

The proportion of women currently married increases with age, up to age 40-44, and then declines among the oldest women. Among women age 45-49, only 4 percent have never married, 80 percent are married or cohabiting with a man, and 15 percent are formerly married. The main reason for marital disruption among this age group is widowhood (9 percent).

Men, in comparison with women, are more likely to have never married (45 percent of men and 32 percent of women). This difference is largely explained by the tendency of men to marry at later ages. For example, 44 percent of women between the ages of 20 and 24 are in union compared with 14 percent of men of the same age.

Compared with the results of the 2000 ADHS, the proportion of married women has changed little over the last 10 years (64 percent in 2000 and 61 percent in 2010), while the proportion of married men has declined considerably (68 percent in 2000 and 54 percent in 2010). There are few, if any, differences in marital status between the 2005 ADHS and 2010 ADHS.

4.2 Age at First Marriage and Sexual Intercourse

Marriage is an important demographic and social indicator; it generally marks the point in a person's life when parenthood becomes socially acceptable. Information on age at first marriage was obtained by asking all ever-married respondents the month and year they started living together with their first spouse.

Age at First Marriage

The 2010 ADHS results indicate that among all women age 25-49, the median age at first marriage was 21.1 years. Table 4.2 indicates that 38 percent of women have married by age 20 and 75 percent of women have married by age 25. The median age at first marriage appears to be increasing among younger women as those age 25-29 report a median age of 22.7 while women age 45-49 report a median age of 20.7 years.

Table 4.2 Age at first marriage

Percentage of women and men age 15-49 who were first married by specific exact ages, percentage never married, and median age at first marriage, according to current age, Armenia 2010

	Percentage first married by exact age:					Percentage never married	Number of respondents	Median age at first marriage
Current age	15	18	20	22	25			
				WOMEN				
15-19	0.0	na	na	na	na	91.7	861	a
20-24	0.0	7.2	22.9	na	na	55.4	1,032	a
25-29	0.7	9.4	26.9	45.1	65.6	29.0	950	22.7
30-34	1.5	19.1	37.6	57.0	72.7	16.3	838	21.2
35-39	0.8	23.9	47.3	61.6	78.2	8.8	643	20.3
40-44	0.3	16.8	44.7	66.0	81.0	5.8	742	20.5
45-49	0.2	13.8	39.0	62.8	81.7	4.4	857	20.7
25-49	0.7	16.0	38.2	57.8	75.3	13.7	4,029	21.1
				MEN				
15-19	0.0	na	na	na	na	99.0	229	a
20-24	0.0	0.0	1.1	na	na	86.0	298	a
25-29	0.0	0.3	2.6	13.3	39.2	47.9	285	a
30-34	0.0	1.4	4.4	18.0	38.9	24.7	229	26.4
35-39	0.0	0.2	4.4	16.4	46.5	7.7	162	25.4
40-44	0.0	0.8	3.9	21.7	44.1	5.3	164	25.9
45-49	0.0	0.6	4.0	19.5	47.4	4.4	217	25.4
25-49	0.0	0.7	3.8	17.4	42.7	21.2	1,057	a

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

Unlike women, very few men age 25-49 are married by age 20 (4 percent), and 43 percent are married by age 25. As with women, the median age at first marriage is increasing among younger men: men age 30-34 report a median age of 26.4 years compared with 25.9 years among men age 40-44 and 25.4 years among men age 45-49. The median age at first marriage for men age 25-49 is not available because less than 50 percent of men began living with their spouse/partner for the first time before reaching the beginning of the age group. Among all men age 30-49, the median age at first marriage was 25.8 years (Table 4.3).

The median age at first marriage among women age 25-49 and men age 30-49, by background characteristics, is shown in Table 4.3. The median age at first marriage is lower among women in rural areas than among those in urban areas. Regional differentials show that the Yerevan region has the highest median age at first marriage (22.8 years) among women age 25-49, while the Gegharkunik region has the lowest median age at first marriage (19.5 years). The median age at first marriage increases steadily with increasing education from 18.5 years among women with a basic education to 24.0 years among women with higher education. Similarly, women in households in the lower wealth quintiles are likely to marry earlier than women in the higher wealth quintiles. There has been a small increase in age at first marriage among women age 25-49 over the past decade (21.1 years in 2010 versus 20.7 years in 2005 and 20.5 years in 2000).

Table 4.3 Median age at first marriage by background characteristics

Median age at first marriage among women age 25-49, and median age at first marriage among men age 30-49, according to background characteristics, Armenia 2010

Background characteristic	Women age 25-49	Men age 30-49
Residence		
Urban	22.0	26.3
Rural	20.0	24.9
Region		
Yerevan	22.8	27.2
Aragatsotn	20.4	25.9
Ararat	21.2	25.0
Armavir	19.9	24.7
Gegharkunik	19.5	25.1
Lori	20.7	25.3
Kotayk	20.7	24.7
Shirak	20.4	26.0
Syunik	20.9	25.9
Vayots Dzor	20.0	24.5
Tavush	20.2	24.9
Education		
Basic	18.5	24.3
Secondary	19.5	25.4
Secondary special	21.1	25.1
Higher	24.0	27.4
Wealth quintile		
Lowest	20.1	25.5
Second	20.0	24.7
Middle	21.2	27.4
Fourth	21.7	25.7
Highest	22.6	25.9
Total	21.1	25.8

Note: The age at first marriage is defined as the age at which the respondent began living with her/his first spouse/partner.

Table 4.3 also shows the median age at first marriage for men age 30-49. Data are not shown for men age 25-49 as less than 50 percent of men began living with their spouse/partner for the first time before reaching the beginning of the age group. Similar to women, men in urban areas get married at a later age than men in rural areas. The median age at first marriage among men with higher education is three years older than for men with only basic education. The median age at first marriage for men varies considerably by region, from 24.5 in Vayots Dzor to 27.2 in Yerevan. There has been little change in age at first marriage among men age 30-49 over time (25.8 years in 2010 versus 25.5 years in 2005).

Age at First Sexual Intercourse

Age at first marriage is sometimes seen as a proxy for a woman's first exposure to intercourse, but the two events need not occur at the same time. Because women and men may engage in sexual relations prior to marriage, age at first sexual intercourse is a more reliable indicator of a woman's exposure to the risk of pregnancy than age at first marriage. In the 2010 ADHS, women and men were asked how old they were when they first had sexual intercourse. Table 4.4 shows the median age at first sexual intercourse by specific exact ages.

Overall, the 2010 ADHS results indicate that among Armenian women, age at first marriage and age at first intercourse correspond almost exactly. Tables 4.2 and 4.4 indicate that virtually the same proportion of women age 25-49 report that by age 20 they had married (38 percent) as had

sexual intercourse (39 percent). By age 25, 75 percent of women have married and the same proportion has had sexual intercourse. This relationship is observed among women of all ages. The median age at first intercourse is increasing among younger women (age 25-29); the same pattern as seen with the median age at first marriage. Women age 45-49 report a median age at first intercourse of 20.7 years, which has increased to 22.7 years among women age 25-29. Among all women age 25-49, the median age at both first marriage and first intercourse was 21.1 years.

Unlike women, it is common for Armenian men to report having sexual intercourse before marriage. For example, although very few men age 25-49 are married by age 20 (just 4 percent), nearly half (47 percent) have had sexual intercourse by the same age. The median age at first intercourse among men age 30-34 is almost six years younger than the median age at first marriage for the same age group (20.5 versus 26.4). The same is true for men age 30-49 whose median age at first sexual intercourse is 20.1 years (data not shown separately); the median age at marriage for the same age group is 25.8 years (Table 4.3).

There has been a small increase in the age at first intercourse among both female and male respondents age 25-49 over the past five years (21.1 years in 2010 versus 20.7 years in 2005 for women age 25-49; and 20.2 years in 2010 versus 19.8 years in 2005 among men age 25-49).

Table 4.4 Age at first sexual intercourse

Percentage of women and men age 15-49 who had first sexual intercourse by specific exact ages, percentage who never had intercourse, and median age at first intercourse, according to current age, Armenia 2010

Current age	Percentage who had first sexual intercourse by exact age: 15	18	20	22	25	Percentage who never had intercourse	Number	Median age at first intercourse
				WOMEN				
15-19	0.0	na	na	na	na	91.6	861	a
20-24	0.0	7.2	23.1	na	na	55.4	1,032	a
25-29	0.7	10.1	27.2	45.9	65.2	28.7	950	22.7
30-34	1.4	19.2	38.2	56.8	72.4	16.3	838	21.2
35-39	0.8	24.4	47.4	61.4	78.3	8.5	643	20.3
40-44	0.3	16.4	44.2	65.2	80.1	5.6	742	20.5
45-49	0.2	14.3	40.1	63.5	81.5	4.2	857	20.7
25-49	0.7	16.3	38.6	57.9	75.0	13.4	4,029	21.1
15-24	0.0	na	na	na	na	71.9	1,893	a
				MEN				
15-19	0.4	na	na	na	na	79.6	229	a
20-24	0.7	22.7	53.0	na	na	26.8	298	19.7
25-29	0.2	20.0	42.9	69.5	87.5	9.4	285	20.4
30-34	0.3	23.5	45.4	65.4	85.8	1.1	229	20.5
35-39	0.0	35.0	58.4	74.9	92.6	0.3	162	18.8
40-44	0.9	16.5	47.1	67.6	85.9	0.3	164	20.3
45-49	0.3	21.4	46.6	68.5	86.9	0.3	217	20.2
25-49	0.3	22.8	47.2	69.0	87.5	2.9	1,057	20.2
15-24	0.6	na	na	na	na	49.7	527	a

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

Table 4.5 shows the median age at first sexual intercourse for women and men age 25-49 by current age and background characteristics. Median age at first intercourse is higher among urban women than rural women. There is an apparent relationship between levels of education and wealth and age at first intercourse; for example, the median age at first sex increases with increasing education, from 18.5 years among women with only basic education to 24.0 years among women with higher education. Median age at first intercourse varies by region. The highest median age for women is in Yerevan (22.7 years), and the lowest is in Gegharkunik (19.5 years).

In contrast with women, the median age at first intercourse is lower among men in urban areas than among those in rural areas and decreases with increasing wealth and education. For example, the median age of first intercourse among the most educated men is nearly three years younger than among men with only basic education. Regional differences are also reported. The median age of first intercourse among men in the Lori and Yerevan regions is about 6 years younger than for men in Ararat and Vayots Dzor.

Table 4.5 Median age at first intercourse by background characteristics

Median age at first sexual intercourse among women and men age 25-49, according to background characteristics, Armenia 2010

Background characteristic	Women age 25-49	Men age 25-49
Residence		
Urban	21.9	19.2
Rural	20.0	21.8
Region		
Yerevan	22.7	18.6
Aragatsotn	20.5	a
Ararat	21.2	24.2
Armavir	19.9	21.0
Gegharkunik	19.5	21.2
Lori	20.7	18.4
Kotayk	20.7	20.5
Shirak	20.4	21.7
Syunik	20.9	20.9
Vayots Dzor	20.0	24.5
Tavush	20.3	23.0
Education		
Basic	18.5	21.7
Secondary	19.5	20.7
Secondary special	21.1	20.4
Higher	24.0	18.8
Wealth quintile		
Lowest	20.1	22.2
Second	20.0	21.6
Middle	21.2	19.7
Fourth	21.6	19.2
Highest	22.6	18.8
Total	21.1	20.2

a = Omitted because less than 50 percent of the respondents had intercourse for the first time before reaching the beginning of the age group

4.3 RECENT SEXUAL ACTIVITY

In the absence of contraceptive use, frequency of sexual intercourse is a direct determinant of pregnancy; therefore, knowledge of frequency is a useful indicator of exposure to pregnancy. The 2010 ADHS asked women and men the timing of their last sexual intercourse. Tables 4.6.1 and 4.6.2 show the percent distribution of women and men age 15-49 by how long ago their last sexual intercourse occurred. Respondents were considered to be sexually active if they had sexual intercourse at least once in the four weeks prior to the survey.

In the four weeks preceding the survey, slightly over half of women were sexually active (52 percent). Eight percent of women had sexual intercourse in the year preceding the survey, but not in the month before the survey, and another 8 percent reported sexual intercourse more than a year before. Among married women, the lack of recent sexual activity may be attributed to the fact that approximately 12 percent of married women reported that their husbands were residing elsewhere (data not shown). At the time of the survey, 32 percent of all female respondents had never had sexual intercourse.

Table 4.6.1 Recent sexual activity: Women

Percent distribution of women age 15-49 by timing of last sexual intercourse, according to background characteristics, Armenia 2010

Background characteristic	Timing of last sexual intercourse: Within the past 4 weeks	Within 1 year[1]	One or more years	Missing	Never had sexual intercourse	Total	Number of women
Age							
15-19	7.2	0.9	0.2	0.0	91.6	100.0	861
20-24	36.0	7.1	1.3	0.1	55.4	100.0	1,032
25-29	59.8	6.7	4.3	0.5	28.7	100.0	950
30-34	68.0	8.9	6.6	0.2	16.3	100.0	838
35-39	69.2	9.1	12.8	0.3	8.5	100.0	643
40-44	66.5	12.4	15.4	0.1	5.6	100.0	742
45-49	64.1	14.3	17.0	0.4	4.2	100.0	857
Marital status							
Never married	0.1	0.1	0.1	0.1	99.5	100.0	1,911
Married or living together	83.8	12.9	3.2	0.2	0.0	100.0	3,626
Divorced/separated/widowed	4.5	6.5	87.7	1.3	0.0	100.0	385
Marital duration[2]							
0-4 years	85.2	13.7	0.9	0.1	0.0	100.0	714
5-9 years	88.4	8.4	2.8	0.4	0.0	100.0	630
10-14 years	86.5	11.2	2.2	0.2	0.0	100.0	522
15-19 years	87.1	10.6	1.8	0.4	0.0	100.0	519
20-24 years	78.6	15.1	6.3	0.1	0.0	100.0	659
25+ years	77.3	17.8	4.9	0.0	0.0	100.0	550
Married more than once	(81.7)	(14.9)	(3.4)	(0.0)	(0.0)	100.0	32
Employment abroad (past 3 years)[3]							
Worked abroad	48.0	18.5	9.7	0.0	23.7	100.0	165
Did not work abroad	51.7	8.0	7.6	0.2	32.4	100.0	5,755
Missing	*	*	*	*	*	100.0	2
Spousal employment abroad reported by ever-married women[4]							
Woman worked abroad herself	(85.9)	(7.0)	(7.1)	(0.0)	(0.0)	100.0	39
Husband worked abroad[2]	41.9	36.9	20.8	0.4	0.0	100.0	826
Both worked abroad	52.6	32.1	15.3	0.0	0.0	100.0	87
None worked abroad	86.1	5.1	8.5	0.3	0.0	100.0	3,045
Missing	*	*	*	*	*	100.0	14
Residence							
Urban	50.8	6.3	8.5	0.2	34.2	100.0	3,641
Rural	52.9	11.6	6.3	0.3	28.9	100.0	2,281
Region							
Yerevan	49.6	4.9	8.0	0.2	37.3	100.0	2,069
Aragatsotn	52.4	5.5	8.3	0.0	33.7	100.0	260
Ararat	56.3	3.5	6.1	1.4	32.7	100.0	379
Armavir	57.4	10.3	8.2	0.1	24.1	100.0	535
Gegharkunik	46.3	17.3	5.6	0.3	30.5	100.0	459
Lori	52.4	9.0	8.3	0.0	30.4	100.0	513
Kotayk	55.3	6.4	8.6	0.2	29.6	100.0	543
Shirak	43.3	18.5	7.8	0.2	30.1	100.0	598
Syunik	65.7	2.5	6.0	0.0	25.8	100.0	198
Vayots Dzor	53.4	10.5	9.9	0.0	26.2	100.0	131
Tavush	57.0	8.2	5.3	0.7	28.7	100.0	238
Education							
Basic	33.3	5.8	12.8	0.1	47.9	100.0	347
Secondary	57.2	11.7	8.0	0.3	22.8	100.0	2,137
Secondary special	58.8	8.6	8.7	0.2	23.5	100.0	1,681
Higher	41.7	4.5	5.2	0.2	48.5	100.0	1,757
Wealth quintile							
Lowest	52.4	9.8	8.3	0.4	29.1	100.0	1,151
Second	48.3	11.2	8.9	0.4	31.3	100.0	1,211
Middle	52.8	10.3	8.2	0.0	28.7	100.0	1,139
Fourth	51.9	6.8	7.0	0.2	34.1	100.0	1,146
Highest	52.9	3.9	6.1	0.2	37.0	100.0	1,275
Total	51.6	8.3	7.7	0.2	32.1	100.0	5,922

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] Excludes women who had sexual intercourse within the past four weeks

[2] Excludes women who are not currently married

[3] "Employment abroad" refers to working abroad during the past three years before the survey for three or more months at a time.

[4] In the 2010 ADHS, information on husband's employment abroad was collected from ever-married women age 15-49. Men in the 2010 ADHS were not asked about their wives' employment outside the country.

The proportion of women who were recently sexually active increases with age to peak at 69 percent among women age 35-39 and then declines to 64 percent among women age 45-49. Only 7 percent of women age 15-19 reported recent sexual activity; the majority (92 percent) have never had sexual intercourse. As previously noted, virtually no women reported sexual activity outside of marriage: nearly all never-married women reported that they had never had intercourse.

All women and men age 15-49 in the 2010 ADHS were asked whether they had worked abroad during the three years preceding the survey for three or more months at a time. Women who worked abroad are slightly less likely to be sexually active than women who did not work abroad (48 percent and 52 percent, respectively), but are more likely to have had sexual intercourse in the past year, although not in the previous four weeks (19 percent and 8 percent, respectively).

All currently married and formerly married women age 15-49 in the 2010 ADHS were asked whether their husbands had worked abroad during the three years preceding the survey for three or more months at a time.[1] Recent sexual activity is less prevalent among women who reported that their spouse had been employed abroad. Forty-two percent of women whose husbands were employed abroad are sexually active, 37 percent had reported that their last sexual intercourse had occurred in the past year but not in the previous four weeks, and 21 percent reported that their last sexual intercourse occurred one or more years preceding the survey.

Women with only basic education are less likely to be sexually active (33 percent) than women with secondary or specialized secondary education (57 and 59 percent, respectively). There are differences in recent sexual activity by region. Less than half of women in Gegharkunik and Shirak had sexual intercourse during the four weeks preceding the survey, compared with two-thirds of women in Syunik.

Overall, men are more likely to have had recent sexual intercourse than women (Table 4.6.2). Sixty-eight percent had sexual intercourse in the four weeks preceding the survey, 11 percent had sexual intercourse in the past year but not in the previous four weeks, 2 percent had sex one or more years ago, and 19 percent have never had sexual intercourse. Men's sexual activity increases with age. Among men age 35 and older, nine in ten had sex in the month preceding the interview, compared with about one in ten men (7 percent) age 15-19 and half of men age 20-24.

As is the case with women, men who are currently married or living with a woman are most likely to have had recent sexual intercourse: 95 percent compared with 36 percent of never married men. Recent sexual activity is more prevalent among men who were recently employed abroad (85 percent) compared with men who did not work abroad (66 percent). Variations in sexual activity are observed at the regional level. The proportion of men who had sex in the past four weeks ranges from 44 percent in Aragatsotn to 86 percent in Lori.

[1] The 2010 ADHS did not specify whether some of the husbands were abroad at the time of the interview.

Table 4.6.2 Recent sexual activity: Men

Percent distribution of men age 15-49 by timing of last sexual intercourse, according to background characteristics, Armenia 2010

Background characteristic	Timing of last sexual intercourse: Within the past 4 weeks	Within 1 year[1]	One or more years	Missing	Never had sexual intercourse	Total	Number of men
Age							
15-19	7.4	10.4	2.6	0.0	79.6	100.0	229
20-24	50.2	19.7	3.3	0.0	26.8	100.0	298
25-29	74.8	12.9	2.6	0.4	9.4	100.0	285
30-34	83.8	13.6	1.5	0.0	1.1	100.0	229
35-39	93.1	5.4	0.8	0.4	0.3	100.0	162
40-44	95.8	3.4	0.4	0.0	0.3	100.0	164
45-49	90.4	5.1	3.9	0.3	0.3	100.0	217
Marital status							
Never married	35.7	18.5	4.4	0.0	41.4	100.0	707
Married or living together	94.8	4.5	0.4	0.3	0.0	100.0	855
Divorced/separated/widowed	(56.5)	(31.3)	(12.2)	(0.0)	(0.0)	100.0	22
Marital duration[2]							
0-4 years	91.7	7.7	0.0	0.6	0.0	100.0	201
5-9 years	95.3	4.4	0.0	0.3	0.0	100.0	184
10-14 years	93.9	5.3	0.8	0.0	0.0	100.0	146
15-19 years	98.2	1.8	0.0	0.0	0.0	100.0	133
20-24 years	96.8	1.7	1.6	0.0	0.0	100.0	129
25+ years	93.0	5.5	0.0	1.5	0.0	100.0	47
Married more than once	*	*	*	*	*	100.0	15
Employment abroad (past 3 years)[3]							
Worked abroad	85.3	11.3	2.1	0.3	0.9	100.0	181
Did not work abroad	65.7	11.1	2.4	0.1	20.7	100.0	1,395
Missing	*	*	*	*	*	100.0	7
Residence							
Urban	72.8	12.1	1.8	0.1	13.1	100.0	984
Rural	59.8	9.4	3.2	0.2	27.3	100.0	600
Region							
Yerevan	74.6	15.1	1.1	0.0	9.2	100.0	593
Aragatsotn	44.2	2.7	3.1	0.0	49.9	100.0	70
Ararat	59.1	1.7	0.5	0.0	38.7	100.0	125
Armavir	60.2	22.4	1.0	0.0	16.5	100.0	148
Gegharkunik	69.9	11.8	1.3	0.0	17.0	100.0	83
Lori	86.0	0.0	0.0	0.0	14.0	100.0	130
Kotayk	69.6	9.9	4.4	1.5	14.6	100.0	148
Shirak	58.6	4.8	9.6	0.0	27.0	100.0	131
Syunik	65.1	8.8	2.5	0.0	23.6	100.0	63
Vayots Dzor	51.9	6.8	6.0	0.6	34.7	100.0	24
Tavush	52.2	16.5	4.2	0.0	27.1	100.0	68
Education							
Basic	50.0	11.0	2.8	0.0	36.2	100.0	188
Secondary	66.1	9.0	2.7	0.2	21.9	100.0	619
Secondary special	75.0	12.1	2.9	0.4	9.7	100.0	301
Higher	72.8	13.2	1.3	0.0	12.7	100.0	477
Wealth quintile							
Lowest	56.8	11.2	2.8	0.3	28.9	100.0	332
Second	66.0	7.6	3.3	0.0	23.1	100.0	285
Middle	68.4	11.8	4.4	0.2	15.2	100.0	312
Fourth	75.5	10.5	1.1	0.2	12.6	100.0	332
Highest	72.7	14.1	0.2	0.0	13.0	100.0	323
Total 15-49	67.9	11.1	2.3	0.2	18.5	100.0	1,584

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] Excludes men who had sexual intercourse within the past 4 weeks

[2] Excludes men who are not currently married

[3] "Employment abroad" refers to working abroad during the past three years before the survey for three or more months at a time.

FERTILITY 5

Fertility is one of the three principal components of population dynamics, the others being mortality and migration. This chapter looks at a number of fertility indicators, including levels, patterns, and trends in current and cumulative fertility; children ever born and living; the length of birth intervals; the age at which women initiate childbearing; and teenage fertility. Postpartum amenorrhea, abstinence from sexual relations, and menopause are also presented in this chapter. Postpartum amenorrhea and sexual abstinence affect the duration of a woman's insusceptibility to pregnancy, which in turn affects birth spacing. Menopause is important because it marks the end of a woman's period of exposure to the risk of pregnancy.

All women who were interviewed in the 2010 ADHS were asked to give a complete reproductive history. In collecting these histories, each woman was first asked about the total numbers of pregnancies that had ended in live births, induced abortions, miscarriages, and stillbirths. After obtaining these aggregate data, an event-by-event pregnancy history was collected. For each pregnancy, the month and year in which the pregnancy ended and the result of the pregnancy were recorded. Information was collected about the most recently completed pregnancy, the next-to-last pregnancy, and so on. For each live birth, information was collected on the sex of the child, its survival status, and its current age (for surviving children) or age at death (for deceased children). In addition, the duration was recorded for each pregnancy ending during the five-year period preceding the survey.

5.1 CURRENT FERTILITY

The data collected in the pregnancy history were used to calculate two of the most widely used measures of current fertility: the total fertility rate (TFR) and its component, age-specific fertility rates. The TFR is interpreted as the number of children the average woman would bear in her lifetime if she experienced the currently observed age-specific fertility rates throughout her reproductive years. The fertility rates refer to the three-year period before the survey (i.e., approximately from November 2007 to November 2010).

Table 5.1 Current fertility

Age-specific and total fertility rates, the general fertility rate, and the crude birth rate for the three years preceding the survey, by residence, Armenia 2010

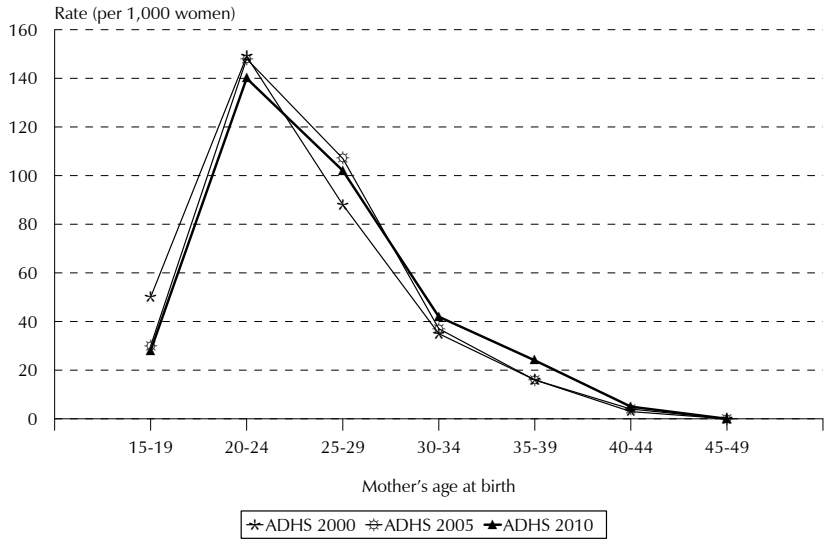
	Residence		
Age group	Urban	Rural	Total
15-19	18	42	28
20-24	124	163	140
25-29	99	108	102
30-34	43	40	42
35-39	31	12	24
40-44	6	3	5
45-49	0	0	0
TFR(15-49)	1.6	1.8	1.7
GFR	57	68	61
CBR	12.8	16.2	14.0

Note: Age-specific fertility rates are per 1,000 women. Rates for age group 45-49 may be slightly biased due to truncation. Rates are for the period 1-36 months prior to interview.
TFR: Total fertility rate expressed per woman
GFR: General fertility rate expressed per 1,000 women age 15-44
CBR: Crude birth rate expressed per 1,000 population

According to the results of the 2010 ADHS, the TFR is 1.7 children per woman (Table 5.1). This is below replacement-level fertility, which is slightly more than 2.0 children per woman. The 2010 ADHS TFR is the same as the TFR estimated by the 2000 ADHS and also the 2005 ADHS. Thus, there is no evidence of change in the overall level of fertility in Armenia over the past decade.

The data, however, reveal some change in urban-rural differentials. Although the urban TFR has not significantly changed since 2000 (1.5 in 2000 versus 1.6 in 2005 and in 2010), there is some evidence of a decline in TFR in rural areas (from 2.1 in 2000 to 1.8 in 2005 and in 2010). Overall, the pattern of age-specific fertility rates for the three-year period preceding the survey has not changed since 2000, although there has been a shift away from childbearing at the youngest ages (15-19) to older ages, particularly the late twenties (Figure 5.1). In fact, fertility rates in these age groups (20-24 and 25-29) account for more than 70 percent of the total fertility rate.

Figure 5.1 Trends in Age-Specific Fertility Rates, Armenia 2000, 2005, and 2010



5.2 FERTILITY DIFFERENTIALS BY BACKGROUND CHARACTERISTICS

Table 5.2 shows the total fertility rates by background characteristics. Albeit not strong, a negative association between education and fertility does exist. Women who have higher than secondary education have fewer children than women with less education (TFR of 1.4 versus 1.8 or 1.9).

At 1.5 births per woman, the TFR in Yerevan is the lowest in Armenia. Variation in TFR among other regions ranges from 1.6 births per woman in Lori and Ararat to 2.0 births in Kotayk, Syunik, and Tavush. Undoubtedly, some of these differences are caused by sampling variability, which is quite large because of the small number of respondents in each region (see Appendix B).

Three percent of women reported being pregnant at the time of the survey, with small differences across subgroups of women.

The last column in Table 5.2 shows the mean number of children ever born to women age 40-49. This is an indicator of cumulative fertility; it reflects the fertility performance of older women who are nearing the end of their reproductive period and thus represents completed fertility. If fertility had remained stable over time, the two fertility measures, TFR and children ever born, would be equal or similar. The findings show that the mean number of children

Table 5.2 Fertility by background characteristics

Total fertility rate for the three years preceding the survey, percentage of women age 15-49 currently pregnant, and mean number of children ever born to women age 40-49, by background characteristics, Armenia 2010

Background characteristic	Total fertility rate	Percentage of women age 15-49 currently pregnant	Mean number of children ever born to women age 40-49
Residence			
Urban	1.6	3.1	2.1
Rural	1.8	2.8	2.7
Region			
Yerevan	1.5	3.5	1.9
Aragatsotn	1.9	1.6	2.6
Ararat	1.6	2.8	2.2
Armavir	1.8	3.1	2.6
Gegharkunik	1.8	2.3	2.8
Lori	1.6	2.1	2.2
Kotayk	2.0	3.8	2.6
Shirak	1.8	2.9	2.6
Syunik	2.0	4.4	2.5
Vayots Dzor	1.8	2.1	2.7
Tavush	2.0	1.8	2.7
Education			
Basic	1.8	1.5	2.8
Secondary	1.9	2.5	2.6
Secondary special	1.9	3.6	2.4
Higher	1.4	3.4	1.8
Wealth quintile			
Lowest	1.8	2.6	2.7
Second	1.8	2.5	2.6
Middle	1.6	3.6	2.3
Fourth	1.8	2.9	2.1
Highest	1.5	3.5	2.0
Total	1.7	3.0	2.4

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

ever born to women age 40-49 (2.4 children per woman) is higher than the TFR for the three years preceding the survey (1.7 children per woman), indicating a decline in fertility over the past 30 years. The decline in fertility implied by a comparison of the TFR with children ever born to women age 40-49 appears to have been shared by all subgroups but is particularly evident among rural women, residents of Gegharkunik and Vayots Dzor, and those with lowest educational attainment and wealth quintile. For these women, the difference between the TFR and completed fertility is 0.9 to 1 child per woman.

5.3 FERTILITY TRENDS

One of the most important and complex issues for Armenia is the decline in fertility. One method of understanding fertility trends is to examine the age-specific fertility rates over time. Because women age 50 and older were not interviewed in the survey, the rates are successively truncated as the number of years before the survey increases (Table 5.3). Data in this table indicate that fertility has declined in the past 20 years. This decline is particularly evident among women in the 15-19 and 20-24 age groups. For example, age-specific fertility among women age 20-24 declined from 209 births per 1,000 women in the period 15 to 19 years before the survey to 138 births per 1,000 women in the period 0 to 4 years before the survey, a decrease of 34 percent. During the same period, age-specific fertility for women age 15-19 declined from 83 births per 1,000 women in the period 15 to 19 years before the survey to 28 births per 1,000 women in the period 0 to 4 years before the survey, a decrease of 66 percent.

Table 5.3 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, Armenia 2010

Mother's age at birth	Number of years preceding survey			
	0-4	5-9	10-14	15-19
15-19	28	29	55	83
20-24	138	146	178	209
25-29	95	94	91	114
30-34	40	39	50	[65]
35-39	17	13	[19]	
40-44	3	[6]		
45-49	[0]			

Note: Age-specific fertility rates are per 1,000 women. Estimates in brackets are truncated. Rates exclude the month of interview.

5.4 FERTILITY RATES FROM NSS AND THE ADHS

At the national level, the 2010 ADHS total fertility rate of 1.7 is slightly higher than the official government rate of 1.6 for 2010 (NSS, 2011d). There is an important difference in computation of these rates. Whereas the ADHS rates are based on information on live births collected from the complete pregnancy history of the de facto population of women (those who stayed the night before the interview in the household) for the three years preceding the survey, the official government annual rates are based on registered births of the de jure population of women (those who usually live in the household). Other factors that could contribute to the difference between fertility rates include sampling variability of the ADHS estimates and underreporting of births to the government registration system.

5.5 CHILDREN EVER BORN AND LIVING

Table 5.4 shows the distribution of all women and currently married women by number of children ever born. Data on the number of children ever born reflect the accumulation of births to women over their reproductive years and therefore have limited reference to current fertility levels, particularly when the country has experienced a decline in fertility.

On average, women in Armenia have given birth to 1.2 children by their late twenties. Through the oldest age group, the mean number of children ever born is 2.5. As expected, currently married women have had more births than all women in all age groups. Nevertheless, the mean number of children ever born does not exceed 3.0 for any age group. The largest difference between the data on children ever born for currently married women and all women is in the young age groups because a large number of unmarried young women are not exposed to the risk of pregnancy. Differences at older ages reflect the impact of marital dissolution (divorce or widowhood).

Table 5.4 Children ever born and living

Percent distribution of all women and currently married women age 15-49 by number of children ever born, mean number of children ever born, and mean number of living children, according to age group, Armenia 2010

Age	Number of children ever born							Total	Number of women	Mean number of children ever born	Mean number of living children
	0	1	2	3	4	5	6+				
ALL WOMEN											
15-19	96.5	3.4	0.0	0.0	0.1	0.0	0.0	100.0	861	0.04	0.04
20-24	67.4	20.8	10.6	1.2	0.0	0.0	0.0	100.0	1,032	0.46	0.45
25-29	35.6	18.4	39.5	5.7	0.4	0.2	0.1	100.0	950	1.18	1.16
30-34	20.1	13.2	48.2	15.7	2.1	0.5	0.1	100.0	838	1.69	1.65
35-39	12.0	10.8	43.4	25.8	6.5	1.2	0.3	100.0	643	2.10	2.01
40-44	8.7	10.1	44.4	26.6	8.2	1.2	0.8	100.0	742	2.22	2.13
45-49	6.1	7.9	40.6	30.2	11.2	2.9	1.1	100.0	857	2.47	2.33
Total	37.6	12.5	31.1	13.9	3.7	0.8	0.3	100.0	5,922	1.38	1.33
CURRENTLY MARRIED WOMEN											
15-19	57.7	41.4	0.0	0.0	0.9	0.0	0.0	100.0	68	0.45	0.45
20-24	26.7	46.2	24.3	2.8	0.0	0.0	0.0	100.0	450	1.03	1.01
25-29	8.3	24.4	57.7	8.5	0.7	0.3	0.2	100.0	641	1.71	1.68
30-34	3.5	13.4	60.1	19.5	2.7	0.7	0.1	100.0	650	2.07	2.03
35-39	2.6	9.5	48.6	30.4	7.3	1.3	0.4	100.0	517	2.36	2.26
40-44	1.9	7.2	48.6	30.5	9.7	1.4	0.6	100.0	613	2.46	2.35
45-49	0.8	6.6	43.0	34.2	11.2	3.0	1.2	100.0	687	2.64	2.51
Total	7.3	17.1	47.3	21.3	5.4	1.2	0.4	100.0	3,626	2.06	1.99

Among currently married women, 17 percent have had only one live-born child, 47 percent have had two children, and 21 percent have had three children. Seven percent of women have had four or more children. In total, only 1 percent of currently married women age 45-49 have never had a live birth. This is an indirect indicator of primary infertility. Voluntary childlessness is rare in Armenia, and most women desire to have at least one child, preferably soon after marriage.

5.6 BIRTH INTERVALS

A birth interval is defined as the length of time between two live births. Research has shown that short birth intervals may adversely affect maternal health and children's chances of survival. Children born too close to a previous birth, especially if the interval between the births is less than two years, are at increased risk of health problems and death at an early age. Longer birth intervals, on the other hand, contribute to the improved health status of both mother and child. Children born 24 to 35 months after a preceding birth are at increased risk of dying compared with children born 36 or more months after a preceding birth (Rutstein, 2005; WHO, 2006; Conde-Agudelo et al., 2006).

Table 5.5 shows the percent distribution of second and higher-order births in the five years prior to the survey by the number of months since the previous birth. The overall median birth interval is 37 months. This finding has not changed since 2005 and indicates that over half of all women are following the recommended birth interval of at least 36 months. Nonetheless, more than one-quarter of births (28 percent) occur within 24 months of the previous birth, and 12 percent of births occur within 18 months of a previous birth. Both of these figures, however, represent a decline since 2005 (the corresponding figures were 32 percent and 17 percent). At a regional level, the most marked improvement has occurred in Yerevan, where 23 percent of women in 2005 spaced their births less than 18 months apart compared with only 8 percent in 2010.

Table 5.5 Birth intervals

Percent distribution of non-first births in the five years preceding the survey by number of months since preceding birth and median number of months since preceding birth, according to background characteristics, Armenia 2010

Background characteristic	Months since preceding birth					Total	Number of non-first births	Median number of months since preceding birth
	7-17	18-23	24-35	36-47	48+			
Age								
15-19	*	*	*	*	*	100.0	2	*
20-29	15.7	21.7	28.2	18.3	16.1	100.0	485	29.0
30-39	3.4	5.8	7.0	12.9	70.8	100.0	256	65.6
40-49	*	*	*	*	*	100.0	21	*
Sex of preceding birth								
Male	12.0	15.1	22.3	16.9	33.6	100.0	387	36.5
Female	11.1	16.9	18.8	16.1	37.2	100.0	377	38.1
Survival of preceding birth								
Living	10.9	16.2	20.5	16.6	35.8	100.0	744	37.6
Dead	*	*	*	*	*	100.0	19	*
Birth order								
2-3	11.5	16.6	21.2	16.6	34.2	100.0	717	36.5
4-6	(10.6)	(4.9)	(8.1)	(16.4)	(60.0)	100.0	40	(68.3)
7+	*	*	*	*	*	100.0	7	*
Residence								
Urban	9.7	14.2	19.6	18.8	37.7	100.0	449	40.2
Rural	14.2	18.5	22.1	13.2	32.0	100.0	315	32.9
Region								
Yerevan	8.4	15.7	18.2	21.6	36.0	100.0	252	40.2
Aragatsotn	20.2	27.3	7.7	7.5	37.4	100.0	33	29.8
Ararat	3.1	26.9	17.1	14.3	38.6	100.0	55	39.1
Armavir	21.4	17.3	13.8	10.4	37.1	100.0	68	33.6
Gegharkunik	12.9	17.7	24.3	16.5	28.5	100.0	64	34.5
Lori	15.6	13.7	25.1	4.9	40.6	100.0	59	34.6
Kotayk	11.7	10.3	21.9	16.8	39.2	100.0	75	45.4
Shirak	15.0	12.6	33.0	11.6	27.8	100.0	80	34.2
Syunik	(4.5)	(15.9)	(24.1)	(23.5)	(32.1)	100.0	26	(39.7)
Vayots Dzor	5.9	11.9	17.1	36.4	28.6	100.0	20	42.1
Tavush	11.0	10.6	22.6	16.0	39.8	100.0	32	39.5
Education								
Basic	(27.5)	(17.1)	(6.7)	(13.0)	(35.6)	100.0	46	(31.6)
Secondary	12.7	18.5	20.6	18.0	30.4	100.0	316	34.9
Secondary special	9.3	15.7	21.0	16.2	37.8	100.0	241	39.6
Higher	8.2	11.2	24.1	15.0	41.5	100.0	161	41.7
Wealth quintile								
Lowest	20.7	24.6	16.1	10.5	28.1	100.0	162	26.8
Second	11.3	13.4	21.2	15.8	38.3	100.0	156	39.5
Middle	12.2	9.6	26.3	19.3	32.5	100.0	152	38.2
Fourth	8.0	13.1	22.7	16.9	39.3	100.0	155	40.7
Highest	4.3	19.1	16.6	20.7	39.2	100.0	139	39.8
Total	11.5	16.0	20.6	16.5	35.4	100.0	764	37.2

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

In general, younger women have shorter birth intervals than older women. Although 37 percent of women age 20-29 space their births less than 24 months apart, the corresponding statistic for women age 30-39 is 9 percent. There is a strong relationship between birth interval and education. Births to mothers with lower levels of education have shorter intervals than births to mothers who have attended secondary-special or higher education. For example, whereas 31 percent of births to mothers with secondary education occur less than 24 months after their older sibling, the corresponding statistic for women with higher education is only 19 percent.

Measured in terms of the median number of months between births, birth intervals also vary by selected background characteristics. Births to mothers in their twenties are closer to each other than births to mothers in their thirties; for example, the median birth interval for births to mothers age

20-29 (29.0 months) is more than twice as short as the median birth interval for births to mothers age 30-39 (65.6 months). Although there is no clear relationship between birth interval and wealth status, births to mothers in the lowest wealth quintile have the shortest interval between births. Birth interval is also related to residence. For example, the median birth interval in urban areas is 40.2 months compared with 32.9 months in rural areas. Birth intervals vary widely across regions, with the longest in Kotayk (45.4 months) and the shortest in Aragatsotn (less than 30 months).

5.7 POSTPARTUM AMENORRHEA, ABSTINENCE, AND INSUSCEPTIBILITY

Postpartum amenorrhea refers to the interval between childbirth and the return of menstruation. During this period, the risk of pregnancy declines. The duration of reduced risk of conception largely depends on two factors: the length and intensity of breastfeeding, which tends to suppress the resumption of ovulation, and the length of time before the resumption of sexual intercourse. Women who are either amenorrheic or abstaining (or both) are considered insusceptible to the risk of pregnancy.

Among births that occurred in the three years preceding the survey, the percentage of mothers who were postpartum amenorrheic, abstaining, or insusceptible at the time of the survey is shown in Table 5.6. At the time of the survey, 10 percent of women who had given birth during the three years preceding the survey were amenorrheic, and 5 percent were abstaining. Overall, 13 percent of these women were insusceptible to the risk of pregnancy.

Table 5.6 Postpartum amenorrhea, abstinence, and insusceptibility

Percentage of births in the three years preceding the survey for which mothers are postpartum amenorrheic, abstaining, and insusceptible, by number of months since birth, and median and mean durations, Armenia 2010

Months since birth	Percentage of births for which the mother is:			Number of births
	Amenorrheic	Abstaining	Insusceptible[1]	
< 2	(91.4)	(68.2)	(100.0)	26
2-3	74.7	20.7	75.2	54
4-5	24.5	5.1	27.4	56
6-7	(6.8)	(6.9)	(13.7)	42
8-9	2.7	4.3	7.0	56
10-11	6.0	7.5	13.5	59
12-13	3.6	3.3	7.0	60
14-15	1.3	2.9	4.2	43
16-17	0.0	0.0	0.0	68
18-19	2.8	1.9	4.7	60
20-21	(0.0)	(0.0)	(0.0)	44
22-23	(4.1)	(2.4)	(6.5)	52
24-25	0.0	0.0	0.0	56
26-27	0.0	4.4	4.4	55
28-29	(0.0)	(0.0)	(0.0)	43
30-31	(0.0)	(0.0)	(0.0)	56
32-33	0.0	0.0	0.0	46
34-35	(0.0)	(0.0)	(0.0)	41
Total	10.1	5.4	12.5	916
Median	3.2	(1.5)	3.5	na
Mean	4.7	3.0	5.5	na

Note: Estimates are based on status at the time of the survey. Figures in parentheses are based on 25-49 unweighted cases.
na = Not applicable
[1] Includes births for which mothers are either still amenorrheic or still abstaining (or both) following birth

During the first year after birth, there was a rapid decline in postpartum amenorrhea, from 75 percent during the first 2 to 3 months after birth to 25 percent of women 4 to 5 months after giving birth and to just 6 percent of women 10 to 11 months after birth. Postpartum abstinence declines rapidly after birth; only 21 percent of women are abstaining after 2 to 3 months and just 8 percent are abstaining after 10 to 11 months. Overall, the median duration of insusceptibility after birth is 4 months.

Because a few women in Armenia are amenorrheic or abstain for a very long time, the mean durations are higher than the median duration for amenorrhea, abstinence, and insusceptibility.

5.8 MENOPAUSE

For women age 30 and older, the risk of pregnancy declines as increasing proportions of women become menopausal. Although the onset of menopause is difficult to determine for an individual woman, methods are available for estimating the proportion of women who are menopausal for the population as a whole. Table 5.7 shows data on the percentage of women age 30 and older who are menopausal, that is, who are not pregnant or postpartum amenorrheic and who have not menstruated for six months or more in the period preceding the survey.

According to the 2010 ADHS, 9 percent of women age 30 to 49 are menopausal. The proportion of women who are menopausal increases with age, from less than 1 percent of women age 30-34 to 36 percent of women age 48-49.

Table 5.7 Menopause

Percentage of women age 30-49 who are menopausal, by age, Armenia 2010

Age	Percentage menopausal[1]	Number of women
30-34	0.6	838
35-39	2.6	643
40-41	4.9	272
42-43	7.1	307
44-45	8.6	334
46-47	17.4	338
48-49	35.9	348
Total	8.7	3,079

[1]Percentage of all women who are not pregnant and not postpartum amenorrheic whose last menstrual period occurred six or more months preceding the survey

5.9 AGE AT FIRST BIRTH

Age at first birth is an important determinant of fertility. It has significant demographic consequences for society as a whole, as well as for the health and welfare of mothers and children. Table 5.8 shows the percentages of women age 15-49 who have given birth by specific exact ages, according to current age. Median age at first birth is presented in the last column of the table.

The 2010 ADHS findings indicate that childbearing among Armenian women begins relatively late. Approximately two-thirds of women age 20-24 (67 percent) have never given birth. The median age at first birth among women by age group varies between 22 and 24 years. The median age at first birth has decreased by nearly half a year, from 22.2 years among women age 45-49 to 21.7 years among women age 35-39. However, median age at first birth seems to be increasing among younger women; the median age for women age 25-29 is 24.1 years.

The median age at first birth cannot be computed for women age 15-19 and age 20-24 because less than half of these women had a live birth before the beginning of the age group. However, recent trends in the initiation of childbearing among young women can be assessed by comparing the overall proportions that had given birth in the 2000 ADHS, 2005 ADHS, and 2010 ADHS. In the 2000 ADHS, 4 percent of women age 15-19 and 44 percent of women age 20-24 had given birth. In the 2005 ADHS, 2 percent of women age 15-19 and 36 percent of women age 20-24 had given birth. In the 2010 ADHS, the comparable figures are 3 percent for women age 15-19 and 33 percent for women age 20-24. The decline indicates a delay in the initiation of childbearing among women age 15-24 during the 2000-2010 period.

Changes in the median age at first birth among women age 25-49 over time (22.5 years in 2010 compared with 22.1 and 21.8 years in 2005 and 2000) may be associated with small changes in age at first marriage among women age 25-49 over the past decade: 21.1 years in 2010 (Chapter 4, Table 4.2) compared with 20.7 years in 2005 and 20.5 years in 2000. Researchers have noted that among Armenians, there is an expectation that a child will be born within the first two years of marriage (National Program on Reproductive Health, 1998). As in 2005, the 2010 ADHS data indicate that Armenian women of all cohorts have adhered to the practice of giving birth to a first child within two years of getting married. Among women age 25-29, for example, the gap between the median age at first marriage and the median age at first birth is almost one and a half years (22.7 and 24.1 years, respectively). The same interval between age at first marriage and age at first birth is observed for women age 45-49 (20.7 and 22.2 years, respectively).

Table 5.8 Age at first birth

Percentage of women age 15-49 who gave birth by specific exact ages, percentage who have never given birth, and median age at first birth, according to current age, Armenia 2010

Current age	Percentage who gave birth by exact age					Percentage who have never given birth	Number of women	Median age at first birth
	15	18	20	22	25			
15-19	0.0	na	na	na	na	96.5	861	a
20-24	0.0	1.5	11.4	na	na	67.4	1,032	a
25-29	0.0	2.3	15.3	33.9	56.3	35.6	950	24.1
30-34	0.1	7.4	25.3	45.5	65.2	20.1	838	22.5
35-39	0.2	6.6	31.7	52.3	71.5	12.0	643	21.7
40-44	0.3	4.7	25.1	51.8	73.4	8.7	742	21.9
45-49	0.0	3.2	21.6	47.8	72.3	6.1	857	22.2
25-49	0.1	4.7	23.1	45.5	67.1	17.4	4,029	22.5

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

Table 5.9 shows the median age at first birth among women age 25-49, by background characteristics. The median age at first birth for urban women is two years older than for rural women (23.3 years compared with 21.3 years). Large differentials in median age at first birth are also observed by region. The median age at first birth for women in Yerevan is three years older than in Gegharkunik (24.1 years compared with 21.1 years). Median age at first birth correlates positively with education and wealth status: the median age at first birth among women living in the wealthiest households is 23.9 years compared with 21.4 years for women living in the poorest households.

Table 5.9 Median age at first birth

Median age at first birth among women age 25-49 years, according to background characteristics, Armenia 2010

Background characteristic	Women age 25-49
Residence	
Urban	23.3
Rural	21.3
Region	
Yerevan	24.1
Aragatsotn	21.7
Ararat	22.7
Armavir	21.2
Gegharkunik	21.1
Lori	21.8
Kotayk	21.9
Shirak	21.8
Syunik	22.6
Vayots Dzor	21.5
Tavush	21.5
Education	
Basic	20.2
Secondary	20.9
Secondary special	22.5
Higher	a
Wealth quintile	
Lowest	21.4
Second	21.5
Middle	22.4
Fourth	23.3
Highest	23.9
Total	22.5

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

5.10 TEENAGE PREGNANCY AND MOTHERHOOD

It is well known that adolescent pregnancy, early childbearing, and motherhood have negative socioeconomic and health consequences. Adolescent mothers are more likely to have complications during labor, which result in higher morbidity and mortality for themselves and their children. Moreover, childbearing during the teenage years frequently has adverse social consequences, particularly on female educational attainment, because women who become mothers in their teens are more likely to curtail education.[1]

Table 5.10 shows that overall, 5 percent of women age 15-19 (teenagers) in Armenia have begun childbearing, about 4 percent are already mothers, and less than 2 percent are pregnant with their first child. Young women do not start childbearing until age 17, but the proportion having children increases rapidly with age to reach 14 percent among women age 19.

Teenage fertility varies by urban-rural residence. The proportion of teenagers who have begun childbearing is 4 percent in urban areas compared with 7 percent in rural areas. Teenage childbearing varies considerably across regions, ranging from none in Lori to 11 percent in Kotayk.

The variation in early childbearing by educational attainment is unclear. The proportion of teenagers who have begun childbearing is highest among women with some secondary education

[1] The legal age for marriage of women in Armenia is 17.

(9 percent). Early childbearing is most pronounced among women in the lowest wealth quintile (9 percent).

In terms of trends, at the national level there is little difference overall in adolescent fertility between the 2000, 2005, and 2010 ADHS surveys (6 percent in 2000 and 5 percent in 2005 and 2010).

Table 5.10 Teenage pregnancy and motherhood

Percentage of women age 15-19 who have had a live birth or who are pregnant with their first child, and percentage who have begun childbearing, by background characteristics, Armenia 2010

Background characteristic	Percentage of women age 15-19 who:		Percentage who have begun childbearing	Number of women
	Have had a live birth	Are pregnant with first child		
Age				
15	0.0	0.0	0.0	142
16	0.0	0.0	0.0	152
17	1.4	0.0	1.4	131
18	5.2	1.4	6.7	214
19	8.9	4.6	13.5	223
Residence				
Urban	2.3	1.7	4.0	516
Rural	6.0	1.3	7.3	345
Region				
Yerevan	1.9	1.3	3.2	296
Aragatsotn	3.7	4.3	7.9	42
Ararat	4.9	0.7	5.6	53
Armavir	7.7	2.0	9.7	62
Gegharkunik	4.5	0.8	5.3	80
Lori	0.0	0.0	0.0	84
Kotayk	10.5	0.0	10.5	72
Shirak	1.9	3.6	5.6	101
Syunik	(3.1)	(5.9)	(9.0)	21
Vayots Dzor	(11.4)	(0.0)	(11.4)	15
Tavush	8.5	0.8	9.3	34
Education				
Basic	3.1	0.0	3.1	134
Secondary	6.6	2.5	9.2	309
Secondary special	3.1	1.2	4.3	137
Higher	1.4	1.3	2.8	281
Wealth quintile				
Lowest	7.2	2.0	9.3	189
Second	4.4	0.4	4.7	189
Middle	0.7	1.6	2.3	139
Fourth	3.9	1.4	5.3	161
Highest	2.0	2.4	4.4	183
Total	3.8	1.5	5.4	861

Note: Figures in parentheses are based on 25-49 unweighted cases

FERTILITY PREFERENCES 6

This chapter presents data from the 2010 ADHS on the fertility preferences of Armenian women and men, including their desired family size. It also considers what effect their preferences may have on the prevention of unwanted pregnancies.

6.1 FERTILITY PREFERENCES

In the 2010 ADHS, insight into the childbearing intentions of Armenian women and men was obtained by asking respondents whether they wanted to have another child and, if so, how soon. Table 6.1 shows fertility preferences among currently married women and currently married men by number of living children at the time of the survey (including any current pregnancy). The majority of married Armenian women express a desire to control their future fertility. Over half of respondents (58 percent) do not want to have any more children or are sterilized. The desire to limit fertility markedly increases by number of living children. For example, most married women with no children want to have a child; more than half (55 percent) say that they want to have a child soon. On the other hand, two-thirds of women with two children say that they want no more, as do eight in ten women with three or more children.

Table 6.1 Fertility preferences by number of living children

Percent distribution of currently married women and currently married men age 15-49 by desire for children, according to number of living children, Armenia 2010

Desire for children	Number of living children					Total
	0	1	2	3	4+	
			WOMEN[1]			
Have another soon[2]	54.6	22.5	4.9	1.0	0.0	9.6
Have another later[3]	3.3	41.7	8.5	2.0	0.0	12.6
Have another, undecided when	6.5	5.8	2.1	0.8	0.0	2.6
Undecided	5.6	6.0	12.1	4.7	5.3	8.7
Want no more	0.6	14.0	66.2	81.8	87.8	57.6
Sterilized[4]	0.0	0.0	0.2	0.8	0.0	0.2
Declared infecund	29.4	9.5	5.9	8.7	6.9	8.3
Missing	0.0	0.5	0.2	0.3	0.0	0.2
Total	100.0	100.0	100.0	100.0	100.0	100.0
Number	177	676	1,826	781	166	3,626
			MEN[5]			
Have another soon[2]	49.8	27.4	5.2	2.4	(5.1)	11.9
Have another later[3]	7.7	22.9	5.4	2.5	(0.0)	8.4
Have another, undecided when	19.1	9.2	0.3	2.5	(0.0)	3.7
Undecided	8.2	20.3	31.8	18.6	(7.6)	24.7
Want no more	0.0	15.8	54.2	71.6	(86.4)	47.4
Sterilized[4]	0.0	0.0	0.0	0.0	(0.0)	0.0
Declared infecund	11.9	4.5	1.2	0.7	(0.9)	2.4
Missing	3.2	0.0	1.9	1.6	(0.0)	1.5
Total	100.0	100.0	100.0	100.0	100.0	100.0
Number	51	176	439	159	30	855

Note: Figures in parentheses are based on 25-49 unweighted cases.
[1] The number of living children 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 sterilization
[5] The number of living children includes one additional child if respondent's wife is pregnant.

Men's fertility preferences, in general, are similar to women's. However, a lower proportion of men than women report that they want no more children (47 percent versus 58 percent) and a much higher percentage of men than women report that they are undecided about their desire for more children (25 percent versus 9 percent).

The proportion of women who say that they want to stop childbearing has decreased in the past 10 years, with a more rapid decrease during the past five years (58 percent in 2010 compared with 70 percent in the 2005 ADHS and 72 percent in the 2000 ADHS). However, an increase is seen in the percentage of women in the 2010 ADHS who say that they cannot conceive (8 percent in 2010 and 4 percent in 2005) or who are undecided about whether they want to have another child (9 percent in 2010 and 3 percent in 2005).

Table 6.2.1 shows the percentage of currently married women who want no more children or are sterilized, by number of living children and background characteristics. Women in urban and rural areas are equally likely to want no more children (58 percent for each). Differences between urban and rural women become more evident if one compares groups of women based on the number of living children that they have. For example, urban mothers are more likely than rural mothers to want to stop childbearing at all parities, except for those with no children. Regional variation among women who want no more children is small; however, it is greater when examined by the number of living children. There is little indication that there is any relationship between desire to stop childbearing and women's education or wealth status.

Table 6.2.1 Desire to limit childbearing: Women

Percentage of currently married women age 15-49 who want no more children, by number of living children, according to background characteristics, Armenia 2010

Background characteristic	Number of living children[1]				Total
	0	1	2	3+	
Residence					
Urban	0.0	17.9	69.4	84.2	57.8
Rural	1.7	6.9	61.2	82.9	58.0
Region					
Yerevan	(0.0)	20.9	72.9	87.2	59.3
Aragatsotn	*	(0.4)	58.6	81.7	58.0
Ararat	*	5.1	58.5	84.2	51.8
Armavir	*	8.8	66.7	84.7	58.9
Gegharkunik	*	4.1	51.2	75.1	52.8
Lori	*	(18.8)	70.2	82.7	61.0
Kotayk	*	7.6	57.3	77.7	52.3
Shirak	(0.0)	21.2	67.9	84.3	60.5
Syunik	*	(0.0)	61.3	95.5	56.4
Vayots Dzor	*	6.9	68.6	81.7	59.8
Tavush	*	7.1	68.9	89.2	63.3
Education					
Basic	*	(6.3)	66.9	81.3	61.6
Secondary	1.5	12.9	63.9	82.3	58.6
Secondary special	(0.0)	15.8	67.7	85.9	60.2
Higher	(0.0)	14.4	68.6	83.9	52.6
Wealth quintile					
Lowest	(2.8)	5.8	65.0	82.5	59.2
Second	(0.0)	11.2	59.7	87.7	59.6
Middle	0.0	19.3	67.3	79.6	56.4
Fourth	(0.0)	12.7	67.0	80.9	55.7
Highest	(0.0)	18.1	72.1	84.6	58.2
Total	0.6	14.0	66.4	83.5	57.9

Note: Women who have been sterilized are considered to want no more children. Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
[1] The number of living children includes the current pregnancy.

Table 6.2.2 shows the percentage of currently married men who want no more children, who are sterilized, or who declared that their wife/partner is sterilized, by number of living children and background characteristics. Men living in urban areas are less likely than those living in rural areas to want to stop childbearing (43 percent and 55 percent, respectively). The relationship between desire to stop childbearing and education is unclear. However, wealth status seems to have a negative association with the desire to limit childbearing. Men living in the poorest households are more likely to want no more children than those living in the richest households (52 percent versus 43 percent).

Table 6.2.2 Desire to limit childbearing: Men

Percentage of currently married men age 15-49 who want no more children, by number of living children, according to background characteristics, Armenia 2010

Background characteristic	Number of living children[1] 1	2	3+	Total
Residence				
Urban	20.9	50.2	64.1	42.9
Rural	(4.0)	62.2	83.0	55.1
Education				
Basic	*	(46.6)	*	43.3
Secondary	6.8	58.4	75.4	49.7
Secondary special	(31.3)	53.4	90.1	54.5
Higher	17.6	51.7	(52.5)	39.9
Wealth quintile				
Lowest	(3.5)	58.7	84.6	52.4
Second	(5.1)	63.8	(80.0)	55.9
Middle	(14.7)	52.8	(73.7)	44.4
Fourth	24.8	50.8	(57.8)	42.8
Highest	(20.1)	48.2	*	42.8
Total	15.8	54.2	73.9	47.4

Note: Men who have been sterilized or who state in response to the question about desire for children that their wife has been sterilized are considered to want no more children. Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
[1] The number of living children includes one additional child if respondent's wife is pregnant.

6.2 IDEAL NUMBER OF CHILDREN

In the 2010 ADHS, respondents were asked what they considered the ideal family size to be. This information was obtained by asking each respondent one of two questions. Respondents who had no children were asked, “If you could choose exactly the number of children to have in your whole life, how many would that be?” For respondents who had children, the question was, “If you could go back to the time you did not have any children and could choose exactly the number of children to have in your whole life, how many would that be?” Responses to these questions are meant to be independent of the number of children that a respondent already has. However, there is typically a correlation between the actual number of children that respondents have and their reported ideal. This correlation may be (1) because respondents who want larger families have more children, (2) because respondents adjust their ideal family size to match their actual family size, or (3) because a combination of these factors exists. The percent distribution of women and men age 15-49 by ideal number of children is detailed in Table 6.3, according to the number of living children.

Table 6.3 Ideal number of children

Percent distribution of women and men age 15-49 by ideal number of children, and mean ideal number of children for all respondents and for currently married respondents, according to the number of living children, Armenia 2010

Ideal number of children	Number of living children 0	1	2	3	4+	Total
			WOMEN[1]			
0	2.2	0.0	0.7	0.0	0.0	1.1
1	6.5	7.4	1.0	1.6	0.1	3.9
2	58.9	59.3	53.8	14.1	15.3	49.6
3	20.1	24.7	34.1	57.8	12.6	30.5
4	7.1	5.2	9.8	22.8	55.8	11.5
5	0.5	1.5	0.2	1.1	8.6	0.9
6+	0.2	0.0	0.1	1.1	6.3	0.5
Non-numeric responses	4.3	1.8	0.2	1.5	1.3	2.1
Total	100.0	100.0	100.0	100.0	100.0	100.0
Number	2,141	800	1,958	840	183	5,922
Mean ideal number of children for:[2]						
All women	2.3	2.3	2.5	3.1	3.9	2.5
Number	2,048	785	1,954	828	181	5,796
Currently married women	2.5	2.4	2.5	3.1	3.9	2.7
Number	175	664	1,822	774	164	3,598
			MEN[3]			
0	1.0	0.0	0.4	0.5	(0.0)	0.6
1	3.8	1.8	0.5	0.0	(0.0)	2.2
2	55.4	63.1	41.8	10.8	(4.7)	47.0
3	27.0	22.8	35.5	39.9	(22.7)	30.1
4	8.4	8.5	18.2	39.8	(53.7)	15.3
5	0.4	3.5	0.8	3.3	(3.1)	1.2
6+	0.8	0.0	1.1	5.3	(8.5)	1.4
Non-numeric responses	3.2	0.2	1.7	0.4	(7.4)	2.2
Total	100.0	100.0	100.0	100.0	100.0	100.0
Number	759	185	449	161	30	1,584
Mean ideal number of children for:[2]						
All men	2.4	2.5	2.8	3.5	(4.0)	2.7
Number	735	184	442	160	28	1,549
Currently married men	2.6	2.5	2.8	3.5	(4.0)	2.9
Number	51	176	432	158	27	844

Note: Figures in parentheses are based on 25-49 unweighted cases.
[1] The number of living children includes current pregnancy for women.
[2] Means are calculated excluding respondents who gave non-numeric responses.
[3] The number of living children includes one additional child if respondent's wife is pregnant.

Virtually all Armenian women desire a family with several children. Half of all women (50 percent) say that two children are ideal, and 31 percent say that three children are ideal. One in seven women (13 percent) states that she prefers to have four or more children. Overall, the mean ideal number of children is 2.5 among all women and 2.7 among currently married women. There is a positive correlation between the actual and ideal number of children. Among all women, the mean ideal number of children increases from 2.3 among women with no children to 3.9 among women with four or more children.

The data do not indicate any substantial change in ideal family size among women since 2000; the mean number of children considered ideal was 2.7 among all women in 2000, 2.6 in 2005, and 2.5 in 2010. Among currently married women, the mean number of children considered ideal was 2.8 in 2000, 2.7 in 2005, and 2.7 in 2010.

In general, Armenian women and men want the same number of children. Forty-seven percent of men say that two children are ideal, 30 percent say that three children are ideal, and 18 percent say that four or more children are ideal. Overall, the mean ideal number of children among all men is 2.7 children, and among currently married men is 2.9 children. As in the case of women, there is a positive correlation between the actual and ideal number of children among men.

There has been almost no change in ideal family size among all men over the past five years (2.8 in 2005 and 2.7 in 2010); however, among currently married men, the mean number of children considered ideal has decreased slightly, from 3.1 in 2005 to 2.9 in 2010.

Table 6.4 shows the mean ideal number of children by background characteristics. In general, there are no significant variations in the mean ideal number of children. However, the mean ideal number of children among both women and men increases with age. For example, women age 15-19 want 2.3 children and women age 45-49 want 2.8 children. Similarly, the mean ideal number of children increases from 2.5 among men age 15-19 to 3.0 among men age 45-49.

The ideal number of children among women ranges from a low of 2.4 in Ararat, Shirak, and Vayots Dzor to 2.8 in Kotayk. Among men, the differential is only slightly greater and ranges from 2.3 children in Lori to 2.9 in Yerevan and Shirak.

Table 6.4 Mean ideal number of children

Mean ideal number of children for all women and all men age 15-49 by background characteristics, Armenia 2010

	Women		Men	
Background characteristic	Mean	Number of women[1]	Mean	Number of men[1]
Age				
15-19	2.3	816	2.5	211
20-24	2.4	1,010	2.5	292
25-29	2.4	931	2.5	282
30-34	2.5	823	2.8	229
35-39	2.6	635	2.9	157
40-44	2.7	737	2.9	162
45-49	2.8	845	3.0	215
Residence				
Urban	2.5	3,554	2.7	964
Rural	2.6	2,242	2.6	585
Region				
Yerevan	2.5	2,013	2.9	585
Aragatsotn	2.6	259	2.5	70
Ararat	2.4	377	2.5	125
Armavir	2.7	520	2.6	144
Gegharkunik	2.7	457	2.5	77
Lori	2.6	494	2.3	127
Kotayk	2.8	539	2.7	137
Shirak	2.4	581	2.9	131
Syunik	2.6	198	2.5	63
Vayots Dzor	2.4	131	2.7	21
Tavush	2.6	229	2.6	68
Education				
Basic	2.6	335	2.6	179
Secondary	2.6	2,100	2.7	603
Secondary special	2.6	1,646	2.6	296
Higher	2.4	1,715	2.7	471
Wealth quintile				
Lowest	2.6	1,129	2.7	321
Second	2.6	1,186	2.6	278
Middle	2.5	1,111	2.6	306
Fourth	2.5	1,118	2.7	325
Highest	2.5	1,252	2.8	319
Total	2.5	5,796	2.7	1,549

[1] Number of women/men who gave a numeric response

6.3 FERTILITY PLANNING

In the 2010 ADHS, women were asked a series of questions about each of their children born in the five years preceding the survey—and, if pregnant, their current pregnancy—to determine whether the pregnancy was wanted *then* (planned), wanted *later* (mistimed), or *not* wanted (unplanned).

Table 6.5 shows the percent distribution of births in the five years preceding the survey by whether the birth was wanted then, wanted later, or not wanted. The data show that 91 percent of the births in the past five years were wanted at the time of conception. Seven percent of births were wanted later, and 1 percent of the births were not wanted at all at the time of conception. These proportions suggest that over the past ten years and especially since 2005, there has been a notable improvement in the level of planned births in Armenia. The level of unwanted births has decreased from 8 percent in 2000 to 7 percent in 2005 and further to an all time low of 1 percent in 2010. In

turn, more births are wanted in 2010 than in either the 2005 or 2000 ADHS: 91 percent in 2010 compared with 82 percent in 2005 and 83 percent in 2000.

There is a strong relationship between planning status and birth order. For example, while 99 percent of first births were wanted at the time of conception, 20 percent of fourth and higher order births were not wanted at all. Younger women are more likely than older women to want their births at the time they were conceived, while older women are more likely than younger women to have wanted no more children.

Table 6.5 Fertility planning status

Percent distribution of births to women age 15-49 in the five years preceding the survey (including current pregnancies), by planning status of the birth, according to birth order and mother's age at birth, Armenia 2010

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	99.1	0.5	0.0	0.4	100.0	775
2	84.9	14.5	0.2	0.4	100.0	610
3	83.3	10.3	5.7	0.6	100.0	192
4+	77.3	3.2	19.5	0.0	100.0	50
Mother's age at birth						
<20	95.5	3.7	0.0	0.9	100.0	143
20-24	93.2	6.1	0.0	0.7	100.0	776
25-29	88.3	10.4	1.3	0.0	100.0	467
30-34	90.3	5.4	4.2	0.0	100.0	162
35-39	80.9	4.8	14.3	0.0	100.0	65
40-44	*	*	*	*	100.0	13
Total	91.3	7.0	1.4	0.4	100.0	1,627

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

6.4 WANTED AND UNWANTED FERTILITY

Table 6.6 provides information on total "wanted" fertility rates and total fertility rates for the three years preceding the survey, by background characteristics. Unwanted births are defined as births that exceed the number considered ideal. Women who did not report a numeric ideal family size were assumed to want all their births. The total wanted fertility 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 total fertility rate suggests the potential demographic impact of the elimination of unwanted births.

In Armenia, there is little difference between the observed total fertility rate (1.7 children per woman) and the wanted total fertility rate (1.6 children per woman).

At the regional level, women in the Yerevan region want the fewest children (1.4) while women in the Syunik region want the most children (2.0). However, the gaps between desired and actual fertility are similar across all regions and vary between either no difference or between 0.1 to 0.2 children. Differences are also very small between groups when comparing women's education and wealth status with fertility.

Table 6.6 Wanted fertility rates

Total wanted fertility rates and total fertility rates for the three years preceding the survey, by background characteristics, Armenia 2010

Background characteristic	Total wanted fertility rates	Total fertility rate
Residence		
Urban	1.5	1.6
Rural	1.8	1.8
Region		
Yerevan	1.4	1.5
Aragatsotn	1.8	1.9
Ararat	1.5	1.6
Armavir	1.7	1.8
Gegharkunik	1.7	1.8
Lori	1.6	1.6
Kotayk	1.8	2.0
Shirak	1.6	1.8
Syunik	2.0	2.0
Vayots Dzor	1.6	1.8
Tavush	1.8	2.0
Education		
Basic	1.6	1.8
Secondary	1.8	1.9
Secondary special	1.7	1.9
Higher	1.4	1.4
Wealth quintile		
Lowest	1.6	1.8
Second	1.7	1.8
Middle	1.5	1.6
Fourth	1.7	1.8
Highest	1.4	1.5
Total	1.6	1.7

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 5.2.

CONTRACEPTION 7

Family planning refers to a conscious effort by a couple to limit or space the number of children they want to have through the use of contraceptive methods. The efficacy of family planning depends on people's knowledge of contraceptive methods and on the availability of methods to meet the varying needs of a wide spectrum of potential users. Availability of methods, in turn, depends on the quality and quantity of service providers and on financial and technical resources. According to the legislation on reproductive health and rights adopted by the parliament of Armenia in 2002, use of contraception, including voluntary sterilization, is legal in Armenia.

This chapter presents the 2010 ADHS findings on contraceptive knowledge and use, attitudes, and sources, met and unmet need for family planning, as well as exposure to media messages about family planning. The information is particularly useful for policymakers, program managers, international and national nongovernmental organizations, and researchers in population and family planning. It provides a means to assess the success of the Armenian family planning program. Although the focus is on women, some results from the male survey are also presented because men play an important role in realizing women's reproductive goals. Comparisons are also made with findings from previous surveys to evaluate trends over the past 10 years in Armenia.

7.1 KNOWLEDGE OF CONTRACEPTIVE METHODS

Acquiring knowledge about fertility control is an important step toward gaining access to and then using a suitable contraceptive method in a timely and effective manner. The 2010 ADHS collected information on knowledge and use of contraception. To obtain these data, a description of each contraceptive method was read aloud, and respondents were asked if they had heard of the method. Non-pregnant women were then asked if they (or their partners) were currently using any method to delay or avoid getting pregnant. Nonusers and pregnant women were asked whether they had ever used a method of contraception.[1] For analytical purposes, contraceptive methods are grouped into two types in Table 7.1: modern and traditional. Modern methods include female sterilization, male sterilization, pill, intrauterine device (IUD), injectables, implants, male condom, foam/jelly, lactational amenorrhea method (LAM),[2] fertility wheel calculator, and emergency contraception. Traditional methods include periodic abstinence (rhythm method), withdrawal, and folk methods.

Table 7.1 shows that knowledge of contraception is high among both women and men. Almost all respondents know at least one method. The mean number of methods known is a rough indicator of the breadth of knowledge of family planning methods. On average, currently married women, who have the greatest exposure to the risk of pregnancy, know of almost eight methods. Knowledge of a modern method is nearly universal. More than nine out of every ten married women have heard about the pill, the male condom, and the IUD. It is noticeable, however, that other modern methods are less well-known; for example, only about six in ten married women are aware of female sterilization and injectables; and only around half have heard about foam/jelly and the fertility wheel

[1] The questions asked about contraceptive knowledge in the 2010 ADHS questionnaire differed from those asked in the 2000 and 2005 ADHS questionnaires. Specifically, in 2000 and 2005, respondents were first asked to name all of the methods that they had heard about. For methods not mentioned spontaneously, a description of the method was read, and the respondents were asked if they had heard of the method. For each method named or recognized, respondents were asked if they had ever used the method. Finally, women were asked if they (or their partners) were currently using a method.

[2] In 2000, a description of LAM would be read to the respondent if she did not recognize the term "lactational amenorrhea method." The 2000 results suggested that the description caused many respondents to confuse the modern method of LAM with the folk method of breastfeeding. Thus, the description was dropped in the 2005 and 2010 ADHS questionnaires.

calculator. Awareness of emergency contraception, male sterilization, and implants is substantially lower. Withdrawal is the most widely known traditional method (91 percent) among currently married women.

Similar to women, currently married men are most aware of the pill, the male condom, and the IUD (79 percent, 100 percent, and 81 percent, respectively). Fewer men than women know of injectables, female sterilization, foam/jelly, LAM, and the fertility wheel calculator. Married men know an average of almost seven contraceptive methods, one fewer than married women. Traditional methods are very well known; for example, 96 percent of married men have heard of withdrawal.

The percentage of currently married women and currently married men who know of at least one method of contraception does not vary by background characteristics. Knowledge of any method and of a modern method is virtually universal (data not shown).

In the past 10 years, contraceptive knowledge has remained consistently high in Armenia. Knowledge of specific methods among currently married women and men has improved considerably over the past five years; specifically knowledge of female sterilization, injectables, implants, LAM, and emergency contraception has increased. Overall, currently married Armenian women and men know on average one more method of contraception in 2010 than they did in 2005 (7.7 and 6.8 methods for women and men, respectively, in 2010, compared with 6.2 and 5.2 methods for women and men, respectively, in 2005).

Table 7.1 Knowledge of contraceptive methods

Percentage of all respondents, currently married respondents, and sexually active unmarried respondents age 15-49 who know any contraceptive method, by specific method, Armenia 2010

	Women			Men		
Method	All women	Currently married women	Sexually active unmarried women[1]	All men	Currently married men	Sexually active unmarried men[1]
Any method	98.1	99.8	*	99.3	100.0	100.0
Any modern method	98.0	99.8	*	99.3	100.0	100.0
Female sterilization	54.2	61.4	*	36.4	45.4	47.4
Male sterilization	20.1	23.2	*	25.1	31.4	32.3
Pill	87.7	93.0	*	72.0	78.6	82.0
IUD	86.6	95.0	*	66.3	81.4	74.8
Injectables	55.9	60.3	*	42.7	50.0	59.9
Implants	14.8	17.2	*	13.8	15.6	18.1
Male condom	96.9	99.2	*	99.2	99.9	100.0
Foam/jelly	47.2	55.5	*	27.5	35.0	31.7
Lactational amenorrhea (LAM)	20.8	27.0	*	9.3	14.1	6.5
Fertility wheel calculator	39.3	48.6	*	29.8	37.9	35.9
Emergency contraception	26.8	33.3	*	30.4	37.5	35.1
Any traditional method	74.9	93.2	*	87.4	96.8	88.5
Rhythm	43.7	56.9	*	37.9	51.7	40.3
Withdrawal	71.7	90.5	*	86.5	95.5	87.9
Other	2.1	2.9	*	1.3	1.7	2.3
Mean number of methods known by respondents 15-49	6.7	7.7	*	5.8	6.8	6.6
Number of respondents	5,922	3,626	20	1,584	855	265

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
[1] Had last sexual intercourse within 30 days preceding the survey

7.2 CURRENT USE OF CONTRACEPTION

This section presents information on the prevalence of current contraceptive use among women age 15-49. The level of current use is a measure of actual contraceptive practice at the time of the survey. Table 7.2 shows by age the percent distribution of all women and currently married women who are currently using specific family planning methods. More than half of married women of reproductive age are using a method of contraception. Among married women, use of traditional methods (28 percent) is nearly as common as use of modern methods (27 percent). The most widely used method among currently married women is, by far, withdrawal (25 percent), followed by the male condom (15 percent), and the IUD (10 percent).

The use of any contraceptive method rises rapidly with age, peaking at 70 percent among currently married women age 30-34 and then declining to 37 percent among those women age 45-49. As expected, contraceptive use is lower among all women (34 percent) than among married women (55 percent) because the former includes women who are not married and who are not sexually active; therefore, they are not in need of family planning.

Table 7.2 Current use of contraception by age

Percent distribution of all women and currently married women age 15-49 by contraceptive method currently used, according to age, Armenia 2010

			Modern method								Traditional method					
Age	Any method	Any modern method	Female sterilization	Pill	IUD	Male condom	Foam/ jelly	LAM	Fertility wheel calculator	Any traditional method	Rhythm	Withdrawal	Other	Not currently using	Total	Number of women
ALL WOMEN																
15-19	1.7	0.5	0.0	0.0	0.0	0.2	0.0	0.2	0.0	1.3	0.2	1.0	0.0	98.3	100.0	861
20-24	17.5	8.1	0.0	0.2	2.0	4.6	0.0	1.1	0.3	9.4	0.5	8.8	0.1	82.5	100.0	1,032
25-29	42.1	21.8	0.0	2.1	6.7	11.6	0.0	1.3	0.1	20.3	1.5	18.1	0.6	57.9	100.0	950
30-34	54.4	29.6	0.2	1.6	10.0	17.0	0.0	0.4	0.4	24.9	3.5	20.1	1.3	45.6	100.0	838
35-39	53.6	27.7	0.3	1.8	10.0	15.0	0.3	0.0	0.3	25.9	2.5	23.3	0.1	46.4	100.0	643
40-44	47.2	23.2	0.8	1.2	8.7	11.8	0.3	0.0	0.6	23.9	1.5	22.0	0.4	52.8	100.0	742
45-49	30.4	12.9	0.3	0.0	6.3	6.1	0.0	0.0	0.2	17.5	1.2	15.5	0.8	69.6	100.0	857
Total	33.9	16.9	0.2	0.9	5.9	9.1	0.1	0.5	0.3	16.9	1.5	15.0	0.5	66.1	100.0	5,922
CURRENTLY MARRIED WOMEN																
15-19	19.1	3.1	0.0	0.0	0.0	0.0	0.0	3.1	0.0	16.0	2.7	13.3	0.0	80.9	100.0	68
20-24	39.8	18.2	0.0	0.3	4.6	10.0	0.0	2.4	0.8	21.6	1.1	20.3	0.2	60.2	100.0	450
25-29	62.1	32.0	0.1	3.1	9.9	16.9	0.0	2.0	0.1	30.1	2.3	26.9	0.9	37.9	100.0	641
30-34	70.1	38.1	0.2	2.1	12.9	21.9	0.0	0.5	0.5	32.1	4.5	25.9	1.6	29.9	100.0	650
35-39	66.5	34.4	0.4	2.2	12.3	18.7	0.4	0.0	0.4	32.1	3.1	29.0	0.1	33.5	100.0	517
40-44	56.7	27.8	0.6	1.4	10.5	14.3	0.4	0.0	0.7	29.0	1.8	26.6	0.5	43.3	100.0	613
45-49	36.8	15.0	0.2	0.0	7.5	7.0	0.0	0.0	0.3	21.8	1.5	19.3	1.0	63.2	100.0	687
Total	54.9	27.2	0.2	1.5	9.6	14.6	0.1	0.8	0.4	27.7	2.4	24.5	0.8	45.1	100.0	3,626

Note: If more than one method is used, only the most effective method is considered in this tabulation.
LAM = Lactational amenorrhea method

7.3 CURRENT USE BY BACKGROUND CHARACTERISTICS

Table 7.3 presents information by background characteristics on current use of contraceptives by currently married women. In general, women in Armenia do not begin to use contraception until they have had at least one child. The difference in the overall use of contraception among married women in urban and rural areas is not large (58 percent and 51 percent, respectively). However, urban women are markedly more likely to be using a modern method than rural women (33 percent and 19 percent, respectively).

There is considerable variation in contraceptive use by region. Yerevan and Lori have the highest rates of use of modern methods (42 percent and 36 percent, respectively) compared with 10 to

11 percent in Tavush and Vayots Dzor. Female sterilization is not common and appears to be most prevalent in Lori, Syunik, and Armavir (1 percent each) compared with less than 1 percent in other regions. Withdrawal, the most popular contraceptive method, is highest in Armavir, Tavush, Aragatsotn and Vayots Dzor where 38 to 50 percent of women use the method, while in Gegharkunik less than 7 percent of women rely on withdrawal. The IUD is used by 19 percent of currently married women in Lori and by at least 10 percent in Yerevan, Aragatsotn, Ararat, and Armavir compared with 4 percent in Shirak and Vayots Dzor. Condom use is reported by more than one in four currently married women in Yerevan (27 percent), by more than one in ten women in Ararat, Armavir, and Lori (11 to 12 percent), and by less than 1 in 25 women in Tavush (4 percent). About three-quarters of women in Gegharkunik (73 percent), nearly two-thirds of women in Shirak (64 percent), and approximately half of women in Kotayk, Tavush, and Syunik (49 to 52 percent) are not using any method of contraception.

Table 7.3 Current use of contraception by background characteristics

Percent distribution of currently married women age 15-49 by contraceptive method currently used, according to background characteristics, Armenia 2010

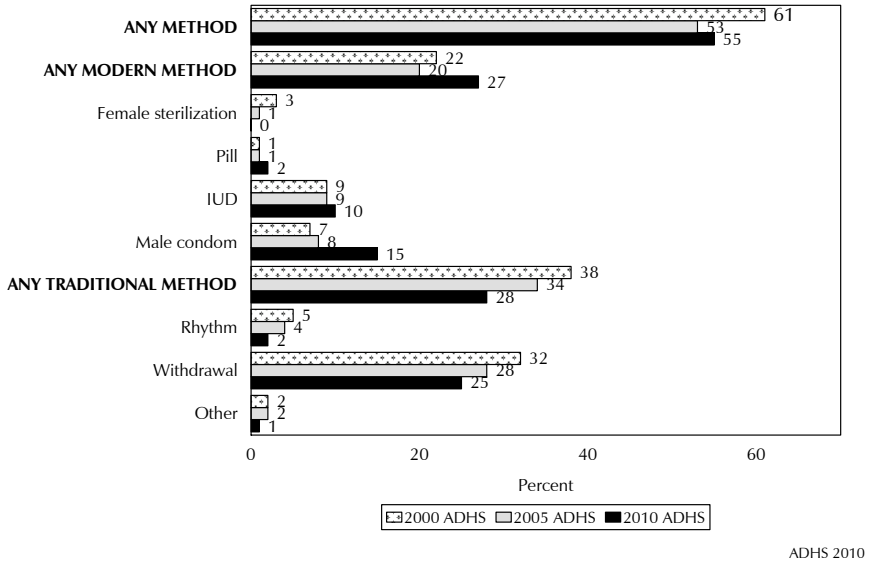
			Modern method								Traditional method					
Background characteristic	Any method	Any modern method	Female sterilization	Pill	IUD	Male condom	Foam/ jelly	LAM	Fertility wheel calculator	Any traditional method	Rhythm	Withdrawal	Other	Not currently using	Total	Number of women
Number of living children																
0	3.0	1.1	0.0	0.0	0.0	1.1	0.0	0.0	0.0	1.8	0.0	1.8	0.0	97.0	100.0	269
1-2	60.6	31.6	0.1	1.6	11.4	16.9	0.2	0.9	0.5	29.0	2.7	25.5	0.8	39.4	100.0	2,434
3-4	56.0	24.0	0.7	1.8	7.7	12.7	0.0	0.9	0.2	32.0	2.5	28.5	1.0	44.0	100.0	887
5+	(27.4)	(3.5)	(0.0)	(0.0)	(2.1)	(1.4)	(0.0)	(0.0)	(0.0)	(23.9)	(0.0)	(22.8)	(1.1)	(72.6)	100.0	36
Residence																
Urban	58.0	32.8	0.1	1.7	10.1	19.2	0.2	0.9	0.6	25.2	2.3	22.0	0.9	42.0	100.0	2,111
Rural	50.5	19.4	0.4	1.3	8.9	8.1	0.0	0.7	0.1	31.1	2.6	27.9	0.5	49.5	100.0	1,515
Region																
Yerevan	66.2	41.7	0.0	1.8	10.8	26.5	0.3	1.4	0.8	24.5	1.5	21.8	1.1	33.8	100.0	1,126
Aragatsotn	66.7	21.6	0.0	1.0	10.4	8.1	0.0	2.1	0.0	45.2	0.1	45.1	0.0	33.3	100.0	164
Ararat	57.8	23.0	0.0	0.7	11.3	10.8	0.0	0.0	0.2	34.8	2.9	31.7	0.1	42.2	100.0	228
Armavir	63.2	22.5	0.7	0.8	9.9	10.5	0.0	0.0	0.5	40.7	2.1	38.3	0.4	36.8	100.0	373
Gegharkunik	27.3	18.6	0.4	0.6	8.3	9.1	0.0	0.0	0.1	8.7	1.5	6.7	0.5	72.7	100.0	300
Lori	53.4	35.8	1.0	1.6	19.2	11.8	0.0	1.5	0.8	17.6	0.8	15.9	1.0	46.6	100.0	325
Kotayk	51.3	14.2	0.0	0.8	7.2	5.8	0.3	0.0	0.0	37.2	10.4	26.2	0.6	48.7	100.0	344
Shirak	35.6	18.3	0.0	4.4	3.5	9.3	0.0	0.8	0.2	17.3	2.8	14.5	0.0	64.4	100.0	384
Syunik	48.3	21.4	0.9	0.0	5.6	13.6	0.0	0.8	0.5	26.8	0.0	22.1	4.8	51.7	100.0	136
Vayots Dzor	62.1	11.2	0.0	0.0	3.5	7.4	0.0	0.1	0.2	50.9	0.5	50.3	0.0	37.9	100.0	90
Tavush	49.9	10.4	0.2	0.9	5.5	3.6	0.2	0.0	0.0	39.5	1.4	37.8	0.3	50.1	100.0	156
Education																
Basic	48.4	21.4	0.9	0.7	6.7	11.8	0.0	0.0	1.3	26.9	3.9	22.7	0.3	51.6	100.0	147
Secondary	50.6	20.2	0.3	1.3	8.3	9.2	0.0	1.0	0.1	30.4	1.4	28.3	0.7	49.4	100.0	1,524
Secondary special	55.8	28.9	0.3	2.1	9.5	15.7	0.3	0.4	0.6	26.9	2.8	23.9	0.2	44.2	100.0	1,139
Higher	62.8	39.1	0.0	1.2	12.5	23.6	0.1	1.1	0.6	23.7	3.7	18.3	1.7	37.2	100.0	816
Wealth quintile																
Lowest	53.2	21.4	0.4	1.9	7.9	10.1	0.0	0.8	0.3	31.8	1.7	29.6	0.5	46.8	100.0	748
Second	47.0	17.1	0.2	1.2	9.1	6.1	0.0	0.4	0.1	29.9	2.4	27.2	0.3	53.0	100.0	741
Middle	52.2	27.0	0.2	1.4	9.4	15.3	0.0	0.6	0.0	25.2	2.8	21.0	1.4	47.8	100.0	725
Fourth	60.2	33.8	0.4	1.5	10.3	19.0	0.3	0.7	1.6	26.4	4.0	21.5	0.9	39.8	100.0	682
Highest	62.4	37.7	0.0	1.6	11.3	22.9	0.3	1.4	0.2	24.7	1.4	22.6	0.8	37.6	100.0	730
Total	54.9	27.2	0.2	1.5	9.6	14.6	0.1	0.8	0.4	27.7	2.4	24.5	0.8	45.1	100.0	3,626

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

As expected, contraceptive use, particularly use of modern methods, increases with educational attainment. Women with higher levels of education are twice as likely to use a modern method as women with only secondary or basic education (39 percent compared with 20 to 21 percent). This difference is due mainly to increased use of IUDs and the male condom. Wealth also correlates positively with women's contraceptive use; modern contraceptive use increases markedly as household wealth increases, from 21 percent among married women in the lowest wealth quintile to 38 percent among those in the highest wealth quintile.

Use of any contraceptive method has not changed much in the past five years; in the 2005 ADHS, 53 percent of currently married women age 15-49 reported using a method, and 55 percent report using a method in the 2010 ADHS. There has been a slight decrease in the use of any method by currently married women since the 2000 ADHS, when 61 percent of currently married women reported using a contraceptive method (Figure 7.1 and Table 7.4). It is possible that sampling variation may account for some of the overall decrease in contraceptive prevalence, but a more plausible explanation is the decrease in the use of traditional methods over the past 10 years (38 percent[3] in 2000 to 28 percent in 2010), particularly withdrawal (32 percent in 2000 to 25 percent in 2010) (Figure 7.1). The decrease in the use of withdrawal is even more striking among currently married women in rural areas (40 percent in 2000 to 28 percent in 2010). On the other hand, the proportion of currently married women who use modern contraceptive methods has increased from 22 percent in 2000 to 27 percent in 2010. In particular, the percentage of women using male condoms has increased from 7 percent in 2000 to 15 percent in 2010.

Figure 7.1 Trends in Contraceptive Use among Currently Married Women



Compared with data from recent DHS surveys conducted in other countries of the former Soviet Union, use of a modern contraceptive method (27 percent) among married women age 15-49 in Armenia appears to be higher than that in Azerbaijan, but lower than in Moldova and Ukraine. Corresponding percentages for modern method use were 14 percent in the 2006 Azerbaijan DHS, 44 percent in the 2006 Moldova DHS, and 48 percent in the 2007 Ukraine DHS (SSC [Azerbaijan] and Macro, 2008; NCPM [Moldova] and ORC Macro, 2006; UCSR [Ukraine] et al., 2008). Armenia has a high percentage of currently married women using a traditional method (28 percent) compared with those reported in Moldova and Ukraine (24 percent and 19 percent, respectively), although their rates are lower than those reported in neighboring Azerbaijan (37 percent).

[3] This estimate differs from the 36.7 percent published in the 2000 ADHS final report. The difference is because "folk method" was not included in the "Any traditional method" category in the 2000 report tabulation but was included in the 2005 and 2010 report tabulations.

Table 7.4 Trends in the current use of contraception

Percent distribution of currently married women age 15-49 by contraceptive method currently used, according to several surveys

Method	2000 ADHS[1]	2005 ADHS	2010 ADHS
Any method	**60.5**	**53.1**	**54.9**
Any modern method	**22.3**	**19.5**	**27.2**
Female sterilization	2.7	0.6	0.2
Pill	1.1	0.8	1.5
IUD	9.4	9.4	9.6
Male condom	6.9	8.1	14.6
Other modern method	2.2	0.6	1.3
Any traditional method[1]	**38.2**	**33.6**	**27.7**
Rhythm	4.8	3.8	2.4
Withdrawal	31.9	27.7	24.5
Other[3]	1.5	2.1	0.8
Not currently using	**39.5**	**46.9**	**45.1**
Total	100.0	100.0	100.0
Number of women	4,125	4,044	3,626

[1] Inclusive "other" traditional methods, such as folk methods. This estimate for 2000 differs from the 36.7 percent published in the 2000 ADHS final report, because "folk method" was not included in the "Any traditional method" category in the 2000 report.

7.4 ACCESS TO FAMILY PLANNING

Source of Supply

Information on where women obtain their modern contraceptive methods is useful for family planning managers and those who implement logistics planning. In the 2010 ADHS, women who reported that they were currently using a modern method of contraception were asked where they obtained the method the last time they acquired it. Interviewers were instructed to record the name of the source or facility because respondents may not always be able to accurately categorize a source as public or private. Supervisors and editors then verified and coded this information to improve the accuracy.

Table 7.5 shows that six in ten users of modern methods received their method from the private sector, with the overwhelming majority being from pharmacies. Only one-third of users in 2010 (37 percent) received their method from the public sector compared with 53 percent in 2005. However, the public sector is still the primary source for almost all users of the IUD (96 percent), the second most common modern method after the male condom. Among condom and pill users, the vast majority reported obtaining their most recent supply from a pharmacy (96 and 94 percent, respectively). Two percent of condom users reported obtaining condoms from friends and relatives.

Table 7.5 Source of modern contraception methods

Percent distribution of users of modern contraceptive methods age 15-49 by most recent source of method, according to method, Armenia 2010

Source	Pill	IUD	Male condom	Total
Public sector	4.4	95.6	1.6	37.3
Hospital	0.0	21.1	0.9	8.9
Maternity home	4.4	46.6	0.2	17.6
Diagnostic center	0.0	0.0	0.0	0.2
Women's consultation	0.0	20.9	0.3	7.7
Polyclinic	0.0	6.2	0.0	2.6
Ambulatory/family doctor's office	0.0	0.8	0.2	0.4
Private medical sector	95.6	4.3	96.2	60.7
Private hospital	0.0	0.4	0.0	0.2
Private maternity home	0.0	2.7	0.0	1.0
Private women' s consultation	0.0	1.2	0.0	0.6
Private polyclinic	1.5	0.0	0.0	0.1
Pharmacy	94.1	0.0	96.2	58.9
Other source	0.0	0.0	2.2	1.9
Shop/market/kiosk	0.0	0.0	0.2	0.1
Friend/relative	0.0	0.0	2.0	1.8
Total	100.0	100.0	100.0	100.0
Number of women	55	350	538	974

Note: Total includes female sterilization, foam/jelly, emergency contraception, and other modern methods not shown separately but excludes lactational amenorrhea method (LAM).

Transportation to Source of Supply

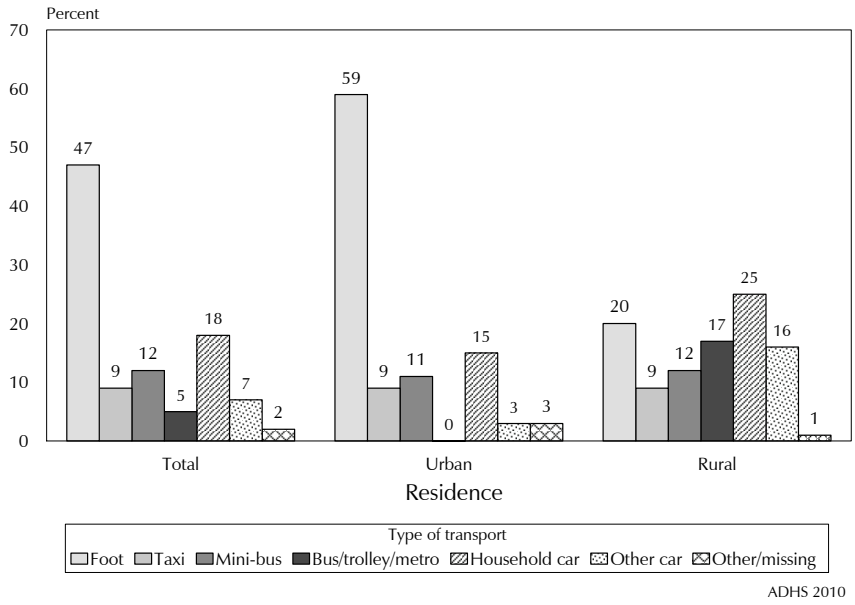
Access to modern contraceptive methods means that the transportation to the source should be quick, easy, and cheap. Figure 7.2 shows that almost half of women (47 percent) walk to their source of contraceptive methods. More than one-quarter of women report that they use a car owned by the household (18 percent), other car (7 percent), or a taxi (9 percent) to obtain their contraceptive method. Just 17 percent of women use public transportation, such as a minibus or bus/trolley/train, to get to a source of contraception.

There are considerable urban-rural differences in the mode of transportation used to get to a source of supply. Urban women are far more likely to walk to their source of supply than rural women (59 percent and 20 percent, respectively). Rural women are more likely than urban women to use a bus/trolley/train, household car or other car to get to a source of contraception.

Use of public transportation such as a minibus or bus/trolley/train has decreased by a factor of more than two since 2005, when more than one-third of women (36 percent) used public transportation to get to a source of contraception, compared with 17 percent in 2010. On the other hand, the proportion of women walking to their source of supply has increased from 32 percent to 47 percent over the same period of time.

The majority of women (eight in ten) who took transportation to their source of contraceptive supply had to pay for the transportation. The median cost of transportation varies according to residence; rural women paid 599 drams while urban women paid 499 drams (data not shown). Cost of transportation has nearly doubled since 2005 for both rural and urban contraceptive users (299 drams and 200 drams, respectively in 2005).

Figure 7.2 Transportation to Source of Contraceptive Supply



The amount of time it takes to reach a source of modern contraceptive supply is longer for rural women than for urban women (data not shown). About four in ten rural women (42 percent) live within 20 minutes of their source of contraception compared with more than seven in ten (76 percent) urban women. Overall, about two-thirds of modern contraceptive method users are within 20 minutes of their source (66 percent), while 82 percent are within 30 minutes of their source. This shows an improvement over the past five years because in 2005 just under half of modern method users were within 20 minutes of their source, and 71 percent were within 30 minutes of their source.

7.5 INFORMED CHOICE

Informed choice is an important aspect of the delivery of family planning services. Family planning clients have a right to information about their contraceptive method. Providers are required to inform all users of contraceptive methods about (1) the potential side effects of their method, (2) what they should do if they encounter side effects or signs of a problem, and (3) alternate methods of family planning they can use. Current users of modern methods who are well informed about the side effects and problems associated with methods and know of a range of method options are better placed to make an informed choice about the method they would like to use. This information improves the quality of care and compliance by assisting users to cope with side effects, thereby decreasing unnecessary discontinuation of temporary methods.

Current users of selected modern contraceptive methods were asked whether, at the time they adopted the particular method, they were informed about the possible side effects or problems that might be encountered with the method. Table 7.6 shows the percentage of current users of modern methods who were either informed about possible side effects or problems with the method used or informed of other methods they could use; these are broken down by method type and source of the method.

Approximately two-thirds of modern contraceptive users were informed about side effects (69 percent) and were told what to do if they did experience side effects (62 percent). The percentage of currently married women informed of side effects and told what to do if they experience side effects has increased from four in ten women in the 2005 ADHS (46 and 44 percent, respectively) and from one-third of users in the 2000 ADHS (36 and 32 percent, respectively). Furthermore, 49 percent of

currently married women in 2010 were informed about other methods of contraception, an increase from 35 percent in 2005 and 23 percent in 2000.

Seventy-two percent of women who obtained their method from the public sector were informed about side effects or problems of the method used, 66 percent were informed about what to do if they experienced side effects, and 46 percent were informed of other methods that could be used.

Despite the improvements suggested by the comparison of the 2010 ADHS with previous surveys, it is clear that both public and private health and family planning workers in Armenia should be providing women with more information about contraceptive methods to encourage them to make informed choices.

Table 7.6 Informed choice

Among current users of modern methods age 15-49 who started the last episode of use within the five years preceding the survey, percentage who were informed about possible side effects or problems of that method, the percentage who were informed about what to do if they experienced side effects, and the percentage who were informed about other methods they could use, by method and initial source, Armenia 2010

	Among women who started last episode of modern contraceptive method within five years preceding the survey:			
Method/source	Percentage who were informed about side effects or problems of method used	Percentage who were informed about what to do if side effects experienced	Percentage who were informed by a health or family planning worker of other methods that could be used	Number of women
Method				
Pill	(44.9)	(34.4)	(63.6)	40
IUD	74.3	69.0	46.2	168
Initial source of method[1]				
Public sector	71.8	66.4	45.6	164
Hospital	(87.4)	(77.4)	(66.1)	37
Maternity home	66.2	62.2	38.7	71
Women's consultation	(76.2)	(75.6)	(59.8)	36
Private medical sector	(58.2)	(48.6)	(61.1)	45
Pharmacy	(47.9)	(35.8)	(55.1)	36
Total	68.6	62.3	49.0	210

Note: Table includes users of only the methods listed individually. Figures in parentheses are based on 25-49 unweighted cases. Total includes cases of female sterilization and initial source not shown separately.
[1] Source at start of current episode of use

7.6 DISCONTINUATION WITHIN 12 MONTHS OF USE

Reproductive goals can only be realized if contraceptive methods are used consistently and correctly. A major concern among family planning program workers is the rate at which contraceptive users discontinue using their methods. To obtain information on contraceptive discontinuation, all segments of contraceptive use in the five-year period before the survey were recorded in the "Calendar" section of the Woman's Questionnaire. In analyzing these data, the month of interview and the two preceding months are ignored in order to avoid the bias that may be introduced by unrecognized pregnancies.

Table 7.7 shows contraceptive discontinuation rates within 12 months of starting use among women age 15-49. Overall, 23 percent of all women who started using a contraceptive method in the past five years discontinued use for various reasons within 12 months of adopting the method, and 3 percent switched to another method. The first year discontinuation rate is lowest among users of the IUD (4 percent) and highest among users of withdrawal (28 percent). Approximately 15 percent of users of condoms discontinued using the method during the first year of use.

Table 7.7 Contraceptive discontinuation rates

Among women age 15-49 who started an episode of contraceptive use in the past five years, the percentage of episodes discontinued within 12 months, by reason for discontinuation and specific method, Armenia 2010

	Reason for discontinuation								
Method	Method failure	Desire to become pregnant	Other fertility related reasons[2]	Side effects/ health reasons	Wanted more effective method	Other method related reasons[3]	Other reasons	Any reason	Switched to another method[4]
IUD	0.0	0.2	0.0	*	(0.0)	*	(0.9)	3.9	0.6
Male condom	3.0	4.1	4.4	*	(1.1)	*	(1.2)	14.8	2.3
Withdrawal	14.0	3.9	6.7	*	(1.7)	*	(1.2)	27.5	2.0
All methods[1]	9.0	3.5	5.3	*	(2.0)	*	(1.8)	23.1	2.9
Number of episodes of use	156	62	94	16	36	12	31	406	51

Note: Figures are based on life-table calculations using information on episodes of use that began 3-62 months prior to the survey. 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] LAM and other methods (female sterilization, pill, foam/jelly, fertility wheel calculator, rhythm) are included in the discontinuation rate for all methods, but are not listed separately.

[2] Includes infrequent sex/husband away, difficult to get pregnant/menopausal, and marital dissolution/separation

[3] Includes lack of access/too far, costs too much, and inconvenient to use

[4] 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 7.8 shows the distribution of discontinuations of all contraceptive methods during the five years preceding the survey by reason for discontinuation. Method failure (i.e., accidental pregnancy or becoming pregnant while using) is the most commonly cited reason for discontinuations. Approximately one-third (33 percent) of all discontinuations were attributed to method failure; 22 percent of respondents who discontinued a contraceptive method said that they wanted to become pregnant, and 16 percent reported infrequent sex or the absence of their partner.

One in three pill users who discontinued use of the method in the five years before the survey cited infrequent sex or the absence of their partner as the reason for discontinuation. An additional 19 percent of women who discontinued use of the pill cited health concerns or side effects as the main reason for stopping. Half of all IUD discontinuations during the five years before the survey were because of side effects or health concerns. An additional 22 percent of IUD discontinuations were because the users wanted to get pregnant. Over one-third (36 percent) of condom use discontinuations occurred because the users wanted to get pregnant. Other frequently mentioned reasons for discontinuing use of the condom included method failure (24 percent) and infrequent sex/husband away (14 percent). Method failure was also cited for 23 percent of discontinuation of the lactational amenorrhea method (LAM), however, the most common reason cited for LAM discontinuation was a desire for a more effective method (27 percent). Discontinuations of the rhythm method were primarily due to method failure (51 percent) or the desire to become pregnant (20 percent). Although method failure is the most commonly cited reason for discontinuations of withdrawal (43 percent), 19 percent of respondents who discontinued withdrawal reported infrequent sex or the absence of their partner, and 16 percent said that they wanted to get pregnant.

The low efficacy of periodic abstinence, withdrawal, and other traditional methods is evidenced by the high failure rate of these methods during use. As previously noted, withdrawal is the most popular method of contraception in Armenia. It is used by 25 percent of currently married women and accounts for nearly half of all contraceptive use. It is striking that a method with such a high failure rate is used by such a substantial proportion of Armenian women who are trying to control their fertility. While not as high as the failure rate attributed to traditional methods, almost one-quarter of the condom and LAM discontinuations are also attributed to method failures.

Table 7.8 Reasons for discontinuation

Percent distribution of discontinuations of contraceptive methods in the five years preceding the survey by main reason stated for discontinuation, according to method, Armenia 2010

Reason	Pill	IUD	Male condom	LAM	Rhythm	Withdrawal	All methods[1]
Became pregnant while using	13.3	2.7	23.7	22.9	50.5	42.9	32.9
Wanted to become pregnant	15.3	21.9	36.1	10.0	20.3	16.2	21.5
Husband/partner disapproved	0.0	0.0	7.2	0.3	2.0	3.3	3.5
Wanted more effective method	4.0	0.8	3.8	27.2	4.3	6.6	5.8
Health concerns/ side effects	19.1	50.2	1.0	2.8	0.0	0.7	6.7
Lack of access/too far	0.0	0.0	0.1	0.0	0.0	0.0	0.0
Costs too much	3.9	0.0	0.9	0.0	0.0	0.0	0.4
Inconvenient to use	2.1	1.1	1.8	6.4	2.7	0.5	1.5
Up to God/fatalistic	0.0	0.0	0.0	2.8	0.0	0.0	0.1
Difficult to get pregnant/ menopausal	6.0	6.4	4.1	0.0	2.0	4.9	4.5
Infrequent sex/husband away	32.2	4.6	14.3	2.1	10.1	19.1	15.8
Marital dissolution/separation	0.0	0.4	3.6	0.0	0.0	1.9	1.9
Other	4.2	7.5	0.0	9.6	3.0	0.3	1.6
Missing	0.0	4.5	3.4	15.8	5.1	3.6	4.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of discontinuations	52	153	337	50	74	761	1,460

[1] Total includes injections, foam/jelly, fertility wheel calculator and traditional methods other than rhythm and withdrawal not shown separately
LAM = Lactational amenorrhea method

7.7 REASONS FOR USING TRADITIONAL METHODS

As mentioned earlier, traditional methods account for about half of all contraceptive use and have high failure rates. To further understand usage patterns, the 2010 ADHS asked users of traditional methods about the reasons that factor into their decision to use a traditional method. The most common reason, given by 60 percent of women (data not shown), was that the traditional method is the husband's or partner's choice, the same percentage as reported this reason in 2005 (59 percent). However, in 2010, 31 percent say that fear of or experience with side effects was a concern, and 20 percent say that the cost of modern methods was a factor in their choice. Both of these reasons have decreased since 2005 when 47 percent and 37 percent of women reported fear of side effects or cost barriers, respectively. Similarly, fewer women in 2010 feel that they lack knowledge about modern methods (10 percent) or that they are difficult to find or are not readily available (11 percent), compared with 20 and 26 percent in 2005. Although there have been some improvements since 2005, Armenian women still perceive barriers to more widespread use of modern contraceptive methods that relate to cost, information, or supply.

7.8 KNOWLEDGE OF THE FERTILE PERIOD

A basic knowledge of the physiology of reproduction is especially useful for the successful practice of coitus-related methods such as withdrawal, condoms, vaginal methods, and fertility-awareness methods that are collectively referred to as periodic abstinence, rhythm, or the calendar method. Knowledge of the fertile period in a woman's menstrual cycle is particularly critical in the case of the rhythm method, and the successful practice of natural family planning depends on an understanding of when during the menstrual cycle a woman is most likely to conceive.

The 2010 ADHS included a question designed to obtain information on the respondent's understanding of when a woman is most likely to become pregnant during the menstrual cycle. All women were asked, "From one menstrual period to the next, are there certain days when a woman is more likely to get pregnant if she has sexual intercourse?" If the answer was "yes," they were further asked whether that time was just before her period begins, during her period, right after her period

ended, or halfway between two periods. Table 7.9 shows the results for all women age 15-49 and for those who reported they are currently using the rhythm method.

Almost one-third (32 percent) of all women age 15-49 correctly identified the fertile period as occurring halfway between periods. However, the same proportion said that they did not know when a woman has her fertile period. Among users of the rhythm method, however, 71 percent were able to correctly identify the fertile period. While not significant, the percentage of women using the rhythm method who can correctly identify the fertile period has slightly decreased in the past 10 years (76 percent in 2005 and 73 percent in 2000, respectively).

Table 7.9 Knowledge of fertile period

Percent distribution of women age 15-49 by knowledge of the fertile period during the ovulatory cycle, according to current use of the rhythm method, Armenia 2010

Perceived fertile period	Users of rhythm method	Nonusers of rhythm method	All women
Just before her menstrual period begins	8.0	4.4	4.4
During her menstrual period	2.1	0.9	1.0
Right after her menstrual period has ended	15.0	17.6	17.6
Halfway between two menstrual periods	71.4	31.0	31.6
No specific time	1.6	13.3	13.1
Don't know	1.9	32.6	32.2
Missing	0.0	0.2	0.2
Total	100.0	100.0	100.0
Number of women	88	5,834	5,922

7.9 NEED FOR FAMILY PLANNING

Maternal health care services are concerned with defining the size of the population of women who have a potential need for family planning services and identifying women whose need for contraception is not being met. Currently married fecund women who either want no more children or want to wait at least two years before having another child, but who are not using contraception, are considered to have an *unmet need* for family planning.[4] Pregnant women are considered to have an unmet need for spacing or limiting if their pregnancy was mistimed or unwanted. Similarly, amenorrheic women who are not using family planning and whose last birth was mistimed are considered to have an unmet need for spacing, and those whose last child was unwanted have an unmet need for limiting. Current users of family planning methods are said to have a *met need* for family planning. The *total demand* for family planning is the sum of the met need and unmet need for family planning.

Table 7.10 presents information on unmet need, met need, and the total demand for family planning services among currently married women, by background characteristics. Overall, 21 percent of currently married women have an unmet need for family planning, with 6 percent having an unmet need for spacing and 15 percent having an unmet need for limiting. Over half of women (55 percent) have a met need for family planning. If all currently married women who say they want to space or limit their children were to use a family planning method, the contraceptive prevalence rate would increase to 77 percent (total demand for family planning). Currently, 72 percent of the family planning needs of currently married women are being met, with just half of that need met by modern methods (36 percent). The total demand for family planning is comprised mostly of the demand to limit births (54 percent), with only 23 percent of the demand for spacing purposes.

[4] For a description of the calculation, see footnote 1, Table 7.10.

A comparison with the 2005 and 2000 ADHS show that total demand for family planning has increased to 77 percent in 2010, after an initial decline from 74 percent in 2000 to 67 percent in 2005; the demand for spacing purposes increased from 15 percent in both 2000 and 2005 to 23 percent in 2010. The percentage of demand satisfied continues to decline from 84 percent in 2000 to 80 percent in 2005 and to 72 percent in 2010.

Table 7.10 Need and demand for family planning among currently married women

Percentage of currently married women age 15-49 with unmet need for family planning, percentage with met need for family planning, the total demand for family planning, and the percentage of the demand for contraception that is satisfied, by background characteristics, Armenia 2010

Background characteristic	Unmet need for family planning[1]			Met need for family planning (currently using)[2]			Total demand for family planning			Percentage of demand satisfied	Percentage of demand satisfied by modern methods	Number of women
	For spacing	For limiting	Total	For spacing	For limiting	Total	For spacing	For limiting	Total			
Age												
15-19	26.8	0.2	27.0	14.7	4.4	19.1	41.5	4.6	46.1	41.5	6.8	68
20-24	13.9	1.9	15.9	34.6	5.2	39.8	50.9	7.1	58.0	72.6	31.4	450
25-29	10.9	4.4	15.3	35.3	26.8	62.1	46.6	31.2	77.8	80.3	41.2	641
30-34	6.4	9.6	16.0	22.5	47.7	70.1	29.0	57.3	86.3	81.4	44.1	650
35-39	1.4	17.9	19.3	7.6	58.8	66.5	9.0	77.1	86.1	77.6	39.9	517
40-44	1.1	25.9	26.9	2.9	53.9	56.7	4.0	79.7	83.7	67.8	33.2	613
45-49	0.9	30.3	31.2	0.9	35.9	36.8	1.8	66.2	68.0	54.1	22.0	687
Residence												
Urban	5.0	14.1	19.1	18.3	39.8	58.0	23.8	54.0	77.8	75.4	42.2	2,111
Rural	7.1	17.2	24.3	14.2	36.3	50.5	21.5	53.5	74.9	67.6	25.9	1,515
Region												
Yerevan	3.0	10.3	13.3	20.6	45.6	66.2	24.4	56.1	80.5	83.5	51.8	1,126
Aragatsotn	3.5	9.7	13.2	21.8	45.0	66.7	25.4	54.8	80.2	83.5	26.9	164
Ararat	11.9	7.7	19.5	19.2	38.6	57.8	31.0	46.2	77.3	74.7	29.7	228
Armavir	2.1	10.7	12.7	18.0	45.3	63.2	20.2	55.9	76.1	83.3	29.6	373
Gegharkunik	12.1	29.5	41.6	5.0	22.2	27.3	17.1	51.7	68.9	39.6	27.0	300
Lori	7.2	18.5	25.6	12.6	40.8	53.4	20.4	59.2	79.6	67.8	44.9	325
Kotayk	9.0	13.7	22.7	19.5	31.9	51.3	28.6	45.5	74.2	69.4	19.1	344
Shirak	8.5	30.4	38.9	11.3	24.3	35.6	19.9	54.7	74.5	47.8	24.5	384
Syunik	6.4	12.8	19.2	15.1	33.2	48.3	21.5	45.9	67.5	71.6	31.8	136
Vayots Dzor	4.4	13.2	17.6	21.0	41.1	62.1	26.2	54.4	80.6	78.1	14.0	90
Tavush	1.8	18.0	19.8	10.8	39.1	49.9	12.6	57.1	69.7	71.6	14.9	156
Education												
Basic	5.2	19.1	24.4	12.2	36.2	48.4	17.4	55.3	72.7	66.5	29.5	147
Secondary	6.5	18.2	24.7	14.0	36.6	50.6	20.6	54.9	75.5	67.3	26.7	1,524
Secondary special	4.8	16.8	21.6	16.8	39.1	55.8	22.4	55.8	78.2	72.4	37.0	1,139
Higher	6.2	7.7	13.9	22.0	40.9	62.8	28.5	48.6	77.1	81.9	50.8	816
Wealth quintile												
Lowest	6.3	15.8	22.0	14.7	38.5	53.2	21.1	54.2	75.3	70.7	28.4	748
Second	7.9	20.6	28.5	11.5	35.5	47.0	19.7	56.1	75.8	62.4	22.6	741
Middle	5.5	17.4	23.0	16.0	36.2	52.2	22.7	53.6	76.2	69.9	35.3	725
Fourth	6.4	9.5	15.9	19.4	40.8	60.2	25.9	50.6	76.5	79.2	44.2	682
Highest	3.2	13.3	16.5	21.6	40.8	62.4	25.1	54.1	79.2	79.1	47.6	730
Total	5.9	15.4	21.3	16.6	38.3	54.9	22.8	53.8	76.6	72.2	35.6	3,626

[1] *Unmet need for spacing:* Includes women who are fecund and not using family planning and who say they want to wait two or more years for their next birth, or who say they are unsure whether they want another child, or who want another child but are unsure when to have the child. In addition, unmet need for spacing includes pregnant women whose current pregnancy was mistimed, or whose current pregnancy was unwanted but who now say they want more children. Unmet need for spacing also includes amenorrheic women whose last birth was mistimed, or whose last birth was unwanted but who now say they want more children. *Unmet need for limiting:* Includes women who are fecund and not using family planning and who say they do not want another child. In addition, unmet need for limiting includes pregnant women whose current pregnancy was unwanted but who now say they do not want more children or who are undecided whether they want another child. Unmet need for limiting also includes amenorrheic women whose last birth was unwanted but who now say they do not want more children or who are undecided whether they want another child.

[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.

Unmet need is high among the youngest age group; one in four women age 15-19 expresses an unmet need for family planning. Most of this need is for spacing (27 percent). In contrast with younger women, women age 35 and older are mainly in need of contraception for limiting. Unmet need is only slightly higher among rural (24 percent) than urban women (19 percent). Looking at regional variation, unmet need is highest in Gegharkunik and Shirak, where four in ten women express a need for family planning, compared with one in eight women in Yerevan, Aragatsotn, and Armavir. Unmet need is higher among women with lower levels of educational attainment and among women living in less economically advantaged households. Unmet need has nearly doubled since 2000, rising from 12 to 21 percent of married women.

7.10 FUTURE USE OF CONTRACEPTION

The needs and practices of women in the area of contraception change as they go through their reproductive years. Currently married women who were not using contraception at the time of the survey were asked whether they intended to use family planning methods in the future. The results are presented in Table 7.11.

Twenty-three percent of all currently married nonusers stated that they intend to use a contraceptive method at some time in the future, a decrease from 29 percent in the 2005 ADHS and 36 percent in the 2000 ADHS. One-third (33 percent) of nonusers with one child say they intend to use a contraceptive method in the future. These women are more likely to intend to use a contraceptive method in the future than women with no children and women with two or more living children. Indeed, a majority of nonusers with two or more children report that they do not intend to use a method in the future.

Table 7.11 Future use of contraception

Percent distribution of currently married women age 15-49 who are not using a contraceptive method by intention to use in the future, according to number of living children, Armenia 2010

	Number of living children[1]					
Intention	0	1	2	3	4+	Total
Intends to use	26.2	33.3	21.4	16.6	9.8	23.0
Unsure	38.2	34.2	24.3	17.2	18.2	26.2
Does not intend to use	35.6	31.3	53.0	65.5	70.8	49.8
Missing	0.0	1.1	1.4	0.7	1.2	1.0
Total	100.0	100.0	100.0	100.0	100.0	100.0
Number of women	169	379	648	359	82	1,636

[1] Includes current pregnancy

7.11 EXPOSURE TO FAMILY PLANNING MESSAGES IN THE MASS MEDIA

The mass media provide an opportunity to communicate family planning information to a broad spectrum of the population. Information on the level of exposure to such media is important for programmers and planners to effectively target population subgroups for information, education, and communication campaigns. To assess the extent to which media serve as sources of family planning messages, respondents were asked whether they had heard or seen a message about family planning on the radio or television or in newspapers or magazines in the few months preceding the survey. Exposure to family planning messages among women and men age 15-49 is shown in Table 7.12.

Among women, television is the most common source of messages on family planning; 51 percent of all female respondents have seen a family planning message on television. Newspapers or magazines and other print materials such as pamphlets are also common sources (32 percent and 29 percent, respectively). Women are least likely to report the radio or community events as a source;

nonetheless, in the months preceding the survey 12 percent of women heard a message on the radio and 17 percent at a community event.

Men are far less likely than women to have seen or heard a family planning message during the past few months preceding the survey. Overall, 70 percent of men were not exposed to a family planning message from any of the specified sources (compared to 40 percent of women). As seen with women, television is the most common source of messages on family planning for men (28 percent).

