## Maldives



## Demographic and Health Survey

## Republic of Maldives <br> 

# Maldives <br> Demographic and Health Survey 2009 

Ministry of Health and Family Malé, Maldives

ICF Macro<br>Calverton, Maryland, USA

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MALDIVES


### 1.1 Geography, History, and Economy

### 1.1.1 Geography

The Republic of Maldives is an archipelago in the Indian Ocean located 600 km south of India. Its islands extend from latitude $0^{\circ} 42^{\prime} 24^{\prime \prime} \mathrm{S}$ of the equator to $7^{\circ} 6^{\prime} 35$ " N . It consists of 1,192 small islands that form a chain, about 820 km long and 120 km wide, within an area of $90,000 \mathrm{sq} \mathrm{km}$. Only 196 of the islands are officially inhabited, although another 84 islands are used as resorts, and 14 islands serve an industrial purpose. The capital of Malé, with an area of about 2 sq km , accommodates one-third of the country's population of about 300,000 . The total land area is estimated to be 300 sq km, of which only 10 percent are suitable for agriculture. For administrative purposes, the 26 natural atolls of the Maldives are classified into 20 groups, each of which is referred to as an administrative atoll.

The islands are low lying, with an average elevation of 1.6 meters above main sea level. Only a few islands have a land area in excess of one sq km. The climate is tropical: warm and humid, with two pronounced monsoon seasons. Daily temperatures vary little throughout the year. The average maximum temperature is $31^{\circ}$ Celsius, and the average minimum temperature is $26^{\circ}$ Celsius. Relative humidity ranges from 73 percent to 85 percent. The average annual rainfall for the period 1996 to 2000 was $2,140 \mathrm{~mm}$. Monthly variations in rainfall are significant, ranging from 22 mm in March to 258 mm in September (Ministry of Planning and National Development, 2008).

### 1.1.2 History

The Republic of Maldives has always been a sovereign and independent state except for brief periods of the $18^{\text {th }}, 19^{\text {th, }}$, and $20^{\text {th }}$ centuries. The people of Maldives embraced Islam in the 12th century, and Maldives today remains solely a Muslim state. The Maldivians are homogenous in nature and traditions and converse in a common language called Dhivehi. During the 18th century, the Maldives became a protectorate of the Dutch rulers of Ceylon and later of the British who took control of Ceylon in 1796. In 1887, its status was formalized as an internally self-governing British protectorate. The first democratic constitution in 1932 proclaimed the sultanate, or office of the sultan, an elected position. The country was ruled by a sultan until 1953, when the Maldives became a republic within the Commonwealth, and Mohamed Amin served as its first president. The sultanate was restored after a short period, and the country gained full independence as a sultanate outside of the Commonwealth in 1965. In 1968, its status as a republic was reinstated after a referendum named Ibrahim Nasir to be president. In 1978, Maumoon Abdul Gayyoom became president and continued to serve for 30 years, after being elected for six consecutive terms. The republic rejoined the Commonwealth in 1982.

In 2005, an important step toward democracy was taken when the parliament voted unanimously for a multiparty political system. In August 2007, voters opted for a presidential system of government. In August 2008, President Gayoom ratified the new constitution that paved the way for the first multiparty presidential election. In October 2008, President Gayoom was defeated by opposition leader Mohamed Nasheed. President Nasheed assumed office in November 2008 (www.themaldives.com).

### 1.1.3 Economy

As an archipelago of many islands that are home to fewer than 500 inhabitants, Maldives has unique development problems. The population is extremely dispersed and fragmented. In addition, the survival of the country's low-lying islands is threatened by the constant rise in sea level due to global warming.

Over the past decade, the gross domestic product (GDP) grew at an annual rate of between 6 and 8 percent, driven by investment in tourism and low levels of inflation. In 2008, tourism accounted for 27 percent of GDP and about 29 percent of government revenue directly. Growth of the tourism sector also opens job opportunities which in 2008 accounted for approximately 24,000 jobs. To boost economic development to the entire country the Government expanded the tourism development, which used to be concentrated in the central region within the easy reach of the Malé International Airport, to other regions of the country. Along with tourism, the fishing industry generates revenues accounting for 6 to 7 percent of GDP and employment from the fishery sector represents 10 to 15 percent of the workforce (The Strategic Action Plan, 2009-2013).

Significant progress has also been achieved in human and social development over the past two decades. Credible macroeconomic and public investment policies as well as a largely favourable external environment have facilitated this progress, lifting Maldives from its status as one of the 20 poorest countries in the 1970s to one that shares characteristics of a lower middle-income country of today.

The small size of its economy, which largely depends on tourism and fisheries, makes the Maldives vulnerable to external shocks, such as the economic recession following the tsunami of December 2004. In spite of the relatively low death toll after the tsunami, the country's economy was badly shaken. According to one government assessment, the tsunami set back development by about 20 years. Financial damage was estimated at 62 percent of GDP, or $\$ 470$ million, aggravated by a non-tsunami budget deficit of approximately $\$ 80$ million in 2005 resulting from a significant fall in revenue from tourism.

The country lacks land-based natural and mineral resources. As a result, virtually all economic production depends on imports, creating heavy dependence on foreign exchange earnings. Intensive agricultural production is limited because of the poor quality of the soil, which is porous and deficient in nitrogen and potassium, and the limited availability of fresh water. All staple foodstuffs, basic necessities, and items for the tourism industry are imported (Ministry of Economic Development, 2010)

### 1.2 Population

Little information is available on the ancient people and their way of life. Evidence suggests that the Maldives has been populated and thriving as early as the 4th century BC. It is argued that the earliest settlers migrated from Arabia, eastern Africa, and the Indian subcontinent among other places. Today, the Maldivians are a mixed race, but no ethnic identities exist. The population is homogeneous, follows the same religion (Islam), and speaks one language (Dhivehi). A large expatriate workforce is found in the country, generally unskilled and working in the area of construction and other unskilled jobs. Expatriates in professional jobs are found in the educational sector and the health sector. All expatriates work on a short-term contract basis, and when the contract expires, they must leave the country.

The first population data, recorded in 1911, showed a population of only 72,237. It took about 60 years for the population to almost double (Census 2006 Analytical Report). In the 1950s, the annual population growth is 1 percent or less until 1958, when the rate was 5.28 percent. Thereafter, population growth slowed and underwent mild fluctuations. Between 1960 and 1980, the population
grew an average of 3 percent annually. Significant declines in mortality during the 1980s and subsequent declines in fertility brought down the population growth rate. Although subsequent censuses recorded an increase in size of the population, the annual population growth rate decreased significantly, from 3.43 percent in 1985-1999 to 1.69 percent in 2000-2006. Between the 2000 and 2006 inter-census years, a 10 percent increase was seen in the total population. The 2006 population census puts the total population at 298,968, of which about 49 percent are women.

The Maldives has recorded significant achievement in human development. The infant mortality rate declined from 63 deaths in 1986 to 11 deaths per 1,000 births in 2009 (Vital Registration data, 2009). The crude death rate declined from 17 deaths per 1,000 population in 1971 to 4 deaths per 1000 population. The crude birth rate, which was 49 births per 1,000 population in 1985, declined to 23 births per 1,000 population in 1996. In 1995, the average life expectancy at birth was 70.6 years, about 20 years higher than the life expectancy recorded in 1980. In 2009, the life expectancy at birth was 73 years for males and 74 years for females (Statistical Year Book of Maldives, 2009).

| Table 1.1 |  |  |  |
| :--- | ---: | ---: | ---: |
| Basic demographic indicators |  |  |  |
| Demographic indicators from selected sources |  |  |  |
| Indicators | 1995 | 2000 | 2006 |
| Population | 244,814 | 270,101 | 298,968 |
| Sex ratio | 104 | 103 | 103 |
| Intercensal growth rate (percent) | 2.73 | 1.96 | 1.69 |
| Percent urban | na | $27 \%$ | $35 \%$ |
| Life expectancy at birth (years) |  |  |  |
| Male | 69.9 | 70.1 | 72.0 |
| Female | 71.6 | 70.1 | 73.2 |
| Source: http://www.planning.gov.mv |  |  |  |
| na $=$ Not available |  |  |  |

### 1.3 Health Services and Health Care Challenges

The unique geographical nature of the country poses a challenge to service provision. Though the size of the population is comparatively small, it is geographically dispersed. Such isolated island communities require many facilities to provide service at a variety of locations.

Health services in the Maldives are currently organized by a four tier referral system comprising of island, atoll, regional and central level services. The Indira Gandhi Memorial Hospital in Malé serves as a tertiary-level hospital at the central level of the referral system. At the regional level, health care is delivered by regional hospitals in six strategic locations across the island archipelago. Each of the six regional hospitals serves as the referral centre for 2 to 4 atolls, providing services in a number of specialty areas of medical care. At the atoll level, hospitals are found in 13 of the atolls in which a regional hospital is not located. Atoll hospitals were initiated in the early 2000s, with the primary objective being to bring emergency obstetric care closer to the community. Atoll health centres provide basic medical care, including obstetric services. The lowest level of the system consists of the island-level primary health care centres, health posts, and family health units. Currently the country has 3 island hospitals (including one private hospital), 6 regional hospitals, 13 atoll hospitals, and 176 health centres (including two in Malé).

Medical services have expanded rapidly in the country during the last two decades. In 2005 the doctor to population ratio was 1:775, and the nurse to population ratio was $1: 302$. The nurse-todoctor ratio was about $3: 1$. Medical services are provided to a large extent by an expatriate workforce, both in the public and the private sectors. The high turnover of professionals and strict recruitment process are among problems faced by the country in its effort to provide health care.

The private sector in health care in the Maldives, although small, is vigorous and popular. There is one private tertiary facility located in Malé. A total of 62 clinics are distributed throughout the country, of which 73 percent are located in Malé. Pharmacy services are predominantly provided by the private sector, except for the pharmacy operated by the State Trading Organization (STO). Owing to the remote and small population in many islands, and the need to ensure access to drugs, the government supports committees of women or youth and NGOs to establish community pharmacies.

The new government, which resumed office in November 2008, re-established the government's health care mission- 'to provide affordable, accessible and quality health care for all through establishing internationally accepted standards of health care, by improving the quality of health services; establishing better referral system and high quality regional centres; assuring health care training opportunities to Maldivians; reducing the costs of health care; setting up an inclusive social health insurance system; and encouraging private sector participation in health' (Strategic Action Plan, 2009-2013).

Under the government's health care reform policies of decentralization, corporatization and privatization, the directive is to deliver health care services through Public Private Partnerships managed by corporate bodies at strategic local levels. Along with corporatization and privatization of delivery of health care, the government gives emphasis for revitalization of primary health care focusing on preventive health by empowering communities to make decisions related to healthy lifestyles and health services at island and atoll levels through political and administrative decentralization and supporting training of community based public health professionals.

## Health Care Challenges

Notable achievements have been made in controlling many communicable diseases. However, acute respiratory infections and some vector-borne diseases such as dengue, chikungunya, scrub typhus, toxoplasmosis and leptospirosis have emerged due to environment and climate changes and have become endemic in various parts of the country. Although the prevalence of HIV/AIDS is low, certain risk behaviours such as sex work and intravenous drug use, which are seen to be increasing, pose increased risk of contracting HIV in these at-risk populations. Lifestyle changes associated with socio-economic development and chronic non-communicable diseases have emerged as the main cause of morbidity and mortality. Thalassaemia with an estimated carrier prevalence of 20 percent and increasing number of renal diseases are other chronic disease concerns. The demography in the Maldives suggests that adolescent sexual and reproductive health issues for the young, as well as health care for the growing number of elderly citizens need to be addressed. In addition, mental health and occupational health are MDG plus issues that the health sector has identified.

### 1.4 Objectives of the Survey

The 2009 MDHS was designed to provide data to monitor the population and health situation in Maldives. Specifically, the MDHS collected information on fertility levels and preferences, marriage, sexual activity, knowledge and use of family planning methods, breastfeeding practices, nutrition status of women and young children, childhood mortality, maternal and child health, and awareness and behaviour regarding AIDS and other sexually transmitted infections. At the household level, the survey collected information on domains of physical disability among those age 5 and older, developmental disability among young children, support for early learning, children at work, the impact of the tsunami of 2004, health expenditures, and care and support for physical activity of adults age 65 and older. At the individual level, the survey assessed additional features of blood pressure, diabetes, heart attack, and stroke.

### 1.5 Organization of the Survey

Maldives' first Demographic and Health Survey (MDHS) was carried out by the Ministry of Health and Family (MOHF). The survey was funded by the government of Maldives, UNFPA, the United Nations Children's Fund (UNICEF), and the World Health Organisation (WHO). Technical assistance was provided by ICF Macro.

Conducting a demographic and health survey in the Maldives has been a long-felt need for internationally comparable information on the demographic and health situation of the Maldivian population. The survey also was intended to provide information for decision-makers to plan, monitor, and evaluate population, health, and nutrition programs. Because it was the first survey of its kind in the Maldives, external technical assistance was sought. The local planners at the Ministry of Health approached the MEASURE DHS program for technical assistance.

Technical assistance from Macro International was received in April 2007 to develop the design of the survey and to identify (1) additional specific data needs; (2) primary design issues; and (3) development of key survey documents, including a draft work plan and the Household and Individual Questionnaires. A steering committee, representing stakeholder agencies, including the UN organizations, was formed to assist mainly in identifying data needs and to provide advice and facilitate the design process.

A second technical support visit was made by Macro staff in June-July 2007, resulting in the development of the sample plan, selection of the sample points, and preparation of household listing documents and household selection materials. A subsequent visit by Macro staff in September 2007 allowed finalization of the MDHS plans. During the visit, the work plan and budget for the MDHS; the household and individual questionnaires; the supervisor's and interviewer's training manuals; and a training agenda for the pre-test training were finalized.

### 1.6 SAMPLE DESIGN

The population of the republic of Maldives is distributed on 195 inhabited islands among a total of 202 inhabited islands; seven islands have no residents (MPND, 2008). Each inhabited island is an administrative unit with an island office that handles island-based affairs. The islands are regrouped to form atolls, a higher-level administrative unit with an atoll office and an atoll chief. There are 20 atolls in total in the republic. The capital city of Malé and the two surrounding islands, Villingili and Hulhumale, form a special atoll. The 21 atolls are regrouped to form six geographic regions according to their location. Malé atoll alone forms a region. In Maldives, there is no urbanrural designation for residential households within an atoll. All residential households in the 20 atolls outside of Malé are considered rural; all residential households in Malé are considered urban.

The 2009 Maldives DHS is based on a probability sample of 7,515 households. The sample was designed to produce representative data on households, women, and children for the country as a whole, for urban and rural areas, for the six geographical regions, and for each of the atolls of the country. The male and youth surveys were designed to produce representative results for the country as a whole, for urban and rural areas, and for each of the six geographical regions.

The 2006 Maldives Population and Housing Census provided the sampling frame for the 2009 MDHS. The MDHS sample was a stratified multistage sample selected in two stages from the census frame. In the first stage, 270 census blocks were selected using a systematic selection, with probability proportional to the number of residential households residing in the block. Stratification was achieved by treating each of the 21 atolls as a sampling stratum. Samples were selected independently in each stratum according to an appropriate allocation.

In the second stage of sampling, residential households were selected in each of the selected census blocks. Household selection involved an equal probability systematic selection of a fixed number of households: 28 households per block. Households were selected from the household listings created in the census, but to allow all households an opportunity to be included in the sample, listings were sent to island offices for updating prior to making household selections for the MDHS.

All ever-married women age 15-49 in the total sample of MDHS households, who were either usual residents of the household or visitors present in the household on the night before the survey, were eligible to be interviewed. In half of the households selected for the ever-married sample of women, all ever-married men age 15-64, who were either usual residents of the household or visitors present in the household on the night before the survey, were eligible to be interviewed. In the same half of households selected for the ever-married sample of men, never-married women and nevermarried men age 15-24, who were either usual residents of the household or visitors present in the household on the night before the survey, were also eligible to be interviewed. The MDHS was for the most part limited to Maldivian citizens; non-Maldivians were included in the survey only if they were the spouse, son, or daughter of a Maldivian.

### 1.7 Questionnaires

Four questionnaires were used for the 2009 MDHS: the Household Questionnaire, the Women's Questionnaire, the Men's Questionnaire, and the Youth Questionnaire. The contents of the Household, Women's, and Men's questionnaires were based on model questionnaires developed by the MEASURE DHS programme. The DHS model questionnaires were modified to reflect concerns pertinent to the Maldives in the areas of population, women and children's health, family planning, and others. Questionnaires were translated from English into Dhivehi.

The Household Questionnaire was used to list all the usual members and visitors in the selected households and to identify women and men who were eligible for the individual interview. Basic information was collected on the characteristics of each person listed, including their age, sex, education, and relationship to the head of the household. The Household Questionnaire was also designed to collect information on characteristics of the household's dwelling unit, such as the source of water, type of toilet facilities, water shortage, materials used for the floor and roof of the house, and ownership of various durable goods. In addition, height and weight measurements of ever-married women age 15-49 and children age 6-59 months were recorded in the Household Questionnaire to assess their nutritional status.

Topics added to the Household Questionnaire to reflect issues relevant in the Maldives include physical disability among those age 5 and older, developmental disability among young children, support for early learning, children at work, the tsunami of 2004, health expenditures, and care and support for physical activities of adults age 65 and older.

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

- Background characteristics (education, media exposure, etc.)
- Reproductive history
- Knowledge and use of family planning methods
- Fertility preferences
- Antenatal and delivery care
- Breastfeeding and infant feeding practices
- Vaccinations and childhood illnesses
- Marriage and sexual activity
- Woman's work and husband's background characteristics
- Infant and child feeding practices
- Childhood mortality
- Awareness and behaviour about AIDS and other sexually transmitted infections (STIs)
- Knowledge of blood pressure, diabetes, heart attack, and stroke

The Men's Questionnaire was administered to all ever-married men age 15-64 living in every second household in the MDHS sample. The Men's Questionnaire collected much of the same information as the Women's Questionnaire, but it was shorter because it did not contain questions on reproduction, maternal and child health, and nutrition.

The Youth Questionnaire was administered to all never-married women and men age 15-24 living in every second household in the MDHS sample (the same one-half selected for the Men's survey). The Youth Questionnaire focuses on priorities of the MOHF that pertain to young adults: reproductive health, knowledge and attitudes about HIV/AIDS, sexual activity, and tobacco, alcohol, and drug use.

### 1.8 Pre-test

A pre-test was conducted in April-May 2008. The training team consisted of two consultants from ICF Macro and eight staff from the MOHF. The pre-test provided the opportunity to review questionnaire content and language, logistics, equipment needs, and general protocols for the survey. Lessons learned from the pre-test were used to finalize the survey instruments and logistical arrangements. The pre-test also served as training for the upcoming main survey. Pre-test fieldwork for the MDHS took place in Malé and Thinadhoo Islands.

### 1.9 TRAINING

The first training course for field staff was conducted for four weeks in December 2008. The training team consisted of one consultant from ICF Macro and staff from the MOHF. A total of 58 trainees participated. Trainees were recruited on the basis of their education, prior experience as interviewers or supervisors in other surveys, interest and ability to travel to other islands, other related experience, and performance during the selection interview. The majority of trainees were graduates of ' $O$ ' level education (completed grade 10). Other staff members are community health workers who were recruited as supervisors. Two additional trainings of three weeks each were conducted in response to field staff dropouts occurring during data collection. An additional 21 recruits were trained in February 2009, and another 20 recruits were trained in April 2009. Each training was held for three weeks. In all, a total of 91 persons were trained for the survey.

All participants were trained on interviewing techniques and the contents of the MDHS questionnaires. Participants were also trained to conduct anthropometric measurements. The training was conducted following the standard DHS training procedures, including class presentations, mock interviews, written tests, and field practice.

At the start of the field work, six field teams were formed. The team of Male region started data collection in the first week of January, and the atoll teams started fieldwork during the third week of January.

### 1.10 Fieldwork

Based on the experience from previous surveys, fieldwork was planned to be completed in four months. However, the 2009 MDHS is the first survey to cover a large number of islands. Furthermore, the high turnover of field staff lengthened the duration of fieldwork because two training sessions had to be conducted to replace staff dropouts. The main reason for the dropouts was the start of the school year when many of the interviewers returned to school.

Fieldwork started with all six teams deployed in Malé on January 8, 2009, with the intent of familiarizing team members with fieldwork procedures and practices. Because of administrative constraints, other teams did not start data collection until January 21, 2009. Teams in atolls outside Malé completed fieldwork in 5 to 6 months. The team in North Central region was the first to complete fieldwork on June 7, 2009. In Malé, fieldwork was slower and had to be suspended for one month to observe fasting (August 22-September 19, 2009). All teams underwent a change of team members. In all, data collection took place over a period of 10 months, from January 2009 to October 2009. All interviews were conducted in Dhivehi.

Field teams usually consisted of 8 members: 4 female interviewers, 2 male interviewers, 1 field editor, and 1 team supervisor. Team composition varied somewhat over time, but each team maintained having one supervisor, one field editor, and at least 2 female interviewers and 1 male interviewer at all times. Fieldwork launched with six teams being disbursed to six regions of the survey. Over time, one team was dismantled and dispersed among other teams that suffered staffing shortfalls.

To ensure data quality in fieldwork, the following steps were followed:

1. Check the accuracy and quality of household listing. On arrival at the cluster, the field team updated the household list. This was done by visiting all households and checking the residential status of the households in the list, removing nonresidential ones, and adding new households to the list. The final revised number on the household list was then sent to the central office, which selected the households for interviews.
2. Observe interviews. The team supervisors observed some interviews to see that the right procedures for interviewing had been followed by the interviewers.
3. Edit all questionnaires. The team field editor checked completed questionnaires for completeness, legibility, and consistency of editing. Mistakes were corrected and, if necessary, the interviewer might have had to revisit the household to clarify or obtain the correct information from the respondent. The team supervisor also reviewed selected questionnaires. When completed questionnaires were received at the central office, all questionnaires were checked by office editors who also recorded the occupation codes.
4. Re-interview households. During the team's visit to a cluster, the team supervisor or the field editor conducted a re-interview in selected households using parts of the Household Questionnaire.
5. Field-check tables. The performance levels of the field teams, including interview response rates, was monitored using field check tables produced by the data processing supervisor.
6. Monitoring fieldwork by the central office. Throughout the fieldwork, each team was visited by the survey coordinator one time. However, communication between the teams and the MOHF central office was carried out on a daily basis by mobile telephone. This mode of communication is possible because mobile telephone coverage is available in Maldives even in the most remote island. In these discussions, problems arising in the field were discussed and resolved immediately. These problems included logistics, accommodations, support from the community, administrative, and health authorities, and team member performance. During field supervision by the survey coordinator, the completed questionnaires were reviewed, and the performance of each team member and response rates were discussed with the teams.

### 1.11 Data Processing

Following completion of all fieldwork, completed questionnaires were sent to the MOHF central office by various means. All programs for processing the MDHS data were prepared using the Census and Survey Processing System (CSPro). Data entry was conducted at the Ministry of Health and Family in Malé. About nine data entry operators worked at any one time to enter and check the data; a total of 20 different data entry operators worked on data entry and processing through the data entry period.

Additional data processing was performed to aggregate all data, complete secondary data editing and date imputation, compute sampling weights, and prepare the data files for analysis. This phase of the survey was completed in November 2009.

### 1.12 Data Collection

Table 1.2 shows response rates for the 2009 MDHS. A total of 7,515 households were selected in the sample, of which 7,137 were found to be occupied at the time of data collection. The difference between the number of households selected and the number occupied usually occurs because some structures are found to be vacant or non-existent. The number of occupied households successfully interviewed was 6,443 , yielding a household response rate of 90 percent.

In the households interviewed in the survey, a total of 8,362 ever-married women were identified as eligible for the individual interview; interviews were completed with 7,131 women, yielding a female response rate of 85 percent. In the one-half sub-sample of MDHS households, a total of 3,224 evermarried men age $15-64$ were identified as eligible for the individual interview; interviews were completed with 1,727 men, yielding a male response rate of 54 percent. In the same sub-sample of households, a total of 3,205 never-married women and men age 15-24 (youth) were identified as eligible for individual interview; interviews were completed with 2,240 youth, yielding a youth response rate of 70 percent. The response rate was higher for female youth ( 80 percent) than male youth ( 61 percent).

The urban household response rate of 83 percent is lower than the 92 percent response rate among rural households. The same is true for individual interviews with ever-married respondents; response rates are somewhat lower among urban women ( 79 percent) and men ( 47 percent) than among their rural counterparts ( 87 percent and 55 percent, respectively). The difference in response rates between urban and rural youth is negligible.

## HOUSEHOLD POPULATION AND HOUSING CHARACTERISTICS

This chapter provides a demographic and socioeconomic profile of the 2009 MDHS household sample. Information is presented on the age, sex, and education of the household population as well as on their housing facilities and household possessions. Information at the household level is included on a variety of health care topics: physical disability among those age 5 and older, developmental disability among young children, support for early learning, children in the workplace, care and support for physical activities of adults age 65 and older, general health expenditures, and the effects on health of the 2004 tsunami. The profiles of the households provided in this chapter will help readers to place in context the results of the 2009 MDHS. In addition, the household information may prove useful for social and economic development planning.

### 2.1 Characteristics of the Household Population

The 2009 MDHS survey collected information from all usual residents of a selected household (de jure population) and from persons who stayed in the selected household the night before the interview (de facto population). The tabulations of the MDHS household data presented in this chapter are based on the de facto population, unless otherwise stated.

### 2.1.1 Age and Sex Composition

Age and sex are important variables and are the primary basis of demographic classification. Table 2.1 presents the percent distribution of the household population by age according to urbanrural residence and sex. The table portrays the demographic context in which behaviours examined later in the report occur. The population spending the night before the survey in the households selected for the survey included 39,945 individuals, of which 47 percent were male and 53 percent were female.

Table 2.1 Household population by age, sex, and residence
Percent distribution of the de facto household population by five-year age groups, according to sex and residence, Maldives 2009

| Age | Urban |  |  | Rural |  |  | Total |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male | Female | Total | Male | Female | Total | Male | Female | Total |
| <5 | 9.7 | 9.1 | 9.4 | 11.8 | 10.2 | 11.0 | 11.1 | 9.8 | 10.5 |
| 5-9 | 7.8 | 6.7 | 7.3 | 11.0 | 9.6 | 10.2 | 10.0 | 8.6 | 9.3 |
| 10-14 | 8.6 | 9.0 | 8.8 | 14.2 | 11.4 | 12.7 | 12.4 | 10.6 | 11.4 |
| 15-19 | 14.1 | 13.8 | 13.9 | 12.3 | 12.0 | 12.2 | 12.9 | 12.6 | 12.7 |
| 20-24 | 12.4 | 13.3 | 12.9 | 7.9 | 11.0 | 9.5 | 9.4 | 11.8 | 10.6 |
| 25-29 | 10.9 | 10.6 | 10.7 | 6.4 | 9.1 | 7.8 | 7.9 | 9.6 | 8.8 |
| 30-34 | 8.3 | 8.9 | 8.6 | 5.3 | 6.9 | 6.1 | 6.3 | 7.6 | 7.0 |
| 35-39 | 7.4 | 7.3 | 7.3 | 5.0 | 6.7 | 5.9 | 5.8 | 6.9 | 6.4 |
| 40-44 | 5.9 | 5.7 | 5.8 | 4.1 | 5.4 | 4.8 | 4.7 | 5.5 | 5.1 |
| 45-49 | 4.7 | 3.6 | 4.1 | 4.4 | 4.2 | 4.3 | 4.5 | 4.0 | 4.2 |
| 50-54 | 3.0 | 3.4 | 3.2 | 3.6 | 4.0 | 3.8 | 3.4 | 3.8 | 3.6 |
| 55-59 | 2.0 | 2.1 | 2.0 | 2.5 | 2.1 | 2.3 | 2.3 | 2.1 | 2.2 |
| 60-64 | 1.3 | 1.2 | 1.2 | 1.7 | 1.6 | 1.7 | 1.6 | 1.5 | 1.5 |
| 65-69 | 1.6 | 1.7 | 1.6 | 3.2 | 2.6 | 2.9 | 2.7 | 2.3 | 2.5 |
| 70-74 | 0.7 | 0.6 | 0.6 | 1.9 | 1.4 | 1.6 | 1.5 | 1.1 | 1.3 |
| 75-79 | 0.4 | 0.5 | 0.5 | 1.0 | 0.6 | 0.8 | 0.8 | 0.6 | 0.7 |
| $80+$ | 0.3 | 0.1 | 0.2 | 1.1 | 0.6 | 0.8 | 0.9 | 0.4 | 0.6 |
| Don't know/missing | 0.9 | 2.5 | 1.7 | 2.4 | 0.5 | 1.4 | 1.9 | 1.1 | 1.5 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Number | 6,233 | 6,915 | 13,148 | 12,732 | 14,062 | 26,797 | 18,965 | 20,977 | 39,945 |

Note: Total includes 3 persons whose sex was not stated.

Fifty-eight percent of the women are in their reproductive years at ages 15-49. The majority of the household population ( 55 percent) is younger than age 25 , and 31 percent of the population is under age 15 . The proportion of the population under age 15 is higher in the rural areas ( 34 percent) than in the urban areas ( 26 percent). Overall, 5 percent of the population is age 65 or older. This proportion is higher in rural than in urban areas (6 percent compared with 3 percent). The age dependency ratio, calculated as the ratio of children under age 15 and adults age 65 and older to the working age population (age 15-64) is 58 percent. This figure is comparable to that reported in the 2006 Maldives population census (Ministry of Planning and National Development, 2006).

The population pyramid shown in Figure 2.1 is constructed using the sex and age distribution of the 2009 MDHS household population. Maldives has a pyramid with a broad base but with a narrower band at the bottom, indicating declining fertility.

Figure 2.1 Population Pyramid


### 2.1.2 Household Composition

Table 2.2 shows for urban and rural areas the distribution of households by the sex of the head of the household, by the number of household members, and by the percentage of households with orphans and foster children under age 18. These characteristics are important because they are associated with the welfare of the household. Female-headed households are, for example, typically poorer than male-headed households. In addition, the size and composition of the household affects the allocation of financial and other resources among household members, which in turn influences the overall well-being of these individuals. Household size is also associated with crowding in the dwelling, which can lead to unfavourable health conditions.

Almost two in three households in Maldives are headed by men. Urban households are more often headed by women than rural households (40 and 33 percent, respectively). The average household size is 6.4 persons, with rural households ( 6.2 persons) having a smaller size than urban households ( 6.6 persons). Forty percent of the households in urban and rural areas have seven or more members.

Table 2.2 provides information on the proportion of households with foster children (that is, children who live in households with neither biological parent present), double orphans (children with both parents dead), and single orphans (children with one parent dead). Overall, 13 percent of the households contain foster children or orphans. Most of these households have foster children (11 percent), and 5 percent of the households have single orphans. Urban households have a higher proportion of foster children and orphans than rural households (19 percent compared with 11 percent). This is because children from other islands come to Malé for their education and live with family or relatives.

| Table 2.2 Household composition |  |  |  |
| :---: | :---: | :---: | :---: |
| Percent distribution of households by sex of head of household and by household size; mean size of household, and percentage of households with orphans and foster children under 18, according to residence, Maldives 2009 |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
| Characteristic | Residence |  | Total |
|  | Urban | Rural |  |
| Household headship |  |  |  |
| Male | 60.5 | 67.0 | 65.0 |
| Female | 39.5 | 33.0 | 35.0 |
| Total | 100.0 | 100.0 | 100.0 |
| Number of usual members |  |  |  |
| 0 | 0.0 | 0.1 | 0.1 |
| 1 | 2.5 | 3.0 | 2.8 |
| 2 | 5.2 | 5.8 | 5.6 |
| 3 | 8.7 | 8.3 | 8.5 |
| 4 | 17.2 | 12.9 | 14.3 |
| 5 | 12.9 | 16.2 | 15.2 |
| 6 | 13.4 | 14.0 | 13.8 |
| 7 | 9.7 | 11.9 | 11.2 |
| 8 | 7.0 | 8.0 | 7.7 |
| 9+ | 23.4 | 19.7 | 20.8 |
| Total | 100.0 | 100.0 | 100.0 |
| Mean size of households | 6.6 | 6.2 | 6.4 |
| Percentage of households with orphans and foster children under 18 |  |  |  |
| Foster children ${ }^{1}$ | 16.8 | 7.6 | 10.5 |
| Double orphans | 0.1 | 0.2 | 0.2 |
| Single orphans | 3.4 | 5.0 | 4.5 |
| Foster and/or orphan children | 18.5 | 11.1 | 13.4 |
| Number of households | 1,994 | 4,449 | 6,443 |
| Note: Table is based on de jure household members, i.e., usual residents. <br> ${ }^{1}$ Foster children are those under age 18 living in households with neither their mother nor their father present. |  |  |  |
|  |  |  |  |  |

### 2.2 Orphaned and Vulnerable Children

### 2.2.1 Children's Living Arrangements and Orphanhood

The Household Questionnaire collected information on the living arrangements of all children under age 18 in the households included in the 2009 MDHS sample. Information was also collected on the survival status of the children's parents. The results are presented in Table 2.3.

Seventy-one percent of children under age 18 live with both of their parents. Six percent of children are not living with a biological parent. The percentage of children who do not live with a biological parent increases with age, from about 1 percent among children age $0-4$ years to 15 percent among children age 15-17. There are urban-rural differences; 11 percent of urban children under age 18 do not live with a biological parent compared with 4 percent of rural children. Children in Malé (11 percent) and in the South region (5 percent) more often live in households with no biological parent than in other regions. Interestingly, children from wealthier households ${ }^{1}$ are more likely to live in households with no biological parent.

[^0]Table 2.3 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, Maldives 2009

| Background characteristic | Living with both parents | Living with mother but not father |  | Living with father but not mother |  | Not living with either parent |  |  |  | Missing information on father or mother | Total | Percentage not living with a biologic al parent | Percentage with one or both parents dead ${ }^{1}$ | Number of children |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | $\mathrm{Or}$ |  |  |  |  |  |  |  |
|  |  | Father alive | Father dead |  |  | Mother alive | Mother dead | Both alive | father alive |  |  |  |  |  | mother alive | Both dead |
| Age |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 0-4 | 74.7 | 22.5 | 0.4 | 0.6 | 0.1 | 1.0 | 0.0 | 0.1 | 0.0 | 0.6 | 100.0 | 1.1 | 0.6 | 4,192 |
| $<2$ | 75.2 | 22.1 | 0.2 | 0.3 | 0.1 | 0.9 | 0.0 | 0.1 | 0.0 | 1.1 | 100.0 | 1.0 | 0.3 | 1,923 |
| 2-4 | 74.2 | 22.8 | 0.5 | 0.9 | 0.1 | 1.2 | 0.0 | 0.1 | 0.0 | 0.2 | 100.0 | 1.2 | 0.8 | 2,269 |
| 5-9 | 74.4 | 20.1 | 1.3 | 0.9 | 0.2 | 1.9 | 0.2 | 0.3 | 0.0 | 0.7 | 100.0 | 2.4 | 2.0 | 3,703 |
| 10-14 | 69.7 | 18.2 | 2.5 | 1.9 | 0.7 | 5.4 | 0.5 | 0.4 | 0.1 | 0.6 | 100.0 | 6.4 | 4.2 | 4,566 |
| 15-17 | 61.3 | 14.8 | 3.2 | 2.3 | 0.9 | 13.5 | 0.5 | 0.8 | 0.3 | 2.5 | 100.0 | 15.0 | 5.6 | 3,032 |
| Sex |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Male | 71.4 | 18.4 | 1.7 | 1.6 | 0.6 | 4.7 | 0.2 | 0.3 | 0.1 | 1.2 | 100.0 | 5.2 | 2.9 | 7,839 |
| Female | 69.7 | 20.0 | 1.8 | 1.2 | 0.3 | 5.3 | 0.4 | 0.5 | 0.0 | 0.8 | 100.0 | 6.2 | 3.0 | 7,651 |
| Residence |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Urban | 70.1 | 14.1 | 0.6 | 1.9 | 0.6 | 10.2 | 0.3 | 0.5 | 0.1 | 1.8 | 100.0 | 11.1 | 2.0 | 4,316 |
| Rural | 70.7 | 21.1 | 2.2 | 1.2 | 0.4 | 2.9 | 0.3 | 0.3 | 0.1 | 0.7 | 100.0 | 3.6 | 3.3 | 11,177 |
| Region |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Malé | 70.1 | 14.1 | 0.6 | 1.9 | 0.6 | 10.2 | 0.3 | 0.5 | 0.1 | 1.8 | 100.0 | 11.1 | 2.0 | 4,316 |
| North | 74.4 | 18.3 | 2.8 | 0.9 | 0.9 | 1.8 | 0.3 | 0.1 | 0.2 | 0.2 | 100.0 | 2.4 | 4.3 | 2,595 |
| North Central | 71.1 | 22.0 | 1.7 | 1.2 | 0.3 | 2.9 | 0.2 | 0.2 | 0.0 | 0.3 | 100.0 | 3.3 | 2.5 | 2,440 |
| Central | 73.7 | 18.3 | 1.5 | 2.3 | 0.0 | 2.5 | 0.5 | 0.3 | 0.1 | 0.7 | 100.0 | 3.4 | 2.4 | 1,381 |
| South Central | 72.9 | 18.9 | 1.7 | 1.3 | 0.4 | 2.9 | 0.3 | 0.4 | 0.1 | 1.1 | 100.0 | 3.7 | 3.0 | 1,889 |
| South | 64.3 | 25.7 | 2.7 | 0.9 | 0.3 | 4.3 | 0.3 | 0.5 | 0.0 | 1.1 | 100.0 | 5.1 | 3.8 | 2,872 |
| Wealth quintile |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Lowest | 69.4 | 21.5 | 3.1 | 1.1 | 0.4 | 2.5 | 0.4 | 0.4 | 0.1 | 0.9 | 100.0 | 3.5 | 4.5 | 3,427 |
| Second | 72.8 | 19.4 | 2.1 | 1.0 | 0.4 | 3.1 | 0.3 | 0.3 | 0.1 | 0.5 | 100.0 | 3.9 | 3.3 | 3,467 |
| Middle | 68.5 | 23.2 | 1.8 | 1.7 | 0.4 | 3.0 | 0.1 | 0.2 | 0.0 | 0.9 | 100.0 | 3.4 | 2.7 | 3,127 |
| Fourth | 69.9 | 17.4 | 0.8 | 1.5 | 0.8 | 7.6 | 0.3 | 0.5 | 0.0 | 1.2 | 100.0 | 8.4 | 2.4 | 2,907 |
| Highest | 72.3 | 12.8 | 0.5 | 1.8 | 0.2 | 10.0 | 0.4 | 0.3 | 0.1 | 1.7 | 100.0 | 10.8 | 1.4 | 2,565 |
| Total < 15 | 72.8 | 20.2 | 1.4 | 1.2 | 0.3 | 2.9 | 0.2 | 0.3 | 0.0 | 0.6 | 100.0 | 3.4 | 2.3 | 12,461 |
| Total < 18 | 70.5 | 19.2 | 1.8 | 1.4 | 0.4 | 5.0 | 0.3 | 0.4 | 0.1 | 1.0 | 100.0 | 5.7 | 3.0 | 15,493 |

Note: Table is based on de jure members, i.e., usual residents. Total includes 3 children whose sex was not stated.

### 2.3 Education of the Household Population

The educational level of household members is among the most important characteristics of the household because education is associated with reproductive health behaviour, including use of contraception and the health of children. In Maldives, the official age for entry into primary school is 6 years. Primary school consists of 7 years of education, and secondary school consists of 5 years. Lower secondary level is defined as completion of grade 10 in secondary school. Maldives has already achieved the Millennium Development Goal of providing universal primary education, and steps are being taken to provide education free of cost and to improve the quality of education (Government of Maldives, 2009).

Information on the educational level of the female and male population age 6 and above is presented in Tables 2.4.1 and 2.4.2. An examination of the education distributions for successive cohorts indicates positive changes over time in the educational attainment of women and men alike. Results show that about one in four women and men have never attended school. Improvements over time can be seen by comparing the percentage of the population that has never attended school: 1 percent for women age $20-24$ compared with 59 percent for women age $40-44$. A similar pattern is observed for men. One in five women and men have gone to primary school without completing it. Twenty-three percent of women and 18 percent of men have completed lower secondary education.

| Percent distribution of the de facto female household populations age 6 and over by highest level of schooling attended or completed and median grade completed, according to background characteristics, Maldives 2009 |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Background characteristic | $\begin{array}{r} \mathrm{No} \\ \text { educat } \end{array}$ | Some primary | Completed primary ${ }^{1}$ | Some lower secondary | Completed lower secondary ${ }^{2}$ | Completed higher secondary ${ }^{3}$ | More than secondary | Don't know/ missing | Total | Number |  |
| Age |  |  |  |  |  |  |  |  |  |  |  |
| 6-9 | 23.9 | 75.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.4 | 100.0 | 1,452 | 0.9 |
| 10-14 | 0.6 | 64.1 | 17.6 | 17.2 | 0.1 | 0.0 | 0.1 | 0.3 | 100.0 | 2,228 | 5.3 |
| 15-19 | 0.6 | 1.4 | 4.5 | 41.5 | 47.7 | 2.2 | 1.4 | 0.6 | 100.0 | 2,641 | 9.1 |
| 20-24 | 1.1 | 2.6 | 8.7 | 9.3 | 63.3 | 5.9 | 6.7 | 2.4 | 100.0 | 2,470 | 9.4 |
| 25-29 | 2.3 | 8.9 | 22.8 | 8.4 | 44.0 | 2.6 | 9.3 | 1.7 | 100.0 | 2,020 | 9.2 |
| 30-34 | 13.8 | 17.2 | 28.3 | 10.9 | 20.4 | 1.2 | 5.7 | 2.5 | 100.0 | 1,585 | 6.6 |
| 35-39 | 33.2 | 19.4 | 25.5 | 5.8 | 9.8 | 0.9 | 3.6 | 1.9 | 100.0 | 1,454 | 5.3 |
| 40-44 | 58.8 | 12.7 | 15.5 | 4.6 | 4.0 | 0.0 | 1.7 | 2.8 | 100.0 | 1,154 | 0.0 |
| 45-49 | 72.2 | 11.2 | 8.9 | 2.5 | 1.9 | 0.0 | 1.4 | 1.8 | 100.0 | 843 | 0.0 |
| 50-54 | 80.5 | 7.5 | 5.2 | 1.4 | 2.3 | 0.0 | 0.0 | 3.1 | 100.0 | 796 | 0.0 |
| 55-59 | 82.0 | 7.0 | 4.0 | 1.6 | 1.0 | 0.0 | 0.9 | 3.6 | 100.0 | 439 | 0.0 |
| 60-64 | 87.7 | 4.5 | 2.4 | 2.0 | 0.0 | 0.0 | 0.0 | 3.4 | 100.0 | 310 | 0.0 |
| 65+ | 91.3 | 3.2 | 0.7 | 0.0 | 0.0 | 0.0 | 0.0 | 4.8 | 100.0 | 924 | 0.0 |
| Don't know/missing | 2.0 | 0.4 | 0.0 | 0.6 | 1.6 | 0.4 | 0.0 | 95.1 | 100.0 | 240 | 7.1 |
| Residence |  |  |  |  |  |  |  |  |  |  |  |
| Urban | 14.9 | 15.8 | 10.6 | 13.3 | 29.8 | 3.6 | 7.5 | 4.5 | 100.0 | 6,174 | 8.1 |
| Rural | 29.4 | 22.3 | 13.6 | 11.4 | 19.6 | 0.6 | 0.9 | 2.3 | 100.0 | 12,382 | 5.5 |
| Region |  |  |  |  |  |  |  |  |  |  |  |
| Malé | 14.9 | 15.8 | 10.6 | 13.3 | 29.8 | 3.6 | 7.5 | 4.5 | 100.0 | 6,174 | 8.1 |
| North | 28.4 | 23.0 | 12.0 | 13.4 | 20.6 | 0.2 | 0.6 | 1.9 | 100.0 | 2,905 | 5.6 |
| North Central | 31.7 | 20.7 | 14.9 | 10.2 | 20.1 | 0.5 | 0.8 | 1.1 | 100.0 | 2,757 | 5.5 |
| Central | 28.5 | 22.3 | 17.0 | 10.8 | 18.3 | 0.5 | 0.7 | 1.8 | 100.0 | 1,444 | 5.8 |
| South Central | 30.6 | 23.6 | 14.1 | 9.8 | 18.8 | 0.5 | 0.6 | 2.1 | 100.0 | 2,101 | 5.2 |
| South | 28.0 | 22.2 | 12.0 | 11.9 | 19.4 | 1.0 | 1.4 | 4.0 | 100.0 | 3,175 | 5.6 |
| Wealth quintile |  |  |  |  |  |  |  |  |  |  |  |
| Lowest | 34.2 | 25.2 | 13.0 | 11.5 | 14.3 | 0.2 | 0.3 | 1.2 | 100.0 | 3,712 | 4.4 |
| Second | 28.6 | 23.7 | 13.5 | 12.1 | 18.8 | 0.3 | 0.7 | 2.3 | 100.0 | 3,649 | 5.4 |
| Middle | 27.4 | 19.6 | 14.9 | 10.9 | 22.4 | 0.8 | 1.2 | 2.8 | 100.0 | 3,618 | 6.1 |
| Fourth | 19.3 | 17.5 | 12.0 | 12.5 | 30.3 | 1.9 | 3.2 | 3.3 | 100.0 | 3,759 | 7.0 |
| Highest | 13.9 | 14.8 | 9.7 | 13.2 | 29.0 | 4.4 | 9.7 | 5.4 | 100.0 | 3,819 | 8.6 |
| Total | 24.6 | 20.1 | 12.6 | 12.0 | 23.0 | 1.6 | 3.1 | 3.0 | 100.0 | 18,556 | 6.3 |
| ${ }^{1}$ Completed $7{ }^{\text {th }}$ grade at the primary level <br> ${ }^{2}$ Completed $10^{\text {th }}$ grade at the lower secondary level <br> ${ }^{3}$ Completed $12^{\text {th }}$ grade at the higher secondary level |  |  |  |  |  |  |  |  |  |  |  |

Table 2.4.2 Educational attainment of the male household population
Percent distribution of the de facto male household populations age 6 and over by highest level of schooling attended or completed and median grade completed, according to background characteristics, Maldives 2009

| Background characteristic | No education | Some primary | Completed primary ${ }^{1}$ | Some lower secondary | Completed lower secondary ${ }^{2}$ | Completed higher secondary ${ }^{3}$ | More than secondary | $\begin{gathered} \hline \text { Don't } \\ \text { know/ } \\ \text { missing } \\ \hline \end{gathered}$ | Total | Number | Median years completed |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Age |  |  |  |  |  |  |  |  |  |  |  |
| 6-9 | 26.0 | 72.8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.2 | 100.0 | 1,527 | 0.0 |
| 10-14 | 0.7 | 68.5 | 16.8 | 13.5 | 0.1 | 0.0 | 0.0 | 0.4 | 100.0 | 2,342 | 5.2 |
| 15-19 | 1.2 | 3.7 | 9.9 | 45.7 | 35.7 | 2.6 | 0.7 | 0.5 | 100.0 | 2,449 | 8.7 |
| 20-24 | 1.5 | 4.7 | 11.8 | 11.7 | 52.1 | 8.4 | 7.3 | 2.4 | 100.0 | 1,781 | 9.4 |
| 25-29 | 2.8 | 8.0 | 20.0 | 12.4 | 38.8 | 5.1 | 8.9 | 4.0 | 100.0 | 1,492 | 9.1 |
| 30-34 | 8.7 | 10.4 | 25.4 | 12.7 | 24.1 | 3.7 | 8.6 | 6.5 | 100.0 | 1,195 | 7.4 |
| 35-39 | 24.9 | 13.5 | 20.1 | 9.0 | 16.1 | 1.3 | 6.5 | 8.6 | 100.0 | 1,096 | 6.4 |
| 40-44 | 46.7 | 9.2 | 15.6 | 6.5 | 9.2 | 0.4 | 3.4 | 9.0 | 100.0 | 892 | 0.0 |
| 45-49 | 61.5 | 5.6 | 9.7 | 3.4 | 4.2 | 0.9 | 3.4 | 11.3 | 100.0 | 846 | 0.0 |
| 50-54 | 69.6 | 4.9 | 8.0 | 3.2 | 3.9 | 0.6 | 3.4 | 6.4 | 100.0 | 650 | 0.0 |
| 55-59 | 75.4 | 5.3 | 3.8 | 3.8 | 2.5 | 0.0 | 1.9 | 7.2 | 100.0 | 445 | 0.0 |
| 60-64 | 78.4 | 3.5 | 4.7 | 4.4 | 1.1 | 0.0 | 1.6 | 6.4 | 100.0 | 300 | 0.0 |
| 65+ | 88.3 | 1.4 | 1.5 | 0.8 | 0.6 | 0.0 | 0.0 | 7.5 | 100.0 | 1,109 | 0.0 |
| Don't know/missing | 5.0 | 0.0 | 3.1 | 0.0 | 0.8 | 0.0 | 0.0 | 91.1 | 100.0 | 367 | 0.0 |
| Residence |  |  |  |  |  |  |  |  |  |  |  |
| Urban | 12.4 | 14.7 | 9.9 | 15.6 | 29.1 | 4.8 | 8.7 | 4.9 | 100.0 | 5,510 | 8.4 |
| Rural | 28.8 | 24.4 | 13.2 | 12.5 | 12.9 | 1.0 | 0.7 | 6.5 | 100.0 | 10,979 | 5.0 |
| Region |  |  |  |  |  |  |  |  |  |  |  |
| Malé | 12.4 | 14.7 | 9.9 | 15.6 | 29.1 | 4.8 | 8.7 | 4.9 | 100.0 | 5,510 | 8.4 |
| North | 30.3 | 26.3 | 11.0 | 14.1 | 12.8 | 1.0 | 0.6 | 3.9 | 100.0 | 2,383 | 4.6 |
| North Central | 29.4 | 24.4 | 15.5 | 12.0 | 12.6 | 1.3 | 0.7 | 4.0 | 100.0 | 2,340 | 5.1 |
| Central | 27.0 | 23.1 | 16.8 | 10.1 | 14.2 | 0.6 | 0.7 | 7.5 | 100.0 | 1,474 | 5.4 |
| South Central | 30.9 | 24.8 | 13.3 | 11.7 | 13.7 | 0.7 | 0.5 | 4.4 | 100.0 | 1,893 | 4.7 |
| South | 26.7 | 23.3 | 11.4 | 13.4 | 11.8 | 1.0 | 0.8 | 11.6 | 100.0 | 2,889 | 5.0 |
| Wealth quintile |  |  |  |  |  |  |  |  |  |  |  |
| Lowest | 33.5 | 27.3 | 12.7 | 12.0 | 8.8 | 0.6 | 0.3 | 4.9 | 100.0 | 3,268 | 4.1 |
| Second | 27.9 | 26.3 | 14.1 | 13.0 | 11.8 | 0.6 | 0.5 | 5.8 | 100.0 | 3,240 | 5.0 |
| Middle | 26.3 | 22.6 | 12.9 | 13.2 | 16.3 | 1.4 | 0.8 | 6.7 | 100.0 | 3,251 | 5.7 |
| Fourth | 17.6 | 16.4 | 11.6 | 15.0 | 24.5 | 3.5 | 3.9 | 7.5 | 100.0 | 3,308 | 7.0 |
| Highest | 12.1 | 13.8 | 9.5 | 14.5 | 29.4 | 4.9 | 10.8 | 5.1 | 100.0 | 3,423 | 8.9 |
| Total | 23.3 | 21.2 | 12.1 | 13.5 | 18.3 | 2.2 | 3.3 | 6.0 | 100.0 | 16,490 | 6.2 |

${ }^{1}$ Completed $7^{\text {th }}$ grade at the primary level
${ }^{2}$ Completed $10^{\text {th }}$ grade at the lower secondary level
${ }^{3}$ Completed $12^{\text {th }}$ grade at the higher secondary level

As expected, women and men in urban areas have better education than those in rural areas. There is not much variation in educational attainment across regions except in Malé, which has a much better educated population than other regions. For example, only 15 percent of women in Malé do not attend formal education compared with 28 to 32 percent in other regions. For women and men, educational attainment increases with the wealth quintile. Fourteen percent of women in the lowest quintile have completed lower secondary education compared with 29 percent in the highest wealth quintile. A similar pattern is observed for men.

### 2.3.1 School Attendance Rates

Data on net attendance ratios (NARs) and gross attendance ratios (GARs) by school level, sex, residence, region, and wealth quintile are shown in Table 2.5. The NAR indicates participation in primary schooling for the population age 6-12 and in secondary schooling for the population age 1318. The GAR measures participation at each level of schooling among the population age 6-24. The GAR is nearly always higher than the NAR for the same educational level because the GAR includes participation by those who may be older or younger than the official age range for that level. A NAR of 100 percent indicates that all persons in the official age range for the level attend school at that level. The GAR can exceed 100 percent if there is significant over-age or under-age participation. Over-age participation for a given level of schooling occurs when a student starts school at a younger age than peers, repeats one or more grades, or drops out of school and later returns.

Table 2.5 also shows the Gender Parity Index (GPI) for primary and secondary school. The GPI for primary school is the ratio of the primary school GAR for females to the GAR for males. The GPI for secondary school is the ratio of the secondary school GAR for females to the GAR for males. The gender parity index (GPI) assesses sex-related differences in school attendance rates and is calculated by dividing the GAR for females by the GAR for males. A GPI less than one indicates a gender disparity in favour of males (i.e., a higher proportion of males than females attends that level of schooling). A GPI greater than 1 indicates a gender disparity in favour of females. A GPI of one indicates parity or equality between participation rates for males and females.

Table 2.5 shows that the overall NAR for primary schools is 83 , although the GAR is 115. There is a small difference in the NAR between males and females at the primary school level ( 82 and 84 percent, respectively). This is also true for the GAR (118 percent for males and 113 percent for females).

## Table 2.5 School attendance ratios

Net attendance ratios (NAR) and gross attendance ratios (GAR) for the de facto household population by sex and level of schooling; and the gender parity index (GPI), according to background characteristics, Maldives 2009

|  | Net attendance ratio ${ }^{1}$ |  |  |  | Gross attendance ratio ${ }^{2}$ |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Background characteristic | Male | Female | Total | Gender Parity Index | Male | Female | Total | Gender Parity Index ${ }^{3}$ |
| PRIMARY SCHOOL |  |  |  |  |  |  |  |  |
| Residence |  |  |  |  |  |  |  |  |
| Urban | 80.3 | 85.0 | 82.7 | 1.06 | 114.3 | 114.5 | 114.4 | 1.00 |
| Rural | 81.9 | 83.0 | 82.4 | 1.01 | 118.9 | 112.2 | 115.7 | 0.94 |
| Region |  |  |  |  |  |  |  |  |
| Malé | 80.3 | 85.0 | 82.7 | 1.06 | 114.3 | 114.5 | 114.4 | 1.00 |
| North | 81.5 | 86.7 | 84.0 | 1.06 | 118.2 | 117.4 | 117.8 | 0.99 |
| North Central | 85.7 | 81.4 | 83.6 | 0.95 | 119.8 | 111.7 | 115.8 | 0.93 |
| Central | 80.3 | 81.4 | 80.8 | 1.01 | 119.9 | 109.2 | 114.9 | 0.91 |
| South Central | 82.9 | 84.8 | 83.8 | 1.02 | 117.8 | 115.5 | 116.7 | 0.98 |
| South | 78.9 | 80.7 | 79.8 | 1.02 | 118.8 | 107.1 | 113.2 | 0.90 |
| Wealth quintile |  |  |  |  |  |  |  |  |
| Lowest | 80.8 | 83.4 | 82.0 | 1.03 | 120.7 | 115.7 | 118.3 | 0.96 |
| Second | 83.9 | 82.6 | 83.3 | 0.99 | 120.0 | 111.8 | 116.1 | 0.93 |
| Middle | 81.6 | 82.6 | 82.1 | 1.01 | 119.8 | 111.2 | 115.7 | 0.93 |
| Fourth | 81.3 | 84.7 | 83.1 | 1.04 | 116.2 | 111.9 | 114.0 | 0.96 |
| Highest | 78.8 | 84.9 | 82.0 | 1.08 | 107.9 | 112.9 | 110.5 | 1.05 |
| Total | 81.5 | 83.5 | 82.5 | 1.02 | 117.8 | 112.8 | 115.3 | 0.96 |
| SECONDARY SCHOOL |  |  |  |  |  |  |  |  |
| Residence |  |  |  |  |  |  |  |  |
| Urban | 57.4 | 60.1 | 58.8 | 1.05 | 71.3 | 75.0 | 73.2 | 1.05 |
| Rural | 50.6 | 60.8 | 55.7 | 1.20 | 59.1 | 68.9 | 64.0 | 1.17 |
| Region |  |  |  |  |  |  |  |  |
| Malé | 57.4 | 60.1 | 58.8 | 1.05 | 71.3 | 75.0 | 73.2 | 1.05 |
| North | 48.1 | 62.1 | 55.5 | 1.29 | 57.0 | 67.6 | 62.6 | 1.19 |
| North Central | 53.1 | 60.9 | 57.2 | 1.15 | 60.7 | 70.3 | 65.7 | 1.16 |
| Central | 46.1 | 59.5 | 52.3 | 1.29 | 54.5 | 69.6 | 61.5 | 1.28 |
| South Central | 53.8 | 57.2 | 55.4 | 1.06 | 64.1 | 64.5 | 64.3 | 1.01 |
| South | 50.8 | 62.3 | 56.3 | 1.23 | 58.7 | 71.6 | 64.8 | 1.22 |
| Wealth quintile |  |  |  |  |  |  |  |  |
| Lowest | 43.4 | 57.6 | 50.7 | 1.33 | 52.5 | 65.6 | 59.2 | 1.25 |
| Second | 52.4 | 60.3 | 56.2 | 1.15 | 60.1 | 69.4 | 64.6 | 1.15 |
| Middle | 53.5 | 61.2 | 57.2 | 1.14 | 61.1 | 69.4 | 65.1 | 1.14 |
| Fourth | 53.9 | 61.8 | 58.2 | 1.15 | 68.0 | 73.2 | 70.8 | 1.08 |
| Highest | 61.9 | 62.5 | 62.2 | 1.01 | 75.6 | 77.8 | 76.7 | 1.03 |
| Total | 52.7 | 60.6 | 56.7 | 1.15 | 62.9 | 70.9 | 66.9 | 1.13 |

[^1]The NAR and GAR at the secondary school level are significantly lower than at the primary level (57 and 67, respectively).

The primary school GPI of 1.02 indicates gender parity at the primary level. The GPI at the secondary school level is 1.15 , reflecting that a larger proportion of girls than boys attend secondary school. The analysis does not show much variation across residence, region, or wealth quintile.

Figure 2.2 illustrates age-specific attendance rates for women and men (i.e., the percentage of a given age cohort who attend school, regardless of the level attended (primary, secondary, or higher). At age 6, only 12 percent of the girls attend school. The percentage jumps to 63 percent by age 7 and to 96 percent by age 8 . For males, the proportion for age 6 is 8 percent. It increases to 54 percent by age 7 and to 95 percent by age 8 .

Figure 2.2 Percentage of Females and Males Currently Attending School, by Age


MDHS 2009

### 2.3.2 Grade Repetition and Dropout Rates

Repetition rates and dropout rates shown in Table 2.6 describe the flow of pupils through the educational system in Maldives at the primary level. The repetition rates indicate the percentage of pupils who attended a particular grade during the 2008 school year (January to November) who again attended that same class in the 2009 school year. The dropout rates show the percentage of pupils in a grade during the 2008 school year who no longer attended school in the 2009 school year.

Table 2.6 shows that, overall, repetition is highest at grade 7 ( 8 percent). At grades 5 and 6 repetition rates are much higher among males and in rural areas than among females and in urban areas. The table also shows that repetition rates at grade 7 are highest among respondents in the lowest wealth quintile (13 percent) and lowest among children in the highest wealth quintile (3 percent).

Dropout rates are small for all grades except grade 7. At this grade, the dropout rate for males is higher than for females (4 percent compared with 1 percent). Rural children more often drop out of school at grade 7 than urban children. Across regions, Grade 7 dropout rate ranges from 4 percent in the North Central and the Central regions to 2 percent in Malé. There is no uniform pattern for Grade 7 dropout rates across wealth quintiles.

| Table 2.6 Grade repetition and dropout rates |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Repetition and dropout rates for the de facto household population age 5-24 who attended primary school in the previous school year by school grade, according to background characteristics, Maldives 2009 |  |  |  |  |  |  |  |
| Background characteristic | School grade |  |  |  |  |  |  |
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| REPETITION RATE ${ }^{1}$ |  |  |  |  |  |  |  |
| Sex |  |  |  |  |  |  |  |
| Male | 1.0 | 1.7 | 1.6 | 1.6 | 3.1 | 4.2 | 11.5 |
| Female | 1.0 | 0.1 | 2.3 | 1.0 | 2.4 | 2.4 | 4.4 |
| Residence |  |  |  |  |  |  |  |
| Urban | 0.0 | 0.0 | 0.9 | 1.1 | 1.3 | 1.0 | 2.8 |
| Rural | 1.3 | 1.2 | 2.3 | 1.3 | 3.2 | 4.2 | 9.8 |
| Region |  |  |  |  |  |  |  |
| Malé | 0.0 | 0.0 | 0.9 | 1.1 | 1.3 | 1.0 | 2.8 |
| North | 1.5 | 0.7 | 0.7 | 0.0 | 2.9 | 8.0 | 13.4 |
| North Central | 1.8 | 0.7 | 2.1 | 3.4 | 3.9 | 1.1 | 8.4 |
| Central | 2.3 | 1.9 | 3.4 | 0.0 | 3.0 | 5.6 | 13.4 |
| South Central | 0.3 | 0.3 | 1.3 | 1.8 | 3.0 | 2.8 | 6.3 |
| South | 1.2 | 2.3 | 4.3 | 0.9 | 3.2 | 4.4 | 7.9 |
| Wealth quintile |  |  |  |  |  |  |  |
| Lowest | 2.3 | 0.9 | 2.2 | 1.8 | 4.9 | 3.5 | 13.3 |
| Second | 0.9 | 0.9 | 2.7 | 1.7 | 3.1 | 5.0 | 8.4 |
| Middle | 1.2 | 1.2 | 2.2 | 0.3 | 1.8 | 4.1 | 7.7 |
| Fourth | 0.0 | 1.5 | 0.3 | 0.5 | 1.0 | 1.6 | 4.0 |
| Highest | 0.0 | 0.0 | 1.6 | 1.6 | 2.4 | 1.9 | 3.4 |
| Total | 1.0 | 0.9 | 1.9 | 1.3 | 2.8 | 3.4 | 8.0 |
| DROPOUT RATE ${ }^{2}$ |  |  |  |  |  |  |  |
| Sex |  |  |  |  |  |  |  |
| Male | 0.0 | 0.0 | 0.0 | 0.3 | 0.3 | 0.3 | 3.8 |
| Female | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 1.3 |
| Residence |  |  |  |  |  |  |  |
| Urban | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.7 |
| Rural | 0.0 | 0.1 | 0.0 | 0.2 | 0.2 | 0.2 | 2.9 |
| Region |  |  |  |  |  |  |  |
| Malé | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.7 |
| North | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2.5 |
| North Central | 0.0 | 0.0 | 0.0 | 0.0 | 0.5 | 0.0 | 3.9 |
| Central | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 4.3 |
| South Central | 0.0 | 0.5 | 0.0 | 0.0 | 0.5 | 0.0 | 2.2 |
| South | 0.0 | 0.0 | 0.0 | 0.9 | 0.0 | 1.0 | 2.2 |
| Wealth quintile |  |  |  |  |  |  |  |
| Lowest | 0.0 | 0.0 | 0.0 | 0.6 | 0.0 | 0.0 | 3.7 |
| Second | 0.0 | 0.3 | 0.0 | 0.0 | 0.3 | 0.3 | 3.2 |
| Middle | 0.0 | 0.0 | 0.1 | 0.0 | 0.3 | 0.6 | 1.8 |
| Fourth | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.7 |
| Highest | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 3.0 |
| Total | 0.0 | 0.1 | 0.0 | 0.2 | 0.1 | 0.2 | 2.6 |
| ${ }^{1}$ The repetition rate is the percentage of students in a given grade in the previous school year who are repeating that grade in the current school year. <br> ${ }^{2}$ The drop-out rate is the percentage of students in a given grade in the previous school year who are not attending school. |  |  |  |  |  |  |  |

### 2.4 Household Environment

The physical characteristics of the dwelling in which a household lives are important determinants of the health status of household members, especially children. Physical characteristics can also be used as indicators of the socioeconomic status of households. MDHS respondents were asked a number of questions about their household environment, including questions on the source of drinking water; type of sanitation facility; type of flooring, walls, and roof; and number of rooms in the dwelling. The results are presented both in terms of households and of the de jure population.

