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2012

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DEMOGRAPHIC AND HEALTH SURVEY

2012

Statistical Agency under the President of the Republic of Tajikistan
Dushanbe, Tajikistan

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Cover motif: Ceiling fragment at Rohat's teahouse, Dushanbe
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This report summarizes the findings of 2012 Tajikistan Demographic and Health Surveys (TjDHS) conducted by the Statistical Agency under the President of the Republic of Tajikistan in collaboration with the Ministry of Health. Support for the 2012 TjDHS was provided by the United States Agency for International Development (USAID) as part of the MEASURE DHS project. Additional funding and support for the 2012 TjDHS was received from the United Nations Population Fund (UNFPA). The TjDHS is part of the worldwide Demographic and Health Surveys program, which is designed to collect data on fertility, family planning, and maternal and child health. The opinions expressed in this report are those of the authors and do not necessarily reflect the views of USAID, the government of Tajikistan, or donor organizations.

Additional information about the 2012 TjDHS may be obtained from the Statistical Agency under the President of the Republic of Tajikistan: 17 Bokhtar Street, Dushanbe, Tajikistan; Telephone 992-372-23-02-45, Fax: 992-372-21-43-75, E-mail: stat@tojikiston.com.

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: info@measuredhs.com, Internet: http://www.measuredhs.com.

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Mrs. Bakhtya Muhammadieva
Director, Statistical Agency under the President of the
Republic of Tajikistan, and National Coordinator, 2012 TjDHS

MILLENNIUM DEVELOPMENT GOAL INDICATORS

Millennium Development Goal Indicators

Tajikistan, 2012

Indicator	Sex: Male	Sex: Female	Total
1. Eradicate extreme poverty and hunger			
1.8 Prevalence of underweight children under 5 years of age	12.3	11.9	12.1
2. Achieve universal primary education			
2.1 Net attendance ratio in primary education[1]	94.0	93.5	93.8
3. Promote gender equality and empower women			
3.1 Ratio of girls to boys in primary, secondary and tertiary education			
3.1a Ratio of girls to boys in primary education[2]	na	na	1.0
3.1b Ratio of girls to boys in secondary education[2]	na	na	1.0
3.1c Ratio of girls to boys in tertiary education[2]	na	na	0.3
4. Reduce child mortality			
4.1 Under five mortality rate[3]	51	46	43
4.2 Infant mortality rate[3]	41	36	34
4.3 Percentage of 1 year old children immunized against measles[4]	95.0	95.5	95.2
5. Improve maternal health			
5.2 Percentage of births attended by skilled health personnel[5]	na	na	87.4
5.3 Contraceptive prevalence rate[6]	na	27.9	na
5.4 Adolescent birth rate[7]	na	53.6	na
5.5 Antenatal care coverage			
5.5a At least one visit[8]	na	78.8	na
5.5b Four or more visits[9]	na	52.5	na
5.6 Unmet need for family planning[10]	na	22.9	na
6. Combat HIV/AIDS, malaria and other diseases			
6.3 Percentage of the population age 15-24 years with comprehensive correct knowledge of HIV/AIDS[11]	na	8.7	na
6.4 Ratio of school attendance of orphans to school attendance of non-orphans age 10-14 years	0.96	0.65	0.81
	Urban	**Rural**	**Total**
7. Ensure environmental sustainability			
7.8 Percentage of population using an improved water source[12]	94.1	70.6	76.2
7.9 Percentage of population using an improved sanitation facility[13]	92.9	94.6	94.2

na = Not applicable

[1] This is a proxy for MDG indicator 2.1, Net enrollment ratio. The ratio is based on reported attendance, not enrollment, in primary education among primary school age children (7-10 year-olds). The rate also includes children of primary school age enrolled in secondary education and therefore is different from the Net Attendance Ratio (NAR) for primary school presented in this report in Table 2.12.

[2] Based on reported net attendance, not gross enrollment, among 7-10 year-olds for primary, 11-17 year-olds for secondary and 18-22 year-olds for tertiary education.

[3] Expressed in terms of deaths per 1,000 live births. Mortality by sex refers to a 10-year reference period preceding the survey. Mortality rates for males and females combined refer to the 5-year period preceding the survey.

[4] In Tajikistan, measles vaccinations are given at the age of 12 months (unlike the standard 9 months in many countries). The values presented in the MDG table are for children age 18-29 months who have been vaccinated against measles or MR at any time before the survey.

[5] Among births in the five years preceding the survey.

[6] Percentage of currently married women age 15-49 using any method of contraception.

[7] Equivalent to the age-specific fertility rate for women age 15-19 for the 3-year period preceding the survey, expressed in terms of births per 1,000 women age 15-19.

[8] With a skilled provider.

[9] With any healthcare provider.

[10] Numbers in this table correspond to the revised definition of unmet need described in Bradley et al., 2012.

[11] 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 transmission or prevention of the AIDS virus.

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

[13] Percentage of de jure population whose household has a flush toilet, ventilated improved pit latrine, pit latrine with a slab, or composting toilet and does not share this facility with other households.

TAJIKISTAN

N
KAZAKHSTAN
KYRGYZSTAN
UZBEKISTAN
Sughd
Districts of
Republican Subordination
(DRS)
Dushanbe
CHINA
Gorno-Badakhshan
Autonomous Oblast
(GBAO)
Khatlon
AFGHANISTAN
PAKISTAN
0 50 100 200
Kilometers

INTRODUCTION 1

1.1 GEOGRAPHY AND POPULATION

The republic of Tajikistan is a small, landlocked country located in the southeastern region of Central Asia. The territory of Tajikistan covers 142,600 square kilometers and is bordered by Uzbekistan and Kyrgyzstan to the west and north, China to the east, and Afghanistan to the south. The country's border is about 3,000 kilometers long. The capital city of Tajikistan is Dushanbe.

Nearly all of Tajikistan is mountainous, with 93 percent of the country covered by the massive mountain systems of Central Asia—the Trans-Alay range in the North and the Pamir Mountains in the Southeast. Somoni Peak, formerly Communism Peak, is the tallest mountain in Tajikistan and in the former Soviet Union (7,495 meters).

Tajikistan's climate is mainly continental, with mild winters and hot summers, but it varies with the altitude. The climate is arid in the subtropical, southwestern lowlands, which have the highest temperatures, and it changes from semi-arid to polar in the Pamir Mountains in the southeast (Curtis, 1997).

Tajikistan's wealth is in its hydropower resources. Among the countries of the former Soviet Union, Tajikistan is second only to Russia in its water resources and has a greater hydroelectric power capacity than any other country in Central Asia. Tajikistan's glaciers and rivers provide an estimated four percent of the world's hydropower resources. The main rivers are the Syr-Darya, Amu-Darya, and Zarafshan. The majority of Tajikistan's hydroelectric energy is produced by hydroelectric stations, including the Varzob, Kayrakkum, Sarband, Nurek, Baipasi, and Sangtuda.

The country's flora and fauna are wonderfully rich and diverse, and include rare species such as the snow leopard, the Macro Polo sheep, the bar-headed migrating goose, the Bukhara red deer, the desert antelope, and the Siberian ibex.

The country is rich in mineral resources; there are many deposits of rare and precious metals such as zinc, lead, bismuth, molybdenum, tungsten, gold, silver, aluminum, antimony, mercury, and fluorspar, as well as coal, gas, oil, and other natural resources.

Tajikistan is a sovereign, democratic, secular, and unitary state. It is also a presidential democracy. The president is elected by the citizens of Tajikistan on the basis of a universal, equal, and direct vote for a seven-year term. The last election was held on November 6, 2007; the president of Tajikistan is the head of state and head of the executive branch of government.

Tajikistan consists of the two administrative regions (oblasts) of Khatlon and Sughd, the Gorno-Badakhshan Autonomous Oblast (GBAO), the Districts of Republican Subordination (DRS), and Dushanbe City. Each region is further broken down into administrative areas called rayons. There are 58 rayons and 74 towns and urban settlements in Tajikistan.

With a population of 8 million in 2013, Tajikistan is the seventh most populous country of the former Soviet Union, following in order, Russia, Ukraine, Uzbekistan, Kazakhstan, Belarus, and Azerbaijan. Approximately 73 percent of the population resides in rural areas. The country is characterized by a high rate of population growth, mainly due to the high (although declining) birth rate (28 per 1,000 population in 2012 as opposed to 39 per 1,000 in 1991) and relatively low death rate (4.3 per 1,000 population in 2012) (SA, 2013b). The size of the resident population enumerated in the 2010 census increased by 24 percent or 1.5 million persons compared with the 2000 census (Table 1.1). As a result of

high fertility and population growth rates, Tajikistan has a young population: 35 percent of the population is under age 15, and the percentage over age 65 is relatively small at 3 percent (SA, 2013b).

Life expectancy in Tajikistan steadily declined after the collapse of the Soviet Union, especially among men during the civil war (1991-1997). In 1993, life expectancy was 68.0 years for women and 56.4 years for men, a difference of nearly 12 years. By 2012, however, life expectancy had increased to 74.6 years for women and 71.1 years for men, a difference between the sexes of only three and a half years. Tajikistan has a double burden of disease, with the majority of deaths being due to cardiovascular diseases (50 percent of all causes), and with malignant neoplasms (cancers) and respiratory, digestive, infectious, and parasitic diseases also being prevalent. A rapid increase in multidrug-resistant tuberculosis and injection drug use is of particular concern.

Table 1.1 Basic demographic indicators

Demographic indicators from selected sources, Tajikistan

Indicators	Tajikistan Census 2000	Tajikistan Census 2010
Population (millions)	6.1	7.6
Intercensal growth rate (percent)	20.3	23.5
Density (population/km^2)	43	53
Percent urban	26.5	26.5
Life expectancy (years)	68.2	72.5
Male	66.1	70.8
Female	70.3	74.4

Source: SA, 2012a. Demographic year book of the Republic of Tajikistan

The population density of Tajikistan is 56 persons per square kilometer. However, the population is unevenly distributed among the regions. The population is mainly concentrated in the cultivated lands and in the industrialized urban areas. The capital of Tajikistan, Dushanbe, with a population of more than 764,000, is the largest city in Tajikistan.

Tajikistan is a multinational country. According to the 2010 Population Census, people of more than 100 nationalities live in Tajikistan. The majority are Tajik, constituting more than 85 percent of the population. Other major ethnic groups are the Uzbek, Kyrgyz, Russian, and Turkmen. The official state language is Tajik. Russian is widely spoken as the language of “inter-ethnic” communication. Any nationality or ethnic group living in Tajikistan has the right to freely use its own language. The Tajik language belongs to the Persian group of languages.

1.2 History of Tajik Culture

Tajikistan is one of the world’s most ancient civilizations. Around the 6-4 centuries B.C., much of what is today Tajikistan was part of the Achaemenid Empire, founded by the Persians. The Bactrians and the Sogdians, ancient inhabitants of Central Asia and ancestors of modern Tajik, were involved in agriculture, trade, and craftsmanship. The formation of the Tajik nation was completed under the Samanids. In the eighteenth century, the territory of what is today modern Tajikistan was home for the Kulab, Gissar, Karategin, Darvaz, Vahan, and Shugnan principalities. Throughout its history, the territory inhabited by the Tajiks was under control of many different states and khanates. In the second half of the nineteenth century, the Russian Empire annexed multiple territories in the Central Asia principalities and established the Governorate-General of Turkestan, which included territories in the northern parts of modern Tajikistan and Pamir, while the central and southern parts, the so-called Eastern Bukhara, came under control of the Bukhara Khanate, also subordinate to Russian Empire.

The October 1917 Russian Revolution ended the tsarist autocracy, and the Soviets took power in Russia and Central Asia. In 1918, the newly proclaimed Turkestan Autonomous Soviet Socialist Republic (ASSR) became a part of the Russian Federation. In 1924, after the dissolution of the Turkestan ASSR, the Tajikistan Autonomous Soviet Socialist Republic was created as a part of Uzbekistan. In 1929, the Soviet government granted Tajikistan the status of Soviet Socialist Republic, thereby incorporating the republic into the Soviet Union. With the collapse of the Soviet Union in 1991, Tajikistan became a sovereign republic and joined the United Nations. A civil war began almost immediately, resulting in a serious loss of human lives and enormous damage to Tajikistan’s economy.

1.3 ECONOMY

The economy deteriorated rapidly from 1992 to1996. By 1996 the GDP was about one-third of the level of the early 1990s (World Bank, 2005). Under such dire circumstances, the government of Tajikistan initiated the development, adoption, and then implementation of a comprehensive program of economic reforms, leading to gradual economic recovery. By World Bank estimates, economic growth averaged 8 percent during the 2000-2008 period, fell to 3.4 percent in 2009 during the world economic crisis, and rose again to 6.5 - 7.4 percent in 2010 and 2011. A similar rate of economic growth (7.5 percent) in 2012 was attributed to higher growth in retail trade, services, and agriculture. In spite of the gradual economic growth in recent years, the country's economy still relies on foreign investment, targeted grants, and support from Tajik citizens working abroad. In search of working opportunities and higher income, approximately 10 percent of the Tajik population is working abroad, mostly in Russia (SA, 2012b). According to the World Bank estimates, remittances from relatives working abroad in 2012 were equivalent to 47 percent of the GDP (World Bank, 2013).

The main economic activities in Tajikistan are aluminum and cotton production. Both resources are highly vulnerable to world market fluctuation. Efforts to diversify agricultural production resulted in strong growth in the agricultural sector in 2009 and in 2012. Tajikistan is rich in minerals and other natural resources, including large deposits of coal, and has substantial hydropwer potential. There are many hydroelectic plants in Tajikistan that produce electricity, and the largest among them, the Nurek hydroelectric facility, is the tallest dam in the world. The government of Tajikistan is planning to build a new Roghun dam that will significantly increase electricity output, if implemented.

Over the past decade, the government of Tajikistan has embarked on various economic and poverty-reduction programs with the aim of improving the living conditions of its citizenry. As a result of this poverty reduction strategy, the poverty rate declined from 72 percent in 2003 to 47 percent in 2009. Decline was more rapid in urban areas than in rural ones. In spite of these marked improvements, in 2012 almost 40 percent of the Tajikistani population still lived below the poverty level (World Bank, 2013). The National Development Strategy for the current period (by 2015) and the third Poverty Reduction Strategy for the preceding period (2010-2012) have identified priorities and general areas of state policy that aim at sustainable economic growth, better access to social services, and less poverty (IMF, 2012). In March 2013, Tajikistan joined the World Trade Organization (WTO).

1.4 HEALTH CARE SYSTEM

The government of Tajikistan is committed to improving access and equity of access to essential health care services. The priority problem areas are maternal and child health, reproductive health, noncommunicable diseases, malaria, tuberculosis, HIV/AIDS, and other sexually transmitted infections (STIs). The government of Tajikistan has established a regulatory framework for the health sector that includes 9 laws, 18 government decrees, and about 40 orders of the Ministry of Health. The National Health Council of Tajikistan was established by government decree to coordinate efforts to improve population health. The Ministry of Health is responsible for "the development, implementation, monitoring, evaluation, and coordination of a unified state policy in the health sector, and for controlling the quality, safety and effectiveness of health services, pharmaceuticals, and medical equipment" (Khodjamurodov and Rechel, 2010).

1.4.1 Facilities and Human Resources

A nationwide network of more than 3,748 health care facilities existed in Tajikistan in 2012 (SA, 2013a). The health care system in Tajikistan is almost all state-owned and administered; however, health financing is decentralized. The allocation of money to the health budget of Tajikistan is handled centrally by the Ministry of Finance, which distributes funds to the finance departments of oblast authorities. The oblasts determine how their own health budgets are spent, and the Ministry of Health controls only the

functioning of health facilities. The republican hospitals, the State Medical University, and public health services operate under the control of the Ministry of Health, while regional and district facilities are managed by local authorities. External funds, mainly in the form of grants from international donors and bilateral agencies, are important sources of revenue to the health sector (Khodjamurodov and Rechel, 2010).

In 2010, there were 163 facilities in the parastatal (parallel) health sector that were not directly subordinate to the Ministry of Health. They are under the control of the institutions that provide health care for their employees, such as the Ministries of Defense, Internal Affairs, Justice, Light Industry, and Transport and Communication (Khodjamurodov and Rechel, 2010). From an operational and a financial perspective, the parastatals are each governed by their own set of rules and regulations, have separate budgets funded directly by their ministries or companies, and exercise more autonomy in daily operations. The Ministry of Health has a coordinating share of the decision-making in parastatal organizations, at least in regards to health care protocols and standards of care.

There is a small, slow-growing private sector in Tajikistan. Pharmacies and dental services are mostly privately owned. Since 2007, a number of private diagnostic centers have opened in cities to compete with the state run outpatient facilities, and about 14 private hospitals were operating in the country in 2010; however, due to the low purchasing power of the population, the share of services provided by the private sector is still low (Khodjamurodov and Rechel, 2010).

According to the legislation of the Republic of Tajikistan, emergency and ambulance care, pediatric services for children under age 1, vaccinations, the initial health examination, and consultation are free of charge. A package of guaranteed health services has been implemented on a pilot basis since 2008, and a fee-for-services program was introduced by the government in 2009.

In 2012, there were 16,268 physicians and 38,635 midlevel health professionals working in Tajikistan, or 20.4 physicians and 48.4 midlevel health professionals per 10,000 population (SA, 2013a). The distribution of medical staff is uneven between urban and rural areas, with the highest proportion of physicians residing in urban areas and Dushanbe (Khodjamurodov and Rechel, 2010). In Tajikistan, almost all health professionals are government employees and are paid on a salary basis. Every year the government increases wages, but the average salary is still low, which is the cause of informal payments made by patients, although there is no reliable data on this practice. In 2012, the average monthly salary for employees working in medical and social services was US$94 compared with the workforce average of US$116.60 (SA, 2013b). Over the past 20 years, the number of health professionals in Tajikistan has declined from 242 physicians, 618 nurses, and 122 midwives per 100,000 population in 1991 to 190 physicians, 447 nurses, and 60 midwives per 100,000 population in 2011 (WHO EURO, 2013). It is estimated that between 1990 and 1999, about 10,000 physicians and 39,000 midlevel health professionals left the state health care system (World Bank, 2005).

1.4.2 Health Care Reforms

Tajikistan inherited a planned Soviet health system, characterized by a pronounced centralization, disproportionally high levels of funding of inpatient care facilities, and an excessive number of hospital beds and medical staff. Economic problems and financial cuts during the transition led to a serious deterioration of the health care system, including maternal and child health care. Since 1991, Tajikistan has undertaken systemic reforms of its health sector. The 1991-1998 reform priorities focused on the development of national policies, health care financing, resource allocation, and improvement of maternal and child health care services, including family planning.

The 1998-2005 reform priorities included establishment of a national network of emergency medical care centers; reorganization and restructuring of outpatient and inpatient health facilities; and establishment and further development of family medicine. In 2002, the new concept of health sector reform was approved by the government. In 2005, the government approved the strategy of health care financing in Tajikistan for the period 2005–2015. In addition, in 2008 the concept of reform of medical and pharmaceutical education was approved by the government.

Over the past 20 years, Tajikistan has introduced fundamental changes to the provision of maternal and child care services. Many important documents and guidelines, including the national plan on safe pregnancy, have been developed and implemented, and these have radically changed approaches to the assessment of quality care. The Ministry of Health developed and implemented the evidence-based approach of care during pregnancy, labor, and delivery, and of essential neonatal care, in accordance with the international standards of care.

1.4.3 Primary and Secondary Health Care

Primary (ambulatory) health care in Tajikistan is provided through health houses and rural health centers in rural areas and through rayon and urban health centers in urban areas. In 2011, there were 1,689 health houses and 1,404 health centers (SA, 2012c). The main focus of rural health houses, staffed by nurses and midwives, is to provide basic first aid, home visits, basic antenatal care services, immunizations, and medical referrals. The rural health centers, staffed by physicians and midlevel health professionals, provide the next level of primary care, including basic blood and urine diagnostics, basic treatment, and surgeries. Rural health centers are subordinate to central rayon hospitals. The main focus of rayon and urban health centers is to provide preventive, diagnostic, and rehabilitative services.

On the secondary level, health services are provided by rural hospitals, central rayon and city hospitals, oblast hospitals, and specialized hospitals. National level and specialized hospitals (cardiology, pediatrics, obstetrics and gynecology, tuberculosis, and others) provide advanced levels of diagnostics and medical care; they are also home for clinical research and teaching institutions. Some hospitals offer day care. Emergency care is provided through emergency hospitals and ambulance services (Khodjamurodov and Rechel, 2010).

Outreach services, though not always sustained, are available for remote areas, especially for immunization and emergency care.

1.4.4 Maternal and Child Health Care

The problems of maternal and child health are among the priority areas identified by the government of Tajikistan, which has ratified a number of international documents, including the Convention on the Elimination of All Forms of Discrimination against Women and the Convention on the Rights of the Child. Legal aspects of protection of the population's health, including that of the mother and child, are reflected in the principal documents of the Republic: the constitution of Tajikistan, the law on health protection, and the law on reproductive health and reproductive rights, among others. The government pays special attention to gender issues, with a focus on improving the status and role of women in society. Tajikistan is also committed to achievement of the Millennium Development Goals, where three of eight goals relate to the health of women and children. In 2008, the government of Tajikistan approved a "National strategy for health care of children and adolescents until 2015."

In rural areas, antenatal care is provided by midwives at rural health houses or by doctors and midwives at rural health centres. In urban areas, antenatal care is provided by family physicians at rayon and urban health centers; however, the initial examination during the first visit is usually conducted with an obstetrician-gynecologist. One family doctor provides care for approximately 1,500 people in a catchment area. Obstetrician-gynecologists serve family doctors as consultants, and they provide care for pregnant women with obstetric complications. The ratio of family doctors to obstetrician-gynecologists is 1:4.

Antenatal care starts early in pregnancy (usually during the first trimester) and continues on a regular basis throughout the pregnancy; a standard recommendation is that all pregnant women should have at least four routine antenatal visits during pregnancy; follow-up visits may be required for certain conditions, problems, or complications.

According to special decree of the Ministry of Health, since 2008, inpatient health services in Tajikistan are provided at three levels. At the first level, care for women with normal (physiological) deliveries at full term and care for newborn children whose birth weight is 2.5 kilograms or more is provided by midwives. Delivery hospitals/gynecological wards at the secondary-level facilities provide skilled obstetric and neonatal care, including care for abnormal (pathological) deliveries, deliveries by cesarean section, and care for newborn children whose birth weight is less than 2.5 kilograms, as well as diagnostic, treatment, and rehabilitation services for women with gynecologic pathologies. Tertiary health services, including perinatal centers, are planned to carry out all types of high-tech diagnostic, treatment, and rehabilitative care for women and children. Currently, tertiary-level health facilities do not meet all of the requirements of the Ministry of Health. The organization of tertiary-level health facilities at the national level will be implemented in full starting in 2013.

In spite of a sufficient number of delivery facilities, about 10 percent of births take place at home without the assistance of a skilled health provider. The main reasons for this are difficulties in accessing a health facility (roads, means of transportation), low social status of women, and in some cases, out-of-pocket payments for delivery in hospitals, a lack of trust in medical personnel, or absence of a specialist in remote settlements.

Child health care is provided immediately following delivery while a woman and her newborn are in the delivery hospital. After discharge from the delivery hospital, child care services are mainly provided by primary health care facilities, including family doctors and nurses who provide counseling on child care and nutrition to the mother. Family doctors ensure that the child is vaccinated according to a schedule. They also can refer children for pediatric care and for hospitalization, as necessary.

Currently, mandatory childhood vaccinations in Tajikistan include vaccination against hepatitis B, poliomyelitis, tuberculosis, diphtheria, pertussis, tetanus, haemophilus influenzae type b, measles and rubella. The child vaccination schedule in Tajikistan requires that Bacillus Calmette-Guérin (BCG), hepatitis B, and oral polio vaccines be given at birth. A high rate of home births jeopardizes the health of newborns because vaccinations may be delayed.

1.4.5 Family Planning Services

The Ministry of Health is responsible for providing family planning services throughout the country. The main goals of family planning policy are to ensure low-risk pregnancy and safe motherhood and to reduce complications caused by closely-spaced pregnancies and pathological conditions among women of reproductive age. Currently, five groups of women at high risk for maternal and perinatal morbidity and mortality have been selected for provision of family planning services upon request.

The Ministry of Health considers family planning to be an important component of reproductive health care. In 2004, the Strategic Plan for Reproductive Health in 2005-2014 was adopted by government resolution. The Ministry of Health manages a broad spectrum of activities, including extensive family planning education of the population, training of health providers, and supply of contraceptives throughout the country. The private sector is also involved in marketing contraceptives. Regional, district, and city centers on reproductive health work at the primary health care level under the management of the National Centre on Reproductive Health (NCRH). Obstetrician-gynecologists working at the NCRH serve family doctors as consultants; family doctors provide counseling on the selection and use of contraceptive methods to the general population.

Induced abortion is legal in Tajikistan. These procedures are typically performed by an obstetrician-gynecologist, either at outpatient clinics by the vacuum aspiration technique during the first five weeks of pregnancy or in state and private health clinics by dilation and curettage during the first 12 weeks of pregnancy. In some cases, induced abortion can be performed after 12 weeks and up to 22 weeks if certain medical or social conditions exist and upon permission from a medical-control commission of the outpatient and inpatient care levels of facilities. These cases require careful supervision of qualified medical personnel in a hospital setting.

1.4.6 Tuberculosis DOTS Program

The 2006 law on protection of the population from tuberculosis established the basis for a state-regulated policy on combatting tuberculosis, for defining organizational and legislative regulations of activities aimed to protect the population from tuberculosis, and for regulation of the rights, responsibilities, and social guarantees of population with tuberculosis.

To improve the epidemiological situation, the government adopted the National Tuberculosis Control Program of 2011-2015, based on the directly observed treatment, short-course (DOTS) approach. The DOTS approach covers all rayons of the country. Tuberculosis services are available at primary health facilities, at republican, city, and central rayon hospitals, and at tuberculosis hospitals.

1.4.7 HIV/AIDS Program

Prevention of HIV/AIDS is high on the political agenda of the government of Tajikistan. It declared its commitment to addressing the HIV/AIDS crisis as outlined in the Declaration of Commitment on HIV/AIDS at the UN General Assembly Special Session on HIV/AIDS (United Nations, 2001). Tajikistan was among the first countries to develop a National Development Strategy by 2015. Issues for combatting the HIV/AIDS epidemic were reflected in the Millennium Development Goals to halt and reverse the spread of HIV/AIDS. In 2008, on the government's initiative, Dushanbe hosted the third Inter-Parliamentary Conference in Central Asia and Azerbaijan on HIV/AIDS.

The government of Tajikistan, with the objective of ensuring effective management and a unified response to the HIV and AIDS epidemic, adopted a multi-sectoral approach. This addressed the developmental challenges of the epidemic and integrated HIV/AIDS issues in the 2010-2012 Poverty Reduction Strategy. Included in the 2010-2020 Health Sector Strategy as high priority issues were prevention, treatment, care, and support activities as well as targeting of the general population, vulnerable groups, and groups at high risk. The HIV and AIDS response in Tajikistan is guided by the National Strategic Framework of 2010-2015 (GOT, 2012).

The National Coordination Committee (NCC) to combat HIV/AIDS, Tuberculosis, and Malaria is a single coordinating body for HIV/AIDS activities. It is chaired by the deputy prime minister of Tajikistan. NCC works on a multisectoral approach with 22 organizations, which include representatives from key ministries, international organizations, and local non-governmental organizations as well as individuals living with HIV/AIDS and a religious leader of all Muslims in Tajikistan (GOT, 2012).

In Tajikistan, HIV prevalence is still low, with only 0.3 percent of the population age 15-49 estimated to be HIV-positive in 2011 (UNAIDS, 2013). The HIV epidemic in Tajikistan is currently concentrated among injection drug users. In 2011, the needle and syringe exchange program was started in 21 drop-in health facilities (trust posts) supported by UNDP grants; this program is also scheduled for implementation in prisons on a pilot basis. In June 2010, the opioid substitution therapy program started on a pilot basis, and 296 patients were covered by the program by the end of 2011 (GOT, 2012).

Although the majority of new HIV infections in Tajikistan are contracted through injection drug use, heterosexual transmission is growing quickly, especially among women. Women and men have equal access to HIV/AIDS services as guaranteed by the national law on gender equality. Staff of 26 crisis centers for vulnerable women received information about preventing violence and discrimination against women with HIV/AIDS, and they learned how to provide social and psychological support to HIV-infected women and children (GOT, 2012). All aspects of civil society, including religious institutions, are involved in combatting the HIV/AIDS epidemic in Tajikistan. The Islamic Institute of Tajikistan published the book *HIV/AIDS from the Perspective of Islam*. Forty-eight religious leaders have been trained at a national seminar, and over 250 religious leaders have been trained about HIV/AIDS issues countrywide (GOT, 2012).

There are 35 HIV/AIDS prevention and treatment centers in Tajikistan: 1 republican, 4 regional, and 30 urban and rural centers. The main tasks of these centers are HIV testing and counseling services, treatment and care of HIV-infected persons, technical support of health facilities on HIV/AIDS- related issues, HIV surveillance, HIV prevention among specific population groups, education of the general population on HIV/AIDS prevention, prevention of transmission from mother to child, and implementation, monitoring, and evaluation of the national program on combatting HIV/AIDS.

1.5 Systems for Collecting Demographic and Health Data

The Statistical Agency is the government agency responsible for collection, processing, analysis, aggregation, dissemination, accumulation, storage, and maintenance of official statistical information. It conducts censuses. Births, deaths, marriages, and divorces are registered in the departments of civil registry (so-called ZAGS) of the Ministry of Justice and in local administrations (jamoats) of rural settlements, where the records are made and certificates of birth, death, marriage, and divorce are issued. Second copies of these records are forwarded on a monthly basis through the rayon and oblast statistical offices to the Statistical Agency for aggregation and processing. The last two censuses in Tajikistan were conducted in 2000 and 2010.

Collection of health data is primarily the responsibility of the Statistical and Information Center of the Ministry of Health. Health information is generated by staff at the facilities delivering service. It is then sent to the Statistical and Information Center through the rayon and oblast health statistic departments, then forwarded on to the Ministry of Health and the Statistical Agency under the President of the Republic of Tajikistan. The Statistical and Information Center of the MOH compiles and analyzes these data and issues annual reports entitled *Population Health and Health Services in the Republic of Tajikistan*. The annual report covers many aspects of health area registration statistics related to morbidity by type of disease; mortality by cause of death; infant deaths, including perinatal and early neonatal deaths; maternal mortality; data on maternal and child health services; the number of health facilities, medical personnel, hospital beds, and length of the average hospital stay; and family medicine, emergency medicine, and funding of health care services. These data are tabulated at the national and oblast levels. These data, at the national level, are also available at the World Health Organization's European Health-for-All database (HFA-DB).

1.6 OBJECTIVES AND ORGANIZATION OF THE SURVEY

The 2012 TjDHS is a nationally representative sample survey designed to provide information on population and health issues in Tajikistan. The 2012 survey, the first of its kind in the country, was conducted by the Statistical Agency and the Ministry of Health (MOH) from July 2012 through September 2012. Support for the 2012 TjDHS was provided by the United States Agency for International Development (USAID) as part of the MEASURE DHS project. MEASURE DHS is a USAID-funded program through which ICF International provides funding and technical assistance in the implementation of population and health surveys in countries worldwide. The United Nations Population Fund (UNFPA)/Tajikistan provided additional funds for the survey.

The purpose of the 2012 TjDHS was to collect national and regional data on fertility and contraceptive use, maternal and child health, childhood mortality, domestic violence against women, and knowledge and behavior regarding tuberculosis, HIV infection, and other sexually-transmitted infections. The survey obtained detailed information on these issues from women of reproductive age. Data are presented by region (oblast) when sample size permits.

The 2012 TjDHS 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 women and children in Tajikistan. The 2012 TjDHS also contributes to the growing international database on demographic and health-related indicators.

1.6.1 Sample Design and Implementation

The 2012 TjDHS sample was designed to permit detailed analysis, including the estimation of rates of fertility, infant/child mortality, and abortion at the national level and for total urban and rural areas separately. Many indicators can also be estimated at the regional (oblast) level. In addition, in the Khatlon region, the sample is sufficient to provide separate estimates of the nutritional status of children for the 12 districts included in the Feed the Future Initiative (FTF) pilot areas.

A representative probability sample of 6,674 households was selected for the 2012 TjDHS sample. The sample was selected in two stages. In the first stage, 356 clusters were selected from a list of enumeration areas that were part of a master sample designed from the 2010 Population Census. In the second stage, a complete listing of households was made for 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 2012 TjDHS sample or visitors present in the household on the night before the survey were eligible to be interviewed. Interviews were completed with 9,656 women.

Appendix A provides additional information on the sample design of the 2012 TjDHS.

1.6.2 Questionnaires

Two questionnaires were used in the TjDHS: a Household Questionnaire and a Woman's Questionnaire. The Household Questionnaire and the Woman's Questionnaire were based on model survey instruments developed in the MEASURE DHS program. The DHS model questionnaires were adapted for use in Tajikistan by experts from the Statistical Agency (SA) and the Ministry of Health (MOH). Suggestions were also sought from USAID; a number of the UN agencies, including the United Nations Development Program (UNDP), UNFPA, and UNICEF; and other international and nongovernmental organizations (NGOs). The questionnaires were developed in English and translated into Russian and Tajik. The Household Questionnaire and the Woman's Questionnaire were pretested in March 2012.

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 households. 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 Tajikistan households. It also was used to identify the women who were eligible for the individual interview (i.e., women age 15-49). The first section of the Household Questionnaire also obtained information on other characteristics of household members, including information on each child's birth registration. Other questions addressed housing characteristics (e.g., the flooring material, the source of water, and the type of toilet facilities), ownership of consumer goods, and other aspects of the socioeconomic status of the household. Results of testing of household salt for the presence of iodine and results of taking height and weight measurements of children under age 5 and of women age 15-49 also were recorded in the Household Questionnaire.

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 health
- Childhood mortality
- 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
- Knowledge of and attitudes toward tuberculosis
- Woman's work and husband's background characteristics
- Other women's health issues
- Domestic violence

1.6.3 Training of Field Staff

The main survey training, which was conducted by the SA, MOH, and ICF International staff, was held during a three-week period in June and was attended by 100 people (78 females and 22 males), including supervisors, field editors, interviewers, and quality control personnel. The training included lectures, demonstrations, practice interviews, and examinations. All field staff received training in anthropometric measurement and participated in two days of field practice.

1.6.4 Fieldwork and Data Processing

Fourteen teams collected the survey data; each team consisted of four female interviewers, a field editor, and a team supervisor. Fieldwork began in early July 2012 and concluded in late September 2012. Senior TjDHS technical staff visited teams regularly to review the work and monitor data quality. MEASURE DHS also assisted with field supervision. In addition, UNFPA/Tajikistan representatives visited teams to monitor data collection and to observe the height and weight measurements of women and children under age 5.

The processing of the TjDHS results began shortly after fieldwork commenced. Completed questionnaires were returned regularly from the field to SA headquarters in Dushanbe, where they were entered and edited by data processing personnel 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, 11 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, and the results were used to provide specific feedback to the teams to improve performance. The data entry and editing phase of the survey was completed in November 2012.

1.7 RESPONSE RATES

Table 1.2 shows response rates for the 2012 TjDHS. A total of 6,674 households were selected in the sample, of which 6,512 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 6,432, yielding a household response rate of 99 percent. The household response rate in urban areas (98 percent) was slightly lower than in rural areas (99 percent).

In these households, a total of 9,794 eligible women were identified; interviews were completed with 9,656 of these women, yielding a response rate of 99 percent. Response rates are slightly higher in urban areas (99 percent) than in rural areas (98 percent).

Table 1.2 Results of the household and individual interviews

Number of households, number of interviews, and response rates, according to residence (unweighted), Tajikistan 2012

	Residence		
Result	Urban	Rural	Total
Household interviews			
Households selected	2,835	3,839	6,674
Households occupied	2,732	3,780	6,512
Households interviewed	2,675	3,757	6,432
Household response rate[1]	97.9	99.4	98.8
Interviews with women age 15-49			
Number of eligible women	3,443	6,351	9,794
Number of eligible women interviewed	3,408	6,248	9,656
Eligible women response rate[2]	99.0	98.4	98.6

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

HOUSING CHARACTERISTICS AND HOUSEHOLD POPULATION

2

Key Findings

- The average Tajik household has 6.3 members.
- Nearly all households (97 percent) use improved sanitation facilities.
- Access among the population to improved drinking water sources increased from 57 percent in 2000 to 76 percent in 2012.
- Among households where the hand washing place was observed, around eight in ten households have soap and water available at the place household members use for hand washing.
- Three in ten households, mainly in rural areas, reside in dwellings with earth or sand floors.
- Forty-one percent of rural households use solid fuels for cooking compared with 3 percent of urban households.
- Possession of cell phones has increased rapidly, from 11 percent of households in 2005 to 93 percent in 2012. Computer ownership also has expanded, from 1 percent in 2005 to 12 percent in 2012.
- The median completed years of schooling is 8.6 years among females and 9.3 years among males.
- Attendance among the school-age population is widespread but not universal; 87 percent of the primary school-age population and 83 percent of the secondary school-age population are attending school.
- There is almost no gender gap in primary school attendance, but males are slightly more likely to attend secondary school than females.
- Most young children are not involved in any early childhood education program; only 6 percent of children age 3-6 attend pre-school education.

This chapter presents information on housing facilities (sources of water supply, sanitation facilities, and dwelling characteristics), household possessions, and household arrangements (headship and size). The data on the dwelling and household characteristics and assets is used to produce the wealth index, an indicator of the household's economic status. The chapter also provides information on general characteristics of the population such as age-sex structure and education. The description of the household environment and survey population in the chapter is useful for understanding the many social and demographic phenomena presented later in the report.

In reviewing this chapter, it is helpful to understand the definitions of a household and of the de jure and de facto populations used in the 2012 TjDHS. A household consists of a person or group of persons, related or unrelated, who live together in the same dwelling unit, acknowledge one adult male or female as the head of household, share the same living arrangements, and are considered as one unit. For each household, information was obtained on usual household members as well as visitors present in the household on the night before the survey. The de jure population includes all usual household residents whether or not they were present at the time of the TjDHS interview. The de facto population includes household members and visitors who were present in the household on the night before survey. The difference between the de jure and de facto populations is small, and most results are presented for the de facto population unless otherwise noted.

2.1 HOUSING CHARACTERISTICS

The 2012 TjDHS collected data on a range of housing characteristics that affect the health of household residents and also reflect the household's socioeconomic status. Housing characteristics include sources of drinking water, type of sanitation facilities, dwelling materials (roof, walls, and floor), access to electricity, and cooking arrangements. These results are presented for households and for the de jure household population by urban-rural residence.

2.1.1 Drinking Water

The source of drinking water is an indicator of whether it is suitable for drinking. Table 2.1 uses the categorization of improved and non-improved sources proposed by the WHO/UNICEF Joint Monitoring Program for Water Supply and Sanitation (UNICEF and WHO, 2012) in presenting the 2012 TjDHS drinking water information. The table also shows the time spent in obtaining drinking water and the practices that Tajik households employ in treating the water they use for drinking.

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, Tajikistan 2012

	Households			Population		
Characteristic	Urban	Rural	Total	Urban	Rural	Total
Source of drinking water						
Improved source	94.6	70.7	78.1	94.1	70.6	76.2
Piped water into dwelling/yard/plot	78.2	22.1	39.3	76.5	22.9	35.7
Public tap/standpipe	12.9	29.8	24.6	13.4	28.9	25.2
Tube well/borehole	1.4	10.6	7.7	1.7	10.8	8.6
Protected dug well	1.4	4.4	3.5	1.5	4.1	3.5
Protected spring	0.4	3.6	2.6	0.5	3.6	2.8
Rain water	0.4	0.3	0.3	0.5	0.3	0.3
Bottled water	0.0	0.0	0.0	0.0	0.0	0.0
Non-improved source	3.7	28.2	20.7	4.1	28.4	22.5
Unprotected dug well	0.2	0.6	0.5	0.3	0.7	0.6
Unprotected spring	0.8	2.3	1.9	0.6	2.3	1.9
Tanker truck/cart with small tank	0.8	6.1	4.5	0.9	6.0	4.8
Surface water	1.9	19.2	13.9	2.4	19.4	15.3
Other source	1.5	0.9	1.1	1.6	0.9	1.1
Missing	0.1	0.2	0.2	0.1	0.1	0.1
Total	100.0	100.0	100.0	100.0	100.0	100.0
Time to obtain drinking water (round trip)						
Water on premises	81.5	39.8	52.6	80.7	41.0	50.5
Less than 30 minutes	15.1	44.7	35.6	14.7	43.3	36.5
30 minutes or longer	2.7	14.0	10.5	3.8	14.2	11.7
Don't know/missing	0.7	1.5	1.2	0.8	1.4	1.3
Total	100.0	100.0	100.0	100.0	100.0	100.0
Water treatment prior to drinking[1]						
Boiled	87.7	83.3	84.6	87.4	83.3	84.3
Bleach/chlorine added	0.3	0.3	0.3	0.4	0.2	0.3
Strained through cloth	0.1	0.4	0.3	0.1	0.4	0.3
Ceramic, sand or other filter	0.6	0.1	0.3	0.5	0.1	0.2
Solar disinfection	0.3	0.5	0.4	0.3	0.5	0.5
Other	24.5	26.1	25.6	22.5	25.3	24.6
No treatment	11.1	15.2	14.0	11.4	15.2	14.3
Percentage using an appropriate treatment method[2]	87.9	83.5	84.8	87.6	83.5	84.5
Number	1,976	4,456	6,432	9,715	30,753	40,468

[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.

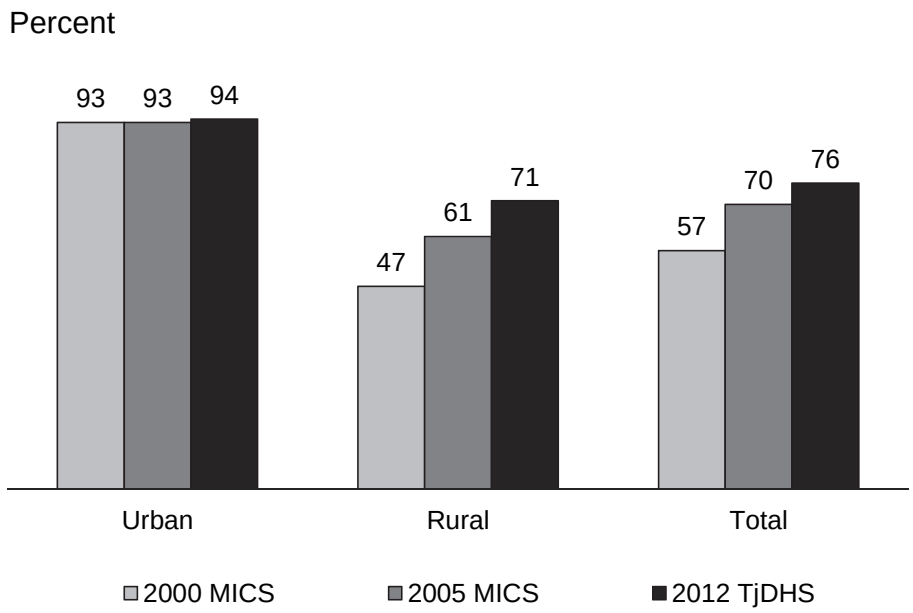
More than three-quarters of households in Tajikistan obtain drinking water from an improved source. Most of these households either have piped water available in the dwelling, yard, or plot (39 percent) or get water from a public tap or standpipe (25 percent). The most common non-improved

water source is surface water (14 percent), i.e., water from rivers, dams, lakes, ponds, or similar sources. Around nine in ten households obtain drinking water from a source on premises (53 percent) or spend less than 30 minutes obtaining water (36 percent). Eighty-five percent of households use an appropriate water treatment method, with almost all boiling the water used for drinking.

Urban households are much more likely than rural households to have access to an improved drinking water source (95 percent versus 71 percent), and they are twice as likely as rural households to have the drinking water source on the premises (82 percent versus 40 percent). On the other hand, the proportion using an appropriate water treatment method is only slightly higher among urban households (88 percent) than rural households (83 percent).

Figure 2.1 compares the results of the 2012 TjDHS with the findings from the Multiple Indicator Cluster Survey conducted in 2000 (UNICEF, 2000) and 2005 (SCS, 2007). Access among the population to improved drinking water sources increased in Tajikistan from 57 percent in 2000 to 76 percent in 2012. The increase was largely concentrated in rural areas. The percentage of the rural population obtaining drinking water from an improved source rose from 47 percent in 2000 to 71 percent in 2012, while in urban areas where access to an improved source was already widespread in 2000, the percentage increased from 93 percent to 94 percent.

Figure 2.1
Trends in use of improved drinking water sources, Tajikistan 2000, 2005, and 2012



2.1.2 Sanitation Facilities

The availability of hygienic sanitation facilities is important in reducing the risk of transmitting diarrhea and other diseases within a household. According to the standards set by the WHO/UNICEF Joint Monitoring Program for Water Supply and Sanitation, the hygienic status of sanitation facilities is determined on the basis of type of facility used and whether or not it is a shared facility (UNICEF and WHO, 2012). 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 toilets emptying into a piped sewer system/septic tank/pit latrine; ventilated, improved pit (VIP) latrines; pit latrines with a slab; and composting toilets.

Table 2.2 shows that the vast majority of the TjDHS households and household population use improved sanitation facilities (97 percent each), which is an increase over the 94 percent of the household population reported in the 2005 MICS (SCS, 2007). Most households using an improved facility do not share the facility; only 3 percent of Tajik households use an improved facility that is shared with other households.

Table 2.2 Household sanitation facilities

Percent distribution of households and de jure population by type of toilet/latrine facilities, according to residence, Tajikistan 2012

	Households			Population		
Type of toilet/latrine facility	Urban	Rural	Total	Urban	Rural	Total
Improved, not shared facility	**91.8**	**94.1**	**93.4**	**92.9**	**94.6**	**94.2**
Flush/pour flush to piped sewer system	52.0	0.1	16.0	45.2	0.1	10.9
Flush/pour flush to septic tank	0.3	0.0	0.1	0.3	0.0	0.1
Flush/pour flush to pit latrine	1.0	0.3	0.5	1.0	0.4	0.5
Ventilated improved pit (VIP) latrine	11.3	23.8	20.0	12.4	23.0	20.4
Pit latrine with slab	27.2	69.8	56.7	34.0	71.1	62.2
Composting toilet	0.0	0.1	0.1	0.0	0.1	0.1
Shared facility[1]	**6.4**	**1.7**	**3.2**	**5.2**	**1.5**	**2.4**
Flush/pour flush to piped sewer system	3.2	0.0	1.0	2.3	0.0	0.5
Flush/pour flush to septic tank	0.0	0.0	0.0	0.0	0.0	0.0
Flush/pour flush to pit latrine	0.5	0.0	0.2	0.3	0.0	0.1
Ventilated improved pit (VIP) latrine	0.9	0.6	0.7	0.9	0.4	0.5
Pit latrine with slab	1.8	1.2	1.4	1.8	1.1	1.2
Non-improved facility	1.4	4.0	3.2	1.6	3.8	3.3
Flush/pour flush not to sewer/septic tank/pit latrine	0.7	0.2	0.3	0.9	0.1	0.3
Pit latrine without slab/open pit	0.6	3.5	2.7	0.7	3.4	2.8
No facility/bush/field	0.1	0.4	0.3	0.1	0.3	0.2
Other	0.1	0.0	0.0	0.0	0.0	0.0
Missing	0.2	0.1	0.2	0.3	0.1	0.2
Total	100.0	100.0	100.0	100.0	100.0	100.0
Number	1,976	4,456	6,432	9,715	30,753	40,468

[1] Facilities that would be considered improved if they were not shared by two or more households.

Pit latrines with slab (58 percent) are the most common type of toilet, followed by VIP latrines (21 percent). One in six households uses a toilet connected to a piped sewer system. More than half of urban households have flush toilets, while they are virtually nonexistent in rural areas.

2.1.3 Other Dwelling Characteristics

Table 2.3 shows the distribution of households and the de jure population by other dwelling characteristics that reflect the socioeconomic status and also may directly affect the health of household members.

Table 2.3 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, Tajikistan 2012

	Residence		
Housing characteristic	Urban	Rural	Total
Electricity			
Yes	99.8	98.8	99.1
No	0.2	1.2	0.9
Total	100.0	100.0	100.0
Flooring material			
Earth/sand	5.3	39.8	29.2
Wood/planks	31.6	18.6	22.6
Parquet or polished wood	43.3	22.0	28.5
Vinyl or linoleum	9.9	3.6	5.5
Ceramic tiles	0.4	0.4	0.4
Cement	8.8	14.8	13.0
Carpet	0.5	0.2	0.3
Other	0.0	0.4	0.3
Missing	0.0	0.2	0.2
Total	100.0	100.0	100.0
Roof material			
No roof	0.1	1.2	0.8
Thatch	0.9	5.8	4.3
Sod	0.1	0.0	0.1
Wood planks	0.2	0.1	0.2
Cardboard	0.0	0.1	0.1
Metal	4.6	3.0	3.5
Wood	0.1	0.0	0.1
Calamine/cement fiber	4.0	0.0	1.2
Ceramic tiles	0.3	0.0	0.1
Cement/concrete blocks	15.9	0.2	5.0
Roofing shingles/shifer	62.2	88.5	80.4
Taule (tarred rough paper)	11.3	0.6	3.9
Other	0.2	0.3	0.3
Missing	0.2	0.1	0.1
Total	100.0	100.0	100.0
Wall material			
No walls	0.1	0.2	0.2
Cane/trunks	0.1	0.3	0.2
Dirt	4.6	13.2	10.5
Stone with mud	3.2	5.3	4.7
Uncovered adobe	6.8	28.0	21.5
Plywood	0.3	0.1	0.2
Reused wood	0.1	0.0	0.0
Cement	33.3	5.6	14.1
Stone with lime/cement	5.2	8.8	7.7
Bricks	32.8	9.0	16.3
Cement blocks	8.5	2.3	4.2
Covered adobe	4.8	27.2	20.3
Wood planks/shingles	0.0	0.0	0.0
Other	0.0	0.0	0.0
Missing	0.2	0.1	0.1
Total	100.0	100.0	100.0
Rooms used for sleeping			
One	22.8	11.9	15.2
Two	42.4	39.4	40.3
Three or more	34.0	47.9	43.6
Missing	0.8	0.8	0.8
Total	100.0	100.0	100.0

Continued…

Table 2.3—*Continued*

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, Tajikistan 2012

Housing characteristic	Residence		Total
	Urban	Rural	
Place for cooking			
In the house	51.5	14.2	25.7
In a separate building	47.0	81.0	70.6
Outdoors	1.1	4.7	3.6
No food cooked in household	0.2	0.1	0.1
Other	0.1	0.0	0.1
Total	100.0	100.0	100.0
Cooking fuel			
Electricity	75.1	42.3	52.3
LPG/natural gas/biogas	21.3	16.8	18.2
Kerosene	0.0	0.0	0.0
Charcoal	0.0	0.1	0.0
Wood	2.6	29.2	21.0
Straw/shrubs/grass	0.1	1.2	0.9
Agricultural crop	0.1	2.8	2.0
Animal dung	0.6	7.4	5.3
Other	0.0	0.2	0.1
No food cooked in household	0.2	0.1	0.1
Total	100.0	100.0	100.0
Percentage using solid fuel for cooking[1]	3.4	40.7	29.2
Frequency of smoking in the home			
Daily	10.4	5.5	7.0
Weekly	3.5	2.8	3.0
Monthly	0.7	0.3	0.4
Less than monthly	1.4	1.1	1.2
Never	83.8	90.2	88.2
Missing	0.2	0.2	0.2
Total	100.0	100.0	100.0
Number	1,976	4,456	6,432

LPG = Liquid petroleum gas
[1] Includes charcoal, wood, straw/shrubs/grass, agricultural crops, and animal dung.

Almost all Tajik households (99 percent) have electricity.

With regard to the construction of the dwelling, while most dwellings have some type of flooring, 29 percent of households reside in dwellings with earth or sand floors. Earth/sand floors are much more common in rural than in urban areas (40 percent versus 5 percent). Shingles are the most widely used roofing material, found in around nine in ten rural and six in ten urban dwellings. Cement (33 percent) and bricks (33 percent) are the most common wall materials in urban dwellings, while rural dwellings are most often built with covered or uncovered adobe (27 percent and 28 percent, respectively).

More than eight in ten Tajik households have at least two rooms in the dwelling used for sleeping, and 44 percent have three or more rooms. Urban households are almost twice as likely as rural households to have only one room for sleeping (23 percent versus 12 percent).

Indoor air pollution from the use of solid (biomass) fuels is related to increased morbidity and mortality (WHO, 2006a). Table 2.3 shows that, while the majority of Tajik households use electricity (52 percent) or LPG/natural gas/biogas (18 percent) for cooking, around three in ten households burn solid fuels (e.g., wood, charcoal, straw, shrubs, grass, agricultural crops or animal dung). Rural households are much more likely than urban households to cook with solid fuels. Among rural households, the practice of cooking in a building separate from the dwelling or outdoors may reduce the exposure to pollutants generated by the burning of solid fuels; more than eight in ten rural households report cooking takes place in a separate building or outside. There is also evidence that the use of solid fuels for cooking is declining in Tajikistan; overall, 35 percent of households reported use of solid fuels for cooking in the 2005 MICS

(SCS, 2007) compared with 29 percent in the TjDHS. The percentage using solid fuels for cooking declined among urban households from 8 percent in 2005 to 3 percent in 2012 and among rural households from 48 percent to 41 percent.

The information on smoking inside the home is included in Table 2.3 to assess the percentage of households in which there is exposure to secondhand smoke. Secondhand smoke (SHS) causes health risks in children and adults who do not smoke. For example, research has shown that 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) and that pregnant women exposed to SHS have a higher risk of giving birth to a low-birth weight baby (Windham et al., 1999). Overall, around one in nine Tajik households report that smoking occurs in the home, with 7 percent saying smoking takes place in the home on a daily basis and 3 percent saying that it occurs on a weekly basis. Smoking in the home is more frequent in urban households than rural households (16 percent versus 10 percent).

2.2 HOUSEHOLD POSSESSIONS

The availability of durable consumer goods is a useful indicator of household socioeconomic level. 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 transport allows greater access to services located away from the local area. Table 2.4 shows the availability of selected household possessions by residence.

Table 2.4 Household possessions

Percentage of households possessing various household effects, means of transportation, agricultural land, livestock/farm animals, watch, or bank account by residence, Tajikistan 2012

	Residence		
Possession	Urban	Rural	Total
Household effects			
Radio	19.3	25.6	23.7
Any television	97.9	95.8	96.4
Black and white television	6.0	11.7	9.9
Color television	95.7	90.3	91.9
DVD	86.4	77.8	80.5
Dish/satellite antenna	53.6	37.2	42.3
Computer	25.0	6.9	12.4
Internet connection	8.3	1.3	3.5
Any phone	96.6	92.9	94.1
Mobile telephone	95.2	92.5	93.3
Non-mobile telephone	28.9	3.6	11.4
Camera	12.8	5.4	7.7
Video camera	7.3	2.2	3.8
Carpet	97.4	95.7	96.2
Table	52.3	31.8	38.1
Chair	43.0	14.0	22.9
Sofa	58.1	32.0	40.0
Bed	38.3	47.6	44.8
Buffet	58.1	34.7	41.9
Refrigerator	77.3	35.0	48.0
Freezer	6.1	2.1	3.3
Fan	54.0	39.8	44.2
Air conditioner	26.7	5.2	11.8
Washing machine	39.6	10.9	19.7
Vacuum cleaner	48.1	13.1	23.8
Sewing machine	49.7	63.3	59.1
In-door heater (burzhuika)	36.4	87.0	71.4
Mini-generator (dvizhok)	8.8	16.4	14.1
Wood/fuel stock	36.9	93.3	76.0
Means of transport			
Bicycle	18.6	29.8	26.3
Animal drawn cart	1.0	6.1	4.6
Motorcycle/scooter	0.6	1.6	1.3
Car/truck	28.0	33.0	31.4
Ownership of agricultural land	27.0	92.9	72.7
Ownership of farm animals[1]	13.4	72.0	54.0
Watch	43.5	33.1	36.3
Bank account	2.9	1.9	2.2
Number	1,976	4,456	6,432

[1] Livestock, herds, other farm animals, beehives, or poultry

Almost all Tajik households (96 percent) own some type of television, primarily a color television, eight in ten have a DVD player, and four in ten own a satellite dish. The vast majority of households (94 percent) have a telephone, with mobile phones much more common than fixed phones. A comparison of the TjDHS and 2005 MICS (SCS, 2007) results documents both a very rapid expansion of mobile phone ownership from 11 percent of households in 2005 to 93 percent in 2012 and a decline in fixed phone ownership from 20 percent in 2005 to 11 percent in 2012. Although the change was not as rapid as the increase in cell phone ownership, computer ownership has also expanded, from 1 percent of households at the time of the 2005 MICS (SCS, 2007) to 12 percent in 2012. Four percent of TjDHS households reported that they could access the Internet in the home. There is considerable variability in the percentages of households possessing other household effects, with households least

likely to have a freezer (3 percent) and most likely to have a stock of wood or other fuel (76 percent) and an indoor heater (71 percent).

Urban households are more likely to have most but not all of the household effects in Table 2.4. One of the most notable differences is in the percentage owning a refrigerator; 77 percent of urban households have a refrigerator compared with 35 percent of rural households. On the other hand, rural households are more likely than urban households to have a stock of wood or other fuel and to own an indoor heater.

Table 2.4 also presents information on household ownership of a means of transport. Twenty-six percent of Tajik households report they own a bicycle, and 31 percent have a car or truck. Household ownership of cars/trucks has almost doubled since the 2005 MICS survey (SCS, 2007) when 17 percent of households reported owning a car or truck. Rural households are more likely to have a car/truck than urban households (33 percent versus 28 percent) and also to own a bicycle (30 percent versus 19 percent).

The majority of Tajik households own agricultural land[1] (73 percent), and a large proportion also owns farm animals (54 percent). As expected, rural households are much more likely than urban households to own agricultural land (93 percent versus 27 percent) or farm animals (72 percent versus 13 percent).

Few Tajik households have a bank account. Three percent of urban households and 2 percent of rural households report they have an account.

2.3 HOUSEHOLD WEALTH

The TjDHS survey did not include direct questions on household consumption or income. However, the detailed data on dwelling and household characteristics and household assets obtained in the survey have been used to construct the wealth index presented in Table 2.5. The wealth index has been shown to be consistent with other expenditure and income measures and to provide a useful measure in assessing inequalities in the use of health and other services and in health outcomes (Rutstein and Johnson, 2004).

The process of constructing the wealth index, which takes into account urban-rural differences in the household characteristics, involved three steps. In the first step, a subset of indicators common to both urban and rural areas was used to create wealth scores for households in both areas. To create the scores, categorical variables were transformed into separate dichotomous (0-1) indicators. These variables and other continuous measures were then analyzed using principal components analysis to produce a common factor score for each household. In a second step, separate factor scores were produced for households in urban areas and rural areas using area-specific indicators (Rutstein, 2008). The third step combined the separate area-specific factor scores to produce a nationally applicable combined wealth index by adjusting the area-specific score through regression on the common factor scores. The resulting combined wealth index has a mean of zero and a standard deviation of one. Once the index was computed, national-level wealth quintiles were formed by assigning the household score to each de jure household member, ranking each person in the population by their score, and then dividing the ranking into five equal categories, each including approximately 20 percent of the population.

[1] According to the Land Code of the Republic of Tajikistan, land in the Republic of Tajikistan is exclusively owned by the State (GOT, 2008). However, upon appropriate State registration, use of a land plot can be given for perpetual use to natural persons and legal entities of the Republic of Tajikistan (Articles 11-15). Land suitable for agricultural needs can be allocated to natural persons and legal entities for agricultural production (Articles 65-71).

Table 2.5 shows the distribution of the population across the five wealth quintiles according to urban-rural residence and region. These distributions indicate the degree to which wealth is evenly (or unevenly) distributed by geographic areas. The distribution of households by quintiles is not exactly 20 percent due to the fact that members of the households, not the households themselves, are divided into the quintiles.

Table 2.5 Wealth quintiles

Percent distribution of the de jure population by wealth quintiles and the Gini Coefficient, according to residence and region, Tajikistan 2012

Residence/region	Wealth quintile					Total	Number of persons	Gini coefficient
	Lowest	Second	Middle	Fourth	Highest			
Residence								
Urban	2.4	5.0	10.9	20.7	61.1	100.0	9,715	0.27
Rural	25.6	24.8	22.9	19.8	6.9	100.0	30,753	0.19
Region								
Dushanbe	0.6	0.7	3.4	15.2	80.1	100.0	3,526	0.24
GBAO	33.0	21.4	19.0	15.9	10.7	100.0	894	0.28
Sughd	17.1	13.3	19.7	29.3	20.5	100.0	11,790	0.29
DRS	11.2	18.6	29.7	24.3	16.3	100.0	9,966	0.28
Khatlon	32.5	31.3	17.7	10.8	7.7	100.0	14,291	0.30
Total	20.0	20.0	20.0	20.0	19.9	100.0	40,468	0.33

The results in Table 2.5 show that wealth is not evenly distributed by residence or region. For example, more than 60 percent of the urban population is in the highest quintile. In contrast, 50 percent of the rural population is found in the two lowest quintiles. Similar disparities are observed across the regions. For example, 80 percent of Dushanbe's population is in the highest wealth quintile, while almost two-thirds of Khatlon's population and more than half of the population in the GBAO region are in the two lowest quintiles.

Table 2.5 also presents the Gini coefficient, which indicates the level of concentration of wealth, 0 being an equal distribution and 1 a totally unequal distribution. The Gini coefficient is higher in urban areas (0.27) than rural areas (0.19), indicating a somewhat more inequitable distribution of wealth in the urban population than in the rural population. Regional differences in Gini coefficients are generally not large; the highest coefficient is observed in the Khatlon region (0.30), indicating that this region has the most inequitable wealth distribution.

2.4 HAND WASHING

Washing hands with soap and water is the ideal hygienic practice. Research shows the substantial potential that hand washing with water and soap (or a non-soap cleansing agent such as ash or sand) has for reducing the transmission of diarrhea, respiratory infections, and other illnesses (Ensink, 2008; Luby et al., 2005). To obtain information on hand washing, the TjDHS interviewer asked to see the place where household members most often washed their hands and recorded information on the availability of water and soap and/or other cleansing agents at that place.

Table 2.6 shows that the place for hand washing was observed in 93 percent of households. The main reason that interviewers were not able to observe the place where household members washed their hands was because the place was not in the dwelling (data not shown).

Table 2.6 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, Tajikistan 2012

Background characteristic	Percentage of households where place for washing hands was observed	Number of households	Among households where place for hand washing was observed, percentage with: 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	Missing	Total	Number of households with place for hand washing observed
Residence											
Urban	97.7	1,976	90.0	0.0	6.1	1.0	0.0	2.7	0.1	100.0	1,931
Rural	90.2	4,456	73.0	0.6	18.2	1.5	0.0	6.5	0.2	100.0	4,019
Region											
Dushanbe	98.0	756	93.1	0.1	3.6	0.6	0.0	2.6	0.0	100.0	741
GBAO	93.5	160	85.5	1.3	12.7	0.0	0.0	0.5	0.0	100.0	149
Sughd	92.4	2,069	71.7	0.2	18.7	0.6	0.0	8.7	0.2	100.0	1,911
DRS	91.3	1,433	83.9	0.6	10.6	1.4	0.1	3.3	0.1	100.0	1,309
Khatlon	91.4	2,014	75.2	0.6	16.8	2.6	0.0	4.7	0.1	100.0	1,840
Wealth quintile											
Lowest	85.7	1,207	60.3	0.7	29.6	2.2	0.0	6.8	0.4	100.0	1,034
Second	86.6	1,132	73.3	0.6	18.9	1.8	0.1	5.3	0.0	100.0	980
Middle	92.5	1,158	75.7	0.6	14.9	1.2	0.0	7.6	0.1	100.0	1,071
Fourth	96.4	1,271	81.2	0.4	10.4	1.3	0.0	6.6	0.1	100.0	1,226
Highest	98.6	1,664	92.9	0.0	4.4	0.8	0.0	1.8	0.1	100.0	1,640
Total	92.5	6,432	78.5	0.4	14.3	1.4	0.0	5.3	0.2	100.0	5,951

[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 the hand washing place was observed, 79 percent had soap and water available. Most other households had water only available. Only 5 percent of households had no water, soap, or other cleaning agent available at the location.

Urban households were more likely to have soap and water available at the usual hand washing place than rural households (90 percent versus 73 percent). The likelihood of having soap and water available was highest in Dushanbe (93 percent) and lowest in Sughd (72 percent) and increased with the wealth quintile, from 60 percent of households in the lowest quintile to more than 90 percent in the highest quintile.

2.5 HOUSEHOLD POPULATION BY AGE AND SEX

Table 2.7 gives the distribution of the 2012 TjDHS de facto household population by age, according to sex and residence. A total of 37,779 persons were found in the 6,432 households interviewed in the TjDHS.

Table 2.7 Household population by age, sex, and residence

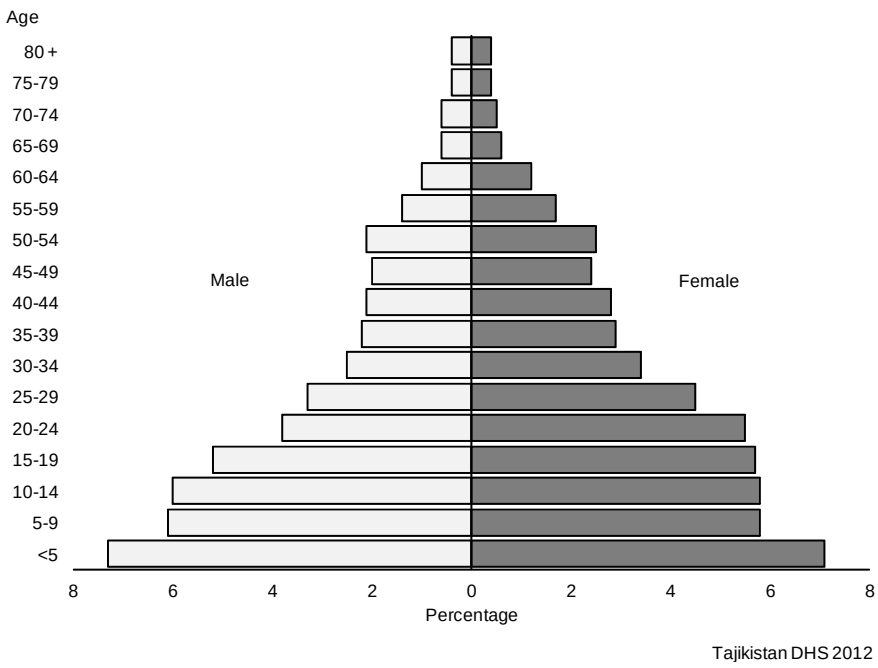
Percent distribution of the de facto household population by five-year age groups, according to sex and residence, Tajikistan 2012

	Urban			Rural			Total		
Age	Male	Female	Total	Male	Female	Total	Male	Female	Total
<5	13.7	11.9	12.8	16.3	13.9	15.0	15.7	13.4	14.5
5-9	12.6	9.4	10.9	13.2	11.4	12.2	13.0	10.9	11.9
10-14	11.1	10.7	10.9	13.3	11.0	12.1	12.8	10.9	11.8
15-19	11.4	10.5	10.9	10.9	10.8	10.9	11.1	10.7	10.9
20-24	9.1	10.1	9.6	7.7	10.4	9.1	8.0	10.3	9.2
25-29	7.1	7.7	7.4	7.0	8.8	7.9	7.0	8.5	7.8
30-34	6.0	6.7	6.4	5.1	6.2	5.7	5.3	6.3	5.8
35-39	5.2	6.4	5.8	4.4	5.1	4.8	4.6	5.4	5.0
40-44	5.7	6.5	6.1	4.0	4.9	4.5	4.4	5.3	4.9
45-49	4.9	5.5	5.2	4.2	4.3	4.2	4.4	4.6	4.5
50-54	4.5	5.5	5.0	4.4	4.5	4.5	4.5	4.7	4.6
55-59	3.3	3.1	3.2	2.9	3.1	3.0	3.0	3.1	3.1
60-64	2.0	2.1	2.1	2.1	2.2	2.2	2.1	2.2	2.1
65-69	0.9	1.3	1.1	1.3	1.0	1.2	1.2	1.1	1.2
70-74	1.0	1.0	1.0	1.4	1.0	1.1	1.3	1.0	1.1
75-79	0.7	0.8	0.8	1.0	0.7	0.8	0.9	0.7	0.8
80 +	0.8	0.6	0.7	0.9	0.8	0.8	0.8	0.7	0.8
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number	4,394	4,807	9,202	13,285	15,292	28,577	17,679	20,099	37,779

The age structure of the household population shows the effects of past demographic trends in Tajikistan, particularly the country's moderately high fertility. The majority of the household population is under age 25 (58 percent), and 38 percent is less than age 15. The proportion of the population under age 25 is higher in rural areas (59 percent) than in urban areas (55 percent).

The population pyramid shown in Figure 2.2 was constructed using the age and sex distribution of the TjDHS household population. The pyramid has a wide base, which is typical of populations that have experienced high fertility in the recent past.

Figure 2.2
Population pyramid



2.6 HOUSEHOLD COMPOSITION

Table 2.8 looks at aspects of the composition of households that may affect the allocation of resources (financial, emotional, etc.) available to household members. For example, in cases where women are heads of households, financial resources are often limited. Similarly, the size of the household affects the wellbeing of its members. Where the size of the household is large, crowding can lead to health problems. The presence of orphans and foster children may also strain household resources.

Table 2.8 shows that the head of most Tajik households is male; the head is female in only 21 percent of households. Female-headed households are more common in urban areas than in rural areas (28 percent versus 18 percent).

The average TjDHS household has 6.3 members. One-quarter of the households have 8 or more members, while just 7 percent have 1 to 2 members. Residence is strongly related to household size; on average, rural households have 6.9 members, two more than the average urban household (4.9 members).

Information was collected in the TjDHS on the living arrangements and survival status of the parents of children under age 18. This information is used in Table 2.8 to identify the percentage of households that include: (1) children who were fostered, that is, children whose parents were both alive but not living in the household with the child and (2) children who were orphans, that is, children whose father or mother or both parents were dead. Eight percent of Tajik households are caring for foster children and/or orphans. Additional detail on the prevalence of fosterhood and orphanhood among children under age 18 is presented later in this chapter.

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 age 18, according to residence, Tajikistan 2012

	Residence		
Characteristic	Urban	Rural	Total
Household headship			
Male	71.7	81.7	78.6
Female	28.3	18.3	21.4
Total	100.0	100.0	100.0
Number of usual members			
0	0.9	0.1	0.3
1	7.0	0.9	2.8
2	8.4	2.7	4.5
3	12.3	4.9	7.2
4	18.5	9.5	12.3
5	17.8	16.0	16.6
6	14.3	18.4	17.2
7	8.5	16.1	13.8
8	4.7	8.8	7.6
9+	7.5	22.5	17.9
Total	100.0	100.0	100.0
Mean size of households	4.9	6.9	6.3
Percentage of households with orphans and foster children under age 18			
Foster children[1]	3.5	3.9	3.8
Double orphans	0.4	0.3	0.3
Single orphans[2]	4.0	5.0	4.7
Foster and/or orphan children	7.0	8.3	7.9
Number of households	1,976	4,456	6,432

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

2.7 BIRTH REGISTRATION

The registration of a child's birth is a critical step to ensuring that a child may claim full legal rights and protections and services in a society (UNICEF, 2012). Table 2.9 provides information collected in the TjDHS Household Questionnaire on birth registration and possession of a birth certificate for the de jure children under age 5. 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 typically issued at the time of registration or later as proof of the registration of the birth. 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.

Table 2.9 Birth registration of children under age 5

Percentage of de jure children under age 5 whose births are registered with civil authorities, according to background characteristics, Tajikistan 2012

Background characteristic	Percentage of children whose births are registered	Percentage of children whose births are registered and who have		Percentage of children who are not registered or who are registered but do not have a birth certificate	Number of children
		Birth certificate	No birth certificate		
Age					
<2	84.3	73.5	10.8	26.5	2,356
2-4	91.5	87.7	3.7	12.3	3,181
Sex					
Male	89.0	82.9	6.2	17.1	2,803
Female	87.8	80.4	7.4	19.6	2,734
Residence					
Urban	87.8	82.7	5.1	17.3	1,193
Rural	88.6	81.4	7.2	18.6	4,343
Region					
Dushanbe	86.5	80.8	5.7	19.2	441
GBAO	89.2	79.2	10.0	20.8	102
Sughd	92.2	91.6	0.6	8.4	1,490
DRS	86.4	76.9	9.5	23.1	1,428
Khatlon	87.4	78.1	9.3	21.9	2,076
Wealth quintile					
Lowest	86.1	76.5	9.6	23.5	1,088
Second	86.8	80.8	6.0	19.2	1,182
Middle	88.7	81.2	7.5	18.8	1,163
Fourth	91.2	85.2	5.9	14.8	1,112
Highest	89.6	85.0	4.6	15.0	991
Total	88.4	81.7	6.8	18.3	5,536

The TjDHS results indicate that almost one in five young children in Tajikistan is potentially at risk of being unable to claim full legal rights and services because their birth is not registered or they lack a birth certificate as proof that the birth was registered. Children under age 2 are more than twice as likely as older children not to be registered or to be without a birth certificate (27 percent versus 12 percent). Only 8 percent of children in the Sughd region are not registered or lack a birth certificate. The percentage of children not registered or lacking a birth certificate is much higher in other regions, ranging from 19 percent in Dushanbe to 23 percent in the DRS region. The likelihood that a child's birth is not registered or a birth certificate is not available decreases as the wealth quintile increases, from 24 percent in the lowest quintile to 15 percent in the fourth and highest quintiles.

2.8 CHILDREN'S LIVING ARRANGEMENTS

The 2012 TjDHS included a series of questions on the living arrangements and the survival status of the parents of all children under age 18. These data were used earlier in this chapter to show the percentage of households in Tajikistan that are caring for foster or orphan children. Table 2.10 employs that information to look at the living arrangements among children under age 18 and to assess the extent of fosterhood and orphanhood among children in Tajikistan. The table shows that 88 percent of de jure children under age 18 live with both parents, 9 percent are living with their mother only, 1 percent are living with their father only, and 2 percent are not living with either parent.

One percent of children under age 18 are defined as foster children, that is, their parents are both alive but are not living in the same household as the child. Three percent of children under age 18 are orphans, that is, one or both parents are dead. Among orphaned children, most have lost their fathers, less than 1 percent have lost their mothers, and very few children have lost both parents (0.1 percent). Children who are not living with a biological parent include foster children and double orphans (children who have lost both parents); less than 2 percent of Tajik children fall into this category.

Table 2.10 Children's living arrangements and orphanhood

Percent distribution of de jure children under age 18 by living arrangements and survival status of parents, 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, Tajikistan 2012

		Living with mother but not with father		Living with father but not with mother		Not living with either parent								
Background characteristic	Living with both parents	Father alive	Father dead	Mother alive	Mother dead	Both alive	Only father alive	Only mother alive	Both dead	Missing information on father/ mother	Total	Percentage not living with a biological parent	Percentage with one or both parents dead[1]	Number of children
Age														
0-4	91.1	7.0	0.7	0.1	0.2	0.6	0.0	0.0	0.1	0.2	100.0	0.7	0.9	5,536
<2	92.1	6.6	0.5	0.1	0.2	0.4	0.0	0.0	0.0	0.2	100.0	0.4	0.6	2,356
2-4	90.5	7.4	0.8	0.2	0.2	0.7	0.0	0.0	0.2	0.2	100.0	0.9	1.1	3,181
5-9	89.6	6.2	1.9	0.4	0.2	1.2	0.1	0.1	0.2	0.1	100.0	1.5	2.4	4,528
10-14	86.8	5.9	3.4	0.7	0.6	1.8	0.1	0.3	0.2	0.3	100.0	2.4	4.6	4,487
15-17	82.2	5.5	5.2	1.1	1.1	2.7	0.3	0.6	0.1	1.1	100.0	3.7	7.3	2,700
Sex														
Male	88.1	6.3	2.4	0.6	0.5	1.4	0.1	0.1	0.1	0.3	100.0	1.8	3.3	8,794
Female	88.3	6.3	2.4	0.4	0.4	1.4	0.1	0.2	0.2	0.4	100.0	1.8	3.3	8,457
Residence														
Urban	84.8	8.6	3.1	0.6	0.2	2.0	0.1	0.2	0.3	0.1	100.0	2.5	3.9	3,888
Rural	89.2	5.6	2.2	0.5	0.5	1.2	0.1	0.2	0.1	0.4	100.0	1.6	3.1	13,363
Region														
Dushanbe	84.5	8.0	3.2	0.6	0.2	2.2	0.1	0.3	0.5	0.2	100.0	3.2	4.4	1,468
GBAO	77.5	9.6	2.2	1.3	0.1	8.0	0.1	0.6	0.1	0.5	100.0	8.7	3.1	343
Sughd	87.9	7.2	1.4	0.6	0.6	1.6	0.0	0.0	0.1	0.5	100.0	1.8	2.2	4,646
DRS	89.9	5.0	2.9	0.5	0.4	0.9	0.2	0.1	0.0	0.3	100.0	1.1	3.4	4,303
Khatlon	88.7	6.0	2.6	0.4	0.5	1.0	0.1	0.3	0.2	0.2	100.0	1.6	3.7	6,492
Wealth quintile														
Lowest	91.6	4.2	2.1	0.1	0.5	0.8	0.1	0.2	0.0	0.3	100.0	1.1	3.0	3,844
Second	88.7	5.6	2.7	0.5	0.7	1.0	0.0	0.1	0.2	0.5	100.0	1.3	3.8	3,562
Middle	87.5	6.5	2.1	0.9	0.4	1.5	0.3	0.3	0.2	0.4	100.0	2.3	3.3	3,361
Fourth	87.8	6.8	2.3	0.4	0.3	2.0	0.0	0.0	0.2	0.2	100.0	2.2	2.8	3,228
Highest	84.9	8.8	2.7	0.7	0.3	1.9	0.2	0.2	0.1	0.3	100.0	2.3	3.5	3,256
Total <15	89.3	6.4	1.9	0.4	0.3	1.1	0.1	0.1	0.1	0.2	100.0	1.5	2.5	14,552
Total <18	88.2	6.3	2.4	0.5	0.5	1.4	0.1	0.2	0.1	0.3	100.0	1.8	3.3	17,252

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

Table 2.10 shows that, as expected, the percentage of orphaned children rises with age, from 1 percent among children age 0-4 to 7 percent among children age 15-17. Similarly, the proportion of children who are not living with a biological parent increases with age, from less than 1 percent among children age 0-4 to 4 percent among children age 15-17. The proportion of children who are not living with a biological parent is 9 percent in GBAO compared with 3 percent or less in the other regions. The difference is mainly due to the much higher level of fostered children in GBAO (8 percent) than in the other regions (2 percent or less).

2.9 EDUCATION OF HOUSEHOLD MEMBERS

Many phenomena such as reproductive behavior, use of contraception, health of children, and proper hygienic habits are affected by the education of household members. During the household interview, questions on the highest level of schooling completed were included for all household members and visitors age three and over and on recent school attendance for persons age 3-24 years. This information is used in this section to examine several aspects of the educational experience of the TjDHS household population, including the overall educational attainment of household members, school attendance among the primary- and secondary-school age populations, and participation in early childhood education programs.

2.9.1 Educational Attainment

Tables 2.11.1 and 2.11.2 present information on the educational attainment of the de facto female and male household population age six and over, respectively. Within the Tajikistan system, education levels are as follows: primary (Grades 1-4); general basic, also known as stage I of secondary education (Grades 5-9[2]); general secondary, also known as stage II of secondary education (Grades 10-11); professional primary/middle (specialized technical or vocational school programs involving two or three grades each); and higher (university or post-graduate programs). Individuals who attended or completed the general basic level (Grades 5-9) and those who attended but did not complete the general secondary level (Grades 10-11) are combined into the some secondary category. The completed secondary category includes individuals who completed grade 11 and those who completed grade 10 and were awarded a general education school diploma ("attestat" in the older Soviet education system terminology).

Overall, most of the female population age six and older has attained at least some secondary education; only one in five never attended school (7 percent) or attended only the primary level (14 percent). One in three women completed secondary school but did not pursue professional or higher education. Ten percent of women attended or completed professional school or have a university or higher education. The median completed years of schooling among females is 8.6 years.

Similar to the female population, only one in five males age six and over never attended school or attained only the primary level. On the other hand, males are more likely than females to have post-secondary education; 8 percent of men have attended or completed the professional level, and 15 percent have higher education. The median completed years of schooling among males is 9.3 years.

[2] It should be noted that Tajikistan's educational system has undergone several stages of restructuring over the past several decades. The current system of formal education was introduced in September 1990. In the new system, primary education consists of Grades 1-4, general basic education consists of Grades 5-9 instead of Grades 5-8 as in the previous system, and general secondary (high school) consists of Grades 10-11 instead of Grades 9-10. For purposes of categorizing educational level in the 2012 TjDHS, individuals who in 1989 were age 15 or older and reported attending or completing grade 9 were included in the general secondary education category because they attained grade 9 before the current educational system change took effect. Individuals who reported at the time of interview that they had attended or completed grade 9 and were age 14 or younger in 1989 were included in the general basic education category, in accordance with the new system.

Table 2.11.1 Educational attainment of the female household population

Percent distribution of the de facto female household population age six and over by highest level of schooling attended or completed and median years completed, according to background characteristics, Tajikistan 2012

Background characteristic	No education	Some primary	Completed primary[1]	Some secondary[2]	Completed secondary[3]	Profes-sional primary	Profes-sional middle	Higher	Don't know/ missing	Total	Number	Median years completed
Age												
6-9	39.8	58.0	1.3	0.4	0.0	0.0	0.0	0.0	0.5	100.0	1,831	0.4
10-14	1.8	11.5	18.9	67.7	0.0	0.0	0.0	0.0	0.1	100.0	2,190	5.0
15-19	2.1	1.0	2.6	60.0	29.1	1.3	1.5	2.4	0.0	100.0	2,154	8.8
20-24	3.5	3.4	3.4	38.8	36.1	1.6	5.5	7.7	0.0	100.0	2,073	9.5
25-29	3.1	3.1	3.6	42.0	34.0	2.4	3.9	7.8	0.1	100.0	1,709	9.0
30-34	1.6	0.7	1.5	45.1	38.4	2.3	4.7	5.6	0.1	100.0	1,269	9.2
35-39	2.0	0.5	0.5	21.2	58.7	4.5	5.3	7.3	0.0	100.0	1,088	9.8
40-44	1.3	0.9	0.3	11.9	64.4	6.8	4.7	9.8	0.0	100.0	1,064	9.6
45-49	1.2	0.5	0.2	12.3	70.7	3.0	5.5	6.5	0.0	100.0	924	9.5
50-54	1.3	0.9	1.3	19.8	62.1	3.9	3.7	6.9	0.1	100.0	954	9.4
55-59	2.4	1.3	1.7	27.8	50.8	2.6	3.5	9.7	0.1	100.0	624	9.4
60-64	4.6	2.7	2.5	39.1	39.4	1.8	3.0	6.9	0.0	100.0	443	9.1
65+	14.7	11.9	10.9	40.1	14.3	1.1	2.1	4.7	0.2	100.0	714	6.2
Residence												
Urban	4.8	7.7	3.8	31.7	31.2	3.2	5.3	12.2	0.1	100.0	4,159	9.2
Rural	7.4	9.9	4.7	37.7	33.5	1.7	2.3	2.7	0.1	100.0	12,879	8.4
Region												
Dushanbe	4.5	9.2	4.4	33.3	25.1	2.2	4.2	17.0	0.1	100.0	1,503	9.0
GBAO	3.3	6.1	2.7	22.0	40.0	3.0	7.6	15.2	0.0	100.0	401	9.7
Sughd	5.7	7.8	2.9	32.0	38.2	3.2	4.3	5.9	0.0	100.0	5,059	9.2
DRS	7.4	9.9	5.7	43.1	26.7	1.4	2.8	2.9	0.2	100.0	4,033	8.1
Khatlon	8.1	10.6	5.2	36.8	34.2	1.4	1.5	2.0	0.1	100.0	6,042	8.2
Wealth quintile												
Lowest	9.4	12.2	6.0	39.8	29.7	1.2	0.6	0.8	0.3	100.0	3,488	7.6
Second	7.9	10.6	5.2	39.3	33.0	1.1	1.5	1.3	0.1	100.0	3,359	8.2
Middle	7.0	9.8	4.8	37.9	34.2	1.8	2.1	2.4	0.0	100.0	3,395	8.5
Fourth	5.3	7.2	3.1	34.3	38.7	2.7	4.4	4.4	0.0	100.0	3,390	9.1
Highest	4.2	7.2	3.4	29.8	29.1	3.4	6.6	16.1	0.1	100.0	3,406	9.4
Total	6.8	9.4	4.5	36.2	32.9	2.1	3.0	5.0	0.1	100.0	17,038	8.6

[1] Completed Grade four at the primary level
[2] Attended or completed the general basic level (Grades 5-9) and attended but did not complete the general secondary level (Grades 10-11)
[3] Completed Grade 11 at the secondary level or completed Grade 10 at the secondary level and has a general education school diploma ("attestat" as in older Soviet educational system terminology)

Table 2.11.2 Educational attainment of the male household population

Percent distribution of the de facto male household population age six and over by highest level of schooling attended or completed and median years completed, according to background characteristics, Tajikistan 2012

Background characteristic	No education	Some primary	Completed primary[1]	Some secondary[2]	Completed secondary[3]	Profes-sional primary	Profes-sional middle	Higher	Don't know/ missing	Total	Number	Median years completed
Age												
6-9	41.0	58.0	0.7	0.1	0.0	0.0	0.0	0.0	0.2	100.0	1,886	0.4
10-14	0.9	11.6	17.4	70.0	0.0	0.0	0.0	0.0	0.1	100.0	2,258	5.0
15-19	1.0	0.7	0.2	51.9	36.2	1.7	1.7	6.5	0.1	100.0	1,957	9.3
20-24	1.7	0.9	1.1	19.3	39.5	3.4	3.7	30.3	0.0	100.0	1,417	10.6
25-29	1.5	1.2	1.2	19.8	41.6	3.6	3.2	27.8	0.0	100.0	1,241	10.6
30-34	0.9	0.8	1.3	16.5	46.8	3.6	3.8	26.4	0.0	100.0	940	10.5
35-39	0.4	0.2	0.5	9.6	52.8	9.1	6.1	21.4	0.0	100.0	814	10.3
40-44	1.2	0.3	0.0	5.5	52.7	11.5	8.1	20.7	0.0	100.0	777	9.9
45-49	0.4	0.8	0.3	7.0	46.1	15.4	7.2	22.6	0.0	100.0	771	9.9
50-54	0.4	0.6	0.2	7.7	50.4	11.9	7.7	21.2	0.0	100.0	789	9.8
55-59	1.2	0.4	0.4	9.4	41.4	10.0	12.3	24.6	0.2	100.0	531	10.0
60-64	1.4	0.4	1.4	15.7	38.5	6.2	10.4	25.5	0.4	100.0	368	9.8
65+	6.3	5.1	7.1	29.0	26.5	6.3	3.9	15.6	0.2	100.0	746	9.1
Residence												
Urban	5.3	9.8	3.1	22.1	25.7	3.8	4.3	25.9	0.0	100.0	3,704	9.8
Rural	6.9	10.2	3.8	27.9	31.7	4.8	3.4	11.2	0.1	100.0	10,791	9.2
Region												
Dushanbe	5.9	10.2	3.5	20.6	20.3	2.7	3.5	33.3	0.1	100.0	1,391	9.9
GBAO	4.2	7.6	2.5	19.0	29.0	6.8	9.9	21.0	0.1	100.0	344	10.2
Sughd	7.0	9.3	3.3	26.8	31.5	5.0	3.6	13.3	0.1	100.0	4,095	9.3
DRS	6.2	10.2	3.2	31.0	30.1	3.4	3.7	12.1	0.1	100.0	3,377	9.1
Khatlon	6.6	10.7	4.2	25.2	31.9	5.2	3.2	12.8	0.1	100.0	5,289	9.3
Wealth quintile												
Lowest	7.9	11.7	4.6	31.9	30.9	4.8	2.6	5.6	0.1	100.0	2,928	8.4
Second	6.7	10.5	4.1	27.5	33.4	4.9	3.4	9.4	0.1	100.0	2,880	9.2
Middle	6.9	9.7	3.1	27.7	32.4	5.3	3.4	11.4	0.2	100.0	2,748	9.2
Fourth	5.7	8.5	3.4	25.9	32.4	4.1	4.7	15.1	0.1	100.0	2,855	9.4
Highest	5.4	10.0	2.8	19.6	22.5	3.7	4.1	32.0	0.1	100.0	3,084	10.0
Total	6.5	10.1	3.6	26.4	30.2	4.5	3.6	14.9	0.1	100.0	14,496	9.3

[1] Completed Grade four at the primary level.
[2] Attended or completed the general basic level (Grades 5-9) and attended but did not complete the general secondary level (Grades 10-11).
[3] Completed Grade 11 at the secondary level or completed Grade 10 at the secondary level and has a general education school diploma ("attestat" as in older Soviet educational system terminology).

Tables 12.11.1 and 12.11.2 also show differentials in educational attainment by age, residence, region, and wealth quintile. The majority of both females and males in every subgroup have at least some secondary education, except children age 6-9, who are, as expected, concentrated at the primary level or have not yet entered school. The median completed years of schooling is higher in urban areas than in rural areas among both females (9.2 years versus 8.4 years) and males (9.8 years versus 9.2 years). On average, educational attainment is highest in the GBAO region and lowest in the DRS region. Among females, there is a difference of 1.6 years in the median years of schooling between GBAO and DRS while the difference among males is 1.1 years. Dushanbe lags behind GBAO in the median completed years of schooling among both males and females; however, the percentage attaining at least some higher education is higher in Dushanbe than in any of the regions, especially among males. Wealth has a strong positive relationship with education. Among females, the median years of schooling varies from 7.6 in the lowest quintile to 9.4 years in the highest quintile, and, among males, the median ranges from 8.4 years in the lowest quintile to 10.0 years in the highest quintile.

2.9.2 School Attendance

Table 2.12 provides information on net and gross attendance ratios and the gender parity index by school level, sex, residence, and region, and Figure 2.3 presents age-specific attendance rates. For purposes of calculating these indicators, children were considered to be currently attending if they had attended school at the given level at any time during the current school year.

Table 2.12 School attendance ratios

Net attendance ratios (NARs) and gross attendance ratios (GARs) for the de facto household population by sex and level of schooling; and the Gender Parity Index (GPI), according to background characteristics, Tajikistan 2012

Background characteristic	Net attendance ratio[1]				Gross attendance ratio[2]			
	Male	Female	Total	Gender Parity Index[3]	Male	Female	Total	Gender Parity Index[3]
PRIMARY SCHOOL								
Residence								
Urban	88.0	88.0	88.0	1.00	100.9	102.4	101.5	1.01
Rural	86.4	87.6	87.0	1.01	103.3	99.1	101.1	0.96
Region								
Dushanbe	84.4	88.5	86.3	1.05	97.1	100.6	98.7	1.04
GBAO	87.9	82.2	85.1	0.94	100.4	93.1	96.8	0.93
Sughd	86.2	87.7	86.9	1.02	103.7	103.1	103.4	0.99
DRS	87.5	88.6	88.1	1.01	105.4	98.4	101.7	0.93
Khatlon	87.4	87.1	87.3	1.00	102.0	98.5	100.2	0.97
Wealth quintile								
Lowest	88.6	87.5	88.0	0.99	101.7	99.5	100.5	0.98
Second	86.2	87.7	87.0	1.02	102.8	99.2	101.0	0.97
Middle	83.8	89.5	86.9	1.07	106.0	102.6	104.2	0.97
Fourth	87.9	84.1	86.1	0.96	102.2	95.8	99.2	0.94
Highest	86.8	89.0	87.8	1.03	101.4	101.2	101.3	1.00
Total	86.8	87.6	87.2	1.01	102.7	99.7	101.2	0.97
SECONDARY SCHOOL								
Residence								
Urban	87.6	82.2	84.9	0.94	95.0	88.3	91.6	0.93
Rural	88.4	78.3	83.4	0.89	94.9	84.5	89.8	0.89
Region								
Dushanbe	87.5	77.0	82.0	0.88	99.8	83.2	91.1	0.83
GBAO	93.0	91.1	92.0	0.98	99.5	100.3	99.9	1.01
Sughd	86.4	80.9	83.6	0.94	92.7	86.8	89.7	0.94
DRS	88.3	78.0	83.3	0.88	93.4	83.4	88.6	0.89
Khatlon	89.3	78.7	84.1	0.88	96.0	85.2	90.7	0.89
Wealth quintile								
Lowest	90.4	76.5	83.7	0.85	94.6	81.3	88.2	0.86
Second	86.7	79.2	83.0	0.91	93.1	83.8	88.6	0.90
Middle	87.5	78.9	83.3	0.90	92.8	87.1	90.0	0.94
Fourth	88.2	79.4	83.8	0.90	96.4	87.2	91.9	0.91
Highest	88.2	82.4	85.1	0.93	98.1	88.1	92.7	0.90
Total	88.3	79.2	83.8	0.90	94.9	85.4	90.2	0.90

[1] The NAR for primary school is the percentage of the primary-school age (7-10) population that is attending primary school. The NAR for secondary school is the percentage of the secondary-school age (11-17) population that is attending secondary school. By definition, the NAR cannot exceed 100 percent.
[2] The GAR for primary school is the total number of primary school students, expressed as a percentage of the official primary-school-age population. The GAR for secondary school is the total number of secondary school students, expressed as a percentage of the official secondary-school-age population. If there are significant numbers of overage and underage students at a given level of schooling, the GAR can exceed 100 percent.
[3] The Gender Parity Index for primary school is the ratio of the primary school NAR(GAR) for females to the primary school NAR(GAR) for males. The Gender Parity Index for secondary school is the ratio of the secondary school NAR(GAR) for females to the NAR(GAR) for males.

The net attendance ratio (NAR) is an indicator of participation in schooling among those of official school age, that is, children age 7-10 for the primary level and children age 11-17 for the secondary level. A NAR of 100 would indicate that all children in the official age range for the level are attending school at that level. The gross attendance ratio (GAR) is an indicator of participation in schooling among those of any age between 5 and 24 years, expressed as a percentage of the official school age population. The GAR can exceed 100 percent if children who are overage or underage for the given level are attending school at the level.[3]

The results in Table 2.12 show school attendance among the school-age population is high but not universal. Among children age 7-10 who should be attending the primary level, 87 percent are doing so. A comparison of primary level NAR and GAR indicates that 14 percent of students attending primary school are underage or over-age for the level. Differentials in the NAR and GAR at the primary level are generally minor.

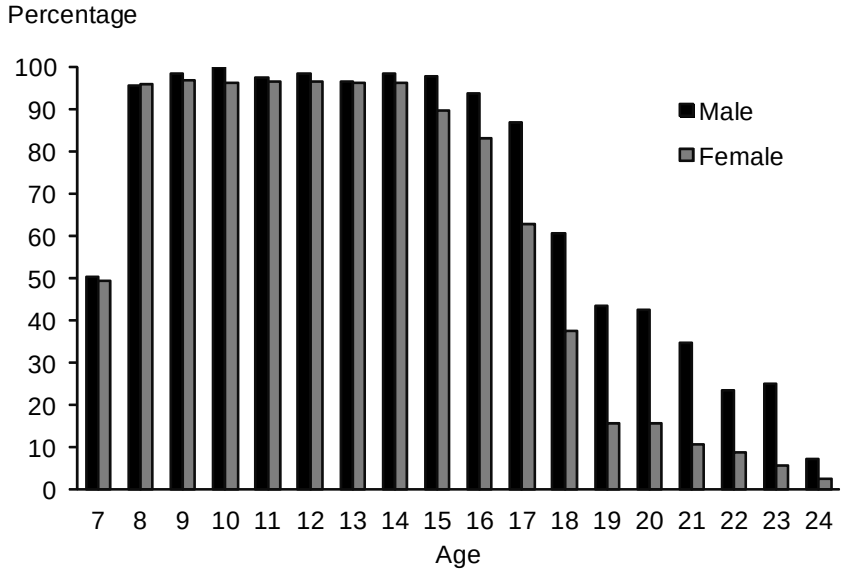
The secondary school NAR indicates that 84 percent of children who should be attending the secondary level are doing so. The comparison of the secondary school NAR and GAR shows the proportion of secondary school students who are outside of the official school age is 6 percent. There are only minor differences in the NAR and GAR across subgroups.

Table 2.12 also includes the Gender Parity Index (GPI), or the ratio of the female to the male GAR at the primary and secondary levels. The GPI indicates the magnitude of the gender gap in attendance ratios. If there is no gender difference, the GPI will equal 1.0, whereas the wider the disparity in favor of males, the closer the GPI will be to 0. If the gender gap favors females, the GPI will exceed 1.0. Table 2.12 shows that, at the primary level, the NAR GPI is 1.01 and the GAR GPI is 0.97, indicating there is almost no gender gap in primary school attendance. At the secondary level, the NAR and GAR GPIs are identical at 0.90, evidence of a modest but clear gender gap in secondary attendance favoring males. The secondary school NAR and GAR GPIs are lowest in rural areas, in the Dushanbe, DRS, and Khatlon regions, and in the lowest quintile, indicating that males have the greatest advantage over females in school attendance in these subgroups.

Figure 2.3 presents information on age-specific school attendance rates for the population age 7-24. Attendance levels are low among children under age 7, and only about half of children age 7, which is the age at which children are expected to enter school, are currently attending school; the low attendance rate may in part reflect the fact that some of the children were not 7 at the start of the school year and, thus, were not eligible to start school. Among children age 8-14, attendance rates exceed 95 percent, with the rates generally slightly higher among boys than girls. Among the population age 15-24, attendance rates decline rapidly, and the gender gap increases with age. For example, among the population age 18, 61 percent of males are attending school compared with 38 percent of girls.

[3] Students who are overage for a given level of schooling may have started school overage, may have repeated one or more grades at school, or may have dropped out of school and later returned. Children who are underage for the level may have started school underage or skipped one or more grades.

Figure 2.3
Age-specific attendance rates of the de facto population 7 to 24 years



Tajikistan DHS 2012

2.9.3 Early Childhood Education

Participation in pre-school is important in preparing children to attend school. Table 2.13 shows the percentage of children age 3-6 who were reported to be currently attending pre-school. Interviewers were instructed to record a child as attending pre-school if they were enrolled in a nursery school, a kindergarten, or any other type of separate structured session conducted by some educational center on a regular basis.

Most young children in Tajikistan are not involved in any type of early childhood educational program; only 6 percent of children age 3-6 are attending pre-school. The highest rates of pre-school attendance are observed among children whose mothers have a professional school or higher education (23 percent and 29 percent, respectively) and children in the highest wealth quintile (20 percent). Urban residence is strongly related to pre-school attendance; 17 percent of children in urban areas are attending pre-school compared with 3 percent in rural areas. Pre-school attendance is markedly higher in Dushanbe (17 percent), GBAO (15 percent), and Sughd (12 percent) than in DRS and Khatlon (2 percent each).

Table 2.13 Early childhood education

Percentage of children 36-83 months attending a pre-school education program, a kindergarten, or any other organized early child education program, Tajikistan 2012

Background Characteristic	Percentage of children attending early child educational program	Number of children
Age (months)		
36-59	6.1	1,967
60-71	8.2	781
72-83	5.4	1,068
Sex		
Male	7.0	1,962
Female	5.6	1,855
Residence		
Urban	17.2	844
Rural	3.2	2,973
Region		
Dushanbe	17.3	314
GBAO	14.9	68
Sughd	12.0	1,117
DRS	1.7	1,003
Khatlon	2.0	1,315
Mother's education		
None/primary	2.0	246
General basic	2.8	1,337
General secondary	4.5	1,721
Professional primary/middle	22.8	257
Higher	29.0	197
Missing	9.7	59
Wealth quintile		
Lowest	0.1	807
Second	2.2	749
Middle	3.1	772
Fourth	6.8	751
Highest	20.3	738
Total	6.3	3,817

BACKGROUND CHARACTERISTICS OF RESPONDENTS

3

Key Findings

- The majority of Tajik women are exposed to some form of media at least once per week; television reaches the largest number of women (84 percent).
- One in three women is currently working or was employed during the past 12 months; one in four working women is not paid or receives only in-kind payment.
- Seven in ten women have heard about tuberculosis.
- Three quarters of the women who knew about tuberculosis correctly identified that the disease is spread through the air when a person with tuberculosis coughs or sneezes, and nearly half mentioned the DOT approach as a way to prevent the spread of tuberculosis.
- One in eight women age 15-49 have ever been told by a health provider they had high blood pressure; women who were overweight or obese were much more likely to be hypertensive than other women.
- The majority of women told they had high blood pressure (82 percent) were taking prescribed medication to control hypertension; however, less than half of the women were taking other actions to lower their blood pressure such as cutting down on salt intake (46 percent), controlling their weight (39 percent), or exercising (28 percent).

This chapter first presents distributions of TjDHS respondents by basic demographic and socioeconomic characteristics including age at the time of the survey, marital status, broad education levels, urban/rural residence, region, and the wealth quintile to which they belong. A number of these characteristics are used in tables throughout the report to provide insights into demographic and social phenomena influencing the health situation of women and children in Tajikistan.

The chapter also provides information on respondents' exposure to mass media and their employment status and earnings. In addition, the chapter covers several important health issues, including respondents' knowledge of tuberculosis, history of hypertension, and use of tobacco.

3.1 BACKGROUND CHARACTERISTICS OF RESPONDENTS

Table 3.1 shows the distribution of the 9,656 women age 15-49 interviewed in the 2012 TjDHS by various demographic and socioeconomic characteristics. Two in five of the TjDHS respondents were under 25, and one in five was age 40 or older. More than two-thirds of respondents were married (67 percent) or living together with a partner (0.2 percent); 27 percent were never-married; and 5 percent were divorced, separated, or widowed.

Three-quarters of respondents lived in rural areas. More than one in three respondents was from Khalton (36 percent), 30 percent resided in Sughd, and 23 percent were from DRS. Dushanbe was home to 9 percent of the TjDHS respondents, and 2 percent lived in the GBAO region. Six in ten respondents had at least a general secondary education, or higher, and an additional 35 percent had attended or completed the general basic level. Relatively few respondents never went to school or attended only the primary level (6 percent).

Table 3.1 Background characteristics of respondents

Percent distribution of women age 15-49 by selected background characteristics, Tajikistan 2012

Background characteristic	Women		
	Weighted percent	Weighted number	Unweighted number
Age			
15-19	20.8	2,013	2,001
20-24	20.2	1,950	1,900
25-29	16.7	1,609	1,566
30-34	12.3	1,188	1,173
35-39	10.7	1,030	1,084
40-44	10.3	991	1,018
45-49	9.1	875	914
Marital status			
Never married	27.4	2,648	2,723
Married	67.1	6,483	6,364
Living together	0.2	21	24
Divorced/separated	2.9	275	301
Widowed	2.4	229	244
Residence			
Urban	25.0	2,413	3,408
Rural	75.0	7,243	6,248
Region			
Dushanbe	9.1	881	1,733
GBAO	2.3	220	1,069
Sughd	29.7	2,872	2,084
DRS	23.2	2,240	2,334
Khatlon	35.7	3,444	2,436
Education			
None	2.0	195	155
Primary	3.9	372	330
General basic	34.7	3,349	3,095
General secondary	46.3	4,474	4,373
Professional primary	2.6	252	276
Professional middle	4.1	394	481
Higher	6.4	620	946
Wealth quintile			
Lowest	19.5	1,878	1,616
Second	19.8	1,913	1,625
Middle	19.7	1,904	1,736
Fourth	20.4	1,971	1,930
Highest	20.6	1,989	2,749
Total	100.0	9,656	9,656

Note: Education categories refer to the highest level of education attended, whether or not that level was completed. Education categories are described in chapter 2, section 2.9.1.

3.2 EDUCATIONAL ATTAINMENT BY BACKGROUND CHARACTERISTICS

Education is a key determinant of health care knowledge, attitudes, and behavior. To gain further insight into how educational attainment varies among TjDHS respondents, Table 3.2 presents the distribution of TjDHS respondents by educational level[1], according to other demographic and socioeconomic background characteristics used throughout the report.

The results show that Tajik women who are of the reproductive ages 15-49 have completed an average of 9.4 years of schooling. Although the gap is not large, educational attainment tends to be somewhat lower among younger women than among older women, with the median years of schooling exceeding the national average among women age 35 and over and falling below the average among women age 15-24. The lower educational attainment among women age 15-24 is mainly due to the fact that some women in the age group are still in school. The somewhat lower median number of years of schooling among women age 25-34 likely reflects the adverse effects of the civil war in the 1990s on Tajikistan's educational system (Shemyakina, 2011).

[1] Education categories are described in chapter 2, section 2.9.1.

Table 3.2 Educational attainment

Percent distribution of women age 15-49 by highest level of schooling attended or completed, and median years completed, according to background characteristics, Tajikistan 2012

Background characteristic	Highest level of schooling								Total	Median years completed	Number of women
	No education	Some primary	Completed primary[1]	Some secondary[2]	Completed secondary[3]	Profes-sional primary	Profes-sional middle	Higher			
Age											
15-24	2.5	2.2	2.9	51.1	31.4	1.4	3.4	5.0	100.0	8.9	3,963
15-19	1.7	0.9	2.5	62.3	27.4	1.3	1.3	2.4	100.0	8.8	2,013
20-24	3.4	3.4	3.4	39.6	35.5	1.5	5.6	7.7	100.0	9.4	1,950
25-29	2.5	3.2	3.8	42.9	34.0	2.1	3.9	7.7	100.0	9.0	1,609
30-34	1.4	0.9	1.6	46.0	38.3	2.3	4.1	5.6	100.0	9.2	1,188
35-39	1.6	0.7	0.6	21.0	59.0	3.8	5.6	7.6	100.0	9.8	1,030
40-44	0.8	0.8	0.1	11.8	65.5	7.0	4.4	9.6	100.0	9.6	991
45-49	1.4	0.6	0.3	12.6	70.1	3.0	5.3	6.7	100.0	9.5	875
Residence											
Urban	0.7	1.6	1.1	32.1	39.4	3.6	6.3	15.2	100.0	9.8	2,413
Rural	2.5	1.8	2.5	40.5	43.7	2.3	3.3	3.5	100.0	9.3	7,243
Region											
Dushanbe	0.9	2.2	1.6	33.9	32.8	2.3	4.9	21.4	100.0	9.7	881
GBAO	0.2	0.3	0.2	16.0	46.5	5.0	10.4	21.4	100.0	10.6	220
Sughd	0.5	0.4	0.6	33.9	47.6	4.1	5.8	7.1	100.0	9.7	2,872
DRS	1.8	2.2	3.2	48.1	35.1	1.9	3.8	3.9	100.0	8.9	2,240
Khatlon	3.9	2.5	3.0	38.4	45.7	1.7	2.2	2.7	100.0	9.2	3,444
Wealth quintile											
Lowest	4.6	2.4	3.2	43.6	42.2	1.6	1.2	1.2	100.0	9.0	1,878
Second	3.3	1.7	3.1	41.8	44.4	1.5	2.6	1.7	100.0	9.1	1,913
Middle	1.6	2.6	2.4	41.6	43.3	2.4	2.6	3.5	100.0	9.2	1,904
Fourth	0.4	0.9	1.0	35.8	47.7	3.3	5.8	5.3	100.0	9.6	1,971
Highest	0.4	1.2	0.9	29.7	35.7	4.2	8.0	19.9	100.0	10.1	1,989
Total	2.0	1.7	2.1	38.4	42.6	2.6	4.1	6.4	100.0	9.4	9,656

Note: Education categories are described in chapter 2, section 2.9.1.
[1] Completed Grade four at the primary level.
[2] Attended or completed the general basic level, also known as stage I, of secondary education (Grades 5-9) and attended but did not complete the general secondary level, also known as stage II of secondary education (Grades 10-11).
[3] Completed Grade 11 at the secondary level or completed Grade 10 at the secondary level and has a general education school diploma ("attestat" in the old Soviet educational system terminology).