Table 7.12 Exposure to family planning messages

Percentage of women and men age 15-49 who heard or saw a family planning message on radio, on television, in a newspaper, at a community event, or in a pamphlet in the past few months, according to background characteristics, Armenia 2010

	Women								Men							
Background characteristic	Radio	Tele-vision	News-paper/ maga-zine	None of these three media sources	Com-munity event	Pamph-let	None of all media sources	Number of women	Radio	Tele-vision	News-paper/ maga-zine	None of these three media sources	Com-munity event	Pamph-let	None of all media sources	Number of men
Age																
15-19	10.8	40.5	25.2	55.8	12.7	19.1	52.5	861	3.7	16.9	4.6	83.0	2.2	1.7	81.8	229
20-24	9.9	49.0	32.1	47.2	15.9	27.4	41.1	1,032	2.4	23.1	8.3	72.2	3.1	3.1	70.7	298
25-29	11.3	54.8	30.7	42.7	16.4	32.1	37.4	950	4.7	29.4	8.9	69.9	1.7	4.4	68.4	285
30-34	15.0	56.2	39.3	39.0	20.4	30.5	34.7	838	6.2	32.0	11.5	65.7	4.0	4.8	64.8	229
35-39	12.2	51.8	33.7	43.2	14.7	33.7	38.2	643	6.8	29.7	6.2	69.0	2.9	1.9	69.0	162
40-44	13.6	54.9	34.7	41.8	18.9	31.2	37.5	742	8.4	32.5	13.6	66.6	3.8	7.0	65.6	164
45-49	12.9	51.4	31.8	44.8	16.4	29.5	39.5	857	6.7	33.2	13.4	66.0	4.9	3.5	66.0	217
Residence																
Urban	17.0	54.9	38.1	41.0	20.9	33.1	35.8	3,641	8.0	35.8	13.0	62.0	5.0	5.8	60.6	984
Rural	4.4	45.0	23.1	51.7	9.4	22.1	47.4	2,281	0.7	14.3	3.3	84.8	0.2	0.2	84.6	600
Region																
Yerevan	23.5	57.7	40.2	39.3	25.8	33.2	34.5	2,069	11.6	39.0	15.6	58.4	5.9	7.2	57.0	593
Aragatsotn	0.2	36.8	8.4	62.0	2.9	2.4	61.3	260	0.1	4.7	3.9	91.8	0.4	1.1	91.6	70
Ararat	0.1	5.2	1.5	94.8	0.7	2.2	94.8	379	0.0	0.4	1.8	97.8	0.0	0.0	97.8	125
Armavir	1.5	49.9	21.9	48.7	4.6	13.8	41.8	535	0.0	9.4	2.1	90.6	0.0	0.8	90.6	148
Gegharkunik	1.9	65.6	19.5	34.1	11.0	9.3	33.2	459	0.4	11.2	1.3	88.2	0.9	0.4	88.2	83
Lori	2.3	38.1	26.8	54.1	4.5	36.2	47.6	513	0.0	1.2	1.2	97.5	0.9	7.4	92.6	130
Kotayk	11.6	47.4	46.4	38.7	18.1	31.4	33.5	543	2.0	15.5	4.1	83.7	0.6	0.0	83.7	148
Shirak	22.2	58.5	36.4	39.1	16.1	48.0	32.1	598	6.3	91.8	28.4	7.2	9.0	2.4	7.2	131
Syunik	0.8	68.2	53.9	27.5	26.9	62.7	20.7	198	0.0	43.0	0.9	57.0	0.0	0.7	57.0	63
Vayots Dzor	1.9	51.5	26.4	45.5	12.0	42.2	35.2	131	0.4	2.3	0.0	97.3	0.0	0.4	97.3	24
Tavush	0.6	61.3	42.4	36.0	29.9	29.2	29.6	238	3.2	10.7	1.7	87.1	0.0	0.7	86.8	68
Education																
Basic	3.3	33.4	12.7	64.3	4.7	14.4	61.9	347	2.1	15.9	5.3	84.1	1.1	1.4	82.7	188
Secondary	6.4	43.9	21.3	53.2	8.9	22.1	48.2	2,137	3.0	18.4	3.5	79.7	1.0	0.8	79.5	619
Secondary special	13.8	55.2	35.9	41.0	18.3	34.5	34.5	1,681	2.0	29.8	10.1	67.6	0.7	2.3	66.6	301
Higher	19.3	59.4	46.4	35.4	26.3	34.5	31.8	1,757	11.4	43.0	18.1	55.5	8.3	9.2	53.8	477
Wealth quintile																
Lowest	3.4	42.3	18.7	56.0	6.4	19.7	52.4	1,151	0.0	14.7	2.4	85.0	0.3	0.0	85.0	332
Second	5.3	47.7	25.6	48.8	11.0	23.2	43.9	1,211	0.8	16.4	3.5	82.1	0.5	1.7	80.9	285
Middle	12.3	53.1	33.8	42.3	15.9	34.0	35.3	1,139	6.7	34.4	14.0	65.0	2.9	3.3	64.2	312
Fourth	18.2	56.0	42.3	38.8	22.4	35.3	34.8	1,146	6.6	34.9	13.7	61.6	4.8	3.0	61.3	332
Highest	20.7	56.1	40.8	39.9	26.0	32.1	35.1	1,275	11.5	37.0	12.7	60.5	7.0	10.4	58.1	323
Total	12.1	51.1	32.3	45.1	16.5	28.9	40.3	5,922	5.2	27.7	9.4	70.6	3.2	3.7	69.7	1,584

Exposure to family planning messages is closely related to age, place of residence, level of education, and household wealth. Women living in rural areas, women with lower levels of education, and those living in poorer households are less likely to have been exposed to family planning messages than older women, urban dwellers, women with higher levels of education, and those living in economically advantaged households. Differentials by residence, education and wealth are more pronounced among men than women.

Regional differences in exposure to family planning messages are considerable. Among both women and men the vast majority of respondents living in Ararat (95 percent of women and 98 percent of men) were not exposed to a family planning message from any of the specified sources. Men living in Shirak and women in Syunik were the most likely to have heard a family planning message. Individuals age 15-19 of both sexes report the lowest exposure to family planning messages in the media. Non-exposure to all media sources among young people age 15-19 is 82 percent for males and 53 percent for females. These results indicate a need for programs that target youth (with family planning messages) in their preferred media channels and sources of information.

Exposure to family planning messages has increased since 2005, when more than three-quarters of men and just under half of women (77 percent and 44 percent, respectively) were not exposed to a family planning message from any of the specified sources, compared with 70 and 40 percent, respectively in 2010. Among men, the most noticeable increase in exposure to a family planning message is from television (28 percent in 2010 and 16 percent in 2005). Among women, newspapers or magazines (32 percent) and other print materials such as pamphlets (29 percent) are more common sources in 2010 than in 2005 (23 and 12 percent, respectively). On the other hand, the proportion of women who cite community events as a source of a family planning message has decreased from 29 percent to 17 percent over the same period of time.

7.12 Contact of Nonusers with Family Planning Providers

To determine whether nonusers of family planning in Armenia have had an opportunity to receive information about family planning from providers, women who were not using contraception were asked whether they had attended a health facility in the past year for any reason and, if so, whether a staff person at that facility spoke to them about family planning methods. These questions help to assess the level of so-called "missed opportunities" to inform women about contraception. The results are shown in Table 7.13.

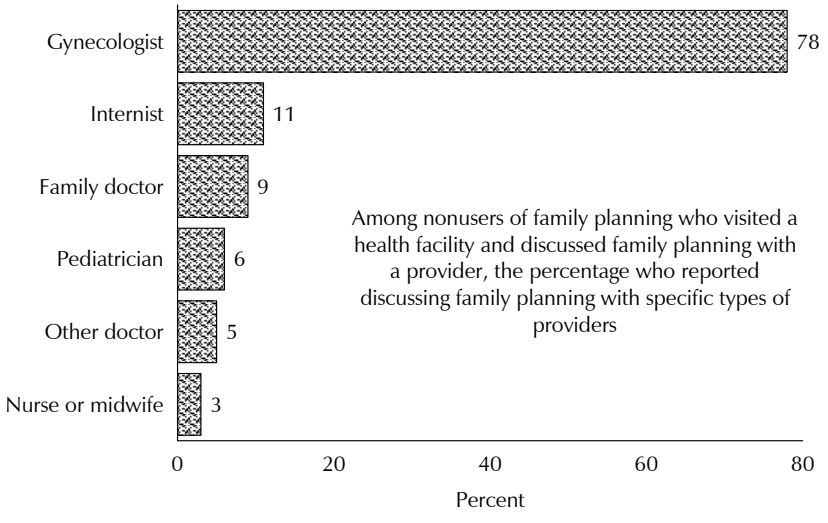
Less than one-third of nonusers (31 percent) visited a health facility during the 12 months preceding the survey. The vast majority of women not using a method of contraception who visited a health facility had no discussions about family planning with a health professional (27 percent). Very few nonusers discussed family planning with a health worker inside a health facility (4 percent). Among those nonusers, the majority talked to their gynecologist (78 percent). In addition, nonusers talked with their internist (11 percent), a family doctor (9 percent), a pediatrician (6 percent), other doctors (5 percent), and a nurse or midwife (3 percent) (Figure 7.3).

Table 7.13 Contact of nonusers with family planning providers

Among women age 15-49 who are not using contraception, the percentage who during the past 12 months visited a health facility, the percentage who visited a health facility and discussed family planning with any staff member, and the percentage who visited a health facility but did not discuss family planning, by background characteristics, Armenia 2010

Background characteristic	Percentage of women who visited a health facility	Percentage of women who visited a health facility in the past 12 months and who:		Number of women
		Discussed family planning with any staff member	Did not discuss family planning	
Age				
15-19	17.0	1.7	15.3	846
20-24	31.4	5.4	26.0	851
25-29	37.9	6.4	31.5	550
30-34	41.4	6.0	35.4	382
35-39	40.5	4.4	36.1	299
40-44	32.2	3.1	29.1	392
45-49	30.2	2.2	28.0	597
Residence				
Urban	32.7	4.2	28.5	2,403
Rural	27.7	3.6	24.0	1,513
Region				
Yerevan	31.6	4.3	27.3	1,313
Aragatsotn	8.8	0.7	8.1	151
Ararat	15.9	2.3	13.6	245
Armavir	30.9	1.2	29.6	299
Gegharkunik	26.4	3.8	22.6	377
Lori	38.5	3.4	35.0	340
Kotayk	43.0	8.2	34.8	364
Shirak	33.7	4.0	29.7	461
Syunik	22.1	9.9	12.2	132
Vayots Dzor	35.6	1.0	34.6	75
Tavush	30.6	1.8	28.8	160
Education				
Basic	22.1	1.7	20.4	274
Secondary	34.6	4.4	30.2	1,364
Secondary special	30.6	4.7	25.9	1,036
Higher	28.7	3.6	25.1	1,241
Wealth quintile				
Lowest	24.3	2.1	22.3	752
Second	29.8	4.7	25.1	861
Middle	33.8	4.5	29.3	755
Fourth	35.0	5.1	29.9	731
Highest	31.2	3.6	27.5	817
Total	30.8	4.0	26.8	3,916

Figure 7.3 Family Planning Counseling of Nonusers by Type of Health Provider



ADHS 2010

7.13 MEN'S ATTITUDES TOWARD FAMILY PLANNING

The 2010 ADHS assessed respondent's attitudes toward contraception by asking currently married male respondents whether they agreed or disagreed with two statements about family planning use: (1) contraception is a woman's business, and a man should not have to worry about it, and (2) women who use contraception may become promiscuous. The results are shown in Table 7.14.

The majority of Armenian men age 15-49 think that men should take some responsibility for family planning, as 73 percent rejected the statement that contraception is a woman's business and men should not have to worry about it. Fourteen percent of men agree with the statement that contraception is a woman's business only, and the same proportion of men do not know the answer. Men's attitude toward the statement that women who use contraception may become promiscuous shows that nearly half of men (47 percent) reject the statement, 14 percent of men agree with the statement, and 39 percent of men do not know the answer. Young men age 15-19 are the most likely to say that they do not know the answer for both statements, while older men age 30 and up are the most likely to reject both statements. Urban men are more likely to disagree with both statements than their rural counterparts. Differences by region are pronounced.

Table 7.14 Men's attitudes toward use of contraception by women

Percent distribution of men age 15-49 by two common attitudes regarding women's use of contraception: "Contraception is a woman's business," and "Women who use contraception may become promiscuous" and by whether the man agrees with these attitudes, according to background characteristics, Armenia 2010

Background characteristics	Contraception is woman's business				Women who use contraception may become promiscuous				
	Disagree	Agree	Don't know	Total	Disagree	Agree	Don't know	Total	Number
Age									
15-19	49.1	8.7	42.2	100.0	20.2	6.8	73.0	100.0	229
20-24	69.2	8.5	22.3	100.0	28.2	13.2	58.5	100.0	298
25-29	74.5	18.4	7.1	100.0	47.4	17.7	34.9	100.0	285
30-34	81.3	15.6	3.0	100.0	59.5	10.2	30.2	100.0	229
35-39	78.9	14.6	6.5	100.0	58.9	18.1	23.0	100.0	162
40-44	77.6	15.7	6.7	100.0	67.2	12.5	20.3	100.0	164
45-49	81.7	16.8	1.4	100.0	61.8	20.2	18.0	100.0	217
Residence									
Urban	75.7	14.2	10.2	100.0	53.3	16.0	30.6	100.0	984
Rural	67.5	13.3	19.1	100.0	36.1	10.8	53.1	100.0	600
Region									
Yerevan	74.6	16.4	9.0	100.0	62.6	15.4	22.0	100.0	593
Aragatsotn	44.3	12.7	43.0	100.0	24.1	5.4	70.4	100.0	70
Ararat	16.5	50.6	32.9	100.0	11.8	1.4	86.8	100.0	125
Armavir	89.1	9.1	1.9	100.0	56.2	8.8	35.0	100.0	148
Gegharkunik	86.7	5.8	7.5	100.0	16.2	28.6	55.3	100.0	83
Lori	79.9	4.4	15.7	100.0	42.2	0.9	56.9	100.0	130
Kotayk	91.6	4.8	3.7	100.0	50.7	24.2	25.1	100.0	148
Shirak	76.1	8.0	16.0	100.0	53.7	7.1	39.2	100.0	131
Syunik	70.2	3.2	26.5	100.0	6.2	62.4	31.4	100.0	63
Vayots Dzor	65.7	14.8	19.5	100.0	37.3	4.2	58.5	100.0	24
Tavush	76.9	4.1	19.0	100.0	41.7	3.2	55.1	100.0	68
Education									
Basic	65.2	11.0	23.8	100.0	36.4	11.7	51.9	100.0	188
Secondary	67.4	16.8	15.8	100.0	41.1	12.6	46.2	100.0	619
Secondary special	77.7	10.2	12.1	100.0	52.7	13.8	33.5	100.0	301
Higher	79.1	13.4	7.6	100.0	54.5	17.0	28.5	100.0	477
Wealth quintile									
Lowest	63.3	15.3	21.4	100.0	35.7	9.2	55.1	100.0	332
Second	71.0	12.0	17.0	100.0	44.6	10.6	44.7	100.0	285
Middle	75.5	13.8	10.8	100.0	40.4	18.2	41.4	100.0	312
Fourth	76.3	14.3	9.3	100.0	52.9	17.3	29.8	100.0	332
Highest	77.0	13.5	9.5	100.0	60.0	14.7	25.2	100.0	323
Total	72.6	13.8	13.6	100.0	46.8	14.0	39.1	100.0	1,584

Over the past five years there has been a notable decline in the proportion of men age 15-49 who agree with the statement that contraception is women's business (23 percent in 2005, compared with 14 percent in 2010). This indication of improved male attitudes toward contraception is encouraging. However, there has been virtually no change in the proportion of men who agree with the statement that women who use contraception may become promiscuous (13 percent in 2005 compared with 14 percent in 2010). Information, education, and communication (IEC) programs that target men and male involvement and partnerships with programs in reproductive health and family planning may be beneficial for improving male attitudes toward contraception.

ABORTION 8

Information about induced abortion was collected in the 2010 ADHS through a detailed reproductive history. Each woman was asked how many pregnancies had ended in live births, induced abortions, miscarriages, and stillbirths. For each pregnancy, the month and year in which the pregnancy ended, and the outcome of the pregnancy were recorded.[1] In addition, the duration was recorded for each pregnancy ending during the five-year period preceding the survey.

8.1 PREGNANCY OUTCOMES

Table 8.1 shows the percent distribution of pregnancy outcomes occurring during the three-year period preceding the survey (approximately November 2007 to November 2010). About six in ten pregnancies resulted in a live birth (63 percent), and about three in ten resulted in abortion (29 percent).[2] Eight percent of pregnancies were miscarried, and less than 1 percent resulted in stillbirths.

The proportion of pregnancies that ends in induced abortion rises dramatically with the woman's age and with the order of pregnancy. Less than 10 percent of teenage pregnancies end in abortion, compared with 18 percent of pregnancies among women age 20-24, 39 percent among women age 25-34, and 42 percent among women age 35-44. There is an even steeper increase in abortion by pregnancy order, ranging from 2 percent of first pregnancies to 66 percent of fifth or higher pregnancies.

There is little difference in pregnancy outcome by urban-rural residence, although rural women are slightly more likely than urban women to have had a recent pregnancy end in a live birth (66 and 62 percent, respectively). Pregnancy outcome varies substantially by region. The lowest proportion of induced abortions is 6 percent in Syunik, and the highest is 40 percent in Armavir. Because regional results are based on a small number of pregnancies, however, these findings should be viewed with caution.

There is a strong negative relationship between abortion and education; the percentage of pregnancies that end in abortion decreases as education increases. Women with basic education only have the highest percentage of pregnancies resulting in induced abortions (37 percent), while women with higher than secondary education have 21 percent of pregnancies resulting in induced abortion. Although there is no clear relationship between induced abortion and wealth status, mothers in the lowest and middle wealth quintiles have the highest proportion of pregnancies resulting in abortion.

[1] The pregnancy history was structured to ensure complete reporting of abortions, especially for those occurring in the period immediately before the survey. Data were collected in reverse chronological order (i.e., information was first collected about the most recent pregnancy and then about the next to last pregnancy and so on). This procedure was designed to result in a more complete reporting of events for the years immediately before the survey than would have occurred by collecting information in chronological order. At the end of the pregnancy history, interviewers were required to check the consistency between the aggregate data collected at the outset of the reproductive section and the number of events reported in the pregnancy history.

[2] In the 2005 ADHS, data collection methodology was modified from the approach used in the 2000 ADHS. In the 2000 ADHS, respondents were asked about "self-induced abortions" and "induced abortions" separately. However, only 37 women in the 2000 ADHS sample reported inducing an abortion themselves without the assistance of a medical professional. This distinction was dropped in the 2005 and 2010 ADHS questionnaires.

Table 8.1 Pregnancy outcome by background characteristics

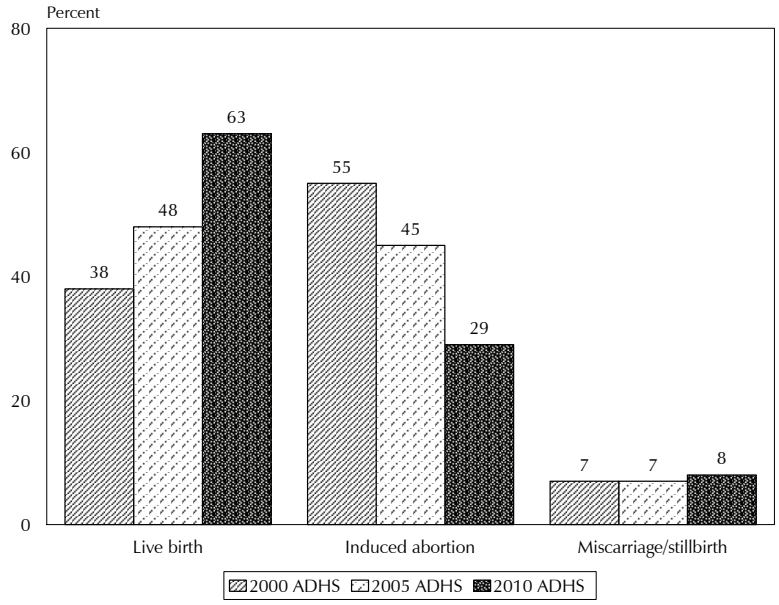
Percent distribution of pregnancies ending in the three years preceding the survey by type of outcome, according to background characteristics, Armenia 2010.

Background characteristic	Pregnancy outcome				Total	Number of pregnancies
	Live birth	Induced abortion	Miscarriage	Stillbirth		
Age at pregnancy outcome						
<20	81.8	7.0	11.2	0.0	100.0	98
20-24	75.3	17.6	7.0	0.0	100.0	563
25-34	54.5	38.6	6.7	0.1	100.0	665
35-44	44.9	42.4	12.1	0.6	100.0	127
45-49	*	*	*	*	100.0	3
Pregnancy order						
First	91.3	1.9	6.7	0.2	100.0	426
Second	79.3	13.2	7.5	0.0	100.0	365
Third	46.6	45.2	8.1	0.1	100.0	247
Fourth	40.6	51.7	7.3	0.3	100.0	167
Fifth or higher	24.9	66.2	9.0	0.0	100.0	252
Residence						
Urban	62.0	29.3	8.6	0.1	100.0	859
Rural	65.5	28.3	6.2	0.1	100.0	598
Region						
Yerevan	62.7	29.2	8.1	0.0	100.0	466
Aragatsotn	89.3	8.7	2.0	0.0	100.0	48
Ararat	81.4	16.1	2.5	0.0	100.0	82
Armavir	52.4	39.7	7.9	0.0	100.0	166
Gegharkunik	67.2	24.4	8.4	0.0	100.0	103
Lori	69.2	16.8	14.0	0.0	100.0	102
Kotayk	61.0	34.8	3.7	0.5	100.0	157
Shirak	54.4	38.1	7.4	0.0	100.0	175
Syunik	79.9	6.0	13.0	1.1	100.0	47
Vayots Dzor	69.4	22.5	8.1	0.0	100.0	36
Tavush	56.1	35.9	7.6	0.4	100.0	75
Education						
Basic	61.2	36.5	2.2	0.0	100.0	68
Secondary	60.5	30.8	8.6	0.2	100.0	595
Secondary special	62.2	31.4	6.4	0.1	100.0	454
Higher	70.8	20.7	8.6	0.0	100.0	339
Wealth quintile						
Lowest	59.6	36.0	4.2	0.2	100.0	309
Second	68.8	24.1	6.8	0.4	100.0	278
Middle	57.4	35.2	7.5	0.0	100.0	319
Fourth	67.2	21.5	11.2	0.0	100.0	291
Highest	65.4	26.0	8.6	0.0	100.0	259
Total	63.4	28.9	7.6	0.1	100.0	1,457

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

The proportion of pregnancies ending in induced abortion has declined over the past ten years, from 55 percent in 2000, to 45 percent in 2005, and to 29 percent in 2010 (Figure 8.1). Conversely, the proportion of pregnancies ending in live births has increased, from 38 percent in 2000, to 48 percent in 2005, and to 63 percent in 2010 (NSS et al., 2001; NSS et al., 2006).

Figure 8.1 **Trends in Pregnancy Outcomes, Armenia 2000, 2005, and 2010**



8.2 LIFETIME EXPERIENCE WITH INDUCED ABORTION

Table 8.2 shows how many abortions are experienced over women's lifetimes. Statistics are based on all women age 15-49, irrespective of their exposure to the risk of pregnancy.

Approximately three in ten respondents have ever had an induced abortion (31 percent). As expected, the likelihood increases with age, from 5 percent among women 20-24 years of age, to 31 percent among women age 25-34, and to 55 percent among women age 35 and older. There is a positive relationship between having had an induced abortion and number of living children. Less than 1 percent of women with no living children have had an abortion, compared with 17 percent of women with one child, 58 percent of women with two to three children, and 56 percent of women with four or more children.

There are no pronounced differentials in lifetime prevalence of induced abortions by urban-rural residence or by wealth. There is a curvilinear relationship between level of education and induced abortion: both the least educated women and the most educated women are less likely to have an induced abortion than other women. However, women with higher education have the lowest percentage of pregnancies resulting in induced abortion (20 percent). It is possible that women with more education, who use more reliable methods of birth control, are less likely to become accidentally pregnant in the first place. There is significant variation in lifetime experience of induced abortion by region, ranging from a low of 16 percent in Syunik to a high of 41 percent in Kotayk.

Among women who have ever had an abortion, almost two-thirds have had more than one abortion, 47 percent of women reported two to three abortions, and 12 percent reported four to five abortions. Five percent had six or more abortions; for these women, abortion is the main method of fertility control. There is considerable variation by region, ranging from 10 to 11 percent of women having six or more abortions in Armavir and Kotayk to 1 percent or less of those in Lori, Tavush, Syunik, and Vayots Dzor. Among women who have had an abortion, the mean number of abortions per woman is 2.4.

Table 8.2 Lifetime experience with induced abortion

Percentage of women age 15-49 who have had at least one induced abortion, and among these women, percent distribution by number of abortions, and the mean number of abortions, according to background characteristics, Armenia 2010

Background characteristic	Percentage of women with an induced abortion	Number of women	Among women who had an abortion, percent distribution by number of abortions					Mean number of abortions	Number of women with abortions
			1	2-3	4-5	6+	Total		
Age									
<20	0.2	861	*	*	*	*	100.0	*	2
20-24	5.2	1,032	(73.5)	(26.5)	(0.0)	(0.0)	100.0	(1.3)	53
25-34	30.5	1,788	53.2	36.8	8.4	1.6	100.0	1.8	545
35+	55.3	2,241	27.2	52.2	13.8	6.8	100.0	2.6	1,239
Number of living children									
0	0.5	2,233	*	*	*	*	100.0	2.3	12
1	16.6	769	57.4	34.1	6.2	2.3	100.0	1.8	128
2-3	58.3	2,737	35.5	47.6	11.8	5.0	100.0	2.4	1,597
4+	56.1	183	18.8	52.6	20.8	7.9	100.0	2.9	103
Marital status									
Never married	0.1	1,911	*	*	*	*	100.0	1.0	2
Currently married	45.9	3,626	37.1	45.8	12.0	5.0	100.0	2.4	1,666
Formerly married	44.3	385	27.4	57.9	9.9	4.8	100.0	2.4	171
Residence									
Urban	29.7	3,641	38.0	47.8	10.4	3.9	100.0	2.2	1,082
Rural	33.2	2,281	34.0	45.5	13.9	6.7	100.0	2.6	756
Region									
Yerevan	29.8	2,069	38.9	48.0	9.1	4.0	100.0	2.2	617
Aragatsotn	30.6	260	51.8	44.5	2.3	1.4	100.0	1.6	80
Ararat	29.5	379	45.5	50.4	2.5	1.6	100.0	1.8	112
Armavir	40.0	535	24.5	45.4	20.6	9.6	100.0	3.1	214
Gegharkunik	32.7	459	22.6	44.1	24.7	8.6	100.0	3.2	150
Lori	18.9	513	64.8	31.9	2.8	0.6	100.0	1.5	97
Kotayk	41.2	543	23.4	51.0	15.1	10.5	100.0	2.9	224
Shirak	33.4	598	32.1	49.1	15.6	3.2	100.0	2.4	200
Syunik	15.7	198	57.0	43.0	0.0	0.0	100.0	1.5	31
Vayots Dzor	30.8	131	59.5	34.3	6.2	0.0	100.0	1.6	40
Tavush	31.0	238	38.3	53.6	7.4	0.7	100.0	2.0	74
Education									
Basic	28.0	347	35.3	42.2	17.6	4.8	100.0	2.7	97
Secondary	37.0	2,137	33.5	47.4	12.4	6.7	100.0	2.5	791
Secondary special	36.0	1,681	35.7	48.2	11.5	4.6	100.0	2.3	604
Higher	19.7	1,757	44.0	44.6	9.5	1.9	100.0	2.0	346
Wealth quintile									
Lowest	32.4	1,151	35.4	48.1	11.4	5.2	100.0	2.4	373
Second	32.9	1,211	32.4	44.9	16.1	6.6	100.0	2.6	398
Middle	33.1	1,139	38.6	44.7	12.9	3.8	100.0	2.3	377
Fourth	28.1	1,146	37.7	50.8	7.8	3.7	100.0	2.2	322
Highest	28.9	1,275	38.0	46.4	10.1	5.6	100.0	2.3	368
Total	31.0	5,922	36.3	46.8	11.8	5.0	100.0	2.4	1,839

Note: Currently married includes respondents in consensual union (living together). Formerly married includes divorced, separated, and widowed respondents. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed. Figures in parentheses are based on 25-49 unweighted cases.

8.3 RATES OF INDUCED ABORTION

Table 8.3 shows the rates of induced abortion for the three-year period preceding the 2010 ADHS survey (approximately November 2007 to November 2010). Three types of rates are presented: age-specific abortion rates, the total abortion rate, and the general abortion rate. Age-specific abortion rates (ASARs), which are shown per 1,000 women, express the number of abortions among women of a given age, divided by the total number of women in that age group. The total abortion rate (TAR), which is expressed per woman, is a summary measure of the age-specific rates. The TAR is interpreted as the number of abortions a woman would have in her lifetime if she experienced the currently observed age-specific rates during her childbearing years. The general abortion rate (GAR) is the number of abortions divided by the number of women age 15-44 and is expressed per 1,000 women.

At the national level, the age-specific rates for induced abortion peak among women age 25-29 and decline in the older age groups. Age-specific abortion rates are lower than the fertility rates for women under age 30 but are nearly the same as the fertility rates for older women (Figure 8.2).

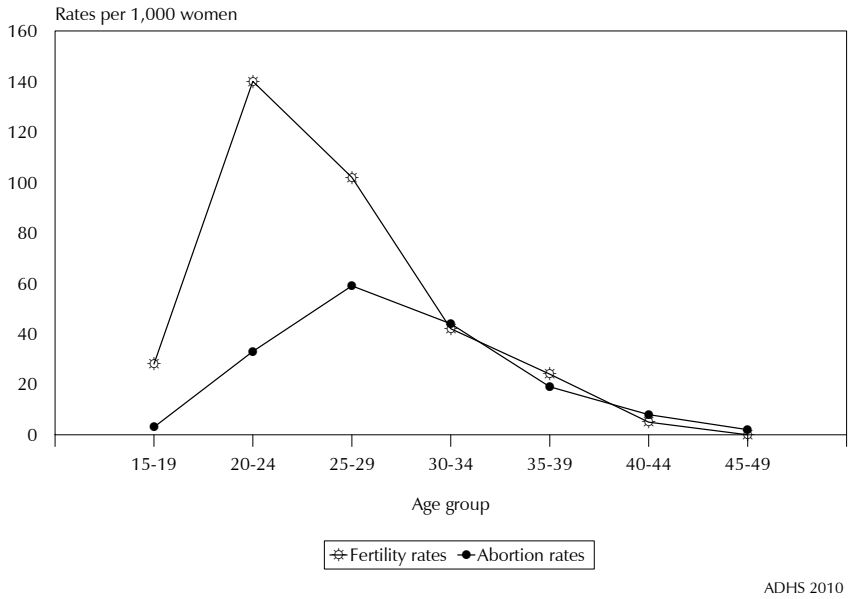
Table 8.3 Induced abortion rates

Age-specific induced abortion rates (per 1,000 women), total abortion rates (TAR), and general abortion rates (GAR), for the three-year period preceding the survey, by residence, Armenia 2010

	Residence		
Age group	Urban	Rural	Total
15-19	1	5	3
20-24	34	31	33
25-29	55	64	59
30-34	42	48	44
35-39	15	25	19
40-44	7	10	8
45-49	2	2	2
TAR(15-49)[1]	0.8	0.9	0.8
TAR(15-44)	0.8	0.9	0.8
GAR[2]	27.0	29.0	28.0

[1] Total abortion rate (TAR) expressed per woman.
[2] General abortion rate (GAR) = number of abortions divided by number of women (15-44), expressed per 1,000 women.

Figure 8.2 **Age-Specific Fertility Rates and Induced Abortion Rates, Armenia 2010**



ADHS 2010

The total abortion rate for Armenia is 0.8 abortions per woman. In 2010, the TAR for rural women is almost the same as that for urban women (0.9 versus 0.8), while in 2005, they were 2.2 and 1.5, respectively (NSS et al., 2006). The age-specific abortion rates are higher among rural women than among urban women for all age groups except women age 20-24 and 45-49.

Table 8.4 shows that induced abortion rates vary by region from 0.2 in Syunik to 1.5 in Armavir. Women with higher education and those from the wealthier households have the lowest TARs. The last column in Table 8.4 shows the mean number of abortions ever performed among women age 40-49. This is an indicator of cumulative terminations; it reflects the lifetime abortion experience of older women who are nearing the end of their reproductive period. The findings show that the mean number of abortions ever performed among women age 40-49 (1.6 abortions per woman) is higher than the TAR for the three years preceding the survey (0.8 abortions per woman), indicating a decline in abortions over the past 30 years. The decline in abortions implied by a comparison of the TAR with the lifetime experience of abortions among older women appears to have been shared by all subgroups, but is particularly evident among women with the lowest educational attainment and among residents of Gegharkunik and Kotayk. For these women the difference between the TAR and the mean number of abortions is 1.3 or more abortions per woman.

Table 8.4 Induced abortion rates by background characteristics

Total induced abortion rates for the three years preceding the survey and mean number of abortions among women age 40-49, by background characteristics, Armenia 2010

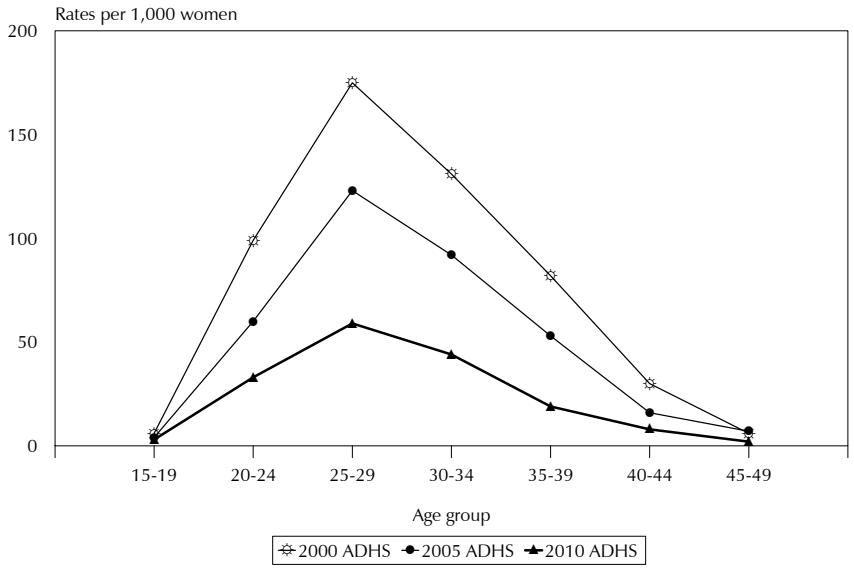
Background characteristic	Total abortion rate for women 15-49	Mean number of abortions among women age 40-49
Residence		
Urban	0.8	1.4
Rural	0.9	1.8
Region		
Yerevan	0.7	1.4
Aragatsotn	0.3	1.1
Ararat	0.3	1.3
Armavir	1.5	2.3
Gegharkunik	0.8	2.3
Lori	0.4	0.6
Kotayk	1.3	2.6
Shirak	1.4	1.6
Syunik	0.2	0.5
Vayots Dzor	0.7	0.9
Tavush	1.3	1.1
Education		
Basic	1.1	2.6
Secondary	1.0	1.7
Secondary special	0.9	1.6
Higher	0.5	1.1
Wealth quintile		
Lowest	1.2	1.5
Second	0.7	1.8
Middle	1.0	1.5
Fourth	0.6	1.5
Highest	0.6	1.5
Total	0.8	1.6

8.4 TRENDS IN INDUCED ABORTION

The TAR in the 2010 ADHS (0.8) is lower than in the 2005 ADHS (1.8) and is considerably lower than in the 2000 ADHS (2.6). The decline is evident for every age group (Figure 8.3).

A decline in the prevalence of induced abortion over the past ten years is consistent with a decline in lifetime abortion measures. For example, almost half (47 percent) of all respondents in the 2000 ADHS had had an induced abortion, compared with 37 percent who reported having had an induced abortion in the 2005 ADHS, and 31 percent in the 2010 ADHS. Furthermore, according to the 2000 ADHS, women age 40-49 had an average of 2.8 abortions, compared with 1.7 in 2005 and 1.6 in 2010.

Figure 8.3 **Trends in Age-Specific Induced Abortion Rates, Armenia 2000, 2005, and 2010**



Another approach to understanding abortion trends is to examine changes in the age-specific abortion rates of the 2010 ADHS respondents over time. Table 8.5 shows the age-specific abortion rates for five-year periods preceding the 2010 ADHS survey. Because women age 50 and above were not interviewed in the survey, the rates are successively truncated as the number of years before the survey increases. The changes in abortion rates over time reported by the 2010 ADHS respondents are consistent with trends observed in the comparisons with the 2000 and 2005 survey results. Data in Table 8.5 indicate that abortion rates have declined rapidly in the past 15 years. For example, the age-specific abortion rate for women age 30-34 declined from 84 abortions per 1,000 women in the period 10-14 years before the survey to 45 abortions per 1,000 women in the period 0-4 years before the survey, a decrease of 46 percent. The most rapid decline in the age-specific rates was observed for women age 20-24; the abortion rate dropped by 56 percent in this age group, from 72 abortions per 1,000 women in the period 10 to 14 years before the survey to 32 abortions per 1,000 women in the period 0-4 years before the survey.

Table 8.5 Trends in age-specific abortion rates

Age-specific induced abortion rates for five-year periods preceding the survey, by woman's age at the time of the abortion, Armenia 2010

Woman's age at the time of the abortion	Number of years preceding survey			
	0-4	5-9	10-14	15-19
15-19	3	4	2	4
20-24	32	58	72	56
25-29	60	79	101	100
30-34	45	70	84	[107]
35-39	27	43	[71]	
40-44	8	[24]		
45-49	[2]			

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

The reasons for the considerable decline in TAR are not entirely clear. A decline in the prevalence of abortion rates over the past 20 years is consistent with concurrent declines in pregnancy rates over the same time period (data not shown). No doubt some of the decline is due to the increase in the use of modern methods of contraception over the past ten years combined with a decrease in the use of traditional methods during the same time period (see Chapter 7). For example, more married women reported use of modern methods of family planning in 2010 than in 2005 and in 2000 (27 percent in 2010 versus 20 percent in 2005 and 22 percent in 2000). Particularly noticeable is the doubling of the use of male condoms by married women over the past 10 years (15 percent in 2010 versus 8 percent in 2005 and 7 percent in 2000). A decrease in the use of traditional methods, particularly of withdrawal (32 percent in 2000, 28 percent in 2005, and 25 percent in 2010), may also have contributed to the overall decrease in abortions. Although it is possible that a decline in sexual activity could have contributed to a lower TAR, approximately the same proportion of women in all three surveys reported being sexually active during the month preceding the survey (Table 4.6.1).

The apparent trend could also be due to underreporting of abortions in 2010 compared with 2005 and 2000. Underreporting of abortion events may be due to recall lapse by respondents for time periods more remote from the survey date or to conscious avoidance of recalling the procedure. To minimize underreporting of induced abortions, the interviewers in the 2010 ADHS were specifically trained to ask about any types of abortion, including those performed by the women at home or elsewhere using misoprostol (cytotec) or any other medicines or herbs with abortive effect. Detailed analysis of reasons for the trends is beyond the scope of this report; however, if having an abortion becomes less socially acceptable, women may become less open to reporting them.

8.5 Use of Contraceptive Methods before Abortion

It is important to know how contraceptive behavior may lead to an induced abortion. This information is of particular interest to both family planning counselors and abortion providers because a woman who has an abortion is either not using a method of contraception at the time of conception or is using (perhaps incorrectly) a method that has failed. For each pregnancy that terminated in the three years preceding the survey, respondents were asked whether they were using a method of contraception at the time they became pregnant, and if so, which method. Table 8.6 shows the results.

Almost half of women who had an induced abortion were using a method of contraception at the time they became pregnant (48 percent). This implies that almost half of the abortions resulted from contraceptive failure. The majority of contraceptive failures occurred when the woman was using a traditional method—31 percent of induced abortions occurred among women who said they were using withdrawal and 5 percent among those who used rhythm.

Although many abortions are related to contraceptive failure, the ADHS results also show that over half of the pregnancies resulting in induced abortion occurred among women not using any method of contraception. Access to and use of more reliable methods of contraception would reduce the number of unwanted pregnancies and the incidence of induced abortions, thus improving the reproductive health of women in Armenia.

Table 8.6 Use of contraception before pregnancy

Percent distribution of pregnancy outcomes in the three years preceding the survey, by contraceptive method used at the time of conception, Armenia 2010

	Pregnancy outcome			
Contraceptive method	Live birth	Induced abortion	Miscarriage	All pregnancies
No method used	84.2	52.5	69.7	74.0
Any method	15.8	47.5	30.3	26.0
Any modern method	5.8	11.3	7.7	7.5
Pill	0.1	0.6	0.0	0.2
IUD	0.9	0.1	2.2	0.7
Injectables	0.0	0.5	0.0	0.1
Male condom	3.8	9.7	5.5	5.6
Lactational amenorrhea (LAM)	0.8	0.5	0.0	0.7
Fertility wheel calculator	0.3	0.0	0.0	0.2
Any traditional method	9.9	36.2	22.6	18.5
Rhythm	0.9	4.5	1.6	2.0
Withdrawal	9.0	30.7	17.2	15.9
Other	0.0	1.0	3.8	0.6
Total	100.0	100.0	100.0	100.0
All pregnancies	924	421	111	1,457

Note: Total includes 2 stillbirths that are not shown separately

8.6 REASONS FOR ABORTION

Table 8.7 presents the main reasons given for having an abortion in the three years prior to the survey. About 39 percent of abortions were performed because women did not want to have any more children. Fifteen percent each of abortions were performed because of either socioeconomic reasons or a desire to space the next birth, and one in nine abortions (11 percent) occurred because of concerns about maternal health. Sex selection was cited as a reason for 9 percent of abortions, most often because the desired sex was male (8 percent). A partner's objection to having another child or the risk of birth defects was cited for 4 percent each of abortions.

Table 8.7 Reason for abortion

Percent distribution of induced abortions in the three years prior to the survey by the most important reason for the abortion, according to background characteristics, Armenia 2010

Background characteristic	Reason for abortion										Total	Number of cases
	Health of mother	Risk of birth defects	Socio-economic reasons	Did not want children	Spacing next pregnancy	Partner did not want the child	Sex selection/ wanted a boy	Sex selection/ wanted a girl	Other	Missing		
Age												
15-19	*	*	*	*	*	*	*	*	*	*	100.0	2
20-24	8.4	10.0	9.1	22.2	41.7	0.0	7.3	0.0	1.4	0.0	100.0	55
25-29	8.5	5.1	20.9	32.0	15.3	2.6	11.0	1.6	1.5	1.6	100.0	167
30-34	17.6	0.9	12.1	44.8	9.4	4.4	7.8	0.8	1.3	0.8	100.0	115
35+	8.6	2.8	12.3	57.5	2.5	9.6	2.7	1.4	0.0	2.8	100.0	82
Residence												
Urban	12.8	3.6	19.9	33.8	13.1	2.8	8.6	1.9	1.3	2.3	100.0	252
Rural	9.3	4.8	8.1	46.9	16.8	6.1	7.1	0.0	0.9	0.0	100.0	169
Education												
Basic	(12.9)	(4.8)	(13.4)	(32.1)	(16.8)	(3.4)	(7.5)	(0.0)	(0.0)	(9.2)	100.0	25
Secondary	7.3	3.3	13.6	42.7	15.4	6.3	9.0	0.2	1.0	1.1	100.0	183
Secondary special	14.1	3.5	17.5	36.6	13.9	2.6	8.0	1.2	1.7	0.9	100.0	143
Higher	16.0	7.1	15.1	37.2	12.9	1.5	5.3	3.7	0.7	0.5	100.0	70
Wealth quintile												
Lowest	11.2	1.9	8.6	43.6	20.7	7.0	6.7	0.0	0.4	0.0	100.0	112
Second	5.6	5.9	7.7	52.0	13.9	2.5	9.0	1.2	1.6	0.6	100.0	67
Middle	16.6	4.8	10.6	41.2	12.5	2.7	7.9	0.2	0.0	3.5	100.0	112
Fourth	7.2	6.6	22.0	27.6	18.6	1.7	8.2	2.9	2.5	2.6	100.0	63
Highest	12.8	2.5	34.6	25.8	4.8	5.3	8.8	2.8	2.5	0.0	100.0	68
Total	11.4	4.1	15.2	39.1	14.6	4.1	8.0	1.1	1.1	1.4	100.0	421

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

8.7 METHOD OF ABORTION

Table 8.8 shows that 96 percent of abortions were done by either dilation and curettage (57 percent) or vacuum aspiration (39 percent). Women age 30-34, rural women, and those from the two lowest wealth quintiles are more likely to use dilation and curettage as a method of abortion than are women from other backgrounds. On the other hand, younger women, urban women, better educated women, and those from the wealthiest households are more likely to use vacuum aspiration.

About 2 percent of abortions were induced by oxytocin and other medicines, and less than 1 percent were carried out by other methods. Differences by background characteristics are small; however, women in the second wealth quintile are somewhat more likely than other women to report other medicines as a method of abortion (6 percent).

Table 8.8 Method of abortion

Percent distribution of induced abortions in the three years prior to the survey by method of termination, according to background characteristics, Armenia 2010

Background characteristic	Method of abortion								Total	Number of abortions
	Dilation & curetting (D&C)	Vacuum aspiration	Oxytocin	Catheter	Other medicines	Other	Don't know	Missing		
Age										
15-19	*	*	*	*	*	*	*	*	100.0	2
20-24	50.0	45.1	0.9	0.6	3.4	0.0	0.0	0.0	100.0	55
25-29	53.6	43.0	0.0	0.0	1.2	1.1	1.0	0.0	100.0	167
30-34	67.0	32.1	0.0	0.0	1.0	0.0	0.0	0.0	100.0	115
35+	55.7	36.4	1.3	0.0	3.4	0.0	0.0	3.2	100.0	82
Residence										
Urban	43.8	52.1	0.6	0.1	1.4	0.7	0.7	0.5	100.0	252
Rural	76.6	20.1	0.0	0.0	2.5	0.0	0.0	0.8	100.0	169
Education										
Basic	(70.7)	(19.2)	(0.0)	(0.0)	(4.1)	(0.0)	(3.0)	(3.0)	100.0	25
Secondary	58.3	37.6	0.3	0.2	3.0	0.0	0.0	0.7	100.0	183
Secondary special	56.0	42.7	0.0	0.0	0.9	0.0	0.4	0.0	100.0	143
Higher	50.8	43.6	1.5	0.0	0.0	2.7	0.5	0.8	100.0	70
Wealth quintile										
Lowest	71.2	26.2	0.0	0.3	1.7	0.0	0.6	0.0	100.0	112
Second	80.6	13.4	0.0	0.0	6.0	0.0	0.0	0.0	100.0	67
Middle	54.6	40.6	1.0	0.0	1.5	0.0	0.7	1.7	100.0	112
Fourth	55.6	42.6	0.0	0.0	0.0	0.0	0.6	1.2	100.0	63
Highest	15.3	81.0	0.7	0.0	0.2	2.8	0.0	0.0	100.0	68
Total	57.0	39.2	0.4	0.1	1.8	0.4	0.4	0.6	100.0	421

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

8.8 COST OF ABORTION

One purpose of the 2010 ADHS was to obtain information about the costs incurred by a woman for the most recent abortion. Table 8.9 shows that 35 percent of women age 15-49 had an induced abortion in the five years preceding the survey; among them only 2 percent had the most recent abortion free of charge. Another 89 percent said that they paid for the abortion and knew the cost, while 9 percent did not know the cost. For those who paid and were able to provide information on cost, the median cost was 11,946 drams; 44 percent paid 10,000 drams or less, 34 percent paid 11,000 to 15,000 drams, and 22 percent paid 16,000 drams[3] or more (data not shown). There are small variations in the cost of abortion. However, younger women, urban women, those with secondary education (but neither secondary special nor higher education), and those from wealthier households tended to pay more than other women for the most recent abortion.

[3] One US dollar is equivalent to 370 Armenian drams at the current exchange rate.

Table 8.9 Cost of the last abortion

Percentage of women age 15-49 who had one or more abortions in the five years preceding the survey and among these women, percent distribution by the cost status of the most recent abortion, and among women who paid for and know the cost of the most recent abortion, the median cost of the most recent abortion, according to background characteristics, Armenia 2010

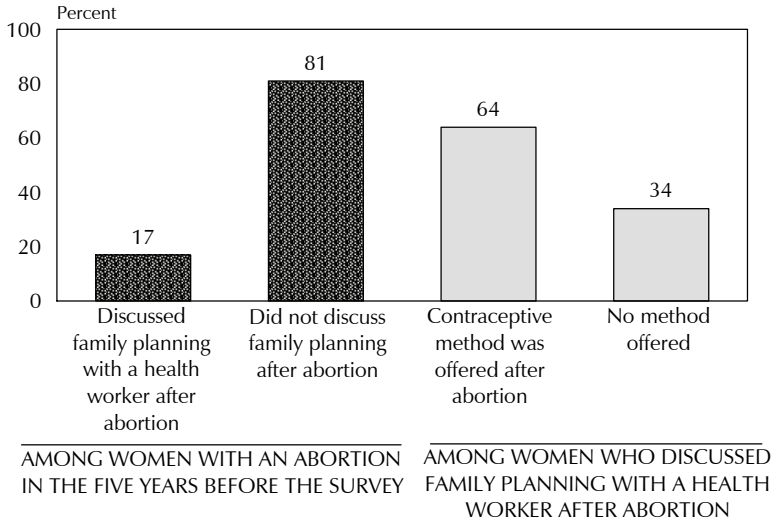
Background characteristic	Percentage of women who had one or more abortions in the five years preceding the survey	Number of women pregnant in the past five years	Among women with at least one abortion, percent distribution by cost status of the most recent abortion:					Among women who paid for and know the cost of the most recent abortion:	
			Received abortion for free	Know the cost	Do not know the cost/ missing	Total	Number of women	Median cost for the most recent abortion in Armenian drams[1]	Number of women
Age									
<20	(5.6)	33	*	*	*	100.0	2	na	0
20-24	15.0	343	(9.1)	(84.5)	(6.4)	100.0	51	11,998	43
25-34	36.8	859	1.2	90.7	8.1	100.0	316	11,943	287
35+	59.8	253	2.3	87.8	9.9	100.0	151	11,907	133
Residence									
Urban	37.4	881	2.9	86.5	10.6	100.0	329	11,980	285
Rural	31.5	606	1.3	93.1	5.6	100.0	191	9,998	178
Mother's education									
Basic	39.4	69	(15.9)	(74.7)	(9.4)	100.0	27	9,996	20
Secondary	37.0	601	0.4	94.2	5.5	100.0	222	12,914	209
Secondary special	38.3	457	3.1	82.2	14.7	100.0	175	11,925	144
Higher	26.6	361	1.3	93.1	5.5	100.0	96	10,922	89
Wealth quintile									
Lowest	38.4	298	1.7	90.4	7.9	100.0	115	9,984	104
Second	30.4	285	5.0	91.5	3.5	100.0	87	9,969	79
Middle	38.9	318	3.0	88.3	8.7	100.0	124	11,990	109
Fourth	32.0	287	2.0	92.3	5.7	100.0	92	12,000	85
Highest	34.6	298	0.0	83.0	17.0	100.0	103	12,983	86
Total	35.0	1,487	2.3	88.9	8.8	100.0	520	11,946	463

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed. Figures in parentheses are based on 25 to 49 unweighted cases.
[1] One US dollar is equivalent to 370 Armenian drams at current exchange rate
na = Not applicable

8.9 COUNSELING ON POST-ABORTION USE OF FAMILY PLANNING

The 2010 ADHS also collected information on whether women had a post-abortion family planning discussion with any health provider at the place of the most recent abortion. Four in five women (81 percent) who had an abortion in the five years before the survey did not discuss contraception with a health provider (Figure 8.4), and 2 percent of women did not remember any discussion (data not shown). Of the 17 percent of women who did discuss post-abortion family planning at the facility, 64 percent said that they were offered a method of contraception at that time.

Figure 8.4 Counseling on Post-Abortion Family Planning at the Facility Where the Most Recent Abortion Was Conducted



Note: Two percent of women with an abortion in the five years before the survey did not remember whether they had discussed family planning with a health worker after the most recent abortion. Among women who discussed family planning with a health worker after the most recent abortion, 2 percent did not remember whether they were offered a method.

ADHS 2010

INFANT AND CHILD MORTALITY 9

One important objective of the 2010 ADHS was to measure the level and trend of mortality among children, since infant and child mortality rates are basic indicators of a country's socioeconomic situation and quality of life. Mortality statistics are useful in identifying segments of the population where children are at high risk so that programs can be designed to increase their chances of survival. This chapter reports information on levels, trends, and differentials in mortality among children under age 5.

The mortality rates presented in this chapter are expressed as deaths per 1,000 live births, except in the case of child mortality, which is expressed as deaths per 1,000 children surviving to age 1. Rates are presented for the following age intervals:

- Neonatal mortality (NN): the probability of dying within the first month of life
- Post-neonatal mortality (PNN): the difference between infant and neonatal mortality
- Infant mortality ($_1q_0$): the probability of dying between birth and exact age 1
- Child mortality ($_4q_1$): the probability of dying between exact age 1 and age 5
- Under-5 mortality ($_5q_0$): the probability of dying between birth and exact age 5

Data on infant and child mortality in the 2010 ADHS are derived from the reproductive history section of the Woman's Questionnaire. The section begins with questions about the respondent's childbearing experience, including the number of sons and daughters who live in the household, the number who live elsewhere, and the number who have died. In the pregnancy history, the woman is asked to report the outcome of each pregnancy, i.e., whether the pregnancy ended in a live birth, a stillbirth, a miscarriage, or an induced abortion. Using the standard international definition, a live birth was any birth, irrespective of the duration of pregnancy, that, after separation from the mother, showed any sign of life (for example, breathing, beating of the heart, or movement of voluntary muscles) (WHO, 1993).

For each live birth reported in the pregnancy history, information was collected on the name, date of birth (month and year), sex, whether the birth was single or multiple, and survivorship. For living children, information was also collected on age at last birthday and whether the child resided with the mother. For children who had died, the respondent was asked to provide the age at death. Mortality rates for specific periods preceding the survey were calculated using direct estimation procedures[1].

9.1 ASSESSMENT OF DATA QUALITY

The accuracy of mortality estimates from the ADHS depends on two factors: sampling error (i.e., variability) and nonsampling error (i.e., all sources of error other than sampling error, which primarily means the completeness and accuracy with which births and deaths are reported by respondents and recorded by interviewers).

[1] The rates are calculated using a synthetic cohort approach in which probabilities of dying are first calculated for small age segments, and the component probabilities are then combined to obtain the rate for the full age segment of interest. The advantage of this approach is that mortality rates can be calculated for time periods close to the survey date while still respecting the principle of correspondence; that is, if a child is included in the exposed-to-risk in the denominator, and he/she dies during the relevant time period, then his/her death must be included in the numerator corresponding to that period of risk. A more detailed explanation of this approach can be found in the Guide to DHS Statistics (Rutstein and Rojas, 2006).

The ADHS child mortality data are based on the births and deaths for a specific time period reported by women in the sampled households rather than on all births and deaths in the entire population during that period. Because the data are based on information from a sample, they are subject to the variability inherent in the sampling approach. If the sampling procedure had selected a different sample of households, a different set of births and deaths would have been reported by different women, and the mortality estimates would likely have differed. Using the mortality estimates from the ADHS, however, statistical techniques allow for the calculation of an interval within which there is a given degree of confidence, e.g., 95 percent, that the true child mortality levels lie within that interval. Appendix B presents the 95 percent confidence intervals that have been calculated for ADHS mortality estimates for the total population, for urban and rural components of the population, and for each of the 11 regions in which the population resides.

Nonsampling errors arise primarily from errors in data collection. The most likely source of nonsampling error is the underreporting of deceased children. It is well-established that underreporting of deceased children by survey respondents is most likely (1) for deaths in time periods remote from the survey date and (2) for deaths in early infancy (i.e., in the neonatal period, before a child is fully integrated into the family). Underreporting of events that occurred in the more distant past is due either to forgetfulness or to conscious avoidance of recalling the tragedy of losing a child. In this report, the focus is on mortality rates for the 15-year period prior to the survey; rates for earlier time periods are not reported. This eliminates showing mortality estimates for the time periods most susceptible to respondent forgetfulness, although there is no guarantee that events occurring in the 15-year period prior to the survey are fully reported.

Omission of early childhood deaths can be difficult to detect. However, one approach is to compare the ratio of early neonatal deaths (deaths in the first week of life) to all neonatal deaths (deaths in the first month of life). Underreporting of early infant deaths is more common for births that occur long before the survey; hence, it is useful to examine how the ratios of early neonatal deaths to neonatal deaths differ over the five-year time periods before the survey. In reviewing these ratios, it is important to keep in mind that the ratios fluctuate due to the small number of deaths. An inspection of the ratios of early neonatal to neonatal deaths over the 20-year period prior to the 2010 ADHS does not find any evidence that significant numbers of early infant deaths have been omitted from the 2010 ADHS survey. Appendix Table C.5 shows that, over the entire 20-year period, the proportion of neonatal deaths that occurs in the first week of life is high (73 percent). The early neonatal-to-neonatal mortality ratio for the periods 0 to 4 years (2006-2010), 5 to 9 years (2001-2005), and 10 to 14 years (1996-2000) preceding the survey are 66, 67, and 89 percent, respectively. The ratios for the periods 5 to 9 years and 10 to 14 years before the 2010 ADHS are very similar to those found for roughly the same calendar periods before the 2005 ADHS (64 percent for the calendar period 2001-2005 and 81 percent for the calendar period 1996-2000, respectively). This indicates that reporting of early neonatal deaths in the 2010 ADHS was good, even for periods fairly far removed from the survey date.

Another measure that is frequently examined for evidence of omission is the proportion of infant deaths that occur during the first month of life. Appendix Table C.6 shows that this proportion is 57 percent for all deaths over the 20 years before 2010 ADHS, and the proportion varies between 45 and 71 percent across the five-year time periods preceding the survey. In general, the ratios seem plausible. However, the ratio for the period 5 to 9 years before the survey (2001-2005) is much lower than the ratio for the same time period in the 2005 ADHS (45 percent and 67 percent respectively. This suggests some underreporting of neonatal deaths for the period 5 to 9 years prior to the 2010 ADHS and, thus, the neonatal mortality during that period may be underestimated somewhat in the 2010 ADHS results.

Finally, another potential problem involves displacement of birth dates, which may cause a distortion of mortality trends. This can occur if an interviewer knowingly records a birth as occurring in a different year, which would happen if an interviewer were trying to cut down on his or her overall work. Extra effort is needed for live births occurring in 2005 or later because the years are the subject

of a lengthy set of additional questions. Shifting of deaths from 2005 or later to earlier time periods could skew the trend in the mortality rates, i.e., exaggerate the decline in mortality levels between the period 0 to 4 years and the period 5 to 9 years before the survey. Appendix Table C.4 shows some year-of-birth transference from 2005 to earlier years for both living and deceased children. Although this has some implication for the estimated mortality rates for the periods 0 to 4 years and 5 to 9 years before the survey, the calculation of DHS mortality estimates, unlike the questionnaire, does not conform to calendar years. Because the survey fieldwork began in early October 2010, the start of the rolling cut-off for the five-year period preceding the survey is early October 2005. Thus, only part of the transference that occurred between the calendar years 2005 and 2004 influenced the mortality rate estimates for the periods 0 to 4 years and 5 to 9 years before the survey. The calendar year sex ratios in Table C.4 indicate some transference of both deaths and live births from the periods 0 to 4 years and 5 to 9 years before the survey. The sex ratio for deaths suggests omission of deaths of both boys and girls in both periods, but the effect is not large.

9.2 LEVELS AND TRENDS IN CHILDHOOD MORTALITY

Table 9.1 and Figure 9.1 show levels and trends in infant and child mortality based on data from the 2010 ADHS. Data in this table indicate that childhood mortality in Armenia has declined significantly in the past five years. For instance, the infant mortality estimate for the five years preceding the survey (2006-2010) is 13 deaths per 1,000 live births. This rate is half the rate for 2001-2005 of 24 deaths per 1,000 live births. The estimate of neonatal mortality is 8 deaths per 1,000 live births, also about half the estimate for the 1996-2000 period. The overall under-5 mortality rate for the 2006-2010 period is 16 deaths per 1,000 live births, again approximately half of the rate recorded in the 2001-2005 period (27 deaths per 1,000 live births).

Table 9.1 Early childhood mortality rates

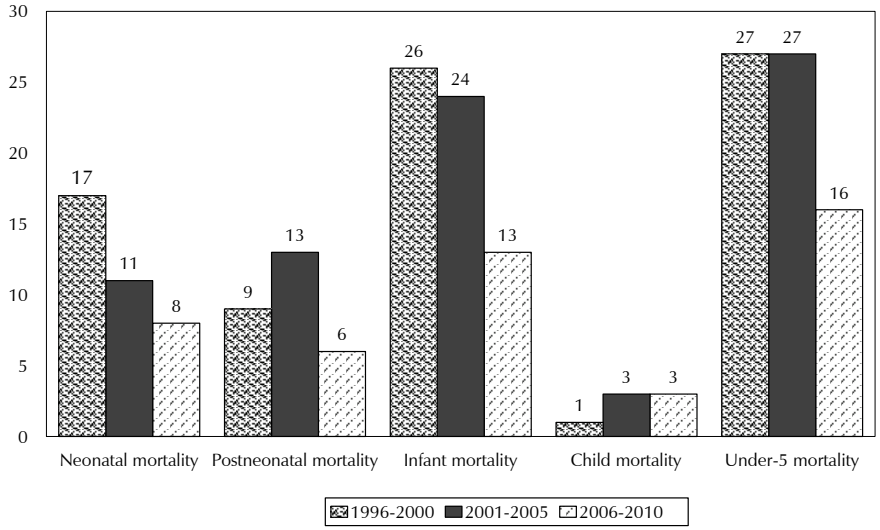
Neonatal, post-neonatal, infant, child, and under-5 mortality rates for five-year periods preceding the survey, Armenia 2010

Years preceding the survey	Approximate calendar year[1]	Neonatal mortality (NN)	Post-neonatal mortality (PNN)[2]	Infant mortality ($_1q_0$)	Child mortality ($_4q_1$)	Under-5 mortality ($_5q_0$)
0-4	2006-2010	8	6	13	3	16
5-9	2001-2005	11	13	24	3	27
10-14	1996-2000	17	9	26	1	27

[1] Because survey fieldwork began in early October 2010 and was completed by late December 2010, the rates for the five-year period 2006-2010 apply approximately to the calendar period from November 2006 through October 2010. The same periods apply to the other five-year periods.
[2] Computed as the difference between the infant and neonatal mortality rates

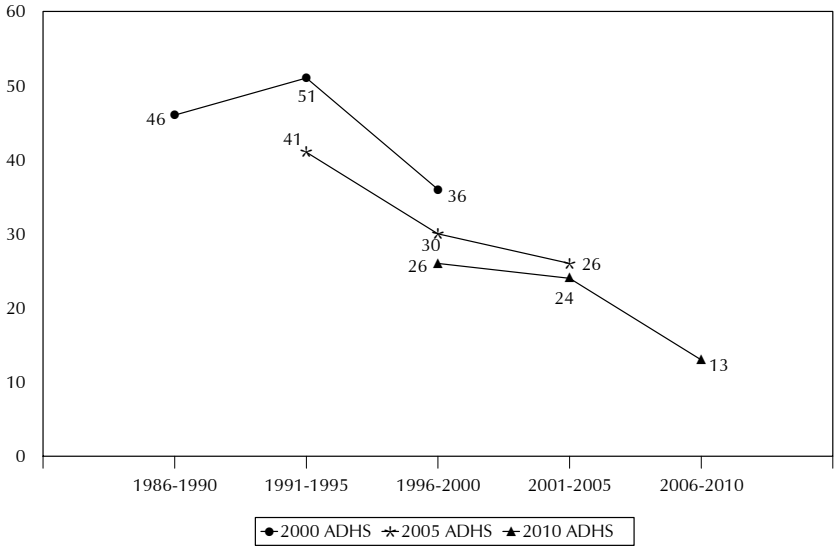
As mentioned, the transference of deaths to the earlier time periods may have contributed to the apparent decline in mortality levels between the periods 0 to 4 years and 5 to 9 years before the survey. Other factors, such as health interventions initiated by the MOH since 1994, including programs in the case management of diarrhea and acute respiratory infection (ARI) as well as programs in support of breastfeeding, may have also contributed to the observed mortality decline in Armenia.

Figure 9.1 Early Childhood Mortality Rates, Armenia 1996-2010



Another approach to looking at trends in mortality levels involves the comparison of the 2010 ADHS results to estimates from the 2000 and 2005 ADHS surveys. Figure 9.2 shows the trends in infant mortality based on data from the three surveys. The figure confirms the decline in childhood mortality in Armenia since 1996. For instance, the infant mortality estimate from the 2000 ADHS for the period 1996-2000 was 36 deaths per 1,000 live births. At the time of the 2005 ADHS, the rate had dropped to 26 deaths per 1,000 live births for the period 2001-2005. The 2010 ADHS documents a further decline to 13 deaths per 1,000 births for the period 2006-2010. This downward trend is noted in all three surveys.

Figure 9.2 Trends in Infant Mortality, Armenia 1986-2010



Note: Rates are means for five-year periods.

9.3 COMPARISON OF RATES FROM THE NATIONAL STATISTICAL SERVICE AND THE ADHS

The 2010 ADHS mortality estimates can also be compared with estimates derived from Armenia's vital registration system. Armenia has a long history of collecting demographic and health data through the use of national registration systems. In the case of births and infant deaths, the National Statistical Service (NSS) collects the data through a system in which reports from local health officials—which primarily document events occurring in health facilities—are forwarded up the reporting hierarchy to the regional *(marz)* level, then to the NSS, and ultimately to the MOH. Official government statistics on infant mortality based on these administrative records are published in the annual statistical reports of the NSS.

Table 9.2 shows infant and under-5 mortality rates reported by the NSS and the 2010 ADHS over the past 10 years. The NSS rates are derived by averaging the annual rates for the 2001-2005 and 2006-2010 periods, respectively. The estimates from the 2010 ADHS are higher than the official estimates from the NSS that were derived from registration data during the same period; however, the confidence intervals for the survey-based estimates overlap with the registration-based statistics, and the differences should be interpreted with caution.

For example, the 95 percent confidence interval for the infant mortality rate for the period 2006-2010 derived from the 2010 ADHS (13 per 1,000) ranges from 5.9 to 20.8 per 1,000 and overlaps with the infant mortality rate reported by the NSS for the period 2006-2010 (12 per 1,000). Similarly, the 95 percent confidence interval for the infant mortality rate derived from the 2010 ADHS (24 per 1,000) for the period 2001-2005, ranges from 13.1 to 34.5 per 1,000 and overlaps with the rate of 13 per 1,000 reported by the NSS for the same period, but just barely.

For the under-5 mortality rate, the 95 percent confidence interval for the period 2006-2010, derived from the 2010 ADHS (16 per 1,000), ranges from 8.6 to 24.2 per 1,000 and overlaps with the under-5 mortality rate of 13 per 1,000 reported by the NSS for the period 2006-2010. However, the 95 percent confidence interval for the under-5 mortality rate derived from the 2010 ADHS (27 per 1,000) for the period 2001-2005 ranges from 17.7 to 37.1 per 1,000, which does not overlap with that reported by NSS (15 per 1,000) for the same period.

Table 9.2 Comparison of infant mortality from registration and survey

Estimates of infant mortality and under-5 mortality rates for five-year periods preceding the survey, by source of data, Armenia 2010

Approximate calendar year[1]	Infant mortality ($_1q_0$)		Under-5 mortality ($_5q_0$)	
	NSS[1]	2010 ADHS	NSS[1]	2010 ADHS
2006-2010	12	13	13	16
2001-2005	13	24	15	27

[1] Estimates are averaged from annual rates.
Source: NSS [Armenia], 2010, and NSS [Armenia], 2011d.

9.4 SOCIOECONOMIC DIFFERENTIALS IN CHILDHOOD MORTALITY

Table 9.3 shows infant and child mortality estimates for the 10-year period preceding the survey by socioeconomic variables (urban-rural residence, education, and wealth quintile). A 10-year period is used to calculate the rates for population subgroups to reduce sampling variability. Despite this longer period, however, the numbers of deaths are still quite small in many categories, and thus, caution should be used in interpreting differences between most subgroups.

Mortality rates in rural areas are higher than in urban areas. For instance, infant mortality in rural areas is 22 per 1,000 compared with 16 per 1,000 in urban areas. Children born to mothers with higher education generally experience lower mortality at all ages in early childhood than children born to other mothers, although the pattern is not uniform. Mortality rates do not show clearly the expected negative association by wealth status, i.e., the highest mortality rates among those children in the lowest wealth quintile and the lowest rates among those children in the highest wealth quintile. Again, this finding may be due to the small number of deaths recorded in the survey.

Table 9.3 Early childhood mortality rates by socioeconomic characteristics

Neonatal, post-neonatal, infant, child, and under-5 mortality rates for the 10-year period preceding the survey, by background characteristics, Armenia 2010

Background characteristic	Neonatal mortality (NN)	Post-neonatal mortality (PNN)[1]	Infant mortality ($_1q_0$)	Child mortality ($_4q_1$)	Under-5 mortality ($_5q_0$)
Residence					
Urban	9	7	16	2	18
Rural	10	12	22	4	26
Mother's education					
Basic	*	*	*	*	*
Secondary	8	12	20	4	24
Secondary special	15	6	20	3	23
Higher	4	10	14	1	16
Wealth quintile					
Lowest	(9)	(11)	(21)	(5)	(25)
Second	14	8	21	7	29
Middle	7	10	17	0	17
Fourth	10	2	12	2	14
Highest	(7)	(13)	(20)	(1)	(21)

Note: Rates are expressed per 1,000 births. Rates in parentheses are based on 250 to 499 unweighted exposed person-years. An asterisk indicates that a rate is based on fewer than 250 unweighted exposed person-years and has been suppressed.
[1] Computed as the difference between the infant and neonatal mortality rates

9.5 DEMOGRAPHIC DIFFERENTIALS IN CHILDHOOD MORTALITY

Table 9.4 shows the relationship between early childhood mortality and demographic variables. As is the case with the socioeconomic differentials shown in Table 9.3, the rates are calculated for the 10-year period preceding the survey.

Childhood mortality rates vary little by the child's sex. Considering the relationship between the mother's age at birth and mortality, results from the World Fertility Survey and from DHS surveys have generally found a curvilinear relationship between childhood mortality and mothers' age at childbirth, i.e., births to younger mothers and older mothers have an elevated risk of dying compared with births to other mothers. Contrary to the expected pattern, results from the 2010 ADHS suggest that mortality rates rise with mother's age at birth, with births to mothers under age 20 being substantially less likely to die than births to women age 20-29 and especially women age 30-39. In considering this finding, however, it is important to bear in mind that the rates in Table 9.4 for women who gave birth under age 20 and over age 30 are based on fewer than 500 person-years and, thus, must be interpreted with caution.

First births typically have been shown to be at an elevated risk of dying compared with higher order births. Results from the 2010 ADHS do not conform to pattern. Without exception, births of order two and three experience higher levels of childhood mortality than first births.

Table 9.4 Early childhood mortality rates by demographic characteristics

Neonatal, post-neonatal, infant, child, and under-5 mortality rates for the 10-year period preceding the survey, by demographic characteristics, Armenia 2010

Demographic characteristic	Neonatal mortality (NN)	Post-neonatal mortality (PNN)[1]	Infant mortality ($_1q_0$)	Child mortality ($_4q_1$)	Under-five mortality ($_5q_0$)
Child's sex					
Male	9	8	17	4	21
Female	10	11	20	2	22
Mother's age at birth					
<20	(3)	(9)	(12)	(1)	(13)
20-29	9	8	17	3	20
30-39	(18)	(15)	(33)	(5)	(38)
Birth order					
1	6	8	14	0	14
2-3	7	10	18	4	22
4+	*	*	*	*	*
Previous birth interval[2]					
<2 years	(9)	(5)	(14)	(8)	(22)
2 + years	14	12	26	4	30

Note: Rates are expressed per 1,000 births. Rates in parentheses are based on 250 to 499 unweighted exposed person-years. An asterisk indicates that a rate is based on fewer than 250 unweighted exposed person-years and has been suppressed.
[1] Computed as the difference between the infant and neonatal mortality rates
[2] Excludes first-order births

Mortality among children has typically been found to be negatively associated with the length of the previous birth interval. This has been the case particularly when the birth interval is less than two years. However, again the typical pattern does not hold true in Armenia. For example, the level of infant mortality among children born after an interval of two years or more is more than twice the mortality of children born less than two years after a previous birth. In interpreting this abnormal pattern, however, it should be kept in mind that the number of births for which the interval since the previous birth was reported to be less than two years is quite small in the 2010 ADHS.

In summary, the differences in child mortality between different demographic groups do not always follow expected patterns in Armenia. Caution must be employed in interpreting these results, however, because the rates in the various demographic subgroups are often based on a relatively small number of births.

9.6 PERINATAL MORTALITY

Perinatal mortality rates indicate the level of mortality from the time of prenatal viability (i.e., the late fetal period beginning at the 28th week of gestation) through labor, delivery, and the early neonatal period of life (i.e., the 0- to 6-day period after birth). Pregnancies that terminate without signs of life after the 28th week of gestation are referred to as stillbirths. Stillbirths and early neonatal deaths share many of the same underlying causes (e.g., congenital malformations), and for this reason, these events are aggregated into the perinatal mortality rate.

It should be noted that data quality is always an issue when considering perinatal mortality rates, as both stillbirths and early neonatal deaths are susceptible to underreporting. Moreover, in general, there are too few cases by subcategories of background characteristics to produce reliable perinatal mortality rates. Table 9.5 shows that the perinatal mortality rate is 11 deaths per 1,000 pregnancies for the five-year period preceding the survey. Stillbirths and early neonatal deaths (deaths under seven days) contribute almost equally to the overall perinatal rate, with stillbirths being slightly more numerous than neonatal deaths.

Table 9.5 Perinatal mortality

Number of stillbirths, early neonatal deaths, and the perinatal mortality rate for the five-year period preceding the survey, by background characteristics, Armenia 2010

Background characteristic	Number of stillbirths[1]	Number of early neonatal deaths[2]	Perinatal mortality rate[3]	Number of pregnancies of 7+ months duration
Mother's age at birth				
<20	0	0	0	136
20-29	6	3	8	1,103
30-39	2	4	31	205
40-49	0	0	*	13
Previous pregnancy interval in months[4]				
First pregnancy	2	3	7	628
<15	2	3	41	135
15-26	2	1	8	291
27-38	2	0	13	156
39+	1	1	5	247
Residence				
Urban	4	4	10	850
Rural	4	3	12	607
Region				
Yerevan	2	3	11	461
Aragatsotn	0	0	2	63
Ararat	0	0	0	104
Armavir	0	2	13	140
Gegharkunik	0	0	0	109
Lori	0	0	0	111
Kotayk	2	1	14	152
Shirak	1	1	11	156
Syunik	2	0	49	54
Vayots Dzor	0	0	16	40
Tavush	2	0	23	66
Mother's education				
Basic	0	2	25	71
Secondary	5	1	10	577
Secondary special	1	4	12	443
Higher	2	0	8	365
Wealth quintile				
Lowest	1	2	13	297
Second	2	2	13	298
Middle	1	1	8	296
Fourth	4	2	18	295
Highest	0	0	2	271
Total	8	7	11	1,457

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
[1] Stillbirths are fetal deaths in pregnancies lasting seven or more months.
[2] Early neonatal deaths are deaths at age 0-6 days among live-born children.
[3] The sum of the number of stillbirths and early neonatal deaths divided by the number of pregnancies of seven or more months' duration, expressed per 1000.
[4] Categories correspond to birth intervals of <24 months, 24-35 months, 36-47 months, and 48+ months.

9.7 HIGH-RISK FERTILITY BEHAVIOR

Table 9.6 shows the percent distribution of currently married women by category of risk of childhood mortality if they were to conceive a child at the time of the survey. Typically, mortality risks are greater for children who are born to mothers who are too young (less than age 18) or too old (greater than age 34), or who are born after a short birth interval (within 24 months of the previous birth), or who have a high birth order (three or more). Overall, two-thirds of currently married women, if they were to conceive a child at the time of the survey, would bear a child subject to an avoidable risk of death, mainly due to the mother’s age and parity.

Table 9.6 High-risk fertility behavior

Percent distribution of currently married women by category of risk if they were to conceive a child at the time of the survey, Armenia 2010

Risk category	Percentage of currently married women[1]
Not in any high-risk category	27.3[a]
Unavoidable risk category	
First-order births between age 18 and 34	6.4
Single high-risk category	42.2
Mother's age <18	0.0
Mother's age >34	29.7
Birth interval <24 months	8.2
Birth order >3	4.3
Subtotal	42.2
Multiple high-risk category	24.1
Age <18 and birth interval <24 months[2]	0.0
Age >34 and birth interval <24 months	0.3
Age >34 and birth order >3	22.3
Age >34 and birth interval <24 months and birth order >3	0.4
Birth interval <24 months and birth order >3	1.2
Subtotal	24.1
In any avoidable high-risk category	66.3
Total	100.0
Number of births/women	3,626

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.

[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 age 17 years and 3 months or older than age 34 years and 2 months, latest birth less than 15 months ago, or latest birth being of order 3 or higher.

[2] Includes the category age <18 and birth order >3

[a] Includes sterilized women

REPRODUCTIVE HEALTH 10

Reproductive and maternal health care in Armenia is implemented through an extensive system of feldsher[1]-accoucher posts (FAPs), ambulatory polyclinics, and hospitals. The network of ambulatory health care is organized around geographical regions and is offered through women's consultation clinics and rural health facilities. Obstetric care is offered at hospital obstetric-gynecological departments, regional delivery hospitals located in urban areas, and republican centers for specialized (tertiary) care. Under the state Basic Benefits Package (BBP), a set of limited reproductive health services is free of charge for all people, and broader services are free for certain vulnerable groups.

This chapter presents findings in several areas of importance to reproductive and maternal health: antenatal, delivery, and postnatal care; problems in accessing health care; breast examination; and Pap smear testing. These data are of great value in identifying subgroups of women who utilize or receive specific health services and are useful in developing plans to improve service delivery.

10.1 ANTENATAL CARE

The survival and well-being of both mother and child are closely associated with the health care that a mother receives during pregnancy and delivery. In this chapter, antenatal care (ANC) is described according to the type of provider, number of ANC visits, stage of pregnancy at the time of the first visit, costs incurred during the most recent ANC visit, and services and information provided during a visit.

Antenatal Care Provider

Table 10.1 shows that almost all women in Armenia (99 percent) received antenatal care. This is an increase from 92 percent, recorded in the 2000 ADHS (NSS et al., 2001), and also from 93 percent, recorded in the 2005 ADHS (NSS et al., 2006). Practically all women who went for ANC saw a doctor (99 percent), and most of them (93 percent) saw a gynecologist. The role of nurse, midwife, or feldsher in providing ANC is gradually diminishing; it was 9 percent in 2000, 3 percent in 2005, and less than 1 percent in 2010.[2]

There are small variations in provider use across subgroups of women. The most notable differences are by region. In Lori, 76 percent of women saw a gynecologist, 5 percent went to see a family doctor, and 13 percent saw an internist for ANC. In Shirak, 86 percent of women saw a gynecologist, and 12 percent of pregnant women received ANC from a family doctor. In all other regions, more than 90 percent of women saw a gynecologist.

[1] A feldsher is a health professional trained in nursing and midwifery with extended training in clinical diagnosis and pharmacology. Feldshers are authorized to provide basic treatment and to prescribe a restricted number of drugs at feldsher-accoucher posts (FAPs) with no assigned doctor.

[2] Note that if more than one source of ANC was mentioned by a respondent, only the provider with the highest qualifications was considered in this tabulation.

Table 10.1 Antenatal care

Percent distribution of women age 15-49 who had a live birth in the five years preceding the survey, by antenatal care (ANC) provider during pregnancy for the most recent birth and percentage receiving antenatal care from a skilled provider for the most recent birth, according to background characteristics, Armenia 2010

Background characteristic	Antenatal care provider							Total	Percentage receiving antenatal care from a skilled provider[2]	Percentage receiving antenatal care from any doctor	Number of women
	Family doctor	Internist	Pediatrician	Gynecologist	Other doctor	Feldsher/ nurse/ midwife[1]	No one				
Age at birth											
<20	3.4	0.0	0.0	93.9	2.4	0.0	0.4	100.0	99.6	99.6	83
20-34	1.8	1.6	1.6	93.6	0.2	0.2	1.0	100.0	99.0	98.8	1,004
35-49	1.7	4.2	3.2	90.0	0.0	0.0	0.9	100.0	99.1	99.1	64
Birth order											
1	1.5	1.7	1.3	94.3	0.5	0.0	0.8	100.0	99.2	99.2	438
2-3	1.9	1.0	1.8	93.6	0.3	0.3	1.0	100.0	99.0	98.7	670
4-5	(4.4)	(12.6)	(0.0)	(81.5)	(0.0)	(0.0)	(1.5)	100.0	(98.5)	(98.5)	36
6+	*	*	*	*	*	*	*	100.0	*	*	6
Residence											
Urban	1.0	1.5	2.3	93.1	0.3	0.2	1.6	100.0	98.4	98.2	680
Rural	3.3	1.8	0.4	93.8	0.4	0.2	0.0	100.0	100.0	99.8	471
Region											
Yerevan	0.0	0.7	3.3	94.0	0.5	0.0	1.5	100.0	98.5	98.5	376
Aragatsotn	0.0	0.0	0.0	99.6	0.0	0.0	0.4	100.0	99.6	99.6	47
Ararat	2.4	0.0	3.6	93.9	0.0	0.0	0.0	100.0	100.0	100.0	83
Armavir	0.9	0.0	0.0	99.1	0.0	0.0	0.0	100.0	100.0	100.0	112
Gegharkunik	0.0	2.9	2.8	94.4	0.0	0.0	0.0	100.0	100.0	100.0	82
Lori	4.7	13.1	0.0	75.8	2.2	1.3	2.9	100.0	97.1	95.8	91
Kotayk	0.0	0.0	0.0	99.0	0.0	0.0	1.0	100.0	99.0	99.0	121
Shirak	12.2	1.5	0.0	85.9	0.0	0.0	0.5	100.0	99.5	99.5	115
Syunik	2.8	0.0	0.0	97.2	0.0	0.0	0.0	100.0	100.0	100.0	41
Vayots Dzor	0.0	0.0	0.0	97.4	0.0	2.6	0.0	100.0	100.0	97.4	32
Tavush	0.0	0.6	0.0	98.8	0.0	0.0	0.6	100.0	99.4	99.4	51
Education											
Basic	2.1	0.0	0.0	95.8	0.0	0.0	2.1	100.0	97.9	97.9	51
Secondary	2.7	2.1	1.7	91.1	0.9	0.2	1.3	100.0	98.7	98.5	446
Secondary special	1.1	1.8	1.1	94.8	0.0	0.3	0.8	100.0	99.2	98.8	354
Higher	1.9	1.0	2.0	94.8	0.0	0.0	0.3	100.0	99.7	99.7	299
Wealth quintile											
Lowest	3.7	1.2	0.0	94.7	0.0	0.0	0.4	100.0	99.6	99.6	215
Second	1.9	1.7	0.0	94.8	0.0	0.4	1.2	100.0	98.8	98.4	237
Middle	1.8	1.5	1.5	94.0	0.8	0.0	0.3	100.0	99.7	99.7	239
Fourth	2.3	1.9	3.3	88.8	0.8	0.5	2.3	100.0	97.7	97.2	234
Highest	0.0	2.0	2.8	94.8	0.0	0.0	0.3	100.0	99.7	99.7	226
Total	1.9	1.7	1.5	93.4	0.3	0.2	0.9	100.0	99.1	98.9	1,151

Note: If more than one source of ANC was mentioned, only the provider with the highest qualifications is considered in this tabulation. 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] A feldsher is a health professional trained in nursing and midwifery with extended training in clinical diagnosis and pharmacology. Feldshers are authorized to provide basic treatment and to prescribe a restricted number of drugs at feldsher-accoucher posts (FAPs) with no assigned doctor.

[2] Skilled provider includes a doctor, feldsher, nurse, or midwife.

Number and Timing of ANC Visits

The prevention of complications during pregnancy and delivery and the successful outcome of the pregnancy for both mother and child are associated with the quality of antenatal care, the number of visits, and the timing of the first visit. The Ministry of Health has adopted the World Health Organization guidelines of at least four to six antenatal care visits for a normal pregnancy and recommends the first visit by 12 weeks of gestation.

Progress in access to quality ANC over time is shown by the increase in the proportion of women who made four or more antenatal care visits for their most recent birth. Table 10.2 shows that 93 percent of women who had a live birth in the five years before the survey had four or more ANC visits during pregnancy for the most recent birth. This is much higher than recorded in the 2005 ADHS (71 percent) and in the 2000 ADHS (65 percent). Less than 1 percent of women reported that they did not make an ANC visit, compared with 6 percent in the 2005 ADHS and 7 percent in the 2000 ADHS. Although there is some urban-rural differential in the percentage of women making four or more ANC visits in 2010 (96 and 89 percent, respectively), the gap is much smaller than that reported in the 2005 ADHS (82 and 53 percent, respectively) and in the 2000 ADHS (82 and 45 percent, respectively).

Table 10.2 Number of antenatal care visits and timing of first visit

Percent distribution of women age 15-49 who had a live birth in the five years preceding the survey by number of antenatal care (ANC) visits for the most recent live birth, and by the timing of the first visit, and among women with ANC, median months pregnant at first visit, according to residence, Armenia 2010

Number and timing of ANC visits	Residence		Total
	Urban	Rural	
Number of ANC visits			
None	1.6	0.0	0.9
1	0.0	0.5	0.2
2-3	1.4	7.6	3.9
4+	95.6	88.8	92.8
Don't know/missing	1.4	3.0	2.1
Total	100.0	100.0	100.0
Number of months pregnant at time of first ANC visit			
No antenatal care	1.6	0.0	0.9
<4	78.5	81.5	79.7
4-5	18.0	17.7	17.9
6-7	1.8	0.5	1.3
Don't know/missing	0.2	0.2	0.2
Total	100.0	100.0	100.0
Number of women	680	471	1,151
Median months pregnant at first visit (for those with ANC)	3.3	3.4	3.3
Number of women with ANC	669	471	1,140

Overall, 80 percent of women make their first ANC visit in the first trimester. Urban women are slightly less likely than rural women to have their first examination (79 percent compared with 82 percent**)** in the first trimester. There is a small difference between urban and rural women in the median number of months pregnant at time of first visit (3.3 and 3.4 months, respectively).

Antenatal Care Content

In Armenia, standard antenatal care includes the testing of urine and blood samples; a bacterioscopic vaginal examination; and height, weight, and blood pressure measurement. In addition, pregnant women should be informed about normal changes during pregnancy and signs of pregnancy complications. The 2010 ADHS respondents who received antenatal care for their most recent birth in the past five years were asked whether they had received each service during at least one of the antenatal care visits (Table 10.3). The content of antenatal care is important in judging its value. Pregnancy complications are an important source of maternal and child mortality and morbidity, and thus both information on the signs of complications and tests for complications should be routinely included in antenatal care.

Virtually all women who had a live birth in the five years preceding the survey in Armenia received all of the specified procedures during an antenatal care visit for their most recent birth, including blood pressure measurement and urine and blood sample analysis; two-thirds of women also had their blood taken for HIV testing. However, provision of information on danger signs during pregnancy was lacking (57 percent). Women in Syunik, Shirak and Armavir are the least likely to be informed of potential complications during pregnancy (26 percent, 33 percent, and 35 percent, respectively).

Iron Supplements

Mothers are advised to take iron supplements during pregnancy because maternal anemia is a principal cause of both maternal and neonatal mortality. Table 10.3 shows that 29 percent of women with a live birth in the past five years took iron tablets or syrup during pregnancy for their last birth, an increase from the 18 percent recorded in the 2005 ADHS. Urban women, women with the highest level of education, and those in the highest wealth quintile are more likely than other women to have taken iron supplements during pregnancy. Prominent differentials are shown by region; ranging from 50 percent in Yerevan to 4 percent of women in Syunik and 6 percent in Gegharkunik.

Table 10.3 Components of antenatal care

Among women age 15-49 with a live birth in the five years preceding the survey, the percentage who took iron tablets or syrup and drugs for intestinal parasites during the pregnancy of the most recent birth, and among women receiving antenatal care (ANC) for the most recent live birth in the five years preceding the survey, the percentage receiving specific antenatal services, according to background characteristics, Armenia 2010

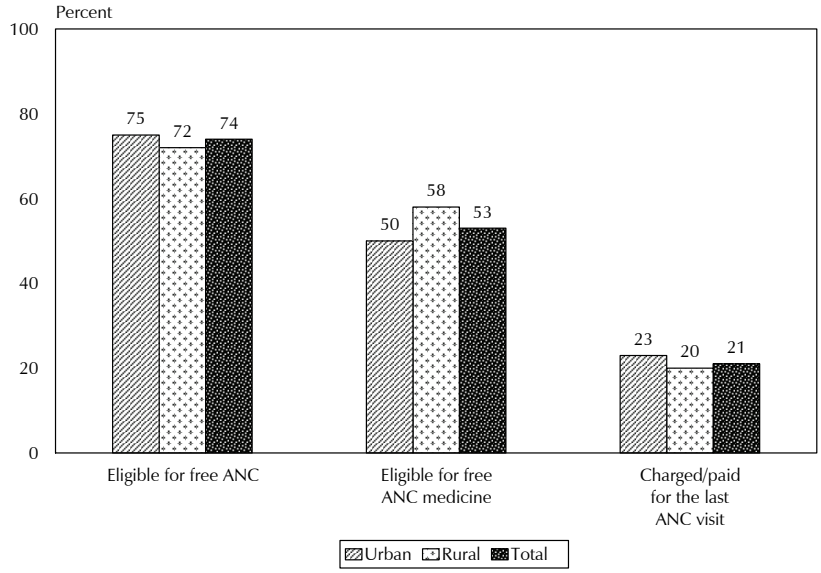
Background characteristic	Among women with a live birth in the past five years, the percentage who during the pregnancy of their last birth:		Number of women with a live birth in the past five years	Among women who received antenatal care for their most recent birth in the past five years, the percentage with selected services					Number of women with ANC for their most recent birth
	Took iron tablets or syrup	Took intestinal parasite drugs		Informed of signs of pregnancy compli-cations	Blood pressure measured	Urine sample taken	Blood sample taken	Blood sample for HIV status taken	
Age at birth									
<20	27.6	4.6	83	55.7	100.0	99.8	99.7	64.3	83
20-34	29.5	0.3	1,004	57.1	100.0	100.0	100.0	66.7	994
35-49	28.3	0.0	64	58.4	100.0	100.0	100.0	69.6	63
Birth order									
1	32.3	1.0	438	58.6	100.0	100.0	99.9	68.1	435
2-3	27.7	0.4	670	56.3	100.0	100.0	100.0	65.4	663
4-5	(25.7)	(0.0)	36	(60.4)	(100.0)	(100.0)	(100.0)	(75.5)	36
6+	*	*	6	*	*	*	*	*	6
Residence									
Urban	38.6	1.0	680	64.0	100.0	100.0	100.0	72.8	669
Rural	16.0	0.0	471	47.3	100.0	100.0	100.0	57.9	471
Region									
Yerevan	49.6	0.5	376	77.0	100.0	100.0	100.0	79.7	370
Aragatsotn	23.0	0.0	47	61.1	100.0	99.6	99.4	34.1	47
Ararat	11.2	0.3	83	45.6	100.0	100.0	100.0	13.0	83
Armavir	20.1	0.6	112	35.2	100.0	100.0	100.0	99.4	112
Gegharkunik	6.0	0.0	82	55.6	100.0	100.0	100.0	58.5	82
Lori	36.4	2.1	91	76.6	100.0	100.0	100.0	93.8	88
Kotayk	26.8	1.4	121	50.1	100.0	100.0	100.0	77.5	120
Shirak	15.3	0.0	115	33.1	100.0	100.0	100.0	40.1	115
Syunik	3.8	0.0	41	25.5	100.0	100.0	100.0	57.5	41
Vayots Dzor	19.9	0.4	32	46.1	100.0	100.0	100.0	26.9	32
Tavush	24.3	0.0	51	46.6	100.0	100.0	100.0	50.0	51
Education									
Basic	15.3	0.0	51	50.2	100.0	100.0	100.0	45.3	50
Secondary	21.8	0.5	446	50.8	100.0	100.0	100.0	62.1	440
Secondary special	34.1	1.0	354	62.4	100.0	100.0	100.0	68.2	351
Higher	37.2	0.4	299	61.2	100.0	100.0	100.0	75.2	299
Wealth quintile									
Lowest	12.7	0.0	215	34.4	100.0	100.0	100.0	57.1	214
Second	20.5	0.7	237	50.8	100.0	99.9	99.9	56.7	234
Middle	29.4	0.8	239	66.3	100.0	100.0	100.0	73.0	238
Fourth	38.1	0.4	234	60.9	100.0	100.0	100.0	70.1	228
Highest	45.1	1.0	226	71.6	100.0	100.0	100.0	75.9	226
Total	29.3	0.6	1,151	57.1	100.0	100.0	100.0	66.7	1,140

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.

Payment for Antenatal Care Visit

Women who gave birth in the five years preceding the survey were asked whether they were eligible for free ANC services and free medicine during pregnancy for the most recent birth, and whether they were charged or had to pay for any of the services they received during the last ANC visit for the most recent birth. The results are presented in Figure 10.1 and Table 10.4. Three in four women (74 percent) reported that they were eligible to receive free ANC, and more than half (53 percent) were eligible to receive free medicine. About one in five women (21 percent) were charged for the services they received during their last ANC visit. There are slight variations in the extent of eligibility for free services between urban and rural areas.

Figure 10.1 Eligibility for Free ANC Services



ADHS 2010

New state reforms on reproductive health were introduced in 2008 and had a positive impact on access of women to quality ANC. For example, Table 10.4 shows that during pregnancy for the most recent birth that occurred after July 2008, nearly twice as many women were eligible for free antenatal care (90 percent) and for free medicine (67 percent) as were eligible when the most recent birth occurred before July 2008 (47 and 31 percent, respectively). Furthermore, there is a sharp decline in the proportion of women who paid for the last antenatal care visit: from 39 percent of women who paid for the last ANC visit before July 2008 to 10 percent of women who paid for a final visit after July 2008.

Table 10.4 Eligibility for free ANC services and payment for the last ANC visit

Among women age 15-49 who had a live birth in the five years preceding the survey, percentages eligible for free outpatient antenatal care and for free medicine during pregnancy for the most recent birth, and percentage charged for the most recent ANC visit, by timing/date of the last birth, according to background characteristics, Armenia 2010

Background characteristic	Among women age 15-49 whose last live birth was before July 2008, the percentage who were:				Among women age 15-49 whose last live birth was after July 2008, the percentage who were:				Among women age 15-49 who had the last live birth in the past five years before the survey, the percentage who were			
	Eligible for free ANC	Eligible for free ANC medicine	Charged/ paid for the last ANC visit	Number of women	Eligible for free ANC	Eligible for free ANC medicine	Charged/ paid for the last ANC visit	Number of women	Eligible for free ANC	Eligible for free ANC medicine	Charged/ paid for the last ANC visit	Number of women
Mother's age at birth												
<20	*	*	*	17	93.6	69.7	5.6	67	84.9	63.3	13.7	83
20-34	47.3	29.9	38.7	399	89.2	67.4	11.5	605	72.6	52.5	22.3	1,004
35-49	*	*	*	17	(90.7)	(60.0)	(2.3)	47	75.5	54.1	15.6	64
Residence												
Urban	52.3	35.4	36.3	269	89.6	60.2	13.3	410	74.8	50.4	22.5	680
Rural	37.9	22.3	44.7	163	89.9	76.2	6.4	308	71.9	57.6	19.7	471
Region												
Yerevan	58.6	41.7	42.2	155	88.1	50.2	17.7	221	76.0	46.7	27.8	376
Aragatsotn	(28.0)	(0.8)	(53.4)	16	54.7	49.3	12.7	31	45.5	32.7	26.6	47
Ararat	(25.3)	(14.0)	(26.2)	30	99.5	97.8	3.9	53	73.0	67.9	11.9	83
Armavir	(49.2)	(23.2)	(58.7)	48	73.7	59.8	19.8	64	63.2	44.2	36.4	112
Gegharkunik	(10.4)	(10.4)	(84.0)	24	99.4	91.9	0.0	57	72.8	67.5	25.1	82
Lori	(31.8)	(17.3)	(25.5)	31	93.0	63.6	3.3	60	72.3	47.9	10.8	91
Kotayk	(61.9)	(54.5)	(31.9)	41	99.2	89.9	8.9	81	86.7	78.1	16.6	121
Shirak	(49.4)	(33.8)	(23.1)	46	96.9	67.3	5.1	70	78.1	54.0	12.2	115
Syunik	*	*	*	14	70.0	64.3	1.9	27	51.1	44.3	8.4	41
Vayots Dzor	(27.5)	(9.8)	(42.9)	12	96.9	73.8	3.9	20	70.8	49.7	18.6	32
Tavush	(65.0)	(27.6)	(7.5)	17	100.0	66.8	7.9	34	88.1	53.5	7.8	51
Education												
Basic	*	*	*	25	(99.4)	(78.7)	(7.5)	26	71.3	51.6	28.4	51
Secondary	43.9	26.9	32.6	165	88.6	70.9	11.2	281	72.0	54.6	19.2	446
Secondary special	45.2	31.4	44.8	136	90.8	57.3	4.9	218	73.2	47.3	20.3	354
Higher	54.7	36.5	40.9	106	88.9	71.1	15.7	194	76.8	58.9	24.6	299
Wealth quintile												
Lowest	41.5	21.7	46.0	80	89.4	75.2	6.2	134	71.5	55.2	21.1	215
Second	36.2	22.9	36.6	85	90.6	72.7	8.7	153	71.2	54.9	18.7	237
Middle	45.0	37.0	42.5	101	87.2	67.9	9.9	138	69.4	54.8	23.7	239
Fourth	41.4	26.2	42.1	71	94.8	63.7	7.5	163	78.7	52.4	17.9	234
Highest	66.5	40.8	31.6	96	85.5	55.6	20.7	130	77.4	49.3	25.4	226
Total	46.8	30.5	39.5	433	89.7	67.1	10.4	718	73.6	53.3	21.3	1,151

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

In the 2010 ADHS, women who paid for the last antenatal care visit for their most recent birth in the past five years were further asked how much they paid for these services. The results are presented in Table 10.5. About one in five women (21 percent) were charged for the services they received during their last ANC visit (Figure 10.1). Among these women, 84 percent specified the amount in Armenian drams[3] (Table 10.5). Three in ten women (29 percent) paid 1,000 to 5,000 drams, and 20 percent paid 6,000 to 10,000 drams. Women are most likely to pay for laboratory services (60 percent) and least likely to pay for medicine, consultation, and other expenses (26, 21, and 23 percent, respectively). The median amounts paid for laboratory services and consultation (4,951 drams and 4,932 drams, respectively) are lower than the median amounts paid for medicine and for other expenses (5,966 drams and 7,974 drams, respectively). The median amount paid for total ANC services is 9,938 drams.

[3] One US dollar is equivalent to about 370 Armenian drams at the current exchange rate.

Table 10.5 Payment for the last ANC visit

Among women who were charged for the last ANC visit they received during the pregnancy of the most recent birth in the five years before the survey, percent distribution by whether they paid for ANC and amount paid; and the median amount paid, according to type of service , Armenia 2010

Payment of ANC and amount paid	Payment for any ANC service	Payment for ANC by type of service			
		Laboratory	Medicine	Consultation	Other expenses
Paid money and knows amount	**84.4**	**59.6**	**25.8**	**20.9**	**22.7**
1,000-5,000 Armenian dram	f28.5	36.7	12.1	12.7	8.7
6,000-10,000 Armenian dram	20.1	11.2	5.6	1.5	5.1
11,000-25,000 Armenian dram	12.1	4.6	3.3	4.8	3.8
26,000-50,000 Armenian dram	15.2	5.7	2.9	0.3	1.5
51,000+ Armenian dram	8.5	1.4	1.9	1.6	3.6
Paid money and does not know amount	**7.0**	**16.0**	**16.5**	**16.3**	**18.5**
Paid no money	**8.5**	**24.3**	**57.7**	**62.8**	**58.9**
Total	100.0	100.0	100.0	100.0	100.0
Number of women	243	243	243	243	243
Median paid (Armenian dram)[1]	9,938	4,951	5,966	(4,932)	(7,974)

Note: Figures in parentheses are based on 25-49 unweighted cases.
[1] Among women who reported the amount they paid; one US dollar is about 370 Armenian drams. For the first column, the median is calculated by summing the amounts the woman paid for all ANC services.

10.2 ASSISTANCE AND MEDICAL CARE AT DELIVERY

Hygienic conditions during delivery and supervision of delivery by trained medical staff reduce the risk of infections and ensure that complications of delivery are effectively handled. The 2010 ADHS collected information on the place of delivery, for all children born in the five years preceding the survey, and on the type of medical staff assisting during delivery.

Place of Delivery

Table 10.6 indicates that almost all births (99 percent) occurred in a health facility. The proportion of births in a health facility increased from 91 percent in 2000 to 97 percent in 2005 and to 99 percent in 2010. At the same time, deliveries at home declined from 9 percent in 2000 to 2 percent in 2005 and to less than 1 percent in 2010. There are small variations in place of delivery across subgroups of women. The most notable differences are in the type of health facility across regions. The highest percentages of deliveries in the private sector are found in Aragatsotn (23 percent) and Armavir (14 percent).

Table 10.6 Place of delivery

Percent distribution of live births in the five years preceding the survey by place of delivery and percentage delivered in a health facility, according to background characteristics, Armenia 2010

Background characteristic	Health facility		Home	Other	Missing	Total	Percentage delivered in a health facility	Number of births
	Public sector	Private sector						
Mother's age at birth								
<20	93.1	5.9	0.1	0.0	0.9	100.0	99.0	136
20-34	94.5	4.8	0.2	0.0	0.4	100.0	99.4	1,241
35-49	93.2	6.8	0.0	0.0	0.0	100.0	100.0	72
Birth order								
1	94.6	4.9	0.0	0.0	0.4	100.0	99.6	683
2-3	94.1	5.3	0.2	0.1	0.5	100.0	99.3	718
4-5	(93.4)	(3.6)	(3.0)	(0.0)	(0.0)	100.0	(97.0)	39
6+	*	*	*	*	*	100.0	*	6
Antenatal care visits[1]								
None	*	*	*	*	*	100.0	*	11
1-3	(97.2)	(0.0)	(2.8)	(0.0)	(0.0)	100.0	(97.2)	48
4+	94.8	5.0	0.0	0.0	0.2	100.0	99.8	1,068
Residence								
Urban	93.8	5.7	0.0	0.1	0.4	100.0	99.5	846
Rural	95.1	4.1	0.4	0.0	0.4	100.0	99.2	603
Region								
Yerevan	91.8	7.5	0.0	0.0	0.8	100.0	99.2	459
Aragatsotn	76.9	22.8	0.3	0.0	0.0	100.0	99.7	63
Ararat	99.4	0.6	0.0	0.0	0.0	100.0	100.0	104
Armavir	84.5	14.1	0.0	0.4	1.0	100.0	98.7	140
Gegharkunik	97.9	0.0	2.1	0.0	0.0	100.0	97.9	109
Lori	100.0	0.0	0.0	0.0	0.0	100.0	100.0	111
Kotayk	99.2	0.8	0.0	0.0	0.0	100.0	100.0	150
Shirak	97.7	1.5	0.0	0.0	0.8	100.0	99.2	155
Syunik	100.0	0.0	0.0	0.0	0.0	100.0	100.0	52
Vayots Dzor	99.7	0.3	0.0	0.0	0.0	100.0	100.0	40
Tavush	100.0	0.0	0.0	0.0	0.0	100.0	100.0	65
Mother's education								
Basic	100.0	0.0	0.0	0.0	0.0	100.0	100.0	71
Secondary	94.4	4.9	0.4	0.1	0.2	100.0	99.3	572
Secondary special	92.4	6.8	0.0	0.0	0.7	100.0	99.3	442
Higher	95.5	4.0	0.0	0.0	0.5	100.0	99.5	363
Wealth quintile								
Lowest	93.5	5.7	0.0	0.0	0.9	100.0	99.1	295
Second	97.8	1.4	0.8	0.0	0.0	100.0	99.2	296
Middle	90.9	9.1	0.0	0.0	0.0	100.0	100.0	295
Fourth	96.0	2.8	0.0	0.0	1.2	100.0	98.8	292
Highest	93.4	6.4	0.0	0.2	0.0	100.0	99.8	271
Total	94.3	5.0	0.2	0.0	0.4	100.0	99.4	1,448

Note: Total includes 24 women with information missing on number of ANC visits. 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 only the most recent birth in the five years preceding the survey

Assistance at Delivery

Assistance at delivery by a health professional is universal in Armenia (Table 10.7). A doctor attended 97 percent of live births during the five years preceding the survey. The role of nurse or trained midwife has declined in the past 10 years, from 14 percent in 2000 to 4 percent in 2005, and to 2 percent in 2010. There are no significant variations across groups of women. Being assisted at delivery by a feldsher is more common among older women and women with basic education (4 percent each). Relative to other regions, the role of nurses and midwives in assisting deliveries is prominent in Aragatsotn (13 percent) and Lori (8 percent).

Table 10.7 Assistance during delivery

Percent distribution of live births in the five years preceding the survey by person providing assistance during delivery, percentage of births assisted by a skilled provider, and percentage delivered by caesarean-section, according to background characteristics, Armenia 2010

Background characteristic	Person providing assistance during delivery							Percentage delivered by a skilled provider[2]	Percentage delivered by C-section	Number of births
	Doctor	Feldsher[1]	Nurse/ midwife	Relative/ friends / others	No one	Don't know/ missing	Total			
Mother's age at birth										
<20	97.3	0.0	1.6	0.1	0.0	0.9	100.0	99.0	4.0	136
20-34	97.0	0.2	2.2	0.2	0.1	0.2	100.0	99.5	12.1	1,241
35-49	95.8	4.2	0.0	0.0	0.0	0.0	100.0	100.0	35.3	72
Birth order										
1	97.8	0.3	1.4	0.0	0.0	0.4	100.0	99.6	13.2	683
2-3	96.7	0.2	2.6	0.2	0.2	0.2	100.0	99.5	12.1	718
4-5	(97.0)	(0.0)	(0.0)	(3.0)	(0.0)	(0.0)	100.0	(97.0)	(9.9)	39
6+	*	*	*	*	*	*	100.0	*	*	6
Residence										
Urban	98.0	0.1	1.6	0.0	0.0	0.2	100.0	99.8	15.9	846
Rural	95.6	0.8	2.6	0.4	0.2	0.4	100.0	99.0	7.8	603
Region										
Yerevan	98.4	0.0	1.3	0.0	0.0	0.3	100.0	99.7	19.5	459
Aragatsotn	87.1	0.0	12.7	0.3	0.0	0.0	100.0	99.7	5.0	63
Ararat	100.0	0.0	0.0	0.0	0.0	0.0	100.0	100.0	5.8	104
Armavir	98.0	0.0	1.0	0.0	0.0	1.0	100.0	99.0	8.9	140
Gegharkunik	88.3	5.0	3.6	2.1	1.1	0.0	100.0	96.8	7.4	109
Lori	92.0	0.5	7.5	0.0	0.0	0.0	100.0	100.0	7.9	111
Kotayk	100.0	0.0	0.0	0.0	0.0	0.0	100.0	100.0	8.1	150
Shirak	98.1	0.0	1.1	0.0	0.0	0.8	100.0	99.2	14.7	155
Syunik	100.0	0.0	0.0	0.0	0.0	0.0	100.0	100.0	6.5	52
Vayots Dzor	100.0	0.0	0.0	0.0	0.0	0.0	100.0	100.0	15.5	40
Tavush	99.5	0.0	0.5	0.0	0.0	0.0	100.0	100.0	12.7	65
Mother's education										
Basic	95.4	3.8	0.8	0.0	0.0	0.0	100.0	100.0	7.1	71
Secondary	96.3	0.6	2.3	0.4	0.2	0.2	100.0	99.2	6.2	572
Secondary special	98.0	0.0	1.3	0.0	0.0	0.7	100.0	99.3	17.4	442
Higher	97.2	0.0	2.8	0.0	0.0	0.0	100.0	100.0	17.5	363
Wealth quintile										
Lowest	94.7	0.9	3.4	0.0	0.0	0.9	100.0	99.1	6.7	295
Second	95.4	0.9	2.4	0.8	0.4	0.0	100.0	98.8	10.2	296
Middle	97.9	0.1	2.0	0.0	0.0	0.0	100.0	100.0	14.4	295
Fourth	98.9	0.1	0.4	0.0	0.0	0.6	100.0	99.4	8.1	292
Highest	98.1	0.0	1.9	0.0	0.0	0.0	100.0	100.0	24.0	271
Total	97.0	0.4	2.0	0.2	0.1	0.3	100.0	99.5	12.5	1,448

Note: If the respondent mentioned more than one person attending during delivery, only the most qualified person is considered in this tabulation. 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] A feldsher is a health professional trained in nursing and midwifery with extended training in clinical diagnosis and pharmacology. Feldshers are authorized to provide basic treatment and to prescribe a restricted number of drugs at feldsher-accoucher posts (FAPs) with no assigned doctor.

[2] Skilled provider includes doctor, nurse, midwife, or feldsher.

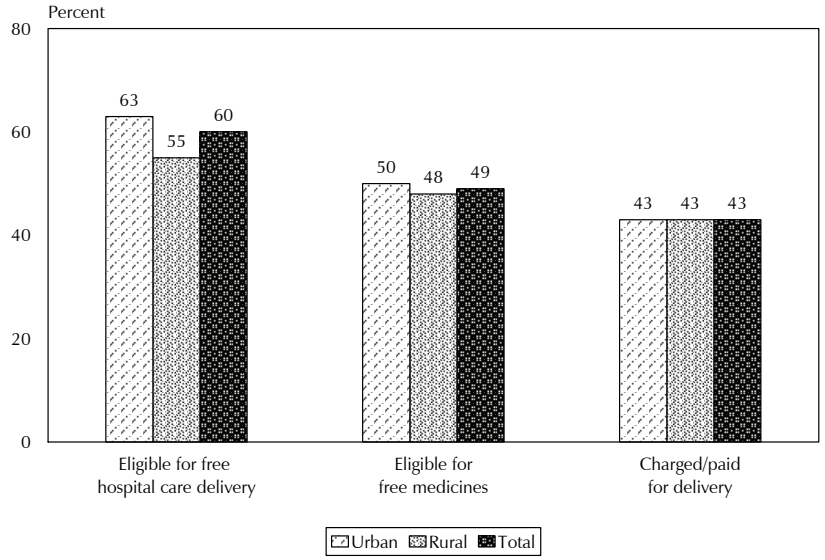
Table 10.7 also presents information on the extent of caesarean section delivery. Access to caesarean section operations is a measure of access to emergency care for childbirth complications. According to the World Health Organization and UNICEF, acceptable rates for caesarean section delivery are between 5 and 15 percent. Rates above 15 percent are considered excessive, while rates below 5 percent indicate that not all women in need are receiving a caesarean section delivery (UNICEF et al., 1997; Althabe and Belizan, 2006). In Armenia, this rate has been increasing, from 7 percent in 2000 to 9 percent in 2005, and then to 13 percent in 2010. Caesarean deliveries increase with the woman's age, education, and wealth quintile. First, second, and third births are more likely to be delivered by caesarean section than higher order births. Women living in urban areas are more

likely than rural women to deliver by caesarean section (16 and 8 percent, respectively). Delivery by caesarean section varies widely across regions, ranging from 5 percent in Aragatsotn to 20 percent in Yerevan.

Payment for Delivery

Women who gave birth in a health facility in the five years preceding the survey were asked whether they were eligible for free delivery and medicine, and whether they were charged or had to pay for any of the services they received during delivery. Figure 10.2 shows that 60 percent of women reported that they were eligible to receive free hospital care delivery, about half (49 percent) were eligible to receive free medicine during delivery, and 43 percent were charged for the delivery services they received. There are only slight variations in the extent of eligibility for free services between urban and rural areas.

Figure 10.2 **Eligibility for Free Delivery Services**



ADHS 2010

In the 2010 ADHS, women who paid for delivery services were further asked how much they paid for various services during delivery for their most recent birth in the past five years. The results are presented in Table 10.8. Among those who paid for delivery, almost all paid in cash; only 6 percent said that they did not pay in cash for any delivery service. Thirty-eight percent of women paid 26,000 to 50,000 drams and 33 percent paid 51,000 drams or more. Women are most likely to pay for delivery and other expenses (44 percent each). The median amount paid for delivery and other expenses (34,994 drams and 44,993 drams, respectively) is higher than the median amount paid for laboratory services and medicine (4,982 drams and 7,958 drams, respectively). The median amount paid for all delivery services is 44,998 drams.

Table 10.8 Payment for delivery of the last birth

Among women who were charged for delivery of the most recent birth in the five years before the survey, percent distribution by whether they paid for delivery and amount paid; and the median amount paid, according to type of service , Armenia 2010

Payment for delivery and amount paid	Payment for any delivery service	Payment for delivery by type of service			
		Laboratory	Medicine	Delivery	Other expenses
Paid money and knows amount	**85.4**	**14.8**	**12.8**	**44.4**	**44.1**
1,000-5,000 Armenian dram	1.1	7.9	5.4	1.0	3.6
6,000-10,000 Armenian dram	1.9	2.6	4.0	0.3	3.0
11,000-25,000 Armenian dram	11.1	2.3	2.1	8.8	5.9
26,000-50,000 Armenian dram	38.4	1.1	1.3	22.4	14.5
51,000+ Armenian dram	32.9	0.9	0.0	11.9	17.1
Paid money and does not know amount	**6.3**	**24.4**	**25.9**	**24.1**	**21.0**
Paid no money	**8.3**	**60.8**	**61.4**	**31.5**	**34.8**
Total	100.0	100.0	100.0	100.0	100.0
Number of women	404	404	404	404	404
Median paid (Armenian dram)[1]	44,998	4,982	7,958	34,994	44,993

[1] Among women who reported the amount they paid; one US dollar is about 370 Armenian drams. For the first column, the median is calculated by summing the amounts the woman paid for all delivery services.

In 2008, as part of broader reproductive health care reforms, Armenia introduced vouchers entitling pregnant women to receive free delivery care services. In the 2010 ADHS, information on the availability of a voucher for free delivery services was collected for every birth after July 2008. Overall, 52 percent of births in the five years preceding the survey occurred after July 2008 (data not shown) and almost all of them (96 percent) had a voucher for free delivery (Table 10.9).The 2010 data show that antenatal and delivery care services were free of charge even before 2008; however, access to free services increased substantially after July 2008, when the reforms took place. Among births in the five years preceding the survey that occurred before July 2008, only 20 percent were eligible for free hospital care and 18 percent were eligible for free medicine during delivery compared with 97 percent and 78 percent, respectively, among births that occurred after July 2008 (Table 10.9). There is a substantial difference in the proportion of births that were charged for delivery services before July 2008 and after July 2008 (82 percent and 8 percent, respectively); the decrease is even steeper in rural areas (89 percent versus 6 percent) than in urban areas (78 percent versus 10 percent).

Table 10.9 Access for free delivery services before and after July 2008

Among live births in the five years preceding the survey, percentages eligible for free hospital care and for free medicine during delivery, percentage charged for delivery, and percentage with a delivery voucher, by timing/date of birth, according to background characteristics, Armenia 2010

Background characteristic	Among births that occurred before July 2008, the percentage who were:				Among births that occurred after July 2008, the percentage who were:				
	Eligible for free hospital care during delivery	Eligible for free medicine during delivery	Charged/ paid for delivery	Number of births	Had a delivery voucher	Eligible for free hospital care during delivery	Eligible for free medicine during delivery	Charged/ paid for delivery	Number of births
Mother's age at birth									
<20	15.2	14.7	84.8	64	96.7	97.2	85.7	12.1	70
20-34	20.4	17.6	82.3	598	96.8	96.6	77.8	7.6	635
35-49	*	*	*	23	(90.3)	(94.6)	(74.5)	(5.5)	49
Residence									
Urban	28.5	25.0	77.8	416	97.5	97.7	75.6	9.5	426
Rural	7.9	7.1	89.4	270	94.9	94.9	81.9	5.8	328
Region									
Yerevan	36.3	31.5	76.9	231	97.4	98.4	71.5	8.4	225
Aragatsotn	0.7	0.7	91.7	29	81.8	81.8	65.3	15.4	34
Ararat	(2.9)	(1.2)	(91.1)	47	96.5	96.0	94.3	4.1	57
Armavir	10.7	7.6	87.2	72	90.1	90.3	71.1	10.5	67
Gegharkunik	3.9	3.9	95.9	47	100.0	100.0	98.1	0.6	60
Lori	(10.7)	(8.4)	(75.9)	48	97.2	97.2	75.7	4.4	64
Kotayk	27.0	24.7	80.2	66	98.7	97.4	82.4	17.4	84
Shirak	21.3	22.8	84.1	76	97.7	96.6	80.0	0.0	78
Syunik	(0.0)	(0.0)	(72.7)	23	94.5	96.1	77.9	5.6	29
Vayots Dzor	11.2	5.7	77.7	19	100.0	100.0	83.9	7.5	20
Tavush	13.0	12.1	91.2	29	99.2	100.0	77.7	12.6	36
Education									
Basic	(20.4)	(17.4)	(85.4)	42	(100.0)	(100.0)	(80.9)	(2.5)	29
Secondary	15.1	14.5	84.7	270	95.4	96.0	77.0	8.3	299
Secondary special	19.9	16.7	83.3	213	96.3	97.3	78.1	6.5	226
Higher	29.8	25.6	76.5	160	97.4	95.8	80.3	9.4	200
Wealth quintile									
Lowest	10.8	7.9	86.1	142	96.9	95.9	84.8	4.9	151
Second	18.9	17.3	83.6	133	94.3	95.3	80.5	10.3	160
Middle	22.3	22.7	81.1	152	97.0	97.8	85.8	8.7	142
Fourth	23.4	17.3	85.1	122	98.2	96.9	70.8	7.0	166
Highest	26.9	24.4	76.5	137	95.3	96.7	70.1	8.4	134
Total	20.4	18.0	82.4	686	96.4	96.5	78.4	7.9	754

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

10.3 POSTNATAL CARE FOR THE MOTHER

The postnatal period is defined as the time between the delivery of the placenta and 42 days after delivery. Postnatal care provides an opportunity 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. Because most maternal and neonatal deaths occur during the first few days after delivery, the timing of postnatal care is important.

Timing of Postnatal Checkups

Table 10.10 presents information on the timing of the first postnatal checkup after the most recent birth for women who gave birth in the two years preceding the survey. The data show that 3 percent of these women did not receive a postnatal checkup. Overall, 8 percent of women did not receive postnatal care within the recommended period (two days after delivery).

Younger women and rural women are more likely than older women and urban women to receive a postnatal checkup within two days after birth. Table 10.10 shows large variations in the timing of postnatal care across regions. However, caution should be exercised in the analysis across regions because of the small number of women in each region. The likelihood of receiving a postnatal

checkup within two days after birth has no direct relationship with the woman's education. For xample, 85 percent of women with higher than secondary education received a postnatal checkup within two days after birth compared with 94 to 96 percent of women with lower educational attainment. A woman's wealth status has no clear association with the likelihood of receiving a postnatal checkup.

Table 10.10 Timing of first postnatal checkup for the mother

Among women giving birth in the two years preceding the survey, the percent distribution of the mother's first postnatal check-up for the last live birth by time after delivery, and the percentage of women with a live birth in the two years preceding the survey who received a postnatal checkup in the first two days after giving birth, according to background characteristics, Armenia 2010

Background characteristic	Time after delivery of mother's first postnatal checkup								Percentage of women with a postnatal checkup in the first two days after birth	Number of women
	Less than 4 hours	4-23 hours	1-2 days	3-6 days	7-41 days	Don't know/ missing	No postnatal checkup[1]	Total		
Mother's age at birth										
<20	45.7	38.7	14.3	0.0	0.0	0.0	1.2	100.0	98.8	52
20-34	50.2	16.0	25.8	2.1	0.3	2.4	3.2	100.0	92.0	513
35-49	(59.3)	(9.8)	(14.1)	(0.0)	(0.0)	(9.6)	(7.2)	100.0	(83.2)	37
Birth order										
1	52.4	20.1	20.3	1.3	0.0	2.7	3.2	100.0	92.8	278
2-3	47.9	16.3	28.3	2.4	0.5	1.7	3.0	100.0	92.4	301
4+	*	*	*	*	*	*	*	100.0	*	24
Residence										
Urban	49.8	15.6	24.3	2.0	0.0	3.3	5.0	100.0	89.8	342
Rural	51.1	20.2	23.8	1.6	0.5	1.8	1.0	100.0	95.0	260
Region										
Yerevan	51.1	13.6	23.9	1.1	0.0	3.1	7.2	100.0	88.6	177
Aragatsotn	(53.2)	(9.4)	(32.6)	(0.0)	(4.8)	(0.0)	(0.0)	100.0	(95.2)	29
Ararat	(53.0)	(39.6)	(7.0)	(0.5)	(0.0)	(0.0)	(0.0)	100.0	(99.5)	43
Armavir	40.7	24.1	27.4	3.6	0.0	0.0	4.1	100.0	92.3	51
Gegharkunik	34.7	27.1	38.2	0.0	0.0	0.0	0.0	100.0	100.0	49
Lori	(38.8)	(5.5)	(32.4)	(8.2)	(0.0)	(13.7)	(1.4)	100.0	(76.7)	54
Kotayk	85.6	12.0	2.4	0.0	0.0	0.0	0.0	100.0	100.0	72
Shirak	42.5	17.6	32.6	2.2	0.0	0.0	5.1	100.0	92.7	57
Syunik	(37.9)	(19.1)	(28.8)	(0.0)	(0.0)	(14.2)	(0.0)	100.0	(85.8)	23
Vayots Dzor	31.2	35.9	28.5	0.0	0.0	0.0	4.4	100.0	95.6	18
Tavush	53.8	14.0	27.1	4.0	0.0	0.0	1.1	100.0	94.9	29
Education										
Basic	(63.9)	(24.7)	(7.6)	(0.0)	(0.0)	(0.0)	(3.9)	100.0	(96.1)	21
Secondary	48.8	18.8	26.5	2.2	0.6	0.5	2.6	100.0	94.0	236
Secondary special	52.5	15.8	27.9	0.7	0.0	3.0	0.1	100.0	96.2	172
Higher	48.8	17.0	19.0	2.6	0.0	5.5	7.2	100.0	84.7	174
Wealth quintile										
Lowest	41.0	21.2	33.0	1.6	1.2	0.0	2.0	100.0	95.2	116
Second	49.4	21.4	21.1	1.8	0.0	3.8	2.5	100.0	91.9	129
Middle	52.9	15.2	26.0	1.0	0.0	4.0	0.9	100.0	94.1	109
Fourth	47.5	16.1	25.1	1.7	0.0	2.8	6.8	100.0	88.7	143
Highest	63.2	13.5	14.4	3.0	0.0	2.7	3.2	100.0	91.1	105
Total	50.4	17.6	24.1	1.8	0.2	2.7	3.3	100.0	92.0	602

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 women who received a checkup after 41 days

Type of Provider

Table 10.11 shows the type of health care provider who performed the postnatal checkup for the mother for the most recent birth in the two years preceding the survey. Among those who had a postnatal examination in the first two days after birth (92 percent), virtually all were examined by a gynecologist.