### 2.4.1 Drinking Water

Table 2.7 shows that 97 percent of households have access to improved sources of water. Rural households are slightly less likely to have access to improved water sources than urban households ( 97 percent compared with 99 percent). Rainwater is a more important source of drinking water in the rural areas ( 95 percent) than in the urban areas ( 5 percent). Fifty-two percent of urban households have piped water into their premises) but it is not the main source of water for drinking. Overall, 13 percent of the households use bottled water for cooking/washing ( 41 percent in urban areas and 1 percent in rural areas).

| Table 2.7 Household drinking water |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percent distribution of households and de jure population by source, time to collect, and person who usually collects drinking water; and percentage of households and the de jure by treatment of drinking water, according to residence, Maldives 2009 |  |  |  |  |  |  |
| Characteristic | Households |  |  | Population |  |  |
|  | Urban | Rural | Total | Urban | Rural | Total |
| Source of drinking water |  |  |  |  |  |  |
| Improved source | 98.6 | 97.0 | 97.4 | 98.8 | 97.4 | 97.7 |
| Piped water into dwelling/yard/plot | 52.0 | 0.5 | 16.4 | 56.6 | 0.7 | 18.7 |
| Public tap/standpipe | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.3 |
| Protected dug well | 0.7 | 1.0 | 0.9 | 1.3 | 1.1 | 1.1 |
| Bottled water, improved source for cooking/washing ${ }^{1}$ | 40.9 | 0.5 | 13.0 | 34.3 | 0.4 | 11.3 |
| Rainwater | 4.7 | 94.7 | 66.8 | 6.3 | 94.8 | 66.3 |
| Non-improved source | 0.7 | 0.4 | 0.5 | 0.6 | 0.4 | 0.4 |
| Unprotected dug well | 0.0 | 0.3 | 0.2 | 0.0 | 0.3 | 0.2 |
| Bottled water, non-improved source for cooking/washing | 0.7 | 0.1 | 0.3 | 0.6 | 0.1 | 0.2 |
| Other | 0.5 | 2.5 | 1.9 | 0.5 | 2.2 | 1.7 |
| Missing | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Percentage using any improved source of drinking water | 98.7 | 97.0 | 97.5 | 98.8 | 97.3 | 97.8 |
| Time to obtain drinking water (round trip) |  |  |  |  |  |  |
| Water on premises | 98.8 | 91.3 | 93.6 | 99.0 | 91.7 | 94.1 |
| Less than 30 minutes | 0.5 | 6.8 | 4.9 | 0.6 | 6.3 | 4.4 |
| 30 minutes or longer | 0.3 | 1.3 | 1.0 | 0.2 | 1.6 | 1.1 |
| Don't know/missing | 0.4 | 0.6 | 0.5 | 0.3 | 0.4 | 0.4 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Person who usually collects drinking water |  |  |  |  |  |  |
| Adult female 15+ | 0.6 | 6.7 | 4.8 | 0.4 | 6.4 | 4.5 |
| Adult male 15+ | 0.6 | 1.1 | 0.9 | 0.5 | 1.0 | 0.8 |
| Female child under age 15 | 0.0 | 0.4 | 0.2 | 0.0 | 0.4 | 0.2 |
| Male child under age 15 | 0.0 | 0.2 | 0.1 | 0.0 | 0.2 | 0.1 |
| Other | 0.0 | 0.2 | 0.2 | 0.0 | 0.2 | 0.1 |
| Water on premises | 98.8 | 91.3 | 93.6 | 99.0 | 91.7 | 94.1 |
| Missing | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Water treatment prior to drinking ${ }^{2}$ |  |  |  |  |  |  |
| Boiled | 10.8 | 8.9 | 9.5 | 11.6 | 8.9 | 9.7 |
| Bleach/chlorine | 0.2 | 3.2 | 2.3 | 0.1 | 3.4 | 2.4 |
| Strained through cloth | 0.5 | 38.2 | 26.6 | 0.9 | 39.3 | 26.9 |
| Ceramic, sand or other filter | 8.0 | 3.6 | 5.0 | 7.9 | 3.5 | 4.9 |
| Solar disinfection | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Other | 0.0 | 0.8 | 0.6 | 0.0 | 0.9 | 0.6 |
| No treatment | 80.8 | 45.8 | 56.7 | 79.6 | 44.3 | 55.7 |
| Percentage using an appropriate treatment method ${ }^{3}$ | 18.9 | 47.6 | 38.7 | 20.0 | 48.7 | 39.5 |
| Number | 1,994 | 4,449 | 6,443 | 13,204 | 27,776 | 40,980 |
| ${ }^{1}$ Because the quality of bottled water is not known, households using bottled water for drinking are classified as using an improved or non-improved source according to their water source for cooking and washing. <br> ${ }^{2}$ Respondents may report multiple treatment methods, so the sum of treatment may exceed 100 percent. <br> ${ }^{3}$ Appropriate water treatment methods include boiling, bleaching, straining, filtering, and solar disinfecting. |  |  |  |  |  |  |

Ninety-four percent of households have the water source on the premises (99 percent in urban and 91 percent in rural areas). Adult females collect drinking water ( 5 percent) more often than anyone else in the household. In urban areas, most households use water from desalinated plants. More than half of the households ( 57 percent) do not treat the water prior to drinking ( 81 percent in urban areas and 46 percent in rural areas). Among households that treat their drinking water; 39 percent use an appropriate method (19 percent in urban areas and 48 percent in rural areas). Straining through cloth ( 27 percent) and boiling ( 10 percent) are the most common methods used to treat water.

### 2.4.2 Household Sanitation Facilities

A household is classified as having an improved toilet if the toilet is used only by members of one household (that is, not shared with members of other households) and if the toilet separates the waste from human contact (WHO/UNICEF Joint Monitoring Programme for Water Supply and Sanitation, 2004).

Table 2.8 shows that rural households are somewhat less likely to have a non-improved toilet facility than urban households ( 7 percent and 3 percent, respectively).Flush toilets are the most common type of toilet in Maldives. Ninety-seven percent of households in urban areas use flush toilets to a piped sewer system. The most common type of toilet in rural areas is a flush toilet facility to a pit latrine. Only 2 percent of households have no toilet facility.

| Table 2.8 Household sanitation facilities |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percent distribution of households and de jure population by type of toilet/latrine facilities, according to residence, Maldives 2009 |  |  |  |  |  |  |
|  | Households |  |  | Population |  |  |
| Type of toilet/latrine facility | Urban | Rural | Total | Urban | Rural | Total |
| Improved, not shared facility |  |  |  |  |  |  |
| Flush/pour flush to piped sewer system | 96.5 | 17.2 | 41.7 | 96.9 | 18.3 | 43.6 |
| Flush/pour flush to septic tank | 0.8 | 34.8 | 24.3 | 0.6 | 35.4 | 24.2 |
| Flush/pour flush to pit latrine | 0.0 | 39.0 | 27.0 | 0.0 | 37.9 | 25.7 |
| Ventilated improved pit (VIP) latrine | 0.0 | 1.1 | 0.8 | 0.0 | 1.1 | 0.7 |
| Pit latrine with slab | 0.0 | 0.5 | 0.4 | 0.0 | 0.5 | 0.3 |
| Non-improved facility |  |  |  |  |  |  |
| Any facility shared with other households | 2.6 | 1.9 | 2.1 | 2.4 | 1.7 | 1.9 |
| Flush/pour flush not to sewer/septic tank/pit latrine | 0.0 | 0.9 | 0.6 | 0.0 | 1.0 | 0.7 |
| Pit latrine without slab/open pit | 0.0 | 0.3 | 0.2 | 0.0 | 0.4 | 0.3 |
| No facility/bush/field | 0.0 | 2.2 | 1.5 | 0.0 | 1.4 | 1.0 |
| Other | 0.0 | 2.0 | 1.4 | 0.0 | 2.2 | 1.5 |
| Missing | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Number | 1,994 | 4,449 | 6,443 | 13,204 | 27,776 | 40,980 |

### 2.4.3 Housing Characteristics

Table 2.9 presents information on a number of household dwelling characteristics and the proportion of households using various types of fuel for cooking. These characteristics reflect the household's socioeconomic situation. They also may influence environmental conditions-for example, in the case of the use of biomass fuels, exposure to indoor pollution-that have a direct bearing on household members' health and welfare. Electricity is universally available in Maldives.

| Table 2.9 Household characteristics |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percent distribution of households and de jure population by housing characteristics and percentage using solid fuel for cooking; and among those using solid fuels, percent distribution by type of fire/stove, according to residence, Maldives 2009 |  |  |  |  |  |  |
|  | Households |  |  | Population |  |  |
| Housing characteristic | Urban | Rural | Total | Urban | Rural | Total |
| Electricity |  |  |  |  |  |  |
| Yes | 99.9 | 99.8 | 99.8 | 99.9 | 99.9 | 99.9 |
| No | 0.0 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 |
| Missing | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Flooring material |  |  |  |  |  |  |
| Earth, sand | 0.3 | 1.0 | 0.8 | 0.6 | 0.9 | 0.8 |
| Wood/planks | 0.4 | 0.0 | 0.1 | 0.3 | 0.0 | 0.1 |
| Parquet or polished wood | 10.4 | 58.1 | 43.3 | 10.3 | 57.1 | 42.0 |
| Vinyl or asphalt strips | 83.5 | 38.1 | 52.1 | 82.8 | 39.3 | 53.3 |
| Ceramic tiles | 2.8 | 2.3 | 2.5 | 2.8 | 2.2 | 2.4 |
| Cement | 0.4 | 0.0 | 0.1 | 0.6 | 0.0 | 0.2 |
| Carpet | 2.1 | 0.1 | 0.7 | 2.3 | 0.1 | 0.8 |
| Other | 0.0 | 0.2 | 0.2 | 0.0 | 0.2 | 0.2 |
| Missing | 0.2 | 0.2 | 0.2 | 0.4 | 0.3 | 0.3 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Rooms used for sleeping |  |  |  |  |  |  |
| One | 23.4 | 13.9 | 16.9 | 13.9 | 8.0 | 9.9 |
| Two | 36.9 | 31.7 | 33.3 | 32.9 | 26.3 | 28.4 |
| Three or more | 39.6 | 53.9 | 49.5 | 53.2 | 65.3 | 61.4 |
| Missing | 0.1 | 0.4 | 0.3 | 0.1 | 0.4 | 0.3 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Place for cooking |  |  |  |  |  |  |
| In the house | 91.1 | 32.9 | 50.9 | 91.4 | 31.0 | 50.5 |
| In a separate building | 6.5 | 63.1 | 45.6 | 7.3 | 66.2 | 47.2 |
| Outdoors | 0.8 | 2.2 | 1.7 | 0.7 | 2.1 | 1.6 |
| Other | 0.0 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 |
| Missing | 1.6 | 1.7 | 1.7 | 0.6 | 0.7 | 0.7 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Cooking fuel |  |  |  |  |  |  |
| Electricity | 1.6 | 0.6 | 0.9 | 1.5 | 0.5 | 0.8 |
| LPG/natural gas/biogas | 96.6 | 88.7 | 91.2 | 97.7 | 89.5 | 92.2 |
| Kerosene | 0.2 | 0.7 | 0.5 | 0.1 | 0.5 | 0.4 |
| Wood | 0.0 | 8.3 | 5.7 | 0.0 | 8.8 | 6.0 |
| No food cooked in household | 1.4 | 1.6 | 1.5 | 0.4 | 0.5 | 0.5 |
| Other | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Missing | 0.2 | 0.0 | 0.1 | 0.2 | 0.1 | 0.2 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Percentage using solid fuel for cooking ${ }^{1}$ | 0.0 | 8.3 | 5.7 | 0.0 | 8.8 | 6.0 |
| Number of households | 1,994 | 4,449 | 6,443 | 13,204 | 27,776 | 40,980 |
| LPG = Liquid petroleum gas <br> ${ }^{1}$ Includes wood |  |  |  |  |  |  |

More than half of the households (52 percent) use vinyl or asphalt strips for flooring material. These materials are more often used in urban areas than in rural areas ( 84 percent and 38 percent, respectively). In rural areas, 58 percent of the households use parquet or polished wood compared with 10 percent in urban areas. Almost half of the households in Maldives live in housing units with three or more bedrooms, and one in three households has two bedrooms. Households in rural areas typically have a larger number of rooms for sleeping compared with urban households.

Fifty-one percent of households cook inside the house, and 46 percent cook in a separate building. Nine in ten households in urban areas cook inside the house. In rural areas this proportion is only 33 percent. LPG, natural gas, or biogas is the most common fuel used for cooking, reported by 91 percent of households. Gas is more often used in urban areas ( 97 percent) than in rural areas (89 percent). Firewood is used for cooking in 6 percent of households, all of them in rural areas.

### 2.5 Household Possessions

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

Table 2.10 shows that most households own the consumer goods asked about in the survey. Eighty-three percent own a radio ( 72 percent in urban areas and 88 percent in rural areas), and 96 percent own a television ( 97 percent in urban areas and 95 percent in rural areas). A mobile telephone is available in 97 percent of households ( 99 percent in urban areas and 97 percent in rural areas) and 24 percent of the households have non-mobile telephones ( 45 percent in urban areas and 15 percent in rural areas). Eighty-five percent of the households own a refrigerator ( 96 percent in urban areas and 80 percent in rural areas).

Table 2.10 also shows that 40 percent of the households own a bicycle ( 15 percent in urban areas and 51 percent in rural areas), 42 percent own a motorcycle ( 70 percent in urban areas and 29 percent in rural areas), and only 5 percent own a car. Five percent of the households own a boat with a motor ( 3 percent in urban areas and 6 percent in rural areas). Bicycles and boats with a motor are more common in rural areas than in urban areas.

| Table 2.10 Household durable goods |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percentage of households and de jure population possessing various household effects, means of transportation, agricultural land and livestock/farm animals by residence, Maldives 2009 |  |  |  |  |  |  |
|  | Households |  |  | Population |  |  |
| Possession | Urban | Rural | Total | Urban | Rural | Total |
| Household effects |  |  |  |  |  |  |
| Radio | 71.9 | 88.1 | 83.1 | 75.4 | 88.9 | 84.6 |
| Television | 97.3 | 95.0 | 95.7 | 98.2 | 97.3 | 97.6 |
| Mobile telephone | 98.9 | 96.6 | 97.3 | 99.6 | 98.2 | 98.7 |
| Non-mobile telephone | 44.6 | 14.8 | 24.0 | 48.2 | 16.2 | 26.5 |
| Refrigerator | 95.7 | 80.1 | 84.9 | 97.4 | 83.6 | 88.0 |
| Means of transport |  |  |  |  |  |  |
| Bicycle | 14.7 | 51.2 | 39.9 | 18.1 | 55.3 | 43.3 |
| Motorcycle/scooter | 69.8 | 28.8 | 41.5 | 76.2 | 32.8 | 46.8 |
| Car/truck | 10.6 | 2.5 | 5.0 | 12.2 | 3.1 | 6.1 |
| Boat with a motor | 2.7 | 5.6 | 4.7 | 3.1 | 6.9 | 5.7 |
| Number | 1,994 | 4,449 | 6,443 | 13,204 | 27,776 | 40,980 |

### 2.6 Wealth Index

Information on household assets was used to create an index representing the wealth of the households interviewed in the MDHS. To construct the wealth index, each household asset for which information was collected in the survey was assigned a weight or factor score generated through principal components analysis, and the resulting asset scores were standardized. The MDHS households were then assigned a standardized score for each asset, where the score differed depending on whether or not the household owned that asset. The scores were summed by household. Individuals were ranked according to the total score of the household in which they resided and divided into population quintiles, i.e., five groups with the same number of individuals in each.

The wealth index has been compared with both poverty rates and gross domestic product per capita for India, and with expenditure data from household surveys in Nepal, Pakistan, Indonesia (Filmer and Pritchett, 1998), and Guatemala (Rutstein, 1999). The evidence from those studies suggests that the assets index is highly comparable to conventionally measured consumption expenditures.

Table 2.11 shows the degree to which wealth is distributed across residence in Maldives. As expected, urban populations are wealthier than rural populations. This is shown by the small percentage of the population in the urban areas in the three lowest quintiles (less than 3 percent). On the other hand, almost six in ten rural populations are in the first two quintiles (59 percent). Across regions, 61 percent of the population in Malé belong to the highest wealth quintile compared with one percent or less in other regions.

| Table 2.11 Wealth quintiles |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percent distribution of the jure population by wealth quintiles according to residence and region, Maldives 2009 |  |  |  |  |  |  |  |
| Residence/region | Wealth quintile |  |  |  |  | Total | Number of population |
|  | Lowest | Second | Middle | Fourth | Highest |  |  |
| Residence |  |  |  |  |  |  |  |
| Urban | 0.2 | 0.4 | 2.2 | 36.4 | 60.9 | 100.0 | 13,204 |
| Rural | 29.4 | 29.3 | 28.5 | 12.2 | 0.6 | 100.0 | 27,776 |
| Region |  |  |  |  |  |  |  |
| Malé | 0.2 | 0.4 | 2.2 | 36.4 | 60.9 | 100.0 | 13,204 |
| North | 39.1 | 28.6 | 22.4 | 9.8 | 0.1 | 100.0 | 6,360 |
| North Central | 29.9 | 29.6 | 29.0 | 10.9 | 0.6 | 100.0 | 5,996 |
| Central | 22.4 | 29.0 | 34.2 | 13.9 | 0.4 | 100.0 | 3,561 |
| South Central | 29.6 | 35.6 | 27.5 | 7.1 | 0.2 | 100.0 | 4,726 |
| South | 23.7 | 25.7 | 31.1 | 18.1 | 1.4 | 100.0 | 7,133 |
| Total | 20.0 | 20.0 | 20.0 | 20.0 | 20.0 | 100.0 | 40,980 |

### 2.7 Birth Registration

The registration of a birth is the inscription of the facts of the birth into an official log. A birth certificate is issued at the time of registration or later as proof of the registration of the birth. Birth registration is basic to ensuring a child's legal status and, thus, basic rights and services (UNICEF, 2006; United Nations General Assembly, 2002). The registration of vital events in most developing countries is a function of a number of socioeconomic factors. Information on the registration of births was collected in the household interview by asking whether children under age 5 had a birth certificate. If the interviewer was told that the child did not have a birth certificate, the interviewer probed further to ascertain whether the child's birth had been registered with the civil authority. Overall, 93 percent of children were registered, 89 percent had a birth certificate, and 3 percent were registered but did not have a birth certificate. Coverage of registration does not vary greatly across most background characteristics, as shown in Table 2.12. For instance, coverage varies between 86 percent in the South region and 97 percent in the North region.

| Table 2.12 Birth registration of children under age 5 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Percentage of de jure children under 5 years of age whose births are registered with the civil authorities, according to background characteristics, Maldives 2009 |  |  |  |  |
|  | Percentage of children whose births are registered |  |  | Number of children |
| Background characteristic | Had a birth certificate | Did not have a birth certificate | Total registered |  |
| Age |  |  |  |  |
| <2 | 86.3 | 5.4 | 91.7 | 1,923 |
| 2-4 | 91.8 | 1.3 | 93.2 | 2,269 |
| Sex |  |  |  |  |
| Male | 89.8 | 3.0 | 92.8 | 2,112 |
| Female | 88.8 | 3.4 | 92.3 | 2,077 |
| Residence |  |  |  |  |
| Urban | 90.4 | 2.2 | 92.6 | 1,233 |
| Rural | 88.8 | 3.6 | 92.4 | 2,960 |
| Region |  |  |  |  |
| Malé | 90.4 | 2.2 | 92.6 | 1,233 |
| North | 94.2 | 2.8 | 96.9 | 672 |
| North Central | 92.9 | 2.4 | 95.3 | 639 |
| Central | 87.3 | 4.5 | 91.8 | 401 |
| South Central | 90.5 | 2.8 | 93.3 | 492 |
| South | 80.3 | 5.5 | 85.7 | 756 |
| Wealth quintile |  |  |  |  |
| Lowest | 87.7 | 4.2 | 91.9 | 795 |
| Second | 89.6 | 3.9 | 93.5 | 888 |
| Middle | 90.4 | 3.0 | 93.5 | 893 |
| Fourth | 87.0 | 2.6 | 89.6 | 846 |
| Highest | 91.7 | 2.2 | 93.8 | 770 |
| Total | 89.3 | 3.2 | 92.5 | 4,192 |

Note: Total includes 3 children whose sex was not stated.

### 2.8 Eariy Childhood Education Attendance

In the MDHS, information was collected if the child attended any organized learning or early childhood education programme, including kindergarten or community childcare, run either by a private or a public facility.

Table 2.13 shows that 71 percent of children age 3-4 years attend some form of early childhood education. Girls attend this education more often than boys; 72 percent and 70 percent, respectively. The highest percentage of children attending early education is reported in the North Central region (79 percent), and the lowest is in the South Central region (52 percent).

### 2.9 Disability

Each respondent to the household questionnaire was asked to report on the ability of household members to function within six domains. The domains inquired about are those

Table 2.13 Early childhood education attendance

Percentage of children age 3-4 years who attend some form of organized early childhood education, by background characteristics, Maldives 2009

| Background <br> characteristic | Percent | Number of <br> children |
| :--- | :---: | :---: |
| Sex |  |  |
| Male | 69.5 | 782 |
| Female | 71.9 | 751 |
|  |  |  |
| Region | 69.0 | 437 |
| $\quad$ Malé | 76.3 | 246 |
| North | 79.2 | 254 |
| North Central | 75.4 | 148 |
| Central | 51.6 | 165 |
| South Central | 69.6 | 284 |
| South | 70.7 | 1,534 |
| Total |  |  | recommended by the Washington Group on Disability Statistics (Washington Group on Disability Statistics, 2006) and include vision, hearing, communicating, remembering, mobility, and self-care. Respondents were asked to report for each household member age 5 years and older whether the person is able to perform those functions with no difficulty, only

with some difficulty, with a lot of difficulty, or not at all. Table 2.14 presents the percentage of household members who are reported to have either some difficulty or a lot of difficulty functioning within each of the six domains. It also presents the percentage of household members reported as not being able to perform the function at all. In addition, the table presents the percentage of household members reported to have some difficulty functioning within at least one of the domains, the percentage having a lot of difficulty functioning within at least one of the domains, and the percentage who cannot perform at all in at least one of the six function domains. Each of the disability measures is presented for the entire household population age 5 years and older and for household members age 5-14 years, age 15-49 years, and age 50 years and older.

| Table 2.14 Disability |  |  |  |
| :---: | :---: | :---: | :---: |
| Percentage of de-facto household members age 5 and above with a disability, by specific age groups, Maldives 2009 |  |  |  |
|  | Level of functioning |  |  |
|  | Some difficulty | Lot of difficulty | Cannot do at all |
| ALL HOUSEHOLD MEMBERS AGE 5 AND ABOVE |  |  |  |
| Function domain |  |  |  |
| Vision | 13.2 | 4.7 | 0.2 |
| Hearing | 4.0 | 1.5 | 0.2 |
| Communicating | 2.5 | 1.1 | 0.5 |
| Remembering | 6.4 | 2.3 | 0.4 |
| Mobility | 7.4 | 4.0 | 0.6 |
| Self-care | 1.6 | 1.1 | 0.6 |
| Prevalence of at least one function being reported at the specified level of functioning | $22.0$ | $\begin{array}{r} 9.6 \\ 6.601 \end{array}$ | $\begin{array}{r} 1.3 \\ 25691 \end{array}$ |
| Number of household members |  |  |  |
| HOUSEHOLD MEMBERS AGE 5-14 |  |  |  |
| Function domain |  |  |  |
| Vision | 6.9 | 2.1 | 0.1 |
| Hearing | 2.1 | 0.7 | 0.2 |
| Communicating | 3.3 | 1.2 | 0.4 |
| Remembering | 4.8 | 2.0 | 0.4 |
| Mobility | 1.3 | 0.7 | 0.2 |
| Self-care | 0.8 | 0.6 | 0.4 |
| Prevalence of at least one function being reported at the specified level of functioning | 13.9 | 5.0 | 0.7 8.7 |
| Number of household members | 8,269 | 8,269 | 8,269 |
| HOUSEHOLD MEMBERS AGE 15-49 |  |  |  |
| Function domain |  |  |  |
| Vision | 10.8 | 3.3 | 0.1 |
| Hearing | 2.9 | 1.0 | 0.2 |
| Communicating | 1.6 | 0.8 | 0.4 |
| Remembering | 4.4 | 1.3 | 0.3 |
| Mobility | 4.1 | 1.7 | 0.2 |
| Self-care | 0.7 | 0.4 | 0.2 |
| Prevalence of at least one function being reported at the specified level of functioning | 17.6 | 6.4 | 0.8 |
| Number of household members | 21,917 | 21,917 | 21,917 |
| HOUSEHOLD MEMBERS AGE 50+ |  |  |  |
| Function domain |  |  |  |
| Vision | 31.9 | 14.5 | 0.7 |
| Hearing | 11.5 | 4.6 | 0.4 |
| Communicating | 4.7 | 2.1 | 0.6 |
| Remembering | 16.8 | 6.6 | 0.9 |
| Mobility | 29.9 | 18.1 | 2.6 |
| Self-care | 6.6 | 4.3 | 2.2 |
| Prevalence of at least one function being |  |  |  |
| reported at the specified level of functioning | 51.3 | 29.3 | 4.2 |
| Number of household members | 5,504 | 5,504 | 5,504 |

Twenty-two percent of household members age 5 years and older have some difficulty functioning in at least one of the domains, 10 percent have a lot of difficulty in at least one of the domains, and 1 percent cannot function at all in at least one of the six domains. The disability reported most often is with vision (13 percent) followed by mobility ( 7 percent). The prevalence of functioning with some difficulty in at least one domain increases from 22 percent for persons age 5-14 to 51 percent for persons age 50 and older. Four percent of persons age 50 and older cannot function at all in at least one of the domains compared with less than one percent of household members in each of the other age groups. The proportion of household members reported to have at least one function impairment increases with age, from 33 percent among household members age 5-14 to 86 percent among household members age 50 and older.

Vision is the domain in which increases in problems across age groups are greatest; the percentage reporting at least difficulty with vision increases from 9 percent among persons age 5-14 to 47 percent among persons age 50 and older. Next to vision, the domains in which household members age 50 and older have the greatest problems in functioning are mobility ( 51 percent) and remembering ( 24 percent).

### 2.9.1 Young Child Disability

Questions relating to young children's disability were asked to a child's parent or primary caretaker. Respondents were asked to report whether the young children had any of the following disabilities: serious delay in sitting, standing, or walking, difficulty seeing, either in the daytime or at night, difficulty hearing, difficulty understanding what is being said, difficulty in walking or moving arms, having fits, becoming rigid or losing consciousness, not learning to do things like other children; and difficulty speaking/being understood.

Table 2.15 shows that one in four children age 2-9 years was reported to have at least one difficulty. The disability reported most often is that the child does not learn to do things like other

Table 2.15 Young child disability
Percentage of children aged 2-9 years who, compared to other children, have specific difficulties, according to type of difficulty, and the percentage of children with at least one disability, Maldives 2009

| Disability | Percent |
| :--- | :---: |
| Serious delay in sitting, standing or walking | 3.8 |
| Difficulty seeing, either in the daytime or at night | 3.1 |
| Have difficulty hearing | 2.9 |
| Difficulty understanding what is being said | 7.3 |
| Difficulty in walking or moving arms | 2.8 |
| Have fits, become rigid or lose consciousness | 5.5 |
| Does not learn to do things like other children | 9.7 |
| Difficulty speaking/being understood | 4.4 |
| At least one disability | 24.8 |
| Number | 6,050 | children ( 10 percent) followed by difficulty understanding what is being said ( 7 percent). Six percent of children were reported to have fits, become rigid, or lose consciousness, and 4 percent have a serious delay in sitting, standing, or walking and difficulty speaking or being understood.

### 2.10 Children in Economically Productive Labour

Information was collected in the survey on work done by children age 5-14 years. Economically productive work includes any work (paid and unpaid) for someone who is not a member of the household; help with household chores such as shopping, collecting firewood, cleaning, fetching water, or caring for children; and family work (on the farm or in a business or selling goods in the street).

Table 2.16 shows that 34 percent of children age $5-14$ are working in economically productive work, and most of them do domestic work ( 32 percent). Among children who work in domestic jobs, 22 percent work for less than 4 hours per day and 11 percent work for more than 4 hours per day. Older children (10-14 years), girls, and children in the South region are more likely to work than other children.

| Table 2.16 Children in economically productive labour |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percentage of children age 5-14 years working in economically productive work, by selected background characteristics, Maldives 2009 |  |  |  |  |  |  |  |
| Background characteristic |  | g for ho is not of the old | Domestic work |  | Other <br> family/ farm business | Currently working | Number of children |
|  | Paid | Unpaid | Less than 4 hours | 4 hours or more/day |  |  |  |
| Age |  |  |  |  |  |  |  |
| 5-9 | 0.1 | 2.2 | 18.5 | 5.3 | 0.5 | 25.5 | 3,735 |
| 10-14 | 0.4 | 3.0 | 24.1 | 14.8 | 1.3 | 41.2 | 4,631 |
| Sex |  |  |  |  |  |  |  |
| Male | 0.4 | 2.8 | 19.4 | 7.6 | 0.8 | 29.3 | 4,278 |
| Female | 0.2 | 2.4 | 24.0 | 13.7 | 1.0 | 39.3 | 4,089 |
| Region |  |  |  |  |  |  |  |
| Malé | 0.0 | 4.2 | 14.4 | 4.9 | 0.4 | 21.9 | 2,123 |
| North | 0.5 | 1.9 | 21.7 | 12.4 | 1.4 | 35.9 | 1,450 |
| North Central | 0.5 | 2.9 | 22.0 | 9.6 | 0.8 | 34.6 | 1,369 |
| Central | 0.4 | 0.7 | 22.2 | 6.2 | 1.3 | 29.7 | 739 |
| South Central | 0.2 | 3.9 | 9.7 | 15.8 | 0.9 | 27.9 | 1,061 |
| South | 0.4 | 1.1 | 38.1 | 15.7 | 1.1 | 54.5 | 1,625 |
| Total | 0.3 | 2.6 | 21.6 | 10.6 | 0.9 | 34.2 | 8,367 |

### 2.11 Care and Support for Older Adults

Table 2.17 shows that overall, 31 percent of household members are under age 15, 64 percent are age $15-64$, and 5 percent are age 65 or older. Malé has the highest proportion of people who belong to the productive group (age 15-64), and the South region has the lowest ( 71 percent and 58 percent, respectively).

More than one in four households (26 percent) has at least one member who is 65 years or older. The proportion of households with a member age 65 or older ranges from 16 percent in Malé to 37 percent in the South region.

Table 2.17 Households with older adult population
Percent distribution of household population by specific age groups and the percentage of households with a usual member (de jure) age 65 or older, by region, Maldives 2009

| Region | Age |  |  |  |  | Number of usual members of a household (de jure members) | Percentage of households with a usual member age 65 or older | Number of households |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 0-14 | 15-64 | 65+ | Don't know/ missing | Total |  |  |  |
| Malé | 25.7 | 71.3 | 2.8 | 0.2 | 100.0 | 12,994 | 15.9 | 1,994 |
| North | 33.3 | 61.1 | 5.4 | 0.1 | 100.0 | 6,302 | 25.9 | 1,032 |
| North Central | 33.4 | 60.4 | 6.0 | 0.2 | 100.0 | 5,970 | 28.2 | 1,008 |
| Central | 32.1 | 63.3 | 4.6 | 0.1 | 100.0 | 3,515 | 26.5 | 480 |
| South Central | 32.6 | 60.9 | 6.4 | 0.0 | 100.0 | 4,698 | 30.0 | 780 |
| South | 34.0 | 57.9 | 7.6 | 0.5 | 100.0 | 6,963 | 37.2 | 1,150 |
| Total | 30.8 | 63.9 | 5.1 | 0.2 | 100.0 | 40,443 | 25.7 | 6,443 |

To gauge the level of care and support that is provided by households for older adults, each respondent to the household questionnaire was asked to report on the care and support that the older members (age 65 and older) of their household require in five areas of physical activity. Respondents were asked to report whether household members age 65 and older require assistance with the following physical activities: personal care such as bathing, dressing, or eating; medical care such as giving medications or changing dressings; household activities such as cooking, laundry, and cleaning; going outside the house; and being watched over so as not to hurt themselves or others. The findings are presented in Table 2.18.

| Table 2.18 Care and support of physical activities for older adults |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percentage of de-facto household members age 65 and older requiring care and support for specific physical activities, by region, Maldives 2009 |  |  |  |  |  |  |
|  | Physical activities for which adults age 65 and older require care and support |  |  |  |  | Total number of household |
| Region | Personal care | Medical care | Household activities | To go outside | Watched over for safety | members age 65 and older |
| Malé | 22.0 | 39.2 | 20.8 | 28.6 | 17.4 | 382 |
| North | 27.4 | 46.4 | 24.7 | 20.4 | 18.6 | 338 |
| North Central | 21.8 | 33.0 | 20.3 | 16.8 | 19.7 | 343 |
| Central | 25.4 | 41.4 | 23.8 | 18.7 | 14.8 | 157 |
| South Central | 28.2 | 43.8 | 27.7 | 19.7 | 15.1 | 294 |
| South | 29.1 | 42.1 | 33.5 | 24.3 | 32.5 | 519 |
| Total | 25.8 | 40.9 | 25.8 | 22.1 | 21.3 | 2,033 |

About 4 in 10 older adults ( 41 percent) need assistance with medical care such as taking medications and changing dressings, or other medical requirements. About one in four older adults requires help with personal care, and the same proportion needs assistance with general household tasks. One in five older adults each must be assisted when leaving their home and must be watched over for safety reasons.

To further assess the overall extent of care and support required by older adults, Table 2.19 presents the percentage of older adults who require assistance with one or more needs, two or more needs, three or more needs, four or more needs, or help with all five needs.. Overall, 5 percent of the population age 65 and older need assistance with all five needs that were asked about, while 43 percent do not require assistance with any of the five activities.

| Percentage of de-facto household members age 65 and older requiring care and support in one or more areas, by region, Maldives 2009 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | In how many areas of physical activity is care and support needed by household members age 65 and older? |  |  |  |  |  | Total number of household |
| Region | Require no support | One or more | Two or more | Three or more | Four or more | All five ${ }^{1}$ | members age 65 and older |
| Malé | 42.9 | 57.1 | 34.3 | 20.7 | 12.5 | 3.5 | 382 |
| North | 38.1 | 61.9 | 37.7 | 22.6 | 10.4 | 5.0 | 338 |
| North Central | 55.2 | 44.8 | 31.4 | 20.1 | 12.0 | 3.2 | 343 |
| Central | 44.6 | 55.4 | 30.8 | 21.2 | 13.1 | 3.6 | 157 |
| South Central | 44.2 | 55.8 | 37.0 | 21.9 | 13.5 | 6.3 | 294 |
| South | 35.1 | 64.9 | 42.7 | 30.9 | 15.5 | 7.5 | 519 |
| Total | 42.5 | 57.5 | 36.6 | 23.7 | 13.0 | 5.1 | 2,033 |

[^2]
### 2.12 Health Expenditures

The MDHS included a health expenditure module to determine how much money households paid for expenditures related to health care. Household respondents were asked to report on expenditures for health insurance premiums, hospital stays in the previous year, and for all health care related costs incurred in the previous month, including visits to health care providers, laboratory tests, other medical tests, prescription drugs, non-prescription drugs, and finally, travel and accommodation costs associated with obtaining care on other islands.

Prior to asking specific expenditure questions, household respondents were asked to report on the frequency of the related health activity. Each household was asked whether any member of the household was covered by a health welfare or assistance plan at any time in the preceding year. Table 2.20 shows that 29 percent of households have at least one household member who was covered by a health welfare or assistance plan in the previous year. As many as 4 in 10 households in Malé had a member so covered. This is the highest percentage in the regions of Maldives. In contrast, only 17 percent of households in South Central have at least one member who is covered by a health welfare plan or assistance. Coverage with a health welfare or assistance plan is more common as the wealth level of the household rises. Only 18 percent of the poorest households have a member who has health coverage compared with 4 in 10 of the wealthiest households.

Table 2.20 shows that hospitalization is more common in rural areas, and in the North, Central, and South regions. Admittance to a hospital declines as the education level and wealth status of the household head increases. For example, the proportion of households with a member admitted to a hospital in households whose head has no education is 58 percent compared with 45 percent of households whose head has more than secondary education.

The last column in Table 2.20 is shown to gauge the utilization of outpatient services. Overall, 61 percent of households had a member who visited a health care provider for treatment or preventive care in the month before the survey. Rural households had a slightly higher proportion of visits to a health care provider than urban households. There are small variations across regions. Visits to a health care provider decline as the education level of the household head increases. For example, 63 percent of households whose head has no education have a member who visited a health care provider compared with 52 percent of households whose head has more than secondary educa-

Table 2.20 Health insurance coverage and utilization of inpatient and outpatient services

Percentage of households with at least one household member who was covered by a health welfare plan or assistance, was hospitalized during the year before the survey, or visited a health provider during the past month, by background characteristics, Maldives 2009

| Background characteristic | Percentage of households with at least one member who: |  |  | Number of households |
| :---: | :---: | :---: | :---: | :---: |
|  | Was covered by a health welfare plan/ assistance | Had a hospital stay last year | Visited a health provider during the last month |  |
| Residence |  |  |  |  |
| Urban (Malé) | 40.2 | 42.9 | 59.8 | 1,994 |
| Rural | 23.2 | 60.3 | 61.8 | 4,449 |
| Region |  |  |  |  |
| Malé | 40.2 | 42.9 | 59.8 | 1,994 |
| North | 22.9 | 61.2 | 62.1 | 1,032 |
| North Central | 21.0 | 58.7 | 62.0 | 1,008 |
| Central | 35.6 | 60.9 | 62.7 | 480 |
| South Central | 16.9 | 59.7 | 62.5 | 780 |
| South | 24.6 | 60.8 | 60.4 | 1,150 |
| Education of the head of the household |  |  |  |  |
| No education | 25.9 | 58.4 | 62.6 | 3,731 |
| Primary | 24.4 | 51.0 | 61.1 | 1,293 |
| Secondary | 42.7 | 46.9 | 57.1 | 829 |
| More than secondary | 42.6 | 44.7 | 51.8 | 211 |
| Wealth index quintile |  |  |  |  |
| Lowest | 17.5 | 56.5 | 60.9 | 1,523 |
| Second | 21.4 | 62.5 | 63.4 | 1,269 |
| Middle | 27.9 | 62.2 | 60.6 | 1,257 |
| Fourth | 37.0 | 51.4 | 62.3 | 1,232 |
| Highest | 42.2 | 40.3 | 58.5 | 1,162 |
| Total | 28.5 | 54.9 | 61.2 | 6,443 |

Note: Total includes 379 households with information missing on the level of formal education for the household head

Results of the specific expenditure questions are not included in this report because as can be seen in Table 2.21, a high percentage of household respondents reported that they did not know all the expenditure questions they were asked. Table 2.21 shows what percentage of households had a household member who experienced a health care service, but did not know the answer to the question on how much the service cost. For example, 38 percent of households had a member of the household admitted to a hospital in the previous year, but did not know how much the household was charged for the hospital stay (excluding costs covered by a health welfare or assistance plan). Similarly, thirty-two percent of households reported having a member of the household obtain laboratory tests, but did not know how much the household was charged for the laboratory tests (excluding costs covered by a health welfare or assistance plan). Due to the rather high percentage of "Don't know" responses or missing data on costs, the cost data are not included in this report.

| Table 2.21 Quality of health expenditure data |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percentage of households with at least one household member having a specific health service for which the response on the question relating to costs of the service was 'Don't know' or missing, Maldives 2009 |  |  |  |  |  |  |
|  | Percentage "don't know" and missing on cost |  |  |  |  |  |
| Background characteristic | Hospital stay | Provider visit | Laboratory fees | $\begin{gathered} \text { Other } \\ \text { medical } \\ \text { test } \end{gathered}$ | Prescription drugs | Nonprescription drugs |
| Residence |  |  |  |  |  |  |
| Urban (Malé) | 47.2 | 33.1 | 44.4 | 45.8 | 45.6 | 35.6 |
| Rural | 35.1 | 18.4 | 25.3 | 36.6 | 25.4 | 17.5 |
| Region |  |  |  |  |  |  |
| Malé | 47.2 | 33.1 | 44.4 | 45.8 | 45.6 | 35.6 |
| North | 32.2 | 10.7 | 19.8 | 31.0 | 22.5 | 17.9 |
| North Central | 30.4 | 11.1 | 22.8 | 34.9 | 21.5 | 11.6 |
| Central | 43.4 | 30.1 | 40.8 | 50.7 | 33.7 | 31.6 |
| South Central | 36.7 | 25.4 | 29.3 | 37.4 | 24.9 | 20.1 |
| South | 37.0 | 22.1 | 22.9 | 33.8 | 28.5 | 14.0 |
| Atoll |  |  |  |  |  |  |
| Malé | 47.2 | 33.1 | 44.4 | 45.8 | 45.6 | 35.6 |
| Haa Alif | 20.2 | 7.9 | 11.3 | (14.8) | 13.2 | (12.1) |
| Haa Dhaal | 35.7 | 10.5 | 20.8 | (32.1) | 22.5 | (13.8) |
| Shaviyani | 39.9 | 14.6 | 27.9 | (49.0) | 33.2 | (27.4) |
| Noonu | 32.6 | 10.8 | 19.5 | (31.8) | 23.3 | * |
| Raa | 33.0 | 8.0 | 26.4 | 38.5 | 25.1 | * |
| Baa | 31.0 | 11.9 | 29.3 | (35.3) | 17.7 | 6.9 |
| Lhaviyani | 20.7 | 15.5 | 10.7 | (30.1) | 18.5 | (22.4) |
| Kaafu | 34.0 | 26.7 | 34.5 | (53.3) | 24.6 | (31.5) |
| Alif Alif | 46.7 | 19.3 | 38.5 | 54.5 | 32.6 | (27.9) |
| Alif Dhaal | 53.3 | 45.4 | 49.9 | 48.7 | 47.2 | 33.7 |
| Vaavu | 29.9 | 11.6 | 27.1 | (26.0) | 16.4 | * |
| Meemu | 35.4 | 12.5 | 29.4 | 33.4 | 22.1 | * |
| Faafu | 21.9 | 11.1 | 19.5 | (33.9) | 13.9 | * |
| Dhaalu | 38.6 | 24.6 | (26.6) | (49.6) | 26.6 | * |
| Thaa | 35.0 | 26.9 | 33.3 | (44.9) | 20.1 | * |
| Lhaamu | 43.3 | 35.1 | 30.3 | 32.2 | 31.9 | (25.5) |
| Gaaf Alif | 49.1 | 27.4 | 24.8 | 41.1 | 32.0 | (27.8) |
| Gaaf Dhaal | 38.5 | 15.5 | 23.3 | (28.4) | 34.6 | (11.4) |
| Gnaviyani | 30.9 | 24.1 | 25.9 | (38.5) | 29.7 | (13.2) |
| Seenu | 32.5 | 23.8 | 20.9 | (32.4) | 22.2 | * |
| Education of the head of the household |  |  |  |  |  |  |
| No education | 36.9 | 21.5 | 29.8 | 41.2 | 30.3 | 25.5 |
| Primary | 36.7 | 21.4 | 27.8 | 32.1 | 26.6 | 22.7 |
| Secondary | 43.5 | 27.6 | 38.5 | 40.8 | 38.5 | 31.6 |
| More than secondary | (33.2) | 22.5 | (29.7) | * | (35.8) | , |
| Certificate | 43.0 | 16.9 | (27.1) | * | 23.0 | * |
| Missing | 45.7 | 35.5 | 52.3 | 68.1 | 47.7 | (25.9) |
| Wealth index quintile |  |  |  |  |  |  |
| Poorest | 38.5 | 18.2 | 29.1 | 36.3 | 27.6 | 14.8 |
| Poorer | 37.4 | 17.2 | 22.2 | 33.8 | 25.8 | 19.6 |
| Middle | 31.8 | 20.6 | 25.0 | 39.9 | 22.0 | 20.3 |
| Richer | 37.9 | 27.9 | 37.1 | 44.7 | 42.4 | 29.9 |
| Richest | 48.6 | 32.7 | 44.7 | 44.0 | 41.5 | 35.1 |
| Total | 38.0 | 22.8 | 31.6 | 40.1 | 31.3 | 25.2 |
| Number | 3,537 | 3,941 | 2,175 | 1,182 | 3,702 | 876 |

[^3]
### 2.13 Tsunami

Nearly one in ten households report having a household member who has been displaced as a result of the tsunami (see Table 2.22). The most affected region is South Central, where one in four households report having a member displaced by the tsunami. The Central and North Central regions each have 20 percent and 11 percent of household members who were displaced.

Table 2.22 indicates that, among households that have a household member who was displaced by the tsunami, 7 percent were displaced on the same island and 2 percent were displaced to another island. Nineteen percent of households in the South Central region and 13 percent in the Central region have a household member who was displaced on the same island.

| Table 2.22 Tsunami displacement |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Percentage of households who have a household member who was displaced because of the tsunami, and whether or not they were displaced to another island, by region, Maldives 2009 |  |  |  |  |  |
|  |  | splaced to whe |  | Percentage of |  |
| Region | Displaced on the same island | Displaced to another island | Not <br> determined | have a household member who was displaced | Number of households |
| Malé | 1.1 | 0.5 | 0.0 | 1.5 | 1,994 |
| North | 5.3 | 0.1 | 0.1 | 5.5 | 1,032 |
| North Central | 7.6 | 2.7 | 0.2 | 10.5 | 1,008 |
| Central | 13.3 | 5.1 | 0.7 | 19.1 | 480 |
| South Central | 18.5 | 6.7 | 0.0 | 25.2 | 780 |
| South | 7.5 | 0.7 | 0.4 | 8.5 | 1,150 |
| Total | 6.9 | 1.9 | 0.2 | 9.0 | 6,443 |

Households which have a household member who was displaced because of the tsunami were asked the location of those household members. Table 2.23 indicates that among those households with a household member who was displaced by the tsunami, 14 percent have a household member who is still living in temporary shelter. About half are living in their own house that has been reconstructed or repaired, and 16 percent are living in a new house. Another 10 percent live with a host family.

The proportion of displaced persons who live in their own renovated or repaired house varies across regions, ranging from 43 percent in North Central to 64 percent in Central region. Three in ten displaced persons in North Central region live in a reconstructed new house.

```
Table 2.23 Current location of tsunami displaced
For those households who have a household member who was displaced because of the tsunami, the distribution of where those displaced members live now, by region, Maldives 2009
```

| Region | Where displaced members live now: |  |  |  |  |  | Total | Number of households |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Temporary shelter | Old damaged house | Own renovated/ repaired house | Reconstructed new house | Living with host family | Not determined |  |  |
| Malé | * | * | * | * | * | * | 100.0 | 31 |
| North | 19.1 | 3.9 | 53.0 | 6.3 | 17.7 | 0.0 | 100.0 | 57 |
| North Central | 7.5 | 10.8 | 43.4 | 30.5 | 6.0 | 1.7 | 100.0 | 106 |
| Central | 6.8 | 9.4 | 64.1 | 8.8 | 10.4 | 0.6 | 100.0 | 92 |
| South Central | 17.6 | 10.2 | 48.8 | 16.1 | 7.3 | 0.0 | 100.0 | 197 |
| South | 12.2 | 6.0 | 52.2 | 7.8 | 15.3 | 6.5 | 100.0 | 98 |
| Total | 13.8 | 8.3 | 49.1 | 16.3 | 10.1 | 2.4 | 100.0 | 580 |

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

Table 2.24 shows that, among households that gave shelter after the tsunami, 3 in 10 provided shelter to $0-4$ people, 36 percent sheltered $5-9$ people, and 26 percent sheltered 10 or more people. Table 2.23 also shows some variations across regions.

| Table 2.24 Number of people sheltered |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Among households giving shelter after the tsunami, the percent distribution of number of people sheltered, by region, Maldives 2009 |  |  |  |  |  |  |
|  | Number of people given shelter |  |  |  |  |  |
| Region | 0-4 | 5-9 | 10+ | $\begin{gathered} \text { Don't know/ } \\ \text { missing } \\ \hline \end{gathered}$ | Total | Number of households |
| Malé | (38.2) | (33.7) | (15.3) | (12.7) | 100.0 | 108 |
| North | 35.3 | 43.9 | 15.4 | 5.4 | 100.0 | 80 |
| North Central | 31.2 | 35.3 | 29.3 | 4.2 | 100.0 | 94 |
| Central | 26.4 | 48.1 | 16.1 | 9.3 | 100.0 | 65 |
| South Central | 25.7 | 31.7 | 35.7 | 6.9 | 100.0 | 178 |
| South | 26.4 | 29.0 | 35.1 | 9.6 | 100.0 | 65 |
| Total | 30.3 | 35.8 | 26.0 | 7.9 | 100.0 | 589 |

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

Households that gave shelter to tsunami victims were asked whether they received benefits after the tsunami. Table 2.25 shows that 70 percent of the households did not receive any benefits. Among households that received benefits, 11 percent received benefits for 1-4 persons, 14 percent for 5-9 people, and 4 percent received benefits for 10 or more people.

Table 2.25 Number of household members who received benefits
Among households giving shelter after the tsunami, the percent distribution of number of household members who received benefits after the tsunami, by region, Maldives 2009

|  | Number of people given benefits |  |  |  |  |  |  |
| :--- | :---: | ---: | :---: | :---: | :---: | :---: | :---: |
|  | 0 | $1-4$ | $5-9$ | $10+$ | Don't know/ <br> missing | TotalNumber of <br> households |  |
| Region | $(80.4)$ | $(13.6)$ | $(4.2)$ | $(0.0)$ | $(1.8)$ | 100.0 | 108 |
| Malé | 85.8 | 8.2 | 6.0 | 0.0 | 0.0 | 100.0 | 80 |
| North | 79.0 | 7.2 | 9.4 | 3.5 | 1.0 | 100.0 | 94 |
| North Central | 62.2 | 9.2 | 22.4 | 6.2 | 0.0 | 100.0 | 65 |
| Central | 13.3 | 22.5 | 5.2 | 1.8 | 100.0 | 178 |  |
| South Central | 57.2 | 14.5 | 15.8 | 6.3 | 3.2 | 100.0 | 65 |
| South | 60.1 | 11.4 | 14.1 | 3.5 | 1.4 | 100.0 | 589 |
| Total | 69.6 | 14.4 |  |  |  |  |  |

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

## CHARACTERISTICS OF FEMALE RESPONDENTS

This chapter provides a demographic and socioeconomic profile of female respondents interviewed in the 2009 MDHS. Such background information is essential to the interpretation of findings and for understanding the results presented later in the report. Basic characteristics collected include age, level of education, marital status, religion, and wealth status. Exposure to mass media and literacy status were examined, and detailed information was collected on employment status, occupation, and earnings.

### 3.1 Characteristics of Survey Respondents

Table 3.1 presents the distribution of the ever-married women who were interviewed in the 2009 MDHS by age, marital status, urban or rural residence, region of residence, educational level, and wealth quintile.

The findings show that approximately two-fifths of women are under age 30 and about one-fourth are age 40 or older. There are fewer women in the 15-19 and 20-24 age groups than in the 25-29 cohort. The majority of women (91 percent) are married, and the remainder are split between divorced or separated (8 percent) and widowed (1 percent). Thirty-three percent of women live in urban areas. Considering place of residence, 33 percent of the women are from Malé, 30 percent are from the North and the North Central regions combined, 9 percent from the Central region, 12 percent from the South Central region, and 17 percent from the South region.

The majority of respondents have had some education. Approximately one-fourth of the women never attended school. Around onethird of women have only a primary education, while four in ten attended secondary school or higher. The women are fairly evenly distributed across the wealth quintiles, with the smallest percentage found in the lowest wealth quintile (18 percent).

### 3.2 Educational Attainment by Background Characteristics

| Percent distribution of women age $15-49$ by selected background characteristics, Maldives 2009 |  |  |  |
| :---: | :---: | :---: | :---: |
| Background characteristic | Weighted percent | Weighted | Unweighted |
| Age |  |  |  |
| 15-19 | 1.7 | 119 | 129 |
| 20-24 | 17.8 | 1,268 | 1,381 |
| 25-29 | 21.6 | 1,539 | 1,528 |
| 30-34 | 18.0 | 1,287 | 1,184 |
| 35-39 | 16.6 | 1,185 | 1,169 |
| 40-44 | 14.2 | 1,013 | 1,004 |
| 45-49 | 10.1 | 721 | 736 |
| Marital status |  |  |  |
| Married | 91.2 | 6,500 | 6,558 |
| Divorced/separated | 7.7 | 549 | 492 |
| Widowed | 1.2 | 82 | 81 |
| Residence |  |  |  |
| Urban | 33.2 | 2,368 | 1,041 |
| Rural | 66.8 | 4,763 | 6,090 |
| Region |  |  |  |
| Malé | 33.2 | 2,368 | 1,041 |
| North | 15.0 | 1,067 | 960 |
| North Central | 14.5 | 1,038 | 1,259 |
| Central | 8.6 | 615 | 1,290 |
| South Central | 12.0 | 853 | 1,543 |
| South | 16.7 | 1,190 | 1,038 |
| Education |  |  |  |
| No formal education | 23.4 | 1,668 | 1,941 |
| Primary | 34.6 | 2,464 | 2,503 |
| Secondary | 36.2 | 2,584 | 2,384 |
| More than secondary | 4.7 | 333 | 216 |
| Unknown - Certificate | 1.1 | 81 | 87 |
| Wealth quintile |  |  |  |
| Lowest | 18.2 | 1,300 | 1,578 |
| Second | 19.6 | 1,396 | 1,850 |
| Middle | 20.9 | 1,488 | 1,931 |
| Fourth | 20.3 | 1,447 | 1,112 |
| Highest | 21.0 | 1,499 | 660 |
| Total 15-49 | 100.0 | 7,131 | 7,131 |

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

Table 3.2 presents a detailed distribution of ever-married women age 15-49 by educational attainment. The general pattern evident in Table 3.2 indicates a decrease in the proportion of women with no education from the oldest to the youngest cohort. For example, 1 percent of women age 15-24 have no formal education, compared with 57 percent of women age 40-44 and 72 percent of women
age 45-49. Similarly, 74 percent of women age 15-24 had some secondary education compared with only 8 percent of women age 40-44 and 5 percent of women age 45-49. Overall, the median years of school completed for women age $15-49$ is 6.7 years.

The MDHS data indicate that educational opportunities vary by urban-rural residence. Urban women have higher rates of school attendance than their rural counterparts. Twelve percent of urban women have not attended school compared with 29 percent of women in rural areas. Comparison of the median number of years of education completed shows that urban women have a median of 8.7 years of schooling and rural women have 6.3 years of education. Forty-four percent of urban women have attended some secondary school compared with 30 percent of rural women.

Table 3.2 Educational attainment
Percent distribution of women age 15-49 by highest level of schooling attended or completed, and median grade completed, according to background characteristics, Maldives 2009

| Background characteristic | Highest level of schooling |  |  |  |  |  |  | Total | Median years completed | Number of women |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | No formal education | $\begin{aligned} & \text { Some } \\ & \text { primary } \end{aligned}$ | Completed primary ${ }^{1}$ | Some secondary | Completed secondary ${ }^{2}$ | More than secondary | Unknown Certificate |  |  |  |
| Age |  |  |  |  |  |  |  |  |  |  |
| 15-24 | 0.7 | 3.0 | 12.7 | 74.2 | 3.3 | 5.0 | 1.1 | 100.0 | 9.3 | 1,387 |
| 15-19 | 0.8 | 3.8 | 9.6 | 84.8 | 0.7 | 0.1 | 0.4 | 100.0 | 9.3 | 119 |
| 20-24 | 0.7 | 2.9 | 13.0 | 73.2 | 3.5 | 5.5 | 1.2 | 100.0 | 9.3 | 1,268 |
| 25-29 | 1.9 | 11.1 | 25.0 | 50.4 | 2.0 | 8.7 | 0.9 | 100.0 | 9.1 | 1,539 |
| 30-34 | 11.7 | 19.8 | 29.4 | 30.3 | 1.9 | 5.2 | 1.8 | 100.0 | 6.6 | 1,287 |
| 35-39 | 32.2 | 22.4 | 26.6 | 14.3 | 0.3 | 2.9 | 1.2 | 100.0 | 5.4 | 1,185 |
| 40-44 | 57.3 | 15.4 | 15.6 | 8.3 | 0.0 | 2.2 | 1.0 | 100.0 | a | 1,013 |
| 45-49 | 71.6 | 13.2 | 9.3 | 4.5 | 0.0 | 0.9 | 0.6 | 100.0 | a | 721 |
| Residence |  |  |  |  |  |  |  |  |  |  |
| Urban | 12.2 | 10.9 | 17.6 | 43.9 | 3.3 | 11.0 | 1.1 | 100.0 | 8.7 | 2,368 |
| Rural | 29.0 | 15.3 | 22.3 | 30.3 | 0.5 | 1.6 | 1.1 | 100.0 | 6.3 | 4,763 |
| Region |  |  |  |  |  |  |  |  |  |  |
| Malé | 12.2 | 10.9 | 17.6 | 43.9 | 3.3 | 11.0 | 1.1 | 100.0 | 8.7 | 2,368 |
| North | 29.6 | 15.7 | 24.7 | 28.6 | 0.2 | 0.7 | 0.5 | 100.0 | 6.2 | 1,067 |
| North Central | 35.2 | 12.4 | 21.8 | 28.1 | 0.4 | 1.1 | 1.1 | 100.0 | 6.2 | 1,038 |
| Central | 27.9 | 16.5 | 25.1 | 27.7 | 0.9 | 1.4 | 0.5 | 100.0 | 6.3 | 615 |
| South Central | 30.9 | 15.7 | 20.4 | 30.2 | 0.5 | 1.0 | 1.3 | 100.0 | 6.3 | 853 |
| South | 22.1 | 16.4 | 20.4 | 35.1 | 0.8 | 3.3 | 1.9 | 100.0 | 6.8 | 1,190 |
| Wealth quintile |  |  |  |  |  |  |  |  |  |  |
| Lowest | 37.0 | 19.3 | 22.3 | 20.5 | 0.4 | 0.3 | 0.3 | 100.0 | 5.4 | 1,300 |
| Second | 29.2 | 16.7 | 22.1 | 29.9 | 0.1 | 0.9 | 1.1 | 100.0 | 6.3 | 1,396 |
| Middle | 24.5 | 13.3 | 24.2 | 34.2 | 0.6 | 2.0 | 1.3 | 100.0 | 6.6 | 1,488 |
| Fourth | 18.8 | 11.1 | 18.7 | 42.7 | 1.9 | 5.4 | 1.5 | 100.0 | 7.4 | 1,447 |
| Highest | 9.4 | 9.6 | 16.8 | 44.7 | 4.0 | 14.1 | 1.4 | 100.0 | 9.1 | 1,499 |
| Total | 23.4 | 13.8 | 20.8 | 34.8 | 1.5 | 4.7 | 1.1 | 100.0 | 6.7 | 7,131 |
| $\mathrm{a}=$ Omitted bec ${ }^{1}$ Completed $7^{\text {th }}$ ${ }^{2}$ Completed $12^{\text {th }}$ |  | n 50 per | cent of wome el level | n had no fo | rmal schoolin |  |  |  |  |  |

Educational levels are lowest in the North Central region, where 35 percent of the women have never attended school. The highest educational level is found in Malé, where only 12 percent of women have never attended school. Educational attainment also increases as household economic status increases. For example, 37 percent of the women in the poorest households have no formal education compared with 9 percent of women in the most advantaged households. Forty-five of women in the highest wealth quintile have some secondary education compared with 21 percent of women in the lowest wealth quintile.

### 3.3 Access to Mass Media

The 2009 MDHS collected information on the exposure of respondents to broadcast and print media and the Internet (Table 3.3). This information is important because it indicates to what extent the mass media can be used to disseminate family planning, health, and other information. Access to
mass media is relatively high in Maldives. Television is the most popular of the mass media among women ( 96 percent watch television at least once a week), followed by radio ( 78 percent of women listen to radio at least once a week). Readership of print media and use of the Internet is comparatively lower for women (36 percent and 21 percent, respectively).