Urban women are notably more likely to have attended or completed professional school or higher levels of education than rural women (25 percent versus 9 percent). The median number of years of schooling among women is highest in GBAO (10.6 years), followed by Dushanbe and Sughd (9.7 years each). As expected, education is directly related to the wealth quintile, with the median number of years completed increasing from 9.0 among women in the lowest quintile to 10.1 years among women in the highest quintile.

3.3 MEDIA EXPOSURE

The 2012 TjDHS included questions to assess the frequency with which respondents were exposed to print and broadcast media. This information is useful for understanding which women are likely to be reached by media campaigns disseminating family planning, health, and other information.

Table 3.3 shows the percentages of women age 15-49 exposed to three specific media (newspaper/magazine, radio, or television) at least once per week. The table also includes information on the percentage of women who are exposed to all three media at least once per week and the percentage not regularly exposed to any of the media.

Overall, television reaches the largest number of women; 84 percent of women watch television at least once per week. Three in ten women read a newspaper or magazine, and 26 percent listen to the radio weekly. Only 17 percent of women access all three media at least once per week, while 15 percent are not regularly exposed to any of the three media.

Table 3.3 Exposure to mass media

Percentage of women age 15-49 who are exposed to specific media on a weekly basis by background characteristics, Tajikistan 2012

Background characteristic	Reads a newspaper/ magazine at least once a week	Watches television at least once a week	Listens to the radio at least once a week	Accesses all three media at least once a week	Accesses none of the three media at least once a week	Number of women
Age						
15-19	37.9	86.7	29.3	20.8	11.0	2,013
20-24	26.0	82.5	26.3	15.2	15.8	1,950
25-29	22.9	82.6	23.7	12.3	15.7	1,609
30-34	25.3	82.6	23.0	13.4	15.3	1,188
35-39	34.3	82.8	25.4	17.8	15.5	1,030
40-44	33.0	84.2	26.8	18.7	13.4	991
45-49	32.4	81.4	26.2	18.6	16.9	875
Residence						
Urban	43.9	89.5	30.4	22.5	8.2	2,413
Rural	25.4	81.5	24.6	14.6	16.7	7,243
Region						
Dushanbe	43.0	87.3	28.6	21.2	9.3	881
GBAO	50.4	78.4	8.0	4.0	14.4	220
Sughd	39.4	85.8	31.7	22.3	12.8	2,872
DRS	29.6	79.8	32.1	22.7	19.3	2,240
Khatlon	18.0	83.4	17.9	7.5	14.3	3,444
Education						
None/primary	5.0	69.9	14.5	3.0	28.4	567
General basic	20.7	81.0	22.3	11.8	17.4	3,349
General secondary	30.2	84.8	25.1	16.0	13.2	4,474
Professional primary/middle	56.3	90.8	36.1	28.8	7.1	645
Higher	75.3	93.1	53.0	46.7	3.5	620
Wealth quintile						
Lowest	15.0	75.6	16.4	7.4	21.6	1,878
Second	17.7	78.5	19.4	9.3	19.6	1,913
Middle	27.9	84.9	26.4	15.9	14.0	1,904
Fourth	38.7	87.1	32.4	22.1	11.3	1,971
Highest	49.7	91.0	34.8	27.5	6.6	1,989
Total	30.1	83.5	26.0	16.6	14.5	9,656

Looking at media exposure rates among subgroups in Table 3.3, the percentage watching television at least once per week exceeds 90 percent among women with a professional or higher education and women in the highest wealth quintile; women with no or only a primary education have the lowest rate of regular exposure to television (70 percent). The percentage listening to the radio regularly is lowest in the GBAO region (8 percent) and highest among women with higher education (53 percent). Only 5 percent of women with no or only a primary education read a newspaper/magazine weekly. In contrast, three-quarters of women with higher education are exposed to newspapers/magazines at least weekly.

3.4 EMPLOYMENT

Like education, employment can be a source of empowerment for women, especially if it puts them in control of income. The measurement of women's employment, however, is difficult. The difficulty arises largely because some of the work that women do, especially work on family farms, family businesses, or in the informal sector is often not perceived by women themselves as employment, and hence not reported as such. To avoid underestimating women's employment, the TjDHS asked respondents several questions to probe for their employment status and to ensure complete coverage of employment in both the formal or informal sectors. Additional information was obtained from employed women on the type of work they were doing, whether they worked continuously throughout the year, whom they worked for, and whether they received their earnings in cash or in kind.

3.4.1 Employment Status

Table 3.4 presents the percent distribution of TjDHS respondents by current employment status, according to background characteristics. Respondents are defined as employed if they were working at the time of the survey or had worked at any time in the 12 months prior to the survey. They were considered to be currently employed if they had done any work in the seven days before the TjDHS interview or if they were regularly employed but had been absent from work during the week before the survey because they were ill, on vacation, or took leave for some other reason.

Table 3.4 Employment status

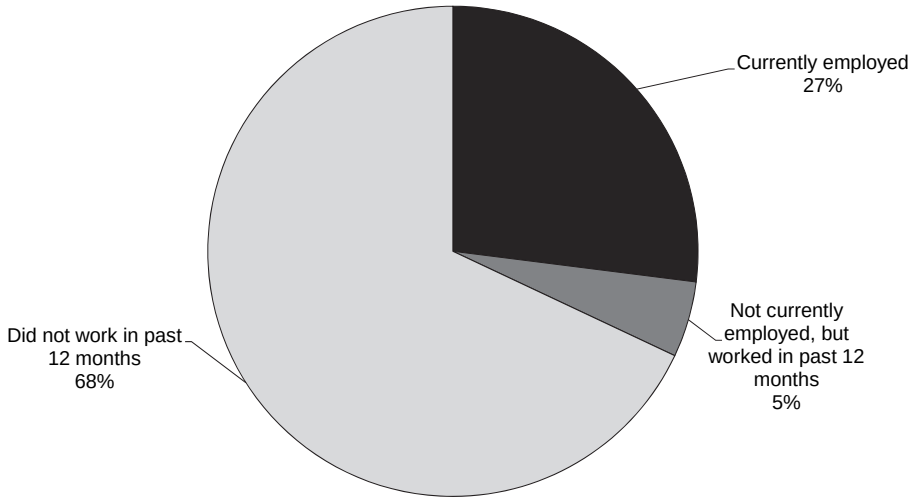
Percent distribution of women age 15-49 by employment status, according to background characteristics, Tajikistan 2012

Background characteristic	Employed in the 12 months preceding the survey		Not employed in the 12 months preceding the survey	Missing/ don't know	Total	Number of women
	Currently employed[1]	Not currently employed				
Age						
15-19	18.0	3.9	78.1	0.0	100.0	2,013
20-24	21.3	6.3	72.3	0.1	100.0	1,950
25-29	26.5	5.3	68.1	0.1	100.0	1,609
30-34	29.5	4.0	66.5	0.0	100.0	1,188
35-39	36.2	4.9	58.8	0.0	100.0	1,030
40-44	41.4	5.3	53.2	0.1	100.0	991
45-49	34.6	5.7	59.6	0.1	100.0	875
Marital status						
Never married	25.8	4.7	69.6	0.0	100.0	2,648
Married or living together	26.6	5.1	68.1	0.1	100.0	6,504
Divorced/separated/widowed	45.1	5.5	49.4	0.0	100.0	504
Number of living children						
0	24.3	5.4	70.3	0.1	100.0	3,483
1-2	25.6	4.5	69.9	0.1	100.0	2,588
3-4	30.4	4.6	65.0	0.0	100.0	2,385
5+	33.9	6.1	59.9	0.1	100.0	1,200
Residence						
Urban	25.5	3.8	70.7	0.0	100.0	2,413
Rural	28.0	5.5	66.5	0.1	100.0	7,243
Region						
Dushanbe	24.8	3.2	72.0	0.0	100.0	881
GBAO	20.1	5.6	74.3	0.0	100.0	220
Sughd	28.3	4.2	67.4	0.0	100.0	2,872
DRS	11.5	0.4	88.0	0.2	100.0	2,240
Khatlon	37.9	9.2	52.9	0.0	100.0	3,444
Education						
None/primary	25.8	7.0	67.1	0.0	100.0	567
General basic	19.9	4.4	75.5	0.1	100.0	3,349
General secondary	27.1	4.8	68.1	0.1	100.0	4,474
Professional primary/middle	46.6	5.7	47.7	0.0	100.0	645
Higher	50.6	7.5	41.9	0.0	100.0	620
Wealth quintile						
Lowest	35.3	7.5	57.1	0.2	100.0	1,878
Second	31.0	6.6	62.4	0.1	100.0	1,913
Middle	21.4	3.3	75.2	0.0	100.0	1,904
Fourth	21.6	4.4	74.0	0.0	100.0	1,971
Highest	27.7	3.5	68.7	0.0	100.0	1,989
Total	27.3	5.0	67.6	0.1	100.0	9,656

[1] "Currently employed" is defined as having done work in the past seven days. Included are 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.

The TjDHS results indicate that more than one in four women age 15-49 in Tajikistan is currently employed, and 5 percent are not currently employed but have worked in the past 12 months (Figure 3.1). The current employment rate generally increases with age and with the number of living children. More than four in ten women who are divorced, separated, or widowed are currently working compared with around one-quarter each of never-married and married women. Rural women are slightly more likely than urban women to be currently employed. The current employment rate is highest in Khalton (38 percent) and lowest in the DRS region (12 percent). Women with higher education are almost twice as likely to be currently employed as women with no or only primary education (51 percent versus 26 percent). Women in the lowest wealth quintile have the highest current employment rate (35 percent) and women in the middle quintile have the lowest (21 percent).

Figure 3.1
Women's employment status in the past 12 months



Tajikistan DHS 2012

3.4.2 Occupation

TjDHS respondents who reported that they were currently employed or had worked in the past 12 months were asked about their occupation. Their responses were recorded verbatim and then coded into major occupation groups after the questionnaires were sent to the central office.

Table 3.5 shows the distribution of employed women by occupation group, according to background characteristics. The largest group is employed in unskilled manual labor jobs (45 percent), 21 percent work in sales and services, 20 percent are in professional, technical, or managerial positions, and 10 percent work in agriculture. Urban women, women from the GBAO and Dushanbe regions, women with a professional or higher education, and women in the highest wealth quintile are most likely to be employed in professional, technical, or managerial occupations. One-third or more of employed women in urban areas, in Dushanbe, and in the fourth and highest wealth quintiles work in sales and services. More than six in ten employed women in the lowest two wealth quintiles and in the Khalton region and more than seven in ten employed women who have no or only a primary education are working as unskilled manual laborers. As expected, women in rural areas are much more likely to work in agricultural occupations than women in urban areas (12 percent versus 1 percent). Agricultural employment is also much more common among women in Khalton (12 percent) and Sughd (10 percent) than in other regions (2 percent or less).

Table 3.5 Occupation

Percent distribution of women age 15-49 employed in the 12 months preceding the survey by occupation, according to background characteristics, Tajikistan 2012

Background characteristic	Profes-sional/ technical/ managerial	Clerical	Sales and services	Skilled manual	Unskilled manual	Domestic service	Agriculture	Other	Missing	Total	Number of women
Age											
15-19	1.9	0.0	26.1	1.6	58.6	0.3	10.5	0.0	1.0	100.0	441
20-24	16.2	1.4	23.2	2.0	48.2	0.0	7.9	0.9	0.2	100.0	538
25-29	20.7	1.2	16.6	1.1	47.4	0.1	11.8	0.6	0.6	100.0	512
30-34	21.4	1.2	22.4	1.5	42.9	0.5	9.2	0.0	0.8	100.0	397
35-39	27.5	1.0	22.2	2.3	38.0	0.4	7.9	0.0	0.7	100.0	424
40-44	27.1	1.2	18.4	3.4	40.0	0.6	8.8	0.0	0.4	100.0	462
45-49	25.0	1.4	20.8	1.3	39.3	0.0	11.2	0.4	0.6	100.0	352
Marital status											
Never married	10.9	1.0	24.3	1.5	52.2	0.1	8.8	0.5	0.7	100.0	806
Married or living together	22.3	1.0	18.9	1.7	44.7	0.3	10.5	0.2	0.4	100.0	2,066
Divorced/separated/widowed	26.5	2.0	31.8	4.5	28.1	0.4	4.6	0.6	1.5	100.0	255
Number of living children											
0	11.8	0.9	23.6	1.6	51.3	0.1	9.6	0.6	0.5	100.0	1,032
1-2	28.1	1.7	21.1	2.8	38.4	0.6	6.2	0.1	1.1	100.0	779
3-4	26.8	1.1	23.9	2.3	37.8	0.1	7.7	0.1	0.3	100.0	835
5+	11.0	0.5	12.4	0.4	56.4	0.3	18.3	0.3	0.4	100.0	480
Residence											
Urban	38.8	3.2	36.6	5.6	12.6	0.7	1.1	0.4	1.0	100.0	707
Rural	14.2	0.5	16.9	0.8	54.8	0.1	12.0	0.3	0.4	100.0	2,420
Region											
Dushanbe	44.6	2.5	33.4	7.2	10.1	0.9	0.0	0.6	0.6	100.0	247
GBAO	66.2	2.4	18.8	1.1	10.9	0.0	0.5	0.0	0.0	100.0	57
Sughd	25.7	1.1	27.1	1.5	32.3	0.5	10.4	0.6	0.8	100.0	936
DRS	34.9	2.5	30.4	2.3	27.4	0.0	1.6	0.0	1.0	100.0	266
Khatlon	8.4	0.6	14.8	1.3	62.2	0.1	12.2	0.1	0.4	100.0	1,622
Education											
None/primary	2.9	0.9	11.3	0.6	72.0	0.0	11.5	0.8	0.0	100.0	186
General basic	1.8	0.3	23.2	1.8	58.1	0.2	13.5	0.2	0.9	100.0	816
General secondary	4.4	0.7	25.8	2.3	54.5	0.5	11.4	0.0	0.5	100.0	1,426
Professional primary/middle	72.4	1.1	16.6	1.5	6.9	0.0	0.9	0.1	0.4	100.0	337
Higher	80.1	4.6	9.0	1.7	1.6	0.0	0.7	1.6	0.6	100.0	361
Wealth quintile											
Lowest	4.9	0.0	11.4	0.7	64.4	0.0	18.1	0.2	0.4	100.0	803
Second	8.4	0.1	14.0	0.5	62.7	0.2	13.9	0.0	0.2	100.0	718
Middle	20.1	1.6	17.1	1.3	50.0	0.5	7.6	0.9	1.0	100.0	472
Fourth	25.7	1.7	33.4	2.9	32.0	0.1	3.4	0.0	0.7	100.0	512
Highest	46.8	2.6	35.9	4.6	7.8	0.6	0.2	0.5	0.9	100.0	622
Total	19.7	1.1	21.3	1.9	45.3	0.3	9.6	0.3	0.6	100.0	3,127

3.4.3 Type of Employment

Table 3.6 shows the percent distribution of women who worked at any time during the 12 months preceding the survey by the type of earnings women received (cash, in-kind, or both), the type of employer, and the continuity of employment, according to the type of work (agricultural or non-agricultural). Slightly more than half (53 percent) of employed women are paid in cash only, and 20 percent are paid in cash and in-kind. Around one in four women either is not paid (19 percent) or receives only in-kind payments (8 percent). As expected, women who work in nonagricultural jobs are much more likely to be paid in cash for the work they do. Six in ten women working in agriculture are not paid at all for their work.

Around half of women (51 percent) are employed by a nonrelative, slightly more than one-third work for a family member, and 12 percent are self-employed. Women who work in agriculture are mainly employed by family members (83 percent), which is likely the reason a large proportion are not paid. Women in nonagricultural jobs are more likely to be employed by a nonfamily member (55 percent) than to work for a relative (32 percent) or to be self-employed (13 percent).

Table 3.6 Type of employment

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), Tajikistan 2012

Employment characteristic	Agricultural work	Non-agricultural work	Total
Type of earnings			
Cash only	4.7	58.6	53.4
Cash and in-kind	24.0	19.7	20.1
In-kind only	12.7	7.1	7.6
Not paid	58.7	14.5	18.8
Missing	0.0	0.2	0.2
Total	100.0	100.0	100.0
Type of employer			
Employed by family member	82.9	31.9	36.9
Employed by nonfamily member	16.6	55.0	51.2
Self-employed	0.4	12.9	11.7
Missing	0.0	0.2	0.2
Total	100.0	100.0	100.0
Continuity of employment			
All year	10.7	47.2	43.6
Seasonal	83.9	43.3	47.1
Occasional	5.0	9.2	8.9
Missing	0.5	0.3	0.3
Total	100.0	100.0	100.0
Number of women employed during the last 12 months	300	2,809	3,127

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

Women's employment in agricultural jobs is more often seasonal than year-round (84 percent versus 11 percent). Women in nonagricultural jobs are much more likely to be employed throughout the year, but even among these women, only 47 percent report that they work year-round.

3.5 TUBERCULOSIS

Tuberculosis is a serious health concern in Tajikistan, which is among 27 nations worldwide identified by WHO as high multi-drug resistant tuberculosis (MDR-TB) countries (WHO, 2012a). In 2010, the prevalence of tuberculosis in Tajikistan was estimated at 332 cases per 100,000 population, and the incidence rate was 206 per 100,000, with 17 percent of new cases being MDR-TB (WHO/EURO, 2012).

TjDHS respondents were asked a series of questions to assess the level of tuberculosis awareness, attitudes about the disease, and knowledge about modes of transmission, tuberculosis symptoms, and ways to prevent the spread of the disease. The information they provided is useful for designing communications strategies to improve awareness of the disease.

3.5.1 Knowledge and Attitudes about Tuberculosis

Table 3.7 shows the percentage of women age 15-49 who had heard about tuberculosis, and, among women who know about tuberculosis, the percentages who are aware that tuberculosis is spread through the air by coughing or sneezing, who believe that tuberculosis can be cured and who would want to keep it a secret if a family member had tuberculosis. Seventy percent of women say they have heard of tuberculosis, showing that awareness of the disease is widespread in Tajikistan but not yet universal. Women in the 15-19 age group, women living in the DRS region, and women with no or only a primary education are least likely to have heard of tuberculosis (54 percent, 58 percent, and 50 percent, respectively). The level of knowledge reaches 90 percent only among women with professional or higher education.

Table 3.7 Knowledge and attitude concerning tuberculosis

Percentage of women age 15-49 who have heard of tuberculosis (TB), and among women who have heard of TB, the percentage who report that TB is spread through the air when an infected person coughs or sneezes, the percentage who believe that TB can be cured, and the percentage who would want to keep secret that a family member has TB, by background characteristics, Tajikistan 2012

			Among women who have heard of TB, percentage who:			
Background characteristic	Percentage of women who have heard of TB	Number of women	Report that TB is spread through the air when an infected person coughs or sneezes	Believe that TB can be cured	Would want a family member's TB kept secret	Number of women who have heard of tuberculosis
Age						
15-19	54.3	2,013	66.7	73.6	24.2	1,092
20-24	65.4	1,950	75.3	79.7	24.4	1,275
25-29	72.0	1,609	77.2	79.0	27.4	1,159
30-34	75.4	1,188	79.1	82.3	25.3	896
35-39	81.8	1,030	81.9	86.9	24.0	842
40-44	82.5	991	81.1	84.1	21.3	817
45-49	81.8	875	80.4	85.4	23.5	716
Residence						
Urban	77.7	2,413	80.7	82.3	27.0	1,875
Rural	68.0	7,243	75.3	80.4	23.5	4,922
Region						
Dushanbe	73.6	881	76.7	76.2	29.5	649
GBAO	79.0	220	72.1	95.7	22.9	173
Sughd	78.5	2,872	85.1	82.7	35.7	2,255
DRS	57.5	2,240	75.0	80.9	20.4	1,288
Khatlon	70.6	3,444	70.4	79.6	15.0	2,432
Education						
None/primary	49.7	567	66.3	71.2	21.6	282
General basic	61.1	3,349	72.6	76.8	22.7	2,046
General secondary	74.2	4,474	76.9	82.0	24.6	3,321
Professional primary/middle	90.3	645	86.2	86.9	25.3	583
Higher	91.1	620	86.7	88.8	30.5	565
Wealth quintile						
Lowest	68.8	1,878	71.8	80.5	17.4	1,293
Second	66.0	1,913	71.9	79.9	19.4	1,262
Middle	65.4	1,904	76.8	80.3	22.1	1,245
Fourth	73.9	1,971	81.8	82.0	31.8	1,457
Highest	77.4	1,989	80.2	81.8	29.5	1,540
Total	70.4	9,656	76.8	81.0	24.5	6,797

Around three in four of the women who have heard about tuberculosis correctly believe that the disease is spread through the air when an infected individual coughs or sneezes. The percentage of women identifying coughing and sneezing as a way in which the disease may be transmitted is lowest among women age 15-19 (67 percent) and women with no or only a primary education (66 percent) and highest among women with professional (86 percent) or higher (87 percent) education.

The majority (81 percent) of women who know about tuberculosis believe that the disease can be cured. Women who never attended school or only attended primary school are least likely to agree that tuberculosis can be cured (71 percent).

One in four women would want to keep a family member’s tuberculosis secret, suggesting there is stigma attached to the disease for these women. The percentages wanting to keep a family member’s tuberculosis diagnosis secret are highest among women in Sughd (36 percent), women with higher education (31 percent), and women in the fourth and in the highest wealth quintiles (32 percent and 30 percent, respectively).

3.5.2 Knowledge of Tuberculosis Symptoms

Table 3.8 presents information on the level of awareness of the symptoms of tuberculosis among women who report knowing about the disease. More than eight in ten of the women identified some form of coughing as a symptom that would lead them to think a person has tuberculosis; 62 percent cited coughing alone, 37 percent mentioned coughing with sputum, and 10 percent cited coughing that lasted for several weeks. Weight loss was mentioned by 24 percent as a tuberculosis symptom, 20 percent cited tiredness/fatigue, and 19 percent said fever was a symptom. Fewer women (11 percent or less) mentioned other symptoms including blood in sputum, loss of appetite, night sweating, and pain in the chest. One in ten women who had heard about tuberculosis was not able to name any symptom that would lead women to think a person had the disease. In general, women with a professional or higher education were more likely than other women to identify the various symptoms of tuberculosis shown in Table 3.8.

Table 3.8. Knowledge of symptoms of tuberculosis

Among women who have heard of tuberculosis (TB), the percentage identifying specific symptoms as signs that would lead them to think a person has tuberculosis, by background characteristics, Tajikistan 2012

Background characteristic	Non-specific coughing	Coughing with sputum	Coughing for several weeks	Any coughing	Fever	Blood in sputum	Loss of appetite	Night sweating	Pain in chest	Tiredness/ fatigue	Weight loss	Lethargy	Other	Don't know	Number of women who heard of TB
Age															
15-19	56.7	32.2	9.8	78.5	13.1	6.1	7.2	5.4	9.3	16.8	20.7	0.2	0.4	17.3	1,092
20-24	62.9	35.1	8.6	83.0	16.9	8.2	7.6	6.7	10.3	19.8	22.5	0.3	0.6	12.4	1,275
25-29	60.0	36.2	10.8	84.3	18.2	7.2	8.4	5.3	9.9	17.9	20.5	0.5	0.3	10.7	1,159
30-34	64.9	38.6	10.9	87.6	21.0	8.0	7.6	5.8	11.1	21.1	26.9	0.7	0.7	7.4	896
35-39	63.2	40.6	10.0	89.3	25.2	7.9	7.7	8.3	10.2	22.8	27.1	0.8	0.5	6.2	842
40-44	67.3	40.5	11.6	89.2	21.2	8.7	11.3	7.0	12.3	20.2	29.3	0.3	0.9	6.4	817
45-49	64.1	41.7	9.1	86.8	20.3	7.8	6.8	7.8	11.1	21.1	24.6	0.7	0.2	9.0	716
Residence															
Urban	66.8	40.5	8.1	88.4	23.6	7.8	9.2	8.2	9.7	19.9	24.6	0.4	0.7	8.3	1,875
Rural	60.7	36.1	10.8	83.7	17.2	7.6	7.6	5.8	10.8	19.6	23.8	0.5	0.4	11.2	4,922
Region															
Dushanbe	75.7	37.6	7.9	86.8	23.7	4.3	9.8	4.6	7.1	18.7	18.7	0.1	1.0	10.2	649
GBAO	59.6	19.0	8.8	79.0	23.7	6.9	7.8	13.9	2.4	16.8	14.6	1.2	0.4	9.7	173
Sughd	63.6	42.9	11.9	88.8	29.9	8.3	7.9	9.9	15.3	28.2	24.3	0.5	1.2	8.2	2,255
DRS	63.0	33.6	12.3	81.4	11.4	2.5	8.6	3.7	6.9	15.0	21.2	1.0	0.1	11.1	1,288
Khatlon	57.6	35.3	7.8	83.4	11.2	10.7	7.4	4.7	9.4	14.8	27.4	0.2	0.0	12.1	2,432
Education															
None/primary	61.9	30.5	4.9	78.6	11.2	8.2	3.4	3.9	10.5	10.5	20.1	0.6	0.2	17.5	282
General basic	63.5	33.4	9.1	82.0	15.7	6.3	7.1	4.9	9.0	17.9	21.7	0.5	0.3	12.7	2,046
General secondary	60.4	38.4	10.4	85.4	18.4	7.7	7.7	6.3	10.3	20.0	24.2	0.6	0.3	10.2	3,321
Professional primary/middle	66.1	45.7	12.2	90.9	30.6	9.2	12.2	7.8	12.1	22.5	24.6	0.2	2.2	5.4	583
Higher	66.3	40.2	11.9	90.8	25.8	10.1	11.5	13.2	15.3	26.0	33.0	0.1	1.3	4.4	565
Wealth quintile															
Lowest	66.7	31.0	10.6	84.3	14.9	6.6	7.5	5.6	8.3	21.1	23.2	0.9	0.0	10.2	1,293
Second	59.9	34.3	10.0	81.8	14.8	9.3	6.8	5.3	11.1	18.0	25.7	0.6	0.2	12.6	1,262
Middle	58.6	39.3	11.2	84.1	17.0	8.3	8.0	5.8	9.1	17.8	23.5	0.4	0.3	11.9	1,245
Fourth	59.2	41.5	10.1	86.3	21.9	6.8	8.1	6.2	12.2	23.7	24.9	0.3	0.8	9.1	1,457
Highest	66.7	39.6	8.8	87.8	24.6	7.4	9.5	9.1	11.4	17.6	23.0	0.2	1.0	8.6	1,540
Total	62.4	37.3	10.1	85.0	18.9	7.6	8.1	6.5	10.5	19.7	24.0	0.5	0.5	10.4	6,797

3.5.3 Misconceptions about How Tuberculosis is Spread

Women who had heard about tuberculosis were asked to identify ways in which the disease is spread from one person to another; all of the modes of transmission that women mentioned in response to the question were recorded.

As shown in Table 3.7, around three-quarters of women who knew about tuberculosis correctly identified that the disease is spread through the air when an individual with the disease coughs or sneezes. Although the majority of women knew the correct mode by which tuberculosis is spread, Table 3.9 shows that substantial minorities of women share misconceptions about other ways the disease may be spread. For example, three in ten women falsely think that the disease may be spread through food, and 26 percent incorrectly believe that it may be spread by sharing utensils with a person with tuberculosis. Fewer women have other misconceptions including believing that tuberculosis may be spread through sexual contact with a person who has tuberculosis (9 percent) or touching a person who has the disease (6 percent). Only 2 percent of women think tuberculosis is spread through mosquito bites.

Table 3.9 Misconceptions about tuberculosis transmission

Among women who have heard of tuberculosis (TB), the percentage who report various misconceptions about ways tuberculosis is spread, by background characteristics, Tajikistan 2012

Background characteristic	Through sharing utensils	Through touching a person with TB	Through food	Through sexual contact	Through mosquito bites	Other	Don't know	Number of women who heard of TB
Age								
15-19	24.8	6.7	28.0	5.9	2.7	0.2	18.0	1,092
20-24	25.2	6.3	25.7	10.0	2.2	0.4	13.6	1,275
25-29	23.4	4.5	28.1	9.4	1.9	0.2	11.9	1,159
30-34	27.0	7.2	29.8	8.1	3.1	0.5	10.1	896
35-39	28.6	6.1	31.1	8.2	1.2	0.6	6.8	842
40-44	28.2	8.5	31.9	10.6	1.9	0.7	8.1	817
45-49	28.1	6.6	31.1	7.1	1.4	0.5	9.5	716
Residence								
Urban	26.8	6.4	26.5	8.2	2.2	0.6	10.1	1,875
Rural	25.9	6.4	29.9	8.7	2.1	0.4	12.2	4,922
Region								
Dushanbe	26.8	6.2	19.7	8.5	3.0	0.9	12.9	649
GBAO	13.0	4.5	39.0	9.0	1.1	0.1	12.7	173
Sughd	32.6	8.8	35.2	6.5	1.2	0.4	9.3	2,255
DRS	30.5	3.0	18.9	3.7	0.2	0.1	11.7	1,288
Khatlon	18.6	6.2	30.3	12.9	3.8	0.5	13.3	2,432
Education								
None/primary	21.1	1.9	36.0	8.7	1.1	0.9	16.3	282
General basic	25.2	5.6	26.0	8.8	1.9	0.3	14.8	2,046
General secondary	25.0	7.1	29.0	8.5	2.4	0.3	11.4	3,321
Professional primary/middle	34.7	6.1	31.0	8.6	2.0	0.6	5.9	583
Higher	29.8	7.8	34.2	7.8	1.6	1.1	5.0	565
Wealth quintile								
Lowest	25.7	6.3	36.3	8.9	3.0	0.1	12.6	1,293
Second	26.1	9.2	30.7	12.2	2.7	0.0	13.4	1,262
Middle	26.6	5.5	27.0	6.9	1.8	0.9	12.3	1,245
Fourth	27.6	5.9	26.5	8.3	1.4	0.4	9.2	1,457
Highest	24.8	5.6	25.5	6.8	1.7	0.6	11.1	1,540
Total	26.1	6.4	29.0	8.5	2.1	0.4	11.6	6,797

3.5.4 Knowledge about How to Prevent Tuberculosis

Women who knew about tuberculosis were asked how they would prevent the spread of the disease if a member of their family became sick with tuberculosis, and all of the actions they mentioned were recorded in the questionnaire. Table 3.10 presents the percentages of women reporting specific actions to prevent the spread of tuberculosis among family members.

Table 3.10 Women's report on how to prevent spreading of tuberculosis

Among women who have heard of tuberculosis (TB), the percentage who report various ways to prevent spreading of tuberculosis, according to background characteristics, Tajikistan 2012

Background characteristic	Sick person treated appro-priately	Sick person follows DOTS treatment	Sick person isolated	Sick person asked to dispose of sputum safely	Sick person avoids coughing or sneezing in open air	Family members get vaccina-tion/ booster	Family members take pre-ventative treatment	Family members seek doctor's advice if have fever	Family members seek doctor's advice if have prolonged cough	Clean house daily	Don't share food and utensils with infected persons	Limit sexual contact with infected person	Do nothing	Smoke house with herb	Pray	Other	Don't know	Number of women who heard of TB
Age																		
15-19	46.2	45.2	18.5	3.2	10.1	1.5	2.9	7.7	5.5	12.2	17.7	1.9	0.3	1.2	4.1	0.0	7.7	1,092
20-24	47.6	45.5	20.6	5.2	9.7	2.1	2.9	8.5	5.6	10.4	18.1	2.8	0.4	1.3	5.7	0.1	6.0	1,275
25-29	49.0	45.6	22.7	2.8	9.2	1.4	3.4	6.8	6.1	7.4	18.3	1.3	0.4	0.8	4.2	0.0	4.9	1,159
30-34	51.6	49.5	23.1	4.9	10.3	1.8	3.3	7.5	7.0	10.5	21.3	2.9	0.1	1.0	6.3	0.0	2.4	896
35-39	53.6	47.8	26.1	4.3	10.9	1.9	5.2	5.8	4.7	10.4	18.8	1.0	0.2	0.7	5.1	0.1	1.9	842
40-44	52.9	49.7	23.4	4.8	9.9	3.1	5.1	9.3	7.6	10.8	21.0	1.9	0.1	1.2	5.7	0.2	3.5	817
45-49	51.7	50.6	22.7	5.0	8.7	2.3	3.7	9.8	7.2	11.6	19.9	1.9	0.2	0.9	6.5	0.0	2.1	716
Residence																		
Urban	55.8	47.0	23.3	5.6	11.4	2.7	4.5	7.5	6.8	12.2	17.1	2.2	0.2	1.2	6.2	0.1	3.3	1,875
Rural	47.7	47.5	21.8	3.8	9.3	1.7	3.4	8.0	5.9	9.6	19.9	1.9	0.3	0.9	4.9	0.0	4.8	4,922
Region																		
Dushanbe	57.7	48.8	20.4	2.9	10.7	3.7	4.9	7.6	6.4	15.7	11.5	1.3	0.4	2.1	9.9	0.1	4.9	649
GBAO	47.2	46.9	14.7	9.3	6.2	4.0	1.6	2.3	2.2	2.3	2.4	0.5	0.2	0.3	0.6	0.0	1.1	173
Sughd	63.2	34.2	40.5	5.7	15.2	1.7	4.8	6.4	7.5	10.0	27.6	1.9	0.2	1.4	10.3	0.1	5.1	2,255
DRS	47.4	46.7	10.6	1.7	4.9	1.4	2.1	11.3	5.8	6.6	16.8	0.9	0.0	0.7	0.4	0.0	3.9	1,288
Khatlon	37.2	59.5	12.4	4.3	7.6	1.8	3.3	7.8	5.2	11.9	15.7	2.9	0.5	0.7	2.3	0.1	4.1	2,432
Education																		
None/primary	37.7	50.3	10.2	3.2	9.0	2.3	1.3	8.1	3.7	9.4	15.2	3.0	0.0	0.2	1.6	0.0	6.7	282
General basic	46.5	48.6	19.0	2.8	8.6	2.0	2.4	8.5	5.6	9.2	18.9	2.2	0.4	0.8	3.9	0.0	5.5	2,046
General secondary	50.5	47.0	22.5	4.5	9.5	1.6	3.9	7.5	6.6	10.6	19.2	1.9	0.3	1.1	6.3	0.1	4.3	3,321
Professional primary/ middle	55.3	46.1	29.5	5.3	11.4	2.1	4.6	7.4	5.3	9.9	20.4	1.1	0.0	1.2	3.0	0.0	2.5	583
Higher	60.1	44.7	30.6	7.4	15.5	3.6	7.1	7.6	7.2	13.8	20.4	2.3	0.3	2.0	7.9	0.0	1.5	565
Wealth quintile																		
Lowest	41.9	56.5	16.6	2.9	6.0	1.8	2.3	8.7	6.2	8.0	19.0	2.0	0.5	0.6	2.6	0.0	4.6	1,293
Second	44.4	52.9	17.8	4.1	6.9	1.9	2.9	9.1	5.6	9.6	20.3	2.8	0.3	1.3	2.7	0.1	5.0	1,262
Middle	49.6	45.9	23.5	4.7	10.1	1.4	2.9	8.8	6.4	10.1	19.6	2.1	0.1	0.7	5.3	0.0	5.1	1,245
Fourth	51.9	42.8	28.8	4.0	12.1	2.0	4.3	6.8	6.4	10.7	19.9	1.4	0.2	1.0	7.7	0.0	3.8	1,457
Highest	59.7	40.6	23.1	5.4	13.2	2.6	5.5	6.3	6.1	12.8	17.1	1.7	0.2	1.4	7.2	0.2	3.8	1,540
Total	50.0	47.3	22.2	4.3	9.8	1.9	3.7	7.8	6.1	10.3	19.1	2.0	0.3	1.0	5.3	0.1	4.4	6,797

The most common preventative action women reported was to seek appropriate treatment for a family member with tuberculosis (50 percent). Around half of women (47 percent) mentioned that a family member with tuberculosis should be observed by a health worker to ensure the treatment regime is being followed. Tajikistan's tuberculosis treatment regime is built around the directly observed therapy (DOT) approach recommended by WHO in which a health worker observes that a person with TB takes each dose of the medications prescribed to treat the disease (Zaleskis et al., 2009).

Other less frequently mentioned actions that women mention to avoid the spread of tuberculosis include isolating the infected person (22 percent), not sharing food and utensils with the infected person (19 percent), cleaning the house daily (10 percent), and having the infected person avoid coughing or sneezing into the open air (10 percent). Only 4 percent of the women reported that they did not know of any way to avoid the spread of tuberculosis, and virtually no women believed there was nothing a family could do to prevent the spread of tuberculosis.

3.6 HYPERTENSION

Cardiovascular diseases, including heart attacks and strokes, accounts for 39 percent of all deaths annually in Tajikistan (WHO, 2011). High blood pressure or hypertension is among the major risk factors for cardiovascular disease. In the 2012 TjDHS, respondents were asked several questions to determine their history of hypertension, including whether they had ever been told by a doctor or other health worker that they had high blood pressure and, if so, whether they had been told that on two or more occasions. If they reported being told one or more times that they had high blood pressure, they were asked additional questions about actions they were taking at the time of the survey to lower their blood pressure.

Table 3.11 summarizes the results of the questions relating to hypertension. In reviewing the findings, it is important to remember that they apply only to women who were advised by a health care provider that they had high blood pressure. Many Tajik women may suffer from hypertension but do not know it; hypertension is often termed the 'silent killer' because of the lack of warning signs or symptoms.

Overall, the TjDHS results indicate 12 percent of women age 15-49 report having ever been told by a doctor or other health worker that their blood pressure was high. A diagnosis of hypertension is usually only made after blood pressure readings are found to be high on several occasions. Table 3.11 shows that the majority of women (78 percent) told they had high blood pressure were advised they were hypertensive on two or more occasions. It is encouraging that more than eight in ten of the women told they had high blood pressure were taking medication to control their blood pressure. Women were much less likely to be taking other measures to lower their blood pressure. For example, less than half were cutting back on salt in their diet (46 percent), 39 percent were controlling or losing weight, and 29 percent were exercising.

Table 3.11 Knowledge and treatment of high blood pressure

Percentage of women age 15-49 who were ever told by a health professional that they have high blood pressure, and among women who were ever told that they have hypertension, the percentage who were told on two or more different occasions by a health professional that they have hypertension, and the percentages taking specific actions to lower blood pressure, by background characteristics, Tajikistan 2012

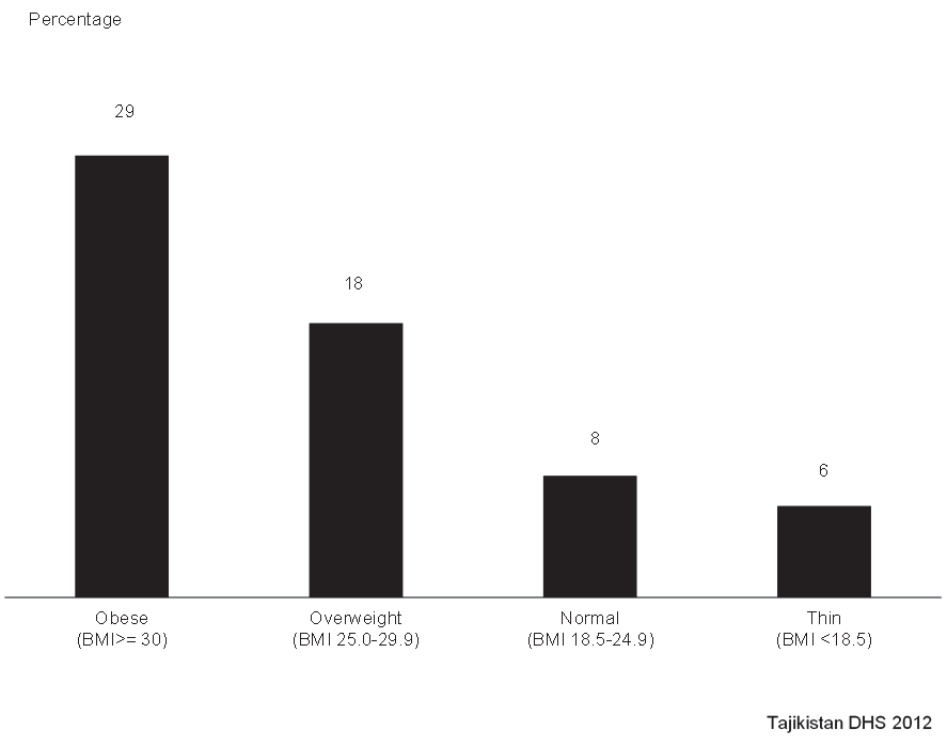
Background characteristic	Percentage of women ever told by a health professional they had hypertension or high blood pressure	Number of women	Among women ever told by a health professional they have hypertension percentage:							Number of women ever told they had hyper-tension
			Told on two or more different occasions that they had high blood pressure	Taking prescribed medication	Controlling or losing weight	Cutting down salt in their diet	Exercising to control hyper-tension	Cutting down on alcohol intake	Stopped smoking	
Age										
15-19	2.6	2,013	42.0	72.4	31.3	41.4	21.6	16.0	15.9	52
20-24	6.6	1,950	69.6	66.8	32.4	36.7	22.3	2.4	2.4	130
25-29	9.9	1,609	75.7	76.7	34.7	33.5	22.2	3.3	5.7	159
30-34	12.7	1,188	79.1	82.8	34.7	42.5	23.6	5.3	5.0	150
35-39	18.4	1,030	78.5	80.6	32.9	48.9	28.1	8.6	8.9	189
40-44	23.3	991	82.7	84.5	47.0	53.0	36.1	10.2	8.2	230
45-49	29.1	875	86.8	92.3	47.9	53.8	34.1	8.7	7.9	254
Body Mass Index [1]										
<18.5 (thin)	6.4	942	72.5	67.0	20.7	34.0	27.0	11.2	11.4	61
18.5 - 24.9 (normal)	8.4	5,788	71.9	76.7	31.1	41.8	23.7	5.4	6.0	483
25.0-29.9 (overweight)	17.7	2,013	82.4	85.9	45.7	52.3	34.7	9.1	8.3	357
>=30.0 (obese)	29.0	895	85.3	88.7	50.2	48.0	30.5	8.1	7.0	260
Residence										
Urban	15.0	2,413	80.0	81.3	42.7	47.0	30.4	10.8	9.9	361
Rural	11.1	7,243	77.4	82.0	37.8	45.8	27.9	5.9	6.0	804
Region										
Dushanbe	12.6	881	85.4	77.2	42.4	42.4	28.4	12.4	11.9	111
GBAO	17.6	220	92.1	89.2	52.0	59.8	45.5	55.7	55.7	39
Sughd	9.8	2,872	76.3	71.9	48.7	56.9	23.3	7.6	6.1	281
DRS	10.6	2,240	82.0	91.0	46.1	41.4	31.6	4.7	4.8	237
Khatlon	14.4	3,444	74.8	83.4	29.1	42.1	29.1	3.8	4.2	497
Education										
None/primary	9.1	567	(70.6)	(74.2)	(17.7)	(30.3)	(21.4)	(3.9)	(4.3)	52
General basic	7.6	3,349	72.9	83.3	37.5	43.1	22.7	5.7	6.6	253
General secondary	14.5	4,474	81.5	82.6	39.3	47.4	28.3	6.7	6.0	648
Professional primary/ middle	19.3	645	77.6	80.3	47.9	49.6	37.3	10.6	11.4	125
Higher	14.2	620	75.2	77.8	44.9	50.3	40.6	15.2	13.4	88
Wealth quintile										
Lowest	10.5	1,878	80.8	83.7	30.2	39.6	32.0	6.0	6.1	196
Second	11.6	1,913	73.5	82.7	36.0	48.4	31.0	7.7	8.6	223
Middle	11.6	1,904	71.0	77.1	37.4	49.0	23.1	4.4	3.6	220
Fourth	13.4	1,971	84.9	84.2	42.6	44.9	25.9	6.5	5.9	264
Highest	13.2	1,989	79.6	81.0	47.2	48.0	31.7	11.8	11.2	262
Total	12.1	9,656	78.2	81.8	39.3	46.2	28.7	7.4	7.2	1,165

Note: Total includes women with missing information on Body Mass Index who are not shown separately. Figures in parentheses are based on 25-49 unweighted cases.
[1] The Body Mass Index (BMI) is expressed as the ratio of weight in kilograms to the square of height in meters (kg/m^2).

Table 3.11 also presents the variation in the percentage of women told they had high blood pressure and the percentages of these women taking various actions to control hypertension by background characteristics. As expected, the percentage told that they had high blood pressure increases directly with age, from 3 percent of women age 15-19 to 29 percent among women age 45-49. Also as expected, being overweight is strongly related to high blood pressure. As shown in Figure 3.2, the percentage of women ever told they had high blood pressure is much higher among women classified as obese (29 percent) or overweight (18 percent) based on body mass[2] than women considered normal-weight (8 percent) or thin (6 percent). The percentage told they had high blood pressure is slightly higher among urban women than rural women, and it ranges from 10 percent in Sughd to 18 percent in the GBAO region. Women with general secondary or higher education are more likely to report having been told they had high blood pressure than less educated women. The percentage told they had high blood pressure generally increases with the wealth quintile, but the differences between quintiles are small.

[2] The 2012 TjDHS obtained data on the height and weight of women age 15-49. This information was used to calculate each woman's Body Mass Index (BMI), a commonly used measure of nutritional status obtained by dividing weight in kilograms by height in meters squared (kg/m^2). More information on BMI levels among TjDHS respondents is presented in Chapter 12 of this report.

Figure 3.2
Women ever told they had hypertension by Body Mass Index



Although the pattern is not uniform, groups where the percentages of women told they had high blood pressure are highest tend to be the groups most often taking actions intended to lower blood pressure. For example, among women told they had high blood pressure, those who are obese and overweight women are more likely to say they are taking medication, losing weight, cutting down on salt, and exercising than normal-weight or thin women.

3.7 SMOKING

Tobacco use is associated with increased risks of respiratory, cardiovascular, and other diseases among adults who smoke, and the effects of second-hand smoke pose increased morbidity and mortality risks among adults and children who do not use tobacco (WHO, 2012b). The 2012 TjDHS included questions designed to assess the prevalence of smoking among the women interviewed in the survey. Smoking is rare among Tajik women, overall. Only 0.3 percent of women age 15-49 interviewed in the TjDHS reported that they currently smoke (data nor shown). While few women themselves smoke, a substantial number of women are regularly exposed to the harmful effects of second-hand smoke. As reported in Chapter 2, one in ten households reports that smoking takes place in the home daily or weekly.

MARRIAGE AND SEXUAL ACTIVITY 4

Key Findings

- More than two-thirds of Tajik women age 15-49 (67 percent) are currently married, just over one-quarter are never-married, and 5 percent are divorced, separated, or widowed.
- Most Tajik women marry at least once during their lifetime, with the proportion never-married decreasing rapidly with age to less than 1 percent among women age 45-49.
- Less than one percent of women age 25-49 married for the first time before age 15, and only 15 percent married before age 18. The median age at first marriage is 20.2 years.

This chapter addresses age at first marriage. Marriage is a primary indication of the exposure of women to the risk of pregnancy and, therefore, is important for the understanding of fertility. Populations in which age at marriage is young tend to be populations with early childbearing and high fertility. For this reason, there is an interest in trends in age at marriage. The chapter also includes information on two other direct measures of exposure to pregnancy: the age at first sexual intercourse and the frequency of intercourse.

4.1 CURRENT MARITAL STATUS

Table 4.1 presents the distribution of all TjDHS respondents by current marital status and age. The term *married* in the table refers to legal or formal unions while *living together* refers to informal unions. In subsequent tables, the two categories are combined into the proportion currently in either type of union, and the new category is referred to as *currently married*.

Table 4.1 shows that more than two-thirds of Tajik women age 15-49 (67 percent) are currently married. Reflecting the traditional character of Tajik society, almost all of these women are in formal unions; less than 1 percent report they are living together with a partner. Just over one-quarter of women are currently never-married, while 5 percent are divorced, separated, or widowed.

Table 4.1 Current marital status

Percent distribution of women age 15-49 by current marital status, according to age, Tajikistan 2012

	Marital status								
Age	Never married	Married	Living together	Divorced	Separated	Widowed	Total	Percentage of respondents currently in union	Number of respondents
15-19	86.7	13.2	0.0	0.1	0.0	0.0	100.0	13.2	2,013
20-24	29.4	67.4	0.3	1.8	0.0	1.1	100.0	67.7	1,950
25-29	12.8	82.6	0.2	3.2	0.1	1.1	100.0	82.8	1,609
30-34	6.8	85.2	0.2	5.2	0.3	2.3	100.0	85.4	1,188
35-39	2.6	89.5	0.1	4.3	0.2	3.2	100.0	89.6	1,030
40-44	1.1	88.2	0.5	4.3	0.2	5.7	100.0	88.7	991
45-49	0.5	87.5	0.5	3.0	0.3	8.3	100.0	88.0	875
Total	27.4	67.1	0.2	2.7	0.1	2.4	100.0	67.4	9,656

The results in Table 4.1 also suggest that most Tajik women marry at least once during their lifetime, with the proportion never-married decreasing rapidly with age. Among women age 30-34, only 7 percent have never married, and the proportion never married declines to 1 percent or less among women age 40 and older. The proportion divorced or separated peaks at 6 percent among women age 30-34, while the proportion widowed increases directly with age to 8 percent among women age 45-49.

4.2 AGE AT FIRST MARRIAGE

First marriage is an important social and demographic indicator since, in most societies, it represents the point in life when childbearing first becomes welcome. The information presented in Table 4.2 on the age at which women first marry was obtained by asking all ever-married TjDHS respondents about the month and year in which they married their first partner. Respondents who were not able to provide the date of their first marriage were asked about their age when they first married.

Trends in age at marriage in Tajikistan can be examined in Table 4.2 by comparing changes in the proportions married at specific exact ages across age groups. In addition, the median age at marriage is presented to provide a measure of the average age at which women married. The median is defined as the age by which half of the cohort has married. In drawing conclusions concerning trends in the age at first marriage, the data for the oldest age cohorts should be interpreted cautiously since respondents may not recall dates or ages at marriage with accuracy.

Table 4.2 Age at first marriage

Percentage of women age 15-49 who were first married, by specific exact ages, and median age at first marriage, according to current age, Tajikistan 2012

	Percentage first married by exact age:					Percentage never married	Number of respondents	Median age at first marriage
Current age	15	18	20	22	25			
15-19	0.1	na	na	na	na	86.7	2,013	a
20-24	0.1	11.6	44.3	na	na	29.4	1,950	a
25-29	0.4	10.9	34.5	61.2	80.6	12.8	1,609	21.1
30-34	1.1	18.8	45.9	63.4	81.6	6.8	1,188	20.4
35-39	0.3	23.8	60.4	78.3	88.5	2.6	1,030	19.3
40-44	1.0	11.6	52.9	78.4	89.6	1.1	991	19.8
45-49	0.3	12.1	49.5	76.0	91.3	0.5	875	20.0
25-49	0.6	15.2	47.1	70.0	85.5	5.8	5,693	20.2

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

Table 4.2 shows that, among women age 25-49, the median age at first marriage was 20.2 years. Less than one percent of women age 25-49 married for the first time before age 15, and only 15 percent married before age 18. The rate at which the women marry clearly accelerates after age 18, with nearly half of women reporting they married for the first time by age 20 and 86 percent by age 25. An examination of the trend in the median age at marriage indicates that women age 25-29 married for the first time more than one year later on average than women age 35 and older.

Table 4.3 presents differentials in the median age at first marriage by background characteristics. In general, differences in age at first marriage are not large, with the median age at marriage for most subgroups falling within half a year of the national median (20.2 years). The median age at first marriage is highest among women in the GBAO region (22.6 years) and women with higher education (22.3 years).

Table 4.3 Median age at first marriage by background characteristics

Median age at first marriage among women age 25-49, according to background characteristics, Tajikistan 2012

Background characteristic	Women age 25-49
Residence	
Urban	20.5
Rural	20.1
Region	
Dushanbe	20.5
GBAO	22.6
Sughd	20.1
DRS	20.1
Khalton	20.2
Education	
None/primary	20.6
General basic	20.2
General secondary	19.8
Professional primary/middle	20.9
Higher	22.3
Wealth quintile	
Lowest	20.4
Second	20.0
Middle	20.4
Fourth	20.0
Highest	20.3
Total	20.2

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

4.3 AGE AT FIRST INTERCOURSE

Age at first marriage has long been used as a proxy for a woman's first exposure to sexual intercourse and, thus, to the risk of pregnancy. However, a woman may initiate sexual intercourse before (or in a few cases after) she begins living together or is formally married to her first spouse/partner. In the 2012 TjDHS, women were asked about how old they were when they first had intercourse. Table 4.4 shows the ages at which women start having sexual intercourse and the trend in this indicator across age cohorts. Table 4.5 shows the variation in the median age at first intercourse among women 25-49 by background characteristics.

Table 4.4 Age at first sexual intercourse

Percentage of women age 15-49 who had first sexual intercourse by specific exact ages, percentage who never had sexual intercourse, and median age at first sexual intercourse, according to current age, Tajikistan 2012

	Percentage who had first sexual intercourse by exact age:					Percentage who never had intercourse	Number	Median age at first intercourse
Current age	15	18	20	22	25			
15-19	0.1	na	na	na	na	86.6	2,013	a
20-24	0.1	11.3	43.3	na	na	29.4	1,950	a
25-29	0.3	10.1	32.6	59.1	77.1	12.8	1,609	21.3
30-34	1.1	18.9	45.7	62.7	79.6	6.8	1,188	20.5
35-39	0.2	23.1	59.3	76.2	85.3	2.6	1,030	19.4
40-44	1.0	11.2	52.0	77.1	87.8	1.1	991	19.9
45-49	0.2	11.3	48.7	75.0	89.2	0.5	875	20.1
25-49	0.6	14.7	46.0	68.5	82.8	5.8	5,693	20.3

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

Tajikistan is a traditional society. In such settings, women are unlikely to have many opportunities to engage in sexual intercourse before marriage. Moreover, those women who initiated intercourse before marriage may be very reluctant to admit that in a survey interview. Thus, it is not surprising that the findings with respect to the age at first intercourse in Table 4.4 correspond almost exactly with the results presented for the age at first marriage in Table 4.2. The median age at first intercourse among women age 25-49 is in fact slightly higher than the age at first marriage (20.3 years versus 20.2 years), and the percentages reporting they initiated sexual intercourse by exact ages 18, 20, 22, and 25 years are uniformly slightly lower than the percentages reporting they were first married at those exact ages. Similarly, the median ages at first intercourse for each of the age cohorts in Table 4.4 are higher than the median ages at first marriage reported for those cohorts in Table 4.2. A comparison of the medians in Table 4.5 with similar information on the median age at first marriage in Table 4.3 indicates that the pattern of a slightly later average age at intercourse than first marriage is apparent in almost all socioeconomic groups.

Table 4.5 Median age at first sexual intercourse by background characteristics

Median age at first sexual intercourse among women age 25-49, according to background characteristics, Tajikistan 2012

Background characteristic	Women age 25-49
Residence	
Urban	20.6
Rural	20.2
Region	
Dushanbe	20.6
GBAO	22.9
Sughd	20.2
DRS	20.2
Khalton	20.3
Education	
None/primary	20.7
General basic	20.3
General secondary	19.9
Professional primary/middle	21.0
Higher	22.4
Wealth quintile	
Lowest	20.4
Second	20.2
Middle	20.4
Fourth	20.1
Highest	20.3
Total	20.3

The pattern of a slightly later age at first intercourse than first marriage in the TjDHS results may reflect a tendency for some couples in Tajikistan to delay cohabitation and the initiation of sexual intercourse for a period after they formally marry. However, much of the pattern is likely owed to errors in the reporting of the age at first marriage and, particularly, first intercourse. In particular, TjDHS respondents were asked to provide the exact month and year they first married and only to provide the age at which they married if they could not provide the date. In contrast, respondents were asked to provide information only on their age at first intercourse, which may have resulted in a greater number of reporting errors.

4.4 Recent Sexual Activity

In the absence of contraception, the probability of pregnancy is related to the regularity of sexual intercourse. Thus, information on intercourse is important for refinement of the measurement of exposure to pregnancy. Table 4.6 is based on responses to a question on time since last intercourse and, considered together with information on whether the woman has ever had sex, allows an assessment of the overall level of sexual activity among all women age 15-49 in Tajikistan.

More than seven in ten women had ever had sexual intercourse, and 45 percent of women were recently sexually active, that is, they had sex during the four weeks before the survey. Nineteen percent of women had sexual intercourse within the year before the survey, but not during the four weeks immediately before the survey, and 9 percent reported they last had intercourse a year or more ago. The percentage recently sexually active increases with age, peaking at 62 percent among women age 40-44.

As expected, marital status is related to the recent sexual activity. Between 60 and 70 percent of currently married women report having recently had intercourse, regardless of the length of time they have been married. The proportion recently sexually active is substantially lower among women who have a husband/partner who lives elsewhere (10 percent) compared with 71 percent among currently married women who report that a husband lives with them. Sixty-three percent of women who have a husband/partner who lives elsewhere had sexual intercourse within the year before the survey, but not during the four weeks immediately before the survey, and 27 percent reported they last had intercourse a year or more ago. Overall, 7 percent of currently married women have a husband/partner who lives elsewhere (data not shown).

Not unexpectedly, nine in ten of the women who are divorced, separated, or widowed reported that it had been one year or more since they last had intercourse. Sexual activity is nonexistent (or underreported) among never-married women. The proportions recently sexually active do not vary much with other background characteristics in Table 4.6.

Table 4.6 Recent sexual activity: Women

Percent distribution of women age 15-49 by timing of last sexual intercourse, according to background characteristics, Tajikistan 2012

Background characteristic	Timing of last sexual intercourse				Never had sexual intercourse	Total	Number of women
	Within the past 4 weeks	Within 1 year[1]	One or more years	Missing			
Age							
15-19	8.7	4.3	0.3	0.1	86.6	100.0	2,013
20-24	42.1	22.3	6.0	0.3	29.4	100.0	1,950
25-29	55.4	23.3	8.3	0.3	12.8	100.0	1,609
30-34	57.4	23.7	11.8	0.3	6.8	100.0	1,188
35-39	61.2	24.0	12.0	0.2	2.6	100.0	1,030
40-44	61.9	20.2	16.5	0.3	1.1	100.0	991
45-49	57.5	23.4	18.5	0.1	0.5	100.0	875
Marital status							
Never married	0.0	0.0	0.0	0.1	99.9	100.0	2,648
Married or living together	66.3	27.5	6.0	0.2	0.0	100.0	6,504
Husband/partner lives with her	70.5	24.9	4.4	0.2	0.0	100.0	6,040
Husband/partner lives elsewhere	9.9	62.7	26.8	0.7	0.0	100.0	455
Divorced/separated/widowed	0.9	8.7	90.2	0.1	0.0	100.0	504
Marital duration[2]							
0-4 years	63.6	31.8	4.2	0.4	0.0	100.0	1,873
5-9 years	64.9	28.1	7.0	0.1	0.0	100.0	1,215
10-14 years	70.1	23.7	5.7	0.5	0.0	100.0	808
15-19 years	67.1	27.3	5.6	0.1	0.0	100.0	852
20-24 years	68.0	23.5	8.3	0.3	0.0	100.0	850
25+ years	67.2	26.0	6.8	0.0	0.0	100.0	698
Married more than once	70.2	22.7	6.8	0.3	0.0	100.0	208
Residence							
Urban	47.2	14.7	10.9	0.4	26.8	100.0	2,413
Rural	43.9	20.4	8.0	0.2	27.6	100.0	7,243
Region							
Dushanbe	47.6	14.0	10.1	0.4	28.0	100.0	881
GBAO	39.9	13.2	9.8	0.6	36.5	100.0	220
Sughd	43.1	22.6	8.8	0.2	25.3	100.0	2,872
DRS	41.8	23.6	9.2	0.1	25.3	100.0	2,240
Khalton	47.5	14.5	7.9	0.3	29.7	100.0	3,444
Education							
None/primary	42.1	17.9	8.3	0.7	31.0	100.0	567
General basic	38.1	19.3	6.9	0.0	35.8	100.0	3,349
General secondary	49.2	19.2	9.8	0.2	21.6	100.0	4,474
Professional primary/middle	48.3	20.6	11.1	0.6	19.3	100.0	645
Higher	47.1	14.6	9.0	0.5	28.9	100.0	620
Wealth quintile							
Lowest	44.6	16.7	7.8	0.1	30.7	100.0	1,878
Second	43.9	19.6	8.0	0.2	28.3	100.0	1,913
Middle	42.8	22.3	8.4	0.1	26.4	100.0	1,904
Fourth	43.8	21.3	9.3	0.3	25.3	100.0	1,971
Highest	48.3	15.0	10.1	0.3	26.4	100.0	1,989
Total	44.7	19.0	8.7	0.2	27.4	100.0	9,656

Note: Table excludes 10 married women with missing information on whether a husband/partner lives with her or elsewhere.
[1] Excludes women who had sexual intercourse within the last 4 weeks.
[2] Excludes women who are not currently married.

FERTILITY 5

Key Findings

- The total fertility rate in Tajikistan is 3.8 births per woman.
- Rural women have higher fertility than urban women (3.9 versus 3.3).
- The total fertility rate is highest in Khatlon (4.2).
- Childbearing begins relatively late in Tajikistan, with less than one-quarter of women giving birth by age 20.
- The median age at first birth is 22.

A major objective of the 2012 TjDHS was to examine fertility levels, trends, and differentials in Tajikistan. This chapter describes current and past fertility, birth intervals, age at first birth, and the reproductive behavior of adolescents. The data on birth intervals are important because short intervals are strongly associated with childhood mortality. The age at which childbearing begins can also have a major impact on the health and well-being of both the mother and the child.

All women who were interviewed in the 2012 TjDHS were asked to give a complete reproductive history. To encourage complete reporting, each woman was asked about the number of sons and daughters living with her, the number living elsewhere, and the number who had died. In addition to information on live births, all women were then asked questions on all pregnancies that did not result in a live birth to obtain the number of induced abortions, the number of miscarriages, and the number of stillbirths that women had experienced in their lifetime.

After obtaining these aggregate data, an event-by-event pregnancy history was collected. Information was collected about all the pregnancies the respondent had in the order in which they occurred, starting with her first pregnancy. For each pregnancy that resulted in a live birth, information was collected on the child's sex, survival status, and current age (for surviving children) or age at death (for deceased children). For all pregnancies that did not result in a live birth, information was collected on the month and year the pregnancy ended. For births and terminations that occurred during the five years preceding the survey (i.e., in January 2007 or later), the pregnancy duration was recorded in the 5-year calendar of events. Women were also asked questions about current pregnancies.

5.1 CURRENT FERTILITY

Several measures of current fertility are derived from the pregnancy history data. Age-specific fertility rates (ASFRs) refer to the average number of live births per 1,000 women in a certain age group.[1] They are a valuable measure to assess the current age pattern of childbearing. The total fertility rate (TFR) is defined as the total number of births a woman would have by the end of her childbearing period if she were to pass through those years bearing children at the currently observed ASFRs. The TFR is obtained by summing the ASFRs and multiplying by five. The general fertility rate (GFR) is expressed as the annual number of live births per 1,000 women age 15-44, and the crude birth rate (CBR) is expressed as the annual number of live births per 1,000 population.

[1] Numerators for age-specific fertility rates are calculated by summing the number of live births that occurred in the period 1-36 months preceding the survey (determined by the date of interview and the date of birth of the child) and classifying them by the age of the mother (in five-year groups) at the time of birth (determined by the mother's date of birth). The denominators for the rates are the number of woman-years lived in each specific five-year age group during the period 1 to 36 months preceding the survey.

The various measures of current fertility are calculated for the three-year period preceding the survey, which roughly corresponds to mid-2009 to mid-2012. A three-year period was chosen because it reflects the current situation without unduly increasing sampling error.

Birth data from the TjDHS are subject to the same types of errors that are inherent in all retrospective sample surveys: the possibility of omitting some births (especially births of children who died at a very young age) and the difficulty of accurately determining each child's date of birth. These errors can bias estimates of fertility trends, which therefore have to be interpreted within the context of data quality and sample sizes. A summary of the quality of the TjDHS birth history data appears in Appendix Table C.4. It shows that there might have been some transference of births from 2007 to 2006 in order to reduce the interviewer's workload; however, the differences are small and could also be due to real fluctuations in fertility. Both month and year of birth were given for all but a tiny fraction of births, and sex ratios at birth—while fluctuating considerably across time—do not show any evidence of omission by sex of the birth.

Table 5.1 shows, that the TFR for the three-year period before the survey is 3.8 children per woman. The TFR for rural areas (3.9 births per woman) is higher than that for urban areas (3.3 births).

Table 5.1 Current fertility

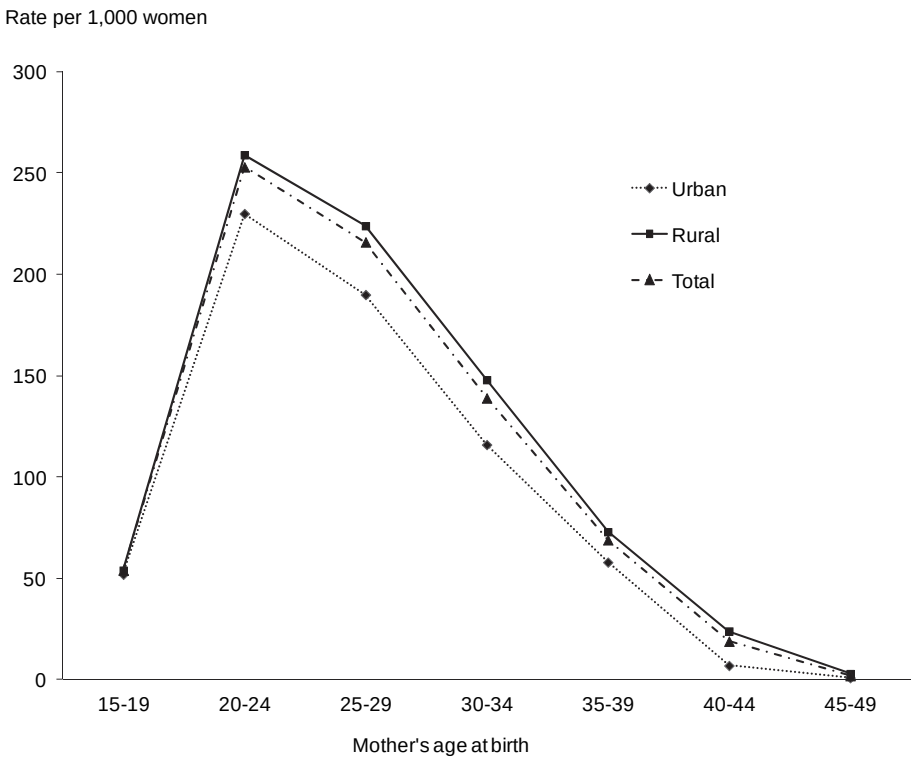
Age-specific and total fertility rates, the general fertility rate, and the crude birth rate for the three years preceding the survey, by residence, Tajikistan 2012

	Residence		
Age group	Urban	Rural	Total
15-19	52	54	54
20-24	230	259	253
25-29	190	224	216
30-34	116	148	139
35-39	58	73	69
40-44	7	24	19
45-49	1	3	2
TFR (15-49)	3.3	3.9	3.8
GFR	113	141	134
CBR	28.9	35.6	33.9

Notes: 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

Table 5.1 and Figure 5.1 show that age-specific fertility rates are low among women age 15-19 (54 per 1,000 at the national level), rise to a peak among women 20-24 (253 per 1,000), remain high for women 25-29 (216 per 1,000), and decline rapidly at older ages. Age-specific fertility rates are higher among rural than urban women throughout the childbearing years, but the difference is more pronounced among women under age 30 than among older women: the greatest absolute urban-rural difference in ASFR (34 births per 1,000 woman) is in the 25-29 age group.

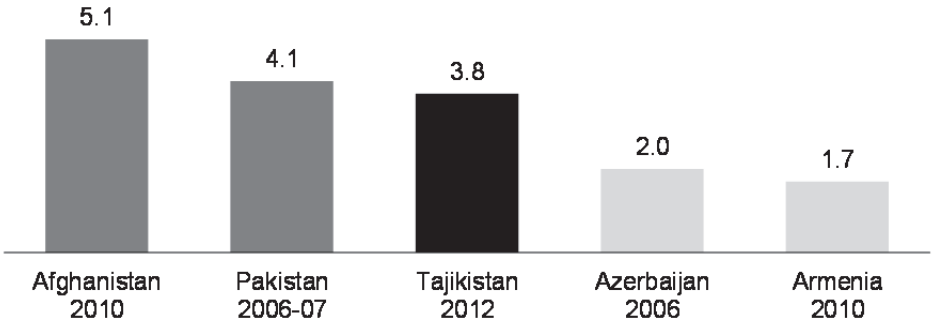
Figure 5.1
Age-specific fertility rates by urban-rural residence



Tajikistan DHS 2012

As shown in Figure 5.2, compared with recent fertility estimates from Demographic and Health Surveys conducted in other countries, the TFR of 3.8 births per woman in Tajikistan in 2012 is lower than in Afghanistan (5.1 births per woman in 2010) and Pakistan (4.1 births per woman in 2006-07), but higher than in Azerbaijan (2.0 births per woman in 2006) and Armenia (1.7 births per woman in 2010). (APHI/MoPH [Afghanistan] et al., 2011; NIPS [Pakistan] and Macro International Inc., 2008; SSC [Azerbaijan] and Macro International Inc., 2008; NSS [Armenia] at al., 2012).

Figure 5.2
Comparison of TFR in Tajikistan with other countries in the region



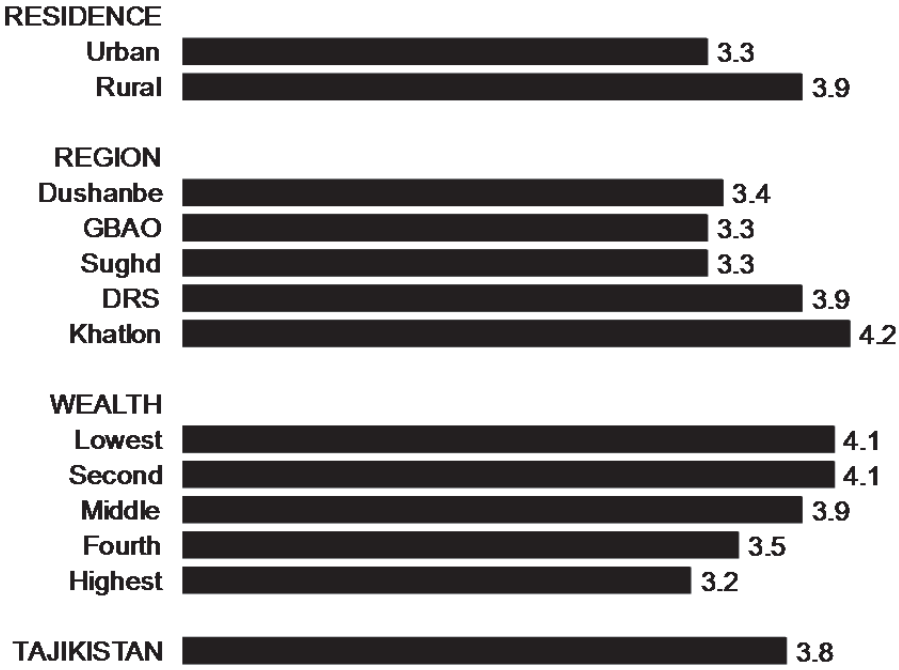
Source: Afghan Public Health Institute et al., 2011; National Institute of Population Studies and Macro International Inc., 2008; State Statistical Committee and Macro International Inc., 2008; National Statistical Service at al., 2012

5.2 FERTILITY DIFFERENTIALS

In addition to urban-rural residence, fertility also varies by region (Table 5.2 and Figure 5.3). The TFR is lowest in GBAO and Sughd (3.3 births per woman), followed by Dushanbe at 3.4 births per woman, and highest in Khatlon (4.2 births per woman) and DRS (3.9 births per women).

Women's education is strongly associated with fertility. The TFR decreases from 4.2 births for women with no education or only primary schooling to 2.7 births for women with higher education. Fertility is also negatively associated with wealth; the difference in fertility between women in the lowest and highest wealth quintiles amounts to almost one child per woman.

Figure 5.3
Fertility differentials



Tajikistan DHS 2012

The percentage of women who reported being pregnant at the time of the survey is also presented in Table 5.2. This percentage may be underreported because some women may not be aware of a pregnancy, especially at the early stages, and some women who are early in their pregnancy may not want to reveal that they are pregnant. At the time of the survey, 8 percent of women age 15-49 reportedly were pregnant. Rural women are slightly more likely to be currently pregnant than urban women (8 percent and 6 percent, respectively).

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 years, by background characteristics, Tajikistan 2012

Background characteristic	Total fertility rate	Percentage of women age 15-49 currently pregnant	Mean number of children ever born to women age 40-49
Residence			
Urban	3.3	6.3	3.8
Rural	3.9	8.0	4.8
Region			
Dushanbe	3.4	5.5	3.6
GBAO	3.3	6.0	4.0
Sughd	3.3	6.8	3.7
DRS	3.9	8.0	4.8
Khatlon	4.2	8.6	5.4
Education			
None/primary	4.2	9.9	(5.2)
General basic	4.1	9.4	5.0
General secondary	3.8	6.2	4.7
Professional primary/middle	3.1	7.3	3.8
Higher	2.7	6.2	3.2
Wealth quintile			
Lowest	4.1	6.5	5.5
Second	4.1	9.2	5.1
Middle	3.9	8.0	4.5
Fourth	3.5	8.5	4.2
Highest	3.2	5.9	3.6
Total	3.8	7.6	4.5

Note: Total fertility rates are for the period 1-36 months prior to interview.
Numbers in parentheses are based on 25-49 unweighted cases.

Among the regions, the proportion of women who are currently pregnant is highest in Khatlon (9 percent) and DRS (8 percent) and lowest in Dushanbe and GBAO (6 percent each). The relationship between the percentage currently pregnant and education is not uniform, but generally decreases as education increases. Women in the highest wealth quintile are less likely to be currently pregnant (6 percent) than women in other quintiles (7 to 9 percent).

Table 5.2 also presents data on the mean number of children ever born to women age 40-49, which allows for a crude assessment of trends in fertility. The TFR is a measure of current fertility, while the mean number of children ever born is a measure of past or completed fertility. Although comparing completed fertility among women age 40-49 with the TFR can provide an indication of fertility change, this change is subject to bias resulting from an understatement of parity by older women. Unless there is evidence of increased age at marriage and/or increased use of contraception, it is unlikely that fertility would decline. The comparison of past and current fertility indicators suggests a decline of almost one child per woman, from 4.5 to 3.8 children. There has been a decline in fertility in both urban and rural areas, in all regions, at all educational levels, and for all wealth quintiles. The difference between current and completed fertility is highest in rural areas (0.9 births), in Khatlon region (1.2 births), and among women in the lowest wealth quintile (1.4 births).

5.3 FERTILITY TRENDS

In addition to the comparison of current and completed fertility, trends in fertility can be assessed in two other ways. First, fertility trends can be investigated using retrospective data from birth histories collected in the 2012 TjDHS. Second, the TFR from the 2012 TjDHS can be compared with estimates obtained in earlier surveys.

Trends in fertility over time can be examined by comparing age-specific fertility rates from the 2012 TjDHS for successive five-year periods preceding the survey, as presented in Table 5.3. The rates for older age groups become progressively more truncated for periods more distant from the survey date, because women age 50 and older were not interviewed in the survey. For example, rates cannot be calculated for women age 35-39 during the period 15-19 years before the survey because these women would have been over age 50 at the time of the survey and therefore not eligible to be interviewed. Nonetheless, the results in Table 5.3 show that fertility has dropped among all age groups over the past two decades. The decline is steepest among the cohort age 30-34, with a 27 percent decline between the period 10 to 14 years before the survey and the period 0 to 4 years before the survey.

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, Tajikistan 2012

Mother's age at birth	Number of years preceding survey			
	0-4	5-9	10-14	15-19
15-19	47	36	49	83
20-24	243	226	251	298
25-29	212	220	234	262
30-34	133	141	181	[181]
35-39	67	87	[107]	
40-44	20	[39]		
45-49	[2]			

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

According to the results of the Survey on Infant, Child, and Maternal Mortality in the Republic of Tajikistan conducted by the Statistical Agency in 2010, the TFR in Tajikistan declined from 5.1 children per woman in 1989 to 3.6 children per woman in 2006-2010 (SA, 2010). The TFR of 3.6 for the four-year period (2006-2010) reported in the 2010 survey is slightly lower than the TFR of 3.8 children per woman in the 2012 Tajik DHS calculated for the three-year period before the survey (2010-2012). This difference could be due to differences in survey methods or to a slight increase in fertility in the recent period.

5.4 CHILDREN EVER BORN AND LIVING

Table 5.4 shows the distribution of all women and currently married women by age and number of children ever born. It also shows the mean number of children ever born to women in each five-year age group, an indicator of the momentum of childbearing, as well as the mean number of living children.

Overall, more than one-third of all women age 15-49 in Tajikistan have never given birth. This proportion is far higher among younger women; 96 percent of women age 15-19 and 47 percent of those age 20-24 have never given birth. However, this proportion rapidly decreases with age. The percentage of women age 45-49 who have never given birth is quite low (2 percent), indicating that childbearing among Tajik women is nearly universal. The percentage of women in their forties who have never had children is a crude indicator of the level of primary infertility—that is, the proportion of women who are unable to bear children at all. Because voluntary childlessness is rare in Tajikistan, it is likely that married women with no births are unable to have children. Primary infertility is relatively low in Tajikistan at less than 2 percent.

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, Tajikistan 2012

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	7	8	9	10+				
ALL WOMEN															
Age															
15-19	96.1	3.6	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	2,013	0.04	0.04
20-24	47.3	29.4	19.1	3.7	0.4	0.0	0.0	0.0	0.0	0.0	0.0	100.0	1,950	0.81	0.77
25-29	21.8	14.1	30.7	23.4	7.6	2.1	0.3	0.0	0.0	0.0	0.0	100.0	1,609	1.88	1.82
30-34	11.5	7.4	17.1	27.3	20.6	10.7	3.9	1.1	0.4	0.0	0.0	100.0	1,188	2.94	2.80
35-39	4.5	5.5	11.9	22.2	25.2	16.2	7.9	5.0	1.2	0.3	0.0	100.0	1,030	3.73	3.49
40-44	3.0	4.4	10.6	18.2	20.5	17.5	11.9	8.7	3.0	1.5	0.6	100.0	991	4.26	3.90
45-49	2.4	3.3	7.0	15.3	18.3	17.0	14.0	11.8	5.1	3.1	2.6	100.0	875	4.86	4.30
Total	35.6	11.3	14.1	13.6	10.3	6.7	3.9	2.6	1.0	0.5	0.3	100.0	9,656	2.12	1.97
CURRENTLY MARRIED WOMEN															
Age															
15-19	71.4	26.7	1.7	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	266	0.31	0.28
20-24	25.0	40.7	28.1	5.5	0.6	0.0	0.0	0.0	0.0	0.0	0.0	100.0	1,320	1.16	1.11
25-29	8.8	15.1	36.1	28.1	8.9	2.6	0.3	0.0	0.0	0.0	0.0	100.0	1,332	2.22	2.15
30-34	3.5	5.9	18.2	30.3	23.3	12.4	4.6	1.3	0.5	0.0	0.0	100.0	1,014	3.29	3.13
35-39	1.7	3.7	10.7	23.1	27.1	17.8	8.8	5.5	1.2	0.4	0.0	100.0	923	3.96	3.71
40-44	1.3	2.8	9.4	18.2	21.4	18.4	13.1	9.5	3.4	1.7	0.7	100.0	879	4.49	4.12
45-49	1.9	2.2	5.0	15.3	18.7	17.9	15.0	12.2	5.5	3.4	3.0	100.0	770	5.04	4.45
Total	11.0	14.5	19.4	19.2	14.5	9.6	5.6	3.7	1.4	0.7	0.4	100.0	6,504	2.98	2.78

As expected, older women have much higher parities than younger women. For example, over half (54 percent) of all women age 45-49 have given birth to five or more children. The mean number of children ever born increases with age from almost zero among women age 15-19 to 4.9 among women age 45-49.

Patterns are similar for currently married women, except that only 11 percent of currently married women age 15-49 have never given birth. These differences in childbearing can be explained by the presence of many young and unmarried women in the *all women* category who are less exposed to the risk of conception than married women.

5.5 BIRTH INTERVALS

Birth interval is the length of time between two successive live births. Information on birth intervals provides insight into birth spacing patterns, which affect fertility as well as maternal, infant, and childhood mortality. Studies have shown that short birth intervals are associated with increased risk of death for mother and baby, particularly when the birth interval is less than 24 months. Table 5.5 shows the percent distribution of non-first births that occurred in the five years preceding the survey by the number of months since the previous birth, according to background characteristics.

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, Tajikistan 2012

Background characteristic	Months since preceding birth						Total	Number of non-first births	Median number of months since preceding birth
	7-17	18-23	24-35	36-47	48-59	60+			
Age									
15-19	*	*	*	*	*	*	100.0	4	*
20-29	21.2	26.1	31.8	12.7	5.2	3.0	100.0	1,848	24.6
30-39	6.9	11.3	22.4	19.6	12.5	27.2	100.0	1,387	41.1
40-49	4.3	2.7	12.8	11.5	14.6	54.2	100.0	229	63.5
Sex of preceding birth									
Male	14.0	18.3	25.6	15.1	9.1	17.8	100.0	1,733	31.5
Female	14.9	18.9	27.9	15.7	8.3	14.4	100.0	1,735	29.9
Survival of preceding birth									
Living	13.2	18.6	27.2	15.6	8.9	16.5	100.0	3,300	31.3
Dead	39.1	18.2	17.7	11.2	5.7	8.1	100.0	167	22.1
Birth order									
2-3	18.4	21.8	29.2	13.5	6.8	10.3	100.0	2,256	26.8
4-6	7.3	13.4	22.8	18.4	12.2	25.8	100.0	1,044	40.5
7+	6.2	7.3	17.9	21.6	13.4	33.5	100.0	167	46.2
Residence									
Urban	14.5	17.5	23.2	13.1	11.9	19.8	100.0	723	33.0
Rural	14.5	18.9	27.7	16.0	7.9	15.1	100.0	2,745	30.1
Region									
Dushanbe	16.6	13.3	23.2	12.4	13.1	21.4	100.0	279	35.1
GBAO	14.4	16.3	21.1	11.9	11.6	24.7	100.0	55	34.5
Sughd	10.9	19.6	28.3	16.3	8.6	16.3	100.0	879	31.3
DRS	16.3	18.7	28.0	15.0	7.1	14.9	100.0	885	29.8
Khatlon	15.2	19.0	25.9	15.8	8.9	15.2	100.0	1,371	30.1
Education									
None/primary	19.1	26.6	29.6	11.3	5.4	8.0	100.0	277	24.8
General basic	15.8	19.1	28.7	15.6	7.9	13.0	100.0	1,332	29.1
General secondary	12.3	16.8	25.1	16.6	9.6	19.5	100.0	1,501	33.8
Professional primary/middle	11.9	17.8	25.6	15.3	8.5	20.9	100.0	200	31.3
Higher	18.7	18.6	22.7	9.4	13.3	17.4	100.0	157	29.9
Wealth quintile									
Lowest	13.4	20.3	24.5	16.5	8.9	16.4	100.0	754	31.2
Second	13.4	18.5	28.9	15.2	7.4	16.6	100.0	757	30.3
Middle	16.9	17.5	26.8	17.0	8.5	13.3	100.0	711	30.7
Fourth	13.9	18.6	29.8	14.8	7.9	15.2	100.0	652	30.1
Highest	15.0	18.1	23.4	12.8	11.4	19.3	100.0	594	32.4
Total	14.5	18.6	26.7	15.4	8.7	16.1	100.0	3,468	30.8

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

Birth intervals are generally moderately long in Tajikistan, with a median interval of 31 months. Nevertheless, one-third of births take place less than 24 months after a previous birth.

The length of the birth interval is closely associated with the survival status of the previous sibling. The median birth interval is 9 months shorter when the previous sibling has died than when the previous sibling is still alive (22 and 31 months, respectively). The percentage of births occurring within a very short interval (less than 18 months) is three times higher for children whose previous sibling died than for children whose previous sibling survived (39 and 13 percent, respectively). The shorter interval following the death of a child is partly due to a shortened period of breastfeeding (or no breastfeeding) for the preceding child, which leads to an earlier return of ovulation and hence increased chance of pregnancy. Minimal use of contraception, presumably because of a desire to have another child as soon as possible, could also be partly responsible for the shorter birth interval in these cases.

The median number of months since a preceding birth increases considerably with age, from 25 months among mothers age 20-29 to 64 months among mothers age 40-49. The median birth interval also increases with birth order. There is a small difference in the length of the median birth interval by sex of the preceding birth, from 30 months when the preceding child was a girl to 32 months when the preceding child was a boy. Birth intervals are slightly longer in urban (33 months) than in rural (30 months) areas. The median birth interval is longest in Dushanbe and GBAO (35 months) and shortest in DRS and Khatlon (30 months). The median number of months since the preceding birth increases and then decreases as mother's education increases. It varies little by wealth quintile.

5.6 POSTPARTUM AMENORRHEA, ABSTINENCE, AND INSUSCEPTIBILITY

Two factors influence birth intervals during the period immediately following a birth: postpartum amenorrhea and postpartum abstinence. Postpartum amenorrhea is the interval between the birth of a child and the resumption of menstruation, during which the risk of pregnancy is very low. Postpartum amenorrhea is affected by the intensity and duration of breastfeeding. Postpartum abstinence refers to the period of voluntary sexual inactivity after childbirth. Delaying the resumption of sexual relations after a birth prolongs the period of postpartum protection. A woman is considered insusceptible to pregnancy if she is not exposed to the risk of pregnancy either because she is amenorrheic or because she is abstaining from sexual intercourse following a birth. The duration of amenorrhea and sexual abstinence following birth jointly determine the length of insusceptibility. Table 5.6 shows the proportion of mothers who are still amenorrheic, abstaining, and insusceptible by number of months since birth for all births occurring in the three years before the survey.

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, Tajikistan 2012

Months since birth	Percentage of births for which the mother is:			Number of births
	Amenorrheic	Abstaining	Insusceptible[1]	
< 2	79.0	81.6	93.7	108
2-3	55.0	27.4	62.6	179
4-5	42.0	15.2	46.0	163
6-7	23.8	13.2	32.3	204
8-9	25.5	10.3	32.9	192
10-11	15.6	8.3	23.8	207
12-13	9.5	10.4	17.7	215
14-15	9.7	2.2	11.5	171
16-17	7.6	5.9	12.9	167
18-19	10.1	6.7	12.5	181
20-21	7.2	3.4	9.1	170
22-23	2.6	5.7	6.4	197
24-25	3.5	4.4	7.0	229
26-27	8.8	4.4	12.9	207
28-29	2.7	4.5	6.8	193
30-31	3.3	3.7	7.0	160
32-33	1.8	3.7	5.3	173
34-35	3.7	3.5	5.2	212
Total	15.5	10.2	20.5	3,328
Median	3.2	2.0	4.1	na
Mean	6.6	4.6	8.4	na

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

The data indicate that mothers in Tajikistan are amenorrheic for a median of 3 months, abstain for a median of 2 months, and are insusceptible to pregnancy for a median of 4 months. The proportion of women who are amenorrheic drops rapidly from 79 percent in the first two months after birth to a low of 2 percent at 32-33 months. The majority (82 percent) of Tajik women abstain from sex during the first two months following a birth. The proportion abstaining drops sharply to 27 percent at 2 to 3 months and then drops to 15 percent at 4 to 5 months. The period of postpartum amenorrhea is longer than the period of postpartum abstinence and is the more important determinant of the length of postpartum insusceptibility to pregnancy. At 8 to 9 months after birth, one-quarter of all women are still amenorrheic, but only 10 percent are abstaining.

Table 5.7 shows the median duration of postpartum amenorrhea, abstinence, and insusceptibility by background characteristics. In general, differences in these three variables by background characteristics are small.

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

Median number of months of postpartum amenorrhea, postpartum abstinence, and postpartum insusceptibility following births in the three years preceding the survey, by background characteristics, Tajikistan 2012

Background characteristic	Postpartum amenorrhea	Postpartum abstinence	Postpartum insusceptibility[1]
Mother's age			
15-29	3.0	2.0	4.0
30-49	3.8	2.0	4.5
Residence			
Urban	(1.9)	1.3	3.0
Rural	3.6	2.1	4.3
Region			
Dushanbe	(0.7)	(0.7)	(2.1)
GBAO	(2.8)	(2.4)	5.8
Sughd	(2.4)	(1.6)	3.1
DRS	4.2	1.9	5.0
Khatlon	3.5	2.2	4.2
Education			
None/primary	(4.7)	(2.6)	(6.4)
General basic	3.7	1.9	4.4
General secondary	2.9	2.0	3.6
Professional primary/middle	*	*	*
Higher	(2.3)	*	*
Wealth quintile			
Lowest	2.9	(2.0)	3.5
Second	4.2	2.5	4.9
Middle	3.7	2.0	4.5
Fourth	3.4	1.6	4.3
Highest	1.1	1.1	2.4
Total	3.2	2.0	4.1

Note: Medians are based on the status at the time of the survey (current status). Medians in parentheses are based on 25-49 unweighted births, while an asterisk denotes that a median is based on fewer than 25 unweighted births and has been suppressed.
[1] Includes births for which mothers are either still amenorrheic or still abstaining (or both) following birth.

5.7 MENOPAUSE

The risk of becoming pregnant declines with age. After age 30, women's susceptibility to pregnancy declines as an increasing proportion of women become infecund. The term infecundity denotes a process rather than a well-defined event. Although the onset of infecundity is difficult to determine for an individual woman, one indicator of infecundity is menopause. Menopause is the culmination of a gradual decline in fecundity with increasing age. The 2012 TjDHS defines menopausal women as those who are neither pregnant nor postpartum amenorrheic but who have not had a menstrual period in the six months preceding the survey. Women who report that they have had a hysterectomy are also defined as menopausal. Table 5.8 presents data on menopause for women age 30 and older.

Table 5.8 Menopause

Percentage of women age 30-49 who are menopausal, by age, Tajikistan 2012

Age	Percentage menopausal[1]	Number of women
Age		
30-34	1.1	1,188
35-39	2.7	1,030
40-41	4.4	404
42-43	8.0	374
44-45	13.1	407
46-47	32.0	375
48-49	49.1	305
Total	10.1	4,084

[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.

Ten percent of women age 30-49 are estimated to be menopausal. The proportion menopausal increases with age, from 1 percent among women age 30-34 to 49 percent among women age 48-49.

5.8 AGE AT FIRST BIRTH

Age at first birth has a direct effect on fertility. The onset of childbearing at an early age has a major effect on both the mother's and the child's health. Early initiation of childbearing lengthens the reproductive period and subsequently increases fertility. In many countries, postponement of first births—reflecting an increase in the age at marriage—has contributed greatly to overall fertility decline. Moreover, bearing children at a young age involves substantial risks to the health of both the mother and child. Early childbearing also tends to restrict educational and economic opportunities for women.

Table 5.9 presents by age cohort the percentage of all women who had given birth by specific ages. The median age at first birth is not shown for women under age 24, because a majority had not become mothers before age 20. Overall, the median age at first birth is about 22 years. This median fluctuates between 21 and 23 across age groups and shows a slight tendency to rise among the younger age groups. Just under one-quarter of women in Tajikistan give birth before reaching age 20, while over half (52 percent) give birth by age 22, and about three-quarters give birth by age 25.

Table 5.9 Age at first birth

Percentage of women age 15-49 who gave birth by exact ages, percentage who have never given birth, and median age at first birth, according to current age, Tajikistan 2012

	Percentage who gave birth by exact age					Percentage who have never given birth	Number of women	Median age at first birth
Current age	15	18	20	22	25			
Age								
15-19	0.1	na	na	na	na	96.1	2,013	a
20-24	0.1	2.2	20.0	na	na	47.3	1,950	a
25-29	0.0	2.7	18.0	41.1	68.6	21.8	1,609	22.8
30-34	0.0	6.1	24.6	48.9	71.6	11.5	1,188	22.1
35-39	0.0	3.7	33.0	64.7	81.5	4.5	1,030	20.8
40-44	0.1	1.0	22.8	58.6	84.3	3.0	991	21.5
45-49	0.0	1.3	19.7	56.7	82.7	2.4	875	21.6
20-49	0.0	2.9	22.4	na	na	19.7	7,643	a
25-49	0.0	3.1	23.2	52.4	76.4	10.3	5,693	21.8

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 5.10 shows the median age at first birth by background characteristics for women currently age 25-49. Women in GBAO have a slightly higher median age at first birth then women in other regions. Differences by other characteristics are very small.

Table 5.10 Median age at first birth

Median age at first birth among women age 25-49 years, according to background characteristics, Tajikistan 2012

Background characteristic	Women age 25-49
Residence	
Urban	22.0
Rural	21.7
Region	
Dushanbe	22.2
GBAO	24.1
Sughd	21.7
DRS	21.6
Khatlon	21.9
Education	
None/primary	22.6
General basic	21.9
General secondary	21.5
Professional primary/middle	22.4
Higher	23.5
Wealth quintile	
Lowest	22.1
Second	21.9
Middle	22.0
Fourth	21.5
Highest	21.7
Total	21.8

5.9 TEENAGE PREGNANCY AND MOTHERHOOD

Teenage pregnancy and motherhood is a major social and health concern. Early teenage pregnancy can cause health problems for both the mother and the child. Teenage mothers are more likely to suffer from severe complications during delivery, which result in higher morbidity and mortality for both themselves and their children. In addition, young mothers may not be sufficiently emotionally mature to bear the burden of childbearing and rearing. Moreover, an early start to childbearing often reduces women's educational and employment opportunities and is associated with higher levels of fertility.

Table 5.11 shows that 7 percent of adolescents age 15-19 in Tajikistan have begun childbearing. Four percent of teenagers have given birth, and another 4 percent are pregnant with their first child. As expected, the proportion of women age 15-19 who have begun childbearing rises with age, from almost zero percent among women age 15 and age 16 to 27 percent of women age 19.

Early childbearing among teenagers is slightly more common in DRS (9 percent) than in other regions, especially GBAO (3 percent). It is also somewhat more common among women with no or only primary education and among women in the fourth wealth quintile.

Table 5.11 Teenage pregnancy and motherhood

Percentage of women age 15-19 who have had a live birth or who are pregnant with their first child, and percentage who have begun childbearing, by background characteristics, Tajikistan 2012

Background characteristic	Percentage of women age 15-19 who: Have had a live birth	Are pregnant with first child	Percentage who have begun childbearing	Number of women
Age				
15	0.3	0.0	0.3	342
16	0.0	0.0	0.0	443
17	0.0	0.7	0.7	422
18	3.7	5.7	9.5	415
19	15.7	11.4	27.1	391
Residence				
Urban	4.6	2.6	7.2	476
Rural	3.7	3.8	7.5	1,537
Region				
Dushanbe	4.4	2.0	6.5	183
GBAO	1.4	1.4	2.8	43
Sughd	3.4	2.9	6.3	580
DRS	4.9	4.2	9.0	461
Khatlon	3.7	4.1	7.8	746
Education				
None/primary	7.0	4.0	10.9	104
General basic	4.9	3.0	7.9	1,029
General secondary	2.5	4.1	6.6	777
Professional primary/middle	2.5	2.5	5.0	54
Higher	0.0	6.7	6.7	48
Wealth quintile				
Lowest	1.4	2.1	3.4	394
Second	3.6	4.5	8.1	398
Middle	4.3	4.1	8.3	380
Fourth	5.2	4.8	9.9	420
Highest	4.8	2.4	7.2	421
Total	3.9	3.5	7.4	2,013

FERTILITY PREFERENCES 6

Key Findings

- Forty-four percent of currently married women in Tajikistan want to limit childbearing—43 percent want no more children, and 1 percent of the women have been sterilized.
- Women prefer to have moderate family sizes (3.6 children). The most commonly reported ideal family size is four children (cited by 45 percent of women).
- Women in Tajikistan have an average of half a child more than their desired number of children. This implies that the total fertility rate would be 3.3 if unwanted births were avoided, instead of the actual rate of 3.8.
- Nevertheless, 93 percent of recent births were reported as being wanted at the time they occurred.

Information on fertility preferences is of considerable importance to family planning programs because it allows planners to assess not only the desire for children but also the extent of unwanted and mistimed pregnancies. Data on fertility preferences also indicate the direction that future fertility efforts of a country's citizens may take. In the 2012 TjDHS, women were asked a series of questions to ascertain their fertility preferences. The resulting data were used to quantify fertility preferences—whether women wanted to cease childbearing altogether or merely delay the next pregnancy, for example. Data can also be used to determine the demand for family planning—in combination with data on contraceptive use—to estimate unmet need for family planning, including the need for spacing and limiting births. The ideal number of children is another important indicator of fertility preferences that shows the number of children a woman would want in total if she could start afresh. The information on ideal family size provides two measures. First, for women who have not yet started a family the data provide an idea of future fertility (to the extent that women are able to realize their fertility desires). Second, the excess of past fertility over ideal family size provides a measure of unwanted fertility. Other topics discussed in this chapter are fertility planning and the effect of unwanted births on fertility rates.

The interpretation of data on fertility preferences is often difficult since it is understood that respondents' reported preferences are, in a sense, hypothetical and thus subject to change and rationalization. Still, data on fertility preferences indicate the direction of future fertility to the extent that individuals and couples will act to achieve their preferred family sizes.

6.1 DESIRE FOR MORE CHILDREN

Information about the desire for more children is important for understanding future reproductive behavior. The provision of adequate and accessible family planning services depends on the availability of such information. In the 2012 TjDHS, women were asked if they wanted to have another child or not and, if so, how soon they wanted the child. The question was phrased differently in the case of pregnant women to ask about desire for a subsequent child after completion of the current pregnancy. Sterilized women were considered to want no more children, and therefore they were not asked questions about their desire for more children.

Table 6.1 and Figure 6.1 show that there is widespread desire among women to control the timing and number of births they have. Overall, 44 percent of currently married women in Tajikistan want to limit childbearing—43 percent say they want no more children, and less than 1 percent have been sterilized. Thirty-seven percent of married women want to have a child at some time in the future, but only 17 percent of married women want a child within two years, and 19 percent would prefer to wait two or more years Thus, the majority of married women want to either space their next birth or cease childbearing altogether. A sizeable proportion of married women in Tajikistan are undecided about their fertility preferences (14 percent), either because they are unsure if they want another child or they want another child but are not sure when.

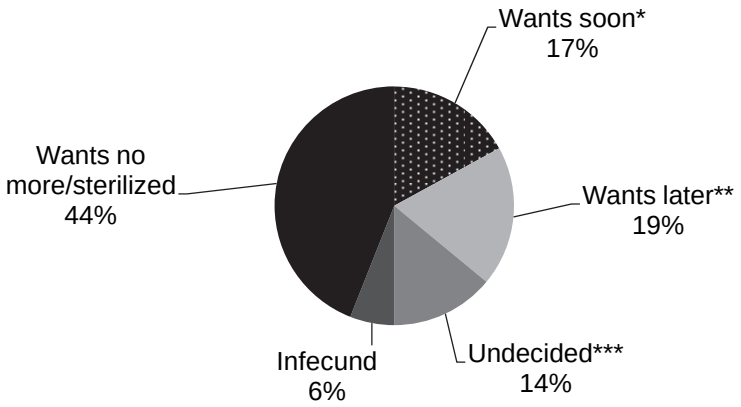
Table 6.1 Fertility preferences by number of living children

Percent distribution of currently married women age 15-49 by desire for children, according to number of living children, Tajikistan 2012

	Number of living children[1]							
Desire for children	0	1	2	3	4	5	6+	Total
Have another soon[2]	77.7	32.5	16.6	7.0	3.5	2.3	1.4	16.9
Have another later[3]	3.2	46.8	32.1	13.9	4.2	4.2	2.4	18.9
Have another, undecided when	2.9	3.1	2.3	0.7	0.3	0.9	0.5	1.5
Undecided	1.5	9.8	18.5	16.6	11.3	6.9	6.0	12.2
Want no more	0.7	2.1	26.7	54.7	73.3	77.2	80.7	43.4
Sterilized[4]	0.0	0.3	0.1	0.9	1.2	0.3	1.3	0.6
Declared infecund	13.5	5.1	3.8	5.9	6.1	8.3	7.7	6.3
Missing	0.5	0.1	0.0	0.2	0.2	0.0	0.0	0.1
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of women	479	1,044	1,410	1,388	1,004	650	529	6,504

[1] The number of living children includes the current pregnancy.
[2] Wants next birth within two years.
[3] Wants to delay next birth for two or more years.
[4] Includes both female and male sterilization.

Figure 6.1
Fertility preferences among currently married women age 15-49



* Within the next 2 years
** After 2 years
*** Wants more, undecided when or undecided if wants more

Tajikistan DHS 2012

The desire to limit fertility increases rapidly with the number of living children (Table 6.1). For example, most childless women want to have a child soon (78 percent); fewer than 1 percent say they do not want any children. However, more than one-fourth of married women with two children say they want no more or are already sterilized. This proportion increases to more than half of women with three children and almost three-quarters of those with four children.

6.2 DESIRE TO LIMIT CHILDBEARING

The proportion of women who want no more children is an important and easily understood measure of fertility preference. Table 6.2 shows the percentage of currently married women who want to stop childbearing by the number of children they already have and by urban-rural residence, region, education, and wealth quintile. Differences by urban-rural residence are very small. Overall, by region, differences among women in their desire to limit childbearing are relatively small, with married women in GBAO being the most likely to want no more children. However, the desire to limit childbearing varies more among currently married women with two or three children. The proportion of women with two or three children who want no more children is lowest in Khatlon and Dushanbe and highest in Sughd.

Generally speaking, the more education a woman has, the more likely she is to want no more children. For example, among married women with two children, the proportion who want no more increases from 18 percent among those with no education or only primary to 32 percent among those with professional primary/middle schooling and then decreases to 31 percent among women with higher education. Differences in the desire to limit childbearing by household wealth are not straightforward. Overall, the desire to have no more children first declines with wealth and then increases; women in the lowest wealth quintile are most likely to want no more children (51 percent), while women in the middle wealth quintile are least likely to want no more children (39 percent). This U-shaped pattern generally holds, regardless of the number of children women already have.

Table 6.2 Desire to limit childbearing

Percentage of currently married women age 15-49 who want no more children, by number of living children, according to background characteristics, Tajikistan 2012

Background characteristic	Number of living children[1]							Total
	0	1	2	3	4	5	6+	
Residence								
Urban	1.3	3.7	28.9	53.0	76.2	78.4	80.0	42.7
Rural	0.5	2.1	25.9	56.5	73.9	77.3	82.3	44.5
Region								
Dushanbe	0.8	5.8	23.8	41.6	70.1	81.7	(79.4)	39.6
GBAO	(3.3)	6.0	27.6	60.7	85.6	(83.7)	(81.9)	46.5
Sughd	0.7	2.5	33.1	66.7	78.3	77.0	(83.8)	45.6
DRS	1.4	2.1	24.4	50.7	67.6	68.3	77.4	41.0
Khatlon	0.0	1.8	20.8	47.2	77.4	82.1	83.9	45.7
Education								
None/primary	(0.0)	0.0	17.9	48.8	(67.3)	*	*	32.2
General basic	0.9	1.3	20.9	47.4	68.8	75.5	75.4	33.3
General secondary	0.0	2.8	30.6	57.9	76.1	77.0	83.5	50.8
Professional primary/middle	(1.0)	4.7	32.4	70.8	79.4	(81.7)	*	52.6
Higher	(6.2)	8.7	31.1	58.4	83.3	(84.1)	*	43.5
Wealth quintile								
Lowest	0.0	1.7	26.6	57.7	74.1	79.8	86.0	51.0
Second	0.0	1.9	26.9	57.4	80.3	74.3	82.9	45.2
Middle	1.6	1.5	22.9	52.6	70.6	74.6	72.1	39.1
Fourth	0.2	2.3	27.0	55.2	73.9	79.0	83.5	41.5
Highest	1.7	5.3	29.8	55.8	73.9	80.4	79.2	44.1
Total	0.7	2.5	26.8	55.6	74.5	77.5	82.0	44.0

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

6.3 IDEAL FAMILY SIZE

Women who were interviewed in the 2012 TjDHS were asked two questions for determining ideal family size. Those who did not have any living children were asked, "If you could choose exactly the number of children to have in your lifetime, how many would that be?" For respondents who had living children, the question was rephrased as follows, "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 lifetime, how many would that be?" The results are presented in Table 6.3.

Table 6.3 Ideal number of children by number of living children

Percent distribution of women 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, Tajikistan 2012

	Number of living children							
Ideal number of children	0	1	2	3	4	5	6+	Total
0	2.2	0.1	0.1	0.3	0.8	0.3	0.0	0.9
1	2.3	1.4	0.3	0.5	0.0	0.4	0.0	1.1
2	39.7	32.3	28.3	13.1	7.3	3.5	3.7	24.9
3	11.1	15.3	17.2	22.3	3.3	3.1	2.3	12.4
4	31.9	42.6	48.2	53.8	73.8	42.5	33.8	44.5
5	2.1	2.0	2.6	4.3	4.1	21.2	5.0	4.2
6+	3.8	4.5	2.8	5.0	9.6	26.2	50.2	8.8
Non-numeric responses	6.9	1.7	0.5	0.9	1.0	2.8	5.1	3.3
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number	3,215	1,188	1,521	1,462	1,047	672	550	9,656
Mean ideal number children for:[2]								
All women	3.0	3.3	3.4	3.7	4.1	4.7	5.4	3.6
Number of women	2,995	1,168	1,513	1,449	1,037	653	522	9,336
Currently married women	3.4	3.3	3.4	3.7	4.1	4.7	5.4	3.8
Number of currently married women	463	1,029	1,404	1,376	993	631	504	6,401

[1] The number of living children includes current pregnancy for women.
[2] Means are calculated excluding respondents who gave non-numeric responses.

Women in Tajikistan generally prefer moderate family sizes (3.6 children on average). More than two in five women (45 percent) want to have four children, while one-quarter (25 percent) want to have two children. Twelve percent of women prefer a three-child family.

The ideal number of children increases with the number of living children. Women with six or more living children have an ideal family size of 5.4, compared with 3.0 for those with no children. The positive association between actual and ideal number of children is due to two factors. First, to the extent that women are able to implement their fertility desires, women who want smaller families will tend to achieve smaller families. Second, some women may have difficulty admitting their desire for fewer children if they could begin childbearing again and may in fact report their actual number as their preferred number. Despite this tendency to rationalize, the data provide evidence of unwanted fertility, with about half of women with five or more children reporting an ideal family size of fewer than their actual number of children.

Table 6.4 shows the mean ideal number of children for women age 15-49, by background characteristics. The ideal family size for women increases with age, from 2.9 children in the youngest age group (15-19 years) to 4.6 children in the oldest age group (45-49 years). Ideal family size is slightly higher in rural areas than urban areas, and it is inversely related to household wealth. Regional variations in ideal family size range from 3.2 children among women in GBAO and Sughd to 3.9 among women in Khatlon. The relationship between ideal family size and education is erratic.

Table 6.4 Mean ideal number of children, by background characteristics

Mean ideal number of children for all women age 15-49 by background characteristics, Tajikistan 2012

Background characteristic	Mean	Number of women[1]
Age		
15-19	2.9	1,860
20-24	3.3	1,889
25-29	3.5	1,589
30-34	3.7	1,170
35-39	4.0	1,019
40-44	4.2	968
45-49	4.6	841
Residence		
Urban	3.4	2,339
Rural	3.6	6,997
Region		
Dushanbe	3.4	851
GBAO	3.2	218
Sughd	3.2	2,812
DRS	3.7	2,141
Khatlon	3.9	3,314
Education		
None/primary	3.5	536
General basic	3.4	3,186
General secondary	3.8	4,377
Professional primary/middle	3.5	633
Higher	3.3	605
Wealth quintile		
Lowest	3.8	1,800
Second	3.7	1,844
Middle	3.5	1,834
Fourth	3.4	1,913
Highest	3.4	1,945
Total	3.6	9,336

[1] Number of women who gave a numeric response.