In the 2010 ADHS, women who gave birth in the five years preceding the survey were asked if any health provider talked about family planning during the first six weeks after the most recent birth. Overall, only 7 percent of women discussed family planning with a health provider during the specified period (data not shown).

Table 10.11 Type of provider of first postnatal checkup for the mother

Among women giving birth in the two years preceding the survey, the percent distribution by type of provider of the mother's first postnatal health check in the two days after the last live birth, according to background characteristics, Armenia 2010

Background characteristic	Type of health provider of mother's first postnatal checkup					No postnatal checkup in the first two days after birth	Total	Number of women
	Internist	Pediatrician	Gynecologist	Other doctors	Nurse/ midwife			
Mother's age at birth								
<20	0.0	3.7	95.1	0.0	0.0	1.2	100.0	52
20-34	1.3	0.3	88.6	0.4	1.3	8.0	100.0	513
35-49	(0.0)	(0.0)	(83.2)	(0.0)	(0.0)	(16.8)	100.0	37
Birth order								
1	2.0	1.3	88.8	0.1	0.7	7.2	100.0	278
2-3	0.0	0.0	90.2	0.6	1.6	7.6	100.0	301
4+	*	*	*	*	*	*	100.0	24
Residence								
Urban	1.3	1.1	86.2	0.6	0.6	10.2	100.0	342
Rural	0.9	0.0	92.3	0.0	1.8	5.0	100.0	260
Region								
Yerevan	2.4	2.0	83.1	1.1	0.0	11.4	100.0	177
Aragatsotn	(0.0)	(0.0)	(95.2)	(0.0)	(0.0)	(4.8)	100.0	29
Ararat	(0.0)	(0.0)	(99.5)	(0.0)	(0.0)	(0.5)	100.0	43
Armavir	0.0	0.0	92.3	0.0	0.0	7.7	100.0	51
Gegharkunik	2.6	0.0	97.4	0.0	0.0	0.0	100.0	49
Lori	(2.2)	(0.0)	(73.0)	(0.0)	(1.4)	(23.3)	100.0	54
Kotayk	0.0	0.0	100.0	0.0	0.0	0.0	100.0	72
Shirak	0.0	0.0	82.7	0.0	10.0	7.3	100.0	57
Syunik	(0.0)	(0.0)	(85.8)	(0.0)	(0.0)	(14.2)	100.0	23
Vayots Dzor	0.0	0.0	94.7	0.9	0.0	4.4	100.0	18
Tavush	0.0	0.0	93.9	0.0	1.0	5.1	100.0	29
Education								
Basic	(0.0)	(0.0)	(96.1)	(0.0)	(0.0)	(3.9)	100.0	21
Secondary	0.5	0.0	91.7	0.8	1.0	6.0	100.0	236
Secondary special	1.8	2.1	90.1	0.0	2.1	3.8	100.0	172
Higher	1.4	0.0	82.8	0.1	0.4	15.3	100.0	174
Wealth quintile								
Lowest	0.0	0.0	93.0	0.0	2.1	4.8	100.0	116
Second	1.0	0.0	89.0	0.0	1.9	8.1	100.0	129
Middle	1.8	0.0	92.2	0.1	0.0	5.9	100.0	109
Fourth	0.8	1.2	84.7	1.3	0.8	11.3	100.0	143
Highest	2.2	1.8	86.2	0.0	0.7	8.9	100.0	105
Total	1.1	0.6	88.9	0.3	1.1	8.0	100.0	602

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.

10.4 POSTNATAL CARE FOR THE NEWBORN

Timing of Postnatal Care

Table 10.12 shows that 50 percent of births in the two years before the survey received a postnatal checkup within two days after birth. Births to younger women, first-order births, and births to rural women are more likely to receive a postnatal checkup in the first two days than births to older women, higher order births, and urban women.

Table 10.12 shows large variations in the timing of the postnatal checkup for the newborn across regions. Interestingly, less than half of the births in Yerevan received a postnatal checkup in the recommended period of two days after birth (43 percent). Births in Ararat are the most likely to have received a checkup within the recommended time period (81 percent). The likelihood of receiving a postnatal checkup for the newborn has no obvious relationship to the mother's education or wealth status.

Table 10.12 Timing of first postnatal checkup for the newborn

Percent distribution of births in the two years preceding the survey by time after birth of first postnatal checkup, and the percentage of births with a postnatal checkup in the first two days after birth, according to background characteristics, Armenia 2010

Background characteristic	Time after birth of newborn's first postnatal checkup							Total	Percentage of births with a postnatal checkup in the first two days after birth	Number of births
	Less than 1 hour	1-3 hours	4-23 hours	1-2 days	3-6 days	Don't know/ missing	No postnatal checkup[1]			
Mother's age at birth										
<20	2.2	33.7	3.9	13.7	10.0	3.8	32.8	100.0	53.5	52
20-34	3.7	25.3	6.7	14.3	15.3	1.1	33.7	100.0	50.0	513
35-49	(3.4)	(19.9)	(12.1)	(8.9)	(18.0)	(5.1)	(32.7)	100.0	(44.2)	37
Birth order										
1	4.3	28.3	7.1	13.4	10.6	2.1	34.3	100.0	53.0	278
2-3	3.1	24.6	5.9	15.1	18.4	1.2	31.8	100.0	48.7	301
4+	*	*	*	*	*	*	*	100.0	*	24
Residence										
Urban	2.5	22.3	7.6	15.4	18.2	1.3	32.8	100.0	47.7	342
Rural	5.0	30.1	5.7	11.9	10.7	1.9	34.6	100.0	52.8	260
Region										
Yerevan	1.1	19.7	7.1	14.8	20.3	1.1	36.0	100.0	42.7	177
Aragatsotn	(4.5)	(42.9)	(0.9)	(26.5)	(1.5)	(4.8)	(18.9)	100.0	(74.8)	29
Ararat	(0.0)	(67.4)	(7.1)	(6.2)	(5.4)	(0.0)	(14.0)	100.0	(80.7)	43
Armavir	0.0	15.1	1.0	0.0	1.7	0.0	82.1	100.0	16.2	51
Gegharkunik	12.1	9.6	16.6	13.1	1.8	1.2	45.5	100.0	51.5	49
Lori	(2.2)	(22.1)	(1.0)	(27.2)	(18.1)	(6.4)	(23.0)	100.0	(52.5)	54
Kotayk	9.1	28.8	6.9	4.0	24.0	0.0	27.2	100.0	48.9	72
Shirak	0.0	22.8	1.1	31.5	24.0	0.0	20.5	100.0	55.4	57
Syunik	(0.0)	(32.4)	(24.7)	(4.4)	(7.6)	(7.3)	(23.6)	100.0	(61.5)	23
Vayots Dzor	0.9	14.9	18.3	9.9	7.7	0.0	48.4	100.0	43.9	18
Tavush	14.6	33.3	4.8	8.5	20.7	0.8	17.3	100.0	61.2	29
Mother's education										
Basic	(4.8)	(24.7)	(6.3)	(7.6)	(29.0)	(0.0)	(27.6)	100.0	(43.4)	21
Secondary	4.3	26.9	6.1	13.4	13.1	1.3	34.9	100.0	50.7	236
Secondary special	2.6	21.3	6.9	20.6	15.8	0.0	32.8	100.0	51.4	172
Higher	3.3	28.5	7.7	8.7	15.1	3.5	33.1	100.0	48.2	174
Wealth quintile										
Lowest	3.0	32.7	2.9	15.1	11.9	1.7	32.8	100.0	53.6	116
Second	4.1	25.2	6.2	11.1	8.9	1.2	43.2	100.0	46.7	129
Middle	3.9	21.6	9.4	13.0	18.5	1.9	31.7	100.0	47.8	109
Fourth	2.9	26.3	4.7	18.0	20.3	2.5	25.2	100.0	52.0	143
Highest	3.9	21.9	11.9	11.5	14.8	0.0	36.0	100.0	49.2	105
Total	3.5	25.7	6.8	13.9	15.0	1.5	33.6	100.0	49.9	602

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 newborns who received a checkup after the first week.

Type of Provider

Table 10.13 shows that almost all births that received a postnatal checkup within the recommended time period were examined by a pediatrician. There are variations in the type of health professional providing the postnatal checkup for the newborn across background characteristics. Infants born to younger women (under age 20 at birth) and born in rural areas are more likely than other infants to receive a postnatal checkup by a pediatrician within two days after birth. The type of provider shows considerable variation across regions.

Table 10.13 Type of provider of first postnatal checkup for the newborn

Percent distribution of births in the two years preceding the survey by type of provider of the newborn's first postnatal health check during the two days after the last live birth, according to background characteristics, Armenia 2010

Background characteristic	Type of health provider of newborn's first postnatal checkup					No postnatal checkup in the first two days after birth	Total	Number of births
	Internist	Pediatrician	Gynecologist	Other doctor	Nurse/ midwife			
Mother's age at birth								
<20	0.0	53.5	0.0	0.0	0.0	46.5	100.0	52
20-34	0.5	46.4	0.6	1.1	1.4	50.0	100.0	513
35-49	(0.0)	(44.2)	(0.0)	(0.0)	(0.0)	(55.8)	100.0	37
Birth order								
1	0.9	48.7	1.1	1.6	0.7	47.0	100.0	278
2-3	0.0	47.0	0.0	0.0	1.7	51.3	100.0	301
4+	*	*	*	*	*	*	100.0	24
Residence								
Urban	0.4	44.6	0.6	1.4	0.8	52.3	100.0	342
Rural	0.5	50.0	0.4	0.4	1.6	47.2	100.0	260
Region								
Yerevan	0.0	40.3	1.1	1.3	0.0	57.3	100.0	177
Aragatsotn	(0.0)	(74.8)	(0.0)	(0.0)	(0.0)	(25.2)	100.0	29
Ararat	(0.0)	(80.7)	(0.0)	(0.0)	(0.0)	(19.3)	100.0	43
Armavir	0.0	16.2	0.0	0.0	0.0	83.8	100.0	51
Gegharkunik	0.0	51.5	0.0	0.0	0.0	48.5	100.0	49
Lori	(2.2)	(48.3)	(0.0)	(0.0)	(2.0)	(47.5)	100.0	54
Kotayk	0.0	48.9	0.0	0.0	0.0	51.1	100.0	72
Shirak	2.3	36.9	0.0	5.7	10.5	44.6	100.0	57
Syunik	(0.0)	(61.5)	(0.0)	(0.0)	(0.0)	(38.5)	100.0	23
Vayots Dzor	0.0	43.9	0.0	0.0	0.0	56.1	100.0	18
Tavush	0.0	57.9	3.4	0.0	0.0	38.8	100.0	29
Mother's education								
Basic	(0.0)	(43.4)	(0.0)	(0.0)	(0.0)	(56.6)	100.0	21
Secondary	0.0	49.3	0.0	0.9	0.5	49.3	100.0	236
Secondary special	0.7	46.5	1.1	0.7	2.4	48.6	100.0	172
Higher	0.8	44.5	0.6	1.4	1.1	51.8	100.0	174
Wealth quintile								
Lowest	0.0	50.9	0.0	0.8	1.9	46.4	100.0	116
Second	0.0	43.5	0.8	0.9	1.6	53.3	100.0	129
Middle	1.2	43.7	0.0	1.1	1.9	52.2	100.0	109
Fourth	0.8	49.2	1.4	0.0	0.6	48.0	100.0	143
Highest	0.0	47.0	0.0	2.2	0.0	50.8	100.0	105
Total	0.4	46.9	0.5	0.9	1.2	50.1	100.0	602

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.

10.5 PROBLEMS IN ACCESSING HEALTH CARE

Many factors can prevent women from getting medical advice or treatment for themselves. The 2010 ADHS included questions on the type of barriers women may face in accessing health care for themselves. All women were asked if the following factors would be a big problem for them in obtaining medical advice or treatment if they were sick: getting permission to go for treatment, getting money for treatment, distance to the health facility, and concern about going alone to the facility.

Table 10.14 shows that two in three women considered at least one of these issues to be potentially a serious problem in accessing health care for themselves. Women most frequently cited the lack of money to pay for treatment (53 percent). One in three women (33 percent) cited not wanting to go alone as a potential barrier. Getting permission to go to a doctor is the least often cited issue (6 percent).

Table 10.14 Problems in accessing health care

Percentage of women age 15-49 who reported that they have serious problems in accessing health care for themselves when they are sick, by type of problem, according to background characteristics, Armenia 2010

Background characteristic	Problems in accessing health care					Number of women
	Getting permission to go for treatment	Getting money for treatment	Distance to health facility	Not wanting to go alone	At least one problem accessing health care	
Age						
15-19	8.9	49.7	21.5	55.6	72.1	861
20-34	6.2	49.1	18.4	34.9	64.7	2,820
35-49	4.1	57.9	18.0	22.7	66.1	2,241
Number of living children						
0	6.4	47.0	19.4	44.7	65.6	2,233
1-2	5.3	53.2	16.9	26.9	64.9	2,690
3-4	5.5	62.8	22.1	25.3	71.8	964
5+	(5.4)	(66.4)	(15.5)	(17.8)	(69.6)	36
Marital status						
Never married	6.4	48.5	19.9	46.1	66.8	1,911
Married or living together	5.9	52.9	18.6	28.5	65.5	3,626
Divorced/separated/widowed	0.9	68.5	13.5	14.3	71.6	385
Employed last 12 months						
Not employed	6.6	55.1	18.5	37.9	69.8	3,850
Employed for cash	3.9	46.1	16.4	23.6	57.7	1,744
Employed not for cash	6.2	57.1	34.5	30.8	70.7	319
Residence						
Urban	4.8	47.2	12.4	30.7	61.8	3,641
Rural	7.3	60.9	28.8	37.4	73.5	2,281
Region						
Yerevan	4.5	44.1	12.4	30.7	59.9	2,069
Aragatsotn	3.3	70.2	24.9	10.9	73.7	260
Ararat	3.5	51.4	30.0	40.0	60.7	379
Armavir	4.3	64.2	23.3	35.2	69.8	535
Gegharkunik	13.5	61.1	47.5	49.3	83.6	459
Lori	2.5	75.7	11.0	26.7	81.8	513
Kotayk	4.8	57.3	15.3	34.0	68.2	543
Shirak	13.5	40.3	15.4	44.0	67.9	598
Syunik	5.2	38.0	24.7	28.4	48.5	198
Vayots Dzor	1.8	44.1	14.0	30.0	55.6	131
Tavush	3.7	51.8	12.7	25.7	60.6	238
Education						
Basic	14.2	73.6	29.0	50.4	84.7	347
Secondary	7.7	61.6	23.3	33.2	72.7	2,137
Secondary special	4.5	53.0	15.8	30.9	65.9	1,681
Higher	3.0	36.9	13.7	32.3	55.3	1,757
Wealth quintile						
Lowest	7.4	65.4	31.7	35.9	75.4	1,151
Second	7.9	61.1	25.1	38.4	74.7	1,211
Middle	5.8	54.4	13.1	29.8	68.0	1,139
Fourth	4.3	42.5	12.2	33.2	59.0	1,146
Highest	3.6	40.0	11.6	29.2	55.2	1,275
Total	5.8	52.5	18.7	33.3	66.3	5,922

Note: Total includes nine women with missing information on employment in the past 12 months. Figures in parentheses are based on 25-49 unweighted cases.

Younger women and women who live in rural areas are somewhat more likely than older and urban women to report at least one potential problem. Women with higher parity, women who were formerly married, and women who were not employed for cash were more likely than others to have encountered at least one obstacle in accessing health care. Women from Gegharkunik are the most likely to mention at least one potential obstacle while women from Syunik are the least likely to have

an obstacle in getting health care for themselves. The proportion of women who mention at least one problem accessing health care declines with increasing education and wealth.

10.6 BREAST EXAMINATION AND PAP SMEAR TEST

Breast Examination

Breast cancer is the most common type of cancer among Armenian women. Breast self-examinations (BSEs)—physical examinations of the breasts performed by women themselves—as well as examinations by medical professionals and mammography are methods for the early detection of breast cancer. According to the MOH regulations, health providers should teach BSE technique during women's annual preventive health care visits.

As shown in Table 10.15, 11 percent of Armenian women performed a BSE within the three months preceding the survey. The likelihood of performance increases with the woman's age, urban residence, educational attainment, and wealth status. Women in Yerevan and Lori are the most likely to have performed a recent BSE, while women in Syunik, Gegharkunik, and Aragatsotn are the least likely. Strikingly, however, more than three-quarters (78 percent) of Armenian women do not know about breast self-examinations.

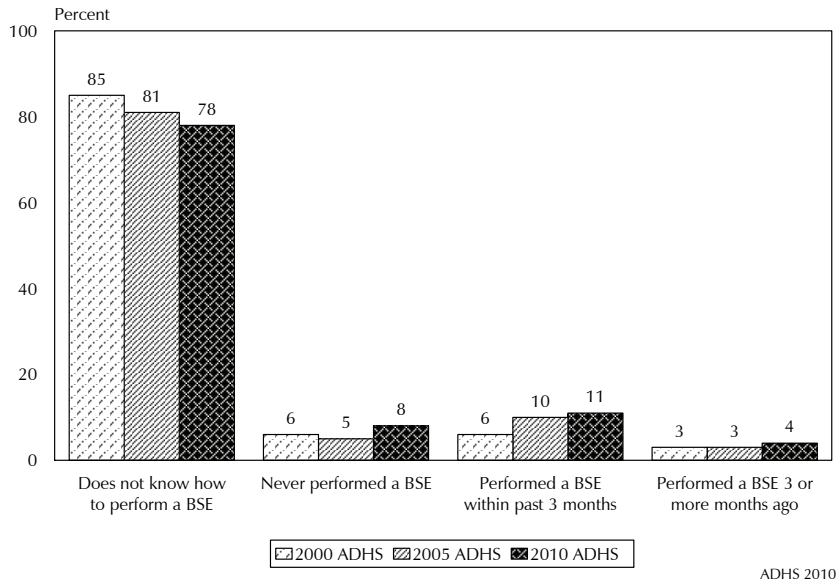
Table 10.15 Last breast self-examination

Percent distribution of women age 15-49 by time since last breast self-examination, according to background characteristics, Armenia 2010

Background characteristic	Last time performed breast self-examination					Total	Number
	Does not know about self-exam	Never	Within past 3 months	3+ months ago	Missing		
Age							
15-19	97.2	1.7	0.6	0.6	0.0	100.0	861
20-24	86.3	6.6	3.6	3.3	0.1	100.0	1,032
25-29	82.7	6.6	7.1	3.3	0.3	100.0	950
30-34	70.0	11.2	14.5	4.0	0.3	100.0	838
35-39	67.7	10.4	14.3	6.7	0.9	100.0	643
40-44	67.9	8.8	17.7	5.0	0.6	100.0	742
45-49	64.1	8.3	20.2	6.7	0.6	100.0	857
Residence							
Urban	73.2	9.0	12.4	4.9	0.5	100.0	3,641
Rural	84.4	5.0	7.7	2.7	0.2	100.0	2,281
Region							
Yerevan	69.9	9.9	13.8	6.0	0.4	100.0	2,069
Aragatsotn	87.0	6.0	5.1	1.8	0.0	100.0	260
Ararat	91.4	0.4	6.8	1.2	0.1	100.0	379
Armavir	77.1	9.6	10.6	2.5	0.2	100.0	535
Gegharkunik	89.6	3.7	4.4	2.0	0.3	100.0	459
Lori	78.6	0.2	17.0	3.7	0.4	100.0	513
Kotayk	83.0	6.0	8.2	1.9	0.8	100.0	543
Shirak	78.1	9.0	8.0	4.7	0.2	100.0	598
Syunik	73.2	25.9	0.0	0.6	0.3	100.0	198
Vayots Dzor	80.3	5.8	11.3	2.5	0.1	100.0	131
Tavush	73.3	3.1	12.7	10.2	0.7	100.0	238
Education							
Basic	93.1	2.9	2.0	2.0	0.0	100.0	347
Secondary	83.1	4.9	8.8	3.1	0.1	100.0	2,137
Secondary special	72.5	9.3	12.2	5.5	0.5	100.0	1,681
Higher	72.3	9.7	13.0	4.4	0.6	100.0	1,757
Wealth quintile							
Lowest	86.5	4.8	6.6	2.1	0.0	100.0	1,151
Second	84.3	4.7	7.2	3.5	0.4	100.0	1,211
Middle	76.5	7.7	10.3	4.9	0.6	100.0	1,139
Fourth	71.8	8.0	14.5	4.8	0.9	100.0	1,146
Highest	68.8	11.9	14.2	5.0	0.0	100.0	1,275
Total	77.5	7.5	10.6	4.1	0.4	100.0	5,922

Comparison of the results of the 2010 ADHS on BSE status with those of the 2005 ADHS and 2000 ADHS suggests modest improvements in BSE awareness and practice over the past 10 years. Figure 10.3 shows that 78 percent of Armenian women did not know about BSE in the current survey, compared with 81 percent in 2005 and 85 percent in 2000. Similarly, 6 percent of women in 2000 had performed a BSE in the three months before the survey compared with 10 percent in 2005 and 11 percent in 2010.

Figure 10.3 Trends in Recent Breast Self-Examination (BSE)



Breast Examination by a Health Provider

The existing guideline recommends that women undergo breast examination by a health provider during an annual health examination. Mammography, unless specifically indicated by a provider, is generally recommended every two years for women age 50 and older.

One in six women (15 percent) reported that a health care provider had given them a breast examination. Ten percent were given a manual breast examination, 4 percent received a mammogram, and 1 percent a sonogram (Table 10.16). As with BSE, the likelihood of having had a manual breast examination by a health provider increases with the woman's age, urban residence, educational attainment, and wealth status. Women in Lori, Tavush and Yerevan are the most likely to have had a manual breast examination given by a health care provider. Older women and those in Ararat and Kotayk are the most likely to have been given a mammogram, while younger women and those in Aragatsotn and Vayots Dzor are the least likely. Women in Armavir are somewhat more likely than other women to receive a sonogram (4 percent).

Table 10.16 Breast examination by a health provider

Percent distribution of women age 15-49 by type of breast examination ever given by a health provider, according to background characteristics, Armenia 2010

Background characteristic	Never gave breast examination	Type of breast examination ever given by a health care provider					Total	Number of women
		Manual	Ultrasound	Mammogram	Other	Missing		
Age								
15-19	96.0	3.4	0.2	0.1	0.0	0.2	100.0	861
20-24	92.0	6.6	0.5	0.6	0.0	0.2	100.0	1,032
25-29	86.8	10.3	1.6	1.0	0.0	0.2	100.0	950
30-34	79.4	12.7	2.5	5.3	0.0	0.0	100.0	838
35-39	84.1	9.1	0.8	5.9	0.1	0.0	100.0	643
40-44	76.9	12.6	2.0	8.4	0.0	0.0	100.0	742
45-49	74.1	13.5	1.5	10.4	0.2	0.2	100.0	857
Residence								
Urban	82.8	10.5	1.3	5.2	0.1	0.1	100.0	3,641
Rural	87.5	8.2	1.2	2.8	0.0	0.3	100.0	2,281
Region								
Yerevan	81.3	12.0	1.2	5.2	0.1	0.1	100.0	2,069
Aragatsotn	90.7	8.1	0.9	0.3	0.0	0.0	100.0	260
Ararat	88.5	2.2	0.6	7.4	0.0	1.3	100.0	379
Armavir	87.3	6.5	4.3	1.8	0.0	0.0	100.0	535
Gegharkunik	88.4	8.4	0.4	2.9	0.0	0.0	100.0	459
Lori	83.6	12.4	1.5	2.5	0.0	0.0	100.0	513
Kotayk	81.0	10.9	0.7	7.0	0.2	0.2	100.0	543
Shirak	87.7	7.5	1.0	3.7	0.0	0.1	100.0	598
Syunik	88.6	6.1	0.0	5.4	0.0	0.0	100.0	198
Vayots Dzor	89.6	7.8	1.6	1.0	0.0	0.0	100.0	131
Tavush	84.2	12.1	0.9	2.8	0.1	0.0	100.0	238
Education								
Basic	88.5	8.3	0.9	1.7	0.0	0.6	100.0	347
Secondary	85.9	9.6	1.3	3.1	0.0	0.1	100.0	2,137
Secondary special	82.4	10.9	1.1	5.3	0.2	0.1	100.0	1,681
Higher	84.4	8.7	1.6	5.1	0.0	0.2	100.0	1,757
Wealth quintile								
Lowest	89.7	7.0	1.3	1.8	0.0	0.1	100.0	1,151
Second	85.9	9.0	1.2	3.5	0.1	0.3	100.0	1,211
Middle	85.6	9.3	1.6	3.4	0.0	0.0	100.0	1,139
Fourth	80.0	12.4	1.2	6.3	0.0	0.1	100.0	1,146
Highest	82.1	10.4	1.2	6.1	0.1	0.2	100.0	1,275
Total	84.6	9.6	1.3	4.3	0.0	0.1	100.0	5,922

Pap Smear Test

Cervical cancer is a slow-growing cancer caused by certain strains of the human papilloma virus (HPV) and can be successfully treated if detected early. In addition to a routine breast examination, sexually active women are also recommended to have the Papanicolaou test (also called a Pap smear test) regularly to detect the presence of malignant cells in the endocervical canal. In Armenia, all women age 30 to 60 are recommended to have Pap smear testing once every three years. Currently, the standard Pap smear test is part of the annual preventive health care examination that can be performed by a district physician, gynecologist, family doctor, or other primary health care provider.

Table 10.17 shows that Pap smear testing coverage is very low. Fewer than one in ten women age 15-49 (9 percent) ever had a Pap smear test, and 7 percent had the test in the three months preceding the survey. These estimates are only slightly higher among women age 30-49 who are recommended by the MOH regulations to undertake a Pap smear test on a regular basis: 13 percent ever had the test and 9 percent had the test in the past three months. As expected, the coverage of Pap smear testing increases with the woman's age, ranging from less than 1 percent among women age 15-19 to 16 percent for women age 45-49.

Pap smear testing varies little by urban-rural residence (10 percent in urban compared with 8 percent in rural areas). Regional variation is pronounced, ranging from a low of 2 percent in Aragatsotn to a high of 14 percent in Kotayk. Women with secondary and secondary-special education are more likely to be tested than women with basic or higher than secondary levels of education. The likelihood of having a Pap smear test increases with the woman's wealth status, ranging from 7 percent for women in the lowest wealth quintile to 11 percent for women in the two highest quintiles.

Table 10.17 Pap smear test

Among women age 15-49, percentage who ever had a Pap smear test and percentage who had the test within the last three months prior to the survey, according to background characteristics, Armenia 2010

Background characteristic	Pap smear test		Number of women
	Ever	In the past 3 months	
Age			
15-19	0.4	0.4	861
20-24	4.9	4.7	1,032
25-29	10.2	9.1	950
30-34	10.8	8.8	838
35-39	14.8	10.4	643
40-44	10.4	7.0	742
45-49	16.2	9.4	857
30-49	13.0	8.9	3,079
Residence			
Urban	10.3	7.5	3,641
Rural	7.8	6.1	2,281
Region			
Yerevan	9.9	7.6	2,069
Aragatsotn	1.6	0.4	260
Ararat	8.9	7.9	379
Armavir	11.4	10.1	535
Gegharkunik	3.5	2.7	459
Lori	8.8	7.5	513
Kotayk	14.1	8.8	543
Shirak	11.5	7.8	598
Syunik	2.9	1.1	198
Vayots Dzor	7.9	5.5	131
Tavush	11.1	5.7	238
Education			
Basic	5.9	5.0	347
Secondary	10.2	7.7	2,137
Secondary special	10.9	8.2	1,681
Higher	7.4	5.1	1,757
Wealth quintile			
Lowest	7.0	5.4	1,151
Second	7.9	5.9	1,211
Middle	9.6	7.2	1,139
Fourth	11.4	7.5	1,146
Highest	10.6	8.5	1,275
Total	9.3	6.9	5,922

CHILD HEALTH 11

This chapter presents the findings on child health from the 2010 ADHS. Topics discussed include birth weight, vaccination status, and treatment practices for children experiencing each of the three major childhood illnesses: acute respiratory infection (ARI), fever, and diarrhea. Combined with information on childhood mortality, these data can be used to plan interventions to improve child health. The results of the survey are based on data collected from mothers of all live births that occurred in the five years preceding the survey.

11.1 CHILD'S WEIGHT AND SIZE AT BIRTH

Birth weight or size at birth is an important indicator of children's vulnerability to childhood illnesses and their chances of survival. Children whose birth weight is less than 2.5 kilograms, or children reported to be "very small" or "smaller than average," are considered to have a higher than average mortality risk. For births in the five years preceding the survey, the birth weight was recorded in the questionnaire if it was available from child health cards maintained at the local health facility (and checked by the supervisor before leaving the cluster) or from mother's recall. Because birth weight may not be known for all babies, the mother's estimate of the baby's size at birth was also obtained. Table 11.1 presents information on weight and size at birth, according to background characteristics.

Table 11.1 Child's weight and size at birth

Percentage of live births in the five years preceding the survey that have a reported birth weight; among live births in the five years preceding the survey with a reported birth weight, percent distribution by birth weight; percent distribution of all live births in the five years preceding the survey by mother's estimate of baby's size at birth, according to background characteristics, Armenia 2010

Background characteristic	Percentage of all births that have a reported birth weight[1]	Distribution of births with a reported birth weight[1]				Percent distribution of all live births by size of child at birth					
		Less than 2.5 kg	2.5 kg or more	Total	Number of births	Very small	Smaller than average	Average or larger	Don't know/ missing	Total	Number of births
Mother's age at birth											
<20	96.7	11.6	88.4	100.0	131	1.9	11.9	85.2	0.9	100.0	136
20-34	98.6	6.3	93.7	100.0	1,224	1.7	8.7	89.1	0.5	100.0	1,241
35-49	99.3	4.7	95.3	100.0	71	0.5	9.4	90.0	0.0	100.0	72
Birth order											
1	98.5	8.0	92.0	100.0	673	1.8	10.4	87.4	0.5	100.0	683
2-3	98.5	5.2	94.8	100.0	707	1.5	8.3	89.6	0.6	100.0	718
4-5	(97.0)	(14.9)	(85.1)	100.0	38	(1.9)	(2.2)	(95.9)	(0.0)	100.0	39
6+	*	*	*	100.0	8	*	*	*	*	100.0	8
Residence											
Urban	98.6	7.1	92.9	100.0	834	2.0	10.8	86.7	0.5	100.0	846
Rural	98.3	6.2	93.8	100.0	592	1.1	6.6	91.6	0.6	100.0	603
Region											
Yerevan	98.8	7.5	92.5	100.0	454	2.7	14.0	82.6	0.7	100.0	459
Aragatsotn	99.0	7.5	92.5	100.0	63	1.9	7.9	88.9	1.3	100.0	63
Ararat	99.7	7.3	92.7	100.0	104	0.5	6.9	92.6	0.0	100.0	104
Armavir	97.3	6.8	93.2	100.0	136	1.0	8.5	89.5	1.0	100.0	140
Gegharkunik	97.9	3.3	96.7	100.0	107	0.0	5.4	94.6	0.0	100.0	109
Lori	99.1	3.9	96.1	100.0	110	1.0	5.9	93.1	0.0	100.0	111
Kotayk	98.3	4.2	95.8	100.0	148	0.8	8.6	89.8	0.7	100.0	150
Shirak	98.0	11.3	88.7	100.0	152	2.1	3.5	93.6	0.8	100.0	155
Syunik	94.0	4.2	95.8	100.0	49	2.9	6.0	91.0	0.0	100.0	52
Vayots Dzor	100.0	3.6	96.4	100.0	40	0.7	7.0	92.3	0.0	100.0	40
Tavush	99.6	8.7	91.3	100.0	65	1.3	9.3	89.4	0.0	100.0	65

Continued...

Table 11.1—*Continued*

Background characteristic	Percentage of all births that have a reported birth weight[1]	Distribution of births with a reported birth weight[1]				Percent distribution of all live births by size of child at birth					
		Less than 2.5 kg	2.5 kg or more	Total	Number of births	Very small	Smaller than average	Average or larger	Don't know/ missing	Total	Number of births
Mother's education											
Basic	97.5	13.4	86.6	100.0	70	3.3	11.1	85.6	0.0	100.0	71
Secondary	98.5	7.2	92.8	100.0	564	1.5	8.6	89.7	0.2	100.0	572
Secondary special	98.3	8.1	91.9	100.0	435	2.3	9.5	87.5	0.7	100.0	442
Higher	98.8	3.1	96.9	100.0	358	0.7	8.8	89.5	1.0	100.0	363
Wealth quintile											
Lowest	97.9	8.9	91.1	100.0	289	2.0	7.8	89.3	0.9	100.0	295
Second	98.7	5.9	94.1	100.0	292	1.0	8.9	90.0	0.0	100.0	296
Middle	98.0	6.8	93.2	100.0	289	2.2	10.5	86.9	0.4	100.0	295
Fourth	98.2	5.9	94.1	100.0	287	2.7	7.7	88.8	0.8	100.0	292
Highest	99.5	6.1	93.9	100.0	270	0.2	10.5	88.7	0.6	100.0	271
Total	98.5	6.7	93.3	100.0	1,426	1.7	9.0	88.8	0.5	100.0	1,448

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] Based on either a written record or the mother's recall

Birth weight was obtained for 99 percent of all births in the five years preceding the survey. Of those babies weighed, 93 percent had a weight of at least 2.5 kilograms. Newborns of higher birth order, those with mothers age 20 or younger, those living in the Shirak region, and those born to mothers with basic education only were more likely than other newborns to weigh less than 2.5 kilograms.

11.2 VACCINATION COVERAGE

Armenia's Ministry of Health has adopted the World Health Organization (WHO) guidelines for childhood immunizations. These guidelines call for all children to receive the following vaccines during the first year of life: a BCG vaccination against tuberculosis; three doses of DPT to protect against diphtheria, pertussis, and tetanus; three doses of polio vaccine; and measles vaccine. In Armenia, the measles vaccine is given in the form of an MMR vaccination at 12 months to protect against measles, mumps, and rubella. In addition to these standard recommendations, since late 1999 the Ministry of Health has recommended that children receive three doses of the hepatitis B vaccine, with the first dose given at birth or at first clinical contact (MOH, 2005). The pentavalent vaccine, introduced in September 2009, has replaced the DPT vaccine and should be given according to the same schedule as the DPT. The pentavalent vaccine contains (in addition to DPT), the hepatitis B vaccine and a vaccine against *Haemophilus* influenza type B (MOH, 2008).

Information on vaccination coverage was collected in the 2010 ADHS for all children under age 5. In Armenia, health cards for each child are maintained in the local health-care facilities. In addition, for some children, immunization passports that also have immunization information, are maintained by the mother/guardian (MOH and UNICEF, 1999). In this survey, the mother of each child under age 5 was requested to show the interviewer the immunization passport for the child. If the immunization passport was available for inspection in the presence of the mother, the interviewer noted down information on each vaccination received and the date when it was given. In the event that the mother did not have an immunization passport, she was asked to recall the child's immunizations. Mothers were asked to recall whether the child had received BCG, polio, DPT, pentavalent, measles, and hepatitis vaccinations. If she recalled that the child had received the polio, DPT, pentavalent, or hepatitis vaccines, she was asked about the number of doses that the child had received of each of the vaccines. Further, once all the interviews in a cluster were completed, the team supervisor went to the local clinic to record information from the health cards maintained in the clinic for all the children in the sample. Notably, for children with facility health cards, information on the

cards was used instead of information obtained from the mother or from immunization passports, even if available.

Overall, for more than 9 of 10 children, the immunization data reported here are based on the health facility cards; for most of the remaining children the information is based on the mother's recall. Information from immunization passports was used only for an almost negligible proportion of children because most children with a passport also had a health card at the facility.

Information on vaccination coverage at any time before the survey among children age 18-29 months is shown by source in Table 11.2. In this report, the population of children age 18-29 months, rather than age 12-23 months (as in earlier DHS surveys in Armenia), is used to examine the vaccination coverage status of children. Because children in Armenia receive the measles vaccine only at age 12 months, this change allows a more accurate estimate of the proportion of children who have been vaccinated at approximately the proper times. It should also be noted that since the pentavalent vaccine was introduced in Armenia only about a year before the 2010 DHS, children age 18-29 months are too old to have been eligible for the three pentavalent vaccinations that are now recommended in the first year of life.

Table 11.2 shows, based on data from either source (health card or mother's recall), that 92 percent of children age 18-29 months have received all basic WHO-recommended vaccinations and that 87 percent have received the entire course of MOH-recommended vaccinations, which includes three doses of the hepatitis B vaccine. The proportion of children age 18-29 months who had received all vaccinations before age 18 months is somewhat lower, at 87 percent for all basic vaccinations and at 81 percent for all basic plus hepatitis B vaccinations.

Table 11.2 Vaccinations by source of information

Percentage of children age 18-29 months who received specific vaccines at any time before the survey, by source of information (health facility card or mother's report), and percentage vaccinated by 18 months of age, Armenia 2010

		DPT			Polio						Hepatittis				
	BCG	1	2	3	1	2	3	Measles (MMR)	All basic vaccina-tions[1]	No vaccina-tions	1	2	3	All[1] + hepatitis	Number of children
Vaccinated at any time before survey															
Health facility card[2]	92.3	91.8	90.5	90.3	92.1	90.8	90.3	88.3	86.8	0.0	91.6	91.0	85.3	82.6	282
Mother's report	7.3	7.1	5.7	4.6	7.3	6.5	5.0	7.1	4.6	0.5	6.6	5.7	4.2	4.2	24
Either source	99.5	98.9	96.2	95.0	99.4	97.3	95.3	95.4	91.5	0.5	98.3	96.7	89.5	86.8	306
Vaccinated by 18 months of age[3]	99.5	98.4	95.3	91.8	98.9	96.5	93.3	92.6	87.1	0.0	98.3	96.7	87.9	80.9	306

[1] BCG, measles, and three doses each of DPT and polio vaccine, excluding polio vaccine given at birth
[2] Includes immunization passports kept by the parent/guardian
[3] For children whose information was based on the mother's report, the proportion of vaccinations given during the first year and a half of life was assumed to be the same as for children with a written record of vaccination.

Table 11.3 shows rates of vaccination coverage for children age 18-29 months (i.e., the age by which children should be fully vaccinated), by background characteristics. Almost all children (at least 98 percent) in the sample had received vaccinations for BCG and the first dose each of polio, DPT, and hepatitis B. The proportions of children receiving the second and third doses of polio, DPT, and hepatitis are only slightly lower, as is the proportion receiving the measles vaccine (95 percent). The dropout rates[1] between the first and third doses are 4 percent each for the DPT and polio vaccines, but they are twice as high, at 9 percent, for the hepatitis B vaccine.

[1] Dropout rate = (Dose 1 – Dose 3) * 100 / Dose 1

Table 11.3 Vaccinations by background characteristics

Percentage of children age 18-29 months who received specific vaccines at any time before the survey (according to a health facility card or the mother's report), and percentage with a facility vaccination card, by background characteristics, Armenia 2010

Background characteristic	BCG	DPT			Polio			Measles (MMR)	All basic vaccinations[1]	No vaccinations	Hepatittis			All[1] + hepatitis	Percentage with a health facility card seen[2]	Number of children
		1	2	3	1	2	3				1	2	3			
Sex																
Male	99.2	98.1	96.5	94.8	99.0	97.5	96.0	94.8	91.3	0.8	98.2	96.5	88.4	85.2	90.6	174
Female	100.0	100.0	95.7	95.3	99.8	97.0	94.5	96.2	91.7	0.0	98.4	96.9	90.9	89.0	94.4	132
Birth order																
1	99.1	98.0	95.2	94.8	98.9	96.1	96.1	95.1	92.3	0.9	96.4	95.8	90.8	89.0	90.8	149
2-3	100.0	99.7	97.0	95.0	99.7	98.3	94.4	95.5	90.3	0.0	100.0	97.5	87.8	84.2	93.4	150
4-5	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	5
6+	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1
Residence																
Urban	100.0	99.5	96.9	95.9	99.7	97.1	95.9	94.9	90.9	0.0	97.8	97.1	90.9	87.9	89.8	181
Rural	98.9	98.1	95.1	93.7	98.9	97.5	94.5	96.1	92.3	1.1	98.9	96.1	87.5	85.3	95.9	124
Mother's education																
Basic	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	14
Secondary	98.7	98.2	92.3	92.3	98.7	94.6	92.8	94.6	90.7	1.3	98.7	96.0	88.6	87.0	96.0	107
Secondary special	100.0	100.0	100.0	98.2	99.8	99.8	97.7	94.1	91.2	0.0	98.1	96.6	87.5	83.9	87.9	105
Higher	100.0	98.3	98.3	98.3	99.5	99.5	99.5	97.4	96.1	0.0	100.0	99.5	96.3	92.9	96.3	79
Wealth quintile																
Lowest	97.6	97.6	91.3	88.3	97.6	94.6	88.3	94.6	88.3	2.4	97.6	94.4	84.4	84.4	91.3	58
Second	100.0	100.0	100.0	99.1	100.0	100.0	100.0	99.1	98.2	0.0	100.0	97.6	93.3	92.4	99.1	64
Middle	100.0	97.4	94.2	94.2	99.6	96.4	94.2	96.8	89.4	0.0	96.4	95.5	87.4	81.4	84.1	61
Fourth	100.0	99.5	96.1	96.1	99.5	96.1	96.1	94.1	90.8	0.0	100.0	98.9	90.6	88.2	96.5	70
Highest	(100.0)	(100.0)	(99.4)	(96.9)	(100.0)	(99.4)	(97.8)	(91.8)	(90.2)	(0.0)	(96.6)	(96.6)	(91.5)	(87.3)	(88.9)	52
Total	99.5	98.9	96.2	95.0	99.4	97.3	95.3	95.4	91.5	0.5	98.3	96.7	89.5	86.8	92.3	306

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] BCG, measles, and three doses each of DPT and polio vaccine (excluding polio vaccine given at birth)

[2] Includes immunization passports kept by the parent/guardian

Differences in immunization coverage are minimal by sex, although a slightly higher percentage of girls than boys have received the MOH-recommended vaccinations (89 percent versus 85 percent). By residence, 88 percent of urban children have received the MOH-recommended vaccinations compared with 85 percent of rural children. There is no clear association between household wealth quintile and vaccination status. The number of children is too small in many of the other categories to allow conclusions to be drawn.

Table 11.4 shows the percentage of children age 18-59 months (at the time of the survey) who received specific vaccines by age 18 months. Children in the oldest cohort (42-59 months) were less likely to have received all their basic WHO-recommended vaccinations (77 percent) than children age 18-41 months (87 percent). This pattern is also seen among children who received the MOH-recommended vaccinations: 68 percent of children age 42-59 months received all of these vaccinations compared with 79-81 percent of children age 18-41 months. The findings support a trend towards increasing vaccination coverage in the recent past. No difference is seen in the percentage of vaccination cards shown to interviewers by age.

Table 11.4 Vaccinations in first year and a half of life

Percentage of children age 18-59 months at the time of the survey who received specific vaccines by 18 months of age, and percentage with a health facility card, by current age of child, Armenia 2010

Age in months	BCG	DPT			Polio			Measles (MMR)	All basic vaccinations[1]	No vaccinations	Hepatitis			All[1] + hepatitis	Percentage with a health facility card seen[2]	Number of children
		1	2	3	1	2	3				1	2	3			
18-29	99.5	98.4	95.3	91.8	98.9	96.5	93.3	92.6	87.1	0.0	98.3	96.7	87.9	80.9	92.3	306
30-41	98.6	96.3	93.7	90.1	97.9	95.7	93.6	91.8	87.0	0.0	95.6	92.4	89.3	79.1	92.3	291
42-59	98.0	95.4	91.2	86.6	95.2	92.4	88.9	83.1	76.7	0.0	96.7	92.8	85.1	67.6	91.5	366
Total	98.7	96.6	93.2	89.4	97.2	94.7	91.7	88.7	83.2	0.0	96.8	93.9	87.3	75.4	92.0	962

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 and a half of life was assumed to be the same as for children with a written record of vaccinations.

[1] BCG, measles, and three doses each of DPT and polio vaccine excluding polio vaccine given at birth
[2] Includes immunization passports kept by the parent/guardian

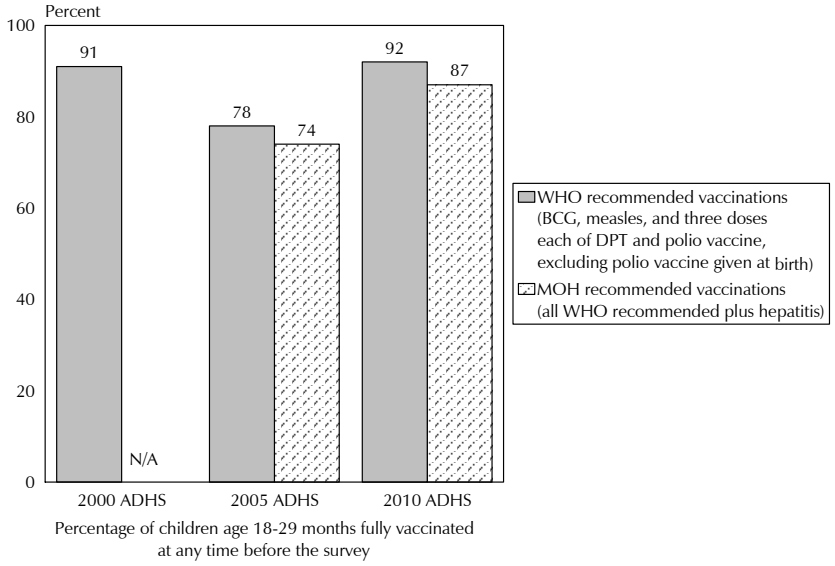
11.3 TRENDS IN VACCINATION COVERAGE

In the 2005 ADHS, rates of vaccination coverage were calculated for children age 12-23 months. For comparison purposes, data from the 2005 ADHS survey were re-calculated for the same age group as in the 2010 ADHS (18-29 months). The results of the 2010 ADHS indicate that vaccination coverage has increased substantially for all basic WHO-recommended vaccinations that have been given over the past five years among children age 18-29 months. Although 78 percent were fully immunized by the date of the interview in 2005, 92 percent were fully immunized in 2010 (Figure 11.1). The same is true for MOH-recommended vaccinations: 74 percent of children age 18-29-months were fully vaccinated by the date of the interview in 2005 compared with 87 percent in 2010. Vaccination coverage by age 18 months has also increased substantially since 2005. In 2005, 61 percent of children age 18-29 months had received all basic WHO-recommended vaccinations, and 58 percent had received all MOH-recommended vaccinations by age 18 months, compared with 87 percent and 81 percent, respectively, in 2010 (data not shown).

The coverage levels for various vaccines have also improved; DPT 3, polio 3, and measles have all increased about 10 percentage points in the past five years. Health facility cards[2] were found for 80 percent of children age 18-29 months in the 2005 ADHS; this compares with 92 percent in the 2010 ADHS (data not shown).

[2] Including immunization passports kept by the parent/guardian.

Figure 11.1 **Trends in Vaccination Coverage among Children Age 18-29 Months, Armenia 2000-2010**



11.4 ACUTE RESPIRATORY INFECTION

Pneumonia and other respiratory tract infections are major causes of childhood morbidity and mortality. Early diagnosis and treatment with antibiotics can prevent a large proportion of deaths due to acute respiratory infections (ARIs). Prompt treatment for children experiencing the symptoms of these illnesses is, therefore, crucial in increasing child well-being and reducing child deaths. In the 2010 ADHS, the prevalence of ARIs was estimated by asking mothers whether their children under age 5 had been ill with a cough accompanied by short, rapid breathing, which was chest-related, and/or by difficult breathing, which was chest-related, in the two weeks preceding the survey. These symptoms are consistent with ARIs. The morbidity data are subjective because they are based on a mother's perception of illness without validation by medical personnel. Table 11.5 shows the percentage of children under age 5 who had a cough with symptoms of ARI.

From mothers' reports, it was estimated that 5 percent of children under age 5 had symptoms of ARI in the two weeks before the survey. More than half (57 percent) of these children were taken to a health facility or health care provider (data not shown). Prevalence of symptoms of ARI increased with age, ranging from a low of 1 percent among children age less than age 6 months to a high of 9 percent among children age 24-35 months; prevalence thereafter declined to 4 to 5 percent among older children. Differences by sex are minimal; however, prevalence of ARI symptoms is higher among children living in urban areas than in rural areas, and among children living in the Yerevan and Kotayk regions than in other regions. The percentage of children with symptoms of ARI tends to increase with a mother's education and wealth quintile; children of mothers with basic education only are less likely to have symptoms of ARI than children of mothers with secondary special education or higher education (3 percent versus 5 to 7 percent).

Treatment with antibiotics can often ameliorate the symptoms of ARI, thereby saving lives. In the 2010 ADHS, more than one-third of children (36 percent) under age 5 who had symptoms of ARI in the two weeks before the survey received antibiotics for their illness (data not shown).

Table 11.5 Prevalence of symptoms of ARI

Among children under age 5, the percentage who had symptoms of acute respiratory infection (ARI) in the two weeks preceding the survey, according to background characteristics, Armenia 2010

Background characteristic	Percentage with symptoms of ARI[1]	Number of children
Age in months		
<6	1.4	136
6-11	1.6	157
12-23	6.1	322
24-35	9.3	297
36-47	3.8	257
48-59	4.5	257
Sex		
Male	4.9	741
Female	5.4	685
Residence		
Urban	7.3	834
Rural	2.0	592
Region		
Yerevan	8.8	452
Aragatsotn	0.0	63
Ararat	3.5	104
Armavir	1.6	135
Gegharkunik	1.1	109
Lori	0.0	110
Kotayk	8.9	147
Shirak	6.7	153
Syunik	0.0	51
Vayots Dzor	1.2	38
Tavush	3.4	65
Mother's education		
Basic	2.5	70
Secondary	4.3	565
Secondary special	6.6	434
Higher	4.9	357
Wealth quintile		
Lowest	1.7	288
Second	2.4	292
Middle	5.0	292
Fourth	8.8	289
Highest	7.9	266
Total	5.1	1,426

[1] Symptoms of ARI (cough accompanied by short, rapid breathing, which is chest-related, and/or by difficult breathing, which is chest-related) are considered a proxy for pneumonia.

11.5 FEVER

Fever is a symptom of malaria in malaria endemic areas. However, because Armenia is not in a malaria endemic region, fever is regarded as a sign of childhood infections other than malaria, such as ARIs and ear infections, among others. To obtain information about the frequency of fever, mothers were asked (for each child under age 5) whether the child had had a fever in the two weeks preceding the survey. Table 11.6 shows the percentage of children with fever, by selected background characteristics.

Twelve percent of all children under age 5 were reported to have had a fever in the past two weeks. Fever is most common among children age 24-35 months (18 percent) and least common, at less than 1 percent, among the youngest children (age <6 months). The prevalence of fever is similar for both sexes. There are large regional differences in the prevalence of fever, with the highest prevalence occurring in the Yerevan region (19 percent) and the lowest prevalence in the Aragatsotn and Syunik regions (1 to 2 percent).

Somewhat surprisingly, the prevalence of fever is highest among urban children, children whose mothers are well educated, and children living in the wealthiest households. This pattern which is also observed with respect to the reporting of ARI symptoms may result from greater maternal concern about any signs of these illnesses rather than higher morbidity rates among children in these categories. However, it is also possible that rural, less educated and poor mothers may be less likely to recognize the symptoms of fever or ARI compared with urban, more educated and wealthier mothers, and they therefore may be more likely to underreport cases.

About half of children with a fever (54 percent) were taken to a health facility or provider for treatment, and 29 percent were given antibiotic drugs. The proportion of children who were taken to a health facility was higher in urban areas than in rural areas and among females than among males. Differences by background characteristics are not large, and for some categories, they are based on very small numbers (data not shown).

Table 11.6 Prevalence of fever

Among children under age 5, the percentage who had a fever in the two weeks preceding the survey, by background characteristics, Armenia 2010

Background characteristic	Percentage with fever	Number of children
Age in months		
<6	0.3	136
6-11	12.1	157
12-23	11.5	322
24-35	18.1	297
36-47	13.6	257
48-59	9.9	257
Sex		
Male	12.5	741
Female	11.4	685
Residence		
Urban	14.7	834
Rural	8.1	592
Region		
Yerevan	18.6	452
Aragatsotn	1.1	63
Ararat	6.3	104
Armavir	14.3	135
Gegharkunik	2.9	109
Lori	7.7	110
Kotayk	11.5	147
Shirak	14.7	153
Syunik	2.3	51
Vayots Dzor	7.5	38
Tavush	8.3	65
Mother's education		
Basic	5.8	70
Secondary	8.8	565
Secondary special	14.0	434
Higher	15.6	357
Wealth quintile		
Lowest	9.5	288
Second	7.4	292
Middle	10.5	292
Fourth	16.5	289
Highest	16.4	266
Total	12.0	1,426

11.6 DIARRHEA

Dehydration caused by severe diarrhea is a major cause of death among young children. A simple and effective response to dehydration 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) or a homemade mixture usually prepared from sugar, salt, and water. Increasing the amount of any other liquids given to a child during a diarrheal episode is another means of preventing dehydration.

In the 2010 ADHS, mothers were asked whether each of their children under age 5 had had diarrhea during the two-week period preceding the survey. If a child had had diarrhea, the mother was asked what actions were taken to treat the diarrhea and what feeding practices were followed during the diarrheal episode.

Prevalence and Treatment of Diarrhea

Table 11.7 shows the percentages of children under age 5 who had either diarrhea or diarrhea with blood in the feces at some time during the two-week period before the survey. Blood in the stools is a symptom of dysentery. When considering the information in Table 11.7, note that the prevalence figures may involve some reporting error because they are based on the mothers' subjective

assessments of their child's illness. Also because there are seasonal variations in the pattern of diarrheal illnesses, the percentages in Table 11.7 may represent the prevalence of diarrhea at the time of the 2010 ADHS (circa October-December 2010) and not the situation at other times of the year in Armenia.

Among children under age 5, 9 percent were reported by their mothers to have been ill with diarrhea during the two-week period before the ADHS interview. Less than 1 percent had diarrhea with bloody stools. Children age 6-24 months, particularly those age 6-11 months (15 percent), were more likely to suffer from diarrhea than older children. Children age 0-5 months were least likely to have diarrhea (3 percent). Differences by gender are small. Looking at residential differentials, diarrheal episodes were most common among children living in the Kotayk and Yerevan regions and least common among those in the Syunik and Aragatsotn regions. Children living in urban areas are almost twice as likely to have had diarrhea as children in rural areas (11 percent versus 6 percent). Surprisingly, diarrhea prevalence is slightly lower among the small number of children living in households where the drinking water source is unimproved compared with children living in households with an improved drinking water source. Similarly, the relationship between diarrheal prevalence and toilet facilities, also contrary to expectations, shows that children living in households where the toilet facilities are unimproved have a lower rate of diarrheal illness than children living in households with improved toilet facilities; however, the differential is not large. Diarrhea prevalence among children increases somewhat with mother's education level and wealth quintile, a pattern also seen among children with symptoms of ARI and fever.

Table 11.7 Prevalence of diarrhea

Percentage of children under age 5 who had diarrhea in the two weeks preceding the survey, by background characteristics, Armenia 2010

Background characteristic	Diarrhea in the two weeks preceding the survey: All diarrhea	Diarrhea with blood	Number of children
Age in months			
<6	2.8	0.7	136
6-11	14.5	1.7	157
12-23	9.1	0.4	322
24-35	12.3	0.4	297
36-47	7.6	0.2	257
48-59	4.9	0.4	257
Sex			
Male	8.2	0.7	741
Female	9.3	0.3	685
Source of drinking water[1]			
Improved	8.9	0.6	1,333
Not improved	6.6	0.0	91
Toilet facility[2]			
Improved, not shared	9.7	0.6	1,097
Non-improved	5.5	0.3	329
Residence			
Urban	10.7	0.8	834
Rural	6.0	0.2	592
Region			
Yerevan	11.5	0.6	452
Aragatsotn	0.7	0.0	63
Ararat	3.4	0.0	104
Armavir	8.4	0.0	135
Gegharkunik	2.8	0.0	109
Lori	6.7	0.9	110
Kotayk	16.1	1.9	147
Shirak	9.5	0.7	153
Syunik	0.0	0.0	51
Vayots Dzor	7.5	0.6	38
Tavush	8.9	0.0	65
Mother's education			
Basic	5.6	0.0	70
Secondary	6.7	0.3	565
Secondary special	10.9	1.2	434
Higher	9.9	0.2	357
Wealth quintile			
Lowest	5.5	0.0	288
Second	9.0	0.7	292
Middle	9.7	0.3	292
Fourth	8.9	0.0	289
Highest	10.7	1.8	266
Total	8.7	0.5	1,426

Note: Total includes 2 weighted cases with missing information on source of drinking water
[1] See Table 2.1 for definition of categories.
[2] See Table 2.2 for definition of categories.

Diarrhea prevalence has decreased by more than half since the 2005 ADHS reported that 17 percent of children had diarrhea (compared with 9 percent reported in the 2010 ADHS). However, this comparison needs to be viewed with caution because the prevalence of diarrhea varies seasonally, and the fieldwork for the 2010 ADHS and 2005 ADHS did not take place in all of the same months of the year. The ADHS 2010 took place from October to late December, whereas, the fieldwork for the 2005 ADHS began in early September, when it was still hot in most parts of Armenia, and was completed by early December.

Mothers of children with diarrhea in the two weeks preceding the survey were asked what was done to manage or treat the illness. Table 11.8 shows the percentage of children with diarrhea who were taken to a health facility or provider for treatment, the percentage who received ORT, and the percentage who were given other treatments, by background characteristics. Overall, 42 percent of children with diarrhea were taken to a health facility or provider for treatment of diarrhea. Males were more likely than females to be taken to a health facility for treatment of diarrhea (50 percent, compared with 35 percent).

Oral rehydration therapy, which involves giving children with diarrhea a solution prepared from oral rehydration salts (ORS) or recommended home fluids (RHF)—usually a homemade sugar-salt-water solution—is a simple and effective response to diarrheal illness. In the 2010 ADHS, three-quarters of children with diarrhea were treated with either ORS (33 percent) or RHF (52 percent). Sixty-five percent of children were given increased fluids. Overall, nine in ten children were treated with ORS, RHF, or increased liquids. Notably, while girls are more likely than boys to receive RHF when ill with diarrhea, boys are more likely than girls to receive ORS and increased fluids.

Table 11.8 Diarrhea treatment

Among children under age 5 who had diarrhea in the two weeks preceding the survey, the percentage for whom advice or treatment was sought from a health facility or provider, the percentage given oral rehydration therapy (ORT), the percentage given increased fluids, the percentage given ORT or increased fluids, and the percentage who given other treatments, by background characteristics, Armenia 2010

Background characteristic	Percentage of children with diarrhea for whom advice or treatment was sought from a health facility or provider[1]	Oral rehydration therapy (ORT)					Other treatments							Number of children with diarrhea
		ORS packets	Recommended home fluids (RHF)	Either ORS or RHF	Increased fluids	ORT or increased fluids	Antibiotic drugs	Anti-motility drugs	Zinc supplements	Intravenous solution	Home remedy/ other	Missing	No treatment	
Sex														
Male	50.0	38.2	43.3	73.7	68.6	92.5	16.8	10.0	2.1	3.0	32.8	3.3	2.4	61
Female	34.6	28.0	60.6	75.3	60.6	88.4	8.0	25.0	0.0	0.0	19.5	0.0	7.8	64
Residence														
Urban	40.8	30.4	47.0	68.9	71.1	88.6	12.2	17.2	0.0	0.3	26.9	2.3	5.6	89
Rural	(45.7)	(39.5)	(64.8)	(88.6)	(48.0)	(94.8)	(12.4)	(18.9)	(3.6)	(4.5)	(23.7)	(0.0)	(3.9)	36
Total	42.2	33.0	52.1	74.5	64.5	90.4	12.3	17.7	1.0	1.5	26.0	1.6	5.1	125

Note: ORT includes solution prepared from oral rehydration salt (ORS) and recommended home fluids (RHF). Figures in parentheses are based on 25-49 unweighted cases.
[1] Excludes pharmacy, shop and traditional practitioner

Antibiotics are generally not recommended for use in treating non-bloody diarrhea in young children. In the 2010 ADHS, 12 percent of children were given antibiotics, 18 percent were given anti-motility drugs, and less than 2 percent were given either a zinc supplement or intravenous solution to treat the diarrhea. Twenty-six percent of children were given a home remedy to treat the diarrhea. Antibiotic drugs and home remedies were used more often to treat male children with diarrhea than female children. Five percent of children were given no treatment at all.

In the 2005 ADHS, data on treatment for diarrhea from a health provider were calculated differently than in 2010. For comparison purposes, data from the 2005 ADHS survey were re-calculated so that the treatment categories are comparable in both surveys. Seeking treatment for diarrhea from a health provider has increased in the past five years, as has the use of ORT or increased fluids for treatment of diarrhea. In the 2005 ADHS, 65 percent of children with diarrhea received ORT or increased fluids compared with 90 percent in the 2010 ADHS. The use of antibiotic drugs to treat diarrhea has decreased (25 percent in 2005 compared with 12 percent in 2010), but the use of antimotility drugs has increased dramatically (1 percent in 2005 compared with 18 percent in 2010). The use of home remedies and other drugs has not changed over the past five years (27 percent in 2005 and 26 percent in 2010) (2005 data not shown).

Feeding Practices

Mothers are encouraged to continue normal feeding of children with diarrhea and to increase the amount of fluids given. These practices help to reduce dehydration and minimize the adverse consequences of diarrhea on the child's nutritional status. Mothers interviewed in the 2010 ADHS were asked whether they gave the child less, the same amount, or more fluids and foods than usual when their child had diarrhea. Table 11.9 shows by feeding practices the percent distribution of children under age 5 who had diarrhea in the two weeks before the survey.

Sixty-five percent of children with diarrhea were given more to drink than usual, 30 percent were given the same amount as usual, and the remaining 5 percent were given somewhat less or much less than usual or nothing at all. The proportion of children with diarrhea who received more to drink than usual has increased substantially in the past five years, from 43 percent in the 2005 ADHS to 65 percent in the 2010 ADHS.

Food intake is curtailed more than fluid intake during episodes of diarrhea. Only 7 percent of children with diarrhea were given more to eat than usual, 47 percent were given the same amount of food as usual, 29 percent were given somewhat less food than usual, and 15 percent were given much less food than usual. When ill with diarrhea, boys were slightly more often than girls given more to eat and drink than usual, while girls received the same amount of food and drink as usual more often than boys. Girls were also less likely than boys to be given somewhat less and much less food during episodes of diarrhea (39 percent versus 49 percent).

Overall, 53 percent of children with diarrhea were given increased fluids and continued feeding, and 77 percent were given continued feeding and increased fluids or ORT. Differences by sex are small. Notably, rural children are much more likely than urban children to have received continued feeding with increased fluids or ORT.

Table 11.9 Feeding practices during diarrhea

Percent distribution of children under age 5 who had diarrhea in the two weeks preceding the survey by amount of liquids and food offered compared with normal practice, the percentage of children given increased fluids and continued feeding during the diarrhea episode, and the percentage of children who continued feeding and were given ORT and/or increased fluids during the episode of diarrhea, by background characteristics, Armenia 2010

	Amount of liquids offered							Amount of food offered									
Background characteristic	More	Same as usual	Some-what less	Much less	None	Don't know/ missing	Total	More	Same as usual	Some-what less	Much less	None	Don't know/ missing	Total	Percentage given increased fluids and continued feeding[1]	Percentage who continued feeding and were given ORT and/or increased fluids[1]	Number of children with diarrhea
Sex																	
Male	68.6	24.4	2.2	1.1	0.4	3.3	100.0	8.4	38.0	33.2	16.2	0.0	4.3	100.0	53.9	76.6	61
Female	60.6	34.3	1.8	2.8	0.6	0.0	100.0	6.3	54.7	25.4	13.4	0.2	0.0	100.0	52.6	77.5	64
Residence																	
Urban	71.1	21.6	1.7	2.7	0.7	2.3	100.0	8.8	42.3	25.1	20.7	0.2	2.9	100.0	55.3	70.0	89
Rural	(48.0)	(49.3	(2.7)	(0.0)	(0.0)	(0.0)	100.0	(3.6)	(57.1)	(39.3)	(0.0)	(0.0)	(0.0)	100.0	(48.0)	(94.8)	36
Total	64.5	29.5	2.0	1.9	0.5	1.6	100.0	7.3	46.5	29.2	14.8	0.1	2.1	100.0	53.2	77.1	125

Note: It is recommended that children should be given more liquids to drink during diarrhea and that food should not be reduced. Figures in parentheses are based on 25-49 unweighted cases.

[1] Continued feeding includes children who were given more, the same as usual, or somewhat less food during the diarrhea episode.

The 2010 ADHS findings indicate that feeding practices during diarrhea have improved in the past five years. The percentage of children with diarrhea who receive more to eat than usual has increased, and the percentage who receive somewhat less to eat than usual has decreased. In the 2005 ADHS, 50 percent of children with diarrhea ate somewhat less or much less than usual, compared with 44 percent of children in 2010.

11.7 KNOWLEDGE OF ORS PACKETS

As mentioned earlier, a prompt increase in a child's fluid intake is a simple and effective means to prevent diarrhea from developing into a life-threatening illness. Oral rehydration therapy (ORT) may include the use of a solution prepared from packets of oral rehydration salts (ORS). To ascertain how widespread knowledge of ORS is in Armenia, female respondents were asked if they knew about ORS packets.

Table 11.10 shows the percentage of women who gave birth in the five years before the survey who know about ORS packets for treatment of diarrhea, by background characteristics. Three in four Armenian mothers of young children know about ORS packets. Younger mothers are slightly less likely to know about ORS packets than older mothers. By region, the proportion of mothers who know about ORS packets ranges from 63 percent in Shirak to 97 percent in Aragatsotn. Knowledge of ORS packets increases with level of education of the mother and wealth quintile. The largest increase is seen by education: 51 percent of mothers with basic education know of ORS compared with 80 percent of mothers with higher than secondary education.

Knowledge of ORS packets has increased somewhat in the past five years, from 70 percent in the 2005 ADHS to 75 percent in 2010. The greatest increase is seen among rural mothers. Sixty-four percent of rural mothers knew of ORS in 2005 compared with 76 percent in 2010.

Table 11.10 Knowledge of ORS packets

Percentage of women age 15-49 who gave birth in the five years preceding the survey who know about ORS packets for treatment of diarrhea by background characteristics, Armenia 2010

Background characteristic	Percentage of women who know about ORS packets	Number of women
Age		
15-19	(74.6)	30
20-24	68.4	331
25-34	77.4	679
35-49	79.1	111
Residence		
Urban	74.3	680
Rural	75.8	471
Region		
Yerevan	70.7	376
Aragatsotn	96.9	47
Ararat	64.9	83
Armavir	74.1	112
Gegharkunik	64.7	82
Lori	85.7	91
Kotayk	85.9	121
Shirak	63.2	115
Syunik	85.9	41
Vayots Dzor	81.5	32
Tavush	87.8	51
Education		
Basic	50.8	51
Secondary	72.5	446
Secondary special	77.1	354
Higher	79.9	299
Wealth quintile		
Lowest	70.0	215
Second	75.8	237
Middle	75.7	239
Fourth	75.2	234
Highest	77.3	226
Total	74.9	1,151

Note: Figures in parentheses are based on 25-49 unweighted cases
ORS = Oral rehydration salts

11.8 DISPOSAL OF CHILDREN'S STOOLS

Poor hygiene, which includes improper disposal of fecal matter, contributes to the spread of disease, including diarrhea. Table 11.11 shows the percent distribution of youngest children under age 5 living with the mother by the way in which the child's stools are disposed of, according to background characteristics and type of toilet facilities in the household.

The most common method of disposing of young children's stools is rinsing the stools into a toilet or latrine (63 percent), followed by having the child use a toilet or latrine (22 percent). Other methods of disposal include throwing them into the garbage (13 percent) and putting them into a drain or ditch (2 percent). Overall, 85 percent of children have their stools disposed of safely.

Table 11.11 Disposal of children's stools

Percent distribution of youngest children under age 5 living with the mother by the manner of disposal of the child's last fecal matter, and percentage of children whose stools are disposed of safely, according to background characteristics, Armenia 2010

Background characteristic	Manner of disposal of children's stools							Total	Percentage of children whose stools were disposed of safely[1]	Number of children
	Child used toilet or latrine	Put/rinsed into toilet or latrine	Put/rinsed into drain or ditch	Thrown into garbage	Left in the open	Other	Missing			
Age in months										
<6	2.6	57.3	3.2	36.2	0.0	0.6	0.0	100.0	59.9	136
6-11	5.0	69.5	2.9	21.4	0.0	0.0	1.1	100.0	74.5	155
12-23	6.2	76.9	2.3	13.0	0.2	0.0	1.3	100.0	83.1	303
24-35	25.4	67.3	3.1	4.2	0.0	0.0	0.0	100.0	92.7	240
36-47	39.3	54.8	1.2	4.6	0.0	0.0	0.1	100.0	94.1	159
48-59	66.7	29.6	0.0	2.2	0.0	0.0	1.5	100.0	96.3	143
Toilet facility										
Improved, not shared[2]	23.7	64.1	0.3	11.2	0.0	0.1	0.7	100.0	87.7	892
Non-improved or shared	15.4	56.7	9.4	17.6	0.3	0.0	0.6	100.0	72.1	243
Residence										
Urban	26.4	61.4	0.0	11.2	0.1	0.0	0.8	100.0	87.8	671
Rural	15.4	64.1	5.4	14.5	0.0	0.2	0.5	100.0	79.4	464
Region										
Yerevan	28.6	58.8	0.0	11.5	0.0	0.0	1.1	100.0	87.4	370
Aragatsotn	13.9	57.0	16.7	12.4	0.0	0.0	0.0	100.0	70.9	47
Ararat	27.3	62.0	0.0	10.3	0.0	0.0	0.5	100.0	89.2	83
Armavir	17.4	42.9	3.4	35.8	0.0	0.0	0.5	100.0	60.3	108
Gegharkunik	5.7	92.4	0.0	0.0	0.0	0.0	1.9	100.0	98.1	82
Lori	15.1	77.4	0.0	7.5	0.0	0.0	0.0	100.0	92.5	90
Kotayk	17.6	70.9	0.0	11.5	0.0	0.0	0.0	100.0	88.5	119
Shirak	31.1	63.8	1.9	0.8	0.6	0.7	1.0	100.0	94.9	115
Syunik	39.1	32.5	7.8	20.6	0.0	0.0	0.0	100.0	71.6	41
Vayots Dzor	6.8	50.4	26.5	16.3	0.0	0.0	0.0	100.0	57.2	31
Tavush	4.1	71.4	0.5	23.4	0.0	0.0	0.6	100.0	75.5	51
Mother's education										
Basic	19.9	69.3	8.4	1.0	1.3	0.0	0.0	100.0	89.2	49
Secondary	19.5	61.6	4.1	14.2	0.0	0.2	0.4	100.0	81.1	441
Secondary special	25.4	62.2	0.6	10.6	0.0	0.0	1.1	100.0	87.6	350
Higher	21.7	63.0	0.2	14.3	0.0	0.0	0.8	100.0	84.6	295
Wealth quintile										
Lowest	13.2	59.8	9.6	15.9	0.3	0.0	1.2	100.0	73.0	211
Second	19.1	63.1	2.1	14.9	0.0	0.4	0.4	100.0	82.2	234
Middle	29.8	61.4	0.0	8.8	0.0	0.0	0.0	100.0	91.2	237
Fourth	19.8	67.4	0.0	11.0	0.0	0.0	1.8	100.0	87.2	233
Highest	26.8	60.6	0.0	12.5	0.0	0.0	0.2	100.0	87.3	221
Total	21.9	62.5	2.2	12.6	0.1	0.1	0.7	100.0	84.4	1,135

[1] Children's stools are considered to be disposed of safely if the child used a toilet or latrine, if the fecal matter was put/rinsed into a toilet or latrine, or if it was buried.
[2] Non-shared facilities that are of the types: flush or pour flush into a piped sewer system/septic tank/pit latrine; pit latrine with a slab.

There are marked differences by background characteristics in the way children's stools are disposed of. For example, older children are more likely than younger children to have their stools disposed of safely. As expected, children in urban areas and children living in households with an improved toilet facility are more likely to have safe disposal of their stools than children in rural areas and those living in households with non-improved toilet facilities. By region, the proportion of children whose stools are disposed of safely ranges from 57 percent in Vayots Dzor to 98 percent in Gegharkunik. There is no clear pattern by mother's education or wealth quintile.

NUTRITION 12

Adequate nutrition is critical to child development. The period from birth to two years of age is important for optimal growth, health, and development. Unfortunately, this period is often marked by growth faltering, micronutrient deficiencies, and common childhood illnesses such as diarrhoea and acute respiratory infections (ARIs). This chapter looks at several aspects of the nutritional status of children and women in Armenia. It covers the following topics: early initiation of breastfeeding, infant feeding practices, including breastfeeding and complementary feeding patterns and the prevalence of bottle-feeding; children's levels of consumption of foods rich in iron and vitamin A; micronutrient intake among mothers; and the nutritional status of children under age 5 based on anthropometric data (height and weight) collected during the survey. A summary indicator that describes the quality of infant and young child (age 6-23 months) feeding practices (IYCF) is included.

12.1 NUTRITIONAL STATUS OF CHILDREN

Anthropometry provides one of the most important indicators of children's nutritional status. The measurement and evaluation of the nutritional status of children allows for identification of subgroups of the population that face increased risk of faltered growth, disease, impaired mental development, and death.

Measurement of Nutritional Status among Young Children

In the 2010 ADHS, height and weight measurements were obtained for all children under age 5. Weight measurements were obtained using lightweight, electronic Seca scales with a digital screen and the mother/child function. Height measurements were carried out with measuring boards made by Shorr Productions. Children younger than age 24 months were measured lying down (recumbent) on the board, while standing height was measured for older children. Based on these measurements, three internationally accepted indices were constructed to reflect the nutritional status of children:

- Height-for-age (stunting)
- Weight-for-height (wasting)
- Weight-for-age (underweight)

For the 2010 ADHS, the nutritional status of children was calculated using growth standards published by the World Health Organisation (WHO) in 2006. These growth standards were generated from data collected in the WHO Multicentre Growth Reference Study (WHO Multicentre Growth Reference Study Group, 2006). Use of a standard reference population as a point of comparison facilitates the examination of differences in the anthropometric status of subgroups in a population and of changes in nutritional status over time. Each of the three nutritional status indicators described here is expressed in standard deviation (SD) units from the median of the WHO Child Growth Standards. The indices are not comparable with those based on the previously used NCHS/CDC/WHO Reference. For comparison with previous surveys, Appendix Table C.7 includes indices expressed in standard deviation units from the median of the NCHS/CDC/WHO international reference population, which was in use prior to the WHO Child Growth Standards.

The height-for-age index reflects the long-term, cumulative effects of inadequate nutrition, poor health, or both. Children whose height is below -2 SD from the median of the reference population are considered short for their age, or *stunted*. Children who are below -3 SD are *severely stunted*. Stunting of a child's growth may result from failure to receive adequate nutrition over a long

period, sustained improper feeding practices, or the effects of repeated episodes of illness. Height-for-age therefore represents a measure of the outcome of malnutrition in a population over a long period and does not vary appreciably with the season of data collection.

The weight-for-height index measures body mass in relation to body length. It describes a recent severe process that has produced substantial weight loss, usually as a consequence of acute shortage of food, severe disease, or both. Children whose weight-for-height is below -2 SD from the median of the reference population are too thin for their height, or *wasted*, while those who measure below -3 SD from the reference population median are *severely wasted*. Wasting represents the failure to receive adequate nutrition during the period immediately before the survey and usually shows marked seasonal patterns associated with changes in food availability or disease prevalence. It may result from recent episodes of illness, particularly diarrhea, improper feeding practices, or acute food shortage.

Weight-for-age is a composite index of height-for-age and weight-for-height. It represents body mass relative to age and takes into account both acute and chronic malnutrition. Children whose weight-for-age measures below -2 SD from the median of the reference population are *underweight* for their age, and those whose measurements are below -3 SD from the reference population median are *severely underweight*.

Overweight and obesity are becoming problems for some children in various countries. The percentage of children more than 2 SD above the median for weight-for-height indicates the level of this potential problem. The percentage of children more than two standard deviations above the median for weight-for-age is included here for comparison with other data sources that did not measure height.

Results of Data Collection

In the survey, children under age 5 in the household were eligible for height and weight measurements. Of the 1,462 children eligible for measurement (i.e., age 0-59 months at the time of the survey), almost all had valid measurements (i.e., not implausibly high or low). Measurements were missing for 4 percent of the children, because the child was not present, the parents refused, or the child was ill. Another 5 percent of the children were considered to have implausibly high or low values for their height or weight measures. The following analysis focuses on the children for whom complete and plausible anthropometric and age data were collected. Table 12.1 shows the percentage of these children classified as malnourished, according to height-for-age, weight-for-height, and weight-for-age indices, by demographic and other background characteristics.

Levels of Child Malnutrition

The results of data collection show that 19 percent of children under age 5 are stunted or chronically malnourished (height-for-age below -2 SD); 8 percent of children are severely stunted (Table 12.1). Children 36-47 months (26 percent) are the most likely to be stunted, and those 9-11 months are the least likely to be stunted (13 percent). Male children are slightly more likely to be stunted than female children (20 percent compared with 18 percent). The extent of stunting increases as the birth interval increases. Children considered by their mother to be smaller than average at birth (26 percent) are more likely to be stunted than children who are average or larger at birth (19 percent).

In general, children born to mothers with less education are more likely to be stunted. Rural children are just slightly more likely to be stunted than their urban counterparts (22 and 17 percent, respectively). There is substantial regional variation in the prevalence of stunted children, ranging from a low of 11 percent in Yerevan to a high of 37 percent in Syunik. There is no clear relationship between wealth quintile and stunting although it is clear that stunting is more common in the lowest quintile (26 percent) than in the other wealth categories (16-19 percent).

Four percent of children under age 5 are wasted (weight-for-height below -2 SD). Children younger than age 6 months are at least three times more likely to be wasted than children age 6-59 months. There is little difference in the level of wasting by sex, birth interval, or residence. The prevalence of wasting is particularly high in the Ararat region (12 percent) compared with other regions.

Table 12.1 Nutritional status of children

Percentage of children under age 5 classified as malnourished according to three anthropometric indices of nutritional status: height-for-age, weight-for-height, and weight-for-age, by background characteristics, Armenia 2010

	Height-for-age[1]			Weight-for-height				Weight-for-age				
Background characteristic	Percentage below -3 SD	Percentage below -2 SD[2]	Mean Z-score (SD)	Percentage below -3 SD	Percentage below -2 SD[2]	Percentage above +2 SD	Mean Z-score (SD)	Percentage below -3 SD	Percentage below -2 SD[2]	Percentage above +2 SD	Mean Z-score (SD)	Number of children
Age in months												
<6	5.1	16.1	-0.6	7.2	12.3	8.7	0.2	3.5	13.5	1.1	-0.4	128
6-8	6.2	18.1	-0.5	2.4	3.0	9.3	0.4	5.9	12.3	2.7	-0.1	67
9-11	1.0	13.0	-0.2	0.0	3.6	10.3	0.5	0.0	0.0	1.6	0.2	68
12-17	10.2	18.7	-0.7	0.1	2.0	20.1	0.9	0.9	3.3	5.3	0.3	163
18-23	6.1	15.3	-0.7	0.9	2.2	13.8	0.9	0.0	1.9	1.1	0.3	135
24-35	8.9	21.0	-0.8	0.3	2.5	13.2	0.8	0.9	2.9	4.1	0.1	290
36-47	10.9	25.5	-0.9	1.3	3.4	15.1	0.7	0.8	4.6	2.9	-0.1	247
48-59	8.7	17.4	-0.9	3.5	4.9	22.7	0.7	0.7	3.8	1.9	-0.1	235
Sex												
Male	7.9	20.2	-0.8	2.1	4.7	16.8	0.8	1.4	4.3	3.3	0.1	694
Female	8.5	18.3	-0.7	1.5	3.3	13.7	0.6	1.0	5.1	2.4	0.0	639
Birth interval in months[3]												
First birth[4]	6.1	16.3	-0.6	3.3	4.7	13.3	0.5	0.8	4.7	3.4	0.0	566
<24	5.7	15.1	-0.7	0.6	4.3	14.8	0.7	1.5	4.3	2.7	0.1	325
24-47	9.8	20.8	-0.9	0.1	1.6	16.7	0.9	0.2	3.2	2.5	0.1	268
48+	17.6	35.2	-1.2	2.4	5.5	21.0	0.8	3.9	8.4	2.3	-0.2	162
Size at birth[3]												
Very small	*	*	*	*	*	*	*	*	*	*	*	23
Small	8.2	25.9	-1.2	1.1	1.9	12.6	0.5	3.1	6.0	3.6	-0.3	115
Average or larger	8.1	18.5	-0.7	1.7	3.9	15.8	0.7	0.9	4.1	2.9	0.1	1,179
Residence												
Urban	6.9	17.3	-0.7	1.6	3.2	15.0	0.7	0.8	2.8	2.3	0.1	777
Rural	10.0	22.0	-0.8	2.2	5.1	15.9	0.6	1.8	7.4	3.6	-0.0	556
Region												
Yerevan	4.7	11.3	-0.6	1.2	2.5	11.4	0.6	0.8	2.1	1.7	0.1	423
Aragatsotn	8.8	32.3	-1.1	3.8	6.0	8.9	0.6	2.5	6.2	0.3	-0.2	56
Ararat	16.2	29.2	-0.5	5.4	11.8	16.8	0.0	3.2	16.8	1.3	-0.3	86
Armavir	8.3	21.5	-0.8	1.6	4.1	9.9	0.5	0.4	8.3	0.5	-0.2	121
Gegharkunik	15.8	25.3	-1.1	5.1	7.4	23.1	0.8	4.6	7.0	1.4	-0.1	104
Lori	11.6	23.4	-0.5	2.6	2.6	34.2	1.3	1.3	5.3	15.9	0.5	90
Kotayk	3.6	17.3	-0.6	0.0	1.4	10.7	0.7	0.0	1.7	2.3	0.2	146
Shirak	10.2	21.4	-1.0	1.7	6.6	17.5	0.8	0.4	2.6	1.4	-0.0	153
Syunik	15.8	36.5	-1.5	0.0	2.3	22.2	0.8	1.1	5.6	0.0	-0.3	49
Vayots Dzor	4.9	16.0	-0.8	0.0	1.8	18.4	0.9	0.0	3.0	6.2	0.2	39
Tavush	4.5	16.1	-0.6	1.0	1.0	14.7	0.8	1.8	4.6	7.8	0.2	67
Mother's education[5]												
Basic	10.4	22.0	-0.6	3.2	14.4	8.3	0.1	1.0	11.9	1.8	-0.3	67
Secondary	9.6	22.0	-0.9	3.2	5.6	14.9	0.6	2.6	8.3	3.2	-0.1	527
Secondary special	8.9	18.2	-0.8	0.6	1.0	15.7	0.9	0.5	1.9	3.3	0.2	405
Higher	4.5	15.2	-0.5	0.9	3.2	16.9	0.7	0.1	1.0	1.9	0.2	328
Wealth quintile												
Lowest	11.0	26.2	-0.9	3.3	7.8	16.3	0.6	2.0	7.9	3.1	-0.1	270
Second	7.5	16.0	-0.6	2.0	3.8	16.4	0.7	2.0	5.2	4.7	0.1	274
Middle	8.8	19.3	-0.8	1.5	3.5	16.5	0.8	1.6	5.5	4.7	0.1	273
Fourth	5.3	16.3	-0.6	2.2	3.7	12.1	0.6	0.2	2.9	1.2	0.1	262
Highest	8.3	18.6	-0.8	0.1	1.2	15.3	0.7	0.1	1.5	0.4	0.0	254
Total	8.2	19.3	-0.7	1.8	4.0	15.3	0.7	1.2	4.7	2.9	0.0	1,333

Note: Table is based on children who slept in the household the night before the interview. Each of the indices is expressed in standard deviation (SD) units from the median of the WHO Child Growth Standards adopted in 2006. The indices in this table are NOT comparable to those based on the previously used 1977 NCHS/CDC/WHO Reference. Table is based on children with valid dates of birth (month and year) and valid measurement of both height and weight. Total includes four weighted cases with missing information on children's size at birth. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

[1] Recumbent length is measured for children under age 2; standing height is measured for all other children.

[2] Includes children who are below -3 standard deviations (SD) from the WHO Child Growth Standards population median

[3] Excludes children whose mothers were not interviewed

[4] First-born twins (triplets, etc.) are counted as first births because they do not have a previous birth interval

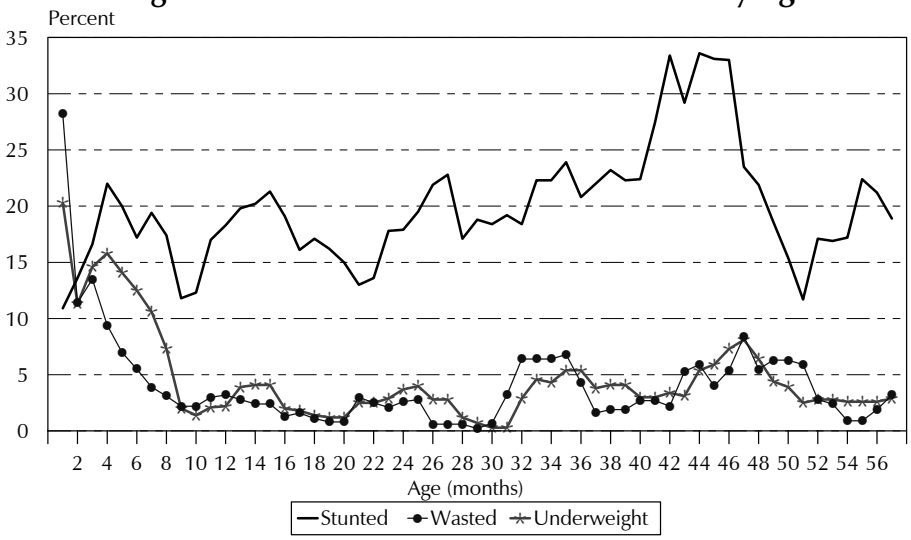
[5] For women who are not interviewed, information is taken from the Household Questionnaire. Excludes children whose mothers are not listed in the Household Questionnaire.

Conversely, 15 percent of children are overweight (weight-for-height above +2 SD), which is about seven times more than what one would expect in a normally distributed population, with boys more frequently being overweight than girls (17 percent versus 14 percent). This indicates that overnutrition is more of a concern than undernutrition among Armenian children. Children living in Lori (34 percent) and Gegharkunik (23 percent) are more likely to be overweight than children living in Armavir and Aragatsotn (10 and 9 percent, respectively). Children born to mothers with only basic education are less likely to be overweight (8 percent) than children born to mothers with only secondary, secondary-special, or higher educational attainment (15, 16, and 17 percent, respectively).

Overall, 5 percent of children are underweight (weight-for-age below -2 SD). Children living in rural areas are more likely to be underweight than urban children (7 percent and 3 percent, respectively). Children born 48 months after the previous birth are more likely to be underweight than children born 24-47 months apart (8 percent and 3 percent, respectively). Similar to the pattern discussed for wasting, younger children and children living in Ararat have a higher prevalence of underweight than their counterparts. The percentage of underweight children decreases as the mother's education and household wealth status increases.

The nutritional status of children varies with age, as shown in Figure 12.1. The level of stunting oscillates between 12 and 23 percent from 4 to 27 months and then peaks in the fourth year at 34 percent, after which it declines. The levels of wasting and underweight peak at about age 5 months when complementary food in addition to breast milk is introduced. After about age 9 months both wasting and underweight levels remain low, with little variation.

Figure 12.1 **Nutritional Status of Children by Age**



Note: *Stunting* reflects chronic malnutrition; *wasting* reflects acute malnutrition; *underweight* reflects chronic or acute malnutrition or a combination of both. Plotted values are smoothed by a five-month moving average. Each of the indices is calculated using the WHO Child Growth Standards adopted in 2006.

ADHS 2010

Trends in Children's Nutritional Status

The nutritional status of Armenian children as measured by the 2010 ADHS can be compared with data from two previous DHS surveys conducted in Armenia in 2000 and 2005. However, several factors impede comparisons. In the 2000 ADHS, anthropometric measurements were restricted to children born to women who were interviewed. However, these data are not representative of all children, because they exclude children whose mothers were not in the household (either because they did not live there, or because they had died). Further, the older surveys did not include data on

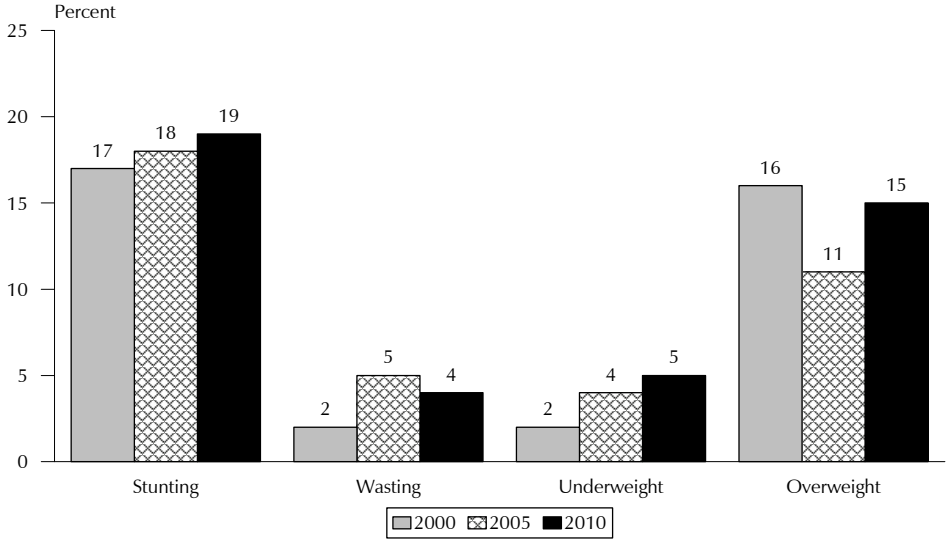
children whose mothers were not eligible for the individual interview (i.e., those under age 15 or age 50 and over) and children whose mothers were eligible but did not complete an individual interview. To overcome these biases, the 2005 and 2010 ADHS surveys included height and weight measurements of all children born in the five years preceding the survey and listed in the Household Questionnaire, irrespective of the interview status of their mother.

It is important to note that the 2010 ADHS analysis is based on the new 2006 WHO Child Growth Reference Standards, while in both the 2000 ADHS and 2005 ADHS, the nutritional status was determined using the 1977 International Reference Population defined by the U.S. National Center for Health Statistics (NCHS), as recommended by WHO and the U.S. Centers for Disease Control and Prevention (CDC). For comparison purposes, data from the 2010 ADHS are tabulated according to the older reference population (Appendix Table C.7).

Finally, for comparative purposes in this section, data from the 2000, 2005, and 2010 ADHS surveys were all re-calculated according to the new reference population, but restricted to children born to women interviewed with the Woman's Questionnaire and living with the mother. When the proportions of children classified as stunted and wasted are calculated according to the 2006 WHO Child Growth Standards, the percentages are higher than those reported according to the NCHS/CDC/WHO Reference from 2000 and 2005.

Overall, the percentages of children who are stunted and who are underweight have increased slightly since 2000. The percentage of stunted children under age 5 increased from 17 percent in 2000 to 18 percent in 2005, and then to 19 percent in 2010. The proportion of underweight children under age 5 also went up, from 2 percent in 2000 to 5 percent in 2010. The proportion of children who are wasted rose to 5 percent in 2005, but this percentage has come down slightly, to 4 percent, in 2010. The proportion of overweight children has also increased in the past five years, from 11 percent in 2005 to 15 percent in 2010 (Figure 12.2).

Figure 12.2 Trends in Nutritional Status of Children under Age 5



Note: Data are based on children whose mothers were interviewed and calculated according to the new WHO Child Growth Standard adopted in 2006.

12.2 BREASTFEEDING AND SUPPLEMENTATION

Initiation of Breastfeeding

Early initiation of breastfeeding is encouraged for a number of reasons. Mothers benefit from early suckling because it stimulates breast milk production and facilitates the release of oxytocin, which helps the uterus to contract and reduces postpartum blood loss. The first breast milk contains colostrum, which is highly nutritious and has antibodies that protect the newborn from diseases. Prelacteal feeding (giving something other than breast milk in the first three days of life) is generally discouraged because it may inhibit breastfeeding and expose the newborn infant to illness.

The importance and necessity of breastfeeding has been well recognized in Armenia since the 1993 adoption of the State Program on Breastfeeding by the Ministry of Health. In conjunction with the state program, reforms occurred in maternity hospitals as part of the Baby Friendly Hospital Initiative (BFHI). Examples of these reforms include establishing immediate contact between mother and newborn after delivery, initiating early breastfeeding (in the first 30 to 60 minutes after birth); allowing the mother and newborn to stay in the same hospital room, breastfeeding the baby on demand, and other Baby Friendly practices. The BFHI Program has expanded since 2000; currently 22 maternity hospitals and 10 polyclinics have Baby Friendly status.

In July 2005, UNICEF and the Ministry of Health of Armenia, in partnership with governmental and nongovernmental organizations, organized an international seminar on "Protecting Breastfeeding through Implementation of the International Code of Marketing of Breast-milk Substitutes." They called for increased commitment in promoting and protecting early and exclusive breastfeeding.

Table 12.2 shows the percentage of all children born in the two years preceding[1] the survey who were ever breastfed and, for last-born children ever breastfed, the timing of initial breastfeeding, by background characteristics.

Overall, 97 percent of children born in the two years before the survey have been breastfed at some time. For last-born children younger than age 2, 36 percent started breastfeeding within one hour of birth and 84 percent started breastfeeding within one day of birth. There are no major differentials in the percentage of children ever breastfed, by background characteristics.

Differences in early initiation of breastfeeding are small by sex of the child. Children in rural areas are more likely to start breastfeeding, either during the first hour after birth or within 24 hours of birth, than children in urban areas. Forty-four percent of children in rural areas started breastfeeding within one hour of birth compared with 29 percent of children in urban areas. There are substantial variations by region; only 20 percent of children in Yerevan started breastfeeding within one hour of birth compared with 72 percent of children in Gegharkunik. Variations are similar, but smaller, for breastfeeding within 24 hours of birth by region; the lowest percentage was in Yerevan and the highest in Gegharkunik (74 percent and 99 percent, respectively).

[1] Note that for the earlier ADHS surveys, the initiation of breastfeeding indicators were reported for children less than age 5. Also, initiation of breastfeeding within one hour and within one day of birth was calculated among the children who were ever-breastfed, unlike the way these are calculated now among last-born children who were born in the two years preceding the survey. Hence, observe caution when comparing the figures in this table with the results of previous ADHS surveys.

Table 12.2 Initial breastfeeding

Among last-born children who were born in the two years preceding the survey, the percentage who were ever breastfed and the percentages who started breastfeeding within one hour and within one day of birth; and among last-born children born in the two years preceding the survey who were ever breastfed, the percentage who received a prelacteal feed, by background characteristics, Armenia 2010

	Among last-born children born in the past two years:				Among last-born children born in the past two years who were ever breastfed:	
Background characteristic	Percentage ever breastfed	Percentage who started breastfeeding within 1 hour of birth	Percentage who started breastfeeding within 1 day of birth[1]	Number of last-born children	Percentage who received a prelacteal feed[2]	Number of last-born children ever breastfed
Sex						
Male	96.5	36.5	82.9	308	8.7	298
Female	98.1	34.9	85.1	294	9.6	289
Residence						
Urban	96.1	29.4	78.8	342	11.3	329
Rural	98.9	44.1	90.9	260	6.4	257
Region						
Yerevan	94.7	20.2	73.9	177	14.1	168
Aragatsotn	(100.0)	(75.0)	(100.0)	29	(4.1)	29
Ararat	(100.0)	(33.0)	(91.3)	43	(0.7)	43
Armavir	95.4	25.6	80.1	51	(13.1)	49
Gegharkunik	100.0	71.7	99.2	49	2.4	49
Lori	(97.1)	(57.2)	(77.8)	54	(3.6)	52
Kotayk	96.9	24.7	84.4	72	8.5	70
Shirak	100.0	52.0	89.8	57	2.0	57
Syunik	(100.0)	(19.0)	(97.8)	23	(0.0)	23
Vayots Dzor	95.0	25.6	85.8	18	(24.9)	17
Tavush	100.0	26.6	87.5	29	26.3	29
Mother's education						
Basic	(100.0)	(41.6)	(100.0)	21	(12.2)	21
Secondary	98.2	34.4	90.2	236	7.2	232
Secondary special	97.7	34.9	82.7	172	13.6	168
Higher	95.3	37.5	75.0	174	7.0	166
Wealth quintile						
Lowest	98.3	44.3	88.4	116	5.4	114
Second	97.9	44.5	89.2	129	9.9	126
Middle	99.3	37.2	87.8	109	4.7	109
Fourth	96.2	30.7	79.3	143	11.2	138
Highest	94.6	20.7	75.3	105	14.6	99
Total	97.3	35.7	84.0	602	9.2	586

Note: Table is based on children born in the two years preceding the survey regardless of whether the children are living or dead at the time of interview. Figures in parentheses are based on 25-49 unweighted cases.

[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

Among children under age 2 who were ever breastfed, 9 percent received a prelacteal feed (i.e., received something other than breast milk during the first three days of life). Children born in urban areas were more likely to receive a prelacteal feed than children born in rural areas (11 percent and 6 percent, respectively). Regional variations in giving prelacteal feeding are notable, ranging from a high of 26 percent in Tavush to a low of 2 percent in Shirak. There is no clear relationship between prelacteal feed and mother's education or wealth quintile.

Breastfeeding Status by Age

Breast milk is the optimal source of nutrients for infants. Children who are exclusively breastfed receive only breast milk. Exclusive breastfeeding is recommended during the first six months of a child's life because it limits exposure to disease agents and provides all of the nutrients

that are required for a baby. As the infant grows, breast milk alone no longer provides sufficient nourishment, and other liquids and foods need to be added to a child's diet.

Table 12.3 shows the percent distribution of youngest children under age 2 living with the mother by breastfeeding status, and the percentage of children under age 2 using a bottle with a nipple, according to age in months.[2] Figure 12.3 illustrates breastfeeding practices by age in Armenia. The results presented in Table 12.3 and Figure 12.3 show that 89 percent of children under age 6 months in Armenia are breastfed. The duration of breastfeeding, however, is not long; at age 12-17 months, 61 percent of infants are no longer breastfed. By age 20-23 months, 77 percent of children have been weaned.

Table 12.3 Breastfeeding status by age

Percent distribution of youngest children under age 2 who are living with their mother, by breastfeeding status; percentage currently breastfeeding; and percentage of all children under age 2 using a bottle with a nipple, according to age in months, Armenia 2010

	Percent distribution of youngest children under two living with their mother by breastfeeding status										
Age in months	Not breast-feeding	Exclusively breastfed	Breast-feeding and consuming plain water only	Breast-feeding and consuming non-milk liquids[1]	Breast-feeding and consuming other milk	Breast-feeding and consuming comple-mentary foods	Total	Percentage currently breast-feeding	Number of youngest children under age 2	Percentage using a bottle with a nipple	Number of all children under age 2
0-1	(0.0)	(72.7)	(10.1)	(6.3)	(10.9)	(0.0)	100.0	(100.0)	26	(2.8)	26
2-3	0.0	36.2	21.3	22.7	14.1	5.7	100.0	100.0	54	36.8	54
4-5	27.1	15.5	11.5	5.2	6.0	34.8	100.0	72.9	56	54.0	56
6-8	29.1	6.0	6.5	4.7	5.2	48.4	100.0	70.9	71	44.8	73
9-11	53.5	1.6	0.0	1.7	0.0	43.3	100.0	46.5	84	76.1	84
12-17	61.4	0.7	0.0	0.0	0.0	37.9	100.0	38.6	164	56.7	171
18-23	82.6	0.0	0.0	0.0	0.0	17.4	100.0	17.4	138	47.5	152
0-3	0.0	47.9	17.7	17.4	13.1	3.9	100.0	100.0	80	25.9	80
0-5	11.2	34.6	15.1	12.4	10.1	16.6	100.0	88.8	136	37.5	136
6-9	37.6	4.4	4.8	3.4	3.8	46.0	100.0	62.4	97	54.8	99
12-15	55.8	1.1	0.0	0.0	0.0	43.1	100.0	44.2	101	54.1	105
12-23	71.1	0.4	0.0	0.0	0.0	28.5	100.0	28.9	303	52.4	322
20-23	77.2	0.0	0.0	0.0	0.0	22.8	100.0	22.8	83	44.8	96

Note: Breastfeeding status refers to a "24-hour" period (yesterday and last night). Children who are classified as breastfeeding and consuming plain water only consumed no liquid or solid supplements. The categories of not breastfeeding, exclusively breastfed, breastfeeding and consuming plain water, non-milk liquids, other milk, and complementary foods (solids and semi-solids) are hierarchical and mutually exclusive, and their percentages add to 100 percent. Thus children who receive breast milk and non-milk liquids and who do not receive other milk and who do not receive complementary foods are classified in the non-milk liquid category even though they may also get plain water. Any children who get complementary food are classified in that category as long as they are breastfeeding as well. Figures in parentheses are based on 25-49 unweighted cases.

[1] Non-milk liquids include juice, juice drinks, clear broth, or other liquids.

Exclusive breastfeeding is not common, and supplementary feeding begins early. Figure 12.3 shows a rapid decline of exclusive breastfeeding after birth. Only about a third of children (35 percent) under 6 months are exclusively breastfed, as recommended. In addition to breast milk, 15 percent of children under 6 months are given plain water, 12 percent are given liquids other than milk, 10 percent are given other milk, and 17 percent are given solid or mushy food.

[2] When comparing the total results of the 2010 ADHS to the previous surveys, it should be noted that in 2010 the table on breastfeeding status by age is restricted to the youngest children under age 2 living with their mothers instead of the youngest children under age 3 living with their mothers (as in the 2005 ADHS report) and instead of all children under age 3 (as in the 2000 ADHS report).

Use of bottles with a nipple for infant feeding is widespread in Armenia. Thirty-seven percent of children age 2-3 months are bottle fed. This proportion increases with age and peaks at 76 percent among children age 9-11 months before declining. For the younger children (2-3 months old) the use of a bottle with a nipple for feeding has decreased by 13 percentage points since the 2005 ADHS; however, it has increased for the older children (18-23 months), from 34 percent in 2005 to 48 percent in 2010.

Since 2005, among children under age 6 months, breastfeeding at the time of the survey has increased slightly (84 and 89 percent, respectively, in 2005 and 2010). Exclusive breastfeeding, as recommended by the Ministry of Health, shows a slight improvement in this age group (35 percent in 2010 compared with 33 percent in 2005). The proportion of children under 6 months receiving complementary foods in addition to breast milk has declined from 20 percent in 2005 to 17 percent in this survey.

The pattern of weaning at an early age has hardly changed. Among children age 6-8 months, 29 percent are not breastfed, compared with 28 percent in 2005. Forty-eight percent of children age 6-8 months received breast milk and complementary foods in 2010, indicating a decrease of fifteen percentage points since 2005 (63 percent).

Figure 12.3 Infant Feeding Practices by Age

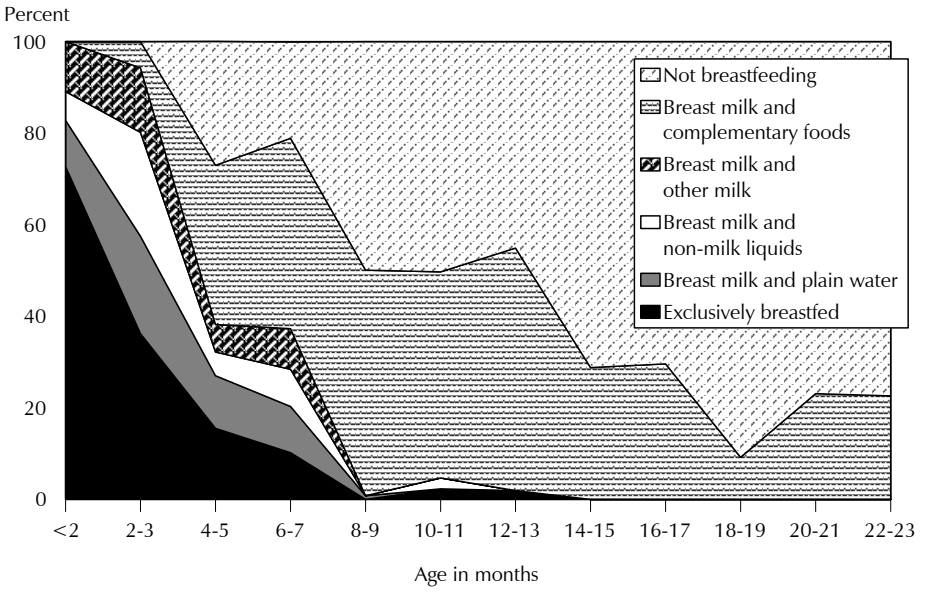
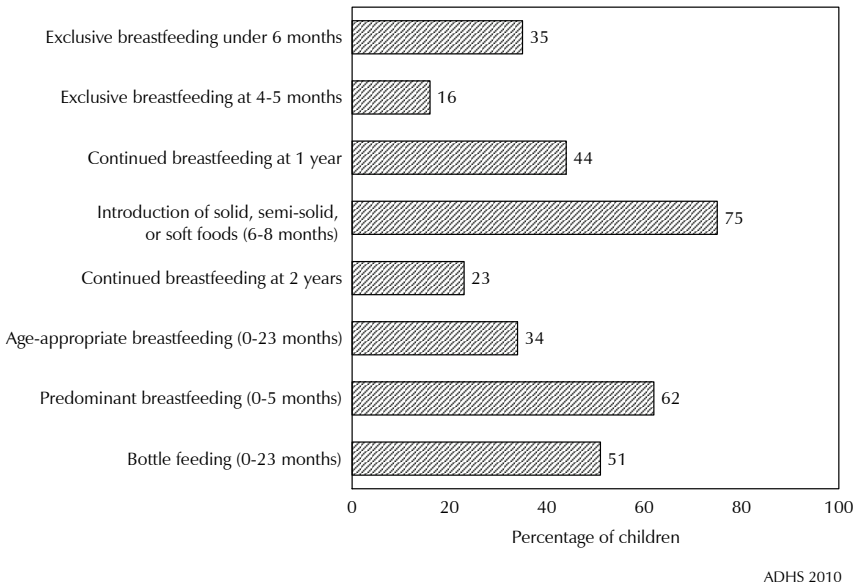


Figure 12.4 shows 2010 ADHS results for key Infant and Young Child Feeding (IYCF) practices indicators. As noted above, 35 percent of children under age 6 months are exclusively breastfed, and 75 percent of children are given a timely introduction of complementary foods. More than four in ten children (44 percent) are still breastfeeding at age 1, and a little more than two in ten children are still breastfeeding at age 2 (23 percent). One-third of Armenian children age 0-23 months are given age-appropriate breastfeeding. This includes exclusive breastfeeding for children under 6 months and continued breastfeeding plus complementary foods for children age 6-23 months. Sixty-two percent of children under 6 months are predominantly breastfed. This percentage includes children who are exclusively breastfed, plus those who receive breast milk and only plain water or non-milk liquids such as juice. Finally, 51 percent of children under age 2 are bottle fed.

Figure 12.4 IYCF Indicators on Breastfeeding Status



ADHS 2010

Duration of Breastfeeding

Table 12.4 shows the median duration of breastfeeding by selected background characteristics. The estimates of median and mean durations of breastfeeding are based on current status data, that is, the proportion of children born in the three years preceding the survey who were being breastfed at the time of the survey.

The median duration of any breastfeeding in Armenia is 10.9 months. However, the median durations of exclusive and predominant breastfeeding (breastfeeding plus plain water, water-based liquids, or juice) are shorter (1.8 months and 4.2 months, respectively). The mean durations of any breastfeeding, exclusive breastfeeding, and predominant breastfeeding are longer (12.5 months, 3.2 months, and 4.9 months, respectively). These figures indicate that the Ministry of Health's official recommendation of exclusive breastfeeding for 6 months has still not been reached. Nevertheless, median duration of any breastfeeding has increased just slightly, from 10.5 months in the 2005 ADHS to 10.9 months in the current survey.

Types of Complementary Foods

UNICEF and WHO recommend the introduction of semi-solid and solid foods to infants around the age of 6 months because by that age breast milk alone is no longer sufficient to maintain a child's optimal growth. To obtain full information on weaning practices, the 2010 ADHS collected data on breastfeeding and nonbreastfeeding children.

Table 12.4 Median duration of breastfeeding

Median duration of any breastfeeding, exclusive breastfeeding, and predominant breastfeeding among children born in the three years preceding the survey, by selected background characteristics, Armenia 2010

Background characteristic	Median duration (months) of breastfeeding among children born in the past three years[1]: Any breast-feeding	Exclusive breast-feeding	Predominant breast-feeding[2]
Sex			
Male	(11.5)	(1.9)	4.2
Female	(10.4)	*	(4.2)
Residence			
Urban	10.5	(1.5)	2.8
Rural	(11.0)	*	(5.1)
Total	10.9	1.8	4.2
Mean for all children	12.5	3.2	4.9

Note: Median and mean durations are based on the distributions at the time of the survey of the proportion of births by months since birth. Includes children living and deceased at the time of the survey. 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] It is assumed that non-last-born children and last-born children not currently living with the mother are not currently breastfeeding.

[2] Either exclusively breastfed or received breast milk and plain water, and/or non-milk liquids only

Table 12.5 provides information on the types of food given to the youngest children under age 2, living with their mother, on the day and night preceding the interview, according to breastfeeding status[3]. Overall, 89 percent of breastfeeding children age 6-23 months received solid or semi-solid foods. The most common complementary foods were made from grains (79 percent); roots and tubers (69 percent); cheese, yogurt, or another milk product (68 percent); and fruits and vegetables other than those rich in vitamin A (58 percent). Among breastfeeding children age 6 months and younger, 19 percent received complementary foods, a practice that can be detrimental to the child's health. Children under age 6 months most often received cheese, yogurt, or other milk products; roots and tubers; and fruits and vegetables other than those rich in vitamin A.

Consumption of complementary foods is generally higher among nonbreastfeeding children than breastfeeding children. Almost all (98 percent) of breastfeeding children age 6-23 months received solid or semi-solid foods. Ninety percent of nonbreastfeeding children age 6-23 months received foods made from grains; 83 percent were given cheese, yogurt, or other milk products; 82 percent ate foods made from roots or tubers, and 74 percent ate fruits and vegetables other than those rich in vitamin A. Almost half (46 percent) of nonbreastfeeding children older than six months consumed fruits and vegetables rich in vitamin A. Consumption of meat, fish, poultry, and eggs is higher among nonbreastfeeding children than among breastfeeding children.

Table 12.5 Foods and liquids consumed by children in the day or night preceding the interview

Percentage of youngest children under age 2 who are living with the mother by type of foods consumed in the day or night preceding the interview, according to breastfeeding status and age, Armenia 2010

	Liquids			Solid or semi-solid foods										
Age in months	Infant formula	Other milk[1]	Other liquids[2]	Fortified baby foods	Food made from grains[3]	Fruits and vege-tables rich in vitamin A[4]	Other fruits and vege-tables	Food made from roots and tubers	Food made from legumes and nuts	Meat, fish, poultry	Eggs	Cheese, yogurt, other milk product	Any solid or semi-solid food	Number of children
BREASTFEEDING CHILDREN														
<6	12.6	11.6	32.1	3.1	4.6	1.3	6.7	7.3	0.5	0.7	4.1	7.3	18.7	121
6-11	9.6	32.5	78.5	12.5	66.0	33.2	49.8	56.0	10.7	29.5	34.0	62.1	79.1	90
12-23	3.2	20.0	91.0	2.1	92.2	37.1	65.5	81.9	7.8	57.3	47.1	74.8	98.7	87
6-23	6.4	26.3	84.7	7.3	79.0	35.1	57.6	68.8	9.3	43.2	40.5	68.4	88.8	177
Total	9.0	20.3	63.3	5.6	48.8	21.4	36.9	43.9	5.7	26.0	25.7	43.6	60.4	298
NONBREASTFEEDING CHILDREN														
<6	*	*	*	*	*	*	*	*	*	*	*	*	*	15
6-11	25.2	70.7	93.9	18.2	87.3	23.0	60.7	68.1	5.5	38.6	30.1	76.6	97.3	66
12-23	8.3	48.8	97.1	13.1	90.7	52.9	77.5	85.8	21.6	64.4	58.2	84.5	98.3	215
6-23	12.3	53.9	96.4	14.3	89.9	45.9	73.5	81.7	17.9	58.4	51.6	82.7	98.1	281
Total	13.6	54.3	95.9	15.0	86.2	43.5	70.5	77.7	16.9	55.5	49.1	79.3	95.2	296

Note: Breastfeeding status and food consumed refer to a "24-hour" period (yesterday and last night). An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

[1] Other milk includes fresh, tinned, and powdered animal milk.

[2] Does not include plain water. Includes juice, juice drinks, clear broth, or other non-milk liquids.

[3] Includes fortified baby food

[4] Includes pumpkin, yellow squash, carrots, dark green leafy vegetables, mangoes, apricots, dried peaches, and other locally grown fruits and vegetables that are rich in vitamin A

[3] When comparing the total results of the 2010 ADHS to the previous surveys, it should be noted that in 2010 the table on foods and liquids consumed by children on the day or night preceding the interview are restricted to the youngest children under age 2 living with their mothers, instead of the youngest children under age 3 living with their mothers (as in the 2005 ADHS report) and instead of all children under age 3 (as in the 2000 ADHS reports). In addition, wording of questions in the 2010 survey differed from those in 2005 and 2000, and questions about foods made with oil, fat, or butter were not asked.

12.3 INFANT AND YOUNG CHILD FEEDING (IYCF) PRACTICES

Infant and Young Child Feeding (IYCF) practices include initiating timely feeding of solid/semi-solid foods at age 6 months and increasing the amount and variety of foods and frequency of feeding as the child gets older, while maintaining frequent breastfeeding. Guidelines have been established with respect to IYCF practices for children age 6-23 months (PAHO/WHO, 2003; WHO, 2005; WHO, 2008). Table 12.6 presents the results of the 2010 ADHS according to IYCF practices for breastfed and nonbreastfed children living with their mother. The indicators focus on the percentage of children for whom feeding practices meet minimum standards with respect to—

- Food diversity (i.e., the number of food groups consumed)
- Feeding frequency (i.e., the number of times a child is fed)
- Consumption of breast milk or other milks or milk products

Table 12.6 Infant and young child feeding (IYCF) practices

Percentage of youngest children age 6-23 months living with their mother who are fed according to three IYCF feeding practices based on breastfeeding status, number of food groups and times they are fed during the day or night preceding the survey, by background characteristics, Armenia 2010

	Among breastfed children 6-23 months, percentage fed:				Among nonbreastfed children 6-23 months, percentage fed:					Among all children 6-23 months, percentage fed:				
Background characteristic	4+ food groups[1]	Minimum meal frequency[2]	Both 4+ food groups and minimum meal frequency	Number of breastfed children 6-23 months	Milk or milk products[3]	4+ food groups[1]	Minimum meal frequency[4]	With 3 IYCF practices[5]	Number of non-breastfed children 6-23 months	Breast milk, milk, or milk products[6]	4+ food groups[1]	Minimum meal frequency[7]	With 3 IYCF practices	Number of all children 6-23 months
Age														
6-8	28.0	46.1	18.5	50	*	*	*	*	21	94.0	32.8	56.1	18.0	71
9-11	(60.4)	(61.0)	(39.1)	39	(72.1)	(48.7)	(70.9)	(10.6)	45	85.1	54.1	66.3	23.8	84
12-17	60.8	62.4	42.8	63	63.6	82.3	78.1	40.2	101	77.7	74.0	72.0	41.2	164
18-23	(61.8)	(63.5)	(37.8)	24	53.0	72.5	66.8	31.0	114	61.1	70.6	66.2	32.2	138
Sex														
Male	51.0	60.5	35.8	88	67.0	66.7	76.7	33.6	140	79.7	60.6	70.4	34.4	228
Female	52.1	54.6	32.9	89	56.7	73.6	68.3	26.4	141	73.5	65.3	63.0	28.9	230
Residence														
Urban	62.6	61.6	42.9	91	61.3	75.7	73.2	33.8	175	74.5	71.2	69.2	36.9	266
Rural	39.9	53.3	25.4	86	62.8	61.0	71.4	23.6	106	79.5	51.5	63.2	24.4	192
Mother's education														
Basic	*	*	*	4	*	*	*	*	9	*	*	*	*	14
Secondary	44.6	56.1	28.4	81	62.0	60.7	75.0	20.7	93	79.6	53.2	66.2	24.3	174
Secondary special	56.6	56.4	34.3	46	61.4	73.1	70.0	31.5	91	74.5	67.6	65.4	32.4	138
Higher	(61.7)	(61.2)	(48.3)	45	62.8	75.8	70.1	37.1	87	75.6	71.0	67.0	41.0	132
Wealth quintile														
Lowest	(32.3)	(47.7)	(16.0)	34	(60.0)	(50.4)	(67.3)	(15.9)	47	76.8	42.8	59.1	15.9	80
Second	(47.8)	(67.6)	(35.3)	40	69.7	64.9	79.7	22.6	53	82.7	57.6	74.5	28.1	93
Middle	(55.0)	(54.4)	(34.4)	43	56.6	71.4	72.5	20.0	48	77.1	63.6	64.0	26.8	90
Fourth	(58.2)	(52.9)	(37.6)	32	56.1	80.5	72.8	41.4	79	68.7	74.1	67.1	40.3	111
Highest	*	*	*	29	(68.5)	(75.9)	(69.4)	(41.4)	55	79.4	72.7	67.9	44.7	84
Total	51.5	57.6	34.4	177	61.8	70.1	72.5	30.0	281	76.6	62.9	66.7	31.7	458

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] Food groups: a. infant formula, milk other than breast milk, cheese or yogurt or other milk products; b. foods made from grains, roots, and tubers, including porridge and fortified baby food from grains; c. vitamin A-rich fruits and vegetables (and red palm oil); d. other fruits and vegetables; e. eggs; f. meat, poultry, fish, and shellfish (and organ meats); g. legumes and nuts.

[2] For breastfed children, minimum meal frequency is receiving solid or semi-solid food at least twice a day for infants 6-8 months and at least three times a day for children 9-23 months.

[3] Includes two or more feedings of commercial infant formula, fresh, tinned and powdered animal milk, and yogurt

[4] For non-breastfed children age 6-23 months, minimum meal frequency is receiving solid or semi-solid food or milk feeds at least four times a day

[5] Non-breastfed children age 6-23 months are considered to be fed with a minimum standard of three Infant and young child feeding practices if they receive other milk or milk products at least twice a day, receive the minimum meal frequency, and receive solid or semi-solid foods from at least four food groups not including the milk/milk product group.