There is no strong relationship between access to the four types of media and age; however, women age 15-19 read a newspaper and listen to the radio once a week less than older women; in contrast, they use the Internet at least once a week at higher rates than older women. On the other hand, media use varies by residence. Women who live in urban areas read a newspaper and use the Internet at least once a week, much more than other women, whereas women living in rural areas listen to the radio at least once a week at higher rates than urban women. The percentage of women who read a newspaper or magazine at least once a week varied considerably, from 15 percent in the Central region to 59 percent in the Male region. The percentage who use the Internet at least once a week ranges from 44 percent in Malé to 6 percent in the North and the Central regions.

| 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, Maldives 2009 |  |  |  |  |  |  |  |
| Background characteristic | Reads a newspaper at least once a week | Watches television at least once a week | Listens to radio at least once a week | At least three media at least once a week ${ }^{1}$ | No media at least once a week | Uses Internet at least once a week | Number of women |
| Age |  |  |  |  |  |  |  |
| 15-19 | 15.6 | 96.2 | 71.8 | 25.8 | 0.0 | 29.2 | 119 |
| 20-24 | 33.0 | 97.0 | 73.7 | 38.4 | 0.2 | 29.7 | 1,268 |
| 25-29 | 36.9 | 96.7 | 77.4 | 39.9 | 0.7 | 27.9 | 1,539 |
| 30-34 | 37.9 | 97.2 | 74.8 | 37.7 | 0.4 | 24.3 | 1,287 |
| 35-39 | 39.1 | 96.7 | 80.4 | 36.6 | 0.8 | 16.9 | 1,185 |
| 40-44 | 37.2 | 95.4 | 79.6 | 33.1 | 0.9 | 12.2 | 1,013 |
| 45-49 | 33.6 | 94.8 | 86.2 | 30.4 | 1.0 | 6.9 | 721 |
| Residence |  |  |  |  |  |  |  |
| Urban | 59.1 | 96.7 | 66.4 | 59.3 | 0.4 | 44.0 | 2,368 |
| Rural | 24.6 | 96.3 | 83.6 | 25.2 | 0.7 | 10.2 | 4,763 |
| Region |  |  |  |  |  |  |  |
| Malé | 59.1 | 96.7 | 66.4 | 59.3 | 0.4 | 44.0 | 2,368 |
| North | 17.8 | 95.7 | 89.8 | 18.9 | 0.6 | 6.2 | 1,067 |
| North Central | 23.6 | 96.4 | 79.8 | 23.0 | 0.9 | 8.6 | 1,038 |
| Central | 15.1 | 96.7 | 78.9 | 15.4 | 1.2 | 5.8 | 615 |
| South Central | 15.6 | 96.3 | 81.3 | 16.7 | 0.7 | 6.8 | 853 |
| South | 43.1 | 96.4 | 85.3 | 43.9 | 0.5 | 19.9 | 1,190 |
| Education |  |  |  |  |  |  |  |
| No formal education | 23.7 | 94.6 | 84.6 | 20.9 | 1.2 | 1.8 | 1,668 |
| Primary | 33.6 | 96.9 | 81.7 | 31.1 | 0.7 | 9.0 | 2,464 |
| Secondary | 41.5 | 97.4 | 72.8 | 45.6 | 0.2 | 36.6 | 2,584 |
| More than secondary | 69.4 | 95.0 | 56.9 | 77.1 | 0.0 | 86.4 | 333 |
| Wealth quintile |  |  |  |  |  |  |  |
| Lowest | 17.7 | 93.2 | 86.1 | 17.0 | 1.3 | 3.7 | 1,300 |
| Second | 19.7 | 96.8 | 84.8 | 20.3 | 0.6 | 5.9 | 1,396 |
| Middle | 30.9 | 97.8 | 82.3 | 30.9 | 0.4 | 11.8 | 1,488 |
| Fourth | 46.7 | 97.2 | 73.7 | 48.6 | 0.5 | 29.4 | 1,447 |
| Highest | 62.2 | 96.8 | 63.9 | 62.5 | 0.3 | 53.0 | 1,499 |
| Total | 36.1 | 96.4 | 77.9 | 36.5 | 0.6 | 21.4 | 7,131 |
| Note: Total includes 81 cases for which information on woman's formal education level is missing. ${ }^{1}$ Refers to radio, television and newspaper |  |  |  |  |  |  |  |

The percentage of women who reported that they have been exposed to at least three media at least once a week is 37 percent. Women with more than secondary education and women in the highest wealth quintile have the highest rates of exposure to three media at least once a week (77 percent and 63 percent, respectively).

### 3.4 EMPLOYMENT

Employment is a source of empowerment for women, given that they gain control over their own income. It is difficult to measure employment status because some work, especially work on family farms, in family businesses, or in the informal sector, is often not perceived as employment by women and men themselves, and hence not reported as such. The 2009 MDHS asked women detailed questions about their employment status to ensure complete coverage of employment in any sector, whether formal or informal. Women who reported that they were currently working and those who reported that they worked at some time during the 12 months preceding the survey are considered to have been employed. Additional information was collected on the type of work women were doing, whether they worked continuously throughout the year, for whom they worked, and the form in which they received their earnings.

Tables 3.4 shows the percent distribution of women age $15-49$ by employment status and according to background characteristics. Two in five women are currently employed. Seven percent reported that they worked at some point during the past 12 months but were not working at the time of the survey, and fifty-three percent did not work at all in the 12 months preceding the survey (Figure 3.1).

| Table 3.4 Employment status |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Percent distribution of women age 15-49 by employment status, according to background characteristics, Maldives 2009 |  |  |  |  |  |
| Background characteristic | Employed in the 12 months preceding the survey |  | Not employed in the 12 months preceding the survey | Total | Number of women |
|  | Currently employed ${ }^{1}$ | Not currently employed |  |  |  |
| Age |  |  |  |  |  |
| 15-19 | 27.3 | 18.5 | 54.2 | 100.0 | 119 |
| 20-24 | 37.1 | 10.5 | 52.3 | 100.0 | 1,268 |
| 25-29 | 37.8 | 7.5 | 54.6 | 100.0 | 1,539 |
| 30-34 | 41.6 | 5.4 | 53.0 | 100.0 | 1,287 |
| 35-39 | 43.2 | 6.4 | 50.4 | 100.0 | 1,185 |
| 40-44 | 42.7 | 5.4 | 51.3 | 100.0 | 1,013 |
| 45-49 | 40.4 | 7.1 | 51.9 | 100.0 | 721 |
| Marital status |  |  |  |  |  |
| Married | 38.7 | 7.5 | 53.7 | 100.0 | 6,500 |
| Divorced/separated/widowed | 53.5 | 5.8 | 39.6 | 100.0 | 631 |
| Number of living children |  |  |  |  |  |
| 0 | 48.4 | 12.5 | 39.1 | 100.0 | 1,040 |
| 1-2 | 39.7 | 6.4 | 53.8 | 100.0 | 3,183 |
| 3-4 | 37.2 | 5.5 | 56.9 | 100.0 | 1,636 |
| 5+ | 37.6 | 7.6 | 54.5 | 100.0 | 1,272 |
| Residence |  |  |  |  |  |
| Urban | 40.3 | 6.1 | 53.3 | 100.0 | 2,368 |
| Rural | 39.9 | 7.9 | 52.1 | 100.0 | 4,763 |
| Region |  |  |  |  |  |
| Malé | 40.3 | 6.1 | 53.3 | 100.0 | 2,368 |
| North | 40.9 | 9.2 | 49.6 | 100.0 | 1,067 |
| North Central | 41.3 | 9.8 | 48.9 | 100.0 | 1,038 |
| Central | 41.2 | 4.7 | 54.1 | 100.0 | 615 |
| South Central | 45.4 | 8.5 | 46.1 | 100.0 | 853 |
| South | 33.3 | 6.5 | 60.2 | 100.0 | 1,190 |
| Education |  |  |  |  |  |
| No formal education | 39.5 | 7.9 | 52.3 | 100.0 | 1,668 |
| Primary | 34.4 | 6.1 | 59.2 | 100.0 | 2,464 |
| Secondary | 41.7 | 8.4 | 49.9 | 100.0 | 2,584 |
| More than secondary | 64.6 | 6.1 | 29.3 | 100.0 | 333 |
| Wealth quintile |  |  |  |  |  |
| Lowest | 40.0 | 9.6 | 50.3 | 100.0 | 1,300 |
| Second | 39.1 | 7.4 | 53.4 | 100.0 | 1,396 |
| Middle | 38.1 | 8.1 | 53.6 | 100.0 | 1,488 |
| Fourth | 39.8 | 5.0 | 55.1 | 100.0 | 1,447 |
| Highest | 43.1 | 6.8 | 49.9 | 100.0 | 1,499 |
| Total | 40.0 | 7.3 | 52.5 | 100.0 | 7,131 |

Note: Total includes women with information missing on employment status who are not shown separately. Total includes 81 cases for which information on woman's formal education level is missing 1 ""Currently employed' is defined as having done work in the past seven days. Includes persons who did not work in the past seven days but who are regularly employed and were absent from work for leave, illness, vacation, or any other such reason.

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


Women in the older age group have higher current employment rates than younger women. A higher proportion of women who are divorced, separated, or widowed ( 54 percent) are currently employed compared with other women ( 39 percent). In addition, higher rates of women with no children are also currently employed compared with those who have children. There is no difference by urban-rural residence in the proportion of women who are currently employed ( 40 percent). Levels of employment vary a little by region; for example, among women, current employment ranges from a low of 33 percent in the South to a high of 45 percent in the South Central region. Women with more than a secondary education had the highest rates of current employment at the time of the survey. For example, 40 percent of the women with no education are currently employed compared with 65 percent of the women with more than secondary education. There are no substantial variations in the proportion currently employed across wealth quintiles.

### 3.5 OCCUPATION

Respondents who reported being currently employed or who worked in the 12 months preceding the survey were asked what type of work they normally do. Table 3.5 shows the distribution of women by occupation and according to background characteristics.

The majority of women who are currently working are employed in non-agricultural occupations. Slightly less than one-third of working women (32 percent) hold skilled manual jobs, and 26 percent work in professional, technical, or managerial positions. An additional 21 percent work in sales and services, and 16 percent have clerical jobs. Only 4 percent of working women are involved in some type of agricultural activity.

More women who are married are engaged in professional, technical, or managerial activities or skilled manual labour than divorced, separated, or widowed women. Higher proportions of women who are divorced, separated, or widowed are in sales and services positions. Residence has a significant effect on the type of occupation. Urban women have higher employment rates in professional, technical, or managerial and clerical jobs, while rural women have higher employment rates in skilled manual labour and agricultural work. About half of women (49 percent) with no formal education and in the lowest wealth quintile ( 53 percent) work as skilled manual labour. The majority of women with more than secondary education ( 85 percent) and women who belong to both the fourth and the highest wealth quintiles ( 32 percent each) hold professional, technical, or managerial jobs.

| 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, Maldives 2009 |  |  |  |  |  |  |  |  |
| Background characteristic | Professional/ technical/ managerial | Clerical | Sales and services | Skilled manual | Agriculture | Missing | Total | Number of women |
| Age |  |  |  |  |  |  |  |  |
| 15-19 | 33.5 | 23.1 | 25.7 | 16.3 | 1.4 | 0.0 | 100.0 | 55 |
| 20-24 | 33.9 | 28.9 | 15.9 | 18.6 | 0.9 | 1.7 | 100.0 | 603 |
| 25-29 | 35.0 | 21.4 | 15.9 | 25.7 | 1.1 | 0.9 | 100.0 | 698 |
| 30-34 | 28.1 | 18.4 | 17.9 | 30.3 | 4.5 | 0.9 | 100.0 | 604 |
| 35-39 | 21.9 | 7.6 | 24.1 | 39.4 | 7.0 | 0.0 | 100.0 | 587 |
| 40-44 | 16.5 | 8.0 | 25.6 | 42.1 | 6.8 | 0.9 | 100.0 | 488 |
| 45-49 | 10.6 | 3.5 | 33.9 | 42.7 | 9.0 | 0.2 | 100.0 | 343 |
| Marital status |  |  |  |  |  |  |  |  |
| Married | 27.0 | 16.0 | 19.3 | 32.4 | 4.5 | 0.8 | 100.0 | 3,004 |
| Divorced/separated/widowed | 19.0 | 16.8 | 35.1 | 25.3 | 3.1 | 0.7 | 100.0 | 374 |
| Number of living children |  |  |  |  |  |  |  |  |
| 0 | 38.9 | 26.9 | 17.5 | 14.4 | 0.9 | 1.3 | 100.0 | 634 |
| 1-2 | 34.2 | 21.1 | 16.6 | 25.7 | 1.8 | 0.6 | 100.0 | 1,470 |
| 3-4 | 14.0 | 7.9 | 26.2 | 44.4 | 6.8 | 0.7 | 100.0 | 700 |
| 5+ | 6.3 | 1.2 | 30.2 | 50.0 | 11.6 | 0.8 | 100.0 | 574 |
| Residence |  |  |  |  |  |  |  |  |
| Urban | 31.0 | 31.5 | 19.0 | 17.3 | 0.4 | 0.8 | 100.0 | 1,098 |
| Rural | 23.8 | 8.6 | 22.1 | 38.5 | 6.2 | 0.8 | 100.0 | 2,280 |
| Region |  |  |  |  |  |  |  |  |
| Malé | 31.0 | 31.5 | 19.0 | 17.3 | 0.4 | 0.8 | 100.0 | 1,098 |
| North | 21.3 | 7.8 | 12.2 | 52.3 | 6.1 | 0.3 | 100.0 | 535 |
| North Central | 23.8 | 6.5 | 24.1 | 41.5 | 3.6 | 0.4 | 100.0 | 530 |
| Central | 23.9 | 7.2 | 33.1 | 27.8 | 5.9 | 2.1 | 100.0 | 282 |
| South Central | 21.4 | 7.3 | 24.8 | 36.7 | 9.4 | 0.3 | 100.0 | 460 |
| South | 28.9 | 14.1 | 21.6 | 27.6 | 6.4 | 1.5 | 100.0 | 473 |
| Education |  |  |  |  |  |  |  |  |
| No formal education | 5.4 | 1.9 | 33.1 | 49.4 | 9.4 | 0.8 | 100.0 | 791 |
| Primary | 13.5 | 6.8 | 27.6 | 45.2 | 6.3 | 0.6 | 100.0 | 998 |
| Secondary | 35.7 | 32.5 | 13.1 | 17.1 | 0.7 | 0.9 | 100.0 | 1,295 |
| More than secondary | 85.1 | 12.1 | 0.7 | 0.8 | 0.0 | 1.4 | 100.0 | 236 |
| Wealth quintile |  |  |  |  |  |  |  |  |
| Lowest | 14.3 | 3.5 | 21.8 | 52.6 | 7.3 | 0.6 | 100.0 | 646 |
| Second | 20.8 | 7.5 | 24.3 | 38.9 | 7.5 | 0.9 | 100.0 | 649 |
| Middle | 29.9 | 11.7 | 20.6 | 32.4 | 4.3 | 1.1 | 100.0 | 687 |
| Fourth | 32.3 | 23.3 | 22.2 | 18.6 | 3.1 | 0.5 | 100.0 | 648 |
| Highest | 32.3 | 32.0 | 17.0 | 17.7 | 0.1 | 0.9 | 100.0 | 748 |
| Total | 26.1 | 16.1 | 21.1 | 31.6 | 4.3 | 0.8 | 100.0 | 3,378 |
| Note: Total includes 59 cases for which information on woman's formal education level is missing. |  |  |  |  |  |  |  |  |

### 3.6 EARNingS and Type Of Employment

Table 3.6 shows the percent distribution of ever-married women who were employed during the 12 months preceding the survey by type of earnings received, type of employer, continuity of employment, and variations by type of employment (agricultural or non-agricultural). Ninety-seven percent of women received their earnings in cash; only 1 percent received payment in cash and in kind; and 2 percent receive no payment (Figure 3.2).

Table 3.6 presents information separately for women engaged in agricultural work or nonagricultural work. Nine in ten women employed in agricultural work are paid in cash, 3 percent are paid in cash and in-kind, and 7 percent are not paid. The majority of women who work in the agricultural sector are self-employed ( 95 percent), and 69 percent work all year. Among women employed in the non-agricultural sector, 97 percent earn cash only, 58 percent are employed by a nonfamily member, and 82 percent work all year.

| 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 non-agricultural), Maldives 2009 |  |  |  |
| Employment characteristic | Agricultural work | Non-agricultural work | Total |
| Type of earnings |  |  |  |
| Cash only | 90.2 | 97.2 | 96.5 |
| Cash and in-kind | 3.1 | 0.5 | 0.6 |
| In-kind only | 0.2 | 0.1 | 0.1 |
| Not paid | 6.5 | 2.0 | 2.4 |
| Missing | 0.0 | 0.2 | 0.4 |
| Total | 100.0 | 100.0 | 100.0 |
| Type of employer |  |  |  |
| Employed by family member | 2.9 | 1.6 | 1.7 |
| Employed by non-family member | 2.6 | 57.8 | 55.3 |
| Self-employed | 94.5 | 40.6 | 42.7 |
| Missing | 0.0 | 0.0 | 0.4 |
| Total | 100.0 | 100.0 | 100.0 |
| Continuity of employment |  |  |  |
| All year | 69.1 | 81.7 | 80.9 |
| Seasonal | 25.4 | 13.2 | 13.6 |
| Occasional | 5.5 | 4.8 | 4.8 |
| Missing | 0.0 | 0.3 | 0.6 |
| Total | 100.0 | 100.0 | 100.0 |
| Number of women employed during the past 12 months | 146 | 3,204 | 3,378 |
| Note: Total includes women with information missing on type of employment who are not shown separately. |  |  |  |

Figure 3.2 Type of Earnings of Employed Women Age 15-49


### 4.1 Introduction

This chapter looks at a number of fertility indicators, including levels, patterns, and trends in both current and cumulative fertility; the length of birth intervals; and the age at which women initiate childbearing. Information on current and cumulative fertility is essential in monitoring population growth. 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.

Data on fertility were collected in several ways. Each woman was asked about all of the births in her lifetime. To ensure completeness of the responses, the duration, the month and year of termination, and the outcome were recorded for each pregnancy. In addition, the women were asked questions separately about sons and daughters who live with them, those who live elsewhere, and those who have died. Subsequently, a list of all births was recorded along with each child's name, age if still alive, and age at death, if dead. Finally, information was collected on whether the women were pregnant at the time of the survey.

### 4.2 Current Fertility

The level of current fertility is one of the most important topics in this report because of its direct relevance to population policies and programs. Current fertility can be measured using the agespecific fertility rate (ASFR), the total fertility rate (TFR), the general fertility rate (GFR), and the crude birth rate (CBR). The ASFR provides the age pattern of fertility, while the TFR refers to the number of live births that a woman would have had if she were subject to the current ASFRs throughout the reproductive ages (15-49 years). The GFR is expressed as the number of live births per 1,000 women of reproductive age, and the CBR is reported as the number of live births per 1,000 population. The measures of fertility presented in this chapter all refer to the period three years prior to the survey. This time span generates a sufficient number of births to provide robust and current estimates.

Current estimates of fertility levels in Maldives are presented in Table 4.1 by urban-rural residence. The total fertility rate (TFR) indicates that if childbearing were to remain constant at the age-specific fertility rates measured for the 36 -month period before the Maldives DHS (MDHS), a Maldivian woman who is at the beginning of her childbearing years would give birth to 2.5 children by the end of her childbearing years. The TFR among urban women is lower than that among rural women ( 2.1 births compared with 2.8 births per woman). The peak of childbearing for urban women is at age 25-29 and for rural women is at age $20-24$, with 152 births per 1,000 women and 165 births per 1,000 women, respectively. At almost all age groups, the age-specific fertility rates for urban women are lower than those for rural women (Figure 4.1). Fertility

## Table 4.1 Current fertility

Age-specific, total, and general fertility rates and the crude birth rate for the three years preceding the survey, by residence, Maldives 2009

|  | Residence |  |  |
| :--- | ---: | ---: | ---: |
| Age group | Urban | Rural | Total |
| $15-19$ | 6 | 12 | 10 |
| $20-24$ | 89 | 165 | 138 |
| $25-29$ | 152 | 159 | 156 |
| $30-34$ | 121 | 118 | 119 |
| $35-39$ | 40 | 72 | 61 |
| $40-44$ | 16 | 24 | 22 |
| $45-49$ | 0 | 2 | 2 |
| TFR | 2.1 | 2.8 | 2.5 |
| GFR | 68 | 88 | 82 |
| CBR | 22.9 | 25.5 | 24.7 |

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
CBR: Crude birth rate, expressed per 1,000 population
declines with age somewhat more rapidly among urban women than among rural women, although the greatest absolute urban-rural difference in ASFRs (76 births per 1,000 women) is among women age 20-24.

The GFR for rural women is much higher than for urban women (88 compared with 68 live births per 1,000 women). The crude birth rate (CBR) is 25 live births per 1,000 population.

Figure 4.1 Age-Specific Fertility Rates by Urban-Rural Residence


MDHS 2009
Figure 4.2 shows that the TFR of 2.5 births per woman in Maldives is higher only in comparison with the TFR in Vietnam of 1.9 births per woman and lower than the rate in any other country in South or Southeast Asia where comparable data are available.

Figure 4.2 Total Fertility Rates in Selected South Asia and Southeast Asia Countries


Source: ICF Macro, 2010. MEASURE DHS STATcompiler
http://www.measuredhs.com, April 262010

The Population and Housing Censuses (PHCs) of Maldives have routinely collected current and retrospective fertility data since 1977. Because the type of data collected in the census and the technique for fertility estimation used in the census differ from those used in the MDHS, fertility estimates from the census are not directly comparable to those from the MDHS. The TFR estimated from the 2006 PHC using direct and indirect techniques for 2006 is 2.15 births per woman. The Vital Registration System (VRS) in Maldives has collected and compiled reports of births and deaths since 1999. Data for 2006 show that the crude birth rate is 23 births per 1,000 population. For all measurements, the MDHS estimates are higher than estimates from the 2006 PHC and the VRS.

Fertility is known to vary by a woman's residence, education, and other background characteristics. Table 4.2 shows several different indicators of fertility, mainly the total fertility rate, the mean number of births to women age 40-49, and the percent of women age 15-49 currently pregnant. The mean number of births to women age $40-49$ is an indicator of cumulative fertility; it reflects the fertility performance of older women who are nearing the end of their reproductive period. If fertility remains stable over time, the two fertility measures, total fertility rate (TFR) and children ever born (CEB), tend to be very similar. The percentage pregnant provides a useful additional measure of current fertility, although it is recognized that it may not capture all pregnancies in an early stage.

Table 4.2 indicates that there are variations in the TFR by residence, region, and wealth quintile. Women in Malé have the smallest average number of children in the country, and women in the South Central region have the highest fertility, followed closely by women in the South and in the Central regions. Fertility varies little by the woman's education. However, wealth quintile is inversely associated with fertility; the TFR is noticeably higher among women in the lowest three quintiles (2.8) than among women in the highest two quintiles.

| Table 4.2 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, Maldives 2009 |  |  |  |
| 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 | 2.1 | 3.6 | 3.7 |
| Rural | 2.8 | 5.7 | 5.6 |
| Region |  |  |  |
| Malé | 2.1 | 3.6 | 3.7 |
| North | 2.7 | 5.9 | 5.5 |
| North Central | 2.5 | 6.1 | 5.7 |
| Central | 2.8 | 6.3 | 5.9 |
| South Central | 3.0 | 5.3 | 5.4 |
| South | 2.9 | 5.0 | 5.7 |
| Education |  |  |  |
| No formal education | 2.8 | 2.5 | 5.5 |
| Primary | 2.7 | 5.7 | 4.5 |
| Secondary | 2.6 | 5.5 | 2.7 |
| More than secondary | 2.7 | 5.3 | 2.6 |
| Wealth quintile |  |  |  |
| Lowest | 2.8 | 5.0 | 5.6 |
| Second | 2.9 | 4.9 | 5.8 |
| Middle | 2.7 | 6.8 | 5.3 |
| Fourth | 2.4 | 4.6 | 4.6 |
| Highest | 2.1 | 3.6 | 3.7 |
| Total | 2.5 | 5.0 | 5.0 |
| Note: Total fertility rates are for the period 1-36 months prior to interview. |  |  |  |

Table 4.2 also presents information on currently pregnant respondents. Five percent of women reported that they were pregnant at the time of the survey. This proportion is higher in rural areas than in urban areas. Women with no education are less than half as likely to be pregnant as educated women. The proportion pregnant by wealth quintile shows a curvilinear pattern, it is lower for women in the lowest and highest wealth quintiles and peaks for women in the middle quintile.

Table 4.2 presents a crude assessment of trends in fertility if one compares current total fertility with a measure of completed fertility: the mean number of children ever born to women age $40-49$. The mean number of children ever born to older women who are nearing the end of their reproductive years is an indicator of average completed fertility among women who began childbearing approximately three decades preceding the survey. If fertility remained constant over time and the reported data on both children ever born and births during the three years preceding the survey are reasonably accurate, the TFR and the mean number of children ever born for women age 40-49 are expected to be similar. When fertility levels have been falling, the TFR will be substantially lower than the mean number of children ever born. The 2009 MDHS data show that the mean number of children ever born for women age 40-49 is much higher than the TFR for the three years preceding the survey ( 5.0 compared with 2.5 children per woman), indicating a recent substantial reduction in fertility.

Fertility has declined in both urban and rural areas, at all educational levels except for women with more than secondary education, and for all wealth quintiles. The difference between current and completed fertility is highest in rural areas ( 2.8 births), among women in the North Central region (3.2 births), among women who have no formal education ( 2.8 births), and among women in the second wealth quintile ( 2.9 births).

### 4.4 Fertility Trends

Table 4.3 uses information from the retrospective birth histories obtained from MDHS respondents to examine trends in age-specific fertility rates for successive five-year periods before the survey. To calculate these rates, births were classified according to the period of time in which the birth occurred and the mother's age at the time of birth. Because birth histories were not collected for women over age 50, the rates for older age groups become progressively more truncated for periods more distant from the survey date. For example, rates cannot be calculated for women age 45-49 for the period $5-9$ years or more prior to the survey, because women in that age group would have been 50 years or older at the time of the survey.

Table 4.3 shows that over time the ASFRs in every age group have declined. The declines are steepest between the periods of 10-14 and 15-19 years preceding the survey. Although fertility has fallen in all age groups for the periods 5-9 and 0-4 years preceding the survey, the declines are less pronounced than in previous years, except in age group 15-19.

### 4.5 Children Ever Born and Living

Table 4.4 presents the distribution of all women and currently married women by number of children ever born, according to five-year age groups. The table also shows the mean number of children ever born. Data on the number of children ever born reflect the accumulation of births to women over their entire reproductive years. They, therefore, have limited reference to current fertility levels, particularly when a country has experienced a decline in fertility. However, the information on
children ever born is useful for observing how average family size varies across age groups, and for observing the level of primary infertility. It reflects the cumulative number of births over the past 30 years among women interviewed in the MDHS. The data may be subject to some recall error, which typically is greater for older women than for younger women.

The information on parity is useful for understanding a number of related issues. First, the results show how the average family size increases from one age group to the next. They also offer insight into the impact of marital status on women's fertility. Because almost all Maldivian women are married by age 35 (see Table 6.1), differences in parity between ever-married women and currently married women represent primarily the effects of widowhood and divorce on fertility. In addition, the percentage of women in their forties who have never had children provides an indicator of the level of primary infertility, ${ }^{1}$ or the inability to bear children. Voluntary childlessness is rare in developing countries like Maldives; married women who are nearing the end of their childbearing years who have no live births are generally thought to be unable to bear children. Finally, a comparison of the mean number of children ever born and surviving children among women in their forties reflects the extent and impact of mortality on the population.

Almost all women age 15-19 (99 percent) have never given birth. However, this proportion declines sharply to 10 percent for women age $30-34$ and to less than 5 percent for women age 35 and older, indicating that childbearing among Maldivian women is nearly universal. Women nearing the end of their reproductive years have a parity of 5.5 children.

Table 4.4 shows that, on average, women gave birth to less than one child before their midtwenties, more than three children by their mid-thirties, and about five children by their mid- to late forties. The same pattern is found among currently married women, except that the mean number of children ever born is higher for currently married women ( 2.68 children) than for all women ( 1.85 children). The difference in the mean number of children ever born between all women and currently married women is due to a large proportion of young, unmarried women who, among all women, have lower fertility.

| Table 4.4 Children ever born and living |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percent distribution of all women and currently married women by number of children ever born, mean number of children ever born, and mean number of living children, according to age group, Maldives 2009 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Number of children ever born |  |  |  |  |  |  |  |  |  |  | Total | Number of women | Mean number of children ever born | Mean number of living children |
| Age | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | $10+$ |  |  |  |  |
| 15-19 | 98.7 | 1.2 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 2,156 | 0.01 | 0.01 |
| 20-24 | 67.6 | 25.9 | 5.8 | 0.6 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 2,161 | 0.40 | 0.39 |
| 25-29 | 24.7 | 39.7 | 24.6 | 7.8 | 2.5 | 0.6 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 1,737 | 1.26 | 1.24 |
| 30-34 | 10.1 | 18.8 | 30.4 | 22.8 | 10.7 | 4.4 | 1.3 | 0.7 | 0.5 | 0.2 | 0.0 | 100.0 | 1,357 | 2.32 | 2.24 |
| 35-39 | 4.8 | 10.0 | 19.0 | 21.5 | 17.8 | 13.0 | 7.7 | 3.3 | 1.7 | 0.5 | 0.6 | 100.0 | 1,213 | 3.43 | 3.25 |
| 40-44 | 3.3 | 6.0 | 7.9 | 17.6 | 13.6 | 15.7 | 14.9 | 10.0 | 6.0 | 2.4 | 2.7 | 100.0 | 1,028 | 4.65 | 4.32 |
| 45-49 | 3.5 | 4.5 | 7.6 | 10.1 | 10.2 | 13.0 | 13.7 | 14.1 | 11.8 | 4.7 | 6.7 | 100.0 | 735 | 5.46 | 4.92 |
| Total | 41.2 | 16.8 | 12.8 | 9.4 | 6.0 | 4.7 | 3.5 | 2.5 | 1.7 | 0.7 | 0.8 | 100.0 | 10,388 | 1.85 | 1.74 |
| CURRENTLY MARRIED WOMEN |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 15-19 | 76.4 | 22.9 | 0.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 111 | 0.24 | 0.24 |
| 20-24 | 45.0 | 45.1 | 9.0 | 0.9 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 1,188 | 0.66 | 0.65 |
| 25-29 | 14.7 | 44.9 | 27.9 | 9.0 | 2.8 | 0.6 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 1,446 | 1.43 | 1.40 |
| 30-34 | 4.5 | 19.4 | 32.5 | 24.4 | 11.4 | 4.7 | 1.5 | 0.8 | 0.6 | 0.2 | 0.0 | 100.0 | 1,193 | 2.48 | 2.39 |
| 35-39 | 2.3 | 8.8 | 19.2 | 22.5 | 18.5 | 14.0 | 8.2 | 3.6 | 2.0 | 0.6 | 0.4 | 100.0 | 1,065 | 3.58 | 3.39 |
| 40-44 | 1.4 | 5.3 | 6.6 | 17.6 | 14.4 | 16.1 | 16.0 | 10.6 | 6.2 | 2.8 | 3.0 | 100.0 | 884 | 4.86 | 4.52 |
| 45-49 | 1.3 | 3.7 | 7.8 | 9.8 | 10.4 | 12.1 | 15.1 | 14.4 | 12.5 | 5.3 | 7.6 | 100.0 | 612 | 5.71 | 5.18 |
| Total | 14.3 | 24.7 | 18.6 | 13.6 | 8.7 | 6.6 | 5.2 | 3.5 | 2.4 | 1.0 | 1.2 | 100.0 | 6,500 | 2.68 | 2.53 |

[^4]
### 4.6 Birth Intervals

A birth interval is defined as the length of time between two live births. The study of birth intervals is important in understanding the health status of young children. Research has shown that short birth intervals are closely associated with poor health of children, especially during infancy. Children born too close to a previous birth, especially if the interval between the births is less than two years, are at increased risk of health problems and dying at an early age. Longer birth intervals, on the other hand, contribute to the improved health status of both mother and child.

Table 4.5 presents the distribution of second and higher-order births in the five years preceding the survey by the number of months since the previous birth, according to background characteristics. The table also presents the median number of months since the preceding birth. Five percent of births are less than 18 months apart and 8 percent of births were born less than two years after the previous birth. Sixteen percent of births are 24-35 months apart, and 70 percent are at least three years apart.

| Table 4.5 Birth intervals |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percent distribution of non-first births in the five years preceding the survey, by number of months since preceding birth and by median number of months since preceding birth, according to background characteristics, Maldives 2009 |  |  |  |  |  |  |  |  |  |
| Background characteristic | Months since preceding birth |  |  |  |  |  |  | Number of nonfirst births | Median number of months since preceding birth |
|  | 7-17 | 18-23 | 24-35 | 36-47 | 48-59 | 60+ | Total |  |  |
| Age |  |  |  |  |  |  |  |  |  |
| 15-19 | * | * | * | * | * | * | 100.0 | 2 | 31.1 |
| 20-29 | 9.3 | 11.3 | 25.2 | 17.4 | 15.5 | 21.3 | 100.0 | 762 | 38.2 |
| 30-39 | 3.7 | 6.8 | 10.5 | 13.0 | 11.2 | 54.7 | 100.0 | 1,180 | 64.8 |
| 40-49 | 0.6 | 4.9 | 13.5 | 10.8 | 8.0 | 62.2 | 100.0 | 227 | 77.5 |
| Birth order |  |  |  |  |  |  |  |  |  |
| 2-3 | 5.9 | 7.8 | 16.4 | 14.7 | 14.0 | 41.2 | 100.0 | 1,446 | 52.1 |
| 4-6 | 4.7 | 8.8 | 15.1 | 12.5 | 7.9 | 51.0 | 100.0 | 567 | 61.9 |
| 7+ | 2.9 | 9.3 | 15.6 | 17.3 | 13.4 | 41.5 | 100.0 | 158 | 52.5 |
| Sex of preceding birth |  |  |  |  |  |  |  |  |  |
| Male | 4.9 | 7.6 | 17.1 | 13.2 | 14.1 | 43.2 | 100.0 | 1,104 | 54.7 |
| Female | 5.8 | 8.8 | 14.9 | 15.5 | 10.6 | 44.4 | 100.0 | 1,066 | 52.8 |
| Survival of preceding birth |  |  |  |  |  |  |  |  |  |
| Living | 5.0 | 8.1 | 16.1 | 14.4 | 12.5 | 43.9 | 100.0 | 2,115 | 54.1 |
| Dead | 19.9 | 11.8 | 14.3 | 8.5 | 7.4 | 38.0 | 100.0 | 56 | 44.5 |
| Residence |  |  |  |  |  |  |  |  |  |
| Urban | 4.2 | 7.6 | 16.2 | 15.6 | 12.0 | 44.4 | 100.0 | 607 | 54.3 |
| Rural | 5.8 | 8.4 | 16.0 | 13.8 | 12.5 | 43.5 | 100.0 | 1,564 | 53.9 |
| Region |  |  |  |  |  |  |  |  |  |
| Malé | 4.2 | 7.6 | 16.2 | 15.6 | 12.0 | 44.4 | 100.0 | 607 | 54.3 |
| North | 4.7 | 8.5 | 17.7 | 14.0 | 12.2 | 43.0 | 100.0 | 347 | 53.4 |
| North Central | 6.2 | 8.4 | 14.7 | 11.4 | 16.1 | 43.2 | 100.0 | 327 | 53.9 |
| Central | 4.9 | 6.7 | 16.3 | 13.8 | 9.2 | 49.1 | 100.0 | 204 | 58.7 |
| South Central | 5.5 | 7.0 | 16.2 | 14.4 | 12.3 | 44.7 | 100.0 | 260 | 56.0 |
| South | 7.1 | 10.2 | 15.2 | 15.1 | 11.8 | 40.7 | 100.0 | 425 | 50.3 |
| Education |  |  |  |  |  |  |  |  |  |
| No formal education | 2.8 | 4.9 | 12.3 | 10.1 | 13.3 | 56.7 | 100.0 | 424 | 68.6 |
| Primary | 4.6 | 9.0 | 14.4 | 13.8 | 11.4 | 46.9 | 100.0 | 1,057 | 56.4 |
| Secondary | 8.4 | 9.1 | 21.7 | 17.9 | 12.7 | 30.2 | 100.0 | 612 | 41.1 |
| More than secondary | (6.5) | (9.4) | (13.0) | (17.3) | (19.9) | (33.8) | 100.0 | 57 | (49.9) |
| Wealth quintile |  |  |  |  |  |  |  |  |  |
| Lowest | 5.4 | 8.4 | 16.5 | 14.1 | 14.5 | 41.2 | 100.0 | 485 | 52.4 |
| Second | 6.2 | 9.1 | 15.1 | 16.2 | 10.7 | 42.7 | 100.0 | 484 | 51.6 |
| Middle | 4.6 | 9.3 | 16.0 | 11.4 | 13.1 | 45.4 | 100.0 | 442 | 56.6 |
| Fourth | 6.6 | 8.8 | 13.5 | 13.7 | 8.8 | 48.5 | 100.0 | 416 | 57.7 |
| Highest | 3.6 | 4.4 | 19.7 | 16.3 | 15.1 | 40.8 | 100.0 | 343 | 51.4 |
| Total | 5.4 | 8.2 | 16.0 | 14.3 | 12.4 | 43.7 | 100.0 | 2,171 | 54.0 |

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. Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed. Total includes 21 births for which information on mother's formal education level is missing.

The overall median birth interval is 54.0 months. The median number of months since the preceding birth increases substantially with age, from 31.1 months for births to women age 15-19 to 77.5 months for births whose mother is age 40-49. The median birth interval is longest for children of birth order 4 to 6 ( 61.9 months) and births to women with no education ( 68.6 months). There are no notable differences in the length of the median birth interval by sex of the preceding birth or by urbanrural residence. The 2009 MDHS confirms findings from previous studies that the death of a preceding child leads to a shorter birth interval than when the preceding child survives (e.g., Bicego and Ahmad, 1996). The median birth interval is ten months longer for births whose previous sibling is alive than for births whose previous sibling did not survive ( 54.1 months and 44.5 months, respectively).

Compared with the median birth interval of other countries in South Asia and Southeast Asia where comparable data are available, the median birth interval in Maldives is one of the longest (Figure 4.3). It is one month shorter than in Indonesia ( 55 months) and longer than in most other Asian countries. In contrast, the median birth interval in Pakistan is only 29 months.

Figure 4.3 Median Birth Interval in Selected South Asia and Southeast Asia Countries


Source: ICF Macro, 2010. MEASURE DHS STATcompiler
http://www.measuredhs.com, April 262010

### 4.7 Age at First Birth

The age at which childbearing commences is an important determinant of the overall level of fertility as well as the health and welfare of the mother and the child. In some societies, postponement of first births due to an increase in age at marriage has contributed to overall fertility decline. Table 4.6 shows the percentage of women who have given birth by specific ages, according to age at the time of the survey. This cross-sectional data can be used to show the trend in age at first birth. The data indicate that women are gradually having children at an older age. The median age at first birth has increased from 19.3 years for women age $45-49$ to 23.9 years for women age 25-29. The increase in age at first birth can also be observed from the increase in the proportion of women who have given birth at age 15 across age groups. Five percent of women age 45-49 had their first child by age 15 compared with less than 1 percent of women age 25-29.

Another indicator shown in the table is the proportion of women who have never given birth, by age. Whereas 99 percent of women age 15-19 have never given birth, the corresponding proportion for women age 45-49 is 4 percent.

| Table 4.6 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, Maldives 2009 |  |  |  |  |  |  |  |  |
|  | Percentage who gave birth by exact age |  |  |  |  | Percentage who have never given birth | Number of women | Median age at first birth |
| Current age | 15 | 18 | 20 | 22 | 25 |  |  |  |
| 15-19 | 0.0 | na | na | na | na | 98.7 | 2,156 | a |
| 20-24 | 0.0 | 1.4 | 8.3 | na | na | 67.6 | 2,161 | a |
| 25-29 | 0.5 | 6.6 | 18.2 | 32.9 | 59.6 | 24.7 | 1,737 | 23.9 |
| 30-34 | 2.4 | 17.6 | 34.8 | 50.9 | 69.0 | 10.1 | 1,357 | 21.9 |
| 35-39 | 3.4 | 27.0 | 48.8 | 65.7 | 81.3 | 4.8 | 1,213 | 20.1 |
| 40-44 | 4.8 | 35.2 | 59.8 | 73.6 | 84.6 | 3.3 | 1,028 | 19.1 |
| 45-49 | 4.6 | 34.4 | 58.6 | 76.3 | 87.8 | 3.5 | 735 | 19.3 |
| 20-49 | 2.0 | 16.1 | 31.7 | na | na | 26.1 | 8,232 | 22.5 |
| 25-49 | 2.7 | 21.4 | 40.0 | 55.6 | 73.7 | 11.3 | 6,070 | 21.2 |

na $=$ Not applicable
$\mathrm{a}=$ Omitted because less than 50 percent of women had a birth before reaching the beginning of the age group

Table 4.7 presents trends and differentials in the median age at first birth across age cohorts for key sub-groups. The measures are also presented for women age 25-49 to ensure that half of the women have already had a birth. Results of the 2009 MDHS indicate that the median age at first birth is 21.2 years. Urban women start childbearing 2.5 years later than their rural counterparts (22.9 years compared with 20.4 years). The median age at first birth increases as a woman's level of education and wealth quintile also increase. The median age at first birth increases from 18.8 years for women with no education to 24.6 years for women with some secondary education. Women in the wealthiest households give birth 3.4 years later than women in poorer households ( 23.4 and 20.0 years, respectively).

| Median age at first birth among women age 25-49 years, according to background characteristics, Maldives 2009 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Background characteristic | Age |  |  |  |  | Women age 25-49 |
|  | 25-29 | 30-34 | 35-39 | 40-44 | 45-49 |  |
| Residence |  |  |  |  |  |  |
| Urban | a | 23.9 | 21.5 | 20.3 | 20.2 | 22.9 |
| Rural | 23.3 | 20.8 | 19.5 | 18.6 | 19.0 | 20.4 |
| Region |  |  |  |  |  |  |
| Malé | a | 23.9 | 21.5 | 20.3 | 20.2 | 22.9 |
| North | 23.3 | 20.8 | 19.3 | 19.1 | 19.8 | 20.8 |
| North Central | 23.6 | 21.6 | 19.9 | 18.7 | 19.0 | 20.6 |
| Central | 22.0 | 19.5 | 18.6 | 18.0 | 17.7 | 19.4 |
| South Central | 23.3 | 20.2 | 19.3 | 18.3 | 19.2 | 20.2 |
| South | 23.5 | 21.3 | 19.6 | 18.8 | 18.3 | 20.7 |
| Education |  |  |  |  |  |  |
| No formal education | 22.4 | 19.6 | 18.6 | 18.5 | 19.0 | 18.8 |
| Primary | 20.7 | 20.0 | 20.0 | 19.2 | 19.5 | 20.1 |
| Secondary | 24.8 | 24.5 | 25.1 | 23.8 | 21.5 | 24.6 |
| More than secondary | a | 26.8 | 24.7 | 24.9 | 17.7 | a |
| Wealth quintile |  |  |  |  |  |  |
| Lowest | 22.7 | 20.5 | 18.3 | 18.7 | 19.8 | 20.0 |
| Second | 23.5 | 19.8 | 19.6 | 18.5 | 19.3 | 20.2 |
| Middle | 23.1 | 21.1 | 20.1 | 18.8 | 18.3 | 20.7 |
| Fourth | 24.0 | 22.9 | 21.0 | 19.5 | 19.5 | 22.0 |
| Highest | a | 24.4 | 22.0 | 20.3 | 19.9 | 23.4 |
| Total | 23.9 | 21.9 | 20.1 | 19.1 | 19.3 | 21.2 |
| $\mathrm{a}=$ Omitted because less than 50 percent of the women had a birth before reaching the beginning of the age group |  |  |  |  |  |  |

### 4.8 Teenage Pregnancy and Motherhood

Teenage pregnancy is a major health concern because of its association with high morbidity and mortality for both the mother and child. Childbearing during the teenage years also frequently has adverse social consequences, particularly on female educational attainment because women who become mothers in their teens are more likely to curtail education.

Table 4.8 shows that pregnancies among teenagers in Maldives are rare. Only 2 percent of adolescents have started childbearing, 1 percent are mothers, and less than one percent are pregnant with their first child. Very few teenagers have begun childbearing at age 18, while 7 percent have started at age 19 (4 percent had a live birth, and 3 percent are pregnant with their first child).

The proportion of teenagers who have entered motherhood varies little across subgroups of women. Women in the South begin childbearing earlier than women in other regions. Although the differences are small, there is an inverse relationship between early childbearing and education. Looking at wealth status, the proportion of teenagers who have begun childbearing is highest among those living in households in the lowest wealth quintile (4 percent).

| Table 4.8 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, Maldives 2009 |  |  |  |  |
| Percentage who: |  |  |  |  |
| Background characteristic | Have had a live birth | Are pregnant with first child | Percentage who have begun childbearing | Number of women |
| Age |  |  |  |  |
| 17 | 0.0 | 0.6 | 0.6 | 167 |
| 18 | 0.5 | 0.2 | 0.7 | 1,462 |
| 19 | 3.8 | 2.8 | 6.5 | 527 |
| Residence |  |  |  |  |
| Urban | 1.1 | 0.3 | 1.4 | 890 |
| Rural | 1.2 | 1.1 | 2.3 | 1,471 |
| Region |  |  |  |  |
| Malé | 1.1 | 0.3 | 1.4 | 890 |
| North | 0.5 | 1.7 | 2.2 | 379 |
| North Central | 0.5 | 0.3 | 0.8 | 330 |
| Central | 1.1 | 1.4 | 2.5 | 196 |
| South Central | 1.5 | 1.0 | 2.5 | 190 |
| South | 2.1 | 1.1 | 3.2 | 418 |
| Education |  |  |  |  |
| No formal education | * | * | * | 20 |
| Primary | 2.1 | 2.2 | 4.3 | 164 |
| Secondary | 1.2 | 0.8 | 2.0 | 1,902 |
| More than secondary | 0.0 | 0.0 | 0.0 | 39 |
| Wealth quintile |  |  |  |  |
| Lowest | 1.6 | 2.0 | 3.6 | 473 |
| Second | 0.4 | 0.7 | 1.1 | 475 |
| Middle | 1.7 | 0.7 | 2.4 | 376 |
| Fourth | 0.7 | 0.3 | 1.0 | 586 |
| Highest | 1.5 | 0.5 | 2.0 | 482 |
| Total | 1.3 | 0.9 | 2.1 | 2,156 |
| Note: An asterisk indicates that an estimate is based on fewer than 25 unweighted cases and has been suppressed. Total includes 1 woman with information missing on education. |  |  |  |  |

Figure 4.4 shows where Maldivian teenagers stand compared with teenagers from other countries in South Asia and Southeast Asia with regard to starting motherhood. Few teenagers in Maldives have begun childbearing (2 percent). In contrast, one in three women age 15-19 in Bangladesh are pregnant with their first child or have become a mother.


[^5]A policy to implement programs in family planning in Maldives was adopted in 1986. By 1990 the programs had reached all islands. Most of the family planning outlets are in the public sector. Private pharmacies are registered to provide contraceptives prescribed by private physicians. Contraceptives are also available through the Society for Health Education, a non-government organization.

Oral contraceptive pills, injectables, and male condoms are available in all government facilities. IUD insertion and removal and female and male sterilization are performed in all hospitals. Norplant, however, is available only in Malé. All contraceptive methods offered by government health facilities are provided free of charge.

The data on family planning knowledge and use collected in the 2009 MDHS provide insight into one of the principal determinants of fertility.

### 5.1 Knowledge of Family Planning Methods

Awareness of family planning methods is crucial when deciding if one should use a contraceptive, and, if an affirmative decision is made, then selecting which method to use. To assess family planning knowledge, respondents were first asked an open-ended question about the methods a couple can use to delay or avoid pregnancy. All methods named spontaneously in response to this question were recorded as recognized family planning methods.

If a respondent failed to mention any of the methods listed in the questionnaire, the interviewer would describe each method and ask whether the respondent had heard about it. Methods recognized by the respondent after the description was read were also recorded as known.

Information was collected for seven modern methods (female sterilization, male sterilization, pill, IUD, injectables, implants, male condom, and emergency contraception) and two traditional methods (periodic abstinence and withdrawal). In addition, provision was made in the questionnaire to record other methods that respondents mentioned spontaneously.

No questions were asked to elicit information on depth of knowledge of these methods (e.g., the respondent's understanding of how to use a specific method). Therefore, in the analysis that follows, knowledge of a family planning method is defined simply as having heard of a method.

Table 5.1 shows that knowledge of family planning methods is virtually universal among married women in Maldives. Almost all currently married women age 15-49 interviewed in the MDHS knew at least one modern family planning method. The male condom was the most widely recognized method (98 percent), followed closely by the pill (96 percent). More than 90 percent were also aware of female sterilization and injectables, more than 80 percent knew about the IUD and male sterilization, and 71 percent had heard of implants. Implants were introduced in 2002 and only available in Malé. Emergency contraception, introduced in the Maldives in 2007, was the least widely recognized, with only 29 percent of married women aware of the method. Seven in ten married women had heard of at least one traditional method. The mean number of methods known by women was 7.7.

| Table 5.1 Knowledge of contraceptive methods |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: |
| Percentage of ever-married women and currently married |  |  |  |  |
| women age 15-49 who know any contraceptive method, by |  |  |  |  |
| specific method, Maldives 2009 |  |  |  |  |
|  |  |  |  |  |
| Method | Ever-married | Currently |  |  |
| married |  |  |  |  |
| Any method | women | women |  |  |
| Any modern method | 99.2 | 99.3 |  |  |
| Female sterilization | 99.2 | 99.3 |  |  |
| Male sterilization | 93.6 | 93.7 |  |  |
| Pill | 81.3 | 81.8 |  |  |
| IUD | 95.7 | 96.1 |  |  |
| Injectables | 86.4 | 86.4 |  |  |
| Implants | 93.0 | 93.2 |  |  |
| Male condom | 70.4 | 71.0 |  |  |
| Emergency contraception | 97.3 | 97.6 |  |  |
| Any traditional method | 29.0 | 28.9 |  |  |
| Rhythm | 71.5 | 71.7 |  |  |
| Withdrawal | 61.0 | 61.5 |  |  |
| Folk method | 56.8 | 56.8 |  |  |
| Mean number of methods known | 1.1 | 1.2 |  |  |
| by respondents 15-49 | 7.7 | 7.7 |  |  |
| Number of respondents | 7,131 | 6,500 |  |  |

### 5.2 Ever Use Of Family Planning

Data on the level of ever use of family planning methods were obtained in the MDHS by asking respondents separately if they had ever used each of the family planning methods that they knew. Table 5.2 shows the percentages of ever-married women and currently married women who had ever used family planning, according to a woman's age and the method used. Overall, 60 percent of currently married women had used a family planning method at some time. Across age groups, the highest level of ever use of any family planning method among currently married women was observed in the 40-44 age group (69 percent), while the lowest level is found among women age 1519 (42 percent).

## Table 5.2 Ever use of contraception

Percentage of ever-married women and currently married women age 15-49 who have ever used any contraceptive method by method, according to age, Maldives 2009

| Age | Modern method |  |  |  |  |  |  |  |  |  | Traditional method |  |  |  | Number of women |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Any method | Any modern method | Female sterilization | Male sterilization | Pill | IUD | Injectables | Implants | Male condom | Emergency contraception | Any traditional method | Rhythm | Withdrawal | Folk method |  |
| EVER-MARRIED WOMEN |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 15-19 | 41.8 | 36.8 | 0.0 | 0.0 | 2.8 | 0.0 | 1.8 | 0.0 | 35.7 | 0.0 | 10.3 | 1.6 | 9.6 | 1.1 | 119 |
| 20-24 | 47.1 | 39.8 | 0.1 | 0.0 | 7.2 | 0.6 | 3.0 | 0.7 | 33.3 | 0.5 | 15.0 | 5.3 | 11.7 | 0.7 | 1,268 |
| 25-29 | 59.0 | 50.7 | 1.2 | 0.1 | 19.9 | 2.6 | 7.3 | 1.4 | 33.6 | 0.9 | 20.5 | 9.9 | 13.8 | 0.8 | 1,539 |
| 30-34 | 60.2 | 52.0 | 6.4 | 0.4 | 27.2 | 3.9 | 6.0 | 1.0 | 28.6 | 0.9 | 21.3 | 13.1 | 12.4 | 0.8 | 1,287 |
| 35-39 | 65.4 | 58.4 | 16.2 | 1.1 | 29.4 | 5.2 | 10.6 | 0.5 | 23.2 | 0.6 | 20.7 | 13.4 | 12.7 | 0.5 | 1,185 |
| 40-44 | 66.3 | 60.4 | 23.0 | 1.4 | 31.2 | 5.4 | 13.2 | 0.7 | 19.0 | 0.3 | 16.3 | 10.2 | 10.0 | 0.3 | 1,013 |
| 45-49 | 57.9 | 54.6 | 24.3 | 1.7 | 25.1 | 2.7 | 13.9 | 0.0 | 12.0 | 0.0 | 10.2 | 6.3 | 5.4 | 0.3 | 721 |
| Total | 58.8 | 51.8 | 9.8 | 0.7 | 22.4 | 3.3 | 8.3 | 0.8 | 26.7 | 0.6 | 17.9 | 9.8 | 11.5 | 0.6 | 7,131 |
| CURRENTLY MARRIED WOMEN |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 15-19 | 41.5 | 36.1 | 0.0 | 0.0 | 2.3 | 0.0 | 1.9 | 0.0 | 34.9 | 0.0 | 9.9 | 1.8 | 9.3 | 1.1 | 111 |
| 20-24 | 47.7 | 40.1 | 0.1 | 0.0 | 7.0 | 0.6 | 2.8 | 0.8 | 33.9 | 0.5 | 15.5 | 5.5 | 12.0 | 0.7 | 1,188 |
| 25-29 | 60.5 | 51.9 | 1.3 | 0.1 | 20.1 | 2.7 | 7.8 | 1.5 | 34.5 | 1.0 | 21.0 | 10.3 | 14.0 | 0.8 | 1,446 |
| 30-34 | 60.6 | 52.5 | 6.4 | 0.5 | 27.7 | 3.8 | 6.3 | 1.1 | 29.0 | 0.7 | 21.8 | 13.5 | 12.9 | 0.8 | 1,193 |
| 35-39 | 67.2 | 60.3 | 17.3 | 1.3 | 30.8 | 4.9 | 11.4 | 0.6 | 23.8 | 0.5 | 21.2 | 14.1 | 12.6 | 0.6 | 1,065 |
| 40-44 | 69.3 | 63.0 | 24.2 | 1.6 | 34.3 | 4.9 | 14.2 | 0.8 | 19.4 | 0.4 | 17.1 | 10.6 | 10.5 | 0.3 | 884 |
| 45-49 | 60.5 | 56.9 | 26.1 | 1.8 | 27.3 | 2.6 | 12.1 | 0.0 | 13.0 | 0.1 | 11.0 | 6.9 | 5.7 | 0.3 | 612 |
| Total | 60.2 | 53.0 | 10.1 | 0.7 | 23.2 | 3.1 | 8.4 | 0.9 | 27.6 | 0.6 | 18.5 | 10.2 | 11.9 | 0.6 | 6,500 |

Virtually all currently married women who had used a method had experience with modern methods. The most commonly used modern method was the male condom ( 28 percent), followed by the pill (23 percent). Around one-fifth of married women had used a traditional method.

### 5.3 Current Use of Family Planning

Overall, the MDHS results indicate that around one-third of currently married women in Maldives are using contraception (Figure 5.1). Female sterilization is the most widely used method, followed closely by the male condom (10 percent and 9 percent, respectively). Five percent of married women use the pill. Smaller proportions of women are using other modern methods; e.g., 1 percent use injectables. Eight percent of women reported use of traditional methods, with women somewhat more likely to have used withdrawal (4 percent) than rhythm (3 percent).

Figure 5.1 Trends in Contraceptive Use, Maldives 1999-2009


Table 5.3 shows that current use levels rise rapidly with age, from a level of 15 percent among currently married women age 15-19 to a peak of 45 percent among women age 40-44. The male condom is the most popular method among women under age 40, with around one in ten women age 20-39 using the condom. Female sterilization is the widely used method among women age 35 and over; around one in four women age 40-49 report they use female sterilization.

Table 5.3 Current use of contraception by age
Percent distribution of currently married women by contraceptive method currently used, according to age, Maldives 2009

| Age | Modern method |  |  |  |  |  |  |  |  | Traditional method |  |  |  |  | Total | Number <br> of <br> women |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Any method | Any modern method | Female sterilization | Male sterilization | Pill | IUD | Injectables | Implants | Male condom | Any traditional method | Rhythm | Withdrawal | Folk method | Not currently using |  |  |
| 15-19 | 15.0 | 9.6 | 0.0 | 0.0 | 1.6 | 0.0 | 1.2 | 0.0 | 6.8 | 5.4 | 0.7 | 4.7 | 0.0 | 85.0 | 100.0 | 111 |
| 20-24 | 23.2 | 16.8 | 0.1 | 0.0 | 3.5 | 0.4 | 1.0 | 0.6 | 11.3 | 6.4 | 1.8 | 4.6 | 0.0 | 76.8 | 100.0 | 1,188 |
| 25-29 | 30.0 | 20.8 | 1.3 | 0.0 | 4.1 | 1.2 | 2.0 | 0.7 | 11.6 | 9.2 | 3.7 | 5.4 | 0.2 | 70.0 | 100.0 | 1,446 |
| 30-34 | 35.1 | 26.5 | 6.4 | 0.2 | 7.1 | 1.2 | 1.0 | 0.6 | 10.1 | 8.6 | 4.1 | 4.2 | 0.2 | 64.9 | 100.0 | 1,193 |
| 35-39 | 44.0 | 35.1 | 17.3 | 0.7 | 5.2 | 0.8 | 1.5 | 0.0 | 9.5 | 8.9 | 4.9 | 4.0 | 0.0 | 56.0 | 100.0 | 1,065 |
| 40-44 | 45.3 | 38.4 | 24.2 | 1.2 | 5.3 | 0.9 | 0.6 | 0.7 | 5.5 | 7.0 | 3.1 | 3.8 | 0.1 | 54.7 | 100.0 | 884 |
| 45-49 | 39.7 | 34.8 | 26.1 | 1.7 | 2.0 | 0.3 | 0.8 | 0.0 | 3.9 | 4.9 | 3.2 | 1.7 | 0.0 | 60.3 | 100.0 | 612 |
| Total | 34.7 | 27.0 | 10.1 | 0.5 | 4.6 | 0.8 | 1.2 | 0.5 | 9.3 | 7.8 | 3.4 | 4.2 | 0.1 | 65.3 | 100.0 | 6,500 |

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

Table 5.4 shows the variation in current use levels with other background characteristics. The results indicate that some women in Maldives adopt contraception before having the first birth; 13 percent of childless women are current family planning users. Among women with more than one child, contraceptive use increases with the number of living children, peaking at 54 percent among women with five or more children.


The MDHS found, somewhat surprisingly, that rural women are slightly more likely than urban women to use family planning ( 35 percent and 34 percent, respectively). Use levels vary markedly by region, from 28 percent in the South to 42 percent in the Central region. Interestingly the level of use of female sterilization is similar in the South and Central regions (13 percent and 14 percent respectively) while the level of condom use among women in the Central region is nearly double the level in the South (11 percent and 6 percent, respectively).

Use generally declines with education. This is largely attributable to a higher rate of use of female sterilization among less educated women; 22 percent of women with no formal education and 12 percent of women with only a primary education are using sterilization compared with only two percent of women with secondary or more than secondary education. Across wealth quintiles, there are only modest differences in the level of current family planning use; 37 percent of married women in the lowest wealth quintile are using family planning compared with 33-34 percent among women in the middle to highest quintiles.

### 5.4 Trends in Current Use of Family Planning

Table 5.5 shows the trend in current use of contraceptive methods among currently married Maldivian women during the period 1999-2009. Findings show that use of any method by currently married women has decreased from 42 percent in the 1999 Reproductive Health Survey (RHS) to 35 percent in the 2009 MDHS. There has been a shift in the use of some modern methods. In 1999, the pill was used by 13 percent of currently married women; this rate has decreased steadily since, with only 5 percent of currently married women using the pill in the 2009 MDHS. Use of condoms has increased from 6 percent in 1999 to the current rate of 9 percent. The proportion of married women who were sterilized declined from 10 percent in 1999 to 7 percent in 2004 but increased to 10 percent in 2009. Use of traditional methods also declined slightly from 9 percent in 1999 to 8 percent in 2009, after dipping to 5 percent in 2004. While the pill was the most commonly used modern method in the 1999 and 2004 RHS surveys,

Table 5.5 Trends in use of specific contraceptive methods, Maldives 1999-2009

Percentage of currently married women who are currently using a contraceptive method, by specific method, Maldives 1999-2009

|  | RHS |  |  |
| :--- | :---: | :---: | :---: |
| Method | RHS | MDHS |  |
| Any method | 42 | 39 | 35 |
| Any modern method | 33 | 34 | 27 |
| Pill | 13 | 13 | 5 |
| IUD | 1 | 2 | 1 |
| Injectables | 3 | 3 | 1 |
| Implants | u | u | 1 |
| Condom | 6 | 9 | 9 |
| Female sterilization | 10 | 7 | 10 |
| Male sterilization | 1 | 1 | 1 |
| Traditional methods | 9 | 5 | 8 |
| Number of women | 923 | 972 | 6,500 |

$\mathrm{u}=$ Not available female sterilization has become the most commonly used modern method in the 2009 MDHS.

### 5.5 First Use of Family Planning

Women who reported that they had used family planning methods at some time were asked about the number of children they had when they first used family planning. These data are useful in identifying the stage in the family-building process when women begin using family planning as well as highlighting their motivation for adopting family planning.

Table 5.6 presents the percent distribution of ever-married women by the number of living children at the time of the first use of family planning. A substantial proportion of women used family planning to delay the first birth; around one-fifth of all women-nearly one-third of all ever usersstarted using family planning immediately after marriage while they were still childless.