6.4 FERTILITY PLANNING

Information collected in the 2012 TjDHS can be used to estimate levels of unwanted fertility. This information provides some insight into the degree to which couples are able to control fertility. Women age 15-49 were asked a series of questions about each child born to them in the preceding five years, as well as any current pregnancy, to determine whether the birth or pregnancy was wanted then (planned), wanted later (mistimed), or not wanted at all (unplanned) at the time of conception. In assessing these results, it is important to recognize that women may declare a previously unwanted birth or current pregnancy as wanted, and this rationalization results in an underestimate of the true extent of unwanted births.

Table 6.5 shows that the vast majority of births in the five years preceding the survey were wanted at the time they occurred (93 percent). Only 2 percent were mistimed (wanted later) and 3 percent were unwanted.

The proportion of wanted births decreases and the proportion of unwanted births increases with increasing birth order. Ninety-seven percent of first births are wanted then, compared with only 86 percent of fourth and higher-order births. The proportion of unwanted births increases from a tiny fraction of first births to 11 percent of fourth and higher births.

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, Tajikistan 2012

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	96.8	0.7	0.1	2.3	100.0	2,023
2	92.5	4.9	0.7	1.9	100.0	1,561
3	93.1	2.7	2.2	2.0	100.0	1,061
4+	86.1	1.5	10.7	1.7	100.0	1,323
Mother's age at birth						
<20	95.3	1.0	0.3	3.3	100.0	546
20-24	95.0	2.8	0.5	1.7	100.0	2,497
25-29	92.6	2.8	2.2	2.4	100.0	1,672
30-34	90.1	1.8	6.8	1.3	100.0	785
35-39	83.6	0.4	13.8	2.1	100.0	359
40-44	76.7	2.0	20.5	0.9	100.0	105
45-49	*	*	*	*	100.0	4
Total	92.7	2.3	3.0	2.0	100.0	5,968

Note: an asterisk denotes a figure based on fewer than 25 unweighted births that has been suppressed.

A similar pattern is observed for the mother's age at birth. The proportion of planned births is highest (95 percent) among mothers in the youngest age groups (<25) and then decreases with mother's age. The percentage of unwanted births increases with mother's age at birth, rising from less than 1 percent among mothers below age 25 to 21 percent of births to mothers age 40-44.

6.5 WANTED FERTILITY RATES

The wanted fertility rate measures the potential demographic impact of avoiding unwanted births. It is calculated in the same manner as the total fertility rate but excludes unwanted births from the numerator. A birth is considered wanted if the number of living children at the time of conception is lower than the ideal number of children reported by the respondent. The gap between wanted and actual fertility shows how successful women are in achieving their reproductive intentions. This measure also may be an underestimate to the extent that women may not report an ideal family size lower than their actual family size.

The total wanted fertility rates in Table 6.6 represent the levels of fertility that would have prevailed in the three years preceding the survey if all unwanted births had been avoided. Overall, the total wanted fertility rate for Tajikistan is 3.3 children, half a child lower than the actual total fertility rate (TFR) of 3.8. This implies that women have 0.5 children more than their wanted number of children and the TFR would be 13 percent lower if unwanted births were avoided.

The gap between wanted and observed fertility rates is not uniform across characteristics of women. It is higher among women in Khatlon region than among women in other regions. The gap decreases as education and wealth of the woman increases. For example, the difference between wanted and actual fertility rates is 0.8 children among women in the lowest wealth quintile, compared with only 0.3 among women in the highest wealth quintile.

Table 6.6 Wanted fertility rates

Total wanted fertility rates and total fertility rates for the three years preceding the survey, by background characteristics, Tajikistan 2012

Background characteristic	Total wanted fertility rates	Total fertility rate
Residence		
Urban	2.9	3.3
Rural	3.4	3.9
Region		
Dushanbe	3.0	3.4
GBAO	3.0	3.3
Sughd	2.9	3.3
DRS	3.4	3.9
Khatlon	3.6	4.2
Education		
None/primary	3.6	4.2
General basic	3.5	4.1
General secondary	3.3	3.8
Professional primary/middle	2.8	3.1
Higher	2.5	2.7
Wealth quintile		
Lowest	3.3	4.1
Second	3.5	4.1
Middle	3.4	3.9
Fourth	3.2	3.5
Highest	2.9	3.2
Total	3.3	3.8

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

FAMILY PLANNING 7

Key Findings

- More than nine in ten women have heard about at least one family planning method.
- Over one-quarter (28 percent) of married women are currently using contraception, primarily the IUD (19 percent).
- Around one-third of married urban women are using family planning compared with slightly more than one-quarter of rural women. Use levels are highest in in the GBAO and Sughd regions (35 percent each) and lowest in the DRS and Khatlon regions (22 and 24 percent, respectively).
- Current use of contraceptives among married women is much lower than the rate reported in the 2005 MICS survey (38 percent).
- Public sector providers are the principal source for contraceptive methods, serving nine in ten users.
- Most current users were provided information essential to making an informed choice at the time they adopted their method; almost 80 percent were told about potential side effects or problems, 73 percent were advised what to do if they experienced side effects or problems, and 70 percent were informed about other methods.
- More than one in five married women is considered to have an unmet need for family planning, 12 percent because they want to delay the next pregnancy and 11 percent because they want no more children.

This chapter first assesses contraceptive knowledge among TjDHS respondents and then moves on to consider the current practice of family planning. Special attention is focused on the source of contraception, informed choice, nonuse, reasons for discontinuation, unmet need for family planning, and intention to use in the future. The chapter concludes with information collected in the TjDHS on exposure to media coverage about family planning and on contact with family planning providers.

These topics are of practical use to the reproductive health program in several ways. The discussion of women's knowledge of family planning methods provides insight into one of the main pre-conditions to adoption of contraception. Levels of use of contraceptives provide the most obvious and widely accepted criterion of success of the program. The examination of use in relation to need pinpoints segments of the population for whom intensified efforts at service provision are most needed. Since most women have tried at least one method, practical problems with particular methods or in obtaining supplies may be important obstacles to further advances in the program. The 2012 TjDHS findings on these topics can provide important guidance for improving family planning services.

7.1 KNOWLEDGE OF CONTRACEPTIVE METHODS

Acquiring knowledge of contraceptive methods is a critical first step in the process of deciding to use family planning. Awareness of a wide range of methods improves a woman's chances of finding an appropriate method to use. To obtain information on contraceptive knowledge in the TjDHS, the names and/or descriptions of 12 contraceptive methods were read aloud, and respondents were asked if they had heard of each method. In addition, respondents were asked about other ways to avoid pregnancy that they may have heard about. Table 7.1 shows the percentages of respondents reporting they had heard of specific

methods of contraception. For analytical purposes, contraceptive methods are grouped into two types: modern and traditional. Modern methods include female sterilization, male sterilization, the pill, IUD, injectables, implants, male condom, foam/jelly, diaphragm, and lactational amenorrhea method (LAM). Traditional methods include the rhythm (calendar) method, withdrawal, and other traditional methods.

Contraceptive knowledge is widespread among women in Tajikistan. More than nine in ten currently married women, who are most immediately faced with the need to plan their families, know about at least one contraceptive method. Almost all of these women are aware of a modern method, and more than half of married women recognize at least one traditional method. Considering knowledge of specific methods, the most widely known modern method among married women is the IUD (93 percent), followed by the pill (83 percent), the male condom (71 percent), and injectables (67 percent). Other modern methods are less well-known; around three in ten married women have heard of female sterilization, implants, and the lactational amenorrhea method (LAM), and 22 percent know about emergency contraception. Very few married women know about male sterilization (12 percent) or the female condom (8 percent). With respect to traditional methods, almost half of married women know about withdrawal, and one-third are aware of the rhythm method.

Table 7.1 Knowledge of contraceptive methods

Percentage of all women and currently married women age 15-49 who know any contraceptive method, by specific method, Tajikistan 2012

Method	All women	Currently married women
Any method	83.2	95.1
Any modern method	83.2	95.0
Female sterilization	24.6	29.9
Male sterilization	9.9	11.6
Pill	70.5	83.2
IUD	81.1	93.4
Injectables	55.9	67.1
Implants	26.0	31.3
Male condom	59.7	70.7
Female condom	7.2	8.0
Lactational amenorrhea (LAM)	26.5	34.6
Emergency contraception	16.5	21.5
Any traditional method	41.5	53.5
Rhythm (Calendar) method	27.3	34.9
Withdrawal	36.1	47.5
Folk method	0.8	1.0
Mean number of methods known by women	4.4	5.3
Number of women	9,656	6,504

The mean number of methods known is a rough indicator of the breadth of knowledge of family planning methods. Table 7.1 shows that, on average, currently married women in Tajikistan are aware of more than five methods.

7.2 CURRENT USE OF CONTRACEPTION

The level of current use is the most widely used and valuable measure of the success of a reproductive health planning program. Furthermore, it can be used to estimate the reduction in fertility attributable to contraception.

To obtain information on current use of contraception, all TjDHS respondents not pregnant at the time of the survey were asked if they (or their partners) were currently using a method. Table 7.2 shows the level in the current use of contraception by method for all women and currently married women, according to age. The 2012 TjDHS found that over one-quarter (28 percent) of currently married women are using some method of contraception. Most currently married women rely on a modern method (26 percent), with only 2 percent relying on a traditional method. By far, the most popular method is the IUD, used by 19 percent of married women (Figure 7.1); more than six in ten women practicing family planning use the IUD. The pill, the male condom, injectables, and withdrawal are each used by 2 percent of married women. Less than 1 percent of women report using female sterilization.

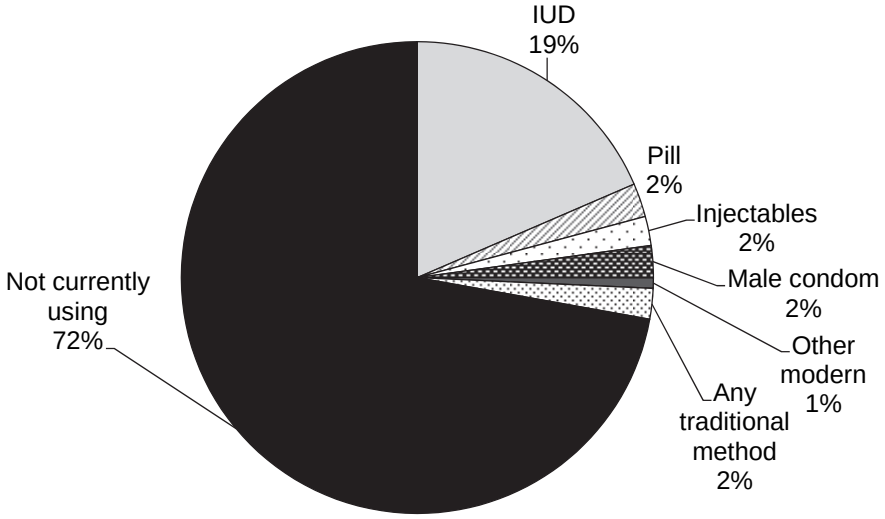
Table 7.2 Current use of contraception by age

Percent distribution of all women and currently married women age 15-49 by contraceptive method currently used, according to age, Tajikistan 2012

			Modern method										Traditional method					
Age	Any method	Any modern method	Female sterili-zation	Pill	IUD	Inject-ables	Implants	Male condom	Foam/ jelly/ diaphragm	LAM	Other	Any traditional method	Rhythm (Calendar) method	With-drawal	Other	Not currently using	Total	Number of women
ALL WOMEN																		
Age																		
15-19	0.3	0.2	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.1	0.0	0.1	0.0	0.1	0.0	99.7	100.0	2,013
20-24	6.8	6.5	0.0	0.6	4.6	0.3	0.1	0.8	0.0	0.1	0.0	0.3	0.0	0.3	0.0	93.2	100.0	1,950
25-29	22.0	20.6	0.2	1.5	16.2	0.4	0.1	2.0	0.0	0.1	0.0	1.4	0.0	1.4	0.1	78.0	100.0	1,609
30-34	35.2	32.2	0.7	3.7	21.7	2.5	0.0	3.5	0.0	0.0	0.1	3.0	0.0	2.9	0.0	64.8	100.0	1,188
35-39	42.0	39.6	1.0	4.2	27.4	3.7	0.0	3.2	0.1	0.0	0.1	2.4	0.5	1.9	0.0	58.0	100.0	1,030
40-44	33.6	30.8	0.9	2.3	22.2	3.4	0.0	2.1	0.0	0.0	0.0	2.8	0.1	2.6	0.1	66.4	100.0	991
45-49	17.4	15.4	1.1	0.4	11.5	1.9	0.0	0.5	0.0	0.0	0.0	2.1	0.2	1.8	0.1	82.6	100.0	875
Total	18.9	17.5	0.4	1.5	12.6	1.3	0.0	1.5	0.0	0.1	0.0	1.4	0.1	1.3	0.0	81.1	100.0	9,656
CURRENTLY MARRIED WOMEN																		
Age																		
15-19	2.4	1.8	0.0	0.0	0.9	0.0	0.0	0.4	0.0	0.5	0.0	0.6	0.0	0.6	0.0	97.6	100.0	266
20-24	9.9	9.5	0.0	0.9	6.8	0.3	0.1	1.2	0.0	0.2	0.0	0.4	0.0	0.4	0.0	90.1	100.0	1,320
25-29	26.6	24.8	0.3	1.8	19.6	0.5	0.1	2.4	0.0	0.1	0.0	1.8	0.0	1.7	0.1	73.4	100.0	1,332
30-34	40.9	37.4	0.8	4.4	25.2	2.9	0.0	4.0	0.0	0.0	0.1	3.5	0.1	3.4	0.0	59.1	100.0	1,014
35-39	46.5	43.9	1.1	4.6	30.3	4.1	0.0	3.6	0.1	0.0	0.0	2.7	0.5	2.1	0.0	53.5	100.0	923
40-44	37.8	34.6	1.0	2.6	25.0	3.8	0.0	2.3	0.0	0.0	0.0	3.1	0.1	2.9	0.1	62.2	100.0	879
45-49	19.4	17.0	1.0	0.5	12.9	2.1	0.0	0.5	0.0	0.0	0.0	2.4	0.2	2.1	0.1	80.6	100.0	770
Total	27.9	25.8	0.6	2.3	18.5	2.0	0.0	2.2	0.0	0.1	0.0	2.1	0.1	1.9	0.0	72.1	100.0	6,504

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

Figure 7.1
Current contraceptive use among currently married women age 15-49



Tajikistan DHS 2012

Note: The category 'other modern' includes female sterilization, LAM and other modern methods.

Table 7.2 also shows how the current use of contraception varies with age. The results conform to the inverted U-shaped pattern of prevalence by age typically observed for currently married women. Use is lower among young women (because they are in an early stage of family building) and among older women (some of whom are no longer fecund) than among those at intermediate ages. Contraceptive use levels are quite low among married women under age 25 but rise rapidly with age, peaking at 47 percent among women age 35-39, and then declining to 19 percent among women age 45-49. The IUD is the most frequently used method in all age groups.

7.3 CURRENT CONTRACEPTIVE USE BY BACKGROUND CHARACTERISTICS

Table 7.3 presents information on the current use of contraception among currently married women, by background characteristics. The table allows the comparison of levels of current contraceptive use among major groups of the population. It also permits an examination of differences in the method mix among current users in the various subgroups.

An examination of the variation in contraceptive use levels with the number of children confirms that very few women in Tajikistan begin using contraception before they have had at least one child. Use levels remain relatively low until women have more than two children; current use among women with 3-4 children is 42 percent, more than twice the level among women with 1-2 children (20 percent). The use level drops off slightly, to 35 percent, among women with 5 or more children.

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, Tajikistan 2012

			Modern method										Traditional method					
Background characteristic	Any method	Any modern method	Female sterili-zation	Pill	IUD	Inject-ables	Implants	Male condom	Foam/ jelly dia-phragm	LAM	Other	Any tradi-tional method	Rhythm (Calen-dar) method	With-drawal	Other	Not currently using	Total	Number of women
Number of living children																		
0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	99.9	100.0	746
1-2	19.5	17.7	0.2	1.7	12.8	0.6	0.1	2.0	0.0	0.3	0.0	1.8	0.1	1.7	0.0	80.5	100.0	2,333
3-4	41.9	38.7	1.1	3.6	29.0	2.0	0.0	3.0	0.0	0.0	0.1	3.2	0.3	2.8	0.1	58.1	100.0	2,268
5+	35.4	33.6	0.7	2.6	21.6	5.8	0.0	2.7	0.1	0.0	0.0	1.9	0.0	1.9	0.0	64.6	100.0	1,157
Residence of a husband/partner																		
Husband/partner lives with her	28.8	26.6	0.6	2.4	19.1	2.0	0.1	2.3	0.0	0.1	0.0	2.2	0.1	2.0	0.0	71.2	100.0	6,040
Husband/partner lives elsewhere	16.6	15.6	0.3	0.9	12.0	1.3	0.0	1.1	0.0	0.0	0.0	1.0	0.0	1.0	0.0	83.4	100.0	455
Residence																		
Urban	31.5	29.0	0.6	3.3	20.5	1.1	0.0	3.2	0.0	0.0	0.1	2.5	0.2	2.1	0.2	68.5	100.0	1,571
Rural	26.8	24.8	0.6	2.0	17.9	2.3	0.1	1.9	0.0	0.1	0.0	1.9	0.1	1.9	0.0	73.2	100.0	4,933
Region																		
Dushanbe	31.7	28.7	0.5	2.7	19.6	0.1	0.0	5.2	0.1	0.1	0.4	3.0	0.5	2.0	0.5	68.3	100.0	559
GBAO	35.0	34.9	0.0	2.5	23.8	5.6	0.0	3.0	0.0	0.0	0.0	0.2	0.0	0.2	0.0	65.0	100.0	129
Sughd	35.3	30.7	0.7	2.0	22.9	2.2	0.0	2.6	0.0	0.3	0.0	4.6	0.2	4.4	0.0	64.7	100.0	2,022
DRS	22.3	22.0	0.7	2.2	16.6	0.8	0.0	1.7	0.0	0.0	0.0	0.4	0.0	0.4	0.0	77.7	100.0	1,546
Khatlon	23.8	22.9	0.4	2.5	15.4	2.9	0.1	1.5	0.0	0.0	0.0	0.9	0.0	0.9	0.0	76.2	100.0	2,249
Education																		
None/primary	20.5	19.9	0.0	0.5	15.4	2.8	0.4	0.9	0.0	0.0	0.0	0.6	0.0	0.6	0.0	79.5	100.0	356
General basic	21.8	20.0	0.4	1.9	14.4	1.3	0.0	1.9	0.0	0.1	0.0	1.8	0.0	1.7	0.0	78.2	100.0	2,016
General secondary	30.0	28.0	0.8	2.7	20.0	2.5	0.0	1.9	0.0	0.1	0.0	2.0	0.1	1.9	0.0	70.0	100.0	3,260
Professional primary/ middle	34.1	30.2	0.3	2.5	22.9	2.0	0.3	2.1	0.0	0.0	0.1	3.9	0.5	3.4	0.0	65.9	100.0	475
Higher	40.7	37.4	0.5	2.8	25.1	0.5	0.0	8.0	0.1	0.1	0.1	3.3	0.4	2.6	0.2	59.3	100.0	397
Wealth quintile																		
Lowest	24.9	23.3	0.1	1.3	15.6	4.4	0.1	1.7	0.0	0.0	0.0	1.6	0.0	1.6	0.0	75.1	100.0	1,210
Second	24.5	22.7	0.7	2.1	16.6	2.4	0.0	1.0	0.0	0.0	0.0	1.8	0.0	1.8	0.0	75.5	100.0	1,287
Middle	25.2	23.7	0.7	1.9	18.2	1.3	0.1	1.3	0.0	0.2	0.0	1.4	0.0	1.4	0.0	74.8	100.0	1,307
Fourth	28.8	25.8	0.7	2.7	18.3	1.3	0.0	2.7	0.0	0.2	0.0	2.9	0.3	2.7	0.0	71.2	100.0	1,379
Highest	35.9	33.3	0.8	3.5	23.7	0.7	0.0	4.4	0.0	0.0	0.2	2.5	0.3	2.0	0.2	64.1	100.0	1,320
Total	27.9	25.8	0.6	2.3	18.5	2.0	0.0	2.2	0.0	0.1	0.0	2.1	0.1	1.9	0.0	72.1	100.0	6,504

Note: If more than one method is used, only the most effective method is considered in this tabulation. Table excludes 10 women with missing information on whether a husband/partner lives with her or elsewhere.
LAM = Lactational amenorrhea method.

There are differences in the current use of contraception by husband's residence. Currently married women who report a husband/partner lives elsewhere are less likely to report using any method or any modern method of contraception (17 and 16 percent, respectively) compared with women whose husbands live with them (29 and 27 percent, respectively).

Around three in ten married women in urban areas are using contraception compared with slightly more than one-quarter of rural married women. There is considerable variation in contraceptive use by region. Women from the DRS and Khatlon regions are the least likely to use any method of contraception (22 and 24 percent, respectively). The GBAO and Sughd regions have the highest rates of use of any method (35 percent each). As expected, contraceptive use increases with educational attainment. Women with higher level of education are nearly twice as likely to use a method as women with primary only or no education (41 percent compared with 21 percent).

The IUD dominates the method mix in all subgroups; whatever their background, two-thirds of current users rely on an IUD to prevent pregnancy. Injectables are most popular among users with five or more children, users in the GBAO region, and users in the lowest wealth quintile. Users in Dushanbe, users with higher education, and users in the highest wealth quintile are most likely to report relying on the male condom.

7.4 TRENDS IN CURRENT CONTRACEPTIVE USE

Table 7.4 compares the level of contraceptive use in the 2012 TjDHS with the levels reported in the 2000 and 2005 MICS surveys (UNICEF, 2000 and SCS, 2007). The survey results indicate that contraceptive use rose modestly in Tajikistan during the first half of the last decade, from 34 percent in 2000 to 38 percent in 2005, before declining sharply to 28 percent in 2012. Much of the decline in contraceptive use was due to decreased use of the IUD; around one in four married women was reported to be using an IUD in both the 2000 and 2005 MICS surveys compared with less than one in five women in the 2012 TjDHS.

Table 7.4 Trends in current use of contraception

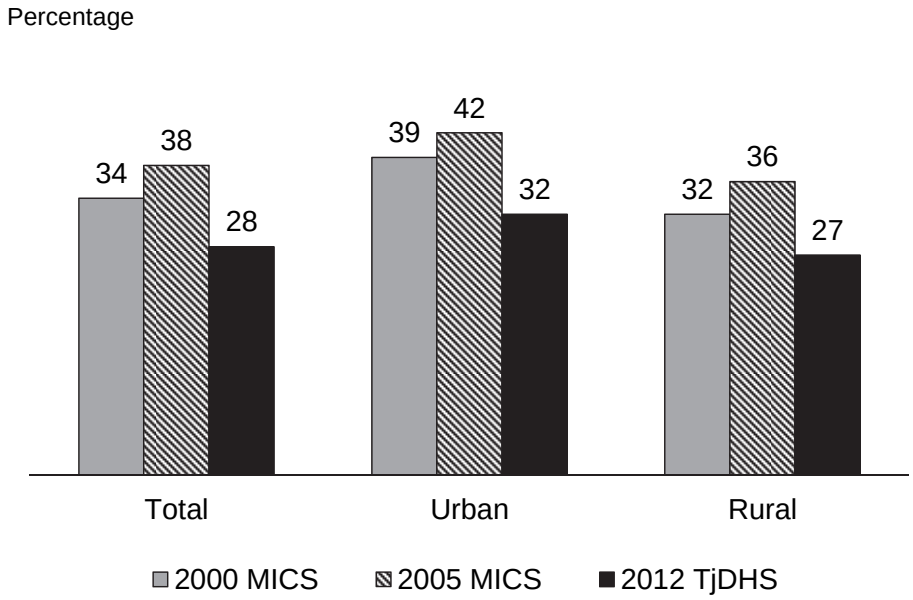
Percent distribution of currently married women by contraceptive method currently used, Tajikistan 2000-2012

Method	2000 MICS	2005 MICS	2012 TjDHS
Any method	33.9	37.9	27.9
Any modern method	28.3	36.1	25.8
Female sterilization	0.2	0.4	0.6
Male sterilization	0.1	0.4	0.0
Pill	0.6	2.1	2.3
IUD	25.1	26.3	18.5
Injectables	0.9	2.4	2.0
Implants	na	0.0	0.0
Male condom	0.4	1.4	2.2
Female condom	na	0.0	0.0
Foam/jelly	0.0	0.0	0.0
Lactational amenorrhea (LAM)[1]	1.0	3.1	0.1
Any traditional method	5.6	1.8	2.1
Rhythm (Calendar) method[2]	2.5	0.3	0.1
Withdrawal	3.0	1.4	1.9
Other	0.1	0.1	0.0
Not using	66.1	62.1	72.1
Total percent	100.0	100.0	100.0
Number of women	3,945	6,245	6,504

na=Not applicable
[1] LAM was considered a traditional method in the 2000 and 2005 MICS surveys.
[2] Periodic abstinence in the 2000 and 2005 MICS surveys.

Figure 7.2 shows that the decrease in the current use of contraception was evident in both urban and rural areas. The urban use rate fell from a peak of 42 percent in 2005 to 32 percent in 2012, while the rural use rate declined from 36 percent to 27 percent.

Figure 7.2
Trends in current contraceptive use among currently married women, Tajikistan 2000, 2005, and 2012



The reason for such a difference between surveys in contraceptive use, and in IUD use in particular, is not clear. One factor that is sometimes cited as a possible explanation is an increase in the outmigration of men from Tajikistan in search of work. Women whose husbands are away for an extended period because of work may be much less likely to adopt contraception or, if they are using contraception, more likely to discontinue use, because they are not exposed to the risk of pregnancy while their husbands are away. As shown in Table 7.3, currently married women who report a husband/partner lives elsewhere are somewhat less likely to report using any method or any modern method of contraception (17 and 16 percent, respectively) compared with women whose husbands live with them (29 and 27 percent, respectively). However, the overall number of women whose husbands live elsewhere is small—only 7 percent of all currently married women report their husbands live away—so the behavior of this group is unlikely to have had a very major effect on the trend in contraceptive use. A more indepth analysis than is possible in this report is needed to understand the role outmigration and other factors have played in the decline in contraceptive use in Tajikistan.

7.5 SOURCE OF MODERN CONTRACEPTIVE METHODS

Table 7.5 documents the main sources of contraception for users of different contraceptive methods. This information is useful for reproductive health program managers, particularly those responsible for program logistics.

The results in Table 7.5 show that public sector providers are the principal source for most of the contraceptive methods used in Tajikistan. Around nine in ten current users of modern methods obtain their method from a public sector provider. The principal public sector sources for contraceptives are polyclinics serving 28 percent of current users, health centers serving 26 percent of users, and maternity homes serving 23 percent of users. Pharmacies, the principal private sector provider for contraceptives, serve 9 percent of users.

Considering specific methods, almost all IUD and injectable users obtain their methods from a public sector provider (97 percent and 96 percent, respectively). IUD users most often obtain the method from polyclinics (31 percent), followed closely by maternity homes (28 percent) and health centers (27 percent). Nearly half of injectable users obtain the method at health centers. Polyclinics (18 percent) and health houses (15 percent) are the other sources most often relied on by injectable users. The majority of pill users rely on public sector providers, principally polyclinics (22 percent) and health centers (20 percent), for their method. More than one-third of pill users obtain their method from pharmacies.

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, Tajikistan 2012

Source	Pill	IUD	Injectables	Male condom	Total
Public Sector	60.7	96.9	96.4	40.0	88.5
Government hospital	4.6	7.0	6.1	1.3	6.6
Maternity home	5.2	28.1	8.0	2.3	23.0
Health center (urban/rural)	19.8	26.5	47.8	11.6	25.8
Reproductive health center	1.3	1.5	2.3	2.3	1.6
Health house	6.4	2.1	14.7	0.8	3.3
Polyclinics	21.9	31.2	17.5	20.7	27.6
Integrated management of childhood illness center	0.0	0.1	0.0	0.0	0.1
Healthy lifestyle center	0.5	0.1	0.0	0.0	0.1
Family medicine center	1.0	0.3	0.0	0.0	0.5
Private Sector	37.4	1.5	0.6	57.4	9.5
Private hospital clinic	0.0	0.2	0.2	0.0	0.1
Private doctor's office	0.0	0.0	0.0	0.5	0.1
Pharmacy	37.4	1.3	0.5	56.9	9.3
Other Source	0.3	0.0	0.0	0.0	0.0
Missing	0.7	1.5	3.0	2.6	1.8
Total	100.0	100.0	100.0	100.0	100.0
Number of women	149	1,213	129	147	1,683

Note: Total includes other modern methods not shown separately but excludes lactational amenorrhea method (LAM). Total and public sector, private sector, and other source subtotals include sources not shown separately.

7.6 INFORMED CHOICE

Informed choice is a key component of effective reproductive health programs. Family planning providers should inform all method users of the potential side effects and what they should do if they encounter any of the effects. Users should also be informed of the range of methods available. This information both assists the user in coping with side effects and decreases unnecessary discontinuation of temporary methods.

Current users of modern methods were asked a series of questions in the TjDHS to assess if family planning providers are giving women the information they need to make an informed choice. Users were asked if the provider had informed them about (1) possible side effects or problems with the method, (2) what to do if they experienced side effects, and (3) other methods that could be used. The questions were directed to the user's experience at the provider that they consulted at the beginning of the current segment of use. Table 7.6 presents information on these three aspects of informed choice obtained from current users who adopted their method within the five-year period prior to the survey.

The majority of women adopting the contraceptive methods shown in the table were provided information essential to making an informed choice. Almost 80 percent of users were told about side effects or problems they might have using the method, 73 percent were advised what to do if they experienced side effects, and 70 percent were informed about other methods. The likelihood that a user received information to make an informed choice generally did not vary markedly by the method the user chose. Private sector providers (mainly pharmacies serving pill users) were somewhat less likely than public sector providers to discuss side effects or other problems of the method (72 percent versus 81

percent) or to advise what to do if the user experienced side effects (67 percent versus 76 percent). On the other hand, private sector providers were more likely to provide information about other methods than public sector providers (78 percent versus 71 percent).

Table 7.6 Informed choice

Among current users of modern methods age 15-49 who started the current episode of use within the five years preceding the survey, the 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, Tajikistan 2012

	Among women who started current 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 experienced side effects	Percentage who were informed by a health or family planning worker of other methods that could be used	Number of women
Method				
Pill	75.6	69.5	71.9	130
IUD	79.5	74.2	68.9	788
Injectables	73.8	70.6	76.9	111
Initial source of method[1]				
Public Sector	81.3	75.6	71.4	963
Government hospital	78.6	71.3	63.2	70
Maternity home	82.6	77.6	76.9	252
Health center (urban/rural)	82.4	79.3	75.4	287
Health house	(88.9)	(82.8)	(80.0)	45
Polyclinics	78.6	70.6	64.1	282
Private Sector	72.1	66.9	78.1	57
Pharmacy	71.0	68.3	77.2	55
Missing	8.6	8.6	8.6	33
Total	78.5	73.0	69.9	1,054

Note: Table includes users of female sterilization and implants not shown separately. Figures in parentheses based on 25-49 unweighted cases. Sources used by fewer than 25 unweighted cases are included in the total and in the public sector and private sector subtotals but not shown separately.
[1] Source at start of current episode of use.

7.7 CONTRACEPTIVE DISCONTINUATION

A key concern for reproductive health programs is the extent to which women discontinue use due to problems with their method, leaving many at risk of an unintended pregnancy. Data on discontinuation was obtained in the 2012 TjDHS by asking respondents for information on all episodes of use between January 2007 and the interview. For each episode of use that a respondent reported, information was obtained and recorded in the calendar included in the TjDHS questionnaire on the contraceptive method used, the date (month and year) the episode began, and, if applicable, the date when the episode ended and the reason for the discontinuation.

Information from the calendar was used to calculate 12-month discontinuation rates presented in Table 7.7 by method and reason for discontinuation. The rates represent the proportion of users discontinuing a method within 12 months after the start of use. The rates refer only to episodes of contraceptive use that *began* during the period of time covered by the calendar, not all episodes that occurred during this period. For purposes of calculating the rates, the month of interview and the 2 months prior are ignored in order to avoid the bias that may be introduced by unrecognized pregnancies. The various reasons for discontinuation were treated as competing risks and, thus, the rates are additive across reasons for discontinuing.

Table 7.7 Twelve-month contraceptive discontinuation rates

Among women age 15-49 who started an episode of contraceptive use within the five years preceding the survey, the percentage of episodes discontinued within 12 months, by reason for discontinuation and specific method, Tajikistan 2012

Method	Method failure	Desire to become pregnant	Other fertility related reasons[2]	Side effects/ health concerns	Wanted more effective method	Other method related reasons[3]	Other reasons	Any reason[4]	Switched to another method[5]	Number of episodes of use[6]
Pill	5.3	4.4	6.2	2.9	2.5	4.9	9.8	36.0	7.2	237
IUD	0.4	2.2	0.8	2.7	0.2	1.8	1.2	9.4	1.1	1,054
Injectables	0.0	1.5	9.7	13.0	2.9	10.7	3.3	41.2	8.7	190
Male condom	5.3	8.8	0.0	0.4	1.0	7.9	7.9	31.3	5.3	241
Withdrawal	6.1	2.6	2.6	0.0	4.8	0.4	14.3	30.8	8.6	168
All methods[1]	2.2	3.4	2.4	3.0	1.6	3.5	8.1	24.3	4.7	2,022

Note: Figures are based on life table calculations using information on episodes of use that began 3-62 months preceding the survey.
[1] LAM, female sterilization, implants, rhythm (calendar), and other methods 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] Reasons for discontinuation are mutually exclusive and add to the total given in this column.
[5] The episodes of use included in this column are a subset of the discontinued episodes included in the discontinuation rate. A woman is considered to have switched to another method if she used a different method in the month following discontinuation or if she gave "wanted a more effective method" as the reason for discontinuation and started another method within two months of discontinuation.
[6] Number of episodes of use includes both episodes of use that were discontinued during the period of observation and episodes of use that were not discontinued during the period of observation.

Table 7.7 shows that one in four contraceptive users who started using within a five-year period before the TjDHS discontinued use within 12 months of the time they began using a method. Women who adopted the IUD were least likely to discontinue use; 9 percent of IUD users stopped using within 12 months of adopting the method. Discontinuation rates were much higher for other methods; more than four in ten injectable users and more than three in ten users of the pill, the male condom, and withdrawal, stopped using within 12 months of starting use of the method.

What happens after a user discontinues use of a method is important; a woman may simply stop all contraceptive use, leaving her potentially vulnerable to an unintended pregnancy, or she may switch to another method. Table 7.7 provides information on switching behavior during the five-year period before the TjDHS among users discontinuing use within 12 months of adopting their method. The episodes of discontinuation used in calculating the rate at which users switched to another method are a subset of all episodes of discontinuation. They include episodes in which a different method was used in the month following discontinuation and episodes in which the user “wanted a more effective method” and started another method within 2 months of discontinuing (i.e., there was only one month with no use following the discontinuation). If the woman restarted the same method after the one month of non-use, she was not considered in the switching rate.

IUD users were least likely to switch to another method immediately after stopping use. The switching rate among IUD users was 1 percent. Comparing that rate to the overall IUD discontinuation rate of 9 percent shows that around one in nine users who discontinued the IUD adopted another method very shortly after they discontinued use of the IUD. Withdrawal users were most likely to switch to another method after they discontinued use; comparing the switching rate among withdrawal users (9 percent) to the overall discontinuation rate for the method (31 percent) shows that more than one in four users discontinuing withdrawal adopted another method shortly after they stopped use of withdrawal.

Table 7.8 presents the distributions of all discontinued episodes of use in the five years preceding the survey by the reason for the discontinuation, according to the method used. Overall, the most frequent reason for discontinuation was the desire to become pregnant (25 percent). Unintended pregnancies due to method failure, i.e., the woman became pregnant while still using the method, were cited as the reason in 10 percent of discontinuations. An additional ten percent of discontinuations were due to changes in a woman’s situation that reduced the risk of pregnancy, including perceived difficulties in becoming pregnant/menopause, infrequent sex, and marital dissolution or separation. Dissatisfaction with the method

was a factor in more than one in four discontinuations, with women most frequently mentioning side effects or health concerns or the fact that the method was inconvenient to use.

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 specific method, Tajikistan 2012

Reason	Pill	IUD	Injectables	Male condom	Lactation amenorrhea	Withdrawal	All methods
Became pregnant while using	15.4	4.3	2.8	14.0	5.6	28.7	9.7
Wanted to become pregnant	16.6	33.1	12.4	35.9	5.5	17.5	25.0
Husband disapproved	2.8	2.0	1.2	9.7	0.0	9.2	3.6
Wanted a more effective method	6.9	1.7	3.7	3.7	8.8	6.8	4.1
Side effects/health concerns	11.1	27.9	28.3	1.0	0.0	0.0	16.6
Lack of access/too far	2.8	0.2	0.0	3.6	0.0	0.0	1.0
Cost too much	1.6	0.0	2.7	2.4	0.0	0.0	0.8
Inconvenient to use	8.3	9.4	21.0	6.9	1.0	1.4	8.6
Difficult to get pregnant/menopausal	1.6	1.1	0.3	0.8	0.0	0.0	0.9
Infrequent sex/husband away	9.1	6.1	14.4	8.9	2.9	12.6	8.2
Marital dissolution/separation	0.0	0.4	0.0	0.9	0.0	0.0	0.3
Other	0.0	1.7	0.0	0.0	18.4	0.0	2.2
Missing	23.8	12.2	13.1	12.1	57.6	23.7	19.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of discontinuations	168	484	123	152	92	122	1,149

Note: All methods includes female sterilization, implants, rhythm (calendar), and other methods in addition to methods shown in table.
LAM = Lactational amenorrhea method

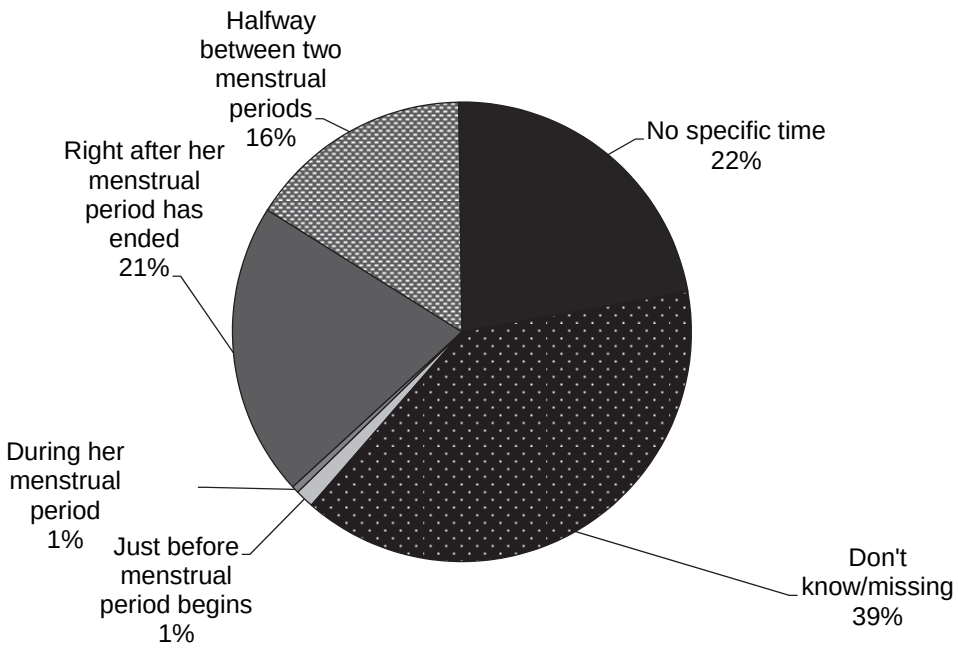
Looking at the reasons for discontinuing specific methods, IUD users most often stopped using because they were ready to have another child (33 percent) or because of side effects/health concerns (28 percent). Around one in two of all discontinuations of injectables was the result of side effects/health concerns (28 percent) or because the method was perceived as inconvenient to use (21 percent). Discontinuation due to method failure was most common among users of withdrawal (29 percent), the pill (15 percent), and the male condom (14 percent).

7.8 KNOWLEDGE OF THE FERTILE PERIOD

An elementary knowledge of reproductive physiology provides a useful background for successful practice of coitus-associated methods such as withdrawal, condoms, and vaginal methods. Knowledge is particularly critical in the case of the rhythm method. In the TjDHS, respondents were asked two questions to ascertain their level of understanding of the ovulatory cycle. The first question determined if respondents had a general understanding that there are certain days during a woman's menstrual cycle when she is more likely to become pregnant. Respondents who indicated that there were certain days a woman was more likely to become pregnant were then asked if that time was just before the woman's period begins, during her period, right after her period has ended, or halfway between two periods.

Figure 7.3 shows that Tajik women generally have a poor understanding of the ovulatory cycle. More than six in ten women either believe that there is no specific time during the menstrual cycle when a woman is more likely to become pregnant (22 percent) or they do not know when a woman is more at risk of becoming pregnant (39 percent). Only one in six women (16 percent) is aware that a woman is most at risk of pregnancy if she has intercourse halfway between two periods.

Figure 7.3
Perceived fertile period among all women age 15-49



Tajikistan DHS 2012

7.9 UNMET NEED FOR FAMILY PLANNING

Women with an **unmet need for family planning** include fecund women who are not using contraception but who wish to postpone the next birth (spacing) or stop childbearing altogether (limiting). An estimate of the size and composition of the population of women who have an unmet need for family planning services is useful for planning purposes in reproductive health programs.

The criteria used within the DHS program to identify women with unmet need for family planning has recently been revised (Bradley et al., 2012).[1] The revised definition was employed for determining the women who have an unmet need for family planning in Table 7.9. Specifically, women are considered to have **unmet need for spacing** if they are:

- At risk of becoming pregnant, not using contraception, and either do not want to become pregnant within the next two years, or are unsure if or when they want to become pregnant.
- Pregnant with a mistimed pregnancy.
- Postpartum amenorrheic for up to two years following a mistimed birth and not using contraception.

Women are considered to have **unmet need for limiting** if they are:

- At risk of becoming pregnant, not using contraception, and want no (more) children.
- Pregnant with an unwanted pregnancy.
- Postpartum amenorrheic for up to two years following an unwanted birth and not using contraception.

[1] Because of differences in the way in which unmet need is defined, the estimates of need presented in Table 7.9 are not comparable to the unmet results from the 2005 MICS survey.

Women who are classified as infecund have no unmet need because they are not at risk of becoming pregnant.

Women using contraception are considered to have **met need**. Women using contraception who say they want no (more) children are considered to have **met need for limiting**, and women who are using contraception and say they want to delay having a child, or are unsure if or when they want a/another child, are considered to have **met need for spacing**.

Finally, in Table 7.9, the total demand, percentage of demand satisfied, and percentage of demand satisfied by modern methods are defined as follows:

- **Total demand for family planning**: the sum of unmet need (for spacing and limiting) plus total contraceptive use
- **Percentage of demand satisfied**: total contraceptive use divided by the sum of unmet need plus total contraceptive use
- **Percentage of demand satisfied by modern methods**: use of modern contraceptive methods divided by the sum of unmet need plus total contraceptive use

Table 7.9 shows that more than one in five currently married women are in need of family planning, 12 percent to delay a wanted birth and 11 percent because they want no more children. Total unmet need rises rapidly with age, peaking at 28 percent among women age 20-29. As expected, the level of unmet need for spacing is higher among younger women than older women. The level of unmet need for limiting peaks at 17 percent among women age 40-44 years. Total unmet need is slightly higher among rural than urban women (23 percent versus 21 percent), and it is highest in DRS (28 percent) and lowest in Sughd (20 percent). Women with a general basic education or less and women in the lowest wealth quintile have higher unmet need than other women.

Table 7.9 also shows that the total demand for family planning among married women in Tajikistan is 51 percent. Fifty-five percent of that demand is satisfied, primarily through use of modern contraceptive methods. Demand for family planning is less than 50 percent among women age 15-24 and women age 45-49. The level of satisfied demand is markedly lower among women age 15-19 (16 percent) and 20-24 (26 percent) than among other women.

Table 7.9 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, Tajikistan 2012

Background characteristic	Unmet need for family planning			Met need for family planning (currently using)			Total demand for family planning[1]			Percentage of demand satisfied[2]	Percentage of demand satisfied by modern methods[3]	Number of women
	For spacing	For limiting	Total	For spacing	For limiting	Total	For spacing	For limiting	Total			
Age												
15-19	12.8	0.0	12.8	2.4	0.0	2.4	15.2	0.0	15.2	15.6	12.0	266
20-24	25.5	2.7	28.2	8.1	1.8	9.9	33.6	4.5	38.2	26.1	25.0	1,320
25-29	18.2	10.1	28.3	14.3	12.3	26.6	32.5	22.3	54.9	48.4	45.2	1,332
30-34	10.6	15.5	26.0	15.3	25.5	40.9	25.9	41.0	66.9	61.1	55.9	1,014
35-39	4.1	16.0	20.1	8.2	38.3	46.5	12.3	54.3	66.6	69.8	65.8	923
40-44	1.1	17.1	18.1	4.0	33.7	37.8	5.1	50.8	55.9	67.6	62.0	879
45-49	0.2	12.1	12.3	1.0	18.4	19.4	1.2	30.5	31.7	61.2	53.8	770
Residence												
Urban	12.1	8.9	21.0	12.6	19.0	31.5	24.7	27.9	52.6	60.0	55.2	1,571
Rural	11.8	11.7	23.4	7.7	19.1	26.8	19.5	30.8	50.2	53.3	49.4	4,933
Region												
Dushanbe	14.6	9.7	24.3	15.1	16.6	31.7	29.7	26.3	56.1	56.6	51.3	559
GBAO	12.6	10.5	23.1	12.0	23.0	35.0	24.6	33.5	58.1	60.3	60.1	129
Sughd	10.5	9.5	20.0	11.1	24.2	35.3	21.6	33.7	55.3	63.8	55.5	2,022
DRS	15.8	11.8	27.6	7.7	14.6	22.3	23.5	26.4	49.9	44.7	44.0	1,546
Khatlon	9.6	12.2	21.8	5.9	17.9	23.8	15.5	30.0	45.6	52.1	50.2	2,249
Education												
None/primary	17.6	10.1	27.7	9.0	11.5	20.5	26.5	21.6	48.2	42.6	41.4	356
General basic	14.8	11.1	25.9	8.4	13.4	21.8	23.2	24.6	47.8	45.7	41.9	2,016
General secondary	9.4	11.4	20.9	8.2	21.8	30.0	17.7	33.2	50.9	59.0	55.1	3,260
Professional primary/ middle	9.6	12.4	22.0	8.9	25.2	34.1	18.5	37.6	56.1	60.8	53.9	475
Higher	14.0	6.4	20.4	16.6	24.2	40.7	30.6	30.6	61.1	66.6	61.2	397
Wealth quintile												
Lowest	10.2	16.6	26.8	5.2	19.8	24.9	15.4	36.3	51.7	48.2	45.1	1,210
Second	9.4	12.2	21.7	6.2	18.3	24.5	15.6	30.5	46.2	53.1	49.2	1,287
Middle	12.7	9.7	22.4	8.8	16.4	25.2	21.5	26.1	47.6	52.9	49.9	1,307
Fourth	14.9	9.3	24.2	9.8	18.9	28.8	24.8	28.2	52.9	54.3	48.8	1,379
Highest	11.6	7.9	19.5	14.1	21.8	35.9	25.6	29.8	55.4	64.8	60.2	1,320
Total	11.8	11.0	22.9	8.9	19.0	27.9	20.7	30.1	50.8	55.0	50.9	6,504

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

7.10 FUTURE USE OF FAMILY PLANNING

Intention to use contraception in the future provides a forecast of potential demand for services and acts as a convenient summary indicator of disposition toward contraception among current nonusers. To obtain information on the intent to use family planning in the future, TjDHS respondents who were not using contraception were asked if they thought they would use a method to delay or avoid pregnancy at any time in the future. It should be realized that respondents may or may not adhere to the intentions for future use they professed at the time of the interview.

Table 7.10 presents information on plans to use family planning among currently married nonusers. Around one in four married women who are not using contraception now intends to use a family planning method in the future. An additional 29 percent are unsure if they will use family planning, and 42 percent say they do not think they will use at any time in the future. The percentage indicating that they plan to adopt contraception is highest among nonusers with two children; one-third of married nonusers in that group intend to use family planning.

Table 7.10 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, Tajikistan 2012

	Number of living children[1]					
Intention	0	1	2	3	4+	Total
Intends to use	12.4	29.0	33.8	29.6	19.6	25.7
Unsure	39.8	37.4	29.4	22.0	23.6	29.1
Does not intend to use	45.1	31.5	33.9	45.5	53.8	42.4
Missing	2.7	2.0	2.9	2.9	2.9	2.7
Total	100.0	100.0	100.0	100.0	100.0	100.0
Number of women	478	989	1,010	852	1,359	4,688

[1] Includes current pregnancy.

7.11 EXPOSURE TO FAMILY PLANNING MESSAGES

Data on the media through subgroups of the population that typically receive family planning messages is useful for assessing the coverage of current information, education, and communication efforts and for planning future media campaigns. To assess the extent to which women receive family planning information through mass media, TjDHS respondents were asked if they had heard about family planning on the radio, seen anything about family planning on television, or read about family planning in a newspaper or magazine in the last few months.

Table 7.11 shows that televised messages about family planning reach the largest audience of women (45 percent). Around one in five women recently read about family planning in a newspaper or magazine, and 16 percent heard about family planning on the radio. Slightly more than half of women did not receive family planning information from any of the three sources in the last few months. Women in their teens, women from Dushanbe, women with no or only a primary education, and women in the lowest wealth quintile are most likely not to have been recently exposed to family planning messages through any of the media.

Table 7.11 Exposure to family planning messages

Percentage of women age 15-49 who heard or saw a family planning message on radio, on television, or in a newspaper or magazine in the past few months, according to background characteristics, Tajikistan 2012

Background characteristic	Radio	Television	Newspaper/ magazine	None of these three media sources	Number of women
Age					
15-19	15.2	37.2	19.8	59.1	2,013
20-24	14.3	43.9	19.6	53.5	1,950
25-29	13.9	45.2	18.0	51.4	1,609
30-34	15.9	46.8	21.7	50.1	1,188
35-39	18.2	51.2	29.1	45.0	1,030
40-44	20.0	52.8	28.6	44.9	991
45-49	15.6	48.4	22.9	49.7	875
Residence					
Urban	17.2	45.1	27.0	51.0	2,413
Rural	15.2	45.2	20.2	52.0	7,243
Region					
Dushanbe	11.9	33.7	18.7	63.5	881
GBAO	7.2	56.1	46.7	41.1	220
Sughd	24.1	54.4	33.3	41.0	2,872
DRS	13.2	46.0	15.3	52.5	2,240
Khatlon	11.9	39.2	15.8	57.9	3,444
Education					
None/primary	7.5	33.5	4.9	64.1	567
General basic	11.5	39.6	14.5	57.1	3,349
General secondary	17.0	46.8	22.9	50.6	4,474
Professional primary/middle	24.3	61.1	44.9	33.7	645
Higher	27.7	57.2	45.4	38.3	620
Wealth quintile					
Lowest	9.8	38.5	12.3	59.0	1,878
Second	12.1	43.4	15.4	54.3	1,913
Middle	16.1	47.6	21.3	49.8	1,904
Fourth	20.8	50.8	29.1	45.8	1,971
Highest	19.4	45.2	30.5	50.2	1,989
Total	15.7	45.2	21.9	51.8	9,656

7.12 FAMILY PLANNING DISCUSSION WITH HEALTH PROVIDERS

Health providers are a very important source of family planning information for nonusers who may be in need of family planning. The 2012 TjDHS included several questions to determine if nonusers had any contacts with health providers in the year before the survey and, if they had had contact with a health provider, whether they had received any information about family planning from the provider.

Table 7.12 shows that 18 percent of nonusers were visited in the home by a health worker who discussed family planning and that 18 percent had discussed family planning during a visit they had made to a health facility in the past 12 months. The results also show that some potential opportunities for discussing family planning with nonusers are missed; around one in four nonusers had visited a health facility in the past year without receiving any information on family planning. Overall, three in four nonusers had not discussed family planning with a fieldworker or at a health facility in the past year. This percentage was markedly lower in the GBAO region (49 percent) compared with other groups (66 percent or higher).

Table 7.12 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 were visited by a fieldworker who discussed family planning, the percentage who visited a health facility and discussed family planning, the percentage who visited a health facility but did not discuss family planning, and the percentage who did not discuss family planning either with a fieldworker or at a health facility, by background characteristics, Tajikistan 2012

Background characteristic	Percentage of women who were visited by fieldworker who discussed family planning	Percentage of women who visited a health facility in the past 12 months and who:		Percentage of women who did not discuss family planning either with fieldworker or at a health facility	Number of women
		Discussed family planning	Did not discuss family planning		
Age					
15-19	8.9	5.7	15.6	88.9	2,007
20-24	21.9	22.7	27.1	70.1	1,818
25-29	24.8	25.1	29.1	66.2	1,255
30-34	21.8	23.1	28.8	69.0	770
35-39	22.4	22.1	26.6	71.2	598
40-44	18.5	15.4	28.9	76.5	658
45-49	16.3	15.7	27.0	76.2	722
Region					
Dushanbe	18.6	10.9	39.2	77.6	700
GBAO	46.6	32.8	21.3	48.9	174
Sughd	19.2	22.5	25.0	71.3	2,153
DRS	17.9	15.1	23.0	77.1	1,895
Khatlon	16.1	16.0	22.4	78.4	2,906
Education					
None/primary	17.9	15.3	25.3	76.0	494
General basic	17.4	16.0	24.3	76.8	2,906
General secondary	17.2	17.3	23.8	76.4	3,488
Professional primary/middle	24.6	25.6	29.1	65.5	484
Higher	25.4	22.1	30.0	67.8	456
Wealth quintile					
Lowest	17.7	16.5	17.6	77.3	1,577
Second	16.6	15.7	20.8	78.2	1,598
Middle	17.8	17.7	26.4	75.0	1,573
Fourth	20.5	20.4	27.8	72.3	1,572
Highest	18.7	17.0	31.5	74.0	1,509
Total	18.3	17.5	24.7	75.4	7,828

ABORTION 8

Key Findings

- The total abortion rate is 0.5 abortions per woman.
- Abortion rates vary minimally by residence, region, education, and wealth, with Dushanbe having the highest rate (0.7).
- Abortion levels appear to have been stable over the past several decades.
- The vast majority of induced abortions occur among women who are not using contraception at the time of conception; 17 percent of induced abortions appear to result from contraceptive failure.

Abortion is legally available as a means of fertility regulation in Tajikistan. In addition to providing information on live births, the pregnancy history in the 2012 TjDHS obtained information on any other pregnancies respondents may have had that ended in a miscarriage, induced abortion, or still birth. The information on induced abortion collected in the pregnancy histories is employed in this chapter to look at women's lifetime experience with abortion and to investigate the current levels and trends in abortion in Tajikistan. In addition, the chapter explores the relationship between contraceptive use and abortion.

8.1 Collection of Abortion Data

The TjDHS pregnancy history was structured to ensure complete reporting of all reproductive events including abortion. To obtain the pregnancy history data, each respondent was first asked questions to determine the total numbers of live births, abortions, miscarriages, and still births she had had during her life. Then she was asked to list in order all the pregnancies she had had, beginning with her first pregnancy, and to provide information on the outcome of each pregnancy. For all pregnancies that did not result in a live birth, information was collected on the month and year the pregnancy ended. At the end of the pregnancy history, the aggregate data collected at the outset of the reproductive event section was compared with the number of various events recorded in the pregnancy history and any discrepancies were reconciled.

The 2012 TjDHS also included a calendar in which information was recorded on the duration and outcome of all pregnancies and periods of contraceptive use that occurred between January 2007 and the interview. The calendar data can be used to explore the role contraceptive method failure plays in abortion.

8.2 Pregnancies Ending in Induced Abortion

Table 8.1 shows the percent distribution of the pregnancies occurring during the three-year period prior to the TjDHS (approximately August 2009 to August 2012) by outcome according to background characteristics. More than eight in ten pregnancies occurring during the period resulted in a live birth, and 9 percent ended in an abortion, 8 percent in a miscarriage, and less than 1 percent in a stillbirth. The proportion of pregnancies ending in an induced abortion rises sharply with woman's age at the time of the abortion. Less than 1 percent of teenage pregnancies ended in induced abortion compared with 26 percent of pregnancies among women age 35-44. The proportion of pregnancies ending in induced abortion also rises steadily with the pregnancy order, from 1 percent of first-order pregnancies to 25 percent of fifth- or higher-order pregnancies.

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, Tajikistan 2012

Background characteristic	Pregnancy outcome				Total	Number
	Live birth	Induced abortion	Miscarriage	Stillbirth		
Age at pregnancy outcome						
<20	85.8	1.1	13.0	0.1	100.0	385
20-24	89.2	3.9	6.5	0.4	100.0	1,549
25-34	81.9	10.2	7.2	0.6	100.0	1,689
35-44	64.1	26.2	8.0	1.6	100.0	404
45-49	*	*	*	*	100.0	12
Pregnancy order						
First	91.0	1.1	7.5	0.4	100.0	1,116
Second	90.0	2.7	6.7	0.6	100.0	980
Third	85.6	6.6	7.1	0.7	100.0	690
Fourth	77.5	14.4	7.2	1.0	100.0	460
Fifth or higher	64.8	25.0	9.5	0.7	100.0	792
Residence						
Urban	77.6	12.3	9.3	0.8	100.0	912
Rural	84.8	7.6	7.1	0.5	100.0	3,127
Region						
Dushanbe	77.0	13.9	8.5	0.6	100.0	336
GBAO	80.5	10.3	8.0	1.2	100.0	74
Sughd	82.8	9.4	7.4	0.3	100.0	1,071
DRS	84.8	7.3	7.6	0.3	100.0	987
Khatlon	83.8	7.7	7.5	1.0	100.0	1,570
Education						
None/primary	89.0	2.7	7.9	0.4	100.0	329
General basic	84.3	7.9	7.2	0.6	100.0	1,627
General secondary	82.0	9.5	7.9	0.6	100.0	1,652
Professional primary/middle	77.8	11.1	10.2	1.0	100.0	229
Higher	79.7	14.3	5.2	0.8	100.0	201
Wealth quintile						
Lowest	83.4	6.8	8.8	0.9	100.0	812
Second	87.8	6.2	5.2	0.8	100.0	843
Middle	84.6	7.1	7.6	0.7	100.0	849
Fourth	80.9	11.1	8.0	0.0	100.0	814
Highest	78.3	12.6	8.5	0.6	100.0	720
Total	83.2	8.6	7.6	0.6	100.0	4,038

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

Pregnancies among urban women were somewhat more likely to have ended in an induced abortion than pregnancies among rural women (12 percent versus 8 percent). Among the regions, Dushanbe had the highest proportion of pregnancies ending in induced abortion (14 percent), and DRS and Khatlon had the lowest proportions (7 percent and 8 percent, respectively). The likelihood that a pregnancy ended in an induced abortion increased directly with education, from 3 percent of pregnancies among women who never attended school or had only a primary education to 14 percent of pregnancies among women with higher education. Considering wealth status, the percentage of pregnancies ending in induced abortion was highest among women in the fourth and fifth quintiles (11 percent and 13 percent, respectively).

8.3 LIFETIME EXPERIENCE WITH INDUCED ABORTION

Table 8.2 presents several indicators from the perspective of women's lifetime experience with abortion, including the percentage of all women reporting they ever had an induced abortion, the percent distribution of women who ever had an abortion by the number of abortions, and the mean number of abortions among women who had an abortion.

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, Tajikistan 2012

Background characteristic	Percentage of women with an induced abortion	Number of women	Among women who had an abortion, percent distribution by number of abortions				Total	Mean number of abortions	Number of women with abortions
			1	2-3	4-5	6+			
Age									
<20	0.2	2,013	*	*	*	*	100.0	*	3
20-24	2.1	1,950	(84.2)	(15.8)	(0.0)	(0.0)	100.0	(1.2)	42
25-34	9.6	2,797	71.1	27.7	1.1	0.1	100.0	1.4	269
35+	21.0	2,896	58.4	36.4	4.4	0.9	100.0	1.6	608
Number of living children									
0	0.3	3,483	*	*	*	*	100.0	*	10
1	3.8	1,142	(78.5)	(20.8)	(0.7)	(0.0)	100.0	(1.3)	44
2	14.7	2,820	66.0	31.8	1.9	0.3	100.0	1.5	413
3	20.6	2,211	59.6	34.7	4.7	0.9	100.0	1.6	455
Marital status									
Currently married	13.5	6,504	62.9	33.3	3.2	0.6	100.0	1.5	878
Formerly married	8.8	504	74.0	23.2	2.8	0.0	100.0	1.3	45
Residence									
Urban	12.6	2,413	59.8	34.8	4.4	1.0	100.0	1.6	305
Rural	8.5	7,243	65.2	31.8	2.6	0.4	100.0	1.5	618
Region									
Dushanbe	11.6	881	56.1	38.6	4.5	0.8	100.0	1.6	102
GBAO	9.5	220	70.2	24.5	5.3	0.0	100.0	1.5	21
Sughd	11.9	2,872	65.2	30.6	3.7	0.4	100.0	1.5	341
DRS	7.5	2,240	62.2	34.7	2.6	0.6	100.0	1.5	168
Khatlon	8.5	3,444	64.1	32.8	2.4	0.8	100.0	1.5	291
Education									
None/primary	3.5	567					100.0	*	20
General basic	6.2	3,349	72.5	24.0	3.3	0.2	100.0	1.4	209
General secondary	11.5	4,474	61.8	34.7	2.6	1.0	100.0	1.6	512
Professional primary/ middle	15.6	645	52.7	40.2	7.1	0.0	100.0	1.7	100
Higher	13.1	620	59.5	37.5	3.1	0.0	100.0	1.5	81
Wealth quintile									
Lowest	7.3	1,878	69.8	28.1	0.9	1.1	100.0	1.4	137
Second	7.3	1,913	58.5	38.7	2.8	0.0	100.0	1.6	139
Middle	8.1	1,904	63.9	33.8	2.3	0.0	100.0	1.5	154
Fourth	11.8	1,971	64.7	30.1	5.2	0.0	100.0	1.5	232
Highest	13.1	1,989	61.2	33.8	3.4	1.5	100.0	1.6	260
Total	9.6	9,656	63.4	32.8	3.2	0.6	100.0	1.5	923

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.

Overall, one in ten Tajik women age 15-49 has ever had an induced abortion. The majority of these women (63 percent) have had only one induced abortion. Around one-third of the women have had two to three abortions, 3 percent have had 4 to 5 abortions, and less than 1 percent has had 6 or more abortions. Among women who have had an abortion, the mean number of abortions per woman is 1.5.

Lifetime experience with abortion increases with the woman's age and number of living children. For example, women age 35 and older are more than twice as likely to have ever had an induced abortion as women age 25-34 (21 percent versus 10 percent). Not surprisingly, marital disruptions are associated with a slightly lower level of induced abortion; 14 percent of currently married women have ever had an abortion compared with 9 percent of women who were divorced, separated, or widowed.

Urban women are more likely to have ever had an induced abortion than rural women, and Sughd and Dushanbe have slightly higher percentages of women ever having had an abortion compared with other regions. Generally, the better educated or better off financially that a woman is, the more likely she is to have had an induced abortion. For example, the percentage ever having had an abortion rises from 4

percent among women with no or only primary education to a peak of 16 percent among women with professional education before declining to 13 percent among women with higher education.

In general, the number of abortions reported among women ever having had an abortion does not vary markedly with the background characteristics shown in Table 8.2. The largest differences are observed by the woman's age and number of living children.

8.4 RATES OF INDUCED ABORTION

8.4.1 Abortion Level

Table 8.3 shows the rates of induced abortion for the three-year period prior to the 2012 TjDHS (approximately August 2009 to August 2012). Three types of rates are presented: age-specific abortion rates (ASARs), the total abortion rates (TARs), and the general abortion rate (GAR). These rates are calculated in a manner analogous to the calculation of age-specific fertility rates, total fertility rates, and general fertility rates. Age-specific abortion rates, shown per 1,000 women, express the number of abortions among women of a given age, divided by the total number of women in the age group. The TAR, expressed per woman, is a summary measure across all age groups. The TAR is interpreted as the number of induced abortions a woman would have in her lifetime if she experienced the currently observed age-specific induced abortion rates during her childbearing years. The general abortion rate is the number of abortions divided by the number of women age 15-44 and is expressed per 1,000 women.

Table 8.3 Induced abortion rates

Age-specific induced abortion rates (ASARs) (per 1,000 women), total abortion rates (TARs), and general abortion rates (GARs), for the three-year period preceding the survey, by residence, Tajikistan 2012

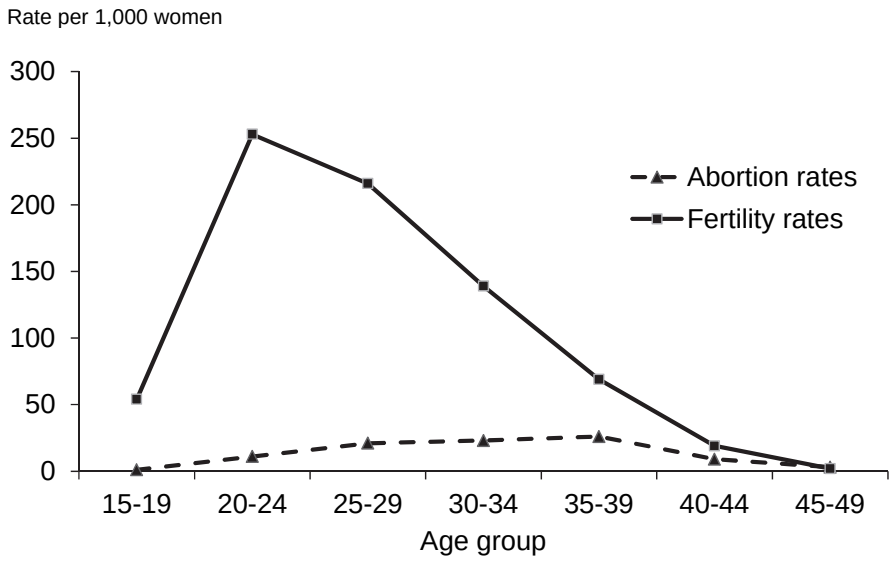
	Residence		
Age group	Urban	Rural	Total
15-19	1	1	1
20-24	17	9	11
25-29	28	20	21
30-34	30	20	23
35-39	30	25	26
40-44	8	9	9
45-49	2	4	3
TAR(15-49)[1]	0.6	0.4	0.5
TAR(15-44)	0.6	0.4	0.5
GAR[2]	18.0	12.0	14.0

[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.

The TAR (15-49) for all of Tajikistan is 0.5 induced abortions per woman. The urban TAR is 0.6 abortions per woman, slightly higher than the rural TAR (0.4 abortions per woman).

Age-specific abortion rates are low among women in age groups 15-19 and 20-24, rise to a broad peak among women in age groups 25-29, 30-34, and 35-39 (21, 23, and 26 per 1,000, respectively), and decline in the older age groups. A comparison of the ASARs with the age-specific fertility rates shows that abortion rates are much lower than fertility rates except among women age 40-49 (Figure 8.1). Among women age 45-49, the ASAR (3 per 1,000) is slightly higher than the fertility rate (2 per 1,000). The urban ASARs are higher than rural rates among women under age 40; among older women, although the differences are very small, the rural rates exceed the urban rates.

Figure 8.1
Age-specific fertility rates and induced abortion rates



Tajikistan DHS 2012

The TAR for induced abortions in Tajikistan is lower than estimates reported in recent DHS surveys in other parts of the former Soviet Union, including Armenia (0.8) in 2010, Azerbaijan (2.3) in 2006, Moldova (1.1) in 2005, and Uzbekistan (0.95) in 2002, but is similar to the TAR for Ukraine (0.4) in 2007) (NSS [Armenia] et al., 2012; SSC [Azerbaijan] and Macro International Inc., 2008; (NCPM) [Moldova] and ORC Macro. 2006; Analytical and Information Centre [Uzbekistan] et al., 2004; UCSR [Ukraine] et al., 2008).

8.4.2 Abortion Differentials

Table 8.4 presents differentials in the total induced abortion rate for the three-year period prior to the survey and in the mean number of abortions ever performed among women age 40-49. The latter is an indicator of cumulative terminations over the lifetime of women who are nearing the end of their reproductive period. When compared to the TAR, it allows for an assessment of the trend in abortion levels over the past 30 years.

In general, differences in the TARs in Table 8.4 are minor. Dushanbe has the highest TAR (0.7 abortions per woman) and GBAO and Sughd the lowest rates (0.4 abortions per woman each). The TAR does not vary in a consistent fashion with education. It generally increases with the wealth quintile, from 0.4 abortions per woman in the two lowest quintiles to 0.6 abortions per woman in the two highest quintiles.

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, Tajikistan 2012

Background characteristic	Total abortion rate 15-49	Mean number of abortions among women age 40-49
Residence		
Urban	0.6	0.4
Rural	0.4	0.3
Region		
Dushanbe	0.7	0.3
GBAO	0.4	0.4
Sughd	0.4	0.4
DRS	0.5	0.2
Khatlon	0.5	0.3
Education		
None/primary	0.4	0.3
General basic	0.5	0.2
General secondary	0.5	0.3
Professional primary/middle	0.4	0.5
Higher	0.5	0.4
Wealth quintile		
Lowest	0.4	0.2
Second	0.4	0.3
Middle	0.5	0.3
Fourth	0.6	0.4
Highest	0.6	0.4
Total	0.5	0.3

The TAR for the three years preceding the survey (0.5 abortions per woman) is only slightly higher than the mean number of abortions ever performed among women age 40-49 (0.3 abortions per woman), suggesting that abortion levels over the past 30 years in Tajikistan have remained relatively stable. The pattern is found in most subgroups, with the greatest difference observed in Dushanbe.

8.4.3 Abortion Trends

Using the TjDHS pregnancy history data, trends in abortion rates can be explored by examining changes in age-specific abortion rates over time. Table 8.5 shows the age-specific abortion rates for four five-year periods prior to the TjDHS. Because women age 50 and older were not interviewed in the survey, the rates are successively more truncated across the periods shown in the table.

In general, the changes in the age-specific rates across the time periods shown in Table 8.5 are minor and do not exhibit a consistent trend. This is further evidence that abortion levels in Tajikistan have remained relatively stable over an extended.

Table 8.5 Trends in age-specific abortion rates

Age-specific abortion rates for five-year periods preceding the survey, by women's age at the time of the abortion, Tajikistan 2012

Woman's age at the time of the abortion	Number of years preceding survey			
	0-4	5-9	10-14	15-19
15-19	1	0	1	2
20-24	11	7	6	7
25-29	20	19	20	14
30-34	22	25	21	[18]
35-39	23	20	[24]	
40-44	7	[9]		
45-49	[4]			

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

8.5 USE OF CONTRACEPTION BEFORE ABORTION

Table 8.6 uses information from the reproductive event calendar in the TjDHS to look at the use of contraception at the time of conception for all pregnancies in the three-year period prior to the survey. The information contributes to an understanding of the extent to which contraceptive method failures are contributing to abortions and of the role that efforts to increase use of contraception might play in reducing abortions.

Table 8.6 shows that women were using contraception at the time of conception in the case of 17 percent of all pregnancies ending in induced abortion during the three-year period prior to the survey. This implies that around one in six induced abortions resulted from contraceptive failures. Looking at specific methods, women were using the pill at the time of conception in the case of 5 percent of the pregnancies ending in induced abortions, while the IUD, male condom, and withdrawal each were used prior to 4 percent of pregnancies ending in induced abortions. These results suggest that improvement in the counseling provided to contraceptive users is an important avenue in efforts to reduce the incidence of abortion.

Although contraceptive failures contribute to abortion, the TjDHS results clearly show the vast majority (83 percent) of induced abortions in the three-year period prior to the survey occurred among women who were not using contraception. Improving access to contraception for women who want to delay or limit childbearing is, thus, a very important step in efforts to reduce the number of abortions.

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, Tajikistan 2012

	Result of the pregnancy			All pregnancies
	Live birth	Induced abortion	Miscarriage	
No method used	96.9	82.7	95.5	95.6
Any method	3.1	17.3	4.5	4.4
Any modern method	2.3	13.1	4.0	3.4
Pill	0.3	5.4	0.4	0.8
IUD	1.2	3.5	0.8	1.4
Injectables	0.4	0.5	0.0	0.3
Male condom	0.3	3.6	2.4	0.7
Lactational amenorrhea (LAM)	0.1	0.0	0.4	0.1
Other	0.0	0.0	0.0	0.0
Any traditional method	0.8	4.2	0.5	1.1
Rhythm	0.0	0.4	0.0	0.1
Withdrawal	0.8	3.9	0.5	1.0
Total	100.0	100.0	100.0	100.0
All pregnancies	3,359	349	306	4,038

Note: Total includes pregnancies ending in still births.

INFANT AND CHILD MORTALITY 9

Key Findings

- The under-5 mortality rate is 43 deaths per 1,000 births. At this rate, one in every 23 children born in Tajikistan dies before reaching their fifth birthday.
- The infant mortality rate is 34 deaths per 1,000 births, and the neonatal mortality rate is 19 deaths per 1,000 births. Thus, almost 80 percent of the deaths of young children take place before the child's first birthday, with more than half occurring during the first month of life.
- The Khatlon region has the highest under-5 mortality level; it is followed by the DRS region, and Dushanbe has the lowest level.
- Infant and under-5 mortality rates decline with the birth interval. For example, under-5 mortality among children born less than two years after a previous birth is more than twice the level among children born four or more years after a previous birth (71 versus 30 per 1,000).

One important objective of the 2012 TjDHS was to measure the level of and trends in mortality among children under age 5. Information on levels and trends in mortality in this age group is central to an assessment of the demographic situation in Tajikistan. The TjDHS mortality data also are useful in identifying subgroups of children at increased risk of dying who should be targeted in programs designed to improve child survival in Tajikistan. In addition to infant and child mortality rates, the chapter presents the distribution of children according to fertility behavior that place children at an elevated risk of mortality. The chapter also considers information obtained in the TjDHS on the registration of child deaths.

9.1 SOURCE AND ASSESSMENT OF MORTALITY DATA

9.1.1 Source of the Data

As described in Chapter 5, the 2012 TjDHS questionnaire included a reproductive history in which respondents were asked to report the outcome of each pregnancy, i.e., to report if the pregnancy ended in a live birth, stillbirth, miscarriage, or abortion. A live birth was defined for respondents as any birth that cried or showed any sign of life. For each live birth reported in the pregnancy history, information was collected on the date of birth (month and year), sex, survivorship, and current age (for surviving children) or age at death (for deceased children).

In this chapter, TjDHS birth history data are used to produce the following five direct measures of mortality:

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

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

9.1.2 Data Quality

As with all the indicators in the TjDHS, the accuracy of the early childhood mortality estimates is influenced by two factors: sampling error and nonsampling error. Sampling error is inherent in the fact that the sample for the TjDHS was only one of a number of samples that could have been selected for the survey. As described further in Appendix B, the sampling error associated with the TjDHS mortality data can be evaluated statistically in order to provide an estimate of the range within which the actual mortality rates in Tajikistan lie.

Nonsampling error arises from problems occurring during the collection or processing of mortality data. Specifically, the reliability of the mortality estimates depends upon full reporting of children who die, the absence of differential displacement of birth dates of surviving and dead children, and accurate information on ages at death. Although the nonsampling error associated with the TjDHS mortality data cannot be evaluated statistically, Appendix C includes several tables that can be used to assess the extent to which the TjDHS mortality data may be subject to common reporting errors.

Omission, or the failure to report births that did not survive, can lead to a serious underestimation of mortality levels, if severe. Omission, which can be difficult to detect, is assumed to occur more often for deaths in early infancy and to increase for time periods more remote from the survey. One approach in looking for evidence of omission is to compare the ratio of neonatal deaths to all infant deaths before the survey and the ratio of early neonatal deaths (deaths in the first week of life) to all neonatal deaths to see if these measures fall within expected ranges. The proportion of neonatal to infant deaths ranges from 58 percent in the period 0 to 4 years prior to the survey to 33 percent during the period 15 to19 years before the survey (Table C.6). This pattern conforms to the expectation that, as mortality levels decline, a larger proportion of infant deaths takes place during the early neonatal period. Early neonatal deaths also do not appear to be severely underreported; the ratio of early neonatal deaths to all neonatal deaths exceeds 70 percent in the period 0 to 14 years prior to the survey (Table C.5).

Another potential data quality problem is heaping of the age of death. Errors in the reporting of the age at death may result in the transference of deaths from one age bracket for which mortality rates are being calculated to another; for example, heaping on age 1 year or 12 months can result in an underestimate of the infant mortality rate and an overestimate of the child mortality level. Several steps were taken in the training of the TjDHS interviewers and in the structure of the TjDHS birth history to reduce errors in the reporting of the age at death. Interviewers were instructed to record information on the age at death in days if the child died during the first month of life and in months if the child died in the first two years of life. Because heaping on “1 year” or “12 months” is very common, interviewers were asked specifically to probe when the mothers gave these responses. Despite these measures, there is evidence of some heaping of deaths on age 12 months, with the heaping most noticeable for the periods 5 to 9 and 10 to 14 years before the survey; however, the effect on the infant mortality rate is quite small, about 3 percent in the periods 5 to 9 years and 10 to 14 years before the survey (Table C.6).

A third data quality problem may arise from errors in the reporting of birth dates. Displacement of births can affect the accuracy of mortality trends if they result in deaths being transferred from one time period to another, e.g., from the period 0 to 4 years to the period 5 to 9 years before the survey. Displacement may be a result of problems with the mothers’ recall. However, it also may reflect deliberate transference of births from one period to another by interviewers interested in reducing their workload by avoiding the detailed set of maternal and child health questions included in DHS surveys for births occurring in 2007 or later. An examination of the distribution of TjDHS birth history data by calendar year shows some evidence of transference of births from 2007 to 2006, with the transference more evident for living children (Table C.4). While the transference has implications for recent mortality trends, it is not

overly severe. Moreover, the effects are mitigated by the fact that the TjDHS data are calculated for five-year periods before the survey and not for specific calendar year periods. Because the TjDHS fieldwork started in July 2012, only part of the transference of births from calendar year 2007 to 2006 influenced the mortality estimates for the periods 0 to 4 years and 5 to 9 years before the survey. Births of dead children, however, appear to have been shifted from 2007 and 2006 to 2005, perhaps because of emphasis during training on the tendency of interviewers to transfer dead children, thus causing interviewers to attempt to avoid this error. The sex ratio also may indicate a greater tendency to transfer deaths of boys than girls. However, there are very few deaths for each sex, so the sex ratios can fluctuate greatly.

9.2 LEVELS AND TRENDS IN CHILDHOOD MORTALITY

Table 9.1 shows childhood mortality estimates based on data from the 2012 TjDHS. For the five years preceding the survey (approximate calendar years 2008-2012), the under-5 mortality rate was 43 per 1,000. At this rate, one in every 23 children born in Tajikistan will die before reaching their fifth birthday. The infant mortality rate was 34 per 1,000 live births, and the child mortality (age 1 to age 4) is 9 per 1,000; thus, almost 80 percent of deaths among children under age 5 during the period occurred during the first year of life. The estimates of neonatal and postneonatal mortality were 19 and 15 per 1,000, respectively, indicating that more than half of infant deaths took place in the first month of life.

Table 9.1 Early childhood mortality rates

Neonatal, postneonatal, infant, child, and under-5 mortality rates for five-year periods preceding the survey, Tajikistan 2012

Years preceding the survey	Approximate calendar period	Neonatal mortality (NN)	Postneonatal mortality (PNN) [1]	Infant mortality (1q0)	Child Mortality (4q1)	Under-5 mortality (5q0)
0-4	2008-2012	19	15	34	9	43
5-9	2003-2007	20	23	43	12	54
10-14	1998-2002	25	31	56	21	76

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

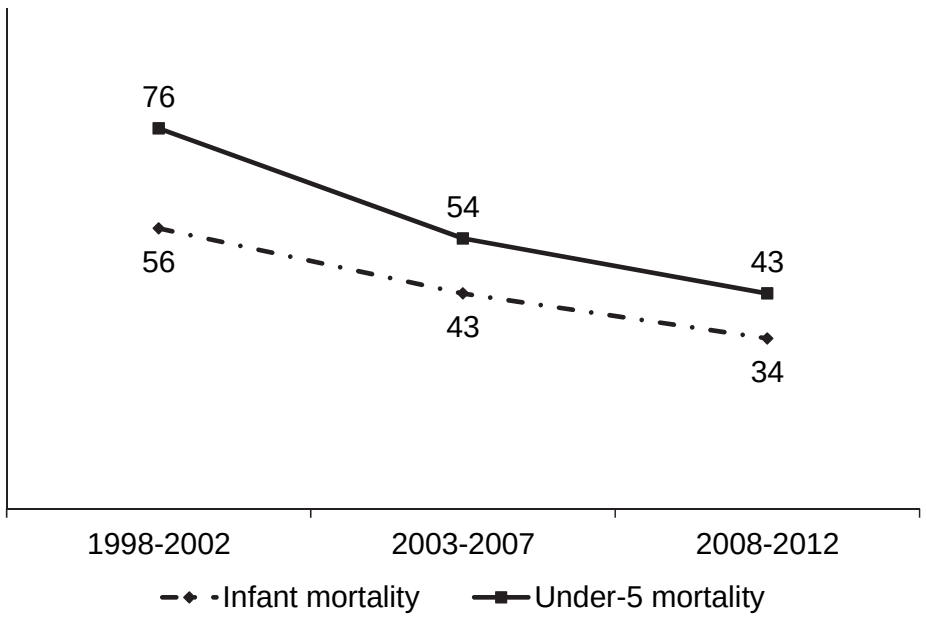
Trends in mortality over the 15-year period prior to the survey are also presented in Table 9.1. The data suggest that mortality has substantially decreased over the last 15 years. For example, the infant mortality rate was 56 per 1,000 during the period 10 to 14 years before the survey and 43 per 1,000 during the period 5 to 9 years before the survey compared with the estimate for the five years before the survey of 34 per 1,000 (Figure 9.1). Because of differences in methodology, it is difficult to directly compare the TjDHS with results from the 2000 and 2005 MICS surveys[1] or the 2010 Tajikistan Infant, Child, and Maternal Mortality Surveys.[2] However, these surveys, like the 2012 TjDHS, provide evidence of a continuous decline in mortality over the past several decades in Tajikistan.[3]

[1] The techniques used to derive the mortality estimates differ between the MICS and the TjDHS surveys. The mortality rates from the MICS surveys are derived from the responses to the questions on the number of children ever born and surviving using indirect estimation techniques (UNICEF, 2000; SCS, 2007). The TjDHS rates are direct estimates using birth history data.

[2] The mortality rates from the 2010 Infant, Child and Maternal Mortality Survey are direct estimates based on birth history data (SA, 2010). However, differences in the calculation approach, including the fact that the published estimates from the 2010 survey are annual rather than period rates, as well as the comparatively low response rate (71 percent) make comparisons with the 2012 TjDHS results difficult.

[3] The 2000 MICS survey found that under-5 mortality was 126 per 1,000 and infant mortality was 89 per 1,000 in 1993, while the 2005 MICS survey estimated under-5 mortality at 79 per 1,000 and infant mortality at 65 per 1,000 ten years later in 2003 (UNICEF, 2008). The 2010 Tajikistan Infant, Child and Maternal Mortality Survey (SA, 2010) also reported a decline in mortality over the past two decades, with under-5 mortality dropping from 77 deaths per 1,000 in 1989 to 34 per 1,000 in 2009.

Figure 9.1
Trends in Infant and Child Mortality, Tajikistan 1998-2012



Tajikistan DHS 2012

Childhood mortality rates in Tajikistan are relatively high when compared with the levels reported in recent DHS surveys in several neighboring countries; for example, infant mortality for the five-year period prior to the survey was 13 and 14 per 1,000 live births in the 2010 Armenia DHS and 2007 Ukraine DHS, respectively, considerably lower than the rate reported in the TjDHS (NSS [Armenia] et al., 2012; UCSR [Ukraine] et al., 2008). On the other hand, survival probabilities for children under age one in Tajikistan are better than those reported in the 2010 Afghanistan Maternal Mortality Survey (55 per 1,000 births), the 2006 Azerbaijan DHS (43 per 1,000 births), and the 2006-07 Pakistan DHS (78 per 1,000 live births) (SSC [Azerbaijan] and Macro International Inc., 2008; APHI/MoPH [Afghanistan] et al., 2011; NIPS [Pakistan] and Macro International Inc., 2008).

9.3 SOCIOECONOMIC DIFFERENTIALS IN CHILDHOOD MORTALITY

Table 9.2 presents infant and child mortality estimates for the 10-year period prior to the survey (approximate calendar years of 2003 through 2012) by socioeconomic characteristics. The rates were calculated for a period of ten rather than five years as was used in Table 9.1 to reduce sampling variability. Despite the longer period, the number of deaths in some categories is still small and, thus, minor differences in mortality between subgroups of the population should be interpreted cautiously.

Rural mortality rates are higher than urban rates although the differences are not large. For example, infant mortality is 39 per 1,000 in rural areas compared with 35 per 1,000 in urban areas. The Khatlon region has the highest childhood mortality levels and Dushanbe has the lowest. The infant and under-5 mortality rates in Khatlon are double the level in Dushanbe. Infant mortality in the DRS region is more than 70 percent higher than in Dushanbe, and under-5 mortality is nearly 60 percent higher. Mortality levels among children in the lowest three wealth quintiles are generally higher than the levels among children in the fourth and highest quintile.

Table 9.2 Early childhood mortality rates by socioeconomic characteristics

Neonatal, postneonatal, infant, child, and under-5 mortality rates for the 10-year period preceding the survey, by background characteristics, Tajikistan 2012

Background characteristic	Neonatal mortality (NN)	Postneonatal mortality (PNN)[1]	Infant mortality (1q0)	Child mortality (4q1)	Under-5 mortality (5q0)
Residence					
Urban	18	17	35	8	42
Rural	20	19	39	11	50
Region					
Dushanbe	11	11	22	7	29
GBAO	13	16	29	8	36
Sughd	18	13	31	9	40
DRS	20	18	38	8	46
Khatlon	23	25	48	13	61
Mother's education					
None/primary	17	(19)	(36)	(20)	(55)
General basic	22	18	40	11	50
General secondary	19	20	39	9	47
Higher/professional primary/middle	18	18	34	10	44
Wealth quintile					
Lowest	18	27	45	13	58
Second	25	19	43	13	56
Middle	22	18	40	11	50
Fourth	18	12	30	6	36
Highest	15	16	30	8	38

Note: Rates in parentheses are based on 250-499 unweighted person-years of exposure.
[1] Computed as the difference between the infant and neonatal mortality rates.

9.4 DEMOGRAPHIC DIFFERENTIALS IN CHILDHOOD MORTALITY

Table 9.3 presents differentials in childhood mortality by several demographic variables known to be associated with a child's probability of dying, including the child's sex, the mother's age at the birth, the birth order, the child's size at birth, and, for second and higher order births, the interval between the birth of the previous child and the child who died. As was the case with the socioeconomic differentials, mortality rates in Table 9.3 are shown for the ten-year period prior to the survey to reduce sampling variability except in the case of birth size where information is available to calculate rates only for the five-year period before the survey.

Under-5 mortality is slightly higher for males than females, with the difference largely due to the expected higher mortality experienced among males in early infancy compared with females (Naeye, et al., 1971).

Mortality levels exhibit the expected relationship with the mother's age at the time of the birth, with mortality levels highest for births to mothers under age 20 and rising with age among older mothers. First-order births have a somewhat higher risk of dying than second-order births. Otherwise, mortality levels generally rise with birth order.

Infant and under-5 mortality levels decline as the birth interval increases. For example, the under-5 mortality rate among children born less than two years after a previous birth is 71 per 1,000, more than twice the level among children born four or more years after a previous birth (30 per 1,000).

Research has shown that small size at birth is related to an elevated risk of dying in infancy. To obtain information on birth size for births during the five-year period before the TjDHS interview, mothers were asked if at the time of the birth the baby was very large, larger than average, average, smaller than average, or very small.[4] Mortality during the neonatal period conformed to the expected pattern, with the rate more than three times higher for babies whom the mother considered to be very small or small

[4] For additional details on the birth size measure, see Chapter 11 in this report.

compared with average or larger babies. However, the pattern is reversed in the postneonatal period, where mortality for very small or small babies is lower than among average or larger babies.

Table 9.3 Early childhood mortality rates by demographic characteristics

Neonatal, postneonatal, infant, child, and under-5 mortality rates for the 10-year period preceding the survey, by demographic characteristics, Tajikistan 2012

Demographic characteristic	Neonatal mortality (NN)	Postneonatal mortality (PNN)[1]	Infant mortality (1q0)	Child mortality (4q1)	Under-5 mortality (5q0)
Child's sex					
Male	21	19	41	10	51
Female	18	18	36	10	46
Mother's age at birth					
<20	38	27	65	13	77
20-29	17	15	32	9	40
30-39	19	24	43	11	53
40-49	*	*	*	*	*
Birth order					
1	25	15	39	8	47
2-3	16	15	31	9	40
4-6	20	24	44	10	54
7+	(20)	(46)	(66)	(35)	(99)
Previous birth interval[2]					
<2 years	28	32	59	12	71
2 years	11	19	30	15	45
3 years	19	9	28	10	38
4+ years	11	14	24	6	30
Birth size[3]					
Small/very small	39	6	45	na	na
Average or larger	12	13	25	na	na

Note: Rates in parentheses are based on 250-499 unweighted person-years of exposure. An asterisk indicates that a rate is based on fewer than 250 uweighted person-years of exposure and has been suppressed.
na = Not applicable
[1] Computed as the difference between the infant and neonatal mortality rate.
[2] Excludes first-order births.
[3] Rates for the five-year period before the survey.

9.5 PERINATAL MORTALITY

Perinatal mortality takes into account fetal deaths occurring late in pregnancy in addition to early neonatal deaths. Examining the perinatal mortality level is important because it is recognized that the distinction between a stillbirth and an early neonatal death is often a fine one, depending on the mother's observing and recalling sometimes-faint signs of life following delivery. The causes of stillbirths and early neonatal deaths are also closely linked, and just examining one or the other can understate the true level of mortality around delivery. In the TjDHS survey, as in other DHS surveys, perinatal deaths are defined to include any deaths of live births within the first seven days of life (early neonatal deaths) and any pregnancies reported by mothers as having ended in stillbirths after seven or more months of gestation. DHS asks and records pregnancy duration in months; the definition of seven months used for the purpose of calculating perinatal mortality in DHS is the equivalent of 28 weeks of pregnancy (Rutstein, S. O., and G. Rojas, 2006). The information on the durations of pregnancies ending in stillbirth is obtained in the detailed reproductive events calendars completed in the survey for the period after January 2007. The perinatal rate is calculated by dividing the total number of perinatal deaths by the total number of pregnancies reported in the calendar as having lasted 7 or more months (i.e., number of pregnancies of seven or more months that terminated in a fetal death plus pregnancies that ended with a live birth).

Table 9.4 presents the number of stillbirths, the number of early neonatal deaths, and the perinatal mortality for the five-year period preceding the survey by selected demographic and socioeconomic characteristics. In considering the results, it should be remembered that both stillbirths and early neonatal deaths are subject to underreporting. The total number of events is also small (45 stillbirths and 80 early

neonatal deaths); as a result, perinatal mortality rates for a number of the subgroups are based on very few events.

Overall, the perinatal mortality rate is 24 per 1,000.[5] In general, differences in the perinatal rates across subgroups are similar to those observed in childhood mortality rates, although the patterns are not identical.

Table 9.4 Perinatal mortality

Number of stillbirths and early neonatal deaths, and the perinatal mortality rate for the five-year period preceding the survey, by background characteristics, Tajikistan 2012

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	1	15	32	481
20-29	27	48	21	3,637
30-39	12	12	23	1,054
40-49	5	6	101	105
Previous pregnancy interval in months[4]				
First pregnancy	11	44	33	1,646
<15	8	11	43	458
15-26	16	10	19	1,354
27-38	5	8	17	757
39+	5	7	10	1,062
Residence				
Urban	10	15	22	1,129
Rural	35	65	24	4,148
Region				
Dushanbe	3	6	21	417
GBAO	1	1	23	92
Sughd	5	16	15	1,388
DRS	9	19	21	1,325
Khatlon	27	38	32	2,055
Mother's education				
None/primary	3	5	18	455
General basic	18	40	28	2,081
General secondary	18	24	19	2,178
Professional primary/middle	4	7	37	306
Higher	3	3	21	258
Wealth quintile				
Lowest	11	22	30	1,073
Second	12	20	28	1,145
Middle	12	16	25	1,102
Fourth	5	14	18	1,042
Highest	5	9	15	914
Total	45	80	24	5,277

[1] Stillbirths are fetal deaths in pregnancies lasting seven or more months (the equivalent of 28 or more weeks of pregnancy duration).
[2] Early neonatal deaths are deaths at age 0 to 6 days among live-born children.
[3] The sum of the number of stillbirths and early neonatal deaths is divided by the number of pregnancies of seven or more months' duration, expressed per 1,000.
[4] Categories correspond to birth intervals of <24 months, 24-35 months, 36-47 months, and 48+ months.

[5] The TjDHS classification of perinatal deaths differs somewhat from that used by the Tajik Republic Ministry of Health. In calculating perinatal mortality, the current Tajik MOH approach includes early neonatal deaths and stillbirths occurring after 22 weeks of pregnancy in the numerator of the rate and all births (stillbirths and live births) in the denominator. DHS asks for and records pregnancy duration only in months; thus, it is not possible to exactly match the MOH definition. However, it is possible to closely approximate the MOH approach by using a cut-off of 6 months or the equivalent of 24 weeks of pregnancy for the purpose of re-calculating perinatal mortality. When the 2012 TjDHS perinatal mortality rate is re-calculated using this cut-off, the estimate of the perinatal mortality rate is 27 per 1,000 (data not shown).

9.6 HIGH-RISK FERTILITY BEHAVIOR

Research suggests there is a strong relationship between several aspects of women's fertility behavior and children's survival risks. The risk of death in early childhood is higher among children whose mothers are young or old at birth, children of too high a parity, or children born after too short a preceding birth interval. The category "young" refers to mothers less than 18 years old while "old" includes mothers over age 34 at the time of the birth. A "short birth interval" is defined as a birth occurring less than 24 months after a previous birth. A child is of "too high a birth order" if the mother had previously given birth to three or more children.

Taking into account the four risk factors, Table 9.5 presents the distribution of births during the five-year period before the survey and of currently married women[6] by whether they are in a single high risk category, a multiple high-risk category, or not in any high-risk category. Although often at increased risk, first births between ages 18 and 34 are assigned to a separate category because the risk is "unavoidable." Table 9.5 also presents risk ratios that represent an increased risk of dying among births in the category relative to births with no risk factors.

Table 9.5 High-risk fertility behavior

Percent distribution of children born in the five years preceding the survey by category of elevated risk of mortality and the risk ratio, and percent distribution of currently married women by category of risk if they were to conceive a child at the time of the survey, Tajikistan 2012

Risk category	Births in the 5 years preceding the survey		Percentage of currently married women[1]
	Percentage of births	Risk ratio	
Not in any high risk category	25.0	1.00	17.3[a]
Unavoidable risk category			
First order births between ages 18 and 34 years	32.3	1.58	10.3
Single high-risk category			
Mother's age <18	0.8	3.16	0.0
Mother's age >34	1.5	2.44	5.2
Birth interval <24 months	17.2	1.53	12.4
Birth order >3	12.3	1.25	12.7
Subtotal	31.8	1.51	30.3
Multiple high-risk category			
Age <18 and birth interval <24 months[2]	0.0	0.00	0.0
Age >34 and birth interval <24 months	0.1	10.54	0.3
Age >34 and birth order >3	6.1	1.32	34.1
Age >34 and birth interval <24 months and birth order >3	0.5	9.24	1.6
Birth interval <24 months and birth order >3	4.0	1.79	6.1
Subtotal	10.8	2.00	42.1
In any avoidable high-risk category	42.7	1.63	72.4
Total	100.0	na	100.0
Number of births/women	5,233	na	6,504

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.
na = Not applicable
[1] Women are assigned to risk categories according to the status they would have at the birth of a child if they were to conceive at the time of the survey: current age less than 17 years and 3 months or older than 34 years and 2 months, latest birth less than 15 months ago, or latest birth being of order 3 or higher.
[2] Includes the category age <18 and birth order >3.
[a] Includes sterilized women.

[6] The criteria for placing women into specific risk categories are adjusted to take into account the gestation time for an additional birth.

Overall, looking at the first column of the table, more than four in ten babies were in some avoidable risk category at the time they were born; 32 percent were in a single risk category, and 11 percent were in a multiple risk category. The most common avoidable risk factors were short birth intervals and high birth order.

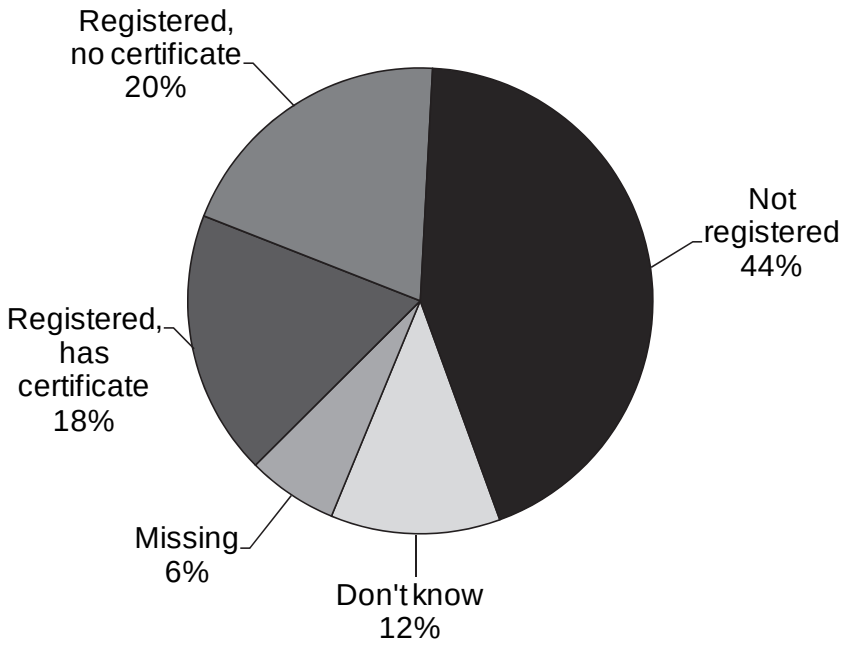
As the second column of Table 9.5 shows, the overall risk of dying was 1.63 times higher among births that fell into any high-risk category compared with births not in any high-risk category. The risk ratio for first births is similar to that for births in any high-risk category.

The final column of Table 9.5 shows that 72 percent of currently married women have the potential to give birth to a child at elevated risk of dying. Three in ten women have the potential for a birth in a single high-risk category (mainly too short a birth interval and too high a birth order), and four in ten women have the potential to give birth to a child in a multiple high-risk category (mainly, too old and too high in birth order).

9.7 REGISTRATION OF CHILD DEATHS

Vital registration systems are a key instrument for tracking mortality trends in a country. To obtain information on the extent to which child deaths are being registered in Tajikistan[7], the TjDHS birth history included a question for each child reported as having ever died on whether a death certificate was available for the child. If a death certificate was not available, an additional question was asked about whether the death had ever been registered in the State Office for Registration of Civil Status (ZAGS). Using this information, Figure 9.2 shows that fewer than four of the ten deaths that occurred among children born in the five years prior to the survey were registered with civil authorities. Moreover, mothers reported having a death certificate available for only 18 percent of the children who died during the five-year period before the survey.

Figure 9.2
Registration of deaths of children born in the five years prior to the 2012 Tajikistan DHS



Tajikistan DHS 2012

[7] Information on birth registration is included in Chapter 2.

MATERNAL HEALTH 10

Key Findings

- Seventy-nine percent of women in Tajikistan received antenatal care from a skilled provider.
- Over half of women have four or more antenatal care visits during the course of their pregnancy, and over half get care in the first trimester of pregnancy, as recommended.
- More than three-quarters of births in Tajikistan take place in a health facility, and 87 percent are assisted by a skilled provider.
- The vast majority of women (80 percent) receive postnatal care from a skilled provider within two days after delivery.
- Knowledge of and testing for breast cancer and cervical cancer are not widespread in Tajikistan. Only 3 percent of women have ever had a breast exam from a health provider, and only 6 percent know how to perform a breast self-exam. Only 8 percent of women have ever had a Pap/cervical cytology smear test for cervical cancer.
- Forty-five percent of women report that getting money for treatment is a serious problem in accessing health care when they are sick.

The health care that a woman receives during pregnancy, at the time of delivery, and soon after delivery is important for the survival and well-being of both the mother and the child. In 2004, the government of Tajikistan adopted a Strategic Plan for Reproductive Health in 2005–2014 that identifies several priorities for improving maternal health: improving access to antenatal care (ANC) and safe delivery services and decreasing mortality and morbidity during pregnancy (Khodjamurodov and Rechel, 2010). Among the targets set in the document were the increase of ANC coverage from 54 percent in 2002 to 80 percent in 2014 and the increase in skilled attendance at home deliveries from 44 to 75 percent over the same time period.

This chapter provides information from the 2012 Tajikistan DHS on several aspects of maternal health, including ANC, delivery, postnatal care, and newborn care. The chapter also covers issues related to breast cancer examinations, awareness of cervical cancer, and coverage of tests for cervical cancer. Finally, information is also presented on problems women face in accessing health care when they are sick.

In the 2012 TjDHS, women who had given birth in the five years preceding the survey were asked a number of questions about maternal and child health care. For the last live birth in that period, mothers were asked whether they had received ANC during pregnancy and whether they had sought postnatal care for themselves and their children. Information was also collected on the place of delivery and on attendance at birth for all births in the five years preceding the survey.

10.1 ANTENATAL CARE

Antenatal care (ANC) from a medically-trained provider is important to monitor the status of a pregnancy, identify the complications associated with the pregnancy, and prevent adverse pregnancy outcomes. To be most effective, there should be regular ANC throughout a pregnancy. Information on ANC was assessed for women who gave birth in the five years preceding the survey. Among women with two or more live births during the five-year period, data refer to the most recent live birth only.

10.1.1 Antenatal Care Coverage

Table 10.1 shows the percent distribution of mothers with a live birth, by source of ANC received during pregnancy. Women were asked to report on all persons they saw for antenatal care for their last birth. However, if a woman saw more than one provider, only the provider with the highest qualifications was considered in the tabulation of results. In Tajikistan, skilled providers trained to assist during pregnancy and delivery include doctors, nurses, midwives, and feldshers.[1]

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 the percentage receiving ANC from a skilled provider for the most recent birth, according to background characteristics, Tajikistan 2012

	Antenatal care provider											
Background characteristic	Family doctor	Other doctor	Nurse/ midwife	Feldsher[1]	Commu-nity health worker	Tradi-tional birth attendant	Other	Missing	No ANC	Total	Percent-age receiving ANC from a skilled provider[2]	Number of women
Mother's age at birth												
<20	14.3	58.0	13.7	0.0	0.0	0.6	0.0	0.3	13.1	100.0	86.0	258
20-34	17.1	47.7	15.0	0.2	0.1	0.3	0.3	0.6	18.7	100.0	80.0	2,945
35-49	10.5	38.8	15.9	0.1	0.0	0.4	0.0	0.9	33.3	100.0	65.3	398
Birth order												
1	18.7	49.9	15.2	0.2	0.1	0.4	0.1	0.6	14.8	100.0	84.0	922
2-3	16.9	50.8	13.7	0.2	0.1	0.2	0.3	0.5	17.3	100.0	81.5	1,672
4-5	13.9	41.1	17.6	0.2	0.0	0.6	0.5	0.7	25.5	100.0	72.8	728
6+	9.3	36.3	15.4	0.0	0.0	0.0	0.0	1.1	37.9	100.0	61.0	279
Residence												
Urban	21.2	52.6	8.6	0.3	0.0	0.0	0.0	0.7	16.6	100.0	82.7	802
Rural	14.8	46.0	16.8	0.1	0.1	0.4	0.3	0.6	20.8	100.0	77.7	2,799
Region												
Dushanbe	20.4	56.1	4.3	0.0	0.0	0.0	0.0	0.5	18.7	100.0	80.8	295
GBAO	5.5	33.9	42.8	3.0	0.0	0.3	0.0	0.6	14.0	100.0	85.1	67
Sughd	25.4	50.7	17.9	0.0	0.0	0.0	0.0	0.3	5.7	100.0	94.1	1,000
DRS	9.9	58.3	10.0	0.4	0.4	0.3	0.3	0.4	19.9	100.0	78.7	887
Khatlon	13.1	36.7	17.0	0.0	0.0	0.6	0.6	1.0	31.0	100.0	66.8	1,351
Education												
None/primary	12.9	44.5	12.0	0.0	0.3	0.0	0.3	0.5	29.5	100.0	69.4	272
General basic	12.5	49.9	15.5	0.2	0.1	0.5	0.6	0.5	20.2	100.0	78.0	1,400
General secondary	18.5	44.2	15.5	0.1	0.0	0.3	0.0	0.9	20.4	100.0	78.4	1,530
Professional primary/ middle	23.4	50.1	13.6	0.3	0.4	0.0	0.0	0.0	12.2	100.0	87.4	210
Higher	21.3	57.3	12.7	0.7	0.0	0.1	0.0	0.0	7.9	100.0	92.0	189
Wealth quintile												
Lowest	10.5	30.8	24.8	0.2	0.0	1.0	0.6	0.7	31.4	100.0	66.3	731
Second	11.2	40.8	18.5	0.4	0.0	0.3	0.2	1.1	27.5	100.0	70.9	757
Middle	18.2	51.0	12.5	0.1	0.2	0.3	0.2	0.7	16.9	100.0	81.7	743
Fourth	22.0	57.3	10.3	0.2	0.1	0.0	0.4	0.4	9.4	100.0	89.7	718
Highest	19.7	59.0	8.0	0.0	0.1	0.0	0.0	0.1	13.1	100.0	86.7	652
Total	16.2	47.5	15.0	0.2	0.1	0.3	0.3	0.6	19.9	100.0	78.8	3,601

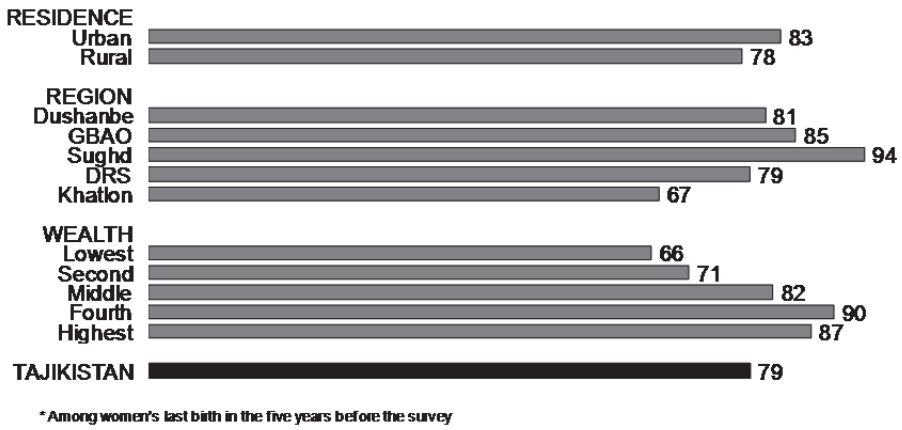
Note: If more than one source of ANC was mentioned, only the provider with the highest qualifications is considered in this tabulation.
[1] Feldsher is a mid-level health professional that provides medical care beyond the scope of a nurse but less than that of a physician.
[2] Skilled provider includes doctor, nurse, midwife, and feldsher.