[6] Breastfeeding, or not breastfeeding and receiving two or more feedings of commercial infant formula, fresh, tinned and powdered animal milk, and yogurt

[7] Children are fed the minimum recommended number of times per day according to their age and breastfeeding status as described in footnotes 2 and 4.

Breastfed children are considered fed in accordance with the minimum IYCF standards if they consume at least four food groups[4] and receive foods at least twice per day in the case of children age 6-8 months and at least three times per day in the case of children age 9-23 months.

Among breastfed children age 6-23 months, a little more than half (52 percent) were given food from at least four food groups in the 24 hours preceding the survey, and 58 percent were fed the recommended minimum number of times. One-third of breastfed children (34 percent) fall into both categories, i.e., their feeding practices meet minimum standards with respect to food diversity and feeding frequency. Feeding frequency increases with children's age, growing from 19 percent among children age 6-8 months to 43 percent among those age 12-17 months. Breastfed children living in urban areas are substantially more likely to receive a more diverse diet, i.e., to be fed from at least four food groups and also the minimum number of times a day (43 percent versus 25 percent, respectively).

Non-breastfed children age 6-23 months are considered to be fed with a minimum standard of three IYCF practices if they receive commercial infant formula, animal milk, or milk products at least twice a day, receive solid or semi-solid food or milk feeds at least four times a day, and receive solid or semi-solid foods from at least four food groups, not including the milk/milk product group.

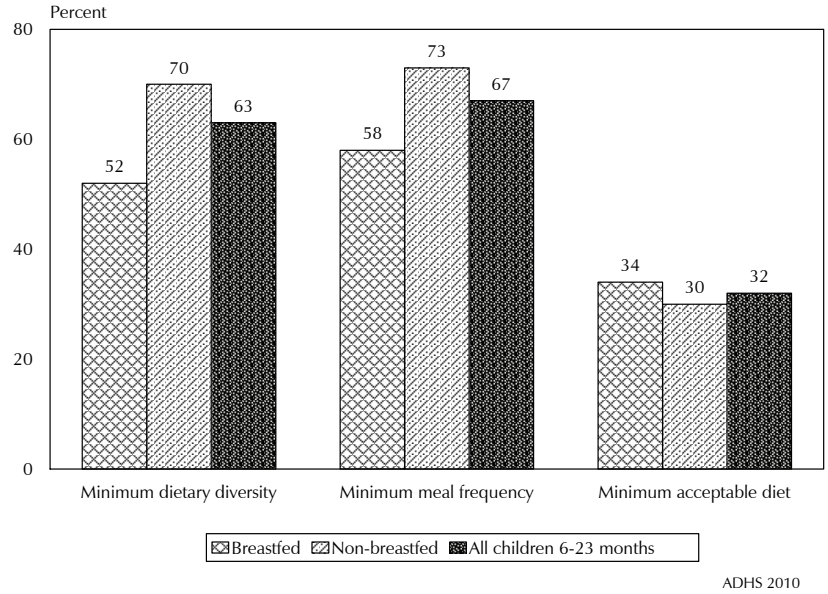
Among non-breastfed children age 6-23 months, 62 percent are given milk or milk products, 70 percent are given food from at least four food groups, and 73 percent are fed four or more times per day. However, less than a third (30 percent) of nonbreastfeeding children are fed in accordance with all three IYCF practices. Nonbreastfed boys are more likely to be given milk and milk products and fed the minimum number of times, and they are somewhat less likely to receive foods from the minimum number of groups compared with nonbreastfed girls. Feeding practices of urban children are more likely to meet recommended minimum standards than feeding practices of their rural counterparts. The proportion of nonbreastfed children who meet the IYCF criteria increases by mother's level of education and household wealth quintile.

The results in Table 12.6 and Figure 12.5 indicate that overall, feeding practices meet the minimum standards for approximately 1 in 3 children age 6-23 months (32 percent). Over three-quarters of children age 6-23 months (77 percent) received breast milk or milk products, 67 percent received an adequate number of feedings, and 63 percent received foods from the recommended number of food groups for their age. Feeding practices are generally more likely to comply with minimum standards for older children. Children age 12-17 months (41 percent) are the most likely to be fed according to the IYCF practices, while those age 6-8 months and 9-11 months (18 and 24 percent, respectively) are the least likely. Some differences are seen in feeding practices by sex and residence. Boys and children residing in urban areas are more likely to be fed according to all three IYCF practices. There is a positive relationship between the proportion of children who are fed appropriately and mother's level of education and wealth.

In the past five years since the 2005 ADHS, the definition of standard IYCF indicators has changed to reflect more restrictive requirements (WHO, 2008; WHO, 2010). To look at the trends, the 2010 data was recalculated according to the 2005 IYCF definitions. As a result, when comparing the 2005 and 2010 IYCF indicators, a decrease is seen in the percentage fed with an adequate diet. Trends should be interpreted with caution as a result of these changes.

[4] Food groups used in the assessment of minimum standard of feeding practices include: infant formula, milk other than breastmilk, cheese or yogurt or other milk products; foods made from grains, roots, and tubers, including porridge and fortified baby food from grains; fruits and vegetables rich in vitamin A; other fruits and vegetables; eggs; meat, poultry, fish, and shellfish (and organ meats); and beans, peas, and nuts.

Figure 12.5 IYCF Indicators on Minimum Acceptable Diet



There has been a decrease in the proportion of children age 6-23 months fed according to all three IYCF practices between 2005 and 2010 (55 percent in 2005 to 35 percent in 2010) (data not shown). These variations are most likely a result of the methodological differences mentioned above. The 2005 ADHS included questions about more complementary food items, including questions about foods made with oil, fat, or butter, which could have helped mother's better recall foods given to the infants and young children. Slight changes in the wording of the questions between the two surveys may account for some of the trends.

12.4 Micronutrient Intake in Children

Micronutrient deficiencies are major contributors to childhood morbidity and mortality. Children can receive micronutrients from foods, food fortification, and direct supplementation. Table 12.7 shows indicators used to measure children's intake of several key micronutrients.

Vitamin A is an essential micronutrient for the immune system and plays an important role in maintaining the epithelial tissue in the body. Vitamin A deficiency can increase the severity of infections, such as measles and diarrheal diseases in children, and can slow recovery from illness. Vitamin A is found in breast milk, other milks, liver, eggs, fish, butter, carrots, pumpkins, yellow-orange sweet potatoes, and dark green leafy vegetables. Periodic dosing (usually every 6 months) with vitamin A supplements is one way to ensure that children at risk do not develop vitamin A deficiency.

Iron is essential for cognitive development. Low iron intake can also contribute to anemia. Iron requirements are greatest between the ages of 6 and 12 months, when growth is extremely rapid. The 2010 ADHS collected information on the consumption of foods rich in vitamin A and foods rich in iron.

Table 12.7 Micronutrient intake among children

Among youngest children age 6-23 months who are living with their mother, the percentages who consumed vitamin A-rich and iron-rich foods in the day or night preceding the survey, and among all children 6-59 months, the percentages who were given iron supplements in the past seven days, and who were given deworming medication in the six months preceding the survey, by background characteristics, Armenia 2010

	Among youngest children age 6-23 months living with the mother:			Among all children age 6-59 months:		
Background characteristic	Percentage who consumed foods rich in vitamin A in past 24 hours[1]	Percentage who consumed foods rich in iron in past 24 hours[2]	Number of children	Percentage given iron supplements in past 7 days	Percentage given deworming medication in past 6 months[3]	Number of children
Age in months						
6-8	40.2	31.7	71	5.4	0.7	73
9-11	70.4	62.7	84	7.0	0.0	84
12-17	86.3	81.3	164	8.8	0.2	171
18-23	82.4	73.5	138	7.3	4.5	152
24-35	na	na	0	5.1	6.3	297
36-47	na	na	0	7.7	8.7	257
48-59	na	na	0	5.1	9.2	257
Sex						
Male	73.5	66.4	228	6.1	5.6	664
Female	76.5	69.2	230	6.9	5.6	626
Breastfeeding status						
Breastfeeding	65.1	57.4	177	6.6	1.4	193
Not breastfeeding	81.8	74.9	279	6.5	6.4	1,087
Missing	*	*	2	*	*	10
Mother's age at birth						
15-19	*	*	16	*	*	18
20-29	76.2	67.6	332	6.6	6.1	938
30-39	69.7	67.7	101	5.7	5.1	304
40-49	*	*	9	(4.4)	(0.0)	30
Residence						
Urban	78.3	73.3	266	8.0	5.8	763
Rural	70.4	60.2	192	4.3	5.4	528
Region						
Yerevan	83.4	79.5	146	10.7	4.4	424
Aragatsotn	(36.6)	(36.1)	22	2.6	0.2	56
Ararat	(69.2)	(68.0)	32	1.0	4.2	92
Armavir	(71.0)	(58.8)	35	7.5	9.2	119
Gegharkunik	(65.5)	(62.2)	39	2.5	1.4	100
Lori	(68.9)	(56.3)	41	0.7	6.9	99
Kotayk	80.7	67.1	54	7.1	7.9	131
Shirak	(74.0)	(63.5)	43	8.1	4.2	139
Syunik	(90.7)	(90.7)	16	1.3	16.6	44
Vayots Dzor	(76.0)	(66.0)	13	2.4	7.7	33
Tavush	(76.0)	(59.5)	17	4.1	8.6	52
Mother's education						
Basic	*	*	14	3.8	1.4	63
Secondary	68.0	61.7	174	6.5	4.2	506
Secondary special	76.8	68.0	138	7.3	7.8	402
Higher	81.8	75.2	132	6.0	5.8	320
Wealth quintile						
Lowest	66.9	58.9	80	5.6	5.5	255
Second	67.1	58.5	93	4.3	3.8	258
Middle	79.5	75.7	90	5.6	8.2	274
Fourth	80.4	72.8	111	6.9	7.3	257
Highest	79.6	71.5	84	10.3	2.9	247
Total	75.0	67.8	458	6.5	5.6	1,290

Note: Information on vitamin A is based on both mother's recall and the immunization card (where available). Information on iron supplements and deworming medication is based on the mother's recall. 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] Includes meat (and organ meat), fish, poultry, eggs, pumpkin, yellow squash, carrots, dark green leafy vegetables, mango, apricots or dried peaches, and other locally grown fruits and vegetables that are rich in vitamin A
[2] Includes meat (including organ meat), fish, poultry, and eggs
[3] Deworming for intestinal parasites is commonly done for helminthes.

Table 12.7 shows that three-quarters of children age 6-23 months living with their mother consumed foods rich in vitamin A in the 24 hours preceding the survey, and 68 percent consumed foods rich in iron. There is a steady increase with age in the proportion of children who eat foods rich in vitamin A and iron. With respect to foods rich in vitamin A, the proportion rises from 40 percent of children age 6-8 months to 86 percent of those age 12-17 months before decreasing to 82 percent among children age 18-23 months. A similar pattern is observed for foods rich in iron, with consumption highest among children age 12-17 months (74 percent). Children who are not breastfeeding are more likely to receive vitamin A-rich and iron-rich foods than breastfeeding children. Consumption of foods rich in vitamin A or iron is higher among children in urban areas than among children in rural areas. Mother's education and wealth indexes are positively associated with children consuming these foods that provide important micronutrients.

The 2010 ADHS also collected information on iron supplementation. Only 7 percent of children age 6-59 months received an iron supplement in the seven days preceding the survey. Iron supplementation is highest among children 12-17 months and 36-47 months (9 and 8 percent, respectively). Differences are very small by sex, breastfeeding status, and mother's age at birth; however, by residence, urban children are twice as likely to have received an iron supplement as rural children (8 and 4 percent, respectively). Consumption of iron supplements ranges from 11 percent in Yerevan to less than 1 percent in Lori region.

Because intestinal worms can contribute to both anemia and vitamin A deficiency, the 2010 ADHS collected information on whether children age 6-59 months had been given deworming medication. Six percent of children age 6-59 months received deworming medication in the six months preceding the survey. Older children, age 18-59 months, non-breastfed children, and those living in Syunik region are more likely to receive deworming medication than other children. Mother's level of education and household wealth quintile are not clearly related to receipt of deworming medication.

12.5 Micronutrient Intake in Women

Adequate micronutrient intake by women has important benefits for them and their children. Breastfeeding children benefit from micronutrient supplementation that mothers receive, especially vitamin A. Iron supplementation of women during pregnancy protects the mother and infant against anemia. It is estimated that one-fifth of perinatal mortality and one-tenth of maternal mortality are attributable to iron deficiency anemia. Iron-deficiency anemia also contributes to premature delivery and low-birth-weight infants.

Table 12.8 presents measures useful in assessing the extent to which women receive adequate intake of iron supplements and deworming medication during pregnancy. Overall, seven in ten women did not take any iron tablets or syrups during the pregnancy for their last birth in the five years preceding the survey. Only two percent of women reported taking iron supplements for the recommended minimum of 90 days during the pregnancy. The proportion of women who took deworming medication during the pregnancy of their last birth is also low; less than 1 percent of women took the medication. Women living in rural areas and in Gegharkunik and Syunik regions are more likely to have not taken any iron tablets or syrups during the pregnancy for their last birth.

Table 12.8 Micronutrient intake among mothers

Among women age 15-49 with a child born in the past five years, the percentages who, during the pregnancy of the last child, took iron tablets or syrup for specific numbers of days and took deworming medication, by background characteristics, Armenia 2010

Background characteristic	Number of days women took iron tablets or syrup during pregnancy of last birth					Percentage of women who took deworming medication during pregnancy of last birth	Number of women
	None	<60	60-89	90+	Don't know/ missing		
Age							
15-19	(75.2)	(20.5)	(0.0)	(0.0)	(4.3)	(0.0)	30
20-29	71.7	21.9	1.1	1.7	3.6	0.6	794
30-39	60.9	30.9	3.2	1.1	3.9	0.5	302
40-49	*	*	*	*	*	*	25
Residence							
Urban	59.8	31.3	2.6	2.0	4.3	1.0	680
Rural	82.7	13.8	0.0	0.7	2.7	0.0	471
Region							
Yerevan	49.0	42.8	3.7	2.4	2.1	0.5	376
Aragatsotn	77.0	23.0	0.0	0.0	0.0	0.0	47
Ararat	87.8	3.7	1.8	3.6	3.1	0.3	83
Armavir	79.9	17.9	0.5	1.7	0.0	0.6	112
Gegharkunik	91.7	3.2	0.0	0.0	5.1	0.0	82
Lori	59.8	23.2	0.0	0.0	17.0	2.1	91
Kotayk	72.0	24.0	0.7	0.0	3.3	1.4	121
Shirak	83.3	11.7	0.8	1.6	2.5	0.0	115
Syunik	96.2	2.4	0.0	0.0	1.4	0.0	41
Vayots Dzor	78.6	17.8	0.5	0.0	3.1	0.4	32
Tavush	71.2	20.1	0.0	1.9	6.8	0.0	51
Education							
Basic	84.2	9.9	0.0	0.0	5.8	0.0	51
Secondary	76.9	18.8	1.0	1.1	2.3	0.5	446
Secondary special	63.4	28.9	1.2	1.1	5.4	1.0	354
Higher	61.9	29.0	3.0	2.7	3.4	0.4	299
Wealth quintile							
Lowest	85.3	10.5	0.0	1.1	3.0	0.0	215
Second	78.7	17.0	0.0	0.4	3.9	0.7	237
Middle	69.9	24.6	1.5	1.9	2.0	0.8	239
Fourth	60.1	32.5	1.7	2.1	3.6	0.4	234
Highest	52.5	35.5	4.6	1.7	5.8	1.0	226
Total	69.2	24.1	1.6	1.5	3.7	0.6	1,151

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

HIV/AIDS AND SEXUALLY TRANSMITTED INFECTIONS

13

Acquired immune deficiency syndrome (AIDS) is caused by a human immunodeficiency virus (HIV) that weakens the immune system, making the body susceptible to and unable to recover from other diseases. HIV/AIDS is an international pandemic, with cases reported from every country. The United Nations Program on AIDS (UNAIDS) estimates that, in 2009, 33.3 million people worldwide were living with HIV and an estimated 2.6 million people became newly infected. The overall growth of the global AIDS epidemic appears to have stabilized, however. Due to the substantial scale up of antiretroviral therapy (ART) over the past few years, there has been a steady decrease in the annual number of new HIV infections worldwide since the late 1990s. Moreover, deaths among people living with HIV declined 19 percent between 2004 and 2009.. Despite these signs of progress, 10 million people still living with HIV worldwide who are eligible for treatment under the new WHO guidelines are still in need (UNAIDS, 2010).

From 1988 to June 30, 2011, 1,072 HIV cases have been registered in Armenia, with 148 new cases registered in 2010. A large majority of the reported HIV cases (71 percent) are among men, while women account for 29 percent. Twenty-two of the reported cases (2 percent) are children. The majority of the registered HIV-infected individuals (58 percent) belong to the age group 25-39. In Armenia the main modes of HIV transmission are through heterosexual practices (53 percent) and injecting drug use (38 percent). Additionally, there are registered cases of transmission through homosexual practices, as well as mother-to-child HIV transmission, and transmission through blood transfusions.

According to the Armenian National AIDS Center, the estimated number of people living with HIV in the country is about 2,500 (National Center for AIDS Prevention [NCAP], 2011).

The 2010 ADHS collected information from women and men on HIV/AIDS and other sexually transmitted infections (STIs), such as syphilis, gonorrhea, and chlamydia, which are known to be important predisposing factors for HIV epidemics. This chapter summarizes information on knowledge, perceptions, and behaviors at the national level and within geographic and socioeconomic subgroups of the population.

13.1 KNOWLEDGE OF HIV/AIDS AND METHODS OF HIV PREVENTION

Table 13.1 shows the percentages of women and men age 15-49 who have heard of AIDS, by background characteristics. Knowledge of AIDS in Armenia continues to be very high, nearly universal. More than nine in ten (96 percent each) women and men reported that they have heard of HIV/AIDS, a slight increase from 95 percent of women and 92 percent of men in 2005. Awareness of AIDS is somewhat lower among the youngest and least educated respondents and among men who have never had sex. Additionally, a lower proportion of women living in Aragatsotn and Ararat regions (81 and 85 percent, respectively) and of men living in Aragatsotn, Vayots Dzor, and Lori regions (83, 86, and 87 percent, respectively) have heard of AIDS when compared with respondents in other regions.

Table 13.1 Knowledge of AIDS

Percentage of women and men age 15-49 who have heard of AIDS, by background characteristics, Armenia 2010

Background characteristic	Women		Men	
	Have heard of AIDS	Number of women	Have heard of AIDS	Number of women
Age				
15-24	91.9	1,893	91.1	527
15-19	86.7	861	82.8	229
20-24	96.3	1,032	97.4	298
25-29	97.6	950	97.8	285
30-39	98.2	1,481	99.1	391
40-49	97.1	1,598	98.1	381
Marital status				
Never married	92.0	1,911	92.6	707
Ever had sex	*	9	99.8	414
Never had sex	92.0	1,903	82.4	293
Married/living together	97.6	3,626	98.7	855
Divorced/separated/widowed	97.5	385	(100.0)	22
Employment abroad (past 3 years)[1]				
Worked abroad	96.1	165	99.3	181
Did not work abroad	95.8	5,755	95.7	1,395
Missing	*	2	*	7
Spousal employment abroad reported by ever-married women[2]				
Woman worked abroad herself	(96.9)	39	na	na
Husband worked abroad[2]	97.5	826	na	na
Both worked abroad	97.6	87	na	na
None worked abroad	97.7	3,045	na	na
Missing	*	14	na	na
Residence				
Urban	97.9	3,641	98.3	984
Rural	92.5	2,281	92.1	600
Region				
Yerevan	98.8	2,069	99.4	593
Aragatsotn	81.3	260	83.1	70
Ararat	84.5	379	91.7	125
Armavir	99.0	535	98.3	148
Gegharkunik	90.5	459	92.9	83
Lori	98.4	513	86.8	130
Kotayk	98.6	543	99.2	148
Shirak	96.5	598	98.7	131
Syunik	97.9	198	90.7	63
Vayots Dzor	88.5	131	86.1	24
Tavush	95.1	238	99.6	68
Education				
Basic	81.7	347	86.8	188
Secondary	93.7	2,137	94.9	619
Secondary special	98.3	1,681	98.0	301
Higher	98.8	1,757	99.7	477
Wealth quintile				
Lowest	90.2	1,151	91.1	332
Second	94.4	1,211	95.4	285
Middle	96.9	1,139	96.0	312
Fourth	98.5	1,146	98.9	332
Highest	98.7	1,275	98.4	323
Total	95.8	5,922	96.0	1,584

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] "Employment abroad" refers to working abroad during the past three years before the survey for three or more months at a time.
[2] In the 2010 ADHS, information on husband's employment abroad was collected from ever-married women age 15-49. Men in the 2010 ADHS were not asked about their wives' employment outside the country.

AIDS prevention programs focus their messages and efforts on safe sexual practices, specifically on proper condom use (using a condom every time one has sexual intercourse) and limiting the number of sexual partners or staying faithful to one uninfected partner who has no other partners. Table 13.2 shows the percentages of women and men who, in response to prompted questions on these two specific ways of avoiding HIV infection, gave positive responses. Overall, the most often mentioned way of avoiding AIDS is by limiting sex to one partner who has not been infected with AIDS (81 percent of women and 87 percent of men). The use of condoms is cited by 74 percent of women and 83 percent of men. Approximately seven in ten women (69 percent) and eight in ten men (80 percent) mentioned both using condoms *and* limiting sex to one uninfected partner.

As Table 13.2 shows, young women and men age 15-24 are somewhat less knowledgeable than older respondents about the various modes of prevention. With regard to marital status, knowledge of HIV prevention methods is lower among never-married respondents than among those who are currently married or who are divorced, separated, or widowed. Men who never had sex have especially low levels of such knowledge: only 50 percent of men in this category know that proper condom use *and* staying faithful to one uninfected partner who has no other partners can prevent HIV infection.

Women who worked abroad in the past three years for three or more months are slightly less knowledgeable of both specified HIV prevention methods than those who did not work abroad (65 versus 69 percent), while the opposite pattern is observed among men: 85 percent of those who worked abroad are aware of both HIV prevention methods versus 80 percent of men who did not work abroad. Urban women and men (74 and 82 percent, respectively) are more likely to be aware of safe sexual practices than rural women and men (61 and 77 percent, respectively). Among women, knowledge of both specified HIV prevention methods ranges from 9 percent in Syunik region to 79 percent in Yerevan and Kotayk regions, while among men it ranges from 58 percent in Aragatsotn region to 97 percent in Tavush region.

There is a strong positive relationship between the respondent's educational background and wealth and his or her knowledge of ways to prevent getting HIV. For example, 45 percent of women and 75 percent of men with basic education say that the risk of getting the AIDS virus can be reduced by using condoms *and* limiting sex to one uninfected partner, compared with 79 percent of women and 85 percent of men with higher than secondary education. Similarly, 56 percent of women and 74 percent of men in the lowest wealth quintile are aware of both HIV prevention methods, compared with 79 percent of women and 88 percent of men in the highest wealth quintile.

Overall, knowledge of HIV prevention methods at the national level has changed little during the past five years among both women and men.

Table 13.2 Knowledge of HIV prevention methods

Percentage of women and men age 15-49 who, in response to prompted questions, say that people can reduce the risk of getting the AIDS virus by using condoms every time they have sexual intercourse, and by having one sex partner who is not infected and has no other partners, by background characteristics, Armenia 2010

	Women				Men			
	Percentage who say HIV can be prevented by:				Percentage who say HIV can be prevented by:			
Background characteristic	Using condoms[1]	Limiting sexual intercourse to one uninfected partner[2]	Using condoms and limiting sexual intercourse to one uninfected partner[1,2]	Number of women	Using condoms[1]	Limiting sexual intercourse to one uninfected partner[2]	Using condoms and limiting sexual intercourse to one uninfected partner[1,2]	Number of men
Age								
15-24	66.4	74.3	60.9	1,893	70.3	74.0	63.9	527
15-19	56.1	66.8	50.0	861	60.0	61.9	50.7	229
20-24	75.0	80.5	70.1	1,032	78.2	83.3	74.1	298
25-29	76.5	82.0	70.4	950	88.0	91.6	86.2	285
30-39	78.1	87.8	75.4	1,481	89.6	94.5	88.6	391
40-49	75.9	82.4	71.1	1,598	91.2	93.5	89.3	381
Marital status								
Never married	66.8	75.0	61.9	1,911	75.5	78.4	70.4	707
Ever had sex	*	*	*	9	90.0	89.4	85.3	414
Never had sex	66.7	75.0	61.8	1,903	54.9	62.9	49.5	293
Married/living together	76.6	83.7	71.9	3,626	89.5	93.7	87.8	855
Divorced/separated/widowed	78.1	86.1	74.2	385	(95.0)	(97.4)	(95.0)	22
Employment abroad (past 3 years)[3]								
Worked abroad	74.2	78.3	64.7	165	88.3	90.1	84.6	181
Did not work abroad	73.5	81.2	68.9	5,755	82.8	86.6	79.7	1,395
Missing	*	*	*	2	*	*	*	7
Spousal employment abroad reported by ever-married women[4]								
Woman worked abroad herself	(64.4)	(78.6)	(58.5)	39	na	na	na	na
Husband worked abroad[4]	78.0	85.9	73.5	826	na	na	na	na
Both worked abroad	80.0	81.2	69.0	87	na	na	na	na
None worked abroad	76.4	83.7	72.1	3,045	na	na	na	na
Missing	*	*	*	14	na	na	na	na
Residence								
Urban	77.9	85.5	73.8	3,641	85.6	88.9	82.1	984
Rural	66.4	74.0	60.9	2,281	79.4	83.7	76.8	600
Region								
Yerevan	82.8	90.0	78.8	2,069	85.4	90.5	81.5	593
Aragatsotn	64.9	68.6	60.8	260	64.3	62.0	58.1	70
Ararat	71.1	71.8	64.6	379	67.7	84.0	67.2	125
Armavir	74.8	86.7	72.3	535	93.5	98.3	93.5	148
Gegharkunik	62.6	82.5	60.1	459	87.4	90.4	87.0	83
Lori	70.5	87.3	68.0	513	72.1	72.8	71.2	130
Kotayk	82.5	88.4	79.4	543	95.3	95.3	93.1	148
Shirak	75.7	74.3	63.2	598	83.8	79.7	72.8	131
Syunik	14.5	14.1	8.5	198	68.0	74.4	67.2	63
Vayots Dzor	58.6	66.5	52.6	131	68.1	72.6	65.3	24
Tavush	61.5	67.7	57.1	238	99.6	97.1	97.1	68
Education								
Basic	50.3	60.4	45.1	347	76.2	81.2	74.6	188
Secondary	67.4	76.3	61.8	2,137	80.4	83.3	76.7	619
Secondary special	76.7	83.8	72.0	1,681	85.2	89.6	82.4	301
Higher	82.5	88.3	78.9	1,757	88.6	92.1	85.3	477
Wealth quintile								
Lowest	63.5	70.1	56.3	1,151	76.6	81.2	73.5	332
Second	67.4	77.1	62.7	1,211	84.6	86.8	80.4	285
Middle	74.8	81.8	71.4	1,139	84.1	86.0	80.3	312
Fourth	77.9	85.1	74.0	1,146	82.5	88.7	79.2	332
Highest	83.3	90.5	79.0	1,275	89.1	91.9	87.6	323
Total	73.5	81.1	68.8	5,922	83.3	86.9	80.1	1,584

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] Using condoms every time they have sexual intercourse
[2] Partner who has no other partners
[3] "Employment abroad" refers to working abroad during the past three years before the survey for three or more months at a time.
[4] In the 2010 ADHS, information on husband's employment abroad was collected from ever-married women age 15-49. Men in the 2010 ADHS were not asked about their wives' employment outside the country.

13.2 REJECTION OF MISCONCEPTIONS ABOUT HIV/AIDS TRANSMISSION AND COMPREHENSIVE KNOWLEDGE OF AIDS

In addition to knowing effective ways to avoid contracting HIV, it is also useful to be able to identify incorrect beliefs about AIDS to eliminate misconceptions. Misconceptions about AIDS and HIV transmission are among the factors that result in discrimination and stigmatization. The 2010 ADHS included questions on common misconceptions about HIV/AIDS. Misconceptions about AIDS in Armenia include the idea that HIV-positive people always appear ill, the belief that the AIDS virus can be transmitted through mosquito bites, by sharing food with someone who has AIDS, and by kissing someone who is infected with the AIDS virus. Respondents who have heard of AIDS were asked about these four misconceptions, and the results are presented in Tables 13.3.1 and 13.3.2 for women and men, respectively.

The results in Tables 13.3.1 and 13.3.2 indicate that many Armenian adults lack accurate knowledge about the ways in which the AIDS virus can and cannot be transmitted. Particularly critical is the fact that only 65 percent of women and 51 percent of men know that a healthy-looking person can have the AIDS virus. Many women and men also erroneously believe that the AIDS virus can be transmitted through mosquito bites: only 47 percent of women and 53 percent of men reject this common misconception. Furthermore, only 52 percent of women and 41 percent of men correctly believe that the AIDS virus cannot be transmitted by kissing a person infected with the AIDS virus, and 67 percent of women and 57 percent of men know that the AIDS virus cannot be contracted by sharing food with a person who has AIDS. Overall, only a quarter of women (24 percent) and a smaller proportion of men (16 percent) reject two of the most common local misconceptions about the transmission of the AIDS virus in Armenia—namely, that the AIDS virus can be transmitted through mosquito bites and by kissing someone infected with HIV—and believe that a healthy-looking person can have the AIDS virus.

Tables 13.3.1 and 13.3.2 document substantial variation in knowledge about AIDS by background characteristics. The proportions of women and men who reject the most common misconceptions and know that a healthy-looking person can have the AIDS virus are lowest among young respondents age 15-19. Respondents who never married and those who never had sex are less likely than other respondents to refute these misconceptions. For all indicators, the proportion of women with correct knowledge about HIV/AIDS prevention and transmission is higher in urban areas than in rural areas. The percentage of men who correctly reject local misconceptions that the AIDS virus can be transmitted through mosquito bites, or through kissing someone infected with HIV, or by sharing food with a person who has AIDS is also higher in urban areas than in rural areas. However, men residing in rural areas are more likely than men in urban areas to know that a healthy-looking person can have the AIDS virus (58 versus 46 percent, respectively). There is almost no difference between men in urban and rural areas on the combined indicator including rejecting the most common misconceptions *and* knowing that a healthy-looking person can have the AIDS virus.

.

The variations are more pronounced by region. For example, while 76 percent of women in Lori region say that a healthy-looking person can have HIV, only 32 percent of women in Aragatsotn region give the same answer. Among men, 87 percent in Kotayk region say that a healthy-looking person can have HIV, compared with 19 percent in Lori region. There is a vast difference in the rejection of misconceptions between women and men residing in the same region. For example, 76 percent of women in Lori say that a healthy-looking person can have HIV versus 19 percent of men residing in the same region. A less pronounced difference is seen among residents of Yerevan; 72 percent of women say a healthy-looking person can have HIV versus 36 percent of men who feel the same way. The same is true for respondents in Shirak (69 percent of women and 45 percent of men).

Table 13.3.1 Comprehensive knowledge 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 a comprehensive knowledge about AIDS by background characteristics, Armenia 2010

Background characteristic	Percentage of women who say that:				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 a comprehensive knowledge about AIDS[2]	Number of women
	A healthy-looking person can have the AIDS virus	AIDS cannot be transmitted by mosquito bites	AIDS cannot be transmitted by kissing someone infected with the AIDS virus	A person cannot become infected by sharing food with a person who has AIDS			
Age							
15-24	59.1	43.0	46.8	60.2	20.6	15.8	1,893
15-19	53.9	36.0	38.6	53.6	15.7	10.4	861
20-24	63.3	48.9	53.6	65.8	24.7	20.3	1,032
25-29	67.6	51.1	55.9	72.4	27.8	22.8	950
30-39	69.7	49.2	56.8	69.2	26.9	23.3	1,481
40-49	66.7	48.6	51.9	67.8	24.4	20.3	1,598
Marital status							
Never married	59.8	42.9	49.4	64.3	21.4	16.8	1,911
Ever had sex	*	*	*	*	*	*	9
Never had sex	59.8	42.8	49.4	64.2	21.3	16.6	1,903
Married/living together	67.6	49.2	53.5	67.2	25.7	21.6	3,626
Divorced/separated/widowed	68.8	51.9	51.7	70.2	25.9	21.7	385
Employment abroad (past 3 years)[3]							
Worked abroad	67.2	53.0	52.2	63.4	26.5	22.7	165
Did not work abroad	65.1	47.2	52.1	66.5	24.3	19.9	5,755
Spousal employment abroad reported by ever-married women[4]							
Woman worked abroad herself	(60.0)	(55.1)	(52.6)	(62.1)	(30.5)	(24.8)	39
Husband worked abroad[4]	70.3	44.1	49.5	64.6	22.5	18.6	826
Both worked abroad	67.2	48.0	55.9	70.4	24.5	21.3	87
None worked abroad	67.2	51.0	54.3	68.2	26.6	22.4	3,045
Residence							
Urban	69.6	48.4	53.9	69.5	25.3	21.1	3,641
Rural	58.0	45.7	49.2	61.5	22.9	18.3	2,281
Region							
Yerevan	72.3	51.9	54.2	69.9	27.8	23.9	2,069
Aragatsotn	31.8	57.6	40.1	63.5	22.9	18.5	260
Ararat	56.6	80.1	75.2	77.6	51.1	40.8	379
Armavir	58.8	51.5	59.6	70.5	29.6	26.4	535
Gegharkunik	68.3	51.4	61.9	73.3	35.6	26.6	459
Lori	76.4	16.8	43.1	55.0	4.2	3.0	513
Kotayk	60.6	25.0	57.0	73.3	10.4	8.2	543
Shirak	68.5	42.4	39.4	51.3	17.4	15.9	598
Syunik	35.6	53.7	35.6	64.8	13.6	1.3	198
Vayots Dzor	65.7	56.3	31.5	58.2	20.8	17.6	131
Tavush	63.9	46.7	39.0	53.0	23.4	18.8	238
Education							
Basic	47.9	29.3	34.4	44.9	13.6	9.3	347
Secondary	57.6	41.4	42.4	57.4	17.3	13.2	2,137
Secondary special	68.8	49.2	56.0	69.7	25.8	21.2	1,681
Higher	74.3	56.5	63.6	78.6	33.7	29.3	1,757
Wealth quintile							
Lowest	51.2	45.8	43.4	56.4	21.0	16.7	1,151
Second	61.2	43.7	53.8	64.6	22.9	17.9	1,211
Middle	68.2	41.4	49.0	62.8	20.7	16.5	1,139
Fourth	74.3	50.2	58.3	74.2	28.6	23.9	1,146
Highest	70.7	55.3	55.5	73.6	28.3	24.8	1,275
Total	65.2	47.4	52.1	66.5	24.4	20.0	5,922

Note: Total includes two women with information missing on employment abroad and 14 women with information missing on spousal employment abroad. Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

[1] The two most common local misconceptions involve transmission by mosquito bites and by kissing someone infected with the AIDS virus.

[2] Comprehensive knowledge means knowing that consistent use of a condom during sexual intercourse and having just one uninfected faithful partner can reduce the chance of getting the AIDS virus, knowing that a healthy-looking person can have the AIDS virus, and rejecting the two most common local misconceptions about HIV/AIDS transmission or prevention.

[3] "Employment abroad" refers to working abroad during the three years before the survey for three or more months at a time.

[4] In the 2010 ADHS, information on husband's employment abroad was collected from ever-married women age 15-49. Men in the 2010 ADHS were not asked about their wives' employment outside the country.

Table 13.3.2 Comprehensive knowledge 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 a comprehensive knowledge about AIDS by background characteristics, Armenia 2010

Background characteristic	Percentage of men who say that: A healthy-looking person can have the AIDS virus	AIDS cannot be transmitted by mosquito bites	AIDS cannot be transmitted by kissing someone infected with the AIDS virus	A person cannot become infected by sharing food with 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 a comprehensive knowledge about AIDS[2]	Number of men
Age							
15-24	41.1	42.3	28.8	44.7	9.2	8.9	527
15-19	29.9	37.7	20.7	37.0	3.9	3.9	229
20-24	49.7	45.8	35.1	50.6	13.3	12.7	298
25-29	51.2	53.9	43.4	63.7	17.1	17.0	285
30-39	55.4	58.6	48.3	64.4	17.9	17.3	391
40-49	59.0	61.6	46.7	62.8	24.5	24.0	381
Marital status							
Never married	43.8	47.6	36.0	51.6	12.5	12.2	707
Ever had sex	49.6	58.2	48.1	64.5	17.4	16.9	414
Never had sex	35.7	32.6	18.8	33.5	5.5	5.5	293
Married/living together	56.3	57.5	44.0	61.9	19.5	19.0	855
Divorced/separated/widowed	(57.8)	(55.3)	(52.0)	(61.2)	(24.5)	(24.5)	22
Employment abroad (past 3 years)[3]							
Worked abroad	54.0	41.8	35.1	54.7	14.8	14.8	181
Did not work abroad	50.3	54.6	41.3	57.7	16.5	16.1	1,395
Residence							
Urban	46.1	64.2	47.8	63.6	16.0	15.7	984
Rural	58.4	34.7	28.7	47.0	17.1	16.5	600
Region							
Yerevan	36.3	79.7	60.0	74.2	17.7	17.4	593
Aragatsotn	41.8	34.9	46.0	52.1	27.8	27.8	70
Ararat	75.3	47.9	45.8	60.9	37.6	37.4	125
Armavir	69.6	21.2	30.6	33.4	14.4	13.5	148
Gegharkunik	70.7	26.4	38.2	68.0	19.9	18.4	83
Lori	19.0	36.9	7.1	16.8	5.3	5.3	130
Kotayk	87.3	19.7	30.3	44.0	9.9	9.9	148
Shirak	45.3	73.4	10.5	57.3	6.5	5.6	131
Syunik	44.1	35.0	34.1	36.7	20.5	20.5	63
Vayots Dzor	44.8	45.5	3.7	34.8	1.9	1.9	24
Tavush	75.3	34.1	43.3	81.7	10.6	10.2	68
Education							
Basic	44.3	30.8	25.8	37.1	5.0	4.8	188
Secondary	50.5	43.0	31.3	48.4	12.8	12.8	619
Secondary special	46.5	56.2	37.7	59.7	14.4	13.6	301
Higher	56.2	72.8	60.2	75.4	26.9	26.3	477
Wealth quintile							
Lowest	52.2	34.7	27.5	44.1	15.8	14.6	332
Second	60.0	41.7	31.8	52.0	16.3	16.3	285
Middle	47.2	54.1	41.9	52.6	12.2	12.2	312
Fourth	53.4	58.3	45.5	63.0	18.7	18.7	332
Highest	41.7	75.5	55.3	74.3	18.9	18.3	323
Total	50.7	53.1	40.6	57.3	16.4	16.0	1,584

Note: Total includes seven men with information missing on employment abroad. Figures in parentheses are based on 25-49 unweighted cases.

[1] The two most common local misconceptions involve transmission by mosquito bites and by kissing someone infected with the AIDS virus.

[2] Comprehensive knowledge means knowing that consistent use of a condom during sexual intercourse and having just one uninfected faithful partner can reduce the chance of getting the AIDS virus, knowing that a healthy-looking person can have the AIDS virus, and rejecting the two most common local misconceptions about HIV/AIDS transmission or prevention.

[3] "Employment abroad" refers to working abroad during the three years before the survey for three or more months at a time.

For most of the misconceptions about HIV/AIDS transmission, the percentage of respondents who correctly reject local misconceptions increases with level of education for both women and men. The relationship with wealth is not linear. However, for most of the misconceptions, poorer respondents tend to have a higher level of misconceptions about HIV/AIDS transmission than wealthier respondents.

Tables 13.3.1 and 13.3.2 provide an assessment of the level of comprehensive knowledge of HIV/AIDS prevention and transmission. Comprehensive knowledge is defined as: (1) knowing that both condom use and limiting sexual partners to one HIV-negative person are HIV/AIDS prevention methods, (2) being aware that a healthy-looking person can have HIV, and (3) rejecting the two most common local misconceptions. The 2010 ADHS results indicate that only one in five women (20 percent) and one in six men (16 percent) in Armenia have comprehensive knowledge of HIV/AIDS prevention and transmission.

This proportion varies by respondent's background characteristics. As in the case with individual aspects of AIDS transmission, young respondents age 15-19 and respondents who never married or who never had sex are less likely than other respondents to have a comprehensive knowledge of AIDS.

Variation by urban-rural residence is small, however, comprehensive knowledge about HIV/AIDS varies widely by region. Among women, it ranges from 1 percent in Syunik to 41 percent in Ararat. Among men, it ranges from 2 percent in Vayots Dzor to 37 percent in Ararat. Large differences in comprehensive knowledge about HIV/AIDS are observed between women and men within the same region. In Syunik, 1 percent of women have a comprehensive knowledge about HIV/AIDS compared with 21 percent of men in the same region. The same pattern is seen in Vayots Dzor where 18 percent of women and 2 percent of men have a comprehensive knowledge of HIV/AIDS.

Women and men with higher levels of schooling are more likely than those with less schooling to be aware of various preventive methods. Among women, for example, 29 percent of women with higher education have comprehensive knowledge about prevention and transmission of HIV/
AIDS, compared with 9 percent of women with only basic education. Similarly, among men, the level of comprehensive knowledge is 26 percent among men with higher education compared with 5 percent among men with basic education.

Comprehensive knowledge is lowest among women and men in the middle wealth quintile (17 and 12 percent, respectively). However, in general, comprehensive knowledge tends to increase with wealth. For example, 17 percent of women in the lowest quintile have comprehensive knowledge about AIDS, compared with 25 percent of women in the highest wealth quintile. Among men, the corresponding proportions are 15 percent in the lowest quintile and 18 percent in the highest.

Over the past five years, the percentage of women who have comprehensive knowledge about HIV/AIDS has decreased from 26 percent in 2005 to 20 percent in 2010, and the percentage of men has decreased from 24 to 16 percent over the same period.

13.3 KNOWLEDGE OF PREVENTION OF MOTHER-TO-CHILD TRANSMISSION OF HIV

Increasing the level of general knowledge about transmission of HIV from mother to child and reducing the risk of transmission by use of antiretroviral drugs is critical to the prevention of mother-to-child transmission (MTCT) of HIV. To assess MTCT knowledge, respondents in the 2010 ADHS were asked if the virus that causes AIDS can be transmitted from a mother to her baby during pregnancy, delivery, or breastfeeding and whether they know of any special drugs a mother with HIV can take to reduce the risk of transmission to the baby.

Table 13.4 shows that in Armenia, women are more likely than men to know of the risk of mother-to-child transmission of HIV through breastfeeding (44 percent versus 35 percent) and to know that the risk of mother-to-child transmission of HIV can be reduced by the mother taking special drugs during pregnancy (17 percent versus 9 percent). Pregnant women are more likely than nonpregnant women to know that HIV can be transmitted by breastfeeding (60 percent versus 44 percent); they are also more likely to know that the risk of MTCT can be reduced by a mother taking special drugs during pregnancy (25 percent versus 17 percent).

Respondents age 15-19, those who never married or who never had sex, and respondents living in rural areas are somewhat less likely than other respondents to know that HIV can be transmitted by breastfeeding or that the risk of MTCT can be reduced by a mother taking special drugs during pregnancy. This knowledge increases with education and tends to increase with wealth, although the variation by wealth is not linear.

Overall, only 12 percent of women and 7 percent of men know that HIV can be transmitted through breastfeeding *and* that the risk of MTCT can be reduced by the mother taking special drugs during pregnancy. Knowledge is lowest among youngest respondents age 15-19 (7 percent of women and less than 1 percent of men) when compared with older respondents. Furthermore, respondents who have never married (8 percent of women and 5 percent of men) and especially those who never had sex (8 percent of women and less than 1 percent of men) are the least likely to know that HIV can be transmitted through breastfeeding *and* that the risk of MTCT can be reduced by the mother taking special drugs during pregnancy. Almost twice as many pregnant women (21 percent) as nonpregnant women (11 percent) have knowledge of MTCT and how it can be reduced. Only a slightly higher percentage of female respondents in urban areas than in rural areas know about MTCT and the use of special drugs to reduce the risk of MTCT. By region, MTCT knowledge among women ranges from less than 1 percent in Aragatsotn and Ararat regions to 29 percent in Armavir. Among men, MTCT knowledge ranges from less than 1 percent in Aragatsotn, Ararat, Lori, Kotayk, and Vayots Dzor regions to 18 percent in Syunik.

Table 13.4 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 the risk of mother-r-to-child transmission (MTCT) of HIV can be reduced by mother taking special drugs during pregnancy, by background characteristics, Armenia 2010

	Women				Men			
	Percentage who know that:				Percentage who know that:			
Background characteristic	HIV 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 can be transmitted by breast-feeding	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								
15-24	39.9	13.5	9.6	1,893	23.2	3.8	2.6	527
15-19	31.8	9.5	6.5	861	17.7	1.3	0.4	229
20-24	46.6	16.8	12.2	1,032	27.5	5.7	4.2	298
25-29	44.3	17.4	12.0	950	40.7	10.7	8.7	285
30-39	46.4	19.8	13.5	1,481	41.9	11.0	8.6	391
40-49	48.1	18.7	11.6	1,598	38.9	12.4	8.7	381
Marital status								
Never married	35.6	12.5	8.0	1,911	26.7	6.3	4.8	707
Ever had sex	*	*	*	9	35.7	10.4	8.1	414
Never had sex	35.6	12.5	7.9	1,903	14.0	0.6	0.1	293
Married/living together	48.8	19.5	13.6	3,626	41.4	10.9	8.2	855
Divorced/separated/widowed	47.1	16.8	9.3	385	(36.7)	(11.7)	(6.5)	22
Employment abroad (past 3 years)[1]								
Worked abroad	45.2	20.0	11.7	165	33.8	13.4	9.0	181
Did not work abroad	44.4	17.0	11.5	5,755	35.1	8.3	6.4	1,395
Spousal employment abroad reported by ever-married women[2]								
Woman worked abroad herself	(40.6)	(30.7)	(12.7)	39	na	na	na	na
Husband worked abroad[2]	46.9	17.7	11.5	826	na	na	na	na
Both worked abroad	43.2	16.1	9.8	87	na	na	na	na
None worked abroad	49.4	19.7	13.8	3,045	na	na	na	na
Currently pregnant								
Pregnant	59.9	24.6	20.9	178	na	na	na	na
Not pregnant or not sure	43.9	16.9	11.2	5,744	na	na	na	na
Residence								
Urban	46.9	17.7	12.2	3,641	38.0	9.9	8.6	984
Rural	40.5	16.1	10.4	2,281	29.4	7.2	3.4	600
Region								
Yerevan	48.7	18.2	13.6	2,069	43.1	11.3	10.7	593
Aragatsotn	41.4	1.0	0.7	260	50.7	0.2	0.2	70
Ararat	12.3	2.7	0.9	379	7.4	0.0	0.0	125
Armavir	56.3	37.7	29.0	535	69.9	4.4	2.5	148
Gegharkunik	33.0	18.3	3.5	459	34.0	37.3	16.4	83
Lori	49.6	7.7	6.7	513	0.0	0.0	0.0	130
Kotayk	33.2	25.0	9.0	543	18.3	3.4	0.9	148
Shirak	52.8	13.8	11.9	598	30.9	13.4	8.1	131
Syunik	47.1	2.8	2.8	198	47.5	19.3	17.5	63
Vayots Dzor	71.2	19.3	19.2	131	37.0	0.0	0.0	24
Tavush	33.3	20.4	16.6	238	17.2	1.8	1.8	68
Education								
Basic	30.2	12.6	9.9	347	25.7	5.6	4.9	188
Secondary	41.0	12.8	8.7	2,137	31.9	7.0	4.4	619
Secondary special	49.1	19.3	13.3	1,681	38.4	8.2	5.8	301
Higher	47.0	21.1	13.5	1,757	39.6	13.1	10.7	477
Wealth quintile								
Lowest	41.7	15.1	11.2	1,151	36.8	7.5	3.9	332
Second	38.1	19.0	11.3	1,211	25.4	5.5	2.3	285
Middle	46.8	14.7	10.3	1,139	35.9	10.8	8.0	312
Fourth	45.4	18.6	12.2	1,146	36.7	10.5	9.9	332
Highest	49.9	17.9	12.5	1,275	37.7	9.7	8.7	323
Total	44.4	17.1	11.5	5,922	34.7	8.9	6.6	1,584

Note: Total includes 2 women and 7 men with information missing on employment abroad, and 14 women with information missing on spousal employment abroad. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed. Figures in parentheses are based on 25-49 unweighted cases.
na = Not applicable
[1] "Employment abroad" refers to working abroad during the past three years before the survey for three or more months at a time.
[2] In the 2010 ADHS, information on husband's employment abroad was collected from ever-married women age 15-49. Men in the 2010 ADHS were not asked about their wives' employment outside the country.

13.4 STIGMA ASSOCIATED WITH AIDS AND ATTITUDES RELATED TO HIV/AIDS

Knowledge and beliefs about AIDS can affect how people treat those they know to be living with HIV. Widespread stigma and discrimination in a population can adversely affect people's willingness to be tested for HIV as well as their adherence to antiretroviral therapy. Reduction of stigma and discrimination in a population is, thus, an important impetus to the success of programs targeting HIV/AIDS prevention and control.

In the 2010 ADHS, a number of questions were posed to respondents to assess the level of stigma associated with HIV and AIDS. Questions asked about the respondents' willingness or unwillingness to buy vegetables from an infected vegetable seller, to let others know the HIV status of family members, and to take care of relatives who have the AIDS virus in their own household. They were also asked whether an HIV-positive female who is not sick should be allowed to continue teaching. Tables 13.5.1 and 13.5.2 show the percentages of women and men who express positive attitudes toward people with HIV among those who have heard about HIV/AIDS, by background characteristics.

Both women and men tend to express more accepting attitudes toward HIV-infected relatives than toward shopkeepers or teachers. Fewer than three in ten women (29 percent) and 41 percent of men say that they would not want to keep secret that a family member was infected with the AIDS virus, and about half of respondents (49 percent of women and 54 percent of men) say they would be willing to care for a family member with the AIDS virus in their home. In contrast, only 19 percent of women and 22 percent of men say that an HIV-positive teacher should be allowed to continue teaching, and only 14 percent of women and 16 percent of men would buy fresh vegetables from a shopkeeper with AIDS. The percentage expressing accepting attitudes on all four measures is low, 1 percent among women and less than 5 percent among men.

Higher education, wealth, and urban residence are generally related to more accepting attitudes toward people who are HIV positive, with the exception of attitudes about not wanting to keep secret a family member's HIV status. Among women, for example, the percentage expressing accepting attitudes toward a female teacher who is infected with AIDS but is not sick is 21 percent among urban women compared with 14 percent among rural women, and ranges from 9 percent among women who have basic secondary education to 29 percent among those with a higher than secondary specialized education. The opposite patterns are observed among both women and men concerning behavior toward HIV-infected relatives, specifically whether they would want to keep secret the illness of a family member. Rural residents and those in the lower wealth quintiles are generally more likely to say that they would not want to keep secret a family member's infection with the AIDS virus.

Across regions, women in Gegharkunik are the most likely to be willing to take care of a relative with HIV/AIDS at home (62 percent), women in Yerevan are the most likely to say that they would buy fresh vegetables from a shopkeeper or vendor who has the AIDS virus (23 percent) or to say that an HIV-positive female teacher should be allowed to continue teaching (25 percent). Women in Ararat and Armavir (45 and 46 percent, respectively) are the most likely to not want a family member's HIV positive status to remain secret.

As for men, those in Vayots Dzor are the most likely to be willing to take care of a relative with HIV/AIDS at home (85 percent), men in Gegharkunik are the most likely to say that they would buy fresh vegetables from a shopkeeper or vendor who has the AIDS virus (31 percent), men in Yerevan are the most likely to say that that an HIV-positive female teacher should be allowed to continue teaching (43 percent), and men in Ararat are the most likely to not want a family member's HIV positive status to remain secret (85 percent). The percentage of men who express accepting attitudes on all indicators is highest among residents of Gegharkunik (11 percent), followed by those residing in Yerevan (9 percent) and Tavush (5 percent).

Table 13.5.1 Accepting attitudes toward those living with HIV/AIDS: Women

Among women age 15-49 who have heard of AIDS, percentage expressing specific accepting attitudes toward people with AIDS, by background characteristics, Armenia 2010

Background characteristic	Percentage of women who: Are willing to care for a family member with the AIDS virus in the respondent's home	Would buy fresh vegetables from shopkeeper who has the AIDS virus	Say that a female teacher with the AIDS virus but is not sick should be allowed to continue teaching	Would not want to keep secret that a family member got infected with the AIDS virus	Percentage expressing accepting attitudes on all four indicators	Number of women who have heard of AIDS
Age						
15-24	44.6	13.0	19.6	24.9	1.4	1,740
15-19	41.0	11.9	19.0	25.3	1.4	746
20-24	47.3	13.7	20.0	24.6	1.5	993
25-29	50.7	16.3	19.9	27.8	1.5	927
30-39	49.1	13.1	16.0	29.6	1.2	1,454
40-49	51.5	14.3	18.9	33.3	1.6	1,552
Marital status						
Never married	43.3	14.6	20.9	24.9	1.1	1,758
Ever had sex	*	*	*	*	*	8
Never had sex	43.3	14.4	20.8	24.8	1.0	1,750
Married/living together	51.7	13.7	17.3	30.2	1.7	3,539
Divorced/separated/ widowed	44.9	13.0	18.7	35.3	0.9	375
Employment abroad (past 3 years)[1]						
Worked abroad	53.6	29.7	19.0	36.2	3.7	159
Did not work abroad	48.5	13.5	18.5	28.7	1.4	5,512
Spousal employment abroad reported by ever-married women[2]						
Woman worked abroad herself	(57.7)	(29.9)	(18.7)	(38.5)	(0.0)	38
Husband worked abroad[2]	51.6	10.6	17.9	28.6	1.2	806
Both worked abroad	52.8	30.6	17.8	44.1	6.9	85
None worked abroad	50.8	13.8	17.3	30.9	1.6	2,974
Residence						
Urban	48.7	17.4	21.2	27.8	1.8	3,564
Rural	48.5	8.0	14.0	30.7	0.8	2,108
Region						
Yerevan	53.0	23.3	24.7	25.9	2.1	2,043
Aragatsotn	11.3	2.7	2.6	17.9	0.0	212
Ararat	38.3	4.2	13.0	45.4	0.0	320
Armavir	56.8	12.0	20.2	45.6	2.8	530
Gegharkunik	62.4	8.7	22.6	12.8	2.6	415
Lori	47.4	2.1	8.5	47.9	0.0	505
Kotayk	42.7	10.4	15.6	28.9	1.0	535
Shirak	56.0	17.8	22.5	16.9	0.7	577
Syunik	0.0	0.0	0.0	19.4	0.0	194
Vayots Dzor	49.0	5.7	7.7	24.8	0.7	115
Tavush	54.6	8.2	14.0	30.6	0.8	226
Education						
Basic	43.6	8.4	8.8	31.6	0.0	284
Secondary	47.6	7.0	11.2	28.4	0.8	2,002
Secondary special	49.5	13.1	18.3	29.8	1.7	1,652
Higher	49.8	23.5	28.7	28.1	2.2	1,735
Wealth quintile						
Lowest	46.2	8.3	12.1	33.6	0.8	1,038
Second	48.1	8.1	14.3	25.9	0.7	1,144
Middle	47.2	14.1	18.8	29.0	1.7	1,104
Fourth	50.7	19.0	23.7	29.3	2.1	1,129
Highest	50.6	19.1	22.7	27.2	1.8	1,259
Total	48.6	13.9	18.5	28.9	1.4	5,673

Note: Total includes 2 women with information missing on employment abroad and 12 women with information missing on spousal employment abroad. 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] "Employment abroad" refers to working abroad during the past three years before the survey for three or more months at a time.

[2] In the 2010 ADHS, information on husband's employment abroad was collected from ever married women age 15-49.

Table 13.5.2 Accepting attitudes toward those living with HIV/AIDS: Men

Among men age 15-49 who have heard of HIV/AIDS, percentage expressing specific accepting attitudes toward people with AIDS, by background characteristics, Armenia 2010

Background characteristic	Percentage of men who: Are willing to care for a family member with the AIDS virus in the respondent's home	Would buy fresh vegetables from shopkeeper who has the AIDS virus	Say that a female teacher with the AIDS virus but is not sick should be allowed to continue teaching	Would not want to keep secret that a family member got infected with the AIDS virus	Percentage expressing accepting attitudes on all four indicators	Number of men who have heard of AIDS
Age						
15-24	51.9	12.9	22.0	33.8	3.2	480
15-19	49.2	10.9	19.3	25.3	1.5	190
20-24	53.7	14.2	23.8	39.3	4.4	291
25-29	48.7	14.7	19.3	41.6	4.7	279
30-39	55.9	16.1	21.2	45.1	4.3	388
40-49	59.4	19.0	24.6	47.0	6.4	373
Marital status						
Never married	50.1	15.1	21.6	33.5	3.9	655
Ever had sex	57.3	19.2	27.6	33.1	5.4	413
Never had sex	37.8	8.2	11.4	34.2	1.4	242
Married/living together	57.5	15.8	21.8	47.3	5.0	843
Divorced/separated/widowed	(46.6)	(20.4)	(34.7)	(45.8)	(8.1)	22
Employment abroad (past 3 years)[1]						
Worked abroad	40.3	10.5	10.7	41.0	1.3	180
Did not work abroad	56.2	16.3	23.5	41.2	5.0	1,336
Residence						
Urban	60.2	20.9	31.1	37.2	6.2	968
Rural	43.6	6.3	5.9	48.6	1.7	553
Region						
Yerevan	71.2	28.1	43.1	34.4	8.7	590
Aragatsotn	46.3	5.6	0.7	30.9	0.0	58
Ararat	6.4	0.7	0.2	84.5	0.0	114
Armavir	70.9	2.3	5.4	53.8	0.4	145
Gegharkunik	66.0	30.5	20.8	45.8	11.0	77
Lori	10.3	0.0	0.0	4.1	0.0	113
Kotayk	50.9	6.4	9.9	61.9	2.0	147
Shirak	17.5	6.6	12.5	60.8	1.7	130
Syunik	72.1	21.8	20.0	2.0	0.0	57
Vayots Dzor	84.9	3.3	24.1	14.2	1.8	21
Tavush	70.6	12.8	10.6	27.9	5.1	68
Education						
Basic	50.2	14.7	14.9	38.5	6.0	163
Secondary	47.9	10.2	12.5	43.3	2.5	587
Secondary special	54.9	14.6	26.4	46.2	4.6	295
Higher	62.8	23.1	33.2	36.9	6.5	475
Wealth quintile						
Lowest	49.3	5.0	4.3	48.7	1.1	302
Second	45.6	12.6	14.6	46.7	3.9	271
Middle	46.8	16.9	21.8	39.9	4.5	300
Fourth	59.2	22.3	29.7	38.7	9.5	329
Highest	67.9	19.9	37.1	34.0	3.4	318
Total	54.2	15.6	21.9	41.4	4.6	1,520

Note: Total includes 4 men with information missing on employment abroad. Figures in parentheses are based on 25-49 unweighted cases.
[1] "Employment abroad" refers to working abroad during the past three years before the survey for three or more months at a time.

Accepting attitudes toward those living with HIV/AIDS for all four specified attitudes is higher among men than among women. In the past five years there has been an increase in the percentage of men who have accepting attitudes toward relatives and nonrelatives who are HIV positive. In 2010, 54 percent of men said that they are willing to care at home for a relative who is sick with the AIDS virus, a noticeable increase from the 15 percent reported in 2005. Similarly, more men in 2010 (41 percent) say that they would not want to keep a family member's HIV-positive status a secret, indicating an increase from 30 percent in 2005. Only 5 percent of men express accepting attitudes on all four indicators, higher than the 1 percent reported in 2005.

Among women, all accepting attitudes improved considerably since 2005, except for not wanting a family member's HIV-positive status to remain a secret. For example, 49 percent of women in 2010 say that they are willing to care at home for a relative, who is sick with HIV/AIDS, a noticeable increase from 15 percent in 2005. However, 29 percent of women in 2010 would not want a family member's HIV-positive status to remain a secret, a decline compared with 35 percent of women in 2005. When taking into account all four stigmas toward persons with AIDS, only 1 percent of women express accepting attitudes on all indicators, the same as reported in 2005.

13.5 Attitudes toward 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. To assess the ability of women to negotiate safer sex with a spouse who has sex with other women or who has an STI, women and men were asked if they thought that a wife was justified (1) in refusing to have sexual intercourse with her husband if she knows he has sex with other women, or (2) in asking that he uses condoms if she knows he has an STI.

Table 13.6 shows that more than eight in ten women (82 percent) and more than half of men (55 percent) agree that a woman is justified in refusing to have sexual intercourse with her husband if she knows he has sex with other women. More than eight in ten women (85 percent) and close to nine in ten men (89 percent) think that a woman is justified in asking her husband to use a condom if he has an STI.

The data show some variation by background characteristics of the respondents. Youngest respondents age 15-19 and those who never married or who never had sex are less supportive than other subgroups of a woman (1) refusing to have sexual intercourse with her husband if she knows he has sex with other women, or (2) requesting that her husband use a condom if she knows he has an STI. Women who worked abroad in the past three years are more likely to support a wife in both specified scenarios. Among men, however, those who worked abroad in the past three years are less likely to be supportive of a wife refusing sexual intercourse with her husband if he has sex with other women than men who did not work abroad (50 percent versus 57 percent). Similar to women, men who worked abroad in the past three years are more likely to be supportive of a wife asking that her husband use a condom if he has an STI.

Urban respondents are more likely than rural respondents to think that a wife is justified in refusing to have sexual intercourse with her husband, if she knows he has sex with other women, or asking that he uses condoms, if she knows he has an STI. In terms of regional variations, women in Yerevan are the most supportive of a woman refusing to have sexual intercourse with her husband if she knows he has sex with other women (92 percent), or a woman requesting that her husband use a condom if he has an STI (95 percent). Women in Syunik are the least supportive (51 and 26 percent, respectively). Among men, the percentage who think a wife is justified in refusing sex with her husband if he has sex with other women ranges from 13 percent, each, in Ararat and Lori to 81 percent in Shirak and Syunik. The percentage who think that a wife is justified in requesting that her husband use a condom if he has an STI ranges from 73 percent in Vayots Dzor to 100 percent in Armavir.

Respondents with more education and those in wealthier households tend to be more supportive of women negotiating safer sex with their husbands than respondents with less education and in poorer households.

Table 13.6 Attitudes toward negotiating safer sexual relations with husband

Percentage of women and men age 15-49 who believe that a woman is justified in refusing to have sexual intercourse with her husband if she knows that he has sexual intercourse with other women, and percentage who believe that a woman is justified in asking that they use a condom if she knows that her husband has a sexually transmitted infection (STI), by background characteristics, Armenia 2010

	Women			Men		
	Woman is justified in:			Woman is justified in:		
Background characteristic	Refusing to have sexual intercourse with husband if she knows he has sex with other women	Asking that they use a condom if she knows that her husband has an STI	Number of women	Refusing to have sexual intercourse with husband if she knows he has sex with other women	Asking that they use a condom if she knows that her husband has an STI	Number of men
Age						
15-24	72.9	75.2	1,893	48.7	79.6	527
15-19	64.8	64.7	861	45.2	68.9	229
20-24	79.6	83.9	1,032	51.4	87.7	298
25-29	84.4	87.3	950	47.4	90.5	285
30-39	87.8	91.3	1,481	62.7	95.3	391
40-49	85.3	88.5	1,598	63.2	95.6	381
Marital status						
Never married	72.6	73.8	1,911	45.9	81.9	707
Ever had sex	*	*	9	53.2	92.1	414
Never had sex	72.6	73.7	1,903	35.5	67.3	293
Married/living together	86.2	90.2	3,626	63.2	95.2	855
Divorced/separated/widowed	86.6	87.9	385	(60.2)	(97.4)	22
Employment abroad (past 3 years)[1]						
Worked abroad	86.4	90.1	165	49.8	98.1	181
Did not work abroad	81.7	84.6	5,755	56.5	88.3	1,395
Spousal employment abroad reported by ever-married women[2]						
Woman worked abroad herself	(90.6)	(94.2)	39	na	na	na
Husband worked abroad[2]	85.2	90.8	826	na	na	na
Both worked abroad	88.2	90.7	87	na	na	na
None worked abroad	86.4	89.7	3,045	na	na	na
Residence						
Urban	85.8	88.4	3,641	62.8	90.1	984
Rural	75.5	78.9	2,281	43.3	88.0	600
Region						
Yerevan	92.2	94.9	2,069	69.0	89.1	593
Aragatsotn	88.9	80.4	260	20.4	80.4	70
Ararat	76.5	71.7	379	13.0	73.2	125
Armavir	79.7	84.3	535	70.4	100.0	148
Gegharkunik	76.0	77.6	459	49.5	89.1	83
Lori	78.4	86.7	513	13.4	93.3	130
Kotayk	80.3	92.1	543	49.8	95.9	148
Shirak	76.2	82.2	598	80.6	88.6	131
Syunik	50.7	25.5	198	80.6	81.3	63
Vayots Dzor	79.4	86.9	131	39.6	73.1	24
Tavush	60.8	70.1	238	52.2	98.5	68
Education						
Basic	59.6	62.4	347	46.4	81.6	188
Secondary	77.6	80.8	2,137	48.8	88.5	619
Secondary special	85.5	88.5	1,681	60.0	89.0	301
Higher	87.8	90.4	1,757	64.7	93.5	477
Wealth quintile						
Lowest	75.5	78.1	1,151	44.5	86.3	332
Second	75.0	78.2	1,211	50.8	89.6	285
Middle	81.0	83.3	1,139	57.0	90.4	312
Fourth	85.9	89.2	1,146	60.5	91.3	332
Highest	91.0	94.2	1,275	64.0	88.9	323
Total	81.8	84.7	5,922	55.4	89.3	1,584

Note: Total includes 2 women and 7 men with information missing on employment abroad, and 14 women with information missing on spousal employment abroad. 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] "Employment abroad" refers to working abroad during the past three years before the survey for three or more months at a time.
[2] In the 2010 ADHS, information on husband's employment abroad was collected from ever-married women age 15-49. Men in the 2010 ADHS were not asked about their wives' employment outside the country.

13.6 ATTITUDES TOWARD CONDOM EDUCATION FOR YOUTH

Condom use is one of the main strategies for combating the spread of HIV. Social acceptance of condom use among young people is a key factor determining use of condoms to prevent the sexual transmission of HIV and other STIs, as well as to prevent early pregnancy. However, educating youth about condoms is sometimes controversial, with some saying it promotes early sexual experimentation. Others are in favor of teaching youth to abstain from sexual intercourse until they are married. To measure attitudes toward education about condoms, the 2010 ADHS respondents were asked if they thought that children age 12-14 should be taught about using a condom to avoid getting AIDS. The results are shown in Table 13.7. Because the table focuses on adult opinion, results are tabulated for respondents age 18-49.

More than half of women (55 percent) and six in ten men (60 percent) agree that children age 12-14 years should be taught about the use of condoms to avoid getting AIDS. Younger respondents, age 18-19, and never married men are less likely than other respondents to agree on safe sex education for children age 12-14. Men who worked abroad over the past three years are considerably less likely to agree that children age 12-14 years should be taught about the use of condoms to avoid getting AIDS (47 percent) than men who did not work abroad (61 percent). Ever-married women who report that both they and their partners worked abroad are more likely (64 percent) than other women (45 to 55 percent) to support education of children age 12-14 about condom use.

Urban women and men are more likely than their rural counterparts to agree on teaching children age 12-14 about condom use to avoid getting AIDS. By region, agreement on teaching children age 12-14 about the use of condoms ranges for women from 19 percent in Syunik to 68 percent in Yerevan and for men from 17 percent in Tavush to 85 percent in Syunik. Similar to the pattern seen with comprehensive knowledge about HIV/AIDS prevention and transmission, attitudes toward education of children about condom use vary greatly by sex within the same region. Differences between women and men are especially noticeable in Syunik, Aragatsotn, Shirak, and Tavush. Women in Syunik and Aragatsotn (19 and 20 percent, respectively) are far less likely to agree on teaching children age 12-14 about the use of condoms than men in these regions (85 and 62 percent, respectively). The opposite is true for respondents in Shirak and Tavush, where women (55 percent and 41 percent) are far more likely to agree with condom education for children age 12-14 than men (29 and 17 percent, respectively).

The proportion of respondents who support teaching children age 12-14 about condoms increases with level of education and wealth quintile. For example, 67 percent of women with higher than secondary education agree on instructing children age 12-14 about condoms, compared with 41 percent of women with basic education. The comparable figures for men are 68 and 55 percent, respectively.

Table 13.7 Adult support of 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, Armenia 2010

Background characteristic	Women		Men	
	Percentage who agree	Number of women	Percentage who agree	Number of men
Age				
18-24	52.3	1,468	54.2	356
18-19	46.4	437	41.4	58
20-24	54.8	1,032	56.7	298
25-29	59.3	950	58.6	285
30-39	56.3	1,481	63.4	391
40-49	54.6	1,598	61.0	381
Marital status				
Never married	55.8	1,491	56.1	536
Married or living together	54.7	3,621	61.3	855
Divorced/separated/widowed	58.1	385	(71.1)	22
Employment abroad (past 3 years)[1]				
Worked abroad	56.3	163	47.3	180
Did not work abroad	55.2	5,332	61.1	1,228
Spousal employment abroad reported by ever-married women[2]				
Woman worked abroad herself	(44.9)	39	na	na
Husband worked abroad[2]	52.8	825	na	na
Both worked abroad	64.1	87	na	na
None worked abroad	55.4	3,041	na	na
Residence				
Urban	61.2	3,387	63.0	892
Rural	45.8	2,110	53.5	520
Region				
Yerevan	67.7	1,924	66.6	534
Aragatsotn	19.6	240	62.3	59
Ararat	63.4	354	77.6	117
Armavir	58.5	499	74.4	127
Gegharkunik	44.7	423	46.3	74
Lori	50.6	464	64.8	112
Kotayk	52.9	512	38.3	131
Shirak	55.3	550	29.4	118
Syunik	19.1	187	85.1	56
Vayots Dzor	38.0	123	53.5	23
Tavush	41.3	220	16.7	61
Education				
Basic	41.2	225	54.8	138
Secondary	44.4	1,960	53.7	557
Secondary special	58.3	1,627	60.3	269
Higher	66.8	1,686	67.6	449
Wealth quintile				
Lowest	43.4	1,057	49.5	287
Second	46.5	1,114	57.9	249
Middle	54.4	1,074	58.1	281
Fourth	64.5	1,065	64.1	307
Highest	66.6	1,188	67.2	288
Total 18-49	55.3	5,497	59.5	1,413

Note: Total includes 2 women and 4 men with information missing on employment abroad, and 14 women with information missing on spousal employment abroad. Figures in parentheses are based on 25-49 unweighted cases.
na = Not applicable
[1] "Employment abroad" refers to working abroad during the past three years before the survey for three or more months at a time.
[2] In the 2010 ADHS, information on husband's employment abroad was collected from ever married women age 15-49. Men in the 2010 ADHS were not asked about their wives' employment outside the country.

13.7 HIGH-RISK SEX

Limiting the number of sexual partners and having protected sex are crucial to combating HIV/AIDS and other sexually transmitted infections (STIs). Condom use is an important tool in the fight. The 2010 ADHS included questions on respondents' sexual partners over their lifetime and during the 12 months preceding the survey. Men were asked an additional question: whether they paid anyone for sex during the 12 months preceding the interview. Information on the use of condoms at last sexual intercourse with each type of partner was collected from both women and men. Because the questions were sensitive, some respondents may have been reluctant to provide information on recent sexual behavior.

Multiple Partners and Condom Use

Table 13.8 shows (1) the percentage of all men age 15-49 years who had sexual intercourse with more than one partner in the past 12 months, (2) among those with more than one partner, the percentage reporting that a condom was used at last intercourse, and (3) the mean number of sexual partners during a lifetime, by background characteristics. The data for women are not presented because close to 0 percent of women age 15-49 reported having had more than one partner in the past 12 months.

Table 13.8 data show that 15 percent of all men age 15-49 had more than one sexual partner in the 12 months preceding the survey. This proportion is higher among men age 20-29 (23-24 percent), those who have never married (22 percent), men who worked abroad in the past three years (20 percent), urban men (18 percent), and men residing in Kotayk (26 percent). The percentage of men who had more than one partner in the past 12 months increases steadily with an increase in education and wealth.

Among men who had more than one sexual partner in the past 12 months, 72 percent used a condom during their last sexual intercourse. Protected sex in the past 12 months is the least likely among men age 40-49 (23 percent), currently married men (38 percent), and rural men (49 percent). Note that men in these categories are also less likely to report having more than one sexual partner in the 12 months preceding the survey. The percentage of men who had more than one sexual partner in the past 12 months and who used a condom the last time they had sex tends to increase with an increase in education and wealth.

Sexually active men report having an average (mean number) of 5.8 lifetime sexual partners, about five times the average number of lifetime sexual partners reported by sexually active women (1.0 partners) (data not shown). The mean number of sexual partners for men increases with age and is higher among urban than rural residents. The mean number of lifetime partners among men is highest in Armavir (9.4) and Lori (8.7) and lowest in Aragatsotn (1.4). The mean number of lifetime sexual partners is higher among never-married men (7.4 partners) than among currently married men (4.8 partners) and also higher among men who recently worked abroad (6.7 partners) than among those who did not work abroad (5.6 partners). Increases are seen with education and wealth. For example, men with higher education have, on average, one more lifetime partner than men with less education (6.4 and 5.4 partners, respectively). Similarly, men from the wealthiest households have on average two more partners than men from the poorest households (6.6 compared with 4.1 partners).

Table 13.8 Multiple sexual partners: Men

Among all men age 15-49, the percentage who had sexual intercourse with more than one sexual partner in the past 12 months; among those having more than one partner in the past 12 months, the percentage reporting that a condom was used at last intercourse; and the mean number of sexual partners during their lifetime for men who ever had sexual intercourse, by background characteristics, Armenia 2010

	All men		Among men who had 2+ partners in the past 12 months:		Among men who ever had sexual intercourse:[1]	
Background characteristic	Percentage who had 2+ partners in the past 12 months	Number of men	Percentage who reported using a condom during last sexual intercourse	Number of men	Mean number of sexual partners in lifetime	Number of men
Age						
15-24	16.1	527	85.9	85	4.7	247
15-19	5.9	229	*	14	(2.6)	42
20-24	23.9	298	85.6	71	5.2	205
25-29	22.9	285	77.0	65	6.1	239
30-39	16.2	391	70.7	63	6.4	342
40-49	7.2	381	(22.9)	28	5.6	345
Marital status						
Never married	22.0	707	91.3	156	7.4	374
Married or living together	9.6	855	37.8	82	4.8	780
Divorced/separated/ widowed	(16.8)	22	*	4	*	20
Employment abroad (past 3 years)[2]						
Worked abroad	20.1	181	(65.9)	36	6.7	161
Did not work abroad	14.7	1,395	73.4	205	5.6	1,009
Residence						
Urban	18.3	984	80.0	180	6.5	780
Rural	10.1	600	49.4	61	4.4	394
Region						
Yerevan	22.1	593	84.1	131	7.0	492
Aragatsotn	0.0	70	na	0	1.4	35
Ararat	1.8	125	*	2	1.9	67
Armavir	14.0	148	*	21	9.4	94
Gegharkunik	20.7	83	(73.4)	17	3.7	53
Lori	6.7	130	*	9	8.7	112
Kotayk	25.9	148	(53.0)	38	4.7	126
Shirak	1.0	131	*	1	2.2	82
Syunik	15.6	63	*	10	3.7	47
Vayots Dzor	0.0	24	na	0	1.7	16
Tavush	16.9	68	*	11	2.6	50
Education						
Basic	7.4	188	*	14	5.4	115
Secondary	14.1	619	67.0	87	5.4	427
Secondary special	16.1	301	(58.2)	48	5.5	252
Higher	19.2	477	85.2	91	6.4	381
Wealth quintile						
Lowest	8.0	332	*	27	4.1	207
Second	11.6	285	(57.4)	33	4.6	198
Middle	14.5	312	(68.8)	45	6.2	245
Fourth	19.6	332	74.0	65	6.7	262
Highest	22.0	323	(85.3)	71	6.6	262
Total	15.2	1,584	72.3	241	5.8	1,174

Note: Total includes men with information missing on employment abroad. 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] Means are calculated excluding respondents who gave non-numeric responses.
[2] "Employment abroad" refers to working abroad during the past three years before the survey for three or more months at a time.

Concurrent Partners

Concurrent partnerships potentially increase the spread of HIV by creating more connected sexual networks. Compared with serial monogamous partnerships, concurrent partnerships can reduce the time between acquiring HIV and passing it along to an uninfected individual. Modeling suggests that even small levels of concurrency can greatly increase the connectivity of sexual networks and thus the speed at which HIV can spread (UNAIDS, 2009). Two sexual partners are considered to be concurrent if the date of the most recent sexual intercourse with the earlier partner is after the date of the first sexual intercourse with the later partner.

This section presents data on point prevalence and cumulative prevalence of concurrent sexual partners for men. The *point prevalence* of concurrent sexual partners is defined as the percentage of respondents who had two (or more) sexual partners that were concurrent at the point in time six months before the survey. The *cumulative prevalence* of concurrent sexual partners is defined as the percentage of respondents who had two (or more) sexual partners that were concurrent at any time during the 12 months preceding the survey. Data for women are not shown because both the point and cumulative prevalence of concurrent sexual partners for women is 0 percent.

Table 13.9 shows the percentage of all men age 15-49 who had concurrent sexual partners six months before the survey (point prevalence) and the percentage who had any concurrent sexual partners during the 12 months before the survey (cumulative prevalence). It also shows the percentage of men who had concurrent sexual partners among those who had multiple sexual partners during the 12 months before the survey.

Overall, the point prevalence of concurrent sexual partners (i.e., in the past six months) among all men age 15-49 is 3 percent, and the cumulative prevalence (i.e., in the past 12 months) is 8 percent. The point and cumulative prevalences are highest among men age 25-39 (5-6 percent and 12 percent, respectively), among urban men (4 and 10 percent, respectively), and among men who worked abroad in the past three years (10 and 15 percent, respectively).

Among men who had multiple partners during the past 12 months, more than half (53 percent) had concurrent sexual partners during the same period. Older men age 30-49 (76-85 percent), currently married men (85 percent), urban men (55 percent), and men who worked abroad in the past three years (72 percent) are more likely than others to have had concurrent sexual partners in the preceding 12 months.

Table 13.9 Point prevalence and cumulative prevalence of concurrent sexual partners

Percentage of all men age 15-49 who had concurrent sexual partners six months before the survey (point prevalence[1]), and percentage of all men age 15-49 who had any concurrent sexual partners during the 12 months before the survey (cumulative prevalence[2]), and among men age 15-49 who had multiple sexual partners during the 12 months before the survey, percentage who had concurrent sexual partners, Armenia 2010

	Among all men			Among men who had multiple partners during the 12 months before the survey	
Background characteristic	Point of prevalence of concurrent sexual partners[1]	Cumulative prevalence of concurrent sexual partners[2]	Number of men	Percentage who had concurrent sexual partners[2]	Number of men
Age					
15-24	1.0	4.3	527	26.5	85
15-19	0.0	0.9	229	*	14
20-24	1.9	6.8	298	28.6	71
25-29	5.9	11.6	285	50.6	65
30-39	5.4	12.3	391	76.1	63
40-49	2.4	6.1	381	(84.7)	28
Marital status					
Never married	2.7	8.2	707	37.1	156
Married or living together	3.9	8.1	855	84.5	82
Divorced/separated/ widowed	(0.0)	(1.4)	22	*	4
Employment abroad (past 3 years)[3]					
Worked abroad	10.1	14.6	181	(72.4)	36
Did not work abroad	2.5	7.2	1,395	49.2	205
Residence					
Urban	4.1	10.0	984	54.6	180
Rural	2.0	4.7	600	46.9	61
Total	3.3	8.0	1,584	52.7	241

Note: Two sexual partners are considered to be concurrent if the date of the most recent sexual intercourse with the earlier partner is after the date of the first sexual intercourse with the later partner. Total includes men with information missing on employment abroad. Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

[1] The percentage of men who had two (or more) sexual partners that were concurrent at the point in time six months before the survey

[2] The percentage of men who had two (or more) sexual partners that were concurrent anytime during the 12 months preceding the survey

[3] "Employment abroad" refers to working abroad during the past three years before the survey for three or more months at a time.

Transactional Sex

Transactional sex is the exchange of sex for money, favors, or gifts. Transactional sex is associated with high risk of contracting HIV and other sexually transmitted infections because of compromised power relations and the likelihood of having multiple partners as a result.

Male respondents in the 2010 ADHS were asked whether they had paid money in exchange for sex in the 12 months preceding the survey or ever before. The findings are presented in Table 13.10.

Among men age 15-49, 16 percent reported having ever paid for sexual intercourse. The percentage who ever paid for sex is highest among men above age 25 (19 to 22 percent), ever-married

men (20 to 22 percent), men who worked abroad in the past three years (23 percent), and urban men (21 percent). This percentage ranges from 1 percent or less of men in Aragatsotn, Lori, Shirak, and Syunik regions to 27 percent of men in Yerevan and 32 percent in Gegharkunik. There is a positive association between payment for sexual relations and education or wealth. For example, 9 percent of men with basic education and 10 percent of men in the lowest wealth quintile have ever paid for sexual intercourse, compared with 22 percent of men with higher than secondary education and 24 percent of men in the highest wealth quintile.

Less than 1 percent of men age 15-49 reported paying for sexual intercourse in the past 12 months. There is little variation by background characteristics.

Table 13.10 Payment for sexual intercourse

Percentage of men age 15-49 who ever paid for sexual intercourse and percentage reporting payment for sexual intercourse in the past 12 months, by background characteristics, Armenia 2010

Background characteristic	Percentage who ever paid for sexual intercourse	Percentage who paid for sexual intercourse in the past 12 months	Number of men
Age			
15-24	8.0	0.4	527
15-19	0.0	0.2	229
20-24	14.2	0.5	298
25-29	21.0	0.2	285
30-39	21.9	0.1	391
40-49	18.8	0.3	381
Marital status			
Never married	12.3	0.4	707
Married or living together	19.6	0.1	855
Divorced/separated/widowed	(21.9)	(3.6)	22
Employment abroad (past 3 years)[1]			
Worked abroad	22.7	0.4	181
Did not work abroad	15.3	0.3	1,395
Residence			
Urban	20.6	0.3	984
Rural	9.5	0.3	600
Region			
Yerevan	27.3	0.0	593
Aragatsotn	1.1	0.7	70
Ararat	11.1	0.5	125
Armavir	18.4	0.4	148
Gegharkunik	31.9	1.2	83
Lori	0.0	0.0	130
Kotayk	10.8	0.8	148
Shirak	0.7	0.6	131
Syunik	0.9	0.0	63
Vayots Dzor	9.9	0.0	24
Tavush	13.2	0.0	68
Education			
Basic	9.1	0.0	188
Secondary	16.0	0.2	619
Secondary special	12.9	0.2	301
Higher	21.9	0.6	477
Wealth quintile			
Lowest	9.9	0.0	332
Second	10.8	0.3	285
Middle	16.0	0.7	312
Fourth	21.0	0.3	332
Highest	23.6	0.2	323
Total	16.4	0.3	1,584

Note: Total includes seven men with information missing on employment abroad. Figures in parentheses are based on 25-49 unweighted cases.
[1] "Employment abroad" refers to working abroad during the past three years before the survey for three or more months at a time.

13.8 COVERAGE OF PRIOR HIV TESTING

For persons who are HIV negative, knowledge of their HIV status helps in making specific decisions that will reduce the risk of getting HIV, lead to safer sex practices, and enable them to remain disease free. For those who are HIV positive, knowledge of their HIV status allows them to take action to protect their sexual partners, to access treatment, and to plan for the future. In the 2010 ADHS, respondents were asked whether they had ever been tested for HIV. If they had been tested, they were asked when they were most recently tested, whether they had received the results of their last test, and where they had been tested. If they had never been tested, they were asked if they knew a place where they could go to be tested.

Tables 13.11.1 and 13.11.2 show that 43 percent of women and 35 percent of men age 15-49 know where to get an HIV test. Knowledge about where to get an HIV test is more common among respondents age 25-39, currently married women, formerly married men, respondents who worked abroad in the past three years, ever-married women who reported that both they and their husbands worked abroad, urban respondents, and women in Kotayk and men in Tavush. Knowledge of the various sites for HIV testing services is also highest among women and men with more education and among those in the higher wealth quintiles.

The proportions ever tested are much smaller; only 13 percent of women[1] and 2 percent of men age 15-49 have ever been tested for HIV, and 9 percent of women and 2 percent of men were ever tested and received the results. The proportions who were tested in the 12 months before the survey and received the results of their most recent test are even smaller; only 2 percent of women and 1 percent of men received the results of the last HIV test taken in the past 12 months.

The proportion of women ever tested for HIV is lowest for the age group 15-19 (2 percent) and highest among women 25-29 (27 percent). Currently married women (20 percent) are more likely to go for an HIV test than those who are never-married or previously married (7 percent or less). Women who worked abroad in the past three years (17 percent) are more likely than those who did not work abroad (13 percent) to have ever been tested for HIV. There are regional variations in HIV testing. Less than 1 percent of women in Ararat region have ever been tested for HIV, compared with 28 percent of women in Armavir. Women with basic education are the least likely to have ever been tested for HIV (6 percent) when compared with more educated women (13-14 percent). There is no clear variation between the percentage who have ever been tested and wealth.

In general, the variation in the proportion of men ever tested for HIV by background characteristics is not pronounced; men who worked abroad in the three years prior to the survey had the highest level (5 percent).

[1] Among women, those who received antenatal care for their most recent birth in the past five years were more likely to be tested for HIV; 67 percent of women reported that a blood sample for HIV status was taken during an ANC visit (Table 10.3).

Table 13.11.1 Coverage of prior HIV testing: Women

Percentage of women age 15-49 who know where to get an HIV test, percent distribution of women age 15-49 by testing status and by whether they received the results of the last test, the percentage of women ever tested, and the percentage of women age 15-49 who received their test results the last time they were tested for HIV in the past 12 months, according to background characteristics, Armenia 2010

Background characteristic	Percentage who know where to get an HIV test	Percent distribution of women by testing status and by whether they received the results of the last test			Total	Percentage ever tested	Percentage who have been tested for HIV in the past 12 months and received the results from the last HIV test	Number of women
		Ever tested and received results	Ever tested, did not receive results	Never tested[1]				
Age								
15-24	34.3	7.6	3.0	89.4	100.0	10.6	2.6	1,893
15-19	23.9	1.3	1.1	97.7	100.0	2.3	0.5	861
20-24	42.9	12.9	4.6	82.5	100.0	17.5	4.3	1,032
25-29	50.8	16.8	10.0	73.2	100.0	26.8	2.7	950
30-39	47.0	10.8	3.1	86.1	100.0	13.9	1.7	1,481
40-49	43.8	4.7	0.9	94.5	100.0	5.5	0.8	1,598
Marital status								
Never married	30.7	0.3	0.1	99.6	100.0	0.4	0.2	1,911
Ever had sex	*	*	*	*	100.0	*	*	9
Never had sex	30.4	0.3	0.1	99.6	100.0	0.4	0.2	1,903
Married/living together	49.6	14.0	5.6	80.4	100.0	19.6	2.9	3,626
Divorced/separated/widowed	36.7	6.4	1.0	92.6	100.0	7.4	1.2	385
Employment abroad (past 3 years)[2]								
Worked abroad	45.8	15.7	0.9	83.3	100.0	16.7	0.0	165
Did not work abroad	42.6	8.9	3.6	87.5	100.0	12.5	2.0	5,755
Spousal employment abroad reported by ever-married women[3]								
Woman worked abroad herself	(49.1)	(20.6)	(1.6)	(77.8)	(100.0	(22.2)	(0.0)	39
Husband worked abroad[3]	42.8	10.6	5.3	84.0	100.0	16.0	2.4	826
Both worked abroad	58.1	20.6	1.1	78.3	100.0	21.7	0.0	87
None worked abroad	49.8	13.7	5.3	81.0	100.0	19.0	2.9	3,045
Residence								
Urban	45.9	9.5	2.8	87.7	100.0	12.3	1.9	3,641
Rural	37.6	8.4	4.7	86.8	100.0	13.2	1.9	2,281
Region								
Yerevan	46.5	8.5	2.3	89.3	100.0	10.7	1.3	2,069
Aragatsotn	13.7	0.9	2.6	96.5	100.0	3.5	0.2	260
Ararat	6.6	0.2	0.0	99.8	100.0	0.2	0.2	379
Armavir	49.1	17.5	10.7	71.7	100.0	28.3	2.7	535
Gegharkunik	35.9	4.5	6.7	88.8	100.0	11.2	1.6	459
Lori	51.8	14.4	5.0	80.7	100.0	19.3	2.9	513
Kotayk	68.3	22.9	3.1	74.0	100.0	26.0	6.5	543
Shirak	30.8	1.7	0.7	97.7	100.0	2.3	0.6	598
Syunik	39.9	11.0	0.0	89.0	100.0	11.0	3.0	198
Vayots Dzor	27.2	3.9	3.0	93.1	100.0	6.9	1.0	131
Tavush	59.3	4.5	7.6	87.9	100.0	12.1	0.9	238
Education								
Basic	20.0	3.0	2.6	94.4	100.0	5.6	0.3	347
Secondary	33.7	8.4	4.7	86.8	100.0	13.2	2.0	2,137
Secondary special	47.9	10.1	3.5	86.4	100.0	13.6	2.3	1,681
Higher	53.1	10.1	2.3	87.5	100.0	12.5	1.8	1,757
Wealth quintile								
Lowest	29.6	6.0	4.5	89.5	100.0	10.5	1.4	1,151
Second	38.3	8.8	3.7	87.6	100.0	12.4	2.3	1,211
Middle	45.4	10.0	4.1	86.0	100.0	14.0	1.8	1,139
Fourth	49.8	10.0	3.8	86.2	100.0	13.8	1.6	1,146
Highest	49.7	10.6	1.9	87.5	100.0	12.5	2.4	1,275
Total	42.7	9.1	3.6	87.4	100.0	12.6	1.9	5,922

Note: Total includes 2 women with information missing on employment abroad and 14 women with information missing on spousal employment abroad. 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 "don't know/missing"

[2] "Employment abroad" refers to working abroad during the past three years before the survey for three or more months at a time.

[3] In the 2010 ADHS information on husband's employment abroad was collected from ever married women age 15-49.

Table 13.11.2 Coverage of prior HIV testing: Men

Percentage of men age 15-49 who know where to get an HIV test, percent distribution of men age 15-49 by testing status and by whether they received the results of the last test, the percentage of men ever tested, and the percentage of men age 15-49 who received their test results the last time they were tested for HIV in the past 12 months, according to background characteristics, Armenia 2010

Background characteristic	Percentage who know where to get an HIV test	Percent distribution of men by testing status and by whether they received the results of the last test			Total	Percentage ever tested	Percentage who have been tested for HIV in the past 12 months and received the results from the last HIV test	Number of men
		Ever tested and received results	Ever tested, did not receive results	Never tested[1]				
Age								
15-24	24.8	0.7	0.2	99.1	100.0	0.9	0.0	527
15-19	18.7	0.8	0.0	99.2	100.0	0.8	0.0	229
20-24	29.5	0.6	0.3	99.1	100.0	0.9	0.0	298
25-29	41.1	2.4	0.4	97.1	100.0	2.9	0.1	285
30-39	41.2	2.4	0.0	97.6	100.0	2.4	1.3	391
40-49	39.3	1.1	0.2	98.7	100.0	1.3	0.6	381
Marital status								
Never married	28.2	1.1	0.1	98.8	100.0	1.2	0.2	707
Ever had sex	35.0	1.8	0.2	98.0	100.0	2.0	0.3	414
Never had sex	18.5	0.0	0.0	100.0	100.0	0.0	0.0	293
Married/living together	40.6	1.9	0.3	97.9	100.0	2.1	0.7	855
Divorced/separated/widowed	(54.9)	(3.6)	(0.0)	(96.4)	100.0	(3.6)	(0.0)	22
Employment abroad (past 3 years)[2]								
Worked abroad	50.6	4.2	0.5	95.3	100.0	4.7	3.0	181
Did not work abroad	33.5	1.2	0.2	98.6	100.0	1.4	0.1	1,395
Residence								
Urban	39.2	1.9	0.1	98.0	100.0	2.0	0.6	984
Rural	28.8	0.9	0.4	98.7	100.0	1.3	0.2	600
Region								
Yerevan	36.9	2.5	0.0	97.5	100.0	2.5	0.9	593
Aragatsotn	27.5	0.3	2.0	97.7	100.0	2.3	0.3	70
Ararat	1.3	0.0	0.0	100.0	100.0	0.0	0.0	125
Armavir	1.9	0.0	0.0	100.0	100.0	0.0	0.0	148
Gegharkunik	20.3	4.0	0.0	96.0	100.0	4.0	2.0	83
Lori	62.9	0.0	0.0	100.0	100.0	0.0	0.0	130
Kotayk	17.9	1.8	1.1	97.1	100.0	2.9	0.0	148
Shirak	58.8	1.3	0.0	98.7	100.0	1.3	0.0	131
Syunik	81.1	0.0	0.0	100.0	100.0	0.0	0.0	63
Vayots Dzor	2.4	1.9	0.0	98.1	100.0	1.9	0.0	24
Tavush	91.5	1.5	0.0	98.5	100.0	1.5	0.0	68
Education								
Basic	23.0	1.9	0.5	97.6	100.0	2.4	1.1	188
Secondary	28.2	1.1	0.2	98.7	100.0	1.3	0.3	619
Secondary special	31.7	1.3	0.0	98.7	100.0	1.3	0.6	301
Higher	51.4	2.2	0.2	97.7	100.0	2.3	0.4	477
Wealth quintile								
Lowest	24.9	0.4	0.4	99.2	100.0	0.8	0.0	332
Second	29.2	0.3	0.3	99.4	100.0	0.6	0.0	285
Middle	38.7	2.7	0.2	97.0	100.0	3.0	1.7	312
Fourth	41.3	1.2	0.0	98.7	100.0	1.3	0.6	332
Highest	41.7	2.9	0.0	97.1	100.0	2.9	0.0	323
Total	35.3	1.5	0.2	98.3	100.0	1.7	0.5	1,584

Note: Total includes seven men with information missing on employment abroad. Figures in parentheses are based on 25-49 unweighted cases.
[1] Includes "don't know/missing"
[2] "Employment abroad" refers to working abroad during the past three years before the survey for three or more months at a time.

13.9 KNOWLEDGE ABOUT SEXUALLY TRANSMITTED INFECTIONS AND SELF-REPORTING OF STIS

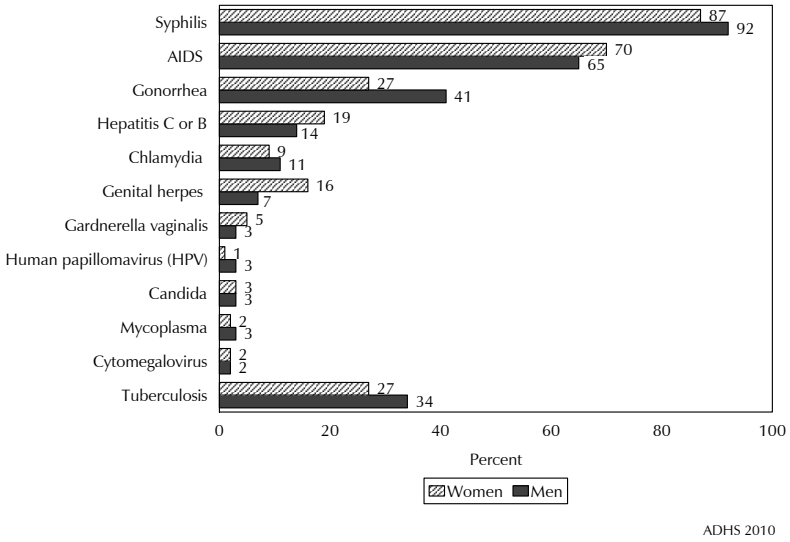
Sexually transmitted infections are closely associated with HIV because they increase the likelihood of contracting HIV and share similar risk factors.

Knowledge about Sexually Transmitted Infections (STI)

In the 2010 ADHS, all women and men age 15-49 were asked if they had heard of sexually transmitted infections (STIs). Overall, about three in five women (65 percent) and four in five men (80 percent) had heard about STIs (data not shown separately).

Those who had heard about STIs were asked to spontaneously name STIs they had ever heard about. Syphilis and HIV/AIDS were named most frequently: nine in ten respondents spontaneously mentioned syphilis, and seven in ten respondents spontaneously cited AIDS[2] (Figure 13.1). More than one-quarter of women (27 percent) and two-fifths of men (41 percent) mentioned gonorrhea, but less than one-fifth of respondents mentioned hepatitis C or B (19 percent of women and 14 percent of men). Genital herpes was cited by 16 percent of women and 7 percent of men. Around one in ten women and men mentioned Chlamydia. About 3 in 10 respondents thought that tuberculosis (TB) is a sexually transmitted disease. Although this misconception is somewhat surprising, only about half of respondents in the 2000 ADHS and 2005 ADHS were able to correctly identify the mode of TB transmission (through the air when coughing).

Figure 13.1 **Infections Spontaneously Identified by Survey Respondents as Sexually Transmitted**



Self-reporting of STI

In the 2010 ADHS, all respondents who ever had sexual intercourse were asked if they had had a sexually transmitted infection (STI) or symptoms of an STI (including bad-smelling/abnormal genital discharge and genital sore or ulcer) in the 12 months preceding the survey. It is important to note that these data are likely to underestimate the true prevalence of STIs for a number of reasons. First, if symptoms are not obvious or prolonged, they may not be recognized as an STI. Furthermore, health care may not be sought for STIs because of the embarrassment or the presumed stigma associated with such infections, and they may go undiagnosed. Even if an individual knows she/he has an STI, there may be a reluctance to report the infection during an interview.

Table 13.12 shows that less than 1 percent of women and men reported having an STI in the past 12 months. These results suggest some underreporting of STIs. When asked whether they had experienced an abnormal genital discharge or genital sores or ulcers in the past 12 months, 2 percent and 1 percent, respectively, of women and 1 percent, each, of men reported that they had. To the extent that women may report a normal genital discharge as abnormal, this may be an overestimate of any serious STIs among women.

[2] When prompted, almost all respondents (96 percent each of women and men) had heard about AIDS (Table 13.1).

Table 13.12 Self-reported prevalence of sexually transmitted infections (STIs) and STI symptoms

Among women and men age 15-49 who ever had sexual intercourse, the percentage reporting having an STI and/or symptoms of an STI in the past 12 months, by background characteristics, Armenia 2010

	Women					Men				
	Percentage of women who reported having in the past 12 months:				Number of women who ever had sexual intercourse	Percentage of men who reported having in the past 12 months:				Number of men who ever had sexual intercourse
Background characteristic	STI	Bad-smelling/ abnormal genital discharge	Genital sore or ulcer	STI/ genital discharge/ sore or ulcer		STI	Bad smelling/ abnormal genital discharge	Genital sore or ulcer	STI/ genital discharge/ sore or ulcer	
Age										
15-24	1.9	1.2	0.8	3.5	531	0.8	0.3	0.0	1.1	264
15-19	0.0	0.0	0.5	0.5	72	(0.0)	(0.0)	(0.0)	(0.0)	46
20-24	2.2	1.4	0.8	4.0	459	0.9	0.4	0.0	1.3	218
25-29	0.6	2.3	0.7	2.9	675	2.0	1.3	0.2	3.6	258
30-39	0.5	2.7	0.8	3.7	1,288	1.0	0.5	0.6	1.6	388
40-49	0.1	2.6	1.1	3.2	1,519	0.0	0.5	0.0	0.5	379
Marital status										
Never married	*	*	*	*	7	1.9	1.0	0.2	3.0	413
Ever had sex	*	*	*	*	7	1.9	1.0	0.2	3.0	413
Married/living together	0.6	2.5	0.8	3.5	3,621	0.3	0.5	0.3	0.9	855
Divorced/separated/ widowed	0.0	1.7	1.1	2.2	385	(0.0)	(0.0)	(0.0)	(0.0)	22
Employment abroad (past 3 years)[1]										
Worked abroad	0.0	4.3	1.9	4.7	126	0.2	1.3	0.0	1.3	180
Did not work abroad	0.6	2.3	0.8	3.3	3,885	1.0	0.5	0.3	1.6	1,105
Spousal employment abroad reported by ever-married women[2]										
Woman worked abroad herself	(0.0)	(5.7)	(0.0)	(5.7)	39	na	na	na	na	na
Husband worked abroad[2]	0.3	3.3	1.0	4.3	826	na	na	na	na	na
Both worked abroad	0.0	3.6	2.8	4.2	87	na	na	na	na	na
None worked abroad	0.7	2.1	0.8	3.1	3,040	na	na	na	na	na
Residence										
Urban	0.8	1.7	1.0	3.0	2,397	1.1	0.8	0.4	2.1	853
Rural	0.2	3.3	0.6	3.8	1,616	0.3	0.3	0.0	0.6	436
Region										
Yerevan	1.2	0.8	1.1	2.4	1,297	1.5	1.0	0.3	2.5	539
Aragatsotn	0.0	6.2	1.3	7.2	173	0.0	0.0	0.0	0.0	35
Ararat	0.3	4.4	1.3	4.8	255	0.0	2.0	0.0	2.0	76
Armavir	0.3	0.8	0.0	1.1	406	0.0	0.0	0.0	0.0	124
Gegharkunik	0.0	1.4	0.0	1.4	317	0.4	0.4	0.0	0.4	69
Lori	0.0	4.5	1.5	5.4	357	0.0	0.0	0.0	0.0	112
Kotayk	0.6	4.1	0.0	4.7	380	1.0	0.7	1.2	2.9	126
Shirak	0.8	1.6	1.0	2.9	418	1.4	0.0	0.0	1.4	95
Syunik	0.0	0.0	0.0	0.0	147	0.0	0.0	0.0	0.0	48
Vayots Dzor	0.0	3.6	0.5	4.0	96	0.0	0.0	0.0	0.0	16
Tavush	0.0	8.2	3.2	9.7	167	0.0	0.0	0.0	0.0	50
Education										
Basic	0.0	3.4	3.4	5.8	181	0.0	0.7	0.0	0.7	120
Secondary	0.2	3.2	0.6	3.5	1,649	0.7	1.1	0.0	1.7	482
Secondary special	1.4	2.2	0.9	3.9	1,279	0.4	0.7	0.3	1.5	272
Higher	0.3	1.0	0.9	2.0	905	1.5	0.0	0.5	1.7	416
Wealth quintile										
Lowest	0.3	4.2	1.2	5.0	815	0.0	0.0	0.0	0.0	236
Second	0.0	1.9	0.6	2.5	827	0.0	1.6	0.0	1.6	219
Middle	1.3	2.7	0.7	4.2	812	1.9	0.5	1.0	2.6	263
Fourth	0.2	1.7	0.7	2.1	755	1.3	1.2	0.0	2.5	290
Highest	1.1	1.3	1.1	2.9	804	0.7	0.0	0.2	1.0	281
Total	0.6	2.4	0.9	3.4	4,013	0.9	0.6	0.2	1.6	1,289

Note: Total includes 2 women and 4 men with information missing on employment abroad, and 14 women with information missing on spousal employment abroad. 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] "Employment abroad" refers to working abroad during the past three years before the survey for three or more months at a time.
[2] In the 2010 ADHS, information on husband's employment abroad was collected from ever-married women age 15-49. Men in the 2010 ADHS were not asked about their wives' employment outside the country.

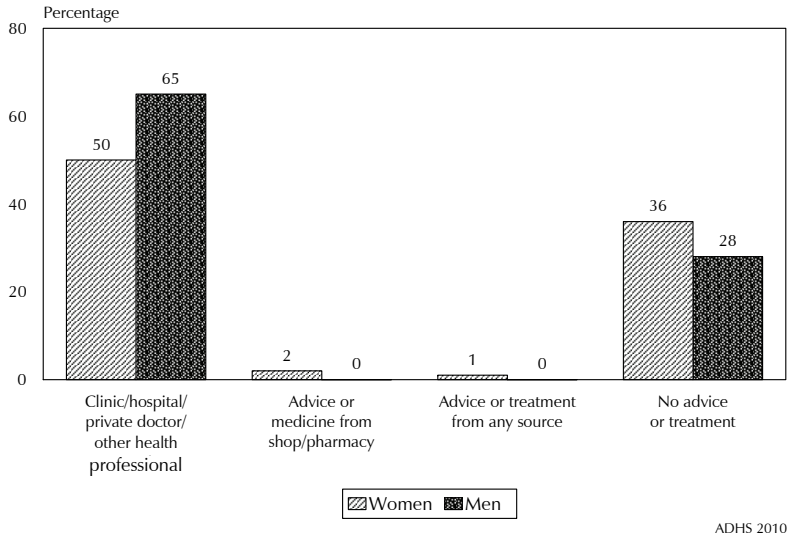
Overall, 3 percent of women reported having an STI, genital discharge, or genital sore or ulcer, substantially less than the 8 percent reported in 2005. Among men, the self-reported prevalence of STIs and STI symptoms is 2 percent, similar to the prevalence of 1 percent reported in 2005.

Among women, prevalence of STIs or their symptoms varies by region, education, and wealth. It ranges from 0 percent of women in Syunik to 10 percent of those in Tavush. Women with only basic education (6 percent) and those in the lowest wealth quintile (5 percent) report the highest prevalence of STIs or STI symptoms.

There is no substantial variation in the prevalence of STIs or STI symptoms among men by various background characteristics.

If respondents reported an STI or an STI symptom (i.e., genital discharge or sore or ulcer) in the past 12 months, they were asked questions about their actions in response to the infection or symptom. Figure 13.2 shows that half of the women (50 percent) and nearly two-thirds of the men (65 percent) who reportedly had an STI or STI symptoms in the past 12 months sought advice or treatment from a clinic or hospital or a health professional. More than one-third (36 percent) of women and 28 percent of men did not solicit any advice or seek treatment.

Figure 13.2 **Women and Men Seeking Advice or Treatment for STIs**



13.10 PREVALENCE OF MEDICAL INJECTIONS

Respondents in the 2010 ADHS were asked if they had any injections from a doctor, nurse, pharmacist, dentist, or health worker in the 12 months preceding the survey and, if so, how many injections (medical injections) they received in that period and who gave the last of these injections. It should be noted that medical injections that are self-administered (e.g., insulin for diabetes) are not considered medical injections.

Table 13.13 shows the percentages of women and men age 15-49 who received a medical injection in the past 12 months, the average number of injections, and whether the syringe and needle used were taken from an unopened package or not. Data show that 14 percent of women and 8 percent of men report having received an injection in the 12 months preceding the survey, with an average of 2 injections for women and 1 injection for men in the past 12 months. Older women 30-49 are more likely than younger women to report getting an injection, with an average of 2.6-2.8 injections in the past 12 months. Women in Aragatsotn, Ararat, and Syunik regions reported getting the fewest injections in the past 12 months (about 1 injection), while women in Vayots Dzor reported getting the highest number of injections (about 4.8 injections) over the same period. The variation in the average number of injections in the preceding 12 months among men by background characteristics is not pronounced, although it is worth noting that men in Lori and Aragatsotn reported receiving virtually no medical injections in the past year.

Table 13.13 Prevalence of medical injections

Percentage of women and men age 15-49 who received at least one medical injection in the past 12 months, the average number of medical injections per person in the past 12 months, and among those who received a medical injection, the percentage of last medical injections for which the syringe and needle were taken from a new, unopened package, by background characteristics, Armenia 2010

	Women					Men				
Background characteristic	Percentage who received a medical injection in the past 12 months	Average number of medical injections per person in the past 12 months	Number of women	For last injection, syringe and needle taken from a new, unopened package	Number of women receiving medical injections in the past 12 months	Percentage who received a medical injection in the past 12 months	Average number of medical injections per person in the past 12 months	Number of men	For last injection, syringe and needle taken from a new, unopened package	Number of men receiving medical injections in the past 12 months
Age										
15-24	10.4	0.9	1,893	98.7	198	5.6	0.3	527	(99.7)	29
15-19	7.8	0.5	861	100.0	67	5.7	0.3	229	*	13
20-24	12.7	1.3	1,032	98.1	131	5.4	0.4	298	*	16
25-29	14.2	1.7	950	98.6	135	5.5	1.1	285	*	16
30-39	16.9	2.6	1,481	99.2	250	10.8	1.7	391	(81.2)	42
40-49	17.0	2.8	1,598	98.6	272	11.4	2.1	381	(94.5)	43
Marital status										
Never married	7.7	0.6	1,911	100.0	147	5.9	0.5	707	(96.8)	41
Ever had sex	*	*	9	*	1	6.2	0.5	414	(97.2)	26
Never had sex	7.7	0.6	1,903	100.0	146	5.4	0.5	293	*	16
Married/living together	17.8	2.7	3,626	98.4	644	10.3	1.8	855	88.9	88
Divorced/separated/widowed	16.6	2.2	385	100.0	64	(5.6)	(1.1)	22	*	1
Employment abroad (past 3 years)[1]										
Worked abroad	13.1	1.7	165	*	22	8.0	1.7	181	*	14
Did not work abroad	14.5	2.0	5,755	98.8	834	8.3	1.2	1,395	91.3	116
Spousal employment abroad reported by ever-married women[2]										
Woman worked abroad herself	(16.0)	(1.6)	39	*	6	na	na	na	na	na
Husband worked abroad[2]	21.5	3.7	826	97.2	178	na	na	na	na	na
Both worked abroad	16.7	2.4	87	*	14	na	na	na	na	na
None worked abroad	16.7	2.4	3,045	99.1	509	na	na	na	na	na
Residence										
Urban	14.0	1.7	3,641	99.2	509	7.1	1.0	984	86.4	70
Rural	15.2	2.5	2,281	98.2	346	10.1	1.6	600	97.4	60
Region										
Yerevan	12.7	1.2	2,069	100.0	263	6.1	0.8	593	*	36
Aragatsotn	5.7	0.5	260	(100.0)	15	3.6	0.3	70	*	3
Ararat	4.9	0.9	379	(100.0)	19	8.4	0.8	125	*	10
Armavir	23.8	3.4	535	96.8	128	9.9	1.8	148	*	15
Gegharkunik	10.3	3.5	459	97.6	47	7.1	2.0	83	*	6
Lori	13.7	1.6	513	98.9	70	0.0	0.0	130	na	0
Kotayk	18.8	2.7	543	98.6	102	22.2	3.6	148	(100.0)	33
Shirak	20.4	3.0	598	99.1	122	8.0	1.6	131	*	11
Syunik	3.3	0.7	198	*	7	2.4	1.3	63	*	2
Vayots Dzor	30.8	4.8	131	98.8	40	27.5	1.6	24	*	7
Tavush	18.4	2.3	238	97.2	44	13.8	1.0	68	*	9
Education										
Basic	12.9	1.8	347	(97.6)	45	11.0	2.2	188	*	21
Secondary	15.2	2.3	2,137	99.7	325	9.4	1.4	619	90.0	58
Secondary special	16.3	2.3	1,681	98.1	274	6.4	0.9	301	(89.3)	19
Higher	12.0	1.3	1,757	98.6	211	6.7	0.9	477	(91.6)	32
Wealth quintile										
Lowest	16.4	2.5	1,151	99.3	189	8.3	1.0	332	*	28
Second	14.4	2.6	1,211	97.1	174	10.5	2.3	285	(100.0)	30
Middle	15.3	2.0	1,139	99.2	174	9.8	1.3	312	(91.5)	31
Fourth	14.2	1.6	1,146	99.2	162	7.4	1.1	332	(92.6)	25
Highest	12.2	1.3	1,275	99.3	156	5.5	0.6	323	*	18
Total	14.4	2.0	5,922	98.8	855	8.2	1.2	1,584	91.5	131

Note: Medical injections are those given by a doctor, nurse, pharmacist, dentist, or other health worker. Figures in parentheses are based on 25-49 unweighted cases. Total includes 2 women and 7 men with information missing on employment abroad, and 14 women with information missing on spousal employment abroad. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
na = Not applicable
[1] "Employment abroad" refers to working abroad during the past three years before the survey for three or more months at a time.
[2] In the 2010 ADHS, information on husband's employment abroad was collected from ever-married women age 15-49. Men in the 2010 ADHS were not asked about their wives' employment outside the country.

When asked whether the syringe used in the last medical injection came from a new, unopened package, 99 percent of women and 92 percent of men responded positively. There are small variations in this proportion across subgroups of the population.

13.11 HIV/AIDS-Related Knowledge and Behavior among Youth

This section addresses knowledge of HIV/AIDS issues and related sexual behavior among youths age 15-24. This age group is of particular interest for HIV/AIDS programs. The period between initiation of sexual activity and marriage is often a time of sexual experimentation, and it may also involve risky behaviors. Comprehensive knowledge of HIV/AIDS transmission and prevention and knowledge of sources of condoms among youth is analyzed. Issues such as age at sexual debut, premarital sex, age differences between partners, and condom use are also covered.

HIV/AIDS-Related Knowledge among Young Adults

Young respondents in the 2010 ADHS were asked the same set of questions as older respondents about whether condom use and limiting the number of sexual partners to one uninfected partner can help protect against getting the AIDS virus, and whether a healthy-looking person can have the AIDS virus (see Tables 13.3.1 and 13.3.2).

The data in Table 13.14 show the level of comprehensive knowledge among young people. Table 13.14 shows the proportion of youth who, in response to prompted questions, answer in the affirmative 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; who know that a healthy-looking person can have the AIDS virus; and who know that HIV cannot be transmitted by mosquito bites or by kissing someone who is infected with the AIDS virus.

Only 16 percent of young women and 9 percent of young men have comprehensive knowledge about HIV/AIDS. Comprehensive knowledge about HIV/AIDS is most common among young respondents age 20-24 (20 percent for women and 13 percent for men), young women who are ever married (19 percent), young never-married men who ever had sex (15 percent), and young respondents with higher than secondary education (22 percent for women and 16 percent for men). The comprehensive knowledge of AIDS among youth does not vary much by urban-rural residence.

More than seven in ten young women (72 percent) and more than nine in ten young men (93 percent) know a place to get condoms. The percentage of youth who know a condom source has increased slightly, from 69 to 72 percent among women, and has increased substantially, from 62 to 93 percent among men, since 2005. Youth age 20-24 are more likely than those age 15-19 to know of a condom source. Youth who never had sex, especially young men, are less likely than others to know of a source for condoms. Youth in urban areas (78 percent of women and 96 percent of men) are more likely to know a condom source than those who live in rural areas (64 percent of women and 90 percent of men). The knowledge of a condom source tends to increase with education, although the relationship is not linear.

Table 13.14 Comprehensive knowledge about AIDS and of a source of condoms among young people

Percentage of young women and young men age 15-24 with comprehensive knowledge about AIDS and percentage with knowledge of a source of condoms, by background characteristics, Armenia 2010

	Women age 15-24			Men age 15-24		
Background characteristic	Percentage with comprehensive knowledge of AIDS[1]	Percentage who know a condom source[2]	Number of women	Percentage with comprehensive knowledge of AIDS[1]	Percentage who know a condom source[2]	Number of men
Age						
15-19	10.4	62.5	861	3.9	90.0	229
15-17	9.8	56.1	425	4.2	90.0	171
18-19	11.1	68.7	437	3.0	90.2	58
20-24	20.3	80.7	1,032	12.7	96.0	298
20-22	17.3	79.4	632	12.4	96.5	172
23-24	25.0	82.9	400	13.2	95.5	127
Marital status						
Never married	14.4	67.6	1,361	9.3	92.8	483
Ever had sex	*	*	0	15.0	98.3	221
Never had sex	14.4	67.6	1,361	4.4	88.2	262
Ever married	19.3	84.8	532	(4.6)	(100.0)	44
Residence						
Urban	15.9	78.3	1,097	8.1	95.6	308
Rural	15.6	64.3	796	10.0	90.3	219
Education						
Basic	9.9	51.1	171	4.2	93.4	85
Secondary	11.3	64.4	639	5.5	90.9	204
Secondary special	14.4	81.1	398	8.5	95.7	78
Higher	22.3	80.2	685	15.8	95.5	161
Total	15.8	72.4	1,893	8.9	93.4	527

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 consistent use of condom during sexual intercourse and having just one uninfected faithful partner can reduce the chance of getting the AIDS virus, knowing that a healthy-looking person can have the AIDS virus, and rejecting the two most common local misconceptions about AIDS transmission or prevention. The components of comprehensive knowledge are presented in Tables 13.2, 13.3.1, and 13.3.2

[2] The following responses are not considered sources for condoms: friends, family members, and home.

Age at First Sex among Youth

Information from the 2010 ADHS can be used to look at several important issues relating to the initiation of sexual activity among youth. Table 13.15 shows the proportions of women and men in the 15-24 age cohort who had sex before age 15 and before age 18.

Overall, no women age 15-24 and less than 1 percent of men age 15-24 in Armenia have had sex by age 15 (Table 13.15). By age 18, however, 8 percent of women age 18-24 and 23 percent of men age 18-24 have had their sexual debut.

Never-married young women report not having had any sexual relations. For women, the initiation to sex varies only slightly by whether they know of a condom source or by residence. However, there are large variations by education: approximately one-third of women age 18-24 with basic education (32 percent) had sexual intercourse before age 18 compared with just 1 percent of women with higher than secondary education.

There are variations among men as well. Never-married men (25 percent) and men in urban areas (30 percent) are far more likely than the ever-married men (5 percent) or men in rural areas (11 percent) to have had sex before age 18. Variation by education does not follow a clear pattern.

Table 13.15 Age at first sexual intercourse among young people

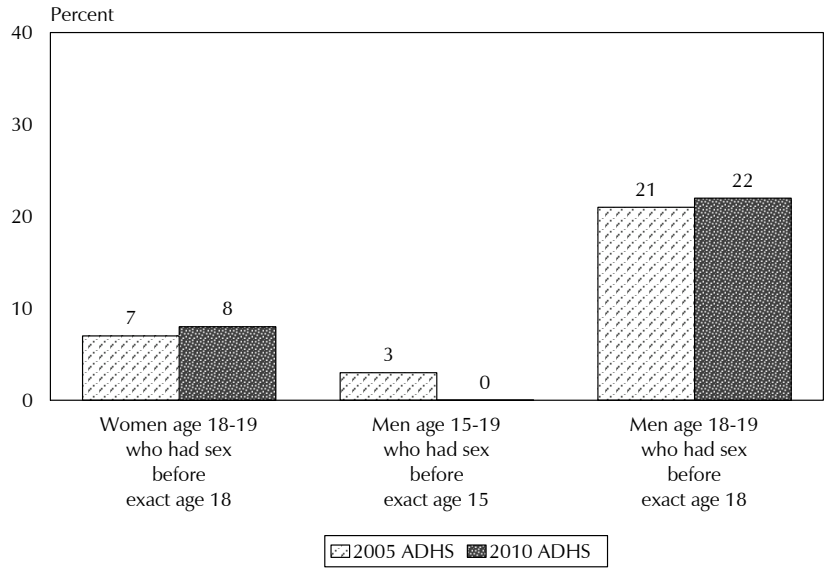
Percentage of young men age 15-24 who had sexual intercourse before age 15 and percentage of young women and young men age 18-24 who had sexual intercourse before age 18, by background characteristics, Armenia 2010

	Women age 18-24		Men age 15-24		Men age 18-24	
Background characteristic	Percentage who had sexual intercourse before age 18	Number of women	Percentage who had sexual intercourse before age 15	Number of men	Percentage who had sexual intercourse before age 18	Number of men
Age						
15-19	na	na	0.4	229	na	na
15-17	na	na	0.0	171	na	na
18-19	8.3	437	1.5	58	21.8	58
20-24	7.2	1,032	0.7	298	22.7	298
20-22	7.0	632	1.3	172	20.7	172
23-24	7.5	400	0.0	127	25.3	127
Marital status						
Never married	0.0	941	0.6	483	25.1	312
Ever married	20.9	527	(0.0)	44	(4.6)	44
Knows condom source[1]						
Yes	7.8	1,133	0.6	493	23.1	339
No	6.7	335	(0.0)	35	*	17
Residence						
Urban	6.6	843	0.4	308	30.2	217
Rural	8.7	625	0.8	219	10.7	139
Education						
Basic	(32.3)	48	0.0	85	(25.5)	35
Secondary	15.5	462	0.9	204	18.5	142
Secondary special	4.3	344	0.6	78	22.0	46
Higher	1.3	614	0.5	161	(26.3)	133
Total	7.5	1,468	0.6	527	22.5	356

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] The following responses are not considered a source for condoms: friends, family members, and home

Figure 13.3 shows that the percentage of men age 15-19 who had sex before age 15 has decreased from 3 percent to less than 1 percent between 2005 and 2010. Additionally, the percentage of young women age 18-19 who initiated sexual intercourse before age 18 has increased only slightly, from 7 percent in 2005 to 8 percent in 2010. Similarly, the percentage of men age 18-19 who had sex before age 18 remained essentially stable (21 percent in 2005 and 22 percent in 2010).