Sixteen percent of women began use of family planning after they had their first child, 9 percent started after they had two children, and 15 percent had three or more children before using family planning.

| Table 5.6 Number of children at first use of contraception |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percent distribution of ever-married women age 15-49, by number of living children at the time of first use of contraception, according to current age, Maldives 2009 |  |  |  |  |  |  |  |  |  |
| Current age | Never used | Number of living children at time of first use of contraception |  |  |  |  |  | Total | Number of women |
|  |  | 0 | 1 | 2 | 3 | 4+ | Missing |  |  |
| 15-19 | 58.2 | 38.4 | 3.4 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 119 |
| 20-24 | 52.9 | 33.3 | 11.7 | 1.8 | 0.2 | 0.1 | 0.0 | 100.0 | 1,268 |
| 25-29 | 41.0 | 25.9 | 24.0 | 7.1 | 1.3 | 0.5 | 0.0 | 100.0 | 1,539 |
| 30-34 | 39.8 | 16.8 | 22.2 | 11.6 | 6.0 | 3.4 | 0.1 | 100.0 | 1,287 |
| 35-39 | 34.6 | 11.2 | 16.6 | 14.3 | 10.3 | 13.0 | 0.1 | 100.0 | 1,185 |
| 40-44 | 33.7 | 9.4 | 7.5 | 12.7 | 12.4 | 23.9 | 0.4 | 100.0 | 1,013 |
| 45-49 | 42.1 | 8.6 | 4.0 | 7.6 | 7.1 | 30.1 | 0.4 | 100.0 | 721 |
| Total | 41.2 | 19.3 | 15.6 | 8.9 | 5.6 | 9.3 | 0.2 | 100.0 | 7,131 |

Looking at the age patterns, there has been a shift in the timing of the adoption of the first contraceptive method, with younger women initiating use of family planning methods at lower parities than older women. For example, one-third of women age 20-24 started family planning when they were childless compared with 9 percent of women age 40-49.

### 5.6 Knowledge of Fertile Period

An elementary understanding of reproductive physiology, particularly knowledge of when in the ovulatory cycle a woman is most likely to become pregnant, may be useful in ensuring success in the use of coitus-related methods such as the condom, vaginal methods, and withdrawal. Such knowledge is especially critical for the practice of periodic abstinence.

To investigate women's knowledge about their fertile period, respondents were asked in the 2009 MDHS whether there are certain days a woman is more likely to become pregnant if she has sexual intercourse. Those who responded affirmatively to that question were asked if this time is just before the period begins, during the period, right after the period ends, or halfway between two periods.

Table 5.7 shows that understanding of the ovulatory cycle is limited among Maldivian women. Only around one-fifth of the ever-married women age 15-49 who were interviewed knew that a woman has a greater probability of becoming pregnant if she has sexual intercourse halfway between two periods. Women who had ever used the rhythm method were more knowledgeable than other women; nevertheless, only around one-third of rhythm users were aware that the chance of becoming pregnant was greatest for a woman if she has intercourse halfway between her periods.

| Table 5.7 Knowledge of fertile period |  |  |  |
| :---: | :---: | :---: | :---: |
| Percent distribution of ever-married women age 15-49 by knowledge of the fertile period during the ovulatory cycle, according to current use of the rhythm method, Maldives 2009 |  |  |  |
| Perceived fertile period | Users of rhythm method | Nonusers of rhythm method | Evermarried women |
| Just before her menstrual period begins | 1.8 | 2.2 | 2.2 |
| During her menstrual period | 0.6 | 0.4 | 0.4 |
| Right after her menstrual period has ended | 46.0 | 32.3 | 32.7 |
| Halfway between two menstrual periods | 34.7 | 20.1 | 20.6 |
| Other | 0.0 | 0.1 | 0.1 |
| No specific time | 3.4 | 11.7 | 11.4 |
| Don't know | 13.5 | 32.9 | 32.3 |
| Missing | 0.0 | 0.3 | 0.3 |
| Total | 100.0 | 100.0 | 100.0 |
| Number of women | 223 | 6,908 | 7,131 |

### 5.7 Timing of Sterilization

Female sterilization is among the most widely used family planning methods in Maldives, with one in ten ever-married women having been sterilized. In countries like the Maldives where contraceptive sterilization is prevalent, there is interest in knowing the trend in the adoption of the method and in determining whether the age at which sterilization occurs is declining. To investigate these issues, information was collected in the 2009 MDHS from sterilized women on the month and year in which the sterilization took place. This information is used in Table 5.8 to look at the timing of adoption of sterilization among Maldivian women. The results indicate that most Maldivian women adopt sterilization when they are in their thirties. An examination of the variation in the median age at sterilization by the years since the operation has occurred indicates little change in the age pattern of adoption of sterilization.

| Table 5.8 Timing of sterilization |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percent distribution of sterilized women age 15-49, by age at the time of sterilization and by median age at sterilization, according to the number of years since the operation, Maldives 2009 |  |  |  |  |  |  |  |  |  |
| Years since operation | Age at time of sterilization |  |  |  |  |  | Total | Number of women | Median age ${ }^{1}$ |
|  | $<25$ | 25-29 | 30-34 | 35-39 | 40-44 | 45-49 |  |  |  |
| $<2$ | 2.3 | 12.8 | 31.1 | 36.8 | 14.8 | 2.2 | 100.0 | 102 | 34.0 |
| 2-3 | 0.0 | 13.5 | 36.1 | 28.5 | 19.2 | 2.7 | 100.0 | 98 | 33.4 |
| 4-5 | 3.2 | 18.5 | 33.6 | 33.6 | 11.1 | 0.0 | 100.0 | 113 | 34.0 |
| 6-7 | 0.9 | 19.6 | 38.9 | 33.7 | 6.9 | 0.0 | 100.0 | 106 | 33.4 |
| 8-9 | 2.1 | 10.7 | 22.3 | 61.9 | 2.9 | 0.0 | 100.0 | 82 | 35.6 |
| 10+ | 10.3 | 39.1 | 36.6 | 13.9 | 0.0 | 0.0 | 100.0 | 201 | a |
| Total | 4.2 | 22.1 | 33.9 | 31.0 | 8.0 | 0.7 | 100.0 | 701 | - |
| $\mathrm{a}=$ Not calculated due to censoring |  |  |  |  |  |  |  |  |  |
| ${ }^{1}$ Median ag | rilizati | calcula | only for | omen | zed b | age | avoid | blems of | censoring |

### 5.8 Sources for Modern Family Planning Methods

In the MDHS, detailed information was collected from current users on sources from which family planning methods were obtained. Table 5.9 shows the distribution of current users by source. Overall, nearly two-thirds of current family planning users in the Maldives received their method from a governmental source. Private sector sources served the majority of users only in the case of the male condom; more than half of condom users said they got their condoms from a private sector source, principally pharmacies. Current users obtaining condoms from public sources were most likely to have gotten them from a government health centre ( 22 percent). Government health centres also served the majority of users of injectables ( 65 percent) and pill users ( 61 percent). Three in four female sterilization users went to a public hospital to be sterilized. Notably the Indira Ghandhi Memorial Hospital provided sterilization services for nearly four in ten sterilization users.

| Percent distribution of current users of modern contraceptive methods age 15-49, by most recent source of method, according to method, Maldives 2009 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Source | Female sterilization | Pill | Injectables | Male condom | Total ${ }^{1}$ |
| Public sector | 76.6 | 81.1 | 89.2 | 32.3 | 63.1 |
| Indhira Gandhi Memorial Hospital | 39.0 | 2.8 | 5.7 | 2.1 | 19.7 |
| Government regional hospital | 23.9 | 5.3 | 6.1 | 3.5 | 12.7 |
| Government atoll hospital | 13.6 | 6.7 | 8.2 | 2.4 | 8.1 |
| Government health centre | 0.1 | 60.6 | 64.9 | 22.2 | 20.6 |
| Government health post | 0.0 | 4.2 | 3.3 | 1.6 | 1.4 |
| Community/family health worker | 0.0 | 1.3 | 0.0 | 0.3 | 0.5 |
| Other public | 0.0 | 0.1 | 1.0 | 0.2 | 0.1 |
| Private medical sector | 22.3 | 14.2 | 4.1 | 56.2 | 31.0 |
| Private hospital, clinic | 8.0 | 0.8 | 1.1 | 2.9 | 4.8 |
| Private pharmacy | 0.0 | 11.3 | 0.0 | 52.7 | 19.6 |
| Private doctor | 0.0 | 1.6 | 0.0 | 0.0 | 0.3 |
| Other private medical | 1.6 | 0.6 | 3.0 | 0.6 | 1.2 |
| Hospital/clinic abroad | 12.8 | 0.0 | 0.0 | 0.0 | 5.2 |
| Other source | 0.0 | 0.6 | 0.0 | 2.6 | 1.0 |
| Shop | 0.0 | 0.6 | 0.0 | 2.4 | 0.9 |
| Friend/relative | 0.0 | 0.0 | 0.0 | 0.2 | 0.1 |
| Other | 0.0 | 4.1 | 0.0 | 5.4 | 2.8 |
| Don't know | 0.2 | 0.0 | 0.0 | 0.0 | 0.1 |
| Missing | 0.9 | 0.0 | 6.8 | 3.5 | 2.0 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Number of women | 701 | 303 | 80 | 607 | 1,809 |

${ }^{1}$ Total includes other modern methods for which results are not presented separately due to the small number of unweighted cases.

### 5.9 Informed Choice

Ensuring that potential users have the information they need to make informed choices is a vital component of family planning programs. Users should be informed of the range of methods that are available in order to make decisions about the contraceptive method most appropriate for their personal situation. Family planning providers should also inform potential users of the side effects that may be experienced when using specific methods and what they should do if effects are encountered. This information both assists the user in coping with side effects and decreases unnecessary discontinuation of temporary methods.

The 2009 MDHS included a number of questions designed to assess whether women who were using family planning at the time of the survey had received sufficient information to make informed choices. Current users were asked whether they had been told about other methods, told about side effects, or given advice about what to do about side effects by the provider from whom they obtained their method. If they were not told about other methods or about side effects during that consultation, they were asked if they had ever received information from a provider about these topics. Caution must be exercised in interpreting the responses to these questions since they are subjective. In addition, they also suffer from an unknown degree of recall error, that is, many users had gone to the provider months or even years before the MDHS interview and may not accurately have remembered the encounter. Nevertheless, the results of these questions provide some insight into the nature of the family planning counselling received by the users.

Table 5.10 presents information on the informed choice indicators for current users who adopted the method in January 2003 or later. In general, the information exchange between many current users and their provider is limited. Less than half of users were told about side effects and only 43 percent were told what to do if they experienced side effects. Just over half of users were provided information about other family planning methods they might use.

## Table 5.10 Informed choice

Among current users of modern methods age 15-49 who started the last episode of use within the five years preceding the survey, percentage who were informed about possible side effects or problems of that method, the percentage who were informed about what to do if they experienced side effects, and the percentage who were informed about other methods that they could use, by method and source; and among sterilized women, the percentage who were informed that the method is permanent, by initial source of method, Maldives 2009

| Method/source | Among women who started last episode of modern contraceptive method within five years preceding the survey: |  |  | Number of women | Among women who were sterilized: |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 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 |  | Percentage who were informed that sterilization is permanent ${ }^{1}$ | Number of women |
| Method |  |  |  |  |  |  |
| Female sterilization | 18.2 | 14.8 | 30.7 | 262 | 75.8 | 262 |
| Pill | 57.4 | 53.6 | 64.9 | 242 | na | na |
| Injectables | 73.6 | 72.9 | 68.4 | 68 | na | na |
| Initial source of method ${ }^{\mathbf{2}}$ |  |  |  |  |  |  |
| Public sector | 49.5 | 47.0 | 58.3 | 522 | 74.4 | 208 |
| Indhira Gandhi Memorial hospital | 47.2 | 46.4 | 58.8 | 151 | 83.8 | 87 |
| Government regional hospital | 32.3 | 28.4 | 46.9 | 98 | 67.2 | 68 |
| Government atoll hospital | 30.2 | 28.4 | 41.5 | 75 | 69.2 | 52 |
| Government health centre | 65.5 | 62.6 | 67.6 | 171 | * | 1 |
| Government health post | * | * | * | 16 | na | na |
| Community/family health worker | * | * | * | 9 | na | na |
| Other public | * | * | * | 1 | na | na |
| Private medical sector | 31.8 | 27.1 | 36.5 | 97 | (81.3) | 54 |
| Total ${ }^{3}$ | 45.3 | 42.6 | 53.7 | 643 | 75.8 | 262 |

Note: Table excludes users who obtained their method from friends/relatives. Figures in parentheses are based on 25-49 unweighted cases.
An asterisk indicates the figure is based on fewer than 25 unweighted cases and has been suppressed.
na $=$ Not applicable
${ }^{1}$ Among women who were sterilized in the five years preceding the survey
${ }^{2}$ Source at start of current episode of use
${ }^{3}$ Total includes users of other modern methods and users of other sources for which results are not presented separately due to the small numbers of unweighted cases.

Table 5.10 also shows that the proportions of users receiving the information needed to make an informed choice vary markedly with both the method adopted and the type of clinical providers. Female sterilization users generally reported receiving less information than users of other methods. Looking at the differentials by provider type, users obtaining their method from a public sector source were somewhat better informed than users relying on medical providers in the private sector.

### 5.10 Reasons for Discontinuation of Contraceptive Use

Table 5.11 looks in greater detail at the reasons the 2009 MDHS respondents gave for discontinuing contraceptive use. The table shows the percent distribution of all discontinuations in the five-year period prior to the survey by the main reason for discontinuing use, according to the specific method.

| Table 5.11 Reasons for discontinuation |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Among all discontinuations of methods in the five years preceding the survey, the percent distribution by main reason for discontinuation, according to method, Maldives 2009 |  |  |  |  |  |  |
| Reason | Pill | Injectables | Male condom | Periodic abstinence | Withdrawal | All methods ${ }^{1}$ |
| Became pregnant while using | 7.6 | 1.1 | 13.4 | 21.5 | 30.7 | 13.8 |
| Wanted to become pregnant | 17.3 | 11.9 | 33.4 | 38.7 | 35.0 | 28.3 |
| Husband disapproved | 2.0 | 0.7 | 1.8 | 2.0 | 0.3 | 1.6 |
| Side effects | 18.8 | 41.6 | 4.4 | 0.0 | 0.6 | 10.4 |
| Health concerns | 14.8 | 18.8 | 3.0 | 0.6 | 0.0 | 6.8 |
| Access/availability | 0.3 | 0.0 | 0.3 | 0.0 | 0.0 | 0.2 |
| Wanted a more effective method | 3.2 | 1.0 | 3.1 | 5.5 | 7.1 | 3.6 |
| Inconvenient to use | 2.3 | 2.9 | 5.9 | 0.0 | 0.3 | 3.5 |
| Infrequent sex/husband away | 8.8 | 3.9 | 8.8 | 5.8 | 4.4 | 7.2 |
| Fatalistic | 0.8 | 1.3 | 0.0 | 0.0 | 0.0 | 0.3 |
| Difficult to get pregnant/menopausal | 0.9 | 0.0 | 0.1 | 0.0 | 0.0 | 0.3 |
| Marital dissolution/separation | 0.5 | 3.3 | 1.5 | 0.4 | 0.8 | 1.1 |
| Other | 11.0 | 7.7 | 8.1 | 1.4 | 2.6 | 7.2 |
| Don't know | 0.0 | 0.0 | 1.0 | 0.0 | 0.3 | 0.5 |
| Missing | 11.7 | 5.7 | 15.4 | 24.3 | 18.0 | 15.3 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Number of discontinuations | 389 | 107 | 756 | 160 | 232 | 1,722 |
| ${ }^{1}$ All methods include other modern methods for which results are not presented separately due to the small number of unweighted cases. |  |  |  |  |  |  |

More than one-quarter of all discontinuations during the five-year period before the survey occurred because the user wanted to have a child. Among modern contraceptive methods, this reason was given most often in the case of condom discontinuations. Fourteen percent of all discontinuations were the result of method failure; that is, the woman became pregnant while using a method. Method failure was most often mentioned as a reason for discontinuations of use of periodic abstinence (22 percent) and withdrawal (31 percent). Side effects and health concerns accounted for 17 percent of all discontinuations. They were cited most often as the reasons for discontinuations of injectables (60 percent) and the pill (33 percent).

Smaller proportions of users cited other reasons for discontinuations. Infrequent sex or marital dissolution were reasons in the case of 8 percent of discontinuations. Dissatisfaction with the method, including concerns about its effectiveness or convenience, were given as reasons for 7 percent of discontinuations. Husband’s disapproval was rarely cited as a main factor affecting the decision to discontinue use (2 percent), and problems in getting the method were almost never cited as reasons for discontinuation.

### 5.11 Intention to Use Contraception in the Future

To obtain information about potential demand for family planning services, all currently married women who were not using contraception at the time of the survey were asked about their intention to adopt family planning methods in the future. Table 5.12 shows the percent distribution of nonusers by their intention to use a method in the future, according to number of living children.

| Table 5.12 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, Maldives 2009 |  |  |  |  |  |  |
|  | Number of living children ${ }^{1}$ |  |  |  |  |  |
| Intention to use in the future | 0 | 1 | 2 | 3 | 4+ | Total |
| Intends to use | 25.9 | 29.3 | 26.7 | 25.2 | 22.8 | 26.4 |
| Unsure | 24.0 | 19.0 | 20.1 | 14.8 | 11.7 | 17.9 |
| Does not intend to use | 49.2 | 50.5 | 52.3 | 58.9 | 63.6 | 54.5 |
| Missing | 1.0 | 1.3 | 1.0 | 1.1 | 1.9 | 1.3 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Number of women | 607 | 1,281 | 925 | 561 | 868 | 4,242 |
| ${ }^{1}$ Includes current pregnancy |  |  |  |  |  |  |

The results suggest that there is only limited interest among nonusers in adopting a family planning method in the future. The majority of nonusers ( 55 percent) did not plan to use in the future, and 18 percent were unsure about their intentions. Only one in four nonusers said that they definitely planned to use in the future. The intention to use varied somewhat with the number of living children the nonuser has. The proportion saying that they did not plan to use in the future increased from 49 percent among women with no children to 64 percent among women with four or more children.

### 5.12 Reasons for Non-use

Table 5.13 presents the distribution of currently married non-users who do not intend to use contraceptive methods in the future by the main reason they gave for not using. The reasons for non-use are of interest to the family planning program because they help to identify areas for potential interventions to support the adoption of contraception by non-users.

Opposition to use was given as the main reason for non-use by more than four in ten women. In most of these cases, the woman cited her own disapproval (39 percent) rather than that of the husband or others or a religious concern. Method-related reasons were cited by a significant proportion of non-users; 12 percent had health concerns, and 6 percent mentioned fear of side effects.

| Table 5.13 Reason for not intending to use contraception in the future |  |
| :---: | :---: |
| Percent distribution of currently married women age 15-49 who are not using contraception and who are not intending to use in the future, by main reason for not intending to use, Maldives 2009 |  |
| Reason | Percent distribution |
| Fertility-related reasons | 19.7 |
| Infrequent sex/no sex | 2.9 |
| Menopausal/had hysterectomy | 1.4 |
| Subfecund/infecund | 8.3 |
| Wants as many children as possible | 7.1 |
| Opposition to use | 45.3 |
| Respondent opposed | 38.8 |
| Husband/partner opposed | 5.5 |
| Others opposed | 0.2 |
| Religious prohibition | 0.8 |
| Lack of knowledge | 0.4 |
| Knows no method | 0.4 |
| Method-related reasons | 19.1 |
| Health concerns | 12.0 |
| Fear of side effects | 5.5 |
| Lack of access/too far | 0.1 |
| Cost too much | 0.2 |
| Inconvenient to use | 0.7 |
| Interfere with body's normal process | 0.6 |
| Other | 6.0 |
| Don't know | 8.8 |
| Missing | 0.7 |
| Total | 100.0 |
| Number of women | 2,311 |

Around one in five non-users had fertility-related reasons for not planning to adopt contraception. These reasons included a perceived lack of need for contraception because the woman was subfecund or infecund (8 percent), menopausal, or had had a hysterectomy ( 1 percent), or was not sexually active, or had sex infrequently ( 3 percent). Seven percent of the non-users mentioned a desire to have as many children as possible.

### 5.13 Preferred Method

Non-users who planned to use family planning in the future were asked about the method they would prefer to use. Table 5.14 shows that 34 percent of all non-users who planned to use preferred the condom, and the pill was preferred by 21 percent. Nine percent said they would use periodic abstinence, and 5 percent would rely on injectables. Four percent preferred female sterilization, and a similar percentage said they planned to use withdrawal. Fifteen percent of non-users intending to use a method in the future were unsure which method they prefer.

| Table 5.14 Preferred method of con- |  |
| :---: | :---: |
| Percent distribution ried women age 1 using a contracep who intend to use preferred method, | urrently marwho are not method but he future, by ves 2009 |
| Method | Percent distribution |
| Female sterilization | 4.3 |
| Male sterilization | 0.0 |
| Pill | 20.9 |
| IUD | 1.8 |
| Injectables | 4.8 |
| Implants | 3.5 |
| Condom | 34.4 |
| Diaphragm | 0.6 |
| Periodic abstinence | 8.9 |
| Withdrawal | 3.9 |
| Other | 1.2 |
| Unsure | 15.1 |
| Missing | 0.6 |
| Total | 100.0 |
| Number of women | 1,119 |

### 5.14 Exposure to Family Planning Messages

The 2009 MDHS obtained information on the types of media (television, radio, newspaper, or magazine) through which women had recently received family planning information.

Table 5.15 shows that radio and television are the primary sources of family planning information for women in the Maldives. Forty-six percent of ever-married women age 15-49 had seen a recent family planning message on radio, and 42 percent reported seeing a message on television. Newspapers and magazines reached far fewer women; around one-quarter of women had read about family planning in a newspaper or magazine. Thirty-eight percent of women had not seen or heard anything any family planning message recently.

The proportion of women who had not been exposed to any family planning message decreased with the woman's age. Somewhat surprisingly, fewer women living in urban areas have seen a family planning message within the few months before the MDHS compared with those living in rural areas. Exposure to a family planning message through the three media sources generally decreases with the woman's educational level and wealth quintile.

| Table 5.15 Exposure to family planning messages |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Percentage of ever-married women age 15-49 who heard or saw a family planning message on the radio or television or in a newspaper in the past few months, according to background characteristics, Maldives 2009 |  |  |  |  |  |
| Background characteristic | Radio | Television | Newspaper/ magazine | None of these three media sources | Number |
| Age |  |  |  |  |  |
| 15-19 | 34.3 | 35.4 | 18.7 | 45.0 | 119 |
| 20-24 | 39.3 | 36.1 | 26.5 | 40.6 | 1,268 |
| 25-29 | 41.5 | 35.8 | 25.1 | 40.3 | 1,539 |
| 30-34 | 44.7 | 41.4 | 23.2 | 37.7 | 1,287 |
| 35-39 | 52.4 | 45.4 | 25.2 | 34.7 | 1,185 |
| 40-44 | 49.5 | 46.4 | 24.4 | 35.1 | 1,013 |
| 45-49 | 55.1 | 50.9 | 25.0 | 32.7 | 721 |
| Residence |  |  |  |  |  |
| Urban | 34.7 | 37.0 | 32.6 | 42.5 | 2,368 |
| Rural | 51.5 | 43.7 | 20.9 | 35.1 | 4,763 |
| Region |  |  |  |  |  |
| Malé | 34.7 | 37.0 | 32.6 | 42.5 | 2,368 |
| North | 52.4 | 38.4 | 18.7 | 37.0 | 1,067 |
| North Central | 51.0 | 45.6 | 20.0 | 34.6 | 1,038 |
| Central | 54.5 | 46.5 | 15.4 | 35.6 | 615 |
| South Central | 54.3 | 46.0 | 17.9 | 31.6 | 853 |
| South | 47.3 | 43.8 | 28.7 | 36.0 | 1,190 |
| Education |  |  |  |  |  |
| No formal education | 54.5 | 49.1 | 19.3 | 33.3 | 1,668 |
| Primary | 53.1 | 46.3 | 24.9 | 31.9 | 2,464 |
| Secondary | 37.0 | 35.0 | 27.3 | 43.3 | 2,584 |
| More than secondary | 22.0 | 23.1 | 30.5 | 53.8 | 333 |
| Wealth quintile |  |  |  |  |  |
| Lowest | 55.6 | 41.5 | 18.6 | 34.9 | 1,300 |
| Second | 52.5 | 44.7 | 18.0 | 34.9 | 1,396 |
| Middle | 50.4 | 45.3 | 22.7 | 35.1 | 1,488 |
| Fourth | 39.4 | 41.4 | 29.5 | 38.4 | 1,447 |
| Highest | 33.2 | 34.7 | 34.0 | 43.9 | 1,499 |
| Total 15-49 | 45.9 | 41.5 | 24.8 | 37.5 | 7,131 |
| Note: Total includes 81 women with information missing on level of education. |  |  |  |  |  |

### 5.15 Contact of Nonusers with Outreach Workers/Health Care Providers

The 2009 MDHS collected information on contacts non-users may have had with family planning workers or other health care providers in which family planning had been discussed during the 12 months prior to survey. Table 15.16 presents the data on both the proportion of currently married non-users who had any contact with a family planning fieldworker and the proportion who discussed family planning with another health care provider during the 12 months prior to the survey. Relatively few women had been reached by fieldworkers, with only 9 percent of non-users reporting that they had been visited at home by a fieldworker who discussed family planning.

Table 15.16 also looks at the extent to which non-users had an opportunity to discuss family planning during their visits to health facilities. Overall, 85 percent of non-users had visited a health facility during the 12 -month period before the survey. Only about one in eight of these women- 10 percent of all nonusers-had discussed family planning during a visit they had made to a health
facility during the 12 months before the MDHS. Overall, at least eight in ten of the nonusers in every population subgroup shown in Table 15.16 reported that they had never discussed family planning with a health provider or fieldworker during the year before the survey.

Although the results in Table 15.16 suggest that there are many "missed" opportunities for informing and motivating nonusers about family planning, caution must be exercised in drawing such conclusions. Not all visits to health providers present appropriate opportunities for offering family planning information or services, and not all non-users are interested in/or in need of family planning when they visit a facility. Nevertheless, health workers should be taking more advantage of visits that women make to facilities to offer family planning information.

Table 5.16 Contact of non-users with family planning providers
Among women age 15-49 who are not using contraception, the percentage who during the last 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 neither discussed family planning with a fieldworker nor at a health facility, by background characteristics, Maldives 2009

| 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 neither discussed family planning with a fieldworker nor at a health facility |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Discussed family planning | Did not discuss family planning |  | Number of women |
| Age |  |  |  |  |  |
| 15-19 | 9.8 | 11.9 | 57.2 | 82.2 | 102 |
| 20-24 | 7.9 | 13.8 | 71.3 | 80.9 | 990 |
| 25-29 | 7.5 | 12.5 | 73.0 | 82.0 | 1,103 |
| 30-34 | 10.4 | 13.0 | 75.4 | 79.8 | 861 |
| 35-39 | 8.8 | 6.4 | 80.3 | 86.5 | 709 |
| 40-44 | 8.7 | 4.9 | 80.8 | 87.5 | 589 |
| 45-49 | 10.7 | 5.8 | 74.9 | 86.1 | 463 |
| Residence |  |  |  |  |  |
| Urban | 7.6 | 10.5 | 72.2 | 83.5 | 1,628 |
| Rural | 9.4 | 10.4 | 76.4 | 82.9 | 3,189 |
| Region |  |  |  |  |  |
| Malé | 7.6 | 10.5 | 72.2 | 83.5 | 1,628 |
| North | 8.5 | 9.9 | 76.1 | 84.4 | 665 |
| North Central | 9.0 | 10.1 | 78.0 | 83.2 | 669 |
| Central | 10.1 | 10.7 | 76.1 | 81.3 | 373 |
| South Central | 10.2 | 11.3 | 75.4 | 81.3 | 600 |
| South | 9.7 | 10.1 | 76.2 | 83.3 | 881 |
| Education |  |  |  |  |  |
| No formal education | 12.0 | 6.7 | 80.0 | 83.9 | 997 |
| Primary | 9.1 | 9.8 | 75.0 | 83.6 | 1,626 |
| Secondary | 7.3 | 12.7 | 72.8 | 82.3 | 1,915 |
| More than secondary | 7.5 | 12.6 | 68.3 | 79.9 | 228 |
| Wealth quintile |  |  |  |  |  |
| Lowest | 8.1 | 10.4 | 77.2 | 84.2 | 862 |
| Second | 10.3 | 10.5 | 76.0 | 81.9 | 931 |
| Middle | 10.3 | 9.1 | 77.8 | 83.3 | 1,010 |
| Fourth | 10.4 | 11.1 | 72.7 | 80.6 | 997 |
| Highest | 4.9 | 10.8 | 71.5 | 85.6 | 1,016 |
| Total | 8.8 | 10.4 | 75.0 | 83.1 | 4,817 |

Note: Total includes 50 women with information missing on level of education

## OTHER PROXIMATE DETERMINANTS OF FERTILITY

This chapter addresses the principal factors, other than contraception, which affect a woman's risk of becoming pregnant. These factors include marriage, sexual activity, postpartum amenorrhoea, abstinence from sexual activity, and onset of menopause. The time when exposure to pregnancy begins and the level of exposure throughout a woman's life are also reported in this chapter.

### 6.1 Current Marital Status

Marriage is a primary indication that a woman will be exposed regularly to the risk of pregnancy. Therefore, knowledge of when marriage typically occurs in a population is important to the understanding of fertility. Populations that have a low age at first marriage tend to have early childbearing and high fertility rates.

Table 6.1 presents the percent distribution of women, by current marital status. Respondents who are currently married, divorced, separated, or widowed are referred to as 'ever married.' The data indicate that 31 percent of women have never been married, 63 percent are currently married, 5 percent are divorced, and less than 1 percent each are separated or widowed. The percentage of women never married decreases rapidly from 95 percent among teenagers (age 15-19) to 41 percent among women age 20-24. By age 35-39 all but 2 percent of women have been married. The proportion of women who are divorced increases steadily with age, from 3 percent of women age $20-24$ to 10 percent of women age $40-44$, and then to 11 percent of women age $45-49$. The proportion who are widowed also increases with age, reaching a high of 4 percent among women age 45-49.

| Table 6.1 Current marital status |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percent distribution of women age 15-49, by current marital status, according to age, Maldives 2009 |  |  |  |  |  |  |  |
|  | Marital status |  |  |  |  | Total | Number of women |
| Age | Never married | Married | Divorced | Separated | Widowed |  |  |
| 15-19 | 94.5 | 5.2 | 0.4 | 0.0 | 0.0 | 100.0 | 2,156 |
| 20-24 | 41.3 | 55.0 | 3.2 | 0.2 | 0.3 | 100.0 | 2,161 |
| 25-29 | 11.4 | 83.2 | 5.2 | 0.1 | 0.1 | 100.0 | 1,737 |
| 30-34 | 5.2 | 87.9 | 6.4 | 0.2 | 0.4 | 100.0 | 1,357 |
| 35-39 | 2.4 | 87.8 | 8.6 | 0.1 | 1.2 | 100.0 | 1,213 |
| 40-44 | 1.5 | 86.0 | 10.0 | 0.2 | 2.4 | 100.0 | 1,028 |
| 45-49 | 1.9 | 83.3 | 10.6 | 0.0 | 4.2 | 100.0 | 735 |
| Total | 31.4 | 62.6 | 5.2 | 0.1 | 0.8 | 100.0 | 10,388 |

### 6.2 Age at First Marriage

Marriage correlates with exposure to risk of conception and is consequently associated with fertility. The duration of exposure to the risk of pregnancy depends primarily on the age at which women first marry. Women who marry early in life can be expected to have their first child early and thus give birth to more children, contributing to higher fertility rates.

Table 6.2 shows the proportions of women who marry at specific ages and the median age at marriage for successive age groups. The median is defined as the age by which 50 percent of all women in the age group were married. This measurement of central tendency is preferred over the mean, because, unlike the mean, it can be estimated for all cohorts where at least half of the women
are ever married at the time of survey. In drawing conclusions concerning trends, the data for the oldest cohorts in Table 6.2 should be interpreted with caution because these women may not recall marriage dates or ages with accuracy.

There has been a notable increase in the age at which women first marry across cohorts. For example, 16 percent of women age 45-49 were married by age 15 compared with only 8 percent of women age 35-39 and with less than 2 percent of women age 25-29. Similarly, more than eight in ten women age 45-49 were married by age 20, while one in four women age 20-24 were married by that same age. Overall, the median age at first marriage increases rapidly across cohorts, from 16.9 years among women age 45-49 to 21.6 years among women age 25-29.

| Percentage of women age 15-49 who married by age and median age at first marriage, according to current age, Maldives 2009 |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | rcenta | marri | exact |  | Percentage never |  | Median age at first |
| Current age | 15 | 18 | 20 | 22 | 25 | married | Number | marriage |
| 15-19 | 0.0 | na | na | na | na | 94.5 | 2,156 | a |
| 20-24 | 0.3 | 3.9 | 25.4 | na | na | 41.3 | 2,161 | a |
| 25-29 | 1.6 | 16.8 | 34.6 | 53.4 | 80.6 | 11.4 | 1,737 | 21.6 |
| 30-34 | 8.7 | 32.5 | 53.3 | 66.2 | 81.9 | 5.2 | 1,357 | 19.7 |
| 35-39 | 8.4 | 45.3 | 67.3 | 79.6 | 91.1 | 2.4 | 1,213 | 18.3 |
| 40-44 | 15.5 | 57.2 | 75.2 | 84.5 | 91.7 | 1.5 | 1,028 | 17.3 |
| 45-49 | 16.3 | 63.0 | 84.0 | 89.1 | 94.9 | 1.9 | 735 | 16.9 |
| 20-49 | 6.5 | 29.4 | 49.6 | 65.3 | 79.3 | 14.8 | 8,232 | 20.0 |
| 25-49 | 8.7 | 38.4 | 58.2 | 71.1 | 86.6 | 5.4 | 6,070 | 19.0 |
| Note: The age at first marriage is defined as the age at which the respondent began living with her/his first spouse/partner na $=$ Not applicable due to censoring <br> $a=$ Omitted because less than 50 percent of the women married for the first time before reaching the beginning of the age group |  |  |  |  |  |  |  |  |

Table 6.3 shows the median age at first marriage according to residence, level of education, and wealth quintile. Because of the small number of married respondents interviewed, the data for women age 15-24 have been omitted. Urban women age 25-49 marry almost two years later than rural women ( 20.4 years and 18.5 years, respectively). There are large variations in the age at first marriage across regions, ranging from 17.7 among women in the Central region to 20.4 years among women in Malé (Figure 6.1). Age at first marriage increases as the woman's level of education and wealth status also increase. Among women with secondary and higher education, the median age at first marriage is 23.8 years, almost seven years older than the age of first marriage among women with no education (17.0 years). Similarly, the richest women marry almost three years later than women in the poorest quintile (21.1 years compared with 18.2 years).

Figure 6.1 presents the median age at marriage for women in Maldives in comparison with their median age in countries in South Asia and Southeast Asia for which comparable data are available. Figure 6.1 shows that, on average, women in Maldives marry later in life than women in Bangladesh, Nepal, and India, at about the same age as women in Pakistan, and earlier in life than women in Southeast Asia.

## Table 6.3 Median age at first marriage

Median age at first marriage among women, by five-year age groups and age 25-49, according to background characteristics, Maldives 2009

| Background characteristic | Age |  |  |  |  | Women age 25-49 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 25-29 | 30-34 | 35-39 | 40-44 | 45-49 |  |
| Residence |  |  |  |  |  |  |
| Urban | 22.4 | 21.6 | 19.5 | 18.5 | 17.5 | 20.4 |
| Rural | 21.1 | 18.8 | 17.9 | 16.9 | 16.8 | 18.5 |
| Region |  |  |  |  |  |  |
| Malé | 22.4 | 21.6 | 19.5 | 18.5 | 17.5 | 20.4 |
| North | 20.9 | 19.0 | 17.7 | 17.7 | 17.8 | 18.9 |
| North Central | 21.9 | 19.2 | 18.5 | 17.3 | 16.9 | 18.7 |
| Central | 20.2 | 17.8 | 17.3 | 16.3 | 15.8 | 17.7 |
| South Central | 21.0 | 18.5 | 17.8 | 16.9 | 17.0 | 18.3 |
| South | 21.3 | 19.0 | 17.8 | 16.4 | 16.2 | 18.4 |
| Education |  |  |  |  |  |  |
| No formal education | 19.8 | 17.9 | 17.3 | 16.9 | 16.7 | 17.0 |
| Primary | 18.8 | 18.3 | 18.1 | 17.2 | 17.0 | 18.2 |
| Secondary | 22.5 | 22.4 | 22.4 | 22.0 | 19.4 | 22.4 |
| More than secondary | 24.0 | 24.4 | 22.4 | 22.7 | 15.7 | 23.8 |
| Wealth quintile |  |  |  |  |  |  |
| Lowest | 20.5 | 18.7 | 17.1 | 17.2 | 16.8 | 18.2 |
| Second | 21.1 | 18.3 | 18.0 | 16.8 | 17.0 | 18.3 |
| Middle | 21.2 | 18.8 | 18.3 | 16.9 | 16.3 | 18.6 |
| Fourth | 21.8 | 20.3 | 19.0 | 17.8 | 17.5 | 19.6 |
| Highest | 22.6 | 22.5 | 19.9 | 18.6 | 16.7 | 21.1 |
| Total | 21.6 | 19.7 | 18.3 | 17.3 | 16.9 | 19.0 |

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

Figure 6.1 Median Age at First Marriage in South and Southeast Asia


Source: Macro International Inc, 2010. MEASURE DHS STATcompiler

### 6.3 Age at First Sexual Intercourse

Although age at first marriage often marks first exposure to intercourse, the two events do not necessarily occur at the same time. Women and men sometimes engage in sexual relations before marriage. In the 2009 MDHS, women were asked how old they were when they first had sexual intercourse.

The age at first sexual intercourse varies throughout the age cohorts. For example, 16 percent of women age 45-49 were sexually active by age 15 compared with 8 percent of women age 35-39 and 1 percent of women age 25-29 (Table 6.4). Similarly, whereas almost all women age 45-49 have had sexual intercourse, 95 percent of women age 15-19 are not sexually active. Overall, the median age at first intercourse has increased from 17.0 years among women 45-49 to 21.8 years among women age 25-29.

| Table 6.4 Age at first sexual intercourse |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percentage of women age 15-49 who had first sexual intercourse by specific exact age, percentage who never had intercourse, and median age at first intercourse, according to current age, Maldives 2009 |  |  |  |  |  |  |  |  |
|  | Percen | who | st sexu | cours | act age | Percentage who never had |  | Median age at first |
| Current age | 15 | 18 | 20 | 22 | 25 | intercourse | Number | intercourse |
| 15-19 | 0.1 | na | na | na | na | 94.5 | 2,156 | a |
| 20-24 | 0.3 | 3.1 | 25.7 | na | na | 41.4 | 2,161 | a |
| 25-29 | 1.2 | 15.7 | 33.9 | 51.7 | 77.1 | 11.6 | 1,737 | 21.8 |
| 30-34 | 7.1 | 27.9 | 48.3 | 63.0 | 76.3 | 5.2 | 1,357 | 20.2 |
| 35-39 | 7.8 | 41.9 | 60.7 | 72.7 | 81.6 | 2.4 | 1,213 | 18.7 |
| 40-44 | 13.6 | 52.2 | 67.4 | 75.5 | 81.3 | 1.5 | 1,028 | 17.8 |
| 45-49 | 15.6 | 59.5 | 76.5 | 81.9 | 85.9 | 1.9 | 735 | 17.0 |
| 20-49 | 5.8 | 26.8 | 46.1 | 61.3 | 73.6 | 14.9 | 8,232 | 20.5 |
| 25-49 | 7.7 | 35.2 | 53.3 | na | na | 5.4 | 6,070 | 19.6 |
| 15-24 | 0.2 | na | na | na | na | 67.9 | 4,318 | a |
| na $=$ Not applicable due to censoring <br> $\mathrm{a}=$ Omitted because less than 50 percent of the respondents had intercourse for the first time before reaching the beginning of the age group |  |  |  |  |  |  |  |  |

Differentials in age at first sex by background characteristics are shown in Table 6.5. Urban women had first sexual intercourse two years later than rural women (20.9 years compared with 18.9 years). Women in Malé had first sexual intercourse at a later age than women in other regions, and women in the Central region had the youngest median age for first intercourse. The median age at first sexual intercourse for women with secondary and higher education is 23.8 years, 6.5 years later than the median age for women with no education (17.3 years). The median age at first sexual intercourse increases with wealth status; women in the highest wealth quintile have a median age of 21.3 years compared with 18.5 years for women in the lowest wealth quintile.

Figure 6.2 shows the median age at first sexual intercourse for countries in South Asia and Southeast Asia for which comparable data are available. Women in Maldives had their first sexual encounter about two years later in life than women in Nepal and India, at about the same age as women in Indonesia and Cambodia, and earlier in life than women in the Philippines.

| Table 6.5 Median age at first intercourse |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Median age at first sexual intercourse among women by five-year age groups and age 25-49, according to background characteristics, Maldives 2009 |  |  |  |  |  |  |
| Background | Age |  |  |  |  | Women age |
| characteristic | 25-29 | 30-34 | 35-39 | 40-44 | 45-49 | 25-49 |
| Residence |  |  |  |  |  |  |
| Urban | 22.6 | 21.8 | 20.1 | 19.2 | 18.1 | 20.9 |
| Rural | 21.3 | 19.2 | 18.3 | 17.2 | 16.9 | 18.9 |
| Region |  |  |  |  |  |  |
| Malé | 22.6 | 21.8 | 20.1 | 19.2 | 18.1 | 20.9 |
| North | 21.3 | 19.8 | 18.3 | 18.2 | 18.0 | 19.6 |
| North Central | 22.1 | 19.3 | 18.8 | 17.2 | 17.0 | 18.8 |
| Central | 20.3 | 18.2 | 18.2 | 16.6 | 15.8 | 18.2 |
| South Central | 21.4 | 19.0 | 18.2 | 17.2 | 17.1 | 18.7 |
| South | 21.3 | 19.5 | 18.1 | 16.7 | 16.4 | 18.7 |
| Education |  |  |  |  |  |  |
| No formal education | 20.3 | 18.3 | 17.7 | 17.2 | 16.8 | 17.3 |
| Primary | 19.0 | 18.7 | 18.2 | 17.9 | 17.6 | 18.5 |
| Secondary | 22.6 | 22.3 | 22.9 | 20.9 | 19.5 | 22.5 |
| More than secondary | 24.0 | 23.7 | 23.1 | 22.8 | 15.7 | 23.8 |
| Wealth quintile |  |  |  |  |  |  |
| Lowest | 20.9 | 18.8 | 17.5 | 17.3 | 17.0 | 18.5 |
| Second | 21.2 | 18.8 | 18.2 | 17.2 | 17.0 | 18.6 |
| Middle | 21.5 | 19.6 | 18.7 | 17.3 | 16.6 | 19.1 |
| Fourth | 21.8 | 21.0 | 19.7 | 18.1 | 18.0 | 20.1 |
| Highest | 22.8 | 22.5 | 20.2 | 20.0 | 16.9 | 21.3 |
| Total | 21.8 | 20.2 | 18.7 | 17.8 | 17.0 | 19.6 |

Figure 6.2 Median Age at First Sexual Intercourse in South and Southeast Asia


[^6]
### 6.4 Postpartum Amenorrhoea, Abstinence, and Insusceptibility

Postpartum amenorrhoea refers to the interval between childbirth and the return of menstruation. The length and intensity of breastfeeding influence the duration of amenorrhoea, which offers protection from conception. Postpartum abstinence refers to the period between childbirth and the time when a woman resumes sexual activity. Delaying the resumption of sexual relations can also prolong protection. Women are considered to be insusceptible to pregnancy if they are not exposed to the risk of conception, either because their menstrual period has not resumed since a birth or because they abstain from intercourse after childbirth.

Table 6.6 shows the percentage of births in the three years preceding the survey for which the mother is postpartum amenorrhoeic, abstaining, or insusceptible. The estimates in Table 6.6 are based on current status data; they refer to the woman's situation at the time of the survey. The data are grouped in two-month intervals to minimize fluctuations in the estimates.

The duration of postpartum amenorrhea for Maldivian women is relatively short, a median of 4.7 months. The median duration of postpartum abstinence is 3 months. Examining the two factors together, the median duration of postpartum insusceptibility to pregnancy is 5.6 months.

Table 6.6 shows that all women in Maldives are insusceptible to pregnancy in the first two months following a birth, mostly due to the contribution of abstinence. However, the proportion of women who abstain from sexual intercourse decreases rapidly from the second month after birth. The decrease in the protective effect of amenorrhea is less rapid; 73 percent of women are still amenorrhoeic at 2 to 3 months after birth, 32 percent are still amenorrhoeic at 6 to 7 months, and 7 percent are still amenorrhoeic at 12 to 13 months.

| Table 6.6 Postpartum amenorrhea, abstinence and insusceptibility |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Percentage of births in the three years preceding the survey for which mothers are postpartum amenorrhoeic, abstaining, insusceptible, by number of months since birth, and median and mean durations, Maldives 2009 |  |  |  |  |
| Months | Percentage of | irths for whi | he mother is: | Number of |
| since birth | Amenorrhoeic | Abstaining | Insusceptible ${ }^{1}$ | births |
| < 2 | 93.2 | 100.0 | 100.0 | 77 |
| 2-3 | 73.4 | 63.5 | 83.1 | 166 |
| 4-5 | 47.8 | 25.4 | 56.9 | 164 |
| 6-7 | 32.4 | 13.4 | 40.6 | 159 |
| 8-9 | 18.6 | 7.9 | 24.1 | 141 |
| 10-11 | 11.8 | 4.6 | 14.4 | 143 |
| 12-13 | 7.1 | 2.1 | 9.2 | 138 |
| 14-15 | 6.0 | 8.3 | 14.3 | 116 |
| 16-17 | 1.0 | 5.7 | 6.6 | 132 |
| 18-19 | 0.8 | 3.6 | 4.4 | 152 |
| 20-21 | 1.6 | 6.0 | 7.6 | 160 |
| 22-23 | 0.2 | 0.8 | 1.1 | 125 |
| 24-25 | 0.0 | 3.2 | 3.2 | 119 |
| 26-27 | 0.0 | 2.1 | 2.1 | 110 |
| 28-29 | 0.0 | 2.1 | 2.1 | 113 |
| 30-31 | 3.4 | 2.6 | 5.9 | 113 |
| 32-33 | 0.0 | 2.3 | 2.3 | 107 |
| 34-35 | 0.0 | 0.1 | 0.1 | 127 |
| Total | 16.6 | 13.2 | 21.3 | 2,362 |
| Median | 4.7 | 3.0 | 5.6 | na |
| Mean | 6.2 | 5.3 | 7.8 | na |
| Note: Estimates are based on status at the time of the survey. <br> na $=$ Not applicable <br> ${ }^{1}$ Includes births for which mothers are either still amenorrhoeic or still abstaining (or both) following birth |  |  |  |  |

Table 6.7 shows the median durations of postpartum amenorrhoea, abstinence, and insusceptibility by background characteristics. There are slight variations of about one month in the median duration across subgroups of women.

| Table 6.7 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, Maldives 2009 |  |  |  |
| Background characteristic | Postpartum amenorrhea | Postpartum abstinence | Postpartum insusceptibility ${ }^{1}$ |
| Mother's age |  |  |  |
| 15-29 | 4.2 | 2.7 | 5.2 |
| 30-49 | 5.7 | 3.6 | 6.5 |
| Residence |  |  |  |
| Urban | 4.1 | 2.6 | 5.2 |
| Rural | 4.9 | 3.2 | 5.8 |
| Region |  |  |  |
| Malé | 4.1 | 2.6 | 5.2 |
| North | 5.3 | 3.2 | 5.5 |
| North Central | 5.0 | 3.5 | 6.2 |
| Central | 5.4 | 2.3 | 5.9 |
| South Central | 4.1 | 2.3 | 5.1 |
| South | 4.7 | 4.3 | 5.9 |
| Education |  |  |  |
| No formal education | 4.5 | 4.4 | 6.3 |
| Primary | 5.3 | 2.7 | 5.9 |
| Secondary | 4.2 | 3.0 | 5.4 |
| More than secondary | 5.7 | 2.4 | 5.7 |
| Wealth quintile |  |  |  |
| Lowest | 4.9 | 2.7 | 6.0 |
| Second | 4.9 | 2.7 | 5.7 |
| Middle | 4.4 | 3.5 | 5.4 |
| Fourth | 5.1 | 2.4 | 6.0 |
| Highest | 3.9 | 3.4 | 5.0 |
| Total | 4.7 | 3.0 | 5.6 |
| Note: Medians are based on the status at the time of the survey (current status) <br> ${ }^{1}$ Includes births for which mothers are either still amenorrhoeic or still abstaining (or both) following birth |  |  |  |

### 6.5 Menopause

Another factor influencing the risk of pregnancy among women is menopause. In the context of the available survey data, women are considered menopausal if they are neither pregnant nor postpartum amenorrhoeic and have not had a menstrual period in the six months preceding the survey (Table 6.8). As expected, the proportion of women who are menopausal or who have had a hysterectomy increases with age. Less than 2 percent of women age 30-34 years are menopausal compared with 23 percent of women age 48-49 years.

Table 6.8 Menopause
Percentage of women age 30-49 who are menopausal, by age, Maldives 2009

| Age | Percentage <br> menopausal $^{1}$ | Number of <br> women |
| :--- | :---: | :---: |
| $30-34$ | 1.5 | 1,287 |
| $35-39$ | 2.3 | 1,185 |
| $40-41$ | 5.4 | 432 |
| $42-43$ | 6.9 | 389 |
| $44-45$ | 8.4 | 340 |
| $46-47$ | 11.6 | 336 |
| $48-49$ | 23.0 | 238 |
|  |  |  |
| Total | 5.2 | 4,205 |

${ }^{1}$ Percentage of all women who are not pregnant and not postpartum amenorrhoeic whose last menstrual period occurred six or more months preceding the survey

Insight into the fertility desires of a population is important, both for estimating the potential unmet need for family planning and for predicting future fertility. This chapter presents data from the 2009 MDHS on the fertility intentions of women, the need for family planning services, and the ideal family size as envisioned by women in Maldives. It also considers the potential effect on fertility of efforts to prevent unwanted pregnancies.

### 7.1 Desire for More CHILDREN

To obtain information on current fertility preferences, all married non-sterilized women were asked the following question in the MDHS: "Would you like to have (a/another) child or would you prefer not to have any (more) children?" For pregnant women, the question was prefaced by the wording, "After the child you are expecting. . . ." Women who wanted more children were then asked how long they would like to wait before the birth of their next child. Sterilized women who were not asked the question about fertility preference are considered to want no more children for purposes of the tabulations in this chapter.

Table 7.1 and Figure 7.1 show the reproductive preferences of currently married women in the Maldives. Nearly half of married women do not want any more children (37 percent) or have been sterilized (11 percent). Among those wanting another child, the majority-26 percent of all currently married women-either want to wait two years or more to have the next birth or are unsure about their childbearing intentions. Slightly less than half of the women who want another child-18 percent of all currently married women-want a child soon (within two years).

Both the desire for a child and the timing desired for the next birth are strongly related to the number of children. As expected, the majority ( 75 percent) of women who have no children want a birth soon. However, there is interest in controlling the timing of the first birth among some childless women; 17 percent expressed a desire to delay having a child for at least two years. Interest in delaying births is even more evident among women with one child; half want to wait two years or more to have the next birth. Among women with more than one child, the proportion wanting to limit childbearing increases rapidly, from 47 percent among women with two children to 96 percent among women with six or more children.


Figure 7.1 Fertility Preferences among Currently Married Women Age 15-49


Table 7.2 shows that, among all married women, the proportion that wants no more children varies markedly with education. Higher proportions of women with primary or no education want no more children compared with women with secondary or higher education. Among currently married women with four or more children, there are only minor differences in the proportions that want to limit childbearing. However, among women with three or fewer children, fertility preferences vary more markedly across subgroups. For example, among women with two children, 60 percent in urban areas want to stop childbearing compared with 38 percent in rural areas.

Table 7.2 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, Maldives 2009

| Background characteristic | Number of living children ${ }^{1}$ |  |  |  |  |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 0 | 1 | 2 | 3 | 4 | 5 | $6+$ |  |
| Residence |  |  |  |  |  |  |  |  |
| Urban | 0.6 | 17.2 | 59.5 | 78.2 | 89.6 | (92.1) | 94.9 | 47.9 |
| Rural | 0.5 | 6.5 | 38.0 | 66.7 | 83.7 | 91.4 | 96.0 | 47.7 |
| Region |  |  |  |  |  |  |  |  |
| Malé | 0.6 | 17.2 | 59.5 | 78.2 | 89.6 | (92.1) | 94.9 | 47.9 |
| North | 0.0 | 4.2 | 34.6 | 71.1 | 82.0 | 90.8 | 98.5 | 46.2 |
| North Central | 0.0 | 3.7 | 45.4 | 61.1 | 80.3 | 91.0 | 94.4 | 47.3 |
| Central | 1.2 | 6.5 | 36.1 | 60.7 | 87.1 | 93.0 | 93.3 | 47.4 |
| South Central | 1.1 | 8.1 | 40.6 | 66.2 | 88.2 | 93.4 | 93.4 | 49.2 |
| South | 0.8 | 10.0 | 34.4 | 71.8 | 81.9 | 89.6 | 98.4 | 48.5 |
| Education |  |  |  |  |  |  |  |  |
| No formal education | (0.0) | 31.9 | 61.7 | 74.9 | 87.6 | 92.5 | 94.9 | 82.6 |
| Primary | 0.0 | 12.5 | 39.6 | 67.2 | 83.7 | 91.6 | 99.3 | 55.1 |
| Secondary | 0.6 | 9.3 | 52.6 | 75.1 | (86.8) | * | * | 24.2 |
| More than secondary | 0.8 | 3.4 | 41.6 | (54.9) | * | * | * | 16.0 |
| Wealth quintile |  |  |  |  |  |  |  |  |
| Lowest | 0.7 | 7.1 | 38.7 | 65.9 | 81.2 | 85.6 | 96.0 | 52.2 |
| Second | 0.1 | 5.8 | 37.7 | 61.3 | 85.3 | 92.4 | 96.6 | 48.6 |
| Middle | 0.4 | 6.7 | 40.7 | 71.6 | 84.5 | 95.9 | 96.0 | 46.6 |
| Fourth | 1.6 | 12.8 | 50.6 | 77.7 | 86.5 | 89.9 | 95.3 | 46.7 |
| Highest | 0.0 | 16.5 | 58.6 | 74.4 | (90.6) | * | (93.8) | 45.4 |
| Total | 0.5 | 10.3 | 47.2 | 70.6 | 85.1 | 91.5 | 95.9 | 47.8 |

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

### 7.2 Need for Family Planning

One of the major concerns of family planning programs is to define the size of the potential demand for contraception and to identify women who are the most in need of contraceptive services. Table 7.3 presents estimates of unmet and met need for family planning services.

Women with an unmet need for family planning (shown in columns 1-3 of Table 7.3) include the following:
(1) Currently married women who are in need of family planning for spacing purposes. This group includes (a) pregnant women whose pregnancy is mistimed (i.e., wanted later); (b) amenorrhoeic women whose last birth was mistimed; and (c) non-users who are neither pregnant nor amenorrhoeic and who either want to delay the next birth at least two or more years, are unsure whether they want another child, or want another child but are unsure when to have the birth.
(2) Currently married women who are in need of family planning for limiting purposes. This group includes: (a) pregnant women whose pregnancy is unwanted; (b) amenorrhoeic women whose last child was unwanted; and (c) non-users who are neither pregnant nor amenorrhoeic and who want no more children.

Menopausal and infecund women are excluded from the unmet need category as are pregnant or amenorrhoeic women who became pregnant while using a contraceptive method. Pregnant women whose pregnancy is mistimed or amenorrhoeic women whose last birth was mistimed are considered to be in need of better contraception.

Women with a met need for family planning (shown in columns 4-6 of Table 7.3) include women who are currently using contraception. The total demand for family planning (shown in columns 7-9 of Table 7.3) represents the sum of unmet need and met need. The total demand also includes pregnant and amenorrhoeic women who became pregnant while using a family planning method. The percentage of the total demand that is satisfied is shown in column 10 in Table 7.3.

Table 7.3 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 for the demand for contraception that is satisfied, by background characteristics, Maldives 2009

| Background characteristic | Unmet need for family planning ${ }^{1}$ |  |  | Met need for family planning (currently using) ${ }^{2}$ |  |  | Total demand for family planning |  |  | Percentage of demand satisfied | Number of women |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | For spacing | For limiting | Total | For spacing | For limiting | Total | For spacing | For limiting | Total |  |  |
| Age |  |  |  |  |  |  |  |  |  |  |  |
| 15-19 | 36.3 | 0.0 | 36.3 | 15.0 | 0.0 | 15.0 | 57.3 | 0.0 | 57.3 | 36.6 | 111 |
| 20-24 | 26.3 | 5.2 | 31.5 | 20.2 | 3.0 | 23.2 | 47.6 | 8.4 | 56.0 | 43.7 | 1,188 |
| 25-29 | 25.3 | 8.8 | 34.2 | 19.2 | 10.8 | 30.0 | 45.7 | 19.7 | 65.3 | 47.7 | 1,446 |
| 30-34 | 13.5 | 16.6 | 30.2 | 13.4 | 21.7 | 35.1 | 27.6 | 38.6 | 66.2 | 54.5 | 1,193 |
| 35-39 | 6.1 | 18.1 | 24.2 | 7.1 | 36.9 | 44.0 | 13.5 | 55.3 | 68.9 | 64.8 | 1,065 |
| 40-44 | 2.4 | 20.8 | 23.2 | 2.5 | 42.8 | 45.3 | 4.9 | 63.8 | 68.8 | 66.3 | 884 |
| 45-49 | 0.3 | 15.7 | 16.0 | 0.4 | 39.2 | 39.7 | 0.7 | 54.9 | 55.6 | 71.3 | 612 |
| Residence |  |  |  |  |  |  |  |  |  |  |  |
| Urban | 14.0 | 12.2 | 26.2 | 12.1 | 21.5 | 33.6 | 26.9 | 33.9 | 60.8 | 56.9 | 2,122 |
| Rural | 15.3 | 13.7 | 29.1 | 12.3 | 23.0 | 35.3 | 28.4 | 36.9 | 65.2 | 55.4 | 4,378 |
| Region |  |  |  |  |  |  |  |  |  |  |  |
| Malé | 14.0 | 12.2 | 26.2 | 12.1 | 21.5 | 33.6 | 26.9 | 33.9 | 60.8 | 56.9 | 2,122 |
| North | 13.5 | 11.8 | 25.4 | 15.6 | 23.8 | 39.4 | 30.4 | 36.0 | 66.4 | 61.8 | 1,009 |
| North Central | 14.4 | 12.6 | 27.1 | 13.8 | 23.6 | 37.4 | 28.5 | 36.4 | 64.8 | 58.3 | 967 |
| Central | 13.3 | 11.8 | 25.1 | 14.0 | 28.0 | 42.0 | 27.7 | 40.0 | 67.7 | 62.9 | 563 |
| South Central | 14.7 | 15.9 | 30.5 | 11.4 | 20.3 | 31.7 | 26.8 | 36.3 | 63.0 | 51.5 | 789 |
| South | 19.6 | 16.0 | 35.6 | 7.5 | 20.9 | 28.4 | 27.9 | 36.9 | 64.9 | 45.2 | 1,051 |
| Education |  |  |  |  |  |  |  |  |  |  |  |
| No formal education | 3.9 | 19.8 | 23.8 | 3.2 | 40.4 | 43.6 | 7.3 | 60.5 | 67.8 | 64.9 | 1,488 |
| Primary | 12.2 | 15.3 | 27.4 | 10.1 | 26.8 | 36.9 | 22.6 | 42.2 | 64.8 | 57.6 | 2,216 |
| Secondary | 23.7 | 8.4 | 32.1 | 18.0 | 9.3 | 27.3 | 43.1 | 17.9 | 61.1 | 47.4 | 2,409 |
| More than secondary | 18.4 | 6.8 | 25.2 | 23.6 | 9.1 | 32.7 | 43.1 | 15.8 | 58.9 | 57.3 | 316 |
| Wealth quintile |  |  |  |  |  |  |  |  |  |  |  |
| Lowest | 14.2 | 14.6 | 28.8 | 11.1 | 25.9 | 36.9 | 26.0 | 40.8 | 66.8 | 56.9 | 1,167 |
| Second | 15.8 | 13.6 | 29.4 | 11.8 | 23.7 | 35.4 | 28.2 | 37.4 | 65.6 | 55.2 | 1,278 |
| Middle | 14.4 | 14.3 | 28.7 | 12.7 | 21.6 | 34.3 | 27.9 | 36.0 | 63.8 | 55.1 | 1,363 |
| Fourth | 15.9 | 12.8 | 28.7 | 12.3 | 21.1 | 33.4 | 28.8 | 34.0 | 62.8 | 54.4 | 1,311 |
| Highest | 14.3 | 11.1 | 25.4 | 13.1 | 20.9 | 33.9 | 28.3 | 32.1 | 60.4 | 57.9 | 1,381 |
| Total | 14.9 | 13.2 | 28.1 | 12.2 | 22.5 | 34.7 | 27.9 | 35.9 | 63.8 | 55.9 | 6,500 |

Note: Total includes 72 women with information missing on education level.
${ }^{1}$ Unmet need for spacing includes pregnant women whose pregnancy was mistimed; amenorrhoeic women who are not using family planning and whose last birth was mistimed, or whose last birth was unwanted but now say they want more children; and fecund women who are neither pregnant nor amenorrhoeic, who are not using any method of family planning, and who say they want to wait 2 or more years for their next birth. Also included in unmet need for spacing are fecund women who are not using any method of family planning and say they are unsure whether they want another child or who want another child but are unsure when to have the birth. Unmet need for limiting refers to pregnant women whose pregnancy was unwanted; amenorrhoeic women who are not using family planning, whose last child was unwanted and who do not want any more children; and fecund women who are neither pregnant nor amenorrhoeic, who are not using any method of family planning, and who want no more children.
${ }^{2}$ Using for spacing is defined as women who are using some method of family planning and say they want to have another child or are undecided whether to have another. Using for limiting is defined as women who are using and who want no more children. Note that the specific methods used are not taken into account here.

According to Table 7.3, the total unmet need among currently married women in Maldives is 28 percent; 15 percent are in need of family planning because of a desire to space the next birth, and the remainder are in need due to an interest in limiting births. Although the drop is not uniform, the level of unmet need tends to decline with age. Unmet need is slightly higher among rural women than urban women and varies from a level of 25 percent in the North and Central regions to 36 percent in the South.

The total met need for family planning (i.e., the proportion of married women currently using contraception) is 35 percent. Around two-thirds of users-23 percent of all married women-are limiters. Overall, the total demand for family planning comprises 64 percent of married women in Maldives. Fifty-six percent of that demand is satisfied. The level of satisfied demand rises with age. It is similar among urban and rural women. Married women in the Central and North regions have the highest level of satisfied demand, and women in the South region have the lowest level (63 percent, 62 percent, and 45 percent, respectively).