[1] A feldsher is a mid-level health professional (equivalent of a paramedical practitioner). A feldsher provides care that is beyond the scope of a nurse but less than that of a physician. A feldsher oversees work at a feldhser-accoucher post (FAP) with no assigned doctor, while in larger facilities a feldsher works under a physician.

Table 10.1 shows that 79 percent of mothers reported seeing a skilled health professional at least once for ANC for the most recent birth in the five-year period before the survey. This is very close to the target of 80 percent set in the strategic plan for 2014. Almost two-thirds (64 percent) saw a doctor—either their family doctor or another doctor. Fifteen percent of mothers saw a nurse or midwife for ANC. However, one in five mothers in Tajikistan did not have any ANC at all for their most recent birth.

There are substantial variations in ANC coverage by background characteristics of the mother. The likelihood of receiving ANC from a medically-trained provider declines rapidly with increasing age and birth order. For example, 86 percent of women who were younger than age 20 at their last birth received ANC from a skilled provider compared with 65 percent of women age 35 or older. ANC coverage is also much higher for first births (84 percent) than for women delivering their sixth or higher birth (61 percent). The urban-rural differential in ANC coverage is not large: 83 percent of urban mothers receive ANC from a skilled provider compared with 78 percent of rural mothers (see also Figure 10.1). Coverage is markedly higher among mothers from Sughd (94 percent) and GBAO (85 percent) regions and is lowest among women in Khatlon (67 percent). The likelihood of receiving ANC from a medically-trained provider increases with the mother's education level and wealth status (Table 10.1). Sixty-nine percent of mothers with no education or only primary education received ANC from a trained provider compared with 92 percent of mothers with higher than secondary education. Similarly, the proportion of women who received ANC from a medically-trained provider is lowest among those in the lowest wealth quintile (66 percent) and increases to a high of 90 percent among women in the fourth wealth quintile.

Figure 10.1
Differentials in coverage of antenatal care from a skilled provider, Tajikistan, 2012*



Tajikistan DHS 2012

Overall, ANC coverage from a skilled provider has barely changed since 2005, increasing from 77 percent as reported in the 2005 Multiple Indicator Cluster Survey (2005 MICS) to 80 percent in the 2012 TjDHS (SCS, 2007)[2].

Compared with estimates from recent Demographic and Health Surveys conducted in other countries in the region, coverage of ANC by a skilled provider in Tajikistan (79 percent) is higher than in Pakistan (61 percent) or Afghanistan (63 percent), but similar to that in Azerbaijan (77 percent), and substantially lower than in Armenia and Ukraine (99 percent each) (NIPS [Pakistan] and Macro International Inc., 2008; APHI/MoH [Afghanistan] et al., 2011; SSC [Azerbaijan] and Macro International Inc., 2008; NSS[Armenia] at al., 2012; UCSR [Ukraine] and Macro International, 2008).

[2] The 2005 Tajikistan MICS collected information on ANC during the pregnancy for the most recent birth in the *two* years before the survey, while the 2012 TjDHS collected it for the most recent birth in the five years before the survey. Thus, in order to obtain estimates comparable to the MICS, the 2012 TjDHS ANC indicators have been re-calculated based on information for the most recent birth in the two years before the survey.

10.1.2 Number of Antenatal Visits

Under normal circumstances, the World Health Organization (WHO) recommends that a pregnant woman should have at least four ANC visits (WHO, 2007). Since 2008, the Ministry of Health of the Republic of Tajikistan recommends seven ANC visits. Table 10.2 presents information on the number of ANC visits and the timing of the first visit for the most recent live birth in the five years preceding the survey.

Over half of women in Tajikistan (53 percent) have four or more ANC visits during their pregnancy. Urban women are more likely than rural women to have made four or more visits (64 percent versus 49 percent).

Also, over half of women (52 percent) have their first ANC visit in the first trimester of pregnancy, as recommended. Urban women are only slightly more likely than rural women to have their first ANC visit in the first trimester. The median number of months of pregnancy at the first visit is 3.5.

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, Tajikistan 2012

Number and timing of ANC visits	Residence		Total
	Urban	Rural	
Number of ANC visits			
None	17.2	21.1	20.2
1	3.4	8.5	7.4
2-3	14.2	20.5	19.1
4+	64.0	49.1	52.5
Don't know/missing	1.2	0.8	0.9
Total	100.0	100.0	100.0
Number of months pregnant at time of first ANC visit			
No antenatal care	17.2	21.1	20.2
<4	57.5	50.3	51.9
4-5	19.1	19.2	19.2
6-7	4.5	6.5	6.0
8+	1.2	2.1	1.9
Don't know/missing	0.5	0.9	0.8
Total	100.0	100.0	100.0
Number of women	802	2,799	3,601
Median months pregnant at first visit (for those with ANC)	3.4	3.6	3.5
Number of women with ANC	664	2,208	2,872

10.1.3 Components of Antenatal Care

The content of ANC is important in assessing the quality of services. Pregnancy complications are an important source of maternal and child morbidity and mortality, and thus teaching pregnant women about the danger signs associated with pregnancy and administering appropriate tests are essential components of ANC. Being accompanied to an ANC visit by a family member or friend can facilitate better care. Table 10.3 presents information on the percentage of women who took iron supplements during the pregnancy that resulted in their most recent birth in the five years preceding the survey. The table also shows the percentage of women receiving ANC who were informed about the signs of pregnancy complications and the percentage who received specific routine ANC services. Finally, it shows the proportion of women with ANC who were accompanied to at least one visit by a family member or friend and the proportion who were admitted to a health facility during the pregnancy.

Among women with a live birth in the past five years, one-third took iron tablets or syrup while pregnant with the last birth. Variations in iron supplementation by background characteristics are moderate. The strongest differences occur by region and education. Mothers in GBAO are more than twice as likely to take iron tablets or syrup as those in DRS (57 percent versus 24 percent). Similarly, iron supplementation increases with education of the mother, from a low of 26 percent among those with no education or only primary to a high of 54 percent among those with higher than secondary education. Those who are more likely to take iron supplements include younger women and those in the upper wealth quintiles. Interestingly, there is no difference in iron supplementation by urban-rural residence.

Among women who received ANC during their most recent pregnancy, 76 percent reported that they were told about the signs of pregnancy complications during at least one of their ANC visits. As for tests, 94 percent of mothers had their blood pressure taken, while 90 percent gave a urine sample and 92 percent gave a blood sample for testing.

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 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, Tajikistan 2012

	Among women with a live birth in the past five years		Among women who received ANC for their most recent birth in the past five years, the percentage with selected services						
Background characteristic	Percentage who took iron tablets or syrup during pregnancy of their last birth	Number of women with a live birth in the past five years	Informed of signs of pregnancy complications	Blood pressure measured	Urine sample taken	Blood sample taken	Accompanied to any ANC visit by husband/ partner, family member, or friend	Admitted to a health facility (including day-bed)	Number of women with ANC for their most recent birth
Mother's age at birth									
<20	38.0	258	75.1	96.3	94.5	94.8	70.1	12.0	223
20-34	33.1	2,945	76.2	93.9	90.3	92.5	63.3	11.0	2,388
35-49	25.7	398	74.5	92.4	87.5	89.0	51.9	7.4	262
Birth order									
1	35.2	922	74.1	94.2	91.5	93.0	71.7	15.7	784
2-3	33.5	1,672	78.2	94.6	91.0	93.1	60.2	9.4	1,379
4-5	31.6	728	72.8	92.6	89.1	91.7	59.3	8.8	539
6+	22.0	279	77.0	90.8	84.0	85.0	53.5	4.1	170
Residence									
Urban	32.2	802	74.6	96.7	95.8	96.7	61.6	10.6	664
Rural	32.8	2,799	76.4	93.1	88.8	91.0	63.1	10.7	2,208
Region									
Dushanbe	29.8	295	72.5	98.7	99.2	99.0	63.0	8.4	239
GBAO	56.5	67	78.7	97.5	92.9	96.1	70.2	31.4	58
Sughd	38.1	1,000	81.3	99.5	97.8	98.4	53.3	14.3	942
DRS	23.7	887	60.1	95.2	94.7	94.8	70.2	6.1	708
Khatlon	33.9	1,351	83.4	85.9	77.1	82.4	66.3	9.9	926
Education									
None/primary	26.2	272	71.0	88.8	81.1	87.8	77.0	6.8	190
General basic	30.5	1,400	72.6	93.9	90.7	92.0	64.2	11.6	1,114
General secondary	31.3	1,530	79.2	93.2	89.4	91.4	59.0	9.7	1,210
Professional primary/ middle	46.4	210	76.6	99.0	96.4	98.2	56.3	15.8	185
Higher	53.6	189	79.9	99.5	99.5	100.0	71.1	11.6	174
Wealth quintile									
Lowest	25.8	731	77.5	88.4	77.4	83.6	64.3	7.4	498
Second	29.3	757	75.7	90.9	86.5	88.4	65.2	10.1	543
Middle	34.3	743	74.6	93.6	91.2	92.9	64.8	11.8	617
Fourth	40.5	718	79.2	96.9	96.1	96.7	61.8	13.2	648
Highest	33.8	652	72.6	98.6	98.1	98.3	58.0	10.2	567
Total	32.7	3,601	76.0	93.9	90.4	92.3	62.8	10.7	2,872

There are remarkably few differences in the content of ANC by background characteristics of women. For example, the proportions of women who were informed of the signs of pregnancy complications during an ANC visit are similar across age, birth order, and residence. The only large variation occurs by region, with mothers in Khatlon region (83 percent) being more likely to be informed about pregnancy complications than those in DRS region (60 percent). The likelihood of receiving blood pressure, urine, and blood tests during pregnancy increases with education and wealth quintile and is also slightly higher among urban than rural women.

Almost two in three women (63 percent) said they were accompanied on at least one ANC visit by either a husband/partner, a family member, or a friend. Those more likely to be accompanied include younger mothers and those who are pregnant with their first child. Women in Sughd region are the least likely to report that they were accompanied to an ANC visit by their husband/partner, a family member, or friend. Differences by residence are minimal, while differences by education and wealth do not follow any clear pattern.

Only 11 percent of women said they were admitted to a health facility (including day-bed occupancy) during their most recent pregnancy. Hospital admission is considerably more common for pregnant women in GBAO (31 percent), than for women in other regions. Younger women and those pregnant with their first births are also more likely to be admitted to a health facility during pregnancy. Among those admitted to a health facility, three-quarters were admitted only once or twice, while 9 percent

were admitted three to five times, and 15 percent were admitted six of more times during the pregnancy (data not shown). The major reasons for admission were anemia (40 percent), threat of miscarriage (38 percent), threat of pre-term labor (20 percent), and bleeding (9 percent) (data not shown).

10.2 DELIVERY CARE

Proper medical attention and hygienic conditions during delivery can reduce the risk of complications and infections that can cause death or serious illness for the mother or the newborn. Hence, it is important to increase the proportion of births delivered in a safe, clean environment and under the supervision of health professionals. Women interviewed in the 2012 TjDHS reported on the place and type of assistance during delivery of all children born in the five years before the survey.

10.2.1 Place of Delivery

Table 10.4 shows the percent distribution of live births in the five years preceding the survey by place of delivery, according to background characteristics. Over three-quarters of births in Tajikistan (77 percent) are delivered at a health facility, while 23 percent are delivered at home.

Table 10.4 Place of delivery

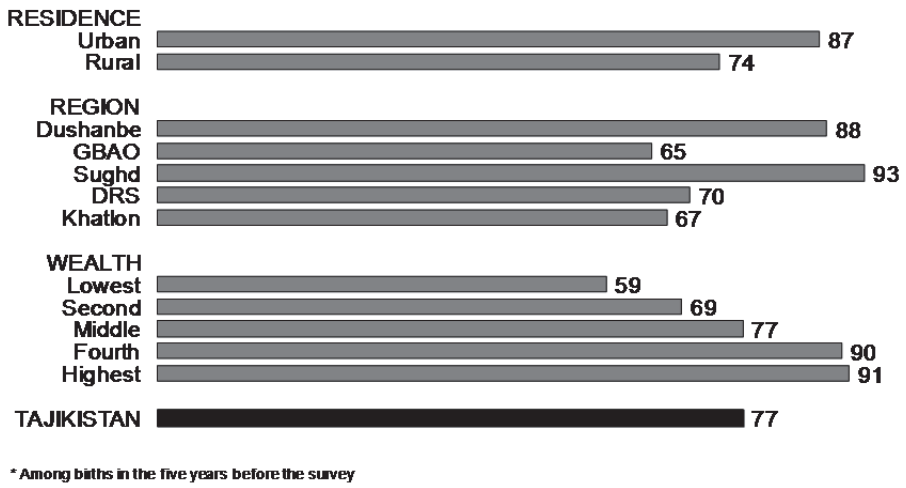
Percent distribution of live births in the five years preceding the survey by place of delivery and percentage delivered in a health facility, according to background characteristics, Tajikistan 2012

Background characteristic	Health facility: Public sector	Health facility: Private sector	Home	Missing	Total	Percentage delivered in a health facility	Number of births
Mother's age at birth							
<20	80.1	0.0	18.0	1.8	100.0	80.1	480
20-34	77.6	0.0	21.6	0.8	100.0	77.7	4,321
35-49	61.1	0.0	37.0	1.8	100.0	61.1	433
Birth order							
1	85.8	0.1	12.9	1.2	100.0	85.9	1,765
2-3	76.1	0.0	23.2	0.7	100.0	76.1	2,256
4-5	68.2	0.0	31.5	0.3	100.0	68.2	889
6+	51.4	0.0	45.8	2.8	100.0	51.4	323
Antenatal care visits[1]							
None	52.8	0.0	45.3	2.0	100.0	52.8	729
1-3	68.8	0.0	31.1	0.1	100.0	68.8	953
4+	91.1	0.1	8.8	0.1	100.0	91.1	1,889
Residence							
Urban	87.3	0.1	11.7	0.8	100.0	87.4	1,119
Rural	73.6	0.0	25.5	1.0	100.0	73.6	4,114
Region							
Dushanbe	88.1	0.2	10.6	1.0	100.0	88.4	414
GBAO	65.4	0.0	33.8	0.9	100.0	65.4	91
Sughd	93.3	0.0	6.1	0.7	100.0	93.3	1,383
DRS	70.0	0.0	29.1	0.9	100.0	70.0	1,316
Khatlon	67.4	0.0	31.4	1.2	100.0	67.4	2,029
Mother's education							
None/primary	69.1	0.0	30.4	0.5	100.0	69.1	452
General basic	73.3	0.0	25.7	1.0	100.0	73.3	2,063
General secondary	77.3	0.0	21.6	1.1	100.0	77.3	2,161
Professional primary/middle	89.1	0.0	10.3	0.6	100.0	89.1	302
Higher	93.5	0.4	5.8	0.3	100.0	93.9	255
Wealth quintile							
Lowest	58.5	0.0	40.5	1.1	100.0	58.5	1,062
Second	68.8	0.0	29.3	1.9	100.0	68.8	1,132
Middle	77.1	0.0	21.9	0.9	100.0	77.1	1,092
Fourth	89.8	0.0	9.9	0.3	100.0	89.8	1,037
Highest	91.2	0.1	8.3	0.3	100.0	91.4	909
Total	76.5	0.0	22.5	0.9	100.0	76.5	5,233

Note: Table excludes 31 births, for which the number of ANC visits is missing.
[1] Includes only the most recent birth in the five years preceding the survey.

There are considerable variations in delivery care by mother's age at birth and residence. Younger women and women delivering their first births are more likely to deliver in a health facility than older women and those who are having their second or higher birth; 80 percent of births to women age 20 or younger are delivered in a health facility compared with 61 percent of births to women age 35 or older. Similarly, 86 percent of first births are delivered in a health facility compared with only 51 percent of sixth and higher births. As expected, women who have ANC care are also more likely to deliver in a health facility than those who do not. The proportion of births that take place in a health facility increases from 53 percent of those to women who had no ANC to 91 percent of those with four or more ANC visits. As shown in Figure 10.2, births in urban areas are more likely to take place in a health facility than those in rural areas (87 percent versus 74 percent). About 88-93 percent of births in the Sughd region and Dushanbe take place in a health facility compared with only 65-67 percent of those in GBAO and Khatlon regions.

Figure 10.2
Differentials in percentage of births delivered in health facilities, Tajikistan, 2012*



Tajikistan DHS 2012

Mother's level of education is directly related to the likelihood that a birth is delivered in a health facility. Only 69 percent of births to women with no education or only a primary education take place in a health facility compared with 94 percent of those to women with higher than a secondary education. Place of delivery is also highly correlated with wealth quintile; fewer than 6 in 10 births to women in the lowest quintile take place in a health facility compared with over 9 in 10 births to women in the highest quintile.

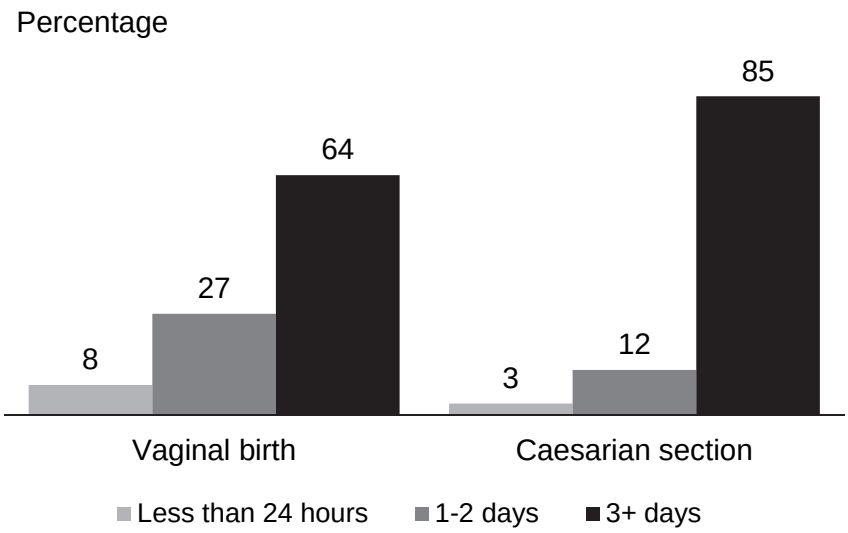
There is some evidence that institutional deliveries may be increasing in Tajikistan. Data from the 2005 Multiple Indicator Cluster Survey (MICS) show that only 62 percent of births in the two years before the survey took place in a health facility (SCS, 2007) compared with 78 percent of births in the two years before the 2012 TjDHS[3].

The proportion of births in Tajikistan that take place in a health facility (77 percent) is substantially higher than in Afghanistan (32 percent) or Pakistan (34 percent), similar to Azerbaijan (78 percent), and lower than in Armenia and Ukraine (99 percent each) (APHI/MoH [Afghanistan] et al., 2011; NIPS [Pakistan] and Macro International Inc. 2008; SSC [Azerbaijan] and Macro International Inc., 2008; NSS[Armenia] at al., 2012; UCSR [Ukraine] and Macro International, 2008).

[3] The 2005 Tajikistan MICS collected information on delivery care for the last live birth in the *two* years before the survey, while the 2012 TjDHS collected it for live births in the five years before the survey. Thus, in order to obtain estimates comparable to the MICS, the 2012 TjDHS ANC indicators have been re-calculated based on information for the last birth in the two years before the survey.

As shown in Figure 10.3, a large majority of women who deliver in a health facility stay for at least three days in the facility after delivery. Among those with a vaginal birth, 64 percent stay three or more days in the facility, while 27 percent stay 1-2 days and 8 percent are released within 24 hours after delivering. As expected, the duration of stay in health facilities is longer for those who deliver by Caesarian section. For these births, 85 percent of mothers stay for three or more days.

Figure 10.3
Duration of mother's stay in health facility after giving birth*, Tajikistan



* Percentage among women whose last birth in the last 5 years was delivered in a health facility.

Tajikistan DHS 2012

10.2.2 Assistance during Delivery

Proper medical attention and hygienic conditions during delivery can reduce the risk of complications and infections that can cause the death or serious illness of the mother, infant, or both. Table 10.5 shows the percent distribution of all live births in the five years preceding the survey by type of assistance during delivery, according to background characteristics.

A large majority of births in Tajikistan (87 percent) are assisted by a medical professional, mainly doctors (64 percent) and nurses or midwives (22 percent). Nine percent of births are assisted by traditional birth attendants. The proportion of births delivered with the assistance of a skilled provider is higher among younger mothers and for first births than for other births. As expected, births that take place in a health facility are also much more likely to be assisted by a skilled professional than births that take place at home. Also more likely to be assisted by a health professional are births to urban women, births to women in Dushanbe, and births to women with more education and in higher wealth quintiles.

The proportion of births delivered with the assistance of a health professional ranges from 80 percent in DRS region to 96 percent in Dushanbe. Although only two-thirds of births in GBAO are delivered in a health facility (65 percent), nearly all births are delivered by a skilled provider (93 percent), in part because the region has the highest use of feldshers as assistants at delivery.

Table 10.5 Assistance during delivery

Percent distribution of live births in the five years preceding the survey by person providing assistance during delivery, percentage of birth assisted by a skilled provider, and percentage delivered by cesarean-section, according to background characteristics, Tajikistan 2012

Background characteristic	Person providing assistance during delivery									Percentage delivered by a skilled provider[2]	Percentage delivered by C-section	Number of births
	Family doctor	Other doctor	Nurse/ midwife	Feldsher[1]	Traditional birth attendant	Relative/ other	No one	Don't know/ missing	Total			
Mother's age at birth												
<20	1.5	63.2	25.5	0.9	5.6	1.0	0.0	2.2	100.0	91.2	3.2	480
20-34	3.5	61.6	22.0	0.9	8.9	2.1	0.1	0.9	100.0	88.0	4.0	4,321
35-49	5.9	51.5	17.8	1.2	14.6	6.6	0.9	1.6	100.0	76.3	5.5	433
Birth order												
1	3.0	66.9	22.6	1.1	4.4	0.4	0.1	1.4	100.0	93.7	5.8	1,765
2-3	3.2	61.0	22.0	0.8	9.8	2.2	0.1	0.9	100.0	87.0	3.4	2,256
4-5	4.4	56.0	20.9	1.3	13.5	3.2	0.5	0.4	100.0	82.5	3.0	889
6+	6.5	40.5	21.3	0.6	17.1	11.3	0.6	2.2	100.0	68.9	1.3	323
Place of delivery												
Health facility	1.9	75.7	21.0	1.1	0.2	0.0	0.0	0.2	100.0	99.5	5.3	4,005
Elsewhere	9.4	13.2	26.3	0.6	39.6	10.2	0.5	0.4	100.0	49.4	0.0	1,179
Residence												
Urban	1.3	69.7	21.9	0.5	4.5	1.0	0.1	1.0	100.0	93.4	6.1	1,119
Rural	4.2	58.5	22.0	1.1	10.3	2.7	0.2	1.1	100.0	85.7	3.5	4,114
Region												
Dushanbe	1.4	67.7	26.1	0.4	2.7	0.6	0.0	1.1	100.0	95.6	9.7	414
GBAO	1.1	46.0	38.7	6.7	3.1	4.0	0.0	0.4	100.0	92.5	6.0	91
Sughd	1.0	74.1	19.1	1.0	1.8	2.0	0.0	1.0	100.0	95.2	4.7	1,383
DRS	1.2	56.1	22.0	1.2	17.0	1.6	0.0	1.0	100.0	80.4	3.3	1,316
Khatlon	7.4	54.3	22.3	0.7	10.5	3.3	0.4	1.2	100.0	84.6	2.8	2,029
Mother's education												
None/primary	4.7	53.6	19.2	1.1	15.0	5.2	0.4	0.8	100.0	78.5	2.8	452
General basic	3.1	58.1	23.1	0.5	11.0	2.8	0.1	1.4	100.0	84.7	4.1	2,063
General secondary	4.1	62.5	21.3	1.3	7.9	1.7	0.2	1.0	100.0	89.2	3.7	2,161
Professional primary/ middle	1.9	72.8	21.4	1.3	2.0	0.3	0.3	0.0	100.0	97.4	5.0	302
Higher	2.7	69.1	24.6	0.7	1.4	0.8	0.0	0.7	100.0	97.1	6.7	255
Wealth quintile												
Lowest	7.6	43.6	21.8	0.9	17.2	7.0	0.5	1.3	100.0	73.9	2.7	1,062
Second	4.7	57.0	22.7	0.6	11.6	1.6	0.2	1.7	100.0	84.9	2.4	1,132
Middle	2.3	62.4	23.9	1.1	7.9	1.3	0.1	1.0	100.0	89.7	4.2	1,092
Fourth	1.6	70.3	20.4	1.5	5.0	0.5	0.0	0.8	100.0	93.6	5.1	1,037
Highest	1.1	73.5	20.7	0.8	2.5	1.1	0.0	0.4	100.0	96.1	6.2	909
Total	3.5	60.9	22.0	1.0	9.1	2.3	0.2	1.1	100.0	87.4	4.0	5,233

Note: If the respondent mentioned more than one person attending during delivery, only the most qualified person is considered in this tabulation. Table excludes 49 births for which information on place of delivery is missing.
[1] Feldsher is a mid-level health professional that provides medical care beyond the scope of a nurse but less than that of a physician.
[2] Skilled provider includes doctor, nurse, midwife, and feldsher.

There has been a modest increase in delivery care by health professionals since 2005. The proportion of births assisted by skilled providers increased from 83 percent in 2005 (SCS, 2007) to 89 percent in 2012[4].

The proportion of births in Tajikistan assisted by a health professional (87 percent) is higher than in Afghanistan (34 percent) or Pakistan (39 percent), similar to Azerbaijan (89 percent) and lower than in Ukraine (99 percent) and Armenia (almost 100 percent) (APHI/MoH [Afghanistan] et al., 2011; NIPS [Pakistan] and Macro International Inc. 2008; SSC [Azerbaijan] and Macro International Inc., 2008; UCSR [Ukraine] and Macro International, 2008; NSS [Armenia] at al., 2012).

[4] The 2005 Tajikistan MICS collected information on delivery care for the last live birth in the *two* years before the survey, while the 2012 TjDHS collected it for live births in the five years before the survey. Thus, in order to obtain estimates comparable to the MICS, the 2012 TjDHS ANC indicators have been re-calculated based on information for the last birth in the two years before the survey.

10.2.3 Cesarean Section

Table 10.5 also shows the percentage of live births delivered by Cesarean section during the five years preceding the survey. The percentage of C-section births is sometimes considered to be a proxy indicator of women's access to skilled care for complicated deliveries. According to the 2012 TjDHS, 4 percent of births are delivered by C-section.

Delivery by Caesarean section is highest among births to mothers who live in Dushanbe (10 percent), who have higher than secondary education (7 percent), and who are in the highest wealth quintile (6 percent).

10.3 POSTNATAL CARE FOR MOTHERS AND CHILDREN

Postnatal care is a crucial component of safe motherhood. Postnatal checkups provide an opportunity to assess and treat delivery complications and to counsel mothers on how to care for themselves and their babies. A large proportion of maternal and neonatal deaths occur during the 24 hours following delivery. In addition, the first two days following delivery are critical for monitoring complications arising from the delivery.

To assess the extent of postnatal care utilization, women interviewed in the 2012 TjDHS were asked about checkups for their last birth in the five years preceding the survey. Specifically, they were asked if they, their child, or both had received a health checkup after the delivery, the timing of the first checkup, and the type of health provider.

10.3.1 Postnatal Checkup for Mother

Table 10.6 shows the percent distribution of last births in the two years preceding the survey for which the mothers received postnatal care. Overall, 80 percent of mothers receive postnatal care within the crucial first two days of delivery. About two-thirds of women received a checkup within the first four hours after delivering, 5 percent received a checkup within 4 to 23 hours, and 8 percent were seen 1 to 2 days following delivery. On the other hand, 13 percent of mothers do not receive any postnatal checkup at all.

The proportion of mothers receiving a postnatal checkup within two days of delivery decreases with age of the mother and birth order. It is higher among urban mothers than rural mothers. Women who deliver in a health facility are more than twice as likely to receive timely postnatal checkups as women who deliver elsewhere (92 percent versus 40 percent). Over 90 percent of women in Sughd and Dushanbe regions receive postnatal care within the first two days after delivery, compared with only 73-74 percent of women in DRS and Khatlon regions. The proportion of women who receive a postnatal checkup within two days of delivering increases steadily with the education level and the wealth quintile of the mother.

Table 10.6 Timing of first postnatal checkup for the mother

Among women age 15-49 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, Tajikistan 2012

Background characteristic	Time after delivery of mother's first postnatal checkup						No postnatal checkup[1]	Total	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				
Mother's age at birth										
<20	72.8	5.7	5.9	3.0	1.3	1.8	9.4	100.0	84.5	186
20-34	67.7	5.6	7.6	3.2	1.6	1.3	12.9	100.0	80.9	1,708
35-49	53.2	3.1	11.6	7.0	1.0	1.4	22.7	100.0	67.8	151
Birth order										
1	74.0	4.8	7.9	1.4	1.7	1.4	8.8	100.0	86.7	664
2-3	66.9	5.9	6.7	4.1	1.5	1.2	13.8	100.0	79.5	933
4-5	64.3	5.7	7.3	3.9	1.6	2.0	15.2	100.0	77.4	325
6+	39.1	4.3	16.1	9.4	1.2	0.9	29.1	100.0	59.4	123
Place of delivery										
Health facility	80.4	5.6	5.8	1.9	1.0	1.2	4.1	100.0	91.7	1,595
Elsewhere	20.6	4.7	15.1	9.2	3.5	1.9	45.0	100.0	40.4	442
Residence										
Urban	76.1	5.6	6.8	1.8	0.5	1.1	8.3	100.0	88.4	431
Rural	64.7	5.4	8.0	4.0	1.9	1.4	14.7	100.0	78.1	1,615
Region										
Dushanbe	82.5	3.6	5.6	0.7	0.0	0.6	7.0	100.0	91.7	154
GBAO	57.8	4.6	20.9	4.1	1.8	1.1	9.6	100.0	83.4	34
Sughd	83.3	3.6	6.9	1.2	0.0	0.3	4.8	100.0	93.8	539
DRS	62.6	5.4	4.8	5.0	1.0	1.7	19.5	100.0	72.8	519
Khatlon	56.6	7.0	10.1	4.6	3.3	2.0	16.4	100.0	73.7	798
Education										
None/primary	55.8	5.5	8.2	4.6	2.6	2.9	20.4	100.0	69.5	177
General basic	62.6	4.8	8.0	4.1	1.7	1.3	17.6	100.0	75.4	850
General secondary	71.9	5.8	7.6	3.3	1.2	0.9	9.3	100.0	85.3	810
Professional primary/middle	75.0	7.2	6.3	0.0	1.4	1.3	8.8	100.0	88.5	107
Higher	77.7	5.7	7.9	2.5	1.1	3.2	1.8	100.0	91.4	100
Wealth quintile										
Lowest	52.2	3.5	11.6	5.2	1.3	0.7	25.5	100.0	67.3	393
Second	62.9	5.4	8.5	4.1	1.8	1.3	16.0	100.0	76.9	454
Middle	66.4	8.0	7.0	3.0	2.6	2.0	11.0	100.0	81.3	451
Fourth	79.1	4.6	4.4	2.3	1.1	1.3	7.2	100.0	88.1	425
Highest	76.4	5.1	7.4	2.9	0.7	1.4	6.0	100.0	89.0	323
Total	67.1	5.4	7.8	3.5	1.6	1.4	13.3	100.0	80.3	2,045

Note: Table excludes nine women for whom information on place of delivery is missing.
[1] Includes women who received a checkup after 41 days.

The skill of the provider who performs the first postnatal checkup has important implications for maternal and neonatal health. Table 10.7 shows that among women who gave birth in the two years before the survey, 60 percent of women received care from a doctor and 20 percent received care from a nurse or midwife within two days after birth. Twenty percent of women received no postnatal checkup within two days of birth.

Table 10.7 Type of provider of first postnatal checkup for the mother

Among women age 15-49 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, Tajikistan 2012

	Type of health provider of mother's first postnatal checkup								
Background characteristic	Family doctor	Other doctor	Nurse/ midwife	Feldsher[1]	Community health worker	Traditional birth attendant	No postnatal checkup in the first two days after birth	Total	Number of women
Mother's age at birth									
<20	1.5	58.3	23.9	0.7	0.0	0.0	15.5	100.0	186
20-34	3.0	57.5	19.6	0.4	0.1	0.4	19.1	100.0	1,708
35-49	5.1	44.0	17.3	0.0	0.0	1.3	32.2	100.0	151
Birth order									
1	2.4	63.9	19.7	0.4	0.1	0.3	13.3	100.0	664
2-3	3.7	55.0	20.0	0.3	0.1	0.4	20.5	100.0	933
4-5	2.1	52.6	21.2	0.7	0.1	0.6	22.6	100.0	325
6+	3.6	38.7	15.4	0.0	0.0	1.6	40.6	100.0	123
Place of delivery									
Health facility	1.5	69.3	20.7	0.2	0.1	0.0	8.3	100.0	1,595
Elsewhere	8.5	11.6	17.2	1.0	0.0	2.1	59.6	100.0	442
Residence									
Urban	1.8	66.3	19.7	0.0	0.1	0.4	11.6	100.0	431
Rural	3.3	53.9	19.9	0.5	0.1	0.5	21.9	100.0	1,615
Region									
Dushanbe	1.6	73.6	15.8	0.0	0.3	0.4	8.3	100.0	154
GBAO	1.8	34.8	41.5	3.6	1.1	0.6	16.6	100.0	34
Sughd	2.2	69.8	21.3	0.5	0.0	0.0	6.2	100.0	539
DRS	1.1	51.2	18.5	0.7	0.2	1.2	27.2	100.0	519
Khatlon	5.1	48.7	19.6	0.0	0.0	0.3	26.3	100.0	798
Education									
None/primary	2.6	51.3	15.2	0.0	0.0	0.4	30.5	100.0	177
General basic	2.1	50.8	21.3	0.5	0.1	0.6	24.6	100.0	850
General secondary	4.4	61.2	19.0	0.3	0.1	0.4	14.7	100.0	810
Professional primary/ middle	3.1	59.0	26.0	0.4	0.0	0.0	11.5	100.0	107
Higher	0.4	74.4	16.1	0.4	0.0	0.0	8.6	100.0	100
Wealth quintile									
Lowest	4.3	41.5	20.1	0.7	0.0	0.7	32.7	100.0	393
Second	3.6	52.8	19.9	0.3	0.0	0.3	23.1	100.0	454
Middle	1.9	56.0	22.0	0.7	0.3	0.4	18.7	100.0	451
Fourth	2.8	65.8	19.3	0.0	0.0	0.2	11.9	100.0	425
Highest	2.5	68.7	17.1	0.0	0.1	0.6	11.0	100.0	323
Total	3.0	56.5	19.8	0.4	0.1	0.5	19.7	100.0	2,045

Note: Table excludes 9 women for whom information on place of delivery is missing.
[1] Feldsher is a mid-level health professional that provides medical care beyond the scope of a nurse but less than that of a physician.

Younger mothers are more likely than older mothers to receive a postnatal checkup within two days of delivery from a doctor or from a nurse/midwife. Similarly, the proportion of mothers who receive a postnatal checkup from a doctor decreases as birth order increases. It is also higher among women in urban areas than in rural areas and among women in Dushanbe than among those in other regions. This is especially true in GBAO, where a sizeable proportion of mothers receive postnatal care from nurses and midwives (42 percent). Timely postnatal care coverage from doctors increases with both education level and wealth quintile of the mother.

10.3.2 Postnatal Checkup for the Newborn

Table 10.8 shows that more than half (54 percent) of last births in the two years preceding the survey received a postnatal checkup within the first two days after birth.

Table 10.8 Timing of first postnatal checkup for the newborn

Percent distribution of last 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, Tajikistan 2012

Background characteristic	Time after birth of newborn's first postnatal checkup						No postnatal checkup[1]	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				
Mother's age at birth										
<20	1.7	34.5	5.1	12.4	6.5	0.0	39.6	100.0	53.8	186
20-34	1.4	36.3	4.2	13.3	7.2	0.8	36.7	100.0	55.2	1,708
35-49	1.7	22.0	2.0	15.3	8.3	0.9	50.0	100.0	40.9	151
Birth order										
1	1.4	41.0	3.7	14.0	4.1	0.0	35.7	100.0	60.1	664
2-3	2.1	34.4	4.4	13.0	8.5	1.0	36.7	100.0	53.9	933
4-5	0.5	30.1	4.8	11.6	8.6	0.9	43.6	100.0	47.0	325
6+	0.0	21.4	1.7	18.2	11.5	1.9	45.4	100.0	41.3	123
Place of delivery										
Health facility	1.8	42.5	4.1	11.6	5.7	0.7	33.6	100.0	59.9	1,595
Elsewhere	0.3	8.9	4.1	20.3	12.9	0.8	52.6	100.0	33.6	442
Residence										
Urban	1.6	42.0	4.3	10.2	5.8	0.7	35.4	100.0	58.2	431
Rural	1.4	33.2	4.0	14.2	7.6	0.7	38.7	100.0	53.0	1,615
Region										
Dushanbe	0.4	45.4	2.9	6.2	4.2	0.9	40.0	100.0	54.9	154
GBAO	0.6	37.1	0.7	22.5	8.4	0.0	30.7	100.0	60.9	34
Sughd	4.6	43.1	3.7	15.4	9.4	0.7	23.1	100.0	66.8	539
DRS	0.2	32.8	1.7	6.1	7.4	1.0	50.7	100.0	40.9	519
Khatlon	0.5	29.0	6.2	17.8	6.3	0.6	39.7	100.0	53.5	798
Mother's education										
None/primary	0.9	27.1	3.5	13.5	7.3	2.1	45.5	100.0	45.1	177
General basic	1.3	33.9	4.1	11.0	7.0	0.6	42.1	100.0	50.3	850
General secondary	1.7	36.1	4.4	15.9	7.8	0.6	33.5	100.0	58.1	810
Professional primary/ middle	2.6	40.0	2.0	10.0	6.7	1.3	37.5	100.0	54.6	107
Higher	1.2	45.6	4.8	16.6	5.7	0.0	26.1	100.0	68.2	100
Wealth quintile										
Lowest	0.3	29.6	3.7	19.2	7.7	0.9	38.5	100.0	52.9	393
Second	1.0	31.9	5.2	16.6	5.9	0.7	38.8	100.0	54.6	454
Middle	1.9	33.2	3.6	9.5	9.0	0.6	42.2	100.0	48.2	451
Fourth	2.0	41.0	4.0	10.3	6.1	0.7	35.9	100.0	57.3	425
Highest	2.4	41.0	3.8	11.3	7.7	0.7	33.1	100.0	58.5	323
Total	1.5	35.1	4.1	13.4	7.3	0.7	38.0	100.0	54.1	2,045

Note: Table excludes 9 births for which information on place of delivery is missing.
[1] Includes newborns who received a checkup after the first week.

Less than two percent of newborns receive a postnatal checkup within one hour after birth; however, 35 percent receive a checkup one to three hours after birth. Thirty-eight percent of babies do not receive any checkup at all in the first week after birth. Differences in postnatal care for newborns by background characteristics are similar to patterns discussed for mothers' postnatal checkups.

Table 10.9 presents the percent distribution of last births in the two years preceding the survey by type of provider of postnatal care during the first two days after delivery, according to background characteristics. Among all newborns, 45 percent receive a checkup from a doctor and 8 percent receive a checkup from a nurse or midwife within the first two days after birth. Almost half of newborns (46 percent) receive no postnatal checkup in the first two days after birth.

Table 10.9 Type of provider of first postnatal checkup for the newborn

Percent distribution of last 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, Tajikistan 2012

	Type of health provider of newborn's first postnatal checkup					No postnatal checkup in the first two days after birth		
Background characteristic	Family doctor	Other doctor	Feldsher[1]	Nurse/ midwife	Traditional birth attendant		Total	Number of births
Mother's age at birth								
<20	3.2	41.5	0.5	7.3	1.3	46.2	100.0	186
20-34	3.6	42.3	0.1	8.7	0.6	44.8	100.0	1,708
35-49	4.2	30.3	0.0	4.5	2.0	59.1	100.0	151
Birth order								
1	3.3	48.8	0.3	7.1	0.7	39.9	100.0	664
2-3	4.2	39.4	0.1	9.6	0.5	46.1	100.0	933
4-5	2.7	35.8	0.0	7.8	0.8	53.0	100.0	325
6+	3.2	30.1	0.0	5.6	2.4	58.7	100.0	123
Place of delivery								
Health facility	2.5	49.6	0.1	7.6	0.2	40.1	100.0	1,595
Elsewhere	7.8	12.0	0.3	10.8	2.7	66.4	100.0	442
Residence								
Urban	3.9	48.1	0.0	5.7	0.5	41.8	100.0	431
Rural	3.5	39.5	0.2	8.9	0.8	47.0	100.0	1,615
Region								
Dushanbe	2.1	47.5	0.0	4.8	0.4	45.1	100.0	154
GBAO	2.2	29.1	0.0	29.0	0.6	39.1	100.0	34
Sughd	4.6	54.0	0.2	7.7	0.3	33.2	100.0	539
DRS	1.2	31.0	0.4	7.5	1.0	59.1	100.0	519
Khatlon	4.9	38.8	0.0	8.9	1.0	46.5	100.0	798
Mother's education								
None/primary	2.2	32.1	0.0	9.4	1.4	54.9	100.0	177
General basic	2.5	38.8	0.4	8.3	0.4	49.7	100.0	850
General secondary	5.3	43.5	0.0	8.3	1.0	41.9	100.0	810
Professional primary/middle	2.8	44.7	0.0	6.2	0.9	45.4	100.0	107
Higher	2.9	57.7	0.0	7.6	0.0	31.8	100.0	100
Wealth quintile								
Lowest	4.7	36.6	0.3	9.3	2.0	47.1	100.0	393
Second	3.1	41.3	0.0	9.8	0.4	45.4	100.0	454
Middle	2.4	35.5	0.2	9.4	0.7	51.8	100.0	451
Fourth	4.8	45.5	0.2	6.7	0.0	42.7	100.0	425
Highest	3.2	49.5	0.0	5.2	0.7	41.5	100.0	323
Total	3.6	41.3	0.2	8.2	0.7	45.9	100.0	2,045

Note: Table excludes 9 births for which information on place of delivery is missing.
[1] Feldsher is a mid-level health professional that provides medical care beyond the scope of a nurse but less than that of a physician.

10.4 Breast Cancer Awareness and Testing

In order to assess the level of awareness about breast cancer, women who were interviewed in the 2012 TjDHS were asked a series of questions. First they were asked if they had ever heard of breast cancer and if so, what signs or symptoms would lead them to think a woman had breast cancer. They were also asked if they knew how to give themselves a breast examination and, if so, when they most recently performed a self-exam. Finally, they were asked if a health provider had ever given them a breast examination—either a manual exam, an ultrasound, or a mammogram—and if so, when the most recent exam was performed.

As shown in Table 10.10, less than half of all women reported that they had heard of breast cancer. Awareness of breast cancer is higher among older women, women in urban areas, women in Dushanbe and Sughd regions, women with more education, and those in the higher wealth quintiles.

Table 10.10 Knowledge about breast cancer and symptoms of breast cancer

Percentage of women age 15-49 who have heard of breast cancer, and among women who have heard of breast cancer, the percentage who reported knowing of specific symptoms of breast cancer, by background characteristics, Tajikistan 2012

	Among all women		Among women who have heard of breast cancer, percentage who report knowing of specific symptoms of breast cancer									
Background characteristic	Percentage who have heard of breast cancer	Number of women	Lump in breasts	Lump in lymph nodes	Discharge from nipples	Pain in breasts	Inverted nipple	Fatigue	Weight loss	Other	Don't know	Number of women
Age												
15-19	22.9	2,013	34.3	9.6	3.3	1.1	38.4	10.1	6.1	0.3	37.0	461
20-24	43.0	1,950	40.1	14.7	4.2	2.7	46.4	10.1	9.4	0.5	27.8	839
25-29	49.8	1,609	40.5	17.2	3.3	2.1	45.8	9.9	6.3	0.2	24.4	801
30-34	58.3	1,188	45.7	16.9	5.8	3.7	50.6	11.3	10.9	0.5	19.7	693
35-39	61.7	1,030	46.9	16.3	6.6	2.0	52.6	11.1	9.1	1.1	18.1	636
40-44	64.5	991	50.3	21.4	7.0	2.5	55.3	12.4	11.9	1.9	14.6	639
45-49	62.8	875	43.4	16.0	5.1	2.1	53.7	10.3	8.2	0.9	21.1	549
Residence												
Urban	57.4	2,413	50.0	17.3	5.9	3.0	44.0	10.7	8.8	0.9	21.2	1,385
Rural	44.6	7,243	40.2	15.9	4.6	2.1	51.3	10.8	9.0	0.7	23.7	3,233
Region												
Dushanbe	54.3	881	63.3	13.8	5.7	2.5	35.6	13.8	8.2	0.9	19.5	479
GBAO	44.2	220	44.5	17.0	7.0	4.1	42.8	5.1	2.2	0.0	23.6	97
Sughd	55.3	2,872	49.4	21.1	6.2	2.7	50.5	14.4	13.4	1.3	19.9	1,588
DRS	37.0	2,240	39.6	13.9	2.0	1.1	54.7	11.3	6.3	0.2	20.3	828
Khatlon	47.2	3,444	32.9	13.5	5.1	2.6	49.2	6.3	6.5	0.5	28.2	1,626
Education												
None/primary	29.9	567	26.1	9.4	6.2	1.3	47.2	9.0	12.4	0.8	35.0	170
General basic	37.1	3,349	35.6	12.6	3.7	2.3	48.7	10.9	5.5	0.4	27.8	1,241
General secondary	50.6	4,474	42.8	15.7	4.3	1.9	48.4	9.8	10.3	0.6	23.1	2,264
Professional primary/middle	75.1	645	56.2	22.0	8.2	2.7	50.4	10.7	9.6	2.6	15.4	485
Higher	73.9	620	57.8	25.6	8.3	5.0	52.8	15.7	9.5	0.7	12.2	459
Wealth quintile												
Lowest	40.3	1,878	30.7	10.2	3.7	2.1	52.5	9.8	7.2	0.9	29.7	757
Second	40.1	1,913	32.6	14.0	3.6	2.6	51.4	7.7	5.8	0.3	29.2	767
Middle	45.3	1,904	41.6	16.0	4.9	2.5	53.3	11.7	9.1	1.0	22.2	862
Fourth	53.7	1,971	48.0	19.5	6.0	2.0	47.1	11.4	11.2	0.7	20.5	1,058
Highest	59.0	1,989	54.9	19.0	6.0	2.7	44.2	12.1	9.8	0.7	17.2	1,174
Total	47.8	9,656	43.2	16.3	5.0	2.4	49.1	10.7	8.9	0.8	22.9	4,618

Among women who had heard of breast cancer, the most commonly reported signs or symptoms of breast cancer are inverted nipples (49 percent), breast lumps (43 percent), lumps in lymph nodes (16 percent), and fatigue (11 percent).

With regard to breast examinations, only 3 percent of women have ever had any kind of breast exam from a health care provider—a manual exam, an ultrasound, or a mammogram (Table 10.11). Those more likely to have had such an exam include older women, those with living children, those in GBAO region and Dushanbe, and those with more education.

Table 10.11 Breast examinations

Among women age 15-49, percentage who have ever had a breast examination given by a health professional and percentage who know how to give breast self-examination and among them, the percent distribution by time since last breast self-examination, according to background characteristics, Tajikistan 2012

Background characteristic	Percentage of women who ever had breast exam given by health provider	Percentage of women who know how to give self-exam	Number of women	Among women who know how to give self-examination, percent distribution by last time performed breast self-examination					
				Never	Within past 3 months	3+ months ago	Missing	Total	Number
Age									
15-19	0.3	0.5	2,013	*	*	*	*	100.0	10
20-24	2.6	4.3	1,950	53.9	28.4	15.4	2.4	100.0	84
25-29	3.1	4.6	1,609	64.5	27.9	6.5	1.2	100.0	75
30-34	3.7	7.7	1,188	58.5	18.3	20.1	3.1	100.0	91
35-39	5.4	10.3	1,030	49.6	27.0	23.4	0.0	100.0	107
40-44	7.2	12.7	991	57.3	27.4	14.1	1.2	100.0	126
45-49	5.4	10.8	875	61.8	20.7	15.6	2.0	100.0	95
Number of living children									
0	0.8	1.5	3,483	65.3	22.7	8.8	3.2	100.0	53
1-2	4.6	8.2	2,588	58.9	26.5	12.3	2.3	100.0	212
3-4	5.4	9.4	2,385	51.7	30.3	17.1	0.9	100.0	225
5+	4.1	8.1	1,200	64.2	9.5	25.7	0.6	100.0	97
Marital status									
Never married	0.5	1.1	2,648	70.2	18.7	5.9	5.2	100.0	30
Married or living together	4.4	7.9	6,504	57.0	25.5	16.4	1.1	100.0	517
Divorced/separated/ widowed	4.9	8.1	504	56.3	19.6	19.4	4.6	100.0	41
Residence									
Urban	4.5	9.6	2,413	57.8	25.6	14.8	1.9	100.0	232
Rural	3.0	4.9	7,243	57.4	24.3	16.9	1.4	100.0	355
Region									
Dushanbe	5.8	9.2	881	52.8	25.6	19.7	1.9	100.0	81
GBAO	7.1	11.0	220	72.7	12.9	13.7	0.8	100.0	24
Sughd	5.4	7.7	2,872	55.4	26.9	17.1	0.6	100.0	220
DRS	2.3	3.3	2,240	35.2	55.3	9.5	0.0	100.0	73
Khatlon	1.5	5.5	3,444	69.0	11.6	16.1	3.2	100.0	189
Education									
None/primary	1.2	3.9	567	*	*	*	*	100.0	22
General basic	2.2	3.2	3,349	58.1	24.6	15.7	1.6	100.0	109
General secondary	2.5	5.1	4,474	64.5	17.4	17.2	0.9	100.0	227
Professional primary/ middle	11.1	19.4	645	53.5	31.8	13.2	1.5	100.0	125
Higher	9.9	16.6	620	46.2	35.3	17.5	1.0	100.0	103
Wealth quintile									
Lowest	2.8	3.4	1,878	68.5	9.0	18.5	4.1	100.0	64
Second	2.5	3.4	1,913	56.7	17.1	22.1	4.1	100.0	65
Middle	2.0	4.8	1,904	64.6	20.8	14.6	0.0	100.0	91
Fourth	4.1	8.0	1,971	58.0	28.3	12.2	1.4	100.0	157
Highest	5.5	10.5	1,989	51.2	31.1	16.9	0.7	100.0	210
Total	3.4	6.1	9,656	57.6	24.8	16.1	1.6	100.0	587

Note: An asterisk denotes a figure based on fewer than 25 unweighted women and has been suppressed.

Only 6 percent of women say they know how to give themselves a breast exam. Knowledge about breast self-examination is higher among older women, those who have living children, those who have ever been married, and those with more education and in the higher wealth quintiles. Even among women who know how to examine their own breasts, almost 6 in 10 say they have never performed a self-exam and only one-quarter have performed a self-exam in the three months before the survey.

10.5 AWARENESS OF CERVICAL CANCER

Women interviewed in the 2012 TjDHS were also asked if they had ever heard about cervical cancer. As shown in Table 10.12, 42 percent of women said they had heard of cervical cancer. Knowledge of the illness is more common among older women, urban women, and those in Sughd region and Dushanbe. The proportion of women who have ever heard of cervical cancer increases with education and with wealth quintile.

Table 10.12 Knowledge about cervical cancer and Pap smear/cervical cytology smear testing

Among all women age 15-49, percentage who have heard of cervical cancer and percentage who ever had a Pap smear/cervical cytology smear test, and among women who ever had a Pap smear/cervical cytology smear test, the percent distribution by timing of their last Pap smear/cervical cytology smear test, by background characteristics, Tajikistan 2012

	Among all women			Among women who ever had a Pap smear test				
Background characteristic	Percentage who have heard of cervical cancer	Percentage who were ever given a Pap smear/cervi-cal cytology smear test	Number of women	Percentage who had their last Pap smear/cervi-cal cytology smear test within the last 12 months	Percentage who had their last Pap smear/cervi-cal cytology smear test 1-3 years ago	Percentage not stated/ missing	Total	Number of women
Age								
15-19	16.0	0.8	2,013	*	*	*	100.0	15
20-24	36.2	7.3	1,950	66.3	30.9	2.8	100.0	142
25-29	46.0	10.9	1,609	47.5	52.2	0.3	100.0	175
30-34	53.6	10.3	1,188	32.0	61.5	6.5	100.0	122
35-39	58.1	9.4	1,030	29.1	53.0	17.9	100.0	96
40-44	61.0	11.0	991	17.8	58.2	24.0	100.0	109
45-49	53.1	9.9	875	22.8	42.3	34.9	100.0	87
Residence								
Urban	50.7	8.2	2,413	38.5	52.1	9.4	100.0	197
Rural	39.3	7.6	7,243	40.2	47.5	12.3	100.0	550
Region								
Dushanbe	51.0	8.2	881	49.2	46.3	4.5	100.0	72
GBAO	38.1	9.5	220	33.8	62.3	3.9	100.0	21
Sughd	53.1	15.1	2,872	40.5	45.1	14.4	100.0	434
DRS	31.2	1.8	2,240	(51.3)	(46.3)	(2.4)	100.0	40
Khatlon	38.2	5.2	3,444	32.1	57.6	10.3	100.0	179
Education								
None/primary	22.2	3.0	567	*	*	*	100.0	17
General basic	32.3	6.7	3,349	48.5	45.8	5.7	100.0	224
General secondary	44.6	7.8	4,474	31.9	53.1	15.1	100.0	350
Professional primary/middle	68.2	13.2	645	32.3	50.3	17.4	100.0	85
Higher	68.8	11.4	620	53.5	38.3	8.2	100.0	71
Wealth quintile								
Lowest	35.7	10.6	1,878	37.4	43.6	19.0	100.0	200
Second	34.4	6.9	1,913	40.1	50.0	9.9	100.0	131
Middle	38.3	6.8	1,904	34.5	54.2	11.3	100.0	129
Fourth	49.5	7.2	1,971	37.1	54.5	8.4	100.0	142
Highest	52.1	7.3	1,989	49.8	44.2	6.0	100.0	145
Total	42.2	7.7	9,656	39.7	48.7	11.5	100.0	747

Note:: Numbers in parentheses are based on 25-49 unweighted women; an asterisk denotes a figure based on fewer than 25 unweighted women and has been suppressed.

The table also shows that only 8 percent of women in Tajikistan have ever had a Papanicolau (Pap test) or a cervical cytology smear test. Women in Sughd region are the most likely to have ever had a Pap test or a cervical cytology smear test, as are those with professional and higher education and surprisingly, those in the lowest wealth quintile.

Among women who have ever had a Pap test or a cervical cytology smear test, only 40 percent had one in the 12 months before the survey. Since only 8 percent of women have ever had a Pap test, this means that only 3 percent of reproductive age women in Tajikistan had a Pap test or a cervical cytology smear test in the previous 12 months.

10.6 VISITS TO FAMILY DOCTOR

Having a family doctor can presumably improve health care to the extent that there is a sustained and comfortable doctor-patient relationship. Knowledge about a patient's health history can have enormous benefits for subsequent care.

Women interviewed in the 2012 TjDHS were asked if they had a family doctor and if so, whether they had visited that doctor in the 12 months before the survey and if so, how many times. Results are shown in Table 10.13 by background characteristics.

Table 10.13 Family doctor

Percentage of women age 15-49 who have a family doctor, and among them, the percentage who visited the family doctor in the past 12 months for any reason, and percent distribution of women who visited the family doctor in the past 12 months by number of visits; and the median number of visits to a family doctor, according to background characteristics, Tajikistan 2012

			Among women who have a family doctor:		Among women who visited a family doctor in the past 12 months, number of visits to the family doctor:								
Background characteristic	Percentage of women who have a family doctor	Number of women	Percentage who visited the family doctor in past 12 months	Number of women	1-2	3-5	6-10	11+	Don't know	Missing	Total	Number of women	Median number of visits
Age													
15-19	40.9	2,013	32.4	823	46.8	23.3	13.9	5.0	10.8	0.2	100.0	267	1.9
20-24	43.9	1,950	59.3	857	37.4	34.2	16.4	5.3	6.5	0.2	100.0	508	2.7
25-29	45.9	1,609	61.6	738	34.0	32.9	21.2	5.9	5.9	0.1	100.0	455	3.0
30-34	50.0	1,188	64.8	594	36.9	33.7	19.2	4.7	5.5	0.0	100.0	385	2.7
35-39	46.1	1,030	60.4	475	38.8	34.9	12.7	5.6	7.4	0.6	100.0	286	2.5
40-44	46.0	991	55.6	456	37.6	37.7	12.9	8.1	3.7	0.0	100.0	253	2.6
45-49	45.5	875	53.4	398	44.1	24.7	20.6	6.4	4.2	0.0	100.0	212	2.4
Number of living children													
0	42.1	3,483	35.1	1,467	49.3	23.3	14.6	4.7	7.8	0.3	100.0	516	1.9
1-2	48.4	2,588	65.3	1,251	34.1	35.8	17.8	5.9	6.4	0.0	100.0	818	3.0
3-4	46.9	2,385	65.5	1,119	36.8	35.6	16.8	5.8	4.9	0.1	100.0	733	2.7
5+	41.9	1,200	59.8	502	36.0	29.6	19.9	6.9	7.0	0.5	100.0	300	2.9
Currently pregnant													
Pregnant	47.3	734	79.5	347	34.7	35.6	20.4	5.3	3.7	0.3	100.0	276	2.9
Not pregnant or not sure	44.8	8,922	52.4	3,993	39.0	31.8	16.6	5.8	6.7	0.1	100.0	2,091	2.6
Marital status													
Never married	41.8	2,648	27.3	1,107	55.4	18.3	11.6	4.9	9.5	0.2	100.0	303	1.6
Married or living together	46.1	6,504	64.7	2,996	36.1	34.2	17.9	5.9	5.8	0.2	100.0	1,939	2.8
Divorced/separated/widowed	46.9	504	52.8	237	34.9	36.3	16.6	5.7	6.6	0.0	100.0	125	2.8
Residence													
Urban	57.4	2,413	52.8	1,386	34.9	35.4	18.6	8.2	2.8	0.2	100.0	732	3.0
Rural	40.8	7,243	55.3	2,954	40.1	30.8	16.4	4.6	7.9	0.1	100.0	1,634	2.5
Region													
Dushanbe	65.6	881	60.4	578	30.3	40.6	19.6	7.5	1.7	0.3	100.0	349	3.1
GBAO	17.0	220	37.6	37	57.6	26.8	12.8	1.4	1.4	0.0	100.0	14	1.8
Sughd	55.3	2,872	51.9	1,587	43.9	34.4	13.5	3.5	4.8	0.0	100.0	823	2.3
DRS	22.3	2,240	79.6	499	20.8	19.3	25.3	11.5	22.9	0.2	100.0	398	4.7
Khatlon	47.6	3,444	47.8	1,638	45.2	33.0	15.5	4.5	1.7	0.2	100.0	783	2.3
Education													
None/primary	36.9	567	52.8	209	32.1	33.2	20.3	4.9	9.0	0.5	100.0	111	3.3
General basic	39.0	3,349	53.0	1,307	37.3	27.8	18.7	6.8	9.5	0.0	100.0	693	2.7
General secondary	46.7	4,474	54.5	2,089	40.2	33.6	16.1	5.4	4.5	0.3	100.0	1,139	2.5
Professional primary/middle	56.8	645	53.4	367	37.9	35.6	17.5	4.4	4.7	0.0	100.0	196	2.7
Higher	59.2	620	61.9	368	37.5	36.0	14.9	5.6	6.1	0.0	100.0	228	2.8
Wealth quintile													
Lowest	37.4	1,878	44.9	702	40.6	30.6	19.6	5.8	2.9	0.5	100.0	315	2.9
Second	37.8	1,913	53.3	724	43.3	33.9	15.3	4.8	2.8	0.0	100.0	386	2.4
Middle	39.5	1,904	57.2	752	36.8	29.3	17.9	4.3	11.7	0.0	100.0	431	2.6
Fourth	50.5	1,971	58.3	996	41.4	29.3	16.2	3.7	9.2	0.2	100.0	580	2.3
Highest	58.6	1,989	56.1	1,166	33.2	36.6	17.0	9.0	4.1	0.1	100.0	654	3.0
Total	44.9	9,656	54.5	4,340	38.5	32.2	17.0	5.7	6.3	0.1	100.0	2,367	2.6

Just under half (45 percent) of women age 15-49 say they have a family doctor. Differentials by age, number of children, and pregnancy and marital status are minor. However, urban women and those in Dushanbe and Sughd are considerably more likely to have a family doctor than other women. Only about one in five women in GBAO and DRS regions say they have family doctors. The proportion of women with family doctors increases with education and wealth quintile.

Among women with a family doctor, just over half (55 percent) say they have visited the doctor in the 12 months before the survey. There is a hint that many visits to family doctors may be for reproductive health reasons. Pregnant women are far more likely to have visited their family doctor in the previous 12 months than women who are not pregnant (80 percent versus 52 percent). Similarly, women in the prime reproductive ages—late twenties and early thirties—are more likely than younger and older women to have seen their family doctors in the previous 12 months, as are those women who have at least some children. Women who are married are more likely to see their family doctor than those who are divorced, widowed, or separated and those who have never married. Women in DRS region and Dushanbe are also more likely to have visited their family doctor recently than women in other regions.

Among women age 15-49 who visited their family doctor in the 12 months before the survey, about four in ten made one or two visits in that time period, while about one-third visited three to five times and almost one-quarter visited six or more times. The median number of visits to a family doctor in the 12 months before the survey is 2.6.

10.7 Problems in Accessing Health Care

Many factors can prevent women from getting medical advice or treatment for themselves when they are sick. Information on such factors is particularly important in understanding and addressing the barriers women may face in seeking care during pregnancy and at the time of delivery. In the 2012 TjDHS, women were asked whether each of the following factors would be a big problem or not a big problem in seeking medical care for themselves when they are sick: getting permission to go for treatment, getting money needed for advice or treatment, distance to a health facility, and not wanting to go alone.

As shown in Table 10.14, by far the most common problem—cited by 45 percent of women in Tajikistan—is getting money for treatment. Additionally, distance to a health facility and not wanting to go alone are reported as problems by 26-29 percent of women. Seventeen percent of women perceived getting permission to go for treatment to be a very serious problem. Over half of women interviewed cited at least one of the stated factors to be a serious problem in accessing health care.

The proportion of women who report at least one of the issues as a serious problem in getting health care for themselves varies most strongly by education and wealth quintile. For example, among women with no education or only primary education, the proportion who report at least one of the problems in getting health care (72 percent) is more than twice as high as it is among women with higher than professional education (32 percent). Rural women and those in Khatlon and GBAO regions are also more likely than women in urban areas or other regions to cite at least one problem.

As for specific factors, getting permission to go for treatment are bigger problems for women in GBAO and Khatlon regions and for women with less education and less wealth than for other women. Getting money for treatment is more likely to be reported by women who are divorced, separated, or widowed and by women in Khatlon region. Each of the four factors is more likely to be reported as a serious problem by rural women than by urban women. Similarly, for each of the four factors, there is a steady decrease in the proportion of women who report them as serious problems in accessing health care as education and wealth quintile increase.

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, Tajikistan 2012

Background characteristic	Problems in accessing health care					
	Getting permission to go for treatment	Getting money for treatment	Distance to health facility	Not wanting to go alone	At least one problem accessing health care	Number of women
Age						
15-19	18.1	40.6	27.7	33.5	54.0	2,013
20-34	18.9	44.9	30.2	27.3	55.6	4,747
35-49	13.5	46.4	28.4	18.6	54.4	2,896
Number of living children						
0	18.8	43.4	30.4	32.5	55.8	3,483
1-2	17.5	41.8	25.6	23.6	52.0	2,588
3-4	13.9	45.2	27.2	19.4	53.8	2,385
5+	18.0	51.9	36.7	25.1	60.8	1,200
Marital status						
Never married	18.4	43.8	29.6	33.2	56.3	2,648
Married or living together	16.5	43.8	28.7	23.4	53.8	6,504
Divorced/separated/widowed	18.0	56.8	32.2	20.9	62.3	504
Employed last 12 months						
Not employed	17.3	42.2	27.6	27.1	53.7	6,529
Employed for cash	14.3	48.1	27.8	20.8	55.2	2,295
Employed not for cash	23.4	52.0	44.8	30.8	63.6	823
Residence						
Urban	9.6	36.5	12.4	17.4	44.7	2,413
Rural	19.7	47.1	34.7	28.8	58.3	7,243
Region						
Dushanbe	9.5	45.1	10.6	22.7	55.2	881
GBAO	24.6	47.0	32.6	28.7	60.3	220
Sughd	11.7	37.1	23.4	19.8	47.6	2,872
DRS	16.2	37.7	25.7	22.2	46.9	2,240
Khatlon	23.8	54.6	40.6	34.2	65.8	3,444
Education						
None/primary	25.4	59.3	45.4	38.9	72.3	567
General basic	20.4	47.0	33.1	32.8	59.4	3,349
General secondary	16.3	44.8	28.3	23.6	54.7	4,474
Professional primary/middle	9.4	35.5	17.1	12.4	40.6	645
Higher	5.7	23.8	10.9	8.3	31.5	620
Wealth quintile						
Lowest	32.3	69.1	55.6	42.6	77.9	1,878
Second	21.0	51.6	38.3	31.1	63.1	1,913
Middle	14.1	40.8	26.7	24.0	52.0	1,904
Fourth	11.8	31.4	17.5	18.8	44.1	1,971
Highest	7.2	30.8	9.1	14.3	38.9	1,989
Total	17.1	44.5	29.1	26.0	54.9	9,656

Note: Table excludes eight women for whom information on employment is missing.

CHILD HEALTH 11

Key Findings

- Almost all children age 18-29 months (89 percent) are fully vaccinated against the major childhood illnesses.
- Roughly three in five children under age 5 with symptoms of acute respiratory infection or fever were taken to a health facility or provider for advice or treatment.
- Fifteen percent of children under age 5 had diarrhea in the two weeks preceding the survey. Of these children, 54 percent received treatment from a health facility or health provider, and 72 percent were given oral rehydration therapy (ORT). Only one-third of the children with diarrhea were given more liquids than usual.
- Over 90 percent of mothers of children under age 5 have heard about oral rehydration packets (Rehydron).
- Safe disposal of young children's stool is widespread; 90 percent of mothers report that the last time their youngest child under age 5 passed stool, they disposed of the fecal material in a safe manner.

This chapter presents findings in several areas of importance to child health, including the mother's estimate of her baby's size at birth, the vaccination status of children, and the prevalence and treatment of important childhood illnesses. Information on perceived size at birth is important for the design and implementation of programs aimed at reducing neonatal and infant mortality. Information on vaccination coverage focuses on children age 18-29 months. Overall coverage levels at the time of the survey, and at age 18 months, are shown for this group. In addition, the source of the information—a written vaccination card or the mother's recall—is shown. Knowing how vaccination coverage varies among subgroups of the population can aid in program planning.

Examining treatment practices and contact with health services for children with the three most important childhood illnesses—acute respiratory infection (ARI), fever, and diarrhea—can help assess national programs aimed at reducing mortality from these illnesses. Information is provided on the prevalence of ARI, fever, and diarrhea in the two weeks before the survey and the extent to which treatment was sought from a health facility or medically trained provider. Measuring the coverage of oral rehydration therapy (ORT) and increased fluids to treat diarrheal disease can help assess the effectiveness of programs that recommend these treatments.

11.1 Child's Size and Weight at Birth

A child's birth weight or size at birth is an important indicator of the child's vulnerability to the risk of childhood illness and chances of survival. Children whose birth weight is less than 2.5 kilograms, i.e., low birth weight (LBW), have a higher than average risk of early childhood death. In the 2012 TjDHS, for births in the five years before the survey, the actual birth weight was recorded in kilograms in the Woman's Questionnaire, based on either the child's health card or the mother's recall. Because birth weight was likely to be unknown for some babies, particularly for those born at home, the mother's estimate of the baby's size was also obtained in the TjDHS. A mother's report of a child being "very small" or "smaller than average," even though subjective, is considered a useful proxy for LBW.

Table 11.1 shows that an actual birth weight was recorded for more than four in five children (83 percent). Of these, 7 percent were reported to have weighed less than 2.5 kg at birth. Low birth weight is slightly more common among births to women under age 20 or age 35 and older, among first births and sixth and higher births, and among births in the GBAO region. There is no clear relationship between low birth weight and maternal education; however, the likelihood of having a low-birth-weight baby decreases as wealth quintile increases.

Table 11.1 Child's size and weight at birth

Percent distribution of live births in the five years preceding the survey by mother's estimate of baby's size at birth, percentage of live births in the five years preceding the survey that have a reported birth weight, and among live births in the five years preceding the survey with a reported birth weight, percentage less than 2.5 kg, according to background characteristics, Tajikistan 2012

	Percent distribution of all live births by size of child at birth							Births with a reported birth weight[1]	
Background characteristic	Very small	Smaller than average	Average or larger	Don't know/ missing	Total	Percentage of all births that have a reported birth weight[1]	Number of births	Percentage less than 2.5 kg	Number of births
Mother's age at birth									
<20	4.5	11.8	73.3	10.3	100.0	82.0	480	10.2	393
20-34	2.3	10.4	78.5	8.7	100.0	84.4	4,321	6.7	3,648
35-49	3.4	11.3	73.3	12.0	100.0	72.3	433	9.3	313
Birth order									
1	4.1	12.5	76.7	6.7	100.0	88.7	1,765	9.4	1,567
2-3	1.8	9.0	79.5	9.7	100.0	82.8	2,256	5.1	1,869
4-5	1.9	9.8	77.1	11.2	100.0	78.8	889	6.9	700
6+	3.0	13.3	71.2	12.4	100.0	67.7	323	10.1	219
Residence									
Urban	1.9	8.7	84.5	4.9	100.0	90.8	1,119	6.1	1,016
Rural	2.8	11.1	75.8	10.3	100.0	81.1	4,114	7.5	3,339
Region									
Dushanbe	1.6	10.2	84.0	4.2	100.0	89.7	414	6.2	371
GBAO	7.0	12.5	78.2	2.3	100.0	89.6	91	11.9	82
Sughd	1.0	7.8	90.2	1.0	100.0	95.5	1,383	6.1	1,321
DRS	2.9	10.5	68.8	17.8	100.0	77.0	1,316	6.9	1,013
Khatlon	3.5	12.6	73.5	10.3	100.0	77.2	2,029	8.3	1,568
Mother's education									
None/primary	1.9	12.6	70.7	14.8	100.0	77.2	452	7.2	349
General basic	3.1	10.6	74.9	11.3	100.0	80.0	2,063	8.3	1,650
General secondary	2.3	10.3	79.6	7.8	100.0	84.2	2,161	6.2	1,822
Professional primary/middle	3.0	11.4	83.2	2.3	100.0	94.9	302	10.7	287
Higher	2.8	8.2	88.0	1.0	100.0	96.8	255	3.4	247
Wealth quintile									
Lowest	2.7	11.0	70.3	16.0	100.0	66.7	1,062	9.5	709
Second	2.7	11.0	72.8	13.4	100.0	77.6	1,132	7.8	879
Middle	2.9	11.9	77.5	7.8	100.0	86.4	1,092	6.8	943
Fourth	2.7	9.6	84.1	3.6	100.0	93.4	1,037	6.4	970
Highest	2.1	9.2	85.0	3.7	100.0	93.9	909	5.8	853
Total	2.6	10.6	77.6	9.1	100.0	83.2	5,233	7.2	4,354

[1] Based on either a written record or the mother's recall.

Table 11.1 also includes information on the mother's estimate of the baby's size at birth. According to their mother's estimate, 3 percent of children were very small at birth, 11 percent were smaller than average, and 78 percent were average or larger in size. Differentials in the proportion of children reported at birth as either very small or smaller than average are generally similar to those cited above for low birth weight.

The 2005 Tajikistan MICS survey collected information on the birth weight and size for the last live birth in the two years before the survey. Thus, to examine trends since the 2005 MICS, the 2012 TjDHS estimate of the percentage of children with a reported birth weight had to be re-calculated based on information for the last live birth in the two years before the survey. The proportion of births with a reported birth weight has increased from 66 percent in the 2005 MICS (SCS, 2007) to 85 percent in the 2012 TjDHS (data not shown). The 2005 Tajikistan MICS prevalence of LBW was calculated combining reported low birth weight from the card and the mother's assessment of the child's size at birth, and therefore cannot be compared with LBW data from the 2012 TjDHS.

11.2 VACCINATION OF CHILDREN

Universal immunization of children under age 1 against major vaccine-preventable diseases is one of the most cost-effective of all programs to reduce infant and child morbidity and mortality. Tajikistan's Ministry of Health has adopted the World Health Organization (WHO) guidelines for childhood immunizations that call for all children to receive the following: a BCG vaccination against tuberculosis; three doses of DPT to prevent diphtheria, pertussis, and tetanus; three doses of polio vaccine; and a measles vaccine during the first year of life. In addition to these standard vaccinations, since 2001, the Ministry of Health has recommended that children receive three doses of the hepatitis B vaccine, with the first dose given at birth (MOH, 2001; Khodjamuradov and Rechel, 2010). Before 2008, children were given only three doses of hepatitis B vaccine; after 2008, in addition to the first dose given at birth, children receive three doses of the hepatitis B vaccine as part of the pentavalent vaccine, i.e., four times in total (MOH, 2008). The pentavalent vaccine protects against diphtheria, pertussis, and tetanus (DPT); hepatitis B; and *Hemophilus influenza* type B (Hib), and is given at 2-3-4 months according to the immunization schedule. Since 2009, the recommended national immunization schedule includes an MR vaccination to be given at age 12 months and 6 years to protect against measles and rubella (MOH, 2009).

Information on vaccination coverage was collected in the 2012 TjDHS for all children under age 5. In Tajikistan, child health cards (MOH form 112) and vaccination forms (MOH form 63) are maintained in the local health care facilities. On rare occasions, child vaccination passports are kept at home. In this survey, data were collected from three sources when available during the survey visit. If the mother was able to show the child vaccination passport, the dates of vaccinations were transferred from the card to the questionnaire. In the event that the mother did not have a child vaccination passport, she was asked to recall her child's immunizations. After all the interviews in a cluster were completed, the TjDHS team supervisor visited the local health facility to record information from the health cards (MOH forms 112 and 63) of the children in the sample. Health facility cards were found for 89 percent of children age 18-29 months, while 13 percent had immunization records that were seen at home (data not shown). Thus, while most of the data about immunization coverage are based on vaccination cards, in the case of children for whom a vaccination card was not located or was missing information on specific vaccines, the data are based on the mother's recall.

11.2.1 Vaccination Coverage

Table 11.2 presents information on vaccination coverage according to the source of information. Data are presented for children age 18-29 months, thereby including only those children who have reached the age by which they should be fully vaccinated. The first three rows show the proportions of these children vaccinated at any time before the survey. These results are presented according to the source of the information used to determine coverage, that is, a vaccination card—whether seen at home or at the health facility—a mother's report, or either source. The last row shows the proportion of children who had been vaccinated by age 18 months, the age by which vaccination coverage should be complete.

Table 11.2 Vaccinations by source of information

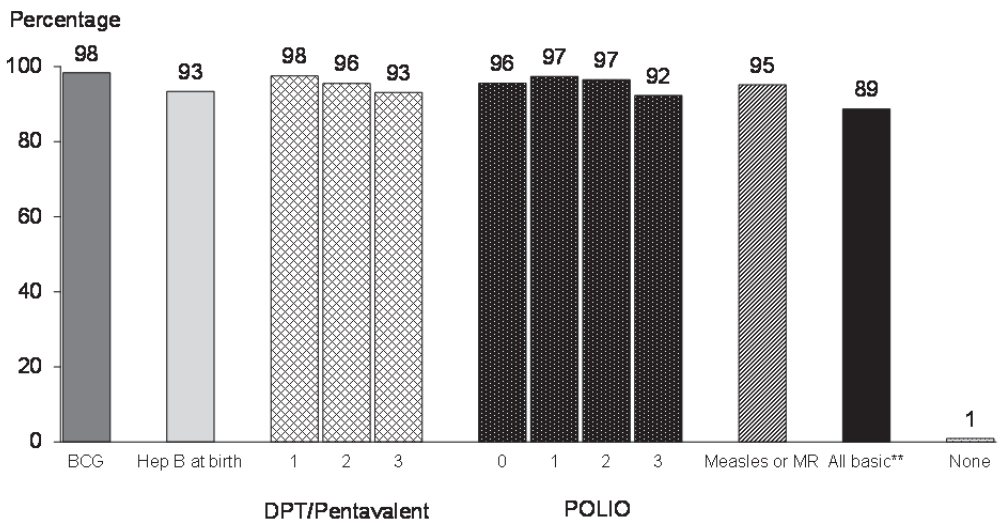
Percentage of children age 18-29 months who received specific vaccines at any time before the survey, by source of information (vaccination card at home or at a health facility or mother's report), and percentage vaccinated by 18 months of age, Tajikistan 2012

Source of information	BCG	Hepatitis B at birth	DPT/ pentavalent[1] 1	DPT/ pentavalent[1] 2	DPT/ pentavalent[1] 3	Polio 0[2]	Polio 1	Polio 2	Polio 3	Measles or MR	All basic vaccinations[3]	All basic[3] plus hepatitis B at birth	No vaccinations	Number of children
Vaccinated at any time before survey														
Vaccination card[4]	90.6	88.5	90.6	89.8	88.5	90.2	90.6	90.5	88.5	88.5	85.7	84.2	0.0	1,044
Mother's report	7.6	5.0	6.9	5.7	4.6	5.4	6.8	6.1	3.8	6.7	3.0	2.2	0.9	103
Either source	98.3	93.4	97.5	95.5	93.1	95.6	97.4	96.5	92.3	95.2	88.7	86.4	0.9	1,148
Vaccinated by 18 months of age[5]	98.3	93.4	97.4	95.2	91.7	95.6	97.3	96.3	91.7	91.4	84.3	82.0	0.9	1,148

[1] The pentavalent vaccine contains DPT, hepatitis B, and *Hemophilus influenza* type B (Hib) vaccines.
[2] Polio 0 is the polio vaccination given at birth.
[3] BCG, measles or MR, and three doses each of DPT/pentavalent and polio vaccine (excluding polio vaccine given at birth).
[4] Includes immunization cards kept by the parent/guardian and in the health facility.
[5] For children whose information is based on the mother's report, the proportion of vaccinations given during the first 18 months of life is assumed to be the same as for children with a written record of vaccination.

According to information from both vaccination cards and mothers' reports, 89 percent of children age 18-29 months are fully vaccinated (Figure 11.1). A slightly lower proportion of children (86 percent) received the entire course of MOH-recommended vaccinations, which includes hepatitis B at birth (Table 11.2). Almost all children (at least 97 percent) had received vaccinations for BCG and the first doses of polio and DPT/pentavalent. Ninety-three percent received a vaccination for hepatitis B at birth. The proportions of children receiving the second and third doses of polio and DPT/pentavalent are slightly lower, as is the proportion receiving the measles or MR vaccine. For example, 98 percent of children received the first dose of DPT/pentavalent, compared with 93 percent who received the third dose. Thus, the dropout rate[1] between the first and third doses of DPT/pentavalent is 5 percent. The corresponding dropout rate for polio is also 5 percent. Less than 1 percent of children age 18-29 months have not received any vaccinations.

Figure 11.1
Percentage of children age 18-29 months with specific vaccinations, Tajikistan 2012*



* Percentage of children who received the vaccine at any time before the survey.
** BCG, measles or MR, and three doses each of DPT/Pentavalent and polio vaccine (excluding polio 0)

Tajikistan DHS 2012

[1] Dropout rate = (Dose 1 – Dose 3) * 100/Dose 1

Vaccinations are most effective when given at the proper age. In Tajikistan, it is recommended that children complete the schedule of immunizations during the first 18 months of life. Overall, 84 percent of children age 18-29 months had received all the recommended vaccinations before reaching 18 months of age.

11.2.2 Differentials in Vaccination Coverage

Table 11.3 shows that vaccination cards were seen either at home or at the health facility for 91 percent of children age 18-29 months. The table shows that differences by sex and urban-rural residence in the proportion of children who have received all the basic WHO-recommended vaccinations are very small. However, there are marked variations by region and maternal education (Figure 11.2). Children living in the Sughd and Khatlon regions are more likely than children in other regions to be fully vaccinated (93 percent and 91 percent, respectively). Children born to mothers with general secondary education are more likely to be fully vaccinated (93 percent) than children of mothers with other levels of education.

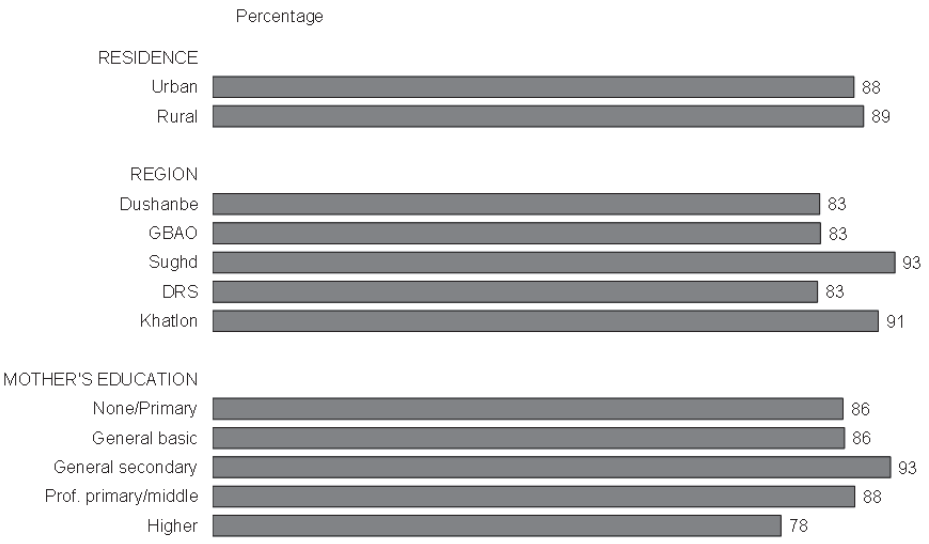
Table 11.3 Vaccinations by background characteristics

Percentage of children age 18-29 months who received specific vaccines at any time before the survey (according to a vaccination card at home or health facility or the mother's report), and percentage with any vaccination card, by background characteristics, Tajikistan 2012

Background characteristic	BCG	Hepatitis B at birth	DPT/Pentavalent[1] 1	2	3	Polio 0[2]	Polio 1	Polio 2	Polio 3	Measles or MR	All basic vaccinations[3]	All basic[3] plus Hepatitis B at birth	No vaccinations	Percentage with any vaccination card seen	Number of children
Sex															
Male	98.3	92.8	98.1	96.5	94.2	95.9	97.6	97.2	93.6	95.0	89.3	86.6	0.6	90.3	604
Female	98.2	94.1	96.8	94.4	91.9	95.3	97.2	95.8	90.8	95.5	88.1	86.2	1.2	91.7	544
Birth order															
1	98.7	95.5	98.2	95.8	93.6	96.7	97.5	96.0	92.5	95.5	88.9	87.5	1.0	89.8	384
2-3	98.0	91.1	96.7	95.0	91.8	94.9	97.3	96.4	91.1	95.3	87.1	84.2	0.7	89.4	496
4-5	99.3	95.5	99.1	96.5	96.4	95.8	97.3	97.3	95.0	96.5	93.3	90.1	0.7	95.5	191
6+	95.0	93.0	94.9	94.9	90.4	95.0	98.0	98.0	92.4	90.4	87.4	86.4	2.0	95.8	77
Residence															
Urban	98.5	94.3	96.4	94.0	91.8	97.2	95.9	93.9	91.2	93.7	87.7	86.1	1.1	88.9	230
Rural	98.2	93.2	97.8	95.9	93.4	95.2	97.8	97.2	92.6	95.6	89.0	86.5	0.8	91.5	918
Region															
Dushanbe	97.6	91.1	93.4	90.8	86.9	95.9	94.9	91.3	86.7	93.3	83.0	80.9	1.4	83.6	90
GBAO	98.8	89.3	98.9	92.6	86.8	90.7	97.6	96.4	92.9	96.4	83.1	77.2	0.0	89.3	17
Sughd	100.0	97.9	98.4	96.4	95.3	97.4	98.9	98.9	95.8	96.9	93.3	92.4	0.0	98.1	288
DRS	97.0	88.1	96.6	93.8	91.8	92.2	97.2	94.9	86.0	95.3	82.7	76.9	1.4	83.8	292
Khatlon	98.2	94.6	98.2	97.0	94.0	96.8	97.1	97.1	95.1	94.5	91.0	90.2	1.0	92.6	459
Mother's education															
None/primary	97.6	88.9	95.7	92.5	90.0	93.8	95.3	94.0	88.8	93.0	86.2	83.0	1.6	85.1	99
General basic	97.5	91.2	96.6	95.6	92.2	94.2	96.5	96.0	90.8	94.3	86.4	83.3	1.1	90.4	433
General secondary	98.8	95.7	98.7	97.3	95.6	97.7	99.3	98.7	95.6	96.4	92.7	90.8	0.6	93.7	494
Professional primary/ middle	99.7	97.5	99.4	93.0	92.4	92.4	93.1	91.7	88.7	96.9	87.8	87.8	0.0	91.3	67
Higher	98.5	94.1	93.9	87.0	83.7	95.1	96.5	92.7	84.6	93.8	77.7	76.8	1.5	81.3	55
Wealth quintile															
Lowest	95.9	90.6	97.2	96.4	92.9	92.5	96.5	96.4	94.3	92.7	88.7	86.8	1.7	90.4	231
Second	99.7	94.3	100.0	97.8	95.6	98.1	98.3	98.0	95.4	97.7	92.4	88.9	0.0	93.4	265
Middle	99.0	95.3	96.2	94.8	92.7	94.8	97.1	96.6	90.0	95.0	88.5	86.8	1.0	91.2	250
Fourth	98.5	92.6	96.7	93.7	91.9	96.1	97.7	96.2	90.1	96.0	86.3	83.7	0.7	90.0	213
Highest	98.0	94.3	96.8	94.1	91.6	96.7	97.3	95.0	90.9	94.4	86.7	85.2	1.1	89.2	189
Total	98.3	93.4	97.5	95.5	93.1	95.6	97.4	96.5	92.3	95.2	88.7	86.4	0.9	91.0	1,148

[1] The pentavalent vaccine contains DPT, hepatitis B, and *Hemophilus influenza* type B (Hib) vaccines.
[2] Polio 0 is the polio vaccination given at birth.
[3] BCG, measles or MR, and three doses each of DPT/pentavalent and polio vaccine (excluding polio vaccine given at birth).

Figure 11.2
Differentials in vaccination coverage, Tajikistan 2012



Note: Percentage of children 18-29 months who received all basic vaccinations any time before the survey.

Tajikistan DHS 2012

11.2.3 Trends in Vaccination Coverage

The results of the 2012 TjDHS indicate that vaccination coverage has increased substantially for all basic WHO-recommended vaccinations over the past seven years among children age 18-29 months. The 2005 Tajikistan MICS survey reported that only 77 percent of children age 18-29 months were fully immunized by the date of the interview; however, this percentage had increased to 89 percent in the 2012 TjDHS (SCS, 2007). The improvement is mainly due to an increase in the proportions of children receiving the second and third doses of polio and DPT/pentavalent. Vaccination coverage for measles or MR has increased slightly, from 92 percent in 2005 to 95 percent in 2012. It should be noted that in the 2012 TjDHS, immunization records from a vaccination card kept at home or in a heath facility were found for 91 percent of children age 18-29 months compared with 83 percent of children in the 2005 MICS (SCS, 2007).

11.3 CHILDHOOD ILLNESS AND TREATMENT

This section discusses three illnesses that are major contributors to childhood morbidity and mortality in many countries: acute respiratory infection (ARI), fever, and diarrhea. Estimates of the prevalence of these illnesses as well as data concerning types of treatment are presented.

11.3.1 Acute Respiratory Infections (ARI)

Acute respiratory infections (ARIs), primarily pneumonia, are a leading cause of childhood morbidity and mortality throughout the world. Early diagnosis and treatment with antibiotics can reduce the number of deaths caused by ARIs, particularly deaths resulting from pneumonia. The 2012 TjDHS estimated the prevalence of ARIs by asking mothers whether their children under age 5 had been ill in the two weeks preceding the survey with a cough accompanied by short, rapid breathing or by difficulty in breathing that the mother considered to be chest-related. These symptoms are considered to be a proxy for pneumonia.

Table 11.4 shows that less than 1 percent of children under age 5 had symptoms of an ARI, that is, cough accompanied by short, rapid breathing and/or by difficult breathing, which was chest-related, at some time in the two weeks preceding the survey. The prevalence of ARIs varies little by background characteristics, though it appears to be slightly higher among children in GBAO than among those in other regions. The prevalence of suspected ARIs has hardly changed since 2005, when the prevalence was 2 percent of children under age 5 (SCS, 2007).

Sixty-three percent of the children with symptoms of ARI were taken to a health facility or a medically trained provider for treatment (data not shown). The number of children with ARI symptoms is insufficient to show data on treatment by background characteristics. The 2005 MICS also showed that 64 percent of children with a suspected ARI were taken for treatment (SCS, 2007).

Table 11.4 Prevalence and treatment 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, Tajikistan 2012

Background characteristic	Among children under age 5: Percentage with symptoms of ARI[1]	Number of children
Age in months		
<6	0.8	442
6-11	0.7	591
12-23	1.4	1,072
24-35	0.5	1,146
36-47	0.8	930
48-59	1.0	851
Sex		
Male	0.7	2,566
Female	1.1	2,465
Cooking fuel		
Electricity or gas	1.1	3,236
Wood/straw[2]	0.7	1,450
Animal dung	0.1	335
Other fuel	(0.0)	10
Residence		
Urban	1.2	1,086
Rural	0.8	3,945
Region		
Dushanbe	0.9	404
GBAO	3.8	88
Sughd	0.4	1,343
DRS	0.8	1,271
Khatlon	1.2	1,924
Mother's education		
None/primary	0.2	435
General basic	1.2	1,975
General secondary	0.6	2,083
Professional primary/middle	1.1	289
Higher	1.7	249
Wealth quintile		
Lowest	0.7	1,007
Second	1.4	1,081
Middle	0.6	1,045
Fourth	0.9	1,007
Highest	0.8	891
Total	0.9	5,031

Note: Figures in parentheses are based on 25-49 unweighted cases.
[1] Symptoms of ARI (cough accompanied by short, rapid breathing, which was chest-related, and/or by difficult breathing, which was chest-related) are considered a proxy for pneumonia.
[2] Includes grass, shrubs, crop residues.

11.3.2 Fever

Table 11.5 shows that 9 percent of children under age 5 had a fever during the two weeks preceding the survey. The prevalence of fever varies by age, with children age 6-23 months being more likely to have a fever than either younger or older children. The prevalence of fever is highest among children residing in the Khatlon region (15 percent)—where the burden of malaria has been the greatest—and lowest in the Sughd (4 percent) and DRS (5 percent) regions. Fever is slightly more common among children whose mothers have no education or only primary education and among those in the lowest wealth quintile.

Table 11.5 Prevalence and treatment of fever

Among children under age 5, the percentage who had a fever in the two weeks preceding the survey and, among children with fever, the percentage for whom advice or treatment was sought from a health facility or provider, the percentage who took antimalarial drugs, and the percentage who received antibiotics as treatment, by background characteristics, Tajikistan 2012

	Among children under age 5:		Among children under age 5 with fever			
Background characteristic	Percentage with fever	Number of children	Percentage for whom advice or treatment was sought from a health facility or provider[1]	Percentage who took antimalarial drugs	Percentage who took antibiotic drugs	Number of children
Age in months						
<6	7.0	442	(73.8)	(0.0)	(66.3)	31
6-11	15.7	591	56.5	2.7	50.9	93
12-23	14.8	1,072	59.1	2.7	55.7	159
24-35	9.4	1,146	52.9	1.2	47.0	108
36-47	5.0	930	(54.0)	(0.0)	(39.0)	46
48-59	3.3	851	(48.3)	(4.8)	(29.0)	28
Sex						
Male	10.4	2,566	57.3	2.0	49.5	266
Female	8.1	2,465	56.5	2.1	51.1	199
Residence						
Urban	10.9	1,086	61.3	1.9	62.4	118
Rural	8.8	3,945	55.5	2.1	46.0	347
Region						
Dushanbe	11.3	404	57.8	0.6	60.4	46
GBAO	11.8	88	44.2	3.8	24.5	10
Sughd	4.0	1,343	(76.7)	(10.0)	(63.5)	54
DRS	4.8	1,271	51.2	1.6	47.1	60
Khatlon	15.3	1,924	54.8	0.9	47.7	295
Mother's education						
None/primary	12.3	435	(52.7)	(0.0)	(49.6)	53
General basic	9.4	1,975	56.2	2.8	53.3	186
General secondary	8.7	2,083	58.6	2.4	44.2	181
Professional primary/middle	7.4	289	(68.1)	(0.0)	(72.4)	21
Higher	9.6	249	(50.2)	(0.0)	(52.2)	24
Wealth quintile						
Lowest	12.1	1,007	47.9	1.4	40.8	122
Second	10.2	1,081	51.6	0.9	46.3	110
Middle	7.3	1,045	62.1	1.8	55.0	76
Fourth	7.3	1,007	67.6	3.4	55.0	74
Highest	9.4	891	63.3	3.6	60.3	84
Total	9.2	5,031	57.0	2.1	50.2	465

Note: Figures in parentheses are based on 25-49 unweighted cases.
[1] Excludes pharmacy, shop, traditional practitioner, and market.

Nearly three in five children with fever were taken to a health facility or a medically-trained provider for treatment. Only 2 percent of children with fever were given antimalarial medicines. Half of children with fever were given antibiotics. Analysis of differences in treatment patterns by background characteristics is hampered by the small numbers of children with fever in some groups. Nevertheless, it is clear that the percentages of children with fever who are taken to a health facility or provider or who are

given antibiotics increase with wealth. Urban children with fever are also more likely than rural children to receive antibiotics and to be taken to a health facility for treatment.

The 2005 MICS survey reported that 7 percent of children under 5 had a fever in the two weeks before the survey, almost indistinguishable from the level of 9 percent reported in the 2012 TjDHS (SCS, 2007). The MICS also found higher levels of fever in the Khatlon region than in other regions. Only 2 percent of children with fever were treated with an antimalarial drug in the 2005 MICS, a finding identical to the proportion in the 2012 TjDHS.

11.3.3 Diarrhea

Diarrhea remains a leading cause of childhood morbidity and mortality in developing countries. Dehydration caused by severe diarrhea is a major cause of illness among young children, although the condition can be easily treated with oral rehydration therapy (ORT). The child with diarrhea is given a solution that can be prepared by mixing water with a commercially-prepared packet of oral rehydration salts (ORS)—also known in Tajikistan as Rehydron—or by making a homemade mixture of sugar, salt, and water.

The 2012 TjDHS asked mothers if any of their children under age 5 had experienced an episode of diarrhea in the two weeks before the survey. If the child had diarrhea during this period, the mother was asked what she did to treat the diarrhea. Because the prevalence of diarrhea varies seasonally, the survey results pertain only to the period from July through September when the fieldwork took place.

Table 11.6 presents information on episodes of diarrhea among young children in the two weeks before the interview. Overall, 15 percent of children under age 5 were reported to have had diarrhea in the two-week period before the survey. The prevalence of diarrhea is highest at age 6-23 months, a period during which solid and/or semi-solid foods are first introduced into the child's diet. This pattern is believed to be associated with increased exposure to illness as a result of both weaning and the greater mobility of the child, as well as the immature immune system of children in this age group. The prevalence of diarrhea is slightly higher among boys and children living in urban areas than among other children. It is

Table 11.6 Prevalence of diarrhea

Percentage of children under age 5 who had diarrhea in the two weeks preceding the survey, by background characteristics, Tajikistan 2012

Background characteristic	Diarrhea in the two weeks preceding the survey: All diarrhea	Diarrhea in the two weeks preceding the survey: Diarrhea with blood	Number of children
Age in months			
<6	10.4	0.0	442
6-11	23.2	1.9	591
12-23	24.3	2.1	1,072
24-35	15.3	1.6	1,146
36-47	8.9	0.8	930
48-59	6.6	0.9	851
Sex			
Male	16.5	1.8	2,566
Female	13.5	0.9	2,465
Source of drinking water[1]			
Improved	15.1	1.2	3,720
Not improved	14.8	1.6	1,308
Toilet facility[2]			
Improved, not shared	15.1	1.3	4,726
Shared[3]	12.7	2.7	113
Non-improved	14.7	1.2	190
Residence			
Urban	17.9	1.5	1,086
Rural	14.3	1.3	3,945
Region			
Dushanbe	17.4	1.1	404
GBAO	16.4	0.9	88
Sughd	7.5	0.3	1,343
DRS	9.3	0.5	1,271
Khatlon	23.5	2.7	1,924
Mother's education			
None/primary	18.7	1.7	435
General basic	16.2	1.9	1,975
General secondary	13.4	0.7	2,083
Professional primary/ middle	14.5	1.0	289
Higher	14.0	1.1	249
Wealth quintile			
Lowest	16.3	2.3	1,007
Second	15.7	1.0	1,081
Middle	13.7	1.2	1,045
Fourth	13.1	0.7	1,007
Highest	16.7	1.4	891
Total	15.1	1.3	5,031

Note: Total includes three children for whom source of drinking water is missing and two children for whom type of toilet facility is missing.
[1] See Table 2.1 for definition of categories.
[2] See Table 2.2 for definition of categories.
[3] Facilities that would be considered improved if they were not shared by two or more households.

considerably higher among children in the Khatlon region (24 percent) than among children in the Dushanbe and GBAO regions (16-17 percent) and especially those in the Sughd and DRS regions (8-9 percent). The relationship between diarrhea prevalence with mother's education and wealth is not linear, but it is highest among children of mothers with no education or only primary education.

Only 1 percent of children under 5 were reported to have had bloody diarrhea in the two weeks before the survey, a symptom usually associated with dysentery. There are no major differences in the prevalence of bloody diarrhea by background characteristics.

Table 11.7 shows data on the treatment of recent episodes of diarrhea among children under age 5, as reported by their mothers. Overall, more than half (54 percent) of children with diarrhea were taken to a medically trained health provider for advice or treatment. Children age 12-23 months, children with bloody diarrhea, children living in the Sughd region, and children from households in the middle wealth quintile are more likely than other children to visit a health professional or a health facility to treat the diarrhea.

More than four in five children with diarrhea (82 percent) were given oral rehydration therapy (ORT) or increased fluids. Sixty percent of children with diarrhea received fluid from oral rehydration salt (ORS) packets, while 29 percent received a recommended homemade fluid. Overall, 72 percent were given either ORS or a recommended homemade fluid. One in three children was given increased liquids, while half of children were given antibiotics to treat the diarrhea. Twenty-two percent of children were given home remedies to treat the diarrhea, while 4 percent of children were given nothing to treat the diarrhea.

In general, differences by background characteristics in the treatment of childhood diarrhea are not large, except that almost all types of treatments reported are more prevalent among the small number of children with bloody diarrhea than among those with non-bloody diarrhea. Use of ORS packets generally increases with maternal education and is also more common in the GBAO region. Use of recommended home fluids is more widespread in DRS region than in other regions. Children in urban areas and especially those in Dushanbe are relatively more likely to be given increased fluids when they have diarrhea. Use of antibiotics is particularly high for children in the Khatlon region, while antimotility drugs are more widely used in Dushanbe than in other regions. It is interesting to note that use of antibiotics tends to decrease as wealth quintile increases.

The 2005 MICS survey reported 13 percent of children under five as having diarrhea in the two weeks before the survey, almost identical to the 15 percent reported in the 2012 TjDHS (SCS, 2007). It appears that treatment with ORS packets has increased, from 48 percent of children with diarrhea in 2005 to 60 percent in 2012. Use of recommended home fluids has increased only slightly from 25 to 29 percent of children with diarrhea. Use of either ORS or recommended home fluids has increased from 58 percent to 72 percent of children with diarrhea between 2005 and 2012.

Mothers are encouraged to continue feeding children with diarrhea normally and to increase the amount of fluids they offer. The 2012 TjDHS asked mothers who had a child under age 5 with a recent episode of diarrhea how much they gave the child to drink and eat during the diarrheal episode compared with usual practice. Table 11.8 shows that only one-third of children with diarrhea received more liquids than usual, while 27 percent were given the same amount of liquids as usual. Almost four in ten mothers still engage in the dangerous practice of curtailing fluid intake when their children have diarrhea; 28 percent give the child somewhat less liquids than normal, while 10 percent give the child much less, and 2 percent give the child no liquids. Urban mothers and especially those in Dushanbe seem to know the importance of increasing fluid intake when a child has diarrhea. Children in the DRS region are relatively more likely than children in other regions to receive less liquid when they have diarrhea.

With regard to food intake during a diarrhea episode, only about one-third of children with diarrhea are fed according to the recommended practice of giving either more food or the same amount of food as usual. Two-thirds of children are given less food to eat than usual, with one-fifth given much less to eat than usual.

Table 11.7 Diarrhea treatment

Among children under age five 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 given other treatments, by background characteristics, Tajikistan 2012

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						
		Fluid from ORS packets	Recom-mended home fluids (RHF)	Either ORS or RHF	Increased fluids	ORT or increased fluids	Antibiotic drugs	Antimotility drugs	Intravenous solution	Home remedy/other	Missing	No treatment	Number of children with diarrhea
Age in months													
<6	(67.1)	(43.5)	(22.7)	(54.9)	(22.2)	(65.7)	(39.3)	(3.4)	(6.7)	(35.9)	(0.0)	(8.4)	46
6-11	59.8	68.8	32.1	81.0	29.8	84.6	56.8	1.3	3.0	11.5	0.0	4.1	137
12-23	64.2	65.0	26.7	74.9	37.4	87.6	47.5	2.1	6.7	27.6	0.1	2.8	260
24-35	40.5	60.6	35.0	73.7	33.9	84.6	52.0	2.0	1.2	16.8	0.0	3.0	175
36-47	45.9	52.1	27.1	67.0	29.6	75.0	56.1	5.0	1.8	30.1	2.0	5.7	83
48-59	32.0	42.4	14.9	48.2	23.8	60.5	46.4	8.4	3.2	19.4	0.9	7.3	56
Sex													
Male	53.6	62.1	28.7	73.2	33.1	82.8	49.7	3.5	4.0	21.7	0.4	4.9	424
Female	53.9	57.9	28.4	69.7	31.6	80.1	51.8	2.0	3.9	23.2	0.1	3.0	334
Type of diarrhea													
Non-bloody	50.5	58.7	28.9	71.7	32.9	81.5	49.0	3.2	4.1	20.7	0.0	4.6	631
Bloody	78.7	75.4	25.6	78.6	38.4	93.0	59.1	1.8	5.0	34.5	0.0	0.0	67
Residence													
Urban	50.2	57.8	28.8	67.9	40.2	79.0	50.2	6.5	4.4	30.2	0.3	4.5	194
Rural	54.9	61.2	28.4	72.9	29.8	82.5	50.7	1.6	3.8	19.7	0.3	3.9	563
Region													
Dushanbe	46.5	56.9	24.8	63.7	52.8	82.5	35.1	12.2	0.9	29.7	0.7	5.7	70
GBAO	40.8	78.1	23.1	79.5	19.4	82.2	35.7	0.0	0.0	20.6	1.2	5.6	15
Sughd	66.0	61.4	37.5	79.2	26.1	80.5	47.9	1.3	0.0	23.8	0.0	5.2	101
DRS	55.8	68.4	42.3	82.2	17.6	86.8	25.4	1.0	0.0	22.0	0.0	4.4	119
Khatlon	52.0	57.9	23.7	68.2	35.0	80.4	60.7	2.3	6.5	21.1	0.4	3.4	453
Mother's education													
None/primary	57.9	58.3	34.4	77.0	37.9	83.5	57.2	5.8	6.4	25.9	0.0	4.7	81
General basic	54.0	60.2	27.3	70.1	29.5	80.5	50.4	2.8	3.0	21.7	0.7	4.3	321
General secondary	52.4	59.4	30.2	71.7	34.5	83.0	48.7	0.9	4.8	19.0	0.0	3.7	279
Professional primary/ middle	52.0	61.4	18.7	66.8	29.3	72.3	50.5	10.3	5.0	37.7	0.0	6.8	42
Higher	53.4	71.2	25.3	78.9	34.3	87.8	52.7	2.3	0.0	28.9	0.5	0.0	35
Wealth quintile													
Lowest	48.1	53.0	27.9	65.7	31.6	78.4	56.9	4.6	7.5	23.4	0.0	5.2	164
Second	45.8	52.2	29.6	66.8	33.9	78.4	52.1	0.0	2.7	23.0	1.0	4.1	170
Middle	65.9	72.4	26.3	82.4	23.7	88.2	51.5	3.0	3.2	17.8	0.0	1.2	143
Fourth	58.5	64.6	33.6	76.8	33.7	86.5	50.1	4.1	2.7	20.3	0.0	4.4	132
Highest	53.1	62.1	25.6	68.8	39.1	78.1	41.6	2.7	3.3	26.8	0.5	5.2	149
Total	53.7	60.3	28.5	71.6	32.5	81.6	50.6	2.8	4.0	22.4	0.3	4.1	757

Note: ORT includes fluid prepared from oral rehydration salt (ORS) packets and recommended home fluids (RHF). Total includes 59 children with information on type of diarrhea missing. Figures in parentheses are based on 25-49 unweighted cases.
[1] Excludes pharmacy, shop, and traditional practitioner.