Figure 13.3 Trends in Age at First Sexual Intercourse



Abstinence and Premarital Sex

The period between age at first sex and age at marriage is often a time of sexual experimentation. Premarital sex and the length of the interval between sexual initiation and marriage are among the factors contributing to the spread of HIV.

Table 13.16 shows, for never-married men age 15-24, the percentage who never had sexual intercourse, the percentage who have had sex in the 12 months before the survey, and among those who had sex in the past 12 months, the percentage who used a condom at last sexual intercourse. Table 13.16 is confined to young men age 15-24 because, as mentioned earlier, young women in this age group report having sex only after marriage (Table 13.15).

Overall, 54 percent of never-married men age 15-24 report that they have never had sex, 43 percent have had sex in the 12 months preceding the survey, and, of these men, 88 percent used a condom at their last sexual intercourse. The proportion of never-married young men who have never had sex drops rapidly with increasing age and education. For instance, 89 percent of never-married men age 15-17 have never had sex compared with 25 percent of men age 23-24. Similarly, 72 percent of young men with basic education have never had sex compared with 38 percent of those with higher than secondary education. Young men in urban areas (42 percent) and those who know of a condom source (52 percent) are considerably less likely than men in rural areas (72 percent) and those who do not know of a condom source (89 percent) to have never had sex. The variation in the percentage of men who had sexual intercourse in the past 12 months by background characteristics follows the same patterns. There are no meaningful variations for condom use at last sexual intercourse by background characteristics, mostly because of small numbers of cases.

Table 13.16 Premarital sexual intercourse and condom use during premarital sexual intercourse among young men

Among never-married men age 15-24, the percentage who have never had sexual intercourse, the percentage who had sexual intercourse in the past 12 months, and, among those who had premarital sexual intercourse in the past 12 months, the percentage who used a condom at the last sexual intercourse, by background characteristics, Armenia 2010

	Never-married men age 15-24				
				Among men who had sexual intercourse in the past 12 months:	
Background characteristic	Percentage who have never had sexual intercourse	Percentage who had sexual intercourse in the past 12 months	Number of never married men	Percentage who used a condom at last sexual intercourse	Number of men
Age					
15-19	80.4	17.0	227	(83.2)	39
15-17	89.1	9.1	171	*	16
18-19	53.4	41.5	55	*	23
20-24	31.2	65.0	257	88.6	167
20-22	35.0	61.1	159	88.6	97
23-24	25.0	71.4	98	88.7	70
Knows condom source[1]					
Yes	51.6	44.9	449	87.4	202
No	(89.0)	(11.0)	35	*	4
Residence					
Urban	42.1	56.0	284	88.5	159
Rural	71.6	23.3	199	(84.7)	46
Education					
Basic	72.0	23.3	81	*	19
Secondary	65.7	30.8	183	81.2	56
Secondary special	39.4	55.1	69	*	38
Higher	37.6	61.3	150	92.1	92
Total 15-24	54.3	42.5	483	87.6	205

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] The following responses are not considered a source for condoms: friends, family members, and home.

Multiple Sexual Partners and Condom Use among Young Men

Table 13.17 shows, for young men age 15-24 who were sexually active in the 12 months preceding the survey, the proportion with more than one sexual partner in the past 12 months. The table also shows for those with more than one sexual partner, the proportion who used a condom at last sexual intercourse. Data are not presented for young women as there were no young women age 15-24 reporting multiple sexual partners in the 12 months before the survey.

Sixteen percent of young men had more than one sexual partner in the 12 months preceding the survey. This proportion is highest among men age 20-24 (24 percent) and lowest among those age 15-17 (2 percent). Never married men and those who know of a condom source (17 percent, each) are about three times as likely as those who are ever married (5 percent) or who do not know of a condom source (6 percent) to have had more than one sexual partner in the 12 months preceding the survey. Young men living in urban areas are twice as likely as young rural men to have had multiple partners in the 12 months preceding the survey (20 percent versus 10 percent). This proportion increases steadily with education, from 8 percent among young men with basic education to 24 percent among those with higher than secondary education.

More than eight in ten young men (86 percent) who had more than one sexual partner in the 12 months preceding the survey used a condom the last time they had sexual intercourse. The numbers are too small for a meaningful analysis of the differentials by background characteristics.

Table 13.17 Multiple sexual partners in the past 12 months among young men

Percentage of young men age 15-24 who had sexual intercourse with more than one sexual partner in the past 12 months, and among those having more than one partner in the past 12 months, the percentage reporting that a condom was used at last intercourse, by background characteristics, Armenia 2010

	Among all men age 15-24		Among men age 15-24 who had 2+ partners in the past 12 months:	
Background characteristic	Percentage who had 2+ partners in the past 12 months	Number of men	Percentage who reported using a condom at last intercourse	Number of men
Age				
15-19	5.9	229	*	14
15-17	1.9	171	*	3
18-19	18.0	58	*	10
20-24	23.9	298	85.6	71
20-22	24.0	172	(85.8)	41
23-24	23.7	127	*	30
Marital status				
Never married	17.1	483	88.4	82
Ever married	(5.4)	44	*	2
Knows condom source[1]				
Yes	16.8	493	85.6	83
No	(5.5)	35	*	2
Residence				
Urban	20.4	308	(90.3)	63
Rural	10.0	219	*	22
Education				
Basic	7.5	85	*	6
Secondary	12.7	204	(78.6)	26
Secondary special	17.5	78	*	14
Higher	24.3	161	(88.0)	39
Total 15-24	16.1	527	85.9	85

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] The following responses are not considered a source for condoms: friends, family members, and home.

Age Mixing in Sexual Relationships

In many societies, young adults have sexual relationships with partners who are considerably older than they are. This practice can contribute to the spread of HIV and other STIs because if a younger, HIV-negative partner has sexual intercourse with an older, HIV-positive partner, the virus can be introduced into a younger, HIV-negative cohort. To examine age differences between sexual partners, young respondents age 15-19 who had sex in the 12 months preceding the survey were asked the age of their partners. In the event they did not know a partner's exact age, they were asked if the partner was older or younger than they were and, if older, whether the partner was 10 or more years older.

Data show that 15 percent of women age 15-19 and 4 percent of men age 15-19 engaged in sexual intercourse with a partner who was 10 or more years older than themselves in the past 12 months. Because of the small sample size, there are no clear patterns in the variation of this indicator by background characteristics.

Table 13.18 Age-mixing in sexual relationships among women and men age 15-19

Among women and men age 15-19 who had sexual intercourse in the past 12 months, percentage who had sexual intercourse with a partner who was 10 or more years older than themselves, by background characteristics, Armenia 2010

	Women age 15-19 who had sexual intercourse in the past 12 months		Men age 15-19 who had sexual intercourse in the past 12 months	
Background characteristic	Percentage who had sexual intercourse with a man 10+ years older	Number of women	Percentage who had sexual intercourse with a woman 10+ years older	Number of men
Age				
15-17	*	5	*	16
18-19	14.0	65	*	25
Marital status				
Never married	*	0	(3.7)	39
Ever married	15.5	70	*	2
Knows condom source[1]				
Yes	13.6	53	(3.7)	41
No	*	17	*	0
Residence				
Urban	(20.0)	37	*	35
Rural	(10.3)	33	*	6
Education				
Basic	*	4	*	2
Secondary	(15.5)	40	*	6
Secondary special	*	10	*	11
Higher	*	16	*	22
Total	15.4	70	(3.7)	41

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] The following responses are not considered a source for condoms: friends, family members, and home.

Recent HIV Tests among Youth

Individuals' knowledge of their own HIV status can provide motivation to practice safer sexual practices. People who learn that they do not have HIV may decide to take precautions in the future so as not to contract the virus, and those who learn that they are carrying the virus may decide to take precautions to avoid transmitting the virus to others.

Less than one percent of male youth reported that they had ever been tested for HIV (see Table 13.11.2) so Table 13.19 focuses on coverage of the HIV testing among sexually active young women age 15-24. Overall, 9 percent of these young women were recently tested for HIV and received the results. In general, the numbers are too small to reach meaningful conclusions on the variation in testing coverage by the background characteristics shown in Table 13.19; however, the proportion ever tested increases steadily with an increase in education, from 0 percent among the small number of women with basic education to 11 percent among those with higher than secondary education.

Table 13.19 Recent HIV tests among young women

Among young women age 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 last test, by background characteristics, Armenia 2010

	Among women age 15-24 who have had sexual intercourse in the past 12 months:	
Background characteristic	Percentage who have been tested for HIV in the past 12 months and received the results from the last HIV test	Number of women
Age		
15-19	6.3	70
15-17	*	5
18-19	6.8	65
20-24	9.2	445
20-22	9.2	216
23-24	9.3	229
Marital status		
Never married	*	0
Ever married	8.8	514
Knows condom source[1]		
Yes	9.1	434
No	7.3	81
Residence		
Urban	8.7	259
Rural	8.9	256
Education		
Basic	(0.0)	22
Secondary	8.1	242
Secondary special	9.4	135
Higher	11.2	117
Total	8.8	515

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] The following responses are not considered a source for condoms: friends, family members, and home.

ACCESS TO AND UTILIZATION OF PRIMARY HEALTH CARE SERVICES 14

Primary health care in Armenia is traditionally provided through a network of health facilities. These facilities of first contact include urban polyclinics (freestanding or integrated with a hospital or a maternity home), rural ambulatories, family doctor's offices, and feldsher-accoucher health posts.[1] Specialized services are delivered through secondary and tertiary health care institutions, such as freestanding municipal and regional multi-use hospitals and maternity homes; integrated multi-use hospitals and medical centers with ambulatory care provision; and rural health centers with beds for inpatient care. Tertiary care is usually provided through specialized health care institutions that offer complex technologies, mainly based in the capital city of Yerevan.

After Armenia declared independence, the government focused on improving health care through reform that included building a strong primary health care system. According to a 2006 report on the health system in transition, reforms involved "administrative decentralization of the health system toward more open and democratic structures, changes in health care delivery in outpatient and inpatient settings, changes in financial and regulatory mechanisms, adoption of the law on medical aid and services to the population in 1996, and the introduction of official user charges in 1997. In 1998, following the 1997 decree on provision of free-of-charge services to the population, the government of Armenia introduced the first state Basic Benefits Package (BBP) and established the State Health Agency as purchaser of publicly financed health care services." The BBP is a publicly funded package of basic medical services (including services of a general practitioner/family doctor, pediatrician, district physician, and 11 specialists), which are free for the entire population, and broader services, which are free for certain vulnerable groups. In 2006, the range of free health care services was expanded to include services related to disease prevention in all public polyclinics (Hakobyan et al., 2006).

A priority for health care reform was development of a strong primary health care system. The Primary Health Care (PHC) strategy for the Armenian Population was first approved in 1997 and later revised in 2003. According to the 2008 Health System Performance Assessment in Armenia report, "the main goals of the PHC strategy are disease prevention, greater access to primary health care, improved quality and effectiveness, provision of continuous health care, responsiveness to population needs, reduced need for hospital care, increased resource utilization efficiency, and greater community participation in achieving PHC goals. Specific strategies developed to attain these goals include strengthening preventive measures by reducing risk factors and use of early diagnosis, introducing family medicine, providing comprehensive primary care, enhancing the material and technical bases for ambulatory-polyclinic services, and enhancing the diversity of ambulatory polyclinic services" (HSPA, 2008; Government of the Republic of Armenia, 2003).

To increase the use of primary health care services, the Ministry of Health of Armenia and the United States Agency for International Development (USAID) launched a five-year project in 2005 called Primary Health Care Reform (PHCR). Areas of focus for the PHCR project included strengthening primary health care (PHC) facilities and services provided by family medicine providers and improving public health awareness, health-seeking behavior, and demand for PHC services.

[1] A feldsher is a health professional trained in nursing and midwifery with extended training in clinical diagnosis and pharmacology. Feldshers are authorized to provide basic treatment and to prescribe a restricted number of drugs at feldsher-accoucher posts (FAPs) with no assigned doctor.

All women and men age 15-49 interviewed in the 2010 ADHS were asked a series of questions about access to and utilization of primary health care services. Information was collected on whether each respondent had chosen a primary doctor and what that doctor's specialty was. Respondents who said that their primary doctor was a family doctor were asked if the family doctor was working at a polyclinic serving their area of residence and whether they were satisfied with the care received from the family doctor. In addition, respondents were asked questions about utilization of preventive health examinations and their recent need for services available at polyclinics or ambulatory facilities.

14.1 PRIMARY HEALTH CARE PROVIDER

One of the objectives of primary health care reform, in addition to rehabilitating facilities and training family doctors, is to introduce the principle of free selection of a primary health care provider (WHO, 2009). According to the 1996 law on medical aid and services to the population, residents of Armenia have the right to select a primary health care provider of their choice (i.e., family doctor, district physician, pediatrician, etc.) and register accordingly. Enrollment is open to any primary health facility city-wide, village-wide, or region-wide (Hakobyan et al., 2006).

In the 2010 ADHS, all respondents age 15-49 were asked whether they had chosen a primary doctor. Respondents who had chosen a primary doctor were then asked about the specialty of that doctor. Results are presented in Tables 14.1.1 and 14.1.2 for women and men, respectively.

Overall, more than half of women (58 percent) and over one-third of men (38 percent) have chosen a primary doctor. The percentage of women with a primary doctor varies little by age; among men, however, the percentage generally increases with age, from 29 percent among men age 15-19 to 50 percent among men age 45-49. Women and men living in rural areas are more likely to have a primary doctor than their counterparts living in urban areas. Differences by region are pronounced: the Syunik region has the lowest percentage of both women and men who report having a primary doctor (5 percent and 4 percent, respectively). The Shirak region has the highest percentage of women (89 percent) and the Gegharkunik region has the highest percentage of men (85 percent) that report having a primary doctor.

Among those with a primary doctor, 70 percent of women and 60 percent of men said that their primary doctor specialized in internal and general medicine (referred to as an internist in this report).[2] Fifteen percent of women and 17 percent of men have chosen a family doctor as their primary doctor, with smaller percentages of both women and men choosing a pediatrician or other type of doctor. Residence in a rural area and belonging to the lowest two wealth quintiles are both associated with a greater likelihood of having a family doctor as a primary doctor. Women living in Ararat (90 percent) and men living in Shirak (66 percent) are far more likely to choose a family doctor as their primary doctor than respondents in other regions. It is curious, however, that only 15 percent of men living in Ararat chose a family doctor as their primary doctor and only 9 percent of women from Shirak chose a family doctor as their primary doctor. One might expect that women and men in the same region would make similar choices, but the data suggest that this may not be the case.

[2] In the present health system in Armenia, a physician specialized in internal and general medicine (internist) is called a "*therapevt*" (Russian), as in older Soviet health system terminology.

Table 14.1.1 Primary doctor: Women

Percentage of women age 15-49 who have chosen a primary doctor, and percent distribution of women who have chosen a primary doctor by specialization of the primary doctor, according to background characteristics, Armenia 2010

Background characteristic	Percentage of women who have chosen a primary doctor	Number of women	Among women who have chosen a primary doctor, specialization of the primary doctor: Family doctor	Internist	Pediatrician	Other specialization	Don't know	Total	Number of women
Age									
15-19	54.0	861	13.0	67.1	12.4	0.4	7.1	100.0	465
20-24	59.7	1,032	17.8	69.4	8.1	0.3	4.4	100.0	616
25-29	54.4	950	15.5	68.0	12.5	1.3	2.8	100.0	517
30-34	60.8	838	17.5	66.9	11.1	2.1	2.3	100.0	510
35-39	61.5	643	12.3	74.4	7.8	1.4	4.1	100.0	395
40-44	55.4	742	14.5	72.7	8.0	2.3	2.4	100.0	411
45-49	60.8	857	15.1	75.3	7.1	0.6	1.9	100.0	521
Residence									
Urban	54.5	3,641	10.0	78.4	7.1	1.3	3.2	100.0	1,986
Rural	63.5	2,281	22.6	59.4	13.0	1.0	4.0	100.0	1,449
Region									
Yerevan	46.8	2,069	7.0	85.4	4.4	1.8	1.4	100.0	968
Aragatsotn	11.5	260	5.8	91.9	0.4	0.0	2.0	100.0	30
Ararat	50.8	379	89.6	1.6	8.8	0.0	0.0	100.0	193
Armavir	53.6	535	35.0	52.0	5.2	3.6	4.1	100.0	287
Gegharkunik	83.1	459	6.7	90.4	1.8	0.0	1.1	100.0	381
Lori	62.5	513	4.8	83.7	9.9	0.7	1.0	100.0	321
Kotayk	79.8	543	19.3	63.2	10.0	0.3	7.2	100.0	433
Shirak	89.4	598	8.7	64.4	19.3	0.8	6.8	100.0	534
Syunik	5.4	198	*	*	*	*	*	100.0	11
Vayots Dzor	58.3	131	1.1	70.7	20.8	3.0	4.4	100.0	76
Tavush	84.5	238	4.5	59.3	26.8	1.0	8.5	100.0	201
Education									
Basic	59.5	347	14.6	65.6	8.9	0.9	10.0	100.0	207
Secondary	58.4	2,137	17.9	68.1	10.3	0.5	3.2	100.0	1,248
Secondary special	59.4	1,681	14.7	68.8	11.5	2.1	2.9	100.0	999
Higher	55.8	1,757	12.9	76.0	6.9	1.0	3.3	100.0	981
Wealth quintile									
Lowest	55.4	1,151	22.2	57.6	14.4	1.5	4.3	100.0	638
Second	64.3	1,211	19.3	64.1	10.4	0.8	5.4	100.0	779
Middle	60.1	1,139	10.5	75.2	10.4	1.8	2.1	100.0	685
Fourth	56.8	1,146	14.5	74.6	7.3	0.8	2.7	100.0	651
Highest	53.4	1,275	9.9	80.7	5.6	0.9	2.9	100.0	682
Total	58.0	5,922	15.3	70.4	9.6	1.1	3.6	100.0	3,434

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

Table 14.1.2 Primary doctor: Men

Percentage of men age 15-49 who have a primary doctor, and percent distribution of men who have a primary doctor by specialization of the primary doctor, according to background characteristics, Armenia 2010

Background characteristic	Percentage of men who have chosen a primary doctor	Number	Among men who have chosen a primary doctor, specialization of the primary doctor						
			Family doctor	Internist	Pediatrician	Other specialization	Don't know	Total	Number
Age									
15-19	28.5	229	13.3	64.1	3.5	2.3	16.8	100.0	65
20-24	33.4	298	16.5	61.6	8.9	0.8	12.1	100.0	100
25-29	35.5	285	17.4	56.5	6.0	4.1	16.0	100.0	101
30-34	38.9	229	12.3	58.9	8.3	1.7	18.8	100.0	89
35-39	46.8	162	13.4	60.3	12.0	1.7	12.5	100.0	76
40-44	41.3	164	25.6	58.9	1.7	3.6	10.3	100.0	68
45-49	49.5	217	20.9	63.1	5.0	3.7	7.3	100.0	107
Residence									
Urban	32.6	984	12.8	66.3	4.5	1.7	14.8	100.0	320
Rural	47.5	600	22.0	53.9	9.1	3.6	11.5	100.0	285
Region									
Yerevan	23.4	593	10.2	71.0	4.3	1.7	12.8	100.0	139
Aragatsotn	17.8	70	18.2	66.9	0.8	0.0	14.1	100.0	12
Ararat	25.8	125	(15.4)	(13.9)	(0.0)	(0.0)	(70.7)	100.0	32
Armavir	35.8	148	(17.3)	(45.9)	(11.1)	(15.7)	(10.0)	100.0	53
Gegharkunik	84.5	83	5.6	93.0	0.5	0.0	0.9	100.0	70
Lori	48.5	130	1.8	98.2	0.0	0.0	0.0	100.0	63
Kotayk	60.0	148	10.5	50.7	14.0	2.7	22.1	100.0	89
Shirak	64.2	131	66.2	23.5	0.0	1.2	9.0	100.0	84
Syunik	3.8	63	*	*	*	*	*	100.0	2
Vayots Dzor	42.3	24	(0.0)	(41.3)	(17.2)	(1.1)	(40.3)	100.0	10
Tavush	73.1	68	3.8	64.9	27.7	2.4	1.1	100.0	50
Education									
Basic	38.0	188	7.7	69.9	12.5	0.0	9.9	100.0	71
Secondary	36.2	619	16.5	61.3	6.0	2.6	13.5	100.0	224
Secondary special	42.6	301	20.2	58.7	5.2	4.1	11.7	100.0	128
Higher	38.3	477	19.4	56.8	6.1	2.4	15.3	100.0	182
Wealth quintile									
Lowest	37.5	332	27.7	47.6	8.2	6.2	10.3	100.0	124
Second	45.8	285	19.0	55.7	9.1	0.9	15.3	100.0	130
Middle	43.5	312	13.1	69.3	5.5	0.7	11.4	100.0	136
Fourth	30.7	332	12.7	67.9	4.6	1.3	13.6	100.0	102
Highest	35.1	323	12.1	62.5	5.4	3.9	16.1	100.0	113
Total	38.2	1,584	17.1	60.4	6.7	2.6	13.2	100.0	606

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.

Family Doctors

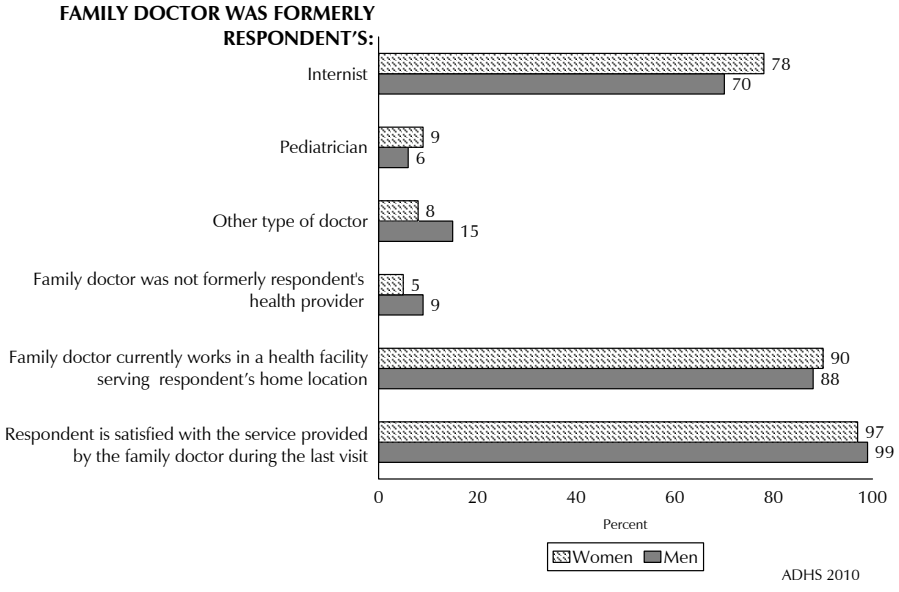
The MOH introduced the family medicine program in 1997. The purpose of the program is to strengthen primary health care in Armenia by registering all family members with a doctor who can provide ongoing care for people of all ages and be the point of entry into the health care system. An expected outcome will be that "family doctors will replace the current polyclinic system, assume the functions of district general practitioners, and closely cooperate with narrow specialists of the hospital system" (HSPA, 2008).

Training of family doctors is an important element of primary health care reform. The country needs 1,500 to 2,000 family doctors, according to the Primary Health Care (PHC) strategy for 2003-2008. Since the reforms began, many physicians practicing at outpatient facilities, including physicians specialized in internal and general medicine (internists), pediatrics, or other specialties, have been retrained as family doctors. Although more than 1,200 family doctors have been trained between 2006 and 2010, their services have not been fully utilized. Reasons include a lack of appropriate funding and regulatory support, absence of licenses in facilities that family doctors returned to after training, little public understanding of the scope of services provided by family doctors, and existence of narrow, specialized services in many urban polyclinics (WHO, 2009; Hakobyan et al., 2006).

In order to gain insight into the pattern of utilization of family doctors in Armenia, all respondents age 15-49 who had chosen a family doctor as their primary doctor were asked whether their family doctor was their former internist, pediatrician, or "other" doctor. In addition, information was collected on whether their family doctor was working at an outpatient health facility serving the respondent's area of residence, and about the respondent's satisfaction with the care received from the family doctor during his or her most recent visit. Results are presented in Figure 14.1.

The large majority of respondents reported that their family doctor is their former internist (78 percent of women and 70 percent of men). Although residents of Armenia have the right to choose their health care provider from any in the city or region, in practice, nine in ten respondents who had a family doctor as their primary doctor stated that their family doctor worked at an outpatient health facility serving the population in their area of residence. In general, both women and men are satisfied with the services they received from their family doctor during their most recent visit (97 percent and 99 percent, respectively).

Figure 14.1 Family Doctor's Background and Respondent's Satisfaction with Services, Women and Men Age 15-49



14.2 UTILIZATION OF PRIMARY HEALTH CARE SERVICES

The key to primary health care reform was "the introduction of family medicine as the first point of contact" (Hakobyan et al., 2006). However, a considerable proportion of the population still bypasses family doctors and refers themselves to hospitals for non-emergency conditions. According to the 2009 Health System Performance Assessment survey, 43 percent of referrals to hospitals were by individuals, 39 percent were by specialists, and only 20 percent were by family doctors and district physicians (WHO, 2009).

One goal of the 2010 ADHS was to provide insight into respondents' recent primary health care needs and patterns of facility usage. All respondents age 15-49 were asked about their experiences utilizing primary health care services in the two months preceding the survey. First, all women and men were asked whether in the two months preceding the survey they had a perceived health need to visit a polyclinic or an ambulatory facility. Respondents who said that they did have a perceived health need were asked whether or not they had visited a polyclinic or an ambulatory facility. Respondents who had a perceived health need but did not visit either a polyclinic or an ambulatory facility were asked whether they instead went to a hospital or a specialist and also why they did not seek care at a polyclinic or an ambulatory facility.

Visit to a Polyclinic or an Ambulatory Facility

Table 14.2 shows that 76 percent of women and 85 percent of men reported no perceived health need to visit a polyclinic or an ambulatory facility in the two months preceding the survey. Only 14 percent of women and 10 percent of men had a perceived health need and went to a polyclinic or an ambulatory facility. The remaining 10 percent of women and 6 percent of men had a perceived health need but did not go to these facilities[3]. Although differences by urban-rural residence are small, there is considerable variation by region. Female respondents living in Lori, Armavir, and Vayots Dzor are more likely to report a perceived health need that resulted in a visit to a polyclinic or ambulatory facility (25, 22, and 21 percent, respectively). Female residents of Ararat are least likely to report this need (4 percent). Women in Shirak and Kotayk are most likely to report they had a perceived health need but did not visit a polyclinic or an ambulatory facility (20 and 18 percent, respectively). Among men, those in Vayots Dzor (22 percent) and Kotayk (15 percent) are most likely to have had a need in the past two months that led to a visit to a polyclinic or ambulatory facility. Those in Kotayk (16 percent) are also the most likely to have had a need that did not result in a visit to either type of facility.

[3] The estimates from the 2010 ADHS differ from those reported in the 2006 Household Health Survey (HHS). The 2006 HHS found that 41 percent of female respondents had no perceived health need that required seeking health care in the two months before the survey, 32 percent had a perceived health need and went to a polyclinic or ambulatory clinic, and 26 percent had a perceived health need and did not go to an ambulatory clinic (Emerging Market Groups, 2006). The data from the two surveys are not directly comparable for a number of methodological reasons. First, each survey employed a different sampling methodology, had different age ranges for their survey population, and had questions in each questionnaire worded slightly differently. For example, in the 2010 ADHS, the respondent was asked if she herself had a perceived health need that required a visit to a polyclinic or ambulatory clinic, while in the 2006 HHS women were asked whether they themselves or any other family member had a perceived health need that required a visit to a polyclinic or ambulatory clinic. In the 2010 ADHS, all women age 15-49 in all selected households were interviewed with an individual questionnaire, while in the 2006 HHS survey, interviews were conducted with adult female representatives of households age 18 and older (with preference given to interviewing women who were mothers with children under age 18) (Emerging Market Groups, 2006).

Table 14.2 Utilization of Primary Health Care

Percent distribution of women and men age 15-49 by whether they had a perceived health need to visit a polyclinic or ambulatory facility and whether or not they visited such a facility in the two months preceding the survey, by background characteristics, Armenia 2010

	Women						Men					
	Had a perceived need to seek health care at a polyclinic/ ambulatory facility in the past two months and:						Had a perceived need to seek health care at a polyclinic/ ambulatory facility in the past two months and:					
Background characteristic	Visited a facility[1]	Did not visit a facility[1]	Had no perceived need to seek health care at a polyclinic/ ambulatory facility	Missing	Total	Number	Visited a facility[1]	Did not visit a facility[1]	Had no perceived need to seek health care at a polyclinic/ ambulatory facility	Missing	Total	Number
Age												
15-24	12.0	4.9	83.1	0.0	100.0	1,893	7.0	5.6	87.4	0.0	100.0	527
25-29	16.5	7.5	76.0	0.0	100.0	950	7.8	4.7	87.5	0.0	100.0	285
30-39	15.7	12.4	72.0	0.0	100.0	1,481	10.5	6.1	83.5	0.0	100.0	391
40-49	13.4	15.5	70.9	0.2	100.0	1,598	14.0	6.6	79.1	0.3	100.0	381
Residence												
Urban	13.5	10.2	76.2	0.1	100.0	3,641	11.8	5.7	82.4	0.1	100.0	984
Rural	14.8	9.7	75.4	0.0	100.0	2,281	6.2	6.0	87.8	0.0	100.0	600
Region												
Yerevan	11.4	9.0	79.5	0.2	100.0	2,069	14.6	4.2	81.1	0.0	100.0	593
Aragatsotn	9.2	4.0	86.8	0.0	100.0	260	14.1	11.1	74.8	0.0	100.0	70
Ararat	3.6	0.9	95.6	0.0	100.0	379	0.0	0.4	99.3	0.3	100.0	125
Armavir	22.1	7.1	70.8	0.0	100.0	535	5.3	10.7	84.0	0.0	100.0	148
Gegharkunik	16.0	6.2	77.8	0.0	100.0	459	3.9	3.1	93.0	0.0	100.0	83
Lori	25.4	13.3	61.4	0.0	100.0	513	0.9	0.0	98.5	0.6	100.0	130
Kotayk	13.7	18.0	68.3	0.0	100.0	543	15.4	16.2	68.5	0.0	100.0	148
Shirak	15.0	19.9	65.1	0.0	100.0	598	9.3	10.5	80.2	0.0	100.0	131
Syunik	11.4	1.8	86.8	0.0	100.0	198	2.4	0.0	97.6	0.0	100.0	63
Vayots Dzor	20.8	10.4	68.8	0.0	100.0	131	21.7	10.0	68.3	0.0	100.0	24
Tavush	8.8	11.2	80.0	0.0	100.0	238	3.8	0.0	96.2	0.0	100.0	68
Education												
Basic	11.8	7.5	80.7	0.0	100.0	347	10.9	6.4	82.8	0.0	100.0	188
Secondary	14.0	12.4	73.5	0.0	100.0	2,137	8.5	5.6	85.8	0.1	100.0	619
Secondary special	15.4	10.9	73.8	0.0	100.0	1,681	10.1	5.8	84.2	0.0	100.0	301
Higher	13.1	6.8	79.9	0.2	100.0	1,757	10.5	5.8	83.5	0.2	100.0	477
Wealth quintile												
Lowest	14.5	10.9	74.6	0.0	100.0	1,151	5.4	5.8	88.8	0.0	100.0	332
Second	14.3	9.9	75.8	0.0	100.0	1,211	11.3	7.5	81.3	0.0	100.0	285
Middle	16.2	12.7	70.9	0.2	100.0	1,139	12.3	5.3	82.3	0.0	100.0	312
Fourth	12.8	9.1	78.1	0.0	100.0	1,146	7.6	8.6	83.4	0.3	100.0	332
Highest	12.4	7.9	79.6	0.1	100.0	1,275	12.2	1.9	85.9	0.0	100.0	323
Total	14.0	10.0	75.9	0.1	100.0	5,922	9.7	5.8	84.5	0.1	100.0	1,584

[1] Includes only polyclinics or ambulatory facilities

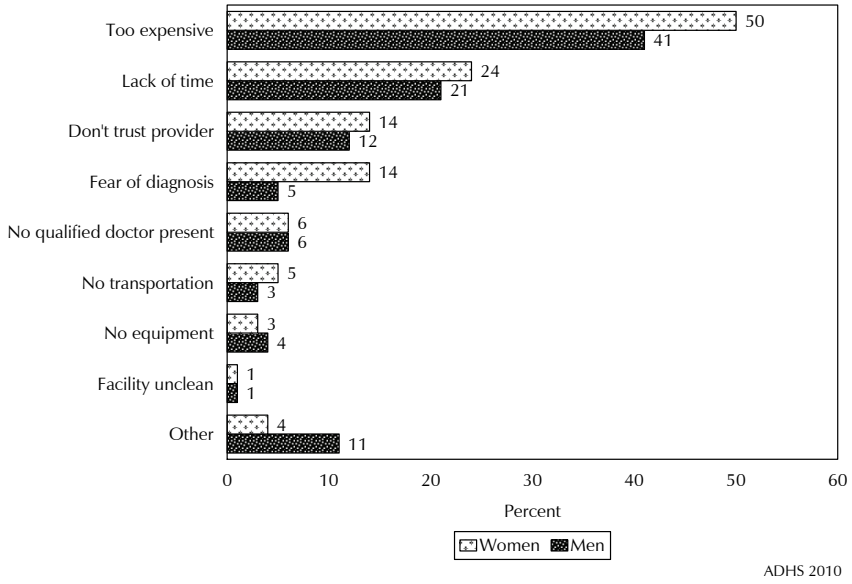
Among the 10 percent of women and 6 percent of men who reported a perceived health need that required a visit to a polyclinic or an ambulatory facility but who did not make such a visit, 13 percent of women and 18 percent of men instead visited a hospital (data not shown). A comparison of the 2010 ADHS estimate with the 2006 Household Health Survey (HHS) finds similar percentages of women with a perceived health need who visited a hospital instead of a polyclinic or an ambulatory facility (13 percent in the 2010 ADHS and 16 percent in the 2006 HHS) (Emerging Market Groups, 2006).

Perceived Barriers to Health Care in a Polyclinic or an Ambulatory Facility

Among women and men who did not visit a polyclinic or an ambulatory facility when they had a perceived health need, the specific reasons given for not seeking care are shown in Figure 14.2. The most common reason given by both women and men was related to cost. Fifty percent of women and 41 percent of men who had a perceived need but who did not seek care said that the care was too expensive. This finding matches the results of the 2006 HHS, in which 50 percent of female respondents stated that the reason they did not seek ambulatory care when they had a perceived need was that it was "expensive" (Emerging Markets Group, 2006).

Personal reasons also affected respondents' decisions not to seek health care at polyclinics or ambulatory facilities. Approximately one-quarter of women and one-fifth of men cited lack of time as a barrier; 14 percent of women and 12 percent of men said that they did not trust the provider; and another 14 percent of women and 5 percent of men stated that they feared the diagnosis. Only 5 percent of women and 3 percent of men cited lack of transportation as a barrier. A small proportion of respondents reported reasons associated with quality of care: 6 percent cited concern that there is no qualified doctor available, 3 to 4 percent were concerned that there was no equipment, and 1 percent felt the facility was unclean.

Figure 14.2 Reasons for Not Seeking Care in a Polyclinic or an Ambulatory Facility



Women living in rural areas, those with lower educational attainment, and those who live in poorer households are more likely than other women to report financial reasons as a barrier to visiting a polyclinic or an ambulatory facility for their perceived health needs. Regionally, the percentage of women who report financial barriers to seeking care ranges from a low of 29 percent in Shirak to highs of 76 percent in Armavir and 72 percent in Tavush (data not shown). Because of the small number of cases among male respondents, it was not possible to analyze the reasons for not seeking health care at polyclinics or ambulatory facilities by background characteristics.

14.3 PREVENTIVE HEALTH EXAMINATION VISITS

The Ministry of Health recommends that Armenian citizens undergo a preventive health examination at least once a year. Currently, a preventive health examination includes a routine check-up to detect high blood pressure, diabetes, lung diseases, and certain reproductive health exams (a

breast examination and the Pap smear test for women and a prostate gland examination for men). The 2010 ADHS included a series of questions designed to obtain information related to preventive health visits. All respondents age 15-49 were asked if they had visited a health facility to conduct the recommended routine preventive health examination in the three years preceding the survey. Respondents who had a preventive care visit were asked about the timing and content of their most recent visit.

One in four women and one in five men (25 and 19 percent, respectively) in Armenia had visited a health facility for a routine check up in the three years preceding the survey. Among them, 17 percent of women were told by a health provider that they have high blood pressure, 13 percent were given a breast examination, 14 percent had a Pap smear test to check for cervical cancer, and 3 percent were diagnosed with diabetes. Among men who visited a health facility for a routine check up in the past three years, 14 percent were told they have high blood pressure, 10 percent were given a prostate examination, 7 percent were told they have lung disease, and 5 percent were diagnosed with diabetes (data not shown).

Overall, one-third of women and men who had received a routine health examination reported that their most recent check-up had been between one and three years ago. Twenty-four percent of women and 31 percent of men had the most recent preventive care visit 6 to 11 months before the interview, while 43 percent of women and 36 percent of men had the most recent visit within the past six months (data not shown).

14.4 Exposure to General Health Care Messages in the Media

Mass media provides an opportunity to communicate health-related information to a broad spectrum of the population. Information on the level of exposure to health messages through the radio, television, newspapers, and magazines was collected in the 2010 ADHS.

Tables 14.3.1 and 14.3.2 show that more than four in five women and more than half of men have seen or heard a health message on the radio or television or in a newspaper or magazine in the few months preceding the survey. Both women and men are most likely to have been exposed to health messages on television: 81 percent of women and 55 percent of men have seen a health-related message on television in the past few months. Newspapers or magazines also provide a high level of exposure particularly for women: 46 percent of women report having recently read about a health-related issue in a newspaper or magazine, but only 12 percent of men report having done so. Respondents are least likely to report that they heard a health message on the radio; nonetheless, in the months preceding the survey, 17 percent of women and 8 percent of men heard a health-related message on the radio. The much higher level of exposure to health-related messages on television rather than on the radio is not surprising because almost all households in Armenia have televisions, but only 12 percent have radios (Chapter 2, Table 2.5).

Exposure to health messages is closely related to place of residence, level of education, and household wealth. Respondents residing in rural areas, those with lower levels of education, and those living in poorer households are less likely to have seen or heard health messages through any media source than respondents from urban areas, those with higher levels of education, and those living in more economically advantaged households. There are pronounced variations by region. More than 9 of 10 women in Lori, Syunik, and Kotayk and men in Shirak have recently been exposed to a health message through one or more forms of mass media. Women in Ararat (66 percent) and men in Syunik (75 percent) are the most likely not to have seen or heard health messages from any of the specified three sources of media.

Table 14.3.1 Exposure to mass media health messages: Women

Percentage of women age 15-49 who have seen or heard a health message on the radio or ,television or in a newspaper or magazine in the past few months, by background characteristics, Armenia 2010

Background characteristic	Exposed to health message through:			Not exposed to health message through any of these sources	Number of women
	Radio	Television	Newspaper or magazine		
Age					
15-19	17.3	74.5	42.4	22.8	861
20-24	15.8	80.3	46.4	18.1	1,032
25-29	15.6	80.4	43.0	19.2	950
30-34	19.8	83.9	52.3	14.9	838
35-39	17.7	84.1	51.6	15.1	643
40-44	17.2	81.9	45.6	16.6	742
45-49	14.0	80.9	43.2	17.4	857
Residence					
Urban	22.8	83.2	54.3	15.2	3,641
Rural	6.8	76.6	33.0	22.2	2,281
Region					
Yerevan	31.1	83.0	55.9	15.8	2,069
Aragatsotn	3.5	86.3	11.1	13.7	260
Ararat	0.3	33.7	15.2	65.6	379
Armavir	2.1	73.1	24.9	26.3	535
Gegharkunik	2.5	79.8	23.7	19.6	459
Lori	5.6	90.8	62.7	5.7	513
Kotayk	16.6	86.0	60.8	9.7	543
Shirak	31.2	85.6	54.2	13.3	598
Syunik	0.6	92.4	58.0	7.6	198
Vayots Dzor	2.4	87.6	36.4	11.8	131
Tavush	0.5	88.0	44.7	11.3	238
Education					
Basic	6.4	65.3	18.5	33.5	347
Secondary	9.3	76.4	31.1	22.4	2,137
Secondary special	18.6	83.9	50.8	14.3	1,681
Higher	25.9	85.8	65.2	12.8	1,757
Wealth quintile					
Lowest	5.5	73.7	24.7	25.5	1,151
Second	9.3	77.9	36.1	20.5	1,211
Middle	17.3	85.4	50.9	12.9	1,139
Fourth	23.5	86.3	60.4	12.1	1,146
Highest	27.1	80.2	57.8	18.2	1,275
Total	16.7	80.7	46.1	17.9	5,922

Table 14.3.2 Exposure to mass media health messages: Men

Percentage of men age 15-49 who have seen or heard a health message on the radio or television or in a newspaper or magazine in the past few months, by background characteristics, Armenia 2010

Background characteristic	Exposed to health message through:			Not exposed to health message through any of these sources	Number of men
	Radio	Television	Newspaper or magazine		
Age					
15-19	4.8	50.8	8.4	49.1	229
20-24	5.3	50.5	10.2	48.8	298
25-29	6.0	55.9	14.0	43.2	285
30-34	9.4	56.0	10.2	43.8	229
35-39	13.9	59.2	13.3	37.7	162
40-44	9.2	61.5	12.8	38.5	164
45-49	11.6	57.1	17.4	41.9	217
Residence					
Urban	11.0	58.5	16.1	40.4	984
Rural	3.4	49.8	5.8	49.9	600
Region					
Yerevan	14.0	57.7	19.6	40.8	593
Aragatsotn	11.1	77.0	14.4	22.8	70
Ararat	0.2	32.3	1.2	67.7	125
Armavir	5.2	36.8	4.8	63.2	148
Gegharkunik	2.8	42.5	2.4	57.5	83
Lori	1.0	86.1	2.8	12.9	130
Kotayk	6.8	31.8	6.5	68.2	148
Shirak	7.3	92.8	24.2	7.2	131
Syunik	0.0	25.5	2.5	74.5	63
Vayots Dzor	10.5	43.0	6.2	55.0	24
Tavush	5.2	60.0	12.0	37.2	68
Education					
Basic	1.7	39.3	3.8	59.5	188
Secondary	4.8	51.3	4.6	48.3	619
Secondary special	7.7	59.0	9.3	40.8	301
Higher	15.1	64.2	27.3	34.3	477
Wealth quintile					
Lowest	3.1	50.6	4.2	49.2	332
Second	4.8	50.1	5.6	49.4	285
Middle	7.6	59.2	12.5	39.7	312
Fourth	9.7	59.4	19.6	39.2	332
Highest	15.0	56.4	18.4	42.9	323
Total	8.1	55.2	12.2	44.0	1,584

14.5 HEALTH INSURANCE

The government of Armenia is currently undertaking health sector reforms that focus on decreasing out-of-pocket payments and increasing the motivation of health care providers to improve the quality of care. At present, health insurance is not mandatory in Armenia; however, in some cases, voluntary health insurance is provided through an employer or may be purchased independently. Because the general population's knowledge and understanding of insurance plans, particularly of health insurance plans, is limited, assessing the advantages and disadvantages of such offerings is difficult. In addition, there is little confidence that such insurance plans provide quality care (Hakobyan et al., 2006).

The 2010 ADHS asked all respondents whether or not they were covered by a health insurance plan. As expected, the results confirm that the level of health insurance coverage is very low: only 1 percent of women and 2 percent of men reported having any type of health insurance (data not shown). Among those with health insurance, the most common provider for men is their employer and for women it is the government's basic benefit package.

WOMEN'S EMPOWERMENT AND DEMOGRAPHIC AND HEALTH OUTCOMES

15

The study of women's status and empowerment—important in its own right—takes on special significance in study of demographic and health outcomes. As caretakers for their children, women are the direct or indirect targets of many population, health, and nutrition programs. The constraints that women face while they learn to access, and utilize these and other developmental programs are inherently tied to their status in society as well as in the home.

The 2010 ADHS Woman's Questionnaire collected data specific to women's empowerment from both women and men. Specifically, information was collected on the receipt of cash earnings, the magnitude of a woman's earnings relative to those of her husband/partner,[1] and women's and men's control over the use of their own earnings. Women were also asked about the use of their husband's earnings. The survey also collected data on women's and men's participation in household decision making and on their attitudes toward wife beating.

Information collected from women is summarized in two indices of women's empowerment. The first index is based on the number of household decisions in which a woman participates, and the second is based on the number of reasons for which a woman justifies wife beating. The ranking of women on these two indices is then related to selected demographic and health outcomes, including contraceptive use.

15.1 EMPLOYMENT AND CASH EARNINGS

In the 2010 ADHS, respondents were asked a number of questions to determine their employment status at the time of the survey and their continuity of employment in the 12 months prior to the survey. They were also asked about the type of payment they received for their work. Table 15.1 shows the percentage of currently married women and men who were employed at any time during the 12 months preceding the survey and the percent distribution of those employed at any time in the 12 months preceding the survey by the type of earnings they received (cash, in-kind, or both).

According to the 2010 ADHS data, 36 percent of currently married women were employed at any time in the preceding 12 months. Younger women, especially those age 15-19 (3 percent) and age 20-24 (13 percent) were less likely to be employed than women in other age groups, possibly due to their being in school or in training rather than in the job market. As women get older, their likelihood of being employed increases, and almost half of currently married women age 35-49 years are employed.

Among women who were employed in the preceding 12 months, more than seven in ten (72 percent) received only cash for their work, while one in nine (11 percent) did not receive any payment at all. Nine percent of women received cash and in-kind earnings for their work, and 8 percent received payment in-kind only.

Currently married men are much more likely to be employed than currently married women (92 percent versus 36 percent). Men are also more likely than women to be paid in cash only (87 percent versus 72 percent), and less likely to work with no pay (4 percent versus 11 percent). Only 6 percent of men employed in the preceding 12 months received cash and in-kind payment, and 2 percent were paid in-kind only.

[1] For the rest of this chapter the term "husband" refers to any man living with a respondent in either formal or informal marital union.

Table 15.1 Employment and cash earnings of currently married women and men

Percentage of currently married women and men age 15-49 who were employed at any time in the past 12 months and the percent distribution of currently married women and men employed in the past 12 months by type of earnings, according to age, Armenia 2010

	Among currently married respondents:		Percent distribution of currently married respondents employed in past 12 months, by type of earnings						
Age	Percentage employed	Number of respondents	Cash only	Cash and in-kind	In-kind only	Not paid	Missing/ don't know	Total	Number of respondents
				WOMEN					
15-19	2.9	68	*	*	*	*	*	100.0	2
20-24	13.1	450	82.4	0.0	3.9	13.7	0.0	100.0	59
25-29	19.7	641	84.6	4.1	3.4	6.1	1.8	100.0	126
30-34	36.7	650	74.8	6.5	8.0	10.7	0.0	100.0	238
35-39	46.9	517	70.7	9.7	9.7	9.9	0.0	100.0	242
40-44	48.0	613	68.9	12.8	8.9	9.4	0.0	100.0	294
45-49	48.4	687	65.2	11.9	9.2	13.6	0.0	100.0	333
Total	35.7	3,626	71.5	9.4	8.2	10.8	0.2	100.0	1,295
				MEN					
15-19	*	2	*	*	*	*	*	100.0	1
20-24	(90.0)	(42)	(84.4)	(5.9)	(5.1)	(0.0)	(4.6)	100.0	38
25-29	91.4	146	85.3	6.4	3.8	4.4	0.0	100.0	133
30-34	94.4	169	86.2	4.9	0.8	6.1	2.0	100.0	159
35-39	94.1	147	91.6	4.6	0.8	3.0	0.0	100.0	138
40-44	92.5	150	82.6	9.5	4.3	3.5	0.0	100.0	139
45-49	89.3	200	88.0	6.2	1.1	4.7	0.0	100.0	178
Total	92.0	855	86.7	6.2	2.2	4.2	0.6	100.0	786

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.

15.2 CONTROL OVER CASH EARNINGS AND RELATIVE MAGNITUDE OF WOMEN'S EARNINGS

In addition to access to paid employment, control over cash earnings is another important dimension of empowerment. Currently married, employed women who earn cash for their work were asked the relative magnitude of their earnings compared with their husbands' earnings. In addition, they were asked who the main decision maker is with regard to the use of their earnings. This information may provide some insight into women's empowerment within the family and the extent of their control over other decision making in the household.

Table 15.2.1 shows the percent distribution of currently married women who received cash earnings in the past 12 months, according to the person who mainly decides about the use of their earnings and their perception of the magnitude of their earnings relative to those of their husbands'. Twenty-seven percent of women say that they themselves mainly decide how their cash earnings are used. The majority of women (69 percent) indicate that the decision is made jointly with their husbands. Only 3 percent of women say that the decision is made mainly by their husbands.

Table 15.2.1 Control over women's cash earnings and relative magnitude of women's cash earnings: Women

Percent distribution of currently married women age 15-49 who received cash earnings for employment in the 12 months preceding the survey by person who decides how wife's cash earnings are used and by whether she earned more or less than her husband, according to background characteristics, Armenia 2010

Background characteristic	Person who decides how wife's cash earnings are used:						Wife's cash earnings compared with husband's cash earnings:						
	Mainly wife	Wife and husband jointly	Mainly husband	Other	Missing	Total	More	Less	About the same	Husband has no earnings	Don't know/ missing	Total	Number of women
Age													
15-19	*	*	*	*	*	100.0	*	*	*	*	*	100.0	1
20-24	(23.0)	(72.4)	(0.0)	(4.6)	(0.0)	100.0	(13.4)	(55.5)	(25.2)	(5.5)	(0.5)	100.0	48
25-29	24.0	71.0	2.2	1.3	1.4	100.0	9.2	74.9	11.3	2.2	2.5	100.0	112
30-34	28.2	67.6	3.5	0.7	0.0	100.0	6.8	77.7	12.1	3.1	0.2	100.0	194
35-39	24.7	71.1	3.2	1.1	0.0	100.0	12.3	60.2	23.7	2.9	0.9	100.0	195
40-44	27.0	70.9	1.5	0.6	0.0	100.0	6.1	67.2	22.8	3.1	0.8	100.0	241
45-49	29.3	66.6	4.1	0.0	0.0	100.0	11.6	62.2	21.5	3.5	1.2	100.0	257
Number of living children													
0	25.1	68.1	5.5	1.3	0.0	100.0	10.1	64.5	17.1	8.1	0.1	100.0	75
1-2	28.8	68.1	2.0	0.9	0.2	100.0	10.0	68.1	17.9	3.2	0.9	100.0	712
3-4	22.4	73.3	3.9	0.4	0.0	100.0	7.5	63.6	25.1	2.3	1.6	100.0	256
5+	*	*	*	*	*	100.0	*	*	*	*	*	100.0	5
Residence													
Urban	34.2	62.8	2.4	0.6	0.0	100.0	9.6	70.5	16.3	2.9	0.6	100.0	716
Rural	11.1	83.4	3.7	1.3	0.5	100.0	8.8	58.9	26.6	4.0	1.7	100.0	331
Region													
Yerevan	40.5	57.2	2.3	0.0	0.0	100.0	11.7	68.5	17.7	2.2	0.0	100.0	436
Aragatsotn	2.7	97.3	0.0	0.0	0.0	100.0	10.6	39.3	45.3	1.3	3.5	100.0	40
Ararat	0.5	94.6	4.4	0.5	0.0	100.0	3.3	52.8	39.0	4.4	0.5	100.0	80
Armavir	17.1	73.5	7.0	0.0	2.4	100.0	7.5	43.9	36.3	9.9	2.4	100.0	66
Gegharkunik	5.6	92.1	1.9	0.3	0.0	100.0	11.9	68.7	14.5	0.6	4.2	100.0	90
Lori	27.9	63.5	6.0	2.5	0.0	100.0	7.4	74.9	10.2	6.0	1.5	100.0	71
Kotayk	28.7	68.5	1.5	1.3	0.0	100.0	4.5	78.9	9.0	6.5	1.0	100.0	85
Shirak	24.0	70.8	2.3	2.9	0.0	100.0	10.0	73.1	14.7	1.1	1.1	100.0	74
Syunik	12.6	83.1	2.0	2.3	0.0	100.0	4.0	75.1	18.2	2.7	0.0	100.0	51
Vayots Dzor	35.3	55.6	9.1	0.0	0.0	100.0	15.1	77.0	5.8	1.5	0.6	100.0	18
Tavush	34.8	60.9	0.0	4.4	0.0	100.0	9.9	71.8	13.7	4.0	0.7	100.0	36
Education													
Basic	(6.0)	(75.4)	(18.6)	(0.0)	0.0	100.0	(4.4)	(58.0)	(17.5)	(15.8)	(4.3)	100.0	32
Secondary	21.8	73.8	3.8	0.6	0.0	100.0	9.5	65.3	19.6	4.3	1.3	100.0	301
Secondary special	24.9	72.7	0.5	1.4	0.5	100.0	8.2	67.9	19.4	3.1	1.4	100.0	322
Higher	34.2	62.5	2.8	0.6	0.0	100.0	10.6	67.8	19.7	1.6	0.2	100.0	392
Wealth quintile													
Lowest	6.9	84.6	6.2	1.2	1.2	100.0	6.7	55.5	28.0	6.4	3.5	100.0	138
Second	18.4	78.8	1.7	1.1	0.0	100.0	14.5	58.0	23.4	2.9	1.2	100.0	189
Middle	31.8	66.5	1.0	0.6	0.0	100.0	8.7	66.1	20.2	4.0	1.0	100.0	188
Fourth	28.6	67.0	3.0	1.4	0.0	100.0	9.2	73.3	14.8	2.2	0.6	100.0	248
Highest	37.6	59.4	3.0	0.1	0.0	100.0	7.8	73.1	16.6	2.5	0.0	100.0	284
Total	26.9	69.3	2.8	0.8	0.2	100.0	9.4	66.8	19.5	3.3	1.0	100.0	1,047

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

The likelihood that a currently married woman is the main decision maker regarding the use of her cash earnings tends to increase somewhat with age, suggesting that older women are more empowered than younger women. In terms of residence, women in urban areas (34 percent) are three times more likely than women in rural areas (11 percent) to mainly decide themselves how their cash earnings are used. Decision making alone by women on the use of their cash earnings varies widely across regions, ranging from 1 percent in Ararat to 41 percent in Yerevan. The percentage of women who mainly decide themselves how their cash earnings are used increases with education, from 6 percent among women with basic education to 34 percent among women with higher than secondary education. It also increases with wealth, from 7 percent for women in the lowest wealth quintile to 38 percent for women in the highest wealth quintile.

Table 15.2.1 also shows that about two-thirds of women (67 percent) earn less than their husbands, one in eleven women (9 percent) earns more than her husband, and one in five (20 percent) earns about the same amount as her husband. Three percent of women say that their husbands have no cash earnings. The proportion of women who earn more than their husbands does not vary uniformly with most background characteristics. This proportion varies from 3 percent in Ararat to 15 percent in Vayots Dzor.

Currently married men age 15-49 who receive cash earnings were asked who decides how their cash earnings are spent. Additionally, currently married women age 15-49 whose husbands receive cash earnings were also asked who decides how the husband's cash earnings are spent. Table 15.2.2 shows that the majority (83 percent) of currently married men age 15-49 who receive cash earnings report that they decide jointly with their wives how their earnings will be used, while one in nine (11 percent) says he mainly make the decisions himself. Only a small proportion of men (3 percent) say that decisions on how their earnings are used are mainly made by their wives.

There are a few distinct patterns on who decides on how their own earnings are used, according to men. Older men are more likely to make joint decisions with their wives on how to use their cash earnings when compared with younger men (91 percent for men age 45-49, compared with 69 percent for men age 20-24). Men in rural areas (88 percent) are more likely than those in urban areas (81 percent) to make joint decisions with their wives on how to use their cash earnings. Among regions, the percentage of men who make joint decisions with their wives ranges from 75 percent in Aragatsotn to 100 percent in Ararat. Joint decision making about men's earnings does not vary uniformly with education and wealth.

Table 15.2.2 shows that 81 percent of currently married women age 15-49 whose husbands receive cash earnings report that their husbands decide jointly with them how the husbands' cash earnings will be used. Seven percent of women report that they mainly decide how their husbands' cash earnings are used, and 8 percent say that their husbands mainly make this decision. Thus women's reports on decision making about the use of their husbands' earnings are fairly similar to the reports of men about the use of their own earnings.

Table 15.2.2 Control over men's cash earnings

Percent distribution of currently married men age 15-49 who receive cash earnings and of currently married women age 15-49 whose husbands receive cash earnings, by person who decides how husband's cash earnings are used, according to background characteristics, Armenia 2010

	Men							Women						
	Person who decides how husband's cash earnings are used:							Person who decides how husband's cash earnings are used:						
Background characteristic	Mainly wife	Husband and wife jointly	Mainly husband	Other	Missing	Total	Number of men	Mainly wife	Husband and wife jointly	Mainly husband	Other	Missing	Total	Number of women
Age														
15-19	*	*	*	*	*	100.0	1	1.1	59.6	16.0	23.3	0.0	100.0	60
20-24	4.6	69.0	10.5	15.8	0.0	100.0	34	1.4	74.8	9.9	13.7	0.3	100.0	434
25-29	2.6	83.4	7.6	6.5	0.0	100.0	122	4.1	81.7	7.4	6.9	0.0	100.0	613
30-34	2.4	84.8	9.9	2.9	0.0	100.0	145	7.4	82.0	7.6	3.0	0.0	100.0	631
35-39	3.6	78.4	16.2	1.7	0.0	100.0	133	8.1	81.6	8.4	1.7	0.3	100.0	503
40-44	3.6	79.3	16.0	1.0	0.1	100.0	128	8.3	84.4	6.5	0.5	0.3	100.0	592
45-49	2.4	90.5	6.4	0.0	0.7	100.0	168	10.2	84.2	5.2	0.1	0.3	100.0	666
Number of living children														
0	4.4	79.6	11.3	4.7	0.0	100.0	65	3.9	75.3	8.3	12.4	0.1	100.0	251
1-2	2.7	84.1	9.7	3.3	0.3	100.0	524	6.5	82.0	7.1	4.3	0.1	100.0	2,357
3-4	2.5	80.1	16.6	0.7	0.0	100.0	132	8.0	81.9	8.0	1.8	0.3	100.0	858
5+	*	*	*	*	*	100.0	10	(13.9)	(76.5)	(9.6)	(0.0)	(0.0)	100.0	33
Residence														
Urban	4.3	80.6	13.6	1.5	0.0	100.0	476	7.7	81.2	7.5	3.3	0.3	100.0	2,056
Rural	0.5	87.7	6.0	5.5	0.5	100.0	255	5.3	81.8	7.4	5.5	0.0	100.0	1,443
Region														
Yerevan	5.4	79.9	14.6	0.0	0.0	100.0	277	7.0	83.7	7.0	1.9	0.3	100.0	1,105
Aragatsotn	6.5	74.6	0.0	18.2	0.7	100.0	26	6.0	84.5	1.3	8.3	0.0	100.0	152
Ararat	0.0	100.0	0.0	0.0	0.0	100.0	39	0.4	94.2	4.6	0.6	0.2	100.0	218
Armavir	0.0	75.8	20.9	3.3	0.0	100.0	78	8.5	67.7	16.8	7.0	0.0	100.0	351
Gegharkunik	0.0	89.4	2.4	8.2	0.0	100.0	44	1.8	92.2	4.9	1.0	0.1	100.0	297
Lori	(0.0)	(81.3)	(18.7)	(0.0)	(0.0)	100.0	57	12.3	71.2	5.0	11.5	0.0	100.0	317
Kotayk	3.1	85.2	5.0	5.2	1.5	100.0	78	4.0	85.1	4.6	5.8	0.5	100.0	335
Shirak	4.3	87.0	8.8	0.0	0.0	100.0	62	12.7	70.6	11.6	5.0	0.0	100.0	375
Syunik	(0.0)	(97.7)	(2.3)	(0.0)	(0.0)	100.0	25	2.8	93.2	0.8	3.2	0.0	100.0	134
Vayots Dzor	(0.0)	(88.1)	(7.4)	(4.5)	(0.0)	100.0	13	7.0	83.8	9.0	0.1	0.0	100.0	78
Tavush	0.0	81.7	1.5	16.9	0.0	100.0	33	3.0	81.9	11.2	3.6	0.2	100.0	138
Education														
Basic	3.0	82.3	7.5	7.2	0.0	100.0	67	7.1	70.7	16.9	4.7	0.6	100.0	136
Secondary	2.1	80.4	12.7	4.4	0.4	100.0	279	7.1	79.2	8.8	4.8	0.0	100.0	1,458
Secondary special	2.4	86.5	10.0	1.1	0.0	100.0	172	6.2	83.7	5.7	4.1	0.3	100.0	1,112
Higher	4.6	83.9	10.5	0.9	0.1	100.0	213	6.7	84.1	5.7	3.2	0.2	100.0	793
Wealth quintile														
Lowest	1.1	83.6	8.8	6.6	0.0	100.0	142	6.0	78.8	10.4	4.8	0.0	100.0	696
Second	0.0	89.0	7.4	2.6	0.9	100.0	124	5.7	82.0	7.1	5.1	0.2	100.0	717
Middle	5.1	80.0	11.5	3.5	0.0	100.0	140	8.7	80.4	6.9	3.9	0.2	100.0	706
Fourth	6.4	84.5	7.2	1.8	0.1	100.0	154	6.4	84.2	5.6	3.8	0.0	100.0	668
Highest	2.0	79.4	18.2	0.5	0.0	100.0	171	6.9	81.8	7.3	3.4	0.6	100.0	711
Total	3.0	83.0	10.9	2.9	0.2	100.0	731	6.7	81.4	7.5	4.2	0.2	100.0	3,499

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

Table 15.3 shows, for currently married women who earned cash in the past 12 months, the person who decides how their cash earnings are used and, for all currently married women whose husbands earned cash in the past 12 months, the person who decides how their husbands' cash earnings are used, according to the magnitude of the women's earnings relative to their husbands' earnings. This table shows whether women's control over the use of their own and their husbands' earnings varies by whether they earn more or less than their husbands. Women who earn less than their husbands are more likely than women who earn an equal amount or more than their husbands to be the main decision maker about their own cash earnings (30 percent, compared with 19 percent). However, women who earn more than their husbands are more likely than other women to be the main decision makers on how their husbands' earnings are used (15 percent, compared with 7 percent or less).

Women who earn the same as their husbands are more likely than women who earn less than their husbands to report that decisions on the use of their own earnings and their husbands' earnings are mainly made jointly with their husbands.

Table 15.3 Woman's control over her own earnings and over those of her husband

Percent distribution of currently married women age 15-49 with cash earnings in the last 12 months by person who decides how the wife's cash earnings are used and percent distribution of currently married women age 15-49 whose husbands have cash earnings by person who decides how the husband's cash earnings are used, according to the relation between wife's and husband's cash earnings, Armenia 2010

	Person who decides how the wife's cash earnings are used:							Person who decides how the husband's cash earnings are used:						
Women's earnings relative to husband's earnings	Mainly wife	Wife and husband jointly	Mainly husband	Other	Missing	Total	Number of women	Mainly wife	Wife and husband jointly	Mainly husband	Other	Missing	Total	Number of women
More than husband	18.8	76.0	3.7	1.5	0.0	100.0	98	15.0	76.5	7.6	0.9	0.0	100.0	91
Less than husband	30.4	65.8	2.9	1.0	0.0	100.0	700	7.3	86.5	4.8	1.4	0.0	100.0	700
Same as husband	19.4	78.6	2.0	0.0	0.0	100.0	204	3.2	90.0	6.7	0.0	0.0	100.0	204
Husband has no cash earnings or did not work	(26.1)	(68.7)	(5.2)	(0.0)	(0.0)	100.0	34	na	na	na	na	na	na	0
Woman worked but has no cash earnings	na	na	na	na	na	na	0	4.4	89.8	4.2	1.5	0.0	100.0	244
Woman did not work	na	na	na	na	na	na	0	6.8	78.4	8.7	5.8	0.3	100.0	2,251
Total[1]	26.9	69.3	2.8	0.8	0.2	100.0	1,047	6.7	81.4	7.5	4.2	0.2	100.0	3,499

Note: Figures in parentheses are based on 25-49 unweighted cases.
na = Not applicable
[1] Includes cases where a woman does not know whether she earned more or less than her husband

15.3 OWNERSHIP OF ASSETS

Asset ownership, particularly of land and a house, has many beneficial effects for households including protection against financial ruin. For women, asset ownership is a source of financial empowerment, and for married women, it can provide economic protection in the case of marital dissolution or abandonment. Information on women's asset ownership can provide important insights into women's status and demographic and health outcomes.

The 2010 ADHS asked women and men if they own land or a house, alone or jointly. If respondents are the sole owners of the asset (they do not share ownership with anyone), then they own the asset "Alone." If respondents own the asset with someone else, then they are classified as owning the asset "Jointly only." If they own more than one asset, and some assets are owned alone and some jointly with someone else, then they are classified in the "Both alone and jointly" category. Finally, respondents who do not own the specific asset, either alone or jointly, are in the "Does not own" category.

Tables 15.4.1 and 15.4.2 show the distribution of women and men age 15-49, respectively, by ownership of housing and land, according to background characteristics. Table 15.4.1 shows that more than seven in ten women (72 percent) own a house, including the majority of women who own it jointly (58 percent). House ownership, either alone or jointly, increases with age from 61 percent among women age 15-19 to 85 percent among women age 45-49. Sixty-four percent of urban women own a house compared with 84 percent of women in rural areas. House ownership, either alone or jointly, ranges from 25 percent in Vayots Dzor to 98 percent in Gegharkunik. There is no clear relationship between women's house ownership and their education. Women's ownership of a house is lowest (63 percent) among women in the highest wealth quintile and highest among women in the lowest wealth quintile (80 percent).

Women are less likely to own land than a house; about four in ten women (39 percent) own land, either alone or jointly. One in three women (33 percent) owns land jointly. Land ownership increases only somewhat with age: 34 percent of women own some land by age 20 compared with 47 percent of women age 45-49. As expected, women living in rural areas, where more land is available, are considerably more likely to own land (72 percent) than women in urban areas (19 percent). Land ownership, either alone or jointly, is lowest among women in Yerevan and Vayots Dzor (15 and 16 percent, respectively) and highest among women in Gegharkunik (83 percent). The percentage of women who own land decreases with an increase in education and wealth. For example, land ownership is highest (68 percent) among women in the lowest wealth quintile and lowest among the wealthiest women (17 percent).

Table 15.4.1 Ownership of assets: Women

Percent distribution of women age 15-49 by ownership of house and land, according to background characteristics, Armenia 2010

Background characteristic	Percentage who own a house: Alone	Jointly	Alone and jointly	Percentage who do not own a house	Missing	Total	Percentage who own land: Alone	Jointly	Alone and jointly	Percentage who do not own land	Missing	Total	Number of women
Age													
15-19	0.5	54.8	5.3	38.9	0.5	100.0	0.2	32.4	1.4	65.4	0.6	100.0	861
20-24	2.0	55.4	8.2	34.3	0.2	100.0	0.5	31.7	3.6	63.6	0.7	100.0	1,032
25-29	2.2	54.8	8.4	34.5	0.0	100.0	0.8	31.6	4.1	63.4	0.0	100.0	950
30-34	2.9	55.2	10.5	31.3	0.0	100.0	0.4	29.2	4.5	65.9	0.0	100.0	838
35-39	3.1	60.4	10.4	26.0	0.1	100.0	0.3	37.6	4.2	57.5	0.4	100.0	643
40-44	7.3	63.5	14.0	15.1	0.0	100.0	2.7	36.6	6.7	53.9	0.0	100.0	742
45-49	10.7	64.6	10.1	14.6	0.0	100.0	4.6	36.7	5.4	53.4	0.0	100.0	857
Residence													
Urban	5.1	48.0	10.7	36.0	0.1	100.0	1.2	14.6	2.8	81.2	0.2	100.0	3,641
Rural	2.2	74.2	7.2	16.3	0.2	100.0	1.6	63.5	6.4	28.2	0.3	100.0	2,281
Region													
Yerevan	6.0	35.5	12.5	45.9	0.0	100.0	1.1	10.4	3.0	85.3	0.2	100.0	2,069
Aragatsotn	1.5	78.5	1.0	19.0	0.0	100.0	1.2	53.7	1.0	44.0	0.0	100.0	260
Ararat	2.8	83.9	10.8	2.6	0.0	100.0	0.3	66.2	7.0	25.5	1.1	100.0	379
Armavir	3.6	49.2	12.9	34.3	0.0	100.0	2.6	39.7	10.6	47.1	0.0	100.0	535
Gegharkunik	0.3	96.9	1.2	1.6	0.0	100.0	0.1	82.8	0.2	16.9	0.0	100.0	459
Lori	2.9	66.1	5.5	24.7	0.7	100.0	0.5	32.0	1.4	65.7	0.5	100.0	513
Kotayk	2.9	88.7	2.8	4.9	0.7	100.0	0.6	36.2	1.8	60.7	0.7	100.0	543
Shirak	4.9	62.5	11.8	20.8	0.0	100.0	3.6	33.7	5.0	57.6	0.2	100.0	598
Syunik	4.6	51.3	14.9	29.1	0.0	100.0	4.0	40.8	9.8	45.3	0.0	100.0	198
Vayots Dzor	2.8	21.0	1.8	74.5	0.0	100.0	1.9	14.3	0.2	83.5	0.0	100.0	131
Tavush	1.3	63.3	14.0	21.5	0.0	100.0	0.5	49.4	13.9	36.3	0.0	100.0	238
Education													
Basic	2.1	60.7	4.3	32.5	0.5	100.0	0.4	43.0	2.0	54.1	0.5	100.0	347
Secondary	2.9	64.8	8.1	24.2	0.1	100.0	1.3	43.2	4.2	51.0	0.1	100.0	2,137
Secondary special	4.7	56.0	11.5	27.8	0.1	100.0	1.9	31.1	5.3	61.5	0.2	100.0	1,681
Higher	5.1	51.3	10.0	33.5	0.2	100.0	1.0	21.8	3.5	73.4	0.4	100.0	1,757
Wealth quintile													
Lowest	2.7	67.5	9.6	20.1	0.1	100.0	2.3	57.9	7.6	32.1	0.1	100.0	1,151
Second	2.3	66.5	6.2	24.8	0.2	100.0	0.7	52.4	5.0	41.3	0.6	100.0	1,211
Middle	5.8	54.3	8.3	31.5	0.2	100.0	1.8	26.4	3.4	68.0	0.4	100.0	1,139
Fourth	4.3	54.9	12.5	28.3	0.1	100.0	1.3	17.0	3.2	78.4	0.1	100.0	1,146
Highest	4.8	47.8	10.5	36.9	0.0	100.0	0.8	14.1	2.0	83.0	0.1	100.0	1,275
Total	4.0	58.1	9.4	28.4	0.1	100.0	1.3	33.4	4.2	60.8	0.3	100.0	5,922

Table 15.4.2 shows that about eight in ten men (79 percent) own a house, somewhat more than women (72 percent). Two-thirds of men (67 percent) own a house jointly. House ownership among men increases rapidly with age, from 56 percent among men age 15-19 to 93 percent among men age 45-49. Similar to women, a higher percentage of rural men own a house than urban men (90 percent and 73 percent, respectively). House ownership, either alone or jointly, is lowest among men in Syunik (31 percent) and highest among men in Gegharkunik and Tavush (about 100 percent).

House ownership does not vary uniformly with men's education. Ownership of a house tends to decrease with an increase in wealth, although the relationship is not linear.

Forty percent of men, about the same as women (39 percent), own land. About one-third of men (34 percent) own land jointly. Land ownership among men fluctuates with age as with women, and the variation by age is not as large as variation in house ownership. One-third of men under age 20 own some land (33 percent), compared with 43-46 percent of men age 40-49. As observed among women, men living in rural areas are substantially more likely to own land alone or jointly than men in urban areas (81 percent versus 15 percent). Land ownership, either jointly or alone, ranges from 11 percent among men in Yerevan to 80 percent among men in Gegharkunik. Men with lower levels of education and wealth are more likely to own land than more educated and wealthier men.

Table 15.4.2 Ownership of assets: Men

Percent distribution of men age 15-49 by ownership of house and land, according to background characteristics, Armenia 2010

Background characteristic	Percentage who own a house: Alone	Jointly	Alone and jointly	Percentage who do not own a house	Missing	Total	Percentage who own land: Alone	Jointly	Alone and jointly	Percentage who do not own land	Total	Number of men
Age												
15-19	0.0	55.7	0.0	44.3	0.0	100.0	0.0	32.5	0.0	67.5	100.0	229
20-24	0.2	66.1	1.6	32.1	0.0	100.0	0.2	36.0	0.7	63.2	100.0	298
25-29	7.3	75.1	1.9	15.7	0.0	100.0	5.1	33.7	1.2	60.0	100.0	285
30-34	12.8	68.1	4.0	15.2	0.0	100.0	6.9	35.5	2.1	55.5	100.0	229
35-39	16.7	70.0	2.8	10.5	0.0	100.0	6.7	30.2	0.3	62.8	100.0	162
40-44	17.0	62.4	10.3	9.8	0.5	100.0	10.0	30.2	5.7	54.0	100.0	164
45-49	21.4	68.4	2.9	7.3	0.0	100.0	8.0	34.8	0.5	56.7	100.0	217
Residence												
Urban	13.3	55.3	4.1	27.3	0.1	100.0	4.3	9.3	1.0	85.4	100.0	984
Rural	3.5	85.8	1.1	9.5	0.0	100.0	5.6	73.5	2.0	19.0	100.0	600
Region												
Yerevan	15.7	45.4	5.7	33.2	0.0	100.0	5.7	4.6	1.1	88.7	100.0	593
Aragatsotn	7.3	74.9	0.3	17.5	0.0	100.0	5.7	70.4	0.2	23.8	100.0	70
Ararat	1.6	94.2	0.5	3.6	0.0	100.0	0.0	77.0	0.0	23.0	100.0	125
Armavir	10.0	73.5	0.6	15.9	0.0	100.0	11.3	41.7	0.6	46.3	100.0	148
Gegharkunik	1.8	96.2	1.6	0.4	0.0	100.0	1.8	77.0	1.6	19.6	100.0	83
Lori	6.6	91.6	0.0	1.8	0.0	100.0	4.3	36.3	1.2	58.1	100.0	130
Kotayk	1.0	89.1	2.0	7.3	0.5	100.0	0.8	45.0	0.0	54.2	100.0	148
Shirak	4.4	76.9	2.1	16.6	0.0	100.0	0.5	47.3	1.7	50.5	100.0	131
Syunik	29.7	0.9	0.0	69.4	0.0	100.0	17.6	0.9	0.9	80.6	100.0	63
Vayots Dzor	3.2	43.0	16.9	36.8	0.0	100.0	1.9	45.4	14.9	37.8	100.0	24
Tavush	0.5	99.2	0.0	0.3	0.0	100.0	0.3	69.1	6.6	24.0	100.0	68
Education												
Basic	3.5	67.9	2.0	26.6	0.0	100.0	3.0	39.9	0.0	57.2	100.0	188
Secondary	7.6	75.7	1.8	14.9	0.0	100.0	5.5	47.1	1.7	45.7	100.0	619
Secondary special	10.3	65.8	3.8	20.1	0.0	100.0	3.4	29.5	0.7	66.4	100.0	301
Higher	14.1	55.6	4.4	25.8	0.2	100.0	5.4	16.3	1.9	76.4	100.0	477
Wealth quintile												
Lowest	3.9	83.2	1.0	11.9	0.0	100.0	6.3	70.8	1.9	21.1	100.0	332
Second	3.8	76.2	1.5	18.5	0.0	100.0	4.9	53.9	1.8	39.4	100.0	285
Middle	10.2	61.9	0.2	27.4	0.2	100.0	4.2	26.4	0.5	68.9	100.0	312
Fourth	12.3	59.7	5.2	22.9	0.0	100.0	1.8	11.9	0.1	86.2	100.0	332
Highest	17.2	53.9	6.7	22.1	0.0	100.0	6.7	7.0	2.4	83.8	100.0	323
Total	9.6	66.8	3.0	20.6	0.0	100.0	4.8	33.6	1.3	60.3	100.0	1,584

15.4 WOMEN'S PARTICIPATION IN DECISION MAKING

To assess women's decision making autonomy, the 2010 ADHS collected information on currently married women's participation in three different types of decisions: on their own health care, on making major household purchases, and on visits to the women's family, friends, or relatives. Having a final say in the decision-making process reflects a high degree of autonomy. Women are considered a participant in a decision if they usually make that decision alone or jointly with their

husbands. The ability of women to make decisions that affect the circumstances of their own lives is an essential aspect of empowerment.

Table 15.5 shows the percent distribution of currently married women and currently married men according to the person in the household who usually makes the decisions concerning these matters. Data show that about one in five women (19 percent) are the main decision makers about their own health care, three-quarters decide jointly with their husband, while 6 percent have no say in this decision. Fifteen percent of currently married women decide mainly themselves about major household purchases, more than seven in ten (71 percent) decide jointly with their husbands, and 14 percent have no say in these matters. Decisions about visits to the woman's family or relatives are also mostly made jointly (82 percent), with only 9 percent of women making this decision by themselves.

Currently married men were asked who usually makes decisions about their own health care and about large household purchases. Table 15.5 shows that 10 percent of men are the main decision makers about their own health care or major household purchases, while about three-quarters decide jointly with their wives (78 and 75 percent, respectively). For 12 and 15 percent of men, respectively, the decisions about their own health care and about major household purchases are mainly made by their wives or someone else.

A comparison of women's and men's participation in decisions about their own health care and major household purchases suggests that women in Armenia are somewhat more likely to participate in these decisions than men.

Table 15.5 Participation in decision making

Percent distribution of currently married women and currently married men age 15-49 by person who usually makes decisions about various issues, Armenia 2010

Decision	Mainly wife	Wife and husband jointly	Mainly husband	Someone else	Other	Missing	Total	Number
			WOMEN					
Woman's own health care	18.9	75.3	4.5	0.7	0.5	0.1	100.0	3,626
Major household purchases	15.2	71.1	5.4	6.5	1.7	0.1	100.0	3,626
Visits to her family or relatives	9.2	82.2	4.5	3.5	0.4	0.2	100.0	3,626
			MEN					
Man's own health care	9.2	77.6	10.4	0.2	2.5	0.1	100.0	855
Major household purchases	7.5	75.2	9.5	2.2	5.5	0.1	100.0	855

Table 15.6.1 shows how women's participation in decision making varies by their background characteristics. As mentioned above, a large majority of married women either make household decisions themselves or participate in the decisions jointly with their husbands. Overall, more than nine in ten women have a say in the decisions about their own health care (94 percent) or visits to their family and friends (91 percent), while 86 percent are involved in decision making about major household purchases. About eight in ten currently married women (82 percent) participate in all three specified household decisions, while only 3 percent report having no say in any of the three decisions (Figure 15.1).

Table 15.6.1 Women's participation in decision making by background characteristics

Percentage of currently married women age 15-49 who usually make specific decisions either by themselves or jointly with their husband, by background characteristics, Armenia 2010

Background characteristic	Specific decisions				Percentage who participate in none of the three decisions	Number of women
	Woman's own health care	Making major household purchases	Visits to her family or relatives	Percentage who participate in all three decisions		
Age						
15-19	87.1	51.8	75.5	50.9	8.5	68
20-24	89.0	67.0	81.7	63.4	7.4	450
25-29	94.8	79.2	87.5	73.5	2.7	641
30-34	95.1	87.6	92.0	81.9	2.0	650
35-39	94.1	93.5	95.9	88.8	1.5	517
40-44	95.8	94.6	96.0	91.8	2.0	613
45-49	95.4	94.6	95.0	89.8	1.3	687
Employment (past 12 months)						
Not employed	92.6	82.8	89.1	77.1	3.6	2,331
Employed for cash	97.4	93.7	96.7	91.2	0.8	1,047
Employed not for cash	95.3	87.5	90.5	84.7	2.7	246
Number of living children						
0	89.7	68.0	80.8	65.9	8.2	269
1-2	95.0	86.6	92.4	82.4	2.1	2,434
3-4	93.4	90.2	91.8	84.3	2.7	887
5+	(91.2)	(98.6)	(91.8)	(88.0)	(1.4)	36
Residence						
Urban	95.1	88.4	93.4	84.0	2.2	2,111
Rural	93.0	83.3	88.6	78.5	3.5	1,515
Region						
Yerevan	95.8	91.7	95.3	86.7	1.2	1,126
Aragatsotn	95.6	80.2	80.7	70.9	2.3	164
Ararat	99.4	81.5	87.8	76.5	0.4	228
Armavir	81.4	76.2	80.1	72.0	13.5	373
Gegharkunik	94.8	84.1	86.2	80.0	2.1	300
Lori	96.8	82.1	95.7	80.1	1.2	325
Kotayk	97.4	88.1	96.8	87.1	2.0	344
Shirak	92.2	85.6	90.8	76.1	0.7	384
Syunik	94.2	90.9	93.9	89.4	3.2	136
Vayots Dzor	99.2	93.3	98.4	93.3	0.7	90
Tavush	92.8	86.4	91.9	82.7	2.9	156
Education						
Basic	85.6	75.0	81.9	69.2	8.4	147
Secondary	93.5	84.9	89.8	80.2	3.1	1,524
Secondary special	94.9	88.3	92.4	83.8	2.4	1,139
Higher	96.1	87.8	94.8	83.7	1.4	816
Wealth quintile						
Lowest	90.6	82.9	86.5	76.6	4.8	748
Second	94.5	84.7	88.8	80.5	2.8	741
Middle	95.6	88.0	92.4	83.9	2.2	725
Fourth	93.6	87.2	94.9	82.4	2.2	682
Highest	96.7	88.7	94.8	85.2	1.4	730
Total	94.2	86.3	91.4	81.7	2.7	3,626

Note: Total includes 2 women with information missing on employment in the past 12 months. Figures in parentheses are based on 25-49 unweighted cases.

Table 15.6.1 shows that there is a strong correlation between women's age and their participation in decision making. The percentage of women participating in all three decisions increases with age from 51 percent among women age 15-19 to 89 to 92 percent among women age 35-49. Furthermore, the proportion of women participating in all three decisions is lowest among women who were not employed in the past 12 months (77 percent) and those who have no children (66 percent). Participation in all three decisions is somewhat lower among women in rural areas (79 percent) than among those in urban areas (84 percent). The proportion of currently married women participating in all three decisions varies widely among regions, ranging from 71 percent in Aragatsotn to 93 percent in Vayots Dzor. Women's education and wealth have a positive association with their participation in household decisions. The proportion of women who participate in all three decisions increases from 69 percent among women with basic education to 84 percent among women with secondary special or higher education, and from 77 percent among women in the lowest wealth quintile to 85 percent among women in the highest wealth quintile.

Figure 15.1 Number of Household Decisions in Which Currently Married Women Participate

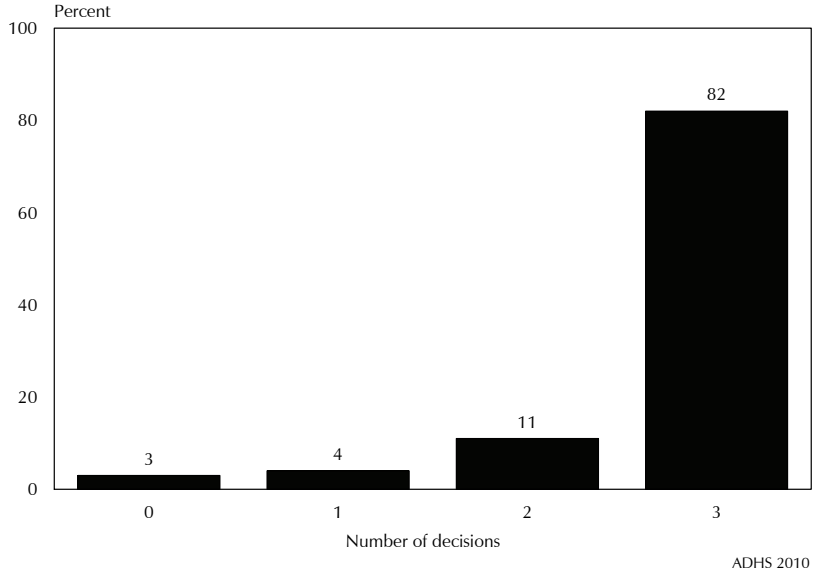


Table 15.6.2 shows that a large majority of married men (more than eight in ten) make each of the two specified household decisions (own health care and major household purchases) themselves or participate in the decision jointly with their wives. Eighty-eight percent of men participate in the decisions about their own health care, and 85 percent are involved in decision making about major household purchases. About eight in ten (78 percent) currently married men participate in both decisions, and 5 percent report having no say in any household decision. The percentage of men participating in both specified decisions fluctuates with age; it is lowest among men age 20-24 (60 percent) and highest among men age 35-39 (87 percent). It is lowest among men who were employed not for cash in the past 12 months (68 percent) followed by those who were not employed at all (74 percent). Rural men and those who have no children are less likely than urban men and those who have children to participate in both decisions. There are large differences in the proportion of currently married men participating in both decisions across regions. This proportion is lowest in Aragatsotn (34 percent) and highest in Ararat (97 percent). The proportion of men who participate in both decisions does not vary in a clear pattern by men's education but does increase with wealth—from 66 percent among men in the lowest wealth quintile to 90 percent among men in the highest wealth quintile.

Table 15.6.2 Men's participation in decision making by background characteristics

Percentage of currently married men age 15-49 who usually make specific decisions either alone or jointly with their wife, by background characteristics, Armenia 2010

Background characteristic	Specific decisions: Man's own health care	Specific decisions: Making major household purchases	Both decisions	Neither of the two decisions	Number of men
Age					
15-19	*	*	*	*	2
20-24	(81.9)	(69.1)	(59.6)	(8.6)	42
25-29	84.5	73.8	66.8	8.4	146
30-34	90.3	83.0	77.7	4.5	169
35-39	93.0	88.8	86.7	4.9	147
40-44	86.8	88.9	79.8	4.1	150
45-49	86.9	90.9	80.1	2.3	200
Employment (past 12 months)					
Not employed	83.8	81.4	74.3	9.1	68
Employed for cash	89.4	84.9	78.3	4.0	731
Employed not for cash	(72.2)	(84.2)	(68.2)	(11.9)	50
Number of living children					
0	90.1	77.2	70.5	3.1	79
1-2	89.2	84.4	78.5	4.9	597
3-4	82.0	88.0	75.7	5.7	168
5+	*	*	*	*	11
Residence					
Urban	90.4	87.4	82.3	4.5	537
Rural	83.9	80.1	69.4	5.4	318
Region					
Yerevan	90.8	88.8	84.4	4.8	322
Aragatsotn	48.0	58.9	34.1	27.2	33
Ararat	100.0	97.0	97.0	0.0	60
Armavir	98.5	54.0	54.0	1.5	86
Gegharkunik	92.4	78.6	77.4	6.3	47
Lori	100.0	92.7	92.7	0.0	63
Kotayk	93.0	86.1	86.1	7.0	83
Shirak	54.8	95.4	53.6	3.4	78
Syunik	98.5	94.8	94.8	1.5	31
Vayots Dzor	96.7	83.1	83.1	3.3	14
Tavush	75.4	83.2	67.7	9.0	36
Education					
Basic	85.7	81.6	74.7	7.4	84
Secondary	89.6	80.9	74.9	4.4	339
Secondary special	89.2	90.8	84.2	4.1	196
Higher	85.6	86.0	76.7	5.1	236
Wealth quintile					
Lowest	82.1	78.6	66.2	5.5	179
Second	87.2	82.0	74.0	4.9	152
Middle	88.7	81.9	76.7	6.1	159
Fourth	88.8	84.2	79.8	6.8	183
Highest	93.0	95.7	89.8	1.1	182
Total	88.0	84.7	77.5	4.8	855

Note: Total includes 5 men with information missing on employment in the past 12 months. 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.

15.5 ATTITUDES TOWARD WIFE BEATING

Wife beating is a form of physical violence that degrades women's humanity and is a violation of women's human rights. Abuse by a husband or partner is one of the most common forms of violence against women worldwide (Heise et al., 1999). Acceptance of this practice reflects women's low status and the perception that men are superior to women. Further, this form of violence lowers a woman's self-esteem and her image in society, leading to her disempowerment. Overall, violence against women has serious consequences for women's mental and physical health, including their reproductive and sexual health (WHO, 1997).

The 2010 ADHS collected information on attitudes toward wife beating. Women and men were asked whether a husband is justified in beating his wife under a series of circumstances: if the wife burns the food, argues with him, goes out without telling him, neglects the children, and refuses to have sexual intercourse with him. Women who perceive that a husband is justified in hitting or beating his wife for any of the mentioned reasons may believe that they are lower in status, both absolutely and relative to men. Such a stereotypical perception could act as a barrier to taking advantage of social and economic opportunities. This in turn may negatively affect women's quality of life and general well-being.

Table 15.7.1 shows women's acceptance of wife beating in each of the five circumstances listed above and also shows the percentage of women who agree with wife beating for at least one of the specified circumstances.

Overall, 9 percent of women agree that wife beating by a husband is justified for at least one of the specified situations. Fewer women accept wife beating for the specific reasons: 7 percent if a woman neglects her children, 6 percent if she argues with her husband, 3 percent if she goes out without telling him, and 1 percent or less if the woman refuses to have sexual intercourse with her husband or burns the food. Whether women believe a husband is justified in wife beating for any of the specified reasons varies little by age or employment status. The more children a woman has, the more likely she is to believe that wife beating is justified in any of the situations. In addition, women who have never married (7 percent) or who were previously married (8 percent) are less likely than married women (11 percent) to believe that there are occasions when wife beating is justified. Eleven percent of women in rural areas agree with at least one specified reason that justifies wife beating compared with 8 percent of women in urban areas. Attitudes toward wife beating vary considerably across regions, ranging from 2 to 3 percent acceptance of at least one reason for wife beating in Ararat and Syunik to 23 percent in Tavush. The acceptance of wife beating among women correlates inversely with their education and wealth. The percentage of women who agree with at least one of the specified reasons to justify wife beating declines from 18 percent among women with basic education to 5 percent among those with higher than secondary education, and from 14 percent among women in the lowest wealth quintile to 6 percent among those in the highest wealth quintile.

Table 15.7.2 shows men's attitudes toward wife beating. It is interesting to note that men are more likely than women to justify wife beating (20 percent compared with 9 percent). Seventeen percent of men say that wife beating is justified if a woman argues with him, 13 percent if she neglects her children, 8 percent if she goes out without telling him, 3 percent if she refuses to have sexual intercourse with her husband, and less than 1 percent if she burns the food. The percentage of men who believe a husband is justified in beating his wife for any of the specified reasons fluctuates with age; it is lower among men age 45-49 (13 percent) than among men in other age groups (16-24 percent). Men who are employed but do not earn cash are much more likely to justify wife beating (30 percent) than unemployed men or men employed for cash (19 percent, each). Men who have no children (23 percent) and never married men (24 percent) are more likely than men with children and ever-married men, respectively, to believe that there are occasions when wife beating is justified. Similar to women, men in rural areas (28 percent) are more likely than those in urban areas (15 percent) to agree with at least one specified justification for wife beating. Men in Yerevan (7 percent) are the least likely to agree with at least one specified reason, while men in Lori are the most likely (56 percent) to do so. As observed for women, the percentage of men who agree with at least one of the specified reasons that justify wife beating is highest among the least educated and poorest men.

Table 15.7.1 Attitude toward wife beating: Women

Percentage of all women age 15-49 who agree that a husband is justified in hitting or beating his wife for specific reasons, by background characteristics, Armenia 2010

Background characteristic	Husband is justified in hitting or beating his wife if she:					Percentage who agree with at least one specified reason	Number of women
	Burns the food	Argues with him	Goes out without telling him	Neglects the children	Refuses to have sexual intercourse with him		
Age							
15-19	0.5	4.3	1.8	6.2	0.4	7.8	861
20-24	0.3	7.1	3.6	7.3	1.5	9.8	1,032
25-29	0.1	4.6	3.0	6.5	1.8	8.2	950
30-34	0.4	5.5	4.1	8.2	1.1	9.9	838
35-39	0.4	5.1	2.8	5.0	1.3	8.6	643
40-44	0.6	6.7	2.6	7.4	0.9	10.3	742
45-49	0.0	6.1	3.7	7.7	1.4	10.6	857
Employment (past 12 months)							
Not employed	0.5	6.2	3.4	7.4	1.4	9.9	3,850
Employed for cash	0.1	4.3	2.2	5.9	0.8	7.7	1,744
Employed not for cash	0.0	6.3	4.1	7.8	0.6	10.8	319
Number of living children							
0	0.5	4.2	2.0	5.4	0.7	7.0	2,233
1-2	0.2	5.7	3.2	7.1	1.4	9.6	2,690
3-4	0.1	8.5	5.3	10.1	1.7	13.2	964
5+	(0.0)	(12.5)	(6.9)	(15.4)	(2.6)	(25.1)	36
Marital status							
Never married	0.5	4.0	1.6	5.5	0.4	7.0	1,911
Married or living together	0.2	6.8	4.0	8.0	1.5	10.7	3,626
Divorced/separated/widowed	0.4	3.0	2.4	4.5	2.4	7.5	385
Residence							
Urban	0.2	4.9	2.2	5.9	1.1	8.0	3,641
Rural	0.4	6.8	4.5	8.8	1.4	11.4	2,281
Region							
Yerevan	0.2	5.5	2.1	5.9	1.3	8.1	2,069
Aragatsotn	0.0	3.6	1.9	9.1	0.0	11.6	260
Ararat	0.0	0.3	1.7	1.0	0.0	2.1	379
Armavir	0.4	6.7	3.6	5.2	2.0	7.2	535
Gegharkunik	0.4	8.0	7.1	12.6	0.0	14.9	459
Lori	0.6	3.1	1.6	5.7	0.8	7.2	513
Kotayk	0.2	2.7	2.7	5.2	0.6	5.9	543
Shirak	1.0	9.7	6.7	10.3	3.5	14.9	598
Syunik	0.0	0.5	0.6	2.4	0.6	2.9	198
Vayots Dzor	0.0	12.2	3.3	9.4	1.9	15.2	131
Tavush	0.1	13.8	4.3	17.8	0.6	23.0	238
Education							
Basic	0.6	13.5	7.5	11.9	3.3	18.2	347
Secondary	0.3	7.2	4.3	9.4	1.6	12.1	2,137
Secondary special	0.4	5.3	2.9	6.1	1.2	8.5	1,681
Higher	0.2	2.5	1.0	4.0	0.3	4.9	1,757
Wealth quintile							
Lowest	0.4	9.0	5.7	10.4	2.1	13.9	1,151
Second	0.6	6.0	3.7	8.3	1.4	10.9	1,211
Middle	0.3	5.3	2.6	6.7	1.2	9.3	1,139
Fourth	0.2	4.2	2.0	5.4	0.6	6.9	1,146
Highest	0.2	3.8	1.6	4.4	0.7	5.7	1,275
Total	0.3	5.7	3.1	7.0	1.2	9.3	5,922

Note: Total includes 9 women with information missing on employment in the past 12 months. Figures in parentheses are based on 25-49 unweighted cases.

Table 15.7.2 Attitude toward wife beating: Men

Percentage of all men age 15-49 who agree that a husband is justified in hitting or beating his wife for specific reasons, by background characteristics, Armenia 2010

Background characteristic	Husband is justified in hitting or beating his wife if she:					Percentage who agree with at least one specified reason	Number of men
	Burns the food	Argues with him	Goes out without telling him	Neglects the children	Refuses to have sexual intercourse with him		
Age							
15-19	0.8	19.1	9.2	14.6	2.6	21.3	229
20-24	0.5	16.2	9.9	13.6	2.5	20.9	298
25-29	0.0	20.9	7.8	15.5	4.0	24.0	285
30-34	0.1	17.1	7.1	13.8	1.6	20.3	229
35-39	0.9	14.9	5.3	9.7	3.7	15.5	162
40-44	2.3	17.4	10.5	15.4	4.0	22.5	164
45-49	0.0	9.6	4.3	8.0	1.3	12.8	217
Employment (past 12 months)							
Not employed	0.5	15.7	8.5	13.3	2.6	19.2	420
Employed for cash	0.6	16.3	7.0	12.5	2.5	19.4	1,069
Employed, not for cash	0.4	27.3	15.6	20.6	7.1	30.3	89
Number of living children							
0	0.4	19.6	9.3	14.8	3.7	23.1	787
1-2	0.8	13.5	6.3	10.8	2.1	16.1	616
3-4	0.0	13.9	7.3	12.5	0.8	18.1	169
5+	*	*	*	*	*	*	11
Marital status							
Never married	0.5	20.2	9.7	15.7	3.5	24.1	707
Married or living together	0.4	12.6	5.5	10.1	1.8	15.4	855
Divorced/separated/ widowed	(10.8)	(61.3)	(38.5)	(45.8)	(18.3)	(63.3)	22
Residence							
Urban	0.5	11.9	5.0	8.9	2.6	14.8	984
Rural	0.7	24.6	12.6	20.1	3.0	28.4	600
Region							
Yerevan	0.7	5.2	2.8	3.4	2.4	7.4	593
Aragatsotn	0.0	48.4	30.1	18.9	1.7	49.9	70
Ararat	0.0	6.6	1.5	11.1	0.0	11.3	125
Armavir	0.9	19.2	5.0	13.2	0.9	21.0	148
Gegharkunik	2.5	17.1	14.2	21.2	6.6	22.2	83
Lori	0.0	55.2	14.7	49.5	6.6	56.4	130
Kotayk	0.0	18.2	12.2	8.3	0.0	19.0	148
Shirak	0.0	7.4	1.7	9.1	2.7	13.0	131
Syunik	0.6	23.8	34.6	42.4	6.6	44.6	63
Vayots Dzor	0.0	25.8	9.3	11.6	9.5	27.8	24
Tavush	1.7	27.4	3.5	8.3	4.9	28.8	68
Education							
Basic	0.2	20.1	10.3	19.9	3.5	25.1	188
Secondary	0.5	22.8	11.1	17.1	2.5	26.2	619
Secondary special	0.5	15.7	5.6	11.9	2.4	18.6	301
Higher	0.8	8.1	4.1	6.1	3.1	10.6	477
Wealth quintile							
Lowest	0.9	26.4	15.9	20.6	3.3	31.8	332
Second	0.4	18.7	6.7	14.8	2.8	20.9	285
Middle	0.1	19.2	7.8	16.6	3.7	22.4	312
Fourth	0.7	12.4	5.7	8.7	3.6	14.8	332
Highest	0.6	6.9	2.9	5.2	0.5	9.7	323
Total	0.6	16.7	7.9	13.1	2.8	19.9	1,584

Note: Total includes 6 men with information missing on employment in the past 12 months. 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.

There has been a remarkable improvement in attitudes toward wife beating, among both women and men, between the 2005 ADHS and 2010 ADHS suggesting an increasing belief in gender equality. For example, among women, the proportions who agree with at least one of the specified reasons that justify wife beating decreased from 22 percent in 2005 to 9 percent in the current survey. The corresponding decline for men is from 31 percent in 2005 to 20 percent in 2010. Between 2005 and 2010, the most pronounced changes in attitudes, as measured by agreement with at least one reason for wife beating, are found for women in Armavir (from 47 percent to 7 percent), Aragatsotn (from 46 percent to 12 percent), Gegharkunik (from 38 percent to 15 percent), and Kotayk (from 30 percent to 6 percent). Among men, the greatest corresponding declines are in Syunik (73 percent in 2005 to 45 percent in 2010) and in Gegharkunik (57 percent in 2005 to 22 percent in 2010). However, men in Lori and Vayots Dzor are more likely to agree with wife beating in 2010 than in 2005. In Vayots Dzor, for example, the proportion of men who agreed with at least one reason for wife beating was 29 percent in 2005, but is 56 percent in 2010 (NSS et al., 2006).

15.6 INDICATORS OF WOMEN'S EMPOWERMENT

The two sets of empowerment indicators, namely women's participation in making household decisions and their attitudes toward wife beating are summarized in two separate indices. The first index shows the number of decisions (see Table 15.6.1 for the list of decisions) in which women participate alone or jointly with their husbands. This index ranges in value from 0 to 3 and is positively related to women's empowerment. It reflects the degree of decision-making control that women are able to exercise in areas that affect their own lives and environments. The second indicator, which ranges in value from 0 to 5, is the total number of reasons (see Table 15.7.1 for the list of reasons) for which the woman feels that a husband is justified in beating his wife. A lower score on this indicator is interpreted as reflecting a greater sense of entitlement and self-esteem and a higher status of women.

Table 15.8 shows how these indicators relate to each other for currently married female respondents. In general, the expectation is that women who participate in making household decisions are also more likely to have gender-egalitarian beliefs. The data show that there is the expected positive relationship between the number of decisions in which the woman participates and the proportion who disagree with all the reasons given for a husband to beat his wife. Data in Table 15.8 show that 79 percent of women who do not participate in any of the household decisions disagree with all of the given reasons for a husband to beat his wife, compared with 91 percent of women who participate in all three decisions.

Table 15.8 Indicators of women's empowerment

Percentage of currently married women age 15-49 who participate in all decision making and the percentage who disagree with all of the reasons justifying wife beating, by value on each of the indicators of women's empowerment, Armenia 2010

Empowerment indicator	Percentage who participate in all decision-making	Percentage who disagree with all the reasons justifying wife beating	Number of women
Number of decisions in which women participate[1]			
0	na	79.1	99
1-2	na	83.6	565
3	na	90.7	2,962
Number of reasons for which wife beating is justified[2]			
0	83.0	na	3,237
1-2	76.4	na	289
3-4	54.7	na	97
5	*	na	2

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
na = Not applicable
[1] See Table 15.6.1 for the list of decisions.
[2] See Table 15.7.1 for the list of reasons.

The second panel in Table 15.8 shows that participation in making household decisions declines as the number of justifications for wife beating increases, from 83 percent of women who agree with none of the reasons that justify wife beating to 55 percent among women who agree with three to four reasons. The number of cases of women who agree with all five reasons is too small to permit further analysis.

15.7 CURRENT USE OF CONTRACEPTION BY WOMEN'S STATUS

A woman's ability to control her fertility and use a method of contraception is likely to be affected by her self-image and sense of empowerment. A woman who feels that she is unable to control other aspects of her life may be less likely to feel that she can make decisions regarding fertility.

Table 15.9 shows the relationship of each of the two empowerment indices with current use of contraceptive methods among currently married women age 15-49. The data indicate that there is a positive association between the two empowerment indices and contraceptive use. For example, the proportion of married women who are using any method of contraception rises steadily, from 43 percent of women who do not participate in household decision making to 56 percent of women who participate in all three decisions. The use of modern methods follows the same pattern: the proportion of women who are using a modern method is 12 percent among women who do not participate in any of the household decisions and 28 percent among women who participate in all three decisions.

Table 15.9 Current use of contraception by women's empowerment

Percent distribution of currently married women age 15-49 by current contraceptive method, according to selected indicators of women's status, Armenia 2010

		Modern methods							
Empowerment indicator	Any method	Any modern method[1]	Female sterili-zation	Temporary modern female methods[1]	Male condom	Any traditional method	Not currently using	Total	Number of women
Number of decisions in which women participate[2]									
0	43.3	11.8	0.0	4.8	7.0	31.6	56.7	100.0	99
1-2	50.2	24.2	0.4	11.2	12.7	26.0	49.8	100.0	565
3	56.2	28.3	0.2	12.9	15.2	27.8	43.8	100.0	2,962
Number of reasons for which wife beating is justified[3]									
0	56.1	28.4	0.2	12.9	15.3	27.7	43.9	100.0	3,237
1-2	44.4	18.9	0.4	8.2	10.3	25.4	55.6	100.0	289
3-4	45.0	13.2	0.0	10.5	2.7	31.9	55.0	100.0	97
5	*	*	*	*	*	*	*	100.0	2
Total	54.9	27.2	0.2	12.4	14.6	27.7	45.1	100.0	3,626

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed. If more than one method is used, only the most effective method is considered in this tabulation.
[1] Pill, IUD, injectables, implants, female condom, foam/jelly, and lactational amenorrhea method
[2] See Table 15.6.1 for the list of decisions.
[3] See Table 15.7.1 for the list of reasons.

The data further show that use of contraception decreases from 56 percent among women who agree with none of the reasons for which wife beating is justified to 44-45 percent among those who agree with one to four reasons. Similarly, current use of a modern method decreases from 28 percent of women who do not agree with any of the wife-beating justifications to 13 percent of women who agree with three to four of them.

In societies where health care is widespread, such as in Armenia, women's status may not affect their access to health services. In other societies, however, increased empowerment of women is likely to increase their ability to seek out and use health services to better meet their own reproductive health goals, including the goal of safe motherhood. As a woman becomes more empowered, she is more likely to have a say in the number and spacing of children she desires. However, in Armenia, almost all women received antenatal care or delivery care from health personnel for the most recent birth in the five years preceding the survey, and almost all births were delivered at a health facility (see Chapter 10). Therefore it is not surprising that women's access to and use of reproductive health care services is not found to vary by women's empowerment indices in Armenia (data not shown) where reproductive health services are widely accessible to all women.

REFERENCES

Althabe, F., and J. M. Belizan. 2006. Caesarean Section: The Paradox. *Lancet* 368(9546):1472-1473. doi:10.1016/S0140-6736(06)69616-5.

Conde-Agudelo, A., A. Rosas-Bermudez, and A. C. Kafury-Goeta. 2006. Birth Spacing and Risk of Adverse Perinatal Outcomes, a Meta-analysis. *Journal of the American Medical Association* 295(15): 1809-1823. doi:10.1001/jama.295.15.1809.

Emerging Markets Group [USAID] and Center for Health Services Research and Development (CHSR) [University of Armenia]. 2006. USAID Primary Healthcare Reform (PHCR) Project. *Household Health Survey: Baseline Evaluation*. Yerevan, Armenia: USAID and University of Armenia.

Government of Armenia (GOA), United Nations Children's Fund (UNICEF), and Save the Children Fund (SCF). 1999. *Situation Analysis of Children and Women in Armenia*. Yerevan: GOA, UNICEF, and SCF.

Government of the Republic of Armenia, Decree N1533-N, On Approval of the Primary Health Care Strategy for the Armenian Population for 2003-2008 and of the 2003-2005 Pilot Programme to Develop New Methods for the Organization and Financing of PHC Service Delivery in Armenia, November 13, 2003.

Hakobyan, T., M. Nazaretyan, T. Makarova, M, Aristakesyan, H. Margaryants, and E. Nolte. 2006. Armenia: Health System Review. *Health Systems in Transition* 8(6):1-180.

Health System Performance Assessment Working Group (HSPA). 2008. Health System Performance in Armenia: Strategic Review Summary. Yerevan, Armenia: Republic of Armenia.

Heise, L., M. Ellsberg, and M. Gottemoeller. 1999. *Ending violence against women*. Population Reports, Series L, No. 11. Baltimore, Maryland, USA: Johns Hopkins University School of Public Health, Population Information Program.

International Labor Organization (ILO), Subregional Office for Eastern Europe and Central Asia. 2009. *Migration and Development. Armenia Country Study*. Yerevan, Armenia: ILO.

Joint United Nations Programme on HIV/AIDS (UNAIDS). Consultation on Concurrent Sexual Partnerships: Recommendations from a Meeting of the UNAIDS Reference Group on Estimates, Modeling and Projections, Nairobi, Kenya, April 20-21, 2009.

Ministry of Health (MOH) [Armenia]. 2005. The National Immunization Program of the Republic of Armenia 2006-2010, Appendix # 1 according to decision # 2119 dated by 2005 Nov 9 of RA. Yerevan, Armenia: MOH.

Ministry of Health (MOH) [Armenia]. 2008. Ministry of Health Form 112, Child's Health Ambulatory Card. Yerevan, Armenia: MOH.

Ministry of Health (MOH) [Armenia] and United Nations Children's Fund (UNICEF) [Armenia]. 1999. *Evaluation of the National Immunization Program of the Republic of Armenia.* Yerevan, Armenia: MOH and UNICEF/Armenia.

National Center for AIDS Prevention (NCAP) [Armenia]. 2011. Yerevan, Armenia: Ministry of Health (MOH). Available at http://www.armaids.am/main/free_code.php?lng=1&parent=3.

National Program on Reproductive Health (NPRH) [Armenia]. 1998. *Reproductive Health Survey Armenia, 1997*. Yerevan, Armenia: Administrative Office of the NPRH, Armenian Research Center on Maternal and Child Health Protection, and National Health Information and Analytic Center, Ministry of Health.

National Scientific and Applied Center for Preventive Medicine (NCPM) [Moldova] and ORC Macro. 2006. *Moldova Demographic and Health Survey 2005.* Calverton, Maryland: NCPM and ORC Macro.

National Statistical Service (NSS) [Armenia]. 2005. *Labour Force and Child Labour in Armenia, 2001-2004.* Yerevan, Armenia: NSS.

National Statistical Service (NSS) [Armenia]. 2010. Armenia MDGs Indicators. Available at www.armstat.am/file/doc/99462398.pdf.

National Statistical Service (NSS) [Armenia], Ministry of Health (MOH), and ORC Macro. 2001. *Armenia Demographic and Health Survey 2000.* Calverton, Maryland: NSS, MOH, and ORC Macro.

National Statistical Service (NSS) [Armenia], Ministry of Health (MOH), and ORC Macro. 2006. *Armenia Demographic and Health Survey 2005.* Calverton, Maryland: NSS, MOH, and ORC Macro.

National Statistical Service (NSS) [Armenia]. 2011a. *Housing Resources and Public Utility of the Republic of Armenia 2010*. Yerevan, Armenia: NSS.

National Statistical Service (NSS) [Armenia]. 2011b. *Social Snapshot and Poverty in Armenia.* Yerevan, Armenia: National Statistical Service.

National Statistical Service (NSS) [Armenia]. 2011c. *Statistical Yearbook of Armenia 2011.* Yerevan, Armenia: National Statistical Service.

National Statistical Service (NSS) [Armenia]. 2011d. *The Demographic Handbook of Armenia 2011*. Yerevan, Armenia: NSS.

Pan American Health Organization (PAHO) and World Health Organization (WHO). 2003. *Guiding Principles for Complementary Feeding of the Breastfed Child.* Washington, D.C./Geneva, Switzerland: PAHO and WHO.

Rutstein, S. O. 2005. Effects of Preceding Birth Intervals on Neonatal, Infant and Under Five Years Mortality and Nutritional Status in DSeveloping Countries: Evidence from the Demographic and Health Surveys. *International Journal of Gynecology & Obstetrics* 89 (Suppl. 1):S7-24. doi:10.1016/j.ijgo.2004.11.012.

Rutstein, S.O., and G. Rojas. 2006. *Guide to DHS statistics*. Calverton, Maryland, USA: ORC Macro.

Rutstein, S.O., and K. Johnston. 2004. *The DHS Wealth Index*. DHS Comparative Report No. 6. Calverton, Maryland: ORC Macro.

Rutstein, S., K. Johnston, and D. Gwatkin. 2000. *Poverty, Health Inequality, and Its Health and Demographic Effects*. Paper presented at the 2000 annual meeting of the Population Association of America, Los Angeles, California.

State Statistical Committee (SSC) [Azerbaijan] and Macro International Inc. 2008. *Azerbaijan Demographic and Health Survey 2006.* Calverton, Maryland, USA: SSC and Macro International Inc.

Ukrainian Center for Social Reforms (UCSR), State Statistical Committee (SSC) [Ukraine], Ministry of Health (MOH) [Ukraine], and Macro International Inc. 2008. *Ukraine Demographic and Health Survey 2007.* Calverton, Maryland, USA: UCSR and Macro International.

UNAIDS. 2010. 2010 Report on the Global AIDS Epidemic. Geneva, Switzerland: UNAIDS. Available at http://www.unaids.org/globalreport/global_report.htm.

United Nations Children's Fund (UNICEF) and "Harmonic Society" Social Workers Association. 2008, Child Labor in the Republic of Armenia, Yerevan, Armenia: UNICEF and Social Workers Association..

United Nations Children's Fund (UNICEF) 2011, Child protection from violence, exploitation and abuse. Available at http://www.unicef.org/media/media_45451.html (September, 2011).

United Nations Children's Fund (UNICEF), World Health Organization (WHO), and United Nations Population Fund (UNFPA). 1997. *Guidelines for Monitoring the Availability and Use of Obstetric Services*. New York: UNICEF, WHO, and UNFPA.

United Nations General Assembly. *Resolution* 25, session 44. Convention on the Rights of the Child. November 20, 1989.

US Department of Health and Human Services. 2006. The Health Consequences of Involuntary Exposure to Tobacco Smoke. A Report of the Surgeon General. Rockville, MD: US Department of Health and Human Services, Public Health Service, and Office of the Surgeon General, Washington, DC.

WHO Multicentre Growth Reference Study Group. 2006. *WHO Child Growth Standards: Length/height-for-age, Weight-for-age, Weight-for-length, Weight-for-height and Body Mass Index-for-age: Methods and development.* Geneva, Switzerland. World Health Organization.

Windham G.C., A. Eaton, and B. Hopkins. 1999. Evidence for an Association between Environmental Tobacco Smoke Exposure and Birth Weight: A Meta-analysis and New Data. Paediatric and Perinatal Epidemiology. 13:35-37. doi:10.1046/j.1365-3016.1999.00150.x.

World Health Organization (WHO). 1993. *International Classification of Diseases and Related Health Problems, tenth revision*. Geneva, Switzerland: WHO.

World Health Organisation (WHO). 1997. *Violence against Women, A Priority Health Issue.* WHO/FRH/WHD/97.8. Geneva: WHO.

World Health Organization (WHO). 2005. *Guiding Principles for Feeding Nonbreastfed Children 6 to 24 Months of Age.* Geneva: WHO.

World Health Organization (WHO). 2006. *Birth Spacing: Report from a WHO Technical Consultation.* Geneva: WHO.

World Health Organization (WHO). 2008. *Indicators for Assessing Infant and Young Child Feeding Practices. Part I: Definitions.* Conclusions of a consensus meeting held 6-8 November 2007 in Washington DC, USA. Available at http://whqlibdoc.who.int/publications/2008/ 9789241596664 _eng.pdf.

World Health Organization (WHO) 2009. Armenia: Health System Performance Assessment 2009. Copenhagen: WHO Regional Office for Europe.

World Health Organization (WHO). 2010. *Indicators for Assessing Infant and Young Child Feeding Practices. Part II: Measurement.* Geneva, Switzerland: WHO. Available at http://whqlibdoc.who.int/ publications/2010/9789241599290_eng.pdf.

SAMPLE DESIGN FOR THE 2010 ARMENIA DHS

Appendix A

A.1 INTRODUCTION

The purpose of this document is to describe the sample design of the 2010 Armenia Demographic and Health Survey (2010 ADHS) and the corresponding selection procedures performed prior to the survey implementation. The 2010 ADHS is based on a representative probability sample of households. In the selected households, all women age 15-49 were eligible for interview. In one in every three selected households, all men age 15-49 were eligible for interview.

A.2 OBJECTIVES OF THE SAMPLE DESIGN

The 2010 ADHS survey is designed to allow reliable estimation of various population and health indicators of interest for the country as a whole and of selected indicators for the various domains of interest. Among the key indicators of interest are the fertility and contraceptive prevalence rates, selected maternal and child health measures including anthropometric indices, and mortality rates for children under age 5.

The major domains of interest are the following:

- Armenia as a whole
- Urban and rural areas of Armenia (each as a separate domain)
- 11 major regions (*marz*) in Armenia:
  - Yerevan (the capital city)
  - Aragatson
  - Ararat
  - Armavir
  - Gegharkunik
  - Lori
  - Kotayk
  - Shirak
  - Syunik
  - Vayots Dzor
  - Tavush

A.3 SAMPLE FRAME

Administratively, Armenia is divided into 11 administrative regions (marz), including the capital city of Yerevan. Each region in turn is subdivided into districts. During the last Population Census in 2001, each locality was subdivided into convenient areas called census enumeration areas (EAs). In 2003, the State Council on Statistics designed a master sample using as a frame the list of 2001 census EAs. A subset of the 2003 master sample was used for the selection of the 2010 ADHS sample.

A.4 STRATIFICATION

In the census frame, the EAs were grouped by location in the 11 major administrative areas. Because of the interest in obtaining separate estimates for urban and rural areas, the EAs also were stratified separately by urban and rural areas.

A.5 SAMPLE ALLOCATION

Balancing both survey costs and the interest in obtaining estimates of adequate precision for key domains, the target number of completed women's interviews for the 2010 ADHS was set at 6,575. Taking into account the level of non-response in the 2005 DHS, it was determined that a sample of 7,580 households would have to be selected in order to achieve this target. To determine the sample allocation, a minimum requirement of 25 households per cluster was imposed, with the final design calling for the selection of 308 clusters (221 clusters in the urban areas and 87 clusters in the rural areas).

Taking into account these parameters, Table A.1 shows the allocation of clusters and households according to administrative region and type of residence. The sample allocation among regions was not done in proportion to the number of households in the region at the last census. If that approach had been adopted, some of the less populated regions would have received a too-small sample size. Instead the number of EAs (PSUs) in each major region was calculated to provide adequate representation in the sample for the region.

Table A.1 Sample allocation of clusters and households

Sample allocation of clusters and households by region, according to residence, Armenia, 2010

	Allocation of clusters			Allocation of households		
Region	Urban	Rural	Total	Urban	Rural	Total
Yerevan	52	0	52	1,354	0	1,354
Aragatson	17	8	25	408	192	600
Ararat	18	8	26	468	208	676
Armavir	17	9	26	425	225	650
Gegharkunik	17	9	26	425	225	650
Lori	16	10	26	400	250	650
Kotayk	17	9	26	425	225	650
Shirak	16	10	26	400	250	650
Syunik	17	8	25	408	192	600
Vayots Dzor	17	8	25	340	160	500
Tavush	17	8	25	408	192	600
Armenia	221	87	308	5,461	2,119	7,580

As noted above, the target of the 2010 ADHS sample was to obtain 6,575 completed women's interviews. The survey design called for all men age 15-49 to be interviewed in every third household selected for the woman's interview. In the 2005 ADHS, a total of 1,447 successfully completed male interviews were obtained with a sample of 2,512 selected households. Assuming a similar rate of completed interviews, the 2010 ADHS was expected to yield 1,456 completed male interviews.

Table A.2 shows the distribution of the number of completed interviews with women and men, according to administrative region and urban-rural residence.

Table A.2 Sample allocation of expected completed interviews with women and men

Sample allocation of expected number of completed interviews with women and men by region, according to residence, Armenia, 2010

	Women 15-49			Men 15-49		
Region	Urban	Rural	Total	Urban	Rural	Total
Yerevan	1,142	0	1,142	253	0	253
Aragatson	421	146	567	108	37	146
Ararat	408	137	545	78	26	104
Armavir	442	170	613	110	42	152
Gegharkunik	434	159	593	94	34	128
Lori	325	139	464	41	17	58
Kotayk	408	150	557	97	36	133
Shirak	431	152	583	86	30	117
Syunik	368	169	537	95	44	139
Vayots Dzor	306	101	407	76	25	101
Tavush	424	144	568	93	32	125
Armenia	5,108	1,467	6,575	1,131	324	1,456

A.6 SAMPLE SELECTION

The 2010 ADHS sample was selected using a stratified two-stage cluster design consisting of 308 clusters. The numbers of clusters in each stratum (i.e., region and residential grouping) was calculated dividing the total number of households allocated to the specific region-residential group by the planned sample take for the group—between 20 to 26 households per EA. Within each group, clusters were selected systematically with probability proportional to size.

The selection was done using the following formula:

$$P_{1i} = (b\ m_i / \Sigma\ m_i)$$

where

b: number of EAs in the 2010 ADHS in a given region-residence group (i.e., combination of region and urban or rural area),

m_i: measure of size of i^{th} EA

$\Sigma\ m_i$: measure of size for the corresponding group

In each selected EA, a household listing operation was carried out and households were selected to achieve a fixed sample take per cluster.