### 7.3 Ideal Number of Children

In the first part of this chapter, the discussion of fertility preferences focused on women's desires with respect to future childbearing. A woman's future childbearing intentions obviously are influenced by the number of children she already has. The 2009 MDHS tried to obtain a measure of fertility preferences that was less dependent on current family size by asking about the respondent's ideal number of children. This question required the respondent to perform the difficult task of considering the number of children she would choose to have in her whole life regardless of the number (if any) that she had already borne. Respondents had problems with the abstract nature of the question, and so some respondents gave non-numeric responses.

In considering the results from the question on the ideal number of children, it is important to remember that, for several reasons, the ideal number tends to be fairly closely associated with the actual number of children a woman has. First, women who want a large family tend to have more children than other women. Second, women may rationalize their ideal family size so that as the actual number of children increases, their preferred family size also increases. Furthermore, women with large families are on average older than women with small families and may actually prefer a large family size because of attitudes that they acquired 20 to 30 years ago.

Table 7.4 presents the distribution of ever-married women by their ideal number of children. The table shows that 13 percent of women gave non-numeric responses to a question about their ideal number of children. The proportion giving non-numeric answers rises steeply with the number of children, exceeding 20 percent among women with four and five children and peaking at 40 percent among women with 6 or more children. As a result, caution should be exercised in interpreting the information on family size preferences among higher parity women.

Table 7.4 shows that an ever-married woman in Maldives prefers a moderate-size family. Less than one-third of ever-married women want a two-child family, 23 percent consider a three-child family to be ideal, and almost the same proportion prefer to have four children. Nine percent want five or more children. The mean ideal number of children among ever-married women who gave numeric responses is 2.9 children. As expected, higher parity women expressed a preference for more children; the mean ideal number ranges from 2.6 among women with one child to 4.4 among women with six or more children.

The results in Table 7.4 indicate that some women in Maldives are having more children than they would prefer. For example, 19 percent of women with four children say they would have preferred to have three or fewer children, and 43 percent of the women with six of more children considered a smaller family to be ideal.

| Table 7.4 Ideal number of children |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percent distribution of ever-married women, by ideal number of children and by mean ideal number of children, for evermarried women and for currently married women, according to number of living children, Maldives 2009 |  |  |  |  |  |  |  |  |
| Ideal number of children | Number of living children ${ }^{1}$ |  |  |  |  |  |  | Total |
|  | 0 | 1 | 2 | 3 | 4 | 5 | 6+ |  |
| 0 | 0.1 | 0.2 | 0.1 | 0.2 | 0.1 | 0.3 | 0.9 | 0.2 |
| 1 | 2.4 | 5.0 | 1.4 | 0.5 | 0.1 | 0.7 | 0.3 | 2.0 |
| 2 | 50.3 | 46.1 | 40.3 | 16.8 | 9.2 | 9.6 | 6.8 | 30.8 |
| 3 | 24.5 | 29.7 | 25.7 | 29.9 | 9.3 | 11.4 | 9.1 | 22.9 |
| 4 | 14.0 | 11.7 | 22.9 | 30.3 | 49.0 | 20.5 | 21.5 | 22.1 |
| 5 | 1.8 | 1.4 | 2.6 | 6.0 | 6.4 | 24.9 | 4.5 | 4.8 |
| 6+ | 0.7 | 1.0 | 0.9 | 2.8 | 5.2 | 8.0 | 17.5 | 3.9 |
| Non-numeric responses | 6.1 | 5.0 | 6.3 | 13.7 | 20.8 | 24.4 | 39.5 | 13.3 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Number | 822 | 1,827 | 1,500 | 1,049 | 648 | 493 | 791 | 7,131 |
| Mean ideal number of children ${ }^{2}$ : |  |  |  |  |  |  |  |  |
| Ever-married | 2.6 | 2.6 | 2.9 | 3.4 | 3.9 | 4.2 | 4.4 | 3.1 |
| Number | 772 | 1,736 | 1,406 | 906 | 513 | 372 | 479 | 6,185 |
| Currently married | 2.6 | 2.6 | 2.9 | 3.4 | 3.9 | 4.2 | 4.5 | 3.1 |
| Number | 687 | 1,597 | 1,282 | 825 | 476 | 336 | 432 | 5,635 |

Table 7.5 shows how the mean ideal number of children for ever-married women varies among subgroups. As expected, the mean increases with the woman's age and is higher among rural women ( 3.3 children) compared with urban women ( 2.8 children). The mean ideal number of children among women with no education is 4.0 children, nearly 50 percent higher than the ideal number among women with more than secondary education ( 2.7 children). Similarly, family size preferences decline with increasing wealth, from 3.4 children among women in the lowest wealth quintile to 2.8 children in the highest quintile.

### 7.4 UnPLANNED and Unwanted Fertility

Information obtained in the 2009 MDHS on fertility preferences can be used to derive several indicators of the level of unwanted fertility. First, responses to a question about the planning status of recent births, i.e., whether a birth was planned (wanted then), unplanned (wanted later), or not wanted at all, provide some indication of the extent of unwanted childbearing. In interpreting these data, it is important to remember that women may rationalize mistimed or unwanted pregnancies, declaring them as wanted only after the children are born.

Table 7.6 presents the information on the planning status of recent births. The results indicate that around onequarter of all births in the five-year period before the MDHS were unplanned; 16 percent were not wanted at all at the time they were conceived, and 10 percent were mistimed, i.e., their mothers would have preferred to delay the birth by at least two years. The proportion of births that were not wanted at the time of conception increases directly with birth order. Fortyseven percent of all fourth and higher order births were not

Table 7.5 Mean ideal number of children
Mean ideal number of children for evermarried women age $15-49$ by background characteristics, Maldives 2009

| Background characteristic | Mean | Number of women |
| :---: | :---: | :---: |
| Age |  |  |
| 15-19 | 2.6 | 109 |
| 20-24 | 2.6 | 1,217 |
| 25-29 | 2.8 | 1,455 |
| 30-34 | 3.1 | 1,181 |
| 35-39 | 3.4 | 1,008 |
| 40-44 | 3.8 | 751 |
| 45-49 | 4.1 | 463 |
| Residence |  |  |
| Urban | 2.8 | 2,128 |
| Rural | 3.3 | 4,057 |
| Region |  |  |
| Malé | 2.8 | 2,128 |
| North | 3.2 | 890 |
| North Central | 3.3 | 867 |
| Central | 3.4 | 518 |
| South Central | 3.4 | 756 |
| South | 3.3 | 1,025 |
| Education |  |  |
| No formal education | 4.0 | 1,183 |
| Primary | 3.3 | 2,174 |
| Secondary | 2.6 | 2,438 |
| More than secondary | 2.7 | 315 |
| Wealth quintile |  |  |
| Lowest | 3.4 | 1,071 |
| Second | 3.3 | 1,193 |
| Middle | 3.2 | 1,275 |
| Fourth | 3.0 | 1,275 |
| Highest | 2.8 | 1,371 |
| Total | 3.1 | 6,185 |

Note: Total includes 72 women with information missing on education level. Means are based on number of women who gave a numeric response
wanted at all, compared with only about 11 percent of second order births. The planning status of births is also affected by the age of the mother. In general, the older the mother, the higher is the percentage of children that are unwanted at conception.

A second approach to assessing unwanted fertility considers what the fertility rate would be in Maldives if women had avoided recent births they did not want. The wanted fertility rate is calculated in the same manner as the total fertility rate, but unwanted births are excluded from the numerator. Unwanted births are defined as births that exceed the number considered ideal by the respondent. For purposes of calculating the wanted fertility rate, women who did not report a numeric ideal family size are assumed to have wanted all their births. To the extent that women are unwilling to report an ideal family size that is lower than their actual family size, the wanted fertility rate may be overestimated.

## Table 7.6 Fertility planning status

Percent distribution of births to ever-married 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, Maldives 2009

| 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 | 88.7 | 5.9 | 4.6 | 0.8 | 100.0 | 1,769 |
| 2 | 73.7 | 14.4 | 11.3 | 0.6 | 100.0 | 1,085 |
| 3 | 69.1 | 13.5 | 17.0 | 0.5 | 100.0 | 603 |
| 4+ | 43.2 | 9.5 | 46.9 | 0.5 | 100.0 | 800 |
| Mother's age at birth |  |  |  |  |  |  |
| <20 | 69.5 | 10.6 | 17.8 | 2.2 | 100.0 | 179 |
| 20-24 | 78.5 | 12.2 | 8.7 | 0.6 | 100.0 | 1,484 |
| 25-29 | 77.6 | 10.6 | 11.3 | 0.5 | 100.0 | 1,281 |
| 30-34 | 71.7 | 7.8 | 20.1 | 0.4 | 100.0 | 836 |
| 35-39 | 57.4 | 3.4 | 38.2 | 1.0 | 100.0 | 364 |
| 40-44 | 33.3 | 4.6 | 61.3 | 0.8 | 100.0 | 109 |
| 45-49 | * | * | * | * | 100.0 | 5 |
| Total | 73.5 | 9.8 | 16.0 | 0.7 | 100.0 | 4,258 |

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

Table 7.7 presents total wanted fertility rates and total fertility rates for the three-year period before the survey. Overall, the wanted fertility rate is 2.2 births per woman, which is 12 percent lower that the total fertility rate ( 2.5 births). The gap between actual and wanted fertility is smallest among women with a secondary or higher education and among women in the highest wealth quintile.

| Table 7.7 Wanted fertility rates |  |  |
| :---: | :---: | :---: |
| Total wanted fertility rates and total fertility rates for the three years preceding the survey, by background characteristics, Maldives 2009 |  |  |
| Background characteristic | Total wanted fertility rates | Total fertility rate |
| Residence |  |  |
| Urban | 1.9 | 2.1 |
| Rural | 2.4 | 2.8 |
| Region |  |  |
| Malé | 1.9 | 2.1 |
| North | 2.3 | 2.7 |
| North Central | 2.2 | 2.5 |
| Central | 2.4 | 2.8 |
| South Central | 2.6 | 3.0 |
| South | 2.5 | 2.9 |
| Education |  |  |
| No formal education | 2.4 | 2.8 |
| Primary | 2.2 | 2.7 |
| Secondary | 2.5 | 2.6 |
| More than secondary | 2.6 | 2.7 |
| Wealth quintile |  |  |
| Lowest | 2.3 | 2.8 |
| Second | 2.5 | 2.9 |
| Middle | 2.4 | 2.7 |
| Fourth | 2.1 | 2.4 |
| Highest | 2.0 | 2.1 |
| Total | 2.2 | 2.5 |

Note: Rates are calculated based on births to women age 15-49 in the period 1-36 months preceding the survey. The total fertility rates are the same as those presented in Table 4.2.

## INFANT AND CHILD MORTALITY

This chapter presents levels, trends, and differentials in neonatal, postneonatal, infant, child, and perinatal mortality. The information is relevant both for understanding population trends-for example, the mortality rates can be used in population projections-and for the planning and evaluation of health policies and programs. Information on child mortality serves the needs of the health sector by identifying population groups that are at high risk.

In the Maldives, mortality statistics are routinely collected and reported to the Ministry of Health through the Vital Registration System (VRS). In addition, every five years, the Population and Housing Census, conducted by the Ministry of Planning and National Development (MPND), generates mortality estimates. These two methods provide an opportunity to compare and address any discrepancy that may exist between the two methods of estimation. The 2009 Maldives DHS provides yet another set of estimates.

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

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

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

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

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

Infant and under-5 mortality rates from the 2009 MDHS are presented in Table 8.1. Under-5 mortality was 17 deaths per 1,000 live births for the five-year period preceding the survey (circa 2005-2009), implying that about one in every 60 children born in the Maldives during that period died before reaching a fifth birthday. The infant mortality rate during the five-year period was 14 deaths per 1,000 , and the neonatal mortality rate was 10 deaths per 1,000 . Thus, more than 80 percent of child deaths during 2005-2009 took place during the first year of the child's life, and seven in ten of those infant deaths occurred during the neonatal period, that is, within the first month of life.

The trend in early childhood mortality in the mid-1990s and later, can be examined by looking at changes in the mortality rates over the three successive five-year periods prior to the survey. The results indicate that mortality among young children has declined significantly in the 15 years prior to the survey, and that decline has occurred much faster in the most recent five years. For example, under-5 mortality in 2000-2004 was 14 percent lower than in 1995-1999, while the rate in the 2005-2009 period ( 17 deaths per 1,000 ) is less than half the level estimated for the 2000-2004 period (38 deaths per 1,000).

| Table 8.1 Early childhood mortality rates |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Neonatal, postneonatal, infant, child, and under-5 mortality rates for five-year periods preceding the survey, Maldives 2009 |  |  |  |  |  |  |
| Years preceding the survey | Approximate calendar year ${ }^{1}$ | Neonatal mortality (NN) | Postneonatal mortality $(\mathrm{PNN})^{1}$ | Infant mortality $\left({ }_{1} \mathrm{q}_{0}\right)$ | Child mortality $\left({ }_{4} q_{1}\right)$ | Under-5 mortality $\left({ }_{5} \mathrm{q}_{0}\right)$ |
| 0-4 | 2005-2009 | 10 | 4 | 14 | 3 | 17 |
| 5-9 | 2000-2004 | 23 | 9 | 32 | 6 | 38 |
| 10-14 | 1995-1999 | 25 | 11 | 35 | 9 | 44 |
| ${ }^{1}$ Data collection took place between January and October 2009. The period 0-59 months prior to the survey spans a period between February 2004 and October 2009. <br> ${ }^{2}$ Computed as the difference between the infant and neonatal mortality rates |  |  |  |  |  |  |

In the Population and Housing Censuses (PHC) of Maldives, the infant mortality rate was calculated data based on infant deaths among live births that occurred during the year preceding the census. This type of data does not permit direct estimation of child mortality. Therefore an indirect technique was employed to arrive at estimates of childhood mortality rates using information on children surviving among children ever born. Based on the 2006 PHC (referring to 2005), the IMR is estimated as 18 deaths per 1,000 live births (MPND, 2008). The Vital Registration System's estimate for 2006 is 16 deaths per 1,000 live births (MOH, 2007).

The low level of childhood mortality in Maldives should be viewed with caution and sampling variability should be considered.

Figure 8.1 is presented to show that the infant mortality rate in Maldives is lower than in any other country in South Asia and Southeast Asia where comparable data are available. Among these countries, Pakistan has the highest rate, with 78 deaths per 1,000 births. Vietnam (18 deaths per 1,000 births) has the second lowest infant mortality rate, and ranks directly after Maldives.

Figure 8.1 Infant Mortality Rate for Five-Year Period Before the Survey for Selected Countries in South and Southeast Asia


Source: ICF Macro, 2010. MEASURE DHS STATcompiler.
http://www.measuredhs.com, June 92010.

### 8.2 Data Quality

Because of the decline in infant and child mortality, a thorough review of the MDHS data was conducted. The quality of mortality estimates calculated from retrospective birth histories depends upon the completeness with which births and deaths are reported and recorded.

One factor that affects childhood mortality estimates is the quality of reporting of age at death, which may distort the age pattern of mortality. If age at death is misreported, it will bias the estimates, especially if the net effect of the age misreporting results in transference from one age bracket to another. For example, a net transfer of deaths from under 1 month to a higher age bracket will affect the estimates of neonatal and postneonatal mortality. To minimise errors in reporting of age at death, interviewers were instructed to record age at death in days if the death took place in the month following the birth, in months if the child died before age 2, and in years if the child was at least age 2 . They also were asked to probe for deaths reported at age 1 to determine a more precise age at death in terms of months. Examination of the reporting of age at deaths in months for deaths under age 2 years show that reporting is accurate even for events that took place in a distant past, where deaths are more likely to be reported at ages in multiples of six months (see Appendix Table C.6).

Another potential data quality problem is the selective omission from the birth histories of infants who did not survive, which can lead to underestimation of mortality rates. When selective omission of childhood deaths occurs, it is usually more severe for deaths occurring early in infancy. One way such omissions can be detected is by examining the proportion of neonatal deaths to infant deaths. Generally, if there is substantial underreporting of deaths, the result is an abnormally low ratio of neonatal deaths to infant deaths. Appendix Table C. 5 shows that the ratio declines from 93 percent in the $0-4$ years preceding the survey to 82 percent in the 10-15 years before the survey.

Data quality is also affected by displacement of birth dates, which may cause a distortion of mortality trends. This can occur if an interviewer knowingly records a death as occurring in a different year; the purpose is to cut down on overall work because live births occurring during the five years preceding the interview are the subject of a lengthy set of additional questions. In the 2009 MDHS questionnaire, the cut-off year for these questions was 2003. Data in Appendix Table C. 4 show that there is no evidence of shifting of births outside the reference period; in fact, the number of births in calendar year 2003 is less than in 2004.

### 8.3 Socioeconomic Differentials in Infant and Child Mortality

A number of socioeconomic, environmental, and biological factors influence infant and child mortality. In a framework developed for the study of child mortality in developing countries, Mosley and Chen (1984) outlined various proximate determinants and socioeconomic factors related to infant mortality. The proximate determinants, which are factors that affect mortality directly, include maternal characteristics such as age, parity, and birth interval; environmental contamination; nutrition; injury; and personal illness. Socioeconomic factors operate through the proximate determinants.

This section discusses differentials in early childhood mortality by the socioeconomic and biodemographic characteristics of the mother. The socioeconomic determinants include place of residence, mother's educational attainment, and wealth index quintile. The biodemographic determinants include sex of child, age of mother, parity, birth interval, and child's birth weight.

Mortality differentials by place of residence, region, educational level of the mother, and household wealth are presented in Table 8.2. Period-specific rates are presented for the ten-year period preceding the survey (approximately 2000 to 2009) to capture a sufficient number of births to study mortality differentials across population subgroups.

There seems to be no difference in infant mortality between children born to mothers living in urban areas and those born to women in rural areas. However, the neonatal mortality rate in urban areas is 33 percent higher than that in rural areas ( 20 per 1,000 live births compared with 15 per 1,000 live births), and the postneonatal rate in the rural areas is more than double the rate in the urban areas ( 8 and 3 deaths per 1,000 live births, respectively).

Infant mortality rates vary by region, ranging from 13 deaths per 1,000 live births in the North region to 32 deaths per 1,000 in the South Central region. The two regions also show the lowest and highest under-age-5 mortality ( 21 and 41 deaths per 1,000 live births, respectively).

The 2009 MDHS data show that as a mother's educational attainment goes up, the childhood mortality levels decline; children of less educated mothers generally have higher mortality rates than those born to more educated mothers. For instance, the infant mortality rate for children whose mothers had no education is 41 deaths per 1,000 live births compared with 13 deaths per 1,000 live births for children whose mothers have a secondary education.

There are no large differentials and no clear patterns in childhood mortality by the wealth status. Some rates are highest among children in the middle wealth quintile.

| Neonatal, postneonatal, infant, child, and under-5 mortality rates for the 10-year period preceding the survey, by background characteristic, Maldives 2009 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Background characteristic | Neonatal mortality (NN) | Postneonatal mortality (PNN) ${ }^{1}$ | Infant mortality $\left({ }_{1} q_{0}\right)$ | Child mortality $\left({ }_{4} q_{1}\right)$ | Under-5 mortality $\left({ }_{5} \mathrm{q}_{0}\right)$ |
| Residence |  |  |  |  |  |
| Urban | 20 | 3 | 23 | 1 | 23 |
| Rural | 15 | 8 | 22 | 6 | 28 |
| Region |  |  |  |  |  |
| Malé | 20 | 3 | 23 | 1 | 23 |
| North | 10 | 3 | 13 | 8 | 21 |
| North Central | 17 | 7 | 24 | 6 | 30 |
| Central | 19 | 11 | 30 | 4 | 34 |
| South Central | 23 | 10 | 32 | 9 | 41 |
| South | 10 | 9 | 19 | 4 | 23 |
| Mother's education |  |  |  |  |  |
| No formal education | 32 | 9 | 41 | 6 | 47 |
| Primary | 17 | 6 | 23 | 5 | 28 |
| Secondary | 7 | 6 | 13 | 1 | 14 |
| Wealth quintile |  |  |  |  |  |
| Lowest | 12 | 9 | 21 | 7 | 28 |
| Second | 20 | 5 | 25 | 6 | 31 |
| Middle | 21 | 8 | 28 | 5 | 33 |
| Fourth | 10 | 7 | 16 | 3 | 19 |
| Highest | 18 | 2 | 21 | 0 | 21 |
| ${ }^{1}$ Computed as the difference between the infant and neonatal mortality rates |  |  |  |  |  |

### 8.4 Demographic Differentials in Infant and Child Mortality

The demographic characteristics of both mother and child have been found to play an important role in the survival probability of children. Table 8.3 presents early childhood mortality rates by demographic characteristics (i.e., sex of child, mother's age at birth, birth order, previous birth interval, and birth size). The rates for males are consistently slightly higher than those for females. A mother's age at birth can affect a child's chances of survival. Neonatal mortality rates and infant mortality rates exhibit the expected U-shaped relationship with mother's age-high for women in the young age groups, low for women in the middle age groups, and high for women in the older age groups. For example, the infant mortality rate for women under age 20 when they gave birth is 29
deaths per 1,000 live births. The rate decreases for women who give birth at age $20-29$ and at age 30 39 (20 and 26 deaths per 1,000 live births, respectively) and then rises to 48 deaths per 1,000 live births for women who give birth at age 40-49 years. The higher rates for younger and older women may relate to biological factors that lead to complications during pregnancy and delivery.

The 2009 MDHS results show that the risk of dying increases with higher order births. For example, although the infant mortality rate for first-order births is 17 deaths per 1,000 live births, the rate for seventh-order births or higher is 47 deaths per 1,000 live births.

As expected, childhood mortality rates decline as the birth interval increases. For example, the infant mortality rate for children born fewer than two years after a previous birth is more than two times higher than the rate for children born after an interval of four or more years ( 52 deaths per 1,000 live births compared with 22 deaths per 1,000 live births).

A child's size at birth has been shown to be strongly associated with the risk of dying during infancy, particularly during the first months of life. In the 2009 MDHS, for all children born in the five years preceding the survey, mothers were asked whether the child was very small, small, average size, large, or very large at birth. Although subjective, the mother's judgment has been shown to correlate closely with the actual birth weight. Results show that mortality levels are higher among children perceived by their mother to have been small or very small at birth compared with other children. Infant mortality rates for infants who were judged by their mothers to be small or very small at birth are, for example, twice as high as those for infants who were reported by their mothers to be average or large at birth ( 20 deaths per 1,000 live births compared with 10 deaths per 1,000 live births).

| Table 8.3 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, Maldives 2009 |  |  |  |  |  |
| Demographic characteristic | Neonatal mortality ( NN ) | Postneonatal mortality (PNN) ${ }^{1}$ | Infant mortality $\left({ }_{1} q_{0}\right)$ | Child mortality $\left({ }_{4} \mathrm{q}_{1}\right)$ | Under-5 mortality $\left({ }_{5} \mathrm{q}_{0}\right)$ |
| Child's sex |  |  |  |  |  |
| Male | 18 | 7 | 24 | 5 | 29 |
| Female | 15 | 6 | 21 | 5 | 25 |
| Mother's age at birth |  |  |  |  |  |
| <20 | 25 | 4 | 29 | 8 | 36 |
| 20-29 | 13 | 7 | 20 | 2 | 22 |
| 30-39 | 20 | 5 | 26 | 7 | 33 |
| 40-49 | 26 | 22 | 48 | 20 | 67 |
| Birth order |  |  |  |  |  |
| 1 | 12 | 4 | 17 | 2 | 19 |
| 2-3 | 13 | 7 | 20 | 3 | 23 |
| 4-6 | 25 | 5 | 30 | 7 | 37 |
| 7+ | 30 | 17 | 47 | 11 | 57 |
| Previous birth interval ${ }^{2}$ |  |  |  |  |  |
| $<2$ years | 37 | 15 | 52 | 5 | 57 |
| 2 years | 12 | 6 | 18 | 8 | 25 |
| 3 years | 13 | 6 | 19 | 3 | 22 |
| $4+$ years | 16 | 6 | 22 | 6 | 28 |
| Birth size ${ }^{3}$ |  |  |  |  |  |
| Small/very small | 11 | 9 | 20 | - | - |
| Average or larger | 7 | 3 | 10 | - | - |
| ${ }^{1}$ Computed as the difference between the infant and neonatal mortality rates <br> ${ }^{2}$ Excludes first-order births <br> ${ }^{3}$ Rates for the five-year period before the survey |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |

### 8.5 Perinatal Mortality

In the 2009 MDHS, women were asked to report all pregnancy losses that occurred in the five years preceding the survey. For each such pregnancy, the duration was recorded. Pregnancy losses occurring after seven completed months of gestation (stillbirths) plus deaths to live births within the first seven days of life (early neonatal deaths) constitute perinatal deaths. The distinction between a stillbirth and an early neonatal death may be a fine one, often depending on observing and then remembering sometimes faint signs of life after delivery. The causes of stillbirths and early neonatal deaths are closely linked, and examining just one or the other can understate the true level of mortality around delivery. For this reason deaths around the time of delivery are combined into the perinatal mortality rate. When the number of perinatal deaths is divided by the total number of pregnancies reaching seven months of gestation, the perinatal mortality rate is derived. The perinatal mortality rate is a useful indicator of the state of delivery services, both in terms of the use of these services and of their ability to ensure delivery of healthy babies.

Table 8.4 presents the number of stillbirths and early neonatal deaths, and the perinatal mortality rate, for the five-year period preceding the survey. The data show that, overall, 34 stillbirths and 35 early neonatal deaths were reported in the survey, resulting in a perinatal mortality rate of 18 per 1,000 pregnancies.

| Table 8.4 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, Maldives 2009 |  |  |  |  |
| Background characteristic | Number of stillbirths ${ }^{1}$ | Number of early neonatal deaths ${ }^{2}$ | Perinatal mortality rate ${ }^{3}$ | Number of pregnancies of $7+$ months duration |
| Mother's age at birth |  |  |  |  |
| <20 | 0 | 8 | 47 | 165 |
| 20-29 | 18 | 16 | 14 | 2,433 |
| 30-39 | 15 | 9 | 23 | 1,071 |
| 40-49 | 0 | 3 | 26 | 101 |
| Previous pregnancy interval in months ${ }^{4}$ |  |  |  |  |
| First pregnancy | 15 | 14 | 21 | 1,426 |
| <15 | 0 | 1 | 9 | 160 |
| 15-26 | 5 | 4 | 19 | 470 |
| 27-38 | 3 | 2 | 13 | 365 |
| 39+ | 10 | 14 | 18 | 1,348 |
| Residence |  |  |  |  |
| Urban | 10 | 15 | 22 | 1,133 |
| Rural | 24 | 21 | 17 | 2,637 |
| Region |  |  |  |  |
| Malé | 10 | 15 | 22 | 1,133 |
| North | 9 | 2 | 18 | 587 |
| North Central | 3 | 5 | 14 | 542 |
| Central | 4 | 1 | 13 | 346 |
| South Central | 3 | 8 | 23 | 456 |
| South | 6 | 5 | 16 | 707 |
| Mother's education |  |  |  |  |
| No education | 4 | 5 | 20 | 453 |
| Primary | 14 | 17 | 22 | 1,382 |
| Secondary | 15 | 13 | 17 | 1,719 |
| More than secondary | 0 | 0 | 0 | 173 |
| Wealth quintile |  |  |  |  |
| Lowest | 8 | 4 | 16 | 717 |
| Second | 10 | 12 | 27 | 812 |
| Middle | 4 | 7 | 14 | 787 |
| Fourth | 5 | 6 | 14 | 760 |
| Highest | 7 | 7 | 21 | 693 |
| Total | 34 | 35 | 18 | 3,770 |
| ${ }^{1}$ Stillbirths are foetal deaths in pregnancies lasting seven or more months. <br> ${ }^{2}$ Early neonatal deaths are deaths at age 0-6 days among live-born children. <br> ${ }^{3}$ The sum of the number of stillbirths and early neonatal deaths divided by the number of pregnancies of seven or more months' duration, expressed per 1000. <br> ${ }^{4}$ Categories correspond to birth intervals of $<24$ months, 24-35 months, 36-47 months, and $48+$ months. |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

Perinatal mortality is highest among births to women who gave birth before age 20 and lowest among births to women age 20-29. First pregnancies have the highest proportions resulting in stillbirths or early neonatal death. Perinatal mortality rates are higher in urban than in rural areas (22 and 17 per 1,000 pregnancies, respectively).

There is no clear pattern in the relationship between perinatal mortality and education or perinatal mortality and household wealth.

### 8.6 High-Risk Fertility Behaviour

Findings from scientific studies have confirmed that there is a strong relationship between children's chances of dying and certain fertility behaviours. Typically, the probability of dying in early childhood is much greater if children are born to mothers who are too young or too old, if they are born after a short preceding birth interval, or if they are high-parity births. Very young mothers may experience difficult pregnancies and deliveries because of their physical immaturity. Older women may also experience age-related problems during pregnancies and delivery. In this analysis, a mother is considered to be too young if she is less than age 18 and "too old" if she is above 34 years at the time of delivery. A "short birth interval" is a birth occurring within 24 months of a previous birth.

Table 8.5 shows the distribution of children born in the five years preceding the survey by risk category. Although first births to women age 18-34 are considered an unavoidable risk, they are included in the analysis and are shown as a separate risk category. The first column in Table 8.5 shows the percentages of births in the five years preceding the survey that fall into the various risk categories. Twenty-eight percent of births have an elevated risk of death that is avoidable, another 41 percent are first births for which risk is considered unavoidable, and 31 percent are not in any highrisk category. Among those who are at risk, 18 percent of births are in only one of the high-risk categories, but 10 percent are in multiple high-risk categories (due to combinations of mother's age, birth order, and birth interval).

Column 2 shows risk ratios for births in various high-risk categories relative to births not having any high-risk characteristics. The single high-risk category with the largest percentage of births is birth order three or higher, which constitutes 9 percent of births. The mortality of this category is 1.56 times that of births with no elevated mortality risk. The multiple high-risk category with the largest percentage of births is children with birth order three or higher born to mothers age 34 or older ( 8 percent). Compared with births with no elevated risk, these births have an 84 percent greater risk of death in early childhood. The multiple high-risk category with the highest risk ratio consists of the following combination: age more than 34 years, birth interval less than 24 months, and birth order three or higher. Less than 1 percent of children fall in this category, in which children are almost eight times more likely to die than children who have no elevated mortality risk.

The last column in Table 8.5 looks to the future and addresses the question of how many currently married women have the potential for having a high-risk birth. The results were obtained by simulating the risk category into which a birth to a currently married woman would fall if she were to become pregnant at the time of the survey. The results show that more than half of currently married women are in the "any avoidable risk" category, 25 percent face a single risk, and 27 percent are in multiple risk categories.

## Table 8.5 High-risk fertility behaviour

Percent distribution of children born in the five years preceding the survey by category of elevated risk of mortality and the risk ratio, and percent distribution of currently married women by category of risk if they were to conceive a child at the time of the survey, Maldives 2009

| Risk category | Births in the 5 years preceding the survey |  | Percentage of currently married women ${ }^{1}$ |
| :---: | :---: | :---: | :---: |
|  | Percentage of births | Risk <br> ratio |  |
| Not in any high risk category | 31.2 | 1.00 | $34.2^{\text {a }}$ |
| Unavoidable risk category First-order births between ages 18 and 34 years | 40.6 | 0.90 | 13.5 |
| Single high-risk category <br> Mother's age <18 <br> Mother's age >34 <br> Birth interval $<24$ months <br> Birth order $>3$ | $\begin{aligned} & 0.5 \\ & 3.0 \\ & 5.2 \\ & 9.2 \end{aligned}$ | $\begin{array}{r} 10.08 \\ 1.42 \\ 0.56 \\ 1.56 \end{array}$ | $\begin{array}{r} 0.0 \\ 8.3 \\ 10.6 \\ 6.0 \end{array}$ |
| Subtotal | 17.9 | 1.48 | 25.0 |
| 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 <br> Age $>34$ and birth order $>3$ | 0.1 7.6 | 0.00 0.84 | 0.5 23.0 |
| Age $>34$ and birth interval $<24$ months and birth order $>3$ | 0.6 | 7.77 | 1.4 |
| Birth interval $<24$ months and birth order $>3$ | 1.9 | 0.87 | 2.5 |
| Subtotal | 10.3 | 1.25 | 27.4 |
| In any avoidable high-risk category | 28.2 | 1.40 | 52.4 |
| Total | 100.0 | na | 100.0 |
| Number of births/women | 3,736 | na | 6,500 |

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 $>3$
${ }^{\text {a }}$ Includes sterilized women

This chapter presents findings on important areas of maternal health: antenatal, delivery, and postnatal care. This information, in combination with data on mortality, is useful in formulating programs and policies to improve maternal and child health services.

### 9.1 Antenatal Care

The health care that a mother receives during pregnancy and at the time of delivery is important for the survival and well-being of both the mother and the child. Antenatal care (ANC) coverage is described according to the type of provider, number of visits, stage of pregnancy at the time of the first and last visits, and services and information provided during visits. It is also recommended that women receive two doses of tetanus toxoid vaccine, adequate amounts of iron and folic acid tablets, and iron syrup to prevent and treat anaemia while at their ANC visits. Blood pressure checks and procedures to detect pregnancy complications are also part of ANC coverage. A well-designed and carefully implemented ANC program facilitates detection and treatment of problems, such as anaemia and infections, and also provides an opportunity to disseminate health care messages to women and their families.

Information on ANC coverage was obtained from women who had given birth in the five years preceding the survey. For women with two or more live births during the five-year period, data on antenatal care refer to the most recent birth only.

### 9.1.1 Source of Antenatal Care

Table 9.1 shows the percent distribution of women age 15-49 who had a live birth in the five years prior to the survey. Although mothers of live births may have received antenatal care from more than one type of provider, this report uses the best qualified provider cited by the women. Almost all women (99 percent) received antenatal care from a skilled provider. Most women saw a gynaecologist (92 percent) for antenatal care, while 7 percent of the remaining women report that they received care from a doctor other than a gynaecologist, and less than 1 percent report that they received care from a trained nurse or midwife, a community health worker, or a traditional birth attendant.

There is little variation by background characteristics in the percentage receiving antenatal care from a skilled provider (gynaecologist, doctor, nurse, midwife, and community/family health worker). However, antenatal care received from a gynaecologist is less common among mothers who are age 35-49 at the birth of the child. It is more common among mothers with a first-order birth, those residing in urban areas, those with more than secondary education, and those belonging to the highest wealth quintile.

## Table 9.1 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 antenatal care from a skilled provider for the most recent birth, according to background characteristics, Maldives 2009

| Background characteristic | Gynaecologist | Doctor | Nurse/ midwife | Community/ family health worker | Traditional birth attendant | No one | Missing | Total | Percentage receiving antenatal care from a skilled provider ${ }^{1}$ | Number of women |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Mother's age at birth |  |  |  |  |  |  |  |  |  |  |
| <20 | 92.4 | 7.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 100.0 | 111 |
| 20-34 | 92.9 | 6.3 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 100.0 | 99.3 | 2,682 |
| 35-49 | 86.7 | 11.2 | 0.0 | 0.4 | 0.5 | 0.6 | 0.6 | 100.0 | 97.9 | 397 |
| Birth order |  |  |  |  |  |  |  |  |  |  |
| 1 | 94.6 | 5.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.2 | 100.0 | 99.8 | 1,263 |
| 2-3 | 92.8 | 6.6 | 0.0 | 0.2 | 0.2 | 0.1 | 0.2 | 100.0 | 99.3 | 1,275 |
| 4-5 | 86.7 | 11.3 | 0.2 | 0.3 | 0.1 | 1.2 | 0.2 | 100.0 | 98.2 | 411 |
| 6+ | 85.3 | 10.8 | 0.5 | 0.6 | 1.2 | 1.0 | 0.5 | 100.0 | 96.6 | 241 |
| Residence |  |  |  |  |  |  |  |  |  |  |
| Urban | 97.5 | 2.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.4 | 100.0 | 99.6 | 964 |
| Rural | 89.8 | 9.0 | 0.1 | 0.2 | 0.3 | 0.4 | 0.1 | 100.0 | 99.0 | 2,227 |
| Region |  |  |  |  |  |  |  |  |  |  |
| Malé | 97.5 | 2.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.4 | 100.0 | 99.6 | 964 |
| North | 88.8 | 9.8 | 0.2 | 0.4 | 0.0 | 0.7 | 0.2 | 100.0 | 98.8 | 489 |
| North Central | 85.5 | 12.5 | 0.2 | 0.2 | 1.0 | 0.4 | 0.2 | 100.0 | 98.2 | 466 |
| Central | 92.4 | 6.3 | 0.1 | 0.4 | 0.4 | 0.2 | 0.2 | 100.0 | 98.8 | 293 |
| South Central | 81.5 | 17.5 | 0.0 | 0.3 | 0.1 | 0.6 | 0.0 | 100.0 | 99.1 | 390 |
| South | 98.3 | 1.4 | 0.1 | 0.0 | 0.0 | 0.0 | 0.2 | 100.0 | 99.8 | 589 |
| Mother's education |  |  |  |  |  |  |  |  |  |  |
| No formal education | 84.9 | 11.8 | 0.4 | 0.1 | 1.2 | 0.7 | 0.9 | 100.0 | 97.2 | 396 |
| Primary | 89.4 | 9.3 | 0.0 | 0.4 | 0.1 | 0.5 | 0.3 | 100.0 | 98.7 | 1,143 |
| Secondary | 95.5 | 4.4 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 100.0 | 1,456 |
| More than secondary | 99.5 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 100.0 | 156 |
| Wealth quintile |  |  |  |  |  |  |  |  |  |  |
| Lowest | 87.1 | 10.9 | 0.3 | 0.3 | 0.6 | 0.8 | 0.0 | 100.0 | 98.3 | 595 |
| Second | 88.6 | 9.9 | 0.2 | 0.4 | 0.2 | 0.4 | 0.4 | 100.0 | 98.6 | 677 |
| Middle | 91.5 | 7.7 | 0.0 | 0.1 | 0.2 | 0.1 | 0.3 | 100.0 | 99.3 | 677 |
| Fourth | 95.1 | 4.9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 100.0 | 643 |
| Highest | 98.7 | 0.9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.4 | 100.0 | 99.6 | 599 |
| Total | 92.1 | 6.9 | 0.1 | 0.2 | 0.2 | 0.3 | 0.2 | 100.0 | 99.2 | 3,190 |

Vote: If more than one source of ANC was mentioned, only the provider with the highest qualifications is considered in this tabulation. Total includes 39 cases for which information on mother's formal education level is missing.
${ }^{1}$ Skilled provider includes gynaecologist, doctor, nurse, midwife, and community/family health worker

### 9.2 Number of ANC Visits, Timing of First Visit, and Source Where ANC Received

Antenatal care is most beneficial in preventing adverse pregnancy outcomes when it is sought early in the pregnancy and is continued throughout the pregnancy. Health professionals recommend that the first antenatal visit should occur within the first three months of the pregnancy and further visits should continue on a monthly basis through week 28 of pregnancy and fortnightly up to week 36 (or until birth). If the first antenatal visit is made at the third month of pregnancy and as regularly as recommended, there will be a total of at least 12 to 13 antenatal visits.

The Master Plan 2006-2015 of the Ministry of Health in Maldives highlights reproductive and maternal health as one of its priority areas (Ministry of Health 2006). The plan aims to provide four ANC checkups by a trained health professional to all pregnant women by 2015 and to ensure that
more than 95 percent of pregnant women are attended to by a gynaecologist at least once during the third trimester by 2015. Table 9.2 presents information on the number of antenatal visits and the timing of the first antenatal visit for the most recent birth in the five years preceding the survey. Eighty-five percent of women who had a live birth in the five years preceding the survey reported visiting antenatal clinics at least four times during pregnancy, and 2 percent reported two or three antenatal visits during their last pregnancy. Less than 1 percent did not receive any antenatal care.

Table 9.2 shows that the majority of women ( 90 percent) had their first antenatal visit in the first trimester of pregnancy; another 7 percent had their first ANC visit during the fourth and fifth months of pregnancy. The median number of months of pregnancy at the first ANC visit is 1.8 months. Women in urban areas do not make four or more ANC visits as often as women in rural areas (80 and 88 percent, respectively). Urban women started ANC earlier than rural women, however; the median number of months pregnant at first visit is 1.6 and 1.9 months, respectively.

| Table 9.2 Number of antenatal care visits and timing of first visit |  |  |  |
| :---: | :---: | :---: | :---: |
| Percent distribution of women age 15-49 who had a live birth in the 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, Maldives 2009 |  |  |  |
| Number and timing | Residence |  |  |
| of ANC visits | Urban | Rural | Total |
| Number of ANC visits |  |  |  |
| None | 0.0 | 0.4 | 0.3 |
| 1 | 0.2 | 0.3 | 0.3 |
| 2-3 | 1.2 | 1.7 | 1.5 |
| 4+ | 79.6 | 87.5 | 85.1 |
| Don't know/missing | 19.0 | 10.2 | 12.8 |
| Total | 100.0 | 100.0 | 100.0 |
| Number of months pregnant at time of first ANC visit |  |  |  |
| No antenatal care | 0.0 | 0.4 | 0.3 |
| <4 | 95.8 | 87.9 | 90.3 |
| 4-5 | 2.9 | 9.3 | 7.3 |
| 6-7 | 0.9 | 1.6 | 1.4 |
| 8+ | 0.0 | 0.4 | 0.3 |
| Don't know/missing | 0.4 | 0.5 | 0.5 |
| Total | 100.0 | 100.0 | 100.0 |
| Number of women | 964 | 2,227 | 3,190 |
| Median months pregnant at first visit (for those with ANC) | 1.6 | 1.9 | 1.8 |
| Number of women with ANC | 960 | 2,215 | 3,175 |

### 9.3 Components of Antenatal Care

The content of antenatal care is an essential component of the quality of ANC services received. Focused antenatal care hinges on the principle that every pregnancy is at risk of complications. Therefore, apart from receiving basic care, every pregnant woman should be monitored for complications.

Screening for complications in addition to providing information concerning pregnancy complications should be routinely included in all antenatal care visits. To assess ANC services, the 2009 MDHS respondents were asked a number of questions about the care they received during pregnancy for their most recent live birth.

Table 9.3 presents information on the content of ANC services, including the percentage of women who took iron tablets, who took intestinal parasite drugs, who were informed of the symptoms of pregnancy complications, and who received selected routine services during ANC visits for their most recent birth in the past five years.

Eighty-seven percent of women take iron supplements during pregnancy. A higher proportion of mothers age 20 or older take iron supplements compared with younger women. A lower proportion of women with four or more children take iron supplements ( 82 percent) than women having three or fewer children (87-90 percent). There are no variations by urban-rural residence or by region. The percentage of women who take iron supplements increases with level of education and wealth quintile.

Table 9.3 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 and drugs for intestinal parasites during the pregnancy of the most recent birth, and among women receiving antenatal care (ANC) for the most recent live birth in the five years preceding the survey, the percentage receiving specific antenatal services, according to background characteristics, Maldives 2009

| Background characteristic | Among women with a live birth in the past five years, the percentage who during the pregnancy of their last birth: |  |  | Among women who received antenatal care for their most recent birth in the past five years, the percentage with selected services: |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Took iron tablets | Took intestinal parasite drugs | Number of women with a live birth in the past five years | Informed of signs of pregnancy complications | Weighed | Blood pressure measured | Urine sample taken | Blood sample taken | Number of women with ANC for their most recent birth |
| Mother's age at birth |  |  |  |  |  |  |  |  |  |
| <20 | 81.5 | 17.7 | 111 | 53.8 | 97.0 | 97.8 | 95.9 | 96.6 | 111 |
| 20-34 | 87.8 | 13.9 | 2,682 | 52.5 | 99.7 | 99.7 | 97.2 | 98.7 | 2,672 |
| 35-49 | 84.6 | 18.9 | 397 | 47.0 | 99.4 | 99.8 | 95.0 | 96.5 | 392 |
| Birth order |  |  |  |  |  |  |  |  |  |
| 1 | 90.1 | 11.8 | 1,263 | 57.2 | 99.6 | 99.6 | 98.0 | 99.0 | 1,261 |
| 2-3 | 86.9 | 12.9 | 1,275 | 47.6 | 99.7 | 99.7 | 97.0 | 98.3 | 1,272 |
| 4-5 | 82.3 | 20.5 | 411 | 46.7 | 99.4 | 99.5 | 95.8 | 97.2 | 405 |
| 6+ | 81.6 | 28.2 | 241 | 55.5 | 99.2 | 99.8 | 92.3 | 97.2 | 237 |
| Residence |  |  |  |  |  |  |  |  |  |
| Urban | 88.7 | 6.8 | 964 | 49.4 | 99.7 | 99.7 | 96.6 | 99.1 | 960 |
| Rural | 86.5 | 18.0 | 2,227 | 53.0 | 99.5 | 99.6 | 97.0 | 98.1 | 2,215 |
| Region |  |  |  |  |  |  |  |  |  |
| Malé | 88.7 | 6.8 | 964 | 49.4 | 99.7 | 99.7 | 96.6 | 99.1 | 960 |
| North | 88.5 | 12.3 | 489 | 59.1 | 100.0 | 99.8 | 97.1 | 98.6 | 485 |
| North Central | 89.9 | 23.9 | 466 | 54.7 | 98.8 | 98.8 | 95.5 | 95.7 | 463 |
| Central | 88.1 | 21.2 | 293 | 45.1 | 99.7 | 99.7 | 96.5 | 97.2 | 292 |
| South Central | 84.0 | 18.4 | 390 | 48.8 | 99.8 | 99.8 | 96.8 | 98.3 | 388 |
| South | 83.1 | 16.3 | 589 | 53.2 | 99.4 | 99.8 | 98.6 | 99.8 | 588 |
| Mother's education |  |  |  |  |  |  |  |  |  |
| No formal education | 80.0 | 23.7 | 396 | 42.1 | 99.1 | 99.2 | 93.6 | 96.7 | 390 |
| Primary | 83.5 | 19.7 | 1,143 | 51.6 | 99.7 | 99.6 | 96.9 | 98.0 | 1,134 |
| Secondary | 91.1 | 9.3 | 1,456 | 54.4 | 99.6 | 99.7 | 98.0 | 98.9 | 1,456 |
| More than secondary | 95.7 | 6.4 | 156 | 55.6 | 100.0 | 100.0 | 94.1 | 100.0 | 156 |
| Wealth quintile |  |  |  |  |  |  |  |  |  |
| Lowest | 84.1 | 22.4 | 595 | 52.2 | 99.5 | 99.5 | 95.5 | 97.3 | 590 |
| Second | 86.1 | 20.2 | 677 | 56.0 | 99.3 | 99.5 | 97.3 | 98.3 | 671 |
| Middle | 87.9 | 15.0 | 677 | 50.8 | 99.7 | 99.7 | 98.1 | 98.3 | 674 |
| Fourth | 87.0 | 10.5 | 643 | 50.1 | 100.0 | 99.9 | 97.0 | 99.1 | 643 |
| Highest | 90.9 | 4.7 | 599 | 50.1 | 99.5 | 99.6 | 96.5 | 98.8 | 597 |
| Total | 87.2 | 14.6 | 3,190 | 51.9 | 99.6 | 99.6 | 96.9 | 98.4 | 3,175 |

As a component of antenatal care, the administration of intestinal antiparasitic drugs is less common than the administration of iron supplements because administration of intestinal antiparasitic drugs is not part of the national ANC program in Maldives. Fifteen percent of women took drugs to combat intestinal parasites during their last pregnancy. There is variation in the use of deworming mediations during pregnancy by background characteristics. Administration of intestinal antiparasitic drugs is lower among mothers who were age 20-34 at the birth of the child and among mothers of third- or lower-order births. Fewer women in urban areas ( 7 percent) took intestinal drugs than women in rural areas (18 percent). By region, women taking intestinal parasitic drugs ranged from 7 percent in Malé to 24 percent in the North Central region. The percentages were lowest for women with more than secondary education (6 percent) and women who are in the highest wealth quintile (5 percent).

More than half of the women ( 52 percent) who received antenatal care during their last pregnancy were informed of the symptoms of pregnancy complications. A smaller proportion of women in urban areas receive such information compared with women in rural areas (49 percent compared with 53 percent). The percentage of women informed of complications ranges from 45 percent in the Central region to 59 percent in the North region. Also, mothers with no formal education have the lowest rates of having been informed of signs of pregnancy complications.

Almost all women who received antenatal care were weighed ( 100 percent), had their blood pressure measured ( 100 percent), had urine and blood samples taken ( 97 percent), and had their blood tested ( 98 percent). Blood testing is of particular importance in the screening for maternal syphilis, HIV, anaemia, and Hepatitis B.

### 9.4 Tetanus Toxoid Injections

Neonatal tetanus is a leading cause of neonatal death in developing countries where a high proportion of deliveries take place at home or in places where hygienic conditions may be poor.

Tetanus toxoid (TT) injections are given to women during pregnancy to prevent infant deaths from neonatal tetanus. Neonatal tetanus can result if sterile procedures are not followed in cutting the umbilical cord after delivery. In the 2009 MDHS, information was collected on the number of TT doses the mother received during pregnancy for her most recent birth in the five years preceding the survey. If the mother did not receive at least two TT injections during the pregnancy, additional questions were asked about the number and timing of TT injections that she may have received prior to that pregnancy. If a pregnant woman has not received any previous TT injections, she needs two doses of TT during pregnancy to be fully protected. However, if a woman was immunised before she became pregnant, she may require one or no TT injections during her pregnancy, depending on the number of injections she has received in the past and the timing of the last injection. Five lifetime tetanus toxoid doses are required to provide protection from neonatal tetanus.

The Maldives' Health Master Plan 2006-2015 aims to improve TT vaccination coverage among mothers from a baseline of 65 percent in 2005 to 90 percent by 2015 (Ministry of Health 2006). Table 9.4 shows the percentage of women with a live birth in the five years preceding the survey who reported receiving TT injections during the pregnancy for the last live birth. Also shown is whether the last birth was fully protected against neonatal tetanus. An infant is considered fully protected if any of the following criteria are met: (1) the mother had two tetanus toxoid injections during the pregnancy; (2) the mother had two lifetime injections, with the last injection received within three years of the last birth; (3) the mother had three lifetime injections, with the last injection received within five years of the last birth; (4) the mother had four lifetime injections, with the last injection received within 10 years of the last birth; or (5) the mother had at least five lifetime injections.

Six in ten women received two or more TT injections during the pregnancy. Three in four women in urban areas received two doses of TT during pregnancy compared with 52 percent of those in rural areas. By region, the percentage of women who received two or more TT injections during the last pregnancy ranges from 32 percent in the Central region to 77 percent in Malé. More than four in five women with more than secondary education received two or more TT injections during the last pregnancy compared with 54 percent of women with no formal education. Women in the lowest wealth quintile (48 percent) have lower rates of TT injections compared with women in the highest wealth quintile (78 percent).

Overall, 82 percent of women's last births were protected against neonatal tetanus. Higher proportions of women age 20-34 were protected ( 83 percent) compared with older women and younger women ( 79 percent). The South region had the highest proportion of women whose last birth was protected against neonatal tetanus ( 87 percent), while the Central region had the lowest proportion ( 77 percent). Women with more than secondary education and those in the highest wealth quintile had the highest rates of protection against tetanus for their last birth compared with other women.

Table 9.4 Tetanus toxoid injections
Among mothers age 15-49 with a live birth in the five years preceding the survey, the percentage receiving two or more tetanus toxoid injections (TTI) during the pregnancy for the last live birth and the percentage whose last live birth was protected against neonatal tetanus, according to background characteristics, Maldives 2009

| Background characteristic | Percentage receiving two or more injections during last pregnancy | Percentage whose last birth was protected against neonatal tetanus ${ }^{1}$ | Number of mothers |
| :---: | :---: | :---: | :---: |
| Mother's age at birth |  |  |  |
| <20 | 59.1 | 78.8 | 111 |
| 20-34 | 59.5 | 82.7 | 2,682 |
| 35-49 | 59.0 | 79.0 | 397 |
| Birth order |  |  |  |
| 1 | 61.7 | 83.6 | 1,263 |
| 2-3 | 59.5 | 82.6 | 1,275 |
| 4-5 | 53.1 | 79.4 | 411 |
| 6+ | 58.1 | 76.5 | 241 |
| Residence |  |  |  |
| Urban | 76.6 | 84.4 | 964 |
| Rural | 52.0 | 81.1 | 2,227 |
| Region |  |  |  |
| Malé | 76.6 | 84.4 | 964 |
| North | 49.6 | 79.0 | 489 |
| North Central | 50.0 | 79.8 | 466 |
| Central | 32.2 | 77.2 | 293 |
| South Central | 43.7 | 79.8 | 390 |
| South | 71.1 | 86.8 | 589 |
| Mother's education |  |  |  |
| No formal education | 53.8 | 78.1 | 396 |
| Primary | 50.3 | 77.2 | 1,143 |
| Secondary | 65.9 | 85.8 | 1,456 |
| More than secondary | 84.4 | 94.3 | 156 |
| Wealth quintile |  |  |  |
| Lowest | 48.4 | 77.7 | 595 |
| Second | 48.8 | 80.9 | 677 |
| Middle | 55.0 | 83.0 | 677 |
| Fourth | 68.3 | 82.4 | 643 |
| Highest | 77.9 | 86.6 | 599 |
| Total | 59.4 | 82.1 | 3,190 |

Note: Total includes 39 cases for which information on mother's formal education level is missing.
${ }^{1}$ Includes mothers with two injections during the pregnancy of her last birth, or two or more injections (the last within 3 years of the last live birth), or three or more injections (the last within 5 years of the last birth), or four or more injections (the last within ten years of the last live birth), or five or more injections prior to the last birth.

### 9.5 Place of Delivery

Increasing the percentage of births delivered in health facilities is an important factor in reducing deaths arising from the complications of pregnancy. The expectation is that if a complication arises during delivery, a skilled health worker can manage the complication or refer the mother to the next level of care. Table 9.5 shows the percent distribution of all live births in the five years preceding the survey by place of delivery and by the percentage of births delivered in a health facility.

The majority of births ( 95 percent) in the five years preceding the survey were delivered in a health facility; 85 percent were delivered in a public facility, and 10 percent were delivered in a private health facility. By age, women 20-34 most often deliver in a health facility ( 96 percent). Women having their first baby have higher rates of delivering in a health facility than other women; the proportion of births occurring in a health facility decreases as birth order increases. Women in urban areas are more likely than rural women to deliver in a health facility (98 percent compared with 94 percent). Across regions, Malé and the South Central region have the highest proportion of institutional deliveries ( 98 percent), while the North Central region has the lowest ( 90 percent).

## Table 9.5 Place of delivery

Percent distribution of live births in the five years preceding the survey by place of delivery and by percentage delivered in a health facility, according to background characteristics, Maldives 2009

| Background characteristic | Health facility |  | Home | Other | Missing | Total | Percentage delivered in a health facility | Number of births |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Public sector | Private sector |  |  |  |  |  |  |
| Mother's age at birth |  |  |  |  |  |  |  |  |
| <20 | 84.9 | 7.3 | 4.1 | 3.1 | 0.5 | 100.0 | 92.3 | 165 |
| 20-34 | 85.1 | 10.8 | 2.7 | 1.1 | 0.2 | 100.0 | 95.9 | 3,148 |
| 35-49 | 84.0 | 6.8 | 5.6 | 3.0 | 0.5 | 100.0 | 90.8 | 423 |
| Birth order |  |  |  |  |  |  |  |  |
| 1 | 84.7 | 12.8 | 0.8 | 1.5 | 0.2 | 100.0 | 97.5 | 1,552 |
| 2-3 | 84.2 | 10.7 | 3.2 | 1.5 | 0.4 | 100.0 | 94.9 | 1,459 |
| 4-5 | 87.0 | 3.8 | 8.0 | 1.0 | 0.2 | 100.0 | 90.8 | 460 |
| 6+ | 87.3 | 2.6 | 7.6 | 2.0 | 0.5 | 100.0 | 89.9 | 265 |
| Residence |  |  |  |  |  |  |  |  |
| Urban | 74.5 | 23.4 | 0.2 | 1.5 | 0.4 | 100.0 | 97.9 | 1,123 |
| Rural | 89.5 | 4.5 | 4.3 | 1.4 | 0.3 | 100.0 | 94.0 | 2,613 |
| Region |  |  |  |  |  |  |  |  |
| Malé | 74.5 | 23.4 | 0.2 | 1.5 | 0.4 | 100.0 | 97.9 | 1,123 |
| North | 93.0 | 1.3 | 4.3 | 1.3 | 0.2 | 100.0 | 94.3 | 578 |
| North Central | 86.2 | 4.0 | 9.0 | 0.5 | 0.3 | 100.0 | 90.3 | 539 |
| Central | 83.6 | 8.2 | 7.4 | 0.7 | 0.1 | 100.0 | 91.8 | 343 |
| South Central | 93.8 | 4.0 | 1.2 | 0.8 | 0.2 | 100.0 | 97.8 | 453 |
| South | 89.3 | 6.0 | 1.3 | 3.0 | 0.5 | 100.0 | 95.2 | 700 |
| Mother's education |  |  |  |  |  |  |  |  |
| No formal education | 83.5 | 3.3 | 10.8 | 1.6 | 0.8 | 100.0 | 86.8 | 449 |
| Primary | 89.6 | 4.6 | 4.4 | 1.0 | 0.5 | 100.0 | 94.2 | 1,368 |
| Secondary | 83.3 | 14.7 | 0.4 | 1.5 | 0.0 | 100.0 | 98.1 | 1,703 |
| More than secondary | 67.0 | 28.2 | 0.6 | 4.1 | 0.0 | 100.0 | 95.2 | 173 |
| Antenatal care visits ${ }^{1}$ |  |  |  |  |  |  |  |  |
| None | * | * | * | * | * | * | * | 8 |
| 1-3 | 77.1 | 5.2 | 17.7 | 0.0 | 0.0 | 100.0 | 82.3 | 57 |
| 4+ | 86.1 | 10.3 | 2.6 | 1.0 | 0.0 | 100.0 | 96.4 | 2,715 |
| Don't know/missing | 81.8 | 13.3 | 1.5 | 1.9 | 1.5 | 100.0 | 95.1 | 410 |
| Wealth quintile |  |  |  |  |  |  |  |  |
| Lowest | 88.0 | 2.4 | 7.8 | 1.8 | 0.0 | 100.0 | 90.5 | 709 |
| Second | 90.5 | 3.0 | 4.8 | 1.2 | 0.4 | 100.0 | 93.6 | 802 |
| Middle | 91.2 | 5.1 | 2.1 | 0.9 | 0.7 | 100.0 | 96.3 | 783 |
| Fourth | 84.3 | 14.0 | 0.9 | 0.9 | 0.0 | 100.0 | 98.2 | 756 |
| Highest | 69.1 | 28.1 | 0.0 | 2.5 | 0.3 | 100.0 | 97.2 | 686 |
| Total | 85.0 | 10.2 | 3.1 | 1.5 | 0.3 | 100.0 | 95.1 | 3,736 |

[^7] is based on fewer than 25 unweighted cases and has been suppressed.
${ }^{1}$ Includes only the most recent birth in the five years preceding the survey

Delivery in a health facility increases with the woman's education. For example, 87 percent of women with no formal education delivered in a health facility compared with 95 percent of women with more than secondary education. The proportion of births occurring in a health facility increases with increasing wealth status, from 91 percent of births in the lowest quintile to 97 percent among those in the highest quintile. Poorer women are more likely than richer women to deliver in a public facility, while richer women tend to give birth in a private facility. For example, 88 percent of births to mothers in the lowest wealth quintile occur in a public health facility compared with 69 percent of births to women in the highest wealth quintile.

### 9.6 Assistance during Delivery

In addition to place of birth, assistance during childbirth is an important variable influencing the birth outcome and the health of the mother and infant. The skills and performance of the person providing assistance during delivery determine whether complications are managed and hygienic practices are observed. Table 9.6 shows the percent distribution of live births in the five years preceding the survey by person providing assistance at delivery and by the percentage of births attended by a skilled health worker. If the respondent mentioned more than one person attending during delivery, only the most qualified person is presented in the table. Table 9.6 also presents data on the prevalence of births by caesarean section (C-section).

According to Table 9.6, 95 percent of births in the five years preceding the survey were assisted by a skilled health worker (gynaecologist, doctor, nurse, midwife, or community/family health worker); 71 percent by a gynaecologist; 9 percent by a doctor other than a gynaecologist, and 14 percent by a nurse or midwife. Very few births (1 percent) were assisted at delivery by a community/family health worker. In the absence of a skilled health worker, a traditional birth attendant was the next most common person assisting at a delivery (4 percent).

First births have higher rates of assistance from a skilled health professional (99 percent) than subsequent births. Urban women receive assistance from a trained health professional during childbirth more often than rural women ( 99 percent and 93 percent, respectively). Six percent of rural women receive assistance during birth from a traditional birth attendant. In all regions, the proportion of births assisted by a trained health professional ranges from 89 percent in North Central and Central regions to 99 percent in Malé. As expected, a mother's education and wealth status have a positive relationship with the delivery of care. For example, educated women have higher rates of delivery assistance from a health professional than women with no formal education (92-99 percent compared with 85 percent).

Delivery assistance by gynaecologists varies according to background characteristics of the mother. The percentage of births delivered by a gynaecologist decreases with age of the mother at birth and increases with the mother's level of education and wealth status. The percentage of births delivered by a gynaecologist decreases with increasing birth order and is higher in urban areas than in rural areas.