Table 11.8 Feeding practices during diarrhea

Percent distribution of children under age five 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, Tajikistan 2012

	Amount of liquids given							Amount of food given										
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	Never gave food	Don't know/ missing	Total	Percent-age given increased fluids and continued feeding[1]	Percent-age who continued feeding and were given ORT and/or increaseed fluids[1]	Number of children with diarrhea
Age in months																		
<6	(22.2)	(39.0)	(26.7)	(10.4)	(1.8)	(0.0)	100.0	(7.7)	(45.2)	(25.1)	(15.5)	(0.0)	(6.4)	(0.0)	100.0	(15.7)	(47.3)	46
6-11	29.8	28.7	27.3	13.9	0.0	0.3	100.0	6.1	25.1	42.9	23.6	1.1	1.1	0.0	100.0	19.1	64.2	137
12-23	37.4	19.2	32.1	9.1	1.1	1.0	100.0	4.0	18.4	52.3	23.0	1.1	0.6	0.7	100.0	28.2	65.3	260
24-35	33.9	27.4	25.3	10.4	2.5	0.4	100.0	8.2	29.3	38.4	23.3	0.3	0.0	0.4	100.0	22.6	61.4	175
36-47	29.6	29.8	29.1	6.1	3.4	2.0	100.0	5.8	23.6	49.3	13.3	4.9	0.0	3.1	100.0	22.8	58.2	83
48-59	23.8	45.4	15.5	10.1	1.1	4.2	100.0	0.9	49.0	29.2	18.8	0.0	1.3	0.9	100.0	19.3	45.0	56
Sex																		
Male	33.1	25.9	26.3	11.3	1.7	1.6	100.0	4.4	29.1	41.2	21.5	2.1	0.7	1.0	100.0	23.2	60.2	424
Female	31.6	28.7	29.7	8.5	1.3	0.3	100.0	7.0	23.4	46.8	21.2	0.0	1.2	0.4	100.0	23.3	61.6	334
Type of diarrhea																		
Non-bloody	32.9	27.2	29.3	8.2	1.5	0.9	100.0	5.5	26.8	46.1	18.9	1.4	1.1	0.3	100.0	24.7	63.0	631
Bloody	38.4	22.2	25.5	13.9	0.0	0.0	100.0	1.5	20.3	32.7	45.6	0.0	0.0	0.0	100.0	12.6	47.4	67
Residence																		
Urban	40.2	26.6	18.1	12.0	0.7	2.3	100.0	5.7	27.9	35.5	28.5	0.3	1.0	1.1	100.0	27.4	54.5	194
Rural	29.8	27.3	31.1	9.4	1.8	0.6	100.0	5.5	26.2	46.5	18.9	1.5	0.9	0.6	100.0	21.8	63.0	563
Region																		
Dushanbe	52.8	26.1	12.3	5.3	0.0	3.5	100.0	10.4	28.8	37.1	20.7	0.7	0.8	1.5	100.0	39.1	63.1	70
GBAO	19.4	33.2	35.5	9.3	0.0	2.5	100.0	16.5	32.3	38.0	10.7	0.0	0.0	2.5	100.0	19.4	72.9	15
Sughd	26.1	28.3	35.4	6.8	0.0	3.4	100.0	3.2	30.0	43.0	22.5	1.2	0.0	0.0	100.0	17.8	60.9	101
DRS	17.6	25.6	38.9	17.2	0.7	0.0	100.0	0.0	17.0	50.3	32.0	0.0	0.7	0.0	100.0	11.6	58.9	119
Khatlon	35.0	27.2	25.4	9.7	2.3	0.4	100.0	6.4	27.8	43.3	18.7	1.6	1.2	0.9	100.0	25.1	60.6	453
Mother's education																		
None/primary	37.9	19.0	29.9	6.3	7.0	0.0	100.0	4.6	15.4	48.4	22.7	7.0	0.0	1.9	100.0	23.7	53.2	81
General basic	29.5	29.9	27.5	11.2	0.5	1.5	100.0	5.5	31.1	41.1	19.1	0.5	2.0	0.8	100.0	22.7	61.7	321
General secondary	34.5	26.7	28.3	8.4	1.3	0.7	100.0	5.8	23.9	48.1	21.8	0.0	0.0	0.4	100.0	24.9	63.6	279
Professional primary/ middle	29.3	28.3	20.4	19.8	0.0	2.3	100.0	3.6	32.2	31.0	31.9	0.0	1.3	0.0	100.0	13.6	46.8	42
Higher	34.3	22.9	30.3	10.1	1.8	0.5	100.0	9.2	26.9	36.1	22.4	5.0	0.0	0.5	100.0	25.6	65.0	35
Wealth quintile																		
Lowest	31.6	29.0	32.8	5.3	1.2	0.0	100.0	4.2	28.5	45.9	20.9	0.0	0.5	0.0	100.0	20.0	58.1	164
Second	33.9	27.2	25.7	8.9	3.3	1.0	100.0	6.4	28.4	39.1	18.5	4.2	1.4	1.9	100.0	24.9	56.2	170
Middle	23.7	27.6	34.9	13.8	0.0	0.0	100.0	3.7	29.6	49.6	17.1	0.0	0.0	0.0	100.0	18.2	73.3	143
Fourth	33.7	23.8	27.1	11.6	1.8	1.9	100.0	8.5	18.1	49.4	21.4	1.3	1.2	0.0	100.0	28.0	66.0	132
Highest	39.1	27.5	18.3	11.7	0.9	2.5	100.0	5.2	27.1	35.5	29.2	0.0	1.3	1.6	100.0	25.6	52.5	149
Total	32.5	27.1	27.8	10.1	1.5	1.0	100.0	5.6	26.6	43.7	21.3	1.2	0.9	0.7	100.0	23.2	60.8	757

Note: It is recommended that children should be given more liquids to drink during diarrhea and food should not be reduced. Total includes 59 children with information on type of diarrhea missing. Figures in parentheses are based on 25-49 unweighted cases.

[1] Continued feeding practices includes children who were given more, same as usual, or somewhat less food during the diarrhea episode.

Table 11.8 also shows that 23 percent of children with diarrhea were given increased fluids and either more, the same as usual, or somewhat less food to eat than usual. When ORT (either ORS fluid or a recommended home fluid) is also taken into account, the figure increases to 61 percent of children who are given either ORT or increased fluids and at least the same amount of food or only somewhat less food than usual. Children age 48-59 months and those with bloody diarrhea are the least likely to be given either ORT or increased fluids and continued feeding. There is no uniform relationship between the use of continued feeding and increased fluids or ORT when a child has diarrhea and either maternal education or wealth. Children in the GBAO region and children from households in the middle wealth quintile are more likely than other children to be given either ORT or increased fluids and continued feeding when they have diarrhea.

Results from the TjDHS indicate considerable improvement in the handling of childhood diarrhea. The proportion of children under 5 with diarrhea who are given the same amount of food or only somewhat less food to eat and either increased fluids or ORT has almost tripled, from 22 percent in 2005 (SCS, 2007) to 61 percent in 2012. The improvement is due mostly to a large increase in the proportion of children who continue feeding during episodes of diarrhea, from 36 percent in 2005 to 76 percent in 2012. The proportion of children with diarrhea who are given increased liquids has increased less dramatically, from 22 percent in 2005 to 33 percent in 2012. As mentioned above, the use of ORT has increased from 58 to 72 percent of children with diarrhea between 2005 and 2012.

11.3.4 Knowledge of ORS

A simple and effective response to dehydration caused by diarrhea is a prompt increase in the child's fluid intake through some form of oral rehydration therapy, which may include the use of a solution prepared from packets of oral rehydration salts (ORS). To ascertain how widespread knowledge of ORS is in Tajikistan, women interviewed in the 2012 TjDHS were asked whether they had ever heard of a special product called Rehydron (the name for ORS in Tajikistan) for the treatment of diarrhea. Results are tabulated in Table 11.9 for women who gave birth in the five years before the survey.

The table shows that more than nine in ten mothers have heard of ORS packets (Rehydron). Knowledge of ORS increases with age of the mother. It is slightly lower among mothers in the Khatlon region (87 percent) than among those in the other regions (91 to 95 percent). Knowledge of ORS generally increases with education and wealth of the mother, although it declines slightly among the most highly educated women and those in the highest wealth quintile.

Table 11.9 Knowledge of ORS packets

Percentage of women age 15-49 with a live birth in the five years preceding the survey who know about ORS packets for treatment of diarrhea, by background characteristics, Tajikistan 2012

Background characteristic	Percentage of women who know about ORS packets	Number of women
Age		
15-19	84.0	78
20-24	90.2	1,024
25-34	90.7	1,890
35-49	91.3	608
Residence		
Urban	92.1	802
Rural	90.0	2,799
Region		
Dushanbe	92.0	295
GBAO	94.8	67
Sughd	94.3	1,000
DRS	90.8	887
Khatlon	86.9	1,351
Education		
None/primary	80.8	272
General basic	88.9	1,400
General secondary	92.3	1,530
Professional primary/middle	97.5	210
Higher	93.8	189
Wealth quintile		
Lowest	85.1	731
Second	88.4	757
Middle	92.5	743
Fourth	94.3	718
Highest	92.5	652
Total	90.5	3,601

ORS = Oral rehydration salts

11.4 STOOL DISPOSAL

If human feces are left uncontained, disease may spread by direct contact or by animal contact with the feces. Hence, the proper disposal of children's stools is extremely important in preventing the spread of disease. In the 2012 TjDHS, women were asked about stool disposal for their children under age 5. If a woman had more than one child under age 5, the questions were asked about the youngest child who was living with her. Specifically, she was asked when the child had last passed stools what was done to dispose of the stools. Table 11.10 presents results by background characteristics.

Table 11.10 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, Tajikistan 2012

	Manner of disposal of children's stools										
Background characteristic	Child used toilet or latrine	Put/rinsed into toilet or latrine	Buried	Put/rinsed into drain or ditch	Thrown into garbage	Left in the open	Other	Missing	Total	Percentage of children whose stools are disposed of safely[1]	Number of children
Age in months											
<6	4.7	69.1	5.6	12.4	6.6	0.6	0.0	1.0	100.0	79.4	440
6-11	3.5	80.0	2.5	5.8	5.3	0.9	0.2	1.9	100.0	86.0	583
12-23	7.5	79.1	3.3	2.9	4.0	1.0	0.1	2.0	100.0	89.9	968
24-35	24.0	66.0	2.1	2.6	2.7	0.6	0.0	2.0	100.0	92.0	777
36-47	54.4	39.4	1.0	1.4	2.4	0.8	0.0	0.6	100.0	94.8	451
48-59	66.5	27.9	0.8	0.2	2.2	1.0	0.0	1.3	100.0	95.3	325
Toilet facility[2]											
Improved, not shared	21.2	66.3	2.7	3.5	3.9	0.7	0.1	1.7	100.0	90.1	3,334
Shared[3]	23.1	61.8	1.8	8.6	1.0	3.9	0.0	0.0	100.0	86.6	82
Non-improved	27.0	45.0	3.9	16.4	5.5	1.1	0.0	1.2	100.0	75.9	126
Residence											
Urban	24.5	64.7	0.8	2.1	5.3	0.6	0.2	1.7	100.0	90.1	788
Rural	20.6	65.6	3.2	4.6	3.5	0.9	0.0	1.6	100.0	89.4	2,755
Region											
Dushanbe	21.7	67.4	0.2	1.6	7.4	0.0	0.7	1.0	100.0	89.3	291
GBAO	8.2	63.1	0.0	6.5	21.6	0.0	0.0	0.6	100.0	71.3	66
Sughd	17.0	63.4	4.6	4.4	7.1	2.8	0.0	0.7	100.0	85.0	990
DRS	22.9	69.6	0.2	4.1	1.7	0.2	0.0	1.3	100.0	92.7	873
Khatlon	24.4	63.8	3.5	4.2	1.3	0.0	0.0	2.7	100.0	91.8	1,322
Mother's education											
None/primary	22.8	66.1	2.8	3.8	1.9	0.0	0.0	2.7	100.0	91.7	267
General basic	19.5	66.0	2.2	5.3	4.1	1.1	0.0	1.8	100.0	87.8	1,376
General secondary	21.9	65.7	3.1	3.1	3.7	0.9	0.0	1.7	100.0	90.6	1,508
Professional primary/ middle	25.9	61.2	4.6	4.4	3.9	0.0	0.0	0.0	100.0	91.7	207
Higher	25.6	62.3	0.7	3.1	6.5	0.0	1.0	0.7	100.0	88.7	185
Wealth quintile											
Lowest	23.8	61.7	5.6	3.5	4.3	0.0	0.0	1.1	100.0	91.1	719
Second	18.7	68.6	1.9	5.4	2.3	0.7	0.0	2.3	100.0	89.3	748
Middle	20.7	65.7	2.3	4.0	3.9	1.0	0.0	2.5	100.0	88.7	720
Fourth	19.4	66.6	2.8	4.7	3.8	1.2	0.1	1.4	100.0	88.8	710
Highest	25.2	64.1	0.6	2.5	5.4	1.2	0.2	0.7	100.0	89.9	648
Total	21.5	65.4	2.7	4.1	3.9	0.8	0.1	1.6	100.0	89.5	3,543

[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. Total includes one child for whom type of toilet facility is missing.
[2] See Table 2.2 for definition of categories.
[3] Shared facilities would be considered improved if they were not shared by two or more households.

The table shows that the most commonly used method for disposing of young children's stools is putting them into a toilet or latrine (65 percent). Twenty-two percent of children used the toilet or latrine themselves. Other methods of disposal include rinsing stools into a drain or ditch (4 percent), throwing them into the garbage (4 percent), and burying them (3 percent). Overall, 90 percent of children's stools are disposed of safely.

A closer look at the table shows some differentials in the disposal of stools. In the GBAO region, the stools of 71 percent of children under 5 are disposed of safely, compared with over 90 percent of children in the DRS and Khatlon regions (93 percent and 92 percent). The percentage of children whose stools are disposed of safely increases with age of the child, however, differences in safe disposal of children's stools by urban-rural residence, education, and wealth quintile of the mother are small.

A similar question was included in the 2005 Tajikistan MICS survey, but it referred to all children age 0-2, whereas the 2012 TjDHS question referred to the youngest child under age 5. In addition, the MICS indicator on children whose stools are disposed of safely did not include burying stool as safe disposal. When data from the 2012 TjDHS are restricted to the youngest child under age 3 and burying stool is considered a safe source for the 2005 MICS data, the information from the two sources becomes more comparable, although not completely so. The results imply a large improvement in the proportion of children's stools that are disposed of safely, from around 42 percent in 2005 (SCS, 2007) to 88 percent in 2012 (data not shown).

NUTRITION OF CHILDREN AND WOMEN 12

Key Findings

- Twenty-six percent of children under age 5 are stunted, 10 percent are wasted, and 12 percent are underweight.
- Breastfeeding is nearly universal in Tajikistan: 98 percent of children are ever breastfed and three-quarters are still breastfeeding at age 1. Only one-third of children under age 6 months are exclusively breastfed as recommended.
- Complementary foods are not introduced in a timely fashion for all children. Only half of children age 6-8 months receive complementary foods.
- Overall, only 20 percent of children age 6-23 months are fed appropriately based on recommended infant and young child feeding (IYCF) practices.
- Three-quarters of children age 6-59 months were given a vitamin A supplement and half were given deworming medicine in the 6 months before the survey.
- The vast majority of households (84 percent) have iodized salt.
- Three in ten women age 15-49 are overweight or obese (BMI ≥25.0).

Good nutrition is a prerequisite for the national development of countries and for the wellbeing of individuals. Although problems related to poor nutrition affect the entire population, women and children are especially vulnerable because of their unique physiology and socioeconomic characteristics. The period from birth to age 2 is especially important for optimal growth, health, and development. Unfortunately, this period is often marked by protein-energy and micronutrient deficiencies that interfere with optimal physical growth and cognitive development. Common illnesses such as diarrhea and acute respiratory infections are also common in young children (Black et al., 2008). Malnutrition in adults results in reduced productivity, increased susceptibility to infections, slow recovery from illness, and for women, increased risk of adverse pregnancy outcomes (Cesar et al., 2008). A woman of poor nutritional status (indicated by a low body mass index, short stature, anemia, or other micronutrient deficiencies) has a heightened risk of obstructed labor, having a baby with low birth weight, and dying from postpartum hemorrhage. Morbidity, in general, is high for both the woman and her baby. Numerous socioeconomic and cultural factors influence patterns of feeding and nutritional status.

The 2012 TjDHS interviewers took height and weight measurements of all children under age 5 and all women age 15-49 in the household. Data were collected from the women on feeding practices for infants and young children, including breastfeeding, the feeding of solid and semisolid foods, diversity of foods, and frequency of feeding. In addition, they were asked about the feeding of foods rich in iron and vitamin A to children and the administration of iron and vitamin A supplements to children and women.

12.1 NUTRITIONAL STATUS OF CHILDREN

The 2012 TjDHS collected data on the nutritional status of children by measuring the height and weight of all children under age 5 in the interviewed households. The nutritional status assessment helps to identify subgroups of the child population that face increased risk of faltered growth and contributes data for comparison with previous surveys in trend analyses.

12.1.1 Measurement of Nutritional Status among Young Children

All children listed in the Household Questionnaire who were born in January 2007 or later were eligible for measurement of height and weight. Thus, height and weight measurements were collected from children whose mothers may not have been interviewed in the survey. Each interviewing team carried scales and height boards. Weight was measured using lightweight scales with digital screens manufactured by SECA. The height/length boards were specially produced by Shorr Productions for use in survey settings. Recumbent length was recorded for children under age 2. Standing height was measured for all other children.

The nutritional status of children in the survey population is compared with the World Health Organization (WHO) Child Growth Standards, which are based on an international sample of ethnically, culturally, and genetically diverse healthy children living under optimum conditions that are conducive to achieving a child's full genetic growth potential (WHO, 2006b). The WHO Child Growth Standards identify breastfed children as the normative model for growth and development and document how children should grow under optimum conditions and with optimum infant feeding and child health practices. Use of the WHO Child Growth Standards is based on the finding that well-nourished children of all population groups for which data exist follow very similar growth patterns before puberty. These standards can therefore be used to assess the nutritional status of children all over the world, regardless of ethnicity, social and economic influences, and feeding practices.

Three standard indices of physical growth that describe the nutritional status of children are:

- Height-for-age (stunting)
- Weight-for-height (wasting)
- Weight-for-age (underweight)

Each of these indices provides different information about growth and body composition that can be used to assess nutritional status.

Height-for-age measures linear growth. A child who is more than two standard deviations below the median (-2 SD) of the WHO reference population in terms of height-for-age is considered short for his or her age, or stunted. This condition reflects the cumulative effect of chronic malnutrition. If a child is below three standard deviations (-3 SD) from the reference median, then he or she is considered to be severely stunted. Stunting reflects a failure to receive adequate nutrition over a long period of time and is worsened by recurrent and chronic illness. Height-for-age, therefore, reflects the long-term effects of malnutrition in a population and does not vary appreciably according to recent dietary intake.

Weight-for-height describes current nutritional status. A child who is more than two standard deviations below (-2 SD) the reference median for weight-for-height is considered to be too thin for his or her height, or wasted. This condition reflects acute or recent nutritional deficit. As with stunting, wasting is considered severe if the child is more than three standard deviations below the reference median. Severe wasting is closely linked to mortality risk.

Weight-for-age is a composite index of weight-for-height and height-for-age. Thus, it does not distinguish between acute malnutrition (wasting) and chronic malnutrition (stunting). A child can be underweight for his age because he or she is stunted, because he or she is wasted, or both. Children whose weight-for-age is below two standard deviations (-2 SD) from the median of the reference population are classified as underweight. Children whose weight-for-age is below three standard deviations (-3 SD) from the median of the reference population are considered severely underweight. Weight-for-age is an overall indicator of a population's nutritional health.

Z-score means are also calculated as summary statistics representing the nutritional status of children in a population. These mean scores describe the nutritional status of the entire population without the use of a cut off. A mean Z-score of less than 0 (i.e., a negative mean value for stunting, wasting, or

underweight) suggests that the distribution of an index has shifted downward and that most if not all children in the population suffer from undernutrition relative to the reference population.

12.1.2 Levels of Child Malnutrition

Table 12.1 shows the percentage of children under age 5 classified as malnourished according to the three anthropometric indices of nutritional status (height-for-age, weight-for-height, and weight-for-age) by various background characteristics. A total of 4,993 children (unweighted) under age 5 in the TjDHS sample households were eligible for anthropometric measurements. The following analysis focuses on the 4,664 (unweighted) children (93 percent) for whom complete and credible anthropometric and age data are available. Measurements were missing for 2 percent of the children because the child was not present, the parents refused, the child was ill, or for some other reason. Another 5 percent of the children were considered to have implausibly high or low values for their height or weight measures (data not shown).

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, Tajikistan 2012

	Height-for-age[1]			Weight-for-height				Weight-for-age				
Background characteristic	Percent-age below -3 SD	Percent-age below -2 SD[2]	Mean Z-score (SD)	Percent-age below -3 SD	Percent-age below -2 SD[2]	Percent-age above +2 SD	Mean Z-score (SD)	Percent-age below -3 SD	Percent-age below -2 SD[2]	Percent-age above +2 SD	Mean Z-score (SD)	Number of children
Age in months												
<6	5.3	15.2	0.0	10.8	23.0	5.4	-0.8	4.7	13.9	2.9	-0.6	427
6-8	13.1	22.6	-0.5	9.7	17.8	8.3	-0.5	6.2	15.0	2.1	-0.8	302
9-11	7.5	19.9	-0.7	4.9	14.2	6.7	-0.4	2.8	9.7	1.5	-0.8	288
12-17	8.1	19.8	-1.0	3.9	14.9	5.2	-0.5	4.3	14.4	0.6	-0.8	529
18-23	12.6	32.4	-1.4	1.8	7.6	5.2	-0.1	3.9	14.0	1.1	-0.8	545
24-35	11.6	33.8	-1.5	3.0	7.5	5.6	-0.0	4.4	12.5	0.7	-0.8	1,142
36-47	9.9	27.9	-1.3	1.4	4.7	7.0	0.1	2.0	10.4	0.5	-0.7	964
48-59	7.8	22.8	-1.3	3.2	6.7	5.0	-0.2	2.8	10.1	0.3	-0.9	882
Sex												
Male	9.8	25.5	-1.1	4.1	9.9	6.1	-0.2	3.3	12.3	1.0	-0.8	2,575
Female	9.6	26.8	-1.1	3.7	10.0	5.6	-0.2	4.0	11.9	0.9	-0.8	2,505
Birth interval in months[3]												
First birth[4]	9.3	26.4	-1.1	4.2	10.1	6.4	-0.2	4.0	11.9	1.0	-0.8	1,655
<24	11.4	27.5	-1.2	3.9	9.5	4.2	-0.2	4.6	14.0	0.3	-0.8	1,076
24-47	9.9	26.0	-1.1	4.0	10.6	6.0	-0.2	3.3	12.3	1.2	-0.8	1,404
48+	7.3	23.7	-1.1	3.6	9.2	6.5	-0.2	2.2	9.8	1.4	-0.7	823
Size at birth[3]												
Very small	19.4	35.7	-1.5	8.0	15.6	4.0	-0.6	10.3	33.0	0.0	-1.3	128
Small	14.6	36.4	-1.4	4.7	11.6	3.4	-0.5	5.9	18.8	0.9	-1.1	517
Average or larger	9.0	24.2	-1.1	3.7	9.5	6.6	-0.2	3.0	10.4	1.0	-0.7	3,897
Mother's interview status												
Interviewed	9.6	26.1	-1.1	4.0	10.0	5.8	-0.2	3.6	12.1	1.0	-0.8	4,957
Not interviewed but in household	5.5	25.9	-1.3	0.0	2.6	13.8	0.1	2.6	5.9	0.0	-0.7	62
Not interviewed and not in the household[5]	23.6	33.9	-1.3	0.0	13.7	3.4	-0.4	7.5	20.2	0.0	-1.1	61
Mother's nutritional status[6]												
Thin (BMI<18.5)	7.8	25.3	-1.1	5.2	15.1	3.4	-0.6	3.1	14.7	1.3	-1.0	425
Normal (BMI 18.5-24.9)	10.5	26.9	-1.2	3.8	9.4	5.9	-0.2	4.0	12.5	0.9	-0.8	3,149
Overweight/obese (BMI >= 25)	8.2	24.7	-1.0	3.7	9.4	6.5	-0.1	3.0	10.2	1.0	-0.7	1,403
Residence												
Urban	7.8	21.4	-0.9	3.8	9.9	5.5	-0.3	2.7	10.7	1.3	-0.7	1,092
Rural	10.2	27.4	-1.2	3.9	9.9	6.0	-0.2	3.9	12.5	0.8	-0.8	3,988
Region												
Dushanbe	7.4	18.9	-0.7	3.8	10.3	5.4	-0.3	3.1	9.3	1.4	-0.6	392
GBAO	9.1	24.3	-1.0	2.2	8.1	1.1	-0.4	2.5	13.0	0.2	-0.8	93
Sughd	11.7	27.2	-1.2	3.9	8.4	11.8	0.1	3.3	10.4	1.1	-0.6	1,365
DRS	8.5	26.3	-1.1	3.7	9.8	4.3	-0.3	3.5	12.7	1.3	-0.8	1,296
Khatlon	9.6	26.9	-1.2	4.1	11.1	3.0	-0.4	4.2	13.5	0.5	-0.9	1,934
FTF districts	8.1	24.6	-1.1	5.0	11.2	3.3	-0.4	5.0	13.1	0.6	-0.9	782
Mother's education[7]												
None/primary	11.1	27.6	-1.3	5.3	13.5	3.6	-0.5	7.0	19.0	0.2	-1.1	416
General basic	9.9	27.2	-1.2	4.6	10.1	4.6	-0.3	3.9	12.5	0.6	-0.8	1,981
General secondary	9.5	26.4	-1.2	3.1	9.4	7.1	-0.1	2.8	10.9	1.3	-0.7	2,080
Professional primary/middle	6.8	21.3	-0.9	2.6	7.6	5.9	-0.2	3.0	10.3	0.5	-0.7	296
Higher	8.0	17.2	-0.7	4.4	9.3	10.4	-0.1	3.0	7.9	1.9	-0.5	245

Continued…

Table 12.1—*Continued*

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, Tajikistan 2012

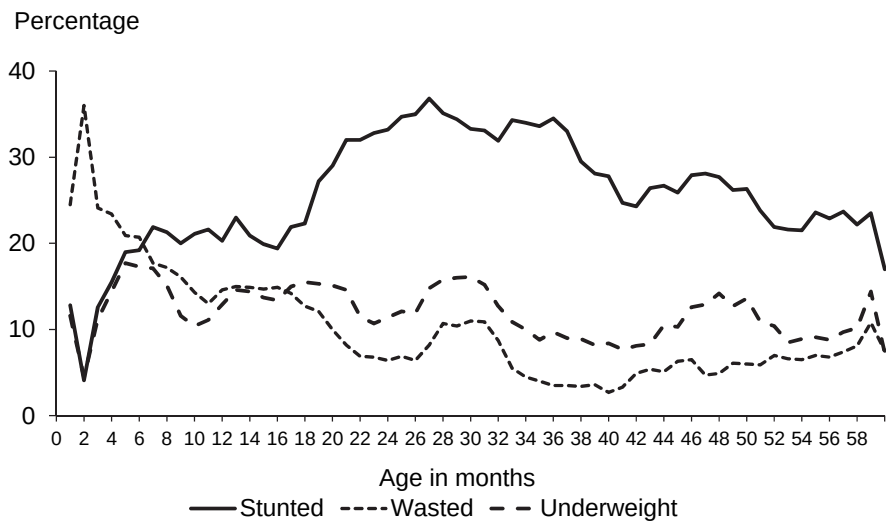
	Height-for-age[1]			Weight-for-height				Weight-for-age				
Background characteristic	Percent-age below -3 SD	Percent-age below -2 SD[2]	Mean Z-score (SD)	Percent-age below -3 SD	Percent-age below -2 SD[2]	Percent-age above +2 SD	Mean Z-score (SD)	Percent-age below -3 SD	Percent-age below -2 SD[2]	Percent-age above +2 SD	Mean Z-score (SD)	Number of children
Wealth quintile												
Lowest	12.0	32.1	-1.4	5.2	9.5	4.3	-0.3	4.5	15.8	0.7	-1.0	998
Second	10.1	29.0	-1.2	3.4	10.9	3.3	-0.3	4.8	13.7	0.5	-0.9	1,084
Middle	7.3	23.4	-1.1	3.0	9.6	7.4	-0.2	2.3	10.2	0.6	-0.7	1,060
Fourth	9.9	24.9	-1.1	4.3	10.5	8.1	-0.2	3.9	11.5	1.5	-0.7	1,032
Highest	9.2	20.9	-0.9	3.4	9.0	6.4	-0.2	2.7	9.3	1.4	-0.6	906
Total	9.7	26.2	-1.1	3.9	9.9	5.9	-0.2	3.7	12.1	0.9	-0.8	5,080

Note: Table is based on children who stayed in the household on the night before the interview and who had valid dates of birth (month and year) and valid measurement of both height and weight. Each of the indices is expressed in standard deviation units (SD) 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 NCHS/CDC/WHO reference. Total includes 415 children whose size at birth is missing.
FTF = Feed the Future
[1] Recumbent length is measured for children under age 2, or in the few cases when the age of the child is unknown and the child is less than 85 cm; standing height is measured for all other children.
[2] Includes children who are below -3 standard deviations (SD) from the WHO Child Growth standards population median.
[3] Excludes children whose mothers were not interviewed.
[4] First-born twins (triplets, etc.) are counted as first births because they do not have a previous birth interval.
[5] Includes children whose mothers are deceased.
[6] Excludes children whose mothers were not weighed and measured. Mother's nutritional status in terms of BMI (Body Mass Index) is presented in Table 12.9.
[7] For women who are not interviewed, information is taken from the Household Questionnaire. Excludes children whose mothers are not listed in the Household Questionnaire.

Height-for-age (stunting)

At the national level, 26 percent of children under age 5 are stunted, and 10 percent are severely stunted. Analysis by age group shows that stunting rises rapidly from 15 percent among children under 6 months to a high of one-third of children age 18-35 months (Figure 12.1). Severe stunting shows a similar pattern, with the lowest proportion of severe stunting in children under 6 months.

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 5-month moving average.

Tajikistan DHS 2012

In the 2012 TjDHS, mothers were asked their perception of their child's birth size: average or larger, small, or very small. The perceived birth size is useful as a proxy for birth weight because not all mothers can recall birth weight accurately and not all newborns are weighed at birth. Table 12.1 shows that about one-third of the children perceived by their mothers to be very small at birth are stunted and about one-third of those perceived to be small at birth are stunted (36 percent each), compared with less than one-quarter of those reported to have been average or larger in size at birth.

In general, rural children and children born to mothers with less education are more likely to be stunted. There is large regional variation in the prevalence of stunting, ranging from 19 percent in Dushanbe to 27 percent each in the Sughd and Khatlon regions. Prevalence of severe stunting is especially high among children in Sughd (12 percent), Khatlon (10 percent), GBAO and DRS (9 percent each) regions. Stunting generally decreases as wealth quintile increases.

Weight-for-height (wasting)

Overall, 10 percent of children in Tajikistan are wasted. Analysis by age group shows that wasting is highest (23 percent) in children under 6 months and lowest (5 percent) in children age 36-47 months. Female and male children are equally likely to be wasted. Wasting is not strongly correlated with the length of the preceding birth interval. Children who are very small at birth are more likely to be wasted (16 percent) than children who are of average size or larger at birth (10 percent). Children whose mothers are thin are more likely to be wasted than children whose mothers are either normal weight or overweight (15 percent versus 9 percent). Children residing in urban areas are just as likely to be wasted as children living in rural areas. By region, wasting in children ranges from 8 percent in GBAO and Sughd to 11 percent in Khatlon. It is slightly higher than average in those districts that fall into the Feed the Future (FTF) program (11 percent). Wasting prevalence generally decreases as mother's education increases. However, there is no uniform relationship between wasting and wealth quintile.

Table 12.1 also shows the proportion of children who are more than 2 SD above the reference mean. These children are considered to be heavy for their height. Six percent of children under age 5 fall into this category. The proportion of children who are heavy for their height is highest in Sughd region (12 percent) and lowest in GBAO region (1 percent).

Weight-for-age (underweight)

Table 12.1 shows that 12 percent of children under age 5 are underweight and 4 percent are severely underweight. The proportion of children who are underweight varies only slightly for most background characteristics. It is slightly higher among children age 6-8 months than those age 9-11 months (15 percent and 10 percent, respectively). Children born less than 24 months after a previous birth are slightly more likely to be underweight (14 percent) than children born at least 48 months after a previous birth (10 percent). The data show a strong correlation between underweight children and their perceived birth size. Babies perceived by mothers as very small at birth are much more likely to be underweight (33 percent) than those perceived as either small (19 percent) or average or larger (10 percent) at birth.

Dushanbe has the lowest proportion of underweight children (9 percent), while Khatlon has the largest (14 percent). As with wasting and stunting, mother's education is associated with underweight, with the percentage of children who are underweight decreasing steadily as mother's education increases. A similar negative relationship is observed between household wealth and the percentage of underweight children, though it is not as uniform.

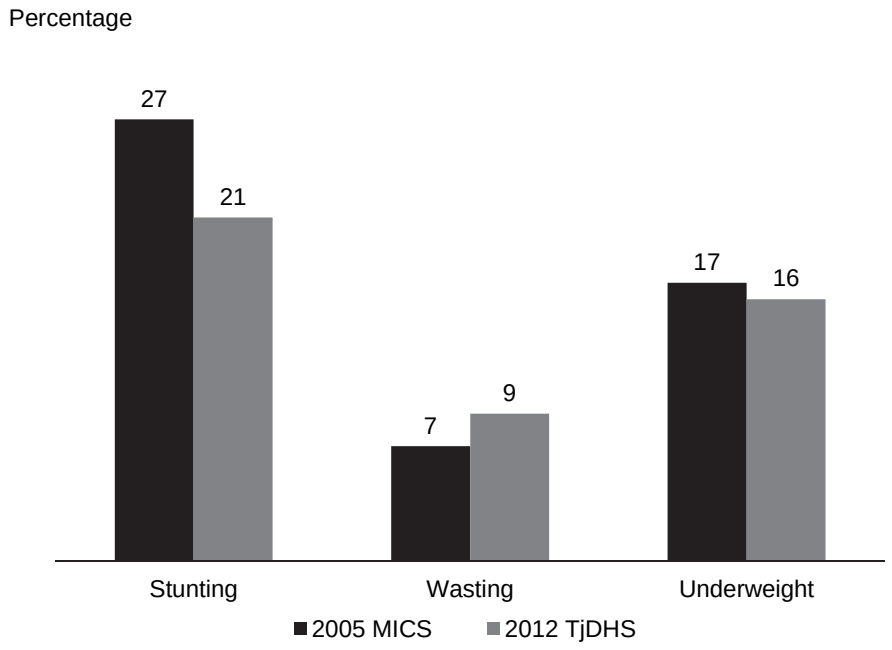
12.1.3 Trends in Children's Nutritional Status

The 2005 MICS survey also collected height and weight measurements to assess children's nutrition status. However, at that time, the National Center for Health Statistics (NCHS) reference standards were used to derive the levels of stunting, wasting, and underweight. Thus, in order to assess

trends in nutrition status, the 2012 TjDHS nutrition indicators have been re-calculated using the older NCHS reference population.

Figure 12.2 shows that the proportion of children under age 5 who are stunted decreased from 27 percent in 2005 to 21 percent in 2012. The proportion of children who are wasted rose from 7 percent in 2005 to 9 percent in 2012, while the proportion of underweight children decreased just slightly, from 17 percent in 2005 to 16 percent in 2012 (SCS, 2007; UNICEF, 2008).

Figure 12.2
Trends in nutritional status of children under age 5, Tajikistan 2012



Note: Based on children who spent the night before the interview in the household, had valid month and year of birth, and valid height and weight measurements, according to NCHS/CDC/WHO. *Stunting* reflects chronic malnutrition; *Wasting* reflects acute malnutrition; *Underweight* reflects chronic or acute malnutrition or a combination of both.

Thus, it appears that there has been some improvement in the prevalence of stunting; however, the prevalence of wasting and underweight has changed little during the seven years between the surveys.

The 2009 Micronutrient Status Survey in Tajikistan (MSST) also collected height and weight measurements to assess children's nutrition status (MOH and UNICEF, 2010). The 2009 data on nutritional status are based on children age 6-59 months, while in the 2012 TjDHS, the data represent children age 0-59 months; thus, to compare the survey results, the 2012 TjDHS nutrition indicators have been re-calculated for children age 6-59 months using the older NCHS reference standards. Caution should be exercised in interpreting the trend data because there are many methodological differences between the DHS and MSST surveys. The number of children age 6-59 measured in the 2009 MSST was considerably smaller (about 2,150) than in the 2012 TjDHS sample (4,654 weighted and 4,283 unweighted cases), so differences between the surveys may simply reflect the variability inherent in estimates from sample surveys rather than true differences.

When compared with the data on stunting in the 2009 MSST survey, the proportion of children 6-59 months who are stunted decreased from 29 percent in 2009 to 22 percent in 2012. The proportion of children who are wasted increased from 5 percent in 2009 to 9 percent in 2012, while the proportion of underweight children increased substantially, from 8 percent in 2009 to 17 percent in 2012 (MOH and

UNICEF, 2010). Thus, it appears that although the prevalence of stunting has decreased, wasting and underweight have increased during the three years between the surveys.

12.2 BREASTFEEDING AND COMPLEMENTARY FEEDING

Feeding practices play a pivotal role in determining the optimal growth and development of infants. Poor breastfeeding and infant feeding practices have adverse consequences for the health and nutritional status of children. These consequences, in turn, affect their mental and physical development. Breastfeeding also affects mothers by physiologically suppressing the return of fertility, thereby lengthening the interval between pregnancies.

UNICEF and WHO recommend that children be exclusively breastfed (that is, given no other liquid or solid food or plain water) for the first six months of life and that children be given solid or semisolid complementary foods beginning in the seventh month of life. The standard indicator of exclusive breastfeeding is the percentage of children under age 6 months who are exclusively breastfeeding. The standard indicator of timely complementary feeding is the percentage of children age 6-8 months who receive solid, semisolid, or soft foods. WHO recommends that breastfeeding continue through the second year of life. Use of bottles with nipples is not recommended for feeding at any age (WHO, 2008).

12.2.1 Initiation of Breastfeeding

Early initiation of breastfeeding is important for both the mother and the child. There are a number of reasons to encourage early breastfeeding. Mothers benefit from early suckling because it stimulates breast milk production and facilitates the release of oxytocin, which helps to contract the uterus and reduce postpartum blood loss. The first breast milk contains colostrum, which is highly nutritious and contains antibodies that protect the newborn from diseases. Early initiation of breastfeeding also encourages bonding between the mother and her newborn.

Table 12.2 presents by background characteristics the breastfeeding status of all last-born children born in the two years preceding the survey. The table shows the percentage of children according to whether they were ever breastfed, when they started breastfeeding, and whether they were fed anything other than breast milk prior to the commencement of breastfeeding. Breastfeeding is almost universal in Tajikistan; 98 percent of last-born children born in the two years preceding the survey were breastfed at some point in their life. There are no marked differences by background characteristics in the proportion of children ever breastfed.

Overall, half of children are breastfed within one hour after birth, and 92 percent are breastfed within one day after birth. Compared with data from the 2005 MICS, the percentage of children who were breastfed within one hour of birth has declined somewhat (from 61 percent in 2005 to 50 percent in 2012), while the percentage of children who started breastfeeding within one day of birth has increased slightly (from 87 percent in 2005 to 92 percent in 2012) (SCS, 2007).

Table 12.2 indicates no marked differences in the timing of initial breastfeeding within one hour of birth, either by the sex of the child or by urban-rural residence. Notable variations, however, can be seen by region. The proportion of children breastfed within one hour of birth is highest in Sughd region (74 percent) and lowest in Khatlon region (37 percent).

The timing of initiation of breastfeeding varies by other background characteristics. Less likely to begin breastfeeding within one hour of birth are children born at home, children attended by a traditional birth attendant at delivery, children of mothers with no education, and children from households in the lowest two wealth quintiles. Similar patterns were also reported in the 2005 MICS. It is encouraging to note that health facilities are apparently not obstructing early initiation of breastfeeding.

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, Tajikistan 2012

	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	98.0	50.0	91.9	1,047	13.7	1,026
Female	98.3	49.1	91.9	999	13.6	982
Assistance at delivery						
Health professional[3]	98.4	52.2	92.2	1,814	14.1	1,785
Traditional birth attendant	99.3	27.4	94.3	167	10.2	166
Other	(100.0)	(37.2)	(88.2)	54	(9.7)	54
No one	*	*	*	2	*	2
Place of delivery						
Health facility	98.4	53.8	92.4	1,595	13.6	1,569
At home	99.0	35.4	92.0	442	13.9	437
Residence						
Urban	98.2	52.4	90.6	431	15.1	423
Rural	98.2	48.8	92.3	1,615	13.3	1,585
Region						
Dushanbe	98.1	46.6	86.5	154	26.1	151
GBAO	98.2	54.2	88.5	34	10.1	34
Sughd	98.5	74.4	92.5	539	7.0	531
DRS	98.6	43.1	94.4	519	13.4	512
Khatlon	97.7	37.4	91.1	798	16.1	780
FTF districts	97.1	46.4	91.7	301	17.8	293
Mother's education						
None/primary	99.1	36.1	92.8	177	16.5	176
General basic	98.6	49.7	91.5	850	12.4	838
General secondary	97.7	49.9	92.3	810	14.3	792
Professional primary/middle	95.9	59.0	90.1	107	14.1	103
Higher	99.1	58.7	92.9	100	14.2	100
Wealth quintile						
Lowest	98.5	44.2	91.5	393	14.8	387
Second	96.9	42.6	92.5	454	11.6	440
Middle	98.3	48.5	91.6	451	15.7	443
Fourth	98.9	58.0	92.6	425	10.8	420
Highest	98.5	56.1	91.2	323	16.1	318
Total	98.2	49.6	91.9	2,045	13.7	2,008

Note: Table is based on last-born children born in the two years preceding the survey regardless of whether the children are living or dead at the time of interview. Total includes nine children for whom assistance at delivery is missing and nine children for whom place of delivery is missing. Figures in parentheses are based on 25-49 unweighted cases; an asterisk denotes a figure based on fewer than 25 unweighted cases that has been suppressed.

FTF = Feed the Future.

[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.

[3] Doctor, nurse/midwife, or feldsher.

Prelacteal feeding is the practice of giving other liquids to a child during the first three days of life. The practice of prelacteal feeding is discouraged because it limits the frequency of suckling by the infant and exposes the child to the risk of gastrointestinal infection. Only 14 percent of newborns in Tajikistan receive a prelacteal feed. The likelihood of receiving a prelacteal feed is higher for births in Dushanbe and lower for births in Sughd region but, otherwise, does not vary much by other characteristics.

12.3 BREASTFEEDING STATUS BY AGE

Breast milk contains all the nutrients needed by children in the first six months of life. It is recommended that during the first six months of life a child should not be given any complementary liquid or solid food or plain water. Exclusive breastfeeding (i.e., receiving only breast milk) is encouraged for newborns because it reduces the likelihood of contamination introduced by other feeding and thus reduces the risk of diarrhea. As an infant grows, breast milk alone no longer provides sufficient nourishment, and other liquids and foods need to be added to a child's diet. When the child reaches age 6 months, solid or semisolid complementary foods should be added to the diet with continued breastfeeding.

The 2012 TjDHS collected data on infant and young child feeding for all last-born children under age 2 living with their mothers, using a 24-hour recall method. As shown in Table 12.3 and Figure 12.3, a large majority of children in Tajikistan are breastfed during the first year of life, and breastfeeding continues through the second year for almost half of the children. However, supplementing breast milk with other liquids or foods starts at an early age. Among children under age 6 months, most are breastfed (94 percent). But contrary to recommended practices, only one-third (34 percent) of children under age 6 months are being exclusively breastfed. In addition to breast milk, 39 percent of children under age 6 months consume plain water, 2 percent consume nonmilk liquids, 14 percent consume other milk, and 5 percent consume complementary foods.

Table 12.3 Breastfeeding status by age

Percent distribution of youngest children under 2 who are living with their mother by breastfeeding status and the percentage currently breastfeeding; and the percentage of all children under 2 using a bottle with a nipple, according to age in months, Tajikistan 2012

	Breastfeeding status										
Age in months	Not breast-feeding	Exclusively breastfed	Breast-feeding and consu-ming plain water only	Breast-feeding and consu-ming nonmilk liquids[1]	Breast-feeding and consu-ming other milk	Breast-feeding and consu-ming comple-mentary foods	Total	Percentage currently breast-feeding	Number of youngest child under age 2 living with their mother	Percentage using a bottle with a nipple	Number of all children under age 2
0-1	4.6	63.6	21.7	0.0	8.4	1.8	100.0	95.4	106	7.3	106
2-3	6.3	29.1	46.0	2.3	13.8	2.4	100.0	93.7	175	29.0	176
4-5	5.7	20.6	43.2	3.8	18.0	8.7	100.0	94.3	160	40.3	160
6-8	11.5	5.9	20.3	7.3	14.0	41.0	100.0	88.5	295	43.7	301
9-11	15.5	2.4	5.3	6.8	4.5	65.5	100.0	84.5	288	42.5	290
12-17	25.2	0.9	2.0	3.3	1.6	66.9	100.0	74.8	518	36.1	539
18-23	47.3	0.5	0.3	0.8	0.8	50.3	100.0	52.7	451	24.5	533
0-3	5.7	42.1	36.9	1.4	11.8	2.2	100.0	94.3	280	20.9	282
0-5	5.7	34.3	39.1	2.3	14.0	4.6	100.0	94.3	440	27.9	442
6-9	12.1	5.2	16.3	7.9	12.4	46.0	100.0	87.9	386	45.2	392
12-15	23.3	1.3	2.9	2.2	1.7	68.7	100.0	76.7	367	39.1	378
12-23	35.5	0.7	1.2	2.1	1.3	59.2	100.0	64.5	968	30.3	1,072
20-23	50.5	0.8	0.4	0.7	0.3	47.2	100.0	49.5	296	20.6	356

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, nonmilk 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 nonmilk liquids and who do not receive other milk and who do not receive complementary foods are classified in the nonmilk liquid category even though they may also get plain water. Any children who get complementary food are classified in that category as long as they are breastfeeding as well.

[1] Nonmilk liquids include juice, juice drinks, clear broth, or other liquids.

Comparison of the 2012 TjDHS rates of exclusive breastfeeding among children under age 6 months (34 percent) suggests an apparent increase from the 2005 MICS estimate of 25 percent (SCS, 2007). When comparing the results of the 2012 TjDHS to the MICS estimates, it should be noted that the 2012 DHS survey asked mothers about more kinds of complementary foods that could have been given to the child than were asked about in the 2005 MICS.

Figure 12.3
Infant feeding practices by age, Tajikistan 2012

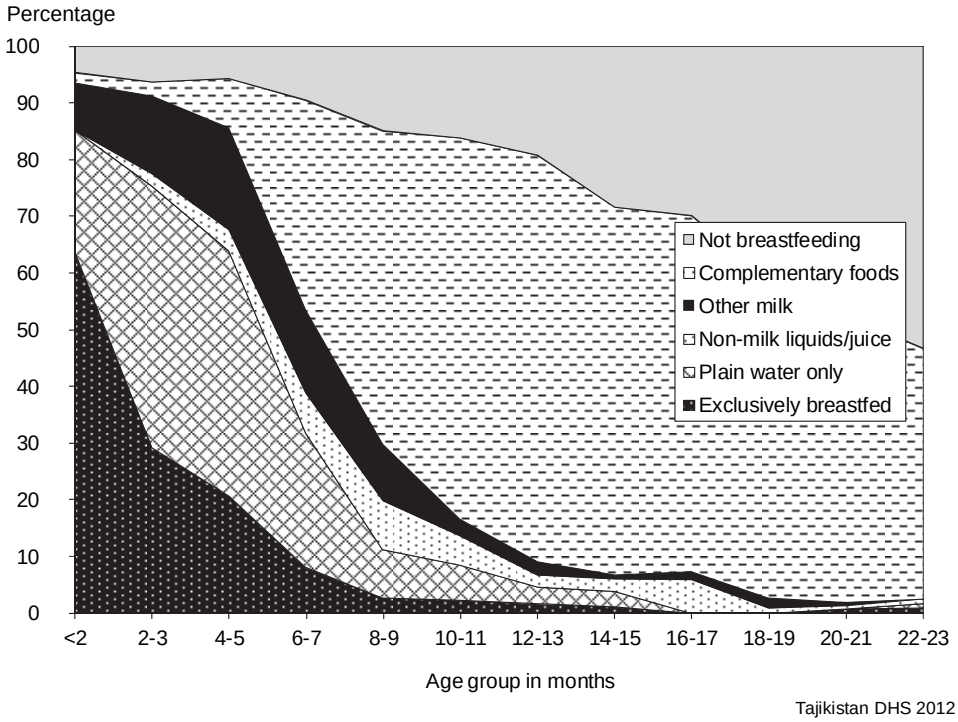
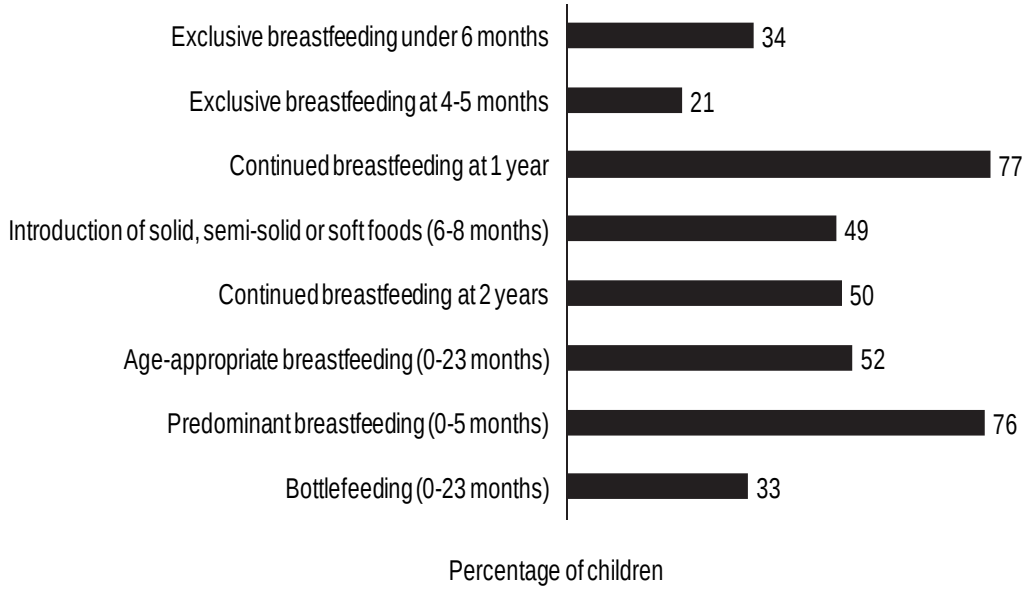


Table 12.3 also presents the percentage of children using a bottle with a nipple. While only 7 percent of children under 2 months are being given a bottle with a nipple, bottle feeding increases rapidly to 29 percent of children age 2-3 months and 40 percent of children 4-5 months old. This is of potential concern, since bottles can transmit germs unless they are adequately sterilized.

Figure 12.4 shows the 2012 TjDHS results for key infant and young child feeding (IYCF) practices on breastfeeding for youngest children under age 2 who are living with their mothers. Although 34 percent of children under age 6 months are exclusively breastfed, only 21 percent of those age 4-5 months are exclusively breastfed. Most children (77 percent) continue breastfeeding at age 1, and half continue to breastfeed until age 2. Only half of children are introduced to complementary foods at an appropriate age, and only 52 percent of children 0-23 months are breastfed appropriately for their age, i.e., exclusive breastfeeding for children 0-5 months and continued breastfeeding along with complementary foods for children age 6-23 months. Predominant breastfeeding (receiving breastmilk and only plain water or nonmilk liquids such as juice, clear broth, and other liquids) is prevalent in 76 percent of the children; 33 percent of children under age 2 are bottlefed.

Figure 12.4
Infant and young child feeding indicators on breastfeeding status, Tajikistan 2012



Tajikistan DHS 2012

12.4 DURATION OF BREASTFEEDING

Table 12.4 shows the median duration of breastfeeding by selected background characteristics. The estimates of median and mean duration 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 total median duration of any breastfeeding among children in Tajikistan in 2012 is 19 months. The total median duration of exclusive breastfeeding is two months, while the total median duration of predominant breastfeeding is five months.

The median durations of any, exclusive, and predominant breastfeeding do not vary much across background characteristics. The median duration of any breastfeeding is four months shorter in Dushanbe than in Khatlon region. Durations of any breastfeeding and predominant breastfeeding tend to decrease as wealth quintile increases. Comparisons are hampered by the small number of cases.

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 background characteristics, Tajikistan 2012

Background characteristic	Median duration (months) of breastfeeding among children born in the past three years[1]		
	Any breastfeeding	Exclusive breastfeeding	Predominant breastfeeding[2]
Sex			
Male	19.8	1.4	5.7
Female	18.1	1.5	5.1
Residence			
Urban	18.3	0.8	5.1
Rural	19.1	1.6	5.4
Region			
Dushanbe	15.8	(0.5)	4.6
GBAO	(19.4)	(2.6)	5.5
Sughd	19.4	(1.6)	4.9
DRS	18.1	0.8	5.3
Khatlon	19.6	1.8	6.1
FTF districts	18.2	(1.5)	4.8
Mother's education			
None/primary	(20.5)	(2.0)	(6.3)
General basic	19.2	1.5	5.3
General secondary	18.6	1.3	5.5
Professional primary/middle	(18.1)	*	(4.3)
Higher	(16.1)	*	(4.0)
Wealth quintile			
Lowest	22.8	(1.4)	5.8
Second	18.7	2.2	6.0
Middle	18.9	1.5	5.6
Fourth	18.1	0.7	5.2
Highest	15.8	0.7	3.9
Total	18.9	1.5	5.4
Mean for all children	18.8	3.1	6.6

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 denotes a figure based on fewer than 25 unweighted cases that has been suppressed.
FTF = Feed the Future.
[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 nonmilk liquids only.

12.5 TYPES OF COMPLEMENTARY FOODS

As mentioned above, it is recommended that complementary feeding (giving solid or semi-solid foods to infants in addition to breast milk) start at age 6 months, because at this age breast milk is no longer sufficient to maintain the child's growth (WHO, 2008). Children should be fed small quantities of solid and semisolid foods while continuing to breastfeed. The amount of food is increased gradually from 6 to 23 months, which is the period of transition to eating the regular family diet.

In the 2012 TjDHS, women who had at least one child living with them who was born in 2010 or later were asked questions about the types of liquids and foods the child had consumed during the day or night preceding the interview (e.g., fortified baby food, meat, eggs, etc.). Mothers who had more than one child born in 2010 or later were asked questions about the youngest child living with them.

The results are subject to a number of limitations. The dietary data on children are subject to recall errors on the mother's part. In addition, a mother may not be able to report fully on a child's intake of food and liquids if the child was fed by other individuals during the period. Despite these limitations, the information collected on the types of foods and liquids consumed by young children is useful in assessing timely and appropriate complementary feeding.

For many breastfeeding children, liquids other than breast milk are introduced earlier than the recommended age of 6 months. As shown in Table 12.5, 11 percent of breastfeeding children age 2-3 months are given infant formula, and 7 percent receive other milk in addition to breast milk.

By age 9 months, every child is expected to be receiving at least one daily feeding of solid or semi-solid foods. However, Table 12.5 indicates that only 78 percent of breastfeeding children ages 9-11 months received any solid or semi-solid food on the day before the interview.

Overall, half of breastfeeding children age 6-23 months consume foods made from grains (including fortified baby foods), 25 percent consume vitamin A-rich fruits and vegetables, 24 percent have meat, fish, or poultry, and 27 percent consume eggs. In addition to being breastfed, 17 percent of these children also receive infant formula, 35 percent receive other milk, and 44 percent receive cheese, yogurt, or other milk products.

As expected, nonbreastfed children age 6-23 months are more likely than breastfed children to receive the different types of liquids and solid and semisolid foods. However, caution should be exercised while interpreting these results because the number of nonbreastfed children is small compared with the number of breastfed 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, Tajikistan 2012

	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 veget-ables 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														
0-1	1.8	7.1	2.7	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.9	101
2-3	10.5	7.0	4.1	0.7	0.2	0.2	0.2	1.0	0.2	0.2	0.7	1.9	2.6	164
4-5	15.6	10.4	8.9	4.5	2.0	0.1	0.3	2.7	1.0	0.0	1.0	3.7	9.3	150
6-8	16.8	23.5	43.1	10.5	20.7	6.0	6.5	28.7	2.3	7.1	6.2	18.3	46.4	261
9-11	17.7	29.6	76.6	15.9	45.0	20.7	28.2	59.9	9.9	14.0	16.4	35.1	77.5	243
12-17	16.9	39.8	83.4	11.9	61.6	29.5	44.7	69.0	19.3	28.4	35.7	56.2	89.5	387
18-23	15.2	45.0	90.7	8.1	84.5	44.4	58.8	80.4	26.6	43.8	44.3	62.0	95.4	238
6-23	16.7	34.9	74.1	11.6	53.4	25.3	35.3	60.1	14.9	23.6	26.5	44.1	78.2	1,129
Total	15.0	27.8	55.7	9.1	39.2	18.5	25.8	44.3	11.0	17.3	19.6	32.8	58.5	1,544
NONBREASTFEEDING CHILDREN														
0-1	*	*	*	*	*	*	*	*	*	*	*	*	*	5
2-3	*	*	*	*	*	*	*	*	*	*	*	*	*	11
4-5	*	*	*	*	*	*	*	*	*	*	*	*	*	9
6-8	(23.8)	(51.3)	(59.4)	(13.3)	(23.4)	(18.8)	(33.4)	(46.6)	(16.3)	(13.7)	(20.9)	(24.0)	(68.9)	34
9-11	(35.4)	(69.6)	(83.7)	(23.8)	(68.4)	(40.2)	(33.4)	(72.7)	(20.4)	(28.6)	(24.8)	(58.3)	(95.9)	45
12-17	21.5	48.6	85.7	12.8	81.4	33.5	59.9	76.8	19.0	39.5	42.8	57.2	96.3	130
18-23	16.0	53.2	93.1	12.9	87.1	56.4	72.0	91.4	38.7	53.3	54.4	66.5	98.2	213
6-23	20.4	53.3	87.1	14.0	78.2	44.6	61.1	81.3	28.9	43.2	45.0	59.3	95.0	422
Total	21.0	51.6	82.8	14.0	74.0	42.7	57.7	77.2	27.3	41.2	42.9	56.4	91.0	447

Note: Breastfeeding status and food consumed refer to a 24-hour period (yesterday and last night). Figures in parentheses are based on 25-49 unweighted cases. An asterisk denotes a figure based on fewer than 25 unweighted cases that has been suppressed.
[1] Other milk includes fresh, tinned, and powdered cow or other animal milk.
[2] Doesn't include plain water.
[3] Includes fortified baby food.
[4] Includes fruits and vegetables such as pumpkin, carrots, red sweet bell peppers, dark green leafy vegetables, persimmon, and other locally grown fruits and vegetables that are rich in vitamin A.

12.6 INFANT AND YOUNG CHILD FEEDING PRACTICES

Infant and young child feeding (IYCF) practices include initiating timely feeding of solid or semisolid 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 for IYCF practices for children age 0-23 months (PAHO/WHO, 2003; WHO, 2005; WHO, 2008). Although breastfeeding is recommended for infants up to age 2, there are infants who have stopped breastfeeding before reaching age 2 because their mothers are HIV-positive, have died, or for some other reason do not breastfeed (WHO, 2005).

Minimum dietary diversity means feeding the child food from at least four food groups. This cut-off was selected because it is associated with better-quality diets for both breastfed and nonbreastfed children. Studies have shown that plant-based complementary foods by themselves are insufficient to meet the needs for certain micronutrients (WHO and UNICEF, 1998). Therefore it is recommended that meat, poultry, fish, or eggs be eaten daily or as often as possible. Vegetarian diets may not meet children's nutrient requirements unless supplements or fortified products are used. Vitamin A-rich fruits and vegetables should be consumed daily. Children's diets should include an adequate fat content, because fat provides essential fatty acids, facilitates absorption of fat-soluble vitamins (such as vitamin A), and enhances dietary energy density and palatability. Consumption of food from at least four food groups means that the child has a high likelihood of consuming at least one animal source of food and at least one fruit or vegetable in addition to a staple food (grains, roots, or tubers) (WHO, 2008). The four food groups should come from a list of seven food groups: grains, roots, and tubers; legumes and nuts; dairy products (milk yogurt, cheese); flesh foods (meat, fish, poultry, and liver/organ meat); eggs; vitamin A-rich fruits and vegetables; and other fruits and vegetables. The minimum dietary diversity is reported separately for breastfed and nonbreastfed children. However, diversity scores for breastfed and nonbreastfed children should not be directly compared, because breast milk is not counted in any of the above stated food groups.

In addition to dietary diversity, frequency of feeding is important to ensure that children's nutrient and caloric requirements are met. The recommended number of feedings is as follows:

- Breastfed infants 6-8 months should be fed meals of complementary foods two to three times per day, with one to two snacks as desired; breastfed children 9-23 months should be fed meals three to four times per day, with one to two snacks.

- Nonbreastfed children 6-23 months should receive milk products at least twice a day to ensure their calcium needs are met. In addition, they need animal-source foods and vitamin A-rich fruits and vegetables. Therefore, four food groups are considered a minimum acceptable number of food groups for nonbreastfed young children. Nonbreastfed children should be fed meals four to five times per day, with one to two snacks as desired (WHO, 2005). Meal frequency is considered a proxy for energy intake from foods other than breast milk; therefore, the feeding frequency indicator for nonbreastfed children includes both milk feeds and solid/semi-solid feeds (WHO, 2008). The minimum feeding frequencies are based on the energy needs from complementary foods estimated from age-specific total daily energy requirements. Infants with low breast milk intake would need to be fed more frequently. However, overly frequent feeding may lead to the displacement of breast milk (PAHO and WHO, 2003).

Table 12.6 shows the IYCF practices for the youngest children age 6-23 months living with the mother. The recommendations take into account children for whom feeding practices meet minimum standards with respect to:

- Food diversity (the number of food groups consumed)
- Feeding frequency (the number of times the child is fed)
- Consumption of breast milk or other types of milk or milk products

The results presented in Table 12.6 show that 33 percent of breastfed children age 6-23 months are fed foods from four or more food groups, and 35 percent are fed the minimum number of times. Among nonbreastfed children age 6-23 months, 58 percent are given milk or milk products, 60 percent are fed foods from four or more food groups, and 70 percent are fed the minimum number of times.

Table 12.6 shows that among all children age 6-23 months, the vast majority (89 percent) are given breast milk or other milk products, but only 40 percent receive an appropriately diverse diet, and only 45 percent of children are fed the recommended number of times with solid or semisolid foods. One in five children (20 percent) complies with all three of the IYCF recommendations of consuming breastmilk or other milk products, having the minimum dietary diversity, and having the minimum meal frequency.

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, Tajikistan 2012

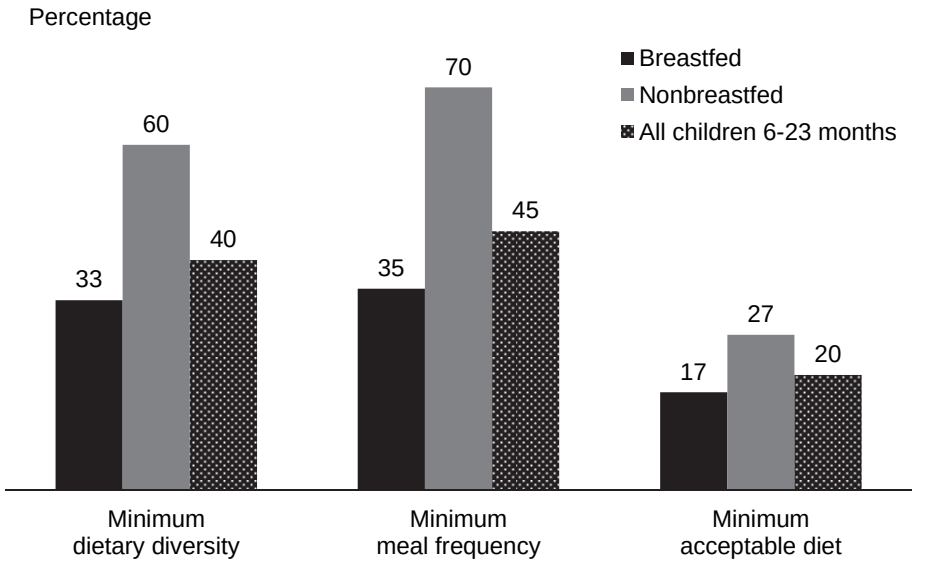
	Among breastfed children 6-23 months, percentage fed:				Among nonbreastfed children 6-23 months, percentage fed:					Among all children 6-23 months, percentage fed:				
Background characteristic	4+ food groups[1]	Minimum meal frequency[2]	Both 4+ food groups and minimum meal frequency	Number of breast-fed 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-breast-fed 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 in months														
6-8	4.2	24.4	1.8	261	(59.7)	(27.8)	(58.7)	(11.1)	34	95.4	6.9	28.3	2.9	295
9-11	22.3	28.7	9.6	243	(78.5)	(45.0)	(77.1)	(13.0)	45	96.7	25.8	36.2	10.2	288
12-17	44.2	39.0	23.5	387	56.5	52.8	60.5	21.4	130	89.0	46.4	44.4	23.0	518
18-23	55.4	47.6	29.6	238	54.9	72.0	76.6	36.4	213	78.7	63.2	61.3	32.8	451
Sex														
Male	32.0	35.6	17.3	584	56.2	56.0	72.0	24.0	215	88.2	38.5	45.4	19.1	799
Female	33.3	34.8	16.2	545	60.4	63.5	68.4	30.7	207	89.1	41.6	44.0	20.2	752
Residence														
Urban	33.1	35.3	18.4	216	64.6	55.1	72.0	30.5	116	87.6	40.8	48.1	22.7	332
Rural	32.5	35.2	16.4	913	55.9	61.4	69.6	26.0	306	88.9	39.7	43.8	18.8	1,219
Region														
Dushanbe	30.7	30.1	11.6	70	80.0	52.0	79.1	37.0	48	91.9	39.4	50.1	21.9	118
GBAO	31.4	32.5	12.9	19	(70.2)	(29.4)	(77.6)	(18.5)	5	93.2	31.0	42.8	14.2	24
Sughd	29.1	45.0	18.7	323	40.1	62.3	59.4	14.5	109	84.9	37.4	48.6	17.6	431
DRS	35.5	34.0	18.7	275	68.7	62.9	74.6	34.6	125	90.2	44.1	46.7	23.7	400
Khatlon	33.7	29.7	15.2	443	55.0	58.5	71.5	27.6	135	89.5	39.5	39.5	18.1	578
FTF districts	31.3	32.1	12.6	170	(56.2)	(65.5)	(77.4)	(31.0)	52	89.8	39.3	42.7	16.9	222
Mother's education														
None/primary	40.9	29.2	18.7	101	*	*	*	*	25	94.9	41.3	36.4	18.4	126
General basic	32.1	35.8	17.0	457	61.2	61.2	71.1	27.9	168	89.5	39.9	45.3	19.9	625
General secondary	31.2	35.8	16.6	463	49.2	57.9	68.9	26.0	176	86.0	38.5	44.9	19.2	638
Professional primary/middle	28.2	41.5	15.6	56	(57.2)	(65.4)	(68.9)	(34.8)	26	86.5	39.9	50.2	21.7	82
Higher	38.2	29.6	13.8	53	(84.7)	(71.7)	(79.7)	(34.2)	27	94.8	49.5	46.6	20.7	80
Wealth quintile														
Lowest	29.4	43.0	19.8	243	(51.5)	(47.1)	(72.2)	(13.6)	58	90.6	32.9	48.7	18.6	301
Second	28.9	34.1	13.9	247	43.5	58.6	73.0	21.0	84	85.7	36.4	43.9	15.7	331
Middle	40.1	31.9	19.8	256	67.7	65.0	79.1	37.8	83	92.1	46.2	43.4	24.2	338
Fourth	30.2	30.0	11.8	226	61.3	68.3	61.1	28.1	101	88.1	41.9	39.5	16.8	327
Highest	34.6	37.9	18.9	157	64.0	54.6	68.6	31.1	97	86.3	42.2	49.6	23.6	254
Total	32.6	35.2	16.8	1,129	58.3	59.7	70.2	27.3	422	88.6	40.0	44.7	19.6	1,551

Note: Figures in parentheses are based on 25-49 unweighted cases; an asterisk denotes a figure based on fewer than 25 unweighted cases that has been suppressed.
FTF = Feed the Future
[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; 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 nonbreastfed 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] Nonbreastfed 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 products 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.

The proportion of all children 6-23 months who are fed according to all three IYCF recommendations increases with the child's age, from 3 percent for children 6-8 months to 33 percent for children 18-23 months. Feeding practices do not vary between boys and girls, but there are differences across other background characteristics. Children living in urban areas (23 percent) are more likely to be fed according to the recommendation than their rural counterparts (19 percent). Children living in GBAO region are the least likely to be fed according to all IYCF practices (14 percent), while children living in DRS region are the most likely (24 percent). There is a weak positive relationship between infant and child feeding practices and mother's education, but the relationship with wealth status is not clear.

Figure 12.5 shows IYCF practices according to breastfeeding status. In terms of overall feeding practices, a higher proportion of nonbreastfed children meet the minimum requirements (27 percent) than breastfed children (17 percent).

Figure 12.5
IYCF indicators on minimum acceptable diet, Tajikistan 2012



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12.7 MICRONUTRIENT INTAKE AMONG CHILDREN

Micronutrient deficiency is a major contributor to childhood morbidity and mortality. Children can receive micronutrients from foods, fortified food, and direct supplementation. The 2012 TjDHS collected information on consumption of foods rich in vitamin A and iron, vitamin A and iron supplementation, and deworming status for children age 6-59 months. Household salt samples were also tested for iodine levels.

Table 12.7 presents data regarding the intake of key micronutrients among children age 6-59 months. The table shows, by background characteristics, the percentage of youngest children age 6-23 months who are living with their mother and who consumed foods rich in vitamin A and iron in the day or night preceding the survey. In addition, the table shows the proportion of all children age 6-59 months who had received vitamin A supplements or deworming medication in the six months preceding the survey and iron supplements in the week before the survey. The table also presents information on children age 6-59 months who live in households with iodized salt.

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 vitamin A supplements in the six months preceding the survey, who were given iron supplements in the past seven days, and who were given deworming medication in the six months preceding the survey, and among all children age 6-59 months who live in households that were tested for iodized salt, the percentage who live in households with iodized salt, by background characteristics, Tajikistan 2012

	Among youngest children age 6-23 months living with the mother:			Among all children age 6-59 months:				Among children age 6-59 months living in households tested for iodized salt	
Background characteristic	Percentage who consumed foods rich in vitamin A in last 24 hours[1]	Percentage who consumed foods rich in iron in last 24 hours[2]	Number of children	Percentage given vitamin A supplements in last 6 months	Percentage given iron supplements in last 7 days	Percentage given deworming medication in last 6 months[3]	Number of children	Percentage living in households with iodized salt[4]	Number of children
Age in months									
6-8	15.6	12.6	295	56.4	15.2	17.0	301	82.2	286
9-11	39.3	28.2	288	73.6	18.3	23.0	290	81.6	279
12-17	59.6	49.9	518	76.8	22.2	35.0	539	85.7	520
18-23	74.4	65.7	451	82.9	20.1	52.0	533	81.7	527
24-35	na	na	na	76.3	22.2	55.2	1,146	83.6	1,111
36-47	na	na	na	78.7	20.2	60.0	930	79.5	892
48-59	na	na	na	78.4	19.3	59.6	851	84.9	827
Sex									
Male	50.1	41.7	799	76.8	21.4	49.9	2,346	83.1	2,271
Female	53.5	45.2	752	76.2	19.2	49.5	2,243	82.5	2,170
Breastfeeding status									
Breastfeeding	44.4	36.9	1,129	73.5	20.9	32.4	1,279	83.5	1,246
Not breastfeeding	71.3	60.7	420	77.8	20.1	56.5	3,282	82.5	3,172
Mother's age at birth									
15-19	(45.4)	(36.9)	39	(61.9)	(19.0)	(15.8)	46	(75.4)	46
20-29	51.7	43.9	1,103	77.1	20.6	48.5	2,960	82.6	2,864
30-39	52.7	42.0	372	75.9	20.0	54.1	1,359	83.6	1,327
40-49	(50.0)	(47.6)	37	75.0	18.8	45.8	224	83.1	205
Residence									
Urban	51.4	44.6	332	72.9	17.6	52.7	995	87.5	963
Rural	51.8	43.0	1,219	77.5	21.1	48.9	3,595	81.5	3,478
Region									
Dushanbe	47.8	37.2	118	62.5	14.6	49.5	368	90.7	359
GBAO	37.9	22.7	24	79.4	34.9	39.6	79	80.3	77
Sughd	53.3	46.8	431	78.2	19.9	56.9	1,245	89.0	1,231
DRS	52.4	41.1	400	72.7	21.0	56.8	1,162	72.1	1,133
Khatlon	51.5	44.5	578	80.7	20.6	40.3	1,735	84.0	1,641
FTF districts	58.0	47.7	222	86.0	20.7	49.8	682	78.9	661
Mother's education									
None/primary	55.1	45.3	126	75.2	18.1	45.3	387	77.7	379
General basic	50.7	42.4	625	74.3	20.4	49.2	1,770	78.9	1,694
General secondary	51.0	43.1	638	78.6	20.1	50.0	1,935	86.8	1,878
Professional primary/ middle	52.9	43.4	82	76.7	24.8	56.4	266	80.7	262
Higher	58.9	49.7	80	78.6	19.4	51.1	231	89.7	228
Wealth quintile									
Lowest	43.1	34.9	301	77.9	19.6	43.1	924	81.2	895
Second	50.2	42.8	331	82.8	19.2	48.3	981	82.2	938
Middle	57.9	47.1	338	76.0	21.4	51.1	946	82.5	915
Fourth	53.3	45.4	327	76.5	22.9	56.0	915	82.6	889
Highest	53.8	46.6	254	68.1	18.3	50.1	822	85.9	805
Total	51.7	43.4	1,551	76.5	20.3	49.7	4,589	82.8	4,442

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. Total includes 29 children age 6-59 months who are missing information on breastfeeding status. Figures in parentheses are based on 25-49 unweighted cases.

na = Not applicable

FTF = Feed the Future

[1] Includes meat (and organ meat), fish, poultry, eggs, pumpkin, carrots, red sweet bell pepper, dark green leafy vegetables, persimmon, 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 helminths.

[4] Excludes children in households in which salt was not tested.

12.7.1 Consumption of Micronutrient-rich Foods

Table 12.7 shows that just over half (52 percent) of children age 6-23 months consumed foods rich in vitamin A in the day or night preceding the survey. The proportion of children consuming vitamin A-rich foods increases with age, from 16 percent among children age 6-8 months to 74 percent among children age 18-23 months. Similarly, consumption of vitamin A-rich foods is higher among children who are not breastfeeding, since these children also tend to be older than those who are still being breastfed. Otherwise, differences in consumption of vitamin A-rich foods by other background characteristics are not large, although the proportion of children consuming vitamin A-rich foods is relatively low in GBAO region (38 percent).

At the national level, 43 percent of children age 6-23 months consumed foods rich in iron in the 24 hours before the survey. Differences in the intake of iron-rich foods by background characteristics are largely similar to those for consumption of vitamin A-rich foods. However, the differences by region are more pronounced than for vitamin A-rich foods, with children in GBAO region only about half as likely to receive iron-rich foods in the 24 hours before the survey as those in Sughd or Khatlon regions. The consumption of iron-rich foods is notably lower among children in the lowest wealth quintile.

12.7.2 Micronutrient Supplementation

Survey results indicate that 77 percent of children age 6-59 months received a vitamin A supplement in the six months preceding the survey (Table 12.7). Children age 18-23 months are the most likely to have received vitamin A supplements (83 percent). Across regions, the proportion of children who received vitamin A supplements ranges from 63 percent in Dushanbe to 81 percent in Khatlon. It is also high (86 percent) in the districts that fall in the Feed the Future (FTF) program. There are no clear patterns in vitamin A supplementation by mother's education or wealth quintile; however, it is interesting to note that children in the highest wealth quintile are the least likely to have received a vitamin A supplement in the previous six months.

The 2012 TjDHS results indicate a substantial increase in vitamin A supplementation coverage. The proportion of children age 6-59 months who received supplementation in the previous six months increased from 47 percent in the 2005 MICS survey to 77 percent in 2012 (SCS, 2007).

In the 2012 TjDHS, mothers were asked if their children under age 5 had taken an iron tablet in the seven days prior to the survey. Table 12.7 shows that 20 percent of children age 6-59 months received iron supplements in this period. Iron supplementation varies little by the child's background characteristics, except that it is notably higher among children in GBAO region (35 percent) than among those in other regions.

Fortified salt that contains 15 parts of iodine per million of salt (15 ppm) is considered adequate for the prevention of iodine deficiency (ICCIDD, UNICEF, and WHO, 2001). To assess the use of iodized salt in Tajikistan, the 2012 TjDHS included salt testing at the household level using the MBI rapid test kit for salt fortified with potassium iodate (in Tajikistan, salt is commonly iodized with potassium iodate). The MBI rapid test kit provides a good qualitative indication of the presence or absence of iodine. Interviewers asked households to provide a teaspoon of salt used for cooking. A recheck solution was used when the salt showed no change in color. Table 12.7 presents information about all children age 6-59 months who live in households that use iodized salt.

At the national level, 83 percent of children live in households that use iodized salt: 88 percent in urban and 82 percent in rural areas. The percentage of children living in households that use iodized salt ranges from 72 percent in DRS region to 91 percent in Dushanbe. Mother's education and household wealth are positively associated with the likelihood of children living in households that use iodized salt.

12.7.3 Deworming

Certain types of intestinal parasites can cause anemia. Periodic deworming for organisms such as helminthes can improve children's micronutrient status. In the 2012 TjDHS, mothers were asked if their children under age 5 had taken deworming medication in the six months prior to the survey. At the national level, 50 percent of children age 6-59 months received deworming medication in this period (Table 12.7). The percentage of children who received deworming medication increases with age, ranging from 17 percent of children age 6-8 months to 60 percent of children age 36-59 months. Breastfed children are less likely than nonbreastfed children to receive deworming medication (32 percent and 57 percent, respectively). There is little difference between urban and rural areas, but the coverage of deworming medication varies across regions, ranging from 40 percent in GBAO and Khatlon regions to 57 percent in Sughd and DRS regions. Mother's education and household wealth have positive associations with children's likelihood of receiving deworming medication.

12.8 HOUSEHOLD IODIZED SALT CONSUMPTION

Salt used in the household is the most common vehicle for iodine fortification to prevent the public health concerns of iodine deficiency disorders (IDD). Since 1997, the government and donor community have addressed IDD through the National Programme for Elimination of IDD, which requires that salt be iodized to 45 parts per million (ppm) (SCS, 2007). A subsequent law (№ 344) regulating the production, distribution, and consumption of iodized salt in Tajikistan was adopted in 2002 (SCS, 2007). According to the World Health Organization, a country's salt iodization program is considered to be on a good track to eliminate iodine deficiency when 90 percent of households use iodized salt.

Table 12.8 shows the proportion of households with iodized salt according to background characteristics. Overall, salt was tested in 97 percent of households and 84 percent of the tested households were found to use salt with at least some iodine. However, although the presence of any iodine is most commonly accepted to define iodized salt, the test kits allow classification as to whether the salt contains at least 15 parts per million (ppm) of iodine, which constitutes the adequate amount of iodization. Using this criterion, only 39 percent of the tested households had adequately iodized salt. These results show some improvement in use of iodized salt, from 69 percent of households in 2005 to 83 percent in 2009 and to 84 percent in 2012. However, the proportion of households using adequately iodized salt has declined slightly, from 46 percent in 2005 to 39 percent in 2012 (SCS, 2007; MOH and UNICEF, 2010). The decrease is substantially larger when the 2012 TjDHS data are compared with the data from the 2009 Micronutrient Status Survey (MSST), when 62 percent of households were using salt containing 15 parts per million or more of iodine, indicating a 37 percent decrease in the proportion of households using adequately iodized during the past 3 years between the surveys (MOH and UNICEF, 2010). However, it should be noted, that in the 2012 TjDHS survey, a test kit for salt fortified with potassium iodate was used to test the salt for the presence of iodine, while in the 2009 MSST two different kits were used, one for salt fortified with potassium iodate and the second for salt fortified with potassium iodide.

Looking at the proportion of households using salt with at least some iodine, urban households are more likely to consume iodized salt than rural households (88 percent and 83 percent, respectively). Dushanbe and Sughd regions have the highest proportion of households consuming iodized salt (90 percent), while DRS region has the lowest (75 percent). The percentage of households with iodized salt shows some tendency to increase with wealth. The wealthiest households are twice as likely to use adequately iodized salt as the poorest households (52 percent and 25 percent, respectively).

Table 12.8 Presence of iodized salt in household

Among all households, percentage of households tested for iodine content and percentage of households with no salt; and among households with salt tested, the percent distribution by level of iodine in salt (parts per million or ppm) and percentage with iodized salt, according to background characteristics, Tajikistan 2012

	Among all households, the percentage:			Among households with tested salt:					
Background characteristic	With salt tested	With no salt in the household	Number of households	None (0 ppm)	Inadequate (<15 ppm)	Adequate (15+ ppm)	Total	Percentage with iodized salt	Number of households
Residence									
Urban	97.3	2.7	1,976	12.5	37.5	50.0	100.0	87.5	1,922
Rural	97.2	2.8	4,456	17.4	48.7	33.8	100.0	82.6	4,330
Region									
Dushanbe	96.7	3.3	756	9.8	40.3	49.8	100.0	90.2	732
GBAO	96.4	3.6	160	22.0	47.4	30.6	100.0	78.0	154
Sughd	98.6	1.4	2,069	10.5	31.3	58.2	100.0	89.5	2,039
DRS	97.8	2.2	1,433	25.1	53.5	21.4	100.0	74.9	1,402
Khatlon	95.6	4.4	2,014	16.9	55.8	27.4	100.0	83.1	1,926
FTF districts	97.4	2.6	800	21.9	55.4	22.7	100.0	78.1	779
Wealth quintile									
Lowest	97.1	2.9	1,207	17.5	57.8	24.7	100.0	82.5	1,172
Second	95.9	4.1	1,132	16.5	53.3	30.2	100.0	83.5	1,085
Middle	97.2	2.8	1,158	18.0	49.1	32.8	100.0	82.0	1,125
Fourth	98.1	1.9	1,271	16.3	36.0	47.7	100.0	83.7	1,247
Highest	97.6	2.4	1,664	12.7	35.3	52.0	100.0	87.3	1,624
Total	97.2	2.8	6,432	15.9	45.3	38.8	100.0	84.1	6,252

12.9 NUTRITIONAL STATUS OF WOMEN

Low pre-pregnancy body mass index (BMI) and short stature of women are known risk factors for poor maternal and birth outcomes. In developing countries, maternal underweight is a leading risk factor for preventable death and diseases. The prevalence of overweight adults is also a growing concern in developing countries. Overweight individuals are predisposed to a wide range of health problems such as diabetes and heart disease as well as poor birth outcomes for women. In many countries, though, chronic energy deficiency, characterized by a BMI of less than 18.5 among adults remains the predominant problem, leading to low work productivity and reduced resistance to illness.

The 2012 TjDHS included measuring the height and weight of women age 15-49. The data are used to derive two measures of nutritional status: height and body mass index (BMI). Given the relationship between maternal stature and pelvic size, women's height can be useful in predicting the risk of difficulties in delivery. The risk of giving birth to low-weight babies is also higher among women of small stature. The cut-off point at which mothers are considered at risk because of short stature normally falls between 140 and 150 centimeters. The BMI is used to measure thinness or obesity. It is defined as weight in kilograms divided by height in meters squared (kg/m^2). A BMI of less than 18.5 is used to define thinness or acute undernutrition. A BMI of 25 or above usually indicates overweight, and a BMI of 30 or above indicates obesity.

Table 12.9 presents the height analysis for 9,630 women age 15-49, while the analysis of BMI is based on 8,800 women. The table excludes women for whom there was no information on height and/or weight and women for whom a BMI could not be estimated because they were pregnant or had given birth in the preceding two months.

Overall, only 1 percent of women fall below the cut-off of 145 centimeters in height. The proportion below the cut-off for women's height is only very slightly higher among women age 15-19 and among those in the lowest education group and wealth quintile.

Table 12.9 Nutritional status of women

Among women age 15-49, the percentage with height under 145 cm, mean Body Mass Index (BMI), and the percentage with specific BMI levels, by background characteristics, Tajikistan 2012

	Height		Body Mass Index[1]								
Background characteristic	Percent-age below 145 cm	Number of women	Mean Body Mass Index (BMI)	18.5-24.9 (Total normal)	<18.5 (Total thin)	17.0-18.4 (Mildly thin)	<17 (Moder-ately and severely thin)	>=25.0 (Total over-weight or obese)	25.0-29.9 (Over-weight)	>=30.0 (Obese)	Number of women
Age											
15-19	2.7	2,005	20.7	72.2	20.8	14.2	6.6	7.0	6.3	0.7	1,919
20-29	0.9	3,552	22.1	70.5	12.0	9.0	3.0	17.5	14.0	3.4	2,936
30-39	0.9	2,210	24.7	52.4	5.8	4.3	1.5	41.8	29.1	12.7	2,092
40-49	0.8	1,863	26.6	37.8	3.4	2.0	1.3	58.8	34.1	24.8	1,853
Residence											
Urban	1.3	2,404	24.1	52.1	10.2	7.1	3.1	37.7	23.8	14.0	2,233
Rural	1.2	7,226	23.1	62.3	10.8	7.7	3.1	26.9	18.9	8.0	6,567
Region											
Dushanbe	0.5	876	24.5	50.0	9.6	7.0	2.5	40.4	24.4	16.0	820
GBAO	1.2	218	22.2	64.8	13.3	9.1	4.2	22.0	17.2	4.8	202
Sughd	1.5	2,865	23.1	64.0	10.0	7.1	2.9	26.0	19.0	7.0	2,651
DRS	1.2	2,230	23.7	57.3	10.0	7.3	2.8	32.7	20.6	12.1	2,035
Khatlon	1.3	3,441	23.1	59.9	11.6	8.1	3.5	28.5	19.9	8.6	3,091
FTF districts	1.0	1,364	23.5	56.4	11.5	7.8	3.7	32.1	21.6	10.5	1,230
Education											
None/primary	3.3	566	22.9	64.9	11.4	7.8	3.7	23.7	15.9	7.9	495
General basic	1.8	3,338	22.5	63.8	14.2	10.2	4.0	22.0	16.0	6.0	2,980
General secondary	0.8	4,463	23.9	57.2	8.7	6.0	2.6	34.1	22.4	11.8	4,152
Professional primary/ middle	0.4	645	24.3	51.5	9.5	6.9	2.6	39.0	24.9	14.1	594
Higher	0.8	618	23.7	60.1	7.0	5.4	1.6	32.9	24.6	8.4	579
Wealth quintile											
Lowest	2.2	1,874	22.5	66.1	12.0	8.4	3.6	21.9	16.7	5.3	1,737
Second	1.1	1,909	23.2	62.6	10.2	7.9	2.3	27.2	18.3	8.9	1,703
Middle	1.0	1,900	23.4	59.8	10.1	7.0	3.1	30.1	21.1	9.0	1,726
Fourth	1.1	1,966	23.7	56.6	11.3	8.0	3.2	32.1	20.6	11.5	1,781
Highest	0.9	1,980	24.0	53.9	9.7	6.5	3.1	36.4	23.8	12.6	1,852
Total	1.3	9,630	23.4	59.7	10.6	7.5	3.1	29.7	20.2	9.5	8,800

Note: The Body Mass Index (BMI) is expressed as the ratio of weight in kilograms to the square of height in meters (kg/m2).
[1] Excludes pregnant women and women with a birth in the preceding 2 months.

The mean BMI for women age 15-49 is 23.4 (Table 12.9), which falls in the normal BMI classification. Six in ten women have a normal BMI, 11 percent are undernourished or thin (BMI less than 18.5), and 30 percent are overweight or obese (BMI 25 or higher). Variations are apparent by background characteristics. Women age 15-19 are more likely to be thin or undernourished (21 percent) than women in other age cohorts (3-12 percent). On the other hand, the proportion of women who are overweight increases with age; almost three in ten women age 40-49 are overweight, and another one-quarter are obese. Urban women are more likely to be overweight or obese than rural women (38 percent and 27 percent, respectively). By region, the proportion of undernourished women does not vary much; however, the proportion of overweight or obese women ranges from 22 percent in GBAO region to 40 percent in Dushanbe. There is no clear relationship between women's nutritional status and education. However, as household wealth rises, the proportion of women who are overweight increases.

Compared with data from the 2009 MSST, the percentage of nonpregnant women age 15-49 who are thin (BMI <18.5) has increased from 7 percent in 2009 to 11 percent in 2012; the percentage of women who are overweight or obese (BMI >25) has increased somewhat, from 28 percent in 2009 to 30 percent in 2012 (MOH and UNICEF, 2010).

12.10 MICRONUTRIENT INTAKE AMONG MOTHERS

Adequate micronutrient intake by women has important benefits for both women and their children. Breastfeeding children benefit from micronutrient supplementation that mothers receive, especially vitamin A. Iron supplementation during pregnancy can reduce the likelihood of anemia. Finally, iodine deficiency is related to a number of adverse pregnancy outcomes, including abortion and stillbirth, as well as fetal brain damage and congenital malformation.

Vitamin A deficiency (VAD) can be prevented through the provision of a high-dose (200,000 IU) vitamin A capsule in the first six to eight weeks after delivery (when women are considered not at risk of being pregnant). Due to possible adverse effects (birth defects) resulting from high doses of vitamin A, pregnant women should not be given a high-dose vitamin A supplement. The 2012 TjDHS collected data on use of vitamin A supplements among women age 15-49 with a child born in the past five years.

Table 12.10 presents information on the percentage of women who received a dose of vitamin A during the first two months after the birth of their most recent child in the five years before the survey. Overall, 27 percent of women age 15-49 received a postpartum vitamin A dose. This proportion tends to decline as age of the woman increases. The percentage of women who received a postpartum vitamin A dose is highest in GBAO region (55 percent) and lowest in DRS region (22 percent). Postpartum vitamin A supplementation increases steadily with women's educational level, ranging from 17 percent of women with no education or only primary education to 39 percent of women with higher than secondary education. Vitamin A supplementation is also associated with household wealth, increasing from 20 percent among mothers in the lowest wealth quintile to 32 percent among mothers in the fourth quintile. It should be noted, that since 2008, the MOH guidelines no longer support postpartum vitamin A supplementation during the first six to eight weeks after delivery.

As for iron supplementation, survey results indicate that only 30 percent of women took iron tablets or syrup during pregnancy for their most recent birth in the five years before the survey. Moreover, most of the women who did take iron supplements did so for fewer than 60 days; less than one percent of women said they took iron supplements for 90 days or more. Iron supplementation during pregnancy is more common among younger women, women in GBAO region, and those with more education and wealth.

Table 12.10 also shows that 83 percent of women age 15-49 with a child born in the past five years lives in a household with iodized salt. Urban women are more likely to live in households that use iodized salt than their rural counterparts (87 percent and 82 percent, respectively). Dushanbe has the highest proportion of recent mothers living in households with iodized salt (90 percent), while DRS region has the lowest percentage (74 percent). The proportion of women living in households with iodized salt is positively related to educational level but shows little relationship with household wealth status.

Table 12.10 Micronutrient intake among mothers

Among women age 15-49 with a child born in the past five years, the percentage who received a vitamin A dose in the first two months after the birth of the last child, the percent distribution by number of days they took iron tablets or syrup during the pregnancy of the last child, and among women age 15-49 with a child born in the past five years and who live in households that were tested for iodized salt, the percentage who live in households with iodized salt, by background characteristics, Tajikistan 2012

	Among women with a child born in the past five years:								Among women with a child born in the last five years, who live in households that were tested for iodized salt:	
		Number of days women took iron tablets or syrup during pregnancy of last birth								
Background characteristic	Percentage who received vitamin A dose post-partum[1]	None	<60	60-89	90+	Don't know/ missing	Total	Number of women	Percentage living in households with iodized salt[2]	Number of women
Age										
15-19	32.0	57.9	31.6	1.6	0.0	8.8	100.0	78	76.1	78
20-29	26.5	64.5	29.0	1.5	0.9	4.1	100.0	2,179	83.4	2,111
30-39	27.3	64.5	27.2	0.9	1.0	6.4	100.0	1,124	83.8	1,098
40-49	25.1	74.0	21.5	0.0	0.6	3.9	100.0	221	81.6	201
Residence										
Urban	27.7	62.8	26.9	1.9	0.3	8.1	100.0	802	87.3	778
Rural	26.6	65.5	28.4	1.0	1.0	4.0	100.0	2,799	82.1	2,710
Region										
Dushanbe	26.4	66.3	24.4	0.9	0.3	8.1	100.0	295	90.4	288
GBAO	54.7	43.2	55.6	0.6	0.0	0.6	100.0	67	80.2	66
Sughd	29.4	59.1	27.9	3.7	1.4	7.9	100.0	1,000	88.2	988
DRS	21.9	73.5	22.0	0.1	0.5	3.9	100.0	887	73.6	867
Khatlon	26.8	64.4	31.6	0.2	0.9	2.9	100.0	1,351	84.5	1,279
FTF districts	31.4	69.3	26.9	0.4	1.6	1.7	100.0	518	79.3	505
Education										
None/primary	16.7	72.7	23.3	1.1	0.5	2.4	100.0	272	78.0	268
General basic	23.7	67.3	26.6	0.8	1.0	4.4	100.0	1,400	79.7	1,346
General secondary	29.5	66.1	26.7	1.4	0.7	5.1	100.0	1,530	86.9	1,482
Professional primary/ middle	30.2	52.2	41.3	2.1	1.4	2.9	100.0	210	81.0	207
Higher	38.6	40.4	42.3	2.7	1.4	13.3	100.0	189	90.1	186
Wealth quintile										
Lowest	19.5	72.7	23.3	0.0	0.4	3.7	100.0	731	82.9	708
Second	25.5	69.6	25.5	0.8	0.5	3.6	100.0	757	82.5	725
Middle	26.9	63.2	28.8	1.3	2.3	4.4	100.0	743	83.6	719
Fourth	31.5	57.0	35.3	2.1	0.5	5.1	100.0	718	82.3	699
Highest	31.3	61.5	27.7	2.0	0.6	8.2	100.0	652	85.3	638
Total	26.8	64.9	28.1	1.2	0.9	4.9	100.0	3,601	83.3	3,488

[1] In the first two months after delivery of last birth.
[2] Excludes women in households where salt was not tested.

HIV/AIDS-RELATED KNOWLEDGE, ATTITUDES, AND BEHAVIOR

13

Key Findings

- Only 62 percent of women age 15-49 have heard of AIDS, but this percentage represents an increase since 2005 when only 42 percent of women had heard of AIDS. Slightly more than one-third of women know that using condoms can reduce the risk of getting AIDS, and 43 percent say that staying faithful to one partner can reduce the chance of getting AIDS.
- Only 11 percent of women age 15-49 have comprehensive knowledge about HIV/AIDS.
- Survey data show considerable stigma towards people living with HIV among women age 15-49 who have heard about AIDS. Only about one-quarter each of women would buy fresh vegetables from a shopkeeper with the AIDS virus and think that a female teacher with the AIDS virus but who is not sick should be allowed to continue teaching. A slightly higher percentage of women (42 percent) say they would be willing to care in their own households for a relative who is sick with AIDS.
- Only 15 percent of women age 15-49 have ever been tested for HIV.
- A majority of women think that a woman is justified in refusing to have sex with her husband if she knows he has sex with other women, and they also think a woman is justified in asking her husband to use a condom if she knows that he has a sexually transmitted infection.

Acquired immune deficiency syndrome (AIDS) is an illness caused by the human immunodeficiency virus (HIV). AIDS was first recognized internationally in 1981. Epidemiological studies have since identified the main routes of transmission of HIV to be unsafe sexual intercourse, intravenous injections with contaminated needles, unscreened or contaminated blood transfusions, and transmission from an infected mother to her child during pregnancy, delivery, or breastfeeding. HIV cannot be transmitted through food, water, insect vectors, or casual contact. HIV infection weakens the immune system and makes the body susceptible to and unable to recover from other opportunistic diseases. Secondary infections, if not adequately treated, can lead to death.

In Tajikistan, HIV prevalence is still low, with only 0.3 percent of the population age 15-49 estimated to be HIV-positive in 2011 (UNAIDS, 2013). Approximately 11,000 people in Tajikistan were living with HIV as of 2011 (UNAIDS, 2013). Nevertheless, the prevalence has been increasing, with a sharp rise in the number of injecting drug users, among whom the HIV epidemic is concentrated (AFEW, 2013). About 78 percent of HIV infection is registered among men and 22 percent among women. Although the majority of new HIV infections in Tajikistan are contracted through injection drug use (53 percent of people infected with HIV), about 30 percent of HIV infections occur from heterosexual contact (GOT, 2012). Heterosexual transmission is especially notable among women; in 2011, about 63 percent of HIV infections among women occurred via heterosexual contact. The number of women newly infected with HIV has tripled, increasing from 96 cases in 2009 to 282 cases in 2011 (GOT, 2012). High rates of migration and a high prevalence of sexually transmitted infections (STIs) also act as catalysts for the growing epidemic. Nonetheless, the government has committed to address these issues and has promoted educational programs as well as the distribution of condoms and clean injecting equipment to vulnerable groups (AFEW, 2013). The government program for 2011-2015 focuses on both HIV prevention and

reduction of stigma against those living with the disease (Central Asia Newswire, 2010). Emphasis on use of prophylaxis to reduce the spread of the disease as well as to provide access to antiretroviral treatment for those infected are featured in the program (Central Asia Newswire, 2010).

This chapter presents current levels of knowledge and attitudes regarding HIV/AIDS prevention and transmission among women of reproductive age. This chapter also discusses self-reported prevalence of sexually transmitted infections (STIs) and symptoms.

13.1 KNOWLEDGE OF HIV/AIDS AND TRANSMISSION AND PREVENTION METHODS

13.1.1 Knowledge of AIDS

The 2012 TjDHS included a series of questions to gauge women's knowledge and attitudes about HIV and AIDS. All women age 15-49 were first asked if they had ever heard of AIDS. Those who had heard of AIDS were then asked about their knowledge of HIV transmission and prevention.

Table 13.1 shows that 62 percent of women have heard of AIDS. Awareness of AIDS is considerably lower among the youngest women, women who have never married, women from rural areas, and those with less education and less wealth. Women living in the DRS and Khatlon regions are substantially less likely to have heard of AIDS than women from the GBAO and Sughd regions. Awareness of AIDS falls below 50 percent among women in the DRS region, women age 15-19, and women with primary or no education or only a general basic education.

Table 13.1 Knowledge of AIDS

Percentage of women age 15-49 who have heard of AIDS, by background characteristics, Tajikistan 2012

Background characteristic	Has heard of AIDS	Number of women
Age		
15-24	51.2	3,963
15-19	43.3	2,013
20-24	59.3	1,950
25-29	64.3	1,609
30-39	70.9	2,217
40-49	70.2	1,866
Marital status		
Never married	47.9	2,648
Married/living together	66.6	6,504
Divorced/separated/widowed	67.9	504
Residence		
Urban	72.1	2,413
Rural	58.0	7,243
Region		
Dushanbe	64.4	881
GBAO	77.1	220
Sughd	77.6	2,872
DRS	46.1	2,240
Khatlon	56.5	3,444
Education		
None/primary	34.9	567
General basic	49.5	3,349
General secondary	65.3	4,474
Professional primary/middle	91.3	645
Higher	92.8	620
Wealth quintile		
Lowest	53.6	1,878
Second	53.6	1,913
Middle	57.5	1,904
Fourth	68.1	1,971
Highest	74.0	1,989
Total	61.6	9,656

Note: Knowledge of AIDS among never married is not disaggregated by ever having had sex/ never having had sex because only one never married woman reported ever having had sexual intercourse.

Women's knowledge of AIDS has markedly improved during the last seven years, from 42 percent in 2005 (SCS, 2007) to 62 percent in 2012; nevertheless, it remains a concern that nearly four in ten women in Tajikistan have not heard of AIDS.

13.1.2 Knowledge of HIV Prevention Methods

HIV prevention programs focus their messages and efforts on two important aspects of behavior: (1) using condoms and (2) staying faithful to one uninfected partner. To ascertain whether programs have effectively communicated these messages, respondents were asked specific questions about whether it is possible to reduce the chance of getting the AIDS virus by using a condom at every sexual encounter and by limiting sexual intercourse to one uninfected partner.

Table 13.2 and Figure 13.1 show that 43 percent of women are aware that the chance of getting the AIDS virus can be reduced by limiting sex to one uninfected partner who has no other partners, 36 percent know about using condoms at every sexual intercourse, and 33 percent are aware of both of these means of reducing the risk of HIV transmission.

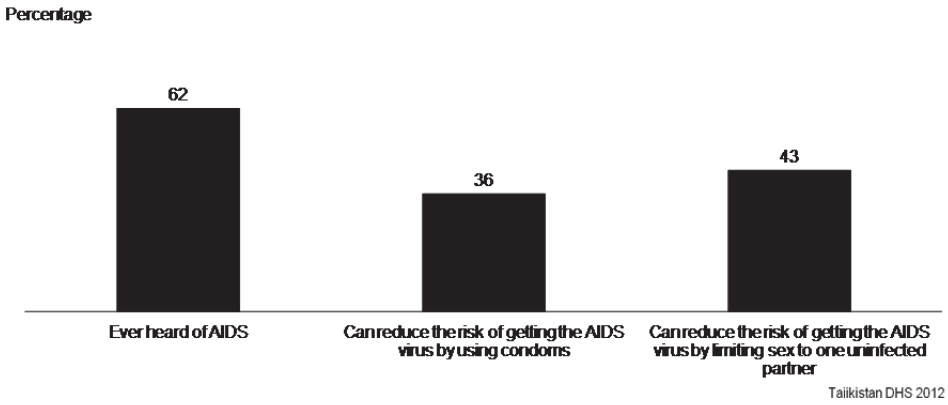
Table 13.2 Knowledge of HIV prevention methods

Percentage of women age 15-49 who, in response to prompted questions, say that people can reduce the risk of getting the AIDS virus (1) by using condoms every time they have sexual intercourse, (2) by having one sex partner who is not infected and who has no other partners, and (3) by both using condoms and limiting intercourse to one uninfected partner who has no other partners, by background characteristics, Tajikistan 2012

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
Age				
15-24	28.3	33.4	25.1	3,963
15-19	21.3	25.2	18.6	2,013
20-24	35.5	41.8	31.8	1,950
25-29	40.2	46.1	36.5	1,609
30-39	44.2	50.8	40.0	2,217
40-49	41.1	51.6	37.6	1,866
Marital status				
Never married	24.1	29.6	21.6	2,648
Married/living together	41.1	47.9	37.2	6,504
Divorced/separated/widowed	40.1	50.7	36.4	504
Residence				
Urban	42.1	49.7	37.1	2,413
Rural	34.5	40.8	31.4	7,243
Region				
Dushanbe	37.3	43.1	33.4	881
GBAO	47.3	67.7	44.1	220
Sughd	44.9	51.5	39.4	2,872
DRS	27.7	33.0	26.3	2,240
Khatlon	34.1	40.8	30.8	3,444
Education				
None/primary	18.5	22.8	17.1	567
General basic	26.7	31.4	23.4	3,349
General secondary	38.1	45.4	34.6	4,474
Professional primary/middle	60.2	69.7	55.0	645
Higher	68.2	78.8	62.9	620
Wealth quintile				
Lowest	30.0	36.8	27.4	1,878
Second	28.7	36.4	25.7	1,913
Middle	35.1	41.1	32.1	1,904
Fourth	43.3	48.9	39.2	1,971
Highest	44.2	51.2	39.3	1,989
Total	36.4	43.0	32.9	9,656

[1] Using condoms every time they have sexual intercourse.
[2] Partner who has no other partners.

Figure 13.1
Knowledge about AIDS and HIV prevention methods among women age 15-49, Tajikistan 2012



Younger and never-married women are less likely than older women and ever-married women to know ways to avoid getting the HIV virus. Urban women are more likely to be aware of safe sexual practices than rural women. Looking at regional patterns, knowledge about safe sex practices is generally lowest in the DRS region and highest in the GBAO region.

There is a strong positive relationship between the respondent's educational background and her knowledge of ways to prevent getting HIV. For example, 23 percent of women with general basic education say that the risk of getting the HIV virus can be reduced by using condoms *and* limiting sex to one uninfected partner, compared with 63 percent of women with higher education. Knowledge of ways to prevent getting HIV is also positively related to wealth quintile, although knowledge increases much less dramatically with wealth than with education.

Overall, women's knowledge of HIV prevention methods at the national level has improved substantially during the last seven years when compared with the results of the 2005 MICS, when condom use and staying faithful to one partner who had no other partners were individual behaviors cited by 21 percent and 25 percent of women, respectively (SCS, 2007).

13.1.3 Comprehensive Knowledge about AIDS

As part of the effort to assess HIV and AIDS knowledge, the 2012 TjDHS collected information on common misconceptions about HIV transmission. Respondents were asked whether they think it is possible for a healthy-looking person to have HIV, and also whether they believe HIV can be transmitted through mosquito bites, by kissing a person who has HIV, or by sharing food with a person who has HIV. Comprehensive knowledge is defined as follows: (1) knowing that consistent condom use and having just one faithful partner can reduce the chance of getting the AIDS virus, (2) knowing that a healthy-looking person can have the AIDS virus, and (3) rejecting the two most common local misconceptions about HIV transmission in Tajikistan: that HIV can be transmitted by mosquito bites and that HIV can be transmitted by kissing a person who has HIV.

The data presented in Table 13.3 indicate that many women in Tajikistan lack accurate knowledge about the ways in which the AIDS virus can and cannot be transmitted. Only 30 percent of women know that a healthy-looking person can have HIV, and 32 percent know that HIV cannot be transmitted by mosquito bites (Figure 13.2). Thirty-one percent of women know that HIV cannot be transmitted by kissing someone infected with HIV, and 36 percent correctly believe that a person cannot become infected by sharing food with a person who has HIV.

Table 13.3 Comprehensive knowledge about AIDS

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 transmission or prevention of the AIDS virus, and the percentage with a comprehensive knowledge about AIDS by background characteristics, Tajikistan 2012

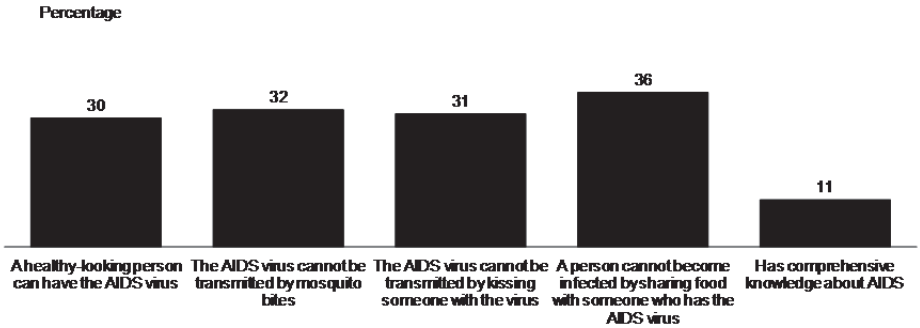
Background characteristic	Percentage of women who say that: A healthy-looking person can have the AIDS virus	The AIDS virus cannot be transmitted by mosquito bites	The AIDS virus cannot be transmitted by kissing someone infected with the AIDS virus	A person cannot become infected by sharing food with a person who has the AIDS virus	Percentage who say that a healthy-looking person can have the AIDS virus and who reject the two most common local miscon-ceptions[1]	Percentage with a comprehensive knowledge about AIDS[2]	Number of women
Age							
15-24	24.2	27.3	25.2	29.3	12.4	8.7	3,963
15-19	19.7	22.7	20.2	23.9	9.7	6.5	2,013
20-24	28.8	32.0	30.3	35.0	15.2	11.0	1,950
25-29	30.2	33.3	33.8	37.7	15.6	12.0	1,609
30-39	37.5	35.8	37.4	42.6	19.0	14.0	2,217
40-49	35.5	35.9	34.5	38.9	17.5	13.0	1,866
Marital status							
Never married	22.5	25.6	23.7	27.9	11.7	7.8	2,648
Married/living together	33.3	34.0	34.0	38.4	16.8	12.6	6,504
Divorced/separated/widowed	35.8	37.6	35.3	41.0	18.3	13.4	504
Residence							
Urban	42.0	39.9	39.8	47.2	21.8	14.3	2,413
Rural	26.6	29.3	28.3	31.8	13.3	10.3	7,243
Region							
Dushanbe	36.3	36.8	34.6	41.8	19.7	12.8	881
GBAO	49.2	42.4	39.0	45.4	22.3	16.7	220
Sughd	42.0	41.4	41.7	48.8	20.8	14.2	2,872
DRS	18.5	22.7	19.6	23.1	8.5	7.7	2,240
Khatlon	25.9	28.0	28.6	30.6	14.0	10.5	3,444
Education							
None/primary	13.9	16.6	15.8	15.0	5.6	4.4	567
General basic	20.7	22.4	21.3	24.8	9.2	6.3	3,349
General secondary	31.6	33.4	32.5	37.2	15.8	11.7	4,474
Professional primary/middle	55.3	52.8	57.3	62.4	30.6	21.3	645
Higher	64.4	64.4	62.0	73.9	40.3	31.3	620
Wealth quintile							
Lowest	23.2	28.1	27.3	28.9	12.3	8.5	1,878
Second	22.1	26.1	25.0	27.2	10.2	7.7	1,913
Middle	26.8	30.7	27.0	31.8	13.7	10.7	1,904
Fourth	37.0	34.6	37.2	41.3	18.9	14.2	1,971
Highest	42.4	39.6	39.0	48.2	21.8	15.1	1,989
Total	30.4	31.9	31.2	35.6	15.5	11.3	9,656

[1] Two most common local misconceptions: kissing someone infected with AIDS and mosquito bites.

[2] Comprehensive knowledge means knowing that consistent use of condoms during sexual intercourse and having just one uninfected faithful partner can reduce the chance of getting the AIDS virus, knowing that a healthy-looking person can have the AIDS virus, and rejecting the two most common local misconceptions about transmission or prevention of the AIDS virus.