In a given area, if c is the fixed number of households selected out of the total households (L_i)—found in the 2010 listing process—for the i^{th} cluster, then the household probability in the selected i^{th} cluster can be expressed as:

$$P_{2i} = (c / L_i)$$

The final overall household probability in the i^{th} cluster could be calculated as

$$f_i = P_{1i} * P_{2i}$$

and the sampling design weight for the i^{th} cluster is given as

$$1/ f_i = 1 / (P_{1i} * P_{2i})$$

A.7 SAMPLE IMPLEMENTATION

In Table A.3 and Table A.4 the survey implementation results are presented. The total numbers of completed interviews are below the expected numbers for both women and men because the survey found the fewer women 15-49 and men 15-49 per household than expected, especially in the Armavir and Lori regions.

A.8 SAMPLE WEIGHTS

In ADHS as in many DHS surveys, sample weights must be calculated to adjust for non-proportional allocation of the sample and different response patterns. The following describes how ADHS weights are constructed.

Sampling weights are adjustment factors applied to each case in tabulations to adjust for differences in probability of selection and interview between cases in a sample, either due to design or happenstance. In the 2010 ADHS, the sample was selected with unequal probability to increase the number of cases available (and hence reduce sample variability) for the smaller regions for which

statistics were needed., As a result, weights need to be applied when tabulations are made of statistics to produce the proper representation. When weights are calculated because of sample design, corrections for differential response rates are also made.

Two main sampling weights were calculated for the 2010 ADHS: household weights and individual women's weights. The household weight for a particular household is the inverse of its household selection probability multiplied by the inverse of the household response rate for the specific region-residence group in which the household is found. The individual weight of a respondent's case is the household weight multiplied by the inverse of the individual response rate of individual response rate for the specific region-residence group in which the individual is found. The household and individual weights are standardized so that the sum of the standardized weights equals the sum of the cases over the entire sample. The standardization is done separately for each weight.

A sampling weight was also calculated for the male subsample. Strictly speaking the male weight was not necessary since there is only a need for the additional sample weights if there is a differential probability in selecting the subsamples. Notwithstanding the foregoing, the ADHS follows customary DHS practice and includes both household weights and individual weights for the men's surveys, normalizing the weights for the number of households in the subset for the men's surveys, and to the number of men's individual interviews even when no differential subselection has been used.

Table A.3 Sample implementation: Women

Percent distribution of households and eligible women by results of the household and individual interviews, and household, eligible women and overall women response rates, according to urban-rural residence and region (unweighted), Armenia 2010

	Residence		Region											
Result	Urban	Rural	Yerevan	Aragatsotn	Ararat	Armavir	Gegharkunik	Lori	Kotayk	Shirak	Syunik	Vayots Dzor	Tavush	Total
Selected households														
Completed (C)	87.0	91.9	85.0	84.7	94.2	83.2	88.8	81.5	88.8	90.2	97.3	84.4	97.8	88.4
Household present but no competent respondent at home (HP)	2.5	1.7	1.8	1.5	0.1	3.1	0.6	8.5	3.5	1.8	0.2	4.6	0.7	2.3
Postponed (P)	0.1	0.1	0.0	0.2	0.1	0.0	0.0	0.3	0.0	0.2	0.0	0.0	0.0	0.1
Refused (R)	2.5	1.0	5.0	3.3	0.6	3.5	0.5	1.5	1.7	1.7	0.2	1.0	0.3	2.1
Dwelling not found (DNF)	0.0	0.1	0.1	0.0	0.0	0.3	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.1
Household absent (HA)	5.1	3.2	4.3	7.0	4.4	6.8	4.3	5.5	3.2	4.9	1.5	8.4	0.5	4.6
Dwelling vacant/address not a dwelling (DV)	1.9	1.0	2.8	1.0	0.3	2.6	5.8	0.0	1.2	1.1	0.3	0.6	0.5	1.6
Dwelling destroy (DD)	0.1	0.0	0.0	0.2	0.0	0.0	0.0	0.2	0.0	0.0	0.2	0.0	0.0	0.0
Other (O)	0.8	0.9	1.0	2.2	0.1	0.5	0.0	2.5	1.4	0.2	0.3	1.0	0.2	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	100.0	100.0
Number of sampled households	5,461	2,119	1,352	601	676	650	651	650	650	650	600	500	600	7,580
Household response rate (HRR)[1]	94.4	96.9	92.5	94.4	99.1	92.3	98.8	88.8	94.3	96.1	99.7	93.8	99.0	95.1
Eligible women														
Completed (EWC)	97.4	98.5	96.2	98.8	97.7	93.5	99.5	98.9	97.2	97.5	100.0	99.7	99.1	97.7
Not at home (EWNH)	1.1	0.7	1.3	0.6	1.2	2.8	0.2	0.7	1.8	0.6	0.0	0.0	0.0	0.9
Refused (EWR)	0.8	0.4	1.0	0.4	1.0	2.4	0.2	0.4	0.3	0.8	0.0	0.3	0.0	0.7
Partly completed (EWPC)	0.2	0.1	0.4	0.0	0.0	0.2	0.0	0.0	0.2	0.2	0.0	0.0	0.4	0.1
Incapacitated (EWI)	0.4	0.4	0.6	0.2	0.0	1.1	0.2	0.0	0.5	0.9	0.0	0.0	0.4	0.4
Other (EWO)	0.1	0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
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	100.0	100.0
Number of women	4,073	1,986	1,026	491	487	539	567	458	601	648	379	398	465	6,059
Eligible women response rate (EWRR)[2]	97.4	98.5	96.2	98.8	97.7	93.5	99.5	98.9	97.2	97.5	100.0	99.7	99.1	97.7
Overall women response rate (ORR)[3]	92.0	95.4	89.0	93.3	96.8	86.3	98.3	87.8	91.6	93.7	99.7	93.5	98.1	93.0

[1] Using the number of households falling into specific response categories, the household response rate (HRR) is calculated as:

$$\frac{100 * C}{C + HP + P + R + DNF}$$

[2] The eligible women response rate (EWRR) is equivalent to the percentage of interviews completed (EWC)
[3] The overall women response rate (OWRR) is calculated as:

$$OWRR = HRR * EWRR/100$$

Table A.4 Sample implementation: Men

Percent distribution of households and eligible men by results of the household and individual interviews, and household, eligible man and overall man response rates, according to urban-rural residence and region (unweighted), Armenia 2010

	Residence		Region											
Result	Urban	Rural	Yerevan	Aragatsotn	Ararat	Armavir	Gegharkunik	Lori	Kotayk	Shirak	Syunik	Vayots Dzor	Tavush	Total
Selected households														
Completed (C)	84.2	90.7	81.8	82.5	92.3	78.8	87.6	79.8	85.6	86.1	96.5	82.3	97.0	86.0
Household present but no competent respondent at home (HP)	2.9	1.7	1.7	2.5	0.4	3.4	0.5	8.2	3.4	2.9	0.0	5.7	1.0	2.5
Postponed (P)	0.1	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.1
Refused (R)	3.1	1.3	6.4	3.0	0.4	5.8	0.5	2.4	2.9	1.9	0.0	0.6	0.0	2.6
Dwelling not found (DNF)	0.1	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Household absent (HA)	6.1	3.7	5.1	8.0	5.6	8.7	4.8	6.3	3.8	6.7	1.5	9.7	1.0	5.5
Dwelling vacant/address not a dwelling (DV)	2.4	1.4	3.8	1.0	0.9	2.9	6.7	0.0	1.9	1.9	0.5	0.6	1.0	2.1
Dwelling destroy (DD)	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.5	0.0	0.0	0.1
Other (O)	1.0	1.1	0.9	3.0	0.0	0.5	0.0	2.9	2.4	0.0	1.0	1.1	0.0	1.0
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	100.0	100.0
Number of sampled households	1,822	696	468	200	234	208	209	208	208	208	200	175	200	2,518
Household response rate (HRR)[1]	93.2	96.8	90.8	93.8	98.6	89.6	98.9	88.3	93.2	94.2	100.0	92.9	99.0	94.2
Eligible men														
Completed (EMC)	96.2	97.2	94.3	98.7	97.8	93.5	100.0	93.9	95.2	97.8	96.1	97.8	100.0	96.5
Not at home (EMNH)	0.9	1.1	2.3	0.0	1.4	0.0	0.0	3.5	1.2	0.7	0.0	0.0	0.0	1.0
Refused (EMR)	1.6	0.6	1.3	1.3	0.7	2.6	0.0	2.6	1.8	1.4	0.0	2.2	0.0	1.3
Partly completed (EMPC)	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	0.0	0.0	0.1
Incapacitated (EMI)	0.8	0.4	1.0	0.0	0.0	1.3	0.0	0.0	1.8	0.0	2.3	0.0	0.0	0.7
Other (EMO)	0.3	0.7	1.0	0.0	0.0	2.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4
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	100.0	100.0
Number of men	1,105	536	300	150	139	155	134	114	166	138	128	89	128	1,641
Eligible men response rate (EMRR)[2]	96.2	97.2	94.3	98.7	97.8	93.5	100.0	93.9	95.2	97.8	96.1	97.8	100.0	96.5
Overall men response rate (ORR)[3]	89.7	94.1	85.6	92.5	96.5	83.8	98.9	82.9	88.7	92.2	96.1	90.8	99.0	90.9

[1] Using the number of households falling into specific response categories, the household response rate (HRR) is calculated as:

$$\frac{100 * C}{C + HP + P + R + DNF}$$

[2] The eligible men response rate (EMRR) is equivalent to the percentage of interviews completed (EMC)
[3] The overall men response rate (OMRR) is calculated as:

$$OMRR = HRR * EMRR/100$$

ESTIMATES OF SAMPLING ERRORS

Appendix B

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 2010 Armenia Demographic and Health Survey (ADHS) 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 2010 ADHS 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 2010 ADHS 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 2010 ADHS 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:

$$SE^2(r) = var(r) = \frac{1-f}{x^2}\sum_{h=1}^{H}\left[\frac{m_h}{m_{h-1}}\left(\sum_{i=1}^{m_h} z_{hi}^2 - \frac{z_h^2}{m_h}\right)\right]$$

in which

$$z_{hi} = y_{hi} - rx_{hi}\text{, and } z_h = y_h - rx_h$$

where h represents the stratum that varies from 1 to H,
m_h is the total number of clusters selected in the h^{th} stratum,

y_{hi} is the sum of the weighted values of variable y in the i^{th} cluster in the h^{th} stratum,
x_{hi} is the sum of the weighted number of cases in the i^{th} cluster in the h^{th} stratum, and
f is the overall sampling fraction, which is so small that it is ignored.

The Jackknife repeated replication method derives estimates of complex rates from each of several replications of the parent sample, and calculates standard errors for these estimates using simple formulae. Each replication considers *all but one* cluster in the calculation of the estimates. Pseudo-independent replications are thus created. In the 2010 ADHS, there were 308 nonempty clusters. Hence, 308 replications were created. The variance of a rate r is calculated as follows:

$$SE^2(r) = var(r) = \frac{1}{k(k-1)} \sum_{i=1}^{k} (r_i - r)^2$$

in which

$$r_i = kr - (k-1)r_{(i)}$$

where r is the estimate computed from the full sample of 308 clusters,
$r_{(i)}$ is the estimate computed from the reduced sample of 307 clusters (i^{th} cluster excluded), and
k is the total number of clusters.

In addition to the standard error, the design effect (DEFT) is estimated for each estimate. DEFT 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. The relative error and confidence limits for the estimates were also computed.

Sampling errors for the 2010 ADHS are calculated for selected variables considered to be of primary interest for a woman's survey and for a man's survey, respectively. The results are presented in this appendix for the country as a whole, for urban and rural areas, and for each of the 11 regions. For each variable, the type of statistic (mean, proportion, or rate) and the base population are given in Table B.1. Tables B.2 through B.15 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 (R±2SE) 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 child-bearing.

The confidence interval (e.g., as calculated for *children ever born to women age 40-49*) can be interpreted as follows: the overall average from the national sample is 2.353 and its standard error is 0.040. Therefore, to obtain the 95 percent confidence limits, one adds and subtracts twice the standard error to the sample estimate, i.e., 2.353 ± 2 × 0.040. There is a high probability (95 percent) that the *true* average number of children ever born to all women age 40 to 49 is between **2.273** and **2.433.**

Sampling errors are analyzed for the national woman's sample and for two separate groups of estimates: (1) means and proportions, and (2) complex demographic rates. Except for mortality estimates values, the relative standard errors (SE/R) for the means and proportions range between almost 0 percent and 18.2 percent for the country as a whole. The relative standard error for the total fertility rate is small, 3.9 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 27.9.

There are differentials in the relative standard error for the estimates of sub-populations. For example, for the variable *children ever born to women age 40-49*, the relative standard errors as a percent of the estimated mean for the whole country, for the urban areas, and for the rural areas are 1.7 percent, 2.4 percent and 2.1 percent, respectively.

For the total sample, the value of the design effect (DEFT), averaged over all selected variables, is 1.30, which means that, due to multi-stage clustering of the sample, the average standard error is increased by a factor of 1.30 over that in an equivalent simple random sample.

Table B.1 List of selected variables for sampling errors, Armenia 2010

Variable	Estimation	Base population
	WOMEN	
Urban residence	Proportion	All women 15-49
Secondary education or higher	Proportion	All women 15-49
Never married/in union	Proportion	All women 15-49
Currently married/in union	Proportion	All women 15-49
Had sexual intercourse before age 18	Proportion	All women 20-49
Married before age 20	Proportion	All women 20-49
Currently pregnant	Proportion	All women 15-49
Children ever born	Mean	All women 15-49
Children surviving	Mean	All women 15-49
Children ever born to women age 40-49	Mean	All women 40-49
Know any contraceptive method	Proportion	Currently married women 15-49
Currently using any method	Proportion	Currently married women 15-49
Currently using a modern method	Proportion	Currently married women 15-49
Currently using a traditional method	Proportion	Currently married women 15-49
Currently using pill	Proportion	Currently married women 15-49
Currently using condoms	Proportion	Currently married women 15-49
Currently using IUD	Proportion	Currently married women 15-49
Currently using withdrawal	Proportion	Currently married women 15-49
Currently using rhythm	Proportion	Currently married women 15-49
Used public sector source	Proportion	Current users of modern method
Want no more children	Proportion	Currently married women 15-49
Want to delay next birth at least 2 years	Proportion	Currently married women 15-49
Ideal number of children	Mean	All women 15-49
Births with skilled attendant at delivery	Proportion	Births occuring 1-59 months before survey
Had diarrhea in the past 2 weeks	Proportion	Children under 5
Treated with ORS	Proportion	Children under 5 with diarrhea in past 2 weeks
Sought medical treatment	Proportion	Children under 5 with diarrhea in past 2 weeks
Vaccination card seen	Proportion	Chidren 18 -29 months
Received BCG vaccination	Proportion	Chidren 18 -29 months
Received DPT vaccination (3 doses)	Proportion	Chidren 18 -29 months
Received polio vaccination (3 doses)	Proportion	Chidren 18 -29 months
Received measles vaccination	Proportion	Chidren 18 -29 months
Received all vaccinations	Proportion	Chidren 18 -29 months
Height-for-age (-2SD)	Proportion	Children under 5 who are measured
Weight-for-height (-2SD)	Proportion	Children under 5 who are measured
Weight-for-age (-2SD)	Proportion	Children under 5 who are measured
Has heard of HIV/AIDS	Proportion	All women 15-49
Know about condoms	Proportion	All women 15-49
Know about limiting partners	Proportion	All women 15-49
Abstinence among youth (never had sex)	Proportion	Never married women 15-24
Accepting attitudes toward people with HIV	Proportion	All women who have heard of HIV/AIDS
Total fertility rate (3 years)	Rate	Women years of exposure to childbearing
Perinatal mortality (0-4 years)	Proportion	Pregnancies 7 or more months in past 5 yars
Neonatal mortality rate[1]	Rate	Children exposed to the risk of mortality
Post-neonatal mortality rate[1]	Rate	Children exposed to the risk of mortality
Infant mortality rate (0-4)[1]	Rate	Children exposed to the risk of mortality
Infant mortality rate (5-9)	Rate	Children exposed to the risk of mortality
Infant mortality rate (10-14)	Rate	Children exposed to the risk of mortality
Child mortality rate[1]	Rate	Children exposed to the risk of mortality
Under five mortality rate[1]	Rate	Children exposed to the risk of mortality
	MEN	
Urban residence	Proportion	All men 15-49
Secondary education or higher	Proportion	All men 15-49
Never married/in union	Proportion	All men 15-49
Currently married/in union	Proportion	All men 15-49
Had sexual intercourse before age 18	Proportion	All men 20-49
Want no more children	Proportion	Currrently married men 15-49
Want to delay next birth at least 2 years	Proportion	Currrently married men 15-49
Ideal number of children	Mean	All men 15-49
Has heard of HIV/AIDS	Proportion	All men 15-49
Know about condoms	Proportion	All men 15-49
Know about limiting partners	Proportion	All men 15-49
Had 2+ sexual partners in past 12 months	Proportion	All men 15-49
Condom use at last sex	Proportion	All men 15-49 with 2+ partners in past 12 months
Accepting attitudes toward people with HIV	Proportion	All men 15-49 who has heard of HIV
Abstinence among youth (never had sex)	Proportion	Men 15-24
Sexually active in past 12 months among never-married youth	Proportion	Never-married men 15-24
Paid for sexual intercourse in past 12 months	Proportion	All men 15-49

[1] The mortality rates are calculated for 5 years and 10 years before the survey for the national sample and regional samples, respectively.

Table B.2 Sampling errors for National sample, Armenia 2010

Variable	Value (R)	Standard error (SE)	Number of cases: Unweighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits: R-2SE	Confidence limits: R+2SE
WOMEN								
Urban residence	0.615	0.012	5,922	5,922	1.931	0.020	0.590	0.639
Secondary education	0.920	0.005	5,922	5,922	1.357	0.005	0.910	0.930
Never married/in union	0.323	0.007	5,922	5,922	1.139	0.021	0.309	0.337
Currently married/in union	0.612	0.008	5,922	5,922	1.231	0.013	0.597	0.628
Had sexual intercourse before age 18	0.145	0.008	5,078	5,061	1.561	0.053	0.129	0.160
Married before age 20	0.351	0.010	5,078	5,061	1.442	0.028	0.332	0.370
Currently pregnant	0.030	0.003	5,922	5,922	1.315	0.097	0.024	0.036
Children ever born	1.376	0.018	5,922	5,922	1.049	0.013	1.341	1.412
Children surviving	1.325	0.016	5,922	5,922	1.028	0.012	1.293	1.358
Children ever born to women age 40-49	2.353	0.040	1,634	1,598	1.398	0.017	2.273	2.433
Know any contraceptive method	0.998	0.001	3,706	3,626	0.988	0.001	0.997	1.000
Currently using any method	0.549	0.013	3,706	3,626	1.582	0.024	0.523	0.575
Currently using a modern method	0.272	0.013	3,706	3,626	1.807	0.049	0.246	0.299
Currently using a traditional method	0.277	0.009	3,706	3,626	1.245	0.033	0.258	0.295
Currently using pill	0.015	0.003	3,706	3,626	1.316	0.174	0.010	0.020
Currently using condom	0.146	0.012	3,706	3,626	2.128	0.085	0.121	0.170
Currently using IUD	0.096	0.007	3,706	3,626	1.37	0.069	0.083	0.109
Currently using withdrawal	0.245	0.009	3,706	3,626	1.253	0.036	0.227	0.262
Currently using rhythm	0.024	0.003	3,706	3,626	1.157	0.121	0.018	0.030
Used public sector source	0.373	0.026	875	974	1.58	0.069	0.322	0.425
Want no more children	0.579	0.011	3,706	3,626	1.315	0.018	0.557	0.600
Want to delay next birth at least 2 years	0.126	0.007	3,706	3,626	1.285	0.055	0.112	0.141
Ideal number of children	2.541	0.017	5,817	5,796	1.377	0.007	2.507	2.575
Births with skilled attendant at delivery	0.995	0.003	1,473	1,448	1.33	0.003	0.989	1.000
Had diarrhea in the past 2 weeks	0.087	0.009	1,450	1,426	1.118	0.100	0.070	0.105
Treated with ORS	0.330	0.060	128	125	1.381	0.182	0.210	0.450
Sought medical treatment	0.422	0.060	128	125	1.292	0.141	0.303	0.541
Vaccination card seen	0.923	0.023	299	306	1.513	0.025	0.876	0.969
Received BCG vaccination	0.995	0.005	299	306	1.178	0.005	0.986	1.005
Received DPT vaccination (3 doses)	0.950	0.016	299	306	1.311	0.017	0.917	0.983
Received polio vaccination (3 doses)	0.953	0.016	299	306	1.347	0.017	0.921	0.986
Received measles vaccination	0.954	0.015	299	306	1.215	0.015	0.925	0.983
Received all vaccinations	0.915	0.021	299	306	1.302	0.023	0.873	0.956
Height-for-age (-2SD)	0.192	0.014	1,351	1,342	1.24	0.074	0.163	0.220
Weight-for-height (-2SD)	0.040	0.007	1,351	1,342	1.224	0.164	0.027	0.053
Weight-for-age (-2SD)	0.046	0.008	1,351	1,342	1.327	0.172	0.030	0.063
Has heard of HIV/AIDS	0.958	0.004	5,922	5,922	1.436	0.004	0.950	0.965
Know about condoms	0.735	0.008	5,922	5,922	1.411	0.011	0.719	0.751
Know about limiting partners	0.811	0.009	5,922	5,922	1.71	0.011	0.793	0.828
Abstinence among youth (never had sex)	1.000	0.000	1,348	1361	0.589	0.000	0.999	1.000
Accepting attitudes toward people with HIV	0.014	0.002	5,617	5673	1.433	0.158	0.010	0.019
Total fertility rate (3 years)	1.701	0.066	na	17,268	1.368	0.039	1.569	1.834
Perinatal mortality (0-4 years)	10.811	2.931	1,484	1,457	1.085	0.271	4.950	16.672
Neonatal mortality rate (0-4 years)	7.696	2.612	1,486	1,472	1.148	0.339	2.473	12.920
Post-neonatal mortality rate(0-4 years)	5.660	2.371	1,486	1,472	1.205	0.419	0.917	10.403
Infant mortality rate (0-4 years)	13.357	3.721	1,486	1,472	1.24	0.279	5.915	20.798
Infant mortality rate (5-9 years)	23.869	5.364	1,299	1,331	1.206	0.225	13.142	34.597
Infant mortality rate (10-14 years)	26.215	4.844	1,470	1,440	1.12	0.185	16.528	35.902
Child mortality rate (0-4 years)	3.124	1.316	1,487	1,472	0.845	0.421	0.493	5.756
Under-five mortality rate (0-4 years)	16.439	3.896	1,487	1,472	1.187	0.237	8.647	24.231
MEN								
Urban residence	0.621	0.017	1,584	1,584	1.374	0.027	0.588	0.655
Secondary education	0.856	0.011	1,584	1,584	1.221	0.013	0.834	0.877
Never married/in union	0.447	0.014	1,584	1,584	1.154	0.032	0.418	0.475
Currently married/in union	0.540	0.015	1,584	1,584	1.163	0.027	0.510	0.569
Had sexual intercourse before age 18	0.228	0.018	1,347	1,355	1.6	0.080	0.191	0.264
Want no more children	0.474	0.022	858	855	1.279	0.046	0.431	0.518
Want to delay next birth at least 2 years	0.084	0.012	858	855	1.232	0.139	0.061	0.107
Ideal number of children	2.692	0.031	1,538	1,549	1.253	0.012	2.629	2.755
Has heard of HIV/AIDS	0.960	0.006	1,584	1,584	1.195	0.006	0.948	0.972
Know about condoms	0.833	0.015	1,584	1,584	1.621	0.018	0.802	0.863
Know about limiting partners	0.869	0.013	1,584	1,584	1.542	0.015	0.843	0.895
Had 2+ sexual partners in past 12 months	0.152	0.017	1,584	1,584	1.932	0.115	0.117	0.187
Condom use at last sex	0.723	0.044	197	241	1.383	0.061	0.634	0.811
Accepting attitudes toward people with HIV	0.046	0.008	1,500	1,520	1.472	0.174	0.030	0.061
Abstinence among youth (never had sex)	0.543	0.032	491	483	1.429	0.059	0.478	0.607
Sexually active in past 12 months among never-married youth	0.425	0.031	491	483	1.406	0.074	0.362	0.488
Paid for sexual intercourse in past 12 months	0.164	0.017	1,584	1,584	1.781	0.101	0.131	0.197

na = Not applicable

Table B.3 Sampling errors for Urban sample, Armenia 2010

Variable	Value (R)	Standard error (SE)	Number of cases: Unweighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits: R-2SE	Confidence limits: R+2SE
WOMEN								
Secondary education	0.937	0.005	3,966	3,641	1.305	0.005	0.927	0.947
Never married/in union	0.343	0.009	3,966	3,641	1.155	0.025	0.326	0.361
Currently married/in union	0.580	0.010	3,966	3,641	1.306	0.018	0.559	0.600
Had sexual intercourse before age 18	0.114	0.009	3,423	3,125	1.738	0.083	0.095	0.133
Married before age 20	0.289	0.012	3,423	3,125	1.587	0.043	0.264	0.313
Currently pregnant	0.031	0.004	3,966	3,641	1.269	0.112	0.024	0.038
Children ever born	1.238	0.022	3,966	3,641	1.145	0.018	1.194	1.282
Children surviving	1.197	0.021	3,966	3,641	1.143	0.017	1.155	1.238
Children ever born to women age 40-49	2.118	0.051	1,077	950	1.495	0.024	2.017	2.220
Know any contraceptive method	0.999	0.001	2,410	2,111	0.857	0.001	0.997	1.000
Currently using any method	0.580	0.016	2,410	2,111	1.578	0.027	0.549	0.612
Currently using a modern method	0.328	0.019	2,410	2,111	2.024	0.059	0.290	0.367
Currently using a traditional method	0.252	0.011	2,410	2,111	1.196	0.042	0.231	0.273
Currently using pill	0.017	0.004	2,410	2,111	1.528	0.239	0.009	0.025
Currently using condom	0.192	0.019	2,410	2,111	2.412	0.101	0.154	0.231
Currently using IUD	0.101	0.010	2,410	2,111	1.609	0.098	0.081	0.121
Currently using withdrawal	0.220	0.010	2,410	2,111	1.241	0.048	0.199	0.241
Currently using rhythm	0.023	0.003	2,410	2,111	1.146	0.153	0.016	0.030
Used public sector source	0.320	0.032	628	688	1.717	0.100	0.256	0.384
Want no more children	0.578	0.014	2,410	2,111	1.389	0.024	0.550	0.606
Want to delay next birth at least 2 years	0.129	0.009	2,410	2,111	1.264	0.067	0.112	0.146
Ideal family size	2.488	0.023	3,894	3,554	1.463	0.009	2.443	2.533
Births with skilled attendant at delivery	0.998	0.002	965	846	1.275	0.002	0.994	1.002
Had diarrhea in the past 2 weeks	0.107	0.013	951	834	1.225	0.122	0.081	0.133
Treated with ORS	0.304	0.075	96	89	1.566	0.245	0.155	0.454
Sought medical treatment	0.408	0.074	96	89	1.44	0.182	0.259	0.556
Vaccination card seen	0.898	0.034	196	181	1.584	0.038	0.829	0.966
Received BCG vaccination	1.000	0.000	196	181	na	0.000	1.000	1.000
Received DPT vaccination (3 doses)	0.959	0.017	196	181	1.181	0.017	0.925	0.992
Received polio vaccination (3 doses)	0.959	0.017	196	181	1.238	0.018	0.924	0.994
Received measles vaccination	0.949	0.021	196	181	1.325	0.022	0.908	0.991
Received all vaccinations	0.909	0.027	196	181	1.295	0.029	0.856	0.962
Height-for-age (-2SD)	0.171	0.018	881	786	1.375	0.107	0.135	0.208
Weight-for-height (-2SD)	0.032	0.008	881	786	1.249	0.239	0.017	0.047
Weight-for-age (-2SD)	0.027	0.007	881	786	1.21	0.266	0.013	0.042
Has heard of HIV/AIDS	0.979	0.003	3,966	3,641	1.441	0.003	0.972	0.985
Know about condoms	0.779	0.009	3,966	3,641	1.396	0.012	0.761	0.798
Know about limiting partners	0.855	0.010	3,966	3,641	1.818	0.012	0.835	0.875
Abstinence among youth (never had sex)	1.000	0.000	883	828	0.611	0.000	0.999	1.000
Accepting attitudes toward people with HIV	0.018	0.003	3,797	3,564	1.574	0.189	0.011	0.025
Total fertility rate (3 years)	1.601	0.088	na	10,665	1.536	0.055	1.424	1.778
Perinatal mortality (0-4 years)	10.230	3.885	971	850	1.179	0.380	2.461	17.999
Neonatal mortality rate (10 years)	8.896	2.691	1,831	1,682	1.101	0.302	3.514	14.278
Post-neonatal mortality rate (10 years)	7.319	3.156	1,831	1,682	1.598	0.431	1.007	13.631
Infant mortality rate (10 years)	16.215	4.040	1,831	1,682	1.301	0.249	8.135	24.295
Child mortality rate (10 years)	2.206	1.037	1,832	1,683	0.929	0.470	0.131	4.280
Under-five mortality rate (10 years)	18.385	4.142	1,832	1,683	1.266	0.225	10.102	26.669
MEN								
Secondary education	0.900	0.012	1,063	984	1.348	0.014	0.875	0.925
Never married/in union	0.440	0.019	1,063	984	1.222	0.042	0.403	0.477
Currently married/in union	0.546	0.019	1,063	984	1.247	0.035	0.508	0.584
Had sexual intercourse before age 18	0.295	0.027	914	851	1.77	0.090	0.242	0.349
Want no more children	0.429	0.031	581	537	1.498	0.072	0.367	0.490
Want to delay next birth at least 2 years	0.093	0.017	581	537	1.409	0.183	0.059	0.127
Ideal number of children	2.720	0.045	1,033	964	1.438	0.017	2.629	2.810
Has heard of HIV/AIDS	0.983	0.004	1,063	984	1.068	0.004	0.975	0.992
Know about condoms	0.856	0.020	1,063	984	1.823	0.023	0.817	0.896
Know about limiting partners	0.889	0.017	1,063	984	1.76	0.019	0.855	0.923
Had 2+ sexual partners in past 12 months	0.183	0.026	1,063	984	2.187	0.142	0.131	0.235
Condom use at last sex	0.800	0.048	144	180	1.425	0.060	0.704	0.895
Accepting attitudes toward people with HIV	0.062	0.012	1,023	968	1.612	0.196	0.038	0.086
Abstinence among youth (never had sex)	0.421	0.043	316	284	1.543	0.102	0.335	0.507
Sexually active in past 12 months among never-married youth	0.560	0.042	316	284	1.505	0.075	0.476	0.644
Paid for sexual intercourse in past 12 months	0.206	0.025	1,063	984	2.008	0.121	0.156	0.255

na = Not applicable

Table B.4 Sampling errors for Rural sample, Armenia 2010

Variable	Value (R)	Standard error (SE)	Number of cases: Unweighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits: R-2SE	Confidence limits: R+2SE
WOMEN								
Secondary education	0.893	0.009	1,956	2,281	1.353	0.011	0.874	0.912
Never married/in union	0.290	0.011	1,956	2,281	1.094	0.039	0.267	0.312
Currently married/in union	0.664	0.012	1,956	2,281	1.085	0.017	0.641	0.688
Had sexual intercourse before age 18	0.194	0.013	1,655	1,936	1.333	0.067	0.168	0.220
Married before age 20	0.452	0.015	1,655	1,936	1.208	0.033	0.422	0.481
Currently pregnant	0.028	0.005	1,956	2,281	1.361	0.181	0.018	0.038
Children ever born	1.596	0.027	1,956	2,281	0.848	0.017	1.543	1.650
Children surviving	1.531	0.024	1,956	2,281	0.8	0.016	1.483	1.579
Children ever born to women age 40-49	2.697	0.057	557	649	1.181	0.021	2.583	2.811
Know any contraceptive method	0.998	0.001	1,296	1,515	1.012	0.001	0.995	1.000
Currently using any method	0.505	0.021	1,296	1,515	1.496	0.041	0.463	0.547
Currently using a modern method	0.194	0.013	1,296	1,515	1.191	0.067	0.168	0.221
Currently using a traditional method	0.311	0.016	1,296	1,515	1.221	0.051	0.279	0.342
Currently using pill	0.013	0.003	1,296	1,515	0.949	0.230	0.007	0.019
Currently using condom	0.081	0.008	1,296	1,515	1.101	0.103	0.064	0.097
Currently using IUD	0.089	0.008	1,296	1,515	0.995	0.089	0.073	0.104
Currently using withdrawal	0.279	0.015	1,296	1,515	1.197	0.053	0.249	0.309
Currently using rhythm	0.026	0.005	1,296	1,515	1.131	0.191	0.016	0.036
Used public sector source	0.500	0.031	247	287	0.958	0.061	0.439	0.561
Want no more children	0.580	0.017	1,296	1,515	1.204	0.028	0.547	0.613
Want to delay next birth at least 2 years	0.123	0.012	1,296	1,515	1.287	0.096	0.099	0.146
Ideal family size	2.626	0.025	1,923	2,242	1.235	0.010	2.576	2.677
Births with skilled attendant at delivery	0.990	0.006	508	603	1.243	0.006	0.977	1.003
Had diarrhea in the past 2 weeks	0.060	0.010	499	592	0.891	0.166	0.040	0.080
Treated with ORS	0.395	0.095	32	36	1.016	0.241	0.205	0.585
Sought medical treatment	0.457	0.091	32	36	0.949	0.199	0.275	0.640
Vaccination card seen	0.959	0.021	103	124	1.091	0.022	0.918	1.001
Received BCG vaccination	0.989	0.011	103	124	1.093	0.011	0.967	1.011
Received DPT vaccination (3 doses)	0.937	0.032	103	124	1.359	0.034	0.873	1.001
Received polio vaccination (3 doses)	0.945	0.031	103	124	1.393	0.033	0.884	1.007
Received measles vaccination	0.961	0.020	103	124	1.038	0.020	0.922	1.000
Received all vaccinations	0.923	0.034	103	124	1.303	0.036	0.856	0.991
Height-for-age (-2SD)	0.220	0.022	470	556	1.037	0.098	0.177	0.263
Weight-for-height (-2SD)	0.051	0.011	470	556	1.121	0.220	0.029	0.074
Weight-for-age (-2SD)	0.074	0.016	470	556	1.255	0.214	0.042	0.105
Has heard of HIV/AIDS	0.925	0.008	1,956	2,281	1.324	0.009	0.909	0.940
Know about condoms	0.664	0.015	1,956	2,281	1.392	0.022	0.635	0.694
Know about limiting partners	0.740	0.015	1,956	2,281	1.503	0.020	0.711	0.770
Abstinence among youth (never had sex)	1.000	0.000	465	533	na	0.000	1.000	1.000
Accepting attitudes toward people with HIV	0.008	0.002	1,820	2,108	0.985	0.251	0.004	0.013
Total fertility rate (3 years)	1.842	0.098	na	6,663	1.096	0.053	1.645	2.038
Perinatal mortality (0-4 years)	11.624	4.455	513	607	0.95	0.383	2.715	20.534
Neonatal mortality rate (10 years)	10.163	3.413	954	1,121	1.062	0.336	3.336	16.990
Post-neonatal mortality rate (10 years)	11.504	3.257	954	1,121	0.961	0.283	4.991	18.017
Infant mortality rate (10 years)	21.667	4.982	954	1,121	1.047	0.230	11.702	31.632
Child mortality rate (10 years)	4.078	2.339	954	1,121	1.146	0.574	0.000	8.756
Under-five mortality rate (10 years)	25.656	5.459	954	1,121	1.073	0.213	14.738	36.574
MEN								
Secondary education	0.783	0.019	521	600	1.046	0.024	0.745	0.821
Never married/in union	0.457	0.023	521	600	1.04	0.050	0.412	0.503
Currently married/in union	0.530	0.022	521	600	1.023	0.042	0.485	0.575
Had sexual intercourse before age 18	0.113	0.014	433	504	0.928	0.125	0.085	0.142
Want no more children	0.551	0.027	277	318	0.895	0.049	0.498	0.605
Want to delay next birth at least 2 years	0.069	0.013	277	318	0.858	0.190	0.043	0.095
Ideal number of children	2.646	0.038	505	585	0.918	0.015	2.569	2.723
Has heard of HIV/AIDS	0.921	0.013	521	600	1.126	0.014	0.894	0.948
Know about condoms	0.794	0.024	521	600	1.355	0.030	0.746	0.842
Know about limiting partners	0.837	0.020	521	600	1.222	0.024	0.797	0.877
Had 2+ sexual partners in past 12 months	0.101	0.016	521	600	1.228	0.161	0.069	0.133
Condom use at last sex	0.494	0.083	53	61	1.195	0.168	0.328	0.659
Accepting attitudes toward people with HIV	0.017	0.005	477	553	0.901	0.313	0.006	0.028
Abstinence among youth (never had sex)	0.716	0.041	175	199	1.199	0.057	0.634	0.798
Sexually active in past 12 months among never-married youth	0.233	0.038	175	199	1.194	0.164	0.156	0.309
Paid for sexual intercourse in past 12 months	0.095	0.015	521	600	1.172	0.158	0.065	0.126

na = Not applicable

Table B.5 Sampling errors for Yerevan sample, Armenia 2010

Variable	Value (R)	Standard error (SE)	Number of cases: Unweighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits: R-2SE	Confidence limits: R+2SE
WOMEN								
Secondary education	0.944	0.007	987	2,069	1.001	0.008	0.929	0.958
Never married/in union	0.375	0.013	987	2,069	0.852	0.035	0.348	0.401
Currently married/in union	0.544	0.016	987	2,069	0.986	0.029	0.513	0.576
Had sexual intercourse before age 18	0.110	0.016	848	1,773	1.458	0.142	0.079	0.141
Married before age 20	0.240	0.020	848	1,773	1.374	0.084	0.199	0.280
Currently pregnant	0.035	0.006	987	2,069	0.965	0.162	0.023	0.046
Children ever born	1.124	0.032	987	2,069	0.876	0.028	1.060	1.188
Children surviving	1.088	0.030	987	2,069	0.872	0.028	1.028	1.149
Children ever born to women age 40-49	1.921	0.073	249	509	1.129	0.038	1.774	2.067
Know any contraceptive method	1.000	0.000	536	1,126	na	0.000	1.000	1.000
Currently using any method	0.662	0.024	536	1,126	1.197	0.037	0.613	0.711
Currently using a modern method	0.417	0.032	536	1,126	1.5	0.077	0.353	0.481
Currently using a traditional method	0.245	0.016	536	1,126	0.882	0.067	0.212	0.278
Currently using pill	0.018	0.007	536	1,126	1.168	0.369	0.005	0.032
Currently using condom	0.265	0.033	536	1,126	1.728	0.124	0.199	0.331
Currently using IUD	0.108	0.017	536	1,126	1.24	0.154	0.075	0.142
Currently using withdrawal	0.218	0.017	536	1,126	0.929	0.076	0.185	0.252
Currently using rhythm	0.015	0.005	536	1,126	0.931	0.323	0.005	0.025
Used public sector source	0.261	0.041	219	465	1.365	0.156	0.180	0.342
Want no more children	0.593	0.023	536	1,126	1.07	0.038	0.548	0.638
Want to delay next birth at least 2 years	0.138	0.014	536	1,126	0.938	0.101	0.110	0.166
Ideal family size	2.464	0.035	964	2,013	1.119	0.014	2.395	2.534
Births with skilled attendant at delivery	0.997	0.004	211	459	0.89	0.004	0.989	1.004
Had diarrhoea in the past 2 weeks	0.115	0.022	207	452	1.022	0.192	0.071	0.159
Treated with ORS	0.329	0.118	25	52	1.249	0.359	0.093	0.564
Sought medical treatment	0.479	0.121	25	52	1.21	0.254	0.236	0.722
Vaccination card seen	0.869	0.054	46	104	1.116	0.062	0.761	0.976
Received BCG vaccination	1.000	0.000	46	104	na	0.000	1.000	1.000
Received DPT vaccination (3 doses)	0.962	0.026	46	104	0.957	0.027	0.911	1.014
Received polio vaccination (3 doses)	0.949	0.029	46	104	0.926	0.030	0.891	1.007
Received measles vaccination	0.930	0.036	46	104	1	0.039	0.858	1.003
Received all vaccinations	0.880	0.046	46	104	0.993	0.052	0.787	0.972
Height-for-age (-2SD)	0.112	0.025	193	429	1.077	0.223	0.062	0.161
Weight-for-height (-2SD)	0.025	0.012	193	429	1.07	0.472	0.001	0.048
Weight-for-age (-2SD)	0.021	0.011	193	429	1.082	0.520	0.000	0.043
Has heard of HIV/AIDS	0.988	0.005	987	2,069	1.312	0.005	0.978	0.997
Know about condoms	0.828	0.014	987	2,069	1.133	0.016	0.801	0.856
Know about limiting partners	0.900	0.015	987	2,069	1.584	0.017	0.869	0.930
Abstinence among youth (never had sex)	1.000	0.000	229	473	na	0.000	1.000	1.000
Accepting attitudes toward people with HIV	0.021	0.006	974	2,043	1.203	0.261	0.010	0.033
Total fertility rate (3 years)	1.534	0.143	na	6,030	1.239	0.093	1.248	1.821
Perinatal mortality (0-4 years)	11.444	6.610	212	461	0.923	0.578	0.000	24.664
Neonatal mortality rate (10 years)	9.085	4.089	443	955	0.929	0.450	0.908	17.262
Post-neonatal mortality rate (10 years)	10.753	5.404	443	955	1.139	0.504	0.000	21.561
Infant mortality rate (10 years)	19.838	6.659	443	955	1.043	0.336	6.520	33.157
Under five mortality rate (10 years)	19.838	6.659	443	955	1.043	0.336	6.520	33.157
MEN								
Secondary education	0.905	0.018	283	593	1.021	0.020	0.870	0.941
Never married/in union	0.443	0.026	283	593	0.891	0.060	0.390	0.495
Currently married/in union	0.542	0.027	283	593	0.914	0.050	0.488	0.596
Had sexual intercourse before age 18	0.362	0.041	243	511	1.322	0.113	0.280	0.443
Want no more children	0.371	0.048	153	322	1.231	0.130	0.274	0.467
Want to delay next birth at least 2 years	0.087	0.025	153	322	1.11	0.292	0.036	0.138
Ideal number of children	2.864	0.072	279	585	1.141	0.025	2.721	3.007
Has heard of HIV/AIDS	0.994	0.004	283	593	0.916	0.004	0.985	1.002
Know about condoms	0.854	0.028	283	593	1.352	0.033	0.797	0.911
Know about limiting partners	0.905	0.024	283	593	1.361	0.026	0.857	0.953
Had 2+ sexual partners in past 12 months	0.221	0.041	283	593	1.679	0.188	0.138	0.304
Condom use at last sex	0.841	0.057	60	131	1.201	0.068	0.727	0.955
Accepting attitudes toward people with HIV	0.087	0.020	281	590	1.19	0.231	0.047	0.127
Abstinence among youth (never had sex)	0.312	0.065	78	164	1.236	0.209	0.182	0.443
Sexually active in past 12 months among never-married youth	0.675	0.064	78	164	1.203	0.095	0.547	0.804
Paid for sexual intercourse in past 12 months	0.273	0.040	283	593	1.525	0.148	0.193	0.354

na = Not applicable

Table B.6 Sampling errors for Aragatsotn sample, Armenia 2010

Variable	Value (R)	Standard error (SE)	Number of cases: Unweighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits: R-2SE	Confidence limits: R+2SE
WOMEN								
Urban residence	0.178	0.022	485	260	1.248	0.122	0.135	0.221
Secondary education	0.947	0.015	485	260	1.523	0.016	0.916	0.978
Never married/in union	0.337	0.021	485	260	0.972	0.062	0.295	0.379
Currently married/in union	0.630	0.021	485	260	0.965	0.034	0.587	0.672
Had sexual intercourse before age 18	0.115	0.021	413	218	1.353	0.185	0.072	0.157
Married before age 20	0.380	0.035	413	218	1.445	0.091	0.311	0.449
Currently pregnant	0.016	0.006	485	260	1.079	0.381	0.004	0.029
Children ever born	1.526	0.063	485	260	0.959	0.041	1.401	1.652
Children surviving	1.509	0.058	485	260	0.924	0.039	1.393	1.626
Children ever born to women age 40-49	2.610	0.168	135	79	2.011	0.065	2.273	2.947
Know any contraceptive method	0.999	0.001	295	164	0.562	0.001	0.997	1.001
Currently using any method	0.667	0.063	295	164	2.306	0.095	0.541	0.794
Currently using a modern method	0.216	0.033	295	164	1.355	0.151	0.151	0.281
Currently using a traditional method	0.452	0.049	295	164	1.695	0.109	0.353	0.550
Currently using pill	0.010	0.009	295	164	1.537	0.913	0.000	0.027
Currently using condom	0.081	0.012	295	164	0.762	0.150	0.057	0.105
Currently using IUD	0.104	0.025	295	164	1.393	0.238	0.054	0.154
Currently using withdrawal	0.451	0.049	295	164	1.694	0.109	0.353	0.549
Currently using rhythm	0.001	0.001	295	164	0.461	1.007	0.000	0.002
Used public sector source	0.480	0.083	65	32	1.322	0.172	0.314	0.645
Want no more children	0.580	0.038	295	164	1.33	0.066	0.503	0.657
Want to delay next birth at least 2 years	0.099	0.026	295	164	1.516	0.267	0.046	0.152
Ideal family size	2.623	0.064	483	259	1.657	0.024	2.495	2.752
Births with skilled attendant at delivery	0.997	0.003	120	63	0.582	0.003	0.992	1.003
Had diarrhea in the past 2 weeks	0.007	0.004	119	63	0.478	0.506	0.000	0.015
Height-for-age (-2SD)	0.323	0.073	112	56	1.53	0.227	0.176	0.469
Weight-for-height (-2SD)	0.059	0.029	112	56	1.318	0.486	0.002	0.117
Weight-for-age (-2SD)	0.062	0.029	112	56	1.305	0.472	0.003	0.120
Has heard of HIV/AIDS	0.813	0.028	485	260	1.604	0.035	0.756	0.869
Know about condoms	0.649	0.041	485	260	1.902	0.064	0.567	0.732
Know about limiting partners	0.686	0.035	485	260	1.64	0.050	0.616	0.755
Abstinence among youth (never had sex)	1.000	0.000	123	72	na	0.000	1.000	1.000
Total fertility rate (3 years)	1.923	0.406	na	786	1.972	0.211	1.111	2.736
Perinatal mortality (0-4 years)	1.784	1.827	120	63	0.47	1.024	0.000	5.437
Neonatal mortality rate (10 years)	3.912	2.665	224	116	0.612	0.681	0.000	9.243
Post-neonatal mortality rate (10 years)	1.103	1.151	224	116	0.504	1.043	0.000	3.406
Infant mortality rate (10 years)	5.016	3.056	224	116	0.626	0.609	0.000	11.128
Child mortality rate (10 years)	11.776	12.262	224	116	1.677	1.041	0.000	36.299
Under-five mortality rate (10 years)	16.732	12.567	224	116	1.481	0.751	0.000	41.866
MEN								
Urban residence	0.200	0.027	148	70	0.811	0.134	0.147	0.254
Secondary education	0.843	0.044	148	70	1.464	0.052	0.755	0.931
Never married/in union	0.532	0.036	148	70	0.883	0.068	0.459	0.605
Currently married/in union	0.468	0.036	148	70	0.883	0.078	0.395	0.541
Want no more children	0.661	0.077	74	33	1.381	0.116	0.508	0.814
Want to delay next birth at least 2 years	0.024	0.011	74	33	0.636	0.472	0.001	0.047
Ideal number of children	2.519	0.051	148	70	0.793	0.020	2.416	2.621
Has heard of HIV/AIDS	0.831	0.050	148	70	1.615	0.060	0.731	0.931
Know about condoms	0.643	0.076	148	70	1.921	0.118	0.491	0.795
Know about limiting partners	0.620	0.059	148	70	1.481	0.096	0.501	0.739
Abstinence among youth (never had sex)	0.991	0.007	56	28	0.506	0.007	0.978	1.004
Paid for sexual intercourse in past 12 months	0.011	0.005	148	70	0.625	0.490	0.000	0.022

na = Not applicable

Table B.7 Sampling errors for Ararat sample, Armenia 2010

Variable	Value (R)	Standard error (SE)	Number of cases: Unweighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits: R-2SE	Confidence limits: R+2SE
WOMEN								
Urban residence	0.286	0.031	476	379	1.503	0.109	0.224	0.348
Secondary education	0.911	0.019	476	379	1.477	0.021	0.873	0.950
Never married/in union	0.327	0.033	476	379	1.518	0.100	0.262	0.392
Currently married/in union	0.603	0.042	476	379	1.871	0.070	0.519	0.687
Had sexual intercourse before age 18	0.131	0.017	417	326	1.006	0.127	0.098	0.165
Married before age 20	0.335	0.034	417	326	1.472	0.102	0.267	0.404
Currently pregnant	0.028	0.013	476	379	1.712	0.465	0.002	0.054
Children ever born	1.298	0.070	476	379	1.245	0.054	1.158	1.438
Children surviving	1.283	0.068	476	379	1.22	0.053	1.148	1.418
Children ever born to women age 40-49	2.210	0.189	126	91	1.823	0.085	1.832	2.587
Know any contraceptive method	1.000	0.000	287	228	na	0.000	1.000	1.000
Currently using any method	0.578	0.034	287	228	1.169	0.059	0.509	0.646
Currently using a modern method	0.230	0.029	287	228	1.162	0.126	0.172	0.288
Currently using a traditional method	0.348	0.027	287	228	0.949	0.077	0.294	0.401
Currently using pill	0.007	0.003	287	228	0.598	0.424	0.001	0.013
Currently using condom	0.108	0.018	287	228	0.998	0.169	0.072	0.145
Currently using IUD	0.113	0.019	287	228	1.021	0.169	0.075	0.151
Currently using withdrawal	0.317	0.021	287	228	0.745	0.065	0.276	0.358
Currently using rhythm	0.029	0.013	287	228	1.349	0.458	0.002	0.056
Used public sector source	0.517	0.054	71	54	0.899	0.104	0.409	0.624
Want no more children	0.518	0.052	287	228	1.771	0.101	0.413	0.622
Want to delay next birth at least 2 years	0.183	0.052	287	228	2.28	0.285	0.079	0.287
Ideal family size	2.360	0.066	473	377	1.917	0.028	2.227	2.493
Births with skilled attendant at delivery	1.000	0.000	110	104	na	0.000	1.000	1.000
Had diarrhea in the past 2 weeks	0.034	0.019	109	104	1.217	0.575	0.000	0.072
Height-for-age (-2SD)	0.291	0.038	87	86	0.801	0.130	0.215	0.366
Weight-for-height (-2SD)	0.118	0.039	87	86	1.285	0.330	0.040	0.195
Weight-for-age (-2SD)	0.167	0.059	87	86	1.49	0.354	0.049	0.286
Has heard of HIV/AIDS	0.845	0.031	476	379	1.881	0.037	0.783	0.908
Know about condoms	0.711	0.047	476	379	2.238	0.066	0.617	0.804
Know about limiting partners	0.718	0.055	476	379	2.667	0.077	0.608	0.828
Abstinence among youth (never had sex)	1.000	0.000	108	84	na	0.000	1.000	1.000
Total fertility rate (3 years)	1.559	0.250	na	1084	1.651	0.160	1.060	2.058
Post-neonatal mortality rate (10 years)	2.206	2.317	211	189	0.748	1.050	0.000	6.840
Infant mortality rate (10 years)	2.206	2.317	211	189	0.748	1.050	0.000	6.840
Child mortality rate (10 years)	11.164	11.524	211	189	1.684	1.032	0.000	34.211
Under-five mortality rate (10 years)	13.345	11.454	211	189	1.54	0.858	0.000	36.252
MEN								
Urban residence	0.204	0.033	136	125	0.957	0.163	0.137	0.270
Secondary education	0.871	0.038	136	125	1.33	0.044	0.794	0.948
Never married/in union	0.499	0.065	136	125	1.509	0.130	0.369	0.629
Currently married/in union	0.482	0.059	136	125	1.377	0.123	0.364	0.601
Had sexual intercourse before age 18	0.005	0.004	122	113	0.569	0.703	0.000	0.013
Want no more children	0.310	0.052	69	60	0.924	0.167	0.206	0.414
Want to delay next birth at least 2 years	0.005	0.005	69	60	0.594	1.023	0.000	0.015
Ideal number of children	2.515	0.080	136	125	0.915	0.032	2.356	2.675
Has heard of HIV/AIDS	0.917	0.019	136	125	0.788	0.020	0.880	0.955
Know about condoms	0.677	0.059	136	125	1.457	0.087	0.560	0.794
Know about limiting partners	0.840	0.039	136	125	1.243	0.047	0.762	0.918
Had 2+ sexual partners in past 12 months	0.018	0.015	136	125	1.278	0.807	0.000	0.048
Abstinence among youth (never had sex)	0.967	0.016	44	39	0.58	0.016	0.935	0.998
Sexually active in past 12 months among never-married youth	0.033	0.016	44	39	0.58	0.477	0.002	0.065
Paid for sexual intercourse in past 12 months	0.111	0.042	136	125	1.568	0.382	0.026	0.196

na = Not applicable

Table B.8 Sampling errors for Gegharkunik sample, Armenia 2010

Variable	Value (R)	Standard error (SE)	Number of cases: Unweighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits: R-2SE	Confidence limits: R+2SE
WOMEN								
Urban residence	0.264	0.031	564	459	1.642	0.116	0.203	0.325
Secondary education	0.877	0.024	564	459	1.748	0.028	0.829	0.926
Never married/in union	0.309	0.024	564	459	1.251	0.079	0.260	0.358
Currently married/in union	0.653	0.025	564	459	1.261	0.039	0.603	0.704
Had sexual intercourse before age 18	0.265	0.045	472	379	2.226	0.171	0.175	0.356
Married before age 20	0.503	0.039	472	379	1.679	0.077	0.426	0.581
Currently pregnant	0.023	0.009	564	459	1.374	0.377	0.006	0.040
Children ever born	1.624	0.065	564	459	1.081	0.040	1.494	1.755
Children surviving	1.553	0.053	564	459	0.943	0.034	1.446	1.659
Children ever born to women age 40-49	2.826	0.108	155	135	1.238	0.038	2.610	3.043
Know any contraceptive method	0.994	0.005	369	300	1.171	0.005	0.984	1.003
Currently using any method	0.273	0.039	369	300	1.67	0.142	0.195	0.350
Currently using a modern method	0.186	0.025	369	300	1.216	0.133	0.137	0.235
Currently using a traditional method	0.087	0.018	369	300	1.231	0.208	0.051	0.123
Currently using pill	0.006	0.005	369	300	1.302	0.862	0.000	0.017
Currently using condom	0.091	0.019	369	300	1.288	0.212	0.053	0.130
Currently using IUD	0.083	0.012	369	300	0.804	0.139	0.060	0.107
Currently using withdrawal	0.067	0.019	369	300	1.432	0.279	0.029	0.104
Currently using rhythm	0.015	0.007	369	300	1.109	0.461	0.001	0.030
Used public sector source	0.502	0.060	77	56	1.052	0.120	0.381	0.622
Want no more children	0.528	0.023	369	300	0.891	0.044	0.481	0.574
Want to delay next birth at least 2 years	0.082	0.019	369	300	1.304	0.227	0.045	0.119
Ideal family size	2.734	0.048	563	457	1.162	0.018	2.637	2.831
Births with skilled attendant at delivery	0.968	0.030	145	109	1.561	0.031	0.908	1.028
Had diarrhea in the past 2 weeks	0.028	0.016	145	109	1.142	0.576	0.000	0.060
Vaccination card seen	0.980	0.019	28	19	0.677	0.020	0.942	1.019
Received BCG vaccination	1.000	0.000	28	19	na	0.000	1.000	1.000
Received DPT vaccination (3 doses)	0.980	0.019	28	19	0.677	0.020	0.942	1.019
Received polio vaccination (3 doses)	0.980	0.019	28	19	0.677	0.020	0.942	1.019
Received measles vaccination	0.980	0.019	28	19	0.677	0.020	0.942	1.019
Received all vaccinations	0.980	0.019	28	19	0.677	0.020	0.942	1.019
Height-for-age (-2SD)	0.250	0.055	134	105	1.375	0.218	0.141	0.359
Weight-for-height (-2SD)	0.073	0.035	134	105	1.525	0.475	0.004	0.143
Weight-for-age (-2SD)	0.069	0.032	134	105	1.466	0.468	0.004	0.133
Has heard of HIV/AIDS	0.905	0.018	564	459	1.424	0.019	0.870	0.941
Know about condoms	0.626	0.028	564	459	1.366	0.044	0.570	0.682
Know about limiting partners	0.825	0.020	564	459	1.264	0.025	0.784	0.865
Abstinence among youth (never had sex)	0.997	0.003	136	121	0.632	0.003	0.991	1.003
Accepting attitudes toward people with HIV	0.026	0.009	524	415	1.216	0.323	0.009	0.043
Total fertility rate (3 years)	1.815	0.208	na	1328	1.253	0.115	1.399	2.230
Neonatal mortality rate (10 years)	9.246	6.334	252	265	0.925	0.685	0.000	21.914
Post-neonatal mortality rate (10 years)	6.808	5.453	275	215	1.114	0.801	0.000	17.714
Infant mortality rate (10 years)	16.054	7.407	275	215	0.923	0.461	1.241	30.868
Child mortality rate (10 years)	1.902	1.941	275	215	0.712	1.021	0.000	5.783
Under-five mortality rate (10 years)	17.926	7.459	275	215	0.888	0.416	3.008	32.843
MEN								
Urban residence	0.347	0.053	134	83	1.282	0.153	0.241	0.452
Secondary education	0.876	0.030	134	83	1.053	0.034	0.816	0.936
Never married/in union	0.434	0.044	134	83	1.017	0.101	0.347	0.521
Currently married/in union	0.562	0.043	134	83	1.01	0.077	0.475	0.649
Married before age 20	0.037	0.021	93	57	1.083	0.576	0.000	0.080
Had sexual intercourse before age 18	0.107	0.041	117	74	1.438	0.386	0.025	0.190
Want no more children	0.653	0.044	77	47	0.815	0.068	0.564	0.742
Want to delay next birth at least 2 years	0.056	0.031	77	47	1.189	0.558	0.000	0.119
Ideal number of children	2.494	0.115	121	77	1.228	0.046	2.264	2.725
Has heard of HIV/AIDS	0.929	0.047	134	83	2.087	0.050	0.835	1.022
Know about condoms	0.874	0.050	134	83	1.757	0.058	0.773	0.975
Know about limiting partners	0.904	0.048	134	83	1.867	0.053	0.809	0.999
Had 2+ sexual partners in past 12 months	0.207	0.046	134	83	1.314	0.223	0.115	0.300
Accepting attitudes toward people with HIV	0.110	0.028	128	77	0.996	0.252	0.054	0.165
Abstinence among youth (never had sex)	0.522	0.164	37	25	1.969	0.314	0.194	0.850
Sexually active in past 12 months among never-married youth	0.478	0.164	37	25	1.969	0.343	0.150	0.806
Paid for sexual intercourse in past 12 months	0.319	0.038	134	83	0.932	0.118	0.244	0.395

na = Not applicable

Table B.9 Sampling errors for Armavir sample, Armenia 2010

Variable	Value (R)	Standard error (SE)	Number of cases: Unweighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits: R-2SE	Confidence limits: R+2SE
WOMEN								
Urban residence	0.341	0.029	504	535	1.369	0.085	0.283	0.399
Secondary education	0.891	0.023	504	535	1.622	0.025	0.846	0.936
Never married/in union	0.242	0.021	504	535	1.098	0.087	0.200	0.284
Currently married/in union	0.697	0.020	504	535	0.953	0.028	0.657	0.736
Had sexual intercourse before age 18	0.198	0.019	444	473	1.029	0.098	0.159	0.237
Married before age 20	0.473	0.029	444	473	1.224	0.061	0.415	0.531
Currently pregnant	0.031	0.011	504	535	1.473	0.367	0.008	0.054
Children ever born	1.641	0.052	504	535	0.866	0.032	1.536	1.746
Children surviving	1.555	0.045	504	535	0.794	0.029	1.465	1.645
Children ever born to women age 40-49	2.639	0.094	152	166	0.984	0.036	2.450	2.828
Know any contraceptive method	0.998	0.002	343	373	0.727	0.002	0.995	1.002
Currently using any method	0.632	0.041	343	373	1.557	0.064	0.551	0.714
Currently using a modern method	0.225	0.027	343	373	1.216	0.122	0.170	0.280
Currently using a traditional method	0.407	0.032	343	373	1.191	0.078	0.344	0.471
Currently using pill	0.008	0.005	343	373	0.944	0.573	0.000	0.017
Currently using condom	0.105	0.022	343	373	1.317	0.207	0.062	0.149
Currently using IUD	0.099	0.017	343	373	1.063	0.173	0.065	0.133
Currently using withdrawal	0.383	0.031	343	373	1.196	0.082	0.320	0.446
Currently using rhythm	0.021	0.011	343	373	1.492	0.557	0.000	0.043
Used public sector source	0.497	0.065	89	84	1.225	0.131	0.367	0.628
Want no more children	0.589	0.030	343	373	1.112	0.050	0.530	0.648
Want to delay next birth at least 2 years	0.152	0.020	343	373	1.028	0.131	0.112	0.192
Ideal family size	2.667	0.066	492	520	1.309	0.025	2.535	2.799
Births with skilled attendant at delivery	0.990	0.009	130	140	1.11	0.010	0.971	1.009
Had diarrhea in the past 2 weeks	0.084	0.019	125	135	0.796	0.228	0.046	0.122
Vaccination card seen	0.829	0.074	33	40	1.2	0.089	0.682	0.977
Received BCG vaccination	0.965	0.035	33	40	1.162	0.036	0.896	1.035
Received DPT vaccination (3 doses)	0.799	0.100	33	40	1.516	0.125	0.599	0.998
Received polio vaccination (3 doses)	0.828	0.097	33	40	1.573	0.117	0.634	1.022
Received measles vaccination	0.906	0.053	33	40	1.109	0.059	0.800	1.012
Received all vaccinations	0.799	0.100	33	40	1.516	0.125	0.599	0.998
Height-for-age (-2SD)	0.214	0.055	114	122	1.378	0.257	0.104	0.324
Weight-for-height (-2SD)	0.040	0.021	114	122	1.176	0.513	0.000	0.082
Weight-for-age (-2SD)	0.083	0.037	114	122	1.529	0.452	0.008	0.158
Has heard of HIV/AIDS	0.990	0.005	504	535	1.141	0.005	0.980	1.000
Know about condoms	0.748	0.029	504	535	1.494	0.039	0.690	0.806
Know about limiting partners	0.867	0.020	504	535	1.342	0.023	0.826	0.908
Abstinence among youth (never had sex)	1.000	0.000	99	99	na	0.000	1.000	1.000
Accepting attitudes toward people with HIV	0.028	0.008	500	530	1.057	0.277	0.013	0.044
Total fertility rate (3 years)	1.766	0.194	na	1,579	1.146	0.110	1.378	2.155
Perinatal mortality (0-4 years)	12.701	12.654	130	140	1.294	0.996	0.000	38.008
Neonatal mortality rate (10 years)	22.073	10.691	211	189	na	0.484	0.690	43.456
Post-neonatal mortality rate (10 years)	12.222	8.209	252	265	1.185	0.672	0.000	28.640
Infant mortality rate (10 years)	34.295	13.814	252	265	1.046	0.403	6.668	61.923
Child mortality rate (10 years)	2.054	2.089	252	265	0.708	1.017	0.000	6.233
Under-five mortality rate (10 years)	36.279	13.829	252	265	1.028	0.381	8.621	63.937
MEN								
Urban residence	0.332	0.039	145	148	0.992	0.117	0.254	0.410
Secondary education	0.770	0.040	145	148	1.153	0.053	0.689	0.851
Never married/in union	0.416	0.059	145	148	1.432	0.141	0.298	0.533
Currently married/in union	0.584	0.059	145	148	1.432	0.101	0.467	0.702
Married before age 20	0.052	0.027	93	95	1.186	0.528	0.000	0.107
Had sexual intercourse before age 18	0.118	0.026	122	125	0.872	0.217	0.067	0.169
Want no more children	0.521	0.050	82	86	0.902	0.096	0.421	0.621
Want to delay next birth at least 2 years	0.063	0.028	82	86	1.039	0.444	0.007	0.120
Ideal number of children	2.606	0.065	140	144	0.992	0.025	2.476	2.737
Has heard of HIV/AIDS	0.983	0.017	145	148	1.564	0.017	0.949	1.017
Know about condoms	0.935	0.036	145	148	1.756	0.038	0.863	1.007
Know about limiting partners	0.983	0.017	145	148	1.564	0.017	0.949	1.017
Had 2+ sexual partners in past 12 months	0.140	0.043	145	148	1.473	0.304	0.055	0.226
Accepting attitudes toward people with HIV	0.004	0.004	143	145	0.738	1.005	0.000	0.011
Abstinence among youth (never had sex)	0.517	0.085	47	47	1.156	0.165	0.347	0.687
Sexually active in past 12 months among never-married youth	0.471	0.084	47	47	1.145	0.179	0.303	0.640
Paid for sexual intercourse in past 12 months	0.184	0.037	145	148	1.162	0.204	0.109	0.259

na = Not applicable

Table B.10 Sampling errors for Lori sample, Armenia 2010

Variable	Value (R)	Standard error (SE)	Number of cases		Design effect (DEFT)	Relative error (SE/R)	Confidence limits	
			Unweighted (N)	Weighted (WN)			R-2SE	R+2SE
WOMEN								
Urban residence	0.553	0.040	453	513	1.729	0.073	0.472	0.634
Secondary education	0.908	0.017	453	513	1.235	0.018	0.875	0.942
Never married/in union	0.304	0.026	453	513	1.182	0.084	0.253	0.355
Currently married/in union	0.634	0.030	453	513	1.303	0.047	0.574	0.693
Had sexual intercourse before age 18	0.134	0.019	379	429	1.108	0.145	0.095	0.173
Married before age 20	0.375	0.022	379	429	0.884	0.059	0.331	0.419
Currently pregnant	0.021	0.012	453	513	1.719	0.551	0.000	0.044
Children ever born	1.381	0.053	453	513	0.951	0.038	1.275	1.486
Children surviving	1.332	0.047	453	513	0.899	0.036	1.237	1.427
Children ever born to women age 40-49	2.164	0.074	120	141	0.8	0.034	2.016	2.313
Know any contraceptive method	1.000	0.000	283	325	na	0.000	1.000	1.000
Currently using any method	0.534	0.049	283	325	1.655	0.092	0.436	0.632
Currently using a modern method	0.358	0.052	283	325	1.832	0.146	0.253	0.462
Currently using a traditional method	0.176	0.019	283	325	0.856	0.110	0.138	0.215
Currently using pill	0.016	0.008	283	325	1.09	0.517	0.000	0.032
Currently using condom	0.118	0.025	283	325	1.299	0.212	0.068	0.168
Currently using IUD	0.192	0.032	283	325	1.378	0.168	0.127	0.257
Currently using withdrawal	0.159	0.021	283	325	0.972	0.133	0.116	0.201
Currently using rhythm	0.008	0.005	283	325	0.887	0.599	0.000	0.017
Used public sector source	0.579	0.057	100	112	1.144	0.098	0.465	0.693
Want no more children	0.610	0.043	283	325	1.485	0.071	0.523	0.696
Want to delay next birth at least 2 years	0.112	0.025	283	325	1.324	0.221	0.063	0.162
Ideal family size	2.562	0.036	435	494	0.924	0.014	2.489	2.634
Births with skilled attendant at delivery	1.000	0.000	98	111	na	0.000	1.000	1.000
Had diarrhea in the past 2 weeks	0.067	0.024	97	110	0.852	0.357	0.019	0.115
Height-for-age (-2SD)	0.234	0.046	80	90	0.909	0.195	0.142	0.325
Weight-for-height (-2SD)	0.026	0.017	80	90	0.94	0.656	0.000	0.060
Weight-for-age (-2SD)	0.053	0.023	80	90	0.911	0.439	0.006	0.100
Has heard of HIV/AIDS	0.984	0.009	453	513	1.446	0.009	0.967	1.001
Know about condoms	0.705	0.021	453	513	0.963	0.029	0.664	0.746
Know about limiting partners	0.873	0.023	453	513	1.467	0.026	0.827	0.919
Abstinence among youth (never had sex)	1.000	0.000	110	124	na	0.000	1.000	1.000
Total fertility rate (3 years)	1.607	0.170	na	1528	0.996	0.106	1.268	1.946
Neonatal mortality rate (10 years)	8.924	8.985	275	215	0.958	1.007	0.000	26.894
Post-neonatal mortality rate (10 years)	15.399	8.539	204	223	1	0.555	0.000	32.476
Infant mortality rate (10 years)	24.323	10.873	204	223	1.017	0.447	2.577	46.068
Child mortality rate (10 years)	4.729	4.772	205	224	0.959	1.009	0.000	14.273
Under-five mortality rate (10 years)	28.937	11.431	205	224	0.977	0.395	6.075	51.799
MEN								
Urban residence	0.502	0.046	107	130	0.94	0.091	0.411	0.593
Secondary education	0.776	0.049	107	130	1.198	0.062	0.679	0.873
Never married/in union	0.513	0.052	107	130	1.068	0.101	0.409	0.617
Currently married/in union	0.487	0.052	107	130	1.068	0.106	0.383	0.591
Had sexual intercourse before age 18	0.417	0.049	88	109	0.928	0.118	0.319	0.515
Want no more children	0.560	0.072	50	63	1.01	0.128	0.416	0.703
Want to delay next birth at least 2 years	0.071	0.037	50	63	1.023	0.530	0.000	0.146
Ideal number of children	2.269	0.062	104	127	0.911	0.027	2.146	2.393
Has heard of HIV/AIDS	0.868	0.037	107	130	1.131	0.043	0.794	0.943
Know about condoms	0.721	0.063	107	130	1.453	0.088	0.594	0.847
Know about limiting partners	0.728	0.060	107	130	1.381	0.082	0.608	0.847
Had 2+ sexual partners in past 12 months	0.067	0.024	107	130	0.978	0.355	0.019	0.114
Abstinence among youth (never had sex)	0.449	0.089	36	41	1.061	0.199	0.270	0.627
Paid for sexual intercourse in past 12 months	0.551	0.089	36	41	1.061	0.162	0.373	0.730

na = Not applicable

Table B.11 Sampling errors for Kotayk sample, Armenia 2010

Variable	Value (R)	Standard error (SE)	Number of cases: Unweighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits: R-2SE	Confidence limits: R+2SE
WOMEN								
Urban residence	0.531	0.039	584	543	1.909	0.074	0.453	0.610
Secondary education	0.908	0.013	584	543	1.044	0.014	0.883	0.933
Never married/in union	0.298	0.024	584	543	1.273	0.081	0.249	0.346
Currently married/in union	0.635	0.020	584	543	1.021	0.032	0.594	0.675
Had sexual intercourse before age 18	0.164	0.016	505	471	0.947	0.095	0.133	0.196
Married before age 20	0.372	0.027	505	471	1.258	0.073	0.318	0.427
Currently pregnant	0.038	0.008	584	543	1.065	0.221	0.021	0.055
Children ever born	1.499	0.056	584	543	1.016	0.037	1.387	1.611
Children surviving	1.437	0.053	584	543	1.015	0.037	1.331	1.543
Children ever born to women age 40-49	2.620	0.097	163	157	1.116	0.037	2.426	2.813
Know any contraceptive method	0.992	0.004	373	344	0.959	0.004	0.983	1.001
Currently using any method	0.513	0.036	373	344	1.384	0.070	0.441	0.585
Currently using a modern method	0.142	0.019	373	344	1.065	0.136	0.103	0.180
Currently using a traditional method	0.372	0.036	373	344	1.431	0.097	0.300	0.443
Currently using pill	0.008	0.005	373	344	1.038	0.589	0.000	0.018
Currently using condom	0.058	0.014	373	344	1.14	0.239	0.030	0.085
Currently using IUD	0.072	0.013	373	344	0.958	0.178	0.047	0.098
Currently using withdrawal	0.262	0.031	373	344	1.339	0.116	0.201	0.323
Currently using rhythm	0.104	0.016	373	344	0.999	0.152	0.072	0.135
Used public sector source	0.557	0.067	59	51	1.023	0.120	0.423	0.690
Want no more children	0.523	0.036	373	344	1.372	0.068	0.452	0.594
Want to delay next birth at least 2 years	0.117	0.016	373	344	0.956	0.136	0.085	0.149
Ideal family size	2.799	0.047	578	539	1.185	0.017	2.704	2.894
Births with skilled attendant at delivery	1.000	0.000	166	150	na	0.000	1.000	1.000
Had diarrhea in the past 2 weeks	0.161	0.025	162	147	0.829	0.153	0.112	0.210
Treated with ORS	0.255	0.085	26	24	0.934	0.334	0.085	0.426
Sought medical treatment	0.332	0.079	26	24	0.81	0.237	0.175	0.489
Vaccination card seen	0.970	0.031	30	27	0.976	0.032	0.908	1.031
Received BCG vaccination	1.000	0.000	30	27	na	0.000	1.000	1.000
Received DPT vaccination (3 doses)	0.933	0.051	30	27	1.102	0.054	0.832	1.035
Received polio vaccination (3 doses)	0.970	0.031	30	27	0.976	0.032	0.908	1.031
Received measles vaccination	1.000	0.000	30	27	na	0.000	1.000	1.000
Received all vaccinations	0.933	0.051	30	27	1.102	0.054	0.832	1.035
Height-for-age (-2SD)	0.172	0.039	158	147	1.184	0.226	0.094	0.250
Weight-for-height (-2SD)	0.014	0.010	158	147	1.115	0.733	0.000	0.035
Weight-for-age (-2SD)	0.017	0.010	158	147	0.965	0.579	0.000	0.037
Has heard of HIV/AIDS	0.986	0.008	584	543	1.659	0.008	0.971	1.002
Know about condoms	0.825	0.022	584	543	1.369	0.026	0.782	0.868
Know about limiting partners	0.884	0.022	584	543	1.644	0.025	0.841	0.928
Abstinence among youth (never)	1.000	0.000	137	126	na	0.000	1.000	1.000
Accepting attitudes toward people with HIV	0.010	0.004	575	535	0.982	0.411	0.002	0.018
Total fertility rate (3 years)	1.955	0.174	na	1,652	1.062	0.089	1.606	2.304
Perinatal mortality (0-4 years)	13.730	8.251	168	152	0.911	0.601	0.000	30.231
Neonatal mortality rate (10 years)	12.594	7.504	204	223	1.351	0.596	0.000	27.603
Post-neonatal mortality rate (10 years)	3.080	3.093	298	270	0.93	1.004	0.000	9.266
Infant mortality rate (10 years)	15.674	9.999	298	270	1.165	0.638	0.000	35.672
Child mortality rate (10 years)	9.790	5.390	298	270	0.904	0.551	0.000	20.569
Under-five mortality rate (10 years)	25.310	13.027	298	270	1.281	0.515	0.000	51.363
MEN								
Urban residence	0.452	0.054	158	148	1.349	0.118	0.345	0.560
Secondary education	0.758	0.032	158	148	0.932	0.042	0.694	0.822
Never married/in union	0.422	0.039	158	148	0.984	0.092	0.345	0.500
Currently married/in union	0.564	0.040	158	148	1.002	0.070	0.484	0.643
Had sexual intercourse before age 18	0.288	0.029	134	126	0.738	0.101	0.230	0.346
Want no more children	0.592	0.055	88	83	1.038	0.092	0.482	0.701
Want to delay next birth at least 2 years	0.133	0.028	88	83	0.763	0.209	0.077	0.188
Ideal number of children	2.681	0.063	147	137	0.813	0.023	2.555	2.807
Has heard of HIV/AIDS	0.992	0.008	158	148	1.119	0.008	0.976	1.008
Know about condoms	0.953	0.018	158	148	1.069	0.019	0.917	0.989
Know about limiting partners	0.953	0.024	158	148	1.445	0.025	0.905	1.002
Had 2+ sexual partners in past 12 months	0.259	0.045	158	148	1.282	0.173	0.169	0.349
Condom use at last sex	0.530	0.091	43	38	1.182	0.172	0.347	0.712
Accepting attitudes toward people with HIV	0.020	0.011	157	147	0.981	0.552	0.000	0.042
Abstinence among youth (never had sex)	0.443	0.090	51	48	1.287	0.204	0.262	0.623
Sexually active in past 12 months among never-married youth	0.459	0.089	51	48	1.263	0.194	0.281	0.637
Paid for sexual intercourse in past 12 months	0.108	0.025	158	148	1.019	0.234	0.058	0.159

na = Not applicable

Table B.12 Sampling errors for Shirak sample, Armenia 2010

Variable	Value (R)	Standard error (SE)	Number of cases: Unweighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits: R-2SE	Confidence limits: R+2SE
WOMEN								
Urban residence	0.514	0.033	632	598	1.635	0.063	0.449	0.579
Secondary education	0.917	0.015	632	598	1.35	0.016	0.887	0.947
Never married/in union	0.303	0.018	632	598	0.973	0.059	0.267	0.338
Currently married/in union	0.642	0.019	632	598	1.021	0.030	0.603	0.681
Had sexual intercourse before age 18	0.134	0.018	521	496	1.179	0.131	0.099	0.169
Married before age 20	0.402	0.025	521	496	1.165	0.062	0.352	0.452
Currently pregnant	0.029	0.007	632	598	0.989	0.227	0.016	0.042
Children ever born	1.494	0.052	632	598	0.912	0.035	1.389	1.599
Children surviving	1.409	0.051	632	598	0.952	0.036	1.308	1.510
Children ever born to women age 40-49	2.649	0.145	165	155	1.382	0.055	2.359	2.939
Know any contraceptive method	0.997	0.003	400	384	1.073	0.003	0.991	1.003
Currently using any method	0.356	0.027	400	384	1.113	0.075	0.303	0.409
Currently using a modern method	0.183	0.022	400	384	1.139	0.121	0.139	0.227
Currently using a traditional method	0.173	0.021	400	384	1.108	0.121	0.131	0.215
Currently using pill	0.044	0.010	400	384	0.94	0.219	0.025	0.063
Currently using condom	0.093	0.019	400	384	1.282	0.200	0.056	0.131
Currently using IUD	0.035	0.009	400	384	0.987	0.258	0.017	0.054
Currently using withdrawal	0.145	0.018	400	384	1.013	0.123	0.109	0.181
Currently using rhythm	0.028	0.008	400	384	1	0.295	0.012	0.045
Used public sector source	0.198	0.039	69	67	0.816	0.199	0.119	0.276
Want no more children	0.605	0.023	400	384	0.938	0.038	0.559	0.651
Want to delay next birth at least 2 years	0.102	0.011	400	384	0.732	0.109	0.079	0.124
Ideal family size	2.369	0.040	613	581	1.124	0.017	2.290	2.449
Births with skilled attendant at delivery	0.992	0.008	157	155	1.106	0.008	0.977	1.007
Had diarrhea in the past 2 weeks	0.095	0.027	155	153	0.928	0.282	0.041	0.148
Vaccination card seen	0.959	0.039	33	32	1.149	0.041	0.880	1.038
Received BCG vaccination	1.000	0.000	33	32	na	0.000	1.000	1.000
Received DPT vaccination (3 doses)	1.000	0.000	33	32	na	0.000	1.000	1.000
Received polio vaccination (3 doses)	1.000	0.000	33	32	na	0.000	1.000	1.000
Received measles vaccination	1.000	0.000	33	32	na	0.000	1.000	1.000
Received all vaccinations	1.000	0.000	33	32	na	0.000	1.000	1.000
Height-for-age (-2SD)	0.214	0.038	153	153	1.171	0.178	0.138	0.289
Weight-for-height (-2SD)	0.066	0.023	153	153	1.136	0.342	0.021	0.112
Weight-for-age (-2SD)	0.026	0.016	153	153	0.91	0.609	0.000	0.057
Has heard of HIV/AIDS	0.965	0.008	632	598	1.151	0.009	0.948	0.982
Know about condoms	0.757	0.015	632	598	0.874	0.020	0.727	0.787
Know about limiting partners	0.743	0.028	632	598	1.623	0.038	0.686	0.799
Abstinence among youth (never had sex)	1.000	0.000	163	153	na	0.000	1.000	1.000
Accepting attitudes toward people with HIV	0.007	0.003	612	577	0.97	0.475	0.000	0.013
Total fertility rate (3 years)	1.790	0.165	na	1,740	1.121	0.092	1.460	2.120
Perinatal mortality (0-4 years)	10.880	7.608	158	156	0.943	0.699	0.000	26.096
Neonatal mortality rate (10 years)	10.228	5.481	298	270	1.154	0.536	0.000	21.190
Post-neonatal mortality rate (10 years)	10.988	6.048	282	280	1.006	0.550	0.000	23.084
Infant mortality rate (10 years)	21.217	8.305	282	280	1.028	0.391	4.608	37.826
Under-five mortality rate (10 years)	21.217	8.305	282	280	1.028	0.391	4.608	37.826
MEN								
Urban residence	0.562	0.059	135	131	1.384	0.105	0.444	0.681
Secondary education	0.883	0.034	135	131	1.212	0.038	0.816	0.950
Never married/in union	0.392	0.038	135	131	0.9	0.097	0.316	0.468
Currently married/in union	0.596	0.038	135	131	0.905	0.064	0.519	0.672
Had sexual intercourse before age 18	0.068	0.032	110	108	1.317	0.468	0.004	0.131
Want no more children	0.464	0.047	80	78	0.839	0.101	0.370	0.558
Want to delay next birth at least 2 years	0.150	0.038	80	78	0.942	0.252	0.074	0.226
Ideal number of children	2.918	0.115	135	131	1.433	0.039	2.688	3.147
Has heard of HIV/AIDS	0.987	0.009	135	131	0.954	0.009	0.969	1.006
Know about condoms	0.838	0.059	135	131	1.857	0.071	0.720	0.956
Know about limiting partners	0.797	0.057	135	131	1.655	0.072	0.682	0.912
Had 2+ sexual partners in past 12 months	0.010	0.010	135	131	1.132	0.971	0.000	0.030
Accepting attitudes toward people with HIV	0.017	0.011	133	130	0.983	0.642	0.000	0.040
Abstinence among youth (never had sex)	0.739	0.077	46	45	1.183	0.105	0.584	0.894
Sexually active in past 12 months among never-married youth	0.081	0.036	46	45	0.884	0.444	0.009	0.153
Paid for sexual intercourse in past 12 months	0.007	0.007	135	131	0.975	1.010	0.000	0.021

na = Not applicable

Table B.13 Sampling errors for Syunik sample, Armenia 2010

Variable	Value (R)	Standard error (SE)	Number of cases: Unweighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits: R-2SE	Confidence limits: R+2SE
WOMEN								
Urban residence	0.599	0.028	379	198	1.125	0.047	0.542	0.656
Secondary education	0.934	0.014	379	198	1.108	0.015	0.906	0.962
Never married/in union	0.258	0.023	379	198	1.04	0.091	0.211	0.305
Currently married/in union	0.686	0.026	379	198	1.098	0.038	0.634	0.739
Had sexual intercourse before age 18	0.113	0.014	338	176	0.794	0.121	0.086	0.141
Married before age 20	0.373	0.035	338	176	1.345	0.095	0.302	0.444
Currently pregnant	0.044	0.012	379	198	1.141	0.272	0.020	0.068
Children ever born	1.499	0.056	379	198	0.828	0.037	1.388	1.610
Children surviving	1.469	0.052	379	198	0.791	0.035	1.365	1.573
Children ever born to women age 40-49	2.468	0.110	121	62	1.144	0.045	2.248	2.689
Know any contraceptive method	1.000	0.000	257	136	na	0.000	1.000	1.000
Currently using any method	0.483	0.040	257	136	1.284	0.083	0.403	0.563
Currently using a modern method	0.214	0.022	257	136	0.865	0.103	0.170	0.259
Currently using a traditional method	0.268	0.033	257	136	1.176	0.121	0.203	0.334
Currently using condom	0.136	0.019	257	136	0.9	0.142	0.098	0.175
Currently using IUD	0.056	0.018	257	136	1.221	0.313	0.021	0.091
Currently using withdrawal	0.221	0.033	257	136	1.284	0.151	0.154	0.288
Used public sector source	0.389	0.072	54	28	1.071	0.184	0.245	0.532
Want no more children	0.564	0.025	257	136	0.807	0.044	0.514	0.614
Want to delay next birth at least 2 years	0.087	0.028	257	136	1.606	0.325	0.030	0.144
Ideal family size	2.574	0.044	379	198	1.12	0.017	2.486	2.662
Births with skilled attendant at delivery	1.000	0.000	95	52	na	0.000	1.000	1.000
Height-for-age (-2SD)	0.365	0.049	87	49	1.005	0.135	0.267	0.464
Weight-for-height (-2SD)	0.023	0.016	87	49	1.023	0.700	0.000	0.054
Weight-for-age (-2SD)	0.056	0.026	87	49	1.115	0.465	0.004	0.109
Has heard of HIV/AIDS	0.979	0.008	379	198	1.132	0.009	0.962	0.996
Know about condoms	0.145	0.021	379	198	1.184	0.148	0.102	0.187
Know about limiting partners	0.141	0.021	379	198	1.164	0.148	0.099	0.182
Abstinence among youth (never had sex)	1.000	0.000	63	32	na	0.000	1.000	1.000
Total fertility rate (3 years)	2.048	0.247	na	599	0.953	0.120	1.555	2.542
Perinatal mortality (0-4 years)	48.891	19.287	99	54	0.935	0.394	10.318	87.465
Neonatal mortality rate (10 years)	5.631	5.679	282	280	0.956	1.008	0.000	16.989
Post-neonatal mortality rate (10 years)	6.524	6.580	164	88	1.055	1.008	0.000	19.684
Infant mortality rate (10 years)	12.156	8.497	164	88	1.01	0.699	0.000	29.150
Child mortality rate (10 years)	2.952	2.981	282	280	na	1.010	0.000	8.913
Under-five mortality rate (10 years)	15.072	8.882	164	88	1.01	0.589	0.000	32.837
WOMEN								
Urban residence	0.624	0.030	123	63	0.681	0.048	0.565	0.684
Secondary education	0.866	0.033	123	63	1.074	0.038	0.800	0.932
Never married/in union	0.441	0.043	123	63	0.955	0.097	0.355	0.527
Currently married/in union	0.495	0.042	123	63	0.929	0.085	0.411	0.579
Had sexual intercourse before age 18	0.181	0.043	104	54	1.128	0.237	0.095	0.266
Want no more children	0.647	0.060	60	31	0.971	0.093	0.526	0.767
Want to delay next birth at least 2 years	0.084	0.041	60	31	1.125	0.484	0.003	0.165
Ideal number of children	2.525	0.110	123	63	0.924	0.043	2.305	2.744
Has heard of HIV/AIDS	0.907	0.030	123	63	1.141	0.033	0.846	0.967
Know about condoms	0.680	0.048	123	63	1.127	0.070	0.585	0.775
Know about limiting partners	0.744	0.042	123	63	1.069	0.057	0.659	0.828
Had 2+ sexual partners in past 12 months	0.156	0.043	123	63	1.31	0.276	0.070	0.242
Abstinence among youth (never had sex)	0.627	0.092	39	20	1.174	0.147	0.443	0.811
Sexually active in past 12 months among never-married youth	0.373	0.092	39	20	1.174	0.247	0.189	0.557
Paid for sexual intercourse in past 12 months	0.009	0.009	123	63	1.073	1.002	0.000	0.028

na = Not applicable

Table B.14 Sampling errors for Vayots Dzor sample, Armenia 2010

Variable	Value (R)	Standard error (SE)	Number of cases: Unweighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits: R-2SE	Confidence limits: R+2SE
WOMEN								
Urban residence	0.301	0.032	397	131	1.405	0.108	0.236	0.366
Secondary education	0.925	0.016	397	131	1.225	0.018	0.892	0.957
Never married/in union	0.262	0.026	397	131	1.175	0.099	0.210	0.314
Currently married/in union	0.688	0.026	397	131	1.098	0.037	0.636	0.739
Had sexual intercourse before age 18	0.191	0.037	351	116	1.755	0.193	0.117	0.264
Married before age 20	0.466	0.035	351	116	1.32	0.075	0.396	0.537
Currently pregnant	0.021	0.011	397	131	1.563	0.535	0.000	0.044
Children ever born	1.641	0.058	397	131	0.867	0.036	1.524	1.758
Children surviving	1.574	0.058	397	131	0.903	0.037	1.459	1.689
Children ever born to women age 40-49	2.725	0.097	123	39	1.016	0.036	2.531	2.920
Know any contraceptive method	1.000	0.000	270	90	na	0.000	1.000	1.000
Currently using any method	0.621	0.030	270	90	1.011	0.048	0.561	0.681
Currently using a modern method	0.112	0.015	270	90	0.78	0.134	0.082	0.142
Currently using a traditional method	0.509	0.026	270	90	0.863	0.052	0.456	0.561
Currently using condom	0.074	0.013	270	90	0.833	0.179	0.048	0.101
Currently using IUD	0.035	0.011	270	90	1.021	0.327	0.012	0.058
Currently using withdrawal	0.503	0.026	270	90	0.865	0.052	0.451	0.556
Currently using rhythm	0.005	0.003	270	90	0.665	0.551	0.000	0.011
Used public sector source	0.329	0.087	33	10	1.052	0.266	0.154	0.504
Want no more children	0.598	0.041	270	90	1.368	0.068	0.516	0.680
Want to delay next birth at least 2 years	0.207	0.030	270	90	1.198	0.143	0.148	0.266
Ideal family size	2.420	0.041	397	131	1.064	0.017	2.338	2.502
Births with skilled attendant at delivery	1.000	0.000	108	40	na	0.000	1.000	1.000
Had diarrhea in the past 2 weeks	0.075	0.033	105	38	1.277	0.447	0.008	0.141
Height-for-age (-2SD)	0.160	0.095	103	39	2.49	0.597	0.000	0.350
Weight-for-height (-2SD)	0.018	0.016	103	39	1.284	0.886	0.000	0.050
Weight-for-age (-2SD)	0.030	0.026	103	39	1.684	0.876	0.000	0.082
Has heard of HIV/AIDS	0.885	0.015	397	131	0.957	0.017	0.854	0.916
Know about condoms	0.586	0.053	397	131	2.141	0.090	0.480	0.692
Know about limiting partners	0.665	0.033	397	131	1.39	0.050	0.599	0.730
Abstinence among youth (never had sex)	1.000	0.000	81	26	na	0.000	1.000	1.000
Accepting attitudes toward people with HIV	0.007	0.006	361	115	1.328	0.811	0.000	0.019
Total fertility rate (3 years)	1.762	0.226	na	398	1.288	0.129	1.309	2.215
Perinatal mortality (0-4 years)	16.156	13.141	109	40	1.156	0.813	0.000	42.438
Neonatal mortality rate (10 years)	8.294	6.966	164	88	0.988	0.840	0.000	22.226
Post-neonatal mortality rate (10 years)	17.513	14.451	202	77	1.695	0.825	0.000	46.416
Infant mortality rate (10 years)	25.807	13.934	202	77	1.362	0.540	0.000	53.675
Under-five mortality rate (10 years)	25.807	13.934	202	77	1.362	0.540	0.000	53.675
MEN								
Urban residence	0.298	0.049	87	24	0.992	0.164	0.200	0.396
Secondary education	0.928	0.029	87	24	1.056	0.032	0.869	0.987
Never married/in union	0.403	0.058	87	24	1.102	0.145	0.286	0.519
Currently married/in union	0.593	0.058	87	24	1.096	0.098	0.477	0.709
Had sexual intercourse before age 18	0.026	0.023	76	21	1.272	0.902	0.000	0.073
Want no more children	0.444	0.083	53	14	1.21	0.188	0.277	0.611
Want to delay next birth at least 2 years	0.117	0.050	53	14	1.126	0.428	0.017	0.218
Ideal number of children	2.731	0.101	77	21	0.925	0.037	2.529	2.933
Has heard of HIV/AIDS	0.861	0.051	87	24	1.375	0.059	0.759	0.964
Know about condoms	0.681	0.068	87	24	1.363	0.101	0.544	0.818
Know about limiting partners	0.726	0.055	87	24	1.149	0.076	0.615	0.836
Accepting attitudes toward people with HIV	0.018	0.012	78	21	0.823	0.701	0.000	0.042
Paid for sexual intercourse in past 12 months	0.099	0.034	87	24	1.047	0.340	0.032	0.167

na = Not applicable

Table B.15 Sampling errors for Tavush sample, Armenia 2010

Variable	Value (R)	Standard error (SE)	Number of cases: Unweighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits: R-2SE	Confidence limits: R+2SE
WOMEN								
Urban residence	0.324	0.029	461	238	1.312	0.088	0.267	0.382
Secondary education	0.889	0.023	461	238	1.549	0.026	0.844	0.934
Never married/in union	0.292	0.022	461	238	1.059	0.077	0.248	0.337
Currently married/in union	0.657	0.018	461	238	0.822	0.028	0.620	0.693
Had sexual intercourse before age 18	0.151	0.031	390	204	1.707	0.205	0.089	0.213
Married before age 20	0.439	0.037	390	204	1.458	0.083	0.366	0.513
Currently pregnant	0.018	0.005	461	238	0.832	0.288	0.008	0.028
Children ever born	1.619	0.080	461	238	1.238	0.049	1.459	1.779
Children surviving	1.566	0.071	461	238	1.15	0.045	1.424	1.708
Children ever born to women age 40-49	2.657	0.205	125	64	1.734	0.077	2.248	3.066
Know any contraceptive method	1.000	0.000	293	156	na	0.000	1.000	1.000
Currently using any method	0.499	0.037	293	156	1.27	0.074	0.425	0.573
Currently using a modern method	0.104	0.023	293	156	1.294	0.222	0.058	0.150
Currently using a traditional method	0.395	0.041	293	156	1.43	0.104	0.313	0.477
Currently using pill	0.009	0.007	293	156	1.178	0.705	0.000	0.023
Currently using condom	0.036	0.012	293	156	1.061	0.321	0.013	0.059
Currently using IUD	0.055	0.016	293	156	1.207	0.292	0.023	0.088
Currently using withdrawal	0.378	0.040	293	156	1.417	0.106	0.297	0.458
Currently using rhythm	0.014	0.008	293	156	1.174	0.580	0.000	0.030
Used public sector source	0.549	0.087	39	16	1.08	0.159	0.374	0.723
Want no more children	0.633	0.026	293	156	0.929	0.041	0.580	0.685
Want to delay next birth at least 2 years	0.111	0.017	293	156	0.905	0.150	0.078	0.144
Ideal family size	2.580	0.082	440	229	1.916	0.032	2.417	2.744
Births with skilled attendant at delivery	1.000	0.000	133	65	na	0.000	1.000	1.000
Had diarrhea in the past 2 weeks	0.089	0.027	133	65	0.985	0.307	0.034	0.144
Vaccination card seen	1.000	0.000	29	14	na	0.000	1.000	1.000
Received BCG vaccination	1.000	0.000	29	14	na	0.000	1.000	1.000
Received DPT vaccination (3 doses)	1.000	0.000	29	14	na	0.000	1.000	1.000
Received polio vaccination (3 doses)	0.984	0.016	29	14	0.667	0.016	0.952	1.017
Received measles vaccination	0.983	0.018	29	14	0.699	0.018	0.947	1.018
Received all vaccinations	0.967	0.024	29	14	0.687	0.025	0.920	1.015
Height-for-age (-2SD)	0.161	0.027	130	67	0.825	0.169	0.107	0.216
Weight-for-height (-2SD)	0.010	0.011	130	67	1.171	1.019	0.000	0.032
Weight-for-age (-2SD)	0.046	0.019	130	67	1.005	0.406	0.009	0.083
Has heard of HIV/AIDS	0.951	0.022	461	238	2.138	0.023	0.908	0.994
Know about condoms	0.615	0.018	461	238	0.783	0.029	0.580	0.651
Know about limiting partners	0.677	0.025	461	238	1.161	0.037	0.627	0.728
Abstinence among youth (never had sex)	1.000	0.000	99	51	na	0.000	1.000	1.000
Accepting attitudes toward people with HIV	0.008	0.005	443	226	1.104	0.589	0.000	0.017
Total fertility rate (3 years)	1.957	0.286	na	712	1.311	0.146	1.384	2.530
Perinatal mortality (0-4 years)	22.943	15.729	135	66	1.212	0.686	0.000	54.401
Post-neonatal mortality rate (10 years)	1.896	1.953	230	125	0.69	1.030	0.000	5.802
Infant mortality rate (10 years)	1.896	1.953	230	125	0.69	1.030	0.000	5.802
Under-five mortality rate (10 years)	1.896	1.953	230	125	0.69	1.030	0.000	5.802
MEN								
Urban residence	0.304	0.035	128	68	0.856	0.115	0.234	0.373
Secondary education	0.851	0.053	128	68	1.663	0.062	0.745	0.956
Never married/in union	0.429	0.032	128	68	0.727	0.074	0.365	0.493
Currently married/in union	0.533	0.047	128	68	1.06	0.088	0.439	0.627
Had sexual intercourse before age 18	0.021	0.013	111	60	0.987	0.646	0.000	0.048
Want no more children	0.626	0.048	72	36	0.83	0.076	0.531	0.721
Want to delay next birth at least 2 years	0.083	0.034	72	36	1.032	0.406	0.016	0.151
Ideal number of children	2.634	0.094	128	68	1.304	0.036	2.446	2.823
Has heard of HIV/AIDS	0.996	0.004	128	68	0.695	0.004	0.989	1.004
Know about condoms	0.996	0.004	128	68	0.695	0.004	0.989	1.004
Know about limiting partners	0.971	0.014	128	68	0.955	0.015	0.942	0.999
Had 2+ sexual partners in past 12 months	0.169	0.042	128	68	1.258	0.247	0.085	0.253
Accepting attitudes toward people with HIV	0.051	0.024	127	68	1.201	0.460	0.004	0.099
Abstinence among youth (never has sex)	0.811	0.119	37	22	1.829	0.147	0.572	1.050
Sexually active in past 12 months among never-married youth	0.189	0.119	37	22	1.829	0.631	0.000	0.428
Paid for sexual intercourse in past 12 months	0.132	0.048	128	68	1.584	0.361	0.037	0.227

na = Not applicable

DATA QUALITY TABLES

Appendix C

Table C.1 Household age distribution

Single-year age distribution of the de facto household population by sex (weighted), Armenia 2010

	Male		Female			Male		Female	
Age	Number	Percent	Number	Percent	Age	Number	Percent	Number	Percent
0	166	1.5	142	1.1	36	115	1.1	144	1.1
1	166	1.5	165	1.3	37	93	0.9	137	1.1
2	158	1.5	150	1.2	38	102	0.9	140	1.1
3	147	1.4	113	0.9	39	118	1.1	119	0.9
4	133	1.2	139	1.1	40	120	1.1	166	1.3
5	151	1.4	110	0.9	41	108	1.0	123	1.0
6	184	1.7	130	1.0	42	118	1.1	175	1.4
7	151	1.4	122	1.0	43	88	0.8	155	1.2
8	153	1.4	120	0.9	44	128	1.2	173	1.4
9	105	1.0	116	0.9	45	146	1.3	173	1.3
10	162	1.5	142	1.1	46	141	1.3	193	1.5
11	157	1.4	115	0.9	47	145	1.3	174	1.4
12	160	1.5	129	1.0	48	170	1.6	195	1.5
13	172	1.6	163	1.3	49	141	1.3	175	1.4
14	184	1.7	169	1.3	50	191	1.8	313	2.4
15	184	1.7	154	1.2	51	191	1.8	252	2.0
16	225	2.1	154	1.2	52	180	1.7	272	2.1
17	165	1.5	140	1.1	53	151	1.4	199	1.6
18	130	1.2	217	1.7	54	184	1.7	203	1.6
19	95	0.9	235	1.8	55	151	1.4	226	1.8
20	196	1.8	235	1.8	56	141	1.3	195	1.5
21	182	1.7	205	1.6	57	94	0.9	147	1.2
22	202	1.9	219	1.7	58	160	1.5	158	1.2
23	195	1.8	200	1.6	59	105	1.0	165	1.3
24	185	1.7	217	1.7	60	138	1.3	183	1.4
25	215	2.0	224	1.8	61	74	0.7	134	1.0
26	213	2.0	208	1.6	62	89	0.8	141	1.1
27	176	1.6	197	1.5	63	132	1.2	162	1.3
28	188	1.7	163	1.3	64	67	0.6	90	0.7
29	161	1.5	183	1.4	65	83	0.8	101	0.8
30	195	1.8	219	1.7	66	41	0.4	30	0.2
31	140	1.3	149	1.2	67	49	0.5	22	0.2
32	159	1.5	192	1.5	68	57	0.5	79	0.6
33	137	1.3	167	1.3	69	45	0.4	83	0.7
34	125	1.1	147	1.1	70+	877	8.1	1,406	11.0
35	131	1.2	133	1.0					
					Total	10,885	100.0	12,787	100.0

Note: The de facto population includes all residents and nonresidents who stayed in the household the night before the interview.

Table C.2.1 Age distribution of eligible and interviewed women

De facto household population of women age 10-54 and interviewed women age 15-49; and percent distribution and percentage of eligible women who were interviewed (weighted), by five-year age groups, Armenia 2010

Age group	Household population of women age 10-54	Interviewed women age 15-49		Percentage of eligible women interviewed
		Number	Percentage	
10-14	719	na	na	na
15-19	899	882	14.6	98.0
20-24	1,076	1,056	17.5	98.1
25-29	975	959	15.9	98.4
30-34	873	851	14.1	97.4
35-39	674	651	10.8	96.6
40-44	792	768	12.7	97.0
45-49	910	868	14.4	95.4
50-54	1,239	na	na	na
15-49	6,199	6,035	100.0	97.4

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 interviewed women are household weights. Age is based on the household questionnaire.
na = Not applicable

Table C.2.2 Age distribution of eligible and interviewed men

De facto household population of men age 10-54 and interviewed men age 15-49; and percent distribution and percentage of eligible men who were interviewed (weighted), by five-year age groups, Armenia 2010

Age group	Household population of men age 10-54	Interviewed men age 15-49		Percentage of eligible men interviewed
		Number	Percentage	
10-14	271	na	na	na
15-19	242	235	14.4	97.0
20-24	321	309	19.0	96.3
25-29	301	292	17.9	97.1
30-34	247	235	14.5	95.2
35-39	175	164	10.1	93.5
40-44	174	167	10.3	96.2
45-49	240	225	13.8	93.8
50-54	293	na	na	na
15-49	2,265	1,628	100.0	71.9

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 men and interviewed 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), Armenia 2010

Subject	Reference group	Percentage with information missing	Number of cases
Birth date	Births in the 15 years preceding the survey		
Month only		0.00	4,230
Month and year		0.00	4,230
Age at death	Deceased children born in the 15 years preceding the survey	0.00	96
Age/date at first union[1]	Ever married women age 15-49	0.02	4,011
	Ever married men age 15-49	0.00	877
Respondent's education	All women age 15-49	0.03	5,922
	All men age 15-49	0.00	1,584
Diarrhea in past 2 weeks	Living children 0-59 months	0.38	1,426
Anthropometry	Living children age 0-59 months (from the Household Questionnaire)		
Height		3.82	1,462
Weight		3.31	1,462
Height or weight		3.93	1,462

[1] Both year and age missing

Table C.4 Births by calendar years

Number of births, percentage with complete birth date, sex ratio at birth, and calendar year ratio by calendar year, according to living, dead, and total children (weighted), Armenia 2010

	Number of births			Percentage with complete birth date[1]			Sex ratio at birth[2]			Calendar year ratio[3]		
Calendar year	Living	Dead	Total	Living	Dead	Total	Living	Dead	Total	Living	Dead	Total
2010	267	1	267	100.0	100.0	100.0	114.6	na	115.0	na	na	na
2009	317	7	325	100.0	100.0	100.0	98.4	37.0	96.4	na	na	na
2008	301	4	305	100.0	100.0	100.0	116.5	246.3	117.5	103.8	60.8	103.0
2007	263	4	268	100.0	100.0	100.0	124.1	13.7	120.5	94.1	87.4	93.9
2006	259	7	265	100.0	100.0	100.0	99.1	110.3	99.3	98.9	196.8	100.1
2005	260	2	262	100.0	100.0	100.0	122.5	0.0	120.3	94.5	29.1	92.7
2004	292	9	300	100.0	100.0	100.0	160.3	1,175.5	166.4	109.7	197.8	111.2
2003	272	7	278	100.0	100.0	100.0	104.6	154.0	105.6	96.7	69.4	95.8
2002	270	10	280	100.0	100.0	100.0	125.2	103.1	124.3	110.3	139.6	111.1
2001	218	8	227	100.0	100.0	100.0	86.4	91.9	86.6	80.5	85.1	80.6
2006-2010	1,408	22	1,430	100.0	100.0	100.0	109.8	67.6	109.0	na	na	na
2001-2005	1,312	36	1,348	100.0	100.0	100.0	119.1	142.9	119.7	na	na	na
1996-2000	1,374	37	1,411	100.0	100.0	100.0	113.9	270.4	116.3	na	na	na
1991-1995	1,542	66	1,608	100.0	100.0	100.0	117.3	159.8	118.8	na	na	na
<1995	2,214	139	2,353	99.9	98.8	99.8	106.8	163.6	109.5	na	na	na
All	7,850	300	8,150	100.0	99.5	99.9	112.6	158.4	114.0	na	na	na

na = Not applicable

[1] Both year and month of birth given

[2] $(B_m/B_f)x100$, where B_m and B_f are the numbers of male and female births, respectively

[3] $[2B_x/(B_{x-1}+B_{x+1})]x100$, where B_x is the number of births in calendar year x

Table C.5 Reporting of age at death in days

Distribution of reported deaths under 1 month of age by age at death in days and the percentage of neonatal deaths reported to occur at age 06 days, for five-year periods of birth preceding the survey (weighted), Armenia 2010

Age at death (days)	Number of years preceding the survey				Total
	0-4	5-9	10-14	15-19	0-19
<1	1	1	6	5	13
1	1	0	2	8	11
2	0	0	5	0	5
3	2	2	7	4	14
4	0	2	0	4	6
5	3	4	1	1	9
6	0	0	1	0	2
7	0	1	0	0	1
10	0	1	0	2	4
11	0	0	0	0	0
12	0	1	0	2	3
13	0	0	2	2	4
14	0	0	0	1	1
15	1	0	0	2	3
17	0	2	0	0	2
20	0	0	0	2	2
23	2	0	0	0	2
26	1	0	0	0	1
28	0	0	0	1	1
Total 0-30	11	14	24	33	83
Percentage early neonatal[1]	66.0	66.6	88.5	65.4	72.5

[1] ≤6 days / ≤30 days

Table C.6 Reporting of age at death in months

Distribution of reported deaths under age 2 by age at death in months and the percentage of infant deaths reported to occur under age 1 month, for five-year periods of birth preceding the survey, Armenia 2010

Age at death (months)	Number of years preceding the survey				Total
	0-4	5-9	10-14	15-19	0-19
<1[a]	11	14	24	33	83
1	1	2	4	7	14
2	0	5	0	2	7
3	1	3	2	1	7
4	3	2	1	3	9
5	1	0	0	2	4
6	1	1	3	5	10
7	1	1	0	3	4
8	0	1	0	3	3
9	0	1	0	0	1
10	0	0	0	1	1
11	0	0	0	0	0
12	1	0	0	0	1
13	0	0	0	1	2
14	0	0	1	0	1
17	1	0	0	0	1
18	0	2	0	0	2
Total 0-11	20	31	35	59	144
Percentage neonatal[1]	57.9	45.0	70.5	56.1	57.4

[a] Includes deaths under age 1 month reported in days
[1] Under age 1 month / under age 1 year

Table C.7 Nutritional status of children based on NCHS/CDC/WHO International Reference Population

Percentage of children under age 5 classified as malnourished according to three anthropometric indices of nutritional status: height-for-age, weight-for-height, and weight-for-age, by background characteristics, based on the NCHS/CDC/WHO International Reference Population, Armenia 2010

	Height-for-age			Weight-for-height				Weight-for-age				
Background characteristic	Percentage below -3 SD	Percentage below -2 SD[1]	Mean Z-score (SD)	Percentage below -3 SD	Percentage below -2 SD[1]	Percentage above +2 SD	Mean Z-score (SD)	Percentage below -3 SD	Percentage below -2 SD[1]	Percentage above +2 SD	Mean Z-score (SD)	Number of children
Age in months												
<6	0.7	6.9	-0.6	0.0	4.4	9.2	0.2	0.0	1.7	4.1	-0.1	129
6-8	4.9	15.6	-0.5	0.0	3.0	6.1	0.3	0.0	8.9	2.7	-0.1	67
9-11	0.0	11.0	-0.5	0.0	3.5	9.2	0.0	0.0	0.0	3.3	-0.3	73
12-17	6.9	16.0	-0.9	0.1	2.0	12.4	0.4	0.9	6.6	5.2	-0.3	162
18-23	4.4	12.1	-1.3	0.9	2.1	10.9	-0.1	0.0	5.0	2.1	-0.6	145
24-35	4.8	15.4	-0.7	0.0	2.7	7.6	0.0	1.6	5.5	4.6	-0.4	301
36-47	9.8	19.4	-0.8	1.0	2.6	9.5	0.2	0.0	5.2	3.4	-0.3	248
48-59	6.5	14.4	-1.2	3.1	4.2	14.7	-0.1	0.7	4.5	4.2	-0.6	244
Sex												
Male	5.5	14.8	-0.9	0.9	3.5	11.1	0.2	0.3	3.9	3.7	-0.3	715
Female	5.7	14.4	-0.8	0.7	2.5	9.4	0.0	0.9	5.9	4.2	-0.4	653
Birth interval in months[2]												
First birth[3]	3.4	12.1	-0.8	1.6	3.6	8.5	-0.2	0.3	5.0	4.0	-0.5	586
<24	4.8	13.1	-0.7	0.1	2.9	10.5	0.3	1.2	4.5	3.9	-0.1	330
24-47	7.1	13.1	-0.9	0.1	1.1	9.8	0.4	0.1	2.6	3.9	-0.2	272
48+	13.0	30.1	-1.1	1.1	4.5	17.1	0.4	1.0	9.2	4.0	-0.4	163
Size at birth[2]												
Very small	*	*	*	*	*	*	*	*	*	*	*	23
Small	7.6	19.8	-1.4	0.7	1.8	11.3	-0.1	0.3	8.5	3.8	-0.8	119
Average or larger	5.4	14.0	-0.8	0.6	2.7	10.3	0.2	0.4	4.1	4.1	-0.3	1,205
Missing	*	*	*	*	*	*	*	*	*	*	*	4
Mother's interview status												
Interviewed	5.6	14.7	-0.8	0.9	3.1	10.3	0.1	0.6	4.9	4.0	-0.3	1,351
Not interviewed but in household	*	*	*	*	*	*	*	*	*	*	*	10
Not interviewed, and not in the household[4]	*	*	*	*	*	*	*	*	*	*	*	8
Residence												
Urban	4.9	13.0	-0.9	0.9	2.9	10.3	-0.0	0.6	4.5	3.1	-0.5	804
Rural	6.5	17.1	-0.8	0.7	3.2	10.3	0.2	0.6	5.4	5.1	-0.3	565
Region												
Yerevan	3.5	8.7	-0.9	1.1	2.4	8.8	-0.2	0.8	4.6	2.7	-0.5	444
Aragatsotn	5.6	23.9	-1.0	0.3	2.3	5.0	0.4	0.3	2.5	0.3	-0.3	56
Ararat	11.2	24.8	-0.3	4.7	8.8	10.3	-0.2	2.8	12.4	5.0	-0.4	85
Armavir	3.0	16.7	-1.3	0.0	3.8	3.5	-0.5	0.0	4.4	1.2	-1.0	130
Gegharkunik	10.8	24.0	-1.2	0.0	4.3	14.7	0.3	1.2	4.3	4.4	-0.4	110
Lori	9.3	17.0	-0.7	1.3	2.5	26.2	0.6	0.0	4.7	19.1	0.1	93
Kotayk	2.0	9.6	-0.7	0.0	1.4	8.2	0.2	0.0	3.2	2.2	-0.2	147
Shirak	7.2	14.8	-0.9	0.6	3.7	11.3	0.4	0.4	3.8	2.1	-0.3	150
Syunik	13.1	30.7	-1.4	0.0	2.2	11.5	0.4	0.0	9.1	0.0	-0.5	50
Vayots Dzor	3.0	7.6	-0.6	0.0	1.8	9.4	0.6	0.0	3.0	5.9	0.1	38
Tavush	3.5	13.6	-0.4	0.5	1.0	10.1	0.6	0.0	4.2	6.5	0.2	66
Mother's education[5]												
Basic	4.9	16.5	-0.5	0.0	13.7	6.2	-0.1	1.0	10.4	1.8	-0.5	66
Secondary	6.0	16.4	-1.0	1.6	3.6	10.4	-0.0	0.9	6.8	4.3	-0.6	544
Secondary special	7.2	14.5	-0.9	0.3	1.0	10.9	0.3	0.6	3.9	3.7	-0.2	416
Higher	3.1	11.5	-0.6	0.5	2.5	10.0	0.1	0.0	1.9	4.0	-0.2	335
Wealth quintile												
Lowest	6.3	20.5	-0.9	1.5	6.2	10.5	0.1	1.0	5.2	3.9	-0.4	275
Second	5.7	12.0	-0.6	0.1	2.2	10.4	0.4	0.5	4.5	6.6	-0.1	279
Middle	6.8	15.0	-0.9	1.2	3.0	11.5	0.2	0.6	5.4	5.1	-0.3	279
Fourth	4.2	12.3	-1.0	1.4	2.6	9.6	-0.2	0.8	5.9	2.0	-0.6	275
Highest	4.8	13.4	-0.9	0.0	1.0	9.4	0.0	0.0	3.2	1.9	-0.5	260
Total	5.6	14.6	-0.9	0.8	3.0	10.3	0.1	0.6	4.8	3.9	-0.4	1,369

Note: Table is based on children who slept 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. Table is based on children with valid dates of birth (month and year) and valid measurement of both height and weight. 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 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] Includes children whose mothers are deceased

[5] For women who are not interviewed, information is taken from the Household Questionnaire. Excludes children whose mothers are not listed in the Household Questionnaire

PERSONS INVOLVED IN THE 2010 ARMENIA DEMOGRAPHIC AND HEALTH SURVEY

Appendix D

National Directors

Stepan Mnatsakanyan, President, National Statistical Service of RA
Gagik Gevorgyan, Member, State Council on Statistics of RA

National Directors for Medical Affairs

Sergey Khachatryan, Deputy Minister of Health
Karine Saribekyan, Head of Mother and Child Health Care Department of MOH

National Statistical Service

Araik Hayrapetyan, Head of staff of NSS of RA
Diana Martirosova, Head of Household Survey Division, NSS of RA
Karine Kuyumjyan, Head of Census and Demography Division, NSS of RA
Lusine Kalantaryan, Head of Labor Market Statistics Division, NSS of RA
Nelli Baghdasaryan, Head of Social Sphere and Environment Statistics Division, NSS of RA
Anahit Manandyan, Main Auditor of NSS of RA

Ministry of Health

Armen Karapetyan, Head of Finance and Economy Department of MOH of RA
Razmik Abrahamyan, Chief Obstetrician-Gynecologist of MOH of RA
Gayane Avagyan, Head of Maternity and Reproductive Health Care Division of Mother and Child Health Care Department of MOH of RA
Ruzanna Yuzbashyan, Head of Health Programs Division of Health Programs and Quality Management Department of MOH of RA
Armine Ghazaryan, Chief Specialist of Child Health Care Division of Mother and Child Health Care Department of MOH of RA
Gayane Sahakyan, Coordinator of National Immunization Program of RA
Sonya Arushanyan, Coordinator of IMCI National Program of RA
Konstantin Ter-Voskanyan, National Institute of Health, Head of Pediatrics Department

Armenia Demographic and Health Survey

Bagrat Gevorgyan, Project Manager
Zara Mkrtchyan, Technical Manager
Goharik Meliksetyan, Project Assistant
Anahit Khangeldyan, Project Accountant

ICF International

Gulnara Semenov, Country Manager
Alfredo Aliaga, Senior Sampling Specialist
Ladys Ortiz, Data Processing Specialist
Sri Poedjastoeti, Survey Specialist
Zhuzhi Moore, Survey Specialist
Joanna Lowell, Survey Specialist
Sunita Kishor, Survey Specialist
Monica Kothari, Survey Specialist
Lyndsey Wilson-Williams, Survey Specialist
Kaye Mitchell, Production Specialist
Nancy Johnson, Editor
Christopher Gramer, Cover Design
Erica Nybro, Dissemination Specialist

FIELD STAFF

Yerevan 1

Melkonyan Haykush, Supervisor
Mheryan Maria, Editor
Poghosyan Lusine, Interviewer
Hakobyan Susanna, Interviewer
Sargsyan Karine, Interviewer
Melqonyan Gayane, Interviewer
Gevorgyan Tigran, Interviewer

Yerevan 2

Araqelyan Vahan, Supervisor
Iskandaryan Astghik, Editor
Hakobyan Emma, Interviewer
Ghazaryan Karine, Interviewer
Vardanyan Lorik, Interviewer
Melqonyan Karine, Interviewer
Tarverdyan Ishkhan, Interviewer

Yerevan 3

Abelyan Tigran, Supervisor
Hovhannisyan Svetlana, Editor
Mendzikyan Anahit, Interviewer
Makaryan Lyudmila, Interviewer
Khachatryan Hrachuhi, Interviewer
Kosakyan Armine, Interviewer
Hakobyan Vachagan, Interviewer

Aragatsotn

Simonyan Srapion, Supervisor
Hambardzumyan Hermine, Editor
Tumanyan Lilit, Interviewer
Simonyan Svetlana, Interviewer
Chalabyan Izabella, Interviewer
Ghonaghchyan Hasmik, Interviewer
Movsisyan Sergey, Interviewer

Ararat

Muradyan Armen, Supervisor
Ghazaryan Silva, Editor
Zakaryan Christine, Interviewer
Oseyan Larisa, Interviewer
Sargsyan Narine, Interviewer
Zakaryan Arpine, Interviewer
Grigoryan Mikhail, Interviewer

Armavir

Ginosyan Melanya, Supervisor
Shirinyan Marietta, Editor
Avetisyan Nuard, Interviewer
Makaryan Lilit, Interviewer
Karapetyan Anahit, Interviewer
Amirkhanyan Angela, Interviewer
Davtyan Mher, Interviewer

Gegharkunik
Grigoryan Hasmik, Supervisor
Manukyan Anush, Editor
Khanamiryan Gayane, Interviewer
Zakoyan Anushik, Interviewer
Burnuchyan Haykandukh, Interviewer
Khzmalyan Lusine, Interviewer
Kolozyan Ashot, Interviewer

Lori
Pepanyan Levon, Supervisor
Matevosyan Anahit, Editor
Ghazaryan Lena, Interviewer
Hakobyan Anahit, Interviewer
Perchimyan Hermine, Interviewer
Baghdasaryan Svetlana, Interviewer
Tumanyan Garnik, Interviewer

Kotayk
Matevosyan Mnatsakan, Supervisor
Davtyan Alina, Editor
Andreasyan Armine, Interviewer
Mailyan Lilit, Interviewer
Karapetyan Iskuhi, Interviewer
Hayrapetyan Metaqsia, Interviewer
Soghomonyan Mekhak, Interviewer

Shirak
Hovhannisyan Lilit, Supervisor
Muradyan Gayane, Editor
Hovhannisyan Karine, Interviewer
Hovhannisyan Lusine, Interviewer
Hovhannisyan Ohanna, Interviewer
Setoyan Hasmik, Interviewer
Petrosyan Davit, Interviewer

Syunik
Sargsyan Sona, Supervisor
Hovakimyan Hripsime, Editor
Grigoryan Jasmena, Interviewer
Khachatryan Tsovinar, Interviewer
Tatintsyan Silva, Interviewer
Hakobjanyan Karine, Interviewer
Hambardzumyan Artur, Interviewer

Vayots Dzor
Ghazaryan Andranik, Supervisor
Melikyan Karine, Editor
Eghoyan Liana, Interviewer
Harutyunyan Nazik, Interviewer
Karapetyan Marine, Interviewer
Eghoyan Narine, Interviewer
Gasparyan Mesrop, Interviewer

Tavush

Achinyan Lyudmila, Supervisor
Abovyan Hasmik, Editor
Melikyan Aghavni, Interviewer
Baghmanyan Anahit, Interviewer
Adamyan Nelli, Interviewer
Gharabekyan Ruzanna, Interviewer
Mehrabyan Sasun, Interviewer

Data Entry Staff

Hovhannisyan Ruzanna
Arustamyan Svetlana
Hoveyan Ruzanna
Ishkhanyan Lilit
Davtyan Tatev
Sahakyan Aida
Kosakyan Armen
Asriev Vitali
Sisakyan Evelina
Arustamyan Narine
Nersisyan Lilit
Movsisyan Gohar
Harutyunyan Annman
Igitkhanyan Irina
Davtyan Galia
Mailyan Raisa

Listers and Mappers

Azizjan Ruben
Simonyan Srapion
Tarverdyan Ishkhan
Muradyan Armen
Ginosyan Melanya
Shirinyan Marietta
Grigoryan Hasmik
Manukyan Anush
Pepanyan Levon
Baghramyan Martun
Hayrapetyan Metaqsya
Matevosyan Mnatsakan
Petrosyan Davit
Manukyan Hripsime
Kosakyan Armen
Abrahamyan Andranik
Gevorgyan Lyova
Ghazaryan Andranik
Achinyan Lyudmila
Abovyan Hasmik
Iskandaryan Davit
Meliqyan Karine
Sargsyan Sona
Grigoryan Jasmena
Nazaryan Norayr
Nazaryan Anna
Asriev Vitali
Grigoryan Mikhail
Ghazaryan Silva
Allahverdyan Nora

Regional Chiefs of NSS

Vredz Avetisyan, Chief of Yerevan agency
Levik Movsisyan, Chief of Aragatsotn marz agency
Levon Davtyan, Chief of Ararat marz agency
Ishkhan Sargsyan, Chief of Armavir marz agency
Hakob Badalyan, Chief of Gegharkunik marz agency
Vredz Manukyan, Chief of Lori marz agency
Vahagn Davtyan, Chief of Kotayk marz agency
Vardan Malkhasyan, Chief of Shirak marz agency
Vladimir Grigoryan, Chief of Syunik marz agency
Arushan Ghazaryan, Chief of Vayots Dzor marz agency
Aida Achinyan, Chief of Tavush marz agency

QUESTIONNAIRES

Appendix ***E***

2010 ARMENIA DEMOGRAPHIC AND HEALTH SURVEY
HOUSEHOLD QUESTIONNAIRE

REPUBLIC OF ARMENIA
NATIONAL STATISTICAL SERVICE
MINISTRY OF HEALTH

Questionnaire number ☐☐☐☐☐

IDENTIFICATION

PLACE NAME _____

NAME OF HOUSEHOLD HEAD _____

CLUSTER NUMBER ☐☐☐

HOUSEHOLD NUMBER ☐☐

REGION (MARZ) ☐☐

MEN'S QUESTIONNAIRE (YES=1, NO=2) ☐

INTERVIEWER VISITS

	1	2	3	FINAL VISIT
DATE	_____	_____	_____	DAY ☐☐
				MONTH ☐☐
				YEAR ☐☐☐☐
INTERVIEWER'S NAME	_____	_____	_____	INT. NUMBER ☐☐☐
RESULT*	_____	_____	_____	RESULT ☐
NEXT VISIT: DATE	_____	_____		TOTAL NUMBER OF VISITS ☐
TIME	_____	_____		

*RESULT CODES:

1 COMPLETED
2 NO HOUSEHOLD MEMBER AT HOME OR NO COMPETENT RESPONDENT AT HOME AT TIME OF VISIT
3 ENTIRE HOUSEHOLD ABSENT FOR EXTENDED PERIOD OF TIME
4 POSTPONED
5 REFUSED
6 DWELLING VACANT OR ADDRESS NOT A DWELLING
7 DWELLING DESTROYED
8 DWELLING NOT FOUND
9 OTHER _____ (SPECIFY)

TOTAL PERSONS IN HOUSEHOLD ☐☐

TOTAL ELIGIBLE WOMEN ☐☐

TOTAL ELIGIBLE MEN ☐☐

LINE NO. OF RESPONDENT TO HOUSEHOLD QUESTIONNAIRE ☐☐

SUPERVISOR	FIELD EDITOR	OFFICE EDITOR	KEYED BY
NAME _____ ☐☐☐	NAME _____ ☐☐☐	☐☐	☐☐

INTRODUCTION AND CONSENT

Hello. My name is _____. I am working with (National Statistical Service and Ministry of Health). We are conducting a survey about health all over Armenia. The information we collect will help the government to plan health services. Your household was selected for the survey. I would like to ask you some questions about your household. The questions usually take about 15 to 20 minutes. All of the answers you give will be confidential and will not be shared with anyone other than members of our survey team. You don't have to be in the survey, but we hope you will agree to answer the questions since your views are important. If I ask you any question you don't want to answer, just let me know and I will go on to the next question or you can stop the interview at any time.
In case you need more information about the survey, you may contact the person listed on this card.