Table 9.6 shows that 32 percent of births in the five years preceding the survey were delivered by C-section. Caesarean births are slightly more common among first births ( 39 percent) and births to women in urban areas ( 38 percent). Rates of C-section deliveries increase with the mother's education and wealth status. The percentage of women with no formal education who give birth by C-section is 22 percent, which compares with 27-39 percent or more among educated women. The percentage who deliver by C-section increases from 25 percent among women in the lowest wealth quintile to 41 percent among women in the highest wealth quintile.

| Table 9.6 Assistance during delivery |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percent distribution of live births in the five years preceding the survey by person providing assistance during delivery, percentage of births assisted by a skilled provider, and percentage delivered by caesarean-section, according to background characteristics, Maldives 2009 |  |  |  |  |  |  |  |  |  |  |  |
|  | Person providing assistance during delivery |  |  |  |  |  |  |  | Percentage delivered by a skilled provider ${ }^{1}$ | Percentage delivered by Csection | $\qquad$ <br> of birth |
| Background characteristic | Gynaecologist | Doctor | Nurse/ midwife | Community/ family health worker | Traditional birth attendant | Relative/ other | Don't know/ missing | Total |  |  |  |
| Mother's age at birth |  |  |  |  |  |  |  |  |  |  |  |
| <20 | 74.6 | 10.4 | 7.4 | 0.0 | 7.0 | 0.0 | 0.5 | 100.0 | 92.5 | 30.1 | 165 |
| 20-34 | 71.6 | 8.9 | 14.8 | 0.6 | 3.7 | 0.2 | 0.3 | 100.0 | 95.3 | 32.5 | 3,148 |
| 35-49 | 67.3 | 10.8 | 14.3 | 0.5 | 6.4 | 0.0 | 0.6 | 100.0 | 92.5 | 32.5 | 423 |
| Birth order |  |  |  |  |  |  |  |  |  |  |  |
| 1 | 79.7 | 6.0 | 12.8 | 0.2 | 1.1 | 0.0 | 0.2 | 100.0 | 98.5 | 39.2 | 1,552 |
| 2-3 | 67.7 | 10.2 | 15.6 | 0.9 | 4.9 | 0.3 | 0.4 | 100.0 | 93.4 | 30.3 | 1,459 |
| 4-5 | 58.5 | 14.6 | 16.6 | 0.8 | 9.2 | 0.0 | 0.4 | 100.0 | 89.7 | 20.9 | 460 |
| 6+ | 63.4 | 12.8 | 13.7 | 0.6 | 9.0 | 0.0 | 0.5 | 100.0 | 89.9 | 23.4 | 265 |
| Place of delivery |  |  |  |  |  |  |  |  |  |  |  |
| Health facility | 73.8 | 9.6 | 15.0 | 0.3 | 1.3 | 0.1 | 0.0 | 100.0 | 98.3 | 34.0 | 3,555 |
| Elsewhere | 23.3 | 1.7 | 2.6 | 6.8 | 65.0 | 0.5 | 0.2 | 100.0 | 27.6 | 0.0 | 170 |
| Residence |  |  |  |  |  |  |  |  |  |  |  |
| Urban | 75.3 | 5.0 | 18.7 | 0.2 | 0.2 | 0.2 | 0.4 | 100.0 | 99.0 | 38.3 | 1,123 |
| Rural | 69.5 | 11.0 | 12.6 | 0.7 | 5.8 | 0.1 | 0.3 | 100.0 | 93.0 | 29.8 | 2,613 |
| Region |  |  |  |  |  |  |  |  |  |  |  |
| Malé | 75.3 | 5.0 | 18.7 | 0.2 | 0.2 | 0.2 | 0.4 | 100.0 | 99.0 | 38.3 | 1,123 |
| North | 69.2 | 10.9 | 10.9 | 1.4 | 7.4 | 0.0 | 0.2 | 100.0 | 91.1 | 20.0 | 578 |
| North Central | 62.1 | 12.1 | 14.8 | 0.8 | 9.7 | 0.3 | 0.3 | 100.0 | 88.9 | 28.3 | 539 |
| Central | 65.2 | 9.3 | 15.0 | 0.6 | 9.4 | 0.2 | 0.3 | 100.0 | 89.5 | 32.9 | 343 |
| South Central | 65.1 | 22.2 | 9.3 | 1.0 | 2.0 | 0.1 | 0.3 | 100.0 | 96.6 | 32.7 | 453 |
| South | 80.4 | 3.7 | 13.2 | 0.0 | 2.3 | 0.0 | 0.5 | 100.0 | 97.3 | 35.8 | 700 |
| Mother's education |  |  |  |  |  |  |  |  |  |  |  |
| No formal education | 63.3 | 11.7 | 10.2 | 0.9 | 12.7 | 0.3 | 0.9 | 100.0 | 85.2 | 21.7 | 449 |
| Primary | 64.0 | 13.1 | 14.9 | 1.1 | 6.2 | 0.1 | 0.5 | 100.0 | 92.1 | 27.1 | 1,368 |
| Secondary | 77.8 | 6.5 | 14.8 | 0.1 | 0.7 | 0.1 | 0.0 | 100.0 | 99.0 | 38.5 | 1,703 |
| More than secondary | 85.0 | 0.0 | 14.3 | 0.0 | 0.6 | 0.0 | 0.0 | 100.0 | 99.4 | 39.3 | 173 |
| Wealth quintile |  |  |  |  |  |  |  |  |  |  |  |
| Lowest | 63.0 | 13.2 | 12.4 | 1.3 | 9.9 | 0.1 | 0.0 | 100.0 | 88.6 | 25.4 | 709 |
| Second | 66.3 | 13.0 | 13.3 | 0.8 | 5.9 | 0.2 | 0.5 | 100.0 | 92.6 | 26.6 | 802 |
| Middle | 74.3 | 8.8 | 12.3 | 0.2 | 3.6 | 0.1 | 0.7 | 100.0 | 95.4 | 32.3 | 783 |
| Fourth | 75.4 | 5.1 | 18.0 | 0.5 | 0.9 | 0.2 | 0.0 | 100.0 | 98.4 | 37.8 | 756 |
| Highest | 77.5 | 5.5 | 16.2 | 0.0 | 0.4 | 0.0 | 0.3 | 100.0 | 99.3 | 40.6 | 686 |
| Total | 71.2 | 9.2 | 14.4 | 0.6 | 4.2 | 0.1 | 0.3 | 100.0 | 94.8 | 32.4 | 3,736 |

Note: If the respondent mentioned more than one person attending during delivery, only the most qualified person is considered in this tabulation. Total includes 11 cases for which information on mother's place of delivery and 43 cases for which information on mother's formal education level is missing.
${ }^{1}$ Skilled provider includes gynaecologist, doctor, nurse, midwife and community/family health worker

Table 9.7 shows the percent distribution of women age $15-49$ giving birth in the 5 years preceding the survey, according to assistance at delivery and by place of delivery. Eight in ten deliveries at home were assisted by traditional birth attendants, and 9 percent were assisted by community/family health workers. Public sector health facilities in Maldives include Indhira Gandhi Memorial Hospital (IGMH), Regional Hospital, Atoll Hospital, Health Centre, and Health Post. In IGMH, Regional Hospital, and Atoll Hospital, high proportions of deliveries are assisted by gynaecologists ( 69 percent, 82 percent, and 85 percent, respectively). A nurse or midwife plays an important role at IGMH ( 25 percent) and at Health Centre ( 22 percent). At Health Centre, doctors provide assistance during delivery half of the time. Almost all deliveries ( 97 percent) in the private sector are assisted by a gynaecologist.

## Table 9.7 Assistance at delivery by place of delivery

Percent distribution of women age 15-49 giving birth in the 5 years preceding the survey according to assistance at delivery by place of delivery, Maldives 2009

| Place of delivery | Person providing assistance during delivery |  |  |  |  |  |  | Total | Number |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Gynaecologist | Doctor | Nurse/ midwife | Other health worker | Traditional birth attendant | Relative/ other |  |  |  |
| Home | 2.1 | 2.0 | 3.8 | 8.5 | 83.0 | 0.7 | 0.0 | 100.0 | 116 |
| Public sector | 71.0 | 10.5 | 16.7 | 0.3 | 1.4 | 0.1 | 0.0 | 100.0 | 3,175 |
| IGMH | 68.8 | 6.2 | 24.7 | 0.1 | 0.0 | 0.1 | 0.0 | 100.0 | 1,316 |
| Regional hospital | 81.7 | 6.8 | 11.2 | 0.0 | 0.3 | 0.0 | 0.0 | 100.0 | 912 |
| Atoll hospital | 85.4 | 7.2 | 7.0 | 0.0 | 0.2 | 0.0 | 0.1 | 100.0 | 659 |
| Government health centre | 10.9 | 49.6 | 21.5 | 3.1 | 14.3 | 0.6 | 0.0 | 100.0 | 259 |
| Government health post/ other public | (43.0) | (39.4) | (5.4) | (2.5) | (9.8) | (0.0) | (0.0) | 100.0 | 30 |
| Private medical sector | 97.0 | 2.0 | 0.8 | 0.0 | 0.0 | 0.2 | 0.0 | 100.0 | 380 |
| Other | 68.9 | 1.0 | 0.0 | 3.1 | 26.4 | 0.0 | 0.6 | 100.0 | 54 |
| Total | 71.2 | 9.2 | 14.4 | 0.6 | 4.2 | 0.1 | 0.3 | 100.0 | 3,736 |

Note: Total includes 11 cases for which information on mother's place of delivery is missing. Figures in parentheses are based on 25-49 unweighted cases.
${ }^{1}$ Indhira Gandhi Memorial Hospital

### 9.7 Postnatal Care

Postnatal care (PNC) is important for the welfare of the mother and the child. It provides an opportunity to treat complications arising from the delivery, and it provides the mother with important information on how to care for herself and her infant. The postnatal period is defined as the time between delivery of the placenta and 42 days ( 6 weeks) following delivery. The timing of postnatal care is important because the first two days after delivery are critical; most maternal and neonatal deaths occur during this period. Table 9.8 shows the timing of the first postnatal checkup for women who had a birth in the past five years.

Table 9.8 shows that only 6 percent of women did not receive any postnatal care; however, 24 percent responded that they did not know the timing or there was information missing, 67 percent received a postnatal checkup within two days of delivery, and 3 percent of women had a checkup 3 to 41 days after delivery. Mother's age relates to the likelihood of receiving postnatal care within two days of delivery; younger women have higher rates of checkup after delivery than older women.

There are only slight differences in postnatal care coverage and timing between women in rural and urban areas. By region, the highest percentage of women who receive postnatal care within the first two days after delivery is found in the Central and the South regions ( 74 percent and 73 percent, respectively). The lowest percentage of women receiving postnatal care services is in the South Central and North regions ( 63 percent and 62 percent, respectively). As expected, postnatal coverage increases with women's level of education and wealth status. For example, 14 percent of mothers with no formal education and 11 percent of mothers in the lowest wealth quintile had no postnatal care.

| Table 9.8 Timing of first postnatal checkup |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percent distribution of women age 15-49 with a birth in the five years preceding the survey by timing of first postnatal checkup (for the last live birth), according to background characteristics, Maldives 2009 |  |  |  |  |  |  |  |  |
|  | Timing of first postnatal checkup (time since delivery) |  |  |  |  | No postnatal checkup ${ }^{1}$ | Total | Number of women |
| Background characteristic | Less than 4 hours | 4-23 hours | 2 days | 3-41 days | Don't know/ missing |  |  |  |
| Mother's age at birth |  |  |  |  |  |  |  |  |
| <20 | 52.1 | 16.2 | 6.0 | 1.7 | 20.0 | 3.9 | 100.0 | 111 |
| 20-34 | 46.3 | 12.1 | 9.2 | 2.5 | 24.6 | 5.2 | 100.0 | 2,682 |
| 35-49 | 44.0 | 9.4 | 8.3 | 3.3 | 23.3 | 11.7 | 100.0 | 397 |
| Birth order |  |  |  |  |  |  |  |  |
| 1 | 45.4 | 14.9 | 10.0 | 2.9 | 23.2 | 3.6 | 100.0 | 1,263 |
| 2-3 | 47.0 | 11.1 | 8.5 | 2.2 | 25.6 | 5.6 | 100.0 | 1,275 |
| 4-5 | 46.7 | 7.0 | 8.0 | 3.9 | 23.0 | 11.4 | 100.0 | 411 |
| 6+ | 45.3 | 9.0 | 8.4 | 1.2 | 25.2 | 11.0 | 100.0 | 241 |
| Residence |  |  |  |  |  |  |  |  |
| Urban | 45.7 | 11.0 | 9.7 | 2.8 | 28.1 | 2.8 | 100.0 | 964 |
| Rural | 46.5 | 12.4 | 8.7 | 2.5 | 22.6 | 7.3 | 100.0 | 2,227 |
| Region |  |  |  |  |  |  |  |  |
| Malé | 45.7 | 11.0 | 9.7 | 2.8 | 28.1 | 2.8 | 100.0 | 964 |
| North | 37.8 | 16.8 | 7.6 | 2.9 | 26.7 | 8.3 | 100.0 | 489 |
| North Central | 50.9 | 7.6 | 7.2 | 2.6 | 23.8 | 8.0 | 100.0 | 466 |
| Central | 50.6 | 10.6 | 12.8 | 1.7 | 15.3 | 9.0 | 100.0 | 293 |
| South Central | 41.0 | 13.1 | 8.9 | 3.9 | 28.7 | 4.3 | 100.0 | 390 |
| South | 51.6 | 12.8 | 8.8 | 1.7 | 17.9 | 7.2 | 100.0 | 589 |
| Education |  |  |  |  |  |  |  |  |
| No formal education | 39.8 | 8.1 | 10.2 | 1.4 | 26.7 | 13.7 | 100.0 | 396 |
| Primary | 46.3 | 9.7 | 8.9 | 3.0 | 24.2 | 7.9 | 100.0 | 1,143 |
| Secondary | 47.5 | 14.0 | 8.3 | 2.4 | 25.2 | 2.7 | 100.0 | 1,456 |
| More than secondary | 48.3 | 18.5 | 13.5 | 3.4 | 12.4 | 4.0 | 100.0 | 156 |
| Wealth quintile |  |  |  |  |  |  |  |  |
| Lowest | 42.4 | 10.5 | 8.1 | 2.9 | 25.0 | 11.1 | 100.0 | 595 |
| Second | 46.8 | 13.3 | 9.7 | 2.4 | 20.4 | 7.5 | 100.0 | 677 |
| Middle | 46.7 | 14.1 | 8.2 | 2.0 | 23.3 | 5.5 | 100.0 | 677 |
| Fourth | 47.8 | 10.0 | 9.5 | 2.4 | 27.3 | 3.0 | 100.0 | 643 |
| Highest | 47.0 | 11.4 | 9.6 | 3.4 | 25.7 | 2.9 | 100.0 | 599 |
| Total | 46.2 | 11.9 | 9.0 | 2.6 | 24.3 | 6.0 | 100.0 | 3,190 |
| Note: Total includes 39 cases for which information on mother's formal education level is missing. ${ }^{1}$ Includes women who received a checkup after 41 days |  |  |  |  |  |  |  |  |

Table 9.9 presents information on the type of health provider performing the first postnatal checkup. This information is important because the skills of a provider determine the ability to diagnose problems and to recommend appropriate treatment or referral. The majority of women (92 percent) received a postnatal checkup from a gynaecologist, doctor, nurse/midwife, or community/ family health worker. The role of community/family health worker and traditional birth attendant in providing postnatal care is very limited (1 percent).

Mothers who are less than age 20 and mothers who gave birth to their first child have the highest rates of receiving postnatal care from a gynaecologist, doctor, nurse, or midwife ( 95 percent, each). Health professionals provide postnatal care more often to mothers in urban than rural areas (96 percent versus 90 percent). Women who live in Malé ( 96 percent) have the highest rate of care from a gynaecologist, doctor, nurse, or midwife. Mothers with no formal education ( 81 percent) and women in the lowest wealth quintile ( 85 percent) receive the lowest rates of postnatal care from a trained health professional compared with other women.

| Table 9.9 Provider of first postnatal checkup |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percent distribution of women age 15-49 with a birth in the five years preceding the survey by provider of mother's first postnatal checkup (for the last live birth), according to background characteristics, Maldives 2009 |  |  |  |  |  |  |  |  |  |  |
|  | Type of health provider of mother's first postnatal checkup |  |  |  |  |  |  | No postnatal checkup ${ }^{1}$ | Total |  |
| Background characteristic | Gynaecologist | Doctor | Nurse/ midwife | Community/ family health worker | Traditional birth attendant | Other | Don't know/ missing |  |  |  |
| Mother's age at birth |  |  |  |  |  |  |  |  |  |  |
| <20 | 64.8 | 15.3 | 14.9 | 0.7 | 0.0 | 0.0 | 0.4 | 3.9 | 100.0 | 111 |
| 20-34 | 67.0 | 16.1 | 9.7 | 0.5 | 0.8 | 0.3 | 0.4 | 5.2 | 100.0 | 2,682 |
| 35-49 | 57.8 | 19.8 | 6.2 | 1.1 | 1.9 | 1.3 | 0.3 | 11.7 | 100.0 | 397 |
| Birth order |  |  |  |  |  |  |  |  |  |  |
| 1 | 70.7 | 14.3 | 10.3 | 0.3 | 0.1 | 0.5 | 0.1 | 3.6 | 100.0 | 1,263 |
| 2-3 | 66.1 | 16.5 | 9.1 | 0.6 | 1.1 | 0.3 | 0.7 | 5.6 | 100.0 | 1,275 |
| 4-5 | 53.4 | 22.2 | 9.6 | 0.8 | 1.6 | 0.4 | 0.5 | 11.4 | 100.0 | 411 |
| 6+ | 59.5 | 18.5 | 6.7 | 1.3 | 2.5 | 0.6 | 0.0 | 11.0 | 100.0 | 241 |
| Residence |  |  |  |  |  |  |  |  |  |  |
| Urban | 68.9 | 15.0 | 12.2 | 0.3 | 0.0 | 0.8 | 0.0 | 2.8 | 100.0 | 964 |
| Rural | 64.5 | 17.2 | 8.3 | 0.7 | 1.3 | 0.2 | 0.5 | 7.3 | 100.0 | 2,227 |
| Region |  |  |  |  |  |  |  |  |  |  |
| Malé | 68.9 | 15.0 | 12.2 | 0.3 | 0.0 | 0.8 | 0.0 | 2.8 | 100.0 | 964 |
| North | 70.3 | 12.2 | 6.9 | 0.3 | 2.1 | 0.0 | 0.0 | 8.3 | 100.0 | 489 |
| North Central | 46.1 | 31.4 | 11.1 | 1.0 | 1.4 | 0.3 | 0.7 | 8.0 | 100.0 | 466 |
| Central | 57.0 | 23.4 | 7.7 | 0.3 | 1.5 | 0.5 | 0.6 | 9.0 | 100.0 | 293 |
| South Central | 60.3 | 23.8 | 9.8 | 1.0 | 0.2 | 0.3 | 0.4 | 4.3 | 100.0 | 390 |
| South | 80.6 | 2.6 | 6.5 | 0.7 | 1.2 | 0.3 | 0.9 | 7.2 | 100.0 | 589 |
| Education |  |  |  |  |  |  |  |  |  |  |
| No formal education | 57.2 | 15.8 | 7.9 | 1.4 | 2.8 | 0.8 | 0.4 | 13.7 | 100.0 | 396 |
| Primary | 60.8 | 20.8 | 7.9 | 1.0 | 1.0 | 0.4 | 0.3 | 7.9 | 100.0 | 1,143 |
| Secondary | 70.1 | 14.4 | 11.4 | 0.1 | 0.4 | 0.4 | 0.5 | 2.7 | 100.0 | 1,456 |
| More than secondary | 81.3 | 8.4 | 6.3 | 0.0 | 0.0 | 0.0 | 0.0 | 4.0 | 100.0 | 156 |
| Wealth quintile |  |  |  |  |  |  |  |  |  |  |
| Lowest | 60.2 | 17.4 | 7.4 | 1.0 | 2.0 | 0.4 | 0.5 | 11.1 | 100.0 | 595 |
| Second | 61.8 | 18.3 | 9.1 | 0.8 | 1.5 | 0.2 | 0.7 | 7.5 | 100.0 | 677 |
| Middle | 69.4 | 15.6 | 7.6 | 0.5 | 0.7 | 0.3 | 0.4 | 5.5 | 100.0 | 677 |
| Fourth | 69.1 | 16.5 | 10.5 | 0.4 | 0.3 | 0.0 | 0.2 | 3.0 | 100.0 | 643 |
| Highest | 68.4 | 14.6 | 12.9 | 0.0 | 0.0 | 1.2 | 0.0 | 2.9 | 100.0 | 599 |
| Total | 65.8 | 16.5 | 9.5 | 0.6 | 0.9 | 0.4 | 0.4 | 6.0 | 100.0 | 3,190 |

Note: Total includes 39 cases for which information on mother's formal education level is missing.
${ }^{1}$ Includes women who received a checkup after 41 days

### 9.8 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 some women face in seeking care during pregnancy and at the time of delivery. In the 2009 MDHS, women were asked about various problems they face in accessing health care. The women were asked whether each of the following factors would be a big problem in seeking medical care: getting permission to go for treatment, getting money for treatment, distance to health facility, taking transport, not wanting to go alone, concern there may not be a female provider or any health provider, and concern that drugs may not be available. Table 9.10 shows that 83 percent of women reported having one or more problems in accessing health care for themselves.

The main problem in accessing health care was the concern that there would be no drugs available ( 72 percent). Two-thirds of women were concerned that there would be no provider, and 57 of women were concerned that there would be no female provider available at the health facility. More than a quarter of women reported that distance to the health facility and having to take transport was a problem ( 26 percent and 28 percent, respectively).

Older women, women with more children, women who are no longer married, those who are employed but not for cash, those who live in rural areas, those who live in the North Central region, women with no formal education, and women from the poorest households report higher rates of problems in accessing health care than other women. Women who are not currently married mention problems related to lack of money for treatment more often than women who are married. As expected, rural women cite access and availability of health services more often than others as a problem (distance to the health facility, availability of female provider, availability of provider, and lack of drugs).

| 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, Maldives 2009 |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Problems in accessing health care |  |  |  |  |  |  |  |  |  |
| Background characteristic | Getting permission to go for treatment | Getting money for treatment | Distance to health facility | Having to take transport | Not wanting to go alone | Concern no female provider available | Concern no provider available | Concern no drugs available | $\begin{aligned} & \text { At least } \\ & \text { one } \\ & \text { problem } \\ & \text { accessing } \\ & \text { health } \\ & \text { care } \\ & \hline \end{aligned}$ | Number of women |
| Age |  |  |  |  |  |  |  |  |  |  |
| 15-19 | 1.6 | 10.5 | 18.5 | 20.2 | 30.7 | 57.1 | 64.2 | 71.7 | 80.7 | 119 |
| 20-34 | 1.6 | 7.4 | 22.9 | 24.0 | 22.9 | 54.5 | 64.6 | 70.1 | 82.1 | 4,093 |
| 35-49 | 3.2 | 16.9 | 30.6 | 34.5 | 24.6 | 60.5 | 68.9 | 75.2 | 84.3 | 2,918 |
| Number of living children |  |  |  |  |  |  |  |  |  |  |
| 0 | 2.3 | 5.9 | 21.7 | 20.5 | 27.2 | 53.2 | 63.7 | 71.6 | 82.2 | 1,040 |
| 1-2 | 1.4 | 8.1 | 22.7 | 24.8 | 21.0 | 53.1 | 62.0 | 67.0 | 79.9 | 3,183 |
| 3-4 | 2.8 | 13.0 | 27.4 | 31.3 | 22.9 | 58.8 | 69.4 | 75.7 | 84.5 | 1,636 |
| 5+ | 3.6 | 21.9 | 36.1 | 39.2 | 28.7 | 67.3 | 75.6 | 81.1 | 89.2 | 1,272 |
| Marital status |  |  |  |  |  |  |  |  |  |  |
| Married | 1.9 | 9.8 | 25.5 | 27.1 | 23.1 | 56.7 | 66.6 | 72.4 | 82.5 | 6,500 |
| Divorced/separated/widowed | 5.6 | 27.8 | 31.3 | 39.8 | 29.6 | 60.4 | 64.4 | 69.6 | 88.1 | 631 |
| Employed past 12 months |  |  |  |  |  |  |  |  |  |  |
| Not employed | 2.3 | 11.5 | 25.0 | 26.6 | 23.2 | 56.4 | 64.9 | 71.5 | 82.3 | 3,753 |
| Employed for cash | 2.3 | 11.3 | 26.8 | 30.0 | 24.0 | 57.2 | 67.7 | 72.8 | 83.4 | 3,279 |
| Employed not for cash | 1.0 | 11.2 | 33.0 | 28.7 | 35.9 | 76.0 | 76.2 | 81.9 | 93.1 | 85 |
| Residence |  |  |  |  |  |  |  |  |  |  |
| Urban | 1.3 | 10.2 | 14.9 | 24.3 | 18.1 | 35.0 | 44.7 | 51.2 | 68.4 | 2,368 |
| Rural | 2.7 | 12.0 | 31.5 | 30.2 | 26.5 | 67.9 | 77.2 | 82.6 | 90.2 | 4,763 |
| Region |  |  |  |  |  |  |  |  |  |  |
| Malé | 1.3 | 10.2 | 14.9 | 24.3 | 18.1 | 35.0 | 44.7 | 51.2 | 68.4 | 2,368 |
| North | 2.0 | 10.1 | 28.1 | 25.9 | 23.4 | 66.4 | 72.3 | 80.3 | 85.2 | 1,067 |
| North Central | 2.8 | 10.7 | 31.4 | 31.6 | 27.9 | 69.0 | 89.0 | 92.2 | 96.8 | 1,038 |
| Central | 3.2 | 12.4 | 23.0 | 22.8 | 24.9 | 73.1 | 82.7 | 86.9 | 93.3 | 615 |
| South Central | 3.2 | 11.1 | 46.6 | 44.4 | 33.7 | 73.7 | 74.0 | 84.9 | 92.7 | 853 |
| South | 2.6 | 15.2 | 28.3 | 26.4 | 23.8 | 61.5 | 70.6 | 72.5 | 85.6 | 1,190 |
| Education |  |  |  |  |  |  |  |  |  |  |
| No formal education | 3.8 | 19.0 | 33.9 | 37.7 | 28.2 | 69.1 | 76.7 | 82.3 | 89.6 | 1,668 |
| Primary | 2.3 | 12.9 | 29.5 | 30.2 | 24.4 | 60.6 | 69.1 | 75.5 | 85.8 | 2,464 |
| Secondary | 1.2 | 6.1 | 19.8 | 21.1 | 21.5 | 49.1 | 60.4 | 65.5 | 78.5 | 2,584 |
| More than secondary | 2.3 | 5.0 | 10.6 | 21.6 | 14.2 | 34.2 | 45.1 | 51.0 | 64.7 | 333 |
| Wealth quintile |  |  |  |  |  |  |  |  |  |  |
| Lowest | 3.2 | 16.8 | 39.1 | 37.4 | 31.6 | 75.8 | 81.4 | 88.3 | 92.8 | 1,300 |
| Second | 2.7 | 11.7 | 32.6 | 31.5 | 25.9 | 67.8 | 77.0 | 81.9 | 90.5 | 1,396 |
| Middle | 2.5 | 11.1 | 27.9 | 26.8 | 24.4 | 64.4 | 75.2 | 81.1 | 89.7 | 1,488 |
| Fourth | 1.2 | 10.0 | 17.4 | 23.4 | 20.0 | 46.0 | 56.0 | 61.5 | 77.1 | 1,447 |
| Highest | 1.8 | 7.9 | 14.9 | 23.4 | 17.8 | 33.9 | 44.8 | 50.7 | 66.4 | 1,499 |
| Total | 2.3 | 11.4 | 26.0 | 28.2 | 23.7 | 57.0 | 66.4 | 72.2 | 83.0 | 7,131 |

[^8]This chapter presents information and findings in several areas of importance to child survival: birth weight and size, vaccination coverage, and treatment practices for the two most common childhood diseases: fever and diarrhoea.

Many early childhood deaths can be prevented by immunising children against preventable diseases and by ensuring that children receive prompt and appropriate treatment when they become ill. Results are presented on the prevalence of fever and treatment of fever. The prevalence of and treatment of diarrhoeal diseases with oral rehydration therapy (including increased fluids) is useful in assessing programmes that recommend such treatment. Information is also presented on the manner of disposal of children's faecal matter because appropriate sanitary practices help prevent and reduce the severity of diarrhoeal disease.

### 10.1 Child's Size at Birth

Birth weight is an important indicator for assessing child health in terms of early exposure to childhood morbidity and the risks of mortality. Children whose birth weight is less than 2.5 kilograms, or children reported to be 'very small' or 'smaller than average,' are considered to have a higher than average risk of early childhood death. In the 2009 MDHS, for births in the five years preceding the survey, birth weight was recorded in the Women's Questionnaire based on either a written record or the mother's report. The mother's estimate of the infant's size at birth was also obtained because birth weight may not be known for many infants. Although the mother's estimate is subjective, it can be a useful proxy for the child's weight.

Table 10.1 presents information on child's weight and size at birth. Table 10.1 shows that availability of birth weight information was almost universal ( 98 percent), and 11 percent of these infants had low birth weight (less than 2.5 kg ). There are small variations in prevalence of low birth weight across groups of children by mother's age at birth, birth order, and mother's smoking status. Those who live in rural areas have lower birth weights. Among the regions, Malé has the lowest proportion of low birth weight infants (8 percent) and the South and South Central regions have the highest (13 percent, each). There is no systematic pattern in the relationship between low birth weight and mother's education and household wealth quintile.

Table 10.1 also includes information on the mother's assessment of the baby's size at birth. In the absence of birth weight a mother's subjective assessment of the size of the baby at birth may be useful. However, this assessment may vary among respondents because it is based on the mother's own perception of what is small, average, or large for a baby and not on a uniform definition. Eightyseven percent of births were considered by their mothers to be of average or larger than average size. Nine percent were perceived as smaller than average, and 4 percent were considered very small. This indicator is important mostly in countries where it is not common for infants to be weighed at birth; however, this is not the case in Maldives.

## Table 10.1 Child's weight and size at birth

Percent distribution of live births in the five years preceding the survey with reported birth weight by birth weight; percentage of all births with a reported birth weight; percent distribution of all live births in the five years preceding the survey by mother's estimate of baby's size at birth, according to background characteristics, Maldives 2009

| Background characteristic | Distribution of births with reported birth weight ${ }^{1}$ |  |  |  | Percentage of all births with a reported birth weight ${ }^{1}$ | Distribution of births by mother's estimate of size of child at birth |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Less than $2.5 \mathrm{~kg}$ | $\begin{gathered} 2.5 \mathrm{~kg} \\ \text { or more } \end{gathered}$ | Total | Number of births |  | Very small | Smaller than average | Average <br> or larger |  | Total | Number of births |
| Mother's age at birth |  |  |  |  |  |  |  |  |  |  |  |
| <20 | 12.8 | 87.2 | 100.0 | 156 | 94.6 | 9.1 | 11.1 | 77.8 | 2.0 | 100.0 | 165 |
| 20-34 | 10.2 | 89.8 | 100.0 | 3,111 | 98.8 | 3.7 | 8.7 | 87.2 | 0.4 | 100.0 | 3,148 |
| 35-49 | 12.2 | 87.8 | 100.0 | 411 | 97.2 | 4.9 | 9.4 | 85.0 | 0.8 | 100.0 | 423 |
| Birth order |  |  |  |  |  |  |  |  |  |  |  |
| 1 | 11.3 | 88.7 | 100.0 | 1,534 | 98.8 | 4.6 | 9.4 | 85.6 | 0.4 | 100.0 | 1,552 |
| 2-3 | 9.1 | 90.9 | 100.0 | 1,443 | 98.9 | 3.3 | 7.9 | 88.3 | 0.5 | 100.0 | 1,459 |
| 4-5 | 11.4 | 88.6 | 100.0 | 449 | 97.7 | 4.6 | 8.9 | 85.9 | 0.6 | 100.0 | 460 |
| 6+ | 12.6 | 87.4 | 100.0 | 253 | 95.3 | 4.6 | 10.6 | 83.6 | 1.2 | 100.0 | 265 |
| Mother's smoking status |  |  |  |  |  |  |  |  |  |  |  |
| Smokes cigarettes/tobacco | 8.7 | 91.3 | 100.0 | 165 | 95.3 | 5.0 | 6.8 | 87.7 | 0.5 | 100.0 | 173 |
| Does not smoke | 10.6 | 89.4 | 100.0 | 3,508 | 98.6 | 4.0 | 9.0 | 86.5 | 0.5 | 100.0 | 3,557 |
| Residence |  |  |  |  |  |  |  |  |  |  |  |
| Urban | 7.9 | 92.1 | 100.0 | 1,109 | 98.8 | 3.1 | 6.3 | 90.0 | 0.6 | 100.0 | 1,123 |
| Rural | 11.7 | 88.3 | 100.0 | 2,569 | 98.3 | 4.5 | 9.9 | 85.1 | 0.5 | 100.0 | 2,613 |
| Region |  |  |  |  |  |  |  |  |  |  |  |
| Malé | 7.9 | 92.1 | 100.0 | 1,109 | 98.8 | 3.1 | 6.3 | 90.0 | 0.6 | 100.0 | 1,123 |
| North | 10.0 | 90.0 | 100.0 | 577 | 99.8 | 3.5 | 18.1 | 78.3 | 0.2 | 100.0 | 578 |
| North Central | 10.5 | 89.5 | 100.0 | 531 | 98.5 | 4.8 | 6.1 | 88.2 | 0.9 | 100.0 | 539 |
| Central | 12.2 | 87.8 | 100.0 | 342 | 99.6 | 6.7 | 11.6 | 81.2 | 0.5 | 100.0 | 343 |
| South Central | 12.7 | 87.3 | 100.0 | 444 | 98.0 | 5.8 | 6.8 | 86.5 | 0.9 | 100.0 | 453 |
| South | 13.1 | 86.9 | 100.0 | 675 | 96.4 | 3.1 | 7.4 | 89.4 | 0.1 | 100.0 | 700 |
| Mother's education |  |  |  |  |  |  |  |  |  |  |  |
| No formal education | 13.1 | 86.9 | 100.0 | 435 | 96.9 | 6.8 | 11.8 | 80.3 | 1.2 | 100.0 | 449 |
| Primary | 10.3 | 89.7 | 100.0 | 1,341 | 98.0 | 4.3 | 8.6 | 86.3 | 0.8 | 100.0 | 1,368 |
| Secondary | 10.0 | 90.0 | 100.0 | 1,687 | 99.0 | 3.5 | 8.6 | 87.7 | 0.2 | 100.0 | 1,703 |
| More than secondary | 11.7 | 88.3 | 100.0 | 173 | 100.0 | 1.2 | 6.6 | 92.2 | 0.0 | 100.0 | 173 |
| Wealth quintile |  |  |  |  |  |  |  |  |  |  |  |
| Lowest | 12.4 | 87.6 | 100.0 | 703 | 99.2 | 4.6 | 12.5 | 82.6 | 0.3 | 100.0 | 709 |
| Second | 11.9 | 88.1 | 100.0 | 780 | 97.2 | 4.5 | 8.5 | 86.2 | 0.8 | 100.0 | 802 |
| Middle | 12.6 | 87.4 | 100.0 | 770 | 98.3 | 3.7 | 10.0 | 85.6 | 0.6 | 100.0 | 783 |
| Fourth | 6.9 | 93.1 | 100.0 | 746 | 98.7 | 3.5 | 6.1 | 90.2 | 0.1 | 100.0 | 756 |
| Highest | 8.7 | 91.3 | 100.0 | 679 | 99.0 | 4.1 | 7.2 | 88.1 | 0.7 | 100.0 | 686 |
| Total | 10.5 | 89.5 | 100.0 | 3,678 | 98.4 | 4.1 | 8.9 | 86.6 | 0.5 | 100.0 | 3,736 |

Note: Totals include cases for which information on mother's smoking status and mother's formal education level is missing
${ }^{1}$ Based on either a written record or the mother's recall

### 10.2 Vaccination Coverage

According to the World Health Organisation, a child is considered fully vaccinated if he or she has received a BCG vaccination against tuberculosis; three doses of DPT vaccine to prevent diphtheria, pertussis, and tetanus (DPT); at least three doses of polio vaccine; and one dose of measles vaccine. These vaccinations should be received during the first year of life. Maldives achieved universal immunization status in 1989, and to maintain these high rates, the Ministry of Education has made immunization an essential requirement for entry into government schools (Ministry of Health, 2004). Prevention against measles and hepatitis $B$ were later added to the immunisation programme, and these infections are expected to have relatively lower coverage.

The 2009 MDHS collected information on coverage for these vaccinations among all children born in the five years preceding the survey. In the 2009 MDHS, information on vaccination coverage was obtained in two ways-from health cards and from mothers' verbal reports. All mothers were asked to show the interviewer the health cards in which immunisation dates are recorded for all children born since January 2003. If a card was available, the interviewer recorded onto the questionnaire the dates of each vaccination received by the child. If a child never received a health card, or the mother was unable to show the card to the interviewer, or a particular vaccination was not recorded on the health card, the vaccination information for the child was based on the mother's report.

Questions were asked for each vaccine type. Mothers were asked to recall whether the child had received BCG, polio, DPT, measles, and hepatitis B vaccinations. If the mother indicated that the child had received the polio, DPT, or hepatitis B vaccines, she was asked about the number of doses that the child received. The mother was then asked whether the child had received other vaccinations that were not recorded on the card, and if she responded in the affirmative, they too were noted on the questionnaire. The results presented here are based on both health card information and, for children without a card, information provided by the mother.

Table 10.2 shows vaccination coverage by source of information for children age 12-23 months, the age by which they should have received all vaccinations. The last row of Table 10.2 shows that 89 percent of children age 12-23 months were fully vaccinated by 12 months of age. Nearly all children had received the BCG vaccination ( 99 percent), and 91 percent had been vaccinated against measles. Because DPT and polio vaccines are often administered at the same time, their coverage rates are similar. Ninety-five percent or more of children received all doses of DPT and polio vaccine by age 12 months, and 92 percent of the children received all doses of hepatitis B vaccine.

| Table 10.2 Vaccinations by source of information |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percentage of children age 12-23 months who received specific vaccines at any time before the survey, by source of information (vaccination card or mother's report), and percentage vaccinated by 12 months of age, Maldives 2009 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Source of information | BCG | DPT |  |  | Polio |  |  |  | Measles | All basic vaccinations ${ }^{2}$ | No vaccinations | Hepatitis |  |  | Number of children |
|  |  | 1 | 2 | 3 | $0^{1}$ | 1 | 2 | 3 |  |  |  | B1 | B2 | B3 |  |
| Vaccinated at any time before survey |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Vaccination card | 89.0 | 89.0 | 89.0 | 88.6 | 89.0 | 89.0 | 89.0 | 88.7 | 85.9 | 85.3 | 0.0 | 89.0 | 89.0 | 88.1 | 732 |
| Mother's report | 10.3 | 9.8 | 9.5 | 9.2 | 10.1 | 9.7 | 9.6 | 8.3 | 8.7 | 7.6 | 0.6 | 10.0 | 8.9 | 8.9 | 90 |
| Either source | 99.4 | 98.8 | 98.5 | 97.9 | 99.1 | 98.7 | 98.6 | 97.0 | 94.5 | 92.9 | 0.6 | 99.0 | 97.9 | 96.9 | 822 |
| Vaccinated by |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ${ }^{1}$ Polio 0 is the polio vaccination given at birth. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ${ }^{2}$ BCG, measles and three doses each of DPT and polio vaccine (excluding polio vaccine given at birth) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ${ }^{3}$ For children whose information was based on the mother's report, the proportion of vaccinations given during the first year of life was assumed to be the same as for children with a written record of vaccination. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

Table 10.3 presents information on vaccine coverage among children age 12-23 months from the vaccination cards and mothers' reports. This information may give some indication of the success of the immunization program in reaching out to all population subgroups. Vaccination cards were seen for 89 percent of children. There are no differences in vaccination coverage between male and female children. The percentage of children fully vaccinated is lowest in the Central region (88 percent) and highest in the North Central region ( 96 percent). There is no clear pattern between the mother's education or wealth status and the children's vaccination coverage.

## Table 10.3 Vaccinations by background characteristics

Percentage of children age 12-23 months who received specific vaccines at any time before the survey (according to a vaccination card or the mother's report), and percentage with a vaccination card, by background characteristics, Maldives 2009

| Background characteristic | BCG | DPT |  |  | Polio |  |  |  | Measles | All basic vaccinations ${ }^{2}$ | No vaccinations | Percentage with a vaccination card seen | Number <br> of <br> children |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 1 | 2 | 3 | $0^{1}$ | 1 | 2 | 3 |  |  |  |  |  |
| Sex |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Male | 99.9 | 98.9 | 98.4 | 97.9 | 99.9 | 98.9 | 98.9 | 97.0 | 94.9 | 93.4 | 0.1 | 88.4 | 413 |
| Female | 98.8 | 98.7 | 98.7 | 97.9 | 98.4 | 98.5 | 98.4 | 97.1 | 94.2 | 92.3 | 1.2 | 89.7 | 409 |
| Birth order |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1 | 99.4 | 98.8 | 98.1 | 97.4 | 99.0 | 98.7 | 98.7 | 96.7 | 97.3 | 94.3 | 0.6 | 92.3 | 367 |
| 2-3 | 99.1 | 98.4 | 98.4 | 97.8 | 99.0 | 98.2 | 98.0 | 96.7 | 91.4 | 90.8 | 0.9 | 84.5 | 309 |
| 4-5 | 100.0 | 100.0 | 100.0 | 99.5 | 100.0 | 100.0 | 100.0 | 98.8 | 96.1 | 95.0 | 0.0 | 93.8 | 95 |
| 6+ | 99.1 | 99.1 | 99.1 | 99.1 | 99.1 | 99.1 | 99.1 | 98.1 | 91.1 | 91.1 | 0.9 | 84.2 | 51 |
| Residence |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Urban | 100.0 | 99.2 | 99.2 | 98.2 | 100.0 | 99.2 | 99.2 | 95.7 | 93.5 | 91.4 | 0.0 | 85.2 | 243 |
| Rural | 99.1 | 98.7 | 98.3 | 97.7 | 98.8 | 98.5 | 98.4 | 97.6 | 95.0 | 93.5 | 0.9 | 90.6 | 579 |
| Region |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Malé | 100.0 | 99.2 | 99.2 | 98.2 | 100.0 | 99.2 | 99.2 | 95.7 | 93.5 | 91.4 | 0.0 | 85.2 | 243 |
| North | 99.0 | 99.0 | 99.0 | 98.4 | 98.4 | 99.0 | 99.0 | 99.0 | 94.0 | 94.0 | 1.0 | 97.8 | 145 |
| North Central | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 99.3 | 99.3 | 99.3 | 96.2 | 95.5 | 0.0 | 96.1 | 105 |
| Central | 98.6 | 97.5 | 96.8 | 94.3 | 97.9 | 97.5 | 96.9 | 92.3 | 92.5 | 87.8 | 1.4 | 88.2 | 82 |
| South Central | 99.0 | 99.0 | 99.0 | 99.0 | 98.7 | 99.0 | 99.0 | 98.1 | 96.1 | 95.2 | 1.0 | 90.0 | 104 |
| South | 98.8 | 97.7 | 96.5 | 96.5 | 98.8 | 97.5 | 97.5 | 97.5 | 95.7 | 93.4 | 1.2 | 81.0 | 142 |
| Mother's education |  |  |  |  |  |  |  |  |  |  |  |  |  |
| No education | 98.4 | 98.4 | 98.4 | 97.8 | 98.4 | 98.4 | 98.4 | 94.1 | 89.5 | 89.0 | 1.6 | 85.9 | 94 |
| Primary | 100.0 | 100.0 | 100.0 | 99.2 | 99.7 | 99.7 | 99.7 | 98.8 | 95.7 | 94.6 | 0.0 | 90.5 | 246 |
| Secondary | 99.1 | 98.4 | 97.8 | 97.2 | 98.9 | 98.0 | 97.9 | 97.5 | 94.8 | 93.4 | 0.9 | 89.5 | 424 |
| More than secondary | '100.0) | 100.0) | 100.0) | 100.0) | (100.0) | 100.0) | 100.0) | (88.9) | (94.5) | (88.9) | 0.0 | 86.4 | 49 |
| Wealth quintile |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Lowest | 99.3 | 99.0 | 98.6 | 97.7 | 99.3 | 99.0 | 99.0 | 97.7 | 96.0 | 94.7 | 0.7 | 91.5 | 154 |
| Second | 99.6 | 99.6 | 99.6 | 99.3 | 99.1 | 99.6 | 99.6 | 98.6 | 97.4 | 96.4 | 0.4 | 93.4 | 173 |
| Middle | 99.7 | 98.6 | 97.6 | 96.9 | 99.2 | 98.5 | 98.2 | 97.5 | 93.5 | 91.0 | 0.3 | 89.3 | 170 |
| Fourth | 98.1 | 98.1 | 98.1 | 98.1 | 98.1 | 97.6 | 97.6 | 94.1 | 92.1 | 89.9 | 1.9 | 85.8 | 164 |
| Highest | 100.0 | 98.7 | 98.7 | 97.3 | 100.0 | 98.7 | 98.7 | 97.0 | 93.7 | 92.2 | 0.0 | 84.9 | 161 |
| Total | 99.4 | 98.8 | 98.5 | 97.9 | 99.1 | 98.7 | 98.6 | 97.0 | 94.5 | 92.9 | 0.6 | 89.0 | 822 |

Note: Total includes 12 children with information missing on mother's education. Figures in parentheses are based on 25-49 unweighted cases.
Polio 0 is the polio vaccination given at birth.
${ }^{2}$ BCG, measles, and three doses each of DPT and polio vaccine (excluding polio vaccine given at birth)

### 10.3 Trends in Vaccination Coverage

One way of measuring trends in vaccination coverage is to compare coverage among children of different ages within the same survey. Table 10.4 shows the percentage of children age 12-59 months who received vaccinations during the first year of life, by current age. The results show trends in vaccination coverage over the past five years.

Despite the high immunization coverage, improvements in vaccination coverage have continued to take place over the past five years. The percentage of children who received all basic vaccinations by 12 months of age has increased from 83 percent among children age 48-59 months to 89 percent among children age 12-23 months.

Overall, 86 percent of children age 12-59 months received all basic vaccinations on time, that is, by the time they were 12 months old. Vaccination cards were seen for 83 percent of the children.

Table 10.4 Vaccinations in first year of life
Percentage of children age 12-59 months at the time of the survey who received specific vaccines by 12 months of age, and percentage with a vaccination card, by current age of child, Maldives 2009

| Age in months | BCG | DPT |  |  | Polio |  |  |  | Measles | All basic vaccinations ${ }^{2}$ | No vaccinations | Hepatitis |  |  | Percentage with a vaccination card seen | Number of children |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 1 | 2 | 3 | $0^{1}$ | 1 | 2 | 3 |  |  |  | B1 | B2 | B3 |  |  |
| 12-23 | 99.2 | 98.7 | 98.3 | 96.2 | 99.0 | 98.6 | 98.4 | 95.4 | 91.3 | 88.9 | 0.8 | 98.7 | 97.5 | 91.9 | 89.0 | 822 |
| 24-35 | 98.6 | 98.1 | 96.3 | 95.1 | 97.7 | 97.8 | 96.8 | 94.6 | 89.9 | 87.2 | 1.4 | 98.4 | 96.8 | 48.7 | 84.8 | 686 |
| 36-47 | 96.8 | 96.8 | 94.6 | 91.8 | 95.0 | 96.4 | 95.9 | 91.4 | 88.2 | 83.5 | 2.8 | 96.7 | 95.2 | 84.5 | 78.7 | 678 |
| 48-59 | 97.8 | 97.7 | 97.2 | 94.2 | 96.9 | 97.6 | 97.3 | 89.5 | 89.5 | 82.7 | 2.2 | 97.3 | 96.4 | 89.9 | 77.9 | 649 |
| Total | 98.2 | 97.9 | 96.7 | 94.4 | 97.3 | 97.7 | 97.2 | 92.9 | 89.9 | 85.9 | 1.7 | 97.9 | 96.5 | 88.4 | 83.0 | 2,835 |

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

### 10.4 Prevalence and Treatment of Acute Respiratory Infections and Fever

### 10.4.1 Acute Respiratory Infections

In the 2009 MDHS, the prevalence of acute respiratory infection (ARI) was estimated by asking mothers whether their children under age 5 had been ill with a cough accompanied by short, rapid breathing and difficulty in breathing as a result of a problem in the chest, in the two weeks preceding the survey. These symptoms are compatible with ARI. It should be noted that the morbidity data collected are subjective in the sense that they are based on the mother's perception of illness without validation by medical personnel. Less than 1 percent of children had symptoms of ARI in the two weeks preceding the survey, and there are no variations across subgroups of children (data not shown).

### 10.4.2 Fever

The 2009 MDHS also asked mothers about fever, which is a primary manifestation of malaria and other acute infections in children. Table 10.5 shows the percentage of children under five with fever during the two weeks preceding the survey and the percentage receiving various treatments, by background characteristics. Twenty-nine percent of children under age 5 were reported to have had fever in the two weeks preceding the survey. The prevalence of fever varies with children's age. Children age 6-11 months and 12-23 months have higher rates of fever ( 34 percent, each) compared with other children. There are no significant variations in the prevalence of fever by sex of the child or by urban-rural residence. There is some variation among regions in the prevalence of fever, ranging from 25 percent in the South region to 31 percent in the North, North Central, and Central regions. The prevalence of fever has no systematic relation to education and wealth status of mothers, except that children of mothers with more than secondary education are least likely to have fever during the two weeks preceding the survey ( 24 percent).

Eighty-four percent of children with fever were taken to a health facility or health provider for treatment. Female children were slightly more likely to be taken to a health facility or provider. Children in the Central region ( 88 percent) were treated at a health facility or by a health provider more often compared with children in other regions. Children of mothers with secondary level education are more likely to receive treatment for fever ( 87 percent) than are those of mothers with no formal schooling ( 78 percent) and a primary level education ( 82 percent).

Although they were not recommended, almost nine in ten children with fever were reported by their mothers to have been given antibiotic drugs. It should be noted that the mothers may not know the difference between antibiotic and other drugs. Children under 6 months take antibiotics ( 68 percent) less than older children. Use of antibiotic drugs is more common in the South Central region (92 percent) than in other regions.

Table 10.5 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 of children for whom treatment was sought from a health facility or provider and the percentage who took antibiotic drugs, by background characteristics, Maldives 2009

| Background characteristic |  |  | Children under age five with fever |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Among children under age 5 |  | Percentage for whom advice or treatment was sought from a health facility or provider ${ }^{1}$ | Percentage who took antibiotic drugs | Number of children |
|  | Percentage with fever | $\begin{aligned} & \hline \begin{array}{l} \text { Number of } \\ \text { children } \end{array} \\ & \hline \end{aligned}$ |  |  |  |
| Age in months |  |  |  |  |  |
| <6 | 21.8 | 406 | 79.9 | 68.2 | 88 |
| 6-11 | 34.4 | 441 | 86.2 | 81.1 | 152 |
| 12-23 | 33.7 | 822 | 84.5 | 89.6 | 277 |
| 24-35 | 26.9 | 686 | 87.1 | 93.0 | 184 |
| 36-47 | 28.4 | 678 | 83.3 | 89.5 | 193 |
| 48-59 | 25.4 | 649 | 83.5 | 93.9 | 165 |
| Sex |  |  |  |  |  |
| Male | 28.9 | 1,862 | 82.6 | 89.1 | 538 |
| Female | 28.7 | 1,820 | 86.3 | 86.5 | 522 |
| Residence |  |  |  |  |  |
| Urban | 28.9 | 1,106 | 85.1 | 88.0 | 319 |
| Rural | 28.7 | 2,576 | 84.2 | 87.8 | 740 |
| Region |  |  |  |  |  |
| Malé | 28.9 | 1,106 | 85.1 | 88.0 | 319 |
| North | 30.8 | 575 | 86.0 | 86.7 | 177 |
| North Central | 31.3 | 530 | 80.6 | 83.4 | 166 |
| Central | 30.8 | 339 | 88.2 | 90.4 | 104 |
| South Central | 27.3 | 442 | 86.0 | 91.9 | 121 |
| South | 25.0 | 691 | 82.1 | 88.6 | 173 |
| Mother's education |  |  |  |  |  |
| No formal education | 29.2 | 442 | 78.1 | 86.0 | 129 |
| Primary | 30.1 | 1,343 | 82.1 | 86.6 | 404 |
| Secondary | 28.2 | 1,682 | 87.4 | 89.1 | 474 |
| More than secondary | 23.7 | 173 | (97.0) | (92.1) | 41 |
| Wealth quintile |  |  |  |  |  |
| Lowest | 29.9 | 699 | 79.7 | 86.9 | 209 |
| Second | 30.1 | 786 | 87.4 | 84.7 | 237 |
| Middle | 27.8 | 773 | 84.2 | 87.9 | 215 |
| Fourth | 28.4 | 745 | 85.3 | 93.3 | 211 |
| Highest | 27.7 | 679 | 85.3 | 86.8 | 188 |
| Total | 28.8 | 3,682 | 84.4 | 87.9 | 1,060 |

Note: Total includes cases for which information on mother's formal education level is missing.
Figures in parentheses are based on 25-49 unweighted cases.
${ }^{1}$ Excludes pharmacy, shop, and traditional practitioner

### 10.5 Diarrhoeal Disease

Dehydration caused by severe diarrhoea is a major cause of morbidity and mortality among young children, although the condition can be easily treated with oral rehydration therapy (ORT). Exposure to diarrhoea-causing agents is frequently related to the use of contaminated water and to unhygienic practices in food preparation and disposal of excreta.

The 2009 MDHS obtained information on the prevalence of diarrhoea among young children by asking mothers whether their children under age 5 had diarrhoea during the two weeks preceding the interview. When a child was identified as having had diarrhoea, information was collected on treatment and feeding practices during the diarrhoeal episode. The mother was also asked whether there was blood in the child's stools. Diarrhoea with blood in the stools is indicative of cholera or other diseases that need to be treated differently from diarrhoea in which there is no blood in the stool. Mothers of children suffering from recent diarrhoea were asked about actions they had taken to treat
the diarrhoea and about feeding practices during the diarrhoeal episode. Other information included the respondent's knowledge of oral rehydration salt (ORS) packets or pre-packaged liquids for treatment of diarrhoea (oral rehydration therapy) and disposal of children's stools.

Table 10.6 shows the percentage of children under age 5 with diarrhoea in the two weeks preceding the survey, according to selected background characteristics. Overall, only 4 percent of all children under age 5 had diarrhoea, and less than 1 percent had diarrhoea with blood. The occurrence of diarrhoea varies by age of the child. Young children ages 6-11 and 12-23 months are more prone to have diarrhoea than children in the other age groups ( 7 percent). Children in this age group are being introduced to complementary foods. Diarrhoea is more common among children from households with a non-improved/shared toilet facility (8 percent) than among children from households with an improved toilet facility (4 percent). There are also variations in the prevalence of diarrhoea by region, ranging from 3 percent in the North Central region to 8 percent in the Central region. Lower diarrhoea prevalence is found in children of mothers living in households in the highest wealth quintile (2 percent).

| Table 10.6 Prevalence of diarrhoea |  |  |  |
| :---: | :---: | :---: | :---: |
| Percentage of children under age 5 who had diarrhoea in the two weeks preceding the survey, by background characteristics, Maldives 2009 |  |  |  |
|  | Diarrhoea in the two weeks preceding the survey |  |  |
| Background characteristic | All diarrhoea | Diarrhoea with blood | Number of children |
| Age in months |  |  |  |
| <6 | 2.5 | 0.0 | 406 |
| 6-11 | 6.9 | 0.3 | 441 |
| 12-23 | 6.7 | 0.3 | 822 |
| 24-35 | 4.4 | 0.3 | 686 |
| 36-47 | 2.5 | 0.6 | 678 |
| 48-59 | 3.2 | 0.0 | 649 |
| Sex |  |  |  |
| Male | 4.6 | 0.3 | 1,862 |
| Female | 4.3 | 0.3 | 1,820 |
| Source of drinking water ${ }^{1}$ |  |  |  |
| Improved | 4.7 | 0.3 | 3,135 |
| Not improved | 3.1 | 0.0 | 544 |
| Toilet facility ${ }^{2}$ |  |  |  |
| Improved, not shared | 4.3 | 0.3 | 3,519 |
| Non-improved or shared | 7.7 | 0.0 | 156 |
| Residence |  |  |  |
| Urban | 3.7 | 0.4 | 1,106 |
| Rural | 4.8 | 0.2 | 2,576 |
| Region |  |  |  |
| Malé | 3.7 | 0.4 | 1,106 |
| North | 5.3 | 0.4 | 575 |
| North Central | 3.0 | 0.2 | 530 |
| Central | 7.8 | 0.3 | 339 |
| South Central | 5.3 | 0.1 | 442 |
| South | 3.8 | 0.2 | 691 |
| Mother's education |  |  |  |
| No formal education | 3.4 | 1.1 | 442 |
| Primary | 6.3 | 0.1 | 1,343 |
| Secondary | 3.4 | 0.3 | 1,682 |
| More than secondary | 3.4 | 0.0 | 173 |
| Wealth quintile |  |  |  |
| Lowest | 5.4 | 0.5 | 699 |
| Second | 5.1 | 0.2 | 786 |
| Middle | 4.3 | 0.0 | 773 |
| Fourth | 5.3 | 0.7 | 745 |
| Highest | 1.8 | 0.0 | 679 |
| Total | 4.4 | 0.3 | 3,682 |

Note: Total includes 3 cases for which information on source of drinking water, 7 cases for which information on toilet facility, and 41 cases for which information on mother's formal education level is missing.
${ }^{1}$ See Table 2.7 for definition of categories.
${ }^{2}$ See Table 2.8 for definition of categories.

Mothers of children who had diarrhoea in the two weeks preceding the survey were asked what they did to treat the illness. Eighty-four percent of the children with diarrhoea were taken to a health care facility or provider where advice or treatment was sought (data not shown). Information on oral rehydration therapy was requested. Eighty-four percent of children with diarrhoea were treated with oral rehydration therapy (ORT) or increased fluids. Fifty-seven percent were treated with ORS, a solution prepared from a packet of oral rehydration salts; 21 percent were given recommended home fluids, and 59 percent received increased fluids. Eleven percent of children were given antibiotic drugs and 33 percent received home remedies or other treatments. Six percent of children with diarrhoea did not receive any treatment at all (data not shown).

When a child has diarrhoea, mothers are encouraged to continue feeding their child the usual amount of food and to increase the child's fluid intake. These practices help to reduce dehydration and minimise the adverse consequences of diarrhoea on the child's nutritional status. In the 2009 MDHS, mothers were asked whether they gave their child with diarrhoea less, the same amount, or more fluids and food than usual when their child had diarrhoea.

Twenty-four percent of children with diarrhoea were given the same amount of liquids as usual, and 59 percent were given more (data not shown). Eight percent of the children were given somewhat less to drink than usual, and 9 percent were given much less to drink during the diarrhoea episode. Twenty-five percent of children were given the same amount of food as usual, 29 percent were given somewhat less, 18 percent were given much less food, and 15 percent were given more food. Five percent of children were not given any food during the diarrhoea episode. Overall, 45 percent of the children had increased fluid intake and continued feeding, and more than three in four children were given ORT, increased fluids, and continued feeding (data not shown).

### 10.6 KNowledge of ORS Packets

To ascertain respondents’ knowledge of ORS in Maldives, women are asked whether they knew about ORS packets. Table 10.7 presents information on the percentage of mothers with a birth in the five years preceding the survey who had heard about ORS packets. Overall, 96 percent of women know about ORS packets. Knowledge of ORS varies by region, from 99 percent among women in the North Central region to 88 percent among women in the South Central region. Knowledge of ORS is lower among mothers with no formal education and primary schooling (94 percent, each) than among women with more than secondary schooling ( 98 percent).

| liquids |  |  |
| :---: | :---: | :---: |
| Percentage of mothers age 15-49 who gave birth in the five years preceding the survey who know about ORS packets or ORS pre-packaged liquids for treatment of diarrhoea by background characteristics, Maldives 2009 |  |  |
| Background characteristic | Percentage of women who <br> know about ORS packets or ORS pre-packaged liquids | Number of women |
| Age |  |  |
| 15-19 | (96.6) | 27 |
| 20-24 | 94.2 | 687 |
| 25-34 | 96.3 | 1,830 |
| 35-49 | 94.8 | 646 |
| Residence |  |  |
| Urban | 96.6 | 964 |
| Rural | 95.1 | 2,227 |
| Region |  |  |
| Malé | 96.6 | 964 |
| North | 96.9 | 489 |
| North Central | 98.5 | 466 |
| Central | 92.6 | 293 |
| South Central | 88.3 | 390 |
| South | 96.5 | 589 |
| Education |  |  |
| No formal education | 93.6 | 396 |
| Primary | 94.2 | 1,143 |
| Secondary | 96.7 | 1,456 |
| More than secondary | 98.4 | 156 |
| Wealth quintile |  |  |
| Lowest | 94.8 | 595 |
| Second | 93.8 | 677 |
| Middle | 95.5 | 677 |
| Fourth | 97.0 | 643 |
| Highest | 96.7 | 599 |
| Total | 95.5 | 3,190 |
| Note: Total includes 39 cases for which information on mother's formal education level is missing.ORS = Oral rehydration salts |  |  |

### 10.7 Stool Disposal

When human faeces are left uncontained, disease can spread by direct contact or by animal contact with the faeces. Hence, proper disposal of children's stools is extremely important in preventing the spread of disease. Table 10.8 shows stool disposal for children under age 5 . Eighteen percent of children under age 5 use a toilet or latrine, 7 percent dispose of stool in a toilet or latrine, and 9 percent bury the children's stools.. Sixty-two percent are thrown into the garbage, and only 1 percent is left uncontained. It is important to note that in Maldives, where the water table is high, burying stool is not recommended. Stools that are thrown into the garbage may be contained in disposable diapers.