Table 13.3 also shows that only 11 percent of women have comprehensive knowledge about AIDS. Comprehensive knowledge about AIDS is slightly higher among urban women than rural women. Among regions, comprehensive AIDS knowledge is lowest in DRS region (8 percent) and highest in GBAO region (17 percent). Comprehensive knowledge about AIDS increases with education, rising from 4 percent among women with no education or only primary education to 31 percent among women with higher than secondary education. Comprehensive knowledge about AIDS also increases with household wealth, although not to the extent that it does with higher education.

Figure 13.2
Knowledge about AIDS transmission, Tajikistan 2012



Note: Comprehensive knowledge means knowing that a healthy-looking person can have the AIDS virus, knowing that consistent use of condoms and having just one uninfected partner can reduce the chance of getting the AIDS virus, and rejecting the two most common local misconceptions about transmission or prevention of the AIDS virus.

Tajikistan DHS 2012

Despite the low level of knowledge about AIDS and its means of transmission, there has been improvement since 2005. The proportion of women age 15-49 who know that a healthy-looking person can have the AIDS virus has increased from 17 percent in 2005 to 30 percent in 2012. Similarly, the proportion who know that the AIDS virus cannot be transmitted by mosquito bites has increased from 21 percent in 2005 to 32 percent in 2012. Also, the proportion who know that a person cannot become infected by sharing food with someone who has the AIDS virus has increased from 18 percent in 2005 to 36 percent in 2012 (SCS, 2007).

13.2 KNOWLEDGE OF PREVENTION OF MOTHER-TO-CHILD TRANSMISSION OF HIV

Knowledge about how to prevent mother-to-child transmission (MTCT) of HIV and how to use antiretroviral medication before delivery to reduce transmission is critical. To assess MTCT knowledge, women age 15-49 were asked whether HIV can be transmitted from a mother to a child through breastfeeding and whether a mother can reduce the chance of transmitting HIV to her child during pregnancy and delivery by taking special drugs.

Table 13.4 shows that 38 percent of women know that HIV can be transmitted through breastfeeding, and 23 percent of women know that the risk of MTCT can be reduced by taking special drugs during pregnancy; only 18 percent of women know both of these facts. Knowledge of MTCT increases with age of the woman, and is slightly higher among urban than rural women. The percentage of women who know about MTCT is highest among women in the GBAO and Sughd regions and among women in the higher wealth quintiles. It also increases with education of women.

The proportion of women age 15-49 who know that HIV can be transmitted during breastfeeding has increased from 30 percent in 2005 to 38 percent in 2012 (SCS, 2007).

Table 13.4 Knowledge of prevention of mother-to-child transmission of HIV

Percentage of women age 15-49 who know that HIV can be transmitted from mother to child by breastfeeding and that the risk of mother-to-child transmission (MTCT) of HIV can be reduced by the mother taking special drugs during pregnancy, by background characteristics, Tajikistan 2012

	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
Age				
15-24	28.2	17.5	12.4	3,963
15-19	21.7	13.1	9.1	2,013
20-24	35.0	22.0	15.9	1,950
25-29	40.4	25.6	19.9	1,609
30-39	45.0	27.0	21.7	2,217
40-49	46.0	28.5	23.1	1,866
Marital status				
Never married	24.1	14.4	9.8	2,648
Married/living together	42.4	26.3	20.8	6,504
Divorced/separated/widowed	44.7	28.4	22.5	504
Currently pregnant				
Pregnant	38.2	23.4	16.9	734
Not pregnant or not sure	37.5	23.1	18.0	8,922
Residence				
Urban	45.5	26.2	21.7	2,413
Rural	34.9	22.1	16.6	7,243
Region				
Dushanbe	36.4	16.2	15.0	881
GBAO	69.5	21.6	20.4	220
Sughd	52.4	29.1	25.0	2,872
DRS	28.6	19.0	18.2	2,240
Khatlon	29.2	22.7	12.3	3,444
Education				
None/primary	19.4	12.8	9.3	567
General basic	27.1	18.1	13.0	3,349
General secondary	39.2	23.6	18.3	4,474
Professional primary/middle	67.5	35.2	29.2	645
Higher	66.6	44.1	37.1	620
Wealth quintile				
Lowest	32.4	22.7	14.6	1,878
Second	29.3	18.6	11.8	1,913
Middle	33.3	19.8	15.8	1,904
Fourth	43.5	25.3	21.5	1,971
Highest	48.5	28.9	25.2	1,989
Total	37.5	23.1	17.9	9,656

13.3 ATTITUDES TOWARDS PEOPLE LIVING WITH HIV

Widespread stigma and discrimination in a population can adversely affect both people's willingness to be tested and adherence to antiretroviral therapy. Reduction of stigma and discrimination in a population is, thus, an important indicator of the success of programs targeting HIV and AIDS prevention and control.

To assess the level of stigma, women interviewed in the TjDHS who had heard of AIDS were asked if they would be willing to care for a family member sick with AIDS in their own households, if they would be willing to buy fresh vegetables from a shopkeeper who had the AIDS virus, if they thought a female teacher who has the AIDS virus but is not sick should be allowed to continue teaching, and if they would want to keep a family member's HIV status secret. Table 13.5 shows results.

The data indicate that there is considerable stigma among women in Tajikistan towards people who are living with HIV. Only 42 percent of women age 15-49 who have heard of AIDS say they would be willing to care in their own households for a relative who is sick with AIDS. Only about one-quarter of women would be willing to buy fresh vegetables from a shopkeeper who has the AIDS virus or believe that a female teacher who has the AIDS virus but is not sick should be allowed to continue teaching. Of the four attitudes asked about in the survey, the largest proportion of respondents expressed openness about divulging if a family member got infected with HIV; 57 percent of women said they would not want to keep this a secret.

Table 13.5 Accepting attitudes toward those living with HIV/AIDS

Among women age 15-49 who have heard of AIDS, percentage expressing specific accepting attitudes toward people with HIV/AIDS, by background characteristics, Tajikistan 2012

	Percentage of women who:					
Background characteristic	Are willing to care for a family member with AIDS in the respondent's home	Would buy fresh vegetables from shopkeeper who has the AIDS virus	Say that a female teacher who has 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 acceptance attitudes on all four indicators	Number of women who have heard of AIDS
Age						
15-24	42.5	28.9	26.5	55.3	6.6	2,028
15-19	41.2	28.3	27.4	53.1	6.7	871
20-24	43.5	29.4	25.8	57.0	6.5	1,156
25-29	42.5	28.1	26.1	57.5	6.6	1,034
30-39	41.1	26.2	25.3	57.7	4.9	1,572
40-49	42.9	24.6	24.4	58.3	5.1	1,309
Marital status						
Never married	42.5	29.7	29.4	54.2	6.6	1,269
Married/living together	41.9	26.2	24.1	57.7	5.5	4,332
Divorced/separated/widowed	45.6	29.1	31.6	57.9	6.5	342
Residence						
Urban	44.5	32.6	35.1	53.0	6.0	1,740
Rural	41.3	24.8	21.7	58.6	5.7	4,204
Region						
Dushanbe	36.0	31.0	36.6	46.2	4.1	567
GBAO	54.8	26.9	28.5	54.4	10.3	169
Sughd	39.2	26.5	22.3	49.1	1.3	2,227
DRS	40.6	13.9	13.9	65.7	2.6	1,033
Khatlon	47.2	33.7	32.3	64.7	12.7	1,947
Education						
None/primary	38.3	21.7	20.7	57.7	6.0	198
General basic	38.4	20.9	21.3	58.3	5.6	1,658
General secondary	40.4	26.7	22.3	59.1	5.2	2,922
Professional primary/middle	48.5	31.9	34.6	51.8	6.7	589
Higher	57.2	43.8	48.0	47.3	8.6	576
Wealth quintile						
Lowest	40.8	27.1	22.4	60.5	7.5	1,007
Second	43.1	25.3	24.8	61.1	7.2	1,026
Middle	39.1	25.4	21.5	61.7	5.6	1,096
Fourth	44.8	26.1	24.9	54.7	5.0	1,343
Highest	42.5	30.5	32.3	50.2	4.6	1,471
Total	42.2	27.1	25.7	57.0	5.8	5,943

Higher education and urban residence are generally associated with more accepting attitudes towards non-relatives who are HIV-positive and with greater willingness to care for family members with AIDS in their own home. For instance, the percentage of women expressing accepting attitudes towards a female teacher who is HIV-positive but not sick is 35 percent among urban women compared with 22 percent among rural women; it is 21-22 percent among women with general secondary or lower levels of education, compared with 48 percent among those with higher education. On the other hand, among women residing in rural areas, those in households in the lower to middle wealth quintiles, and those with general secondary education or less are generally more likely to say that they would not want to keep secret that a family member is HIV positive.

The percentage expressing acceptance on all four measures is very low—only 6 percent. Differentials in the proportion of women who express acceptance on all four indicators are small, showing almost no relationship with education and only a slightly negative relationship with wealth quintile. Women in the Sughd region are the least likely to express acceptance on all four indicators, while those in the Khatlon region are the most likely.

Similar questions were asked of women in the 2005 MICS; however, data were tabulated to show negative attitudes, making comparisons with the 2012 TjDHS more difficult. Nevertheless, the data imply that attitudes have not changed much in the seven years between the surveys. In 2005, 5 percent of women disagreed with all four of the negative statements, which is roughly comparable to the 6 percent of women in 2012 who expressed acceptance of all four indicators in Table 13.5.

13.4 ATTITUDES TOWARD NEGOTIATING SAFE SEXUAL RELATIONS WITH HUSBANDS

Comprehensive knowledge about HIV trans-mission and ways to prevent it are basic prerequisites for HIV prevention. Translating knowledge into behavior, however, depends on a number of individual, social, and contextual factors. One of the important determinants of practicing safer sex is control over one's own sexuality. Knowledge about HIV transmission and ways to prevent it are of little use if women feel powerless to negotiate safer sex practices with their husbands. In an effort to assess a woman's ability to negotiate safer sex, the 2012 TjDHS asked women if they think that a wife is justified in refusing to have sex with her husband when she knows he has sex with other women and if they think a wife is justified in asking that they use a condom if she knows her husband has a disease that can be transmitted through sexual contact.

Table 13.6 Attitudes toward negotiating safer sexual relations with husband

Percentage of women 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, Tajikistan 2012

Background characteristic	Woman is justified in: Refusing to have sexual intercourse with her husband if she knows he has sex with other women	Asking that they use a condom if she knows that her husband has an STI	Number of women
Age			
15-24	41.1	40.1	3,963
15-19	27.5	25.3	2,013
20-24	55.0	55.4	1,950
25-29	63.5	65.9	1,609
30-39	70.1	72.2	2,217
40-49	72.0	73.3	1,866
Marital status			
Never married	27.5	25.9	2,648
Married/living together	69.1	70.9	6,504
Divorced/separated/widowed	63.9	64.0	504
Residence			
Urban	61.4	63.0	2,413
Rural	56.1	56.6	7,243
Region			
Dushanbe	52.2	54.0	881
GBAO	55.4	61.2	220
Sughd	70.6	72.0	2,872
DRS	39.3	42.0	2,240
Khatlon	59.8	58.1	3,444
Education			
None/primary	39.2	38.6	567
General basic	47.7	48.0	3,349
General secondary	61.8	62.3	4,474
Professional primary/middle	74.3	77.4	645
Higher	77.8	81.7	620
Wealth quintile			
Lowest	54.4	52.0	1,878
Second	51.2	51.1	1,913
Middle	55.2	56.9	1,904
Fourth	63.1	66.1	1,971
Highest	62.9	64.4	1,989
Total	57.4	58.2	9,656

Table 13.6 shows that the majority of women agree with these statements; 57 percent agree that a woman is justified in refusing to have sex with her husband if she knows he has sex with other women, and 58 percent believe a woman is justified in asking her husband to use a condom if she knows that he has a sexually transmitted infection. Both proportions show a steady increase with age of the woman. For example, the proportion of women who believe a woman is justified in asking her husband to use a condom if she knows he has a sexually transmitted infection almost triples, from 25 percent of women age 15-19 to 73 percent of women age 40-49. There is also a steady increase in women's support

for their ability to negotiate safer sex as education levels increase. Women in urban areas and those who have ever been married are more likely than rural women and never-married women to agree that women are justified in pressing for safe sex. Women in the Sughd region are the most likely to support both statements relating to negotiating safe sex, while women in the DRS region are the least likely to agree. The proportions of women who support a woman's right to refuse sex and to ask for condom use generally increase with wealth, but the relationship is not strong.

In an effort to assess a married woman's ability to negotiate safer sex, the 2012 TjDHS asked currently married women if they can say no to their husband/partner if she does not want to have sexual intercourse; and whether she could ask her husband to use a condom if she wanted him to. The data show that nearly two-thirds of currently married women reported that they can say no to a husband/ partner if she does not want to have sexual intercourse (64 percent) but less than half of married women (45 percent) said that they could ask her husband to use a condom if she wanted him to. Currently married women in the Sughd region are the most certain that they can say no to sexual intercourse (77 percent) or ask him to use a condom (55 percent), while women living in the DRS and Khatlon regions are the least certain they can ask for either of these things (54 percent and 41 percent, respectively in DRS and 60 percent and 38 percent, respectively in the Khatlon region) (data not shown).

13.5 ATTITUDES TOWARDS CONDOM EDUCATION FOR YOUTH

Condom use is one of the main strategies for combating the spread of HIV. However, educating youth about condoms is sometimes controversial, with some saying it promotes early sexual experimentation. To gauge attitudes towards condom education, women interviewed in the 2012 TjDHS were asked if they thought that children age 12-14 should be taught about using condoms 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.

The table shows that only 21 percent of women age 18-49 agree that children age 12-14 should be taught about using condoms to avoid AIDS. Women age 18-19 are slightly less likely than women age 20 and above to agree. Urban women are more likely than rural residents to agree about condom education for youth. Residents of the GBAO and Dushanbe regions are the most likely to agree that children age 12-14 should be taught about using condoms to avoid AIDS (35 and 32 percent, respectively), while residents of the DRS region are by far the least likely to agree (10 percent). Support for teaching children about using condoms to avoid AIDS increases with wealth quintile and especially with education; almost half of women with higher education agree that children age 12-14 should be taught about condom use; this compares with only 11 percent of those with no education or only primary education.

Table 13.7 Adult support of education about condom use to prevent AIDS

Percentage of women age 18-49 who agree that children age 12-14 years should be taught about using a condom to avoid AIDS, by background characteristics, Tajikistan 2012

Background characteristic	Percentage who agree	Number of women
Age		
18-24	18.6	2,756
18-19	14.2	806
20-24	20.4	1,950
25-29	21.3	1,609
30-39	21.4	2,217
40-49	24.4	1,866
Marital status		
Never married	19.3	1,455
Married or living together	21.2	6,491
Divorced/separated/widowed	25.3	503
Residence		
Urban	28.6	2,124
Rural	18.6	6,325
Region		
Dushanbe	31.8	772
GBAO	34.9	191
Sughd	20.7	2,515
DRS	9.7	1,979
Khatlon	25.4	2,993
Education		
None/primary	10.7	515
General basic	14.5	2,614
General secondary	20.4	4,063
Professional primary/middle	35.8	639
Higher	47.3	619
Wealth quintile		
Lowest	16.1	1,627
Second	18.1	1,654
Middle	19.9	1,698
Fourth	23.2	1,740
Highest	27.9	1,731
Total 18-49	21.1	8,449

13.6 MULTIPLE SEXUAL PARTNERS

Given that heterosexual contact is a major means of HIV infection among women in Tajikistan, information on sexual behavior is important in designing and monitoring intervention programs to control the spread of the disease. In the context of HIV/AIDS prevention, limiting the number of sexual partners and having protected sex are crucial to combating the epidemic.

The 2012 TjDHS included questions on respondents' sexual partners during the 12 months preceding the survey. Information on the use of condoms at the last sexual encounter was also collected. Finally, sexually active women were asked about the total number of partners they had during their lifetime. These questions are of course sensitive, and respondents' answers are likely subject to at least some reporting bias. Table 13.8 shows that almost no women reported having more than one sexual partner in the reference period. Similarly, among those who ever had sexual intercourse, almost no women reported having had more than one partner; consequently, the mean number of lifetime sexual partners is 1.0.

Table 13.8 Multiple sexual partners

Among all women age 15-49, the percentage who had sexual intercourse with more than one sexual partner in the past 12 months and the mean number of sexual partners during their lifetime for women who ever had sexual intercourse, by background characteristics, Tajikistan 2012

	All women		Among women who ever had sexual intercourse[1]:	
Background characteristic	Percentage who had 2+ partners in the past 12 months	Number of women	Mean number of sexual partners in lifetime	Number of women
Age				
15-24	0.0	3,963	1.0	1,643
15-19	0.0	2,013	1.0	268
20-24	0.0	1,950	1.0	1,375
25-29	0.0	1,609	1.0	1,402
30-39	0.2	2,217	1.1	2,106
40-49	0.0	1,866	1.1	1,846
Marital status				
Never married	0.0	2,648	*	0
Married or living together	0.0	6,504	1.0	6,493
Divorced/separated/widowed	0.5	504	1.1	504
Residence				
Urban	0.1	2,413	1.1	1,755
Rural	0.0	7,243	1.0	5,241
Region				
Dushanbe	0.1	881	1.1	633
GBAO	0.0	220	1.0	138
Sughd	0.0	2,872	1.1	2,145
DRS	0.0	2,240	1.0	1,672
Khatlon	0.1	3,444	1.0	2,409
Education				
None/primary	0.0	567	1.0	391
General basic	0.0	3,349	1.0	2,150
General secondary	0.1	4,474	1.0	3,499
Professional primary/middle	0.0	645	1.0	518
Higher	0.2	620	1.1	440
Wealth quintile				
Lowest	0.0	1,878	1.0	1,300
Second	0.0	1,913	1.0	1,371
Middle	0.0	1,904	1.0	1,399
Fourth	0.1	1,971	1.0	1,469
Highest	0.2	1,989	1.1	1,458
Total	0.0	9,656	1.0	6,997

Note: an asterisk denotes a figure based on fewer than 25 unweighted cases that has been suppressed.
[1] Means are calculated excluding respondents who gave non-numeric responses.

13.7 COVERAGE OF HIV COUNSELING AND TESTING

Knowledge of HIV status helps HIV-negative individuals make specific decisions to reduce risk and to increase safe sex practices so they can remain disease-free. For those who have HIV infection, knowledge of their status allows them to take action to protect their sexual partners, to access treatment, and to plan for the future.

To assess the awareness and coverage of HIV testing services, women interviewed in the 2012 TjDHS who had given birth in the two years before the survey were asked if they had been tested for HIV as part of their antenatal care, either just before delivery or any time afterwards. Women who did not have a birth in the previous two years were asked whether they had ever been tested for HIV and, if so, how long it had been since their most recent test. Respondents were asked whether they had received the results of their last test. If they had never been tested, they were asked if they knew a place where they could go to be tested. Table 13.9 presents the results regarding prior HIV testing.

Table 13.9 Coverage of prior HIV testing

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, percentage of women ever tested, and percentage of women age 15-49 who were tested in the past 12 months and received the results of the last test, according to background characteristics, Tajikistan 2012

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: Ever tested and received results	Ever tested, did not receive results	Never tested[1]	Total	Percentage ever tested	Percentage who have been tested for HIV in the past 12 months and received the results of the last test	Number of women
Age								
15-24	24.5	8.7	2.0	89.3	100.0	10.7	4.5	3,963
15-19	16.6	1.8	0.3	97.9	100.0	2.1	1.1	2,013
20-24	32.7	15.7	3.8	80.5	100.0	19.5	8.0	1,950
25-29	37.8	21.8	3.6	74.7	100.0	25.3	8.2	1,609
30-39	36.6	15.8	2.5	81.7	100.0	18.3	5.1	2,217
40-49	32.4	9.0	1.8	89.2	100.0	10.8	3.0	1,866
Marital status								
Never married	18.6	1.7	0.2	98.2	100.0	1.8	1.1	2,648
Married/living together	35.9	17.1	3.2	79.7	100.0	20.3	6.7	6,504
Divorced/separated/widowed	32.7	10.6	2.3	87.0	100.0	13.0	3.8	504
Residence								
Urban	41.1	19.4	2.8	77.8	100.0	22.2	7.8	2,413
Rural	27.7	10.3	2.2	87.5	100.0	12.5	4.0	7,243
Region								
Dushanbe	40.0	20.7	2.8	76.5	100.0	23.5	8.0	881
GBAO	36.5	15.5	2.1	82.4	100.0	17.6	7.3	220
Sughd	44.5	18.2	2.5	79.3	100.0	20.7	7.3	2,872
DRS	14.3	7.1	1.1	91.8	100.0	8.2	3.4	2,240
Khatlon	28.0	9.1	2.9	88.0	100.0	12.0	3.1	3,444
Education								
None/primary	13.7	5.6	1.7	92.7	100.0	7.3	2.0	567
General basic	22.8	9.8	1.7	88.5	100.0	11.5	3.9	3,349
General secondary	30.5	10.9	2.3	86.8	100.0	13.2	3.8	4,474
Professional primary/middle	58.5	27.5	4.9	67.5	100.0	32.5	12.7	645
Higher	66.2	30.1	3.9	66.1	100.0	33.9	14.0	620
Wealth quintile								
Lowest	25.4	8.3	1.4	90.3	100.0	9.7	2.8	1,878
Second	23.8	8.2	2.4	89.4	100.0	10.6	3.5	1,913
Middle	27.7	11.0	2.7	86.3	100.0	13.7	4.5	1,904
Fourth	35.4	14.9	2.5	82.6	100.0	17.4	5.8	1,971
Highest	42.2	19.9	2.6	77.5	100.0	22.5	8.2	1,989
Total	31.0	12.5	2.3	85.1	100.0	14.9	5.0	9,656

[1] Includes 'don't know/missing'.

Only 31 percent of women have knowledge of a place to get tested for HIV, and only 15 percent have ever been tested. One in twenty women has been tested and received results in the 12 months before the survey.

The percentage of women who have ever been tested for HIV increases with age up to age group 25-29 and then decreases. It is higher among currently married women than among women who are divorced, widowed, or separated or those who have never married. Urban women are more likely than rural women to have ever been tested. The percentage who have ever been tested is highest in Dushanbe and the Sughd regions and lowest in the DRS region. The likelihood that a woman has ever been tested increases with education and wealth quintile. Differentials in knowledge of a place to obtain an HIV test follow a pattern very similar to that for the percentage who have ever been tested.

Although the level of HIV testing is low in Tajikistan, it has been increasing. In 2005, only 4 percent of women age 15-49 had ever been tested, compared with 15 percent in 2012. Knowledge of where to get tested has also increased, from 13 percent of women in 2005 to 31 percent in 2012 (SCS, 2007).

Table 13.10 presents information on HIV screening of pregnant women age 15-49 who gave birth in the two years prior to the survey. The screening process is a key tool in reducing mother-to-child transmission (MTCT). Survey results show that 25 percent of women who gave birth in the two years before the survey received HIV counseling during antenatal care and a total of 28 percent were tested for HIV during antenatal care, although only 16 percent were counseled, tested, and received results during antenatal care.

Rural women and women in DRS and Khatlon regions are less likely than other women to receive counseling and testing for HIV during antenatal care. The survey results also show that HIV counseling and testing during antenatal care increases with the level of education and with increasing wealth quintile.

Comparison of survey data with results from the 2005 MICS survey shows no change in the proportion of women who received HIV counseling during antenatal care (from 24 percent in 2005 to 25 percent in 2012). However, the proportion of women who gave birth in the two years before the surveys and who were tested for HIV during an antenatal care visit increased from 11 percent in 2005 to 28 percent in 2012 (SCS, 2007).

Table 13.10 Pregnant women counseled and tested for HIV

Among all women age 15-49 who gave birth in the two years preceding the survey, the percentage who received counseling for HIV during antenatal care, the percentage who received an HIV test during antenatal care for their most recent birth by whether they received their results and post-test counseling, and the percentage who received an HIV test during ANC or labor for their most recent birth by whether they received their test results, according to background characteristics, Tajikistan 2012

Background characteristic	Percentage who received counseling on HIV during antenatal care[1]	Percentage who were tested for HIV during antenatal care and who:			Percentage who received counseling and an HIV test during ANC, and the results	Percentage who had an HIV test during ANC or labor and who:[2]		Number of women who gave birth in the past two years[3]
		Received results and received post-test counseling	Received results and did not receive post-test counseling	Did not receive results		Received results	Did not receive results	
Age								
15-24	24.3	17.1	4.8	4.4	15.9	23.0	5.1	868
15-19	19.4	12.9	3.8	2.0	13.4	16.7	2.0	72
20-24	24.8	17.4	4.9	4.6	16.1	23.6	5.4	796
25-29	25.9	17.1	8.3	3.9	17.8	27.5	4.3	655
30-39	25.1	18.2	7.6	3.5	15.9	26.8	4.3	473
40-49	(12.1)	(8.9)	(0.0)	(0.0)	(8.9)	(8.9)	(0.0)	49
Marital status								
Married or living together	24.9	17.3	6.5	3.8	16.6	25.2	4.4	2,008
Divorced/separated/widowed	(16.1)	(7.3)	(7.3)	(11.6)	(4.4)	(14.6)	(11.6)	37
Residence								
Urban	29.0	22.8	12.7	4.2	22.0	37.9	5.5	431
Rural	23.6	15.6	4.8	3.9	14.8	21.6	4.2	1,615
Region								
Dushanbe	22.8	23.0	16.0	2.7	19.3	40.5	5.2	154
GBAO	27.7	20.9	6.0	0.5	20.1	28.1	0.5	34
Sughd	37.6	26.4	15.2	5.5	29.0	43.7	5.5	539
DRS	16.4	11.5	2.1	1.0	10.1	14.7	1.5	519
Khatlon	21.6	13.3	1.6	5.1	11.1	16.0	5.8	798
Education								
None/primary	11.4	7.5	1.9	2.6	5.2	10.4	3.1	177
General basic	21.1	15.0	4.1	2.8	14.3	20.2	3.3	850
General secondary	26.2	17.0	6.3	4.8	16.0	25.0	5.4	810
Professional primary/middle	49.2	34.6	18.7	7.1	38.9	56.2	7.1	107
Higher	40.4	34.2	22.7	5.5	31.8	58.0	7.5	100
Wealth quintile								
Lowest	18.3	14.2	2.5	2.9	12.9	18.3	2.9	393
Second	16.8	13.8	3.2	4.0	8.7	17.8	4.9	454
Middle	23.9	13.4	4.0	6.6	12.9	18.4	7.3	451
Fourth	32.3	22.3	9.6	2.2	23.4	33.6	2.3	425
Highest	34.6	23.9	15.1	3.8	26.8	41.3	4.9	323
Total	24.7	17.1	6.5	3.9	16.3	25.0	4.5	2,045

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

[1] In this context, counseling means that someone talked with the respondent about all three of the following topics: (1) babies getting the AIDS virus from their mother, (2) preventing the virus, and 3) getting tested for the virus.

[2] Women are asked whether they received an HIV test during labor only if they were not tested for HIV during ANC.

[3] Denominator for percentages includes women who did not receive antenatal care for their last birth in the past two years.

13.8 Self-reported Prevalence of Sexually Transmitted Infections (STIs) and STI Symptoms

Information about the prevalence of sexually transmitted infections (STIs) is useful not only as a marker of unprotected sexual intercourse but also as a cofactor for HIV transmission. STIs are closely associated with HIV because they increase the likelihood of contracting HIV and share similar risk factors. In the 2012 TjDHS, women who ever had sex were asked whether, in the past 12 months, they had contracted a disease through sexual contact. They were also asked whether they had experienced a genital sore or ulcer or had any abnormal genital discharge in the past year. These symptoms are useful in identifying STIs among men. However, they are less easily interpreted in women because women are likely to experience more conditions of the reproductive tract other than STIs that produce a genital discharge.

Table 13.11 shows that self-reported STI prevalence among women age 15-49 in Tajikistan is negligible, with less than 1 percent of women who have ever had sex reporting having had an STI in the 12 months prior to the survey. It is likely that this figure underestimates the actual prevalence of STIs among the sexually active population, as many STI symptoms are not easily recognized, and many STIs do not have visible symptoms.

Altogether, 6 percent of women report having had either an STI and/or symptoms of an STI in the 12 months prior to the survey. Women who report STI symptoms are much more likely to say they have had a bad-smelling or abnormal genital discharge (6 percent) than a genital ulcer or sore (1 percent). The percentage of women reporting an STI and/or STI symptoms is highest in the GBAO region and lowest in the DRS and Dushanbe regions.

Table 13.11 Self-reported prevalence of sexually-transmitted infections (STIs) and STIs symptoms

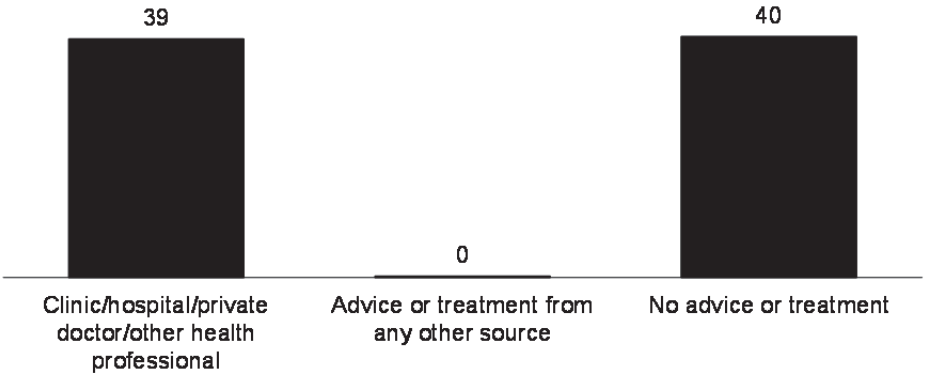
Among women age 15-49 who ever had sexual intercourse, the percentage reporting having an STI and/or symptoms of an STI in the past 12 months, by background characteristics, Tajikistan 2012

Background characteristic	Percentage of women who reported having in the past 12 months: STI	Bad smelling/ abnormal genital discharge	Genital sore/ulcer	STI/ genital discharge/ sore or ulcer	Number of women who ever had sexual intercourse
Age					
15-24	0.1	6.2	0.4	6.4	1,643
15-19	0.5	4.8	0.0	4.8	269
20-24	0.1	6.5	0.5	6.7	1,374
25-29	0.5	6.7	1.1	7.3	1,404
30-39	0.4	6.6	1.7	7.3	2,108
40-49	0.3	4.1	0.8	4.8	1,849
Marital status					
Never married	*	*	*	*	1
Married/living together	0.3	6.0	1.0	6.6	6,500
Divorced/separated/widowed	0.0	3.8	1.4	4.5	503
Residence					
Urban	0.3	4.0	0.5	4.4	1,762
Rural	0.3	6.5	1.2	7.1	5,242
Region					
Dushanbe	0.6	1.6	0.3	1.8	633
GBAO	0.6	12.4	7.4	15.5	137
Sughd	0.4	9.7	1.7	10.6	2,143
DRS	0.0	1.4	0.3	1.6	1,674
Khatlon	0.4	6.2	0.8	6.7	2,416
Education					
None/primary	0.0	2.6	0.3	2.7	391
General basic	0.1	5.9	1.1	6.3	2,151
General secondary	0.3	5.8	0.9	6.4	3,504
Professional primary/middle	0.8	9.3	2.2	10.3	519
Higher	1.0	5.2	1.3	5.9	439
Wealth quintile					
Lowest	0.0	5.0	1.2	5.7	1,299
Second	0.3	6.9	1.5	7.3	1,372
Middle	0.1	5.5	1.2	6.2	1,399
Fourth	0.6	6.0	0.8	6.7	1,469
Highest	0.5	5.7	0.7	6.1	1,464
Total	0.3	5.8	1.0	6.4	7,004

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

When women reported having an STI, STI symptoms, or both in the past 12 months, the 2012 TjDHS interviewer asked them whether they sought any advice or treatment. Figure 13.3 shows that 40 percent of women sought no advice or treatment, while 39 percent sought advice or treatment from a clinic, hospital, private doctor, or other health professional. Almost no women went anywhere else for treatment.

Figure 13.3
Treatment seeking for STI symptoms among women age 15-49, Tajikistan 2012



13.9 PREVALENCE OF MEDICAL INJECTIONS

Nonsterile injections can pose a risk of infection with HIV and other diseases. To measure the potential risk of transmission of HIV associated with medical injections, respondents in the 2012 TjDHS were asked if they had received an injection in the past 12 months and, if so, how many.

The responses presented in Table 13.12 show that almost one-third of women age 15-49 in Tajikistan received a medical injection in the 12 months preceding the survey. The average number of injections per woman is 7.1. The potential risk of transmission of HIV associated with such injections is very low because almost all women (99 percent) said they received their most recent injection from a new, unopened package.

The likelihood of receiving an injection in the previous 12 months is much lower among the youngest women, age 15-19, than among older women. It is also much lower among women who have never married. Variations by other background characteristics are not large. There are no differentials in the likelihood that the injection was a safe one.

Table 13.12 Prevalence of medical injections

Percentage of women 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, Tajikistan 2012

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
Age					
15-24	23.7	5.0	3,963	98.4	941
15-19	16.7	3.2	2,013	98.0	337
20-24	30.9	6.8	1,950	98.7	604
25-29	36.2	7.9	1,609	99.4	582
30-39	34.6	8.2	2,217	98.8	766
40-49	36.1	9.4	1,866	98.5	674
Marital status					
Never married	17.1	3.4	2,648	97.7	452
Married/living together	36.1	8.5	6,504	98.9	2,345
Divorced/separated/widowed	33.0	8.2	504	99.1	167
Residence					
Urban	32.0	7.8	2,413	98.4	772
Rural	30.3	6.8	7,243	98.8	2,191
Region					
Dushanbe	35.8	9.1	881	99.2	316
GBAO	23.5	3.7	220	98.4	52
Sughd	25.2	5.1	2,872	99.6	724
DRS	31.5	6.8	2,240	98.5	705
Khatlon	33.9	8.5	3,444	98.1	1,167
Education					
None/primary	29.7	7.6	567	97.9	168
General basic	29.7	6.8	3,349	98.9	994
General secondary	30.5	7.2	4,474	98.6	1,364
Professional primary/middle	34.9	6.6	645	99.1	225
Higher	34.1	7.4	620	98.9	211
Wealth quintile					
Lowest	26.0	6.8	1,878	97.4	487
Second	31.0	7.2	1,913	98.8	593
Middle	29.8	6.7	1,904	99.3	567
Fourth	33.5	7.3	1,971	99.1	661
Highest	32.9	7.2	1,989	98.8	654
Total	30.7	7.1	9,656	98.7	2,963

Note: Medical injections are those given by a doctor, nurse, pharmacist, dentist, or other health worker.

13.10 HIV/AIDS Knowledge and Sexual Behavior Among Youth

This section addresses HIV/AIDS-related knowledge and sexual behavior among youth age 15-24. In addition to knowledge of HIV transmission, data are presented on age at first sexual intercourse, age differences between sexual partners, and voluntary counseling and testing for HIV. Younger people are often at a higher risk of contracting STIs, as they are more likely to be experimenting with sex before marriage and more prone to risk-taking.

13.10.1 HIV/AIDS-Related Knowledge among Young Adults

Young respondents were asked the same set of questions on beliefs about HIV transmission as older respondents. Information on the level of knowledge of major methods of avoiding HIV and rejection of major misconceptions are shown in Table 13.13.

Table 13.13 Comprehensive knowledge about AIDS and of a source of condoms among young women

Percentage of young women age 15-24 with comprehensive knowledge about AIDS and percentage with knowledge of a source of condoms, by background characteristics, Tajikistan 2012

	Women age 15-24		
Background characteristic	Percentage with comprehensive knowledge of AIDS[1]	Percentage who know a condom source[2]	Number of women
Age			
15-19	6.5	16.4	2,013
15-17	4.8	12.6	1,207
18-19	9.1	22.1	806
20-24	11.0	39.8	1,950
20-22	9.7	38.7	1,210
23-24	13.2	41.6	740
Marital status			
Never married	7.4	18.3	2,319
Ever married	10.6	41.5	1,644
Residence			
Urban	11.0	34.2	926
Rural	8.1	26.0	3,038
Education			
None/primary	3.3	19.2	302
General basic	5.6	21.5	1,778
General secondary	10.5	30.8	1,494
Professional primary/middle	17.3	52.2	191
Higher	24.2	53.9	198
Total	8.7	27.9	3,963

[1] Comprehensive knowledge means knowing that consistent use of condoms during sexual intercourse and having just one uninfected faithful partner can reduce the chance of getting 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 of the AIDS virus. The components of comprehensive knowledge are presented in Tables 13.2 and 13.3.
[2] For this table, the following responses are not considered a source for condoms: friends, family members, and home.

The data show that fewer than one in ten women age 15-24 in Tajikistan (9 percent of young women) have comprehensive knowledge of HIV/AIDS. The data further show that 28 percent of young women know a place where people can get condoms. Comprehensive knowledge about AIDS and knowledge of a source for condoms are both higher among women age 20-24 than among those age 15-19. Both indicators are also higher for young women who have married than for those who have never married. Urban women are more likely to have comprehensive knowledge about AIDS and also know a source of condoms than rural women. Both comprehensive knowledge of AIDS and knowledge of a source of condoms increase with increasing educational level. For example, the proportion of young women with comprehensive knowledge about AIDS increases from 3 percent of those with no education or primary education to 24 percent of those who have attended higher education.

13.10.2 Age at First Sexual Intercourse among Young Adults

Since HIV transmission among women in Tajikistan occurs predominantly through heterosexual intercourse between an infected and a non-infected person, age at first intercourse marks the time at which most individuals first risk exposure to the virus. Table 13.14 shows the percentage of young women age 15-24 who had their sexual debut before age 15 and the percentage who had sex before age 18. The data show that only a tiny fraction of young women in Tajikistan have sex before age 15. By age 18, 11 percent of women have had sexual intercourse.

Table 13.14 Age at first sexual intercourse among young women

Percentage of young women age 15-24 who had sexual intercourse before age 15 and percentage of young women age 18-24 who had sexual intercourse before age 18, by background characteristics, Tajikistan 2012

	Women age 15-24		Women age 18-24	
Background characteristic	Percentage who had sexual intercourse before age 15	Number of women	Percentage who had sexual intercourse before age 18	Number of women
Age				
15-19	0.1	2,013	na	na
15-17	0.2	1,207	na	na
18-19	0.0	806	11.2	806
20-24	0.1	1,950	11.3	1,950
20-22	0.1	1,210	13.6	1,210
23-24	0.1	740	7.4	740
Marital status				
Never married	0.0	2,319	0.0	1,126
Ever married	0.3	1,644	19.0	1,630
Knows condom source[1]				
Yes	0.0	1,107	12.9	955
No	0.2	2,856	10.3	1,801
Residence				
Urban	0.0	926	10.6	636
Rural	0.2	3,038	11.4	2,120
Education				
None/primary	1.2	302	19.7	250
General basic	0.1	1,778	15.5	1,043
General secondary	0.0	1,494	8.8	1,082
Professional primary/middle	0.0	191	1.7	184
Higher	0.0	198	0.5	197
Total	0.1	3,963	11.2	2,756

na = Not applicable
[1] For this table, the following responses are not considered a source for condoms: friends, family members, and home.

Differences by background characteristics in the proportion of young women who have had sexual intercourse by age 15 or age 18 are not large. As expected, the proportion of women age 18-24 who had sex before age 18 is higher among ever-married women (19 percent) than among never-married women, none of whom reported having had sex before age 18. The proportion of young women who had sex before age 18 decreases consistently as education of the woman increases.

13.10.3 Cross-Generational Sexual Partners

To examine age differences between sexual partners, women who had sexual intercourse in the 12 months preceding the survey were asked the age of their partners. The issue of cross-generational sex mainly affects younger women who engage with older men, because such relationships can create situations in which women are at a disadvantage.

As shown in Table 13.15, only 4 percent of women age 15-19 had intercourse with a man 10 or more years older than they were. Those living in urban areas are slightly more likely than rural women to report having sex with a man 10 or more years older than they were.

Table 13.15 Age-mixing in sexual relationships among women age 15-19

Among women 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, Tajikistan 2012

	Women 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
Age		
15-17	*	13
18-19	4.3	249
Knows condom source[1]		
Yes	0.0	67
No	5.9	196
Residence		
Urban	7.6	52
Rural	3.6	211
Education		
None/primary	*	20
General basic	3.9	138
General secondary	5.1	92
Professional primary/middle	*	7
Higher	*	5
Total	4.4	263

Note: An asterisk denotes a figure based on fewer than 25 unweighted cases that has been suppressed.
[1] For this table, the following responses are not considered a source for condoms: friends, family members, and home.

13.10.4 Voluntary HIV Counseling and Testing among Young Adults

Knowledge of an individual's own HIV status can motivate him or her to practice safer sexual behavior thereafter to avoid transmitting the virus to others. Table 13.16 shows the coverage of HIV counseling and testing by background characteristics for women age 15-24 years who have had sexual intercourse in the 12 months before the survey. Ten percent of young women age 15-24 have been tested for HIV and received results in the 12 months preceding the survey.

The data show that urban young women are more likely to have been tested for HIV and received results in the 12 months prior to the survey than their rural counterparts. Recent HIV testing among young people increases with increased level of education. For example, among women who had sex in the 12 months before the survey, only 4 percent of those with no education or only primary education were tested and received results in the 12 months before the survey, compared with 30 percent of those with secondary and higher education.

Table 13.16 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 were tested for HIV in the past 12 months and received the results of the last test, by background characteristics, Tajikistan 2012

	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 of the last test	Number of women
Age		
15-19	4.8	263
15-17	*	13
18-19	5.0	249
20-24	11.1	1,256
20-22	11.6	710
23-24	10.4	546
Knows condom source[1]		
Yes	17.0	640
No	4.9	879
Residence		
Urban	17.0	315
Rural	8.2	1,204
Education		
None/primary	3.5	144
General basic	8.7	658
General secondary	9.3	592
Professional primary/middle	26.6	72
Higher	29.9	53
Total	10.0	1,519

Note: An asterisk denotes a figure based on fewer than 25 unweighted cases that has been suppressed.
[1] For this table, the following responses are not considered a source for condoms: friends, family members and home.

DOMESTIC VIOLENCE 14

Key Findings

- Nineteen percent of women age 15-49 have experienced physical violence at least once since age 15, and 13 percent have experienced physical violence within the 12 months prior to the survey.
- Four percent of women report having experienced sexual violence at least once in their lifetime.
- Overall, almost one in five ever-married women age 15-49 report having experienced emotional, physical, or sexual violence from a husband.
- Among ever-married women who have ever experienced physical or sexual violence from a husband, 27 percent report experiencing physical injuries.
- Only one in five women has sought assistance to try to stop the violence they have experienced.

In recent years, there has been increasing concern about violence against women in general, and about domestic violence in particular, in both developed and developing countries. Not only has domestic violence against women been acknowledged worldwide as a violation of the basic human rights of women, but an increasing amount of research highlights the health burdens, intergenerational effects, and demographic consequences of such violence (United Nations General Assembly, 1991; Heise et al., 1994; Heise et al., 1999; and Jejeebhoy, 1998). Gender-based violence occurs across all socio-economic and cultural backgrounds, and in many societies, women are socialized to accept, tolerate, and even rationalize domestic violence and to remain silent about such experiences (Zimmerman, 1994). Violence of any kind has a serious impact on the economy of a country: because women bear the brunt of domestic violence, they bear the health and psychological burdens as well. Victims of domestic violence are abused inside what should be the most secure environment of all for them–their own homes.

14.1 MEASUREMENT OF VIOLENCE

Collecting valid, reliable, and ethical data on domestic violence poses particular challenges. What constitutes violence or abuse varies across cultures and among individuals. A culture of silence usually surrounds domestic violence and can affect reporting. The sensitivity of the topic is another issue. Specific ethical concerns are assuring the safety of respondents and interviewers when asking about domestic violence in a familial setting, protecting women who disclose violence, and reducing the risk of double-victimization of respondents as they relive their experiences. The responses to these challenges posed by the 2012 TjDHS are described in the sections that follow.

14.1.1 Use of Valid Measures of Violence

In the 2012 TjDHS, information was obtained from ever-married women on violence committed by their current and former spouses and/or by others. Information was collected from never-married women on violence by anyone. Since international research shows that intimate partner violence is one of the most common forms of violence, especially against women, information on spousal violence was measured in more detail than violence by other perpetrators. This was done by using a shortened, modified version of the Conflict Tactics Scale (Strauss, 1990). Specifically, violence by the current husband/partner

for currently married respondents and by the most recent husband/partner for formerly married respondents was measured by asking ever-married women the following set of questions.

Did your (last) (husband/partner) ever:

- Push you, shake you, or throw something at you?
- Slap you?
- Twist your arm or pull your hair?
- Punch you with his fist or with something that could hurt you?
- Kick you, drag you, or beat you up?
- Try to choke you or burn you on purpose?
- Threaten or attack you with a knife, gun, or any other weapon?
- Physically force you to have sexual intercourse with him when you did not want to?
- Physically force you to perform any other sexual acts you did not want to?
- Force you with threats or in any other way to perform sexual acts you did not want to?

For every question that a respondent answered "yes," she was asked about the frequency of the act in the 12 months preceding the survey. An affirmative answer to one or more of the first seven items constitutes evidence of *physical violence*, and a positive answer to any of the final three items constitutes evidence of *sexual violence*. Women who had been married more than once were also asked about physical and/or sexual violence from any previous husband(s).

Similarly, *emotional violence* among ever-married respondents was measured by the following questions.

Did your (last) (husband/partner) ever:

- Say or do something to humiliate you in front of others?
- Threaten to hurt or harm you or someone you care about?
- Insult you or make you feel bad about yourself?

This approach of asking about specific acts to measure different forms of violence has the advantage of not being affected by different understandings of what constitutes a summary term such as "violence." By including a wide range of acts, this approach has the additional advantage of giving the respondent multiple opportunities to disclose any experience of violence.

In addition to these questions that were asked only of ever-married women, all women were asked about physical and sexual violence from persons other than the current or most recent husband/partner. Respondents who answered yes to the question about physical violence were asked who committed the violence against them and the frequency of such violence during the 12 months preceding the survey. Respondents who reported experiencing sexual violence were asked for the perpetrators of the violence.

Although this approach to questioning is generally considered to be optimal, the possibility of underreporting of violence, particularly sexual violence, cannot be entirely ruled out in any survey, and this survey is no exception.

14.1.2 Ethical Considerations in Measuring Violence

In recognition of the challenges in collecting data on violence, the interviewers in the 2012 TjDHS were given special training. The training focused on how to ask sensitive questions, ensure privacy, and build rapport between interviewer and respondent. Rapport with the interviewer, confidentiality, and privacy are all keys to building respondents' confidence so that they can safely share their experiences with the interviewer. Placing questions about violence at the end of the questionnaire also provides time for the interviewer to develop a certain degree of intimacy with respondents that should further encourage women to share their experiences of violence, if any. In addition, the following protections were built into the survey or the questionnaire in keeping with the World Health Organization's ethical and safety recommendations for research on domestic violence (WHO, 2001):

- To maintain confidentiality, only one woman per household was administered the questions on violence. The random selection of one woman was done through a simple selection procedure using a grid that was built into the Household Questionnaire (Kish, 1965).

- As a means of obtaining additional consent, beyond the initial consent at the start of the interview, the respondent was informed that the questions could be sensitive and was reassured regarding the confidentiality of her responses.

- The violence module was implemented only if privacy could be obtained. The interviewers were instructed to skip the module, thank the respondent, and end the interview if they could not maintain privacy during the implementation of this module.

- A brochure that included information on domestic violence and contact information for service centers across the country was provided to all interviewers. Interviewers, however, were instructed not to leave any printed or written information in the household. This was done to safeguard against identifying the respondent selected for the module to ensure the respondent's safety and to avoid any further harm. Interviewers were instructed to provide oral information only upon request of the respondents so that they could access the services and be informed about what to do in the event of domestic violence.

As mentioned previously, only one woman per household was selected for the module. These restrictions resulted in a total of 5,547 (unweighted) women age 15-49 (4,405 ever-married women) who completed the domestic violence module. Twenty-one eligible women were not interviewed because complete privacy could not be obtained. Specially constructed weights were used to adjust for the selection of only one woman per household and to ensure that the domestic violence subsample was nationally representative.

14.2 Experience of Physical Violence

Table 14.1 shows the percentage of women who ever experienced physical violence since age 15 and the percentage who experienced violence during the 12 months preceding the survey, by background characteristics. Slightly fewer than one in five women age 15-49 have experienced physical violence since age 15 (19 percent), and 13 percent have experienced physical violence in the 12 months prior to the survey. Overall, only 2 percent of women reported that they had experienced physical violence often in the past 12 months, and 11 percent said they had experienced physical violence sometimes during the past 12 months.

The experience of physical violence varies by background characteristics. The percentage of women who have experienced physical violence since age 15 tends to increase with age but does not vary much by urban-rural residence or employment status. This percentage is highest among women in Sughd region and lowest among women in DRS region. Women who are divorced, separated, or widowed are far more likely to have experienced physical violence (36 percent) than women who are either currently married (22 percent) or who have never married (7 percent). Women who have children are more likely to have experienced violence than those who have no children, presumably in part because childless women are younger than those with children. The percentage of women who have experienced physical violence since age 15 increases with education level up to the professional primary/middle level, after which it falls to the lowest level (13 percent). Experience with physical violence increases from a low of 16 percent of women in the lowest wealth quintile to 22 percent of those in the second quintile, after which it declines in the upper quintiles.

Table 14.1 Experience of physical violence

Percentage of women age 15-49 who have ever experienced physical violence since age 15 and percentage who have experienced violence during the 12 months preceding the survey, by background characteristics, Tajikistan 2012

Background characteristic	Percentage who have ever experienced physical violence since age 15[1]	Percentage who have experienced physical violence in the past 12 months			Number of women
		Often	Sometimes	Often or sometimes[2]	
Age					
15-19	7.3	0.6	5.6	6.2	1,087
20-24	15.7	1.6	10.2	11.8	1,108
25-29	24.3	2.2	16.2	18.4	970
30-39	24.1	2.8	13.0	16.0	1,237
40-49	22.2	1.4	11.3	12.6	1,145
Residence					
Urban	20.8	1.6	12.6	14.2	1,399
Rural	18.1	1.8	10.7	12.5	4,148
Region					
Dushanbe	14.9	1.8	7.3	9.1	513
GBAO	14.4	1.5	8.5	10.0	126
Sughd	22.2	3.0	14.1	17.2	1,663
DRS	13.0	1.6	9.6	11.2	1,242
Khatlon	20.8	0.8	10.9	11.8	2,004
Marital status					
Never married	6.7	0.3	4.9	5.2	1,454
Married or living together	22.2	1.7	13.6	15.4	3,812
Divorced/separated/widowed	36.1	9.9	11.0	20.9	281
Number of living children					
0	8.6	0.5	5.8	6.3	1,914
1-2	26.1	3.5	15.8	19.4	1,542
3-4	23.1	1.9	14.2	16.1	1,354
5+	22.1	0.9	10.2	11.1	737
Employment					
Employed for cash	20.4	1.6	10.3	11.9	1,379
Employed not for cash	20.0	1.8	9.4	11.2	471
Not employed	18.0	1.8	11.8	13.6	3,693
Education					
None/primary	16.5	1.0	9.2	10.2	323
General basic	18.3	1.7	12.0	13.9	1,886
General secondary	19.5	1.4	11.4	12.8	2,585
Professional primary/middle	24.0	3.9	13.4	17.3	394
Higher	12.6	2.0	5.3	7.3	359
Wealth quintile					
Lowest	15.8	0.5	9.2	9.6	1,093
Second	21.5	2.0	13.0	15.0	1,100
Middle	18.3	3.0	10.5	13.6	1,074
Fourth	19.2	2.0	11.6	13.6	1,133
Highest	19.2	1.3	11.7	13.0	1,147
Total	18.8	1.7	11.2	13.0	5,547

Note: Totals include four women who are missing information as to employment status.
[1] Includes violence in the past 12 months. For women who were married before age 15 and who reported physical violence, the violence could have occurred before age 15.
[2] Includes women who report physical violence in the past 12 months but for whom frequency is not known.

The percentage of women who have experienced physical violence in the past 12 months (often or sometimes) shows variation by background characteristics similar to that of women who have ever experienced violence.

Table 14.2 shows data about the perpetrators of physical violence, according to women's marital status, among those who have experienced physical violence since age 15. Among ever-married women, the most commonly reported perpetrator of physical violence is the current husband or partner (76 percent), followed by the former husband/partner (15 percent), indicating a high concentration towards spousal violence. Among the small number of never-married women who have experienced physical violence since age 15, the most common perpetrators of violence are mothers or step-mothers (45 percent) and sisters/brothers (31 percent).

Table 14.2 Persons committing physical violence

Among women age 15-49 who have experienced physical violence since age 15, percentage who report specific persons who committed the violence, according to the respondent's current marital status, Tajikistan 2012

	Marital status		
Person	Ever married	Never married	Total
Current husband/partner	76.3	na	69.2
Former husband/partner	14.6	na	13.2
Current boyfriend	0.0	0.5	0.1
Former boyfriend	0.2	0.0	0.2
Father/step-father	4.5	14.4	5.4
Mother/step-mother	9.7	45.2	13.0
Sister/brother	7.8	30.6	10.0
Daughter/son	0.6	2.4	0.7
Other relative	1.0	8.4	1.7
Mother-in-law	1.6	na	1.4
Other in-law	0.7	na	0.7
Teacher	0.5	1.8	0.6
Employer/someone at work	0.0	0.0	0.0
Other	1.2	1.0	1.1
Number of women who have experienced physical violence since age 15	946	97	1,043

Note: Women can report more than one person who committed the violence.
na = Not applicable

14.3 EXPERIENCE OF SEXUAL VIOLENCE

Table 14.3 shows the percentage of women who have experienced sexual violence ever and in the past 12 months, according to background characteristics. Results show that 4 percent of women age 15-49 have ever experienced sexual violence and 3 percent have experienced sexual violence in the 12 months before the survey. There are notable variations in the experience of sexual violence by age. Younger women (age 15-19) are less likely to report sexual violence ever and in the past 12 months than older women. Women in the Sughd region are more likely to experience sexual violence than those in the DRS region.

Experience of sexual violence ever and in the past 12 months is lowest among never-married women and women with no living children. It is also slightly lower among women with higher education and women in the second and highest wealth quintiles, although there is no uniform pattern in experience of sexual violence by either education or wealth.

Table 14.3 Experience of sexual violence

Percentage of women age 15-49 who have ever experienced sexual violence and percentage who have experienced sexual violence in the 12 months preceding the survey, by background characteristics, Tajikistan 2012

Background characteristic	Percentage who have experienced sexual violence: Ever[1]	Past 12 months	Number of women
Age			
15-19	0.5	0.4	1,087
20-24	2.9	2.5	1,108
25-29	4.7	3.0	970
30-39	4.2	2.8	1,237
40-49	6.2	3.6	1,145
Residence			
Urban	3.4	2.1	1,399
Rural	3.9	2.6	4,148
Region			
Dushanbe	2.1	1.2	513
GBAO	2.0	1.1	126
Sughd	7.4	4.7	1,663
DRS	0.9	0.9	1,242
Khatlon	3.0	2.1	2,004
Marital status			
Never married	0.3	0.1	1,454
Married or living together	4.7	3.3	3,812
Divorced/separated/widowed	8.6	4.2	281
Employment			
Employed for cash	4.2	2.1	1,379
Employed not for cash	4.0	2.1	471
Not employed	3.5	2.7	3,693
Number of living children			
0	1.1	0.7	1,914
1-2	6.1	4.1	1,542
3-4	4.1	2.6	1,354
5+	5.0	3.6	737
Education			
None/primary	2.1	1.2	323
General basic	3.0	2.1	1,886
General secondary	4.2	2.7	2,585
Professional primary/middle	7.2	6.1	394
Higher	1.6	0.3	359
Wealth quintile			
Lowest	3.8	2.5	1,093
Second	3.4	2.0	1,100
Middle	4.5	3.7	1,074
Fourth	3.6	2.6	1,133
Highest	3.4	1.7	1,147
Total	3.7	2.5	5,547

Note: Totals include four women missing information as to employment status.
[1] Includes violence in the past 12 months.

Table 14.4 shows information on the perpetrators of sexual violence among those who have ever experienced sexual violence, according to women's marital status.

Table 14.4 Persons committing sexual violence

Among women age 15-49 who have experienced sexual violence, percentage who report specific persons who committed the violence according to the respondent's current marital status, Tajikistan 2012

	Marital status		
Person	Ever married[1]	Never married	Total
Current husband/partner	76.4	na	75.0
Former husband/partner	23.0	na	22.6
Current/former boyfriend	0.6	*	0.6
Father/step-father	0.0	*	0.7
Own friend/acquaintance	3.2	*	4.2
Other	0.1	*	0.1
Number women who have experienced sexual violence	204	4	207

Note: An asterisk denotes a figure based on fewer than 25 unweighted cases that has been suppressed.
[1] Women can report more than one person who committed the violence.
na = Not applicable

Among ever-married women, the most commonly reported perpetrators of sexual violence are current husbands/partners (76 percent), followed by former husbands/partners (23 percent). Data on the perpetrators of sexual violence for never married women had been suppressed because there are too few cases of never married respondents who have ever experienced sexual violence.

14.4 EXPERIENCE OF DIFFERENT FORMS OF VIOLENCE

Table 14.5 presents information on the experience of various forms of violence among women age 15-49. The table shows that 19 percent of women age 15-49 reported that they have experienced either physical or sexual violence. Sixteen percent have experienced physical violence only, less than 1 percent have experienced sexual violence only, and 3 percent have experienced both physical and sexual violence. The percentage of women who have ever experienced physical or sexual violence increases with age, from 8 percent of women age 15-19 to 16 percent of women age 20-24 and then to about 25 percent of women age 25 or older.

Table 14.5 Experience of different forms of violence

Percentage of women age 15-49 who have ever experienced different forms of violence by current age, Tajikistan 2012

Age	Physical violence only	Sexual violence only	Physical and sexual violence	Physical or sexual violence	Number of women
15-19	7.1	0.3	0.2	7.6	1,087
15-17	7.5	0.3	0.2	8.1	636
18-19	6.5	0.3	0.2	7.0	451
20-24	13.0	0.2	2.8	15.9	1,108
25-29	20.2	0.6	4.1	24.9	970
30-39	20.3	0.4	3.8	24.5	1,237
40-49	17.6	1.6	4.6	23.9	1,145
Total	15.7	0.6	3.1	19.4	5,547

14.5 VIOLENCE DURING PREGNANCY

Respondents who had ever been pregnant were asked specifically whether they had ever experienced physical violence while pregnant and, if so, who the perpetrators of the violence were.

Table 14.6 shows that 5 percent of women experienced physical violence during pregnancy. This percentage is somewhat lower among the youngest women age 15-19 than among older women. Physical violence during pregnancy does not vary by urban-rural residence, but it is higher among women in the Sughd and Dushanbe regions than among women in other regions. Women who are divorced, separated, or widowed are much more likely to report experiencing violence during pregnancy (19 percent) than women who are currently married (4 percent).

Variations in violence during pregnancy by the number of living children are not large. The experience of violence during pregnancy is slightly higher among women with no education or only primary education than among those with at least a general basic education. Contrarily, women in the lowest wealth quintile are the least likely to have experienced violence during pregnancy compared with those in higher quintiles.

Table 14.6 Experience of violence during pregnancy

Among women age 15-49 who have ever been pregnant, percentage who have ever experienced physical violence during pregnancy, by background characteristics, Tajikistan 2012

Background characteristic	Percentage who experienced violence during pregnancy	Number of women who have ever been pregnant
Age		
15-19	2.6	70
20-24	5.5	712
25-29	5.0	789
30-39	5.8	1,147
40-49	4.5	1,117
Residence		
Urban	5.2	977
Rural	5.1	2,857
Region		
Dushanbe	6.0	345
GBAO	2.3	80
Sughd	6.8	1,199
DRS	4.1	847
Khatlon	4.3	1,364
Marital status		
Married or living together	4.2	3,589
Divorced/separated/widowed	18.9	245
Number of living children		
0	3.6	202
1-2	6.4	1,542
3-4	4.7	1,354
5+	3.7	737
Education		
None/primary	7.3	208
General basic	5.2	1,154
General secondary	5.0	1,917
Professional primary/middle	4.5	306
Higher	5.3	248
Wealth quintile		
Lowest	2.8	722
Second	6.9	755
Middle	6.5	759
Fourth	4.7	790
Highest	4.8	807
Total	5.1	3,834

14.6 MARITAL CONTROL BY HUSBAND

Close control and monitoring of their wives' behavior by husbands is known to be an important warning sign and correlate of violence in a relationship. A series of questions were included in the 2012 TjDHS to elicit the degree of marital control exercised by husbands over their wives. Controlling behaviors most often manifest themselves in terms of extreme possessiveness, jealousy, and attempts to isolate the wife from her family and friends. To determine the degree of marital control, ever-married women were asked whether their current or former husband/partner exhibited each of the following controlling behaviors: (1) is jealous or gets angry if she talks to other men, (2) frequently accuses her of being unfaithful, (3) does not permit meetings with female friends, (4) tries to limit contact with her family, and (5) insists on knowing where she is at all times. Because the concentration of such behaviors is more significant than the display of any single behavior, the proportion of respondents whose spouses display at least three of the specified behaviors is highlighted. Table 14.7 presents the percentage of ever-married women whose husbands display each of the listed behaviors, by selected background characteristics.

Table 14.7 Marital control exercised by husbands

Percentage of ever-married women age 15-49 whose husbands/partners have ever demonstrated specific types of controlling behaviors, by background characteristics, Tajikistan 2012

Background characteristic	Percentage of women whose husband/partner: Is jealous or angry if she talks to other men	Frequently accuses her of being unfaithful	Does not permit her to meet her female friends	Tries to limit her contact with her family	Insists on knowing where she is at all times	Displays three or more of the specific behaviors	Displays none of the specific behaviors	Number of ever-married women
Age								
15-19	80.7	17.5	28.9	8.8	57.2	26.9	10.4	132
20-24	74.6	13.1	21.7	11.3	44.1	23.0	23.3	800
25-29	75.5	15.7	21.8	9.3	45.7	24.0	20.6	848
30-39	73.1	14.0	17.1	8.5	42.6	19.2	21.6	1,178
40-49	57.5	10.0	13.7	5.9	32.4	12.5	35.5	1,135
Residence								
Urban	72.6	13.1	19.5	8.0	40.2	20.2	22.9	1,023
Rural	68.9	13.2	18.0	8.7	41.5	19.1	26.0	3,070
Region								
Dushanbe	69.1	11.0	15.3	9.7	35.8	16.9	25.9	366
GBAO	48.6	12.8	10.3	8.3	36.4	14.5	40.0	84
Sughd	77.6	12.5	26.7	10.1	42.5	27.7	17.8	1,272
DRS	72.2	17.0	12.4	7.8	38.5	13.4	25.5	916
Khatlon	62.9	11.9	16.2	7.3	43.3	16.6	30.6	1,455
Marital status								
Married or living together	70.1	12.3	18.0	7.9	41.4	19.0	24.7	3,812
Divorced/separated/widowed	65.5	24.8	23.6	16.6	37.9	24.4	32.6	281
Number of living children								
0	77.6	14.5	22.4	8.8	46.7	23.3	20.6	460
1-2	71.5	14.9	21.7	10.7	42.2	23.2	24.4	1,542
3-4	71.4	11.9	16.2	7.1	41.4	17.3	22.5	1,354
5+	58.6	11.1	13.0	6.4	35.2	12.5	35.0	737
Employment								
Employed for cash	69.5	14.9	18.9	8.8	40.4	19.9	25.9	1,049
Employed not for cash	68.4	7.7	12.0	5.9	36.6	12.8	26.7	344
Not employed	70.2	13.2	19.1	8.7	42.0	20.0	24.8	2,696
Education								
None/primary	68.4	15.5	19.5	8.7	38.1	18.7	27.4	229
General basic	74.4	16.1	22.9	10.2	47.0	23.9	21.2	1,252
General secondary	66.1	11.7	15.4	7.0	37.8	16.9	28.6	2,031
Professional primary/middle	75.7	10.1	20.0	11.4	41.8	17.9	19.0	313
Higher	70.8	12.4	17.6	8.0	41.4	19.0	23.8	268
Wealth quintile								
Lowest	61.8	11.4	16.6	7.0	39.8	16.0	31.7	765
Second	66.1	15.4	17.8	9.5	41.3	20.0	28.9	821
Middle	69.2	16.6	20.0	9.9	40.4	21.2	25.2	818
Fourth	75.2	9.6	18.8	8.0	43.4	19.3	20.7	840
Highest	75.7	12.8	18.7	8.0	40.9	19.9	20.3	849
Woman afraid of husband								
Most of the time afraid	72.0	15.8	23.2	12.4	38.9	23.1	25.2	1,778
Sometimes afraid	71.1	11.5	15.0	5.7	44.9	17.3	22.4	1,939
Never afraid	53.9	10.0	12.5	5.2	32.0	11.9	38.1	293
Total	69.8	13.2	18.4	8.5	41.2	19.3	25.2	4,093

Note: Husband/partner refers to the current husband/partner for currently married women and the most recent husband/partner for divorced, separated, or widowed women. Totals include four women for whom employment status is missing and 84 women for whom information on how often they are afraid of their husband is missing.

The main controlling behaviors women experienced from their husbands were jealousy or anger if they talked to other men (70 percent) and husbands insisting on knowing where they are at all times (41 percent). The next most common behaviors were not permitting them to meet female friends (18 percent) and frequently accusing them of being unfaithful (13 percent). Only 9 percent of women said their current or most recent husband tried to limit her contact with her family.

Almost one in five ever-married women (19 percent) say that their husbands display three or more of these controlling behaviors. This proportion declines with the increase in age of the women. Women in the Sughd region and those who have been previously married are more likely than other women to report that their husbands display three or more of these controlling behaviors. Having a husband who displays at least three controlling behaviors is least likely among women with five or more living children and those employed not for cash. There is no clear relationship between the percentage of women whose husbands display three or more controlling behaviors and either education of the woman or wealth quintile.

In the 2012 TjDHS, a question about whether (and how frequently) women are afraid of their husbands was included as part of the domestic violence module. For women who report any acts of violence perpetrated by their husbands/partners, information on whether or not women are frequently afraid of their husbands provides a context in which the experience of the reported violent acts can be interpreted. Further, despite the fact that the domestic violence module was designed to optimize the reporting of violent acts, the possibility of underreporting of violence cannot be entirely ruled out. Given that some women may be reluctant to report violence, questions about fear of husband may be a proxy indicator of violence experienced by women. The question asks all ever-married women (irrespective of their experience of spousal violence), whether they are afraid of their husband/partner most of the time, sometimes, or never. Nine in ten of all ever-married women report being afraid of their husbands/partners (data not shown). Women who are almost always afraid of their husbands are about twice as likely as women who are never afraid to report that their husbands display at least three controlling behaviors.

14.7 Forms of Spousal Violence

Different types of violence are not mutually exclusive, and women may report multiple forms of violence. Research suggests that physical violence in intimate relationships is often accompanied by psychological abuse and, in one-third to more than one-half of cases, by sexual abuse (Krug et al., 2002). Table 14.8 shows the percentage of ever-married women age 15-49, who have experienced various forms of violence by their husbands, over the course of the marriage and in the 12 months preceding the survey. Note that respondents who are currently married reported on violence by their current husband, and respondents who are widowed, divorced, or separated reported on violence by their most recent husband.

Table 14.8 shows that 20 percent of ever-married women report ever experiencing physical violence committed by their current or most recent husband or partner, 4 percent report ever experiencing sexual violence, and 11 percent report ever experiencing emotional violence. One in five ever-married women (20 percent) have experienced physical and/or sexual violence, and 24 percent have experienced at least one of the three forms of spousal violence.

The most common form of spousal violence ever experienced by ever-married women is being slapped (17 percent) (Figure 14.1). Eleven percent of ever-married women report having been pushed, shaken, or had something thrown at them, and 5 percent report having ever been punched by their husbands. Four percent of ever-married women say their husbands have twisted their arm or pulled their hair, kicked them or dragged them or beat them up, or physically forced them to have sexual intercourse when they did not want to. One in ten women say that their husbands have said or done something to humiliate them in front of others.

Table 14.8 Forms of spousal violence

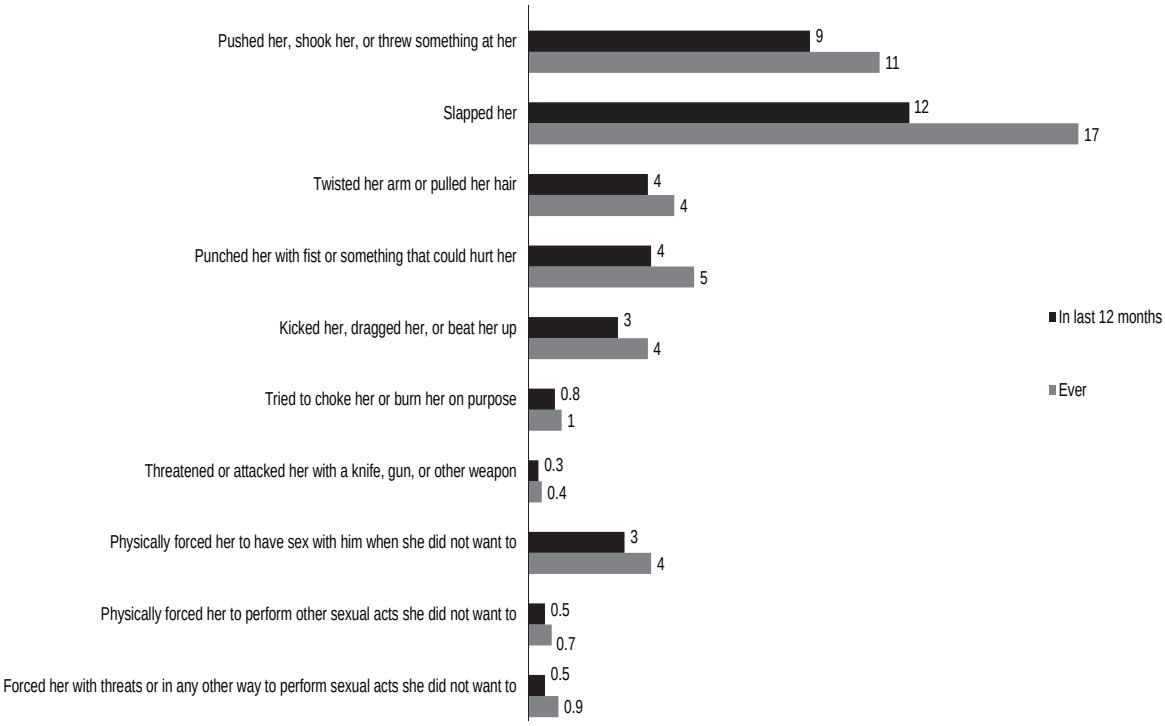
Percentage of ever-married women age 15-49 who have experienced various forms of violence ever or in the 12 months preceding the survey, committed by their husband/partner, ajikistan 2012

Type of violence	Ever	In the past 12 months		
		Often	Sometimes	Often or sometimes
SPOUSAL VIOLENCE COMMITTED BY CURRENT OR MOST RECENT HUSBAND/PARTNER				
Physical violence				
Any physical violence	19.5	2.0	12.5	14.5
Pushed her, shook her, or threw something at her	10.6	1.0	7.5	8.5
Slapped her	16.6	1.2	10.3	11.5
Twisted her arm or pulled her hair	4.4	0.6	3.0	3.6
Punched her with his fist or with something that could hurt her	5.0	0.8	2.9	3.7
Kicked her, dragged her, or beat her up	3.6	0.8	1.9	2.7
Tried to choke her or burn her on purpose	1.0	0.3	0.5	0.8
Threatened or attacked her with a knife, gun, or other weapon	0.4	0.2	0.1	0.3
Sexual violence				
Any sexual violence	4.4	0.6	2.7	3.3
Physically forced her to have sexual intercourse with him when she did not want to	3.7	0.5	2.3	2.9
Physically forced her to perform any other sexual acts she did not want to	0.7	0.2	0.3	0.5
Forced her with threats or in any other way to perform sexual acts she did not want to	0.9	0.1	0.4	0.5
Emotional violence				
Any emotional violence	11.3	2.6	7.8	10.3
Said or did something to humiliate her in front of others	10.4	1.9	7.5	9.4
Threatened to hurt or harm her or someone she cared about	2.9	0.7	1.7	2.4
Insulted her or made her feel bad about herself	4.0	1.0	2.4	3.4
Any form of physical and/or sexual violence	20.3	2.3	12.8	15.2
Any form of emotional and/or physical and/or sexual violence	24.4	3.9	15.6	19.5
SPOUSAL VIOLENCE COMMITTED BY ANY HUSBAND/PARTNER				
Physical violence	20.4	na	na	14.5
Sexual violence	4.8	na	na	3.3
Physical and/or sexual violence	21.2	na	na	15.2
Number of ever-married women	4,093	4,093	4,093	4,093

na = Not applicable

Figure 14.1

Percentage of ever-married women age 15-49 who have experienced specific types of violence from current or most recent husband, ever and in the last 12 months, Tajikistan 2012



Tajikistan DHS 2012

Fifteen percent of ever-married women report experiencing spousal physical violence in the past 12 months, with 13 percent having experienced violence sometimes and 2 percent having experienced it often. Three percent report having experienced spousal sexual violence in the past 12 months, with 3 percent having experienced such violence sometimes and less than one percent often. Additionally, 10 percent of women report spousal emotional violence in the past 12 months, 8 percent sometimes, 3 percent often. Overall, 20 percent of ever-married women have experienced at least one of the three forms of violence by their current or most recent husband or partner in the past year.

The 2012 TjDHS also collected information about spousal violence committed by any husband or partner ever and in the past 12 months. As shown in Table 14.8, 20 percent of ever married women report ever experiencing physical violence committed by any husband or partner and 15 percent experienced such violence often or sometimes in the past 12 months. Five percent of ever married women report ever experiencing sexual violence committed by any husband and 3 percent experienced such violence often or sometimes in the past 12 months. Overall, one in five ever married women (21 percent) has experienced physical and/or sexual violence committed by any husband, and 15 percent have experienced such violence often or sometimes in the past year.

14.8 Differentials in Spousal Violence

Table 14.9 shows the percentage of ever-married women age 15-49 who have experienced spousal emotional, physical, or sexual violence by selected background characteristics of the woman. As mentioned above, 20 percent of ever-married women have experienced physical and/or sexual violence and 24 percent have experienced at least one of the three forms of spousal violence.

The percentage of women who have ever experienced at least one form of spousal violence tends to increase with age to a peak at ages 25-29 and for women with 1-2 children. It is highest among women in the Sughd region (35 percent) and lowest among women in the DRS region (13 percent). Women who are divorced, separated, or widowed are more likely to have experienced physical, sexual, or emotional violence from a husband (36 percent) than women who are currently married (24 percent). Patterns by education and wealth are not consistent. For example, women in the highest education category are the least likely to have experienced at least one form of spousal violence, closely followed by women in the lowest education category.

Table 14.9 Spousal violence by background characteristics

Percentage of ever-married women age 15-49 who have ever experienced emotional, physical or sexual violence committed by their husband/partner, by background characteristics, Tajikistan 2012

Background characteristic	Emotional violence	Physical violence	Sexual violence	Physical and sexual violence	Physical and sexual and emotional violence	Physical or sexual violence	Physical or sexual or emotional violence	Number of ever-married women
Age								
15-19	12.5	7.9	1.7	0.8	0.8	8.7	15.7	132
20-24	11.8	17.3	4.0	3.8	2.3	17.4	22.2	800
25-29	13.8	23.5	4.2	3.5	1.7	24.2	29.8	848
30-39	10.5	20.9	3.6	3.2	2.0	21.3	24.7	1,178
40-49	9.8	18.0	5.9	4.1	2.6	19.8	22.7	1,135
Residence								
Urban	13.3	21.6	3.8	3.3	2.1	22.1	26.0	1,023
Rural	10.7	18.8	4.6	3.6	2.1	19.7	23.9	3,070
Region								
Dushanbe	11.4	14.7	2.4	2.3	2.2	14.8	16.9	366
GBAO	7.1	14.6	2.8	2.0	0.7	15.4	18.2	84
Sughd	23.6	23.0	8.3	6.2	4.3	25.1	34.6	1,272
DRS	4.0	11.5	1.2	1.0	0.5	11.6	12.6	916
Khatlon	5.4	23.0	3.5	3.2	1.2	23.3	25.2	1,455
Marital status								
Married or living together	10.5	18.6	4.1	3.3	1.8	19.5	23.6	3,812
Divorced/separated/widowed	22.4	31.1	8.2	7.6	6.9	31.8	35.8	281
Number of living children								
0	9.0	11.7	3.0	2.4	0.6	12.3	16.2	460
1-2	15.9	22.0	5.2	4.6	3.2	22.6	28.6	1,542
3-4	9.5	19.9	3.8	2.9	1.7	20.8	23.7	1,354
5+	6.5	18.4	4.6	3.3	1.5	19.7	22.2	737
Employment								
Employed for cash	12.7	19.4	4.3	3.4	2.3	20.3	25.0	1,049
Employed not for cash	8.2	21.5	4.7	4.1	1.8	22.2	24.1	344
Not employed	11.2	19.3	4.4	3.6	2.1	20.1	24.3	2,696
Education								
None/primary	5.1	18.9	2.7	2.7	1.7	18.9	19.5	229
General basic	12.8	20.5	3.8	3.1	1.6	21.2	26.6	1,252
General secondary	10.5	19.2	4.7	3.7	2.2	20.3	23.7	2,031
Professional primary/middle	16.5	22.9	8.0	7.7	4.9	23.2	29.0	313
Higher	9.8	13.1	2.1	0.8	0.7	14.4	18.3	268
Wealth quintile								
Lowest	5.8	16.4	4.5	2.7	0.9	18.2	20.8	765
Second	9.7	22.5	3.3	2.9	1.8	22.9	26.3	821
Middle	14.3	18.9	5.8	5.1	3.7	19.5	24.8	818
Fourth	12.7	20.0	4.6	4.1	2.6	20.5	24.5	840
Highest	13.5	19.6	3.7	2.9	1.5	20.4	25.4	849
Total	11.3	19.5	4.4	3.6	2.1	20.3	24.4	4,093

Note: Husband/partner refers to the current husband/partner for currently married women and the most recent husband/partner for divorced, separated, or widowed women. Totals include four women for whom employment status is missing.

Table 14.10 presents information on ever-married women age 15-49 who have experienced emotional, physical, or sexual violence committed by their husband, according to spousal characteristics and empowerment indicators.

Table 14.10 Spousal violence by husband's characteristics and empowerment indicators

Percentage of ever-married women age 15-49 who have ever experienced emotional, physical, or sexual violence committed by their husband/partner, by husband's characteristics and empowerment indicators, Tajikistan 2012

Background characteristic	Emotional violence	Physical violence	Sexual violence	Physical and sexual violence	Physical and sexual and emotional violence	Physical or sexual violence	Physical or sexual or emotional violence	Number of ever-married women
Husband's/partner's education								
None/primary	10.3	10.2	1.4	1.4	1.4	10.2	13.1	99
General basic	16.8	18.5	5.3	4.3	3.4	19.6	25.2	527
General secondary	11.5	20.6	4.8	3.9	2.4	21.5	25.4	2,001
Professional primary/middle	9.4	23.2	5.5	4.1	1.5	24.6	28.9	558
Higher	9.1	16.6	2.5	2.3	1.3	16.8	20.5	897
Husband's/partner's alcohol consumption								
Does not drink alcohol	8.0	15.2	3.1	2.5	1.4	15.8	19.1	3,301
Drinks alcohol but is never drunk	*	*	*	*	*	*	*	2
Is sometimes drunk	21.7	33.0	6.6	5.1	2.2	34.5	42.8	672
Is often drunk	48.2	66.2	28.0	26.6	23.8	67.7	73.4	110
Spousal education difference								
Husband has more education	9.9	19.7	3.3	2.8	1.5	20.2	24.1	2,002
Wife has more education	15.7	19.4	7.2	6.2	4.2	20.4	25.5	653
Both have equal education	11.4	19.6	4.7	3.5	2.0	20.8	24.7	1,406
Neither has any education	*	*	*	*	*	*	*	17
Spousal age difference[1]								
Wife older	9.6	22.7	3.9	2.4	0.0	24.2	28.5	155
Wife is same age	14.3	19.1	5.1	5.1	3.0	19.1	23.3	329
Wife 0-4 years younger	10.7	19.2	3.9	2.9	1.6	20.2	24.2	2,070
Wife 5-9 years younger	9.5	16.8	4.4	3.6	2.0	17.6	22.0	1,035
Wife 10 or more years younger	8.8	20.2	3.5	3.1	1.8	20.6	24.3	206
Number of marital control behaviors displayed by husband/partner[2]								
0	5.5	12.2	2.2	2.1	1.0	12.3	14.2	1,033
1-2	6.8	17.9	3.3	2.4	0.8	18.8	21.6	2,269
3-4	31.0	31.0	9.6	8.0	6.4	32.6	44.5	623
5	33.9	43.1	12.8	11.6	11.0	44.3	50.2	169
Number of decisions in which women participate[3]								
0	8.6	17.9	4.2	3.6	1.8	18.6	21.9	1,298
1-2	14.5	22.3	6.5	5.0	2.7	23.8	30.0	885
3	9.8	17.2	2.6	2.1	1.2	17.8	21.5	1,629
Number of reasons for which wife-beating is justified[4]								
0	11.9	15.9	2.9	2.5	1.4	16.3	21.8	1,405
1-2	11.9	21.2	5.4	4.4	2.5	22.2	26.3	971
3-4	12.6	22.5	4.8	3.8	2.1	23.5	27.7	830
5	8.4	20.6	5.1	4.1	2.8	21.6	23.4	887
Woman's father beat her mother								
Yes	23.2	35.8	12.2	11.0	6.8	36.9	43.1	526
No	9.8	16.6	3.2	2.5	1.4	17.4	21.4	3,227
Don't' know/missing	7.6	22.0	2.9	2.5	1.7	22.4	24.3	341
Woman afraid of husband								
Most of the time afraid	16.2	29.4	6.5	5.9	3.6	30.0	34.5	1,778
Sometimes afraid	7.1	11.5	2.7	1.8	1.0	12.4	15.8	1,939
Never afraid	9.1	8.0	2.9	1.1	1.1	9.7	16.0	293
Total	11.3	19.5	4.4	3.6	2.1	20.3	24.4	4,093

Note: Husband/partner refers to the current husband/partner for currently married women and the most recent husband/partner for divorced, separated, or widowed women. Total includes 11 women for whom husband's education is missing, 7 women for whom husband's alcohol consumption is missing, 15 women for whom spousal education difference is missing, 17 women for whom spousal age difference is missing, and 84 women for whom information on how often they are afraid of their husband is missing. An asterisk denotes a figure based on fewer than 25 unweighted cases that has been suppressed.

[1] Includes only women who have been married only once.

[2] According to the wife's report. See Table 14.7 for list of behaviors.

[3] According to the wife's report. See Table 15.6 for list of decisions.

[4] According to the wife's report. See Table 15.7 for list of reasons.

Results show that the percentage of ever-married women who have experienced physical, sexual, or emotional violence tends to increase as the level of education of the husband increases, from 13 percent of ever-married women whose husbands have no education or only primary education to 29 percent of those whose husbands have professional primary or middle education. Spousal violence is highest among women whose husbands get drunk very often (73 percent) and lowest among those whose husbands do not drink alcohol (19 percent).

Spousal violence increases linearly with the number of controlling behaviors displayed by the husband. Among women whose husbands exhibit five types of controlling behaviors, half (50 percent) have experienced one or more forms of violence. In contrast, among women whose husbands display none of the five controlling behaviors, only 14 percent have experienced any form of spousal violence. Women's experience of violence is not correlated with the number of household decisions in which they participate, being equally low among women who do not participate in any decisions and those who participate in all three decisions asked about. Similarly, although spousal violence is lowest among women who do not think wife beating is justified for any of the given reasons, it is almost as low among those who feel wife beating is justified for all five of the given reasons. Women whose fathers did not beat their mothers are much less likely to experience any type of violence by their husband than women whose fathers beat their mothers (21 percent versus 43 percent). Women who are afraid of their husbands most of the time are about twice as likely to have experienced some form of spousal violence (35 percent) as women who are only sometimes or never afraid of their husbands (16 percent each).

14.9 Recent Experience of Spousal Violence

Table 14.11 shows the percentage of ever-married women who have experienced physical or sexual violence by any husband/partner in the past 12 months, by background characteristics.

Overall, 15 percent of ever-married women experienced physical or sexual violence by a husband in the past 12 months. The percentage of women who have experienced spousal physical or sexual violence in the past 12 months is higher among women age 25-29, women living in the Sughd region, and women who have one or two children. Currently married women are less likely to have experienced physical or sexual violence by a husband in the past 12 months than those previously married. There is no clear correlation between a woman's education level or wealth quintile and the experience of physical or sexual violence in the past 12 months. As expected, women who are afraid of their husbands most of the time are also much more likely to have experienced spousal violence in the previous 12 months than those who are only sometimes or never afraid of their husbands.

Table 14.11 Physical or sexual violence in the past 12 months by any husband/partner

Percentage of ever-married women who have experienced physical or sexual violence by any husband/partner in the past 12 months, by background characteristics, Tajikistan 2012

Background characteristic	Percentage of women who have experienced physical or sexual violence in the past 12 months from any husband/partner	Number of ever-married women
Age		
15-19	8.4	132
20-24	14.4	800
25-29	19.0	848
30-39	15.7	1,178
40-49	13.3	1,135
Residence		
Urban	16.4	1,023
Rural	14.8	3,070
Region		
Dushanbe	10.5	366
GBAO	11.2	84
Sughd	20.3	1,272
DRS	11.3	916
Khatlon	14.6	1,455
Marital status		
Married or living together	14.9	3,812
Divorced/separated/widowed	20.0	281
Number of living children		
0	9.6	460
1-2	18.1	1,542
3-4	15.9	1,354
5+	11.5	737
Employment		
Employed for cash	13.7	1,049
Employed not for cash	12.9	344
Not employed	16.1	2,696
Education		
None/primary	13.1	229
General basic	16.7	1,252
General secondary	15.0	2,031
Professional primary/middle	18.1	313
Higher	8.7	268
Wealth quintile		
Lowest	12.2	765
Second	17.5	821
Middle	15.4	818
Fourth	16.1	840
Highest	14.7	849
Woman afraid of husband		
Most of the time afraid	22.6	1,778
Sometimes afraid	9.5	1,939
Never afraid	4.9	293
Total	15.2	4,093

Note: Any husband/partner includes all current, most recent and former husbands/partners. Total includes 4 women for whom employment status is missing and 84 women for whom information on how often they are afraid of their husband is missing.

14.10 ONSET OF SPOUSAL VIOLENCE

To obtain information on the onset of marital violence, the 2012 TjDHS asked women how long after marriage the onset of spousal violence occurred, if ever. Table 14.12 shows the data for currently married women who have only been married once.

Table 14.12 Experience of spousal violence by duration of marriage

Among currently married women age 15-49 who have been married only once, the percentage who first experienced physical or sexual violence committed by their current husband/partner by specific exact years since marriage according to marital duration, Tajikistan 2012

	Percentage whose first experience of spousal physical or sexual violence by exact marital duration:				Percentage who have not experienced spousal sexual or physical violence	Number of currently married women who have been married only once
Years since marriage	Before marriage	2 years	5 years	10 years		
<2	0.0	na	na	na	88.5	434
2-4	0.3	16.0	na	na	80.0	632
5-9	0.1	13.3	20.9	na	78.1	704
10+	0.3	10.5	15.8	18.8	79.8	1,844
Total	0.2	12.1	16.9	18.6	80.6	3,614

na = Not applicable

The data show that about four in five currently married women (81 percent) have never experienced physical or sexual violence by their current husband, whereas less than 1 percent experienced violence before marriage, 12 percent experienced it in the first two years of marriage, 17 percent experienced it in the first five years, and 19 percent experienced it within the first ten years of marriage. These data clearly suggest that for a considerable percentage of women who experience spousal physical or sexual violence, the violence began relatively early in their marriage.

14.11 PHYSICAL CONSEQUENCES OF SPOUSAL VIOLENCE

In the 2012 TjDHS, ever-married women were asked whether they had sustained some form of injury as a result of physical or sexual violence inflicted by their husband. Just over one-quarter of women (27 percent) who reported ever having experienced spousal physical or sexual violence suffered some sort of injury; 25 percent suffered cuts, bruises, or aches; 8 percent had eye injuries, sprains, dislocations, or burns; and 3 percent had deep wounds, broken bones, broken teeth, or other serious injuries (Table 14.13). The prevalence of all forms of injury is similar among women who had experienced violence in the past 12 months.

Table 14.13 Injuries to women due to spousal violence

Percentage of ever-married women age 15-49 who have experienced specific types of spousal violence by types of injuries resulting from the violence, according to the type of violence and whether they experienced the violence ever and in the 12 months preceding the survey, Tajikistan 2012

Type of violence	Cuts, bruises, or aches	Eye injuries, sprains, dislocations, or burns	Deep wounds, broken bones, broken teeth, or any other serious injury	Any of these injuries	Number of ever-married women who have ever experienced any physical or sexual violence
Experienced physical violence[1]					
Ever[2]	26.2	8.0	2.9	27.5	798
In the past 12 months	27.6	8.1	2.8	29.0	593
Experienced sexual violence					
Ever[2]	38.0	17.2	3.8	40.0	179
In the past 12 months	38.4	16.6	4.0	41.1	135
Experienced physical or sexual violence[1]					
Ever[2]	25.2	7.8	2.8	26.6	832
In the past 12 months	26.4	7.8	2.7	27.9	621

Note: Husband/partner refers to the current husband/partner for currently married women and the most recent husband/partner for divorced, separated, or widowed women.
[1] Excludes women who reported violence only in response to a direct question on violence during pregnancy
[2] Includes in the past 12 months

14.12 VIOLENCE BY WOMEN AGAINST THEIR SPOUSE

In cases of domestic violence, either person (husband or wife) can be the perpetrator of violence. In the 2012 TjDHS, ever-married women were asked about instances when they were the instigator of spousal violence, specifically, whether they had ever hit, slapped, kicked, or done anything else to physically hurt their husband at a time when he was not already beating or physically hurting the respondent. Table 14.14 shows the percentage of ever-married women age 15-49 who reported initiating physical violence against their spouses ever and in the 12 months prior to the survey, by background characteristics.

Table 14.14 Violence by women against their spouse

Percentage of ever-married women age 15-49 who have committed physical violence against their current or most recent husband/partner when he was not already beating or physically hurting her, ever and in the past 12 months, according to women's own experience of spousal violence and background characteristics, Tajikistan 2012

Background characteristic	Percentage who have committed physical violence against their husband/partner		Number of ever-married women
	Ever[1]	Past 12 months	
Women experienced spousal physical violence			
Ever[1]	7.2	5.9	798
In the past 12 months	8.4	7.0	593
Never	0.7	0.7	3,295
Age			
15-19	0.4	0.4	132
20-24	1.3	0.8	800
25-29	2.1	2.1	848
30-39	2.1	1.7	1,178
40-49	2.5	2.1	1,135
Residence			
Urban	2.4	1.8	1,023
Rural	1.9	1.6	3,070
Region			
Dushanbe	2.3	1.5	366
GBAO	1.4	1.2	84
Sughd	3.3	2.6	1,272
DRS	0.8	0.8	916
Khatlon	1.6	1.5	1,455
Marital status			
Married or living together	1.8	1.5	3,812
Divorced/separated/widowed	4.5	3.5	281
Employment			
Employed for cash	2.8	2.4	1,049
Employed not for cash	2.9	2.6	344
Not employed	1.6	1.3	2,696
Number of living children			
0	0.6	0.6	460
1-2	3.0	2.3	1,542
3-4	1.8	1.6	1,354
5+	1.1	1.1	737
Education			
None/primary	2.3	2.3	229
General basic	1.3	1.2	1,252
General secondary	2.1	1.9	2,031
Professional primary/middle	3.8	2.1	313
Higher	2.0	1.1	268
Wealth quintile			
Lowest	1.1	1.1	765
Second	1.9	1.9	821
Middle	1.9	1.7	818
Fourth	2.5	1.7	840
Highest	2.4	1.9	849
Total	2.0	1.7	4,093

Note: Husband/partner refers to the current husband/partner for currently married women and the most recent husband/partner for divorced, separated, or widowed women. Total includes four women for whom employment status is missing.
[1] Includes in the past 12 months

Overall, only 2 percent of ever-married women reported that they had ever initiated physical violence against their husbands, and 2 percent had done so in the past 12 months. Women who have been physically abused by their husband ever and in the past 12 months are more likely to have initiated spousal physical abuse than women who have never been abused (7 to 8 percent and 1 percent, respectively). Women who are divorced, separated, or widowed are slightly more likely to initiate spousal violence than women who are currently married. Women's use of violence against their husbands does not vary much by other background characteristics.

Table 14.15 presents information on ever-married women who have committed physical violence against their spouse, ever and in the past 12 months, according to spousal characteristics and empowerment indicators.

Results show initiation of violence by women who have ever committed physical violence against their husband is highest among those whose husbands get drunk often (12 percent). Women's violence against their spouse generally increases with the number of controlling behaviors displayed by the husband. As expected, women with a father who beat their mother are more likely to commit physical spousal violence than women with a father who did not (7 percent versus 1 percent). Women's initiation of violence does not vary much by other characteristics. Similar patterns are observed in variations of women's physical violence against their spouse in the past 12 months by background characteristics.

Table 14.15 Women's violence against their husband by husband's characteristics and empowerment indicators

Percentage of ever-married women age 15-49 who have committed physical violence against their current or most recent husband/partner when he was not already beating or physically hurting her, ever and in the past 12 months, according husband's characteristics and empowerment indicators, Tajikistan 2012

Background characteristic	Percentage who have committed physical violence against their husband/partner		Number of ever-married women
	Ever[1]	Past 12 months	
Husband's/partner's education			
None/primary	0.9	0.9	99
General basic	1.4	1.4	527
General secondary	2.2	1.7	2,001
Professional primary/middle	2.4	2.2	558
Higher	1.8	1.5	897
Husband's/partner's alcohol consumption			
Does not drink alcohol	1.1	0.9	3,301
Drinks alcohol but is never drunk	*	*	2
Is sometimes drunk	4.6	4.1	672
Is often drunk	11.5	10.1	110
Spousal education difference			
Husband has more education	1.5	1.4	2,002
Wife has more education	2.9	2.2	653
Both have equal education	2.2	1.8	1,406
Neither has any education	*	*	17
Spousal age difference[2]			
Wife older	0.7	0.7	155
Wife is same age	3.6	3.6	329
Wife 0-4 years younger	1.8	1.5	2,070
Wife 5-9 years younger	1.3	0.7	1,035
Wife 10 or more years younger	3.1	3.1	206
Number of marital control behaviors displayed by husband/partner[3]			
0	2.0	1.9	1,033
1-2	1.2	1.0	2,269
3-4	3.4	2.6	623
5	7.1	5.7	169
Number of decisions in which she participates[4]			
0	1.5	1.1	1,298
1-2	2.2	1.8	885
3	1.8	1.8	1,629
Number of reasons for which wife-beating is justified[5]			
0	1.9	1.5	1,405
1-2	2.2	2.1	971
3-4	2.3	2.0	830
5	1.6	1.1	887
Father beat mother			
Yes	7.2	5.7	526
No	1.3	1.1	3,227
Don't know/missing	0.6	0.6	341
Woman afraid of husband/partner			
Most of the time afraid	2.4	2.1	1,778
Sometimes afraid	1.1	0.9	1,939
Never afraid	3.7	2.7	293
Total	2.0	1.7	4,093

Note: Husband/partner refers to the current husband/partner for currently married women and the most recent husband/partner for divorced, separated, or widowed women. Total includes 11 women for whom husband's education is missing, 7 women for whom husband's alcohol consumption is missing, 15 women for whom spousal education difference is missing, 17 women for whom spousal age difference is missing, and 84 women for whom information on how often they are afraid of their husband is missing. An asterisk denotes a figure based on fewer than 25 unweighted cases that has been suppressed.

[1] Includes in the past 12 months.

[2] Includes only women who have been married only once.

[3] According to the wife's report. See Table 14.7 for list of behaviors.

[4] According to the wife's report. See Table 15.6 for list of decisions.

[5] According to the wife's report. See Table 15.7 for list of decisions.

14.13 HELP-SEEKING BEHAVIOR BY WOMEN WHO EXPERIENCE VIOLENCE

This final section of this chapter describes help-seeking behavior by women age 15-49 who have ever experienced physical or sexual violence. Table 14.16 shows the percent distribution of women who have ever experienced physical or sexual violence committed by anyone, according to whether they ever sought help to stop the violence and, if not, whether or not they told anyone about the violence.

Table 14.16 Help seeking to stop violence

Percent distribution of women age 15-49 who have ever experienced physical or sexual violence by their help-seeking behavior, by type of violence and background characteristics, Tajikistan 2012

Background characteristic	Sought help to stop violence	Never sought help but told someone	Never sought help, never told anyone	Missing/ don't know	Total	Number of women who have ever experienced any physical or sexual violence
Type of violence experienced						
Physical only	17.1	9.6	63.6	9.7	100.0	870
Sexual only	(0.0)	(12.9)	(87.1)	(0.0)	100.0	34
Physical and sexual	40.4	11.4	44.8	3.5	100.0	173
Age						
15-19	25.2	9.5	59.0	6.2	100.0	83
20-24	21.3	6.0	57.6	15.0	100.0	176
25-29	15.8	13.3	67.1	3.8	100.0	242
30-39	20.8	8.1	62.2	8.9	100.0	303
40-49	21.5	12.1	58.3	8.2	100.0	273
Residence						
Urban	19.8	13.7	59.8	6.7	100.0	298
Rural	20.4	8.6	61.9	9.0	100.0	779
Region						
Dushanbe	22.8	20.7	46.5	10.0	100.0	78
GBAO	16.9	8.0	73.1	2.0	100.0	19
Sughd	31.3	8.4	56.6	3.7	100.0	397
DRS	12.9	4.1	62.0	21.1	100.0	163
Khatlon	12.4	12.0	67.7	7.9	100.0	421
Marital status						
Never married	22.1	13.4	54.8	9.6	100.0	99
Married or living together	18.9	9.5	63.6	8.0	100.0	874
Divorced/separated/widowed	30.2	11.4	48.0	10.4	100.0	104
Number of living children						
0	21.3	10.3	60.0	8.4	100.0	172
1-2	23.8	10.0	57.5	8.7	100.0	411
3-4	20.6	8.3	66.1	5.0	100.0	324
5+	10.0	13.2	62.7	14.0	100.0	170
Employment						
Employed, for cash	23.4	10.3	57.9	8.4	100.0	291
Employed, not for cash	29.8	4.8	57.2	8.1	100.0	96
Not employed	17.7	10.7	63.5	8.2	100.0	687
Education						
None/primary	11.4	16.5	60.8	11.3	100.0	54
General basic	15.7	8.3	65.0	10.9	100.0	354
General secondary	21.9	11.1	60.1	6.8	100.0	525
Professional primary/middle	34.0	7.8	51.4	6.9	100.0	96
Higher	18.0	8.3	67.3	6.5	100.0	49
Wealth quintile						
Lowest	16.7	10.5	62.0	10.7	100.0	185
Second	17.4	8.2	62.8	11.6	100.0	240
Middle	26.2	6.8	58.9	8.1	100.0	202
Fourth	23.8	10.1	61.3	4.8	100.0	221
Highest	17.6	14.3	61.3	6.8	100.0	229
Total	20.3	10.0	61.3	8.4	100.0	1,077

Note: Women can report more than one source from which they sought help. Total includes two women for whom employment status is missing. Figures in parentheses are based on 25-49 unweighted cases.

Overall, one in five women (20 percent) who have experienced any type of physical or sexual violence sought help to stop the violence. Ten percent never sought help but told someone about the violence, whereas the vast majority (61 percent) never sought help and never told anyone about the violence. Women who have experienced both physical and sexual violence (40 percent) are more than twice as likely to have sought help as women who experienced only physical violence. Similarly, women who are divorced, separated, or widowed are more likely to have sought help to stop the violence than women who are either currently married or never-married. Also more likely to seek help are women who are employed, but not for cash, and women who have professional primary or middle education.

Table 14.17 Sources for help to stop the violence

Percentage of women age 15-49 who have experienced physical or sexual violence and sought help by sources from which they sought help, according to the type of violence that women reported, Tajikistan 2012

	Type of violence experienced		
Person	Physical only	Physical and sexual	Total
Own family	75.7	69.8	73.8
Husband/partner's family	30.7	45.7	35.5
Husband/partner	0.5	0.0	0.3
Friend	0.9	4.0	1.9
Neighbor	6.4	7.5	6.8
Doctor/medical personnel	1.0	6.6	2.8
Police	3.6	5.5	4.2
Lawyer	0.4	0.0	0.3
Social work organization	0.0	1.1	0.3
Other	1.2	1.3	1.2
Number of women who have experienced violence and sought help	148	70	218

Table 14.17 shows the percentage of abused women who reported seeking help, by sources from which help was sought. The most common sources of help are the respondent's own family (reported by 74 percent of women), the husband's family (reported by 36 percent of women), neighbors (reported by 7 percent of women), and the police (reported by 4 percent of women). Differences by type of violence are not large.

WOMEN'S EMPOWERMENT AND DEMOGRAPHIC AND HEALTH OUTCOMES

15

Key Findings

- One-third of currently married employed women who earn cash report deciding themselves how their earnings will be used; 48 percent say that they decide jointly how to use their earnings with their husband.
- Just over half of all women age 15-49 own a house, either alone or jointly, whereas only 29 percent own land.
- Less than half (43 percent) of currently married women report that each of three household decisions is made alone or jointly with their husbands: making decisions about their own health care, making major household purchases, and visits to their family or relatives.
- Six in ten women agree with one or more reasons justifying wife beating; more than half think it is justifiable for a man to beat his wife if she goes out without telling him. Four in ten women agree that husband is justified in beating his wife if she is neglecting the children (44 percent) or arguing with a husband (40 percent).

The 1994 International Conference on Population and Development declared that "advancing gender equality and equity and the empowerment of women and the elimination of all kinds of violence against women, and ensuring women's ability to control their own fertility are cornerstones of population and development related programs" (United Nations, 1994). Women's empowerment has been defined to encompass women having a sense of self-worth, access to opportunities and resources, choices and the ability to exercise them, control over their own lives, and influence over the direction of social change. Empowerment and autonomy are essential for the achievement of sustainable development. The full participation and partnership of both women and men is required in productive and reproductive life, including the sharing of responsibilities for the care and nurture of children as well as for the maintenance of the household.

According to the United Nations Development Program's (UNDP's) Human Development Report for 2013, Tajikistan ranks 57 out of 186 countries on the Gender Inequality Index, which is defined in the report as "a composite measure reflecting inequality in achievements between women and men in three dimensions: reproductive health, empowerment, and the labor market"(UNDP, 2013). The 2012 Global Gender Gap Index, developed by the World Economic Forum, ranks Tajikistan much lower—96 out of 135 countries in terms of gender equality (Hausmann et al., 2012).

In this chapter, indicators of women's empowerment including employed women's control over their own earnings, women's ownership of assets, women's participation in household decisions, and women's acceptance of wife beating are discussed. In addition, two summary indicators of women's empowerment are defined: an index of the number of household decisions (0-3) in which the respondent participates and an index of the number of reasons (0-5) the respondent accepts as justifying wife beating. The ranking of women on these two indices is then related to selected demographic and health outcomes that include contraceptive use, ideal family size, unmet need for contraception, reproductive health care, and child mortality.

15.1 EMPLOYMENT AND FORM OF EARNINGS

Employment, particularly employment for cash, and control over how earnings are used are important indicators of empowerment for women. Women interviewed in the 2012 TjDHS were asked whether they were employed at the time of the survey and, if not, whether they were employed at any time during the 12 months preceding the survey. Table 15.1 shows the percentage of currently married women age 15-49 who were employed at any time in the 12 months preceding the survey, and the percent distribution of employed women by the type of earnings they received (cash, in-kind, both, or neither).

Table 15.1 Employment and cash earnings of currently married women

Percentage of currently married women age 15-49 who were employed at any time in the past 12 months and the percent distribution of currently married women employed in the past 12 months by type of earnings, according to age, Tajikistan 2012

	Among currently married women:		Percent distribution of currently married women employed in the 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 women
15-19	13.5	266	(25.1)	(32.4)	(10.7)	(31.7)	(0.0)	100.0	36
20-24	20.7	1,320	41.6	23.3	8.9	26.0	0.2	100.0	273
25-29	29.9	1,332	42.9	20.3	9.3	26.8	0.5	100.0	399
30-34	30.4	1,014	54.2	20.6	9.4	15.5	0.3	100.0	308
35-39	39.1	923	57.5	18.4	7.4	16.2	0.4	100.0	361
40-44	44.5	879	63.3	16.9	7.6	11.8	0.3	100.0	391
45-49	38.6	770	50.2	26.1	7.5	16.1	0.0	100.0	297
Total	31.8	6,504	51.6	20.8	8.4	18.9	0.3	100.0	2,066

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

Almost one-third of currently married women age 15-49 reported being employed in the past 12 months. By age, employment increases from 14 percent among married women age 15-19 to 45 percent among women age 40-44, before declining to 39 percent in the oldest age group (45-49 years).

Although employment is assumed to go hand in hand with payment for work, not all women receive earnings for the work they do. Even among women who receive earnings, not all are paid in cash. Fifty-two percent of employed married women are paid in cash only, 21 percent receive both cash and in-kind earnings, 8 percent are paid in kind, and 19 percent do not receive any form of payment for their work. Women under age 30 are more likely to be unpaid than their older counterparts.

15.2 WOMEN'S CONTROL OVER THEIR OWN EARNINGS

Besides receiving an income, women need to have control over their earnings to be empowered. In the survey, to assess control over earnings, currently married women with cash earnings in the past 12 months were asked who the main decision maker is with regard to the use of their earnings. It is expected that women who control their own cash earnings will have a greater say in the use of other household resources.

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 on the use of their earnings. One-third of currently married women who earn cash report that they themselves mainly decide how their cash earnings are used; another 48 percent report that they decide jointly with their husbands, 10 percent report that their husbands alone decide how their earnings are used, and 7 percent report that someone else mainly decides. Women age 25-29 are slightly less likely than older and younger women to mainly decide by themselves how their earnings are used (28 percent). Women with no children and those with five or more children are less likely to make their own decisions regarding the use of their earnings than women with one to four children. More than one in four childless married women says that someone other than she herself or her husband usually decides how her earnings are used. Rural women are less likely than urban women to mainly make decisions themselves about spending their earnings.