GIVE CARD WITH CONTACT INFORMATION

Do you have any questions?
May I begin the interview now?

SIGNATURE OF INTERVIEWER: _____ DATE: _____

RESPONDENT AGREES TO BE INTERVIEWED . . . 1 ↓ RESPONDENT DOES NOT AGREE TO BE INTERVIEWED . . . 2 → END

HOUSEHOLD SCHEDULE

							IF AGE 15 OR OLDER			
LINE NO.	USUAL RESIDENTS AND VISITORS	RELATIONSHIP TO HEAD OF HOUSEHOLD	SEX	RESIDENCE		AGE	MARITAL STATUS	ELIGIBILITY		
1	2	3	4	5	6	7	8	9	10	11
	Please give me the names of the persons who usually live in your household and guests of the household who stayed here last night, starting with the head of the household. AFTER LISTING THE NAMES AND RECORDING THE RELATIONSHIP AND SEX FOR EACH PERSON, ASK QUESTIONS 2A-2C TO BE SURE THAT THE LISTING IS COMPLETE. THEN ASK APPROPRIATE QUESTIONS IN COLUMNS 5-20 FOR EACH PERSON.	What is the relationship of (NAME) to the head of the household? SEE CODES BELOW.	Is (NAME) male or female?	Does (NAME) usually live here?	Did (NAME) stay here last night?	How old is (NAME)? IF 95 OR MORE, RECORD '95'.	What is (NAME)'s current marital status? 1 = MARRIED OR LIVING TOGETHER 2 = DIVORCED/ SEPARATED 3 = WIDOWED 4 = NEVER-MARRIED AND NEVER LIVED TOGETHER	CIRCLE LINE NUMBER OF ALL WOMEN AGE 15-49	CIRCLE LINE NUMBER OF ALL MEN AGE 15-49	CIRCLE LINE NUMBER OF ALL CHILDREN AGE 0-5
01			M F 1 2	Y N 1 2	Y N 1 2	IN YEARS		01	01	01
02			1 2	1 2	1 2			02	02	02
03			1 2	1 2	1 2			03	03	03
04			1 2	1 2	1 2			04	04	04
05			1 2	1 2	1 2			05	05	05
06			1 2	1 2	1 2			06	06	06
07			1 2	1 2	1 2			07	07	07
08			1 2	1 2	1 2			08	08	08
09			1 2	1 2	1 2			09	09	09
10			1 2	1 2	1 2			10	10	10

CODES FOR Q. 3: RELATIONSHIP TO HEAD OF HOUSEHOLD

01 = HEAD
02 = WIFE OR HUSBAND
03 = SON OR DAUGHTER
04 = SON-IN-LAW OR DAUGHTER-IN-LAW
05 = GRANDCHILD
06 = PARENT
07 = PARENT-IN-LAW
08 = BROTHER OR SISTER
09 = OTHER RELATIVE
10 = ADOPTED/FOSTER/ STEPCHILD
11 = NOT RELATED
98 = DON'T KNOW

	IF AGE 0-17 YEARS				IF AGE 5 YEARS OR OLDER				IF AGE 5-24 YEARS		IF AGE 0-4 YEARS	
LINE NO.	SURVIVORSHIP AND RESIDENCE OF BIOLOGICAL PARENTS				EVER ATTENDED SCHOOL				CURRENT/RECENT SCHOOL ATTENDANCE		BIRTH REGIS-TRATION	
	12	13	14	15	16	16A	17	17A	18	19	20	21
	Is (NAME)'s natural mother alive?	Does (NAME)'s natural mother usually live in this household or was she a guest last night? IF YES: What is her name? RECORD MOTHER'S LINE NUMBER. IF NO, RECORD '00'.	Is (NAME)'s natural father alive?	Does (NAME)'s natural father usually live in this household or was he a guest last night? IF YES: What is his name? RECORD FATHER'S LINE NUMBER. IF NO, RECORD '00'.	Has (NAME) ever attended school?	What is the total number of years of schooling (NAME) has had?	What is the highest level of school (NAME) has attended? SEE CODES BELOW. What is the highest grade (NAME) completed at that level? SEE CODES BELOW.	CHECK 17: IF CODE "1" FOR PRIMARY/SECONDARY LEVEL AND GRADE 10+ RECORDED, OR CODE "2" FOR SECONDARY-SPECIAL LEVEL RECORDED, Did (NAME) receive a diploma (attestat) for completing secondary education?	Did (NAME) attend school at any time during the (2010-2011) school year?	During this/that school year, what level and grade [is/was] (NAME) attending? SEE CODES BELOW.	Does (NAME) have a birth certificate? IF NO, PROBE: Has (NAME)'s birth ever been registered with the civil authority? 1 = HAS CERTIFICATE 2 = REGISTERED 3 = NEITHER 8 = DON'T KNOW	Why (NAME)'s birth is not registered with the civil authority? 1 = EXPENSIVE 2 = FAR TO TRAVEL 3 = DID NOT KNOW IT SHOULD BE REGISTERED 4 = DID NOT WANT TO PAY FEE 5 = DOES NOT KNOW WHERE TO REGISTER 6= NO PASSPORT /NOT CITIZEN 7= OTHER 8 = DON'T KNOW
01	Y N DK 1 2 8 GO TO 14		Y N DK 1 2 8 GO TO 16		Y N 1 2 NEXT LINE		LEVEL GRADE	Y N 1 2	Y N 1 2 NEXT LINE	LEVEL GRADE	CODE 3 GO TO 21	
02	1 2 8 GO TO 14		1 2 8 GO TO 16		1 2 NEXT LINE			1 2	1 2 NEXT LINE		CODE 3 GO TO 21	
03	1 2 8 GO TO 14		1 2 8 GO TO 16		1 2 NEXT LINE			1 2	1 2 NEXT LINE		CODE 3 GO TO 21	
04	1 2 8 GO TO 14		1 2 8 GO TO 16		1 2 NEXT LINE			1 2	1 2 NEXT LINE		CODE 3 GO TO 21	
05	1 2 8 GO TO 14		1 2 8 GO TO 16		1 2 NEXT LINE			1 2	1 2 NEXT LINE		CODE 3 GO TO 21	
06	1 2 8 GO TO 14		1 2 8 GO TO 16		1 2 NEXT LINE			1 2	1 2 NEXT LINE		CODE 3 GO TO 21	
07	1 2 8 GO TO 14		1 2 8 GO TO 16		1 2 NEXT LINE			1 2	1 2 NEXT LINE		CODE 3 GO TO 21	
08	1 2 8 GO TO 14		1 2 8 GO TO 16		1 2 NEXT LINE			1 2	1 2 NEXT LINE		CODE 3 GO TO 21	
09	1 2 8 GO TO 14		1 2 8 GO TO 16		1 2 NEXT LINE			1 2	1 2 NEXT LINE		CODE 3 GO TO 21	
10	1 2 8 GO TO 14		1 2 8 GO TO 16		1 2 NEXT LINE			1 2	1 2 NEXT LINE		CODE 3 GO TO 21	

CODES FOR Qs. 17 AND 19: EDUCATION

LEVEL
1 = PRIMARY/SECONDARY (1-12)
2= SECONDARY-SPECIAL (1+)
3 = HIGHER (1+)
8 = DON'T KNOW

GRADE
00 = LESS THAN 1 YEAR COMPLETED (USE '00' FOR Q. 17 ONLY. THIS CODE IS NOT ALLOWED FOR Q. 19)
98 = DON'T KNOW

							IF AGE 15 OR OLDER			
LINE NO.	USUAL RESIDENTS AND VISITORS	RELATIONSHIP TO HEAD OF HOUSEHOLD	SEX	RESIDENCE		AGE	MARITAL STATUS	ELIGIBILITY		
1	2	3	4	5	6	7	8	9	10	11
	Please give me the names of the persons who usually live in your household and guests of the household who stayed here last night, starting with the head of the household. AFTER LISTING THE NAMES AND RECORDING THE RELATIONSHIP AND SEX FOR EACH PERSON, ASK QUESTIONS 2A-2C TO BE SURE THAT THE LISTING IS COMPLETE. THEN ASK APPROPRIATE QUESTIONS IN COLUMNS 5-20 FOR EACH PERSON.	What is the relationship of (NAME) to the head of the household? SEE CODES BELOW.	Is (NAME) male or female?	Does (NAME) usually live here?	Did (NAME) stay here last night?	How old is (NAME)? IF 95 OR MORE, RECORD '95'.	What is (NAME)'s current marital status? 1 = MARRIED OR LIVING TOGETHER 2 = DIVORCED/ SEPARATED 3 = WIDOWED 4 = NEVER-MARRIED AND NEVER LIVED TOGETHER	CIRCLE LINE NUMBER OF ALL WOMEN AGE 15-49	CIRCLE LINE NUMBER OF ALL MEN AGE 15-49	CIRCLE LINE NUMBER OF ALL CHILDREN AGE 0-5
11			M F 1 2	Y N 1 2	Y N 1 2	IN YEARS		11	11	11
12			1 2	1 2	1 2			12	12	12
13			1 2	1 2	1 2			13	13	13
14			1 2	1 2	1 2			14	14	14
15			1 2	1 2	1 2			15	15	15
16			1 2	1 2	1 2			16	16	16
17			1 2	1 2	1 2			17	17	17
18			1 2	1 2	1 2			18	18	18
19			1 2	1 2	1 2			19	19	19
20			1 2	1 2	1 2			20	20	20

TICK HERE IF CONTINUATION SHEET USED ☐

2A) Just to make sure that I have a complete listing. Are there any other persons such as small children or infants that we have not listed? YES ☐ → ADD TO TABLE NO ☐

2B) Are there any other people who may not be members of your family, such as domestic servants, lodgers, or friends who usually live here? YES ☐ → ADD TO TABLE NO ☐

2C) Are there any guests or temporary visitors staying here, or anyone else who stayed here last night, who have not been listed? YES ☐ → ADD TO TABLE NO ☐

CODES FOR Q. 3: RELATIONSHIP TO HEAD OF HOUSEHOLD

01 = HEAD
02 = WIFE OR HUSBAND
03 = SON OR DAUGHTER
04 = SON-IN-LAW OR DAUGHTER-IN-LAW
05 = GRANDCHILD
06 = PARENT
07 = PARENT-IN-LAW
08 = BROTHER OR SISTER
09 = OTHER RELATIVE
10 = ADOPTED/FOSTER/ STEPCHILD
11 = NOT RELATED
98 = DON'T KNOW

	IF AGE 0-17 YEARS				IF AGE 5 YEARS OR OLDER				IF AGE 5-24 YEARS		IF AGE 0-4 YEARS	
LINE NO.	SURVIVORSHIP AND RESIDENCE OF BIOLOGICAL PARENTS				EVER ATTENDED SCHOOL				CURRENT/RECENT SCHOOL ATTENDANCE		BIRTH REGIS-TRATION	
	12	13	14	15	16	16A	17	17A	18	19	20	21
	Is (NAME)'s natural mother alive?	Does (NAME)'s natural mother usually live in this household or was she a guest last night? IF YES: What is her name? RECORD MOTHER'S LINE NUMBER. IF NO, RECORD '00'.	Is (NAME)'s natural father alive?	Does (NAME)'s natural father usually live in this household or was he a guest last night? IF YES: What is his name? RECORD FATHER'S LINE NUMBER. IF NO, RECORD '00'.	Has (NAME) ever attended school?	What is the total number of years of schooling (NAME) has had?	What is the highest level of school (NAME) has attended? SEE CODES BELOW. What is the highest grade (NAME) completed at that level? SEE CODES BELOW.	CHECK 17: IF CODE "1" FOR PRIMARY/SECONDARY LEVEL AND GRADE 10+ RECORDED, OR CODE "2" FOR SECONDARY-SPECIAL LEVEL RECORDED, Did (NAME) receive a diploma (attestat) for completing secondary education?	Did (NAME) attend school at any time during the (2010-2011) school year?	During this/that school year, what level and grade [is/was] (NAME) attending? SEE CODES BELOW.	Does (NAME) have a birth certificate? IF NO, PROBE: Has (NAME)'s birth ever been registered with the civil authority? 1 = HAS CERTIFICATE 2 = REGISTERED 3 = NEITHER 8 = DON'T KNOW	Why (NAME)'s birth is not registered with the civil authority? 1 = EXPENSIVE 2 = FAR TO TRAVEL 3 = DID NOT KNOW IT SHOULD BE REGISTERED 4 = DID NOT WANT TO PAY FEE 5 = DOES NOT KNOW WHERE TO REGISTER 6= NO PASSPORT /NOT CITIZEN 7= OTHER 8 = DON'T KNOW
11	Y N DK 1 2 8 GO TO 14		Y N DK 1 2 8 GO TO 16		Y N 1 2 NEXT LINE		LEVEL GRADE	Y N 1 2	Y N 1 2 NEXT LINE	LEVEL GRADE	CODE 3 GO TO 21	
12	1 2 8 GO TO 14		1 2 8 GO TO 16		1 2 NEXT LINE			1 2	1 2 NEXT LINE		CODE 3 GO TO 21	
13	1 2 8 GO TO 14		1 2 8 GO TO 16		1 2 NEXT LINE			1 2	1 2 NEXT LINE		CODE 3 GO TO 21	
14	1 2 8 GO TO 14		1 2 8 GO TO 16		1 2 NEXT LINE			1 2	1 2 NEXT LINE			
15	1 2 8 GO TO 14		1 2 8 GO TO 16		1 2 NEXT LINE			1 2	1 2 NEXT LINE		CODE 3 GO TO 21	
16	1 2 8 GO TO 14		1 2 8 GO TO 16		1 2 NEXT LINE			1 2	1 2 NEXT LINE		CODE 3 GO TO 21	
17	1 2 8 GO TO 14		1 2 8 GO TO 16		1 2 NEXT LINE			1 2	1 2 NEXT LINE			
18	1 2 8 GO TO 14		1 2 8 GO TO 16		1 2 NEXT LINE			1 2	1 2 NEXT LINE		CODE 3 GO TO 21	
19	1 2 8 GO TO 14		1 2 8 GO TO 16		1 2 NEXT LINE			1 2	1 2 NEXT LINE		CODE 3 GO TO 21	
20	1 2 8 GO TO 14		1 2 8 GO TO 16		1 2 NEXT LINE			1 2	1 2 NEXT LINE		CODE 3 GO TO 21	

CODES FOR Qs. 17 AND 19: EDUCATION

LEVEL	GRADE
1 = PRIMARY/SECONDARY (1-12)	00 = LESS THAN 1 YEAR COMPLETED (USE '00' FOR Q. 17 ONLY.
2= SECONDARY-SPECIAL (1+)	
3 = HIGHER (1+)	THIS CODE IS NOT ALLOWED FOR Q. 19)
8 = DON'T KNOW	98 = DON'T KNOW

CHILD LABOR

FOR ALL CHILDREN AGED 5 THROUGH 17

30	CHECK COLUMN (7) AGE: AT LEAST ONE CHILD AGE 5-17 ☐	NO CHILDREN AGE 5-17 ☐ → SKIP TO 41

Now I would like to ask about any work that children in this household may do.

HH LINE NUMBER	NAME OF CHILD FROM COL.2	WORK LAST WEEK		WORK IN LAST YEAR	HOUSEHOLD CHORES		WORK IN FAMILY BUSINESS OR FARM	
WRITE CHILD'S LINE NUMBER FROM COLUMN 1 IN THE HOUSEHOLD SCHEDULE ONLY INCLUDE CHILDREN AGED 5-17 FROM COLUMN 7	WRITE CHILD'S NAME FROM COLUMN 2 IN THE HOUSEHOLD SCHEDULE.	During the past week, did (NAME) do any kind of work for someone who is not a member of this household? IF YES: Was that for pay or unpaid?	Since last (DAY OF THE WEEK), about how many hours did (NAME) do this work for someone who is not a member of this house-hold? INCLUDE ALL HOURS AT ALL JOBS.	At any time during the past year, did (NAME) do any kind of work for someone who is not a member of this household? IF YES: Was that for pay or unpaid?	During the past week, did (NAME) help with household chores such as shopping collecting firewood, cleaning, fetching water, or caring for children?	Since last (DAY OF THE WEEK), about how many hours did (NAME) spend doing these chores?	During the past week, did (NAME) do any other family work, on the farm or in a business or selling goods in the street or market?	Since last (DAY OF THE WEEK), about how many hours did (NAME) do this work?
(31)	(32)	(33)	(34)	(35)	(36)	(37)	(38)	(39)
☐☐		PAID 1 UNPD 2 NO 3 → GO TO 35	HOURS ☐☐ → GO TO 36	PAID 1 UNPD 2 NO 3	Y 1 N 2 → GO TO 38	HOURS ☐☐	Y 1 N 2 → NEXT LINE	HOURS ☐☐
☐☐		PAID 1 UNPD 2 NO 3 → GO TO 35	HOURS ☐☐ → GO TO 36	PAID 1 UNPD 2 NO 3	Y 1 N 2 → GO TO 38	HOURS ☐☐	Y 1 N 2 → NEXT LINE	HOURS ☐☐
☐☐		PAID 1 UNPD 2 NO 3 → GO TO 35	HOURS ☐☐ → GO TO 36	PAID 1 UNPD 2 NO 3	Y 1 N 2 → GO TO 38	HOURS ☐☐	Y 1 N 2 → NEXT LINE	HOURS ☐☐
☐☐		PAID 1 UNPD 2 NO 3 → GO TO 35	HOURS ☐☐ → GO TO 36	PAID 1 UNPD 2 NO 3	Y 1 N 2 → GO TO 38	HOURS ☐☐	Y 1 N 2 → NEXT LINE	HOURS ☐☐
☐☐		PAID 1 UNPD 2 NO 3 → GO TO 35	HOURS ☐☐ → GO TO 36	PAID 1 UNPD 2 NO 3	Y 1 N 2 → GO TO 38	HOURS ☐☐	Y 1 N 2 → NEXT LINE	HOURS ☐☐
☐☐		PAID 1 UNPD 2 NO 3 → GO TO 35	HOURS ☐☐ → GO TO 36	PAID 1 UNPD 2 NO 3	Y 1 N 2 → GO TO 38	HOURS ☐☐	Y 1 N 2 → NEXT LINE	HOURS ☐☐
☐☐		PAID 1 UNPD 2 NO 3 → GO TO 35	HOURS ☐☐ → GO TO 36	PAID 1 UNPD 2 NO 3	Y 1 N 2 → GO TO 38	HOURS ☐☐	Y 1 N 2 → NEXT LINE	HOURS ☐☐
☐☐		PAID 1 UNPD 2 NO 3 → GO TO 35	HOURS ☐☐ → GO TO 36	PAID 1 UNPD 2 NO 3	Y 1 N 2 → GO TO 38	HOURS ☐☐	Y 1 N 2 → NEXT LINE	HOURS ☐☐

LIST OF ALL CHILDREN AGE 2-14

	41	CHECK COLUMN (7) AGE: AT LEAST ONE CHILD AGE 2-14 ↓	NO CHILDREN AGE 2-14 → SKIP TO 101

LIST EACH OF THE CHILDREN AGED 2-14 YEARS BELOW IN THE ORDER THEY APPEAR IN THE HOUSEHOLD LISTING FORM. DO NOT INCLUDE OTHER HOUSEHOLD MEMBERS OUTSIDE OF THE AGE RANGE 2-14 YEARS.
THE MODULE ON CHILD DISCIPLINE IS TO BE ADMINISTERED ONLY TO THE MOST KNOWLEDGEABLE ADULT (MOTHER, FATHER, OTHER PRIMARY CARETAKER OR A GUARDIAN OF EACH CHILD).

	CHILDREN AGE 2-14 YEARS			
RANK NO.	LINE NUMBER	NAME OF CHILD	CHILD'S AGE	PARENT'S OR PRIMARY CARETAKER'S LINE NUMBER AND NAME
	WRITE CHILD'S LINE NUMBER FROM COLUMN 1 IN THE HOUSEHOLD SCHEDULE ONLY INCLUDE CHILDREN AGED 2-14	WRITE CHILD'S NAME FROM COLUMN 2 IN THE HOUSEHOLD SCHEDULE. ONLY INCLUDE CHILDREN AGED 2-14	WRITE CHILD'S AGE FROM COLUMN 7 IN THE HOUSEHOLD SCHEDULE	WRITE PARENT'S OR CARETAKER'S LINE NUMBER/ NAME FROM COLUMNS 13, 15 OR 1 IN THE HOUSEHOLD SCHEDULE: IF NOT AVAILABLE, RECORD '00' AND CONTINUE TO NEXT CHILD IN COLUMN 42.
	(42)	(43)	(44)	(45)
1	☐☐	_____	☐☐	☐☐ _____
2	☐☐	_____	☐☐	☐☐ _____
3	☐☐	_____	☐☐	☐☐ _____
4	☐☐	_____	☐☐	☐☐ _____
5	☐☐	_____	☐☐	☐☐ _____
6	☐☐	_____	☐☐	☐☐ _____
7	☐☐	_____	☐☐	☐☐ _____
8	☐☐	_____	☐☐	☐☐ _____

TABLE FOR SELECTION OF CHILDREN FOR THE CHILD DISCIPLINE QUESTIONS

54 CHECK COLUMN 44:

- MORE THAN ONE CHILD AGE 2-14: ENTER TOTAL NUMBER IN BOX AND GO TO INSTRUCTIONS
- ONLY ONE CHILD AGE 2-14 → 57
- NO CHILDREN AGE 2-14 → 101

INSTRUCTIONS

LOOK AT THE LAST DIGIT OF THE QUESTIONNAIRE NUMBER ON THE COVER PAGE. THIS IS THE ROW NUMBER YOU SHOULD CIRCLE. LOOK AT QS 44 AND RECORD THE TOTAL NUMBER OF ELIGIBLE CHILDREN AGE 2-14 FROM COLUMN (44)_____. THIS IS THE COLUMN NUMBER YOU SHOULD CIRCLE. IF THERE ARE MORE THAN 8 ELIGIBLE CHILDREN IN THE HOUSEHOLD, CIRCLE '8' IN THE ROW AT THE TOP OF THE TABLE. FIND THE BOX WHERE THE CIRCLED ROW AND THE CIRCLED COLUMN MEET AND CIRCLE THE NUMBER THAT APPEARS IN THE BOX. THIS IS THE RANK NUMBER OF THE ELIGIBLE CHILD WHOSE PARENT OR CARETAKER WILL BE ASKED THE QUESTIONS ON CHILD DISCIPLINE. THEN, GO TO COLUMN (42) AND PUT A * NEXT TO THE HOUSEHOLD LINE NUMBER OF THE SELECTED CHILD AND RECORD CHILD'S HOUSEHOLD LINE NUMBER IN Q.57 AND RECORD CHILD'S PARENT OR OTHER MOST KNOWLEDGEABLE ADULT'S NAME AND LINE NUMBER IN Q.58.

FOR EXAMPLE , IF THE HOUSEHOLD QUESTIONNAIRE NUMBER IS '3716', GO TO ROW 6 AND CIRCLE THE ROW NUMBER ('6'). IF THERE ARE THREE ELIGIBLE CHILDREN IN THE HOUSEHOLD, GO TO COLUMN 3 AND CIRCLE THE COLUMN NUMBER ('3'). DRAW LINES FROM ROW 6 AND COLUMN 3 AND FIND THE BOX WHERE THE TWO MEET, AND CIRCLE THE NUMBER IN IT ('2'). THIS MEANS YOU HAVE TO SELECT THE SECOND ELIGIBLE CHILD. SUPPOSE THE HOUSEHOLD LINE NUMBERS OF THE THREE ELIGIBLE CHILDREN ARE '02', '03', AND '07'; THEN THE ELIGIBLE CHILD FOR THE QUESTIONS ON CHILD DISCIPLINE IS THE SECOND ELIGIBLE CHILD, I.E., THE CHILD WITH HOUSEHOLD LINE NUMBER '03'. PUT A * NEXT TO THIS CHILD'S LINE NUMBER IN COLUMN (42) OF THE HOUSEHOLD SCHEDULE AND ALSO ENTER THE TWO DIGIT LINE NUMBER AND CHILD'S NAME IN Q.57. THEN, RECORD THE LINE NUMBER AND A NAME OF CHILD'S PARENT OT OTHER MOST, OR OTHER MOST KNOWLEDGEABLE ADULT IN Q.58.

LAST DIGIT OF THE QUESTIONNAIRE NUMBER	TOTAL NUMBER OF CHILDREN AGE 2-14 IN THE HOUSEHOLD							
	1	2	3	4	5	6	7	8+
0	1	2	2	4	3	6	5	4
1	1	1	3	1	4	1	6	5
2	1	2	1	2	5	2	7	6
3	1	1	2	3	1	3	1	7
4	1	2	3	4	2	4	2	8
5	1	1	1	1	3	5	3	1
6	1	2	2	2	4	6	4	2
7	1	1	3	3	5	1	5	3
8	1	2	1	4	1	2	6	4
9	1	1	2	1	2	3	7	5

CHILD DISCIPLINE

FOR ONE CHILD AGED 2 THROUGH 14

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	
57	LINE NUMBER AND NAME OF THE SELECTED CHILD AGE 2-14 YEARS FROM COLUMNS 42 AND 43:	LINE NUMBER . . . . . ☐☐ NAME _____	
58	LINE NUMBER AND NAME OF CHILD'S MOTHER, FATHER OR OTHER PRIMARY CARETAKER FROM COLUMN 45:	MOTHER/CARETAKER NOT AVAILABLE . . . . . 00 → 101 LINE NUMBER . . . . . ☐☐ NAME _____	

THE FOLOWING QUESTIONS 57-70 ON CHILD DISCIPLINE ARE TO BE ADMINISTERED ONLY TO THE MOST KNOWLEDGEABLE ADULT (MOTHER, FATHER, OTHER PRIMARY CARETAKER OR A GUARDIAN OF A CHILD).

	All adults use certain ways to teach or to address a behavior problem. I will read various methods that are used. I want you to tell me if you or anyone else in the household has used this method with (NAME) in the past month.		
59	Took away privileges, forbade something (NAME) liked or did not allow him/her to leave the house (in the past month)?	YES . . . . . 1 NO 2	
60	Explained why some behavior was wrong (in the past month)?	YES . . . . . 1 NO 2	
61	Shook him/her (in the past month)?	YES . . . . . 1 NO 2	
62	Shouted, yelled or screamed at (NAME) in the past month?	YES . . . . . 1 NO 2	
63	Gave him/her something else to do (in the past month)?	YES . . . . . 1 NO 2	
64	Spanked, hit or slapped him/her on the bottom with bare hand (in the past month)?	YES . . . . . 1 NO 2	
65	Hit him/her on the bottom or elsewhere on the body with something like a belt, hairbrush, stick or other (in the past month)	YES . . . . . 1 NO 2	
66	Called him/her dumb, lazy, or a similar name (in the past month)?	YES . . . . . 1 NO 2	
67	Hit or slapped him/her on the face, head or ears (in the past month)?	YES . . . . . 1 NO 2	
68	Hit or slapped him/her on the hand, arm or leg (in the past month)?	YES . . . . . 1 NO 2	
69	Beat her/him up with an implement (hit over and over as hard as one could) (in the past month)?	YES . . . . . 1 NO 2	
70	Do you believe that in order to bring up (raise, educate) (NAME) properly, you need to physically punish him/her?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	

HOUSEHOLD CHARACTERISTICS

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
101	How often does anyone smoke inside your house? Would you say daily, weekly, monthly, less than monthly, or never?	DAILY . . . . . 1 WEEKLY . . . . . 2 MONTHLY . . . . . 3 LESS THAN MONTHLY . . . . . 4 NEVER 5	
102	What is the main source of drinking water for members of your household?	PIPED WATER PIPED INTO DWELLING(CENTRALIZED) 11 PIPED TO YARD/PLOT . . . . . 12 PUBLIC TAP/STANDPIPE . . . . . 13 PIPED INTO DWELLING (OWN ARTESIAN)14 TUBE WELL OR BOREHOLE . . . . . 21 DUG WELL PROTECTED WELL . . . . . 31 UNPROTECTED WELL . . . . . 32 WATER FROM SPRING PROTECTED SPRING . . . . . 41 UNPROTECTED SPRING . . . . . 42 RAINWATER . . . . . 51 TANKER TRUCK/CISTERN 61 SURFACE WATER (RIVER/DAM/ LAKE/POND/STREAM/CANAL/ IRRIGATION CHANNEL) . . . . . 81 BOTTLED WATER . . . . . 91 OTHER _____ 96 (SPECIFY)	→ 105 → 105 → 105
103	Where is that water source located?	IN OWN DWELLING . . . . . 1 IN OWN YARD/PLOT . . . . . 2 ELSEWHERE 3	→ 105
104	How long does it take to go there, get water, and come back?	MINUTES . . . . . ☐☐☐ DON'T KNOW 998	
105	Do you do anything to the water to make it safer to drink?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 107
106	What do you usually do to make the water safer to drink? Anything else?	BOIL . . . . . A STRAIN THROUGH A CLOTH . . . . . C USE WATER FILTER (CERAMIC/ SAND/COMPOSITE/ETC.) . . . . . D LET IT STAND AND SETTLE . . . . . F OTHER _____ X (SPECIFY) DON'T KNOW . . . . . Z	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
107	What kind of toilet facility do members of your household usually use?	FLUSH OR POUR FLUSH TOILET FLUSH TO PIPED SEWER SYSTEM . . . . . 11 FLUSH TO SEPTIC TANK . . . . . 12 FLUSH TO PIT LATRINE . . . . . 13 FLUSH TO SOMEWHERE ELSE . . . . . 14 FLUSH, DON'T KNOW WHERE . . . . . 15 PIT LATRINE PIT LATRINE WITH SLAB . . . . . 22 PIT LATRINE WITHOUT SLAB/ OPEN PIT . . . . . 23 BUCKET TOILET . . . . . 41 PUBLIC TOILET . . . . . 52 NO FACILITY/BUSH/FIELD . . . . . 61 OTHER _____ 96 (SPECIFY)	→ 110
108	Do you share this toilet facility with other households?	YES . . . . . 1 NO 2	→ 110
109	How many households use this toilet facility?	NO. OF HOUSEHOLDS IF LESS THAN 10 . . . . . [0][ ] 10 OR MORE HOUSEHOLDS . . . . . 95 DON'T KNOW 98	
110	Does your household have: Electricity? A radio? A black and white television? A color television? A washing machine? A vacuum cleaner? A computer? A mobile telephone? A non-mobile telephone? A refrigerator? A digital camera? A video camera/camcorder? A table? A chair? A sofa/divan? A bed? A buffet/servant/stenka? An air conditioner? A DVD player? A Satellite antenna/dish? A freezer? An electric fan? A sewing machine? A carpet (handmade or machine made)?	YES NO ELECTRICITY . . . . . 1 2 RADIO . . . . . 1 2 B&W TELEVISI . . . . . 1 2 COLOR TELEVISION . . . . . 1 2 WASHING MACHINE . . . . . 1 2 VACUUM CLEANER . . . . . 1 2 COMPUTER . . . . . 1 2 MOBILE TELEPHONE . . . . . 1 2 NON-MOBILE TELEPHONE . . . 1 2 REFRIGERATOR . . . . . 1 2 CAMERA . . . . . 1 2 VIDEOCAMERA . . . . . 1 2 TABLE . . . . . 1 2 CHAIR . . . . . 1 2 SOFA . . . . . 1 2 BED . . . . . 1 2 SERVANT . . . . . 1 2 AIRCONDITIONER . . . . . 1 2 DVD . . . . . 1 2 DISH . . . . . 1 2 FREEZER . . . . . 1 2 FAN . . . . . 1 2 SEWING MACHINE . . . . . 1 2 CARPET 1 2	
111	What type of fuel does your household mainly use for cooking?	ELECTRICITY . . . . . 01 LPG . . . . . 02 NATURAL GAS . . . . . 03 KEROSENE . . . . . 05 COAL, LIGNITE . . . . . 06 CHARCOAL . . . . . 07 WOOD . . . . . 08 ANIMAL DUNG . . . . . 11 NO FOOD COOKED IN HOUSEHOLD . . . . . 95 OTHER _____ 96 (SPECIFY)	→ 114

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
112	Is the cooking usually done in the house, in a separate building, or outdoors?	IN THE HOUSE . . . . . 1 IN A SEPARATE BUILDING . . . . . 2 OUTDOORS . . . . . 3 OTHER _____ 6 (SPECIFY)	→ 114
113	Do you have a separate room which is used as a kitchen?	YES . . . . . 1 NO 2	
114	MAIN MATERIAL OF THE FLOOR.	NATURAL FLOOR EARTH/SAND . . . . . 11 RUDIMENTARY FLOOR WOOD PLANKS . . . . . 21 FINISHED FLOOR PARQUET OR POLISHED WOOD/LAMINAT . . . . . 31 VINYL OR LINOLEUM . . . . . 32 CERAMIC/MARBLE TILES . . . . . 33 CEMENT . . . . . 34 CARPET . . . . . 35 OTHER _____ 96 (SPECIFY)	
115	MAIN MATERIAL OF THE ROOF. RECORD OBSERVATION.	NATURAL ROOFING NO ROOF . . . . . 11 THATCH . . . . . 12 RUDIMENTARY ROOFING RUSTIC MAT . . . . . 21 WOOD PLANKS . . . . . 23 CARDBOARD . . . . . 24 FINISHED ROOFING METAL . . . . . 31 WOOD . . . . . 32 CALAMINE/CEMENT FIBER . . . . . 33 CERAMIC TILES . . . . . 34 CEMENT . . . . . 35 ROOFING SHINGLES/SHIFER . . . . . 36 TAULE (TARRED ROOFING PAPER) . . . . 37 OTHER _____ 96 (SPECIFY)	
116	MAIN MATERIAL OF THE EXTERIOR WALLS. RECORD OBSERVATION.	NATURAL WALLS NO WALLS . . . . . 11 TREE TRUNKS . . . . . 12 DIRT . . . . . 13 RUDIMENTARY WALLS STONE WITH MUD . . . . . 22 UNCOVERED ADOBE . . . . . 23 PLYWOOD . . . . . 24 CARDBOARD . . . . . 25 REUSED WOOD . . . . . 26 FINISHED WALLS CEMENT MONOLIT . . . . . 31 STONE WITH LIME/CEMENT . . . . . 32 BRICKS . . . . . 33 CEMENT BLOCKS (PANELS) . . . . . 34 COVERED ADOBE . . . . . 35 WOOD PLANKS/SHINGLES . . . . . 36 OTHER _____ 96 (SPECIFY)	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
117	How many rooms in this household are used for sleeping?	ROOMS	
118	Does any member of this household own: A watch? A bicycle? A motorcycle or motor scooter? An animal-drawn cart? A car or truck? A boat with a motor?	YES NO WATCH . . . . . 1 2 BICYCLE . . . . . 1 2 MOTORCYCLE/SCOOTER . . . 1 2 ANIMAL-DRAWN CART . . . . . 1 2 CAR/TRUCK . . . . . 1 2 BOAT WITH MOTOR 1 2	
119	Does any member of this household own any agricultural land?	YES . . . . . 1 NO 2	→ 121
120	How many square meters of agricultural land do members of this household own? IF 950,000 M^2 OR MORE, CIRCLE '999.995'. I HECTARE = 10.000 M^2 NOTE TO THE INTERVIEWER: INCLUDE PONDS FOR FARMING FISH/SEA FOOD TO THE AGRICULTURAL LAND	SQAURE METERS (M^2) . . . . . . 950,000 M^2 OR MORE . . . . . 999.995 DON'T KNOW 999.998	
121	Does this household own any livestock, herds, other farm animals, or poultry?	YES . . . . . 1 NO 2	→ 123
122	How many of the following animals does this household own? IF NONE, ENTER '00'. IF 95 OR MORE, ENTER '95'. IF UNKNOWN, ENTER '98'. Cattle? Milk cows or bulls? Horses, donkeys, or mules? Goats? Sheep? Chickens and other poultry? Pigs? Rabbits? Nutria/fur animals? Beehive (number of units)	CATTLE . . . . . COWS/BULLS . . . . . HORSES/DONKEYS/MULES . . . . . GOATS . . . . . SHEEP . . . . . CHICKENS . . . . . PIGS . . . . . RABBITS . . . . . NUTRIA/FUR . . . . . BEEHIVE	
123	Does any member of this household have a bank account?	YES . . . . . 1 NO 2	
137	Please show me where members of your household most often wash their hands.	OBSERVED . . . . . 1 NOT OBSERVED, NOT IN DWELLING/YARD/PLOT . . . . . 2 NOT OBSERVED, NO PERMISSION TO SEE . . . . . 3 NOT OBSERVED, OTHER REASON . . . . . 4 (SKIP TO 201)	
138	OBSERVATION ONLY: OBSERVE PRESENCE OF WATER AT THE PLACE FOR HANDWASHING.	WATER IS AVAILABLE . . . . . 1 WATER IS NOT AVAILABLE 2	
139	OBSERVATION ONLY: OBSERVE PRESENCE OF SOAP, DETERGENT, OR OTHER CLEANSING AGENT.	SOAP OR DETERGENT (BAR, LIQUID, POWDER, PASTE) . . . . . A ASH, MUD, SAND . . . . . B NONE C	

WEIGHT AND HEIGHT MEASUREMENT FOR CHILDREN AGE 0-5

201	CHECK COLUMN 11 IN HOUSEHOLD SCHEDULE. RECORD THE LINE NUMBER AND NAME FOR ALL ELIGIBLE CHILDREN 0-5 YE IN QUESTION 202. IF MORE THAN SIX CHILDREN, USE ADDITIONAL QUESTIONNAIRE(S).			
		CHILD 1	CHILD 2	CHILD 3
202	LINE NUMBER FROM COLUMN 11 NAME FROM COLUMN 2	LINE NUMBER . . . . . ☐☐ NAME _____	LINE NUMBER . . . . . ☐☐ NAME _____	LINE NUMBER . . . . . ☐☐ NAME _____
203	IF MOTHER INTERVIEWED, COPY MONTH AND YEAR OF BIRTH FROM BIRTH HISTORY AND ASK DAY; IF MOTHER NOT INTERVIEWED, ASK: What is (NAME)'s birth date?	DAY . . . . . ☐☐ MONTH . . . . . ☐☐ YEAR ☐☐☐☐	DAY . . . . . ☐☐ MONTH . . . . . ☐☐ YEAR ☐☐☐☐	DAY . . . . . ☐☐ MONTH . . . . . ☐☐ YEAR ☐☐☐☐
204	CHECK 203: CHILD BORN IN JANUARY 2005 OR LATER?	YES . . . . . 1 NO . . . . . 2 (GO TO 203 FOR NEXT CHILD OR, IF NO MORE CHILDREN, END INTERVIEW)	YES . . . . . 1 NO . . . . . 2 (GO TO 203 FOR NEXT CHILD OR, IF NO MORE CHILDREN, END INTERVIEW)	YES . . . . . 1 NO . . . . . 2 (GO TO 203 FOR NEXT CHILD OR, IF NO MORE CHILDREN, END INTERVIEW)
205	WEIGHT IN KILOGRAMS	KG. ☐☐.☐☐ NOT PRESENT . . . 9994 REFUSED . . . . . 9995 OTHER 9996	KG. ☐☐.☐☐ NOT PRESENT . . . 9994 REFUSED . . . . . 9995 OTHER 9996	KG. ☐☐.☐☐ NOT PRESENT . . . 9994 REFUSED . . . . . 9995 OTHER 9996
206	HEIGHT IN CENTIMETERS	CM. ☐☐☐.☐ NOT PRESENT . . . 9994 REFUSED . . . . . 9995 OTHER 9996	CM. ☐☐☐.☐ NOT PRESENT . . . 9994 REFUSED . . . . . 9995 OTHER 9996	CM. ☐☐☐.☐ NOT PRESENT . . . 9994 REFUSED . . . . . 9995 OTHER 9996
207	MEASURED LYING DOWN OR STANDING UP?	LYING DOWN . . . . . 1 STANDING UP . . . . . 2 NOT MEASURED 3	LYING DOWN . . . . . 1 STANDING UP . . . . . 2 NOT MEASURED 3	LYING DOWN . . . . . 1 STANDING UP . . . . . 2 NOT MEASURED 3
213	GO BACK TO 203 IN NEXT COLUMN OF THIS QUESTIONNAIRE OR IN THE FIRST COLUMN OF THE NEXT PAGE; IF NO MORE CHILDREN, END INTERVIEW.			

WEIGHT AND HEIGHT MEASUREMENT FOR CHILDREN AGE 0-5

		CHILD 4	CHILD 5	CHILD 6
202	LINE NUMBER FROM COLUMN 11 NAME FROM COLUMN 2	LINE NUMBER . . . . . ☐☐ NAME _____	LINE NUMBER . . . . . ☐☐ NAME _____	LINE NUMBER . . . . . ☐☐ NAME _____
203	IF MOTHER INTERVIEWED, COPY MONTH AND YEAR OF BIRTH FROM BIRTH HISTORY AND ASK DAY; IF MOTHER NOT INTERVIEWED, ASK: What is (NAME)'s birth date?	DAY . . . . . ☐☐ MONTH . . . . . ☐☐ YEAR ☐☐☐☐	DAY . . . . . ☐☐ MONTH . . . . . ☐☐ YEAR ☐☐☐☐	DAY . . . . . ☐☐ MONTH . . . . . ☐☐ YEAR ☐☐☐☐
204	CHECK 203: CHILD BORN IN JANUARY 2005 OR LATER?	YES . . . . . 1 NO . . . . . 2 (GO TO 203 FOR NEXT CHILD OR, IF NO MORE CHILDREN, END INTERVIEW)	YES . . . . . 1 NO . . . . . 2 (GO TO 203 FOR NEXT CHILD OR, IF NO MORE CHILDREN, END INTERVIEW)	YES . . . . . 1 NO . . . . . 2 (GO TO 203 IN FIRST COLUMN OF NEW QUESTIONNAIRE; OR, IF NO MORE CHILDREN, END INTERVIEW)
205	WEIGHT IN KILOGRAMS	KG. ☐☐.☐☐ NOT PRESEN . . . . . 9994 REFUSED . . . . . 9995 OTHER 9996	KG. ☐☐.☐☐ NOT PRESEN . . . . . 9994 REFUSED . . . . . 9995 OTHER 9996	KG. ☐☐.☐☐ NOT PRESEN . . . . . 9994 REFUSED . . . . . 9995 OTHER 9996
206	HEIGHT IN CENTIMETERS	CM. ☐☐☐.☐ NOT PRESENT . . . 9994 REFUSED . . . . . 9995 OTHER 9996	CM. ☐☐☐.☐ NOT PRESENT . . . 9994 REFUSED . . . . . 9995 OTHER 9996	CM. ☐☐☐.☐ NOT PRESENT . . . 9994 REFUSED . . . . . 9995 OTHER 9996
207	MEASURED LYING DOWN OR STANDING UP?	LYING DOWN . . . . . 1 STANDING UP . . . . . 2 NOT MEASURED 3	LYING DOWN . . . . . 1 STANDING UP . . . . . 2 NOT MEASURED 3	LYING DOWN . . . . . 1 STANDING UP . . . . . 2 NOT MEASURED 3
213	GO BACK TO 203 IN NEXT COLUMN OF THIS QUESTIONNAIRE OR IN THE FIRST COLUMN OF AN ADDITIONAL QUESTIONNAIRE IF NO MORE CHILDREN, END INTERVIEW.			

2010 ARMENIA DEMOGRAPHIC AND HEALTH SURVEY
WOMAN'S QUESTIONNAIRE

REPUBLIC OF ARMENIA
NATIONAL STATISTICAL SERVICE
MINISTRY OF HEALTH

IDENTIFICATION

PLACE NAME _____

NAME OF HOUSEHOLD HEAD _____

CLUSTER NUMBER ..... | | | |

HOUSEHOLD NUMBER ..... | | | |

REGION (MARZ) ..... | | | |

NAME AND LINE NUMBER OF WOMAN _____ | | |

INTERVIEWER VISITS

	1	2	3	FINAL VISIT
DATE				DAY
				MONTH
				YEAR
INTERVIEWER'S NAME				INT. NUMBER
RESULT*				RESULT
NEXT VISIT: DATE				TOTAL NUMBER OF VISITS
TIME				

*RESULT CODES:

1	COMPLETED	4	REFUSED		
2	NOT AT HOME	5	PARTLY COMPLETED	7	OTHER _____ (SPECIFY)
3	POSTPONED	6	INCAPACITATED		

COUNTRY-SPECIFIC INFORMATION: LANGUAGE OF QUESTIONNAIRE, LANGUAGE OF INTERVIEW, NATIVE LANGUAGE OF RESPONDENT, AND WHETHER TRANSLATOR USED

SUPERVISOR	FIELD EDITOR	OFFICE EDITOR	KEYED BY
NAME _____	NAME _____		

SECTION 1. RESPONDENT'S BACKGROUND

INTRODUCTION AND CONSENT

INFORMED CONSENT

Hello. My name is _____. I am working with RA NSS AND RA MOH. We are conducting a survey about health all over ARMENIA. The information we collect will help the government to plan health services. Your household was selected for the survey. The questions usually take about 30 to 60 minutes. All of the answers you give will be confidential and will not be shared with anyone other than members of our survey team. You don't have to be in the survey, but we hope you will agree to answer the questions since your views are important. If I ask you any question you don't want to answer, just let me know and I will go on to the next question or you can stop the interview at any time.

In case you need more information about the survey, you may contact the person listed on the card that has already been given to your household.
Do you have any questions? May I begin the interview now?

SIGNATURE OF INTERVIEWER: _____ DATE: _____

RESPONDENT AGREES TO BE INTERVIEWED . . . 1 ↓ RESPONDENT DOES NOT AGREE TO BE INTERVIEWE . . . 2 → END

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
101	RECORD THE TIME.	HOUR . . . . . ☐☐ MINUTES . . . . . ☐☐	
102	In what month and year were you born?	MONTH . . . . . ☐☐ DON'T KNOW MONTH . . . . . 98 YEAR . . . . . ☐☐☐☐ DON'T KNOW YEAR 9998	
103	How old were you at your last birthday? COMPARE AND CORRECT 102 AND/OR 103 IF INCONSISTENT.	AGE IN COMPLETED YEARS ☐☐	
104	Have you ever attended school?	YES . . . . . 1 NO 2	→ 110
104A	What is the total number of years of schooling you have had?	YEARS OF SCHOOLING . . . . . ☐☐	
105	What is the highest level of school you attended: primary/ secondary, secondary-special or higher?	PRIMARY/SECONDARY . . . . . 1 SECONDARY-SPECIAL . . . . . 2 HIGHER 3	
106	What is the highest (grade/class/year) you completed at that level? IF COMPLETED LESS THAN ONE YEAR AT THAT LEVEL, RECORD '00'.	GRADE/CLASS/YEAR . . . . . ☐☐	
106A	CHECK 105 AND 106: CODES "1" PRIMJARY/ SECONDARY LEVEL AND GRADE 10+ CIRCLED OR CODE "2" SECONDARY-SPECIAL LEVEL CIRCLED,ASK: ☐ ↓ OTHER (CODES ☐ → 110 "1" PRIMARY/SECONDARY LEVEL AND GRADE 1-9 CIRCLED OR CODE "3" HIGHER LEVEL CIRCLED) Did you receive a diploma (attestat) for completing secondary education?	YES . . . . . 1 NO 2	
110	Do you read a newspaper or magazine at least once a week, less than once a week or not at all?	AT LEAST ONCE A WEEK . . . . . 1 LESS THAN ONCE A WEEK . . . . . 2 NOT AT ALL 3	
111	Do you listen to the radio at least once a week, less than once a week or not at all?	AT LEAST ONCE A WEEK . . . . . 1 LESS THAN ONCE A WEEK . . . . . 2 NOT AT ALL 3	
112	Do you watch television at least once a week, less than once a week or not at all?	AT LEAST ONCE A WEEK . . . . . 1 LESS THAN ONCE A WEEK . . . . . 2 NOT AT ALL 3	
113	In the last 3 years, have you been working abroad for three or more months at a time?	YES . . . . . 1 NO 2	

SECTION 2. REPRODUCTION

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
201	Now I would like to ask about all the births you have had during your life. Have you ever given birth?	YES . . . . . 1 NO 2	→ 206
202	Do you have any sons or daughters to whom you have given birth who are now living with you?	YES . . . . . 1 NO 2	→ 204
203	How many sons live with you? And how many daughters live with you? 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 . . . . . 1 NO 2	→ 206
205	How many sons are alive but do not live with you? And how many daughters are alive but do not live with you? 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? IF NO, PROBE: Any baby who cried or showed signs of life but did not survive?	YES . . . . . 1 NO 2	→ 208
207	How many boys have died? And how many girls have died? IF NONE, RECORD '00'.	BOYS DEAD . . . . . ☐☐ GIRLS DEAD . . . . . ☐☐	
207A	Were there any other children who were born alive, but who died within a few minutes, hours, or days?	YES . . . . . 1 NO 2	→ 208
207B	CORRECT 207 AND THEN CONTINUE WITH QUESTION 208.		
208	SUM ANSWERS TO 203, 205, AND 207, AND ENTER TOTAL. IF NONE, RECORD '00'.	TOTAL BIRTHS . . . . . ☐☐	
209	CHECK 208: Just to make sure that I have this right: you have had in TOTAL _____ births during your life. Is that correct? YES ☐ ↓ NO ☐ → PROBE AND CORRECT 201-208 AS NECESSARY.		
209A	Women sometimes have pregnancies which do not result in a live born child. That is, a pregnancy can be ended early by an abortion, a miscarriage, or a stillbirth. I will now ask you about each of them separately. In total, how many abortions have you had? Please, also include abortions induced by cytotec or other medicines/herbs with abortive effect conducted at home or elswhere by yourself or with a help of a health professional. IF NONE, RECORD '00'	TOTAL ABORTIONS ☐☐	
209B	How many miscarriages? IF NONE, RECORD '00'	TOTAL MISCARRIAGES ☐☐	
209C	How many stillbirths? IF NONE, RECORD '00'	TOTAL STILLBIRTHS ☐☐	
209D	SUM ANSWERS TO 208, 209A, 209B, 209C, AND ENTER TOTAL. IF NO PREGNANCIES, RECORD '00'.	TOTAL . . . . . ☐☐	
210	CHECK 209D: Just to make sure that I have this right: you have had in TOTAL _____ pregnancies outcomes during your life. Is that correct? ONE OR MORE PREGNANCIES ☐ ↓ NO PREGNANCIES ☐ →		→ 226

211 PREGNANCY HISTORY. Now I want to talk about each of your pregnancies, including those which ended in a live birth, a stillbirth, a miscarriage, and an induced abortion.
Starting with your last pregnancy, please tell me the following information:
RECORD ALL PREGANCIES. RECORD TWINS AND TRIPLETS ON SEPARATE LINES. IF THERE MORE THAN 15 PREGANCIES USE AN ADDITIONAL QUESTIONNAIRE
PROBE FOR PREGNANCIES ENDED IN ABORTION INCLUDING THOSE INDUCED BY CYTOTEC OR OTHER MEDICINES/HERBS WITH SIMILAR EFFECT

212 Did your (last/next to last/etc) pregnancy end in a live birth, a stillbirth , a miscarriage, or an abortion (including those induced by cytotec or similar abortive medication)?	213 Was this a single or a multiple birth?	214 In what month and year (was this child born / did this pregnancy end?)	215 Were there any other pregnancies between this and the pregnancy we were just talking about? IF YES, ADD IT TO TABLE	215A CHECK 212: RECORD SAME RESPONSE	216 What name was given to this child? WRITE 'BABY 1' BABY 2' , ETC. IF NO NAME WAS GIVEN TO A CHILD	217 Is (NAME) a boy or girl?	218 Is (NAME) still alive?	219 IF ALIVE: How old was (NAME) on his/her last birthday? **RECORD AGE IN COMPLETE YEARS**	220 IF ALIVE: Is (NAME) living with you?	221 IF ALIVE: **RECORD HOUSEHOLD LINE N0. OF CHILD.** **RECORD '00' IF CHILD NOT LISTED IN HOUSEHOLD**	222 IF DIED: How old was (NAME) when he/she died? IF '1 YR', PROBE: How many months old was (NAME)? RECORD DAYS IF LESS THAN 1 MONTH; MONTHS IF LESS THAN TWO YEARS; OR YEARS.
01 LIVE BIRTH . . . . . 1 STILL BIRTH . . . . . 2 MISCARRIAGE . . . 3 ABORTION . . . . . 4 GOTO 214	SING 1 MULT 2	MONTH YEAR		LIVE BIRTH . . . . . 1 STILL BIRTH . . 2 MISCARRIAGE . . 3 ABORTION . . . . . 4 NEXT PREGNANCY	NAME:	BOY 1 GIRL 2	YES . . . 1 NO 2 222	AGE IN YEARS	YES . . 1 NO . . . 2	LINE NO.: NEXT PREGNANCY	DAYS . . . 1 MONTHS 2 YEARS . . 3
02 LIVE BIRTH . . . . . 1 STILL BIRTH . . . . . 2 MISCARRIAGE . . . 3 ABORTION . . . . . 4 GOTO 214	SING 1 MULT 2	MONTH YEAR	YES . . . . . 1 ADD PREGN NO. . . . . 2 NEXT PREGN	LIVE BIRTH . . . . . 1 STILL BIRTH . . 2 MISCARRIAGE . . 3 ABORTION . . . . . 4 NEXT PREGNANCY	NAME:	BOY 1 GIRL 2	YES . . . . 1 NO 2 222	AGE IN YEARS	YES . . 1 NO . . . 2	LINE NO.: NEXT PREGNANCY	DAYS . . . 1 MONTHS 2 YEARS . . 3
03 LIVE BIRTH . . . . . 1 STILL BIRTH . . . . . 2 MISCARRIAGE . . . 3 ABORTION . . . . . 4 GOTO 214	SING 1 MULT 2	MONTH YEAR	YES . . . . . 1 ADD PREGN NO. . . . . 2 NEXT PREGN	LIVE BIRTH . . . . . 1 STILL BIRTH . . 2 MISCARRIAGE . . 3 ABORTION . . . . . 4 NEXT PREGNANCY	NAME:	BOY 1 GIRL 2	YES . . . . 1 NO 2 222	AGE IN YEARS	YES . . 1 NO . . . 2	LINE NO.: NEXT PREGNANCY	DAYS . . . 1 MONTHS 2 YEARS . . 3
04 LIVE BIRTH . . . . . 1 STILL BIRTH . . . . . 2 MISCARRIAGE . . . 3 ABORTION . . . . . 4 GOTO 214	SING 1 MULT 2	MONTH YEAR	YES . . . . . 1 ADD PREGN NO. . . . . 2 NEXT PREGN	LIVE BIRTH . . . . . 1 STILL BIRTH . . 2 MISCARRIAGE . . 3 ABORTION . . . . . 4 NEXT PREGNANCY	NAME:	BOY 1 GIRL 2	YES . . . . 1 NO 2 222	AGE IN YEARS	YES . . 1 NO . . . 2	LINE NO.: NEXT PREGNANCY	DAYS . . . 1 MONTHS 2 YEARS . . 3
05 LIVE BIRTH . . . . . 1 STILL BIRTH . . . . . 2 MISCARRIAGE . . . 3 ABORTION . . . . . 4 GOTO 214	SING 1 MULT 2	MONTH YEAR	YES . . . . . 1 ADD PREGN NO. . . . . 2 NEXT PREGN	LIVE BIRTH . . . . . 1 STILL BIRTH . . 2 MISCARRIAGE . . 3 ABORTION . . . . . 4 NEXT PREGNANCY	NAME:	BOY 1 GIRL 2	YES . . . . 1 NO 2 222	AGE IN YEARS	YES . . 1 NO . . . 2	LINE NO.: NEXT PREGNANCY	DAYS . . . 1 MONTHS 2 YEARS . . 3

212 Did your (last/next to last/etc) pregnancy end in a live birth, a stillbirth , a miscarriage, or an abortion (including those induced by cytotec or similar abortive medication)?	213 Was this a single or a multiple birth?	214 In what month and year (was this child born / did this pregnancy end?)	215 Were there any other pregnancies between this and the pregnancy we were just talking about? IF YES, ADD IT TO TABLE	215A CHECK 212: RECORD SAME RESPONSE	216 What name was given to this child? WRITE 'BABY 1' BABY 2' , ETC. IF NO NAME WAS GIVEN TO A CHILD	217 Is (NAME) a boy or girl?	218 Is (NAME) still alive?	219 IF ALIVE: How old was (NAME) on his/her last birthday? **RECORD AGE IN COMPLETE YEARS**	220 IF ALIVE: Is (NAME) living with you?	221 IF ALIVE: **RECORD HOUSEHOLD LINE N0. OF CHILD.** **RECORD '00' IF CHILD NOT LISTED IN HOUSEHOLD**	222 IF DIED: How old was (NAME) when he/she died? IF '1 YR', PROBE: How many months old was (NAME)? RECORD DAYS IF LESS THAN 1 MONTH; MONTHS IF LESS THAN TWO YEARS; OR YEARS.
06 LIVE BIRTH . . . . . 1 STILL BIRTH . . . . . 2 MISCARRIAGE . . . 3 ABORTION . . . . . 4 GOTO 214	SING 1 MULT 2	MONTH YEAR	YES . . . . 1 ADD PREGN NO . . . . . 2 NEXT PREGN	LIVE BIRTH . . . . . 1 STILL BIRTH . . . . 2 MISCARRIAGE . . 3 ABORTION . . . . . 4 NEXT PREGNANCY	NAME:	BOY 1 GIRL 2	YES . . . 1 NO 2 222	AGE IN YEARS	YES . . 1 NO . . . 2	LINE NO.: NEXT PREGNANCY	DAYS . . . 1 MONTHS 2 YEARS . . 3
07 LIVE BIRTH . . . . . 1 STILL BIRTH . . . . . 2 MISCARRIAGE . . . 3 ABORTION . . . . . 4 GOTO 214	SING 1 MULT 2	MONTH YEAR	YES . . . . . 1 ADD PREGN NO. . . . . 2 NEXT PREGN	LIVE BIRTH . . . . . 1 STILL BIRTH . . . . 2 MISCARRIAGE . . 3 ABORTION . . . . . 4 NEXT PREGNANCY	NAME:	BOY 1 GIRL 2	YES . . . . 1 NO 2 222	AGE IN YEARS	YES . . 1 NO . . . 2	LINE NO.: NEXT PREGNANCY	DAYS . . . 1 MONTHS 2 YEARS . . 3
08 LIVE BIRTH . . . . . 1 STILL BIRTH . . . . . 2 MISCARRIAGE . . . 3 ABORTION . . . . . 4 GOTO 214	SING 1 MULT 2	MONTH YEAR	YES. . . . . 1 ADD PREGN NO. . . . . 2 NEXT PREGN	LIVE BIRTH . . . . . 1 STILL BIRTH . . . . 2 MISCARRIAGE . . 3 ABORTION . . . . . 4 NEXT PREGNANCY	NAME:	BOY 1 GIRL 2	YES . . . . 1 NO 2 222	AGE IN YEARS	YES . . 1 NO . . . 2	LINE NO.: NEXT PREGNANCY	DAYS . . . 1 MONTHS 2 YEARS . . 3
09 LIVE BIRTH . . . . . 1 STILL BIRTH . . . . . 2 MISCARRIAGE . . . 3 ABORTION . . . . . 4 GOTO 214	SING 1 MULT 2	MONTH YEAR	YES . . . . . 1 ADD PREGN NO . . . . . 2 NEXT PREGN	LIVE BIRTH . . . . . 1 STILL BIRTH . . . . 2 MISCARRIAGE . . 3 ABORTION . . . . . 4 NEXT PREGNANCY	NAME:	BOY 1 GIRL 2	YES . . . . 1 NO 2 222	AGE IN YEARS	YES . . 1 NO . . . 2	LINE NO.: NEXT PREGNANCY	DAYS . . . 1 MONTHS 2 YEARS . . 3
10 LIVE BIRTH . . . . . 1 STILL BIRTH . . . . . 2 MISCARRIAGE . . . 3 ABORTION . . . . . 4 GOTO 214	SING 1 MULT 2	MONTH YEAR	YES . . . . . 1 ADD PREGN NO . . . . . 2 NEXT PREGN	LIVE BIRTH . . . . . 1 STILL BIRTH . . . . 2 MISCARRIAGE . . 3 ABORTION . . . . . 4 NEXT PREGNANCY	NAME:	BOY 1 GIRL 2	YES . . . . 1 NO 2 222	AGE IN YEARS	YES . . 1 NO . . . 2	LINE NO.: NEXT PREGNANCY	DAYS . . . 1 MONTHS 2 YEARS . . 3

212 Did your (last/next to last/etc) pregnancy end in a live birth, a stillbirth , a miscarriage, or an abortion (including those induced by cytotec or similar abortive medication)?	213 Was this a single or a multiple birth?	214 In what month and year (was this child born / did this pregnancy end?)	215 Were there any other pregnancies between this and the pregnancy we were just talking about? IF YES, ADD IT TO TABLE	215A CHECK 212: RECORD SAME RESPONSE	216 What name was given to this child? WRITE 'BABY 1' BABY 2' , ETC. IF NO NAME WAS GIVEN TO A CHILD	217 Is (NAME) a boy or girl?	218 Is (NAME) still alive?	219 IF ALIVE: How old was (NAME) on his/her last birthday? **RECORD AGE IN COMPLETE YEARS**	220 IF ALIVE: Is (NAME) living with you?	221 IF ALIVE: **RECORD HOUSEHOLD LINE N0. OF CHILD.** **RECORD '00' IF CHILD NOT LISTED IN HOUSEHOLD**	222 IF DIED: How old was (NAME) when he/she died? IF '1 YR', PROBE: How many months old was (NAME)? RECORD DAYS IF LESS THAN 1 MONTH; MONTHS IF LESS THAN TWO YEARS; OR YEARS.
11 LIVE BIRTH . . . . . 1 STILL BIRTH . . . . . 2 MISCARRIAGE . . . 3 ABORTION . . . . . 4 GOTO 214	SING 1 MULT 2	MONTH YEAR	YES . . . . 1 ADD PREGN NO . . . . . 2 NEXT PREGN	LIVE BIRTH . . . . . 1 STILL BIRTH . . . . 2 MISCARRIAGE . . 3 ABORTION . . . . . 4 NEXT PREGNANCY	NAME:	BOY 1 GIRL 2	YES . . . 1 NO 2 222	AGE IN YEARS	YES . . 1 NO . . . 2	LINE NO.: NEXT PREGNANCY	DAYS . . . 1 MONTHS 2 YEARS . . 3
12 LIVE BIRTH . . . . . 1 STILL BIRTH . . . . . 2 MISCARRIAGE . . . 3 ABORTION . . . . . 4 GOTO 214	SING 1 MULT 2	MONTH YEAR	YES . . . . . 1 ADD PREGN NO. . . . . 2 NEXT PREGN	LIVE BIRTH . . . . . 1 STILL BIRTH . . . . 2 MISCARRIAGE . . 3 ABORTION . . . . . 4 NEXT PREGNANCY	NAME:	BOY 1 GIRL 2	YES . . . . 1 NO 2 222	AGE IN YEARS	YES . . 1 NO . . . 2	LINE NO.: NEXT PREGNANCY	DAYS . . . 1 MONTHS 2 YEARS . . 3
13 LIVE BIRTH . . . . . 1 STILL BIRTH . . . . . 2 MISCARRIAGE . . . 3 ABORTION . . . . . 4 GOTO 214	SING 1 MULT 2	MONTH YEAR	YES. . . . . 1 ADD PREGN NO. . . . . 2 NEXT PREGN	LIVE BIRTH . . . . . 1 STILL BIRTH . . . . 2 MISCARRIAGE . . 3 ABORTION . . . . . 4 NEXT PREGNANCY	NAME:	BOY 1 GIRL 2	YES . . . . 1 NO 2 222	AGE IN YEARS	YES . . 1 NO . . . 2	LINE NO.: NEXT PREGNANCY	DAYS . . . 1 MONTHS 2 YEARS . . 3
14 LIVE BIRTH . . . . . 1 STILL BIRTH . . . . . 2 MISCARRIAGE . . . 3 ABORTION . . . . . 4 GOTO 214	SING 1 MULT 2	MONTH YEAR	YES . . . . . 1 ADD PREGN NO . . . . . 2 NEXT PREGN	LIVE BIRTH . . . . . 1 STILL BIRTH . . . . 2 MISCARRIAGE . . 3 ABORTION . . . . . 4 NEXT PREGNANCY	NAME:	BOY 1 GIRL 2	YES . . . . 1 NO 2 222	AGE IN YEARS	YES . . 1 NO . . . 2	LINE NO.: NEXT PREGNANCY	DAYS . . . 1 MONTHS 2 YEARS . . 3
15 LIVE BIRTH . . . . . 1 STILL BIRTH . . . . . 2 MISCARRIAGE . . . 3 ABORTION . . . . . 4 GOTO 214	SING 1 MULT 2	MONTH YEAR	YES . . . . . 1 ADD PREGN NO . . . . . 2 NEXT PREGN	LIVE BIRTH . . . . . 1 STILL BIRTH . . . . 2 MISCARRIAGE . . 3 ABORTION . . . . . 4 NEXT PREGNANCY	NAME:	BOY 1 GIRL 2	YES . . . . 1 NO 2 222	AGE IN YEARS	YES . . 1 NO . . . 2	LINE NO.: NEXT PREGNANCY	DAYS . . . 1 MONTHS 2 YEARS . . 3

222A	Have you had any pregnancies since the last birth/stillbirth/miscarriage/ abortion (including abortions induced by cytotec or other medications/herbs with abortive effect)? IF YES, RECORD PREGNANCIES IN TABLE ABOVE.	YES . . . . . 1 NO 2
222B	RECORD AND COMPARE NUMBER OF EVENTS RECORDED IN PREGNANCY HISTORY WITH EARLIER RESPONSES TOTAL NUMBER OF PREGANCIES ☐☐ TOTAL NUMBER OF PREGANCIES SAME AS NUMBER IN 209D ☐ DIFFERENT ☐ → (PROBE AND RECONCILE) TOTAL NUMBER OF LIVE BIRTH ☐☐ TOTAL NUMBER OF LIVE BIRTH SAME AS NUMBER IN 208 ☐ DIFFERENT ☐ → (PROBE AND RECONCILE) TOTAL NUMBER OF ABORTIONS ☐☐ TOTAL NUMBER OF ABORTIONS SAME AS NUMBER IN 209A ☐ DIFFERENT ☐ → (PROBE AND RECONCILE)	
223	COMPARE 209D WITH TOTAL NUMBER OF PREGNANCIES IN PREGNANCY HISTORY AND MARK: NUMBERS ARE DIFFERENT ☐ → (PROBE AND RECONCILE) NUMBERS ARE SAME ☐ CHECK: FOR EACH PREGNANCY: YEAR WHEN PREGNANCY ENDED IS RECORDED (Q.214) ☐ FOR EACH LIVE BIRTH SINCE JANUARY 2005, MONTH AND YEAR OF BIRTH IS RECORDED (Q.214) ☐ FOR EACH LIVING CHILD: CURRENT AGE IS RECORDED (Qs. 218, 219) ☐ FOR EACH CHILD THAT DIED: AGE AT DEATH IS RECORDED (Qs. 218, 222). ☐ FOR AGE AT DEATH 12 MONTHS OR 1 YEAR: PROBE TO DETERMINE EXACT NUMBER OF MONTHS (Q. 222). ☐	
224	CHECK 212 AND 214: ENTER THE NUMBER OF BIRTHS IN 2005 OR LATER (IN 212 CIRCLED CODE "1")	NUMBER OF BIRTHS . . . . . ☐ NONE 8

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
225	**C** FOR EACH BIRTH SINCE JANUARY 2005, ENTER 'B' IN THE MONTH OF BIRTH IN THE CALENDAR. WRITE THE NAME OF THE CHILD TO THE LEFT OF THE 'B' CODE. FOR EACH BIRTH, ASK THE NUMBER OF MONTHS THE PREGNANCY LASTED AND RECORD 'P' IN EACH OF THE PRECEDING MONTHS ACCORDING TO THE DURATION OF PREGNANCY. (NOTE: THE NUMBER OF 'P's MUST BE ONE LESS THAN THE NUMBER OF MONTHS THAT THE PREGNANCY LASTED.) FOR EACH PREGNANCY TERMINATION SINCE JANUARY 2005 (ABORTION, MISCARRIAGE OR STILLBIRTH), ENTER 'T' IN THE CALENDAR IN THE MONTH THAT THE PREGNANCY TERMINATED, AND 'P' IN EACH OF THE PRECEDING MONTHS ACCORDING TO THE DURATION OF THE PREGNANCY. AS ABOVE, THE NUMBER OF P's MUST BE ONE LESS THAN THE NUMBER OF MONTHS THAT THE PREGNANCY LASTED.		
226	Are you pregnant now?	YES . . . . . 1 NO . . . . . 2 UNSURE 8	→ 238
227	How many months pregnant are you? RECORD NUMBER OF COMPLETED MONTHS. **C** ENTER 'P's IN THE CALENDAR, BEGINNING WITH THE MONTH OF INTERVIEW AND FOR THE TOTAL NUMBER OF COMPLETED MONTHS.	MONTHS . . . . . ☐☐	
228	When you got pregnant, did you want to get pregnant at that time?	YES . . . . . 1 NO 2	→ 238
229	Did you want to have a baby later on or did you not want any (more) children?	LATER . . . . . 1 NO MORE 2	
238	When did your last menstrual period start? _____ (DATE, IF GIVEN)	DAYS AGO . . . . . 1 ☐☐ WEEKS AGO . . . . . 2 ☐☐ MONTHS AGO . . . . . 3 ☐☐ YEARS AGO . . . . . 4 ☐☐ IN MENOPAUSE/ HAS HAD HYSTERECTOMY . . . 994 BEFORE LAST BIRTH/PREGNANCY 995 NEVER MENSTRUATED 996	
239	From one menstrual period to the next, are there certain days when a woman is more likely to become pregnant?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 241
240	Is this time just before her period begins, during her period, right after her period has ended, or halfway between two periods?	JUST BEFORE HER PERIOD BEGINS . . . . . 1 DURING HER PERIOD . . . . . 2 RIGHT AFTER HER PERIOD HAS ENDED . . . . . 3 HALFWAY BETWEEN TWO PERIODS . . . . . 4 OTHER _____ 6 (SPECIFY) DON'T KNOW 8	

NO.	QUESTIONS AND FILTER	LAST ABORTION	NEXT-TO-LAST ABORTION	SECOND-TO-LAST ABORTION	THIRD-TO-LAST ABORTION
241	CHECK 212 AND 214: ONE OR MORE ABORTIONS SINCE JANUARY 2005 OR LATER ☐ / NO ABORTIONS IN 2005 OR LATER ☐ → 301				
242	PREGNANCY № FROM 212	PREGNANCY № ☐☐	PREGNANCY № ☐☐	PREGNANCY № ☐☐	PREGNANCY № ☐☐
243	How many weeks pregnant you were at the time of this abortion?	WEEKS ☐☐	WEEKS ☐☐	WEEKS ☐☐	WEEKS ☐☐
244	What was the main reason you decided to have this (last, next-to-last, second-from-last, third-from-last) abortion (mini-abortion)?	HEALTH OF MOTHER . . . . . 01 RISK OF BIRTH DEFECTS . . . . 02 SOCIOECONOMIC REASONS . . 03 RESPONDENT DID NOT WANT (ANYMORE) CHILDREN . . . 04 SPACING NEXT PREGNANCY. . 05 PARTNER DID NOT WANT THE CHILD . . . . . 06 SEX SELECTION/WANTED BOY 07 SEX SELECTION/WANTED GIRL 08 UNMARRIED . . . . . 09 OTHER _____ 96 (SPECIFY)	HEALTH OF MOTHER . . . . . 01 RISK OF BIRTH DEFEC . . . . 02 SOCIOECONOMIC REASON 03 RESPONDENT DID NOT WANT (ANYMORE) CHILDREN . . 04 SPACING NEXT PREGNANC 05 PARTNER DID NOT WANT THE CHILD . . . . . 06 SEX SELECTION/WANTED E 07 SEX SELECTION/WANTED C 08 UNMARRIED . . . . . 09 OTHER _____ 96 (SPECIFY)	HEALTH OF MOTHER . . . . . 01 RISK OF BIRTH DEFECT . . . . 02 SOCIOECONOMIC REASONS 03 RESPONDENT DID NOT WANT (ANYMORE) CHILDREN . . 04 SPACING NEXT PREGNANC 05 PARTNER DID NOT WANT THE CHILD . . . . . 06 SEX SELECTION/WANTED B 07 SEX SELECTION/WANTED G 08 UNMARRIED . . . . . 09 OTHER _____ 96 (SPECIFY)	HEALTH OF MOTHER . . . . . 01 RISK OF BIRTH DEFECT . . . . 02 SOCIOECONOMIC REASONS 03 RESPONDENT DID NOT WANT (ANYMORE) CHILDREN . . 04 SPACING NEXT PREGNANC 05 PARTNER DID NOT WANT THE CHILD . . . . . 06 SEX SELECTION/WANTED B 07 SEX SELECTION/WANTED G 08 UNMARRIED . . . . . 09 OTHER _____ 96 (SPECIFY)
245	What method was used for this (last, next-to-last, second-from-last, third-from-last) abortion?	D & C (DILATION&CURETTING) 01 VACUUM ASPIRATION . . . . 02 OXYTOCIN . . . . . 03 CATHETER . . . . . 04 OTHER MEDICINES . . . . 05 OTHER _____ 96 (SPECIFY) DON'T KNOW 98	D & C . . . . . 01 VACUUM ASPIRATION . . . . 02 OXYTOCIN . . . . . 03 CATHETER . . . . . 04 OTHER MEDICINE . . . . 05 OTHER _____ 96 (SPECIFY) DON'T KNOW 98	D & C . . . . . 01 VACUUM ASPIRATION . . . . 02 OXYTOCIN . . . . . 03 CATHETER . . . . . 04 OTHER MEDICINES . . . . 05 OTHER _____ 96 (SPECIFY) DON'T KNOW 98	D & C . . . . . 01 VACUUM ASPIRATION . . . . 02 OXYTOCIN . . . . . 03 CATHETER . . . . . 04 OTHER MEDICINES . . . . 05 OTHER _____ 96 (SPECIFY) DON'T KNOW 98

NO.	QUESTIONS AND FILTER	LAST ABORTION
246	How much did you pay for this abortion, including gifts or money given to the doctor (person, who performed the abortion)?	☐☐☐☐☐☐☐ ENTER TOTAL NUMERIC VALUE IN DRAMS PAID NO MONEY . . . . 9999994 DON'T KNOW 9999998
247	At the place where you had the abortion, did anyone talk to you about using family planning after abortion?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 249) DON'T REMEMBER 8
248	Wre you offered any contraceptive method at that time?	YES . . . . . 1 NO 2
249		GO BACK TO 242 IN NEXT COLUMN; OR, IF NO MORE ABORTIONS, GO TO 301.

GO BACK TO 242 IN NEXT COLUMN; OR, IF NO MORE ABORTIONS, GO TO 301.	GO BACK TO 242 IN NEXT COLUMN; OR, IF NO MORE ABORTIONS, GO TO 301.	GO BACK TO 242 IN NEXT-TO-LAST-ABORTION COLUMN IN THE NEW QUESTIONNAIRE; OR, IF NO MORE ABORTIONS, GO TO 301.

SECTION 3. CONTRACEPTION

301	Now I would like to talk about family planning - the various ways or methods that a couple can use to delay or avoid a pregnancy. Have you ever heard of (METHOD)?		
01	**Female Sterilization**. PROBE: Women can have an operation to avoid having any more children.	YES . . . . . 1 NO 2	
02	**Male Sterilization**. PROBE: Men can have an operation to avoid having any more children.	YES . . . . . 1 NO 2	
03	**IUD** PROBE: Women can have a loop or coil placed inside them by a doctor or a nurse.	YES . . . . . 1 NO 2	
04	**Injectables**. PROBE: Women can have an injection by a health provider that stops them from becoming pregnant for one or more months.	YES . . . . . 1 NO 2	
05	**Implants**. PROBE: Women can have one or more small rods placed in their upper arm by a doctor or nurse which can prevent pregnancy for one or more years.	YES . . . . . 1 NO 2	
06	**Pill**. PROBE: Women can take a pill every day to avoid becoming pregnant.	YES . . . . . 1 NO 2	
07	**Condom**. PROBE: Men can put a rubber sheath on their penis before sexual intercourse.	YES . . . . . 1 NO 2	
08	**Spermicides**: PROBE: Foam/jelly or vaginal pills that women can insert in their vagina before sexual intercourse to prevent pregnancy.	YES . . . . . 1 NO 2	
09	**Lactational Amenorrhea Method** (LAM)	YES . . . . . 1 NO 2	
10	**Rhythm Method**. PROBE: 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 . . . . . 1 NO 2	
11	**Fertility Wheel Calculator.** PROBE: Ovulation Pinwheel calendar provides day-to-day information on fertility and peak ovulation when a sexually active woman is most likely to get pregnant.	YES . . . . . 1 NO 2	
12	**Withdrawal**. PROBE: Men can be careful and pull out before climax.	YES . . . . . 1 NO 2	
13	**Emergency Contraception**. PROBE: As an emergency measure, within three-five days after they have unprotected sexual intercourse, women can take special pills to prevent pregnancy.	YES . . . . . 1 NO 2	
14	Have you heard of any other ways or methods that women or men can use to avoid pregnancy?	YES . . . . . 1 _____ (SPECIFY) _____ (SPECIFY) NO 2	
302	CHECK 226: NOT PREGNANT OR UNSURE ☐ PREGNANT ☐ → 311		
303	Are you currently doing something or using any method to delay or avoid getting pregnant?	YES . . . . . 1 NO 2	→ 311

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
304	Which method are you using? CIRCLE ALL MENTIONED. IF MORE THAN ONE METHOD MENTIONED, FOLLOW SKIP INSTRUCTION FOR HIGHEST METHOD IN LIST.	FEMALE STERILIZATION . . . . . A MALE STERILIZATION . . . . . B IUD . . . . . C INJECTABLES . . . . . D IMPLANTS . . . . . E PILL . . . . . F CONDOM . . . . . G DIAPHRAGM . . . . . H FOAM/JELLY . . . . . I LACTATIONAL AMEN. METHOD . . . . . J RHYTHM METHOD . . . . . K FERTILITY WHEEL CALCULATOR L WITHDRAWAL . . . . . M OTHER MODERN METHOD . . . . . X OTHER TRADITIONAL METHOD . . . Y	→ 307 → 308A
307	In what facility did the sterilization take place? PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE)	PUBLIC SECTOR GOVT. HOSPITAL . . . . . 11 MATERNITY HOME . . . . . 12 DIAGNOSTIC CENTEI . . . . . 13 WOMEN' S CONSULTATIO . . . . . 14 POLYCLINIC . . . . . 15 AMBULATORY/FAM. DOC.OFFICE . . 16 FAP . . . . . 17 OTHER PUBLIC SECTOR _____ 18 (SPECIFY) PRIVATE MEDICAL SECTOR HOSPITAL . . . . . 21 MATERNITY HOME . . . . . 22 DIAGNOSTIC CENTER . . . . . 23 WOMEN' S CONSULTATIO . . . . . 24 POLYCLINIC . . . . . 25 FAMILY DOCTOR'S OFFICE . . . . . 26 FAP . . . . . 27 PHARMACY . . . . . 28 OTHER PRIVATE MEDICAL SECTOR _____ 29 (SPECIFY) OTHER _____ 96 (SPECIFY) DON'T KNOW 98	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
308	In what month and year was the sterilization performed?		
308A	Since what month and year have you been using (CURRENT METHOD) without stopping? PROBE: For how long have you been using (CURRENT METHOD) now without stopping?	MONTH . . . . . YEAR	
309	CHECK 308/308A AND 214: ANY BIRTH OR PREGNANCY TERMINATION AFTER MONTH AND YEAR OF START OF USE OF CONTRACEPTION IN 308/308A GO BACK TO 308/308A, PROBE AND RECORD MONTH AND YEAR AT START OF CONTINUOUS USE OF CURRENT METHOD (MUST BE AFTER LAST BIRTH OR PREGNANCY TERMINATION).	YES → NO ↓	
310	CHECK 308/308A: YEAR IS 2005 OR LATER → **C** ENTER CODE FOR METHOD USED IN MONTH OF INTERVIEW IN THE CALENDAR AND IN EACH MONTH BACK TO THE DATE STARTED USING. YEAR IS 2004 OR EARLIER → **C** ENTER CODE FOR METHOD USED IN MONTH OF INTERVIEW IN THE CALENDAR AND EACH MONTH BACK TO JANUARY 2005. THEN SKIP TO → 322		
311	I would like to ask you some questions about the times you or your partner may have used a method to avoid getting pregnant during the last few years. USE CALENDAR TO PROBE FOR EARLIER PERIODS OF USE AND NONUSE, STARTING WITH MOST RECENT USE, BACK TO JANUARY 2005. USE NAMES OF CHILDREN, DATES OF BIRTH, AND PERIODS OF PREGNANCY AS REFERENCE POINTS. **C** **IN COLUMN 1**, ENTER METHOD USE CODE OR '0' FOR NONUSE IN EACH BLANK MONTH. ILLUSTRATIVE QUESTIONS: * When was the last time you used a method? Which method was that? * When did you start using that method? How long after the birth of (NAME)? * How long did you use the method then? **IN COLUMN 2**, ENTER CODES FOR DISCONTINUATION NEXT TO THE LAST MONTH OF USE. NUMBER OF CODES IN COLUMN 2 MUST BE SAME AS NUMBER OF INTERRUPTIONS OF METHOD USE IN COLUMN 1. ASK WHY SHE STOPPED USING THE METHOD. IF A PREGNANCY FOLLOWED, ASK WHETHER SHE BECAME PREGNANT UNINTENTIONALLY WHILE USING THE METHOD OR DELIBERATELY STOPPED TO GET PREGNANT. ILLUSTRATIVE QUESTIONS: * Why did you stop using the (METHOD)? Did you become pregnant while using (METHOD), or did you stop to get pregnant, or did you stop for some other reason? * IF DELIBERATELY STOPPED TO BECOME PREGNANT, ASK: How many months did it take you to get pregnant after you stopped using (METHOD)? AND ENTER '0' IN EACH SUCH MONTH IN COLUMN 1.		

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
312	CHECK THE CALENDAR FOR USE OF ANY CONTRACEPTIVE METHOD IN ANY MONTH NO METHOD USED ☐ ANY METHOD USED ☐ → 314		
313	Have you ever used anything or tried in any way to delay or avoid getting pregnant?	YES . . . . . 1 NO 2	→ 324
314	CHECK 304: CIRCLE METHOD CODE: IF MORE THAN ONE METHOD CODE CIRCLED IN 304, CIRCLE CODE FOR HIGHEST METHOD IN LIST.	NO CODE CIRCLED . . . . . 00 FEMALE STERILIZATION . . . . . 01 MALE STERILIZATION . . . . . 02 IUD . . . . . 03 INJECTABLES . . . . . 04 IMPLANTS . . . . . 05 PILL . . . . . 06 CONDOM . . . . . 07 DIAPHRAGM . . . . . 08 FOAM/JELLY . . . . . 09 LACTATIONAL AMEN. METHOD . . . . . 10 RHYTHM METHOD . . . . . 11 FERTILITY WHEEL CALCULATOR 12 WITHDRAWAL . . . . . 13 OTHER MODERN METHOD . . . . . 95 OTHER TRADITIONAL METHOD 96	→ 324 → 317A → 327 → 315A → 323D → 323A → 323D
315	You first started using (CURRENT METHOD) in (DATE FROM 308/308A). Where did you get it at that time?	PUBLIC SECTOR GOVT. HOSPITAL . . . . . 11 MATERNITY HOME . . . . . 12 DIAGNOSTIC CENTER . . . . . 13 WOMEN' S CONSULTATIO . . . . . 14 POLYCLINIC . . . . . 15 AMBULATORY/FAM.DOC.OFFICE . . 16 FAP . . . . . 17 OTHER PUBLIC SECTOR _____ 18 (SPECIFY)	
315A	Where did you learn how to use the rhythm/fertility wheel calculator/lactational amenorhea method? PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE)	PRIVATE MEDICAL SECTOR HOSPITAL . . . . . 21 MATERNITY HOME . . . . . 22 DIAGNOSTIC CENTER . . . . . 23 WOMEN' S CONSULTATIO . . . . . 24 POLYCLINIC . . . . . 25 FAMILY DOCTOR'S OFFICE . . . . . 26 FAP . . . . . 27 PHARMACY . . . . . 28 OTHER PRIVATE MEDICAL SECTOR _____ 29 (SPECIFY) OTHER SOURCE SHOP/MARKET/KIOSK 31 CHURCH . . . . . 32 FRIEND/RELATIVE . . . . . 33 OTHER _____ 96 (SPECIFY)	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
316	CHECK 304: CIRCLE METHOD CODE: IF MORE THAN ONE METHOD CODE CIRCLED IN 304,	IUD . . . . . 03 INJECTABLES . . . . . 04 IMPLANTS . . . . . 05 PILL . . . . . 06 CONDOM . . . . . 07 DIAPHRAGM . . . . . 08 FOAM/JELLY . . . . . 09 LACTATIONAL AMEN. METHOD . . . . . 10 RHYTHM METHOD . . . . . 11 FERTILITY WHEEL CALCULATOR . . . 12	→ 323 → 320 → 327 → 323
317	At that time, were you told about side effects or problems you might have with the method?	YES . . . . . 1 NO 2	→ 319
317A	When you got sterilized, were you told about side effects or problems you might have with the method?		
318	Were you ever told by a health or family planning worker about side effects or problems you might have with the method?	YES . . . . . 1 NO 2	 → 320
319	Were you told what to do if you experienced side effects or problems?	YES . . . . . 1 NO 2	
320	CHECK 317: CODE '1' CIRCLED → At that time, were you told about other methods of family planning that you could use? CODE '1' NOT CIRCLED → When you obtained (CURRENT METHOD FROM 314) from (SOURCE OF METHOD FROM 307 OR 315), were you told about other methods of family planning that you could use?	YES . . . . . 1 NO 2	→ 322
321	Were you ever told by a health or family planning worker about other methods of family planning that you could use?	YES . . . . . 1 NO 2	
322	CHECK 304: CIRCLE METHOD CODE: IF MORE THAN ONE METHOD CODE CIRCLED IN 304, CIRCLE CODE FOR HIGHEST METHOD IN LIST.	FEMALE STERILIZATION . . . . . 01 MALE STERILIZATION . . . . . 02 IUD . . . . . 03 INJECTABLES . . . . . 04 IMPLANTS . . . . . 05 PILL . . . . . 06 CONDOM . . . . . 07 DIAPHRAGM . . . . . 08 FOAM/JELLY . . . . . 09 LACTATIONAL AMEN. METHOD . . . . . 10 RHYTHM METHOD . . . . . 11 FERTILITY WHEEL CALCULATOR 12 WITHDRAWAL . . . . . 13 OTHER MODERN METHOD . . . . . 95 OTHER TRADITIONAL METHOD . . . 96	→ 327 → 327 → 323D → 323D

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
323	Where did you obtain (CURRENT METHOD) the last time? PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE)	PUBLIC SECTOR GOVT. HOSPITAL . . . . . 11 MATERNITY HOME . . . . . 12 DIAGNOSTIC CENTEI . . . . . 13 WOMEN' S CONSULTATIO . . . . . 14 POLYCLINIC . . . . . 15 AMBULATORY/FAM.DOC.OFFICE . . 16 FAP . . . . . 17 OTHER PUBLIC SECTOR _____ 18 (SPECIFY) PRIVATE MEDICAL SECTOR HOSPITAL . . . . . 21 MATERNITY HOME . . . . . 22 DIAGNOSTIC CENTER . . . . . 23 WOMEN' S CONSULTATIO . . . . . 24 POLYCLINIC . . . . . 25 FAMILY DOCTOR'S OFFICE . . . . . 26 FAP . . . . . 27 PHARMACY . . . . . 28 OTHER PRIVATE MEDICAL SECTOR _____ 29 (SPECIFY) OTHER SOURCE SHOP/MARKET/KIOSK 31 CHURCH . . . . . 32 FRIEND/RELATIVE . . . . . 33 OTHER _____ 96 (SPECIFY)	
323A	When you obtained the (CURRENT METHOD) the last time, how did you get there?	BY FOOT . . . . . 01 TAXI . . . . . 02 MINI-BUS . . . . . 03 BUS/TROLLY/METRO . . . . . 04 HOUSEHOLD CAR . . . . . 05 OTHER CAR . . . . . 06 AMBULANCE . . . . . 07 OTHER _____ 96 (SPECIFY)	→ 323C → 323C → 323C → 323C
323B	Altogether, how much did you pay for transportation to go to the (PLACE FROM Q323) the last time you obtained the (CURRENT METHOD)?	COST ☐☐☐☐☐☐☐ PAID NO MONEY . . . . . 9999994 DON'T KNOW 9999998	
323C	How long did it take you to get to the (PLACE FROM Q323) when you obtained (CURRENT METHOD) the last time?	MINUTES . . . . . ☐☐☐ DON'T KNOW 998	→ 327

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
323D	Please tell me whether each of the following reasons was a factor in your decision to use (TRADTIONAL METHOD FROM Q322) instead of a modern method?	Yes No	
	a. Modern methods are not available or difficult to find	DIFFICULT TO GET 1 2	
	b. Modern methods are expensive	COST 1 2	
	c. Lack of knowledge about any of modern methods	LITTLE KNOWLEDGE 1 2	
	d. Fear of side effects or experience of them in the past	SIDE EFFECTS 1 2	
	e. Husband/partner's choice to use traditional method	HUSBAND/PARTNER 1 2	→ 327
	f. Religious beliefs prohibit using modern methods	RELIGIOUS BELIEFS 1 2	
	g. Doctor's recommendation to use traditional method	DOCTOR 1 2	
	h. Another person's advice to use traditional method	OTHER ADVICE 1 2	
324	Do you know of a place where you can obtain a method of family planning?	YES . . . . . 1 NO 2	→ 327
325	Where is that? Any other place? PROBE TO IDENTIFY EACH TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE(S))	PUBLIC SECTOR GOVT. HOSPITAL . . . . . A MATERNITY HOME . . . . . B DIAGNOSTIC CENTEI . . . . . C WOMEN' S CONSULTATIO . . . . . D POLYCLINIC . . . . . E AMBULATORY/FAM.DOC.OFFICE . . F FAP . . . . . G OTHER PUBLIC SECTOR _____ H (SPECIFY) PRIVATE MEDICAL SECTOR HOSPITAL . . . . . I MATERNITY HOME . . . . . J DIAGNOSTIC CENTER . . . . . K WOMEN' S CONSULTATIO . . . . . L POLYCLINIC . . . . . M FAMILY DOCTOR'S OFFICE . . . . . N FAP . . . . . O PHARMACY . . . . . P OTHER PRIVATE MEDICAL SECTOR _____ Q (SPECIFY) OTHER SOURCE SHOP/MARKET/KIOSK . . . . . R CHURCH . . . . . S FRIEND/RELATIVE . . . . . T OTHER _____ X (SPECIFY)	
327	In the last 12 months, have you visited a health facility for care for yourself (or your children)?	YES . . . . . 1 NO 2	→ 401
328	Did any staff member at the health facility speak to you about family planning methods?	YES . . . . . 1 NO 2	→ 401
329	Who discussed family planning with you? RECORD ALL MENTIONED	FAMILY DOCTOR . . . . . A INTERNIST (TERAPEVT) B PEDIATRICIAN. . . . . C GYNECOLOGIST . . . . . D OTHER DOCTOF . . . . . E FELDSHER . . . . . F NURSE/MIDWIFE . . . . . G DON'T KNOW . . . . . Y	

SECTION 4. PREGNANCY AND POSTNATAL CARE

401	CHECK 224: ONE OR MORE BIRTHS IN 2005 OR LATER ☐ ↓ NO BIRTHS IN 2005 OR LATER ☐ → 556			
402	CHECK 214: ENTER IN THE TABLE THE PREGNANCY HISTORY NUMBER, NAME, AND SURVIVAL STATUS OF EACH BIRTH IN 2005 OR LATER. ASK THE QUESTIONS ABOUT ALL OF THESE BIRTHS. BEGIN WITH THE LAST BIRTH. (IF THERE ARE MORE THAN 3 BIRTHS, USE LAST 2 COLUMNS OF ADDITIONAL QUESTIONNAIRES). Now I would like to ask some questions about your children born in the last five years. (We will talk about each separately.)			
403	LINE NUMBER FROM 212 IN PREGNANCY HISTORY	LAST BIRTH PREGNANCY HISTORY NUMBER ☐☐	NEXT-TO-LAST BIRTH PREGNANCY HISTORY NUMBER ☐☐	SECOND-FROM-LAST BIRTH PREGNANCY HISTORY NUMBER ☐☐
404	FROM 216 AND 218	NAME _____ LIVING ☐ DEAD ☐ ↓	NAME _____ LIVING ☐ DEAD ☐ ↓	NAME _____ LIVING ☐ DEAD ☐ ↓
405	When you got pregnant with (NAME), did you want to get pregnant at that time?	YES . . . . . 1 (SKIP TO 408) ← NO 2	YES . . . . . 1 (SKIP TO 430) ← NO 2	YES . . . . . 1 (SKIP TO 430) ← NO 2
406	Did you want to have a baby later on, or did you not want any (more) children?	LATER . . . . . 1 NO MORE . . . . . 2 (SKIP TO 408) ←	LATER . . . . . 1 NO MORE . . . . . 2 (SKIP TO 430) ←	LATER . . . . . 1 NO MORE . . . . . 2 (SKIP TO 430) ←
407	How much longer did you want to wait?	MONTHS . .1 ☐☐ YEARS . . 2 ☐☐ DON'T KNOW . . . 998	MONTHS . .1 ☐☐ YEARS . . 2 ☐☐ DON'T KNOW . . . 998	MONTHS . .1 ☐☐ YEARS . . 2 ☐☐ DON'T KNOW . . . 998
408	Did you see anyone for antenatal care for this pregnancy?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 421) ←		
409	Whom did you see? Anyone else? PROBE TO IDENTIFY EACH TYPE OF PERSON AND RECORD ALL MENTIONED.	HEALTH PERSONNEL FAMILY DOCTOR . . A INTERNIST. . . . . B PEDIATRICIAN. . . . C GYNECOLOGIST . . D OTHER DOCTOR . . E FELDSHER . . F NURSE/MIDWIFE . . G OTHER PERSON TRADITIONAL BIRTH ATTENDANT . . H RELATIVE/ FRIEND . . . . I OTHER_____ X (SPECIFY)		

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____
410	Where did you receive antenatal care for this pregnancy? Anywhere else? PROBE TO IDENTIFY TYPE(S) OF SOURCE(S). IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE(S))	HOME YOUR HOME . . . A OTHER HOME . . . B PUBLIC SECTOR GOVT. HOSPITAL . . C MATERNITY HOME . . D DIAGNOSTIC CENTEF E WOMEN' S CONSULTATION . . F POLYCLINIC . . . . . G AMBUL./FML.DOC. . . H FAP . . . . . I OTHER PUBLIC SECTOR _____ J (SPECIFY) PRIVATE SECTOR PVT.HOSPITAL . . K PVT. MATER. HOME . . L PVT. DIAGN. CENTER M PVT. WOMEN' S CONSULTATION . . N PVT.POLYCLINIC . . . . O PVT.FML.DOC .OFFIC P PVT.FAP . . . . . Q OTHER PRIVATE SECTOR _____ R (SPECIFY) OTHER _____ X (SPECIFY)		
411	How many months pregnant were you when you first received antenatal care for this pregnancy?	MONTHS . . . ☐☐ DON'T KNOW 98		
412	How many times did you receive antenatal care during this pregnancy?	NUMBER OF TIMES ☐☐ DON'T KNOW 98		
413	As part of your antenatal care during this pregnancy, were any of the following done at least once:	YES NO		
	Was your blood pressure measured?	BP 1 2		
	Did you give a urine sample?	URINE 1 2		
	Did you give a blood sample?	BLOOD . . . 1 2		
	Were you tested for HIV/AIDS?	HIV TEST . . . 1 2		

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____
414	During (any of) your antenatal care visit(s), were you told about things to look out for that might suggest problems with the pregnancy?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8		
421	During this pregnancy, were you given or did you buy any iron tablets or iron syrup? SHOW TABLETS/SYRUP.	YES . . . . . 1 NO . . . . . 2 (SKIP TO 423) DON'T KNOW 8		
422	During the whole pregnancy, for how many days did you take the tablets or syrup? IF ANSWER IS NOT NUMERIC, PROBE FOR APPROXIMATE NUMBER OF DAYS.	DAYS ☐☐☐ DON'T KNOW . . . 998		
423	During this pregnancy, did you take any drug for intestinal worms?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8		
423A	Were you eligible to receive a free outpatient antenatal care?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8		
423B	Were you eligible to receive free medicines for the outpatient antenatal care?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8		
423C	Were you charged, or did you pay anything for any services provided for the last ANC visit during this pregnancy?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 430)		
423D	What is the total amount you paid for all services or treatments you received for the last ANC visit during this pregnancy? Please include any money you paid for services, laboratory tests or medicines. RECORD AMOUNT OF MONEY PAID SEPARATELY FOR: THE LABORATORY, MEDICINE, CONSULTATION AND OTHER SERVICES. PAID NO MONEY = 9999994 DON'T KNOW = 9999998	1)LABORATORY ☐☐☐☐☐☐☐ 2) MEDICINES ☐☐☐☐☐☐☐ 3) CONSULTATIONS ☐☐☐☐☐☐☐ 4) OTHER ☐☐☐☐☐☐☐		

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME ________	NEXT-TO-LAST BIRTH NAME ________	SECOND-FROM-LAST BIRTH NAME ________
430	When (NAME) was born, was he/she very large, larger than average, average, smaller than average, or very small?	VERY LARGE ..... 1 LARGER THAN AVERAGE ..... 2 AVERAGE .... 3 SMALLER THAN AVERAGE ..... 4 VERY SMALL ..... 5 DON'T KNOW 8	VERY LARGE ..... 1 LARGER THAN AVERAGE ..... 2 AVERAGE .... 3 SMALLER THAN AVERAGE ..... 4 VERY SMALL ..... 5 DON'T KNOW 8	VERY LARGE ..... 1 LARGER THAN AVERAGE ..... 2 AVERAGE .... 3 SMALLER THAN AVERAGE ..... 4 VERY SMALL ..... 5 DON'T KNOW 8
431	Was (NAME) weighed at birth?	YES .... 1 NO .... 2 (SKIP TO 433) DON'T KNOW 8	YES .... 1 NO .... 2 (SKIP TO 433) DON'T KNOW 8	YES .... 1 NO .... 2 (SKIP TO 433) DON'T KNOW 8
432	How much did (NAME) weigh? RECORD WEIGHT IN KILOGRAMS FROM HEALTH CARD, IF AVAILABLE.	KG FROM CARD 1 [ ] . [ ][ ][ ] KG FROM RECALL 2 [ ] . [ ][ ][ ] DON'T KNOW 99998	KG FROM CARD 1 [ ] . [ ][ ][ ] KG FROM RECALL 2 [ ] . [ ][ ][ ] DON'T KNOW 99998	KG FROM CARD 1 [ ] . [ ][ ][ ] KG FROM RECALL 2 [ ] . [ ][ ][ ] DON'T KNOW 99998
433	Who assisted with the delivery of (NAME)? Anyone else? PROBE FOR THE TYPE(S) OF PERSON(S) AND RECORD ALL MENTIONED. IF RESPONDENT SAYS NO ONE ASSISTED, PROBE TO DETERMINE WHETHER ANY ADULTS WERE PRESENT AT THE DELIVERY.	HEALTH PERSONNEL DOCTOR .... A NURSE/MIDWIFE B FELDSHER ...... C OTHER PERSON TRADITIONAL BIRTH ATTENDANT .. D RELATIVE/FRIEND E OTHER ________ X (SPECIFY) NO ONE ASSISTED Y	HEALTH PERSONNEL DOCTOR .... A NURSE/MIDWIFE B FELDSHER ...... C OTHER PERSON TRADITIONAL BIRTH ATTENDANT .. D RELATIVE/FRIEND . E OTHER ________ X (SPECIFY) NO ONE ASSISTED Y	HEALTH PERSONNEL DOCTOR .... A NURSE/MIDWIFE B FELDSHER ...... C OTHER PERSON TRADITIONAL BIRTH ATTENDANT .. D RELATIVE/FRIEND E OTHER ________ X (SPECIFY) NO ONE ASSISTED Y
433A	Immediately after the birth, was (NAME) put directly on the bare skin of you chest?	YES .... 1 NO .... 2 (SKIP TO 434)		
433B	How long did (NAME) stay on your chest? IF LESS THAN 1 MINUTE, RECORD '00' . IF MORE THAN 99 MIN RECORD "99"	MINUTES 1 [ ][ ] DON'T KNOW 998		

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____
434	Where did you give birth to (NAME)? PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE)	HOME YOUR HOME . . . 11 (SKIP TO 438) ← OTHER HOME . . . 12 PUBLIC SECTOR GOVT. HOSPITAL . . 21 MATERNITY HOME . . 22 DIAGNOSTIC CENTER 23 WOMEN' S CONSULTATION . . 24 POLYCLINIC . . . . . 25 AMBUL/FML DOC . . . 26 FAP . . . . . 27 OTHER PUBLIC SECTOR _____ 28 (SPECIFY) PRIVATE SECTOR PVT.HOSPITAL . . 41 PVT. MATER. HOME . . 42 PVT. DIAGN. CENTER 43 PVT. WOMEN' S CONSULTATION . . 44 PVT.POLYCLINIC . . . . 45 PVT.FML DOC OFFICE 46 PVT.FAP . . . . . 47 OTHER PRIVATE SECTOR _____ 48 (SPECIFY) OTHER _____ 96 (SPECIFY) (SKIP TO 438) ←	HOME YOUR HOME . . . 11 (SKIP TO 448) ← OTHER HOME . . . 12 PUBLIC SECTOR GOVT. HOSPITAL . . 21 MATERNITY HOME . . 22 DIAGNOSTIC CENTER 23 WOMEN' S CONSULTATION . . 24 POLYCLINIC . . . . . 25 AMBULAT/FML DOC 26 FAP . . . . . 27 OTHER PUBLIC SECTOR _____ 28 (SPECIFY) PVT.HOSPITAL . . 41 PVT. MATER. HOME . . 42 PVT. DIAGN. CENTER 43 PVT. WOMEN' S CONSULTATION . . 44 PVT.POLYCLINIC . . . . 45 PVT.FML DOC OFFICE 46 PVT.FAP . . . . . 47 OTHER PRIVATE SECTOR _____ 56 (SPECIFY) OTHER _____ 96 (SPECIFY) (SKIP TO 448) ←	HOME YOUR HOME . . . 11 (SKIP TO 448) ← OTHER HOME . . . 12 PUBLIC SECTOR GOVT. HOSPITAL . . 21 MATERNITY HOME . . 22 DIAGNOSTIC CENTER 23 WOMEN' S CONSULTATION . . 24 POLYCLINIC . . . . . 25 AMBULAT/FML DOC 26 FAP . . . . . 27 OTHER PUBLIC SECTOR _____ 28 (SPECIFY) PVT.HOSPITAL . . 41 PVT. MATER. HOME . . 42 PVT. DIAGN. CENTER 43 PVT. WOMEN' S CONSULTATION . . 44 PVT.POLYCLINIC . . . . 45 PVT.FML DOC OFFICE 46 PVT.FAP . . . . . 47 OTHER PRIVATE SECTOR _____ 56 (SPECIFY) OTHER _____ 96 (SPECIFY) (SKIP TO 448) ←
435	Was (NAME) delivered by caesarean, that is, did they cut your belly open to take the baby out?	YES . . . . . 1 NO 2	YES . . . . . 1 NO 2	YES . . . . . 1 NO 2
435A	CHECK 214 BIRTH BEFORE JULY 2008=1 BIRTH AFTER JULY 2008=2	BEFORE . . . . . 1 (SKIP TO 435C) ← AFTER 2	BEFORE . . . . . 1 (SKIP TO 435C) ← AFTER 2	BEFORE . . . . . 1 (SKIP TO 435C) ← AFTER 2
435B	Did you have a delivery voucher for (NAME)'s delivery?	YES . . . . . 1 NO 2	YES . . . . . 1 NO 2	YES . . . . . 1 NO 2
435C	Were you eligible to receive a free hospital care for delivery of (NAME)?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8
435D	Were you eligible to receive free medicines during delivery of (NAME)?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____
435E	Were you charged, or did you pay anything for any services provided for delivery of (NAME)?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 436)	YES . . . . . 1 NO 2	YES . . . . . 1 NO 2
435F	What is the total amount you paid for all services or treatments you received for delivery of (NAME)? Please include any money you paid for services, laboratory tests or medicines. RECORD AMOUNT OF MONEY PAID SEPARATELY FOR: THE LABORATORY, MEDICINE, CONSULTATION AND OTHER SERVICES. PAID NO MONEY = 9999994 DON'T KNOW = 9999998	1)LABORATORY 2) MEDICINES 3) DELIVERY 4) OTHER		
436	After you gave birth to (NAME), did anyone check on your health while you were still in the facility?	YES . . . . . 1 (SKIP TO 439) NO 2		
437	Did anyone check on your health after you left the facility?	YES . . . . . 1 (SKIP TO 439) NO . . . . . 2 (SKIP TO 447)		
438	After you gave birth to (NAME), did anyone check on your health?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 442)		
439	Who checked on your health at that time? PROBE FOR MOST QUALIFIED PERSON.	HEALTH PERSONNEL FAMILY DOCTOR . . 11 INTERNIST . . . . . 12 PEDIATRICIAN. . . . 13 GYNECOLOGIST . . 14 OTHER DOCTOR . . 15 FELDSHER . . . . . 16 NURSE/MIDWIFE . . 17 OTHER PERSON TRADITIONAL BIRTH ATTENDANT 21 RELATIVE/FRIEND. 22 OTHER _____ 96 (SPECIFY)		

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____
440	How long after delivery did the first check take place? IF LESS THAN ONE DAY, RECORD HOURS. IF LESS THAN ONE WEEK, RECORD DAYS.	HOURS 1 DAYS 2 WEEKS 3 DON'T KNOW . . . 998		
441	CHECK 437:	YES NOT ASKED (SKIP TO 447)		
442	In the two months after (NAME) was born, did any health care provider or a traditional birth attendant check on his/her health?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 447) DON'T KNOW 8		
443	How many hours, days or weeks after the birth of (NAME) did the first check take place? IF LESS THAN ONE DAY, RECORD HOURS. IF LESS THAN ONE WEEK, RECORD DAYS.	HRS AFTER BIRTH . . 1 DAYS AFTER BIRTH . . 2 WKS AFTER BIRTH . . 3 DON'T KNOW . . . 998		
444	Who checked on (NAME)'s health at that time? PROBE FOR MOST QUALIFIED PERSON.	HEALTH PERSONNEL FAMILY DOCTOR . . 11 INTERNIST . . . . . 12 PEDIATRICIAN. . . . 13 GYNECOLOGIST . . 14 OTHER DOCTOR . . 15 FELDSHER . . . . . 16 NURSE/MIDWIFE . . 17 OTHER PERSON TRADITIONAL BIRTH ATTENDANT 21 RELATIVE/FRIEND. 22 OTHER _____ 96 (SPECIFY)		

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____
445	Where did this first check of (NAME) take place? PROBE TO IDENTIFY THE TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE)	HOME YOUR HOME . . . 11 OTHER HOME . . . 12 PUBLIC SECTOR GOVT. HOSPITAL . . 21 MATERNITY HOME . . 22 DIAGNOSTIC CENTEF 23 WOMEN' S CONSULTATION . . 24 POLYCLINIC . . . . . 25 AMBUL/FML DOC OFF 26 FAP . . . . . 27 OTHER PUBLIC SECTOR _____ 28 (SPECIFY) PRIVATE SECTOR PVT.HOSPITAL . . 41 PVT. MATER. HOME . . 42 PVT. DIAGN. CENTER 43 PVT. WOMEN' S CONSULTATION . . 44 PVT.POLYCLINIC . . . . 45 PVT.FML DOC OFFICE 46 PVT.FAP . . . . . 47 OTHER PRIVATE SECTOR _____ 48 (SPECIFY) OTHER _____ 96 (SPECIFY)		
447	Has your menstrual period returned since the birth of (NAME)?	YES . . . . . 1 (SKIP TO 449) NO . . . . . 2 (SKIP TO 450)		
448	Did your period return between the birth of (NAME) and your next pregnancy?		YES . . . . . 1 NO . . . . . 2 (SKIP TO 452)	YES . . . . . 1 NO . . . . . 2 (SKIP TO 452)
449	For how many months after the birth of (NAME) did you not have a period?	MONTHS . . . ☐☐ DON'T KNOW 98	MONTHS . . . ☐☐ DON'T KNOW 98	MONTHS . . . ☐☐ DON'T KNOW 98
450	CHECK 226: IS RESPONDENT PREGNANT?	NOT PREG-NANT ☐ PREGNANT OR ☐ UNSURE (SKIP TO 452)		
451	Have you had sexual intercourse since the birth of (NAME)?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 453)		
452	For how many months after the birth of (NAME) did you not have sexual intercourse?	MONTHS . . . ☐☐ DON'T KNOW 98	MONTHS . . . ☐☐ DON'T KNOW 98	MONTHS . . . ☐☐ DON'T KNOW 98
453	Did you ever breastfeed (NAME)?	YES . . . . . 1 (SKIP TO 455) NO 2	YES . . . . . 1 NO 2	YES . . . . . 1 NO 2

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____
454	CHECK 404: IS CHILD LIVING?	LIVING ☐ (SKIP TO 460) DEAD ☐ (SKIP TO 460A)		
455	How long after birth did you first put (NAME) to the breast? IF LESS THAN 1 HOUR, RECORD '00' HOURS. IF LESS THAN 24 HOURS, RECORD HOURS. OTHERWISE, RECORD DAYS.	IMMEDIATELY . . . 000 HOURS 1 ☐☐ DAYS 2 ☐☐		
456	In the first three days after delivery, was (NAME) given anything to drink other than breast milk?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 458)		
457	What was (NAME) given to drink? Anything else? RECORD ALL LIQUIDS MENTIONED.	MILK (OTHER THAN BREAST MILK) A PLAIN WATER . . . B SUGAR OR GLUCOSE WATER . . . C GRIPE WATER . . . D SUGAR-SALT-WATER SOLUTION . . . . . E FRUIT JUICE . . . . . F INFANT FORMULA G TEA/INFUSIONS . . . H COFFEE . . . . . I HONEY . . . . . J OTHER _____ X (SPECIFY)		
458	CHECK 404: IS CHILD LIVING?	LIVING ☐ DEAD ☐ (GO TO 460A)	LIVING ☐ DEAD ☐ (GO BACK TO 405 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO501)	LIVING ☐ DEAD ☐ (GO BACK TO 405 IN NEXT-TO-LAST COLUMN OF NEW QUESTIONNAIRE; OR, IF NO MORE BIRTHS, GO TO 501)
459	Are you still breastfeeding (NAME)?	YES . . . . . 1 NO 2		
460	Did (NAME) drink anything from a bottle with a nipple yesterday or last night?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____
460A	During the first six weeks after you were discharged from a health facility where you gave birth to (NAME), did you visit any health facility or a health provider to check on your own health?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 460F) DON'T KNOW 8		
460B	Were you charged, or did you pay anything for any services provided for the last postnatal care visit?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 460D)		
460C	What is the total amount you paid for all services or treatments you received for the last postnatal care visit? Please include any money you paid for services, laboratory tests or medicines. RECORD AMOUNT OF MONEY PAID SEPARATELY FOR: THE LABORATORY, MEDICINE, CONSULTATION AND OTHER SERVICES. PAID NO MONEY = 9999994 DON'T KNOW = 9999998	1)LABORATORY 2) MEDICINES 3) CONSULTATIONS 4) OTHER		
460D	Were you eligible to receive a free outpatient postnatal care after delivery of (NAME)?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8		
460E	Were you eligible to receive free medicines for the postnatal care after delivery of (NAME)?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8		
460F	During the first six weeks after you gave birth to (NAME), did any health provider talked to you about contraception?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 461) DON'T KNOW 8		

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____
460G	Who discussed contraception with you at that time? PROBE FOR MOST QUALIFIED PERSON.	HEALTH PERSONNEL FAMILY DOCTOF . . 11 INTERNIST . . . . . 12 PEDIATRICIAN. . . . 13 GYNECOLOGIST . . 14 OTHER DOCTOR . . 15 FELDSHER . . . . . 16 NURSE/MIDWIFE . . 17 OTHER PERSON TRADITIONAL BIRTH ATTENDANT 21 RELATIVE/FRIEND. 22 OTHER_____ 96 (SPECIFY)		
461		GO BACK TO 405 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 501.	GO BACK TO 405 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 501.	GO BACK TO 405 IN NEXT-TO-LAST COLUMN OF NEW QUESTIONNAIRE; OR, IF NO MORE BIRTHS, GO TO 501.

SECTION 5. CHILD IMMUNIZATION, HEALTH AND NUTRITION

501	ENTER IN THE TABLE THE BIRTH HISTORY NUMBER, NAME, AND SURVIVAL STATUS OF EACH BIRTH IN 2005 OR LATER. ASK THE QUESTIONS ABOUT ALL OF THESE BIRTHS. BEGIN WITH THE LAST BIRTH. (IF THERE ARE MORE THAN 3 BIRTHS, USE LAST 2 COLUMNS OF ADDITIONAL QUESTIONNAIRES).			
502	PREGNANCY NUMBER FROM 212 IN PREGNANCY HISTORY	LAST BIRTH PREGNANCY NUMBER	NEXT-TO-LAST BIRTH PREGNANCY NUMBER	SECOND-FROM-LAST BIRTH PREGNANCY NUMBER . . . . .
503	FROM 216 AND 218	NAME_____ LIVING / DEAD (GO TO 503 IN NEXT COLUMN OR, IF NO MORE BIRTHS, GO TO 553)	NAME_____ LIVING / DEAD (GO TO 503 IN NEXT COLUMN OR, IF NO MORE BIRTHS, GO TO 553)	NAME_____ LIVING / DEAD (GO TO 503 IN NEXT-TO-LAST COLUMN OF NEW QUESTIONNAIRE, OR IF NO MORE BIRTHS, GO TO 553)
504	Do you have a card where (NAME)'s vaccinations are written down? IF YES: May I see it please?	YES, SEEN . . . . . 1 (SKIP TO 506) YES, NOT SEEN . . . . . 2 (SKIP TO 509) NO CARD 3	YES, SEEN . . . . . 1 (SKIP TO 506) YES, NOT SEEN . . . . . 2 (SKIP TO 509) NO CARD 3	YES, SEEN . . . . . 1 (SKIP TO 506) YES, NOT SEEN . . . . . 2 (SKIP TO 509) NO CARD 3
505	Did you ever have a vaccination card for (NAME)?	YES . . . . . 1 (SKIP TO 509) NO 2	YES . . . . . 1 (SKIP TO 509) NO 2	YES . . . . . 1 (SKIP TO 509) NO 2

506 (1) COPY DATES FROM THE CARD.
(2) WRITE '44' IN 'DAY' COLUMN IF CARD SHOWS THAT A DOSE WAS GIVEN, BUT NO DATE IS RECORDED.
(3) WRITE '98' FOR DON'T KNOW IN 'DAY' OR 'MONTH' OR "9998' IN 'YEAR' COLUMN FOR WHICH THE INFORMATION IS NOT GIVEN IF CARD SHOWS THAT A DOSE WAS GIVEN, BUT ONLY PART OF THE DATE IS RECORDED.