There are pronounced differences in practices of stool disposal by background characteristics. A child's use of the toilet or latrine increases with increasing age of the child and is higher in rural areas (20 percent) compared with urban areas (14 percent). Malé (14 percent) has the lowest proportion of children using a toilet or latrine, while the North Central region has the highest proportion (26 percent). Surprisingly, a mother's level of education is negatively associated with a child's use of the toilet or latrine, being highest for mothers with no formal education (24 percent). Also, it is lowest for women from the highest wealth quintile.

| Table 10.8 Disposal of children's stools |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percent distribution of youngest children under age 3 living with the mother by the manner of disposal of the child's last faecal matter, according to background characteristics, Maldives 2009 |  |  |  |  |  |  |  |  |  |  |
|  | Manner of disposal of children's stools |  |  |  |  |  |  |  | Total | Number of mothers |
| Background characteristic | $\begin{gathered} \hline \text { Child used } \\ \text { toilet or } \\ \text { latrine } \\ \hline \end{gathered}$ | Put/rinsed into toilet or latrine | Buried | Put/rinsed into drain or ditch | $\begin{aligned} & \text { Thrown } \\ & \text { into } \\ & \text { garbage } \end{aligned}$ | Rinsed away | Other | Missing |  |  |
| Age in months |  |  |  |  |  |  |  |  |  |  |
| <6 | 1.4 | 1.4 | 11.0 | 0.2 | 81.1 | 1.3 | 3.5 | 0.2 | 100.0 | 401 |
| 6-11 | 4.3 | 4.7 | 7.1 | 0.3 | 78.0 | 1.5 | 3.9 | 0.2 | 100.0 | 437 |
| 12-23 | 13.4 | 5.9 | 9.3 | 0.1 | 66.8 | 1.8 | 2.7 | 0.1 | 100.0 | 792 |
| 24-35 | 46.3 | 13.3 | 7.6 | 0.6 | 29.4 | 1.1 | 1.5 | 0.2 | 100.0 | 593 |
| Toilet facility |  |  |  |  |  |  |  |  |  |  |
| Improved, not shared ${ }^{1}$ | 18.1 | 6.7 | 8.7 | 0.3 | 61.9 | 1.4 | 2.7 | 0.1 | 100.0 | 2,126 |
| Non-improved or shared | 20.2 | 7.1 | 9.2 | 0.0 | 56.3 | 2.9 | 4.3 | 0.0 | 100.0 | 92 |
| Residence |  |  |  |  |  |  |  |  |  |  |
| Urban | 14.0 | 3.0 | 0.0 | 0.0 | 83.0 | 0.0 | 0.0 | 0.0 | 100.0 | 685 |
| Rural | 20.1 | 8.5 | 12.6 | 0.4 | 52.1 | 2.1 | 4.0 | 0.2 | 100.0 | 1,538 |
| Region |  |  |  |  |  |  |  |  |  |  |
| Malé | 14.0 | 3.0 | 0.0 | 0.0 | 83.0 | 0.0 | 0.0 | 0.0 | 100.0 | 685 |
| North | 17.0 | 16.5 | 19.4 | 0.0 | 42.1 | 0.3 | 4.6 | 0.0 | 100.0 | 348 |
| North Central | 26.4 | 0.3 | 15.1 | 0.4 | 51.5 | 2.9 | 3.0 | 0.5 | 100.0 | 303 |
| Central | 13.9 | 5.2 | 7.2 | 0.3 | 67.0 | 2.9 | 3.2 | 0.2 | 100.0 | 205 |
| South Central | 22.6 | 1.4 | 18.0 | 0.3 | 51.1 | 3.5 | 2.7 | 0.4 | 100.0 | 279 |
| South | 19.2 | 14.3 | 3.9 | 0.9 | 54.4 | 1.6 | 5.6 | 0.0 | 100.0 | 404 |
| Education |  |  |  |  |  |  |  |  |  |  |
| No formal education | 23.7 | 12.9 | 14.1 | 0.0 | 45.9 | 1.2 | 2.0 | 0.2 | 100.0 | 220 |
| Primary | 20.7 | 7.1 | 12.2 | 0.3 | 53.8 | 1.9 | 3.9 | 0.1 | 100.0 | 714 |
| Secondary | 15.6 | 6.3 | 6.4 | 0.4 | 67.6 | 1.3 | 2.4 | 0.2 | 100.0 | 1,135 |
| More than secondary | 16.8 | 1.0 | 1.6 | 0.0 | 79.6 | 0.4 | 0.7 | 0.0 | 100.0 | 129 |
| Wealth quintile |  |  |  |  |  |  |  |  |  |  |
| Lowest | 18.3 | 9.1 | 19.7 | 0.2 | 46.7 | 2.6 | 3.2 | 0.2 | 100.0 | 393 |
| Second | 20.9 | 8.5 | 13.2 | 0.5 | 50.4 | 2.2 | 4.1 | 0.2 | 100.0 | 473 |
| Middle | 21.9 | 8.1 | 9.8 | 0.3 | 54.2 | 1.1 | 4.2 | 0.3 | 100.0 | 471 |
| Fourth | 15.8 | 4.8 | 1.8 | 0.4 | 74.0 | 1.4 | 1.9 | 0.0 | 100.0 | 445 |
| Highest | 13.6 | 3.5 | 0.0 | 0.0 | 82.5 | 0.0 | 0.4 | 0.0 | 100.0 | 441 |
| Total | 18.2 | 6.8 | 8.7 | 0.3 | 61.6 | 1.4 | 2.8 | 0.1 | 100.0 | 2,223 |

Note: Total includes 5 cases for which information on toilet facility and 26 cases for which mother's formal education level is missing. ${ }^{1}$ Non-shared facilities that are of the types: flush or pour flush into a piped sewer system/septic tank/pit latrine; ventilated, improved pit (VIP) latrine; and pit latrine with a slab

## NUTRITION OF CHILDREN AND WOMEN

This chapter on nutrition covers concerns about children and women. The section on children addresses anthropometric assessment of the nutritional status of young children; infant and young child feeding practices, including breastfeeding and feeding with solid/semi-solid foods; diversity of foods; frequency of feeding; and micronutrient status, supplementation, and fortification. The section on women covers nutritional status of ever-married women 15-49 years of age; the diversity of foods eaten by mothers of children under age 3; and micronutrient status, supplementation, and fortification.

Adequate nutrition is critical to child development. The period from birth to age 2 is important to optimal growth, health, and development. This period is one that may be marked by growth faltering, micronutrient deficiencies, and common childhood illnesses, such as diarrhoea and acute respiratory infections (ARIs). Optimal feeding practices reported in this chapter include early initiation of breastfeeding, exclusive breastfeeding during the first 6 months of life, continued breastfeeding until age 2 and beyond, timely introduction of complementary feeding at 6 months of age, frequent feeding of solid/semi-solid foods, and feeding of diverse food groups to children between 6 and 23 months of age. A summary indicator that describes the quality of infant and young child (age 6-23 months) feeding (IYCF) practices is included.

A woman's nutritional status has important implications for her health as well as for the health of her children. Malnutrition in women results in reduced productivity, increased susceptibility to infections, retarded recovery from illness, and heightened risk of adverse pregnancy outcomes. A woman who has a poor nutritional status as indicated by a low body mass index (BMI), short stature, and presence of anaemia or other micronutrient deficiency faces a greater risk of obstructed labour, low birth weight, poor quality breast milk, illness for herself and her baby, and death from postpartum haemorrhage.

### 11.1 Nutritional Status of Children

Anthropometric data on height and weight collected in the 2009 MDHS permit the measurement and evaluation of the nutritional status of young children in Maldives. This evaluation allows identification of subgroups of the child population that are at increased risk of faltered growth, disease, impaired mental development, and death. However, marked differences, especially with regard to height-for-age, weight-for-height, and weight-for-age measures are often seen among subgroups of children.

### 11.1.1 Measurement of Nutritional Status among Young Children

The 2009 MDHS collected data on the nutritional status of children by measuring the height and weight of all children under age 5, regardless of whether their mother was interviewed in the survey. Data were collected to calculate three indices-namely, height-for-age, weight-for-height, and weight-for-age. Weight measurements were obtained using lightweight, SECA mother-infant scales with a digital screen, designed and manufactured under the guidance of the United Nations Children's Fund (UNICEF). Height measurements were carried out using a measuring board produced by Shorr Productions. Children younger than 24 months were measured lying down on the board (recumbent length), while standing height was measured for older children.

For the 2009 MDHS, the nutritional status of children is calculated using new growth standards published by the World Health Organization (WHO) in 2006. These new growth standards were generated using data collected in the WHO Multicentre Growth Reference Study (WHO, 2006). The study, with a sample size of 8,440 children from six countries around the world, was designed to
describe how children should grow under optimal conditions. The WHO Child Growth Standards can therefore be used to assess children everywhere regardless of ethnicity, social and economic influences, and feeding practices. Each of the three nutritional status indicators described below is expressed as standard deviation units from the median of the Multicentre Growth Reference Study sample.

Each of these indices-height-for-age, weight-for-height, and weight-for-age-provides different information about growth and body composition, which is used to assess nutritional status. The height-for-age index is an indicator of linear growth retardation and cumulative growth deficits. Children whose height-for-age Z-score is below minus two standard deviations (-2 SD) are considered short for their age (stunted) and are chronically malnourished. Children who are below minus three standard deviations (-3 SD) are considered severely stunted. Stunting reflects failure to receive adequate nutrition over a long period and is also affected by recurrent and chronic illness. Height-for age, therefore, represents the long-term effects of malnutrition in a population and is not sensitive to recent, short-term changes in dietary intake.

The weight-for-height index measures body mass in relation to body height or length and describes current nutritional status. Children whose Z-scores are below minus two standard deviations (-2 SD) are considered thin (wasted) and are acutely malnourished. Wasting represents the failure to receive adequate nutrition in the period immediately preceding the survey and may result from inadequate food intake or a recent episode of illness causing loss of weight and the onset of malnutrition. Children whose weight-for-height is below minus three standard deviations (-3 SD) are considered severely wasted. The weight-for-height index can also be used to assess the extent to which children's weight-for-height exceeds that considered normal. Children whose weight-for-height falls above plus two standard deviations ( $+2 \mathrm{SD} \mathrm{)} \mathrm{from} \mathrm{the} \mathrm{WHO} \mathrm{reference} \mathrm{population} \mathrm{median} \mathrm{are}$ considered too heavy for their height.

Weight-for-age is a composite index of height-for-age and weight-for-height. It takes into account both acute and chronic malnutrition. Children whose weight-for-age is below minus two standard deviations (-2 SD) from the median of the reference population are classified as underweight. Children whose weight-for-age is below minus three standard deviations (-3 SD) from the median of the reference population are considered severely underweight. Children whose weight-for-age falls above plus two standard deviations ( +2 SD ) from the WHO reference population median are considered to be overweight.

### 11.1.2 Results of Data Collection

Height and weight measurements were obtained for 2,513 children under age 5 who were present in MDHS households at the time of the survey. The following analysis focuses on the children for whom complete and credible anthropometric and valid age data were collected. Table 11.1 and Figure 11.1 show 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-forage.

## Height-for-age

Nineteen percent of children under age 5 are stunted, and 6 percent are severely stunted. Stunting is apparent even among children less than 6 months of age ( 15 percent). As shown in Figure 11.1, stunting increases with the age of the child through the first year of life (from 15 percent among children less than age 6 months to 24 percent among children age 9-11 months) before declining slightly to 22 percent between 12-17 months and then increasing to 25 percent for children age 18-23 months. A higher proportion of male children ( 20 percent) are stunted compared with female children (17 percent).

Stunting did not vary systematically with the length of the birth interval. Stunting levels were higher among children who were considered by the mother to be very small or smaller than average at birth than among children who were reported to be average or larger at birth. A larger percentage of children whose mothers were underweight ( 21 percent) were stunted than children of normal weight or overweight/obese mothers (18 percent).

Rural children are more often stunted (20 percent) than urban children (16 percent). Regional variation in nutritional status of children is substantial, with stunting being highest in the North Central region ( 23 percent) and lowest in Malé and the North (16 percent). Education and wealth are both inversely related to stunting levels. For example, children born to mothers with primary education have higher rates of stunting ( 21 percent) compared with children born to mothers with more than secondary education (12 percent). A quarter of children born to mothers with no formal education are stunted.

## Weight-for-height

Table 11.1 shows that the highest level of wasting is observed for children under age 6 months (16 percent) and children who were reported by the mother to have been very small at birth (20 percent). The proportion of wasting in children of thin mothers is almost twice that of children whose mothers have a normal BMI. The degree of wasting is less in urban than in rural areas (7 percent versus 12 percent).

At the regional level, the North Central region reports the highest level of wasting (15 percent), and Malé reports the lowest level ( 7 percent). As with stunting, wasting decreases as the level of education increases. For example, children whose mothers have never attended school have the highest levels of wasting ( 15 percent), while children whose mothers have secondary or more than secondary education have the lowest levels of wasting (8 percent). There is no systematic relationship between wasting level and wealth quintile. Six percent of children under age 5 in Maldives are too heavy for their height, with Z-scores more than two standard deviations (+2 SD) above the median.

## Weight-for-age

Reflecting the effects of both chronic and short-term malnutrition, 17 percent of children under age 5 are underweight for their age. Table 11.1 shows the highest proportions of underweight children are in the categories of children age $24-35$ months ( 21 percent), children born less than 24 months after a sibling ( 26 percent), and children considered by their mother to have been very small or small at birth ( 43 percent). Children born to thin or underweight mothers are more often underweight than those born to mothers with a normal BMI ( 27 percent compared with 18 percent).

There are substantial geographical variations. The proportion of children who are underweight is higher in rural areas than in urban areas. At the regional level, children in Malé are the least likely (11 percent) to be underweight, while children in the North Central and the South Central regions are the most likely ( 24 percent and 20 percent, respectively). As maternal education and wealth increase, the proportion of underweight children declines.

## Table 11.1 Nutritional status of children

Percentage of children under five years classified as malnourished according to three anthropometric indices of nutritional status: height-for-age, weight-for-height, and weight-for-age, by background characteristics, Maldives 2009

| Background characteristic | Height-for-age |  |  | Weight-for-height |  |  |  | Weight-for-age |  |  |  | Number of children |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Percentage below -3 SD | Percentage below -2 SD $^{1}$ | $\begin{gathered} \text { Mean } \\ \text { Z-score } \\ \text { (SD) } \\ \hline \end{gathered}$ | Percentage below -3 SD | Percentage below -2 SD $^{1}$ | Percentage above +2 SD | $\begin{aligned} & \hline \text { Mean } \\ & \text { Z-score } \\ & \text { (SD) } \\ & \hline \end{aligned}$ | Percentage below -3 SD | Percentage below $-2 \mathrm{SD}^{1}$ | Percentage above +2 SD | $\begin{gathered} \text { Mean } \\ \text { Z-score } \\ \text { (SD) } \\ \hline \end{gathered}$ |  |
| Age in months |  |  |  |  |  |  |  |  |  |  |  |  |
| <6 | 7.8 | 14.8 | (0.6) | 6.0 | 15.5 | 8.8 | (0.3) | 3.9 | 17.2 | 2.3 | (0.8) | 222 |
| 6-8 | 8.6 | 18.5 | (0.9) | 4.7 | 8.9 | 4.9 | (0.3) | 2.7 | 9.7 | 2.2 | (0.8) | 156 |
| 9-11 | 9.6 | 24.4 | (0.9) | 4.1 | 13.8 | 5.0 | (0.4) | 4.5 | 19.1 | 2.2 | (0.9) | 156 |
| 12-17 | 7.5 | 21.9 | (1.0) | 1.8 | 6.6 | 3.9 | (0.3) | 1.3 | 13.8 | 1.7 | (0.7) | 269 |
| 18-23 | 8.0 | 25.1 | (1.1) | 1.5 | 6.7 | 6.3 | (0.2) | 0.6 | 14.1 | 2.4 | (0.7) | 261 |
| 24-35 | 6.6 | 19.4 | (1.0) | 2.4 | 10.0 | 4.1 | (0.6) | 4.8 | 21.2 | 1.3 | (1.0) | 472 |
| 36-47 | 5.2 | 18.1 | (0.9) | 2.2 | 10.9 | 7.7 | (0.6) | 4.1 | 19.1 | 3.0 | (0.9) | 499 |
| 48-59 | 3.4 | 14.2 | (0.8) | 1.2 | 12.5 | 6.1 | (0.6) | 3.0 | 17.3 | 2.5 | (0.9) | 477 |
| Sex |  |  |  |  |  |  |  |  |  |  |  |  |
| Male | 7.9 | 20.3 | (1.0) | 2.6 | 10.7 | 6.0 | (0.5) | 3.2 | 17.6 | 2.2 | (0.9) | 1,266 |
| Female | 4.9 | 17.4 | (0.9) | 2.4 | 10.6 | 5.8 | (0.4) | 3.3 | 17.0 | 2.2 | (0.8) | 1,246 |
| Birth interval in months ${ }^{2}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| First birth ${ }^{3}$ | 5.1 | 16.8 | (0.8) | 2.8 | 10.1 | 7.4 | (0.3) | 2.6 | 13.5 | 2.8 | (0.7) | 953 |
| $<24$ | 8.1 | 20.5 | (1.2) | 3.0 | 11.9 | 3.6 | (0.7) | 5.8 | 25.7 | 1.4 | (1.2) | 172 |
| 24-47 | 6.9 | 21.0 | (1.0) | 1.3 | 9.2 | 4.2 | (0.5) | 3.4 | 16.1 | 1.2 | (0.9) | 399 |
| 48+ | 5.4 | 17.8 | (0.9) | 2.4 | 12.7 | 4.7 | (0.6) | 3.2 | 20.2 | 2.1 | (0.9) | 758 |
| Size at birth ${ }^{2}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Very small | 23.6 | 35.6 | (1.9) | 4.0 | 19.8 | 7.4 | (0.7) | 15.6 | 42.6 | 0.5 | (1.6) | 88 |
| Small | 6.3 | 27.4 | (1.3) | 4.7 | 15.2 | 2.7 | (0.8) | 3.3 | 27.4 | 0.7 | (1.3) | 211 |
| Average or larger | 4.9 | 16.4 | (0.8) | 2.1 | 10.1 | 5.9 | (0.4) | 2.6 | 14.9 | 2.4 | (0.7) | 1,978 |
| Mother's interview status |  |  |  |  |  |  |  |  |  |  |  |  |
| Interviewed | 5.7 | 18.1 | (0.9) | 2.4 | 10.9 | 5.7 | (0.5) | 3.2 | 17.1 | 2.2 | (0.8) | 2,282 |
| Not interviewed but in household | 14.1 | 25.8 | (1.2) | 4.1 | 7.8 | 9.7 | (0.4) | 4.5 | 21.1 | 2.4 | (0.9) | 202 |
| Not interviewed, and not in the household ${ }^{4}$ | (3.1) | (26.8) | ((1.1)) | (0.0) | (6.3) | (0.0) | ((0.3)) | (3.1) | (6.3) | (2.9) | ((0.8)) | 28 |
| Mother's nutritional status ${ }^{5}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Thin ( $\mathrm{BMI}<8.5$ ) | 6.5 | 20.5 | (1.2) | 6.1 | 18.0 | 2.3 | (1.0) | 5.4 | 26.5 | 0.0 | (1.3) | 187 |
| Normal (BMI 18.5- 24.9) | 5.7 | 18.1 | (0.9) | 2.2 | 10.3 | 4.5 | (0.5) | 2.7 | 17.8 | 1.4 | (0.9) | 1,167 |
| Overweight/obese $(\mathrm{BMI} \geq 25)$ <br> Missing | 6.7 8.7 | 18.4 22.8 | (0.9) $(1.0)$ | 2.2 2.6 | 9.8 10.8 | 7.7 11.6 | $(0.3)$ $(0.1)$ | 3.1 4.4 | 15.1 16.4 | 3.2 3.8 | $(0.7)$ $(0.6)$ | 959 156 |
| Residence |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Rural | 6.5 | 20.1 | (1.0) | 3.2 | 12.0 | 5.4 | (0.6) | 4.2 | 19.9 | 2.2 | (1.0) | 1,792 |
| Region |  |  |  |  |  |  |  |  |  |  |  |  |
| Malé | 6.2 | 15.7 | (0.7) | 0.8 | 7.2 | 7.2 | (0.2) | 1.1 | 10.9 | 2.3 | (0.5) | 721 |
| North | 4.0 | 15.7 | (0.9) | 2.3 | 11.8 | 5.0 | (0.6) | 2.7 | 18.4 | 3.1 | (0.9) | 387 |
| North Central | 7.9 | 22.7 | (1.1) | 3.4 | 14.5 | 3.3 | (0.7) | 5.7 | 24.4 | 1.3 | (1.2) | 543 |
| Central | 8.5 | 20.9 | (1.0) | 5.7 | 14.1 | 5.7 | (0.6) | 4.8 | 18.0 | 1.3 | (0.9) | 235 |
| South Central | 7.7 | 20.9 | (1.1) | 2.6 | 10.2 | 5.8 | (0.5) | 3.7 | 19.9 | 2.6 | (0.9) | 280 |
| South | 4.7 | 19.9 | (1.0) | 2.8 | 8.4 | 8.6 | (0.3) | 3.4 | 15.9 | 2.9 | (0.7) | 346 |
| Mother's education ${ }^{6}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| No formal education | 8.9 | 24.9 | (1.2) | 2.3 | 14.8 | 5.5 | (0.7) | 5.2 | 27.1 | 2.7 | (1.2) | 321 |
| Primary | 7.0 | 20.8 | (1.0) | 3.4 | 12.0 | 4.7 | (0.6) | 4.7 | 21.0 | 1.4 | (1.0) | 937 |
| Secondary | 5.4 | 16.2 | (0.8) | 2.2 | 8.7 | 7.1 | (0.3) | 1.9 | 12.3 | 2.4 | (0.6) | 1,092 |
| More than secondary | 5.0 | 12.1 | (0.5) | 1.0 | 8.4 | 6.2 | (0.3) | 0.0 | 11.9 | 3.7 | (0.4) | 110 |
| Wealth quintile |  |  |  |  |  |  |  |  |  |  |  |  |
| Lowest | 7.4 | 21.9 | (1.2) | 2.8 | 12.7 | 4.2 | (0.7) | 4.8 | 24.3 | 2.3 | (1.1) | 508 |
| Second | 7.3 | 23.1 | (1.1) | 3.8 | 11.4 | 6.8 | (0.5) | 5.0 | 19.0 | 1.6 | (1.0) | 533 |
| Middle | 4.9 | 17.6 | (0.9) | 3.3 | 12.8 | 4.8 | (0.6) | 3.7 | 19.3 | 1.8 | (0.9) | 519 |
| Fourth | 6.7 | 15.4 | (0.8) | 0.9 | 7.1 | 6.9 | (0.2) | 1.6 | 12.5 | 3.3 | (0.6) | 477 |
| Highest | 5.6 | 15.7 | (0.7) | 1.6 | 8.7 | 7.0 | (0.3) | 0.9 | 10.5 | 2.1 | (0.6) | 475 |
| Total | 6.4 | 18.9 | (0.9) | 2.5 | 10.6 | 5.9 | (0.5) | 3.3 | 17.3 | 2.2 | (0.8) | 2,513 |

Note: Table is based on children who slept in the household the night before the interview. Each of the indices is expressed in standard deviation units (SD) from the median of the WHO Child Growth Standards adopted in 2006. The indices in this table are NOT comparable to those based on the previously used $\mathrm{NCHS} / \mathrm{CDC} / \mathrm{WHO}$ reference. Table is based on children with valid dates of birth (month and year) and valid measurement of both height and weight. Total includes 1 case for which information on size at birth and 24 cases for which information on mother's formal education level is missing
${ }^{1}$ Includes children who are below -3 standard deviations (SD) from the WHO Child Growth standards 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
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 11.8
${ }^{6}$ For women who are not interviewed, information is taken from the Household Questionnaire. Excludes children whose mothers are not listed in the Household Questionnaire

Figure 11.1 Nutritional Status of Children by Age


Note: Stunting reflects chronic malnutrition; wasting reflects
acute malnutrition; underweight reflects chronic or acute malnutrition or a combination of both. Plotted values are smoothed by a five-month moving average

### 11.2 Initiation of Breastfeeding

Early initiation of breastfeeding is encouraged for a number of reasons. Mothers benefit from early suckling because it stimulates breast milk production and facilitates the release of oxytocin, which helps the contraction of the uterus and reduces postpartum blood loss. The first breast milk contains colostrum, which is highly nutritious and has antibodies that protect the newborn from diseases. Early initiation of breastfeeding also fosters bonding between mother and child.

Table 11.2 shows the breastfeeding status and the timing of initial breastfeeding of all children born in the five years before the survey. It also considers the prevalence of the practice of prelacteal feeding, that is, giving the infant other liquids during the period between the birth and when the mother's milk is flowing freely. This practice is discouraged because it limits the frequency of breastfeeding by the infant and exposes the baby to the risk of infection.

Nearly all children ( 98 percent) born in the five years preceding the survey were breastfed regardless of their background characteristics. Slightly less than two-thirds of infants ( 64 percent) were put to the breast within one hour of birth, and 92 percent started breastfeeding within the first day.

Although breastfeeding is widely practiced across all subgroups of women, the timing of initial breastfeeding varies by background characteristics. The proportion of children breastfed within one hour of delivery is higher in rural areas ( 66 percent) than in urban areas ( 60 percent). With respect to regions, the South Central region has the highest proportion ( 74 percent) of children breastfed within one hour of birth, while Malé and the North regions have the lowest proportion (60 percent).

Children born to mothers with no formal education or with at least primary education are breastfed within one hour of birth more often than those born to mothers with secondary or higher education. The timing of initial breastfeeding varies according to the person who assisted at delivery and the place of delivery. Children whose mothers are assisted at birth by a health professional are less likely to be breastfed within one hour of birth ( 64 percent), and children whose mothers are assisted by a traditional birth attendant are breastfed more often ( 78 percent). Similarly, the proportion of children breastfed within one hour of birth is higher for children born at home (77 percent) than for those born at a health facility ( 64 percent).

Only 12 percent of last-born children received a prelacteal feed. There are no marked differences in the proportions of children who received a prelacteal feed by the child's sex. However, there are variations by residence, assistance at delivery, and place of delivery. Prelacteal feeding is practiced more in urban areas and in Malé (16 percent). It is also more common among children whose mothers were assisted by a health professional during delivery and those born in a health facility Children of mothers who have no formal education (6 percent) are least likely to receive prelacteal feeds; likewise, children born to mothers in the higher (fourth and highest) wealth quintiles (15 percent and 16 percent, respectively) are more likely to receive a prelacteal feed than children born to mothers in other wealth quintiles (9 percent).

| Table 11.2 Initial breastfeeding |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percentage of children born in the five years preceding the survey who were ever breastfed, and for the last-born children born in the five years preceding the survey ever breastfed, the percentage who started breastfeeding within one hour and within one day of birth and the percentage who received a prelacteal feed, by background characteristics, Maldives 2009 |  |  |  |  |  |  |
| Breastfeeding among children born in past five years |  |  | Among last-born children ever breastfed: |  |  |  |
| Background characteristic | Percentage ever breastfed | Number of children born in past five years | Percentage who started breastfeeding within 1 hour of birth | Percentage who started breastfeeding within 1 day of birth ${ }^{1}$ | Percentage who received a prelacteal feed ${ }^{2}$ | Number of last-born children ever breastfed |
| Sex |  |  |  |  |  |  |
| Male | 98.0 | 1,896 | 63.2 | 91.9 | 11.5 | 1,575 |
| Female | 98.0 | 1,840 | 65.4 | 92.2 | 11.8 | 1,560 |
| Residence |  |  |  |  |  |  |
| Urban | 97.2 | 1,123 | 60.0 | 89.5 | 16.2 | 940 |
| Rural | 98.3 | 2,613 | 66.1 | 93.1 | 9.7 | 2,195 |
| Region |  |  |  |  |  |  |
| Malé | 97.2 | 1,123 | 60.0 | 89.5 | 16.2 | 940 |
| North | 98.2 | 578 | 59.6 | 93.9 | 9.7 | 480 |
| North Central | 98.9 | 539 | 68.4 | 93.0 | 8.2 | 461 |
| Central | 99.4 | 343 | 70.8 | 93.7 | 12.1 | 292 |
| South Central | 97.5 | 453 | 74.2 | 92.3 | 11.2 | 382 |
| South | 98.1 | 700 | 62.1 | 92.8 | 8.8 | 579 |
| Mother's education |  |  |  |  |  |  |
| No formal education | 97.4 | 449 | 69.2 | 91.0 | 6.0 | 385 |
| Primary | 98.7 | 1,368 | 69.2 | 93.7 | 9.3 | 1,132 |
| Secondary | 97.7 | 1,703 | 59.7 | 91.2 | 14.6 | 1,425 |
| More than secondary | 98.4 | 173 | 61.1 | 92.1 | 12.8 | 156 |
| Assistance at delivery |  |  |  |  |  |  |
| Health professional ${ }^{3}$ | 98.0 | 3,564 | 63.9 | 92.0 | 12.0 | 3,007 |
| Traditional birth attendant | 97.3 | 155 | 78.0 | 98.8 | 4.7 | 117 |
| Other | * | 5 | * | * | * | 5 |
| Place of delivery |  |  |  |  |  |  |
| Health facility | 98.1 | 3,555 | 64.1 | 92.1 | 12.0 | 3,009 |
| At home | 99.1 | 116 | 76.9 | 96.1 | 3.2 | 88 |
| Other | (87.9) | 54 | (61.3) | (98.0) | (8.4) | 32 |
| Wealth quintile |  |  |  |  |  |  |
| Lowest | 98.3 | 709 | 65.8 | 93.6 | 8.7 | 586 |
| Second | 97.9 | 802 | 68.8 | 93.6 | 9.4 | 664 |
| Middle | 98.4 | 783 | 65.1 | 92.2 | 9.3 | 668 |
| Fourth | 98.0 | 756 | 63.1 | 91.3 | 15.4 | 631 |
| Highest | 97.5 | 686 | 58.0 | 89.4 | 15.9 | 587 |
| Total | 98.0 | 3,736 | 64.3 | 92.0 | 11.7 | 3,135 |
| Note: Table is based on births in the past five years whether the children are living or dead at the time of interview. Total includes cases for which information on mother's formal education level, assistance at delivery and place of delivery is missing. Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed. <br> ${ }^{1}$ Includes children who started breastfeeding within one hour of birth <br> ${ }^{2}$ Children given something other than breast milk during the first three days of life <br> ${ }^{3}$ Doctor, gynaecologist, nurse/midwife, or community/family health worker |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |

### 11.3 Breastfeeding Status by Age

Both UNICEF and WHO recommend that children be exclusively breastfed during the first six months of life and that children be given solid or semi-solid complementary foods in addition to continued breastfeeding from age 6 months to 24 months (or more) when the child is fully weaned. Exclusive breastfeeding is recommended because breast milk is uncontaminated and contains all the nutrients necessary for children in the first few months of life. In addition, the mother's antibodies in breast milk provide immunity to disease. Early supplementation is discouraged for several reasons. First, it exposes infants to risk of infection. Second, it decreases infants’ intake of breast milk and therefore the frequency of breastfeeding, which reduces breast milk production. Third, in low resource settings, supplementary food is often nutritionally inferior.

Table 11.3 and Figure 11.3 show the percent distribution of youngest children under age 3 living with the mother by breastfeeding status, according to age in months. Table 11.3 also presents the percentage of all children under age three who use a bottle with a nipple, by the child's age. Exclusive breastfeeding is common but not universal in early infancy in Maldives. Table 11.3 shows that, among infants under age 2 months, 69 percent receive only breast milk, 2 percent consume breast milk and plain water, 4 percent drink non-milk liquids/juice, and 22 percent have other milk in addition to breast milk. Overall, only 48 percent of infants below age 6 months are exclusively breastfed, and the proportion exclusively breastfed drops off rapidly among older infants. By age 4-5 months, around three in four babies are receiving some form of supplementation and complementary foods.

## Table 11.3 Breastfeeding status by age

Percent distribution of youngest children under three years who are living with their mother by breastfeeding status; and the percentage currently breastfeeding; and the percentage of all children under three years using a bottle with a nipple, according to age in months, Maldives 2009

| Age in months | Percent distribution of youngest children under three living with their mother by breastfeeding status |  |  |  |  |  |  | Percentage currently breastfeeding | Number of youngest child under three years | Percentage using a bottle with a nipple ${ }^{1}$ | Number of children under three years |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Breastfeeding and consuming: |  |  |  |  |  | Total |  |  |  |  |
|  |  | Exclusively breastfed | Plain water only | Nonmilk liquids/ juice | Other milk | Complementary foods |  |  |  |  |  |
| 0-1 | 1.4 | 68.9 | 2.0 | 4.3 | 22.0 | 1.4 | 100.0 | 98.6 | 77 | 12.5 | 77 |
| 2-3 | 2.1 | 59.8 | 10.0 | 3.7 | 22.1 | 2.4 | 100.0 | 97.9 | 163 | 23.7 | 166 |
| 4-5 | 7.0 | 25.5 | 9.9 | 5.3 | 27.8 | 24.5 | 100.0 | 93.0 | 161 | 44.4 | 164 |
| 6-8 | 9.3 | 3.0 | 3.5 | 1.2 | 1.5 | 81.6 | 100.0 | 90.7 | 225 | 47.2 | 227 |
| 9-11 | 12.8 | 0.0 | 0.5 | 0.0 | 0.4 | 86.3 | 100.0 | 87.2 | 213 | 44.5 | 214 |
| 12-17 | 22.0 | 0.0 | 0.0 | 0.1 | 0.1 | 77.8 | 100.0 | 78.0 | 378 | 41.3 | 387 |
| 18-23 | 32.4 | 0.0 | 0.2 | 0.0 | 0.0 | 67.4 | 100.0 | 67.6 | 414 | 35.8 | 436 |
| 24-35 | 58.1 | 0.1 | 0.0 | 0.0 | 0.0 | 41.8 | 100.0 | 41.9 | 593 | 33.5 | 686 |
| 0-3 | 1.8 | 62.7 | 7.5 | 3.9 | 22.1 | 2.1 | 100.0 | 98.2 | 240 | 20.2 | 242 |
| 0-5 | 3.9 | 47.8 | 8.4 | 4.4 | 24.4 | 11.1 | 100.0 | 96.1 | 401 | 30.0 | 406 |
| 6-9 | 11.0 | 2.2 | 2.7 | 0.9 | 1.4 | 81.8 | 100.0 | 89.0 | 298 | 47.5 | 301 |
| 12-15 | 22.7 | 0.0 | 0.0 | 0.0 | 0.1 | 77.2 | 100.0 | 77.3 | 249 | 41.6 | 254 |
| 12-23 | 27.5 | 0.0 | 0.1 | 0.1 | 0.0 | 72.4 | 100.0 | 72.5 | 792 | 38.4 | 822 |
| 20-23 | 31.6 | 0.0 | 0.3 | 0.0 | 0.0 | 68.0 | 100.0 | 68.4 | 267 | 33.7 | 286 |

[^9]Figure 11.2 Infant Feeding Practices by Age


MDHS 2009

After age 6 months, children need to start receiving foods in order to meet all of their nutritional requirements. As shown in Table 11.3, 82 percent of children age 6-9 months are breastfeeding and receiving complementary food.

The use of a bottle with a nipple, regardless of the contents (breast milk, formula, or any other liquid), requires hygienic handling to avoid contamination that may cause infection in the infant. Table 11.3 shows that 30 percent of infants age 0-5 months are fed using a bottle with a nipple.

### 11.4 Duration and Frequency of Breastfeeding

Table 11.4 shows the median duration of breastfeeding by selected background characteristics. The estimates of median and mean durations of breastfeeding are based on current status information, that is, the proportion of children born in the three years preceding the survey who were being breastfed at the time of the survey. The median duration of any breastfeeding in Maldives is 25.3 months, and the mean duration is 23.9 months. The median duration does not vary much by the child's background characteristics. Children in households in the fourth wealth quintile are breastfed for the shortest duration (19.9 months), while other children are breastfed for 25-27 months.

At the national level, the median duration of exclusive breastfeeding is 2.2 months. Median duration of exclusive breastfeeding in some other countries is as follows: Bangladesh (2007) 1.8 months, Cambodia (2005) 3.2 months, Egypt (2008) 2.7 months, India (2005-06) 2 months, Indonesia (2007) 0.7 months, Jordan (2007) 0.6 months, Nepal (2006) 2.6 months, and Philippines (2008) 0.7 months (source: STATcompiler 2010).

The median duration of predominant breastfeeding, which is defined as exclusive breastfeeding or breastfeeding in combination with plain water, water-based liquids, or juices, is 3.5 months in Maldives. There is little variation by subgroups of children.

## Table 11.4 Median duration and frequency of breastfeeding

Median duration of any breastfeeding, exclusive breastfeeding, and predominant breastfeeding among children born in the three years preceding the survey, percentage of breastfeeding children under six months of age living with the mother who were breastfed six or more times in the 24 hours preceding the survey, and mean number of feeds (day/night), by background characteristics, Maldives 2009

| Background characteristic | Median duration (months) of breastfeeding among children born in the past three years ${ }^{1}$ |  |  | Frequency of breastfeeding among children under six months of age ${ }^{2}$ |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Any breastfeeding | Exclusive breastfeeding | Predomi- nant breast- feeding ${ }^{3}$ | Percentage breastfed 6+ times in past 24 hours | Mean number of day feeds | Mean number of night feeds | Number of children |
| Sex |  |  |  |  |  |  |  |
| Male | 25.2 | 2.2 | 3.5 | 96.6 | 9.3 | 9.3 | 172 |
| Female | 25.3 | 2.2 | 3.4 | 97.3 | 8.3 | 8.9 | 182 |
| Residence |  |  |  |  |  |  |  |
| Urban | (23.3) | (2.2) | (3.3) | (96.0) | (7.3) | (8.6) | 104 |
| Rural | 25.6 | 2.2 | 3.6 | 97.4 | 9.4 | 9.3 | 249 |
| Region |  |  |  |  |  |  |  |
| Malé | (23.3) | (2.2) | (3.3) | (96.0) | (7.3) | (8.6) | 104 |
| North | (29.1) | (3.1) | (4.1) | (97.2) | (10.1) | (9.6) | 49 |
| North Central | 27.1 | 3.2 | 4.3 | 95.9 | 10.7 | 11.0 | 48 |
| Central | 27.2 | 2.7 | 3.9 | 98.3 | 8.2 | 8.2 | 39 |
| South Central | 23.7 | 0.4 | 0.4 | 97.5 | 8.6 | 8.5 | 48 |
| South | 22.1 | 2.6 | 4.0 | 98.0 | 9.4 | 9.2 | 65 |
| Mother's education |  |  |  |  |  |  |  |
| No formal education | (29.3) | (1.6) | (2.2) | (100.0) | (10.7) | (10.6) | 22 |
| Primary | 25.5 | 2.4 | 4.1 | 97.8 | 9.7 | 9.9 | 121 |
| Secondary | 25.5 | 2.0 | 3.3 | 96.3 | 8.5 | 8.7 | 181 |
| More than secondary | * | * | * | * | * | * | 29 |
| Wealth quintile |  |  |  |  |  |  |  |
| Lowest | 26.7 | 1.3 | 3.0 | 98.1 | 11.4 | 10.5 | 61 |
| Second | 25.7 | 3.1 | 4.3 | 97.4 | 9.3 | 9.4 | 78 |
| Middle | 25.3 | 1.0 | 2.3 | 97.3 | 8.3 | 8.3 | 71 |
| Fourth | 19.9 | 2.3 | 3.7 | 98.3 | 8.2 | 9.0 | 81 |
| Highest | (14.4) | (2.5) | (3.4) | (93.3) | (7.0) | (8.4) | 62 |
| Total | 25.3 | 2.2 | 3.5 | 97.0 | 8.8 | 9.1 | 354 |
| Mean for all children | 23.9 | 3.5 | 4.3 | na | na | na | na |

Note: Median and mean durations are based on current status. Includes children living and deceased at the time of the survey. Total includes 1 case for which information on mother's formal education level is missing. Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
na $=$ Not applicable
${ }^{1}$ It is assumed that non-last-born children and last-born children not currently living with the mother are not currently breastfeeding
${ }^{2}$ Excludes children without a valid answer on the number of times breastfed
${ }^{3}$ Either exclusively breastfed or received breast milk and plain water, and/or non-milk liquids only

Almost all breastfeeding children less than six months of age ( 97 percent) were breastfed at least six times during the 24 hours preceding the survey, which meets the WHO/UNICEF recommendations for optimal breastfeeding. The mean number of daytime feeds is 8.8 , and the mean number of nighttime feeds is 9.1.

### 11.5 Types of Complementary Foods

UNICEF and WHO recommend the introduction of solid food to infants around the age of 6 months because by that age breast milk alone is no longer sufficient to maintain a child's optimal growth. In the transition to eating the family diet, children age 6 months and older should be fed small quantities of solid and semi-solid foods throughout the day. During this transition period (age 6-23 months), the prevalence of malnutrition increases substantially in many countries because of increases in infections and poor feeding practices.

Table 11.5 provides information on the types of foods given on the day and night preceding the survey to youngest children under age 3 years living with their mother. As expected, the proportions of children who consumed foods or liquids included in the various groups shown in the table rises with the age of the child. The results show that, among all breastfeeding children under age 3 , 36 percent consume infant formula and higher proportions receive other milk ( 55 percent) and other liquids (60 percent). Children age 6-23 months consume foods made from grains more often than foods from any other food group. Among breastfeeding children in this age group, 96 percent ate foods made from grains, and 64 percent ate fruits and vegetables rich in vitamin A during the day and night preceding the interview.

Table 11.5 Foods and liquids consumed by children in the day and night preceding the interview
Percentage of youngest children under three years of age 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, Maldives 2009

| Ageinmonths | Liquids |  |  | Solid or semi-solid foods |  |  |  |  |  |  |  | Any solid or semisolid food | Food made with oil, fat, and butter | Sugary foods |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Fortified baby foods | Food made from grains ${ }^{3}$ | Fruits and vegetables rich in vitamin $\mathrm{A}^{4}$ | Other fruits and vegetables | Food made from roots and tubers | Food made from legumes and nuts | Meat, fish, poultry, and eggs | Cheese, yogurt, other milk product |  |  |  |  |
|  | Infant formula | Other milk ${ }^{1}$ | Other liquids ${ }^{2}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| BREASTFEEDING CHILDREN |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 0-1 | 7.3 | 23.2 | 5.6 | 0.0 | 0.0 | 1.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.4 | 0.0 | 0.0 | 76 |
| 2-3 | 15.5 | 18.8 | 12.3 | 0.8 | 2.0 | 0.6 | 0.5 | 0.0 | 0.0 | 0.0 | 0.6 | 2.5 | 0.0 | 0.0 | 160 |
| 4-5 | 35.0 | 37.6 | 26.7 | 16.7 | 22.5 | 8.0 | 4.2 | 0.8 | 0.8 | 2.0 | 8.4 | 26.3 | 0.5 | 1.7 | 150 |
| 6-8 | 47.0 | 53.5 | 56.2 | 67.0 | 85.3 | 49.0 | 24.1 | 10.2 | 10.9 | 13.1 | 32.5 | 89.9 | 10.1 | 15.9 | 204 |
| 9-11 | 46.0 | 46.6 | 66.9 | 70.3 | 96.9 | 67.8 | 30.6 | 26.9 | 24.2 | 47.2 | 45.5 | 99.0 | 35.9 | 36.7 | 185 |
| 12-17 | 40.4 | 69.2 | 80.9 | 53.1 | 99.5 | 70.6 | 34.6 | 25.0 | 23.1 | 68.5 | 45.2 | 99.5 | 39.2 | 47.9 | 295 |
| 18-23 | 39.7 | 70.1 | 76.6 | 34.6 | 98.5 | 66.8 | 35.3 | 16.9 | 25.5 | 76.7 | 34.6 | 99.0 | 45.4 | 58.9 | 280 |
| 24-35 | 34.9 | 73.8 | 82.7 | 11.0 | 99.2 | 68.4 | 34.7 | 26.5 | 26.3 | 85.8 | 28.5 | 99.7 | 50.8 | 60.4 | 248 |
| 6-23 | 42.7 | 61.8 | 71.7 | 54.0 | 95.7 | 64.4 | 31.8 | 19.9 | 21.4 | 55.1 | 39.5 | 97.2 | 34.2 | 42.2 | 964 |
| Total | 36.3 | 55.3 | 60.1 | 35.9 | 75.5 | 50.4 | 25.0 | 16.2 | 17.1 | 46.8 | 29.1 | 76.9 | 28.6 | 35.0 | 1,597 |
|  |  |  |  |  |  | NON-BR | EASTFEE | DING CH | HILDREN |  |  |  |  |  |  |
| 9-11 | (80.8) | (92.3) | (85.7) | (65.3) | (98.8) | (81.1) | (54.7) | (26.4) | (31.9) | (65.2) | (58.5) | (98.8) | (39.9) | (58.3) | 27 |
| 12-17 | 70.6 | 88.5 | 74.0 | 47.0 | 99.1 | 79.2 | 45.0 | 31.3 | 39.4 | 64.7 | 52.4 | 100.0 | 45.0 | 39.6 | 83 |
| 18-23 | 54.3 | 85.4 | 78.9 | 33.7 | 96.8 | 61.6 | 41.3 | 15.8 | 32.2 | 67.7 | 47.8 | 99.2 | 40.6 | 37.8 | 134 |
| 24-35 | 32.1 | 78.2 | 85.1 | 11.9 | 99.2 | 79.5 | 41.5 | 21.4 | 29.5 | 82.7 | 33.6 | 100.0 | 53.3 | 60.1 | 345 |
| 6-23 | 64.7 | 86.8 | 76.9 | 44.5 | 97.9 | 69.3 | 42.9 | 21.3 | 33.6 | 64.1 | 50.3 | 99.5 | 40.4 | 40.4 | 266 |
| Total | 46.7 | 81.9 | 81.2 | 25.9 | 97.5 | 73.2 | 41.1 | 20.8 | 30.5 | 72.7 | 40.9 | 98.5 | 46.5 | 50.4 | 626 |

[^10]Of particular concern is the fact that the majority (68-80 percent) of breastfed children age 623 months did not consume any food made from roots and tubers, food made from legumes and nuts, or other fruits and vegetables during the 24 -hour period before the survey. Roots and tubers include white potatoes, white yams, manioc, cassava, or any other foods made from roots. Legumes and nuts include beans, peas, lentils, or nuts. The majority of children age 6-23 months also did not consume cheese, yogurt, and other milk products or food made with oil, fat, or butter. The patterns are similar for non-breastfeeding children. Non-breastfeeding children consume milk other than breast milk more often than breastfeeding children ( 87 percent compared with 62 percent).

### 11.6 Infant and Young Child Feeding (IYCF) Practices

Appropriate infant and young child feeding (IYCF) practices include timely initiation of feeding solid/semi-solid foods from age 6 months and increasing the amount and variety of foods and frequency of feeding as the child gets older while maintaining frequent breastfeeding. Guidelines have been established with respect to IYCF practices for children age 6-23 months (PAHO/WHO, 2003 and WHO, 2005).

Table 11.6 presents a summary indicator of IYCF practices. The indicator takes into account the percentages of children for whom feeding practices met minimum standards with respect to food diversity (i.e., the number of food groups consumed) and feeding frequency (i.e., the number of times the child was fed), as well the consumption of breast milk or other milks or milk products. Breastfed children are considered fed by the minimum standards if they consume at least three food groups ${ }^{1}$ and receive foods other than breast milk at least twice per day in the case of infants $6-8$ months and at least three times per day in the case of children 9-23 months. Non-breastfed children are considered to be adequately fed if they consume milk or milk products, eat from four food groups (including milk products), and are fed at least four times per day.

Data in Table 11.6 show that 98 percent of youngest children age 6-23 months living with the mother received breast milk or breast milk substitutes during the 24 -hour period prior to the survey. Seventy-two percent had an adequately diverse diet; that is, they had been fed foods from the appropriate number of food groups depending on their age and breastfeeding status. Seventy-four percent had been fed the minimum standard number of times appropriate for their age. Feeding practices for about 58 percent of children age 6-23 months met the minimum standard with respect to all three of these feeding practices (Figure 11.3).

The proportion fed according to the guidelines is much higher among breastfed children (63 percent) than among those who are not breastfed ( 40 percent). Among breastfed children age 6-23 months, 74 percent receive foods from at least three food groups, while 80 percent are fed the minimum number of times or more. Among non-breastfed children age 6-23 months, 92 percent receive milk or milk products, 67 percent are fed foods from at least four food groups, and 50 percent are fed four or more times per day.

[^11]Table 11.6 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 upon number of food groups and times they are fed during the day or night preceding the survey by breastfeeding status and background characteristics, Maldives 2009

| Background characteristic | Among breastfed children 6-23 months, percentage fed: |  |  |  | Among non-breastfed children 6-23 months, percentage fed: |  |  |  |  | Among all children 6-23 months, percentage fed: |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $3+$ food groups ${ }^{1}$ | Minimum times or more ${ }^{2}$ | Both 3+ food groups and minimum times or more | Number <br> of breastfed children 6-23 months | Milk or milk products ${ }^{3}$ | $\begin{gathered} 4+\text { food } \\ \text { groups } \end{gathered}$ | 4+ times or more | With 3 <br> IYCF practices ${ }^{4}$ | Number of nonbreastfed children 6-23 months | Breast milk or milk products ${ }^{3}$ | $\begin{gathered} 3+\text { or } \\ 4+ \\ \text { food } \\ \text { groups }^{5} \end{gathered}$ | Minimum times or more ${ }^{6}$ | With all 3 IYCF practices | Number of all children 6-23 months |
| Age in months |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 6-8 | 43.5 | 74.7 | 39.8 | 204 | * | * | * | * | 21 | 99.1 | 43.4 | 70.5 | 37.2 | 225 |
| 9-11 | 72.0 | 81.1 | 61.2 | 185 | (94.2) | (71.7) | (59.3) | (38.1) | 27 | 99.3 | 72.0 | 78.3 | 58.3 | 213 |
| 12-17 | 83.8 | 82.0 | 69.7 | 295 | 95.6 | 74.6 | 48.3 | 40.1 | 83 | 99.0 | 81.8 | 74.5 | 63.2 | 378 |
| 18-23 | 85.4 | 82.1 | 72.3 | 280 | 90.1 | 66.0 | 52.5 | 44.5 | 134 | 96.8 | 79.1 | 72.5 | 63.3 | 414 |
| Sex |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Male | 75.4 | 74.5 | 59.5 | 475 | 89.8 | 65.1 | 48.7 | 35.7 | 146 | 97.6 | 73.0 | 68.4 | 53.9 | 621 |
| Female | 71.7 | 85.9 | 65.4 | 489 | 95.3 | 70.3 | 51.8 | 45.1 | 120 | 99.1 | 71.4 | 79.2 | 61.4 | 609 |
| Residence |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Urban | 64.4 | 82.6 | 55.2 | 264 | (90.2) | (74.9) | (55.5) | (53.4) | 105 | 97.2 | 67.4 | 74.9 | 54.6 | 369 |
| Rural | 76.9 | 79.4 | 65.3 | 700 | 93.6 | 62.6 | 46.6 | 31.2 | 161 | 98.8 | 74.2 | 73.3 | 58.9 | 860 |
| Region |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Malé | 64.4 | 82.6 | 55.2 | 264 | (90.2) | (74.9) | (55.5) | (53.4) | 105 | 97.2 | 67.4 | 74.9 | 54.6 | 369 |
| North | 82.9 | 80.5 | 70.0 | 185 | * | * | * | * | 22 | 100.0 | 83.6 | 76.6 | 66.5 | 207 |
| North Central | 72.6 | 79.3 | 64.8 | 146 | (96.6) | (65.1) | (46.1) | (33.1) | 23 | 99.5 | 71.6 | 74.8 | 60.5 | 169 |
| Central | 68.6 | 73.3 | 54.3 | 89 | (89.5) | (58.5) | (50.0) | (26.4) | 22 | 97.9 | 66.6 | 68.6 | 48.8 | 111 |
| South Central | 80.2 | 81.2 | 69.8 | 117 | 94.1 | 56.1 | 52.8 | 37.2 | 30 | 98.8 | 75.2 | 75.4 | 63.1 | 147 |
| South | 76.3 | 80.4 | 63.1 | 162 | 91.5 | 56.8 | 43.5 | 27.0 | 63 | 97.6 | 70.8 | 70.0 | 53.0 | 226 |
| Mother's education |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| No formal education | 74.1 | 75.6 | 59.3 | 101 | (90.9) | (64.6) | (39.4) | (25.7) | 29 | 98.0 | 72.0 | 67.6 | 51.9 | 130 |
| Primary | 74.5 | 76.5 | 61.7 | 295 | 93.1 | 71.1 | 52.7 | 42.1 | 53 | 98.9 | 74.0 | 72.8 | 58.7 | 348 |
| Secondary | 72.5 | 82.1 | 62.5 | 523 | 93.3 | 63.9 | 46.9 | 37.6 | 150 | 98.5 | 70.6 | 74.3 | 56.9 | 673 |
| More than secondary | (73.8) | (92.6) | (71.8) | 33 | * | * | * | * | 33 | 93.6 | 77.7 | 82.2 | 66.5 | 65 |
| Wealth quintile |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Lowest | 73.5 | 77.5 | 62.5 | 196 | (91.8) | (63.9) | (56.0) | (38.1) | 32 | 98.8 | 72.1 | 74.5 | 59.0 | 229 |
| Second | 74.4 | 80.7 | 62.0 | 215 | 92.8 | 57.9 | 45.6 | 24.7 | 46 | 98.7 | 71.5 | 74.5 | 55.4 | 262 |
| Middle | 79.6 | 80.1 | 67.9 | 207 | 93.4 | 62.9 | 43.8 | 30.4 | 54 | 98.6 | 76.1 | 72.6 | 60.1 | 262 |
| Fourth | 68.8 | 82.3 | 59.4 | 170 | 90.1 | 74.0 | 50.7 | 47.5 | 65 | 97.3 | 70.2 | 73.6 | 56.1 | 235 |
| Highest | 69.7 | 81.1 | 59.9 | 175 | (93.4) | (73.1) | (54.9) | (51.6) | 68 | 98.1 | 70.7 | 73.8 | 57.6 | 243 |
| Total | 73.5 | 80.3 | 62.5 | 964 | 92.3 | 67.4 | 50.1 | 39.9 | 266 | 98.3 | 72.2 | 73.8 | 57.6 | 1,229 |

Note: Total includes cases for which information on mother's formal education level is missing. Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
${ }^{1}$ Food groups: a. infant formula, milk other than breast milk, cheese or yogurt or other milk products; b. foods made from grains, roots, and tubers, including porridge, 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; h. foods made with oil, fat, butter.
${ }^{2}$ At least twice a day for breastfed infants 6-8 months and at least three times a day for breastfed children 9-23 months
${ }^{3}$ Includes commercial infant formula; fresh, tinned, and powdered animal milk; and cheese, yogurt, and other milk products
${ }^{4}$ Non-breastfed children age 6-23 months are considered to be fed with a minimum standard of three Infant and Young Child Feeding practices if they receive other milk or milk products and are fed at least the minimum number of times per day with at least the minimum number of food groups.
${ }^{5} 3+$ food groups for breastfed children and $4+$ food groups for non-breastfed children
${ }^{6}$ Fed solid or semi-solid food at least twice a day for infants 6-8 months, $3+$ times a day for other breastfed children, and $4+$ times for non-breastfed children

Figure 11.3 Infant and Young Child Feeding (IYCF) Practices


MDHS 2009

### 11.7 Micronutrient Intake among Children

Table 11.7 summarises information collected in the 2009 MDHS on the intake of food rich in vitamin A and iron by youngest children and on the receipt of a vitamin A supplement and deworming medication by all children.

Vitamin A is an essential micronutrient for the immune system that plays an important role in maintaining the epithelial tissue in the body. Severe Vitamin A Deficiency (VAD) can cause eye damage. Deficiency also can increase severity of infections, such as measles and diarrhoeal diseases in children, and can slow recovery from illness. Vitamin A is found in breast milk, other milks, liver, eggs, fish, butter, red palm oil, mangoes, papayas, carrots, pumpkins, and dark green leafy vegetables. The liver can store an adequate amount of the vitamin for four to six months. Periodic dosing (usually every six months) with vitamin A supplement is one method of ensuring that children at risk do not develop VAD.

The MDHS collected information on the consumption of foods rich in vitamin A and on the coverage of supplements. Table 11.7 shows that 82 percent of last-born children living with the mother consumed foods rich in vitamin A in the 24-hour period before the survey. Consumption of foods rich in vitamin A increases from 53 percent among children age 6-8 months to 91 percent among children age $24-35$ months. There is no gender difference in the consumption of foods rich in vitamin A. Not surprisingly, breastfeeding children ( 80 percent) consume foods rich in vitamin A much less frequently than non-breastfeeding children ( 87 percent). There is not much variation by urban-rural residence in the consumption of vitamin A-rich foods.

With regard to regions, children living in the North region (88 percent) consume foods rich in vitamin A more often than children in other regions. Children of young mothers (15-19) consume food rich in vitamin A (86 percent) at higher rates than children of older mothers. No systematic relation is observed between children's consumption of vitamin A-rich food and the mother's education or wealth status.

Table 11.7 Micronutrient intake among children
Among youngest children age 6-35 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 age 6-59 months, the percentages who were given vitamin A supplements in the six months preceding the survey, and who were given de-worming medication in the six months preceding the survey, by background characteristics, Maldives 2009

| Background characteristic | Among youngest children age 6-35 months living with the mother: |  |  | Among all children age 6-59 months: |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Percentage who consumed foods rich in vitamin A in past 24 hours $^{1}$ | Percentage who consumed foods rich in iron in past 24 hours $^{2}$ | Number of children | Percentage given vitamin A supplements in past 6 months | Percentage given deworming medication in past 6 months ${ }^{3}$ | Number of children |
| Age in months |  |  |  |  |  |  |
| 6-8 | 53.2 | 15.4 | 225 | 11.9 | 7.0 | 227 |
| 9-11 | 76.2 | 49.5 | 213 | 46.7 | 23.9 | 214 |
| 12-17 | 85.4 | 67.6 | 378 | 59.0 | 58.8 | 387 |
| 18-23 | 85.3 | 73.8 | 414 | 46.3 | 78.1 | 436 |
| 24-35 | 90.8 | 84.0 | 593 | 49.6 | 83.9 | 686 |
| 36-47 | na | na | 0 | 52.0 | 81.1 | 678 |
| 48-59 | na | na | 0 | 50.0 | 74.9 | 649 |
| Sex |  |  |  |  |  |  |
| Male | 81.1 | 64.6 | 917 | 48.9 | 66.9 | 1,668 |
| Female | 83.1 | 67.0 | 905 | 47.2 | 70.3 | 1,608 |
| Breastfeeding status |  |  |  |  |  |  |
| Breastfeeding | 79.8 | 61.4 | 1,212 | 49.4 | 57.1 | 1,343 |
| Not breastfeeding | 86.7 | 75.2 | 600 | 47.3 | 76.8 | 1,872 |
| Residence |  |  |  |  |  |  |
| Urban | 79.8 | 59.9 | 547 | 27.4 | 64.4 | 968 |
| Rural | 83.1 | 68.3 | 1,275 | 56.7 | 70.3 | 2,308 |
| Region |  |  |  |  |  |  |
| Malé | 79.8 | 59.9 | 547 | 27.4 | 64.4 | 968 |
| North | 87.6 | 70.0 | 293 | 59.1 | 70.7 | 517 |
| North Central | 83.9 | 67.1 | 253 | 59.0 | 73.3 | 481 |
| Central | 79.2 | 69.4 | 163 | 63.5 | 81.7 | 296 |
| South Central | 81.9 | 69.7 | 228 | 59.7 | 70.7 | 390 |
| South | 81.2 | 66.3 | 337 | 47.9 | 62.1 | 624 |
| Mother's education |  |  |  |  |  |  |
| No formal education | 81.8 | 68.5 | 193 | 58.4 | 75.1 | 415 |
| Primary | 81.3 | 67.1 | 578 | 55.0 | 72.4 | 1,204 |
| Secondary | 81.8 | 63.6 | 930 | 41.9 | 63.7 | 1,476 |
| More than secondary | 88.4 | 70.7 | 98 | 27.4 | 68.7 | 142 |
| Mother's age at birth |  |  |  |  |  |  |
| 15-19 | 85.9 | 73.8 | 65 | 37.0 | 62.6 | 147 |
| 20-29 | 82.0 | 65.4 | 1,187 | 47.0 | 69.0 | 2,115 |
| 30-39 | 82.3 | 66.0 | 521 | 51.5 | 68.0 | 926 |
| 40-49 | 78.9 | 61.4 | 48 | 54.6 | 72.6 | 88 |
| Wealth quintile |  |  |  |  |  |  |
| Lowest | 80.6 | 66.7 | 329 | 59.0 | 74.1 | 633 |
| Second | 82.8 | 68.4 | 389 | 58.5 | 69.2 | 701 |
| Middle | 83.7 | 68.1 | 396 | 56.1 | 71.0 | 697 |
| Fourth | 82.1 | 67.7 | 353 | 35.5 | 65.5 | 652 |
| Highest | 81.0 | 57.7 | 356 | 28.4 | 62.4 | 593 |
| Total | 82.1 | 65.8 | 1,822 | 48.1 | 68.6 | 3,276 |

Note: Information on vitamin A and de-worming medication is based on the mother's recall. Total includes cases for which information on breastfeeding status and for which information on mother's formal education level is missing.
na $=$ Not applicable
${ }^{1}$ Includes meat (and organ meat), fish, poultry, eggs, pumpkin, red or yellow yams or squash, carrots, red sweet potatoes,
dark green leafy vegetables, mango, and papaya
${ }^{2}$ Includes meat, (including organ meat), fish, poultry, and eggs
${ }^{3}$ De-worming for intestinal parasites is commonly done for helminths and for schistosomiasis.

Iron is essential for cognitive development. Low iron intake can contribute to anaemia. Iron requirements are greatest between age 6 and 11 months, when growth is most rapid. Table 11.7 shows that 66 percent of the youngest children age $6-35$ months who live with their mother consumed foods rich in iron in the 24 hours preceding the interview. The proportion of children who are fed foods rich in iron increases with age, from 15 percent among children age 6-8 months to 84 percent among children age 24-35 months.

As expected, breastfeeding children (61 percent) consume iron-rich foods less often than those not breastfeeding ( 75 percent). Urban children ( 60 percent) are less likely than rural children ( 68 percent) to receive iron-rich foods. By region, the proportion of children who consume iron-rich foods ranges from 60 percent in Malé to 70 percent in the North and the South Central regions. Consumption of iron-rich foods is highest among children whose mothers were age 15-19 years at the time of their birth. The proportion of children who are fed foods rich in iron does not vary systematically with the mother's level of education and wealth status.

The 2009 MDHS also collected information on vitamin A supplementation. As shown in Table 11.7, almost half of the children (48 percent) age 6-59 months received vitamin A supplements in the six months preceding the survey. Children ages 6-8 months and urban children have low rates of vitamin A supplementation in the six months preceding the survey ( 12 percent and 27 percent, respectively). A mother's level of education is negatively associated with children receiving vitamin A supplements; 58 percent of children of mothers with no formal education received vitamin A supplements in the past six months compared with 27 percent of children whose mothers have more than secondary education. The proportion of children who receive vitamin A supplements increased with mothers' age at birth and decreased with household wealth status. The proportion of children in the lowest and second wealth quintile who received vitamin A supplement is 59 percent, compared with 28 percent of children in the highest wealth quintile.

Infection with helminths or intestinal worms has been shown to have an adverse impact on the physical development of children and is associated with high levels of iron deficiency anaemia and other nutritional deficiencies. Regular treatment with de-worming medication is a simple, cost effective measure to address these infections. Table 11.7 shows that more than two-thirds of children age 6-59 months received de-worming medication during the six months preceding the survey.

The proportion of children who receive de-worming medication increases with age, from 7 percent among children age 6-8 months to 84 percent among children age $24-35$ months, before declining among children age 36 months and older. The proportion of children who receive deworming medication is much higher among non-breastfeeding children ( 77 percent) than among those who are breastfeeding ( 57 percent). By region, the proportion of children who received de-worming medication is highest in the Central region ( 82 percent) and lowest in the South region (62 percent). The rate of de-worming medication decreases with increase in the mother's level of education and household wealth quintile.