Table 15.2.1 Control over women's cash earnings and relative magnitude of women's cash earnings

Percent distribution of currently married women age 15-49 who received cash earnings for employment in the 12 months preceding the survey, by person who decides how wife's cash earnings are used and by whether she earned more or less than her husband, according to background characteristics, Tajikistan 2012

	Person who decides how the wife's cash earnings are used:						Wife's cash earnings compared with husband's cash earnings:						
Background characteristic	Mainly wife	Wife and husband jointly	Mainly husband	Other	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	21
20-24	33.8	37.2	6.5	19.0	3.5	100.0	3.0	74.5	9.7	4.2	8.7	100.0	177
25-29	27.5	40.8	14.4	16.6	0.7	100.0	3.1	83.1	9.9	1.2	2.7	100.0	252
30-34	34.1	49.5	8.0	7.2	1.2	100.0	4.7	79.3	11.5	1.9	2.6	100.0	231
35-39	31.5	57.7	8.6	0.9	1.2	100.0	9.1	73.7	11.6	3.1	2.6	100.0	274
40-44	33.4	52.6	11.7	0.0	2.3	100.0	12.5	69.6	11.1	3.0	3.9	100.0	314
45-49	37.0	48.6	10.4	0.0	4.0	100.0	12.5	66.8	13.0	3.1	4.6	100.0	227
Number of living children													
0	23.7	37.7	9.9	26.2	2.5	100.0	4.4	66.7	17.4	5.4	6.2	100.0	124
1-2	35.8	43.6	11.1	8.2	1.4	100.0	7.7	77.9	8.8	2.0	3.6	100.0	485
3-4	35.7	49.4	9.7	4.1	1.2	100.0	8.3	76.0	11.2	1.8	2.6	100.0	587
5+	25.6	57.4	11.0	1.5	4.4	100.0	8.2	69.4	12.1	4.2	6.2	100.0	299
Residence													
Urban	37.3	48.8	9.9	1.4	2.7	100.0	12.5	66.6	14.6	2.1	4.3	100.0	417
Rural	30.9	47.9	10.6	8.8	1.7	100.0	6.0	77.6	9.8	2.9	3.8	100.0	1,078
Region													
Dushanbe	36.0	46.6	10.7	0.3	6.4	100.0	10.2	61.9	16.4	2.4	9.2	100.0	145
GBAO	44.6	44.6	8.8	1.0	1.0	100.0	24.3	57.2	12.9	4.6	1.0	100.0	40
Sughd	36.3	48.6	12.0	2.6	0.6	100.0	4.6	83.0	10.1	0.9	1.4	100.0	523
DRS	40.7	47.3	4.2	4.7	3.1	100.0	13.8	58.8	17.9	3.0	6.5	100.0	133
Khatlon	26.7	48.5	10.5	12.2	2.1	100.0	7.5	74.9	9.3	3.9	4.4	100.0	655
Education													
None/primary	27.3	27.2	13.0	30.4	2.1	100.0	6.5	72.3	8.9	2.4	9.8	100.0	75
General basic	28.9	47.3	11.6	9.9	2.3	100.0	4.0	72.5	14.5	2.7	6.3	100.0	267
General secondary	32.7	48.3	11.1	5.0	2.9	100.0	7.1	75.7	9.9	3.5	3.8	100.0	662
Professional primary/ middle	37.4	46.1	9.7	6.7	0.0	100.0	9.3	78.3	9.6	1.7	1.1	100.0	235
Higher	33.9	56.4	7.2	1.2	1.3	100.0	12.5	70.9	12.7	1.2	2.6	100.0	257
Wealth quintile													
Lowest	28.7	52.6	12.8	3.8	2.2	100.0	8.2	67.9	13.1	5.4	5.4	100.0	286
Second	26.0	44.3	12.1	15.3	2.3	100.0	6.4	78.1	9.2	3.2	3.1	100.0	323
Middle	29.9	48.7	8.3	11.2	1.8	100.0	4.3	78.4	9.5	1.7	6.1	100.0	215
Fourth	37.3	45.2	12.7	3.5	1.2	100.0	6.0	81.4	7.9	1.6	3.0	100.0	273
Highest	39.3	49.8	6.9	1.7	2.4	100.0	11.7	69.6	14.3	1.3	3.1	100.0	399
Total	32.7	48.1	10.4	6.7	2.0	100.0	7.8	74.5	11.1	2.6	3.9	100.0	1,496

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

There is variation among the regions in who makes decisions on how women's earnings are used. The proportion of married employed women who mainly decide by themselves about the use of their earnings ranges from a high of 45 percent in the GBAO region to a low of 27 percent in the Khatlon region. Decisions by someone other than the wife or her husband about how the wife's earnings are used also varies by region, ranging from less than one percent in Dushanbe region to 12 percent of women in the Khatlon region.

The relationship between women's education and their decision-making power regarding their earnings does not show strong patterns except that married women with no education or only primary education are much more likely to have someone other than themselves or their husbands make decisions about how to use their earnings. Women's ability to decide themselves on how to spend their earnings generally increases with their wealth quintile. Thirty-nine percent of women in the highest wealth quintile mainly decide by themselves about the use of their earnings compared with 29 percent of women in the lowest wealth quintile.

Table 15.2.1 also shows information about how married women say their cash earnings compare with those of their husbands. Three-quarters of married women who earn cash say that they earn less than their husbands. Eleven percent say that they earn about the same as their husbands, while 8 percent say they earn more than their husbands, and 3 percent say their husbands have no earnings. Older women are

more likely than younger women to earn about the same or more than their husbands. Similarly, urban women are more likely than rural women to earn about the same or more than their husbands. In the GBAO region, almost one-quarter of married women who earn cash earn more than their husbands. On the other hand, married women in the Sughd region are the least likely to earn more than their husbands (5 percent) and most likely to earn less than their husbands (83 percent). Married women in the highest education and wealth categories are more likely to earn more than their husbands than women in other education and wealth categories; however, there is no clear relationship between wife's and husband's comparative cash earnings and either education or wealth quintile of the woman.

15.3 WOMEN'S CONTROL OVER THEIR HUSBAND'S EARNINGS

Table 15.2.2 shows data about control over the husband's cash earnings from the wife's perspective, by background characteristics. Among currently married women age 15-49 who say their husbands receive cash earnings, almost half (48 percent) say they decide jointly with their husbands how their husbands' earnings will be used, while 29 percent say their husbands mainly make decisions themselves. Sixteen percent of women say someone else makes decisions about their husbands' earnings. Only a small proportion of women (7 percent) say that they mainly make decisions on how their husbands' earnings are used.

Table 15.2.2 Control over men's cash earnings

Percent distribution 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, Tajikistan 2012

	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 women
Age							
15-19	2.4	28.5	25.8	43.0	0.3	100.0	248
20-24	2.9	37.0	26.2	33.5	0.5	100.0	1,284
25-29	4.0	39.6	32.6	23.6	0.2	100.0	1,312
30-34	7.4	47.9	32.5	12.3	0.0	100.0	997
35-39	11.0	58.2	28.1	2.6	0.1	100.0	907
40-44	12.0	59.3	27.8	0.5	0.4	100.0	862
45-49	9.4	61.8	28.4	0.0	0.4	100.0	744
Number of living children							
0	2.3	36.4	25.9	34.5	0.8	100.0	708
1-2	5.8	42.3	29.9	21.9	0.2	100.0	2,283
3-4	8.8	51.9	29.4	9.9	0.0	100.0	2,236
5+	8.7	58.4	29.5	2.7	0.6	100.0	1,128
Residence							
Urban	8.1	48.1	36.0	7.6	0.2	100.0	1,537
Rural	6.6	47.8	27.1	18.2	0.3	100.0	4,818
Region							
Dushanbe	8.8	43.9	45.1	2.2	0.0	100.0	543
GBAO	21.6	54.7	19.5	4.2	0.0	100.0	123
Sughd	6.9	42.9	35.1	15.0	0.1	100.0	1,983
DRS	4.5	50.6	24.5	20.1	0.3	100.0	1,529
Khatlon	7.5	51.1	23.8	17.2	0.5	100.0	2,177
Education							
None/primary	3.8	38.1	27.8	30.1	0.3	100.0	344
General basic	5.8	41.2	30.2	22.4	0.3	100.0	1,965
General secondary	7.3	50.9	29.3	12.2	0.3	100.0	3,187
Professional primary/middle	9.4	48.0	31.9	10.5	0.2	100.0	467
Higher	9.8	65.2	21.2	3.8	0.0	100.0	392
Wealth quintile							
Lowest	7.7	50.2	29.8	11.8	0.6	100.0	1,168
Second	6.1	45.5	27.4	20.6	0.4	100.0	1,263
Middle	6.9	46.3	26.2	20.5	0.1	100.0	1,284
Fourth	6.3	48.0	27.9	17.6	0.2	100.0	1,343
Highest	7.9	49.5	34.8	7.7	0.0	100.0	1,297
Total	7.0	47.9	29.2	15.7	0.3	100.0	6,355

There are some interesting patterns in control of husband's earnings by women's background characteristics. For example, among married women age 15-19, 43 percent say that someone else mainly makes decisions about how to spend their husbands' earnings. This finding may reflect the fact that younger married couples are more likely to live with their parents, who may therefore exert some influence over decisions about spending income. Other groups with relatively large proportions reporting that someone else mainly decides on how to use the husband's earnings include women with no children, rural women, women in the DRS region, and women with less education.

Table 15.3 shows, for currently married women who earned cash in the past 12 months, the person who mainly 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 mainly decides how their husband's cash earnings are used, according to the relative magnitude of the earnings of the women and their husbands. As expected, women whose earnings exceed their husband's are more likely to have control over their own earnings. On the other hand, women who receive the same amount of pay as their husbands are much more likely to say that decisions on the use of their earnings are mainly made jointly with their husbands.

Table 15.3 Women's control over their earnings and over those of their husbands

Percent distribution of currently married women age 15-49 with cash earnings in the last 12 months by person who decides how the wife's cash earnings are used and percent distribution of currently married women age 15-49 whose husbands have cash earnings by person who decides how the husband's cash earnings are used, according to the relation between wife's and husband's cash earnings, Tajikistan 2012

	Person who decides how the wife's cash earnings are used:							Person who decides how 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	47.8	45.1	5.7	1.4	0.0	100.0	116	23.1	58.4	16.7	1.8	0.0	100.0	116
Less than husband	33.5	47.5	11.5	7.4	0.1	100.0	1,115	8.4	57.0	22.7	11.8	0.0	100.0	1,115
Same as husband	15.5	72.3	8.0	4.1	0.0	100.0	166	3.0	80.7	11.9	4.4	0.0	100.0	166
Husband has no cash earnings or did not work	(55.7)	(30.0)	(8.1)	(3.9)	(2.3)	100.0	39	na	na	na	na	na	na	0
Woman worked but has no cash earnings	na	na	na	na	na	na	0	8.7	52.7	28.3	10.0	0.3	100.0	555
Woman did not work	na	na	na	na	na	na	0	6.1	43.4	31.9	18.3	0.3	100.0	4,344
Total[1]	32.7	48.1	10.4	6.7	2.0	100.0	1,496	7.0	47.9	29.2	15.7	0.3	100.0	6,355

na = Not applicable.
Note: Figures in parentheses are based on 25-49 unweighted cases.
[1] Includes 59 cases where a woman does not know whether she earned more or less than her husband.

With regard to the husband's cash earnings, decisions on using the earnings are most likely to be made jointly, regardless of the relative income of the wife or whether the wife receives any cash earnings. Nevertheless, women who earn more than their husbands are more likely to be the main decisionmaker as to how to use their husbands' earnings than women who earn the same or less than their husbands or who have no cash earnings. Women who earn about the same amount as their husbands are the most likely to say they make joint decisions about how to use the husbands' earnings.

15.4 OWNERSHIP OF ASSETS

Asset ownership, particularly of land and housing, has many beneficial effects for households, including protection against financial ruin. For women, asset ownership is a source of financial empowerment and can provide protection in the case of marital dissolution or abandonment. The limited information available suggests that women are much less likely than men to own productive assets. Information on women's asset ownership can provide important insights into women's status and demographic and health outcomes. Accordingly, the TjDHS asked women about their ownership, alone or jointly, of two of the most important assets: land[1] and housing.

[1] According to the Land Code of the Republic of Tajikistan, land is exclusively owned by the State (GOT, 2008). However, upon appropriate State registration, use of a land plot can be given for perpetual use to natural persons and

Continued…

The 2012 TjDHS asked women if they owned 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.

As shown in Table 15.4, almost half of all women interviewed said they did not own a house, while 71 percent said they did not own land. Almost one-third of women said they owned a house jointly, while 4 percent owned a house alone and 17 percent owned a house alone and jointly. As might be expected, the proportions of women who do not own a house at all or do not own land at all are highest among younger women and decline with age. Urban and rural women are about equally likely to own a house either alone or jointly, whereas urban women are far less likely than rural women to own land. The percentage of women who do not own a house is highest in the Khatlon region (60 percent), while the percentage who do not own land is highest in Dushanbe (97 percent). Women's education shows a slight tendency to be positively related to ownership of a house but is not related to ownership of land. With regard to wealth, the proportion of women who do not own a house varies little by wealth quintile. However, the proportion of women who do not own land increases steadily as wealth quintile increases, perhaps because wealthier women are more concentrated in urban areas.

Table 15.4 Ownership of assets

Percent distribution of women age 15-49 by ownership of housing and land, according to background characteristics, Tajikistan 2012

	Percentage who own a house:						Percentage who own land:						
Background characteristic	Alone	Jointly	Alone and jointly	Percentage who do not own a house	Missing	Total	Alone	Jointly	Alone and jointly	Percentage who do not own land	Missing	Total	Number
Age													
15-19	0.2	15.2	9.8	74.7	0.1	100.0	0.1	3.2	5.8	90.9	0.1	100.0	2,013
20-24	0.4	21.6	16.8	61.1	0.1	100.0	0.2	7.7	12.5	79.3	0.3	100.0	1,950
25-29	1.6	29.8	17.8	50.5	0.3	100.0	0.2	12.9	13.6	73.2	0.1	100.0	1,609
30-34	5.5	35.8	19.4	39.0	0.2	100.0	2.2	15.9	14.7	66.6	0.6	100.0	1,188
35-39	6.4	46.9	21.6	24.8	0.2	100.0	2.9	25.3	16.1	55.3	0.3	100.0	1,030
40-44	8.9	52.1	20.2	18.7	0.1	100.0	4.0	29.7	15.9	49.9	0.5	100.0	991
45-49	12.9	49.2	21.5	16.1	0.3	100.0	7.3	28.5	17.7	46.4	0.1	100.0	875
Residence													
Urban	6.7	33.9	12.7	46.6	0.2	100.0	1.5	8.0	6.6	83.5	0.5	100.0	2,413
Rural	2.9	31.0	18.6	47.4	0.2	100.0	1.8	16.9	14.8	66.3	0.2	100.0	7,243
Region													
Dushanbe	6.2	37.6	8.2	47.8	0.2	100.0	0.4	1.6	0.7	96.7	0.7	100.0	881
GBAO	11.5	38.4	7.9	41.7	0.5	100.0	11.1	33.0	7.4	48.2	0.3	100.0	220
Sughd	4.4	41.5	15.4	38.4	0.2	100.0	1.7	15.3	12.5	70.3	0.2	100.0	2,872
DRS	2.1	25.5	33.7	38.5	0.2	100.0	1.6	9.1	23.3	65.6	0.3	100.0	2,240
Khatlon	3.4	25.7	10.6	60.2	0.1	100.0	1.6	19.8	9.6	68.8	0.2	100.0	3,444
Education													
None/primary	2.1	23.5	18.6	55.9	0.0	100.0	0.4	14.3	14.3	71.0	0.0	100.0	567
General basic	1.9	26.5	16.7	54.8	0.2	100.0	0.8	11.2	12.0	75.7	0.3	100.0	3,349
General secondary	4.9	35.3	18.2	41.5	0.2	100.0	2.4	18.1	13.9	65.3	0.3	100.0	4,474
Professional primary/ middle	4.6	37.9	14.7	42.6	0.2	100.0	2.2	13.4	11.9	72.5	0.0	100.0	645
Higher	7.8	35.3	13.4	43.5	0.0	100.0	2.8	10.4	8.4	78.4	0.1	100.0	620
Wealth quintile													
Lowest	2.9	36.8	15.9	44.2	0.2	100.0	2.0	29.9	12.7	55.2	0.2	100.0	1,878
Second	3.5	28.5	16.8	51.1	0.1	100.0	2.6	18.5	12.2	66.7	0.1	100.0	1,913
Middle	2.5	24.9	22.5	50.0	0.1	100.0	1.4	10.0	17.8	70.6	0.2	100.0	1,904
Fourth	3.7	32.1	18.3	45.6	0.3	100.0	1.5	9.6	14.3	74.4	0.2	100.0	1,971
Highest	6.5	36.1	12.3	45.0	0.1	100.0	1.3	6.1	7.1	85.1	0.5	100.0	1,989
Total	3.8	31.7	17.1	47.2	0.2	100.0	1.8	14.6	12.8	70.6	0.3	100.0	9,656

legal entities of the Republic of Tajikistan. Land suitable for agricultural needs can be allocated to natural persons and legal entities for agricultural production.

15.5 WOMEN'S EMPOWERMENT

The 2012 TjDHS survey collected information from women on other measures of women's autonomy and status. In particular, questions were asked about women's participation in household decisions and their attitudes regarding gender roles. Such information provides insight into women's control over household resources and environment, factors that are relevant to understanding women's demographic and health behavior.

The ability of women to make decisions that affect the personal circumstances of their own lives is an essential aspect of empowerment and serves as an important contributor to their overall welfare. To assess currently married women's decisionmaking autonomy, the 2012 TjDHS collected information on women's participation in three types of decisions: their own health care, major household purchases, and visits to the woman's family or relatives. Table 15.5 shows the percent distribution of currently married women age 15-49, according to the person who usually makes decisions concerning these matters.

Table 15.5 Participation in decision making

Percent distribution of currently married women age 15-49 by person who usually makes decisions about various issues, Tajikistan 2012

Decision	Mainly wife	Wife and husband jointly	Mainly husband	Someone else	Other	Missing	Total	Number of women
Own health care	14.5	39.7	30.5	6.2	8.9	0.2	100.0	6,504
Major household purchases	7.9	46.8	25.1	8.2	11.7	0.2	100.0	6,504
Visits to her family or relatives	9.4	46.5	25.1	7.6	11.1	0.3	100.0	6,504

Between 40 and 47 percent of women make each of the three types of decisions jointly with their husbands. Husbands have more input into decisions than women, since 25 to 31 percent mainly make each of the three decisions, compared with only 8 to 15 percent of women. Women have more say in decisions related to their own health care than in the other two types of decisions; 15 percent say that they mainly make decisions about their health care by themselves. Still, 31 percent of the women report that their husbands mainly make decisions for them about their health care.

Table 15.6 shows how currently married women's participation (alone or jointly) in decision making varies by background characteristics. The table presents the results for the three specific types of decisions asked about, namely women's own health care, making major household purchases, and visits to the woman's family or relatives. In addition, the table includes two summary indicators: the proportion of women involved in making all three decisions and the proportion not involved in making any of the three decisions.

Just over half of currently married women participate in each individual decision, either alone or jointly with their husbands. Forty-three percent of currently married women participate in all three decisions, and 34 percent do not participate in any of the decisions.

Women's participation in all three decisions varies by background characteristics. Participation in decision making increases steadily with age, with married women age 15-19 being the least likely to participate in all three decisions. As expected, employed women who have cash earnings are more likely to participate in all three decisions (53 percent) than women who are not employed (41 percent) or women who are employed but not for cash (32 percent). The proportion of married women who participate in all three household decisions increases steadily as the number of children increases, from 27 percent of childless women to 54 percent of those with five or more children. Urban women participate more in all three decisions than their rural counterparts (47 percent versus 42 percent, respectively).

Table 15.6 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, Tajikistan 2012

Background characteristic	Specific decisions			All three decisions	None of the three decisions	Number of women
	Woman's own health care	Making major household purchases	Visits to her family or relatives			
Age						
15-19	30.4	25.7	27.9	18.0	61.1	266
20-24	40.7	37.6	39.5	29.2	50.5	1,320
25-29	45.8	40.9	43.7	32.1	45.1	1,332
30-34	54.7	58.2	57.9	44.3	31.7	1,014
35-39	66.0	70.7	69.0	56.1	20.9	923
40-44	66.9	73.7	74.3	58.1	17.9	879
45-49	71.2	73.0	75.1	60.3	16.1	770
Employment (last 12 months)						
Not employed	51.4	51.7	53.3	41.4	37.9	4,432
Employed for cash	65.8	66.2	65.8	52.7	22.0	1,496
Employed not for cash	46.1	48.9	49.9	31.5	37.1	564
Number of living children						
0	40.0	35.5	39.0	27.1	51.1	746
1-2	50.3	47.2	49.1	38.0	40.3	2,333
3-4	59.1	62.8	62.1	48.3	27.6	2,268
5+	61.9	66.8	68.2	53.6	23.9	1,157
Residence						
Urban	58.5	58.5	61.8	47.3	28.6	1,571
Rural	52.9	53.6	54.0	41.8	36.0	4,933
Region						
Dushanbe	51.9	52.7	60.3	40.7	29.9	559
GBAO	69.3	73.6	73.9	58.3	16.5	129
Sughd	53.0	54.5	56.8	39.0	31.8	2,022
DRS	63.4	59.7	58.5	53.8	33.2	1,546
Khatlon	48.8	51.0	51.1	39.2	39.2	2,249
Education						
None/primary	39.8	38.3	44.3	31.0	49.1	356
General basic	48.0	46.9	46.9	37.4	43.0	2,016
General secondary	56.2	58.3	59.5	45.4	30.9	3,260
Professional primary/middle	65.1	60.7	62.8	48.2	24.6	475
Higher	70.2	73.1	73.9	58.1	14.6	397
Wealth quintile						
Lowest	49.4	53.8	54.5	41.4	38.0	1,210
Second	47.8	48.6	48.9	37.9	41.6	1,287
Middle	55.4	54.4	54.2	43.1	34.4	1,307
Fourth	57.6	55.8	58.2	43.5	30.6	1,379
Highest	60.4	60.9	63.1	49.3	27.1	1,320
Total	54.2	54.8	55.9	43.1	34.2	6,504

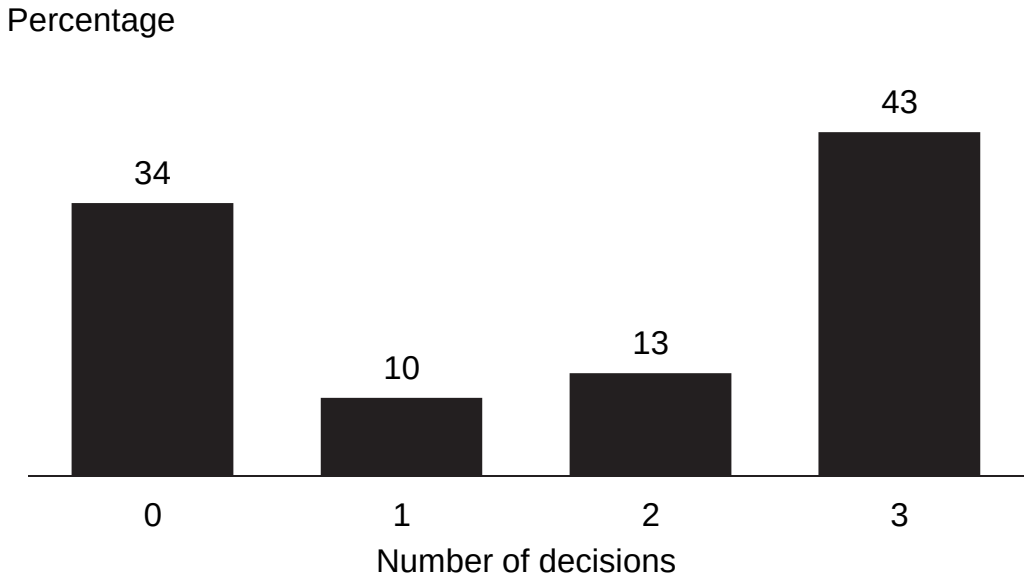
Note: Totals include 12 women missing information as to employment status.

Among administrative regions, women's participation in decisionmaking is lowest in the Sughd and Khatlon regions (39 percent each) and highest in the GBAO region (58 percent). The Khatlon region has the highest percentage of married women who do not participate in any of the three types of decisions (39 percent).

Women's participation in decisionmaking increases steadily as education level increases. Only 31 percent of married women with no education or only primary education participate in all three types of decisions, compared with 58 percent of women with higher education. The relationship between women's participation in decisionmaking and wealth is not so strong, although it is positively correlates with increasing wealth quintile.

Women may have a say in some, but not all decisions. The number of decisions that a woman makes by herself or jointly with her husband is positively related to women's empowerment and reflects the degree of control women are able to exercise in areas that affect their lives and environments. Figure 15.1 shows the percent distribution of currently married women according to the number of decisions in which they participate. Two in five currently married women participate in all three household decisions; one in three currently married women participates in none.

Figure 15.1
Number of decisions in which currently married women participate, Tajikistan 2012



TjDHS 2012

The 2005 MICS survey included similar questions to the 2012 TjDHS about decisionmaking. Results indicate that there has been an increase in the proportion of married women who participate in making decisions about large household purchases, from 42 percent in 2005 to 55 percent in 2012. In contrast, the proportion of married women who participate in making decisions about their own health care has hardly changed (52 percent in 2005 and 54 percent in 2012). Similarly, the proportion of women participating in decisions about visits to their relatives remains flat at 55 percent in 2005 and 56 percent in 2012 (SCS, 2007).

15.6 ATTITUDES TOWARD WIFE BEATING

The problems that women face are many and diverse. One of the most serious is violence, and Tajikistan is no exception in this regard. One of the most common forms of violence against women worldwide is abuse by the husband or partner (Heise et al., 1999). The 2012 TjDHS obtained information on women's attitudes toward wife beating. Women were asked their opinion on whether a husband is justified in hitting or beating his wife under a series of circumstances: if she burns the food, if she argues with him, if she goes out without telling him, if she neglects the children, and if she refuses to have sexual intercourse with him. A woman's attitude toward wife beating is considered a proxy for her perception of women's status. A lower score on the "number of reasons wife beating is justified" indicates a woman's greater sense of entitlement, self-esteem, and status and reflects positively on her sense of empowerment. Agreement with wife beating as justified indicates that a woman generally accepts the right of a man to control her behavior even by means of violence. Such a perception could act as a barrier to accessing health care for her children and herself, affect her attitude toward contraceptive use, and have an impact on her general well-being.

Table 15.7 shows the 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. Three in five women agree that a husband is justified in beating his wife for at least one of the reasons listed.

The most widely accepted reason for wife beating among women in Tajikistan is going out without telling her husband (51 percent), followed by neglecting the children (44 percent), and arguing with him (40 percent). Just over one-quarter of women agree that refusing to have sexual intercourse (27 percent) and burning the food (28 percent) are acceptable reasons for a man to beat his wife.

Table 15.7 Attitude toward wife beating

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, Tajikistan 2012

	Husband is justified in hitting or beating his wife if she:						
Background characteristic	Burns the food	Argues with him	Goes out without telling him	Neglects the children	Refuses to have sexual intercourse with him	Percentage who agree with at least one specified reason	Number
Age							
15-19	21.5	31.2	38.3	33.6	17.0	46.5	2,013
20-24	29.6	42.6	53.2	45.0	28.7	61.6	1,950
25-29	32.1	44.2	56.9	49.9	31.5	64.2	1,609
30-34	31.6	43.6	56.5	48.8	30.6	66.4	1,188
35-39	30.3	39.7	50.8	46.3	29.9	62.8	1,030
40-44	28.5	41.8	51.1	47.0	30.6	63.2	991
45-49	27.4	39.6	51.2	45.5	28.2	59.4	875
Employment (last 12 months)							
Not employed	27.9	41.0	51.1	44.6	27.9	59.1	6,523
Employed for cash	27.5	37.0	47.6	41.9	24.4	58.3	2,295
Employed not for cash	33.4	39.8	53.1	48.5	29.7	66.6	823
Number of living children							
0	23.0	32.1	40.5	34.5	18.6	48.0	3,483
1-2	29.4	43.1	54.5	48.1	31.1	63.5	2,588
3-4	30.0	43.4	55.2	48.4	30.0	67.0	2,385
5+	38.2	49.2	61.0	56.4	38.6	69.6	1,200
Marital status							
Never married	20.7	28.2	35.9	31.1	14.3	43.3	2,648
Married or living together	31.9	45.3	57.4	50.3	33.0	67.2	6,504
Divorced/separated/widowed	22.5	32.5	37.2	36.0	21.6	46.9	504
Residence							
Urban	21.0	32.0	42.5	35.8	20.0	50.8	2,413
Rural	30.8	42.6	53.1	47.1	29.7	62.5	7,243
Region							
Dushanbe	11.8	24.2	38.9	30.0	14.2	46.3	881
GBAO	22.2	23.1	33.8	35.3	16.4	45.0	220
Sughd	24.6	37.3	43.6	32.2	24.6	57.5	2,872
DRS	26.3	47.0	58.2	54.9	34.6	62.2	2,240
Khatlon	37.3	42.7	55.1	51.7	28.7	63.9	3,444
Education							
None/primary	40.4	51.0	62.4	54.6	32.0	68.0	567
General basic	30.9	42.3	52.5	47.1	29.9	60.7	3,349
General secondary	28.1	40.0	52.0	44.6	27.5	61.7	4,474
Professional primary/middle	22.2	34.5	40.0	37.1	21.9	52.1	645
Higher	11.7	22.5	28.1	24.7	12.7	37.9	620
Wealth quintile							
Lowest	38.1	45.1	55.0	51.6	35.1	65.9	1,878
Second	36.4	45.6	56.5	51.8	31.0	65.4	1,913
Middle	27.8	39.7	52.4	45.8	27.5	60.8	1,904
Fourth	22.9	38.9	48.2	39.0	24.2	57.9	1,971
Highest	17.2	31.1	40.7	34.0	19.0	48.4	1,989
Total	28.3	40.0	50.5	44.3	27.3	59.6	9,656

Note: Totals include 14 women missing information as to employment status.

Agreement with at least one reason for wife beating is somewhat lower among women 15-19 and those who are childless, but otherwise varies little with age or number of children. Women who are either not employed or employed and get paid in cash are slightly less likely to agree with at least one reason for wife beating than women who are employed but not for cash. Agreement with at least one reason for wife beating is lowest among women who have never married, followed by women who are divorced, separated, or widowed; it is highest among currently married women. Urban women are less likely than rural women to agree with wife beating, as are women in the GBAO and Dushanbe regions. The percentage of women who agree with at least one of the specified reasons for wife beating decreases as education and wealth quintile increase.

Although acceptance of wife beating is prevalent in Tajikistan, there is evidence that it is declining. Data from the 2005 MICS survey indicate that the proportion of women who agree that wife beating is justified is lower in 2012 for each of the five specified reasons: if she burns the food (declined from 44 percent in 2005 to 28 percent in 2012); if she argues with him (from 68 percent in 2005 to 40 percent in 2012); if she goes out without telling him (from 62 percent in 2005 to 51 percent in 2012); if she neglects the children (from 61 percent in 2005 to 44 percent in 2012), and if she refuses to have sex with him (from 48 percent in 2005 to 27 percent in 2012) (SCS, 2007).

15.7 INDICATORS OF WOMEN'S EMPOWERMENT

Women's empowerment has important implications for demographic and health outcomes, including women's use of family planning and maternal health care services. To examine how selected demographic and health outcomes vary by women's empowerment, information on women's participation in household decisionmaking and their attitudes toward wife beating are summarized in two separate indices.

The first index is the number of decisions (0 to 3) in which women participate, either alone or jointly with their husbands (see Table 15.6 for the list of decisions). This index reflects the degree of control that women are able to exercise through making decisions in areas that affect their own lives and environments and is positively related to women's empowerment (i.e., a higher number of decisions indicates greater empowerment).

The second index is the number of reasons (0 to 5) for which women think a husband is justified in beating his wife (see Table 15.7 for the list of reasons). This index is negatively related to women's empowerment (i.e., a lower score is interpreted as reflecting a greater sense of entitlement, higher self-esteem, and a higher status of women).

In general, it is expected that women who participate in making household decisions are also more likely to have gender-egalitarian beliefs and to reject wife beating. Accordingly, Table 15.8 provides an overview of how these two basic empowerment indices—number of decisions in which women participate and number of reasons for which wife beating is justified—relate to one another.

Women's rejection of all the reasons for wife beating varies only somewhat by the number of decisions they participate in. Specifically, 27-30 percent of women who participate in 0-2 decisions reject all the reasons for wife beating, compared with 39 percent of women who participate in all three decisions.

However, the proportion of women who participate in all three decisions varies more uniformly with the number of reasons for which wife beating is justified. The percentage of women who participate in all three decisions is highest (51 percent) for women who do not agree with any reason for wife beating and falls steadily to 38 percent of women who agree with all five reasons for wife beating.

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, Tajikistan 2012

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	29.5	2,225
1-2	na	27.1	1,476
3	na	38.5	2,803
Number of reasons for which wife-beating is justified[2]			
0	50.5	na	2,135
1-2	40.7	na	1,616
3-4	39.3	na	1,346
5	38.3	na	1,408

na = Not applicable
[1] See Table 15.6 for the list of decisions.
[2] See Table 15.7 for the list of reasons.

15.8 CURRENT USE OF CONTRACEPTION BY WOMEN'S EMPOWERMENT

A woman's desire and ability to control her fertility and the contraceptive method she chooses are likely to be affected by her status in the household, her self-image, and her own 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 and carry out decisions about her fertility. She may also feel the need to choose methods that can be hidden from others or that do not depend on her husband's cooperation. Table 15.9 shows the distribution of currently married women age 15-49 by current contraceptive method, according to the two women's empowerment indices.

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, Tajikistan 2012

			Modern methods						
Empowerment indicator	Any method	Any modern method	Female sterilization	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	22.3	20.1	0.3	18.2	1.7	2.2	77.7	100.0	2,225
1-2	28.7	26.8	0.7	23.2	2.9	1.9	71.3	100.0	1,476
3	32.0	29.8	0.8	26.7	2.4	2.1	68.0	100.0	2,803
Number of reasons for which wife-beating is justified[3]									
0	31.5	29.2	0.6	25.6	3.0	2.2	68.5	100.0	2,135
1-2	31.0	28.7	0.5	25.9	2.3	2.3	69.0	100.0	1,616
3-4	24.5	22.3	0.4	19.6	2.3	2.3	75.5	100.0	1,346
5	22.3	20.9	0.9	19.0	1.0	1.4	77.7	100.0	1,408
Total	27.9	25.8	0.6	23.0	2.2	2.1	72.1	100.0	6,504

Note: If more than one method is used, only the most effective method is considered in this tabulation.
[1] Pill, IUD, injectables, implants, female condom, diaphragm, foam/jelly, and lactational amenorrhea method.
[2] See Table 15.6 for the list of decisions.
[3] See Table 15.7 for the list of reasons.

As might be expected, contraceptive use is positively associated with women's participation in household decisionmaking and negatively associated with women's agreement with wife beating. In particular, use of any method and any modern method increases steadily with the number of decisions in which women participate. For example, only 20 percent of married women who do not participate in making any household decisions are using a modern method of contraception, compared with 30 percent of those who participate in all three decisions.

Similarly, use of any method and any modern method decrease as the number of reasons for which wife-beating is justified increase. The proportion of married women using a modern method of contraception decreases from 29 percent of women who do not believe wife-beating is justified for any of the reasons to 21 percent of those who believe wife-beating is justified for all five reasons.

15.9 IDEAL FAMILY SIZE AND UNMET NEED BY WOMEN'S EMPOWERMENT

The ability of women to make decisions effectively has important implications for their fertility preferences and for meeting their goals for family size. In particular, it is expected that more empowered women will want smaller families and be better able to negotiate decisions regarding fertility and family planning. Hence, ideal family size and unmet need for family planning—which reflects women's unsatisfied need for contraception—should both be lower among more empowered women.

Table 15.10 shows how women's ideal family size and their unmet need for family planning vary by the two indicators of women's empowerment. The mean ideal family size does not show much association with either of the two indicators. It is almost uniform across the number of decisions in which women participate, and is lower only among women who do not believe wife beating is justified for any of the five reasons.

Table 15.10 Ideal number of children and unmet need for family planning, by women's empowerment

Mean ideal number of children for women 15-49 and the percentage of currently married women age 15-49 with an unmet need for family planning, by indicators of women's empowerment, Tajikistan 2012

Empowerment indicator	Mean ideal number of children[1]	Number of women	Percentage of currently married women with an unmet need for family planning[2]			Number of currently married women
			For spacing	For limiting	Total	
Number of decisions in which women participate[3]						
0	3.8	2,195	15.3	9.4	24.7	2,225
1-2	3.8	1,445	11.4	11.9	23.3	1,476
3	3.9	2,760	9.3	11.9	21.2	2,803
Number of reasons for which wife-beating is justified[4]						
0	3.4	3,726	11.6	10.7	22.3	2,135
1-2	3.7	2,112	11.8	9.3	21.1	1,616
3-4	3.7	1,778	13.0	11.5	24.4	1,346
5	3.7	1,721	11.3	13.0	24.3	1,408
Total	3.6	9,336	11.8	11.0	22.9	6,504

[1] Mean excludes respondents who gave non-numeric responses.
[2] See Table 7.9 for the definition of unmet need for family planning.
[3] Restricted to currently married women. See Table 15.6 for the list of decisions.
[4] See Table 15.7 for the list of reasons.

There is an association between participation in decision making and unmet need for family planning. Women who participate in no household decisions have the highest unmet need for family planning (25 percent), compared with those who participate in one to two decisions (23 percent) or in all three decisions (21 percent). There is no apparent association between acceptance of wife beating and unmet need.

15.10 REPRODUCTIVE HEALTH CARE BY WOMEN'S EMPOWERMENT

Table 15.11 examines whether empowered women are more likely to access antenatal, delivery, and postnatal care services from medically trained health personnel. In societies where health care is widespread, women's empowerment may not affect their access to reproductive health services. In other societies, however, increased empowerment of women is likely to increase their ability to seek out and use health services from qualified health providers to better meet their own reproductive health goals, including the goal of safe motherhood. The table includes only women who had a birth in the five years preceding the survey and examines their access to antenatal care, delivery care, and postnatal care from trained health personnel for their most recent birth.

Table 15.11 Reproductive health care by women's empowerment

Percentage of women age 15-49 with a live birth in the five years preceding the survey who received antenatal care, delivery assistance and postnatal care from health personnel for the most recent birth, by indicators of women's empowerment, Tajikistan 2012

Empowerment indicator	Percentage receiving antenatal care from a skilled provider[1]	Percentage receiving delivery care from a skilled provider[1]	Percentage of women with a postnatal checkup in the first two days after birth[2]	Number of women with a child born in the last five years
Number of decisions in which women participate[3]				
0	76.4	96.6	78.6	1,433
1-2	84.4	95.3	83.4	774
3	79.1	97.8	80.6	1,288
Number of reasons for which wife-beating is justified[4]				
0	80.8	97.2	82.5	1,120
1-2	83.8	98.1	89.7	868
3-4	77.7	96.2	77.2	774
5	72.1	95.5	71.4	839
Total	78.8	96.8	80.5	3,601

[1] "Skilled provider" includes doctor, nurse, midwife, or feldsher.
[2] Includes women who received a postnatal checkup from a doctor, nurse, midwife, feldsher, or traditional birth attendant (TBA) in the first two days after the birth. Includes women who gave birth in a health facility and those who did not give birth in a health facility.
[3] Restricted to currently married women. See Table 15.6 for the list of decisions.
[4] See Table 15.7 for the list of reasons.

Decisionmaking is not related to women's access to reproductive health care for their most recent birth. For example, the proportion of married women receiving antenatal care from health personnel increases from 76 percent of those who participate in no household decisions to 84 percent of those who participate in one to two decisions, but then falls to 79 percent of women who participate in all three decisions. There are similar zigzag relationships for delivery care and postnatal care.

However, attitudes towards wife beating do seem to be associated with women's access to reproductive health care for their most recent birth. The proportion of women receiving antenatal care from a skilled provider generally decreases with the number of reasons for which women feel wife beating is justified, from 81 to 84 percent of women who believe wife beating is justified for zero to two reasons to 72 percent of those who believe it is justified for all five reasons. There is a similar negative relationship between attitudes towards wife beating and postnatal care. The proportion of women receiving delivery care from a skilled provider is almost uniformly high across the number of reasons for justifying wife beating.

15.11 INFANT AND CHILD MORTALITY AND WOMEN'S EMPOWERMENT

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

Table 15.12 shows that infant, child, and under-5 mortality rates are highest among women who do not participate in any household decisions, although they do not decline uniformly as women's participation in decision making increases. Similarly, infant mortality and under-5 mortality rates are lowest among women who do not agree with any reason for wife beating and generally tend to rise with women's agreement with wife beating. For example, among women who do not agree with any reason for wife beating, under-5 mortality is 40 per 1,000 live births, compared with 61 for women who agree with three to four reasons for wife beating.

Table 15.12 Early childhood mortality rates by women's status

Infant, child, and under-5 mortality rates for the 10-year period preceding the survey, by indicators of women's empowerment, Tajikistan 2012

Empowerment indicator	Infant mortality (1q0)	Child mortality (4q1)	Under-5 mortality (5q0)
Number of decisions in which women participate[1]			
0	44	11	54
1-2	32	9	40
3	36	10	46
Number of reasons for which wife-beating is justified[2]			
0	31	9	40
1-2	38	8	46
3-4	50	11	61
5	37	14	51

[1] Restricted to currently married women. See Table 15.6 for the list of decisions.
[2] See Table 15.7 for the list of reasons.

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SAMPLE DESIGN APPENDIX A

A.1 INTRODUCTION

The 2012 Tajikistan Demographic and Health Survey (2012 TjDHS) is the first of its kind implemented in Tajikistan. A nationally representative sample of 6,675 households was selected. All women age 15-49 who were usual residents of the selected households or who slept in the households the night before the survey were eligible for the survey. The main objectives of the 2012 TjDHS were to provide up-to-date information on fertility and fertility preferences, awareness and use of family planning methods, maternal and child health and childhood mortality levels, and knowledge and attitudes toward HIV/AIDS and other sexually transmitted infections (STIs). The survey was designed to produce representative results for the country as a whole, for urban and rural areas separately, and for each of the five administrative regions.

A.2 SAMPLE FRAME

The sampling frame used for the 2012 TjDHS is the 2010 Tajikistan Population and Housing Census (TjPHC) conducted by the Statistical Agency under the President of the Republic of Tajikistan. The sampling frame for the urban areas is a list of enumeration areas (EAs) covering all urban areas of the country. An EA is a geographical area, usually a city block, consisting of an adequate number of households; each EA serves as a counting unit for the population census. Each EA has a sketch map delineating its boundaries, with identification information and a measure of size, which is the number of residential households enumerated in the 2010 TjPHC. However, such materials do not exist for the rural areas. The Statistical Agency collected a list of natural villages through its regional offices in 2010, with estimated population in each village. The list of EAs in the urban areas and the list of natural villages in the rural areas constituted the sampling frame for the 2012 TjDHS, with the primary sampling units (PSUs) being EAs in urban areas and natural villages in rural areas. Table A.1 below shows the distribution of households in the sampling frame by region and by type of residence. In Tajikistan, the region size varies from 3 percent for the region of Gorno-Badakhshan Autonomous Oblast (GBAO) to 33 percent for the region of Sughd; 33 percent of the households reside in urban areas.

Table A.1 Households

Distribution of households by region and by residence, Tajikistan 2012

	Number of households in frame*			Percentage of households that are urban	Percent distribution of households across regions
Region	Urban	Rural	Total		
GBAO[1]	5,111	25,851	30,962	16.5	2.7
Dushanbe	138,588	na	138,588	100.0	12.2
DRS[2]	40,731	196,014	236,745	17.2	20.9
Sughd	110,001	259,882	369,883	29.7	32.7
Khatlon	75,344	281,242	356,586	21.1	31.5
Tajikistan	369,775	762,989	1,132,764	32.6	100.0

na = Not applicable
*Source: The 2012 Tajikistan DHS sampling frame.
[1] The Gorno-Badakhshan Autonomous Oblast region.
[2] Districts of Republican Subordination.

A.3 SAMPLING PROCEDURES AND SAMPLE ALLOCATION

The sample for the 2012 TjDHS was a stratified sample selected in two stages. In the first stage, 356 primary sampling units (PSU) were selected with a stratified probability proportional to size selection from the sampling frame. The PSU size was the number of households residing in the PSU recorded at the 2010 census. Stratification was achieved by separating every region into urban and rural areas. Therefore, the five regions were stratified into nine sampling strata, consisting of five urban strata and four rural strata (the region of Dushanbe has only urban areas). Samples were selected independently in every stratum, with a predetermined number of PSUs to be selected as shown in Table A.2. Implicit stratification with proportional allocation should have been achieved at each of the lower administrative unit levels by sorting the sampling frame within a sampling stratum according to administrative unit before the sample selection, and by using a probability proportional to size selection procedure.

After the selection of PSUs and before the main survey, a household listing operation was carried out in all of the selected PSUs. The resulting lists of households served as the sampling frame for the selection of households in the second stage. In the second stage of selection, 15 households per cluster were selected in every urban cluster, except in the region of Dushanbe, by an equal probability systematic sampling. In the region of Dushanbe and in all the rural clusters, 20 households per cluster were selected by equal probability systematic sampling. A spreadsheet indicating the selected household numbers for each cluster was prepared for facilitating the household selection in the central office. The survey interviewers were asked to interview only the pre-selected households. No replacements and no changes of the pre-selected households were allowed in the implementing stages in order to prevent bias.

Table A.2 below shows the sample allocation of PSUs and households by region and by type of residence. Among the 356 clusters selected, 164 are in urban areas and 192 are in rural areas. Among the 6,675 selected households, 2,835 are from urban areas and 3,840 are from rural areas.

Table A.2 Sample allocation of clusters and households

Sample allocation of clusters and households by region, according to residence, Tajikistan 2012

	Sample allocation of clusters			Sample allocation of households		
Region	Urban	Rural	Total	Urban	Rural	Total
GBAO	9	33	42	135	660	795
Dushanbe	75	0	75	1,500	0	1,500
DRS	17	62	79	255	1240	1,495
Sughd	29	51	80	435	1020	1,455
Khatlon	34	46	80	510	920	1,430
Tajikistan	164	192	356	2,835	3,840	6,675

A.4 SAMPLE PROBABILITIES AND SAMPLING WEIGHTS

Due to the non-proportional allocation of the sample to the different regions and the differences in response rates, analysis of the 2012 TjDHS data requires the data to be weighted to ensure the actual representation of the survey results at the national level as well as at the regional level. Since the 2012 TjDHS sample is a two-stage stratified cluster sample, sampling weights were calculated based on sampling probabilities for each sampling stage and for each cluster. We use the following notations:

P_{1hi}: first stage's sampling probability of the ith cluster in stratum h
P_{2hi}: second-stage's sampling probability within the ith cluster (households)
P_{hi}: overall sampling probability of any household of the ith cluster in stratum h

Let n_h be the number of clusters selected in stratum h, M_{hi} the number of households according to the sampling frame in the ith cluster, and $\sum M_{hi}$ the total number of households in the stratum h. The probability of selecting the ith cluster in stratum h is calculated as follows:

$$P_{1hi} = \frac{n_h M_{hi}}{\sum M_{hi}}$$

Let L_{hi} be the number of households listed in the household listing operation in cluster i in stratum h, let m_{hi} be the number of households selected in the cluster. The second stage's selection probability for each household in the cluster is calculated as follows:

$$P_{2hi} = \frac{m_{hi}}{L_{hi}}$$

The overall selection probability of each household in cluster i of stratum h is therefore the product of the selection probabilities:

$$P_{hi} = P_{1hi} \times P_{2hi}$$

Therefore, the design weight for each household in cluster i of stratum h is the inverse of its overall selection probability:

$$W_{hi} = 1 / P_{hi}$$

A spreadsheet containing all sampling parameters and selection probabilities was prepared to facilitate the calculation of the design weights. Design weights were adjusted for household non-response as well as for individual non-response to get the sampling weights for households and women surveyed, respectively. The differences in the household sampling weights and the individual sampling weights are introduced by individual nonresponse. Finally, the household and individual sampling weights were normalized to give the total number of un-weighted cases equal to the total number of weighted cases at the national level, for both households and individuals. The normalized weights are relative weights, which are valid for estimating means, proportions, and ratios but not valid for estimating population totals and for pooled data.

A.5 SURVEY RESULTS

Table A.3 shows the survey implementation results by giving the number of households selected and interviewed, women eligible and interviewed, and the various response rates. According to the definition of each category, the completion rates for the household survey and the woman's survey are based on the following formula. The household completion rate is calculated by:

$$\frac{100 * C}{C + HP + R + DNF}$$

The eligible women completion rate (EWC) is equivalent to the percentage of interviews completed over total eligible women calculated by:

$$\frac{100 * EWC}{EWC + EWNH + EWP + EWR + EWPC + EWI + EWO}$$

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), Tajikistan 2012

	Residence		Region					
Result	Urban	Rural	Dushanbe	GBAO	Sughd	DRS	Khatlon	Total
Selected households								
Completed (C)	94.4	97.9	94.8	95.8	98.6	96.1	96.3	96.4
Household present but no competent respondent at home (HP)	1.3	0.5	1.5	1.9	0.1	0.7	0.4	0.9
Refused (R)	0.7	0.0	0.9	0.0	0.0	0.2	0.2	0.3
Dwelling not found (DNF)	0.0	0.1	0.0	0.0	0.0	0.2	0.0	0.0
Household absent (HA)	3.0	1.3	2.3	1.6	1.2	2.1	2.5	2.0
Dwelling vacant/address not a dwelling (DV)	0.6	0.2	0.3	0.5	0.0	0.5	0.5	0.4
Dwelling destroyed (DD)	0.0	0.1	0.0	0.0	0.0	0.1	0.1	0.0
Other (O)	0.1	0.0	0.1	0.1	0.0	0.0	0.0	0.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of sampled households	2,835	3,839	1,500	795	1,450	1,499	1,430	6,674
Household response rate (HRR)[1]	97.9	99.4	97.5	98.1	99.9	98.8	99.4	98.8
Eligible women								
Completed (EWC)	99.0	98.4	99.0	95.6	99.7	97.9	99.4	98.6
Not at home (EWNH)	0.7	1.0	0.9	3.1	0.1	1.3	0.1	0.9
Postponed (EWP)	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0
Refused (EWR)	0.1	0.1	0.0	0.3	0.0	0.2	0.0	0.1
Partly completed (EWPC)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Incapacitated (EWI)	0.2	0.5	0.2	0.8	0.2	0.5	0.4	0.4
Other (EWO)	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of women	3,443	6,351	1,751	1,118	2,090	2,384	2,451	9,794
Eligible women response rate (EWRR)[2]	99.0	98.4	99.0	95.6	99.7	97.9	99.4	98.6
Overall women response rate (OWRR)[3]	96.9	97.8	96.5	93.8	99.6	96.8	98.7	97.4

[1] Using the number of households falling into specific response categories, the household response rate (HRR) is calculated as:

$$\frac{100 * C}{C + HP + R + DNF}$$

[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:

$$OWRR = HRR * EWRR/100$$

ESTIMATES OF SAMPLING ERRORS APPENDIX B

The estimates from a sample survey are affected by two types of errors: (1) non-sampling errors and (2) sampling errors. Non-sampling errors are the results from 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 2012 Tajikistan Demographic and Health Survey (TjDHS 2012) 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 TjDHS 2012 is only one of many samples that could have been selected from the same population, using the same design and identical size. Each of these samples would yield results that differ somewhat from the results of the actual sample selected. Sampling errors are a measure of the variability among all possible samples. Although the degree of variability is not known exactly, it can be estimated from the survey results.

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 TjDHS 2012 sample is the result of a multi-stage stratified design, and, consequently, it was necessary to use more complex formulas. The computer software used to calculate sampling errors for the TjDHS 2012 was a SAS program. This program uses the Taylor linearization method for 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:

$$SE^2(r) = var(r) = \frac{1}{x^2}\sum_{h=1}^{H}\left[(1-f_h)\frac{m_h}{m_h-1}\left(\sum_{i=1}^{m_h} z_{hi}^2 - \frac{z_h^2}{m_h}\right)\right]$$

in which

$$z_{hi} = y_{hi} - rx_{hi}\text{, and } z_h = y_h - rx_h$$

where h represents the stratum, which varies from 1 to H,
m_h is the total number of clusters selected in the hth stratum,
y_{hi} is the sum of the weighted values of variable y in the ith cluster in the hth stratum,
x_{hi} is the sum of the weighted number of cases in the ith cluster in the hth stratum, and
f_h is the sampling fraction of PSU in the hth stratum, which is small and ignored.

The Jackknife repeated replication method derives estimates of complex rates from each of several replications of the parent sample, and calculates standard errors for these estimates using simple formulas. Each replication considers *all but one* cluster in the calculation of the estimates. Pseudo-independent replications are thus created. In the TjDHS 2012, there were 356 non-empty clusters. Hence, 356 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 356 clusters,
$r_{(i)}$ is the estimate computed from the reduced sample of 355 clusters (i^{th} cluster excluded), and
k is the total number of clusters.

In addition to the standard error, the program computes the design effect (DEFT) for each estimate, which is defined as the ratio between the standard error using the given sample design and the standard error that would result if a simple random sample had been used. A DEFT value of 1.0 indicates that the sample design is as efficient as a simple random sample, while a value greater than 1.0 indicates the increase in the sampling error due to the use of a more complex and less statistically efficient design, such as multistage and cluster selection. The program also computes the relative standard error and the confidence limits for the estimates.

Sampling errors for the TjDHS 2012 are calculated for selected variables considered to be of primary interest for the survey. The results are presented in this appendix for the country as a whole, for urban and rural areas separately, and for each of the five 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.9 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 a simple random sample is zero (when the estimate is close to 0 or 1). In the case of the total fertility rate, the number of unweighted cases is not relevant, as there is no known unweighted value for woman-years of exposure to childbearing.

The confidence interval (e.g., as calculated for *children ever born to women age 40-49*) can be interpreted as follows: the overall average from the national sample is 4.543, and its standard error is 0.073. Therefore, to obtain the 95 percent confidence limits, one adds and subtracts twice the standard error to the sample estimate, i.e., 4.543±2×0.073. There is a high probability (95 percent) that the *true* average number of children ever born to all women age 40-49 is between 4.398 and 4.688.

For the total sample, the value of the design effect (DEFT), averaged over all variables for the women's survey, is 1.51, which means that, due to multi-stage and clustering of the sample, the average standard error is increased by a factor of 1.51 over that in an equivalent simple random sample.

Table B.1 List of selected variables for sampling errors, Tajikistan DHS 2012

Variable	Estimate	Base population
	WOMEN	
Urban residence	Proportion	All women age 15-49
No education/primary	Proportion	All women age 15-49
Secondary education or higher	Proportion	All women age 15-49
Never married (never in union)	Proportion	All women age 15-49
Currently married (in union)	Proportion	All women age 15-49
Married before age 20	Proportion	All women age 25-49
Had sexual intercourse before age 18	Proportion	All women age 25-49
Currently pregnant	Proportion	All women age 15-49
Children ever born	Mean	All women age 15-49
Children surviving	Mean	All women age 15-49
Children ever born to women age 40-49	Mean	All women age 40-49
Know any contraceptive method	Proportion	Currently married women 15-49
Know a modern method	Proportion	Currently married women 15-49
Currently using any method	Proportion	Currently married women 15-49
Currently using a modern method	Proportion	Currently married women 15-49
Currently using a traditional method	Proportion	Currently married women 15-49
Currently using pill	Proportion	Currently married women 15-49
Currently using IUD	Proportion	Currently married women 15-49
Currently using condoms	Proportion	Currently married women 15-49
Currently using injectables	Proportion	Currently married women 15-49
Currently using female sterilization	Proportion	Currently married women 15-49
Currently using rhythm	Proportion	Currently married women 15-49
Currently using withdrawal	Proportion	Currently married women 15-49
Used public sector source	Proportion	Currently married women 15-49
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 age 15-49
Mothers received antenatal care for last birth	Proportion	Women with a live birth in the last 5 years
Births with skilled attendant at delivery	Proportion	Births occurring 1-59 months before survey
Had diarrhea in the past 2 weeks	Proportion	Children under age 5
Treated with ORS	Proportion	Children under age 5 with diarrhea in past 2 weeks
Sought medical treatment for diarrhea	Proportion	Children under age 5 with diarrhea in past 2 weeks
Vaccination card seen	Proportion	Children age 18-29 months
Received BCG vaccination	Proportion	Children age 18-29 months
Received DPT vaccination (3 doses)	Proportion	Children age 18-29 months
Received polio vaccination (3 doses)	Proportion	Children age 18-29 months
Received measles vaccination	Proportion	Children age 18-29 months
Received all vaccinations	Proportion	Children age 18-29 months
Height-for-age (-2SD)	Proportion	Children under age 5 who are measured
Weight-for-height (-2SD)	Proportion	Children under age 5 who are measured
Weight-for-age (-2SD)	Proportion	Children under age 5 who are measured
Body Mass Index (BMI) <18.5	Proportion	All women age 15-49 who are measured
Had an HIV test and received results in past 12 months	Proportion	All women age 15-49
Accepting attitudes towards people with HIV	Proportion	All women age 15-49 who have heard of HIV/AIDS
Has heard of HIV/AIDS	Proportion	All women age 15-49
Know about condoms	Proportion	All women age 15-49
Know about limiting partners	Proportion	All women age 15-49
Experienced physical violence since age 15 by anyone	Proportion	All women age 15-49
Ever experienced any sexual violence	Proportion	All women age 15-49
Experienced physical or sexual violence by any husband/partner	Proportion	All ever married women age 15-49
Experienced physical or sexual violence in the last 12 months by any husband/partner	Proportion	All ever married women age 15-49
Total abortion rate (3 years)	Rate	Women-years of exposure to childbearing
Total fertility rate (3 years)	Rate	Women-years of exposure to childbearing
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[1]	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

[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: National sample, Tajikistan 2012

VARIABLE	R	SE	N	WN	DEFT	SE/R	R-2SE	R+2SE
Urban residence	0.250	0.007	9,656	9,656	1.572	0.028	0.236	0.264
No education/primary	0.059	0.006	9,656	9,656	2.651	0.108	0.046	0.071
Secondary or higher education	0.941	0.006	9,656	9,656	2.651	0.007	0.929	0.954
Never married (never in union)	0.274	0.006	9,656	9,656	1.273	0.021	0.263	0.286
Currently married (in union)	0.674	0.006	9,656	9,656	1.228	0.009	0.662	0.685
Married before age 20	0.471	0.011	5,755	5,693	1.599	0.022	0.450	0.492
Had sexual intercourse before age 18	0.147	0.007	5,755	5,693	1.503	0.048	0.133	0.161
Currently pregnant	0.076	0.003	9,656	9,656	1.127	0.040	0.070	0.082
Children ever born	2.122	0.028	9,656	9,656	1.274	0.013	2.066	2.179
Children surviving	1.973	0.024	9,656	9,656	1.202	0.012	1.925	2.022
Children ever born to women age 40-49	4.543	0.073	1,932	1,866	1.493	0.016	4.398	4.688
Know any contraceptive method	0.951	0.005	6,388	6,504	1.795	0.005	0.942	0.961
Know a modern method	0.950	0.005	6,388	6,504	1.795	0.005	0.941	0.960
Currently using any method	0.279	0.008	6,388	6,504	1.439	0.029	0.263	0.295
Currently using a modern method	0.258	0.008	6,388	6,504	1.470	0.031	0.242	0.275
Currently using a traditional method	0.021	0.002	6,388	6,504	1.366	0.117	0.016	0.026
Currently using pill	0.023	0.002	6,388	6,504	1.234	0.101	0.018	0.028
Currently using IUD	0.185	0.007	6,388	6,504	1.404	0.037	0.172	0.199
Currently using condoms	0.022	0.002	6,388	6,504	1.114	0.092	0.018	0.027
Currently using injectables	0.020	0.003	6,388	6,504	1.572	0.138	0.014	0.025
Currently using female sterilization	0.006	0.001	6,388	6,504	1.150	0.187	0.004	0.008
Currently using rhythm	0.001	0.000	6,388	6,504	1.036	0.375	0.000	0.002
Currently using withdrawal	0.019	0.002	6,388	6,504	1.348	0.120	0.015	0.024
Used public sector source	0.884	0.009	1,725	1,686	1.205	0.011	0.865	0.902
Want no more children	0.440	0.009	6,388	6,504	1.449	0.020	0.422	0.458
Want to delay birth at least 2 years	0.189	0.006	6,388	6,504	1.132	0.029	0.178	0.200
Ideal number of children	3.573	0.024	9,368	9,336	1.565	0.007	3.525	3.620
Mothers received antenatal care for last birth	0.788	0.013	3,482	3,601	1.944	0.017	0.761	0.815
Births with skilled attendant at delivery	0.874	0.012	5,013	5,233	2.202	0.014	0.849	0.898
Had diarrhea in the past 2 weeks	0.151	0.007	4,838	5,031	1.340	0.049	0.136	0.165
Treated with ORS	0.603	0.026	723	757	1.311	0.042	0.552	0.654
Sought medical treatment for diarrhea	0.537	0.027	723	757	1.333	0.049	0.484	0.590
Vaccination card seen	0.910	0.010	1,092	1,148	1.174	0.011	0.890	0.930
Received BCG vaccination	0.983	0.004	1,092	1,148	1.166	0.005	0.974	0.992
Received DPT vaccination (3 doses)	0.931	0.011	1,092	1,148	1.484	0.012	0.908	0.953
Received polio vaccination (3 doses)	0.923	0.009	1,092	1,148	1.174	0.010	0.904	0.941
Received measles vaccination	0.952	0.010	1,092	1,148	1.647	0.011	0.932	0.973
Received all vaccinations	0.887	0.014	1,092	1,148	1.472	0.016	0.860	0.915
Height-for-age (-2SD)	0.262	0.009	4,664	5,080	1.378	0.035	0.243	0.280
Weight-for-height (-2SD)	0.099	0.006	4,664	5,080	1.306	0.058	0.088	0.111
Weight-for-age (-2SD)	0.121	0.007	4,664	5,080	1.360	0.056	0.108	0.135
Body Mass Index (BMI) <18.5	0.106	0.005	8,832	8,800	1.423	0.044	0.097	0.116
Had an HIV test and received results in past 12 months	0.050	0.003	9,656	9,656	1.392	0.062	0.044	0.056
Accepting attitudes towards people with HIV	0.058	0.006	6,068	5,943	1.939	0.100	0.046	0.070
Has heard about HIV/AIDS	0.616	0.013	9,656	9,656	2.706	0.022	0.589	0.642
Know about condoms	0.364	0.013	9,656	9,656	2.685	0.036	0.338	0.390
Know about limiting partners	0.430	0.013	9,656	9,656	2.630	0.031	0.404	0.457
Experienced physical violence since age 15 by anyone	0.188	0.008	5,547	5,547	1.612	0.045	0.171	0.205
Ever experienced any sexual violence	0.037	0.004	5,547	5,547	1.409	0.096	0.030	0.045
Experienced physical or sexual violence by any husband/partner	0.212	0.010	4,405	4,093	1.591	0.046	0.192	0.231
Experienced physical or sexual violence in the last 12 months by any husband/partner	0.152	0.008	4,405	4,093	1.519	0.054	0.136	0.169
Total abortion rate (3 years)	0.472	0.035	27,205	27,208	1.186	0.075	0.402	0.543
Total fertility rate (3 years)	3.756	0.086	27,205	27,208	1.299	0.023	3.585	3.928
Neonatal mortality rate (0-4 years)	19.455	2.479	5,070	5,286	1.198	0.127	14.498	24.413
Post-neonatal mortality rate (0-4 years)	15.042	2.085	5,068	5,288	1.161	0.139	10.871	19.212
Infant mortality rate (0-4 years)	34.497	3.147	5,073	5,289	1.161	0.091	28.202	40.792
Child mortality rate (0-4 years)	9.194	1.882	4,743	4,924	1.329	0.205	5.431	12.957
Under-five mortality rate (0-4 years)	43.374	3.703	5,085	5,301	1.180	0.085	35.968	50.780

Table B.3 Sampling errors: Urban sample, Tajikistan 2012

VARIABLE	R	SE	N	WN	DEFT	SE/R	R-2SE	R+2SE
Urban residence	1.000	0.000	3,408	2,413	na	0.000	1.000	1.000
No education/primary	0.034	0.004	3,408	2,413	1.344	0.123	0.025	0.042
Secondary or higher education	0.966	0.004	3,408	2,413	1.344	0.004	0.958	0.975
Never married (never in union)	0.270	0.009	3,408	2,413	1.229	0.035	0.251	0.288
Currently married (in union)	0.651	0.010	3,408	2,413	1.226	0.015	0.631	0.671
Married before age 20	0.432	0.013	2,105	1,488	1.186	0.030	0.406	0.457
Had sexual intercourse before age 18	0.137	0.010	2,105	1,488	1.289	0.071	0.118	0.156
Currently pregnant	0.063	0.005	3,408	2,413	1.298	0.086	0.052	0.074
Children ever born	1.980	0.035	3,408	2,413	1.060	0.018	1.910	2.050
Children surviving	1.862	0.031	3,408	2,413	1.041	0.017	1.799	1.925
Children ever born to women age 40-49	3.797	0.082	771	543	1.241	0.022	3.634	3.961
Knows any contraceptive method	0.964	0.005	2,178	1,571	1.182	0.005	0.954	0.973
Know a modern method	0.963	0.005	2,178	1,571	1.155	0.005	0.954	0.972
Currently using any method	0.315	0.013	2,178	1,571	1.324	0.042	0.289	0.342
Currently using a modern method	0.290	0.013	2,178	1,571	1.350	0.045	0.264	0.316
Currently using a traditional method	0.025	0.004	2,178	1,571	1.205	0.160	0.017	0.033
Currently using pill	0.033	0.005	2,178	1,571	1.245	0.143	0.024	0.043
Currently using IUD	0.205	0.011	2,178	1,571	1.262	0.053	0.183	0.227
Currently using condoms	0.032	0.004	2,178	1,571	1.077	0.127	0.024	0.040
Currently using injectables	0.011	0.003	2,178	1,571	1.246	0.255	0.005	0.016
Currently using female sterilization	0.006	0.002	2,178	1,571	1.081	0.288	0.003	0.010
Currently using rhythm	0.002	0.001	2,178	1,571	1.057	0.470	0.000	0.004
Currently using withdrawal	0.021	0.004	2,178	1,571	1.219	0.177	0.014	0.029
Used public sector source	0.838	0.017	647	463	1.151	0.020	0.805	0.871
Want no more children	0.427	0.014	2,178	1,571	1.351	0.034	0.398	0.456
Want to delay birth at least 2 years	0.180	0.011	2,178	1,571	1.281	0.059	0.159	0.201
Ideal number of children	3.403	0.035	3,302	2,339	1.490	0.010	3.333	3.473
Mothers received antenatal care for last birth	0.827	0.016	1,112	802	1.428	0.020	0.794	0.859
Births with skilled attendant at delivery	0.934	0.011	1,543	1,119	1.563	0.012	0.911	0.957
Had diarrhea in the past 2 weeks	0.179	0.013	1,502	1,086	1.197	0.072	0.154	0.205
Treated with ORS	0.578	0.036	278	194	1.101	0.063	0.505	0.650
Sought medical treatment for diarrhea	0.502	0.036	278	194	1.073	0.072	0.430	0.575
Vaccination card seen	0.889	0.020	328	230	1.153	0.023	0.849	0.930
Received BCG vaccination	0.985	0.009	328	230	1.336	0.009	0.967	1.003
Received DPT vaccination (3 doses)	0.918	0.017	328	230	1.078	0.018	0.885	0.952
Received polio vaccination (3 doses)	0.912	0.017	328	230	1.085	0.019	0.877	0.946
Received measles vaccination	0.937	0.017	328	230	1.257	0.018	0.903	0.971
Received all vaccinations	0.877	0.019	328	230	1.057	0.022	0.838	0.916
Height-for-age (-2SD)	0.214	0.015	1,421	1,092	1.316	0.070	0.184	0.245
Weight-for-height (-2SD)	0.099	0.010	1,421	1,092	1.226	0.099	0.080	0.119
Weight-for-age (-2SD)	0.107	0.011	1,421	1,092	1.255	0.098	0.086	0.128
Body Mass Index (BMI) <18.5	0.102	0.007	3,160	2,233	1.350	0.071	0.087	0.116
Had an HIV test and received results in past 12 months	0.078	0.006	3,408	2,413	1.241	0.073	0.067	0.089
Accepting attitudes towards people with HIV	0.060	0.009	2,402	1,740	1.841	0.149	0.042	0.078
Has heard about HIV/AIDS	0.721	0.017	3,408	2,413	2.153	0.023	0.688	0.754
Know about condoms	0.421	0.017	3,408	2,413	1.963	0.039	0.388	0.454
Know about limiting partners	0.497	0.019	3,408	2,413	2.217	0.038	0.459	0.535
Experienced physical violence since age 15 by anyone	0.208	0.014	2,171	1,399	1.578	0.066	0.180	0.235
Ever experienced any sexual violence	0.034	0.006	2,171	1,399	1.468	0.169	0.022	0.045
Experienced physical or sexual violence by any husband/partner	0.229	0.015	1,723	1,023	1.494	0.066	0.199	0.260
Experienced physical or sexual violence in the last 12 months by any husband/partner	0.164	0.012	1,723	1,023	1.371	0.075	0.140	0.189
Total abortion rate (3 years)	0.579	0.056	9,620	6,813	1.057	0.097	0.466	0.691
Total fertility rate (3 years)	3.274	0.113	9,620	6,813	1.244	0.034	3.048	3.500
Neonatal mortality rate (0-9 years)	17.621	2.821	2,945	2,105	1.041	0.160	11.979	23.264
Post-neonatal mortality rate (0-9 years)	17.239	2.615	2,944	2,105	0.952	0.152	12.009	22.469
Infant mortality rate (0-9 years)	34.860	3.941	2,948	2,108	0.951	0.113	26.978	42.743
Child mortality rate (0-9 years)	7.786	1.858	2,906	2,061	1.102	0.239	4.070	11.502
Under-five mortality rate (0-9 years)	42.375	4.496	2,950	2,111	0.986	0.106	33.384	51.367

na = Not applicable

Table B.4 Sampling errors: Rural sample, Tajikistan 2012

VARIABLE	R	SE	N	WN	DEFT	SE/R	R-2SE	R+2SE
Urban residence	0.000	0.000	6,248	7,243	na	na	0.000	0.000
No education/primary	0.067	0.008	6,248	7,243	2.635	0.124	0.050	0.084
Secondary or higher education	0.933	0.008	6,248	7,243	2.635	0.009	0.916	0.950
Never married (never in union)	0.276	0.007	6,248	7,243	1.246	0.026	0.262	0.290
Currently married (in union)	0.681	0.007	6,248	7,243	1.202	0.010	0.667	0.695
Married before age 20	0.485	0.014	3,650	4,205	1.643	0.028	0.458	0.512
Had sexual intercourse before age 18	0.150	0.009	3,650	4,205	1.501	0.059	0.132	0.168
Currently pregnant	0.080	0.004	6,248	7,243	1.057	0.045	0.073	0.088
Children ever born	2.170	0.036	6,248	7,243	1.260	0.017	2.098	2.242
Children surviving	2.011	0.031	6,248	7,243	1.184	0.015	1.949	2.072
Children ever born to women age 40-49	4.850	0.095	1,161	1,323	1.481	0.020	4.660	5.039
Know any contraceptive method	0.948	0.006	4,210	4,933	1.795	0.007	0.935	0.960
Know a modern method	0.946	0.006	4,210	4,933	1.798	0.007	0.934	0.959
Currently using any method	0.268	0.010	4,210	4,933	1.428	0.036	0.248	0.287
Currently using a modern method	0.248	0.010	4,210	4,933	1.462	0.039	0.229	0.268
Currently using a traditional method	0.019	0.003	4,210	4,933	1.384	0.152	0.014	0.025
Currently using pill	0.020	0.003	4,210	4,933	1.237	0.135	0.014	0.025
Currently using IUD	0.179	0.008	4,210	4,933	1.401	0.046	0.163	0.196
Currently using condoms	0.019	0.002	4,210	4,933	1.126	0.123	0.015	0.024
Currently using injectables	0.023	0.004	4,210	4,933	1.527	0.155	0.016	0.030
Currently using female sterilization	0.006	0.001	4,210	4,933	1.142	0.232	0.003	0.008
Currently using rhythm	0.001	0.000	4,210	4,933	1.071	0.570	0.000	0.002
Currently using withdrawal	0.019	0.003	4,210	4,933	1.348	0.151	0.013	0.024
Used public sector source	0.901	0.011	1,078	1,223	1.218	0.012	0.879	0.923
Want no more children	0.445	0.011	4,210	4,933	1.430	0.025	0.423	0.466
Want to delay birth at least 2 years	0.192	0.007	4,210	4,933	1.072	0.034	0.179	0.205
Ideal number of children	3.629	0.029	6,066	6,997	1.526	0.008	3.571	3.687
Mothers received antenatal care for last birth	0.777	0.016	2,370	2,799	1.933	0.021	0.744	0.810
Births with skilled attendant at delivery	0.857	0.015	3,470	4,114	2.131	0.018	0.826	0.888
Had diarrhea in the past 2 weeks	0.143	0.009	3,336	3,945	1.333	0.061	0.125	0.160
Treated with ORS	0.612	0.032	445	563	1.319	0.052	0.548	0.675
Sought medical treatment for diarrhea	0.549	0.033	445	563	1.354	0.061	0.482	0.616
Vaccination card seen	0.915	0.011	764	918	1.140	0.012	0.892	0.938
Received BCG vaccination	0.982	0.005	764	918	1.090	0.005	0.972	0.992
Received DPT vaccination (3 doses)	0.934	0.013	764	918	1.502	0.014	0.907	0.961
Received polio vaccination (3 doses)	0.926	0.011	764	918	1.149	0.012	0.904	0.947
Received measles vaccination	0.956	0.012	764	918	1.678	0.013	0.931	0.981
Received all vaccinations	0.890	0.017	764	918	1.481	0.019	0.857	0.923
Height-for-age (-2SD)	0.274	0.011	3,243	3,988	1.312	0.040	0.253	0.296
Weight-for-height (-2SD)	0.099	0.007	3,243	3,988	1.251	0.069	0.086	0.113
Weight-for-age (-2SD)	0.125	0.008	3,243	3,988	1.296	0.065	0.109	0.142
Body Mass Index (BMI) <18.5	0.108	0.006	5,672	6,567	1.397	0.053	0.096	0.119
Had an HIV test and received results in past 12 months	0.040	0.004	6,248	7,243	1.450	0.089	0.033	0.048
Accepting attitudes towards people with HIV	0.057	0.007	3,666	4,204	1.919	0.129	0.043	0.072
Has heard about HIV/AIDS	0.580	0.017	6,248	7,243	2.723	0.029	0.546	0.614
Know about condoms	0.345	0.017	6,248	7,243	2.769	0.048	0.312	0.378
Know about limiting partners	0.408	0.017	6,248	7,243	2.655	0.041	0.375	0.441
Experienced physical violence since age 15 by anyone	0.181	0.010	3,376	4,148	1.558	0.057	0.161	0.202
Ever experienced any sexual violence	0.039	0.004	3,376	4,148	1.325	0.114	0.030	0.048
Experienced physical or sexual violence by any husband/partner	0.206	0.012	2,682	3,070	1.546	0.059	0.182	0.230
Experienced physical or sexual violence in the last 12 months by any husband/partner	0.148	0.010	2,682	3,070	1.485	0.069	0.128	0.169
Total abortion rate (3 years)	0.438	0.044	17,585	20,396	1.201	0.099	0.351	0.525
Total fertility rate (3 years)	3.920	0.107	17,585	20,396	1.272	0.027	3.707	4.134
Neonatal mortality rate (0-9 years)	20.325	2.252	6,234	7,462	1.109	0.111	15.822	24.829
Post-neonatal mortality rate (0-9 years)	19.083	2.323	6,226	7,459	1.261	0.122	14.438	23.729
Infant mortality rate (0-9 years)	39.408	3.140	6,242	7,473	1.125	0.080	33.129	45.688
Child mortality rate (0-9 years)	11.018	1.868	5,920	7,109	1.334	0.170	7.283	14.754
Under-five mortality rate (0-9 years)	49.992	4.029	6,257	7,490	1.243	0.081	41.935	58.050

na = Not applicable

Table B.5 Sampling errors: Dushanbe sample, Tajikistan 2012

VARIABLE	R	SE	N	WN	DEFT	SE/R	R-2SE	R+2SE
Urban residence	1.000	0.000	1,733	881	na	0.000	1.000	1.000
No education/primary	0.047	0.008	1,733	881	1.595	0.173	0.030	0.063
Secondary or higher education	0.953	0.008	1,733	881	1.595	0.008	0.937	0.970
Never married (never in union)	0.281	0.012	1,733	881	1.078	0.041	0.258	0.304
Currently married (in union)	0.635	0.014	1,733	881	1.204	0.022	0.607	0.663
Married before age 20	0.444	0.017	1,085	554	1.105	0.038	0.411	0.477
Had sexual intercourse before age 18	0.165	0.013	1,085	554	1.162	0.079	0.139	0.192
Currently pregnant	0.055	0.005	1,733	881	0.983	0.098	0.044	0.066
Children ever born	1.977	0.046	1,733	881	1.000	0.023	1.885	2.070
Children surviving	1.879	0.043	1,733	881	0.983	0.023	1.794	1.965
Children ever born to women age 40-49	3.628	0.110	388	196	1.147	0.030	3.409	3.848
Know any contraceptive method	0.933	0.010	1,098	559	1.298	0.011	0.913	0.952
Know a modern method	0.930	0.009	1,098	559	1.228	0.010	0.911	0.949
Currently using any method	0.317	0.016	1,098	559	1.161	0.051	0.285	0.350
Currently using a modern method	0.287	0.016	1,098	559	1.174	0.056	0.255	0.320
Currently using a traditional method	0.030	0.006	1,098	559	1.130	0.194	0.018	0.041
Currently using pill	0.027	0.005	1,098	559	1.052	0.191	0.017	0.037
Currently using IUD	0.196	0.014	1,098	559	1.199	0.073	0.167	0.225
Currently using condoms	0.052	0.007	1,098	559	1.106	0.142	0.037	0.067
Currently using injectables	0.001	0.001	1,098	559	0.980	1.008	0.000	0.003
Currently using female sterilization	0.005	0.002	1,098	559	0.852	0.352	0.002	0.009
Currently using rhythm	0.005	0.003	1,098	559	1.229	0.529	0.000	0.010
Currently using withdrawal	0.020	0.005	1,098	559	1.062	0.223	0.011	0.029
Used public sector source	0.796	0.026	323	163	1.170	0.033	0.743	0.848
Want no more children	0.396	0.022	1,098	559	1.463	0.055	0.353	0.439
Want to delay birth at least 2 years	0.132	0.015	1,098	559	1.468	0.114	0.102	0.162
Ideal number of children	3.444	0.040	1,674	851	1.285	0.012	3.365	3.523
Mothers received antenatal care for last birth	0.808	0.026	570	295	1.565	0.032	0.757	0.859
Births with skilled attendant at delivery	0.956	0.010	795	414	1.196	0.010	0.937	0.975
Had diarrhea in the past 2 weeks	0.174	0.019	780	404	1.278	0.107	0.137	0.211
Treated with ORS	0.569	0.043	140	70	0.972	0.076	0.482	0.655
Sought medical treatment for diarrhea	0.465	0.044	140	70	0.974	0.094	0.377	0.553
Vaccination card seen	0.836	0.027	183	90	0.975	0.032	0.782	0.891
Received BCG vaccination	0.976	0.018	183	90	1.613	0.019	0.940	1.013
Received DPT vaccination (3 doses)	0.869	0.028	183	90	1.094	0.032	0.813	0.924
Received polio vaccination (3 doses)	0.867	0.029	183	90	1.141	0.034	0.808	0.925
Received measles vaccination	0.933	0.022	183	90	1.173	0.024	0.889	0.977
Received all vaccinations	0.830	0.031	183	90	1.110	0.038	0.767	0.893
Height-for-age (-2SD)	0.189	0.018	722	392	1.163	0.098	0.152	0.226
Weight-for-height (-2SD)	0.103	0.014	722	392	1.239	0.137	0.075	0.131
Weight-for-age (-2SD)	0.093	0.011	722	392	1.081	0.123	0.070	0.116
Body Mass Index (BMI) <18.5	0.096	0.007	1,612	820	1.017	0.078	0.081	0.111
Had an HIV test and received results in past 12 months	0.080	0.008	1,733	881	1.193	0.098	0.064	0.095
Accepting attitudes towards people with HIV	0.041	0.006	1,140	567	1.096	0.158	0.028	0.053
Has heard about HIV/AIDS	0.644	0.029	1,733	881	2.550	0.046	0.585	0.703
Know about condoms	0.373	0.023	1,733	881	2.020	0.063	0.326	0.420
Know about limiting partners	0.431	0.027	1,733	881	2.267	0.063	0.377	0.485
Experienced physical violence since age 15 by anyone	0.149	0.016	1,124	513	1.483	0.106	0.118	0.181
Ever experienced any sexual violence	0.021	0.005	1,124	513	1.154	0.237	0.011	0.030
Experienced physical or sexual violence by any husband/partner	0.161	0.017	885	366	1.336	0.103	0.128	0.194
Experienced physical or sexual violence in the last 12 months by any husband/partner	0.105	0.014	885	366	1.327	0.130	0.078	0.133
Total abortion rate (3 years)	0.667	0.081	4,896	2,486	0.957	0.121	0.506	0.828
Total fertility rate (3 years)	3.384	0.158	4,896	2,486	1.273	0.047	3.069	3.699
Neonatal mortality rate (0-9 years)	11.029	3.002	1,550	795	1.132	0.272	5.024	17.033
Post-neonatal mortality rate (0-9 years)	10.804	3.856	1,546	792	1.184	0.357	3.092	18.516
Infant mortality rate (0-9 years)	21.833	4.515	1,550	795	1.074	0.207	12.802	30.863
Child mortality rate (0-9 years)	6.878	2.421	1,549	790	1.127	0.352	2.036	11.719
Under-five mortality rate (0-9 years)	28.560	5.184	1,550	795	1.061	0.182	18.193	38.927

na = Not applicable

Table B.6 Sampling errors: GBAO sample, Tajikistan 2012

VARIABLE	R	SE	N	WN	DEFT	SE/R	R-2SE	R+2SE
Urban residence	0.143	0.011	1,069	220	0.988	0.074	0.122	0.165
No education/primary	0.006	0.002	1,069	220	1.009	0.385	0.001	0.011
Secondary or higher education	0.994	0.002	1,069	220	1.009	0.002	0.989	0.999
Never married (never in union)	0.368	0.015	1,069	220	1.012	0.041	0.338	0.398
Currently married (in union)	0.586	0.016	1,069	220	1.044	0.027	0.554	0.617
Married before age 20	0.272	0.019	677	139	1.121	0.071	0.233	0.310
Had sexual intercourse before age 18	0.076	0.012	677	139	1.165	0.156	0.052	0.100
Currently pregnant	0.060	0.007	1,069	220	0.964	0.116	0.046	0.075
Children ever born	1.789	0.071	1,069	220	1.123	0.039	1.648	1.930
Children surviving	1.660	0.063	1,069	220	1.105	0.038	1.534	1.786
Children ever born to women age 40-49	3.960	0.199	250	51	1.482	0.050	3.561	4.359
Know any contraceptive method	0.979	0.008	626	129	1.378	0.008	0.963	0.995
Know a modern method	0.979	0.008	626	129	1.378	0.008	0.963	0.995
Currently using any method	0.350	0.031	626	129	1.635	0.089	0.288	0.413
Currently using a modern method	0.349	0.031	626	129	1.650	0.090	0.286	0.412
Currently using a traditional method	0.002	0.002	626	129	0.974	1.000	0.000	0.005
Currently using pill	0.025	0.006	626	129	0.913	0.230	0.013	0.036
Currently using IUD	0.238	0.025	626	129	1.481	0.106	0.188	0.289
Currently using condoms	0.030	0.008	626	129	1.228	0.279	0.013	0.047
Currently using injectables	0.056	0.010	626	129	1.104	0.181	0.036	0.076
Currently using female sterilization	0.000	0.000	626	129	na	na	0.000	0.000
Currently using rhythm	0.000	0.000	626	129	na	na	0.000	0.000
Currently using withdrawal	0.002	0.002	626	129	0.974	1.000	0.000	0.005
Used public sector source	0.868	0.028	220	45	1.217	0.032	0.813	0.924
Want no more children	0.465	0.024	626	129	1.225	0.053	0.416	0.514
Want to delay birth at least 2 years	0.226	0.021	626	129	1.259	0.093	0.184	0.268
Ideal number of children	3.240	0.069	1,063	218	1.470	0.021	3.102	3.378
Mothers received antenatal care for last birth	0.851	0.020	328	67	1.029	0.024	0.811	0.892
Births with skilled attendant at delivery	0.925	0.016	445	91	1.011	0.018	0.892	0.957
Had diarrhea in the past 2 weeks	0.164	0.023	432	88	1.242	0.142	0.118	0.211
Treated with ORS	0.781	0.065	71	15	1.264	0.083	0.651	0.911
Sought medical treatment for diarrhea	0.408	0.066	71	15	1.095	0.161	0.276	0.539
Vaccination card seen	0.893	0.031	84	17	0.927	0.035	0.831	0.956
Received BCG vaccination	0.988	0.012	84	17	0.994	0.012	0.964	1.012
Received DPT vaccination (3 doses)	0.868	0.037	84	17	0.992	0.042	0.795	0.942
Received polio vaccination (3 doses)	0.929	0.026	84	17	0.931	0.028	0.877	0.982
Received measles vaccination	0.964	0.020	84	17	0.997	0.021	0.924	1.005
Received all vaccinations	0.831	0.045	84	17	1.096	0.054	0.741	0.921
Height-for-age (-2SD)	0.243	0.024	447	93	1.180	0.100	0.194	0.291
Weight-for-height (-2SD)	0.081	0.016	447	93	1.224	0.200	0.048	0.113
Weight-for-age (-2SD)	0.130	0.023	447	93	1.409	0.177	0.084	0.176
Body Mass Index (BMI) <18.5	0.133	0.012	986	202	1.120	0.091	0.109	0.157
Had an HIV test and received results in past 12 months	0.073	0.012	1,069	220	1.443	0.157	0.050	0.097
Accepting attitudes towards people with HIV	0.103	0.013	822	169	1.231	0.127	0.077	0.129
Has heard about HIV/AIDS	0.771	0.037	1,069	220	2.906	0.049	0.696	0.846
Know about condoms	0.473	0.031	1,069	220	2.028	0.066	0.411	0.535
Know about limiting partners	0.677	0.040	1,069	220	2.798	0.059	0.597	0.758
Experienced physical violence since age 15 by anyone	0.144	0.018	621	126	1.304	0.128	0.107	0.181
Ever experienced any sexual violence	0.020	0.005	621	126	0.795	0.221	0.011	0.029
Experienced physical or sexual violence by any husband/partner	0.157	0.022	445	84	1.260	0.139	0.114	0.201
Experienced physical or sexual violence in the last 12 months by any husband/partner	0.112	0.020	445	84	1.357	0.182	0.071	0.152
Total abortion rate (3 years)	0.420	0.091	3,005	617	1.160	0.216	0.239	0.602
Total fertility rate (3 years)	3.295	0.203	3,005	617	1.170	0.062	2.889	3.702
Neonatal mortality rate (0-9 years)	12.884	4.678	770	158	0.959	0.363	3.528	22.240
Post-neonatal mortality rate (0-9 years)	15.657	3.746	763	156	0.831	0.239	8.165	23.148
Infant mortality rate (0-9 years)	28.541	5.365	770	158	0.791	0.188	17.810	39.272
Child mortality rate (0-9 years)	8.130	3.855	721	147	1.158	0.474	0.420	15.839
Under-five mortality rate (0-9 years)	36.438	6.515	772	158	0.858	0.179	23.408	49.468

na = Not applicable

Table B.7 Sampling errors: Sughd sample, Tajikistan 2012

VARIABLE	R	SE	N	WN	DEFT	SE/R	R-2SE	R+2SE
Urban residence	0.211	0.013	2,084	2,872	1.438	0.061	0.185	0.237
No education/primary	0.015	0.003	2,084	2,872	1.272	0.227	0.008	0.022
Secondary or higher education	0.985	0.003	2,084	2,872	1.272	0.003	0.978	0.992
Never married (never in union)	0.253	0.012	2,084	2,872	1.240	0.047	0.230	0.277
Currently married (in union)	0.704	0.012	2,084	2,872	1.194	0.017	0.680	0.728
Married before age 20	0.483	0.023	1,268	1,746	1.616	0.047	0.438	0.529
Had sexual intercourse before age 18	0.116	0.012	1,268	1,746	1.298	0.101	0.093	0.140
Currently pregnant	0.068	0.006	2,084	2,872	1.041	0.084	0.057	0.080
Children ever born	1.923	0.047	2,084	2,872	1.181	0.024	1.829	2.017
Children surviving	1.806	0.039	2,084	2,872	1.079	0.022	1.728	1.885
Children ever born to women age 40-49	3.732	0.130	409	560	1.497	0.035	3.471	3.992
Know any contraceptive method	0.975	0.006	1,468	2,022	1.448	0.006	0.963	0.986
Know a modern method	0.973	0.006	1,468	2,022	1.497	0.006	0.961	0.986
Currently using any method	0.353	0.019	1,468	2,022	1.540	0.054	0.315	0.392
Currently using a modern method	0.307	0.019	1,468	2,022	1.607	0.063	0.268	0.346
Currently using a traditional method	0.046	0.007	1,468	2,022	1.267	0.151	0.032	0.060
Currently using pill	0.020	0.004	1,468	2,022	1.061	0.194	0.012	0.028
Currently using IUD	0.229	0.017	1,468	2,022	1.509	0.072	0.196	0.262
Currently using condoms	0.026	0.004	1,468	2,022	1.009	0.161	0.018	0.035
Currently using injectables	0.022	0.005	1,468	2,022	1.423	0.248	0.011	0.033
Currently using female sterilization	0.007	0.002	1,468	2,022	1.064	0.328	0.002	0.012
Currently using rhythm	0.002	0.001	1,468	2,022	0.964	0.504	0.000	0.005
Currently using withdrawal	0.044	0.007	1,468	2,022	1.229	0.150	0.030	0.057
Used public sector source	0.887	0.018	454	620	1.197	0.020	0.852	0.923
Want no more children	0.456	0.020	1,468	2,022	1.563	0.045	0.415	0.497
Want to delay birth at least 2 years	0.166	0.010	1,468	2,022	1.024	0.060	0.147	0.186
Ideal number of children	3.210	0.047	2,042	2,812	1.654	0.015	3.116	3.305
Mothers received antenatal care for last birth	0.941	0.019	724	1,000	2.192	0.020	0.902	0.979
Births with skilled attendant at delivery	0.952	0.020	1,005	1,383	2.456	0.021	0.912	0.993
Had diarrhea in the past 2 weeks	0.075	0.010	975	1,343	1.158	0.139	0.054	0.096
Treated with ORS	0.614	0.072	72	101	1.145	0.117	0.470	0.757
Sought medical treatment for diarrhea	0.660	0.069	72	101	1.111	0.104	0.523	0.797
Vaccination card seen	0.981	0.009	209	288	0.994	0.010	0.962	1.000
Received BCG vaccination	1.000	0.000	209	288	na	0.000	1.000	1.000
Received DPT vaccination (3 doses)	0.953	0.024	209	288	1.655	0.025	0.905	1.002
Received polio vaccination (3 doses)	0.958	0.019	209	288	1.360	0.020	0.920	0.996
Received measles vaccination	0.969	0.018	209	288	1.493	0.018	0.933	1.005
Received all vaccinations	0.933	0.030	209	288	1.719	0.032	0.874	0.993
Height-for-age (-2SD)	0.272	0.019	934	1,365	1.229	0.070	0.234	0.310
Weight-for-height (-2SD)	0.084	0.010	934	1,365	1.087	0.123	0.063	0.105
Weight-for-age (-2SD)	0.104	0.012	934	1,365	1.098	0.116	0.080	0.128
Body Mass Index (BMI) <18.5	0.100	0.009	1,926	2,651	1.240	0.085	0.083	0.117
Had an HIV test and received results in past 12 months	0.073	0.007	2,084	2,872	1.264	0.099	0.059	0.088
Accepting attitudes towards people with HIV	0.013	0.003	1,618	2,227	1.032	0.219	0.008	0.019
Has heard about HIV/AIDS	0.776	0.020	2,084	2,872	2.133	0.025	0.737	0.815
Know about condoms	0.449	0.026	2,084	2,872	2.378	0.058	0.397	0.501
Know about limiting partners	0.515	0.025	2,084	2,872	2.258	0.048	0.466	0.565
Experienced physical violence since age 15 by anyone	0.222	0.018	1,249	1,663	1.492	0.079	0.187	0.258
Ever experienced any sexual violence	0.074	0.009	1,249	1,663	1.236	0.123	0.056	0.093
Experienced physical or sexual violence by any husband/partner	0.258	0.020	1,043	1,272	1.451	0.076	0.218	0.297
Experienced physical or sexual violence in the last 12 months by any husband/partner	0.203	0.017	1,043	1,272	1.359	0.083	0.169	0.237
Total abortion rate (3 years)	0.413	0.064	5,855	8,069	1.158	0.154	0.285	0.540
Total fertility rate (3 years)	3.313	0.128	5,855	8,069	1.035	0.039	3.056	3.570
Neonatal mortality rate (0-9 years)	17.640	3.329	1,898	2,610	1.023	0.189	10.983	24.298
Post-neonatal mortality rate (0-9 years)	13.032	3.458	1,898	2,608	1.240	0.265	6.117	19.948
Infant mortality rate (0-9 years)	30.673	4.857	1,899	2,611	1.130	0.158	20.959	40.387
Child mortality rate (0-9 years)	9.138	2.616	1,813	2,490	1.078	0.286	3.907	14.369
Under-five mortality rate (0-9 years)	39.530	6.676	1,904	2,618	1.306	0.169	26.178	52.883

na = Not applicable

Table B.8 Sampling errors: DRS sample, Tajikistan 2012

VARIABLE	R	SE	N	WN	DEFT	SE/R	R-2SE	R+2SE
Urban residence	0.129	0.012	2,334	2,240	1.664	0.090	0.106	0.152
No education/primary	0.071	0.010	2,334	2,240	1.927	0.144	0.051	0.092
Secondary or higher education	0.929	0.010	2,334	2,240	1.927	0.011	0.908	0.949
Never married (never in union)	0.253	0.010	2,334	2,240	1.106	0.039	0.233	0.272
Currently married (in union)	0.690	0.011	2,334	2,240	1.098	0.015	0.669	0.711
Married before age 20	0.481	0.017	1,326	1,276	1.252	0.036	0.446	0.515
Had sexual intercourse before age 18	0.177	0.015	1,326	1,276	1.408	0.083	0.148	0.207
Currently pregnant	0.080	0.006	2,334	2,240	1.030	0.072	0.068	0.091
Children ever born	2.189	0.047	2,334	2,240	1.033	0.022	2.095	2.284
Children surviving	2.053	0.042	2,334	2,240	1.010	0.021	1.968	2.138
Children ever born to women age 40-49	4.752	0.123	408	392	1.225	0.026	4.506	4.998
Know any contraceptive method	0.913	0.012	1,611	1,546	1.690	0.013	0.890	0.937
Know a modern method	0.913	0.012	1,611	1,546	1.690	0.013	0.890	0.937
Currently using any method	0.223	0.012	1,611	1,546	1.179	0.055	0.199	0.248
Currently using a modern method	0.220	0.012	1,611	1,546	1.169	0.055	0.196	0.244
Currently using a traditional method	0.004	0.002	1,611	1,546	1.043	0.430	0.001	0.007
Currently using pill	0.022	0.004	1,611	1,546	1.196	0.199	0.013	0.031
Currently using IUD	0.166	0.011	1,611	1,546	1.227	0.069	0.143	0.189
Currently using condoms	0.017	0.004	1,611	1,546	1.181	0.225	0.009	0.024
Currently using injectables	0.008	0.002	1,611	1,546	1.058	0.297	0.003	0.012
Currently using female sterilization	0.007	0.002	1,611	1,546	1.076	0.315	0.003	0.012
Currently using rhythm	0.000	0.000	1,611	1,546	na	na	0.000	0.000
Currently using withdrawal	0.004	0.002	1,611	1,546	1.043	0.430	0.001	0.007
Used public sector source	0.912	0.016	351	340	1.055	0.017	0.881	0.944
Want no more children	0.410	0.016	1,611	1,546	1.310	0.039	0.378	0.442
Want to delay birth at least 2 years	0.242	0.012	1,611	1,546	1.137	0.050	0.218	0.266
Ideal number of children	3.679	0.038	2,238	2,141	1.240	0.010	3.603	3.754
Mothers received antenatal care for last birth	0.787	0.031	921	887	2.278	0.039	0.725	0.848
Births with skilled attendant at delivery	0.804	0.028	1,366	1,316	2.114	0.035	0.748	0.860
Had diarrhea in the past 2 weeks	0.093	0.011	1,320	1,271	1.287	0.116	0.072	0.115
Treated with ORS	0.684	0.043	123	119	0.954	0.063	0.598	0.769
Sought medical treatment for diarrhea	0.558	0.057	123	119	1.178	0.102	0.444	0.671
Vaccination card seen	0.838	0.024	302	292	1.143	0.029	0.789	0.886
Received BCG vaccination	0.970	0.011	302	292	1.105	0.011	0.948	0.991
Received DPT vaccination (3 doses)	0.918	0.020	302	292	1.251	0.022	0.878	0.957
Received polio vaccination (3 doses)	0.860	0.023	302	292	1.173	0.027	0.814	0.907
Received measles vaccination	0.953	0.016	302	292	1.347	0.017	0.920	0.986
Received all vaccinations	0.827	0.026	302	292	1.187	0.031	0.775	0.879
Height-for-age (-2SD)	0.263	0.016	1,286	1,296	1.178	0.061	0.231	0.295
Weight-for-height (-2SD)	0.098	0.010	1,286	1,296	1.114	0.101	0.078	0.118
Weight-for-age (-2SD)	0.127	0.010	1,286	1,296	0.992	0.079	0.107	0.147
Body Mass Index (BMI) <18.5	0.100	0.007	2,115	2,035	1.000	0.065	0.087	0.113
Had an HIV test and received results in past 12 months	0.034	0.005	2,334	2,240	1.387	0.153	0.024	0.045
Accepting attitudes towards people with HIV	0.026	0.006	1,092	1,033	1.266	0.233	0.014	0.039
Has heard about HIV/AIDS	0.461	0.023	2,334	2,240	2.216	0.050	0.415	0.507
Know about condoms	0.277	0.018	2,334	2,240	1.958	0.066	0.240	0.313
Know about limiting partners	0.330	0.020	2,334	2,240	2.043	0.060	0.290	0.370
Experienced physical violence since age 15 by anyone	0.130	0.014	1,261	1,242	1.487	0.108	0.102	0.159
Ever experienced any sexual violence	0.009	0.003	1,261	1,242	1.059	0.321	0.003	0.014
Experienced physical or sexual violence by any husband/partner	0.119	0.014	1,008	916	1.341	0.115	0.092	0.147
Experienced physical or sexual violence in the last 12 months by any husband/partner	0.113	0.013	1,008	916	1.323	0.117	0.087	0.140
Total abortion rate (3 years)	0.453	0.068	6,596	6,336	1.110	0.150	0.317	0.588
Total fertility rate (3 years)	3.881	0.145	6,596	6,336	1.317	0.037	3.591	4.172
Neonatal mortality rate (0-9 years)	19.629	2.976	2,453	2,371	0.906	0.152	13.676	25.582
Post-neonatal mortality rate (0-9 years)	18.287	3.169	2,454	2,373	1.026	0.173	11.949	24.625
Infant mortality rate (0-9 years)	37.916	4.165	2,458	2,376	0.901	0.110	29.587	46.245
Child mortality rate (0-9 years)	8.285	2.188	2,328	2,253	1.132	0.264	3.909	12.661
Under-five mortality rate (0-9 years)	45.887	4.803	2,463	2,381	0.917	0.105	36.281	55.493

na = Not applicable

Table B.9 Sampling errors: Khatlon sample, Tajikistan 2012

VARIABLE	R	SE	N	WN	DEFT	SE/R	R-2SE	R+2SE
Urban residence	0.176	0.009	2,436	3,444	1.208	0.053	0.157	0.194
No education/primary	0.094	0.016	2,436	3,444	2.711	0.171	0.061	0.126
Secondary or higher education	0.906	0.016	2,436	3,444	2.711	0.018	0.874	0.939
Never married (never in union)	0.298	0.011	2,436	3,444	1.139	0.035	0.277	0.319
Currently married (in union)	0.653	0.010	2,436	3,444	1.079	0.016	0.632	0.674
Married before age 20	0.475	0.019	1,399	1,978	1.454	0.041	0.437	0.514
Had sexual intercourse before age 18	0.153	0.014	1,399	1,978	1.436	0.090	0.126	0.181
Currently pregnant	0.086	0.006	2,436	3,444	1.019	0.067	0.075	0.098
Children ever born	2.304	0.060	2,436	3,444	1.201	0.026	2.183	2.424
Children surviving	2.105	0.051	2,436	3,444	1.133	0.024	2.002	2.208
Children ever born to women age 40-49	5.416	0.135	477	667	1.352	0.025	5.145	5.686
Know any contraceptive method	0.960	0.009	1,585	2,249	1.926	0.010	0.941	0.979
Know a modern method	0.959	0.010	1,585	2,249	1.906	0.010	0.940	0.978
Currently using any method	0.238	0.012	1,585	2,249	1.161	0.052	0.213	0.263
Currently using a modern method	0.229	0.012	1,585	2,249	1.177	0.054	0.204	0.254
Currently using a traditional method	0.009	0.002	1,585	2,249	0.996	0.266	0.004	0.013
Currently using pill	0.025	0.005	1,585	2,249	1.188	0.185	0.016	0.035
Currently using IUD	0.154	0.010	1,585	2,249	1.063	0.063	0.135	0.173
Currently using condoms	0.015	0.003	1,585	2,249	1.062	0.216	0.009	0.022
Currently using injectables	0.029	0.006	1,585	2,249	1.411	0.206	0.017	0.041
Currently using female sterilization	0.004	0.002	1,585	2,249	1.052	0.397	0.001	0.008
Currently using rhythm	0.000	0.000	1,585	2,249	na	na	0.000	0.000
Currently using withdrawal	0.009	0.002	1,585	2,249	0.996	0.266	0.004	0.013
Used public sector source	0.890	0.017	377	518	1.038	0.019	0.857	0.924
Want no more children	0.457	0.014	1,585	2,249	1.088	0.030	0.429	0.484
Want to delay birth at least 2 years	0.186	0.010	1,585	2,249	0.983	0.052	0.166	0.205
Ideal number of children	3.866	0.042	2,351	3,314	1.288	0.011	3.783	3.949
Mothers received antenatal care for last birth	0.668	0.025	939	1,351	1.661	0.038	0.618	0.719
Births with skilled attendant at delivery	0.846	0.022	1,402	2,029	1.903	0.026	0.803	0.889
Had diarrhea in the past 2 weeks	0.235	0.015	1,331	1,924	1.179	0.062	0.206	0.265
Treated with ORS	0.579	0.037	317	453	1.234	0.065	0.504	0.653
Sought medical treatment for diarrhea	0.520	0.037	317	453	1.215	0.072	0.445	0.595
Vaccination card seen	0.926	0.017	314	459	1.194	0.019	0.892	0.961
Received BCG vaccination	0.982	0.008	314	459	1.065	0.008	0.966	0.997
Received DPT vaccination (3 doses)	0.940	0.019	314	459	1.443	0.020	0.902	0.978
Received polio vaccination (3 doses)	0.951	0.012	314	459	1.046	0.013	0.927	0.976
Received measles vaccination	0.945	0.021	314	459	1.624	0.022	0.903	0.986
Received all vaccinations	0.910	0.023	314	459	1.483	0.026	0.864	0.957
Height-for-age (-2SD)	0.269	0.017	1,275	1,934	1.270	0.061	0.236	0.302
Weight-for-height (-2SD)	0.111	0.011	1,275	1,934	1.220	0.099	0.089	0.133
Weight-for-age (-2SD)	0.135	0.014	1,275	1,934	1.342	0.103	0.107	0.163
Body Mass Index (BMI) <18.5	0.116	0.010	2,193	3,091	1.465	0.086	0.096	0.137
Had an HIV test and received results in past 12 months	0.031	0.004	2,436	3,444	1.245	0.140	0.023	0.040
Accepting attitudes towards people with HIV	0.127	0.014	1,396	1,947	1.598	0.112	0.099	0.156
Has heard about HIV/AIDS	0.565	0.030	2,436	3,444	2.954	0.053	0.506	0.625
Know about condoms	0.341	0.027	2,436	3,444	2.808	0.079	0.287	0.395
Know about limiting partners	0.408	0.028	2,436	3,444	2.767	0.068	0.353	0.463
Experienced physical violence since age 15 by anyone	0.208	0.015	1,292	2,004	1.369	0.074	0.177	0.239
Ever experienced any sexual violence	0.030	0.006	1,292	2,004	1.213	0.192	0.018	0.041
Experienced physical or sexual violence by any husband/partner	0.246	0.019	1,024	1,455	1.409	0.077	0.208	0.283
Experienced physical or sexual violence in the last 12 months by any husband/partner	0.146	0.015	1,024	1,455	1.365	0.103	0.116	0.177
Total abortion rate (3 years)	0.492	0.068	6,853	9,700	1.053	0.138	0.356	0.628
Total fertility rate (3 years)	4.200	0.173	6,853	9,700	1.227	0.041	3.854	4.545
Neonatal mortality rate (0-9 years)	23.495	3.757	2,508	3,634	1.064	0.160	15.981	31.008
Post-neonatal mortality rate (0-9 years)	24.844	3.719	2,509	3,634	1.166	0.150	17.405	32.283
Infant mortality rate (0-9 years)	48.339	5.051	2,513	3,641	1.041	0.104	38.238	58.440
Child mortality rate (0-9 years)	13.261	3.167	2,415	3,490	1.322	0.239	6.926	19.596
Under-five mortality rate (0-9 years)	60.959	6.324	2,518	3,648	1.151	0.104	48.311	73.606

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), Tajikistan 2012

	Female		Male	
Age	Number	Percent	Number	Percent
0	575	2.9	596	3.4
1	586	2.9	555	3.1
2	590	2.9	620	3.5
3	483	2.4	525	3.0
4	461	2.3	474	2.7
5	367	1.8	413	2.3
6	523	2.6	533	3.0
7	417	2.1	481	2.7
8	448	2.2	448	2.5
9	443	2.2	425	2.4
10	442	2.2	396	2.2
11	384	1.9	436	2.5
12	462	2.3	516	2.9
13	410	2.0	458	2.6
14	493	2.5	452	2.6
15	374	1.9	410	2.3
16	475	2.4	465	2.6
17	445	2.2	462	2.6
18	443	2.2	340	1.9
19	417	2.1	280	1.6
20	445	2.2	308	1.7
21	443	2.2	303	1.7
22	409	2.0	297	1.7
23	387	1.9	258	1.5
24	387	1.9	251	1.4
25	407	2.0	271	1.5
26	366	1.8	250	1.4
27	313	1.6	244	1.4
28	323	1.6	263	1.5
29	300	1.5	212	1.2
30	284	1.4	212	1.2
31	280	1.4	205	1.2
32	256	1.3	193	1.1
33	229	1.1	194	1.1
34	219	1.1	135	0.8
35	204	1.0	184	1.0
36	249	1.2	175	1.0
37	224	1.1	149	0.8
38	206	1.0	150	0.8
39	206	1.0	157	0.9
40	218	1.1	170	1.0
41	211	1.1	150	0.8
42	211	1.0	166	0.9
43	197	1.0	143	0.8
44	228	1.1	148	0.8
45	206	1.0	144	0.8
46	181	0.9	149	0.8
47	219	1.1	162	0.9
48	169	0.8	173	1.0
49	149	0.7	144	0.8
50	224	1.1	165	0.9
51	191	0.9	163	0.9
52	220	1.1	171	1.0
53	161	0.8	151	0.9
54	158	0.8	138	0.8
55	167	0.8	141	0.8
56	124	0.6	99	0.6
57	120	0.6	102	0.6
58	120	0.6	98	0.6
59	94	0.5	91	0.5
60	118	0.6	96	0.5
61	65	0.3	58	0.3
62	90	0.4	76	0.4
63	95	0.5	89	0.5
64	75	0.4	50	0.3
65	71	0.4	70	0.4
66	43	0.2	41	0.2
67	42	0.2	34	0.2
68	39	0.2	34	0.2
69	28	0.1	35	0.2
70+	492	2.4	532	3.0
Total	20,099	100.0	17,679	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 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, Tajikistan 2012

Age group	Household population of women age 10-54	Interviewed women age 15-49		Percentage of eligible women interviewed
		Number	Percentage	
10-14	2,190	na	na	na
15-19	2,154	2,132	21.0	99.0
20-24	2,073	2,053	20.2	99.1
25-29	1,709	1,687	16.6	98.7
30-34	1,269	1,258	12.4	99.2
35-39	1,088	1,077	10.6	99.0
40-44	1,064	1,058	10.4	99.4
45-49	924	909	8.9	98.3
50-54	954	na	na	na
15-49	10,281	10,174	100.0	99.0

Note: The de facto population includes all residents and nonresidents who stayed in the household the night before the interview. Weights for both the household population of women and interviewed women are household weights. Age is based on the household questionnaire.
na = Not applicable

Table C.3 Completeness of reporting

Percentage of observations missing information for selected demographic and health questions (weighted), Tajikistan 2012

Subject	Reference group	Percentage with information missing	Number of cases
Birth date	Births in the 15 years preceding the survey		
Month only		0.21	13,495
Month and year		0.01	13,495
Age at death	Deceased children born in the 15 years preceding the survey	0.05	692
Age/date at first union[1]	Ever-married women age 15-49	0.02	7,008
Respondent's education	All women age 15-49	0.00	9,656
Diarrhea in past 2 weeks	Living children age 0-59 months	0.34	5,031
Anthropometry	Living children age 0-59 months from the Household Questionnaire		
Height		1.04	5,422
Weight		0.97	5,422
Height or weight		1.16	5,422

[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 (L), dead (D), and total (T) children (weighted), Tajikistan 2012

Calendar year	Number of births			Percentage with complete birth date[1]			Sex ratio at birth[2]			Calendar year ratio[3]		
	Living	Dead	Total	Living	Dead	Total	Living	Dead	Total	Living	Dead	Total
2012	631	14	645	99.9	100.0	99.9	102.6	127.6	103.1	na	na	na
2011	1,105	41	1,145	100.0	100.0	100.0	96.8	175.1	98.8	na	na	na
2010	1,123	41	1,164	99.8	100.0	99.8	111.4	88.1	110.5	106.5	96.0	106.1
2009	1,004	45	1,049	100.0	100.0	100.0	99.8	130.2	101.0	100.5	104.9	100.6
2008	876	45	920	100.0	100.0	100.0	107.7	75.6	105.9	96.0	100.6	96.2
2007	820	44	863	99.9	100.0	99.9	117.3	164.5	119.3	92.6	114.1	93.5
2006	894	32	926	100.0	99.3	100.0	90.3	55.1	88.9	110.7	73.5	108.8
2005	796	43	839	99.7	100.0	99.7	120.3	183.1	122.9	94.2	119.8	95.2
2004	796	40	836	100.0	97.2	99.9	103.7	125.5	104.7	99.2	87.5	98.6
2003	809	49	858	99.8	100.0	99.8	96.1	170.7	99.2	104.8	98.6	104.4
2012-2008	4,739	185	4,924	99.9	100.0	99.9	103.5	111.3	103.8	na	na	na
2007-2003	4,115	208	4,322	99.9	99.4	99.9	104.6	135.6	105.9	na	na	na
2002-1998	3,664	286	3,950	99.8	95.5	99.5	102.3	114.0	103.1	na	na	na
1997-1993	3,353	352	3,705	99.9	97.5	99.7	103.0	129.3	105.3	na	na	na
< 1992	3,184	409	3,593	99.9	99.3	99.8	111.1	140.6	114.1	na	na	na
All	19,055	1,440	20,494	99.9	98.2	99.8	104.7	127.5	106.1	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 age 1 month by age at death in days and percentage of neonatal deaths reported to occur at ages 0-6 days, for five-year periods of birth preceding the survey (weighted), Tajikistan 2012

	Number of years preceding the survey				Total
Age at death (days)	0-4	5-9	10-14	15-19	0-19
<1	7	7	7	9	29
1	34	35	28	22	119
2	11	8	11	2	32
3	14	10	17	9	50
4	4	3	7	3	17
5	7	5	3	2	16
6	4	2	2	0	8
7	2	5	6	3	15
8	3	2	1	1	6
9	0	1	1	1	4
10	5	2	1	2	10
11	0	1	1	2	5
12	1	0	1	0	2
13	0	0	2	0	2
14	1	2	0	2	5
15	2	3	2	0	7
17	0	0	2	1	2
18	3	0	0	1	4
20	3	3	3	3	12
21	0	0	0	0	0
22	1	0	0	1	2
24	0	0	1	4	5
25	0	0	0	2	2
27	3	0	0	0	3
28	0	0	0	2	2
30	0	0	0	0	0
Total 0-30	103	87	96	73	359
Percentage early neonatal[1]	77.7	79.6	77.0	65.5	75.5

[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 percentage of infant deaths reported to occur at age under 1 month, for five-year periods of birth preceding the survey (weighted), Tajikistan 2012

	Number of years preceding the survey				
Age at death (months)	0-4	5-9	10-14	15-19	Total 0-19
<1[a]	103	87	96	73	359
1	15	11	8	12	46
2	4	11	15	16	47
3	10	21	13	16	60
4	5	9	13	11	38
5	9	4	5	14	32
6	6	6	11	15	39
7	3	3	10	21	37
8	8	7	14	12	41
9	2	9	13	22	44
10	8	3	4	9	24
11	5	2	4	2	13
12	8	11	20	45	83
13	1	2	5	4	11
14	2	1	3	1	6
15	0	0	0	3	3
16	1	2	0	5	7
17	0	0	0	7	7
18	2	0	3	6	11
19	0	0	0	1	1
20	0	1	2	0	3
23	0	0	0	1	1
24+	0	2	1	0	2
Missing	0	0	0	0	0
Total 0-11	176	175	207	223	781
Percentage neonatal[1]	58.4	49.9	46.3	32.5	45.9

[a] Includes deaths under 1 month reported in days.
[1] Under 1 month/under 1 year.