	LAST BIRTH DAY	LAST BIRTH MONTH	LAST BIRTH YEAR		NEXT-TO-LAST BIRTH	NEXT-TO-LAST BIRTH DAY	NEXT-TO-LAST BIRTH MONTH	NEXT-TO-LAST BIRTH YEAR		SECOND-FROM-LAST BIRTH	SECOND-FROM-LAST BIRTH DAY	SECOND-FROM-LAST BIRTH MONTH	SECOND-FROM-LAST BIRTH YEAR	
BCG					BCG					BCG				
HEP-1 AT BIRTH					H1					H1				
HEP 2					H2					H2				
HEP 3					H3					H3				
DPT 1					D1					D1				
DPT 2					D2					D2				
DPT 3					D3					D3				
DPT 4-BOOST					D4					D4				
POLIO 1					P1					P1				
POLIO 2					P2					P2				
POLIO 3					P3					P3				
POLIO 4-BOOST					P4					P4				
PENTAVALENT 1					PNT1					PNT1				
PENTAVALENT 2					PNT2					PNT2				
PENTAVALENT 3					PNT3					PNT3				
MMR1					MMR					MMR				

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME ________	NEXT-TO-LAST BIRTH NAME ________	SECOND-FROM-LAST BIRTH NAME ________
508	Has (NAME) had any vaccinations that are not recorded on this card, including vaccinations given in a national immunization day campaign? RECORD 'YES' ONLY IF THE RESPONDENT MENTIONS AT LEAST ONE OF THE VACCINATIONS IN 506 THAT ARE NOT RECORDED AS HAVING BEEN GIVEN.	YES . . . . 1 (PROBE FOR VACCINATIONS AND WRITE '66' IN THE CORRESPONDING DAY COLUMN IN 506) (SKIP TO 512) NO . . . . 2 (SKIP TO 512) DON'T KNOW 8	YES . . . . 1 (PROBE FOR VACCINATIONS AND WRITE '66' IN THE CORRESPONDING DAY COLUMN IN 506) (SKIP TO 512) NO . . . . 2 (SKIP TO 512) DON'T KNOW 8	YES . . . . 1 (PROBE FOR VACCINATIONS AND WRITE '66' IN THE CORRESPONDING DAY COLUMN IN 506) (SKIP TO 512) NO . . . . 2 (SKIP TO 512) DON'T KNOW 8
509	Did (NAME) ever have any vaccinations to prevent him/her from getting diseases, including vaccinations received in a national immunization day campaign?	YES . . . . 1 NO . . . . 2 (SKIP TO 512) DON'T KNOW 8	YES . . . . 1 NO . . . . 2 (SKIP TO 512) DON'T KNOW 8	YES . . . . 1 NO . . . . 2 (SKIP TO 512) DON'T KNOW 8
510	Please tell me if (NAME) had any of the following vaccinations:			
510A	A BCG vaccination against tuberculosis, that is, an injection in the upper left arm that usually causes a scar?	YES . . . . 1 NO . . . . 2 DON'T KNOW 8	YES . . . . 1 NO . . . . 2 DON'T KNOW 8	YES . . . . 1 NO . . . . 2 DON'T KNOW 8
510B	Polio vaccine, that is, drops in the mouth?	YES . . . . 1 NO . . . . 2 (SKIP TO 510E) DON'T KNOW 8	YES . . . . 1 NO . . . . 2 (SKIP TO 510E) DON'T KNOW 8	YES . . . . 1 NO . . . . 2 (SKIP TO 510E) DON'T KNOW 8
510D	How many times was the polio vaccine given?	NUMBER OF TIMES . . . . . ☐	NUMBER OF TIMES . . . . . ☐	NUMBER OF TIMES . . . . . ☐
510E	A DPT vaccination, that is, an injection given in the thigh, sometimes at the same time as polio drops?	YES . . . . 1 NO . . . . 2 (SKIP TO 510G) DON'T KNOW 8	YES . . . . 1 NO . . . . 2 (SKIP TO 510G) DON'T KNOW 8	YES . . . . 1 NO . . . . 2 (SKIP TO 510G) DON'T KNOW 8
510F	How many times was the DPT vaccination given?	NUMBER OF TIMES . . . . . ☐	NUMBER OF TIMES . . . . . ☐	NUMBER OF TIMES . . . . . ☐
510G	A measles injection or an MMR injection - that is, a shot in the thigh at the age of 12 months or older - to prevent him/her from getting measles?	YES . . . . 1 NO . . . . 2 DON'T KNOW 8	YES . . . . 1 NO . . . . 2 DON'T KNOW 8	YES . . . . 1 NO . . . . 2 DON'T KNOW 8
510H	A Hepatitis B vaccination, that is, an injection given in the thigh?	YES . . . . 1 NO . . . . 2 (SKIP TO 510J) DON'T KNOW 8	YES . . . . 1 NO . . . . 2 (SKIP TO 510J) DON'T KNOW 8	YES . . . . 1 NO . . . . 2 (SKIP TO 510J) DON'T KNOW 8
510I	How many times was the Hepatitis B vaccination given?	NUMBER OF TIMES . . . . . ☐	NUMBER OF TIMES . . . . . ☐	NUMBER OF TIMES . . . . . ☐

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME ________	NEXT-TO-LAST BIRTH NAME ________	SECOND-FROM-LAST BIRTH NAME ________
510J	A PENTAVALENT vaccine against five diseases in children — diphtheria, pertussis, tetanus (DPT), hepatitis B and Haemophilus Influenza type B (HIB), that is, an injection given in the thigh at the same time as polio drops? NOTE: THE PENTAVALENT VACCINATION WAS INTRODUCED IN SEPTEMBER **2009** AND REPLACED DPT (1-3) AND HEPATITIS B (2-3) VACCINATIONS	YES . . . . 1 NO . . . . 2 (SKIP TO 512) DON'T KNOW 8	YES . . . . 1 NO . . . . 2 (SKIP TO 512) DON'T KNOW 8	YES . . . . 1 NO . . . . 2 (SKIP TO 512) DON'T KNOW 8
510K	How many times was the PENTAVALENT vaccination given?	NUMBER OF TIMES . . . . . [ ]	NUMBER OF TIMES . . . . . [ ]	NUMBER OF TIMES . . . . . [ ]
512	In the last seven days, was (NAME) given iron pills, sprinkles with iron, or iron syrup like (this/any of these)? SHOW COMMON TYPES OF PILLS/SPRINKLES/ SYRUPS.	YES . . . . 1 NO . . . . 2 DON'T KNOW 8	YES . . . . 1 NO . . . . 2 DON'T KNOW 8	YES . . . . 1 NO . . . . 2 DON'T KNOW 8
513	Was (NAME) given any drug for intestinal worms in the last six months?	YES . . . . 1 NO . . . . 2 DON'T KNOW 8	YES . . . . 1 NO . . . . 2 DON'T KNOW 8	YES . . . . 1 NO . . . . 2 DON'T KNOW 8
514	Has (NAME) had diarrhea in the last 2 weeks?	YES . . . . 1 NO . . . . 2 (SKIP TO 525) DON'T KNOW 8	YES . . . . 1 NO . . . . 2 (SKIP TO 525) DON'T KNOW 8	YES . . . . 1 NO . . . . 2 (SKIP TO 525) DON'T KNOW 8
515	Was there any blood in the stools?	YES . . . . 1 NO . . . . 2 DON'T KNOW 8	YES . . . . 1 NO . . . . 2 DON'T KNOW 8	YES . . . . 1 NO . . . . 2 DON'T KNOW 8
516	Now I would like to know how much (NAME) was given to drink during the diarrhea (including breastmilk). Was he/she given less than usual to drink, about the same amount, or more than usual to drink? IF LESS, PROBE: Was he/she given much less than usual to drink or somewhat less?	MUCH LESS . . . . . 1 SOMEWHAT LESS 2 ABOUT THE SAME 3 MORE . . . . 4 NOTHING TO DRINK 5 DON'T KNOW 8	MUCH LESS . . . . . 1 SOMEWHAT LESS 2 ABOUT THE SAME 3 MORE . . . . 4 NOTHING TO DRINK 5 DON'T KNOW 8	MUCH LESS . . . . . 1 SOMEWHAT LESS 2 ABOUT THE SAME 3 MORE . . . . 4 NOTHING TO DRINK 5 DON'T KNOW 8
517	When (NAME) had diarrhea, was he/she given less than usual to eat, about the same amount, more than usual, or nothing to eat? IF LESS, PROBE: Was he/she given much less than usual to eat or somewhat less?	MUCH LESS . . . . . 1 SOMEWHAT LESS 2 ABOUT THE SAME 3 MORE . . . . 4 STOPPED FOOD 5 NEVER GAVE FOOD 6 DON'T KNOW 8	MUCH LESS . . . . . 1 SOMEWHAT LESS 2 ABOUT THE SAME 3 MORE . . . . 4 STOPPED FOOD 5 NEVER GAVE FOOD 6 DON'T KNOW 8	MUCH LESS . . . . . 1 SOMEWHAT LESS 2 ABOUT THE SAME 3 MORE . . . . 4 STOPPED FOOD 5 NEVER GAVE FOOD 6 DON'T KNOW 8
518	Did you seek advice or treatment for the diarrhea from any source?	YES . . . . 1 NO . . . . 2 (SKIP TO 522)	YES . . . . 1 NO . . . . 2 (SKIP TO 522)	YES . . . . 1 NO . . . . 2 (SKIP TO 522)

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _______________	NEXT-TO-LAST BIRTH NAME _______________	SECOND-FROM-LAST BIRTH NAME _______________
519	Where did you seek advice or treatment? Anywhere else? PROBE TO IDENTIFY EACH TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. _______________ (NAME OF PLACE(S))	PUBLIC SECTOR GOVT. HOSPITAL . . A MATERNITY HOME . . B DIAGNOSTIC CENTEI C WOMEN' S CONSULTATION . . D POLYCLINIC . . . . . E AMBUL/FML DOC OF. F FAP . . . . G OTHER PUBLIC SECTOR _______________ H (SPECIFY) PRIVATE SECTOR PVT.HOSPITAL . . I PVT. MATER. HOM . . J PVT. DIAGN. CENTEF K PVT. WOMEN' S CONSULTATION . . L PVT.POLYCLINI(. . . . M PVT. FML DOC OFC. . N PVT.FAP . . . . O PHARMACY . . . . P OTHER PRIVATE MED. SECTOR _______________ Q (SPECIFY) OTHER SOURCE SHOP . . . . R TRADITIONAL PRACTITIONER S MARKET . . . . . T OTHER _________ X (SPECIFY)	PUBLIC SECTOR GOVT. HOSPITAL . . A MATERNITY HOME . . B DIAGNOSTIC CENTEI C WOMEN' S CONSULTATION . . D POLYCLINIC . . . . . E AMBUL/FML DOC OF. F FAP . . . . G OTHER PUBLIC SECTOR _______________ H (SPECIFY) PRIVATE SECTOR PVT.HOSPITAL . . I PVT. MATER. HOM . . J PVT. DIAGN. CENTEF K PVT. WOMEN' S CONSULTATION . . L PVT.POLYCLINI(. . . . M PVT. FML DOC OFC. . N PVT.FAP . . . . O PHARMACY . . . . P OTHER PRIVATE MED. SECTOR _______________ Q (SPECIFY) OTHER SOURCE SHOP . . . . R TRADITIONAL PRACTITIONER S MARKET . . . . . T OTHER _________ X (SPECIFY)	PUBLIC SECTOR GOVT. HOSPITAL . . A MATERNITY HOME . . B DIAGNOSTIC CENTEI C WOMEN' S CONSULTATION . . D POLYCLINIC . . . . . E AMBUL/FML DOC OF. F FAP . . . . G OTHER PUBLIC SECTOR _______________ H (SPECIFY) PRIVATE SECTOR PVT.HOSPITAL . . I PVT. MATER. HOM . . J PVT. DIAGN. CENTEF K PVT. WOMEN' S CONSULTATION . . L PVT.POLYCLINI(. . . . M PVT. FML DOC OFC. . N PVT.FAP . . . . O PHARMACY . . . . P OTHER PRIVATE MED. SECTOR _______________ Q (SPECIFY) OTHER SOURCE SHOP . . . . R TRADITIONAL PRACTITIONER S MARKET . . . . . T OTHER _________ X (SPECIFY)
520	CHECK 519:	TWO OR MORE CODES CIRCLED ☐ ONLY ONE CODE CIRCLED ☐ (SKIP TO 522)	TWO OR MORE CODES CIRCLED ☐ ONLY ONE CODE CIRCLED ☐ (SKIP TO 522)	TWO OR MORE CODES CIRCLED ☐ ONLY ONE CODE CIRCLED ☐ (SKIP TO 522)
521	Where did you first seek advice or treatment? USE LETTER CODE FROM 519.	FIRST PLACE . . . ☐	FIRST PLACE . . . ☐	FIRST PLACE . . . ☐
522	Was he/she given any of the following to drink at any time since he/she started having the diarrhea:	YES NO DK	YES NO DK	YES NO DK
	a) A fluid made from a special packet called Rehydron or ORS?	FLUID FROM ORS PKT 1 2 8	FLUID FROM ORS PKT 1 2 8	FLUID FROM ORS PKT 1 2 8
	c) A homemade fluid?	HOMEMADE FLUID . . . 1 2 8	HOMEMADE FLUID . . . 1 2 8	HOMEMADE FLUID . . . 1 2 8

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME ________	NEXT-TO-LAST BIRTH NAME ________	SECOND-FROM-LAST BIRTH NAME ________
523	Was anything (else) given to treat the diarrhea?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 525) DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO 525) DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO 525) DON'T KNOW 8
524	What (else) was given to treat the diarrhea? Anything else? RECORD ALL TREATMENTS GIVEN.	PILL OR SYRUP ANTIBIOTIC . . . . . A ANTIMOTILITY B ZINC . . . . . C OTHER (NOT ANTI-BIOTIC, ANTI-MOTILITY, OR ZINC) . . . . . D UNKNOWN PILL OR SYRUP . . . E INJECTION ANTIBIOTIC . . . . . F NON-ANTIBIOTIC G UNKNOWN INJECTION . . . H (IV) INTRAVENOUS I HOME REMEDY/ HERBAL MED-ICINE . . . . . J OTHER ________ X (SPECIFY)	PILL OR SYRUP ANTIBIOTIC . . . . . A ANTIMOTILITY B ZINC . . . . . C OTHER (NOT ANTI-BIOTIC, ANTI-MOTILITY, OR ZINC) . . . . . D UNKNOWN PILL OR SYRUP . . . E INJECTION ANTIBIOTIC . . . . . F NON-ANTIBIOTIC G UNKNOWN INJECTION . . . H (IV) INTRAVENOUS I HOME REMEDY/ HERBAL MED-ICINE . . . . . J OTHER ________ X (SPECIFY)	PILL OR SYRUP ANTIBIOTIC . . . . . A ANTIMOTILITY B ZINC . . . . . C OTHER (NOT ANTI-BIOTIC, ANTI-MOTILITY, OR ZINC) . . . . . D UNKNOWN PILL OR SYRUP . . . E INJECTION ANTIBIOTIC . . . . . F NON-ANTIBIOTIC G UNKNOWN INJECTION . . . H (IV) INTRAVENOUS I HOME REMEDY/ HERBAL MED-ICINE . . . . . J OTHER ________ X (SPECIFY)
525	Has (NAME) been ill with a fever at any time in the last 2 weeks?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8
527	Has (NAME) had an illness with a cough at any time in the last 2 weeks?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 530) DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO 530) DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO 530) DON'T KNOW 8
528	When (NAME) had an illness with a cough, did he/she breathe faster than usual with short, rapid breaths or have difficulty breathing?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 531) DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO 531) DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO 531) DON'T KNOW 8
529	Was the fast or difficult breathing due to a problem in the chest or to a blocked or runny nose?	CHEST ONLY . . . 1 NOSE ONLY . . . . . 2 BOTH . . . . . 3 OTHER ________ 6 (SPECIFY) DON'T KNOW . . . . . 8 (SKIP TO 531)	CHEST ONLY . . . 1 NOSE ONLY . . . . . 2 BOTH . . . . . 3 OTHER ________ 6 (SPECIFY) DON'T KNOW . . . . . 8 (SKIP TO 531)	CHEST ONLY . . . 1 NOSE ONLY . . . . . 2 BOTH . . . . . 3 OTHER ________ 6 (SPECIFY) DON'T KNOW . . . . . 8 (SKIP TO 531)
530	CHECK 525: HAD FEVER?	YES ☐ NO OR DK ☐ (GO BACK TO 503 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 553)	YES ☐ NO OR DK ☐ (GO BACK TO 503 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 553)	YES ☐ NO OR DK ☐ (GO TO 503 IN NEXT-TO-LAST COLUMN OF NEW QUESTIONNAIRE; OR, IF NO MORE BIRTHS, GO TO 553)

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME ________	NEXT-TO-LAST BIRTH NAME ________	SECOND-FROM-LAST BIRTH NAME ________
531	Now I would like to know how much (NAME) was given to drink (including breastmilk) during the illness with a (fever/cough). Was he/she given less than usual to drink, about the same amount, or more than usual to drink? IF LESS, PROBE: Was he/she given much less than usual to drink or somewhat less?	MUCH LESS ..... 1 SOMEWHAT LESS 2 ABOUT THE SAME 3 MORE .... 4 NOTHING TO DRINK 5 DON'T KNOW 8	MUCH LESS ..... 1 SOMEWHAT LESS 2 ABOUT THE SAME 3 MORE .... 4 NOTHING TO DRINK 5 DON'T KNOW 8	MUCH LESS ..... 1 SOMEWHAT LESS 2 ABOUT THE SAME 3 MORE .... 4 NOTHING TO DRINK 5 DON'T KNOW 8
532	When (NAME) had a (fever/cough), was he/she given less than usual to eat, about the same amount, more than usual, or nothing to eat? IF LESS, PROBE: Was he/she given much less than usual to eat or somewhat less?	MUCH LESS ..... 1 SOMEWHAT LESS .. 2 ABOUT THE SAME .. 3 MORE .... 4 STOPPED FOOD .... 5 NEVER GAVE FOO .. 6 DON'T KNOW 8	MUCH LESS ..... 1 SOMEWHAT LESS .. 2 ABOUT THE SAME .. 3 MORE .... 4 STOPPED FOOD .... 5 NEVER GAVE FOO .. 6 DON'T KNOW 8	MUCH LESS ..... 1 SOMEWHAT LESS .. 2 ABOUT THE SAME .. 3 MORE .... 4 STOPPED FOOD .... 5 NEVER GAVE FOO .. 6 DON'T KNOW 8
533	Did you seek advice or treatment for the illness from any source?	YES .... 1 NO .... 2 (SKIP TO 537)	YES .... 1 NO .... 2 (SKIP TO 537)	YES .... 1 NO .... 2 (SKIP TO 537)
534	Where did you seek advice or treatment? Anywhere else? PROBE TO IDENTIFY EACH TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. ________ (NAME OF PLACE(S))	PUBLIC SECTOR GOVT. HOSPITAL .. A MATERNITY HOME .. B DIAGNOSTIC CENTEI C WOMEN' S CONSULTATION .. D POLYCLINIC ..... E AMBUL/FML DOC OF. F FAP .... G OTHER PUBLIC SECTOR ________ H (SPECIFY) PRIVATE SECTOR PVT.HOSPITAL .. I PVT. MATER. HOM .. J PVT. DIAGN. CENTEF K PVT. WOMEN' S CONSULTATION .. L PVT.POLYCLINI(.... M PVT. FML DOC OFCE N PVT.FAP .... O PHARMACY .... P OTHER PRIVATE MED. SECTOR ________ Q (SPECIFY) OTHER SOURCE SHOP .... R TRADITIONAL PRACTITIONER S MARKET ..... T OTHER ________ X (SPECIFY)	PUBLIC SECTOR GOVT. HOSPITAL .. A MATERNITY HOME .. B DIAGNOSTIC CENTEI C WOMEN' S CONSULTATION .. D POLYCLINIC ..... E AMBUL/FML DOC OF. F FAP .... G OTHER PUBLIC SECTOR ________ H (SPECIFY) PRIVATE SECTOR PVT.HOSPITAL .. I PVT. MATER. HOM .. J PVT. DIAGN. CENTEF K PVT. WOMEN' S CONSULTATION .. L PVT.POLYCLINI(.... M PVT. FML DOC OFCE N PVT.FAP .... O PHARMACY .... P OTHER PRIVATE MED. SECTOR ________ Q (SPECIFY) OTHER SOURCE SHOP .... R TRADITIONAL PRACTITIONER S MARKET ..... T OTHER ________ X (SPECIFY)	PUBLIC SECTOR GOVT. HOSPITAL .. A MATERNITY HOME .. B DIAGNOSTIC CENTEI C WOMEN' S CONSULTATION .. D POLYCLINIC ..... E AMBUL/FML DOC OF. F FAP .... G OTHER PUBLIC SECTOR ________ H (SPECIFY) PRIVATE SECTOR PVT.HOSPITAL .. I PVT. MATER. HOM .. J PVT. DIAGN. CENTEF K PVT. WOMEN' S CONSULTATION .. L PVT.POLYCLINI(.... M PVT. FML DOC OFCE N PVT.FAP .... O PHARMACY .... P OTHER PRIVATE MED. SECTOR ________ Q (SPECIFY) OTHER SOURCE SHOP .... R TRADITIONAL PRACTITIONER S MARKET ..... T OTHER ________ X (SPECIFY)

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME ______	NEXT-TO-LAST BIRTH NAME ______	SECOND-FROM-LAST BIRTH NAME ______
535	CHECK 534:	TWO OR MORE CODES CIRCLED ☐ ↓ ONLY ONE CODE CIRCLED ☐ (SKIP TO 537)	TWO OR MORE CODES CIRCLED ☐ ↓ ONLY ONE CODE CIRCLED ☐ (SKIP TO 537)	TWO OR MORE CODES CIRCLED ☐ ↓ ONLY ONE CODE CIRCLED ☐ (SKIP TO 537)
536	Where did you first seek advice or treatment? USE LETTER CODE FROM 534.	FIRST PLACE . . . ☐	FIRST PLACE . . . ☐	FIRST PLACE . . . ☐
537	At any time during the illness, did (NAME) take any drugs for the illness?	YES . . . . 1 NO . . . . 2 GO TO 538A DON'T KNOW 8	YES . . . . 1 NO . . . . 2 GO TO 538A DON'T KNOW 8	YES . . . . 1 NO . . . . 2 GO TO 538A DON'T KNOW 8
538	What drugs did (NAME) take? Any other drugs? RECORD ALL MENTIONED.	ANTIBIOTIC DRUGS AMOX ORAL . . . . . A SUMOMED/AZYTRO-MYCIN ORAL . . . . B CEFAZOLIN ORAL . . C OTHER ORAL ANTIBIOTIC. . . . . . D INJECTION . . . E OTHER DRUGS ASPIRIN . . . . F PARACETOMOL . . . . G NUROPHEN/IBUPROFEI H DOCTOR MOM/SEPTIN/ TONZILGON/FERVEX/ COLDREX/TERAFLU I ACC/FLUCYTEC . . . . . . J OTHER ______ X (SPECIFY) DON'T KNOW . . . . . Z	ANTIBIOTIC DRUGS AMOX ORAL . . . . . A SUMOMED/AZYTRO-MYCIN ORAL . . . . B CEFAZOLIN ORAL . . C OTHER ORAL ANTIBIOTIC. . . . . . D INJECTION . . . E OTHER DRUGS ASPIRIN . . . . F PARACETOMOL . . . . G NUROPHEN/IBUPROFEI H DOCTOR MOM/SEPTIN/ TONZILGON/FERVEX/ COLDREX/TERAFLU I ACC/FLUCYTEC . . . . . . J OTHER ______ X (SPECIFY) DON'T KNOW . . . . . Z	ANTIBIOTIC DRUGS AMOX ORAL . . . . . A SUMOMED/AZYTRO-MYCIN ORAL . . . . B CEFAZOLIN ORAL . . C OTHER ORAL ANTIBIOTIC. . . . . . D INJECTION . . . E OTHER DRUGS ASPIRIN . . . . F PARACETOMOL . . . . G NUROPHEN/IBUPROFEI H DOCTOR MOM/SEPTIN/ TONZILGON/FERVEX/ COLDREX/TERAFLU I ACC/FLUCYTEC . . . . . . J OTHER ______ X (SPECIFY) DON'T KNOW . . . . . Z
538A	In the past 3 months has (NAME) visited a health provider for any reason?	YES . . . . 1 NO . . . . 2 (SKIP TO 552) DON'T KNOW 8	YES . . . . 1 NO . . . . 2 (SKIP TO 552) DON'T KNOW 8	YES . . . . 1 NO . . . . 2 (SKIP TO 552) DON'T KNOW 8

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME ________	NEXT-TO-LAST BIRTH NAME ________	SECOND-FROM-LAST BIRTH NAME ________
538B	Who checked on (NAME)'s health at that time? PROBE FOR MOST QUALIFIED PERSON	HEALTH PERSONNEL FAMILY DOCTOR . . 11 INTERNIST . . . . . .12 PEDIATRICIAN. . . . 13 GYNECOLOGIST . . 14 OTHER DOCTOR . . 15 FELDSHER . . . . . . 16 NURSE/MIDWIFE . . 17 PHARMACIST . . . 18 OTHER PERSON TRAVNIK . . . . . . 21 RELATIVE/FRIEND. 22 OTHER ________ 96 (SPECIFY)	HEALTH PERSONNEL FAMILY DOCTOR . . 11 INTERNIST . . . . . .12 PEDIATRICIAN. . . . 13 GYNECOLOGIST . . 14 OTHER DOCTOR . . 15 FELDSHER . . . . . . 16 NURSE/MIDWIFE . . 17 PHARMACIST . . . 18 OTHER PERSON TRAVNIK . . . . 21 RELATIVE/FRIEND. 22 OTHER ________ 96 (SPECIFY)	HEALTH PERSONNEL FAMILY DOCTOR . . 11 INTERNIST . . . . . .12 PEDIATRICIAN. . . . 13 GYNECOLOGIST . . 14 OTHER DOCTOR . . 15 FELDSHER . . . . . . 16 NURSE/MIDWIFE . . 17 PHARMACIST . . . 18 OTHER PERSON TRAVNIK . . . . 21 RELATIVE/FRIEND. 22 OTHER ________ 96 (SPECIFY)
538C	What type of care did (NAME) receive the last time (NAME) visited a health provider?	PREVENTIVE CARE . . 1 CURATIVE CARE . . . . 2 BOTH . . . . 3 DON'T KNOW 8	PREVENTIVE CARE . . 1 CURATIVE CARE . . . . 2 BOTH . . . . 3 DON'T KNOW 8	PREVENTIVE CARE . . 1 CURATIVE CARE . . . . 2 BOTH . . . . 3 DON'T KNOW 8
538D	Were you charged, or did you pay anything for any services provided for the last visit of (NAME) to a health provider?	YES . . . . 1 NO . . . . 2 (SKIP TO 552)	YES . . . . 1 NO . . . . 2 (SKIP TO 552)	YES . . . . 1 NO . . . . 2 (SKIP TO 552)
538E	What is the total amount you paid for all services or treatments you received for the last visit of (NAME) to a health provider? Please include any money paid for services, laboratory tests or medicines. RECORD AMOUNT OF MONEY PAID SEPARATELY FOR: THE LABORATORY, MEDICINE, CONSULTATION AND OTHER SERVICES. PAID NO MONEY = 9999994 DON'T KNOW = 9999998	1) LABORATORY [ ][ ][ ][ ][ ][ ][ ] 2) MEDICINES [ ][ ][ ][ ][ ][ ][ ] 3) CONSULTATIONS [ ][ ][ ][ ][ ][ ][ ] 4) OTHER [ ][ ][ ][ ][ ][ ][ ]	1) LABORATORY [ ][ ][ ][ ][ ][ ][ ] 2) MEDICINES [ ][ ][ ][ ][ ][ ][ ] 3) CONSULTATIONS [ ][ ][ ][ ][ ][ ][ ] 4) OTHER [ ][ ][ ][ ][ ][ ][ ]	1) LABORATORY [ ][ ][ ][ ][ ][ ][ ] 2) MEDICINES [ ][ ][ ][ ][ ][ ][ ] 3) CONSULTATIONS [ ][ ][ ][ ][ ][ ][ ] 4) OTHER [ ][ ][ ][ ][ ][ ][ ]
552		GO BACK TO 503 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 553.	GO BACK TO 503 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 553.	GO TO 503 IN NEXT-TO-LAST COLUMN OF NEW QUESTIONNAIRE; OR, IF NO MORE BIRTHS, GO TO 553.

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
553	CHECK 214 AND 220, ALL ROWS: NUMBER OF CHILDREN BORN IN 2005 OR LATER LIVING WITH THE RESPONDENT ONE OR MORE ☐ NONE ☐ → 556 RECORD NAME OF YOUNGEST CHILD LIVING WITH HER AND CONTINUE WITH 554 _____ (NAME)		
554	The last time (NAME FROM 553) passed stools, what was done to dispose of the stools?	CHILD USED TOILET OR LATRINE . . . 01 PUT/RINSED INTO TOILET OR LATRINE . . . . . 02 PUT/RINSED INTO DRAIN OR DITCH . . . . . 03 THROWN INTO GARBAGE . . . . . 04 BURIED . . . . . 05 LEFT IN THE OPEN . . . . . 06 OTHER _____ 96 (SPECIFY)	
555	CHECK 522(a) ALL COLUMNS: NO CHILD RECEIVED FLUID FROM ORS PACKET ☐ ANY CHILD RECEIVED FLUID FROM ORS PACKET ☐ → 557		
556	Have you ever heard of a special product called Rehydron or ORS you can get for the treatment of diarrhea?	YES . . . . . 1 NO 2	
557	CHECK 214 AND 220, ALL ROWS: NUMBER OF CHILDREN BORN IN 2008 OR LATER LIVING WITH THE RESPONDENT ONE OR MORE ☐ NONE ☐ → 601 RECORD NAME OF YOUNGEST CHILD LIVING WITH HER AND CONTINUE WITH 558 _____ (NAME)		

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
558	Now I would like to ask you about liquids or foods that (NAME FROM 557) had yesterday during the day or at night. I am interested in whether your child had the item I mention even if it was combined with other foods. Did (NAME FROM 557) (drink/eat):	YES NO DK	
	a) Plain water?	**a)** 1 2 8	
	b) Juice or juice drinks?	**b)** 1 2 8	
	c) Soup?	**c)** 1 2 8	
	d) Milk such as tinned, powdered, or fresh animal milk?	**d)** 1 2 8	
	IF YES: How many times did (NAME) drink milk? IF 7 OR MORE TIMES, RECORD '7'.	NUMBER OF TIMES DRANK MILK ☐	
	e) Infant formula?(CERELAC,HIPP,NESTLE,VINNY,MALYSH,NAN,NESTOGE)	**e)** 1 2 8	
	IF YES: How many times did (NAME) drink infant formula? IF 7 OR MORE TIMES, RECORD '7'.	NUMBER OF TIMES DRANK FORMULA ☐	
	f) Tea or coffee	**f)** 1 2 8	
	g) Any other liquids?	**g)** 1 2 8	
	h) Yogurt/Kefir/Narine/mazoni?	**h)** 1 2 8	
	IF YES: How many times did (NAME) eat yogurt/kefir/Narine/mazoni? IF 7 OR MORE TIMES, RECORD '7'.	NUMBER OF TIMES ATE YOGURT ☐	
	i) Any commercially fortified baby food (HIPP, Nestle,Vinny, Malysh, NAN, Nestoge)	**i)** 1 2 8	
	j) Bread, rice, noodles, porridge, or other foods made from grains?	**j)** 1 2 8	
	k) Red sweet pepper, pumpkin, carrots and squash that are yellow or orange inside?	**k)** 1 2 8	
	l) White potatoes or any other foods made from roots?	**l)** 1 2 8	
	m) Any dark green, leafy vegetables, for example spinach, parsley, coriander?	**m)** 1 2 8	
	n) Ripe mangoes, ripe or dried apricots, dried peaches.	**n)** 1 2 8	
	o) Any other fruits or vegetables?	**o)** 1 2 8	
	p) Liver, kidney, heart or other organ meats?	**p)** 1 2 8	
	q) Any meat, such as beef, pork, lamb, goat, chicken, or duck?	**q)** 1 2 8	
	r) Eggs?	**r)** 1 2 8	
	s) Fresh or dried fish or shellfish?	**s)** 1 2 8	
	t) Any foods made from beans, peas, lentils, or nuts?	**t)** 1 2 8	
	u) Cheese or other food made from milk?	**u)** 1 2 8	
	v) Any other solid, semi-solid, or soft food?	**v)** 1 2 8	
559	CHECK 558 (CATEGORIES "h" THROUGH "v"): ALL "NO" ☐ ↓ AT LEAST ONE "YES" OR ALL DKs ☐ →		561

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
560	Did (NAME) eat any solid, semi-solid, or soft foods yesterday during the day or at night? IF 'YES' PROBE: What kind of solid, semi-solid or soft foods did (NAME) eat?	YES . . . . . 1 (GO BACK TO 558 TO RECORD FOOD EATEN YESTERDAY) NO . . . . . 2 → 601	
561	How many times did (NAME FROM 557) eat solid, semisolid, or soft foods yesterday during the day or at night? IF 7 OR MORE TIMES, RECORD '7'.	NUMBER OF TIMES . . . . . ☐ DON'T KNOW 8	

SECTION 6. MARRIAGE AND SEXUAL ACTIVITY

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
601	Are you currently married or living together with a man as if married?	YES, CURRENTLY MARRIED . . . . . 1 YES, LIVING WITH A MAN . . . . . 2 NO, NOT IN UNION 3	→ 604
602	Have you ever been married or lived together with a man as if married?	YES, FORMERLY MARRIED . . . . . 1 YES, LIVED WITH A MAN . . . . . 2 NO 3	→ 612
603	What is your marital status now: are you widowed, divorced, or separated?	WIDOWED . . . . . 1 DIVORCED . . . . . 2 SEPARATED 3	→ 609
604	Is your (husband/partner) living with you now or is he staying elsewhere?	LIVING WITH HER . . . . . 1 STAYING ELSEWHERE 2	
605	RECORD THE HUSBAND'S/PARTNER'S NAME AND LINE NUMBER FROM THE HOUSEHOLD QUESTIONNAIRE. IF HE IS NOT LISTED IN THE HOUSEHOLD, RECORD '00'.	NAME _____ LINE NO.	
609	Have you been married or lived with a man only once or more than once?	ONLY ONCE . . . . . 1 MORE THAN ONCE 2	
610	CHECK 609: MARRIED/ LIVED WITH A MAN ONLY ONCE → In what month and year did you start living with your (husband/partner)? MARRIED/ LIVED WITH A MAN MORE THAN ONCE → Now I would like to ask about your first (husband/partner). In what month and year did you start living with him?	MONTH . . . . . DON'T KNOW MONTH . . . . . 98 YEAR . . . . . DON'T KNOW YEAR 9998	→ 612
611	How old were you when you first started living with him?	AGE	
612	CHECK FOR THE PRESENCE OF OTHERS. BEFORE CONTINUING, MAKE EVERY EFFORT TO ENSURE PRIVACY.		
613	Now I would like to ask some questions about sexual activity in order to gain a better understanding of some important life issues. How old were you when you had sexual intercourse for the very first time?	NEVER HAD SEXUAL INTERCOURSE . . . . . 00 AGE IN YEARS . . . . . FIRST TIME WHEN STARTED LIVING WITH (FIRST) HUSBAND/PARTNER 95	→ 628
614	Now I would like to ask you some questions about your recent sexual activity. Let me assure you again that your answers are completely confidential and will not be told to anyone. If we should come to any question that you don't want to answer, just let me know and we will go to the next question.		
615	When was the last time you had sexual intercourse? IF LESS THAN 12 MONTHS, ANSWER MUST BE RECORDED IN DAYS, WEEKS OR MONTHS. IF 12 MONTHS (ONE YEAR) OR MORE, ANSWER MUST BE RECORDED IN YEARS.	DAYS AGO . . . . . 1 WEEKS AGO . . . . . 2 MONTHS AGO . . . . . 3 YEARS AGO 4	→ 627

		LAST SEXUAL PARTNER	SECOND-TO-LAST SEXUAL PARTNER	THIRD-TO-LAST SEXUAL PARTNER
616	When was the last time you had sexual intercourse with this person?		DAYS AGO 1 WEEKS AGO 2 MONTHS AGO 3	DAYS AGO 1 WEEKS AGO 2 MONTHS AGO 3
617	The last time you had sexual intercourse (with this second/third person), was a condom used?	YES . . . . 1 NO . . . . 2 (SKIP TO 619)	YES . . . . 1 NO . . . . 2 (SKIP TO 619)	YES . . . . 1 NO . . . . 2 (SKIP TO 619)
618	Was a condom used every time you had sexual intercourse with this person in the last 12 months?	YES . . . . 1 NO 2	YES . . . . 1 NO 2	YES . . . . 1 NO 2
619	What was your relationship to this person with whom you had sexual intercourse? IF BOYFRIEND: Were you living together as if married? IF YES, CIRCLE '2'. IF NO, CIRCLE '3'.	HUSBAND . . . . 1 LIVE-IN PARTNER . . . 2 BOYFRIEND NOT LIVING WITH RESPONDENT . . . 3 CASUAL ACQUAINTANCE . . . 4 PROSTITUTE . . . . 5 OTHER ______ 6 (SPECIFY) (SKIP TO 622)	HUSBAND . . . . 1 LIVE-IN PARTNER . . . 2 BOYFRIEND NOT LIVING WITH RESPONDENT . . . 3 CASUAL ACQUAINTANCE . . . 4 PROSTITUTE . . . . 5 OTHER ______ 6 (SPECIFY) (SKIP TO 622)	HUSBAND . . . . 1 LIVE-IN PARTNER . . . 2 BOYFRIEND NOT LIVING WITH RESPONDENT . . . 3 CASUAL ACQUAINTANCE . . . 4 PROSTITUTE . . . . 5 OTHER ______ 6 (SPECIFY) (SKIP TO 622)
620	CHECK 609:	MARRIED ONLY ONCE MARRIED MORE THAN ONCE (SKIP TO 622)	MARRIED ONLY ONCE MARRIED MORE THAN ONCE (SKIP TO 622)	MARRIED ONLY ONCE MARRIED MORE THAN ONCE (SKIP TO 622)
621	CHECK 613:	FIRST TIME WHEN STARTED LIVING WITH FIRST HUSBAND (SKIP TO 623) OTHER	FIRST TIME WHEN STARTED LIVING WITH FIRST HUSBAND (SKIP TO 623) OTHER	FIRST TIME WHEN STARTED LIVING WITH FIRST HUSBAND (SKIP TO 623) OTHER
622	How long ago did you first have sexual intercourse with this (second/third) person?	DAYS AGO 1 WEEKS AGO 2 MONTHS AGO 3 YEARS AGO 4	DAYS AGO 1 WEEKS AGO 2 MONTHS AGO 3 YEARS AGO 4	DAYS AGO 1 WEEKS AGO 2 MONTHS AGO 3 YEARS AGO 4
623	How many times during the last 12 months did you have sexual intercourse with this person?	NUMBER OF TIMES	NUMBER OF TIMES	NUMBER OF TIMES
624	How old is this person?	AGE OF PARTNER DON'T KNOW 98	AGE OF PARTNER DON'T KNOW 98	AGE OF PARTNER DON'T KNOW 98
625	Apart from (this person/these two people), have you had sexual intercourse with any other person in the last 12 months?	YES . . . . 1 (GO BACK TO 616 IN NEXT COLUMN) NO . . . . 2 (SKIP TO 627)	YES . . . . 1 (GO BACK TO 616 IN NEXT COLUMN) NO . . . . 2 (SKIP TO 627)	
626	In total, with how many different people have you had sexual intercourse in the last 12 months? IF NON-NUMERIC ANSWER, PROBE TO GET AN ESTIMATE. IF NUMBER OF PARTNERS IS 95 OR MORE, WRITE '95'.			NUMBER OF PARTNERS LAST 12 MONTHS . . . DON'T KNOW . . . 98

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
627	In total, with how many different people have you had sexual intercourse in your lifetime? IF NON-NUMERIC ANSWER, PROBE TO GET AN ESTIMATE. IF NUMBER OF PARTNERS IS 95 OR MORE, WRITE '95'.	NUMBER OF PARTNERS IN LIFETIME . . . . . [ ][ ] DON'T KNOW 98	
628	PRESENCE OF OTHERS DURING THIS SECTION	YES NO CHILDREN <10 . . . . . 1 2 MALE ADULTS . . . . . 1 2 FEMALE ADULTS 1 2	
629	Do you know of a place where a person can get condoms?	YES . . . . . 1 NO 2	→ 701
630	Where is that? Any other place? PROBE TO IDENTIFY EACH TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE(S))	PUBLIC SECTOR GOVT. HOSPITAL . . . . . A MATERNITY HOME . . . . . B DIAGNOSTIC CENTER . . . . . C WOMEN' S CONSULTATION . . . . . D POLYCLINIC . . . . . E AMBULATORY/FML DOC.OFFICE . . F FAP . . . . . G OTHER PUBLIC SECTOR _____ H (SPECIFY) PRIVATE MEDICAL SECTOR HOSPITAL . . . . . I MATERNITY HOME . . . . . J DIAGNOSTIC CENTER . . . . . K WOMEN' S CONSULTATION . . . . . L POLYCLINIC . . . . . M FAMILY DOCTOR'S OFFICE . . . . . N FAP . . . . . O PHARMACY . . . . . P OTHER PRIVATE MEDICAL SECTOR _____ Q (SPECIFY) OTHER SOURCE SHOP/MARKET/KIOSK R CHURCH . . . . . S FRIEND/RELATIVE . . . . . T OTHER _____ X (SPECIFY)	
631	If you wanted to, could you yourself get a condom?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW/UNSURE 8	

SECTION 7. FERTILITY PREFERENCES

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
701	CHECK 304: NEITHER STERILIZED HE OR SHE STERILIZED → 712		
702	CHECK 226: PREGNANT NOT PREGNANT OR UNSURE → 704		
703	Now I have some questions about the future. After the child you are expecting now, would you like to have another child, or would you prefer not to have any more children?	HAVE ANOTHER CHILD . . . . . 1 NO MORE . . . . . 2 UNDECIDED/DON'T KNOW 8	→ 705 → 711
704	Now I have some questions about the future. Would you like to have (a/another) child, or would you prefer not to have any (more) children?	HAVE (A/ANOTHER) CHILD . . . . . 1 NO MORE . . . . . 2 SAYS SHE CAN'T GET PREGNANT 3 UNDECIDED/DON'T KNOW 8	→ 707 → 712 → 710
705	CHECK 226: NOT PREGNANT OR UNSURE: How long would you like to wait from now before the birth of (a/another) child? PREGNANT: After the birth of the child you are expecting now, how long would you like to wait before the birth of another child?	MONTHS . . . . . 1 ☐☐ YEARS . . . . . 2 ☐☐ SOON/NOW . . . . . 993 SAYS SHE CAN'T GET PREGNANT 994 AFTER MARRIAGE . . . . . 995 OTHER _____ 996 (SPECIFY) DON'T KNOW 998	→ 710 → 712 → 710
706	CHECK 226: NOT PREGNANT OR UNSURE PREGNANT → 711		
707	CHECK 303: USING A CONTRACEPTIVE METHOD? NOT CURRENTLY USING CURRENTLY USING → 712		
708	CHECK 705: NOT ASKED 24 OR MORE MONTHS OR 02 OR MORE YEARS 00-23 MONTHS OR 00-01 YEAR → 711		

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
709	CHECK 703 AND 704: WANTS TO HAVE A/ANOTHER CHILD ☐↓ — WANTS NO MORE/NONE ☐↓ You have said that you do not want (a/another) child soon. Can you tell me why you are not using a method to prevent pregnancy? Any other reason? — You have said that you do not want any (more) children. Can you tell me why you are not using a method to prevent pregnancy? Any other reason? RECORD ALL REASONS MENTIONED.	NOT MARRIED . . . . . A FERTILITY-RELATED REASONS NOT HAVING SEX . . . . . B INFREQUENT SEX . . . . . C MENOPAUSAL/HYSTERECTOMY D CAN'T GET PREGNANT . . . . . E NOT MENSTRUATED SINCE LAST BIRTH . . . . . F BREASTFEEDING . . . . . G UP TO GOD/FATALISTIC . . . . . H OPPOSITION TO USE RESPONDENT OPPOSED . . . . . I HUSBAND/PARTNER OPPOSED . . . J OTHERS OPPOSED . . . . . K RELIGIOUS PROHIBITION . . . . . L LACK OF KNOWLEDGE KNOWS NO METHOD . . . . . M KNOWS NO SOURCE . . . . . N METHOD-RELATED REASONS SIDE EFFECTS/HEALTH CONCERNS . . . . . O LACK OF ACCESS/TOO FAR . . . . . P COSTS TOO MUCH . . . . . Q PREFERRED METHOD NOT AVAILABLE . . . . . R NO METHOD AVAILABLE . . . . . S INCONVENIENT TO USE . . . . . T INTERFERES WITH BODY'S NORMAL PROCESSES . . . . . U OTHER _____ X (SPECIFY) DON'T KNOW . . . . . Z	
710	CHECK 303: USING A CONTRACEPTIVE METHOD? NOT ASKED ☐↓ — NO, NOT CURRENTLY USING ☐↓ — YES, CURRENTLY USING ☐ →		712
711	Do you think you will use a contraceptive method to delay or avoid pregnancy at any time in the future?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
712	CHECK 218: HAS LIVING CHILDREN ☐↓ — NO LIVING CHILDREN ☐↓ If you could go back to the time you did not have any children and could choose exactly the number of children to have in your whole life, how many would that be? — If you could choose exactly the number of children to have in your whole life, how many would that be? PROBE FOR A NUMERIC RESPONSE.	NONE . . . . . 00 → 714 NUMBER . . . . . ☐☐ OTHER _____ 96 → 714 (SPECIFY)	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
713	How many of these children would you like to be boys, how many would you like to be girls and for how many would it not matter if it's a boy or a girl?	BOYS GIRLS EITHER NUMBER ☐☐ ☐☐ ☐☐ OTHER _____ 96 (SPECIFY)	
714	In the last few months have you: Heard about family planning on the radio? Seen anything about family planning on the television? Read about family planning in a newspaper or magazine? Heard about family planning at a community event? Read about family planning in a pamphlet/poster/leaflet/booklet?	YES NO RADIO . . . . . 1 2 TELEVISION . . . . . 1 2 NEWSPAPER OR MAGAZINE . . . 1 2 COMMUNITY EVENT . . . . . 1 2 PAMPHLET, ETC. 1 2	
714A	Do you know how to give yourself a breast exam?	YES . . . . . 1 NO 2	→ 714C
714B	Have you ever given yourself a breast exam? IF YES: When was the last time that you gave yourself a breast exam?	MONTHS AGO . . . . . ☐☐ NEVER GAVE EXAM 95	
714C	Has a health care provider ever given you a breast exam? IF YES: The last time a health care provider gave you a breast exam, what kind of a breast exam was it?	NEVER GIVEN EXAM . . . . . 1 MANUAL . . . . . 2 ULTRASOUND . . . . . 3 MAMMOGRAM . . . . . 4 OTHER _____ 6 (SPECIFY)	
714D	Have you ever had a PAP smear test to check for cervical cancer?	YES . . . . . 1 NO 2	→ 716
714E	Have you had a PAP smear test in the last 3 years?	YES . . . . . 1 NO 2	
716	CHECK 601: YES, CURRENTLY MARRIED ☐ ↓ ; YES, LIVING WITH A MAN ☐ ↓ ; NO, NOT IN UNION ☐ →		801
717	CHECK 303: USING A CONTRACEPTIVE METHOD? CURRENTLY USING ☐ ↓ ; NOT CURRENTLY USING OR NOT ASKED ☐ →		720
718	Would you say that using contraception is mainly your decision, mainly your (husband's/partner's) decision, or did you both decide together?	MAINLY RESPONDENT . . . . . 1 MAINLY HUSBAND/PARTNER . . . . . 2 JOINT DECISION . . . . . 3 OTHER _____ 6 (SPECIFY)	
719	CHECK 304: NEITHER STERILIZED ☐ ↓ ; HE OR SHE STERILIZED ☐ →		801
720	Does your (husband/partner) want the same number of children that you want, or does he want more or fewer than you want?	SAME NUMBER . . . . . 1 MORE CHILDREN . . . . . 2 FEWER CHILDREN . . . . . 3 DON'T KNOW 8	

SECTION 8. HUSBAND'S BACKGROUND AND WOMAN'S WORK

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
801	CHECK 601 AND 602: CURRENTLY MARRIED/ LIVING WITH A MAN ↓ FORMERLY MARRIED/ LIVED WITH A MAN → 803 NEVER MARRIED AND NEVER LIVED WITH A MAN → 807		
802	How old was your (husband/partner) on his last birthday?	AGE IN COMPLETED YEARS ☐☐	
803	Did your (last) (husband/partner) ever attend school?	YES . . . . . 1 NO 2	→ 806
803A	What is the total number of years of schooling he has had?	YEARS OF SCHOOLING . . . . . ☐☐	
804	What was the highest level of school he attended: primary/secondary, secondary-special or higher?	PRIMARY/SECONDARY . . . . . 1 SECONDARY-SPECIAL . . . . . 2 HIGHER . . . . . 3 DON'T KNOW 8	→ 806
805	What was the highest (grade/class/year) he completed at that level? IF COMPLETED LESS THAN ONE YEAR AT THAT LEVEL, RECORD '00'.	GRADE/CLASS . . . . . ☐☐ DON'T KNOW 98	
805A	CHECK 804 AND 805: CODES "1" PRIMARY/ SECONDARY LEVEL AND GRADE 10+ CIRCLED OR CODE "2" SECONDARY-SPECIAL LEVEL CIRCLED, ASK: ↓ OTHER (CODES "1" PRIMARY/SECONDARY LEVEL AND GRADE 1-9 CIRCLED OR CODE "3" HIGHER LEVEL CIRCLED) → 806 Did he receive a diploma (attestat) for completing secondary education?	YES . . . . . 1 NO 2	
806	CHECK 801: CURRENTLY MARRIED/ LIVING WITH A MAN ↓ What is your (husband's/ partner's) occupation? That is, what kind of work does he mainly do? FORMERLY MARRIED/ LIVED WITH A MAN ↓ What was your (last) (husband's/ partner's) occupation? That is, what kind of work did he mainly do?	_____ ☐☐ _____ _____	
806A	In the last 3 years, has your husband/partner been working abroad for three or more months at a time?	YES . . . . . 1 NO 2	
807	Aside from your own housework, have you done any work in the last seven days?	YES . . . . . 1 NO 2	→ 811
808	As you know, some women take up jobs for which they are paid in cash or kind. Others sell things, have a small business or work on the family farm or in the family business. In the last seven days, have you done any of these things or any other work?	YES . . . . . 1 NO 2	→ 811
809	Although you did not work in the last seven days, do you have any job or business from which you were absent for leave, illness, vacation, maternity leave, or any other such reason?	YES . . . . . 1 NO 2	→ 811
810	Have you done any work in the last 12 months?	YES . . . . . 1 NO 2	→ 815
811	What is your occupation, that is, what kind of work do you mainly do?	_____ ☐☐ _____ _____	
812	Do you do this work for a member of your family, for someone else, or are you self-employed?	FOR FAMILY MEMBER . . . . . 1 FOR SOMEONE ELSE . . . . . 2 SELF-EMPLOYED 3	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
813	Do you usually work throughout the year, or do you work seasonally, or only once in a while?	THROUGHOUT THE YEAR . . . . . 1 SEASONALLY/PART OF THE YEAR 2 ONCE IN A WHILE 3	
814	Are you paid in cash or kind for this work or are you not paid at all?	CASH ONLY . . . . . 1 CASH AND KIND . . . . . 2 IN KIND ONLY . . . . . 3 NOT PAID 4	
815	CHECK 601: CURRENTLY MARRIED/LIVING WITH A MAN ☐ NOT IN UNION ☐ → 823		
816	CHECK 814: CODE 1 OR 2 CIRCLED ☐ OTHER ☐ → 819		
817	Who usually decides how the money you earn will be used: you, your (husband/partner), or you and your (husband/partner) jointly?	RESPONDENT . . . . . 1 HUSBAND/PARTNER . . . . . 2 RESPONDENT AND HUSBAND/PARTNER JOINTLY . . . 3 OTHER _____ 6 (SPECIFY)	
818	Would you say that the money that you earn is more than what your (husband/partner) earns, less than what he earns, or about the same?	MORE THAN HIM . . . . . 1 LESS THAN HIM . . . . . 2 ABOUT THE SAME . . . . . 3 HUSBAND/PARTNER DOESN'T BRING IN ANY MONEY . . . . . 4 → 820 DON'T KNOW 8	
819	Who usually decides how your (husband's/partner's) earnings will be used: you, your (husband/partner), or you and your (husband/partner) jointly?	RESPONDENT . . . . . 1 HUSBAND/PARTNER . . . . . 2 RESPONDENT AND HUSBAND/PARTNER JOINTLY . . . 3 HUSBAND/PARTNER HAS NO EARNINGS . . . . . 4 OTHER _____ 6 (SPECIFY)	
820	Who usually makes decisions about health care for yourself: you, your (husband/partner), you and your (husband/partner) jointly, or someone else?	RESPONDENT . . . . . 1 HUSBAND/PARTNER . . . . . 2 RESPONDENT AND HUSBAND/PARTNER JOINTLY . . . 3 SOMEONE ELSE . . . . . 4 OTHER 6	
821	Who usually makes decisions about making major household purchases?	RESPONDENT . . . . . 1 HUSBAND/PARTNER . . . . . 2 RESPONDENT AND HUSBAND/PARTNER JOINTLY . . . 3 SOMEONE ELSE . . . . . 4 OTHER 6	
822	Who usually makes decisions about visits to your family or relatives?	RESPONDENT . . . . . 1 HUSBAND/PARTNER . . . . . 2 SOMEONE ELSE HUSBAND/PARTNER JOINTLY . . . 3 SOMEONE ELSE . . . . . 4 OTHER 6	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
823	Do you own this or any other house either alone or jointly with someone else?	ALONE ONLY . . . . . 1 JOINTLY ONLY . . . . . 2 BOTH ALONE AND JOINTLY . . . . . 3 DOES NOT OWN 4	
824	Do you own any land either alone or jointly with someone else?	ALONE ONLY . . . . . 1 JOINTLY ONLY . . . . . 2 BOTH ALONE AND JOINTLY . . . . . 3 DOES NOT OWN 4	
825	PRESENCE OF OTHERS AT THIS POINT (PRESENT AND LISTENING, PRESENT BUT NOT LISTENING, OR NOT PRESENT)	PRES./ LISTEN. / PRES./ NOT LISTEN. / NOT PRES. CHILDREN < 10 . . . . . 1 2 3 HUSBAND . . . . . 1 2 3 OTHER MALES . . . . . 1 2 3 OTHER FEMALES . . . 1 2 3	
826	In your opinion, is a husband justified in hitting or beating his wife in the following situations: If she goes out without telling him? If she neglects the children? If she argues with him? If she refuses to have sex with him? If she burns the food?	YES / NO / DK GOES OUT . . . . . 1 2 8 NEGL. CHILDREN . . . 1 2 8 ARGUES . . . . . 1 2 8 REFUSES SEX . . . . . 1 2 8 BURNS FOOD 1 2 8	

SECTION 9. HIV/AIDS

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
901	Now I would like to talk about something else. Have you ever heard of an illness called AIDS?	YES . . . . . 1 NO 2	→ 937
902	Can people reduce their chance of getting the AIDS virus by having just one uninfected sex partner who has no other sex partners?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
903	Can people get the AIDS virus from mosquito bites?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
904	Can people reduce their chance of getting the AIDS virus by using a condom every time they have sex?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
905	Can people get the AIDS virus by sharing food with a person who has AIDS?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
906	Can people get the AIDS virus through saliva by kissing someone infected with the AIDS virus?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
907	Is it possible for a healthy-looking person to have the AIDS virus?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
908	Can the virus that causes AIDS be transmitted from a mother to her baby: During pregnancy? During delivery? By breastfeeding?	YES NO DK DURING PREG. . . . . 1 2 8 DURING DELIVERY. . . 1 2 8 BREASTFEEDING . . . 1 2 8	
909	CHECK 908: AT LEAST ONE 'YES' ☐ OTHER ☐		→ 926
910	Are there any special drugs that a doctor or a nurse can give to a woman infected with the AIDS virus to reduce the risk of transmission to the baby?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
926	I don't want to know the results, but have you ever been tested to see if you have the AIDS virus?	YES . . . . . 1 NO 2	→ 930
927	How many months ago was your most recent HIV test?	MONTHS AGO . . . . . ☐☐ TWO OR MORE YEARS 96	
928	I don't want to know the results, but did you get the results of the test?	YES . . . . . 1 NO 2	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
929	Where was the test done? PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE)	PUBLIC SECTOR GOVT. HOSPITAL . . . . . 11 MATERNITY HOME . . . . . 12 DIAGNOSTIC CENTEI . . . . . 13 WOMEN' S CONSULTATIO . . . . . 14 POLYCLINIC . . . . . 15 AMBULATORY/FML DOC.OFI . . . . . 16 FAP . . . . . 17 OTHER PUBLIC SECTOR _____ 18 (SPECIFY) PRIVATE MEDICAL SECTOR HOSPITAL . . . . . 21 MATERNITY HOME . . . . . 22 DIAGNOSTIC CENTER . . . . . 23 WOMEN' S CONSULTATIO . . . . . 24 POLYCLINIC . . . . . 25 FAMILY DOCTOR'S OFFICE . . . . . 26 FAP . . . . . 27 PHARMACY . . . . . 28 OTHER PRIVATE MEDICAL SECTOR _____ 29 (SPECIFY) OTHER SOURCE HOME . . . . . 31 CORRECTIONAL FACILITY . . . . . 32 OTHER _____ 96 (SPECIFY)	→ 932
930	Do you know of a place where people can go to get tested for the AIDS virus?	YES . . . . . 1 NO 2	→ 932
931	Where is that? Any other place? PROBE TO IDENTIFY EACH TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE(S))	PUBLIC SECTOR GOVT. HOSPITAL . . . . . A MATERNITY HOME . . . . . B DIAGNOSTIC CENTEI . . . . . C WOMEN' S CONSULTATIO . . . . . D POLYCLINIC . . . . . E AMBULATORY/FML DOC.OFI . . . . . F FAP . . . . . G OTHER PUBLIC SECTOR _____ H (SPECIFY) PRIVATE MEDICAL SECTOR HOSPITAL . . . . . I MATERNITY HOME . . . . . J DIAGNOSTIC CENTER . . . . . K WOMEN' S CONSULTATIO . . . . . L POLYCLINIC . . . . . M FAMILY DOCTOR'S OFFICE . . . . . N FAP . . . . . O PHARMACY . . . . . P OTHER PRIVATE MEDICAL SECTOR _____ Q (SPECIFY) OTHER _____ X (SPECIFY)	
932	Would you buy fresh vegetables from a shopkeeper or vendor if you knew that this person had the AIDS virus?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
933	If a member of your family got infected with the AIDS virus, would you want it to remain a secret or not?	YES, REMAIN A SECRET . . . . . 1 NO . . . . . 2 DK/NOT SURE/DEPENDS 8	
934	If a member of your family became sick with AIDS, would you be willing to care for her or him in your own household?	YES . . . . . 1 NO . . . . . 2 DK/NOT SURE/DEPENDS 8	
935	In your opinion, if a female teacher has the AIDS virus but is not sick, should she be allowed to continue teaching in the school?	SHOULD BE ALLOWED . . . . . 1 SHOULD NOT BE ALLOWED . . . . . 2 DK/NOT SURE/DEPENDS 8	
936	Should children age 12-14 be taught about using a condom to avoid getting AIDS?	YES . . . . . 1 NO . . . . . 2 DK/NOT SURE/DEPENDS 8	
937	CHECK 901: HEARD ABOUT AIDS → Apart from AIDS, have you heard about other infections that can be transmitted through sexual contact? NOT HEARD ABOUT AIDS → Have you heard about infections that can be transmitted through sexual contact?	YES . . . . . 1 NO 2	→ 938
937A	Please tell me the names of all STI diseases you have ever heard about. CIRCLE ALL MENTIONED	GONORRHEA . . . . . A SYPHILIS . . . . . B CHLAMYDIA . . . . . C HERPES GENITAL . . . . . D MYCOPLASMA . . . . . E CANDIDA . . . . . F GARDNERELLA . . . . . G CYTOMEGALOVIRUS . . . . . H HPV . . . . . I TB . . . . . J AIDS . . . . . K HEPATITIS C OR B . . . . . L OTHER_____ X (SPECIFY)	
938	CHECK 613: HAS HAD SEXUAL INTERCOURSE NEVER HAD SEXUAL INTERCOURSE →		→ 946
939	CHECK 937: HEARD ABOUT OTHER SEXUALLY TRANSMITTED INFECTIONS? YES NO →		→ 941
940	Now I would like to ask you some questions about your health in the last 12 months. During the last 12 months, have you had a disease which you got through sexual contact?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
941	Sometimes women experience a bad-smelling abnormal genital discharge. During the last 12 months, have you had a bad-smelling abnormal genital discharge?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
942	Sometimes women have a genital sore or ulcer. During the last 12 months, have you had a genital sore or ulcer?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
943	CHECK 940, 941, AND 942: HAS HAD AN INFECTION (ANY 'YES') ↓ HAS NOT HAD AN INFECTION OR DOES NOT KNOW →		946
944	The last time you had (PROBLEM FROM 940/941/942), did you seek any kind of advice or treatment?	YES . . . . . 1 NO 2	→ 946
945	Where did you go? Any other place? PROBE TO IDENTIFY EACH TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE(S))	PUBLIC SECTOR GOVT. HOSPITAL . . . . . A MATERNITY HOME . . . . . B DIAGNOSTIC CENTEI . . . . . C WOMEN' S CONSULTATIO . . . . . D POLYCLINIC . . . . . E AMBULATORY/FML DOC.OFI . . . . . F FAP . . . . . G OTHER PUBLIC SECTOR _____ H (SPECIFY) PRIVATE MEDICAL SECTOR HOSPITAL . . . . . I MATERNITY HOME . . . . . J DIAGNOSTIC CENTER . . . . . K WOMEN' S CONSULTATIO . . . . . L POLYCLINIC . . . . . M FAMILY DOCTOR'S OFFICE . . . . . N FAP . . . . . O PHARMACY . . . . . P OTHER PRIVATE MEDICAL SECTOR _____ Q (SPECIFY) OTHER SOURCE SHOP . . . . . R OTHER _____ X (SPECIFY)	
946	If a wife knows her husband has a disease that she can get during sexual intercourse, is she justified in asking that they use a condom when they have sex?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
947	Is a wife justified in refusing to have sex with her husband when she knows he has sex with other women?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
948	CHECK 601: CURRENTLY MARRIED/ LIVING WITH A MAN ↓ NOT IN UNION →		1001
949	Can you say no to your (husband/partner) if you do not want to have sexual intercourse?	YES . . . . . 1 NO . . . . . 2 DEPENDS/NOT SURE 8	
950	Could you ask your (husband/partner) to use a condom if you wanted him to?	YES . . . . . 1 NO . . . . . 2 DEPENDS/NOT SURE 8	

SECTION 10. OTHER HEALTH ISSUES

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1001	Now I would like to ask you some other questions relating to health matters. Have you had an injection for any reason in the last 12 months? IF YES: How many injections have you had? IF NUMBER OF INJECTIONS IS 90 OR MORE, OR DAILY FOR 3 MONTHS OR MORE, RECORD '90'. IF NON-NUMERIC ANSWER, PROBE TO GET AN ESTIMATE.	NUMBER OF INJECTIONS . . . ☐☐ NONE 00	→ 1004
1002	Among these injections, how many were administered by a doctor, a nurse, a pharmacist, a dentist, or any other health worker? IF NUMBER OF INJECTIONS IS 90 OR MORE, OR DAILY FOR 3 MONTHS OR MORE, RECORD '90'. IF NON-NUMERIC ANSWER, PROBE TO GET AN ESTIMATE.	NUMBER OF INJECTIONS . . . ☐☐ NONE 00	→ 1004
1003	The last time you got an injection from a health worker, did he/she take the syringe and needle from a new, unopened package?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
1004	Do you currently smoke cigarettes?	YES . . . . . 1 NO 2	→ 1006
1005	In the last 24 hours, how many cigarettes did you smoke?	NUMBER OF CIGARETTES . . . . . ☐☐	
1006	Do you currently smoke or use any (other) type of tobacco?	YES . . . . . 1 NO 2	→ 1008
1007	What (other) type of tobacco do you currently smoke or use? RECORD ALL MENTIONED.	PIPE . . . . . A CHEWING TOBACCO . . . . . B SNUFF . . . . . C CIGARS . . . . . D WATER PIPE/NARGILI . . . . . E OTHER _____ X (SPECIFY)	
1008	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?	BIG PROB-LEM / NOT A BIG PROB-LEM PERMISSION TO GO . . . 1 2 GETTING MONEY . . . . . 1 2 DISTANCE . . . . . 1 2 GO ALONE 1 2	
1009	Are you covered by any health insurance?	YES . . . . . 1 NO 2	→ 1011
1010	What type of health insurance are you covered by? RECORD ALL MENTIONED.	BASIC BENEFIT PACKAGE . . . . . A HEALTH INSURANCE THROUGH EMPLOYER . . . . . B ANY OTHER PRIVATELY PURCHASED COMMERCIAL HEALTH INSURANCE C OTHER _____ X (SPECIFY)	
1011	In the last few months have you: a) Heard messages on any health issues on the radio? b) Seen anything about on any health issues on the television? c) Read about on any health issues in a newspaper or magazine?	YES / NO RADIO . . . . . 1 2 TELEVISION . . . . . 1 2 NEWSPAPER OR MAGAZINE . . . 1 2	
1012	Now I would like to ask about your primary health care provider. Have you already chosen your primary doctor?	YES . . . . . 1 NO 2	→ 1017

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1013	What is the specialty of your primary doctor?	FAMILY DOCTOR . . . . . 1 INTERNIST (TERAPEVT) . . . . . 2 PEDIATRICIAN . . . . . 3 OTHER _____ 6 (SPECIFY) DON'T KNOW 8	→ 1017
1014	Does your family doctor work in a health facility serving your home location ("uchastkovaya" clinic)?	YES . . . . . 1 NO 2	
1015	Is (s)he your former general-doctor-internist ("uchastkoviy terapevt") or former pediatrician?	YES, INTERNIST(TERAP . . . . . 1 YES, PEDIATRICIAN . . . . . 2 OTHER DOCTOR SERVED BEFOR . . . . 3 NO 4	
1016	In general, which of the following statements describes best your opinion of the service given by your family doctor the last time you visited him/her for any reason? (READ ALL STATEMENTS, CHECK ONLY ONE) a) I am **very satisfied** with the service given b) I am **more or less satisfied** with the service c) I am **not** satisfied with the service given	VERY SATISFIED . . . . . 1 MORE OR LESS SATISFIED . . . . . 2 NOT SATISFIED 3	
1017	In the past three years since 2007, have you visited a primary health care facility to conduct a preventive (prophylactic) health examination?	YES . . . . . 1 NO 2	→ 1023
1018	When was the last time you visited a health facility to conduct a preventive health examination?	LESS THAN 6 MONTHS AGO . . . . . 1 6-11 MONTHS AGO . . . . . 2 1-3 YEARS AGO . . . . . 3 OTHER _____ 6 (SPECIFY)	
1019	During this last visit, did your doctor tell you that you have hypertension or high blood pressure? IF YES, PROBE WHETHER OR NOT IT WAS THE FIRST TIME	YES, FIRST TIME . . . . . 1 YES, NOT THE FIRST TIME . . . . . 2 NO 3	
1020	During this visit have you been given breast examination?	YES . . . . . 1 NO 2	
1021	During this visit did you have a PAP- smear test to detect cervical cancer?	YES . . . . . 1 NO 2	
1022	During this last visit, did your doctor tell you that you have diabetes or high level of sugar/glucose in blood? IF YES, PROBE WHETHER OR NOT IT WAS THE FIRST TIME	YES, FIRST TIME . . . . . 1 YES, NOT THE FIRST TIME . . . . . 2 NO 3	
1023	Was there a time in the past two months when you felt that you needed to go to the polyclinic or ambulatory?	YES, AND WENT . . . . . 1 YES, DID NOT GO . . . . . 2 NO 3	→ 1100 → 1100
1024	Did you instead go to a hospital or to a specialist?	YES . . . . . 1 NO 2	
1025	What was the reason for not going to the polyclinic or ambulatory? CIRCLE ALL APPLIED	EXPENSIVE . . . . . A NO TRANSPORT . . . . . B LACK OF TIME . . . . . C FEAR OF DIAGNOSIS . . . . . D DIDN'T TRUST PROVIDE . . . . . E NO QUALIFIED DOCTOR . . . . . F NO EQUIMENT . . . . . G FACILITY UNCLEAN . . . . . H OTHER _____ X (SPECIFY) DON'T KNOW . . . . . Y	

INFORMATION ABOUT A HEALTH FACILITY WHERE THE IMMUNIZATION RECORDS (MOH FORMS 063 AND 112) ARE KEPT

1100	CHECK 503, 214 AND 218: HAS LIVING CHILDREN BORN IN JANUARY 2005 OR LATER YES ☐ NO ☐ → 1109			
1101	CHECK 502: FOR LIVING CHILDREN BORN IN JANUARY 2005 OR LATER	LAST BIRTH PREGNANCY LINE NUMBER ☐☐	NEXT-TO-LAST BIRTH PREGNANCY LINE NUMBER ☐☐	SECOND-FROM-LAST BIRTH PREGNANCY LINE NUMBER ☐☐
1102	CHECK 503: FOR LIVING CHILDREN BORN IN JANUARY 2005 OR LATER	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____
	RECORD MOTHER'S AND CHILD'S FULL NAME,CHILD'S BIRTH DATE, CHILD'S HOME ADDRESS AND NAME AND ADDRESS OF THE MEDICAL FACILITY WHERE CHILD'S IMMUNIZATION RECORDS ARE KEPT (MOH FORMS 063 OR 112)			
1103	CHILD'S FULL NAME	CHILD'S FIRST NAME CHILD'S LAST NAME	CHILD'S FIRST NAME CHILD'S LAST NAME	CHILD'S FIRST NAME CHILD'S LAST NAME
1104	MOTHER'S FULL NAME	MOTHER'S FIRST NAME MOTHER'S LAST NAME	MOTHER'S FIRST NAME MOTHER'S LAST NAME	MOTHER'S FIRST NAME MOTHER'S LAST NAME
1105	RECORD CHILD'S DATE OF BIRTH FROM 214	DAY ☐☐ MONTH ☐☐ YR ☐☐☐☐	DAY ☐☐ MONTH ☐☐ YR ☐☐☐☐	DAY ☐☐ MONTH ☐☐ YR ☐☐☐☐
1106	CHILD HOME ADDRESS			
1107	NAME AND ADDRESS OF MEDICAL FACILITY WHERE CHILD'S IMMUNIZATION RECORDS (FORMS # 063 OR #112) ARE KEPT			
1108		GO BACK TO 1101 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 1109.	GO BACK TO 1101 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 1109.	GO TO 1101 IN NEXT-TO-LAST COLUMN OF NEW QUESTIONNAIRE; OR, IF NO MORE BIRTHS, GO TO 1109.
1109	RECORD THE TIME.	HOUR ..... ☐☐ MINUTES ..... ☐☐		
	AFTER COMPLETING ALL INTERVIEWS IN THIS HOUSEHOLD, PLEASE GO TO A MEDICAL FACILITY AND RECORD DATES OF VACCINES IN SECTION 12.			

INSTRUCTIONS:
ONLY ONE CODE SHOULD APPEAR IN ANY BOX.
COLUMN 1 REQUIRES A CODE IN EVERY MONTH.

INFORMATION TO BE CODED FOR EACH COLUMN

COLUMN 1: BIRTHS, PREGNANCIES, CONTRACEPTIVE USE**

- B BIRTHS
- P PREGNANCIES
- T TERMINATIONS

- 0 NO METHOD
- 1 FEMALE STERILIZATION
- 2 MALE STERILIZATION
- 3 IUD
- 4 INJECTABLES
- 5 IMPLANTS
- 6 PILL
- 7 CONDOM
- 8 DIAPHRAGM
- J FOAM OR JELLY
- K LACTATIONAL AMENORRHEA METHOD
- L RHYTHM METHOD
- M FERTILITY WHEEL CALCULATOR
- N WITHDRAWAL
- X OTHER MODERN METHOD
- Y OTHER TRADITIONAL METHOD

COLUMN 2: DISCONTINUATION OF CONTRACEPTIVE USE

- 0 INFREQUENT SEX/HUSBAND AWAY
- 1 BECAME PREGNANT WHILE USING
- 2 WANTED TO BECOME PREGNANT
- 3 HUSBAND/PARTNER DISAPPROVED
- 4 WANTED MORE EFFECTIVE METHOD
- 5 SIDE EFFECTS/HEALTH CONCERNS
- 6 LACK OF ACCESS/TOO FAR
- 7 COSTS TOO MUCH
- 8 INCONVENIENT TO USE
- F UP TO GOD/FATALISTIC
- A DIFFICULT TO GET PREGNANT/MENOPAUSAL
- D MARITAL DISSOLUTION/SEPARATION
- X OTHER _____ (SPECIFY)
- Z DON'T KNOW

				1	2	
	12	DEC	01			
	11	NOV	02			
	10	OCT	03			
	09	SEP	04			
2	08	AUG	05			2
0	07	JUL	06			0
1	06	JUN	07			1
0	05	MAY	08			0
*	04	APR	09			*
	03	MAR	10			
	02	FEB	11			
	01	JAN	12			
	12	DEC	13			
	11	NOV	14			
	10	OCT	15			
	09	SEP	16			
2	08	AUG	17			2
0	07	JUL	18			0
0	06	JUN	19			0
9	05	MAY	20			9
*	04	APR	21			*
	03	MAR	22			
	02	FEB	23			
	01	JAN	24			
	12	DEC	25			
	11	NOV	26			
	10	OCT	27			
	09	SEP	28			
2	08	AUG	29			2
0	07	JUL	30			0
0	06	JUN	31			0
8	05	MAY	32			8
*	04	APR	33			*
	03	MAR	34			
	02	FEB	35			
	01	JAN	36			
	12	DEC	37			
	11	NOV	38			
	10	OCT	39			
	09	SEP	40			
2	08	AUG	41			2
0	07	JUL	42			0
0	06	JUN	43			0
7	05	MAY	44			7
*	04	APR	45			*
	03	MAR	46			
	02	FEB	47			
	01	JAN	48			
	12	DEC	49			
	11	NOV	50			
	10	OCT	51			
	09	SEP	52			
2	08	AUG	53			2
0	07	JUL	54			0
0	06	JUN	55			0
6	05	MAY	56			6
*	04	APR	57			*
	03	MAR	58			
	02	FEB	59			
	01	JAN	60			
	12	DEC	61			
	11	NOV	62			
	10	OCT	63			
	09	SEP	64			
2	08	AUG	65			2
0	07	JUL	66			0
0	06	JUN	67			0
5	05	MAY	68			5
*	04	APR	69			*
	03	MAR	70			
	02	FEB	71			
	01	JAN	72			

* Year of fieldwork is assumed to be 2010. For fieldwork beginning in 2011 or 2012, the years should be adjusted.

** Response categories may be added for other methods, including fertility awareness methods.

INTERVIEWER'S OBSERVATIONS

TO BE FILLED IN AFTER COMPLETING INTERVIEW

COMMENTS ABOUT RESPONDENT:

COMMENTS ON SPECIFIC QUESTIONS:

ANY OTHER COMMENTS:

SUPERVISOR'S OBSERVATIONS

NAME OF SUPERVISOR: _____ DATE: _____

EDITOR'S OBSERVATIONS

NAME OF EDITOR: _____ DATE: _____

SECTION 12. VISIT TO A HEALTH FACILITY TO COLLECT INFORMATION ABOUT IMMUNIZATION (MOH FORMS 063 or 112).

1201	ENTER IN THE TABLE LINE NUMBER, NAME AND INFORMATION ABOUT THE LIVING CHILD, BORN IN 2005 OR LATER, EXACTLY AS IN QUES.1101 AND 1103. (IF 3 OR MORE BIRTHS, USE THE LAST 2 COLUMNS OF ADDITIONAL QUESTIONNAIRES).			
1202	CHECK 1101 AND 1103:	LAST BIRTH PREGNANCY LINE NUMBER . ☐☐ FULL NAME OF THE CHILD	NEXT-TO-LAST-BIRTH PREGNANCY LINE NUMBER . ☐☐ FULL NAME OF THE CHILD	SECOND-FROM-LAST BIRTH PREGNANCY LINE NUMBER . ☐☐ FULL NAME OF THE CHILD
1203	CHECK 1107 ANY INFORMATION ABOUT MEDICAL INSTITUTION KEEPING IMMUNIZATION DATA?	CHECK 1107 YES . . . . . 1 NO . . . . . 2 NEXT CHILD	CHECK 1107 YES . . . . . 1 NO . . . . . 2 NEXT CHILD	CHECK 1107 YES . . . . . 1 NO . . . . . 2 NEXT CHILD
1204	WAS A HEALTH FACILITY VISITED?	YES . . . . . 1 NO . . . . . 2 NEXT CHILD	YES . . . . . 1 NO . . . . . 2 NEXT CHILD	YES . . . . . 1 NO . . . . . 2 NEXT CHILD
1205	ARE THERE IMMUNIZATION RECORDS (FORMS 063 OR 112) IN A HEALTH FACILITY (NAME)?	YES, SEEN . . . . . 1 YES, NOT SEEN . . . . . 2 NEXT CHILD NO RECORD 3	YES, SEEN . . . . . 1 YES, NOT SEEN . . . . . 2 NEXT CHILD NO RECORD 3	YES, SEEN . . . . . 1 YES, NOT SEEN . . . . . 2 NEXT CHILD NO RECORD 3

1206 (1) COPY DATA ABOUT EACH VACCINE FROM IMMUNIZATION RECORDS (MOH FORMS #063 OR #112)

(2) ENTER '44' IN THE COLUMN 'DAY' IF THE CARD READS THAT VACCINATION TOOK PLACE BUT NO DATE IS PROVIDED

(3) WRITE '98' FOR DON'T KNOW IN 'DAY' OR 'MONTH' OR "9998' IN 'YEAR' COLUMN FOR WHICH THE INFORMATION IS NOT GIVEN IF CARD SHOWS THAT A DOSE WAS GIVEN, BUT ONLY PART OF THE DATE IS RECORDED.

	LAST BIRTH			NEXT-TO-LAST-BIRTH			SECOND-FROM-LAST BIRTH		
	DAY	MONTH	YEAR	DAY	MONTH	YEAR	DAY	MONTH	YEAR
BCG									
HEP1 AT BIRTH									
HEP 2									
HEP 3									
DPT 1									
DPT2									
DPT 3									
DPT 4 BOOST									
POLIO 1									
POLIO 2									
POLIO 3									
POLIO 4 BOOST									
PENTAV ALENT1									
PENTAV ALENT2									
PENTAV ALENT3									
MMR									

NOTE: Since 2009 the DPT(1-3) AND HEP B (2-3) vaccines are given as a combined pentavalent vaccine.

2010 ARMENIA DEMOGRAPHIC AND HEALTH SURVEY
MAN'S QUESTIONNAIRE

REPUBLIC OF ARMENIA
NATIONAL STATISTICAL SERVICE
MINISTRY OF HEALTH

IDENTIFICATION

PLACE NAME _____

NAME OF HOUSEHOLD HEAD _____

CLUSTER NUMBER ..... | | | |

HOUSEHOLD NUMBER ..... | | | |

REGION (MARZ) ..... | | | |

NAME AND LINE NUMBER OF MAN _____ | | |

INTERVIEWER VISITS

	1	2	3	FINAL VISIT
DATE				DAY | | MONTH | |
				YEAR | | | |
INTERVIEWER'S NAME				INT. NUMBER | | | |
RESULT*				RESULT |
NEXT VISIT: DATE				TOTAL NUMBER OF VISITS | |
TIME				

*RESULT CODES:

1	COMPLETED	4	REFUSED		
2	NOT AT HOME	5	PARTLY COMPLETED	7	OTHER _____ (SPECIFY)
3	POSTPONED	6	INCAPACITATED		

COUNTRY-SPECIFIC INFORMATION: LANGUAGE OF QUESTIONNAIRE, LANGUAGE OF INTERVIEW, NATIVE LANGUAGE OF RESPONDENT, AND WHETHER TRANSLATOR USED

SUPERVISOR	FIELD EDITOR	OFFICE EDITOR	KEYED BY
NAME _____ | | |	NAME _____ | | |	| |	| |

SECTION 1. RESPONDENT'S BACKGROUND

INTRODUCTION AND CONSENT

INFORMED CONSENT

Hello. My name is _____. I am working with National Statistical Service and Ministry of Health). We are conducting a survey about health all over Armenia. The information we collect will help the government to plan health services. Your household was selected for the survey. The questions usually take about 20 minutes. All of the answers you give will be confidential and will not be shared with anyone other than members of our survey team. You don't have to be in the survey, but we hope you will agree to answer the questions since your views are important. If I ask you any question you don't want to answer, just let me know and I will go on to the next question or you can stop the interview at any time.

In case you need more information about the survey, you may contact the person listed on the card that has already been given to your household.
Do you have any questions? May I begin the interview now?

SIGNATURE OF INTERVIEWER: _____ DATE: _____

RESPONDENT AGREES TO BE INTERVIEWED . . . . . 1 ↓ RESPONDENT DOES NOT AGREE TO BE INTERVIEWED . . . 2 → END

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
101	RECORD THE TIME.	HOUR . . . . . ☐☐ MINUTES . . . . . ☐☐	
102	In what month and year were you born?	MONTH . . . . . ☐☐ DON'T KNOW MONTH . . . . . 98 YEAR . . . . . ☐☐☐☐ DON'T KNOW YEAR 9998	
103	How old were you at your last birthday? COMPARE AND CORRECT 102 AND/OR 103 IF INCONSISTENT.	AGE IN COMPLETED YEARS ☐☐	
104	Have you ever attended school?	YES . . . . . 1 NO 2	→ 110
104A	What is the total number of years of schooling you have had?	YEARS OF SCHOOLING . . . . . ☐☐	
105	What is the highest level of school you attended: primary/ secondary, secondary-special or higher?	PRIMARY/SECONDARY . . . . . 1 SECONDARY-SPECIAL . . . . . 2 HIGHER 3	
106	What is the highest (grade/class/year) you completed at that level? IF COMPLETED LESS THAN ONE YEAR AT THAT LEVEL, RECORD '00'.	GRADE/CLASS/YEAR . . . . . ☐☐	
106A	CHECK 105 AND 106: CODES "1" PRIMARY-SECONDARY LEVEL AND GRADE 10 + CIRCLED OR CODE "2" SECONDARY-SPECIAL LEVEL CIRCLED,ASK: ☐ OTHER (CODES "1" PRIMARY/SECONDARY LEVEL AND GRADE 1-9 CIRCLED OR CODE "3" HIGHER LEVEL CIRCLED) ☐ → 110 Did you receive a diploma (attestat) for completing secondary education?	YES . . . . . 1 NO 2	
110	Do you read a newspaper or magazine, at least once a week, less than once a week or not at all?	AT LEAST ONCE A WEEK . . . . . 1 LESS THAN ONCE A WEEK . . . . . 2 NOT AT ALL 3	
111	Do you listen to the radio, at least once a week, less than once a week or not at all?	AT LEAST ONCE A WEEK . . . . . 1 LESS THAN ONCE A WEEK . . . . . 2 NOT AT ALL 3	
112	Do you watch television, at least once a week, less than once a week or not at all?	AT LEAST ONCE A WEEK . . . . . 1 LESS THAN ONCE A WEEK . . . . . 2 NOT AT ALL 3	
113	In the last 3 years, have you been working abroad for three or more months at a time?	YES . . . . . 1 NO 2	

SECTION 2. REPRODUCTION

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
201	Now I would like to ask about any children you have had during your life. I am interested in all of the children that are biologically yours, even if they are not legally yours or do not have your last name. Have you ever fathered any children with any woman?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 206
202	Do you have any sons or daughters that you have fathered who are now living with you?	YES . . . . . 1 NO 2	→ 204
203	How many sons live with you? And how many daughters live with you? IF NONE, RECORD '00'.	SONS AT HOME . . . . . ☐☐ DAUGHTERS AT HOME . . . . . ☐☐	
204	Do you have any sons or daughters that you have fathered who are alive but do not live with you?	YES . . . . . 1 NO 2	→ 206
205	How many sons are alive but do not live with you? And how many daughters are alive but do not live with you? IF NONE, RECORD '00'.	SONS ELSEWHERE . . . . . ☐☐ DAUGHTERS ELSEWHERE . . . ☐☐	
206	Have you ever fathered a son or a daughter who was born alive but later died? IF NO, PROBE: Any baby who cried or showed signs of life but did not survive?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 208
207	How many boys have died? And how many girls have died? IF NONE, RECORD '00'.	BOYS DEAD . . . . . ☐☐ GIRLS DEAD . . . . . ☐☐	
208	SUM ANSWERS TO 203, 205, AND 207, AND ENTER TOTAL. IF NONE, RECORD '00'.	TOTAL CHILDREN . . . . . ☐☐	
209	CHECK 208: HAS HAD MORE THAN ONE CHILD HAS HAD ONLY ONE CHILD → 212 HAS NOT HAD ANY CHILDREN → 301		
210	Did all of the children you have fathered have the same biological mother?	YES . . . . . 1 NO 2	→ 212
211	In all, how many women have you fathered children with?	NUMBER OF WOMEN . . . . . ☐☐	
212	How old were you when your (first) child was born?	AGE IN YEARS . . . . . ☐☐	
213	CHECK 203 AND 205: AT LEAST ONE LIVING CHILD NO LIVING CHILDREN → 301		
214	How old is your (youngest) child?	AGE IN YEARS . . . . . ☐☐	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
215	CHECK 214: (YOUNGEST) CHILD IS AGE 0-2 YEARS ↓ OTHER → 301		
216	What is the name of your (youngest) child? WRITE NAME OF (YOUNGEST) CHILD _____ (NAME OF (YOUNGEST) CHILD)		
217	When (NAME)'s mother was pregnant with (NAME), did she have any antenatal check-ups?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 219
218	Were you ever present during any of those antenatal check-ups?	PRESENT . . . . . 1 NOT PRESENT 2	
219	Was (NAME) born in a hospital or health facility?	HOSPITAL/HEALTH FACILITY . . . . . 1 OTHER 2	
220	When a child has diarrhea, how much should he or she be given to drink: more than usual, about the same as usual, less than usual, or nothing to drink at all?	MORE THAN USUAL . . . . . 1 ABOUT THE SAME . . . . . 2 LESS THAN USUAL . . . . . 3 NOTHING TO DRINK . . . . . 4 DON'T KNOW 8	

SECTION 3. CONTRACEPTION

301	Now I would like to talk about family planning - the various ways or methods that a couple can use to delay or avoid a pregnancy. Have you ever heard of (METHOD)?		
01	**Female Sterilization**. PROBE: Women can have an operation to avoid having any more children.	YES . . . . . 1 NO 2	
02	**Male Sterilization**. PROBE: Men can have an operation to avoid having any more children.	YES . . . . . 1 NO 2	
03	**IUD**. PROBE: Women can have a loop or coil placed inside them by a doctor or a nurse.	YES . . . . . 1 NO 2	
04	**Injectables**. PROBE: Women can have an injection by a health provider that stops them from becoming pregnant for one or more months.	YES . . . . . 1 NO 2	
05	**Implants**. PROBE: Women can have one or more small rods placed in their upper arm by a doctor or nurse which can prevent pregnancy for one or more years.	YES . . . . . 1 NO 2	
06	**Pill**. PROBE: Women can take a pill every day to avoid becoming pregnant.	YES . . . . . 1 NO 2	
07	**Condom**. PROBE: Men can put a rubber sheath on their penis before sexual intercourse.	YES . . . . . 1 NO 2	
08	**Spermicides**: PROBE: Foam/jelly or vaginal pills that women can insert in their vagina before sexual intercourse to prevent pregnancy.	YES . . . . . 1 NO 2	
09	**Lactational Amenorrhea Method** (LAM)	YES . . . . . 1 NO 2	
10	**Rhythm Method**. PROBE: 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 . . . . . 1 NO 2	
11	**Fertility Wheel Calculator.** PROBE: Ovulation Pinwheel calendar provides day-to-day information on fertility and peak ovulation when a sexually active woman is most likely to get pregnant.	YES . . . . . 1 NO 2	
12	**Withdrawal**. PROBE: Men can be careful and pull out before climax.	YES . . . . . 1 NO 2	
13	**Emergency Contraception**. PROBE: As an emergency measure, within three days (72 hours)after they have unprotected sexual intercourse, women can take special pills to prevent pregnancy.	YES . . . . . 1 NO 2	
14	Have you heard of any other ways or methods that women or men can use to avoid pregnancy?	YES . . . . . 1 _____ (SPECIFY) _____ (SPECIFY) NO 2	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
302	In the last few months have you: Heard about family planning on the radio? Seen anything about family planning on the television? Read about family planning in a newspaper or magazine? Heard about family planning at a community event? Read about family planning in a pamphlet/poster/leaflet/booklet?	YES NO RADIO . . . . . 1 2 TELEVISION . . . . . 1 2 NEWSPAPER OR MAGAZINE . . 1 2 COMMUNITY EVENT . . . . . 1 2 PAMPHLET, ETC . . 1 2	
303	In the last few months, have you discussed family planning with a health worker or health professional?	YES . . . . . 1 NO 2	→ 304
303A	Who discussed family planning with you? RECORD ALL MENTIONED	FAMILY DOCTOR . . . . . A INTERNIST (TERAP . . . . . B PEDIATRICIAN. . . . . C GYNECOLOGIST . . . . . D OTHER DOCTOR. . . . . E FELDSHER . . . . . F NURSE/MIDWIFE. . . . . G DON'T KNOW . . . . . Y	
304	Now I would like to ask you about a woman's risk of pregnancy. From one menstrual period to the next, are there certain days when a woman is more likely to become pregnant when she has sexual relations?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 306
305	Is this time just before her period begins, during her period, right after her period has ended, or halfway between two periods?	JUST BEFORE HER PERIOD BEGINS . . . . . 1 DURING HER PERIOD . . . . . 2 RIGHT AFTER HER PERIOD HAS ENDED . . . . . 3 HALFWAY BETWEEN TWO PERIODS . . . . . 4 OTHER _____ 6 (SPECIFY) DON'T KNOW 8	
306	I will now read you some statements about contraception. Please tell me if you agree or disagree with each one. a) Contraception is a woman's business and a man should not have to worry about it. b) Women who use contraception may become promiscuous.	AGREE / DISAGREE / DK CONTRACEPTION WOMAN'S BUSINESS 1 2 8 WOMEN MAY BECOME PROMISCUOUS 1 2 8	
307	CHECK 301 (07): KNOWS MALE CONDOM YES ☐ NO ☐		→ 401
308	Do you know of a place where a person can get condoms?	YES . . . . . 1 NO 2	→ 401
309	Where is that? Any other place? PROBE TO IDENTIFY EACH TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE(S))	PUBLIC SECTOR GOVT. HOSPITAL . . . . . A MATERNITY HOME . . . . . B DIAGNOSTIC CENTER. . . . . C WOMEN' S CONSULTATIO . . . . . D POLYCLINIC . . . . . E AMBULATORY/FAMILY DOC.OFFICE F FAP . . . . . G OTHER PUBLIC SECTOR _____ H (SPECIFY) PRIVATE MEDICAL SECTOR HOSPITAL . . . . . I MATERNITY HOME . . . . . J DIAGNOSTIC CENTER . . . . . K WOMEN' S CONSULTATIO . . . . . L POLYCLINIC . . . . . M FAMILY DOCTORS' OFFICE . . . . . N FAP . . . . . O PHARMACY . . . . . P OTHER PRIVATE MEDICAL SECTOR _____ Q (SPECIFY) OTHER SOURCE SHOP/MARKET/KIOSK R CHURCH . . . . . S FRIEND/RELATIVE . . . . . T OTHER _____ X (SPECIFY)	
310	If you wanted to, could you yourself get a condom?	YES . . . . . 1 NO 2	

SECTION 4. MARRIAGE AND SEXUAL ACTIVITY

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
401	Are you currently married or living together with a woman as if married?	YES, CURRENTLY MARRIED . . . . . 1 YES, LIVING WITH A WOMAN . . . . . 2 NO, NOT IN UNION 3	→ 404
402	Have you ever been married or lived together with a woman as if married?	YES, FORMERLY MARRIED . . . . . 1 YES, LIVED WITH A WOMAN . . . . . 2 NO 3	→ 413
403	What is your marital status now: are you widowed, divorced, or separated?	WIDOWED . . . . . 1 DIVORCED . . . . . 2 SEPARATED 3	→ 410
404	Is your (wife/partner) living with you now or is she staying elsewhere?	LIVING WITH HIM . . . . . 1 STAYING ELSEWHERE 2	
405	RECORD THE WIFE'S/PARTNER'S NAME AND LINE NUMBER FROM THE HOUSEHOLD QUESTIONNAIRE. IF SHE IS NOT LISTED IN THE HOUSEHOLD, RECORD '00'.	NAME _____ LINE NO.	
405A	In the last 3 years, has your wife/partner been working abroad for three or more months at a time?	YES . . . . . 1 NO 2	
410	Have you been married or lived with a woman only once or more than once?	ONLY ONCE . . . . . 1 MORE THAN ONCE 2	→ 411A
411	In what month and year did you start living with your (wife/partner)?	MONTH	
411A	Now I would like to ask about your first (wife/partner). In what month and year did you start living with her?	DON'T KNOW MONTH . . . . . 98 YEAR	→ 413
		DON'T KNOW YEAR 9998	
412	How old were you when you first started living with her?	AGE	
413	CHECK FOR THE PRESENCE OF OTHERS. BEFORE CONTINUING, MAKE EVERY EFFORT TO ENSURE PRIVACY.		
414	Now I would like to ask some questions about sexual activity in order to gain a better understanding of some important life issues.	NEVER HAD SEXUAL INTERCOURSE 00	→ 501
	How old were you when you had sexual intercourse for the very first time?	AGE IN YEARS	
		FIRST TIME WHEN STARTED LIVING WITH (FIRST) WIFE/PARTNER 95	
415	Now I would like to ask you some questions about your recent sexual activity. Let me assure you again that your answers are completely confidential and will not be told to anyone. If we should come to any question that you don't want to answer, just let me know and we will go to the next question.		
416	When was the last time you had sexual intercourse? IF LESS THAN 12 MONTHS, ANSWER MUST BE RECORDED IN DAYS, WEEKS OR MONTHS. IF 12 MONTHS (ONE YEAR) OR MORE, ANSWER MUST BE RECORDED IN YEARS.	DAYS AGO . . . . . 1 WEEKS AGO . . . . . 2 MONTHS AGO . . . . . 3 YEARS AGO 4	→ 430

		LAST SEXUAL PARTNER	SECOND-TO-LAST SEXUAL PARTNER	THIRD-TO-LAST SEXUAL PARTNER
417	When was the last time you had sexual intercourse with this person?		DAYS AGO 1 WEEKS AGO 2 MONTHS AGO 3	DAYS AGO 1 WEEKS AGO 2 MONTHS AGO 3
418	The last time you had sexual intercourse (with this second/third person), was a condom used?	YES . . . . 1 NO . . . . 2 (SKIP TO 420)	YES . . . . 1 NO . . . . 2 (SKIP TO 420)	YES . . . . 1 NO . . . . 2 (SKIP TO 420)
419	Was a condom used every time you had sexual intercourse with this person in the last 12 months?	YES . . . . 1 NO 2	YES . . . . 1 NO 2	YES . . . . 1 NO 2
420	What was your relationship to this person with whom you had sexual intercourse? IF GIRLFRIEND: Were you living together as if married? IF YES, CIRCLE '2'. IF NO, CIRCLE '3'.	WIFE . . . . 1 LIVE-IN PARTNER . . . . 2 GIRLFRIEND NOT LIVING WITH RESPONDENT . . . . 3 CASUAL ACQUAINTANCE . . . 4 PROSTITUTE . . . . 5 OTHER ______________ 6 (SPECIFY) (SKIP TO 423)	WIFE . . . . 1 LIVE-IN PARTNER . . . . 2 GIRLFRIEND NOT LIVING WITH RESPONDENT . . . . 3 CASUAL ACQUAINTANCE . . . 4 PROSTITUTE . . . . 5 OTHER ______________ 6 (SPECIFY) (SKIP TO 423)	WIFE . . . . 1 LIVE-IN PARTNER . . . . 2 GIRLFRIEND NOT LIVING WITH RESPONDENT . . . . 3 CASUAL ACQUAINTANCE . . . 4 PROSTITUTE . . . . 5 OTHER ______________ 6 (SPECIFY) (SKIP TO 423)
421	CHECK 410:	MARRIED ONLY ONCE ☐ MARRIED MORE THAN ONCE ☐ (SKIP TO 423)	MARRIED ONLY ONCE ☐ MARRIED MORE THAN ONCE ☐ (SKIP TO 423)	MARRIED ONLY ONCE ☐ MARRIED MORE THAN ONCE ☐ (SKIP TO 423)
422	CHECK 414:	FIRST TIME WHEN STARTED LIVING WITH FIRST WIFE ☐ (SKIP TO 424) OTHER ☐	FIRST TIME WHEN STARTED LIVING WITH FIRST WIFE ☐ (SKIP TO 424) OTHER ☐	FIRST TIME WHEN STARTED LIVING WITH FIRST WIFE ☐ (SKIP TO 424) OTHER ☐
423	How long ago did you first have sexual intercourse with this (second/third) person?	DAYS AGO 1 WEEKS AGO 2 MONTHS AGO 3 YEARS AGO 4	DAYS AGO 1 WEEKS AGO 2 MONTHS AGO 3 YEARS AGO 4	DAYS AGO 1 WEEKS AGO 2 MONTHS AGO 3 YEARS AGO 4
424	How many times during the last 12 months did you have sexual intercourse with this person?	NUMBER OF TIMES	NUMBER OF TIMES	NUMBER OF TIMES
425	How old is this person?	AGE OF PARTNER DON'T KNOW 98	AGE OF PARTNER DON'T KNOW 98	AGE OF PARTNER DON'T KNOW 98

		LAST SEXUAL PARTNER	SECOND-TO-LAST SEXUAL PARTNER	THIRD-TO-LAST SEXUAL PARTNER
426	Apart from (this person/these two people), have you had sexual intercourse with any other person in the last 12 months?	YES . . . . . 1 (GO BACK TO 417 IN NEXT COLUMN) NO . . . . . 2 (SKIP TO 428)	YES . . . . . 1 (GO BACK TO 417 IN NEXT COLUMN) NO . . . . . 2 (SKIP TO 428)	
427	In total, with how many different people have you had sexual intercourse in the last 12 months? IF NON-NUMERIC ANSWER, PROBE TO GET AN ESTIMATE. IF NUMBER OF PARTNERS IS 95 OR MORE, WRITE '95'.			NUMBER OF PARTNERS LAST 12 MONTHS . . . ☐☐ DON'T KNOW . . . 98

428	CHECK 420 (ALL COLUMNS): AT LEAST ONE PARTNER IS PROSTITUTE ☐	NO PARTNERS ARE PROSTITUTES ☐ →	430
429	CHECK 420 AND 418 (ALL COLUMNS): CONDOM USED WITH EVERY PROSTITUTE ☐ →		433
	OTHER ☐ →		434

430	In the last 12 months, did you pay anyone in exchange for having sexual intercourse?	YES . . . . . 1 NO 2	→ 432
431	Have you ever paid anyone in exchange for having sexual intercourse?	YES . . . . . 1 NO . . . . . 2 →	434
432	The last time you paid someone in exchange for having sexual intercourse, was a condom used?	YES . . . . . 1 NO . . . . . 2 →	434
433	Was a condom used during sexual intercourse every time you paid someone in exchange for having sexual intercourse in the last 12 months?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
434	In total, with how many different people have you had sexual intercourse in your lifetime? IF NON-NUMERIC ANSWER, PROBE TO GET AN ESTIMATE. IF NUMBER OF PARTNERS IS 95 OR MORE, WRITE '95'.	NUMBER OF PARTNERS IN LIFETIME . . . . . ☐☐ DON'T KNOW 98	

		LAST SEXUAL PARTNER	SECOND-TO-LAST SEXUAL PARTNER	THIRD-TO-LAST SEXUAL PARTNER
435	CHECK 418, MOST RECENT PARTNER (FIRST COLUMN): NOT ASKED → 438 CONDOM USED ↓ NO CONDOM USED → 438			
437	From where did you obtain the condom the last time? PROBE TO IDENTIFY TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE)		PUBLIC SECTOR GOVT. HOSPITAL . . . . . 11 MATERNITY HOME . . . . . 12 DIAGNOSTIC CENTER . . . . . 13 WOMEN' S CONSULTATIO . . . . . 14 POLYCLINIC . . . . . 15 AMBULATORY/FAMILY DOC.OFFICE 16 FAP . . . . . 17 OTHER PUBLIC SECTOR _____ 18 (SPECIFY) PRIVATE MEDICAL SECTOR HOSPITAL . . . . . 21 MATERNITY HOME . . . . . 22 DIAGNOSTIC CENTER . . . . . 23 WOMEN' S CONSULTATIO . . . . . 24 POLYCLINIC . . . . . 25 FAMILY DOCTOR'S OFFICE . . . . . 26 FAP . . . . . 27 PHARMACY . . . . . 28 OTHER PRIVATE MEDICAL SECTOR _____ 29 (SPECIFY) OTHER SOURCE SHOP/MARKET/KIOSK 31 CHURCH . . . . . 32 FRIEND/RELATIVE . . . . . 33 OTHER _____ 96 (SPECIFY)	
438	The last time you had sex did you or your partner use any method (other than a condom) to avoid or prevent a pregnancy?		YES . . . . . 1 NO . . . . . 2 DON'T KNOW . . . . . 8 → 501	
439	What method did you or your partner use? PROBE: Did you or your partner use any other method to prevent pregnancy? RECORD ALL MENTIONED.		FEMALE STERILIZATION . . . . . A MALE STERILIZATION . . . . . B IUD . . . . . C INJECTABLES . . . . . D IMPLANTS . . . . . E PILL . . . . . F DIAPHRAGM . . . . . G FOAM/JELLY . . . . . H LAM . . . . . I RHYTHM METHOD . . . . . J FERTILITY WHEEL CALCULATOR . . . K WITHDRAWAL . . . . . L OTHER MODERN METHOD . . . . . X OTHER TRADITIONAL METHOD . . . . . Y	

SECTION 5. FERTILITY PREFERENCES

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
501	CHECK 401: CURRENTLY MARRIED OR LIVING WITH A WOMAN ↓ NOT IN UNION →		509
502	CHECK 439: MAN NOT STERILIZED ↓ MAN STERILIZED →		509
503	Is your (wife/partner)currently pregnant?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	505
504	Now I have some questions about the future. After the (child/children) you and your (wife(wives)/partner(s)) are expecting now, would you like to have another child, or would you prefer not have any more children?	HAVE ANOTHER CHILD . . . . . 1 NO MORE . . . . . 2 UNDECIDED/DON'T KNOW 8	507 509
505	Now I have some questions about the future. Would you like to have (a/another) child, or would you prefer not to have any (more) children?	HAVE (A/ANOTHER) CHILD . . . . . 1 NO MORE/NONE . . . . . 2 SAYS COUPLE CAN'T GET PREGNANT . . . . . 3 WIFE/PARTNER STERILIZED . . . . . 4 UNDECIDED/DON'T KNOW 8	509
507	CHECK 503: WIFE/PARTNER NOT PREGNANT OR DON'T KNOW ↓ How long would you like to wait from now before the birth of (a/another) child? WIFE/PARTNER PREGNANT ↓ After the birth of the child you are expecting now, how long would you like to wait before the birth of another child?	MONTHS . . . . . 1 ☐☐ YEARS . . . . . 2 ☐☐ SOON/NOW . . . . . 993 COUPLE INFECUND . . . . . 994 OTHER _____ 996 (SPECIFY) DON'T KNOW 998	
509	CHECK 203 AND 205: HAS LIVING CHILDREN ↓ If you could go back to the time you did not have any children and could choose exactly the number of children to have in your whole life, how many would that be? NO LIVING CHILDREN ↓ If you could choose exactly the number of children to have in your whole life, how many would that be? PROBE FOR A NUMERIC RESPONSE.	NONE . . . . . 00 NUMBER . . . . . ☐☐ OTHER _____ 96 (SPECIFY)	601 601
510	How many of these children would you like to be boys, how many would you like to be girls and for how many would it not matter if it's a boy or a girl?	BOYS GIRLS EITHER NUMBER ☐☐ ☐☐ ☐☐ OTHER _____ 96 (SPECIFY)	

SECTION 6. EMPLOYMENT AND GENDER ROLES

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
601	Have you done any work in the last seven days?	YES . . . . . 1 NO 2	→ 604
602	Although you did not work in the last seven days, do you have any job or business from which you were absent for leave, illness, vacation, or any other such reason?	YES . . . . . 1 NO 2	→ 604
603	Have you done any work in the last 12 months?	YES . . . . . 1 NO 2	→ 607
604	What is your occupation, that is, what kind of work do you mainly do?	_____ ☐☐ _____ _____	
605	Do you usually work throughout the year, or do you work seasonally, or only once in a while?	THROUGHOUT THE YEAR . . . . . 1 SEASONALLY/PART OF THE YEAR 2 ONCE IN A WHILE 3	
606	Are you paid in cash or kind for this work or are you not paid at all?	CASH ONLY . . . . . 1 CASH AND KIND . . . . . 2 IN KIND ONLY . . . . . 3 NOT PAID 4	
607	CHECK 401: CURRENTLY MARRIED OR LIVING WITH A WOMAN ☐ ↓ NOT IN UNION ☐ →		612
608	CHECK 606: CODE 1 OR 2 CIRCLED ☐ ↓ OTHER ☐ →		610
609	Who usually decides how the money you earn will be used: you, your (wife/partner), or you and your (wife/partner) jointly?	RESPONDENT . . . . . 1 WIFE/PARTNER . . . . . 2 RESPONDENT AND WIFE/ PARTNER JOINTLY . . . . . 3 OTHER _____ 6 SPECIFY	
610	Who usually makes decisions about health care for yourself: you, your (wife/partner), you and your (wife/partner) jointly, or someone else?	RESPONDENT . . . . . 1 WIFE/PARTNER . . . . . 2 RESPONDENT AND WIFE/ PARTNER JOINTLY . . . . . 3 SOMEONE ELSE . . . . . 4 OTHER _____ 6 SPECIFY	
611	Who usually makes decisions about making major household purchases?	RESPONDENT . . . . . 1 WIFE/PARTNER . . . . . 2 RESPONDENT AND WIFE/ PARTNER JOINTLY . . . . . 3 SOMEONE ELSE . . . . . 4 OTHER _____ 6 SPECIFY	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
612	Do you own this or any other house either alone or jointly with someone else?	ALONE ONLY . . . . . 1 JOINTLY ONLY . . . . . 2 BOTH ALONE AND JOINTLY . . . . . 3 DOES NOT OWN 4	
613	Do you own any land either alone or jointly with someone else?	ALONE ONLY . . . . . 1 JOINTLY ONLY . . . . . 2 BOTH ALONE AND JOINTLY . . . . . 3 DOES NOT OWN 4	
614	In your opinion, is a husband justified in hitting or beating his wife in the following situations:	YES NO DK	
	If she goes out without telling him?	GOES OUT 1 2 8	
	If she neglects the children?	NEGL. CHILDREN . . . 1 2 8	
	If she argues with him?	ARGUES 1 2 8	
	If she refuses to have sex with him?	REFUSES SEX 1 2 8	
	If she burns the food?	BURNS FOOD 1 2 8	

SECTION 7. HIV/AIDS

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
701	Now I would like to talk about something else. Have you ever heard of an illness called AIDS?	YES . . . . . 1 NO 2	→ 723
702	Can people reduce their chance of getting the AIDS virus by having just one uninfected sex partner who has no other sex partners?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
703	Can people get the AIDS virus from mosquito bites?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
704	Can people reduce their chance of getting the AIDS virus by using a condom every time they have sex?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
705	Can people get the AIDS virus by sharing food with a person who has AIDS?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
706	Can people get the AIDS virus through saliva by kissing someone infected with the AIDS virus?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
707	Is it possible for a healthy-looking person to have the AIDS virus?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
708	Can the virus that causes AIDS be transmitted from a mother to her baby: During pregnancy? During delivery? By breastfeeding?	YES NO DK DURING PREG. . . . . 1 2 8 DURING DELIVERY . . . 1 2 8 BREASTFEEDING . . . 1 2 8	
709	CHECK 708: AT LEAST ONE 'YES' ☐ OTHER ☐		→ 711
710	Are there any special drugs that a doctor or a nurse can give to a woman infected with the AIDS virus to reduce the risk of transmission to the baby?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
711	CHECK FOR PRESENCE OF OTHERS. BEFORE CONTINUING, MAKE EVERY EFFORT TO ENSURE PRIVACY.		
712	I don't want to know the results, but have you ever been tested to see if you have the AIDS virus?	YES . . . . . 1 NO 2	→ 716
713	How many months ago was your most recent HIV test?	MONTHS AGO . . . . . ☐☐ TWO OR MORE YEARS 95	
714	I don't want to know the results, but did you get the results of the test?	YES . . . . . 1 NO 2	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
715	Where was the test done? PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE)	PUBLIC SECTOR GOVT. HOSPITAL . . . . . 11 MATERNITY HOME . . . . . 12 DIAGNOSTIC CENTEI . . . . . 13 WOMEN' S CONSULTATIO . . . . . 14 POLYCLINIC . . . . . 15 AMBULATORY/FAMILY DOC.OFFICE 16 FAP . . . . . 17 OTHER PUBLIC SECTOR _____ 18 (SPECIFY) PRIVATE MEDICAL SECTOR HOSPITAL . . . . . 21 MATERNITY HOME . . . . . 22 DIAGNOSTIC CENTER . . . . . 23 WOMEN' S CONSULTATIO . . . . . 24 POLYCLINIC . . . . . 25 FAMILY DOCTORS' OFFICE . . . . . 26 FAP . . . . . 27 PHARMACY . . . . . 28 OTHER PRIVATE MEDICAL SECTOR _____ 29 (SPECIFY) OTHER SOURCE HOME . . . . . 31 CORRECTIONAL FACILITY . . . . . 32 OTHER _____ 96 (SPECIFY)	→ 718
716	Do you know of a place where people can go to get tested for the AIDS virus?	YES . . . . . 1 NO 2	→ 718
717	Where is that? Any other place? PROBE TO IDENTIFY EACH TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE)	PUBLIC SECTOR GOVT. HOSPITAL . . . . . A MATERNITY HOME . . . . . B DIAGNOSTIC CENTEI . . . . . C WOMEN' S CONSULTATIO . . . . . D POLYCLINIC . . . . . E AMBULAT/FAMILY DOC.OFFICE . . . . F FAP . . . . . G OTHER PUBLIC SECTOR _____ H (SPECIFY) PRIVATE MEDICAL SECTOR HOSPITAL . . . . . I MATERNITY HOME . . . . . J DIAGNOSTIC CENTER . . . . . K WOMEN' S CONSULTATIO . . . . . L POLYCLINIC . . . . . M FAMILY DOCTORS' OFFICE . . . . . N FAP . . . . . O PHARMACY . . . . . P OTHER PRIVATE MEDICAL SECTOR _____ Q (SPECIFY) OTHER _____ X (SPECIFY)	
718	Would you buy fresh vegetables from a shopkeeper or vendor if you knew that this person had the AIDS virus?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
719	If a member of your family got infected with the AIDS virus, would you want it to remain a secret or not?	YES, REMAIN A SECRET . . . . . 1 NO . . . . . 2 DK/NOT SURE/DEPENDS 8	
720	If a member of your family became sick with AIDS, would you be willing to care for her or him in your own household?	YES . . . . . 1 NO . . . . . 2 DK/NOT SURE/DEPENDS 8	
721	In your opinion, if a female teacher has the AIDS virus but is not sick, should she be allowed to continue teaching in the school?	SHOULD BE ALLOWED . . . . . 1 SHOULD NOT BE ALLOWED . . . . . 2 DK/NOT SURE/DEPENDS 8	
722	Should children age 12-14 be taught about using a condom to avoid getting AIDS?	YES . . . . . 1 NO . . . . . 2 DK/NOT SURE/DEPENDS 8	
723	CHECK 701: HEARD ABOUT AIDS → Apart from AIDS, have you heard about other infections that can be transmitted through sexual contact? NOT HEARD ABOUT AIDS → Have you heard about infections that can be transmitted through sexual contact?	YES . . . . . 1 NO 2	→ 724
723A	Please tell me the names of all STI diseases you have ever heard about. CIRCLE ALL MENTIONED	GONORRHEA . . . . . A SYPHILIS . . . . . B CHLAMYDIA . . . . . C HERPES GENITAL . . . . . D MYCOPLASMA . . . . . E CANDIDA . . . . . F GARDNERELLA . . . . . G CYTOMEGALOVIRUS . . . . . H HPV . . . . . I TB . . . . . J AIDS . . . . . K HEPATITIS C OR B . . . . . L OTHER_____ X (SPECIFY)	
724	CHECK 414: HAS HAD SEXUAL INTERCOURSE HAS NOT HAD SEXUAL INTERCOURSE →		→ 732
725	CHECK 723: HEARD ABOUT OTHER SEXUALLY TRANSMITTED INFECTIONS? YES NO →		→ 727
726	Now I would like to ask you some questions about your health in the last 12 months. During the last 12 months, have you had a disease which you got through sexual contact?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
727	Sometimes men experience an abnormal discharge from their penis. During the last 12 months, have you had an abnormal discharge from your penis?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
728	Sometimes men have a sore or ulcer near their penis. During the last 12 months, have you had a sore or ulcer near your penis?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
729	CHECK 726, 727, AND 728: HAS HAD AN INFECTION (ANY 'YES') ↓ HAS NOT HAD AN INFECTION OR DOES NOT KNOW →		→ 732
730	The last time you had (PROBLEM FROM 726/727/728), did you seek any kind of advice or treatment?	YES . . . . . 1 NO 2	→ 732
731	Where did you go? Any other place? PROBE TO IDENTIFY EACH TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE(S))	PUBLIC SECTOR GOVT. HOSPITAL . . . . . A MATERNITY HOME . . . . . B DIAGNOSTIC CENTEI . . . . . C WOMEN' S CONSULTATIO . . . . . D POLYCLINIC . . . . . E AMBULATORY/FAMILY DOC. . . . . F FAP . . . . . G OTHER PUBLIC SECTOR _____ H (SPECIFY) PRIVATE MEDICAL SECTOR HOSPITAL . . . . . I MATERNITY HOME . . . . . J DIAGNOSTIC CENTER . . . . . K WOMEN' S CONSULTATIO . . . . . L POLYCLINIC . . . . . M FAMILY DOCTORS' OFFICE . . . . . N FAP . . . . . O PHARMACY . . . . . P OTHER PRIVATE MEDICAL SECTOR _____ Q (SPECIFY) OTHER SOURCE SHOP/MARKET/KIOSK R CHURCH . . . . . S FRIEND/RELATIVE . . . . . T OTHER _____ X (SPECIFY)	
732	If a wife knows her husband has a disease that she can get during sexual intercourse, is she justified in asking that they use a condom when they have sex?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
733	Is a wife justified in refusing to have sex with her husband when she knows her husband has sex with other women?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	

SECTION 8. OTHER HEALTH ISSUES

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
805	Now I would like to ask you some other questions relating to health matters. Have you had an injection for any reason in the last 12 months? IF YES: How many injections have you had? IF NUMBER OF INJECTIONS IS 90 OR MORE, OR DAILY FOR 3 MONTHS OR MORE, RECORD '90'. IF NON-NUMERIC ANSWER, PROBE TO GET AN ESTIMATE.	NUMBER OF INJECTIONS . . . ☐☐ NONE 00	→ 808
806	Among these injections, how many were administered by a doctor, a nurse, a pharmacist, a dentist, or any other health worker? IF NUMBER OF INJECTIONS IS 90 OR MORE, OR DAILY FOR 3 MONTHS OR MORE, RECORD '90'. IF NON-NUMERIC ANSWER, PROBE TO GET AN ESTIMATE.	NUMBER OF INJECTIONS . . . ☐☐ NONE 00	→ 808
807	The last time you got an injection from a health worker, did he/she take the syringe and needle from a new, unopened package?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
808	Do you currently smoke cigarettes?	YES . . . . . 1 NO 2	→ 810
809	In the last 24 hours, how many cigarettes did you smoke?	NUMBER OF CIGARETTES . . . . . ☐☐	
810	Do you currently smoke or use any (other) type of tobacco?	YES . . . . . 1 NO 2	→ 812
811	What (other) type of tobacco do you currently smoke or use? RECORD ALL MENTIONED.	PIPE . . . . . A CHEWING TOBACCO . . . . . B SNUFF . . . . . C CIGARS . . . . . D WATER PIPE/NARGIL . . . . . E OTHER _____ X (SPECIFY)	
812	Are you covered by any health insurance?	YES . . . . . 1 NO 2	→ 814
813	What type of health insurance are you covered by? RECORD ALL MENTIONED.	BASIC BENEFIT PACKAGE . . . . . A HEALTH INSURANCE THROUGH EMPLOYER . . . . . B ANY OTHER PRIVATELY PURCHASED COMMERCIAL HEALTH INSURANCE C OTHER _____ X (SPECIFY)	
814	In the last few months have you: a)Heard messages on any health issues on the radio? b)Seen anything about on any health issues on the television? c) Read about on any health issues in a newspaper or magazine?	YES NO RADIO . . . . . 1 2 TELEVISION . . . . . 1 2 NEWSPAPER OR MAGAZINE . . . 1 2	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
815	Now I would like to ask about your primary health care provider. Have you already chosen your primary doctor?	YES . . . . . 1 NO 2	→ 820
816	What is the specialty of your primary doctor?	FAMILY DOCTOR . . . . . 1 INTERNIST (TERAPEVT) . . . . . 2 PEDIATRICIAN . . . . . 3 OTHER _____ 6 (SPECIFY) DON'T KNOW 8	→ 820
817	Does your family doctor work in a health facility serving your home location ("uchastkovaya" clinic)?	YES . . . . . 1 NO 2	
818	Is (s)he your former general-doctor-internist ("uchastkoviy terapevt") or former pediatrician?	YES, INTERNIST(TERAP . . . . . 1 YES, PEDIATRICIAN . . . . . 2 OTHER DOCTOR SERVED BEFOR . . . . 3 NO 4	
819	In general, which of the following statements describes best your opinion of the service given by your family doctor the last time you visited him/her for any reason? (READ ALL STATEMENTS, CHECK ONLY ONE) a) I am **very satisfied** with the service given b) I am **more or less satisfied** with the service c) I am **not** satisfied with the service given	VERY SATISFIED . . . . . 1 MORE OR LESS SATISFIED . . . . . 2 NOT SATISFIED 3	
820	In the past three years since 2007, have you visited a primary health care facility to conduct a preventive (prophylactic) health examination?	YES . . . . . 1 NO 2	→ 826
821	When was the last time you visited a health facility to conduct a preventive health examination?	LESS THAN 6 MONTHS AGO . . . . . 1 6-11 MONTHS AGO . . . . . 2 1-3 YEARS AGO . . . . . 3 OTHER _____ 6 (SPECIFY)	
822	During this last visit, did your doctor tell you that you have hypertension or high blood pressure? IF YES, PROBE WHETHER OR NOT IT WAS THE FIRST TIME	YES, FIRST TIME . . . . . 1 YES, NOT THE FIRST TIME . . . . . 2 NO 3	
823	During this visit have you been given prostate examination?	YES . . . . . 1 NO 2	
824	During this last visit, did your doctor tell you that you have lung disease? IF YES, PROBE WHETHER OR NOT IT WAS THE FIRST TIME	YES, FIRST TIME . . . . . 1 YES, NOT THE FIRST TIME . . . . . 2 NO 3	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
825	During this last visit, did your doctor tell you that you have diabetes or high level of sugar/glucose in blood? IF YES, PROBE WHETHER OR NOT IT WAS THE FIRST TIME	YES, FIRST TIME . . . . . 1 YES, NOT THE FIRST TIME . . . . . 2 NO 3	
826	Was there a time in the past two months when you felt that you needed to go to the polyclinic or ambulatory?	YES, AND WENT . . . . . 1 YES, DID NOT GO . . . . . 2 NO 3	→ 829 → 829
827	Did you instead go to a hospital or to a specialist?	YES . . . . . 1 NO 2	
828	What was the reason for not going to the polyclinic or ambulatory? CIRCLE ALL APPLIED	EXPENSIVE . . . . . A NO TRANSPORT . . . . . B LACK OF TIME . . . . . C FEAR OF DIAGNOSIS . . . . . D DIDN'T TRUST PROVIDE . . . . . E NO QUALIFIED DOCTOR . . . . . F NO EQUIPMENT . . . . . G FACILITY UNCLEAN . . . . . H OTHER _____ X (SPECIFY) DON'T KNOW . . . . . Y	
829	RECORD THE TIME.	HOUR . . . . . [ ][ ] MINUTES . . . . . [ ][ ]	

INTERVIEWER'S OBSERVATIONS

TO BE FILLED IN AFTER COMPLETING INTERVIEW

COMMENTS ABOUT RESPONDENT:

COMMENTS ON SPECIFIC QUESTIONS:

ANY OTHER COMMENTS:

SUPERVISOR'S OBSERVATIONS

NAME OF SUPERVISOR: _____ DATE: _____

EDITOR'S OBSERVATIONS

NAME OF EDITOR: _____ DATE: _____