Table C.7 Nutritional status of children based on the 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, Tajikistan 2012

	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	1.9	7.9	0.1	1.7	8.9	5.2	-0.3	0.7	4.6	5.5	-0.1	424
6-8	5.6	16.3	-0.4	4.7	12.9	6.8	-0.3	4.4	11.9	3.3	-0.6	300
9-11	5.7	18.1	-0.7	3.4	15.6	5.6	-0.6	3.2	20.3	1.9	-1.1	288
12-17	7.3	18.9	-1.0	3.2	16.3	2.7	-0.8	6.3	23.3	0.8	-1.3	523
18-23	10.2	31.0	-1.4	1.4	10.5	3.5	-0.5	4.2	21.0	0.9	-1.2	541
24-35	8.4	22.7	-1.1	1.9	6.9	2.9	-0.4	4.9	18.7	1.2	-1.1	1,161
36-47	8.3	21.3	-1.1	1.0	3.9	3.9	-0.2	1.8	12.7	1.1	-0.9	960
48-59	7.5	21.1	-1.2	2.0	6.2	3.4	-0.3	2.8	11.9	0.3	-1.0	882
Sex												
Male	7.1	20.4	-1.0	2.4	8.5	3.6	-0.4	3.1	14.8	1.4	-0.9	2,589
Female	7.8	21.2	-1.0	1.8	8.7	3.9	-0.4	4.0	16.5	1.6	-1.0	2,489
Birth interval in months[2]												
First birth[3]	7.1	20.6	-1.0	2.8	9.1	4.1	-0.4	4.0	16.2	1.2	-1.0	1,654
<24	9.5	23.2	-1.1	1.8	8.1	3.2	-0.3	4.1	17.3	1.0	-1.0	1,084
24-47	7.3	20.1	-1.0	1.8	9.3	3.6	-0.4	3.3	16.0	1.9	-0.9	1,397
48+	5.2	19.1	-0.9	1.8	7.3	3.9	-0.4	2.0	11.6	2.0	-0.9	820
Size at birth[2]												
Very small	13.5	29.7	-1.3	5.9	15.8	3.1	-0.7	10.3	36.3	1.5	-1.4	126
Small	12.2	28.3	-1.3	2.9	8.7	2.4	-0.6	5.3	24.0	1.3	-1.3	516
Average or larger	6.8	19.4	-0.9	1.9	8.4	4.1	-0.3	2.9	13.7	1.6	-0.9	3,898
Missing	5.2	21.8	-1.1	2.5	8.4	2.1	-0.5	4.2	17.2	1.1	-1.1	415
Mother's interview status												
Interviewed	7.4	20.8	-1.0	2.1	8.6	3.7	-0.4	3.5	15.6	1.5	-0.9	4,955
Not interviewed but in household	0.7	12.7	-1.1	0.0	4.4	7.3	-0.3	3.0	6.0	2.7	-0.9	61
Not interviewed and not in the household[4]	19.7	29.9	-1.3	0.0	11.0	2.5	-0.7	7.4	22.6	0.0	-1.3	62
Mother's nutritional status[5]												
Thin (BMI<18.5)	6.5	19.3	-1.0	2.4	14.0	2.7	-0.8	3.5	23.7	1.5	-1.2	420
Normal (BMI 18.5-24.9)	7.7	21.4	-1.0	2.3	8.3	3.5	-0.4	3.7	15.8	1.5	-1.0	3,148
Overweight/obese (BMI >= 25)	6.8	20.0	-0.9	1.5	7.7	4.5	-0.3	3.1	12.6	1.5	-0.8	1,405
Residence												
Urban	6.1	18.2	-0.7	2.6	9.4	4.3	-0.4	2.9	14.5	1.9	-0.8	1,099
Rural	7.8	21.5	-1.1	1.9	8.4	3.6	-0.4	3.7	15.9	1.4	-1.0	3,979
Region												
Dushanbe	7.0	15.6	-0.6	2.3	8.8	4.1	-0.4	2.9	11.9	1.9	-0.7	397
GBAO	6.9	18.8	-0.9	0.9	5.3	1.4	-0.6	2.2	13.9	1.1	-1.0	93
Sughd	8.8	23.4	-1.0	2.1	8.2	7.7	-0.1	3.9	13.2	2.4	-0.8	1,365
DRS	6.5	20.7	-1.0	2.2	8.5	2.6	-0.5	3.3	17.1	1.3	-1.0	1,293
Khatlon	7.2	20.2	-1.0	2.0	9.1	1.8	-0.5	3.6	17.1	0.9	-1.1	1,929

Continued…

Table C.7—*Continued*

Percentage of children under five years classified as malnourished according to three anthropometric indices of nutritional status: height-for-age, weight-for-height, and weight-for-age, by background characteristics, based on the NCHS/CDC/WHO International Reference Population, Tajikistan 2012

Background characteristic	Height-for-age[1]			Weight-for-height				Weight-for-age				Number of children
	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)	
Mother's education[6]												
None/primary	9.4	20.5	-1.1	2.5	10.7	2.2	-0.7	6.0	23.4	0.4	-1.2	412
General basic	7.3	21.7	-1.0	2.1	8.8	2.8	-0.4	3.9	16.3	0.8	-1.0	1,976
General secondary	7.3	20.9	-1.0	2.0	8.2	4.7	-0.3	2.8	14.3	2.4	-0.9	2,085
Professional primary/middle	4.7	16.5	-0.8	2.0	6.6	4.0	-0.4	3.3	13.8	0.9	-0.8	297
Higher	6.6	16.2	-0.6	2.6	8.2	6.4	-0.2	2.4	8.5	2.6	-0.6	247
Wealth quintile												
Lowest	10.5	25.1	-1.2	2.3	8.6	2.0	-0.5	4.6	19.7	0.8	-1.1	995
Second	7.6	24.1	-1.1	2.1	7.9	2.4	-0.5	4.3	17.7	1.3	-1.1	1,087
Middle	5.4	17.2	-0.9	1.7	8.5	4.6	-0.3	2.4	12.9	1.4	-0.9	1,057
Fourth	7.0	19.8	-0.9	1.8	9.5	5.6	-0.3	3.5	15.0	2.3	-0.9	1,026
Highest	6.9	17.5	-0.7	2.6	8.4	4.3	-0.3	2.8	12.4	1.8	-0.8	914
Total	7.4	20.8	-1.0	2.1	8.6	3.8	-0.4	3.5	15.6	1.5	-0.9	5,079

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 (SDs) 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.
[1] Includes children who are below –3 standard deviations (SDs) 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] Excludes children whose mothers were not weighed and measured. Mother's nutritional status in terms of BMI (Body Mass Index) is presented in Table 12.9.
[6] 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 2012 TAJIKISTAN DEMOGRAPHIC AND HEALTH SURVEY

APPENDIX D

National Director

Bakhtya Muhammadieva, Director, Statistical Agency under the President of the Republic of Tajikistan (RT)

National Directors for Medical Affairs

Saida Jobirova, First Deputy Minister of Health
Sherali Rakhmatulloev, Head of Department of Organization of Health Services for Mothers, Children and Family Planning

Statistical Agency under the President of the RT

Abduvali Kulov, Tajikistan DHS Technical Director
Elena Budnikova, Tajikistan DHS Deputy Technical Director
Tatyana Gukasova, Tajikistan DHS Secretary-Assistant of Director
Elena Kislitsyna, Survey Specialist (retired)
Ikhtier Kholmatov, Coordinator of Data Entry
Parviz Yakubov, Deputy Coordinator of Data Entry
Lubov Zhdanova, Office Editor
Salohiddin Faisiev, Administrative Support

Ministry of Health

Gulbahor Ashurova, Head of Section of Protection of Maternal Health and Family Planning
Sanavbar Rakhmatulloeva, Main Specialist, Department of Organization of Health Services for Mothers, Children and Family Planning
Alijon Soliev, Head of M&E Department, Republican AIDS Center
Gulnara Ahmedjanova, Republican Center of Reproductive Health
Barno Yangibaeva, Chief of Integrated Management of Childhood Illness Department, the Republican Scientific Clinical Center of Pediatrics and Pediatric Surgery
Sanoat Norkulova, National Trainer, Integrated Management of Childhood Illness (IMCI) Program, Tajik State Medical University Faculty Member
Urunbish Uzakova, Main Untenured Specialist of the MOH on Obstetrics and Gynecology
Ibodullo Sheraliev, Deputy Director, Republican Center of Medical Statistics and Informatics

ICF International

Gulnara Semenov, Technical Director, Regional Coordinator
Alfredo Aliaga, Senior Sampling Specialist
Ruilin Ren, Senior Sampling Specialist
Shawna Kelly, Data Processing Specialist
Anne Cross, Survey Specialist
Ann Way, Survey Specialist
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Farhod Karimov, Editor
Gulandom Malikova, Interviewer
Gulafzo Alieva, Interviewer
Tahmina Shokirova, Interviewer
Lutfiya Dadojonova, Interviewer

Sughd 6
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Farhod Habibov, Editor
Shahnoza Bobokalonova, Interviewer
Nargis Dadojonova, Interviewer
Barno Hakimova, Interviewer
Marhabo Saidova, Interviewer

Khatlon 7
Shuhrat Shokirov, Supervisor
Sulhiya Alifbekova, Editor
Khursand Otajonova, Interviewer
Nurinoso Yahyoeva, Interviewer
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Nematullo Hojiev, Editor
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Bozorgul Rahimova, Interviewer
Muhayo Kosimova, Interviewer
Tahmina Kholova, Interviewer

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Mahmadsaid Karimov, Editor
Surayo Teshaeva, Interviewer
Farishta Habibulloeva, Interviewer
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Sabzina Minakova, Interviewer
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Ozodamoh Nazirova, Interviewer
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Tojigul Ochibangieva, Interviewer
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Regional Coordinators for DHS Field Work/ Heads of Regional Offices of the SA

Kiemiddin Norov, Dushanbe
Matluba Yusupova, Sughd
Yusuf Safarov, Khatlon
Saidkabar Kurbanov, DRS
Firdaus Asmatbekov, GBAO

Data Entry Staff

Shohida Sherova
Mahmadyusuf Siddikov
Sveta Shley
Abdugaffor Sharipov
Meroj Hojiev
Safargul Hasanova
Husein Orzuev
Mahmadhuja Mahmadiev
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Guli Norbekova
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Samira Umarova
Muhayo Sotieva
Firuza Aminova
Mavluda Mirzoeva
Tojiniso Manonova
Aleksandr Kharchenko
Robiya Safarova
Gulchehra Munavarova
Lola Jalilova
Diyor Boronov
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Havasmoh Saidova
Ganjina Kholova
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Listers and Mappers

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F. Mahmudov	A. Gaziev

Regional Coordinators for Listing

Shodmon Shokirov
Nuralisho Sulemunshoev
Abdumajid Saydulloev

QUESTIONNAIRES APPENDIX E

2012 TAJIKISTAN DEMOGRAPHIC AND HEALTH SURVEY
HOUSEHOLD QUESTIONNAIRE

TAJIKISTAN
THE STATISTICAL AGENCY UNDER PRESIDENT OF THE REPUBLIC OF TAJIKISTAN
THE MINISTRY OF HEALTH

№ [ ][ ][ ][ ][ ]

IDENTIFICATION

PLACE NAME _____

NAME OF HOUSEHOLD HEAD _____

CLUSTER NUMBER . . . . . [ ][ ][ ]

HOUSEHOLD NUMBER . . . . . [ ][ ]

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 [ ][ ]

LINE NO. OF RESPONDENT TO HOUSEHOLD QUESTIONNAIRE [ ][ ]

LANGUAGE OF QUESTIONNAIRE: [ ] LANGUAGE OF INTERVIEW: [ ] NATIVE LANGUAGE OF RESPONDENT [ ]

CODES: TAJIK-1; RUSSIAN-2 ; UZBEK-3; OTHER-6 (SPECIFY_____)

TRANSLATOR USED (YES = 1, NO = 2) [ ]

SUPERVISOR	FIELD EDITOR	OFFICE EDITOR	KEYED BY
NAME _____ [ ][ ][ ]	NAME _____ [ ][ ][ ]	[ ][ ]	[ ][ ]

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INTRODUCTION AND CONSENT

Hello. My name is _____. I am working with the Statistical Agency. Together with the Ministry of Health we are conducting a survey about health all over Tajikistan. 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			IF AGE 0-4 YEARS
LINE NO.	USUAL RESIDENTS AND VISITORS	RELATIONSHIP TO HEAD OF HOUSEHOLD	SEX	RESIDENCE		AGE	MARITAL STATUS	ELIGIBILITY		BIRTH
1	2	3	4	5	6	7	8	9	11	11A
	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 5-19 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 CHILDREN AGE 0-5	Does (NAME) have a birth certificate? IF NO, PROBE: Has (NAME)'s birth ever been registered with the civil 1 = HAS CERTIFICATE 2=REGISTERED 3 = NEITHER 8 = DON'T KNOW
			M F	Y N	Y N	IN YEARS				
01			1 2	1 2	1 2			01	01	
02			1 2	1 2	1 2			02	02	
03			1 2	1 2	1 2			03	03	
04			1 2	1 2	1 2			04	04	
05			1 2	1 2	1 2			05	05	
06			1 2	1 2	1 2			06	06	
07			1 2	1 2	1 2			07	07	
08			1 2	1 2	1 2			08	08	
09			1 2	1 2	1 2			09	09	
10			1 2	1 2	1 2			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 3 YEARS OR OLDER				IF AGE 3-24 YEARS	
LINE NO.	SURVIVORSHIP AND RESIDENCE OF BIOLOGICAL PARENTS				EVER ATTENDED SCHOOL OR PRE-SCHOOL				CURRENT/RECENT SCHOOL OR PRE-SCHOOL ATTENDANCE	
	12	13	14	15	16	16A	17	17A	18	19
	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 or pre-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 GRADES10-11 AT LEVEL 1, OR LEVEL "2" OR "3" PROFESSIONAL-PRIMARY OR MIDDLE LEVEL RECORDED, ASK: Did (NAME) receive a diploma (attestat) for completing secondary education?	Did (NAME) attend school or pre-school at any time during the (2011-2012) school year?	During 2011-2012 school year, what level and grade [is/was] (NAME) attending? SEE CODES BELOW.
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
02	1 2 8 GO TO 14		1 2 8 GO TO 16		1 2 NEXT LINE			Y N 1 2	1 2 NEXT LINE	
03	1 2 8 GO TO 14		1 2 8 GO TO 16		1 2 NEXT LINE			Y N 1 2	1 2 NEXT LINE	
04	1 2 8 GO TO 14		1 2 8 GO TO 16		1 2 NEXT LINE			Y N 1 2	1 2 NEXT LINE	
05	1 2 8 GO TO 14		1 2 8 GO TO 16		1 2 NEXT LINE			Y N 1 2	1 2 NEXT LINE	
06	1 2 8 GO TO 14		1 2 8 GO TO 16		1 2 NEXT LINE			Y N 1 2	1 2 NEXT LINE	
07	1 2 8 GO TO 14		1 2 8 GO TO 16		1 2 NEXT LINE			Y N 1 2	1 2 NEXT LINE	
08	1 2 8 GO TO 14		1 2 8 GO TO 16		1 2 NEXT LINE			Y N 1 2	1 2 NEXT LINE	
09	1 2 8 GO TO 14		1 2 8 GO TO 16		1 2 NEXT LINE			Y N 1 2	1 2 NEXT LINE	
10	1 2 8 GO TO 14		1 2 8 GO TO 16		1 2 NEXT LINE			Y N 1 2	1 2 NEXT LINE	

CODES FOR Qs. 17 AND 19: EDUCATION

LEVEL	GRADE
0 = PRE-SCHOOL (1-4)	
1 = GENERAL EDUCATION SCHOOL (1-11)	00 = LESS THAN 1 YEAR COMPLETED (USE '00' FOR Q. 17 ONLY. THIS CODE IS NOT ALLOWED FOR Q. 19)
2 = PROFESSIONAL PRIMARY (1-3)	
3= PROF. MIDDLE (1-4)	
4 = HIGHER (1-5+)	
5 = POSTGRADUATE	98 = DON'T KNOW
8 = DON'T KNOW	

							IF AGE 15 OR OLDER			IF AGE 0-4 YEARS
LINE NO.	USUAL RESIDENTS AND VISITORS	RELATIONSHIP TO HEAD OF HOUSEHOLD	SEX	RESIDENCE		AGE	MARITAL STATUS	ELIGIBILITY		BIRTH
1	2	3	4	5	6	7	8	9	11	11A
	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 5-19 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 CHILDREN AGE 0-5	Does (NAME) have a birth certificate? IF NO, PROBE: Has (NAME)'s birth ever been registered with the civil 1 = HAS CERTIFICATE 2=REGISTERED 3 = NEITHER 8 = DON'T KNOW
11			M F 1 2	Y N 1 2	Y N 1 2	IN YEARS		11	11	
12			1 2	1 2	1 2			12	12	
13			1 2	1 2	1 2			13	13	
14			1 2	1 2	1 2			14	14	
15			1 2	1 2	1 2			15	15	
16			1 2	1 2	1 2			16	16	
17			1 2	1 2	1 2			17	17	
18			1 2	1 2	1 2			18	18	
19			1 2	1 2	1 2			19	19	
20			1 2	1 2	1 2			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 3 YEARS OR OLDER				IF AGE 3-24 YEARS	
LINE NO.	SURVIVORSHIP AND RESIDENCE OF BIOLOGICAL PARENTS				EVER ATTENDED SCHOOL OR PRE-SCHOOL				CURRENT/RECENT SCHOOL OR PRE-SCHOOL ATTENDANCE	
	12	13	14	15	16	16A	17	17A	18	19
	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 or pre-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 GRADES10-11 AT LEVEL 1, OR LEVEL "2" OR "3" PROFESSIONAL-PRIMARY OR MIDDLE LEVEL RECORDED, ASK: Did (NAME) receive a diploma (attestat) for completing secondary education?	Did (NAME) attend school or pre-school at any time during the (2011-2012) school year?	During 2011-2012 school year, what level and grade [is/was] (NAME) attending? SEE CODES BELOW.
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
12	1 2 8 GO TO 14		1 2 8 GO TO 16		1 2 NEXT LINE			Y N 1 2	1 2 NEXT LINE	
13	1 2 8 GO TO 14		1 2 8 GO TO 16		1 2 NEXT LINE			Y N 1 2	1 2 NEXT LINE	
14	1 2 8 GO TO 14		1 2 8 GO TO 16		1 2 NEXT LINE			Y N 1 2	1 2 NEXT LINE	
15	1 2 8 GO TO 14		1 2 8 GO TO 16		1 2 NEXT LINE			Y N 1 2	1 2 NEXT LINE	
16	1 2 8 GO TO 14		1 2 8 GO TO 16		1 2 NEXT LINE			Y N 1 2	1 2 NEXT LINE	
17	1 2 8 GO TO 14		1 2 8 GO TO 16		1 2 NEXT LINE			Y N 1 2	1 2 NEXT LINE	
18	1 2 8 GO TO 14		1 2 8 GO TO 16		1 2 NEXT LINE			Y N 1 2	1 2 NEXT LINE	
19	1 2 8 GO TO 14		1 2 8 GO TO 16		1 2 NEXT LINE			Y N 1 2	1 2 NEXT LINE	
20	1 2 8 GO TO 14		1 2 8 GO TO 16		1 2 NEXT LINE			Y N 1 2	1 2 NEXT LINE	

CODES FOR Qs. 17 AND 19: EDUCATION

LEVEL

0 = PRE-SCHOOL (1-4)
1 = GENERAL EDUCATION SCHOOL (1-11)
2 = PROFESSIONAL PRIMARY (1-3)
3 = PROF. MIDDLE (1-4)
4 = HIGHER (1-5+)
5 = POSTGRADUATE
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

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 . . . . . 11 PIPED TO YARD/PLOT . . . . . 12 PUBLIC TAP/STANDPIPE . . . . . 13 TUBE WELL OR BOREHOLE . . . . . 21 DUG WELL PROTECTED WELL . . . . . 31 UNPROTECTED WELL . . . . . 32 WATER FROM SPRING PROTECTED SPRING . . . . . 41 UNPROTECTED SPRING . . . . . 42 RAINWATER . . . . . 51 TANKER TRUCK . . . . . 61 CART WITH SMALL TANK . . . . . 71 SURFACE WATER (RIVER/DAM/ LAKE/POND/STREAM/CANAL/ IRRIGATION CHANNEL) . . . . . 81 BOTTLED WATER . . . . . 91 OTHER _____ 96 (SPECIFY)	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? RECORD ALL MENTIONED.	BOIL . . . . . A ADD BLEACH/CHLORINE . . . . . B STRAIN THROUGH A CLOTH . . . . . C USE WATER FILTER (CERAMIC/ SAND/COMPOSITE/ETC.) . . . . . D SOLAR DISINFECTION . . . . . E LET IT STAND AND SETTLE . . . . . F OTHER _____ X (SPECIFY) DON'T KNOW . . . . . Z	

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 VENTILATED IMPROVED PIT LATRINE . . . . . 21 PIT LATRINE WITH SLAB . . . . . 22 PIT LATRINE WITHOUT SLAB/ OPEN PIT . . . . . 23 COMPOSTING TOILET . . . . . 31 BUCKET TOILET . . . . . 41 HANGING TOILET/HANGING LATRINE . . . . . 51 NO FACILITY/BUSH/FIELD . . . . . 61 OTHER _____ 96 (SPECIFY)	→ 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:	YES / NO	
	Electricity?	ELECTRICITY 1 2	
	A radio?	RADIO 1 2	
	A black and white television?	B&W TELEVISI 1 2	
	A color television?	COLOR TELEVISION 1 2	
	A washing machine?	WASHING MACHINE 1 2	
	A vacuum cleaner?	VACUUM CLEANER 1 2	
	A computer?	COMPUTER 1 2	
	A mobile telephone?	MOBILE TELEPHONE 1 2	
	A non-mobile telephone?	NON-MOBILE TELEPHONE . . . 1 2	
	A refrigerator?	REFRIGERATOR 1 2	
	A digital camera?	CAMERA 1 2	
	A video camera/camcorder?	VIDEOCAMERA 1 2	
	A table/hon-tohta?	TABLE 1 2	
	A chair?	CHAIR 1 2	
	A sofa/divan?	SOFA 1 2	
	A bed?	BED 1 2	
	A buffet/curio cabinet/wall unit?	BUFFET 1 2	
	An air conditioner?	AIRCONDITIONER 1 2	
	A DVD player?	DVD 1 2	
	A Satellite antenna/dish?	DISH 1 2	
	A freezer?	FREEZER 1 2	
	An electric fan?	FAN 1 2	
	A sewing machine?	SEWING MACHINE 1 2	
	A wood/coal/gas stove (in-door heater "burzhuika")?	BURZHUIKA 1 2	
	A mini-generator ("dvizhok")?	DVIZHOK 1 2	
	A fuel or wood stock	WOOD/FUEL 1 2	
	A carpet (handmade or machine made)?	CARPET 1 2	
	A connection to the Internet (world wide web)?	INTERNET CONNECTION 1 2	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
111	What type of fuel does your household mainly use for cooking?	ELECTRICITY . . . . . 01 LPG . . . . . 02 NATURAL GAS . . . . . 03 BIOGAS . . . . . 04 KEROSENE . . . . . 05 COAL, LIGNITE . . . . . 06 CHARCOAL . . . . . 07 WOOD . . . . . 08 STRAW/SHRUBS/GRASS . . . . . 09 AGRICULTURAL CROP . . . . . 10 ANIMAL DUNG . . . . . 11 NO FOOD COOKED IN HOUSEHOLD . . . . . 95 OTHER _____ 96 (SPECIFY)	→ 114
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. RECORD OBSERVATION.	NATURAL FLOOR EARTH/SAND . . . . . 11 RUDIMENTARY FLOOR WOOD PLANKS . . . . . 21 FINISHED FLOOR PARQUET OR POLISHED WOOD . . . . . 31 VINYL OR LINOLEUM . . . . . 32 CERAMIC TILES . . . . . 33 CEMENT . . . . . 34 CARPET . . . . . 35 OTHER _____ 96 (SPECIFY)	
115	MAIN MATERIAL OF THE ROOF. RECORD OBSERVATION.	NATURAL ROOFING NO ROOF . . . . . 11 THATCH . . . . . 12 SOD . . . . . 13 RUDIMENTARY ROOFING WOOD PLANKS . . . . . 23 CARDBOARD . . . . . 24 FINISHED ROOFING METAL . . . . . 31 WOOD . . . . . 32 CALAMINE/CEMENT FIBER . . . . . 33 CERAMIC TILES . . . . . 34 CEMENT/CEMENT BLOCKS 35 ROOFING SHINGLES/SHIFER . . . . . 36 TAULE (TARRED ROOFING PAPER) . . . .37 OTHER _____ 96 (SPECIFY)	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
116	MAIN MATERIAL OF THE EXTERIOR WALLS. RECORD OBSERVATION.	NATURAL WALLS NO WALLS . . . . . 11 CANE/TRUNKS . . . . . 12 DIRT . . . . . 13 RUDIMENTARY WALLS STONE WITH MUD . . . . . 22 UNCOVERED ADOBE . . . . . 23 PLYWOOD . . . . . 24 CARDBOARD . . . . . 25 REUSED WOOD . . . . . 26 FINISHED WALLS CEMENT . . . . . 31 STONE WITH LIME/CEMENT . . . . . 32 BRICKS . . . . . 33 CEMENT BLOCKS . . . . . 34 COVERED ADOBE . . . . . 35 WOOD PLANKS/SHINGLES . . . . . 36 OTHER _____ 96 (SPECIFY)	
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?	YES NO WATCH . . . . . 1 2 BICYCLE . . . . . 1 2 MOTORCYCLE/SCOOTER . . . 1 2 ANIMAL-DRAWN CART . . . . . 1 2 CAR/TRUCK 1 2	
119	Does any member of this household own any agricultural land?	YES . . . . . 1 NO 2	→ 121
120	How many hectares of agricultural land do members of this household own? IF 99.5 OR MORE ARES, RECORD IN HECTARES. 100 ARES= 1 HECTAR IF 95 OR MORE HECTARES, CIRCLE '9950'.	ARE (SOTKA) . . . . . 1 [ ][ ].[ ] HECTARES . . . . . 2 [ ][ ].[ ] 95 OR MORE HECTARES . . . . . 9950 DON'T KNOW 9998	
121	Does this household own any livestock, herds, other farm animals, beehives or poultry?	YES . . . . . 1 NO 2	→ 123

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
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? Pigs? Rabbits? Poultry? Beehive (number of units)?	CATTLE . . . . . [ ][ ] COWS/BULLS . . . . . [ ][ ] HORSES/DONKEYS/MULES . . . . . [ ][ ] GOATS . . . . . [ ][ ] SHEEP . . . . . [ ][ ] PIGS . . . . . [ ][ ] RABBITS . . . . . [ ][ ] POULTRY . . . . . [ ][ ] 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 140)	
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	
140	ASK RESPONDENT FOR A TEASPOONFUL OF COOKING SALT. TEST SALT FOR IODINE.	0 PPM (NO IODINE) . . . . . 1 BELOW 15 PPM . . . . . 2 15 PPM AND ABOVE . . . . . 3 NO SALT IN HH . . . . . 4 SALT NOT TESTED _____ 6 (SPECIFY REASON)	

320 **TABLE FOR SELECTION OF ONE WOMAN FOR THE DOMESTIC VIOLENCE INTERVIEW**

INSTRUCTIONS

• LOOK AT THE LAST DIGIT OF THE QUESTIONNAIRE NUMBER ON THE COVER PAGE.
• THIS IS THE ROW NUMBER YOU SHOULD CIRCLE IN THE TABLE BELOW.
• RECORD HERE____ ____ THE TOTAL NUMBER OF ELIGIBLE WOMEN ON THE COVER SHEET OF THE HOUSEHOLD QUESTIONNAIRE:
• THIS IS THE COLUMN NUMBER YOU SHOULD CIRCLE IN THE TABLE BELOW.
• FIND THE BOX WHERE THE CIRCLED ROW AND THE CIRCLED COLUMN MEET AND CIRCLE THE NUMBER THAT APPEARS IN THE BOX.
• THIS IS THE ORDER (RANK) NUMBER OF THE ELIGIBLE WOMAN WHO WILL BE ASKED THE HOUSEHOLD RELATIONS QUESTIONS.
• RECORD THE LINE NUMBER OF THE SELECTED WOMAN IN THE BOX BELOW IN Q321

FOR EXAMPLE:
• IF THE HOUSEHOLD QUESTIONNAIRE NUMBER IS ‘3716’,
• GO TO ROW 6 AND CIRCLE THE ROW NUMBER ('6').
• IF THERE ARE THREE ELIGIBLE WOMEN IN THE HOUSEHOLD, RECORD IN THE BOX "03" AND 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 IS THE ORDER/RANK NUMBER OF THE SELECTED WOMEN IN THE HOUSEHOLD SCHEDULE AND IT MEANS YOU HAVE TO SELECT THE SECOND ELIGIBLE WOMAN.
• SUPPOSE THE HOUSEHOLD LINE NUMBERS OF THE THREE ELIGIBLE WOMEN ARE ‘02', ‘03', AND ‘07'; THEN THE ELIGIBLE WOMAN FOR THE HOUSEHOLD RELATIONS QUESTIONS IS THE SECOND ELIGIBLE WOMAN, I.E., THE WOMAN WITH HOUSEHOLD LINE NUMBER ‘03'.
• RECORD THE LINE NUMBER OF THE SELECTED WOMAN IN THE BOX BELOW IN Q321

LAST DIGIT OF THE QUESTIONNAIRE NUMBER	TOTAL NUMBER OF ELIGIBLE WOMEN 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

321 RECORD HERE LINE NUMBER OF THE WOMAN SELECTED FOR THE DV MODULE [ ][ ] → 401

WEIGHTAND HEIGHT MEASUREMENTS FOR CHILDREN AGE 0-5

401	CHECK COLUMN 11 IN HOUSEHOLD SCHEDULE. RECORD THE LINE NUMBER AND NAME FOR ALL ELIGIBLE CHILDREN 0-5 YEARS IN QUESTION 402. IF MORE THAN SIX CHILDREN, USE ADDITIONAL QUESTIONNAIRE(S).			
		CHILD 1	CHILD 2	CHILD 3
402	LINE NUMBER FROM COLUMN 11 NAME FROM COLUMN 2	LINE NUMBER . . . . . [ ][ ] NAME _____	LINE NUMBER . . . . . [ ][ ] NAME _____	LINE NUMBER . . . . . [ ][ ] NAME _____
403	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 [ ][ ][ ][ ]
404	CHECK 403: CHILD BORN IN JANUARY 2007 OR LATER?	YES . . . . . 1 NO . . . . . 2 (GO TO 403 FOR NEXT CHILD OR, IF NO MORE CHILDREN, GO TO 414)	YES . . . . . 1 NO . . . . . 2 (GO TO 403 FOR NEXT CHILD OR, IF NO MORE CHILDREN, GO TO 414)	YES . . . . . 1 NO . . . . . 2 (GO TO 403 FOR NEXT CHILD OR, IF NO MORE CHILDREN, GO TO 414)
405	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
406	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
407	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
413	GO BACK TO 403 IN NEXT COLUMN OF THIS QUESTIONNAIRE OR IN THE FIRST COLUMN OF THE NEXT PAGE; IF NO MORE CHILDREN, GO TO 414.			

		CHILD 4	CHILD 5	CHILD 6
402	LINE NUMBER FROM COLUMN 11 NAME FROM COLUMN 2	LINE NUMBER . . . . . [ ][ ] NAME _____	LINE NUMBER . . . . . [ ][ ] NAME _____	LINE NUMBER . . . . . [ ][ ] NAME _____
403	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 [ ][ ][ ][ ]
404	CHECK 403: CHILD BORN IN JANUARY 2007 OR LATER?	YES . . . . . 1 NO . . . . . 2 (GO TO 403 FOR NEXT CHILD OR, IF NO MORE CHILDREN, GO TO 414)	YES . . . . . 1 NO . . . . . 2 (GO TO 403 FOR NEXT CHILD OR, IF NO MORE CHILDREN, GO TO 414)	YES . . . . . 1 NO . . . . . 2 (GO TO 403 IN FIRST COLUMN OF NEW QUESTIONNAIRE; OR, IF NO MORE CHILDREN, GO TO 414)
405	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
406	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
407	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
413	GO BACK TO 403 IN NEXT COLUMN OF THIS QUESTIONNAIRE OR IN THE FIRST COLUMN OF AN ADDITIONAL QUESTIONNAIRE; IF NO MORE CHILDREN, GO TO 414.			

WEIGHT AND HEIGHT MEASUREMENTS FOR WOMEN AGE 15-49

414	CHECK COLUMN 9 IN HOUSEHOLD SCHEDULE. RECORD THE LINE NUMBER AND NAME FOR ALL ELIGIBLE WOMEN IN 415. IF THERE ARE MORE THAN THREE WOMEN, USE ADDITIONAL QUESTIONNAIRE(S).			
		WOMAN 1	WOMAN 2	WOMAN 3
415	LINE NUMBER FROM COLUMN 9 NAME FROM COLUMN 2	LINE NUMBER . . . . . [ ][ ] NAME _____	LINE NUMBER . . . . . [ ][ ] NAME _____	LINE NUMBER . . . . . [ ][ ] NAME _____
416	WEIGHT IN KILOGRAMS	KG. [ ][ ][ ].[ ][ ] NOT PRESENT . . . . . 99994 REFUSED . . . . . 99995 OTHER 99996	KG. [ ][ ][ ].[ ][ ] NOT PRESENT . . . . . 99994 REFUSED . . . . . 99995 OTHER 99996	KG. [ ][ ][ ].[ ][ ] NOT PRESENT . . . . . 99994 REFUSED . . . . . 99995 OTHER 99996
417	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
442	GO BACK TO 416 IN NEXT COLUMN OF THIS QUESTIONNAIRE OR IN THE FIRST COLUMN OF AN ADDITIONAL QUESTIONNAIRE; IF NO MORE WOMEN, END INTERVEIW			

WEIGHT AND HEIGHT MEASUREMENTS FOR WOMEN AGE 15-49

414	CHECK COLUMN 9 IN HOUSEHOLD SCHEDULE. RECORD THE LINE NUMBER AND NAME FOR ALL ELIGIBLE WOMEN IN 415. IF THERE ARE MORE THAN THREE WOMEN, USE ADDITIONAL QUESTIONNAIRE(S).			
		WOMAN 4	WOMAN 5	WOMAN 6
415	LINE NUMBER FROM COLUMN 9 NAME FROM COLUMN 2	LINE NUMBER . . . . . [ ][ ] NAME _____	LINE NUMBER . . . . . [ ][ ] NAME _____	LINE NUMBER . . . . . [ ][ ] NAME _____
416	WEIGHT IN KILOGRAMS	KG. [ ][ ][ ]. [ ][ ] NOT PRESENT . . . . . 99994 REFUSED . . . . . 99995 OTHER 99996	KG. [ ][ ][ ]. [ ][ ] NOT PRESENT . . . . . 99994 REFUSED . . . . . 99995 OTHER 99996	KG. [ ][ ][ ]. [ ][ ] NOT PRESENT . . . . . 99994 REFUSED . . . . . 99995 OTHER 99996
417	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
442	GO BACK TO 416 IN NEXT COLUMN OF THIS QUESTIONNAIRE OR IN THE FIRST COLUMN OF AN ADDITIONAL QUESTIONNAIRE; IF NO MORE WOMEN, END INTERVEIW			

2012 TAJIKISTAN DEMOGRAPHIC AND HEALTH SURVEY
WOMAN'S QUESTIONNAIRE

TAJIKISTAN
THE STATISTICAL AGENCY UNDER PRESIDENT OF THE REPUBLIC OF TAJIKISTAN
THE MINISTRY OF HEALTH

IDENTIFICATION

PLACE NAME _____

NAME OF HOUSEHOLD HEAD _____

CLUSTER NUMBER . . . . . [ ][ ][ ]

HOUSEHOLD NUMBER . . . . . [ ][ ]

NAME AND LINE NUMBER OF WOMAN _____ [ ][ ]

CHECK QUESTION 321 IN THE HOUSEHOLD QUESTIONNAIRE. IS THIS WOMAN SELECTED FOR QUESTIONS IN "SECTION 11-DV" ? . . . . . (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 NOT AT HOME
3 POSTPONED
4 REFUSED
5 PARTLY COMPLETED
6 INCAPACITATED
7 OTHER _____ (SPECIFY)

LANGUAGE OF QUESTIONNAIRE: [ ]

LANGUAGE OF INTERVIEW: [ ]

NATIVE LANGUAGE OF RESPONDENT [ ]

TRANSLATOR USED (YES = 1, NO = 2) [ ]

CODES: TAJIK-1; RUSSIAN-2 ; UZBEK-3; OTHER-6 (SPECIFY_____)

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 the Statistical Agency. Together with the Minsirty of Health we are conducting a survey about health all over Tajikistan. The information we collect will help the government to plan health services. Your household was selected for the survey. The questions usually take about 30 to 60 minutes. All of the answers you give will be confidential and will not be shared with anyone other than members of our survey team. You don't have to be in the survey, but we hope you will agree to answer the questions since your views are important. If I ask you any question you don't want to answer, just let me know and I will go on to the next question or you can stop the interview at any time.

In case you need more information about the survey, you may contact the person listed on the card that has already been given to your household.
Do you have any questions? May I begin the interview now?

SIGNATURE OF INTERVIEWER: _____ DATE: _____

RESPONDENT AGREES TO BE INTERVIEWED . . . 1 ↓ RESPONDENT DOES NOT AGREE TO BE INTERVIEWED . . . 2 → END

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: general education school, professional primary(uchiliche), professional middle (tekhnikum, college) higher or postgraduate?	GENERAL SCHOOL . . . . . 1 PROFESSIONAL PRIMAR . . . . . 2 PROFESSIONAL MIDDLE . . . . . 3 HIGHER . . . . . 4 POSTGRADUATE 5	
106	What is the highest (grade/form/year) you completed at that level? IF COMPLETED LESS THAN ONE YEAR AT THAT LEVEL, RECORD '00'.	GRADE/FORM/YEAR . . . . . [ ][ ]	
106A	CHECK 105 AND 106: GRADES 10-11 AT LEVEL 1, OR CODES "2" OR "3" PROFESSIONAL-PRIMARY OR PROF. MIDDLE LEVEL CIRCLED,ASK: [ ] ↓ OTHER CODES [ ] → 110 Did you receive an 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	
115	In the last 12 months, how many times have you been away from home for one or more nights?	NUMBER OF TIMES . . . . . [ ][ ] NONE 00	→ 201
116	In the last 12 months, have you been away from home for more than one month at a time?	YES . . . . . 1 NO 2	

SECTION 2. REPRODUCTION

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
201	Now I would like to ask about all the births you have had during your life. Have you ever given birth?	YES . . . . . 1 NO 2	→ 206
202	Do you have any sons or daughters to whom you have given birth who are now living with you?	YES . . . . . 1 NO 2	→ 204
203	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? 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 first 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

212 Did your (first/next/etc) pregnancy end in a live birth, a stillbirth , a miscarriage, or an abortion?	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.	222A IF DIED: Does (NAME) have a death certificate? IF NO, PROBE: Has (NAME)'s death ever been registered in ZAGS? 1 = HAS CERTIFICATI 2 = REGISTERED 3 = NEITHER 8 = DON'T KNOW
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	NEXT PREGNANCY
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	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	NEXT PREGNANCY
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	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	NEXT PREGNANCY
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	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	NEXT PREGNANCY
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	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	NEXT PREGNANCY

212 Did your next pregnancy end in a live birth, a stillbirth , a miscarriage, or an abortion?	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.	222A IF DIED: Does (NAME) have a death certificate? IF NO, PROBE: Has (NAME)'s death ever been registered in ZAGS? 1 = HAS CERTIFICATE 2 = REGISTERED 3 = NEITHER 8 = DON'T KNOW
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	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	NEXT PREGNANCY
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	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	NEXT PREGNANCY
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	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	NEXT PREGNANCY
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	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	NEXT PREGNANCY
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	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	NEXT PREGNANCY

212 Did your next pregnancy end in a live birth, a stillbirth , a miscarriage, or an abortion?	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.	222A IF DIED: Does (NAME) have a death certificate? IF NO, PROBE: Has (NAME)'s death ever be-en registered in ZAGS? 1 = HAS CERTIFICA 2 = REGISTERED 3 = NEITHER 8 = DON'T KNOW
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	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	NEXT PREGNANCY
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	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	NEXT PREGNANCY
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	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	NEXT PREGNANCY
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	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	NEXT PREGNANCY
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	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	NEXT PREGNANCY

222B	Have you had any ended pregnancies since the last birth of (NAME OF THE LAST CHILD)/stillbirth/miscarriage/abortion ? IF YES, RECORD PREGNANCIES IN TABLE ABOVE.	YES . . . . . 1 NO 2
222C	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 SAME [ ] NUMBERS ARE DIFFERENT [ ] → (PROBE AND RECONCILE) CHECK: FOR EACH PREGNANCY: YEAR WHEN PREGNANCY ENDED IS RECORDED (Q.214) [ ] FOR EACH LIVE BIRTH SINCE JANUARY 2007, 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 2007 OR LATER (IN 212 CIRCLED CODE "1")	NUMBER OF BIRTHS . . . . . [ ] NONE 0

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
225	**C** CHECK 212 AND 214 FOR EACH BIRTH SINCE JANUARY 2007, 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 2007 (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? **C** RECORD NUMBER OF COMPLETED MONTHS. 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	→ 301
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	

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	**Female Condom**. PROBE: Women can place a sheath in their vagina before sexual intercourse.	YES . . . . . 1 NO 2	
09	**Lactational Amenorrhea Method (LAM)**. **(2)**	YES . . . . . 1 NO 2	
10	**Rhythm (or the Calendar) Method.** PROBE: To avoid pregnancy, women do not have sexual intercourse on the days of the month they think they can get pregnant.	YES . . . . . 1 NO 2	
11	**Withdrawal**. PROBE: Men can be careful and pull out before climax.	YES . . . . . 1 NO 2	
12	**Emergency Contraception**. PROBE: As an emergency measure, within three days after they have unprotected sexual intercourse, women can take special pills to prevent pregnancy. **(3)**	YES . . . . . 1 NO 2	
13	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 FEMALE CONDOM . . . . . H DIAPHRAGM . . . . . I FOAM/JELLY . . . . . J LACTATIONAL AMEN. METHOD . . . . . K RHYTHM/CALENDAR METHOD . . . . . 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 HEALTH CENTER (URBAN/RURAL) 13 REPRODUCTIVE HEALTH CENTER . . 14 HEALTH HOUSE . . . . . 15 POLYCLINICS . . . . . 16 INTEGRATED MANAGEMENT OF CHILD-HOOD ILLNESS CENTER(IMC . . . . 17 IMMUNIPROPHYLAXIS CENTER . . . . 18 AIDS CENTER . . . . . 19 HEALTHY LIFESTYLE CENTER . . . . 20 FAMILY MEDICINE CENTER . . . . . 21 DISPENSARY . . . . . 22 OTHER PUBLIC SECTOR _____ 23 (SPECIFY) PRIVATE MEDICAL SECTOR PRIVATE HOSPITAL/CLINIC . . . . . 31 PRIVATE DOCTOR'S OFFICE . . . . . 32 PHARMACY . . . . . 33 OTHER PRIVATE MEDICAL SECTOR _____ 36 (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, 212 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 2007 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 2006 OR EARLIER **C** ENTER CODE FOR METHOD USED IN MONTH OF INTERVIEW IN THE CALENDAR AND EACH MONTH BACK TO JANUARY 2007. 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 2007. 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 FEMALE CONDOM . . . . . 08 DIAPHRAGM . . . . . 09 FOAM/JELLY . . . . . 10 LACTATIONAL AMEN. METHOD . . . . . 11 RHYTHM/CALENDAR METHOD . . . . . 12 WITHDRAWAL . . . . . 13 OTHER MODERN METHOD . . . . . 95 OTHER TRADITIONAL METHOD 96	→ 324 → 317A → 326 → 315A → 326
315	You first started using (CURRENT METHOD) in (DATE FROM 308/308A). Where did you get it at that time? **(5)**	PUBLIC SECTOR GOVT. HOSPITAL . . . . . 11 MATERNITY HOME . . . . . 12 HEALTH CENTER (URBAN/RURAL) 13 REPRODUCTIVE HEALTH CENTER . . 14 HEALTH HOUSE . . . . . 15 POLYCLINICS . . . . . 16 INTEGRATED MANAGEMENT OF CHILD-HOOD ILLNESS CENTER(IMC . . . . 17 IMMUNIPROPHYLAXIS CENTER . . . . 18 AIDS CENTER . . . . . 19 HEALTHY LIFESTYLE CENTER . . . . 20 FAMILY MEDICINE CENTER . . . . . 21 DISPENSARY . . . . . 22 OTHER PUBLIC SECTOR _____ 23 (SPECIFY)	
315A	Where did you learn how to use the rhythm/lactational amenorrhea 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 PRIVATE HOSPITAL/CLINIC . . . . . 31 PRIVATE DOCTOR'S OFFICE . . . . . 32 PHARMACY . . . . . 33 OTHER PRIVATE MEDICAL SECTOR _____ 36 (SPECIFY) OTHER SOURCE SHOP/MARKET . . . . . 41 FRIEND/RELATIVE . . . . . 43 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, CIRCLE CODE FOR HIGHEST METHOD IN LIST.	IUD . . . . . 03 INJECTABLES . . . . . 04 IMPLANTS . . . . . 05 PILL . . . . . 06 CONDOM . . . . . 07 FEMALE CONDOM . . . . . 08 DIAPHRAGM . . . . . 09 FOAM/JELLY . . . . . 10 LACTATIONAL AMEN. METHOD . . . . . 11 RHYTHM/CALENDAR METHOD 12	 → 323 → 320 → 326 → 326
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 FEMALE CONDOM . . . . . 08 DIAPHRAGM . . . . . 09 FOAM/JELLY . . . . . 10 LACTATIONAL AMEN. METHOD . . . . . 11 RHYTHM/CALENDAR METHOD . . . . . 12 WITHDRAWAL . . . . . 13 OTHER MODERN METHOD . . . . . 95 OTHER TRADITIONAL METHOD . . . 96	→ 326 → 326

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 HEALTH CENTER (URBAN/RURAL) 13 REPRODUCTIVE HEALTH CENTER . . 14 HEALTH HOUSE . . . . . 15 POLYCLINICS . . . . . 16 INTEGRATED MANAGEMENT OF CHILD- HOOD ILLNESS CENTER(IMC . . . . 17 IMMUNIPROPHYLAXIS CENTER . . . . 18 AIDS CENTER . . . . . 19 HEALTHY LIFESTYLE CENTER . . . . 20 FAMILY MEDICINE CENTER . . . . . 21 DISPENSARY . . . . . 22 OTHER PUBLIC SECTOR _____ 23 (SPECIFY) PRIVATE MEDICAL SECTOR PRIVATE HOSPITAL/CLINIC . . . . . 31 PRIVATE DOCTOR'S OFFICE . . . . . 32 PHARMACY . . . . . 33 OTHER PRIVATE MEDICAL SECTOR _____ 36 (SPECIFY) OTHER SOURCE SHOP/MARKET . . . . . 41 FRIEND/RELATIVE . . . . . 43 OTHER _____ 96 (SPECIFY)	→ 326
324	Do you know of a place where you can obtain a method of family planning?	YES . . . . . 1 NO 2	→ 326
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 HEALTH CENTER (URBAN/RURAL) C REPRODUCTIVE HEALTH CENTER . . D HEALTH HOUSE . . . . . E POLYCLINICS . . . . . F INTEGRATED MANAGEMENT OF CHILD- HOOD ILLNESS CENTER(IMC . . . . G IMMUNIPROPHYLAXIS CENTER . . . . H AIDS CENTER . . . . . I HEALTHY LIFESTYLE CENTER . . . . J FAMILY MEDICINE CENTER . . . . . K DISPENSARY . . . . . L OTHER PUBLIC SECTOR _____ M (SPECIFY) PRIVATE MEDICAL SECTOR PRIVATE HOSPITAL/CLINIC . . . . . N PRIVATE DOCTOR'S OFFICE . . . . . O PHARMACY . . . . . P OTHER PRIVATE MEDICAL SECTOR _____ Q (SPECIFY) OTHER SOURCE SHOP/MARKET . . . . . R FRIEND/RELATIVE . . . . . S OTHER _____ X (SPECIFY)	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
326	In the last 12 months, were you visited by a healthworker who talked to you about family planning?	YES . . . . . 1 NO 2	
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	

SECTION 4. PREGNANCY AND POSTNATAL CARE

401	CHECK 224: ONE OR MORE BIRTHS IN 2007 OR LATER ☐	NO BIRTHS IN 2007 OR LATER ☐ → 556

402 CHECK 214: ENTER IN THE TABLE THE PREGNANCY HISTORY NUMBER, NAME, AND SURVIVAL STATUS OF EACH BIRTH IN 2007 OR LATER. ASK THE QUESTIONS ABOUT ALL OF LIVE 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	PREGNANCY HISTORY NUMBER FROM 212 IN PREGNANCY HISTORY TABLE	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 OTHER DOCTOR . . B NURSE/MIDWIFE . . C FELDSHER . . . . . D OTHER PERSON TRADITIONAL BIRTH ATTENDANT . . E COMMUNITY/ VILLAGE HEALTH WORKER . . . F 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 EACH TYPE OF SOURCE. 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 HEALTH CENTER E REPRODUCTIVE HEALTH CNTR . . F POLYCLINIC . . . . . G OTHER PUBLIC SECTOR H _____ (SPECIFY) PRIVATE MED. SECTOR PVT. HOSPITAL/ CLINIC . . . . . J OTHER PRIVATE MED. SECTOR _____ K (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: Was your blood pressure Did you give a urine sample? Did you give a blood sample?	YES NO BP . . . . . 1 2 URINE . . . . . 1 2 BLOOD . . . 1 2		
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		
414A	Did your husband/partner, a family member or a friend come with you to any antenatal care visits?	YES . . . . . 1 NO 2		
414B	Have you been admitted to a health facility during this pregnancy, including day-bed occupancy?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 421) ←		

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____
414C	In total, how many times have you been hospitalised during this pregnancy, including day-bed occupancy?	TIMES [ ][ ][ ] DON'T KNOW 998		
414D	Please, list the reasons for all hospitalizations. Anythig else? RECORD ALL MENTIONED	BLOOD PRESSURE . . A BLURRED VISION . . . . . B SEIZURES . . . . . C BLEEDING . . . . . D MISCARRIAGE THREAT E PRETERM LABOR THREAT . . . . . F LABOR OVERDUE . . . . G FETAL/PLACENTAL PROBLEMS . . . . . H DIABETES . . . . . I ANEMIA . . . . . J STD . . . . . K OTHER INFECTION . . L TEST/DIAGNOSTICS. . M ACCIDENT/INJURY . . N OTHER _____ X (SPECIFY) DON'T KNOW . . . . . Y		
421	During this pregnancy, were you given or did you buy any iron tablets or iron syrup?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 430) ←┤ 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		
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

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____
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 FAMILY DOCTOR ... A OTHER DOCTOR . . B NURSE/MIDWIFE . . C FELDSHER . . . . . D OTHER PERSON TRADITIONAL BIRTH ATTENDANT . . E RELATIVE/FRIEND . F OTHER _____ X (SPECIFY) NO ONE ASSISTED Y	HEALTH PERSONNEL FAMILY DOCTOR ... A OTHER DOCTOR . . B NURSE/MIDWIFE . . C FELDSHER . . . . . D OTHER PERSON TRADITIONAL BIRTH ATTENDANT . . E RELATIVE/FRIEND . F OTHER _____ X (SPECIFY) NO ONE ASSISTED Y	HEALTH PERSONNEL FAMILY DOCTOR ... A OTHER DOCTOR . . B NURSE/MIDWIFE . . C FELDSHER . . . . . D OTHER PERSON TRADITIONAL BIRTH ATTENDANT . . E RELATIVE/FRIEND . F OTHER _____ X (SPECIFY) NO ONE ASSISTED Y
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 HEALTH CENTER 23 HEALTH HOUSE 24 OTHER PUBLIC SECTOR _____ 26 (SPECIFY) PRIVATE MED. SECTOR PVT. HOSPITAL/ CLINIC . . . . . 31 OTHER PRIVATE MED. SECTOR _____ 36 (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 HEALTH CENTER 23 HEALTH HOUSE 24 OTHER PUBLIC SECTOR _____ 26 (SPECIFY) PRIVATE MED. SECTOR PVT. HOSPITAL/ CLINIC . . . . . 31 OTHER PRIVATE MED. SECTOR _____ 36 (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 HEALTH CENTER 23 HEALTH HOUSE 24 OTHER PUBLIC SECTOR _____ 26 (SPECIFY) PRIVATE MED. SECTOR PVT. HOSPITAL/ CLINIC . . . . . 31 OTHER PRIVATE MED. SECTOR _____ 36 (SPECIFY) OTHER _____ 96 (SPECIFY) (SKIP TO 448) ←
434A	How long after (NAME) was delivered did you stay there? IF LESS THAN ONE DAY, RECORD HOURS. IF LESS THAN ONE WEEK, RECORD DAYS.	HOURS 1 [ ][ ] DAYS 2 [ ][ ] WEEKS 3 [ ][ ] DON'T KNOW . . . 998		
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
436	I would like to talk to you about checks on your health after delivery, for example, someone asking you questions about your health or examining you. Did anyone check on your health while you were still in the facility?	YES . . . . . 1 (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 442) ←		

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____
438	I would like to talk to you about checks on your health after delivery, for example, someone asking you questions about your health or examining you. Did anyone check on your health after you gave birth to (NAME)?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 442) ←		
439	Who checked on your health at that time? PROBE FOR MOST QUALIFIED PERSON.	HEALTH PERSONNEL FAMILY DOCTOR ... 11 OTHER DOCTOR . . 12 NURSE/MIDWIFE . . 13 FELDSHER . . . . . 14 OTHER PERSON TRADITIONAL BIRTH ATTENDANT 21 COMMUNITY/ VILLAGE HEALTH WORKER . . . 22 OTHER_____ 96 (SPECIFY)		
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		
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 446) ← 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 OTHER DOCTOR . . 12 NURSE/MIDWIFE . . 13 FELDSHER . . . . . 14 OTHER PERSON TRADITIONAL BIRTH ATTENDANT 21 COMMUNITY/ VILLAGE HEALTH WORKER . . . 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 HEALTH CENTER ... 23 HEALTH HOUSE . . 24 INTEGR. MANAGEMENT CHILDHOOD ILLNESS CENTER . . . . . 25 POLYCLINICS 26 OTHER PUBLIC _____ 27 (SPECIFY) PRIVATE MED. SECTOR PVT. HOSPITAL/ CLINIC . . . . . 31 OTHER PRIVATE MED. _____ 36 (SPECIFY) OTHER _____ 96 (SPECIFY)		
446	In the first two months after delivery, did you receive a vitamin A dose?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8		
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 ☐ (GO BACK TO 405 IN NEXT COLUMN; OR IF NO MORE BIRTHS, GO TO 501)		
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 BACK TO 405 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 501)	LIVING ☐ DEAD ☐ (GO BACK TO 405 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 501)	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
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 2007 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 PREGN. HISTORY	LAST BIRTH PREGNANCY HISTORY NUMBER ☐☐	NEXT-TO-LAST BIRTH PREGNANCY HISTORY NUMBER ☐☐	SECOND-FROM-LAST BIRTH PREGNANCY HISTORY NUMBER ☐☐
503	FROM 212 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.

	LAST BIRTH DAY	LAST BIRTH MONTH	LAST BIRTH YEAR		NEXT-TO-LAST BIRTH DAY	NEXT-TO-LAST BIRTH MONTH	NEXT-TO-LAST BIRTH YEAR		SECOND-FROM-LAST BIRTH DAY	SECOND-FROM-LAST BIRTH MONTH	SECOND-FROM-LAST BIRTH YEAR
BCG				BCG				BCG			
POLIO 0 (POLIO GIVEN AT BIRTH)				P0				P0			
POLIO 1				P1				P1			
POLIO 2				P2				P2			
POLIO 3				P3				P3			
POLIO 4				P4				P4			
DPT1				D1				D1			
DPT2				D2				D2			
DPT3				D3				D3			
DPT4				D4				D4			
HEPATITIS-1 (GIVEN AT BIRTH)				H1				H1			
HEPATITIS-2				H2				H2			
HEPATITIS-3				H3				H3			
PENTA-1				PENTA1				PENTA1			
PENTA-2				PENTA2				PENTA2			
PENTA-3				PENTA3				PENTA3			
MEASLES/MR				MEA				MEA			
VITAMIN A (MOST RECENT)				VIT A				VIT A			

507	CHECK 506:	BCG TO MEASLES ALL RECORDED ☐ → (GO TO 511) OTHER ☐ → ↓	BCG TO MEASLES ALL RECORDED ☐ → (GO TO 511) OTHER ☐ → ↓	BCG TO MEASLES ALL RECORDED ☐ → (GO TO 511) OTHER ☐ → ↓

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 511) NO . . . . . 2 (SKIP TO 511) DON'T KNOW 8	YES . . . . . 1 (PROBE FOR VACCINATIONS AND WRITE '66' IN THE CORRESPONDING DAY COLUMN IN 506) (SKIP TO 511) NO . . . . . 2 (SKIP TO 511) DON'T KNOW 8	YES . . . . . 1 (PROBE FOR VACCINATIONS AND WRITE '66' IN THE CORRESPONDING DAY COLUMN IN 506) (SKIP TO 511) NO . . . . . 2 (SKIP TO 511) 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 511) DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO 511) DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO 511) 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 arm or shoulder 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
510C	Was the first polio vaccine given in the first two weeks after birth or later?	FIRST 2 WEEKS . . . 1 LATER 2	FIRST 2 WEEKS . . . 1 LATER 2	FIRST 2 WEEKS . . . 1 LATER 2
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 MR 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 in the thigh?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 510K) DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO 510K) DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO 510K) DON'T KNOW 8
510I	Was the first Hepatitis B vaccine given in the first 3 days after birth or later?	FIRST 3 DAYS . . . 1 LATER 2	FIRST 3 DAYS . . . 1 LATER 2	FIRST 3 DAYS . . . 1 LATER 2
510J	How many times was the Hepatitis 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 _____
510K	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?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 511) ←┤ DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO 511) ←┤ DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO 511) ←┤ DON'T KNOW 8
510L	How many times was the PENTAVALENT vaccination given?	NUMBER OF TIMES . . . . . [ ]	NUMBER OF TIMES . . . . . [ ]	NUMBER OF TIMES . . . . . [ ]
511	Within the last six months, was (NAME) given a vitamin A dose like (this/any of these)?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8
512	In the last seven days, was (NAME) given iron pills, sprinkles with iron, or iron syrup like (this/any of these)?	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 HEALTH CENTER C REPRODUCTIVEE HLTH CENTER . . . . . D HEALTH HOUSE . . E POLYCLINICS . . . F INTEGR. MANAGEMENT CHILDHOOD ILLNESS CENTER . . . . . G IMMUNOPROPHYLA-XIS CENTEF . . . . H AIDS CENTER . . . I HEALTHY LIFESTYLE CENTER . . . . . J FAMILY MEDICINE CENTER . . . . . K DISPENSARY . . . . L OTHER PUBLIC SECTOR _____ M (SPECIFY) PRIVATE MEDICAL SECTOR PVT. HOSPITAL/ CLINIC . . . . . N PVT DOCTOR . . . 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 HEALTH CENTER C REPRODUCTIVEE HLTH CENTER . . . . . D HEALTH HOUSE . . E POLYCLINICS . . . F INTEGR. MANAGEMENT CHILDHOOD ILLNESS CENTER . . . . . G IMMUNOPROPHYLA-XIS CENTEF . . . . H AIDS CENTER . . . I HEALTHY LIFESTYLE CENTER . . . . . J FAMILY MEDICINE CENTER . . . . . K DISPENSARY . . . . L OTHER PUBLIC SECTOR _____ M (SPECIFY) PRIVATE MEDICAL SECTOR PVT. HOSPITAL/ CLINIC . . . . . N PVT DOCTOR . . . 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 HEALTH CENTER C REPRODUCTIVEE HLTH CENTER . . . . . D HEALTH HOUSE . . E POLYCLINICS . . . F INTEGR. MANAGEMENT CHILDHOOD ILLNESS CENTER . . . . . G IMMUNOPROPHYLA-XIS CENTEF . . . . H AIDS CENTER . . . I HEALTHY LIFESTYLE CENTER . . . . . J FAMILY MEDICINE CENTER . . . . . K DISPENSARY . . . . L OTHER PUBLIC SECTOR _____ M (SPECIFY) PRIVATE MEDICAL SECTOR PVT. HOSPITAL/ CLINIC . . . . . N PVT DOCTOR . . . 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: a) A fluid made from a special packet called Regidron? c) A homemade fluid?	YES NO DK FLUID FROM ORS PKT 1 2 8 HOMEMADE FLUID . . . 1 2 8	YES NO DK FLUID FROM ORS PKT 1 2 8 HOMEMADE FLUID . . . 1 2 8	YES NO DK FLUID FROM ORS PKT 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?	NO . . . . . 2 (SKIP TO 527) DON'T KNOW 8	NO . . . . . 2 (SKIP TO 527) DON'T KNOW 8	NO . . . . . 2 (SKIP TO 527) DON'T KNOW 8
526	At any time during the ilness, did (NAME) have blood taken from his/her finger for testing?	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 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
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 HEALTH CENTER C REPRODUCTIVEE HLTH CENTER . . . . . D HEALTH HOUSE . . E POLYCLINICS . . . F INTEGR. MANAGEMENT CHILDHOOD ILLNESS CENTER . . . . . G IMMUNOPROPHYLA-XIS CENTEF . . . . H AIDS CENTER . . . I HEALTHY LIFESTYLE CENTER . . . . . J FAMILY MEDICINE CENTER . . . . . K DISPENSARY . . . . L OTHER PUBLIC SECTOR _____ M (SPECIFY) PRIVATE MEDICAL SECTOR PVT. HOSPITAL/ CLINIC . . . . . N PVT DOCTOR . . . 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 HEALTH CENTER C REPRODUCTIVEE HLTH CENTER . . . . . D HEALTH HOUSE . . E POLYCLINICS . . . F INTEGR. MANAGEMENT CHILDHOOD ILLNESS CENTER . . . . . G IMMUNOPROPHYLA-XIS CENTEF . . . . H AIDS CENTER . . . I HEALTHY LIFESTYLE CENTER . . . . . J FAMILY MEDICINE CENTER . . . . . K DISPENSARY . . . . L OTHER PUBLIC SECTOR _____ M (SPECIFY) PRIVATE MEDICAL SECTOR PVT. HOSPITAL/ CLINIC . . . . . N PVT DOCTOR . . . 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 HEALTH CENTER C REPRODUCTIVEE HLTH CENTER . . . . . D HEALTH HOUSE . . E POLYCLINICS . . . F INTEGR. MANAGEMENT CHILDHOOD ILLNESS CENTER . . . . . G IMMUNOPROPHYLA-XIS CENTEF . . . . H AIDS CENTER . . . I HEALTHY LIFESTYLE CENTER . . . . . J FAMILY MEDICINE CENTER . . . . . K DISPENSARY . . . . L OTHER PUBLIC SECTOR _____ M (SPECIFY) PRIVATE MEDICAL SECTOR PVT. HOSPITAL/ CLINIC . . . . . N PVT DOCTOR . . . O PHARMACY . . . P OTHER PRIVATE MED. SECTOR _____ Q (SPECIFY) OTHER SOURCE SHOP . . . . . R TRADITIONAL PRACTITIONER S MARKET . . . . . T OTHER _____ X (SPECIFY)
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)

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____
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 BACK TO 503 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 553) DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 (GO BACK TO 503 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 553) DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 (GO TO 503 IN NEXT-TO-LAST COLUMN OF NEW QUESTIONNAIRE; OR, IF NO MORE BIRTHS, GO TO 553) DON'T KNOW 8
538	What drugs did (NAME) take? Any other drugs? RECORD ALL MENTIONED.	ANTIMALARIAL DRUGS SP/FANSIDAR . . . A CHLOROQUINE . . B PRIMAQUINE . . . C QUININE . . . . . D COMBINATION WITH ARTEMISININ/ COARTEM . . . . E OTHER ANTI-MALARIAL _____ . . . F (SPECIFY) ANTIBIOTIC DRUGS PILL/SYRUP . . . G INJECTION . . . H OTHER DRUGS ASPIRIN . . . . . I PARACETAMOL . . J IBUPROFEN . . . K SALBUTAMOL . . . . L AMINOPHYLLIN . . M OTHER _____ X (SPECIFY) DON'T KNOW . . . . . Z	ANTIMALARIAL DRUGS SP/FANSIDAR . . . A CHLOROQUINE . . B PRIMAQUINE . . . C QUININE . . . . . D COMBINATION WITH ARTEMISININ/ COARTEM . . . . E OTHER ANTI-MALARIAL _____ . . . F (SPECIFY) ANTIBIOTIC DRUGS PILL/SYRUP . . . G INJECTION . . . H OTHER DRUGS ASPIRIN . . . . . I PARACETAMOL . . J IBUPROFEN . . . K SALBUTAMOL . . . . L AMINOPHYLLIN . . M OTHER _____ X (SPECIFY) DON'T KNOW . . . . . Z	ANTIMALARIAL DRUGS SP/FANSIDAR . . . A CHLOROQUINE . . B PRIMAQUINE . . . C QUININE . . . . . D COMBINATION WITH ARTEMISININ/ COARTEM . . . . E OTHER ANTI-MALARIAL _____ . . . F (SPECIFY) ANTIBIOTIC DRUGS PILL/SYRUP . . . G INJECTION . . . H OTHER DRUGS ASPIRIN . . . . . I PARACETAMOL . . J IBUPROFEN . . . K SALBUTAMOL . . . . L AMINOPHYLLIN . . M OTHER _____ X (SPECIFY) DON'T KNOW . . . . . Z
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 2007 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 you can get for the treatment of diarrhea?	YES . . . . . 1 NO 2	
557	CHECK 214 AND 220, ALL ROWS: NUMBER OF CHILDREN BORN IN 2010 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) Clear broth?	**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?	**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) Any other liquids?	**f)**	1	2	8	
	g) Yogurt (churgot, keifir and similar)?	**g)**	1	2	8	
	IF YES: How many times did (NAME) eat yogurt? IF 7 OR MORE TIMES, RECORD '7'.	NUMBER OF TIMES ATE YOGURT			☐	
	h) Any commercially fortified baby food (e.g Nestle, Agusha, Winnie, Gerber, Gercules, Oats, Nutrilac 2-3)?	**h)**	1	2	8	
	i) Bread, rice, noodles, porridge, or other foods made from grains (atalla, garsus)?	**i)**	1	2	8	
	j) Sweet red bell pepper, pumpkin or carrots that are yellow or orange inside?	**j)**	1	2	8	
	k) Potatoes or any other foods made from roots (shalgan)?	**k)**	1	2	8	
	l) Any dark green, leafy vegetables (spinach, dark green lettus)?	**l)**	1	2	8	
	m) Ripe persimmons, or ripe fresh apricots, dried apricots or dried peaches?	**m)**	1	2	8	
	n) Any other fruits or vegetables?	**n)**	1	2	8	
	o) Liver, kidney, heart or other organ meats?	**o)**	1	2	8	
	p) Any meat, such as beef, pork, lamb, goat, chicken, or duck?	**p)**	1	2	8	
	q) Eggs?	**q)**	1	2	8	
	r) Fresh, canned or dried fish, caviar, squid, shrimp or any other seafood?	**r)**	1	2	8	
	s) Any foods made from beans, peas, lentils, or nuts?	**s)**	1	2	8	
	t) Cheese or other food made from milk?	**t)**	1	2	8	
	u) Any other solid, semi-solid, or soft food?	**u)**	1	2	8	
559	CHECK 558 (CATEGORIES "g" THROUGH "u"):					
	NOT A SINGLE "YES" ☐ ↓	AT LEAST ONE "YES" ☐ →				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, semi-solid, or soft foods yesterday during the day or at night? IF 7 OR MORE TIMES, RECORD '7'.	NUMBER OF TIMES . . . . . [ ] DON'T KNOW 8	

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 <u>last</u> 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? **(2)**	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 CLIENT/SEX WORKER 5 OTHER _____ 6 (SPECIFY) (SKIP TO 622)	HUSBAND . . . . . 1 LIVE-IN PARTNER . . . 2 BOYFRIEND NOT LIVING WITH RESPONDENT . . . 3 CASUAL ACQUAINTANCE . . . 4 CLIENT/SEX WORKER 5 OTHER _____ 6 (SPECIFY) (SKIP TO 622)	HUSBAND . . . . . 1 LIVE-IN PARTNER . . . 2 BOYFRIEND NOT LIVING WITH RESPONDENT . . . 3 CASUAL ACQUAINTANCE . . . 4 CLIENT/SEX WORKER 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 OTHER (SKIP TO 623)	FIRST TIME WHEN STARTED LIVING WITH FIRST HUSBAND OTHER (SKIP TO 623)	FIRST TIME WHEN STARTED LIVING WITH FIRST HUSBAND OTHER (SKIP TO 623)
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? IF NON-NUMERIC ANSWER, PROBE TO GET AN ESTIMATE. IF NUMBER OF TIMES IS 95 OR MORE, WRITE '95'.	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 HEALTH CENTER (URBAN/RURAL) C REPRODUCTIVE HEALTH CENTER . . D HEALTH HOUSE . . . . . E POLYCLINICS . . . . . F INTEGRATED MANAGEMENT OF CHILD-HOOD ILLNESS CENTER(IMC . . . . G IMMUNIPROPHYLAXIS CENTER . . . . H AIDS CENTER . . . . . I HEALTHY LIFESTYLE CENTER . . . . J FAMILY MEDICINE CENTER . . . . . K DISPENSARY . . . . . L OTHER PUBLIC SECTOR _____ M (SPECIFY) PRIVATE MEDICAL SECTOR PRIVATE HOSPITAL/CLINIC . . . . . N PRIVATE DOCTOR'S OFFICE . . . . . O PHARMACY . . . . . P OTHER PRIVATE MEDICAL SECTOR _____ Q (SPECIFY) OTHER SOURCE SHOP/MARKET . . . . . R FRIEND/RELATIVE . . . . . S 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/NONE . . . . . 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 704: WANTS TO HAVE A/ANOTHER CHILD ☐ You have said that you do not want (a/another) child soon. Can you tell me why you are not using a method to prevent pregnancy? Any other reason? WANTS NO MORE/ NONE ☐ 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 ☐ 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)	→ 714 → 714

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?	YES NO RADIO . . . . . 1 2 TELEVISION . . . . . 1 2 NEWSPAPER OR MAGAZINE . . . 1 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 ☐ NEVER MARRIED AND NEVER LIVED WITH A MAN ☐		803 807
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: general education school, professional primary(uchiliche), professional middle(technikum, college), higher or post-graduate?	GENRAL EDUCATION SCHOOL . . . . . 1 PROFESSIONAL PRIMAF . . . . . 2 PROFESSIONAL MIDDLE . . . . . 3 HIGHER . . . . . 4 POST-GRADUATE . . . . . 5 DON'T KNOW 8	 806
805	What was the highest (grade/form/year) he completed at that level? IF COMPLETED LESS THAN ONE YEAR AT THAT LEVEL, RECORD '00'.	GRADE . . . . . ☐☐ DON'T KNOW 98	
805A	CHECK 804 AND 805: OTHER (CODES ☐ GRADES 10-11 AT LEVEL 1, OR CODES "2" OR "3" PROFESSIONAL-PRIMARY OR MIDDLE LEVEL CIRCLED,ASK: ☐ Did he receive an attestat for completing secondary education?	 YES . . . . . 1 NO 2	806
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?	☐☐ _____ _____ _____	
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

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
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	
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 HAS NO EARNINGS . . . . . 4 DON'T KNOW 8	→ 820
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)	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
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 RESPONDENT AND HUSBAND/PARTNER JOINTLY . . . 3 SOMEONE ELSE . . . . . 4 OTHER 6	
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 ☐		→ 911
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	
911	CHECK 208 AND 215: NO BIRTHS ☐ LAST BIRTH SINCE JANUARY 2010 ☐ ↓ LAST BIRTH BEFORE JANUARY 2010 ☐		→ 926 → 926
912	CHECK 408 FOR LAST BIRTH: HAD ANTENATAL CARE ☐ ↓ NO ANTENATAL CARE ☐		→ 920
913	CHECK FOR PRESENCE OF OTHERS. BEFORE CONTINUING, MAKE EVERY EFFORT TO ENSURE PRIVACY.		
914	During any of the antenatal visits for your last birth were you given any information about: Babies getting the AIDS virus from their mother? Things that you can do to prevent getting the AIDS virus? Getting tested for the AIDS virus?	YES NO DK AIDS FROM MOTHER 1 2 8 THINGS TO DO 1 2 8 TESTED FOR AIDS 1 2 8	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
915	Were you offered a test for the AIDS virus as part of your antenatal care?	YES . . . . . 1 NO 2	
916	I don't want to know the results, but were you tested for the AIDS virus as part of your antenatal care?	YES . . . . . 1 NO 2	→ 920
917	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 HEALTH CENTER (URBAN/RURAL) 13 REPRODUCTIVE HEALTH CENTER . . 14 HEALTH HOUSE . . . . . 15 POLYCLINICS . . . . . 16 INTEGRATED MANAGEMENT OF CHILD- HOOD ILLNESS CENTER(IMC . . . . 17 IMMUNIPROPHYLAXIS CENTER . . . . 18 AIDS CENTER . . . . . 19 HEALTHY LIFESTYLE CENTER . . . . 20 FAMILY MEDICINE CENTER . . . . . 21 DISPENSARY . . . . . 22 OTHER PUBLIC SECTOR _____ 23 (SPECIFY) PRIVATE MEDICAL SECTOR PRIVATE HOSPITAL/CLINIC . . . . . 31 PRIVATE DOCTOR'S OFFICE . . . . . 32 PHARMACY . . . . . 33 OTHER PRIVATE MEDICAL SECTOR _____ 36 OTHER SOURCE HOME . . . . . 41 CORRECTIONAL FACILITY . . . . . 42 OTHER _____ 96 (SPECIFY)	
918	I don't want to know the results, but did you get the results of the test?	YES . . . . . 1 NO 2	→ 924
919	All women are supposed to receive counseling after being tested. After you were tested, did you receive counseling?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 924
920	CHECK 434 FOR LAST BIRTH: ANY CODE 21-36 CIRCLED ☐ ↓ OTHER ☐		→ 926
921	Between the time you went for delivery but before the baby was born, were you offered a test for the AIDS virus?	YES . . . . . 1 NO 2	
922	I don't want to know the results, but were you tested for the AIDS virus at that time?	YES . . . . . 1 NO 2	→ 926
923	I don't want to know the results, but did you get the results of the test?	YES . . . . . 1 NO 2	
924	Have you been tested for the AIDS virus since that time you were tested during your pregnancy?	YES . . . . . 1 NO 2	→ 927
925	How many months ago was your most recent HIV test?	MONTHS AGO . . . . . ☐☐ TWO OR MORE YEARS 95	→ 932

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
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 95	
928	I don't want to know the results, but did you get the results of the test?	YES . . . . . 1 NO 2	
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 HEALTH CENTER (URBAN/RURAL) 13 REPRODUCTIVE HEALTH CENTER . . 14 HEALTH HOUSE . . . . . 15 POLYCLINICS . . . . . 16 INTEGRATED MANAGEMENT OF CHILD- HOOD ILLNESS CENTER(IMC . . . . 17 IMMUNIPROPHYLAXIS CENTER . . . . 18 AIDS CENTER . . . . . 19 HEALTHY LIFESTYLE CENTER . . . . 20 FAMILY MEDICINE CENTER . . . . . 21 DISPENSARY . . . . . 22 OTHER PUBLIC SECTOR _____ 23 (SPECIFY) PRIVATE MEDICAL SECTOR PRIVATE HOSPITAL/CLINIC . . . . . 31 PRIVATE DOCTOR'S OFFICE . . . . . 32 PHARMACY . . . . . 33 OTHER PRIVATE MEDICAL SECTOR _____ 36 OTHER SOURCE HOME . . . . . 41 CORRECTIONAL FACILITY . . . . . 42 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

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
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 HEALTH CENTER (URBAN/RURAL) C REPRODUCTIVE HEALTH CENTER . . D HEALTH HOUSE . . . . . E POLYCLINICS . . . . . F INTEGRATED MANAGEMENT OF CHILD- HOOD ILLNESS CENTER(IMC . . . . G IMMUNIPROPHYLAXIS CENTER . . . . H AIDS CENTER . . . . . I HEALTHY LIFESTYLE CENTER . . . . J FAMILY MEDICINE CENTER . . . . . K DISPENSARY . . . . . L OTHER PUBLIC SECTOR _____ M (SPECIFY) PRIVATE MEDICAL SECTOR PRIVATE HOSPITAL/CLINIC . . . . . N PRIVATE DOCTOR'S OFFICE . . . . . 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	
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	CHECK 613: HAS HAD SEXUAL INTERCOURSE ☐ NEVER HAD SEXUAL INTERCOURSE ☐ → 946		

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
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	
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 HEALTH CENTER (URBAN/RURAL) C REPRODUCTIVE HEALTH CENTER . . D HEALTH HOUSE . . . . . E POLYCLINICS . . . . . F INTEGRATED MANAGEMENT OF CHILD-HOOD ILLNESS CENTER(IMC . . . . G IMMUNIPROPHYLAXIS CENTER . . . . H AIDS CENTER . . . . . I HEALTHY LIFESTYLE CENTER . . . . J FAMILY MEDICINE CENTER . . . . . K DISPENSARY . . . . . L OTHER PUBLIC SECTOR _____ M (SPECIFY) PRIVATE MEDICAL SECTOR PRIVATE HOSPITAL/CLINIC . . . . . N PRIVATE DOCTOR'S OFFICE . . . . . 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	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
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? **(1)**	YES . . . . . 1 NO 2	→ 1008
1007	What (other) type of tobacco do you currently smoke or use? RECORD ALL MENTIONED.	PIPE . . . . . A CHEWING TOBACCO/NOS . . . . . B SNUFF . . . . . C 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? Getting permission to go to the doctor? Getting money needed for advice or treatment? The distance to the health facility? Not wanting to go alone?	BIG PROB-LEM / NOT A BIG PROB-LEM PERMISSION TO GO . . . 1 2 GETTING MONEY . . . . . 1 2 DISTANCE . . . . . 1 2 GO ALONE 1 2	
1011	Next questions are about a few common health problems in Tajikistan. Have you ever heard of an illness called tuberculosis or TB?	YES . . . . . 1 NO 2	→ 1022
1012	What signs or symptoms would lead you to think that a person has tuberculosis? PROBE: Any other? RECORD ALL MENTIONED.	COUGHING . . . . . A COUGHING WITH SPUTUM . . . . . B COUGHING FOR SEVERAL WEEKS C FEVER . . . . . D BLOOD IN SPUTUM . . . . . E LOSS OF APPETITE . . . . . F NIGHTSWEATING . . . . . G PAIN IN CHEST . . . . . H TIREDNESS/FATIGUE . . . . . I WEIGHT LOSS . . . . . J LETHARGY . . . . . K OTHER _____ X (SPECIFY) DON'T KNOW . . . . . Z	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1015	How does tuberculosis spread from one person to another? PROBE: Any other ways? RECORD ALL MENTIONED.	THROUGH THE AIR WHEN COUGHING OR SNEEZING . . . . . A THROUGH SHARING UTENSILS . . . . . B THROUGH TOUCHING A PERSON WITH TB . . . . . C THROUGH FOOD . . . . . D THROUGH SEXUAL CONTACT . . . . . E THROUGH MOSQUITO BITES . . . . . F OTHER _____ X (SPECIFY) DON'T KNOW . . . . . Z	
1016	Can tuberculosis be cured?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
1017	If a member of your family got tuberculosis, would you want it to remain a secret or not?	YES, REMAIN A SECRET . . . . . 1 NO . . . . . 2 DON'T KNOW/NOT SURE/ DEPENDS 8	
1018	If a member of your family became sick with TB, what would you do to prevent the spread of tuberculosis to other members of your own household? PROBE: Any other ways? RECORD ALL MENTIONED.	TREAT THE SICK AS APPRORIATE . . A SICK TAKES OBSERVED TB TREATMENT(DOTS) . . . . . B IZOLATE THE SICK PERSON . . . . . C ASK SICK TO COLLECT/DISPOSE HIS/HER SPUTUM TO SAFETY . . . . D PREVENT SICK TO SNEEZE/COUGH TO AN OPEN AIF . . . . . E GET VACCINATED/BOOST . . . . . F FAMILY TAKES PREVENTIVE/TB MEDICATION . . . . . G GO TO DOCTOR IF ANY FEVER . . . . . H GO TO DOCTOR IF PROLONGED CAUGH . . . . . I CLEAN HOUSE DAILY . . . . . J DON'T SHARE FOOD AND UTENSILS . . K LIMIT SEXUAL CONTACT WITH SICK . . L DO NOTHING . . . . . M SMOKE THE HOUSE WITH HERBS . . . N PRAY TO GOD . . . . . O OTHER _____ X (SPECIFY) DON'T KNOW . . . . . Z	
1022	These next questions are about blood pressure. Have you ever been told by a doctor or other health professional that you had hypertension or high blood pressure?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 1025
1023	Were you told on two or more different occasions by a doctor or other health professional that you had hypertension or high blood pressure?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
1024	To lower your hypertension or high blood pressure, are you now: a. Taking prescribed medicine? b. Controlling your weight or losing weight? c. Cutting down on salt in your diet? d. Exercising? e. Cutting down on alcohol? f. Stopping smoking?	YES NO N/A TAKE MEDICINE 1 2 3 CONTROL WEIGHT 1 2 3 CUT DOWN SALT 1 2 3 EXERCISE 1 2 3 CUT DOWN ALCOHOL 1 2 3 STOP SMOKING 1 2 3	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1025	Have you heard of an illness called breast cancer?	YES . . . . . 1 NO 2	→ 1027
1026	What signs or symptoms would lead you to think that a woman has breast cancer? PROBE: Any other? RECORD ALL MENTIONED.	LUMP IN BREAST(S) . . . . . A LUMP IN LYMPH NODES . . . . . B DISCHARGE FROM NIPPLES . . . . . C PAIN IN BREAST(S) . . . . . D NIPPLE(S) GET INVERTED . . . . . E TIREDNESS/FATIGUE . . . . . F WEIGHT LOSS . . . . . G OTHER _____ X (SPECIFY) DON'T KNOW . . . . . Z	
1027	Do you know how to give yourself a breast exam?	YES . . . . . 1 NO 2	→ 1029
1028	Have you ever given yourself a breast exam? IF YES: When was the last time that you gave yourself a breast exam? IF THE LAST SELF BREAST EXAMINATION WAS 90 OR MORE MONTHS AGO, RECORD 90 MONTHS AGO	MONTHS AGO . . . . . [ ][ ] NEVER GAVE EXAM 95	
1029	Has a health care provider ever given you a breast exam, such as a manual, an ultrasound, a mammogram or any other breast exams?	YES . . . . . 1 NO 2	→ 1033
1030	When was the last time that a health provider gave you any breast examination?	LESS THAN 6 MONTHS AGO . . . . . 1 6-11 MONTHS AGO . . . . . 2 1-3 YEARS AGO . . . . . 3 OTHER _____ 6 (SPECIFY)	
1033	Have you heard of an illness called cervical cancer?	YES . . . . . 1 NO 2	
1034	Have you ever given a cervical smear for Papanicolau test or Pap test, also known as "a cytology smear test"?	YES . . . . . 1 NO 2	→ 1036
1035	When was the last time you had Pap smear testing?	LESS THAN 6 MONTHS AGO . . . . . 1 6-11 MONTHS AGO . . . . . 2 1-3 YEARS AGO . . . . . 3 OTHER _____ 6 (SPECIFY)	
1036	Do you have a family doctor?	YES . . . . . 1 NO 2	→ 1100
1037	In the past 12 months, have you visited your family doctor for any reason?	YES . . . . . 1 NO 2	→ 1100
1038	How many times have you visited your family doctor in the past 12 months?	NUMBER OF VISITS . . . [ ][ ][ ] DON'T KNOW 998	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1100	CHECK THE COVER OF THE WOMAN'S QUESTIONNAIRE AND IF NECESSARY THE HOUSEHOLD QUESTIONNAIRE, [HHQ321].		
	WOMAN SELECTED FOR THIS SECTION ☐	WOMAN NOT SELECTED ☐	→ 1300
1101	CHECK FOR PRESENCE OF OTHERS: DO NOT CONTINUE UNTIL PRIVACY IS ENSURED.		
	PRIVACY OBTAINED 1	PRIVACY NOT POSSIBLE 2	→ 1132
	READ TO THE RESPONDENT Now I would like to ask you questions about some other important aspects of a woman's life. You may find some of these questions very personal. However, your answers are crucial for helping to understand the condition of women in Tajikistan. Let me assure you that your answers are completely confidential and will not be told to anyone and no one else in your household will know that you were asked these questions.		
1102	CHECK 601 AND 602:		
	CURRENTLY MARRIED/ LIVING WITH A MAN ☐	FORMERLY MARRIED/ LIVED WITH A MAN (READ IN PAST TENSE AND USE 'LAST' WITH HUSBAND/PARTNER') ☐	NEVER MARRIED/ NEVER LIVED WITH A MAN ☐ → 1116

1103 First, I am going to ask you about some situations which happen to some women. Please tell me if these apply to your relationship with your (last) (husband/partner)?

		YES	NO	DK
a) He (is/was) jealous or angry if you (talk/talked) to other men?	JEALOUS	1	2	8
b) He frequently (accuses/accused) you of being unfaithful?	ACCUSES	1	2	8
c) He (does/did) not permit you to meet your female friends?	NOT MEET FRIENDS . . .	1	2	8
d) He (tries/tried) to limit your contact with your family?	NO FAMILY	1	2	8
e) He (insists/insisted) on knowing where you (are/were) at all times?	WHERE YOU ARE	1	2	8

1104 Now I need to ask some more questions about your relationship with your (last) (husband/partner).

A Did your (last) (husband/partner) ever:	EVER	B How often did this happen during the last 12 months: often, only sometimes, or not at all? OFTEN	SOME-TIMES	NOT IN LAST 12 MONTHS
a) say or do something to humiliate you in front of others?	YES 1 →	1	2	3
	NO 2			
b) threaten to hurt or harm you or someone you care about?	YES 1 →	1	2	3
	NO 2			
c) insult you or make you feel bad about yourself?	YES 1 →	1	2	3
	NO 2			

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1105	A Did your (last) (husband/partner) ever do any of the following things to you:	B How often did this happen during the last 12 months: often, only sometimes, or not at all?	

		EVER		OFTEN	SOME-TIMES	NOT IN LAST 12 MONTHS
a)	push you, shake you, or throw something at you?	YES	1 →	1	2	3
		NO	2 ↓			
b)	slap you?	YES	1 →	1	2	3
		NO	2 ↓			
c)	twist your arm or pull your hair?	YES	1 →	1	2	3
		NO	2 ↓			
d)	punch you with his fist or with something that could hurt you?	YES	1 →	1	2	3
		NO	2 ↓			
e)	kick you, drag you, or beat you up?	YES	1 →	1	2	3
		NO	2 ↓			
f)	try to choke you or burn you on purpose?	YES	1 →	1	2	3
		NO	2 ↓			
g)	threaten or attack you with a knife, gun, or other weapon?	YES	1 →	1	2	3
		NO	2 ↓			
h)	physically force you to have sexual intercourse with him when you did not want to?	YES	1 →	1	2	3
		NO	2 ↓			
i)	physically force you to perform any other sexual acts you did not want to?	YES	1 →	1	2	3
		NO	2 ↓			
j)	force you with threats or in any other way to perform sexual acts you did not want to?	YES	1 →	1	2	3
		NO	2 ↓			

1106	CHECK 1105A (a-j): AT LEAST ONE 'YES' ☐ ↓ NOT A SINGLE 'YES' ☐ →		1109
1107	How long after you first (got married/started living together) with your (last) (husband/partner) did (this/any of these things) first happen? IF LESS THAN ONE YEAR, RECORD '00'.	NUMBER OF YEARS . . . . . ☐☐ BEFORE MARRIAGE/BEFORE LIVING TOGETHER 95	
1108	Did the following ever happen as a result of what your (last) (husband/partner) did to you:		
	a) You had cuts, bruises, or aches?	YES . . . . . 1 NO 2	
	b) You had eye injuries, sprains, dislocations, or burns?	YES . . . . . 1 NO 2	
	c) You had deep wounds, broken bones, broken teeth, or any other serious injury?	YES . . . . . 1 NO 2	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1109	Have you ever hit, slapped, kicked, or done anything else to physically hurt your (last) (husband/partner) at times when he was not already beating or physically hurting you?	YES . . . . . 1 NO 2	→ 1111
1110	In the last 12 months, how often have you done this to your (last) (husband/partner): often, only sometimes, or not at all?	OFTEN . . . . . 1 SOMETIMES . . . . . 2 NOT AT ALL 3	
1111	Does (did) your (last) (husband/partner) drink alcohol?	YES . . . . . 1 NO 2	→ 1113
1112	How often does (did) he get drunk: often, only sometimes, or never?	OFTEN . . . . . 1 SOMETIMES . . . . . 2 NEVER 3	
1113	Are (were) you afraid of your (last) (husband/partner): most of the time, sometimes, or never?	MOST OF THE TIME AFRAID . . . . . 1 SOMETIMES AFRAID . . . . . 2 NEVER AFRAID 3	
1114	CHECK 609: MARRIED MORE THAN ONCE ☐ ↓ MARRIED ONLY ONCE ☐ →		1116
1115	A So far we have been talking about the behavior of your (current/last) (husband/partner). Now I want to ask you about the behavior of any previous (husband/partner).	B How long ago did this last happen?	

	EVER	0 - 11 MONTHS AGO	12+ MONTHS AGO	DON'T REMEMBER
a) Did any previous (husband/partner) ever hit, slap, kick, or do anything else to hurt you physically?	YES 1 →	1	2	3
	NO 2 ↓			
b) Did any previous (husband/partner) physically force you to have intercourse or perform any other sexual acts against your will?	YES 1 →	1	2	3
	NO 2			

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1116	CHECK 601 AND 602: EVER MARRIED/EVER LIVED WITH A MAN → From the time you were 15 years old has anyone other than (your/any) (husband/partner) hit you, slapped you, kicked you, or done anything else to hurt you physically? NEVER MARRIED/NEVER LIVED WITH A MAN → From the time you were 15 years old has anyone hit you, slapped you, kicked you, or done anything else to hurt you physically?	YES . . . . . 1 NO . . . . . 2 REFUSED TO ANSWER/ NO ANSWER 3	→ 1119
1117	Who has hurt you in this way? Anyone else? RECORD ALL MENTIONED.	MOTHER/STEP-MOTHER . . . . . A FATHER/STEP-FATHER . . . . . B SISTER/BROTHER . . . . . C DAUGHTER/SON . . . . . D OTHER RELATIVE . . . . . E CURRENT BOYFRIEND . . . . . F FORMER BOYFRIEND . . . . . G MOTHER-IN-LAW . . . . . H FATHER-IN-LAW . . . . . I OTHER IN-LAW . . . . . J TEACHER . . . . . K EMPLOYER/SOMEONE AT WORK . . . . . L POLICE/SOLDIER . . . . . M OTHER _____ X (SPECIFY)	
1118	In the last 12 months, how often has (this person/have these persons) physically hurt you: often, only sometimes, or not at all?	OFTEN . . . . . 1 SOMETIMES . . . . . 2 NOT AT ALL 3	
1119	CHECK 201, 226, AND 209D: EVER BEEN PREGNANT (YES ON 201 OR 226 OR 209D) → NEVER BEEN PREGNANT →		1122
1120	Has any one ever hit, slapped, kicked, or done anything else to hurt you physically while you were pregnant?	YES . . . . . 1 NO 2	→ 1122
1121	Who has done any of these things to physically hurt you while you were pregnant? Anyone else? RECORD ALL MENTIONED.	CURRENT HUSBAND/PARTNER . . . . . A MOTHER/STEP-MOTHER . . . . . B FATHER/STEP-FATHER . . . . . C SISTER/BROTHER . . . . . D DAUGHTER/SON . . . . . E OTHER RELATIVE . . . . . F FORMER HUSBAND/PARTNER . . . . . G CURRENT BOYFRIEND . . . . . H FORMER BOYFRIEND . . . . . I MOTHER-IN-LAW . . . . . J FATHER-IN-LAW . . . . . K OTHER IN-LAW . . . . . L TEACHER . . . . . M EMPLOYER/SOMEONE AT WORK . . . . . N POLICE/SOLDIER . . . . . O OTHER _____ X (SPECIFY)	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1122	CHECK 601 AND 602: EVER MARRIED/EVER LIVED WITH A MAN ☐ → Now I want to ask you about things that may have been done to you by someone other than (your/any) (husband/partner). NEVER MARRIED/NEVER LIVED WITH A MAN ☐ → At any time in your life, as a child or as an adult, has anyone ever forced you in any way to have sexual intercourse or perform any other sexual acts when you did not want to? At any time in your life, as a child or as an adult, has anyone ever forced you in any way to have sexual intercourse or perform any other sexual acts when you did not want to?	YES . . . . . 1 NO . . . . . 2 REFUSED TO ANSWER/ NO ANSWER 3	→ 1126
1123	How old were you the first first time you were forced to have sexual intercourse or perform any other sexual acts?	AGE IN COMPLETED YEARS ☐☐ DON'T KNOW 98	
1124	Who was the person who was forcing you at that time?	CURRENT HUSBAND/PARTNER . . . . . 01 FORMER HUSBAND/PARTNER . . . . . 02 CURRENT/FORMER BOYFRIEND . . . . . 03 FATHER/STEP-FATHER . . . . . 04 BROTHER/STEP-BROTHER . . . . . 05 OTHER RELATIVE . . . . . 06 IN-LAW . . . . . 07 OWN FRIEND/ACQUAINTANCE . . . . . 08 FAMILY FRIEND . . . . . 09 TEACHER . . . . . 10 EMPLOYER/SOMEONE AT WORK . . . . . 11 POLICE/SOLDIER . . . . . 12 PRIEST/RELIGIOUS LEADER . . . . . 13 STRANGER . . . . . 14 OTHER _____ 96 (SPECIFY)	
1125	CHECK 601 AND 602: EVER MARRIED/EVER LIVED WITH A MAN ☐ → In the last 12 months, has anyone other than (your/any) (husband/partner) physically forced you to have sexual intercourse when you did not want to? NEVER MARRIED/NEVER LIVED WITH A MAN ☐ → In the last 12 months has anyone physically forced you to have sexual intercourse when you did not want to?	YES . . . . . 1 NO 2	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1126	CHECK 1105A (a-j), 1115, 1116, 1120, 1122, AND 1125: AT LEAST ONE 'YES' ☐ ↓ NOT A SINGLE 'YES' ☐ →		1130
1127	Thinking about what you yourself have experienced among the different things we have been talking about, have you ever tried to seek help?	YES . . . . . 1 NO 2	→ 1129
1128	From whom have you sought help? Anyone else? RECORD ALL MENTIONED.	OWN FAMILY . . . . . A HUSBAND'S/PARTNER'S FAMILY . . . . . B CURRENT/FORMER HUSBAND/PARTNER . . . . . C CURRENT/FORMER BOYFRIEND . . . . . D FRIEND . . . . . E NEIGHBOR . . . . . F RELIGIOUS LEADER . . . . . G DOCTOR/MEDICAL PERSONNEL . . . . . H POLICE . . . . . I LAWYER . . . . . J SOCIAL SERVICE ORGANIZATION . . . . . K OTHER _____ X (SPECIFY)	→ 1130
1129	Have you ever told any one about this?	YES . . . . . 1 NO 2	
1130	As far as you know, did your father ever beat your mother?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	

THANK THE RESPONDENT FOR HER COOPERATION AND REASSURE HER ABOUT THE CONFIDENTIALITY OF HER ANSWERS. FILL OUT THE QUESTIONS BELOW WITH REFERENCE TO THE DOMESTIC VIOLENCE MODULE ONLY.

			YES ONCE	YES, MORE THAN ONCE	NO	
1131	DID YOU HAVE TO INTERRUPT THE INTERVIEW BECAUSE SOME ADULT WAS TRYING TO LISTEN, OR CAME INTO THE ROOM, OR INTERFERED IN ANY OTHER WAY?	HUSBAND	1	2	3	
		OTHER MALE ADULT . . .	1	2	3	
		FEMALE ADULT	1	2	3	
1132	INTERVIEWER'S COMMENTS / EXPLANATION FOR NOT COMPLETING THE DOMESTIC VIOLENCE MODULE _____ _____ _____					

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 FEMALE CONDOM
- 9 DIAPHRAGM
- J FOAM OR JELLY
- K LACTATIONAL AMENORRHEA METHOD
- L RHYTHM/CALENDAR METHOD
- M WITHDRAWAL
- X OTHER MODERN METHOD
- Y OTHER TRADITIONAL METHOD

COLUMN 2: DISCONTINUATION OF CONTRACEPTIVE USE

- 0 INFREQUENT SEX/HUSBAND AWAY
- 1 BECAME PREGNANT WHILE USING
- 2 WANTED TO BECOME PREGNANT
- 3 HUSBAND/PARTNER DISAPPROVED
- 4 WANTED MORE EFFECTIVE METHOD
- 5 SIDE EFFECTS/HEALTH CONCERNS
- 6 LACK OF ACCESS/TOO FAR
- 7 COSTS TOO MUCH
- 8 INCONVENIENT TO USE
- F UP TO GOD/FATALISTIC
- A DIFFICULT TO GET PREGNANT/MENOPAUSAL
- D MARITAL DISSOLUTION/SEPARATION
- X OTHER _____ (SPECIFY)
- Z DON'T KNOW

Note: In case of multiple births, that ended in live and non-live births record live births to Calendar

				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
2	05	MAY	08			2
*	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
1	06	JUN	19			1
1	05	MAY	20			1
*	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
1	06	JUN	31			1
0	05	MAY	32			0
*	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
9	05	MAY	44			9
*	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
8	05	MAY	56			8
*	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
7	05	MAY	68			7
*	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.

INFORMATION ABOUT A HEALTH FACILITY WHERE THE IMMUNIZATION RECORDS (MOH FORMS 063 AND 112) ARE KEPT

1300	CHECK 503, 214 AND 218: HAS LIVING CHILDREN BORN IN JANUARY 2007 OR LATER YES ☐ ↓ NO ☐ → 1309			
1301	CHECK 502: FOR LIVING CHILDREN BORN IN JANUARY 2007 OR LATER	LAST BIRTH PREGNANCY LINE NUMBER FROM 212 ☐☐	NEXT-TO-LAST BIRTH PREGNANCY LINE NUMBER FROM 212 ☐☐	SECOND-FROM-LAST BIRTH PREGNANCY LINE NUMBER FROM 212 ☐☐
1302	CHECK 503: FOR LIVING CHILDREN BORN IN JANUARY 2007 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)				
1303	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
1304	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
1305	RECORD CHILD'S DATE OF BIRTH FROM 214	DAY ☐☐ MONTH ☐☐ YR ☐☐☐☐	DAY ☐☐ MONTH ☐☐ YR ☐☐☐☐	DAY ☐☐ MONTH ☐☐ YR ☐☐☐☐
1306	CHILD HOME ADDRESS			
1307	NAME AND ADDRESS OF MEDICAL FACILITY WHERE CHILD'S IMMUNIZATION RECORDS (FORMS # 063 OR #112) ARE KEPT			
1307A	NAME OF THE DOCTOR	NAME	NAME	NAME
1307B	DISTRICT NUMBER	☐☐	☐☐	☐☐
1308		GO BACK TO 1301 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 1309.	GO BACK TO 1301 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 1309.	GO TO 1301 IN NEXT-TO-LAST COLUMN OF NEW QUESTIONNAIRE; OR, IF NO MORE BIRTHS, GO TO 1309.
1309	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 14.

SECTION 14. VISIT TO A HEALTH FACILITY TO COLLECT INFORMATION ABOUT IMMUNIZATION (MOH FORMS 063 or 112).

1401	ENTER IN THE TABLE LINE NUMBER, NAME AND INFORMATION ABOUT THE LIVING CHILD, BORN IN 2007 OR LATER, EXACTLY AS IN QUES.1301 AND 1303. (IF 3 OR MORE BIRTHS, USE THE LAST 2 COLUMNS OF ADDITIONAL QUESTIONNAIRES).			
1402	CHECK 1301 AND 1303:	LAST BIRTH PREGNANCY LINE NUMBER FROM 212 . [ ][ ] FULL NAME OF THE CHILD	NEXT-TO-LAST-BIRTH PREGNANCY LINE NUMBER FROM 212 . [ ][ ] FULL NAME OF THE CHILD	SECOND-FROM-LAST BIRTH PREGNANCY LINE NUMBER FROM 212 . [ ][ ] FULL NAME OF THE CHILD
1403	CHECK 1307 ANY INFORMATION ABOUT MEDICAL INSTITUTION KEEPING IMMUNIZATION DATA?	CHECK 1307 YES . . . . . 1 NO . . . . . 2 NEXT CHILD	CHECK 1307 YES . . . . . 1 NO . . . . . 2 NEXT CHILD	CHECK 1307 YES . . . . . 1 NO . . . . . 2 NEXT CHILD
1404	WAS A HEALTH FACILITY VISITED?	YES . . . . . 1 NO . . . . . 2 NEXT CHILD	YES . . . . . 1 NO . . . . . 2 NEXT CHILD	YES . . . . . 1 NO . . . . . 2 NEXT CHILD
1405	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
1406	(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 DAY	LAST BIRTH MONTH	LAST BIRTH YEAR	NEXT-TO-LAST-BIRTH DAY	NEXT-TO-LAST-BIRTH MONTH	NEXT-TO-LAST-BIRTH YEAR	SECOND-FROM-LAST BIRTH DAY	SECOND-FROM-LAST BIRTH MONTH	SECOND-FROM-LAST BIRTH YEAR
BCG				BCG			BCG		
POLIO 0 (POLIO GIVEN AT BIRTH)				P0			P0		
POLIO 1				P1			P1		
POLIO 2				P2			P2		
POLIO 3				P3			P3		
POLIO 4				P4			P4		
DPT 1				D1			D1		
DPT 2				D2			D2		
DPT 3				D3			D3		
DPT 4				D4			D4		
HEPATITIS-1 (GIVEN SOON AFTER BIRTH)				H1			H1		
HEPATITIS-2				H2			H2		
HEPATITIS-3				H3			H3		
PENTA-1				PENTA 1			PEN TA1		
PENTA-2				PENTA 2			PEN TA2		
PENTA-3				PENTA 3			PEN TA3		
MEASLES or MR				MEASL ES or			MEA SLE		
VITAMIN A (MOST RECENT)				VITAMI N A			VITA MIN		

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: _____