### 11.8 Nutritional Status of Women

Anthropometric measurements of height and weight were collected for women age 15-49. In this report, two indicators of nutritional status based on these data are presented: the percentage of women with very short stature (less than 145 cm ) and the body mass index (BMI).

The body mass index (BMI), or the Quetelet index, is used to measure thinness and obesity. BMI is defined as weight in kilograms divided by height in metres squared ( $\mathrm{kg} / \mathrm{m} 2$ ). A cut-off point of 18.5 is used to define thinness or acute undernutrition, and a BMI of 25.0 or above usually indicates overweight or obesity. The height of a woman is associated with past socioeconomic status and nutrition during childhood and adolescence. Low pre-pregnancy BMI and short stature are risk factors for poor birth outcomes and obstetric complications. In developing countries, maternal underweight is the leading risk factor for preventable deaths and diseases.

Table 11.8 shows the percentage of women with height under 145 cm , the mean BMI, and the proportion of women falling into high-risk categories, according to background characteristics. Respondents for whom there was no information on height or weight and for whom a BMI could not be estimated are excluded from this analysis. The data analysis of height is based on 5,694 women, and the analysis of BMI is based on 5,173 women.

Table 11.8 shows that 12 percent of women have short stature (below 145 cm ). Short stature increases with age, is higher in rural areas, and decreases with increasing level of education and wealth status. The percentage of women with height under 145 cm ranges from 18 percent among women with no formal education to 6 percent among women with more than secondary education. Short stature ranges from 8 percent in the Central region to 18 percent in the South region.

## Table 11.8 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, Maldives 2009

| Background characteristic | Height |  | Body Mass Index ${ }^{1}$ |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Mean <br> Body <br> Mass <br> Index <br> (BMI) | $\begin{gathered} \hline \text { Normal } \\ \hline \\ 18.5- \\ 24.9 \\ \text { (total } \\ \text { normal) } \\ \hline \end{gathered}$ | $\begin{aligned} & <18.5 \\ & \text { (total } \\ & \text { thin) } \end{aligned}$ | Thin |  | Overweight/obese |  |  | Number of women |
|  |  |  |  |  |  | <17 | $\begin{gathered} \geq 25.0 \\ \text { (total } \end{gathered}$ |  |  |  |
|  | Percentage below 145 cm | Number of women |  |  |  | $\begin{gathered} 17.0- \\ 18.4 \\ \text { (mildly } \\ \text { thin) } \\ \hline \end{gathered}$ | (moderately and severely thin) | over- <br> weight or obese) | $\begin{gathered} 25.0- \\ 29.9 \\ \text { (over- } \\ \text { weight) } \\ \hline \end{gathered}$ | $\begin{gathered} \geq 30.0 \\ \text { (obese) } \end{gathered}$ |  |
| Age |  |  |  |  |  |  |  |  |  |  |  |
| 15-19 | 8.4 | 88 |  | 21.9 | 52.7 | 23.7 | 11.1 | 12.6 | 23.5 | 20.7 | 2.8 | 69 |
| 20-29 | 8.0 | 2,211 | 23.4 | 54.2 | 13.4 | 8.1 | 5.3 | 32.4 | 23.6 | 8.8 | 1,877 |
| 30-39 | 11.6 | 2,012 | 25.3 | 46.7 | 4.0 | 2.8 | 1.2 | 49.3 | 36.1 | 13.3 | 1,863 |
| 40-49 | 19.6 | 1,383 | 26.3 | 37.5 | 3.2 | 1.8 | 1.4 | 59.3 | 40.0 | 19.3 | 1,364 |
| Residence |  |  |  |  |  |  |  |  |  |  |  |
| Urban | 10.4 | 1,805 | 25.3 | 43.5 | 5.3 | 3.3 | 2.0 | 51.2 | 36.9 | 14.4 | 1,657 |
| Rural | 12.9 | 3,889 | 24.6 | 48.8 | 8.5 | 5.2 | 3.3 | 42.8 | 30.2 | 12.5 | 3,516 |
| Region |  |  |  |  |  |  |  |  |  |  |  |
| Malé | 10.4 | 1,805 | 25.3 | 43.5 | 5.3 | 3.3 | 2.0 | 51.2 | 36.9 | 14.4 | 1,657 |
| North | 8.6 | 897 | 24.1 | 49.8 | 11.3 | 6.6 | 4.6 | 39.0 | 28.8 | 10.2 | 809 |
| North Central | 13.6 | 998 | 24.9 | 44.8 | 8.2 | 4.7 | 3.5 | 46.9 | 33.4 | 13.5 | 903 |
| Central | 7.8 | 496 | 24.9 | 47.1 | 6.9 | 4.0 | 2.9 | 46.0 | 32.4 | 13.6 | 440 |
| South Central | 14.4 | 657 | 24.5 | 51.5 | 8.6 | 5.7 | 2.9 | 40.0 | 28.4 | 11.6 | 604 |
| South | 18.3 | 841 | 24.7 | 51.2 | 6.7 | 4.4 | 2.3 | 42.1 | 28.2 | 13.9 | 761 |
| Education |  |  |  |  |  |  |  |  |  |  |  |
| No formal education | 18.2 | 1,392 | 25.9 | 41.7 | 4.2 | 2.4 | 1.9 | 54.0 | 34.8 | 19.3 | 1,345 |
| Primary | 12.1 | 2,001 | 25.1 | 45.3 | 5.9 | 3.8 | 2.1 | 48.8 | 35.7 | 13.1 | 1,840 |
| Secondary | 8.6 | 2,003 | 23.7 | 53.2 | 11.4 | 7.3 | 4.1 | 35.4 | 26.6 | 8.9 | 1,724 |
| More than secondary | 5.5 | 233 | 24.2 | 47.0 | 9.1 | 2.3 | 6.9 | 43.9 | 35.5 | 8.3 | 203 |
| Wealth quintile |  |  |  |  |  |  |  |  |  |  |  |
| Lowest | 14.4 | 1,055 | 24.4 | 49.1 | 10.4 | 6.3 | 4.0 | 40.6 | 28.4 | 12.1 | 963 |
| Second | 13.3 | 1,127 | 24.8 | 46.6 | 9.0 | 5.9 | 3.1 | 44.4 | 31.0 | 13.4 | 1,030 |
| Middle | 12.5 | 1,226 | 24.5 | 50.7 | 7.0 | 3.7 | 3.3 | 42.4 | 31.4 | 11.0 | 1,097 |
| Fourth | 10.5 | 1,130 | 25.3 | 42.7 | 5.5 | 2.9 | 2.6 | 51.8 | 37.0 | 14.9 | 1,027 |
| Highest | 9.9 | 1,156 | 25.1 | 46.3 | 5.7 | 4.3 | 1.5 | 48.0 | 33.8 | 14.2 | 1,057 |
| Total | 12.1 | 5,694 | 24.8 | 47.1 | 7.5 | 4.6 | 2.9 | 45.5 | 32.4 | 13.1 | 5,173 |

Note: The Body Mass Index (BMI) is expressed as the ratio of weight in kilograms to the square of height in meters ( $\mathrm{kg} / \mathrm{m}^{2}$ ). Total includes cases for which information on mother's formal education level is missing.
${ }^{1}$ Excludes pregnant women and women with a birth in the preceding 2 months

Almost one in two women ( 47 percent) has a normal BMI. The proportion of women with a normal BMI decreases with age from 53 percent among women age 15-19 to 38 percent among women age 40-49. Small differences are found across other subgroups of women.

Eight percent of women were found to be underweight (BMI less than 18.5), and 46 percent were overweight or obese (BMI 25 or higher). Women age 15-19 are the thinnest compared with older women. Higher rates of underweight women are found in rural areas than in urban areas (9 percent and 5 percent, respectively).

On the other hand, the percentage of overweight or obese women is higher in urban areas (51 percent) than in rural areas ( 43 percent). Malé ( 51 percent), North Central region ( 47 percent), and Central region ( 46 percent) have the highest percentages of overweight or obese women, and the North region has the lowest percentage ( 39 percent). Overweight and obesity decrease with increasing level of education. For example, 54 percent of women with no formal education are overweight or obese compared with 44 percent of women with more than secondary education. Women in the lowest wealth quintile also have the lowest rates of overweight or obesity.

### 11.9 Foods Consumed by Mothers

The quality and quantity of foods consumed by mothers influence their health and that of their children, especially the health of breastfeeding children. The 2009 MDHS included questions on the types of food consumed by mothers with children under age 3 during the day and night preceding the interview.

Table 11.9 shows that approximately nine in ten mothers of young children in Maldives consume foods made of grain and eat meat, fish, shellfish, poultry, or eggs. Two in three women eat vitamin A-rich fruits and vegetables; about one in two eats foods made with oil, fats, or butter; 44 percent of women consume sugary foods; 40 percent consume other solid or semi-solid food; and 35 percent consume other fruits and vegetables. One in four women consumes foods made of roots or tubers and legumes, and 13 percent consume cheese and yogurt.

The consumption of foods varies according to background characteristics. Consumption of milk, other liquids, and other solid or semi-solid food decreases with age, and intake of tea/coffee, foods made from grains, and foods made from roots/tubers increases with age. The consumption of milk, tea/coffee, other solid or semi-solid food and food made with oil/fat/butter is higher in rural areas than in urban areas, while the consumption of other liquids, food made from roots/tubers, legumes, cheese/yogurt, and other fruits and vegetables is higher in urban areas. As women's education increases, the consumption of legumes, cheese/yogurt, vitamin A-rich fruits and vegetables, other fruits and vegetables, other solid or semi-solid food, foods made with oil, fat, and butter, and sugary foods also increases. Finally, the rates of consumption of legumes, cheese/yogurt, and other fruits and vegetables increases with each wealth quintile.

Table 11.9 Foods consumed by mothers in the day and night preceding the interview
Among mothers age 15-49 with a child under age three years living with them, the percentage who consumed specific types of foods in the day or night preceding the interview, by background characteristics, Maldives 2009

| Background characteristic | Liquids |  |  | Solid or semi-solid foods |  |  |  |  |  |  |  |  |  | Number of women |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Foods <br> made <br> from <br> grains ${ }^{1}$ | Foods made from roots/ tubers | Foods made from legumes | Meat/ fish/ shellfish/ poultry/ eggs | Cheese/ yogurt | Vitamin <br> A-rich fruits/ vegetables ${ }^{1}$ | Other <br> fruits/ <br> vege- <br> tables | Other solid or semisolid food | Foods made with oil/ fat/ butter | Sugary foods |  |
|  | Milk | Tea/ coffee | Other liquids |  |  |  |  |  |  |  |  |  |  |  |
| Age |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 15-19 | * | * | * | * | * | * | * | * | * | * | * | * | * | 25 |
| 20-29 | 59.4 | 62.1 | 75.5 | 90.5 | 22.7 | 23.8 | 86.9 | 14.2 | 66.9 | 34.2 | 42.5 | 48.3 | 44.7 | 1,356 |
| 30-39 | 55.4 | 67.2 | 71.7 | 92.3 | 24.7 | 26.3 | 85.2 | 12.4 | 68.0 | 35.4 | 36.0 | 50.9 | 40.9 | 737 |
| 40-49 | 44.0 | 72.7 | 63.2 | 95.3 | 30.7 | 25.7 | 91.5 | 11.7 | 64.8 | 42.6 | 31.4 | 38.8 | 45.7 | 105 |
| Residence |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Urban | 53.2 | 54.5 | 77.2 | 91.4 | 25.9 | 29.6 | 85.7 | 19.3 | 67.8 | 41.1 | 36.5 | 44.9 | 42.0 | 685 |
| Rural | 59.3 | 68.7 | 72.5 | 91.3 | 22.6 | 22.3 | 87.1 | 10.9 | 66.7 | 32.1 | 41.2 | 50.4 | 44.3 | 1,538 |
| Region |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Malé | 53.2 | 54.5 | 77.2 | 91.4 | 25.9 | 29.6 | 85.7 | 19.3 | 67.8 | 41.1 | 36.5 | 44.9 | 42.0 | 685 |
| North | 60.4 | 70.7 | 72.7 | 93.8 | 26.9 | 28.7 | 88.0 | 8.8 | 69.5 | 33.1 | 42.4 | 58.2 | 45.7 | 348 |
| North Central | 57.0 | 71.7 | 60.3 | 92.9 | 22.2 | 22.3 | 89.1 | 9.1 | 68.1 | 34.3 | 37.1 | 48.6 | 47.8 | 303 |
| Central | 57.6 | 63.8 | 77.5 | 91.6 | 17.3 | 18.1 | 86.8 | 12.9 | 61.5 | 31.7 | 49.3 | 45.6 | 46.3 | 205 |
| South Central | 55.2 | 65.5 | 77.4 | 89.9 | 22.5 | 16.4 | 88.7 | 5.8 | 60.6 | 30.2 | 30.5 | 50.5 | 30.8 | 279 |
| South | 63.9 | 69.6 | 75.5 | 88.9 | 21.9 | 23.0 | 83.7 | 16.4 | 70.1 | 31.3 | 46.4 | 47.2 | 48.7 | 404 |
| Education |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| No formal education | 51.6 | 73.0 | 60.1 | 91.7 | 19.6 | 18.2 | 85.0 | 9.2 | 60.9 | 26.1 | 30.7 | 43.7 | 38.8 | 220 |
| Primary | 52.3 | 67.2 | 73.2 | 90.5 | 25.8 | 22.6 | 87.3 | 9.8 | 64.2 | 33.0 | 38.5 | 48.8 | 41.4 | 714 |
| Secondary | 61.9 | 60.8 | 76.7 | 91.5 | 21.5 | 25.4 | 86.3 | 14.6 | 69.0 | 36.5 | 40.1 | 48.2 | 44.8 | 1,135 |
| More than secondary | 53.1 | 63.7 | 75.7 | 94.4 | 35.7 | 39.6 | 88.6 | 31.5 | 75.5 | 48.1 | 57.2 | 57.2 | 53.9 | 129 |
| Wealth quintile |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Lowest | 50.4 | 71.8 | 70.2 | 92.5 | 23.7 | 20.5 | 88.9 | 8.0 | 63.2 | 27.4 | 36.5 | 48.0 | 39.1 | 393 |
| Second | 57.4 | 66.8 | 70.9 | 90.9 | 21.5 | 21.1 | 86.0 | 8.4 | 65.3 | 31.1 | 38.3 | 48.2 | 45.4 | 473 |
| Middle | 62.7 | 67.2 | 75.2 | 90.6 | 20.2 | 22.9 | 86.3 | 11.8 | 68.5 | 33.4 | 45.8 | 50.6 | 42.3 | 471 |
| Fourth | 58.6 | 60.6 | 77.1 | 90.3 | 24.1 | 27.1 | 86.4 | 16.4 | 71.4 | 40.8 | 38.7 | 48.6 | 44.5 | 445 |
| Highest | 56.9 | 56.0 | 76.0 | 92.7 | 28.9 | 31.1 | 86.0 | 22.5 | 66.4 | 41.4 | 38.7 | 47.6 | 45.9 | 441 |
| Total | 57.4 | 64.4 | 73.9 | 91.4 | 23.6 | 24.6 | 86.6 | 13.4 | 67.0 | 34.9 | 39.7 | 48.7 | 43.6 | 2,223 |

Note: Foods consumed in the past 24-hour period (yesterday and last night). Total includes cases for which information on mother's formal education level is missing. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
${ }^{1}$ Includes pumpkin, orange or yellow squash, carrots, sweet potatoes, dark green leafy vegetables, mangoes, and papayas

### 11.10 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 of women during pregnancy protects mother and infant against anaemia. Anaemia may lead to an increased risk of premature delivery and low birthweight.

Table 11.10 lists measures that help assess the extent to which women receive adequate intake of vitamin A and iron during pregnancy. About 93 percent of these mothers eat foods rich in vitamin A, and 87 percent eat iron-rich foods. In general the consumption of vitamin A and iron-rich foods is high and does not vary much by background characteristics.

Table 11.10 shows that 52 percent of women with children born in the five years preceding the survey received a dose of vitamin $A$ in the first two months after the birth of the last child. Postpartum vitamin A supplementation is higher among rural women (55 percent) than among urban women (45 percent). By region, the proportion of women who received postpartum vitamin A supplementation ranges from 45 percent in Malé to 61 percent in the North Central region. Postpartum vitamin A supplementation is lowest among women with more than secondary education and women in the highest wealth quintile ( 32 percent and 44 percent, respectively).

## Table 11.10 Micronutrient intake among mothers

Among women age 15-49 with a child under age three years living with her, the percentages who consumed vitamin A-rich and iron-rich foods in the 24 hours preceding the survey; 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; among mothers age 15-49 who during the pregnancy of the last child born in the five years prior to the survey, the percentage who suffered from night blindness, the percentage who took iron tablets for specific numbers of days, and the percentage who took de-worming medication, by background characteristics, Maldives 2009

| Background characteristic | Women with children under three years living with them |  |  | Women with children under five years |  |  |  |  |  |  |  | Percentage of women who took deworming medication during pregnancy for last birth | Number <br> of <br> women |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Percentage con- | with them <br> Percent- <br> age <br> con- | m |  | Percentage who had night blindness during pregnancy for last birth |  | Number of days iron tablets or syrup taken during pregnancy for last birth |  |  |  |  |  |  |
|  | vitamin- | iron- | Number |  |  |  |  |  |  |  | Don't |  |  |
|  | foods ${ }^{1}$ | foods ${ }^{2}$ | women |  | Reported | Adjusted ${ }^{4}$ | None | <60 | 60-89 | 90+ | missing |  |  |
| Age |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 15-19 | * | * | 25 | (61.6) | (0.0) | (0.0) | (17.7) | (6.9) | (1.6) | (60.2) | (13.6) | (12.6) | 27 |
| 20-29 | 93.1 | 86.9 | 1,356 | 53.0 | 3.4 | 1.8 | 8.9 | 6.7 | 1.8 | 67.2 | 15.4 | 13.0 | 1,758 |
| 30-39 | 91.8 | 85.2 | 737 | 49.3 | 1.5 | 1.0 | 10.1 | 6.4 | 1.2 | 61.7 | 20.6 | 15.1 | 1,183 |
| 40-49 | 97.0 | 91.5 | 105 | 58.1 | 6.3 | 4.8 | 12.6 | 5.7 | 1.4 | 58.4 | 21.9 | 25.1 | 222 |
| Residence |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Urban | 92.0 | 85.7 | 685 | 45.1 | 3.0 | 1.8 | 8.8 | 4.4 | 0.8 | 61.8 | 24.2 | 6.8 | 964 |
| Rural | 93.3 | 87.1 | 1,538 | 55.1 | 2.7 | 1.7 | 10.0 | 7.4 | 1.9 | 65.6 | 15.0 | 18.0 | 2,227 |
| Region |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Malé | 92.0 | 85.7 | 685 | 45.1 | 3.0 | 1.8 | 8.8 | 4.4 | 0.8 | 61.8 | 24.2 | 6.8 | 964 |
| North | 96.1 | 88.0 | 348 | 48.9 | 1.8 | 0.9 | 9.0 | 6.2 | 1.6 | 62.6 | 20.6 | 12.3 | 489 |
| North Central | 93.9 | 89.1 | 303 | 61.3 | 3.7 | 2.1 | 7.5 | 10.6 | 2.4 | 69.3 | 10.2 | 23.9 | 466 |
| Central | 91.5 | 86.8 | 205 | 55.8 | 2.3 | 0.8 | 8.9 | 8.9 | 2.5 | 69.8 | 9.9 | 21.2 | 293 |
| South Central | 92.4 | 88.7 | 279 | 51.9 | 2.7 | 1.6 | 10.4 | 9.8 | 1.6 | 54.6 | 23.6 | 18.4 | 390 |
| South | 92.1 | 83.7 | 404 | 57.0 | 3.1 | 2.5 | 13.3 | 3.6 | 1.6 | 70.5 | 11.0 | 16.3 | 589 |
| Education |  |  |  |  |  |  |  |  |  |  |  |  |  |
| No formal education | 92.2 | 85.0 | 220 | 53.6 | 4.6 | 3.8 | 15.2 | 6.9 | 1.6 | 52.9 | 23.5 | 23.7 | 396 |
| Primary | 93.0 | 87.3 | 714 | 55.8 | 2.5 | 1.1 | 11.9 | 7.7 | 1.8 | 61.5 | 17.1 | 19.7 | 1,143 |
| Secondary | 93.1 | 86.3 | 1,135 | 51.1 | 2.9 | 1.7 | 7.4 | 6.0 | 1.5 | 68.4 | 16.8 | 9.3 | 1,456 |
| More than secondary | 91.7 | 88.6 | 129 | 32.4 | 0.9 | 0.9 | 2.4 | 2.0 | 1.6 | 78.1 | 15.9 | 6.4 | 156 |
| Wealth quintile |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Lowest | 94.2 | 88.9 | 393 | 53.4 | 4.0 | 2.9 | 12.3 | 7.1 | 2.6 | 60.2 | 17.7 | 22.4 | 595 |
| Second | 92.1 | 86.0 | 473 | 55.2 | 2.8 | 1.6 | 10.0 | 7.9 | 1.5 | 66.0 | 14.6 | 20.2 | 677 |
| Middle | 94.5 | 86.3 | 471 | 55.3 | 2.3 | 1.1 | 8.5 | 7.9 | 1.8 | 67.1 | 14.7 | 15.0 | 677 |
| Fourth | 92.8 | 86.4 | 445 | 51.6 | 2.4 | 1.7 | 9.9 | 5.3 | 0.7 | 66.8 | 17.3 | 10.5 | 643 |
| Highest | 91.1 | 86.0 | 441 | 44.1 | 2.7 | 1.4 | 7.7 | 4.0 | 1.3 | 61.4 | 25.5 | 4.7 | 599 |
| Total | 92.9 | 86.6 | 2,223 | 52.1 | 2.8 | 1.7 | 9.7 | 6.5 | 1.6 | 64.5 | 17.8 | 14.6 | 3,190 |

[^12]Only 3 percent of women said that they had experienced night blindness while pregnant with their youngest child. After adjusting this figure for women who also reported vision problems during the day, only 2 percent of women are estimated to have experienced VAD-related night blindness during pregnancy.

To boost iron, 65 percent of women took iron supplements during pregnancy for 90 days or more. Seven percent took iron tablets for fewer than 60 days and 10 percent did not take any iron supplements at all. The percentage of women who took iron supplements for 90 days or more is highest among women age 20-29 ( 67 percent), rural women ( 66 percent), and those with more than a secondary level of education (78 percent). By region, this proportion ranges from 55 percent in the South Central region to 71 percent in the South region.

To treat intestinal worms, 15 percent of the women took de-worming medication while pregnant with the last child in the five years preceding the survey. The use of de-worming medication during pregnancy is highest among women age 40-49 (25 percent), rural women (18 percent), women residing in the North central region (24 percent), women with no formal education ( 24 percent), and women in the lowest wealth quintile ( 22 percent).

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

Acquired Immune Deficiency Syndrome (AIDS) is caused by the human immunodeficiency virus (HIV). As the virus weakens the immune system, the body becomes susceptible to and unable to recover from other opportunistic diseases that may lead to death through secondary infection. The predominant mode of HIV transmission is through heterosexual contact, followed in frequency by perinatal transmission, in which the mother passes the virus to the child during pregnancy, delivery, or breastfeeding. Other modes of transmission are through infected blood and unsafe injections.

The spread of the AIDS epidemic depends on a number of variables, including the level of HIV/AIDS-related knowledge among the general population; social stigmatization; risk behaviour modification; access to high-quality services for sexually transmitted infections (STIs); provision and uptake of HIV counselling and testing; and access to care and antiretroviral therapy (ART). The principal objective of this chapter is to establish the prevalence of relevant knowledge, perceptions, and behaviours at the national level and also within geographic and socioeconomic subpopulations. In this way, prevention programmes can target those groups of individuals most in need of information and most at risk of HIV infection.

In this chapter, HIV/AIDS knowledge and attitudes are discussed first. The level of self-reported prevalence of sexually transmitted diseases is then presented. The prevalence of non-sterile injections, which can increase the risk of infection with HIV and other diseases is considered next. The chapter then reviews several indicators for young ever-married women age 15-24 including HIV/AIDS awareness, knowledge of a source for condoms, and trends in the age at first sex.

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

### 12.1.1 Awareness of HIV/AIDS

MDHS respondents were asked whether they had heard of HIV or AIDS. Those who reported having heard of HIV or AIDS were asked a number of questions about whether and how HIV/AIDS could be avoided. Table 12.1 shows that awareness of AIDS is nearly universal ( 97 percent) among ever-married women age 15-49 in the Maldives. At least 94 percent of respondents in all subgroups shown in the table have heard of AIDS.

| Table 12.1 Knowledge of AIDS |  |  |
| :---: | :---: | :---: |
| Percentage of ever-married women age 15-49 who have heard of AIDS, by background characteristics, Maldives 2009 |  |  |
| Background characteristic | Has heard of AIDS | Number of women |
| Age |  |  |
| 15-24 | 96.7 | 1,387 |
| 15-19 | 98.2 | 119 |
| 20-24 | 96.6 | 1,268 |
| 25-29 | 97.6 | 1,539 |
| 30-39 | 97.5 | 2,471 |
| 40-49 | 95.4 | 1,734 |
| Marital status |  |  |
| Married | 97.0 | 6,500 |
| Divorced/separated/ widowed | 95.3 | 631 |
| Residence |  |  |
| Urban | 97.5 | 2,368 |
| Rural | 96.6 | 4,763 |
| Region |  |  |
| Malé | 97.5 | 2,368 |
| North | 95.0 | 1,067 |
| North Central | 97.8 | 1,038 |
| Central | 97.7 | 615 |
| South Central | 97.0 | 853 |
| South | 96.0 | 1,190 |
| Education |  |  |
| No formal education | 94.1 | 1,668 |
| Primary | 96.5 | 2,464 |
| Secondary | 98.5 | 2,584 |
| More than secondary | 100.0 | 333 |
| Wealth quintile |  |  |
| Lowest | 95.3 | 1,300 |
| Second | 96.4 | 1,396 |
| Middle | 97.1 | 1,488 |
| Fourth | 97.0 | 1,447 |
| Highest | 98.3 | 1,499 |
| Total | 96.9 | 7,131 |

Note: Total includes 81 ever-married women with information missing on level of formal education

### 12.1.2 Methods of HIV Prevention

AIDS prevention programmes focus their messages and efforts on three important aspects of behaviour: using condoms, staying faithful to one partner, and delaying first sexual intercourse in young persons (i.e., abstinence). Table 12.2 shows the percentage of women who, in response to prompted questions, agreed that specific actions would help an individual to avoid AIDS.

Around eight in ten women age 15-49 recognize that using condoms and abstaining from sex are different methods of avoiding HIV infection. Limiting sex to one partner who is not HIV positive is recognized by 9 in 10 women ( 92 percent) as another way to avoid HIV exposure. Seventy-six percent of women recognize that using condoms and limiting sex to one partner who is not HIV positive are ways to prevent transmission of HIV.

| Table 12.2 Knowledge of HIV prevention methods |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Percentage of ever-married women age 15-49 who, in response to prompted questions, say that people can reduce the risk of getting the AIDS virus by using condoms every time they have sexual intercourse, by having one sex partner who is not infected and has no other partners, and by abstaining from sexual intercourse, by background characteristics, Maldives 2009 |  |  |  |  |  |
| Background characteristic | Using condoms ${ }^{1}$ | Limiting sexual intercourse to one uninfected partner ${ }^{2}$ | Using condoms and limiting sexual intercourse to one uninfected partner ${ }^{1,2}$ | Abstaining from sexual intercourse | Number of evermarried women |
| Age |  |  |  |  |  |
| 15-24 | 75.5 | 91.6 | 72.5 | 76.2 | 1,387 |
| 15-19 | 59.7 | 90.8 | 57.1 | 75.0 | 119 |
| 20-24 | 77.0 | 91.7 | 74.0 | 76.3 | 1,268 |
| 25-29 | 82.3 | 91.5 | 77.9 | 79.3 | 1,539 |
| 30-39 | 82.2 | 93.3 | 79.4 | 82.8 | 2,471 |
| 40-49 | 75.2 | 90.0 | 71.7 | 80.4 | 1,734 |
| Marital status |  |  |  |  |  |
| Married | 79.2 | 91.9 | 75.7 | 80.2 | 6,500 |
| Divorced/separated/ widowed | 80.2 | 90.5 | 77.4 | 80.3 | 631 |
| Residence |  |  |  |  |  |
| Urban | 82.4 | 92.9 | 79.4 | 77.5 | 2,368 |
| Rural | 77.7 | 91.2 | 74.1 | 81.5 | 4,763 |
| Region |  |  |  |  |  |
| Malé | 82.4 | 92.9 | 79.4 | 77.5 | 2,368 |
| North | 74.8 | 90.9 | 72.7 | 81.7 | 1,067 |
| North Central | 73.1 | 93.9 | 70.7 | 79.8 | 1,038 |
| Central | 81.9 | 91.0 | 76.8 | 82.1 | 615 |
| South Central | 79.4 | 89.1 | 73.1 | 81.4 | 853 |
| South | 80.8 | 90.7 | 77.7 | 82.6 | 1,190 |
| Education |  |  |  |  |  |
| No formal education | 72.7 | 87.8 | 68.7 | 78.8 | 1,668 |
| Primary | 79.8 | 91.3 | 76.2 | 80.9 | 2,464 |
| Secondary | 81.4 | 93.9 | 78.3 | 80.3 | 2,584 |
| More than secondary | 88.2 | 96.5 | 85.3 | 80.3 | 333 |
| Wealth quintile |  |  |  |  |  |
| Lowest | 74.5 | 89.1 | 70.4 | 79.1 | 1,300 |
| Second | 77.4 | 91.3 | 73.9 | 81.3 | 1,396 |
| Middle | 79.0 | 92.2 | 75.5 | 83.2 | 1,488 |
| Fourth | 79.1 | 92.2 | 76.5 | 79.4 | 1,447 |
| Highest | 85.5 | 93.7 | 82.2 | 77.8 | 1,499 |
| Total | 79.3 | 91.8 | 75.9 | 80.2 | 7,131 |
| Note: Total includes 81 ever-married women with information missing on level of formal education <br> ${ }^{1}$ Using condoms every time they have sexual intercourse <br> ${ }^{2}$ Partner who has no other partners |  |  |  |  |  |

Overall, differentials in the levels of knowledge of the various modes of prevention are not large. The largest differentials tend to be observed across educational levels. For example, 85 percent of women with more than secondary education say that the risk of HIV transmission can be reduced by using condoms and limiting sex to one partner who is not HIV positive; this compares with only 69 percent of women with no formal education. Although knowledge of HIV prevention generally increases with education, there is no clear pattern for knowledge about abstention as a method of prevention.

### 12.1.3 Rejection of Misconceptions about HIV/AIDS

Stigma and discrimination are two of the constraints in the prevention of HIV/AIDS. Stigma and discrimination usually arise from misconceptions about HIV/AIDS. For programme efforts to succeed, therefore, it is important that common misconceptions about HIV/AIDS are corrected. Common misconceptions about AIDS include the idea that HIV-infected people always appear ill and the belief that the virus can be transmitted through mosquito or other insect bites, by sharing food with someone who is infected, or by witchcraft or other supernatural means. Respondents were asked about each of these misconceptions, and the findings are presented in Table 12.3.

Two in three women correctly said that a healthy-looking person can have an HIV infection. The highest rates of misconceptions are for mosquito bites (i.e., 74 percent of women say that HIV cannot be transmitted by mosquito bite) and sharing food with a person who has AIDS (i.e., 83 percent of women correctly report that AIDS cannot be transmitted by sharing food with a person who has AIDS). A woman's level of education and household wealth strongly relate to accurate knowledge about the ways in which HIV can and cannot be transmitted; the level of accurate knowledge about HIV transmission increases with an increase in the level of education and the wealth quintile.

Table 12.3 provides an assessment of the level of comprehensive knowledge of HIV prevention and transmission. Comprehensive knowledge is defined as (1) knowing that consistent use of condoms during sexual intercourse and having just one faithful, HIV-negative partner can reduce the chances of getting HIV, (2) knowing that a healthy-looking person can have HIV, and (3) rejecting the two most common local misconceptions about HIV transmission or prevention: that HIV can be transmitted by mosquito bites and by shared food with a person who has HIV or AIDS. The results show that the percentage of respondents with comprehensive knowledge of AIDS among evermarried women is 42 percent.

## Table 12.3 Comprehensive knowledge about AIDS

Percentage of ever-married women age 15-49 who say that a healthy-looking person can have the AIDS virus and who, in response to prompted questions, correctly reject local misconceptions about AIDS transmission or prevention, and the percentage with a comprehensive knowledge about AIDS, by background characteristics, Maldives 2009

| Background characteristic | Percentage of women who say that: |  |  |  | Percentage who say that a healthylooking person can have the AIDS virus and who reject the two most common local misconceptions ${ }^{1}$ | Percentage with a comprehensive knowledge about AIDS ${ }^{2}$ | Number of evermarried women |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | A healthylooking person can have AIDS | AIDS <br> cannot be transmitted by mosquito bites | AIDS <br> cannot be transmitted by supernatural means | A person cannot become infected by sharing food with a person who has the AIDS virus |  |  |  |
| Age |  |  |  |  |  |  |  |
| 15-24 | 65.3 | 67.2 | 83.4 | 74.7 | 41.8 | 35.0 | 1,387 |
| 15-19 | 69.3 | 54.7 | 70.1 | 62.8 | 33.3 | 21.5 | 119 |
| 20-24 | 64.9 | 68.4 | 84.7 | 75.8 | 42.6 | 36.3 | 1,268 |
| 25-29 | 68.2 | 78.1 | 90.6 | 85.1 | 53.8 | 45.5 | 1,539 |
| 30-39 | 70.5 | 78.9 | 92.3 | 88.3 | 55.8 | 48.0 | 2,471 |
| 40-49 | 63.1 | 67.4 | 85.0 | 81.6 | 42.2 | 33.9 | 1,734 |
| Marital status |  |  |  |  |  |  |  |
| Married | 67.4 | 73.9 | 88.6 | 83.5 | 49.6 | 41.5 | 6,500 |
| Divorced/separated/ widowed | 65.2 | 71.1 | 87.0 | 81.3 | 46.7 | 41.3 | 631 |
| Residence |  |  |  |  |  |  |  |
| Urban | 72.3 | 82.1 | 92.4 | 88.5 | 60.0 | 50.8 | 2,368 |
| Rural | 64.6 | 69.5 | 86.4 | 80.8 | 44.0 | 36.9 | 4,763 |
| Region |  |  |  |  |  |  |  |
| Malé | 72.3 | 82.1 | 92.4 | 88.5 | 60.0 | 50.8 | 2,368 |
| North | 60.3 | 67.9 | 84.2 | 80.2 | 41.0 | 35.1 | 1,067 |
| North Central | 69.2 | 65.1 | 85.4 | 79.1 | 43.9 | 34.7 | 1,038 |
| Central | 69.9 | 72.0 | 86.0 | 82.5 | 49.1 | 42.1 | 615 |
| South Central | 73.0 | 71.3 | 87.3 | 83.1 | 50.7 | 41.9 | 853 |
| South | 55.8 | 72.1 | 88.9 | 80.1 | 39.5 | 34.3 | 1,190 |
| Education |  |  |  |  |  |  |  |
| No formal education | 61.1 | 63.4 | 82.2 | 78.0 | 37.8 | 29.3 | 1,668 |
| Primary | 65.0 | 74.4 | 89.1 | 83.4 | 49.6 | 42.1 | 2,464 |
| Secondary | 70.9 | 76.9 | 90.4 | 85.1 | 53.0 | 45.6 | 2,584 |
| More than secondary | 82.3 | 90.9 | 97.1 | 93.3 | 72.6 | 61.6 | 333 |
| Wealth quintile |  |  |  |  |  |  |  |
| Lowest | 62.8 | 64.7 | 82.8 | 77.7 | 39.3 | 32.4 | 1,300 |
| Second | 65.0 | 67.9 | 86.4 | 79.4 | 43.7 | 36.9 | 1,396 |
| Middle | 66.0 | 72.6 | 88.7 | 82.6 | 47.3 | 39.3 | 1,488 |
| Fourth | 68.3 | 79.1 | 90.5 | 85.7 | 54.2 | 45.4 | 1,447 |
| Highest | 73.1 | 82.7 | 92.9 | 90.4 | 60.6 | 52.1 | 1,499 |
| Total | 67.2 | 73.7 | 88.4 | 83.3 | 49.3 | 41.5 | 7,131 |

Note: Total includes 81 ever-married women with information missing on level of formal education
${ }^{1}$ Two most common local misconceptions: people can get AIDS from mosquito bites and sharing food with a person who has AIDS.
${ }^{2}$ Comprehensive knowledge means knowing that consistent use of a condom during sexual intercourse and having just one uninfected faithful partner can reduce the chance of getting the AIDS virus, knowing that a healthy-looking person can have the AIDS virus, and rejecting the two most common local misconceptions about AIDS transmission or prevention.

### 12.2 Knowledge of Prevention of Mother-to-Child Transmission of Hiv

Increasing the level of general knowledge of transmission of HIV from mother to child and reducing the risk of transmission using antiretroviral drugs is critical to reducing mother-to-child transmission of HIV (MTCT). To assess MTCT knowledge, respondents were asked if the virus that causes AIDS can be transmitted from a mother to a child through breastfeeding and whether a mother with HIV can reduce the risk of transmission to the baby by taking certain drugs during pregnancy.

To assess the extent of awareness of the ways in which AIDS can be transmitted from a mother to her child, MDHS respondents were asked if the virus that causes AIDS can be transmitted during pregnancy, at delivery, or when breastfeeding. As Table 12.4 shows, 85 percent of evermarried women age 15-49 know the virus can be transmitted from mother to child during pregnancy,
and 70 percent of the women are aware the virus can be transmitted during delivery. Women are less knowledgeable about HIV transmission by breastfeeding (64 percent).

Differentials in the level of awareness of the modes of mother-to-child transmission are also shown in Table 12.4. Knowledge of pregnancy, delivery, and breastfeeding as potential modes of transmission for the HIV virus is generally higher among older women than among their younger counterparts. Awareness of HIV transmission during pregnancy and during delivery by place of residence varies within a small range. However, knowledge that HIV can be transmitted by breastfeeding varies widely by region, ranging from 58 percent in Malé to 70 percent in North Central. Although the pattern is not totally uniform, the level of awareness of pregnancy as a mode of mother-to-child transmission increases with a woman's educational attainment and her wealth quintile. Knowledge of breastfeeding as a means of HIV transmission, on the other hand, decreases as the woman's education and wealth increase.

| Percentage of ever-married women who know that HIV can be transmitted from mother to child during pregnancy, during delivery, and by breastfeeding, by background characteristics, Maldives 2009 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Background characteristic | Percentage who know that HIV can be transmitted: |  |  | Number of ever-married women |
|  | During pregnancy | During delivery | By breastfeeding |  |
| Age |  |  |  |  |
| 15-24 | 81.6 | 63.4 | 62.4 | 1,387 |
| 15-19 | 76.6 | 57.6 | 65.9 | 119 |
| 20-24 | 82.1 | 64.0 | 62.1 | 1,268 |
| 25-29 | 84.1 | 65.8 | 58.6 | 1,539 |
| 30-39 | 89.2 | 73.5 | 64.1 | 2,471 |
| 40-49 | 84.2 | 73.7 | 68.3 | 1,734 |
| Marital status |  |  |  |  |
| Married | 85.7 | 70.1 | 63.7 | 6,500 |
| Divorced/separated/widowed | 82.6 | 68.6 | 63.1 | 631 |
| Currently pregnant |  |  |  |  |
| Pregnant | 84.6 | 66.7 | 65.8 | 522 |
| Not pregnant or not sure | 85.5 | 70.2 | 63.4 | 6,609 |
| Residence |  |  |  |  |
| Urban | 86.5 | 70.5 | 58.3 | 2,368 |
| Rural | 84.9 | 69.7 | 66.2 | 4,763 |
| Region |  |  |  |  |
| Malé | 86.5 | 70.5 | 58.3 | 2,368 |
| North | 83.3 | 66.8 | 62.5 | 1,067 |
| North Central | 87.8 | 70.8 | 69.8 | 1,038 |
| Central | 82.5 | 70.6 | 67.1 | 615 |
| South Central | 85.6 | 69.7 | 66.3 | 853 |
| South | 84.5 | 70.9 | 66.0 | 1,190 |
| Education |  |  |  |  |
| No formal education | 83.2 | 71.9 | 68.4 | 1,668 |
| Primary | 85.1 | 70.1 | 63.6 | 2,464 |
| Secondary | 86.1 | 67.2 | 61.0 | 2,584 |
| More than secondary | 91.3 | 77.7 | 58.4 | 333 |
| Wealth quintile |  |  |  |  |
| Lowest | 84.1 | 71.0 | 68.2 | 1,300 |
| Second | 84.2 | 69.3 | 65.8 | 1,396 |
| Middle | 85.1 | 68.5 | 67.0 | 1,488 |
| Fourth | 85.6 | 69.8 | 59.5 | 1,447 |
| Highest | 87.6 | 71.2 | 58.1 | 1,499 |
| Total | 85.4 | 70.0 | 63.6 | 7,131 |

Note: Total includes 81 ever-married women with information missing on level of formal education

### 12.3 Attitudes towards People Living with AIDS

Widespread stigma and discrimination in a population can adversely affect both people's willingness to be tested and their adherence to antiretroviral therapy. Reduction of stigma and discrimination in a population is, thus, an important indicator of the success of programmes targeting HIV and AIDS prevention and control.

To assess the level of stigma, survey respondents who had heard of AIDS were asked if they would be willing to care for a relative sick with AIDS in their own households, if they would be willing to buy fresh vegetables from a market vendor who had HIV, if they thought a female or male teacher who has HIV but is not sick should be allowed to continue teaching, and if they would want to keep a family member's HIV status secret. The results shown in Table 12.5 indicate that most women were willing to care for a relative with AIDS at home ( 86 percent), buy fresh vegetables from a shopkeeper with AIDS (79 percent), allow a female teacher with AIDS to keep teaching (61 percent), or allow a male teacher with AIDS to keep teaching ( 59 percent). Three in four women say that they would be open about having an HIV-positive family member. Thirty-seven percent of women express accepting attitudes on all four indicators, indicating that some degree of stigma is associated with HIV/AIDS within Maldivian society.

| Among ever-married women age 15-49 who have heard of AIDS, percentage expressing specific accepting attitudes toward people with AIDS, by background characteristics, Maldives 2009 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Percentage of women who: |  |  |  |  |  |  |
| Background characteristic | Are willing to care for a family member with the AIDS virus in the respondent's home | Would buy fresh vegetables from shopkeeper who has the AIDS virus | Say that a female teacher with the AIDS virus and is not sick should be allowed to continue teaching | Say that a male teacher with the AIDS virus and 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 five indicators | Number of evermarried women who have heard of AIDS |
| Age |  |  |  |  |  |  |  |
| 15-24 | 85.8 | 71.6 | 53.9 | 52.1 | 80.1 | 32.7 | 1,341 |
| 15-19 | 83.9 | 68.2 | 43.8 | 42.1 | 88.9 | 27.4 | 117 |
| 20-24 | 85.9 | 72.0 | 54.9 | 53.1 | 79.3 | 33.2 | 1,224 |
| 25-29 | 86.8 | 81.0 | 60.1 | 58.6 | 72.8 | 35.5 | 1,503 |
| 30-39 | 84.9 | 81.7 | 65.7 | 62.3 | 73.5 | 37.3 | 2,410 |
| 40-49 | 86.2 | 78.1 | 62.3 | 59.1 | 79.3 | 39.8 | 1,654 |
| Marital status |  |  |  |  |  |  |  |
| Married | 85.6 | 78.5 | 61.4 | 58.9 | 75.9 | 36.6 | 6,307 |
| Divorced/separated/ widowed | 87.5 | 80.7 | 61.0 | 57.5 | 77.7 | 37.2 | 601 |
| Residence |  |  |  |  |  |  |  |
| Urban | 84.0 | 82.6 | 62.0 | 59.8 | 66.8 | 35.3 | 2,309 |
| Rural | 86.7 | 76.7 | 61.1 | 58.2 | 80.7 | 37.3 | 4,599 |
| Region |  |  |  |  |  |  |  |
| Malé | 84.0 | 82.6 | 62.0 | 59.8 | 66.8 | 35.3 | 2,309 |
| North | 84.9 | 76.3 | 62.1 | 59.7 | 79.3 | 36.2 | 1,013 |
| North Central | 84.7 | 74.4 | 58.8 | 56.0 | 77.8 | 33.1 | 1,015 |
| Central | 88.2 | 77.6 | 58.5 | 56.2 | 78.9 | 36.8 | 601 |
| South Central | 92.1 | 79.5 | 65.3 | 62.4 | 80.3 | 42.0 | 827 |
| South | 85.1 | 76.8 | 60.4 | 56.9 | 85.6 | 38.7 | 1,142 |
| Education |  |  |  |  |  |  |  |
| No formal education | 86.1 | 75.0 | 61.3 | 58.6 | 82.1 | 38.8 | 1,571 |
| Primary | 85.8 | 79.4 | 62.7 | 59.2 | 79.5 | 38.6 | 2,377 |
| Secondary | 84.9 | 79.0 | 58.9 | 57.0 | 72.5 | 34.4 | 2,546 |
| More than secondary | 89.4 | 87.6 | 67.3 | 65.7 | 51.3 | 28.7 | 333 |
| Wealth quintile |  |  |  |  |  |  |  |
| Lowest | 85.6 | 74.2 | 59.8 | 57.5 | 81.7 | 36.2 | 1,239 |
| Second | 86.6 | 75.9 | 60.3 | 57.1 | 82.7 | 37.8 | 1,346 |
| Middle | 86.9 | 79.5 | 63.4 | 60.5 | 79.8 | 39.4 | 1,444 |
| Fourth | 85.0 | 79.1 | 59.0 | 56.7 | 72.8 | 33.5 | 1,404 |
| Highest | 84.8 | 84.0 | 64.0 | 61.6 | 64.5 | 36.1 | 1,474 |
| Total | 85.8 | 78.7 | 61.4 | 58.8 | 76.0 | 36.6 | 6,908 |

### 12.4 Knowledge of a Source for HiV Testing

Another important aspect of AIDS awareness assessed in the 2009 MDHS is the level of knowledge of a place where HIV testing is available. Table 12.6 shows that 82 percent of women age 15-49 know where to go for an HIV test. Knowledge of a source where HIV testing is available is highest among currently married women, women living in urban areas, and Malé residents. Knowledge of a place for HIV testing is directly related to the woman's level of education and wealth. For example, 76 percent of women in the lowest wealth quintile know where to obtain HIV testing compared with 90 percent of women in the highest wealth quintile.

### 12.5 Self-Reporting of Sexually Transmitted Infections

In the 2009 MDHS, respondents who had ever had sex were asked if they had had a disease they had contracted through sexual contact in the previous 12 months or if they had had either of two symptoms associated with sexually transmitted infections (STIs)a bad-smelling, abnormal discharge from the vagina or a genital sore or ulcer. Table 12.7 shows the self-reported prevalence of STIs and STI symptoms among evermarried women age 15-49. One percent of women who have ever been sexually active had an STI and/or an STI symptom in the 12 months preceding the survey, 7 percent reported having a bad-smelling genital discharge, and 12 percent had a genital sore or ulcer. The prevalence of an STI or STI symptom is 15 percent. The prevalence of a self-reported STI or STI symptom is higher among women under age 25 compared to older women and among married women compared with divorced/separated/widowed women. Across regions, the prevalence of STI and/or symptoms of STI ranges from 13 percent in Malé, North, and South regions to 19

| Percentage of ever-married women age 15-49 who know where to get an HIV test, according to background characteristics, Maldives 2009 |  |  |
| :---: | :---: | :---: |
| Background characteristic | Percentage who know where to get an HIV test ${ }^{1}$ | Number of ever-married women |
| Age |  |  |
| 15-24 | 83.2 | 1,387 |
| 15-19 | 77.6 | 119 |
| 20-24 | 83.7 | 1,268 |
| 25-29 | 85.1 | 1,539 |
| 30-39 | 83.9 | 2,471 |
| 40-49 | 76.6 | 1,734 |
| Marital status |  |  |
| Married | 82.5 | 6,500 |
| Divorced/separated/ widowed | 79.9 | 631 |
| Residence |  |  |
| Urban | 88.1 | 2,368 |
| Rural | 79.4 | 4,763 |
| Region |  |  |
| Malé | 88.1 | 2,368 |
| North | 78.1 | 1,067 |
| North Central | 79.8 | 1,038 |
| Central | 74.6 | 615 |
| South Central | 78.0 | 853 |
| South | 83.6 | 1,190 |
| Education |  |  |
| No formal education | 73.9 | 1,668 |
| Primary | 79.2 | 2,464 |
| Secondary | 88.7 | 2,584 |
| More than secondary | 94.3 | 333 |
| Wealth quintile |  |  |
| Lowest | 75.7 | 1,300 |
| Second | 78.2 | 1,396 |
| Middle | 80.7 | 1,488 |
| Fourth | 85.9 | 1,447 |
| Highest | 89.8 | 1,499 |
| Total | 82.3 | 7,131 |

Note: Total includes 81 ever-married women with information missing on level of formal education percent in North Central and Central regions.

Among women who report having an STI or symptoms of an STI, more than four in five sought help from a clinic, hospital, or private doctor/other health professional. About one in six did not seek advice or treatment (data not shown).

Table 12.7 Self-reported prevalence of sexually-transmitted infections (STIs) and STI symptoms

Among ever-married 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, Maldives 2009

| Background characteristic | Percentage of ever-married women who reported having in the past 12 months: |  |  |  | Number of ever-married women who ever had sexual intercourse |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | STI | Bad smelling/ abnormal genital discharge | Genital sore/ulcer | STI/genital discharge/ sore or ulcer |  |
| Age |  |  |  |  |  |
| 15-24 | 2.0 | 10.3 | 15.3 | 20.3 | 1,387 |
| 15-19 | 0.0 | 7.3 | 16.8 | 21.6 | 119 |
| 20-24 | 2.2 | 10.6 | 15.1 | 20.2 | 1,268 |
| 25-29 | 1.4 | 9.2 | 13.7 | 16.8 | 1,536 |
| 30-39 | 1.2 | 6.3 | 10.8 | 14.2 | 2,471 |
| 40-49 | 0.8 | 3.6 | 7.6 | 9.1 | 1,734 |
| Marital status |  |  |  |  |  |
| Married | 1.3 | 7.3 | 11.9 | 15.1 | 6,500 |
| Divorced/separated/ widowed | 0.9 | 4.1 | 7.3 | 10.3 | 628 |
| Residence |  |  |  |  |  |
| Urban | 1.4 | 7.5 | 10.7 | 13.2 | 2,365 |
| Rural | 1.2 | 6.9 | 11.9 | 15.5 | 4,763 |
| Region |  |  |  |  |  |
| Malé | 1.4 | 7.5 | 10.7 | 13.2 | 2,365 |
| North | 0.5 | 5.4 | 10.3 | 12.9 | 1,067 |
| North Central | 1.2 | 7.4 | 16.0 | 19.0 | 1,038 |
| Central | 1.8 | 10.2 | 14.3 | 19.4 | 615 |
| South Central | 1.3 | 6.4 | 12.4 | 15.7 | 853 |
| South | 1.6 | 6.3 | 8.2 | 12.6 | 1,190 |
| Education |  |  |  |  |  |
| No formal education | 1.0 | 5.1 | 10.0 | 12.3 | 1,668 |
| Primary | 1.2 | 6.9 | 11.7 | 14.7 | 2,464 |
| Secondary | 1.4 | 8.3 | 12.6 | 16.5 | 2,581 |
| More than secondary | 2.2 | 7.2 | 9.8 | 12.5 | 333 |
| Total | 1.3 | 7.1 | 11.5 | 14.7 | 7,128 |

Note: Total includes 81 ever-married women with information missing on level of formal education

### 12.6 Prevalence of Medical Injections

Non-sterile 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 2009 MDHS were asked if they had received at least one injection in the past 12 months, and if so, the number of injections altogether. The results indicate that more than 34 percent of women received a medical injection in the past 12 months. The average number of injections received per person during this period (including people who received no injections at all) is 4.7 injections per ever-married woman age 15-49. Women age 15-24 have the highest rates of injections.

Women who received injections were further asked if the syringe and needle were taken from a new, previously unopened package. Table 12.8 shows that more than 90 percent of women who received injections in the previous 12 months were administered injections with a syringe and needle taken from a new, unopened package. This is observed across all subgroups of women.

| Table 12.8 Prevalence of medical injections |
| :--- | :--- | :--- | :--- | :--- |
| Percentage of ever-married women age 15-49 who received at least one medical injection in the last 12 |
| months, the average number of medical injections per person in the last 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, Maldives 2009 |

Note: Total includes 81 ever-married women with information missing on level of formal education. Medical injections are those given by a doctor, nurse, pharmacist, dentist, or other health worker

Respondents who have had an injection in the past 12 months were asked where they obtained their last injection. The information is summarized in the Figure 12.1. Overall, 80 percent received the last injection in a public facility; 27 percent in a health centre, 24 percent in Indhira Gandhi Memorial Hospital, 14 percent in a regional hospital, and 13 percent in an atoll hospital.

Figure 12.1 Source of Last Medical Injection


Kaye: Figure 12.1 please 1) combine Government health post and Community/family health worker/other public and call it "Other government facility/provider" $=2 \%$, and 2 ) combine private doctor, dental office, other private medical and call it "Other private medical facility/provider" $=3 \%$.

Figure 12.2 confirms the findings shown in Table 12.8. Safe injection is generally practiced in public facilities. Overall, 94 percent of the women report that their last injection was administered with a new syringe and needle taken from an unopened package at a public facility. The practice is slightly less stringent in the private sector ( 90 percent).

Figure 12.2 Safe Injection


### 12.7 HIV/AIDS Knowledge and Sexual Behaviour among Youth

This section addresses HIV/AIDS-related knowledge and sexual behaviour among youth age 15-24. Special attention is paid to this group because it accounts for half of all new HIV infections worldwide (Ross et al., 2006). In addition to knowledge of HIV transmission, data are presented on age at first sex, condom use, age differences between sexual partners, sex related to alcohol use, and voluntary counselling and testing for HIV.

### 12.7.1 HIV/AIDS-Related Knowledge among Young Adults

Young respondents were asked the same set of questions on facts and beliefs about HIV transmission as other respondents. Information on the overall level of knowledge of major methods of avoiding HIV exposure and the rejection of major misconceptions is shown in Tables 12.2 and 12.3. Table 12.9 shows the level of the composite indicator, "comprehensive knowledge," among young people by background characteristics. In general, the results indicate 35 percent of ever-married women age 15-24 have a comprehensive knowledge of AIDS. The knowledge increases with the woman's age. Women living in urban areas and in Malé are more knowledgeable than women living elsewhere. Comprehensive knowledge of AIDS positively relates to the woman's education; increasing from 20 percent for women with primary education to 63 percent for women with more than secondary education.

| Table 12.9 Comprehensive knowledge about AIDS and of a source of condoms among youth |  |  |  |
| :---: | :---: | :---: | :---: |
| Percentage of ever-married women age 15-24 with comprehensive knowledge about AIDS and percentage with knowledge of a source of condoms, by background characteristics, Maldives 2009 |  |  |  |
| Background characteristic | Percentage with comprehensive knowledge of AIDS ${ }^{1}$ | Percentage who know a condom source ${ }^{2}$ | Number of ever-married women |
| Age |  |  |  |
| 15-19 | 21.5 | 78.0 | 119 |
| 15-17 | * | * | 3 |
| 18-19 | 21.6 | 77.4 | 116 |
| 20-24 | 36.3 | 89.5 | 1,268 |
| 20-22 | 33.4 | 88.1 | 639 |
| 23-24 | 39.2 | 91.0 | 628 |
| Residence |  |  |  |
| Urban | 43.4 | 90.0 | 384 |
| Rural | 31.8 | 88.0 | 1,003 |
| Region |  |  |  |
| Malé | 43.4 | 90.0 | 384 |
| North | 32.9 | 91.6 | 226 |
| North Central | 31.2 | 85.8 | 212 |
| Central | 33.1 | 84.5 | 150 |
| South Central | 33.1 | 90.0 | 189 |
| South | 29.2 | 86.9 | 226 |
| Education |  |  |  |
| No formal education | * | * | 10 |
| Primary | 19.5 | 77.6 | 218 |
| Secondary | 36.4 | 90.5 | 1,074 |
| More than secondary | 62.9 | 93.2 | 69 |
| Wealth quintile |  |  |  |
| Lowest | 23.4 | 87.6 | 253 |
| Second | 32.8 | 85.2 | 291 |
| Middle | 34.1 | 90.4 | 321 |
| Fourth | 38.0 | 88.6 | 286 |
| Highest | 47.8 | 90.9 | 235 |
| Total | 35.0 | 88.5 | 1,387 |

Note: Total includes 16 ever-married women with information missing on level of formal education. An asterisk indicates that an estimate is based on fewer than 25 cases and has been suppressed.
${ }^{1}$ Comprehensive knowledge means knowing that consistent use of condom during sexual intercourse and having just one uninfected faithful partner can reduce the chance of getting the AIDS virus, knowing that a healthy-looking person can have the AIDS virus, and rejecting the two most common local misconceptions about AIDS transmission or prevention. The components of comprehensive knowledge are presented in Tables 12.2 and 12.3.
${ }^{2}$ The following responses are not considered sources for condoms: friends, family members, and home

### 12.7.2 Knowledge of Condom Sources among Young Adults

Condom use among young adults plays an important role in the prevention of transmission of HIV and other sexually transmitted infections as well as prevention of unwanted pregnancies. Knowledge of a source of condoms helps young adults to obtain and use condoms. Table 12.9 shows that the majority of women ( 89 percent) know of a place to obtain a condom. This percentage does not vary much across subgroups of women and generally follows the same pattern as differentials in comprehensive knowledge of AIDS.

### 12.7.3 Trends in Age at First Sex

Age at first sexual intercourse marks the time at which most individuals risk being exposed to HIV. Table 12.10 shows the proportion of ever-married women in the 15-24 age cohort who had sex before age 15 and before age 18 . Less than 1 percent of young women had sex by age 15 , while 6 percent reported having sex by age 18. Most young women in Maldives, therefore, had their first sexual intercourse after age 18 . The proportion of women who had sex before age 18 is high among women who live in urban areas and in Malé ( 8 percent) and low among women in North Central (3 percent). The rate of young women having sexual intercourse by age 18 decreases rapidly by their degree of education, from 14 percent among women with primary education to 5 percent among women with secondary education.

| Table 12.10 Age at first sexual intercourse among youth |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Percentage of ever-married women age 15-24 who had sexual intercourse before age 15 and percentage of ever-married women age 18-24 who had sexual intercourse before age 18, by background characteristics, Maldives 2009 |  |  |  |  |
| Background characteristic | Percentage who had sexual intercourse before age 15 | Number of ever-married women age 15-24 | Percentage who had sexual intercourse before age 18 | Number of ever-married women age 18-24 |
| Age |  |  |  |  |
| 15-19 | 1.6 | 119 | na | na |
| 15-17 | * | 3 | na | na |
| 18-19 | 1.6 | 116 | 14.0 | 116 |
| 20-24 | 0.5 | 1,268 | 5.3 | 1,268 |
| 20-22 | 0.4 | 639 | 5.0 | 639 |
| 23-24 | 0.6 | 628 | 5.6 | 628 |
| Knows condom source ${ }^{1}$ |  |  |  |  |
| Yes | 0.5 | 1,228 | 5.4 | 1,225 |
| No | 1.2 | 159 | 10.9 | 159 |
| Residence |  |  |  |  |
| Urban | 0.5 | 384 | 8.4 | 382 |
| Rural | 0.7 | 1,003 | 5.2 | 1,002 |
| Region |  |  |  |  |
| Malé | 0.5 | 384 | 8.4 | 382 |
| North | 1.1 | 226 | 4.3 | 226 |
| North Central | 0.7 | 212 | 2.7 | 212 |
| Central | 0.4 | 150 | 7.4 | 149 |
| South Central | 0.4 | 189 | 6.6 | 189 |
| South | 0.6 | 226 | 5.5 | 226 |
| Education |  |  |  |  |
| No formal education | * | 10 | * | 10 |
| Primary | 2.5 | 218 | 14.2 | 218 |
| Secondary | 0.3 | 1,074 | 4.5 | 1,071 |
| More than secondary | 0.0 | 69 | 0.0 | 69 |
| Wealth quintile |  |  |  |  |
| Lowest | 0.5 | 253 | 6.6 | 252 |
| Second | 1.4 | 291 | 6.5 | 291 |
| Middle | 1.0 | 321 | 5.5 | 321 |
| Fourth | 0.0 | 286 | 6.9 | 286 |
| Highest | 0.0 | 235 | 4.5 | 233 |
| Total | 0.6 | 1,387 | 6.0 | 1,384 |
| Note: Total includes 16 ever-married women with information missing on level of formal education. An asterisk indicates that an estimate is based on fewer than 25 cases and has been suppressed. <br> na $=$ Not available <br> ${ }^{1}$ The following responses are not considered a source for condoms: friends, family members and home |  |  |  |  |

# WOMEN'S EMPOWERMENT AND DEMOGRAPHIC AND HEALTH OUTCOMES 

The 2009 MDHS Ever-Married Women's Questionnaire collected data on the general background characteristics (e.g., age, education, wealth quintile, and employment status) of female respondents and also data more specific to women's empowerment, such as receipt of cash earnings, the magnitude of a woman's earnings relative to those of her husband/partner, and control over the use of her own earnings and those of her husband/partner.

This questionnaire also collected data on a woman's participation in household decisionmaking, on the circumstances under which she feels that a woman is justified in refusing to have sexual intercourse with her husband, and her attitude towards wife beating. For this report, three separate indices of empowerment are developed based on the number of household decisions in which the respondent participates, her opinion on the number of circumstances for which a woman is justified in refusing to have sexual intercourse with her husband/partner, and her opinion on the number of reasons that justify wife beating. The ranking of women on these three indices is then related to selected demographic and health outcomes, including contraceptive use; ideal family size and unmet need for contraception; the receipt of health care services during pregnancy, childbirth, and the postnatal period; and survivorship of children.

### 13.1 Employment and Form Of Earnings

Like education, employment can also be a source of empowerment for both women and men. It may be particularly empowering for women if it puts them in control of income. Currently married women were asked whether they were employed at the time of the survey and, if not, whether they were employed in the 12 months that preceded the survey. Table 13.1 shows that 46 percent of currently married women in Maldives are currently employed and the majority ( 96 percent) are paid in cash. There are small variations in the level of employment across age groups. Older women are more likely than younger women to receive cash payment, whereas younger women are more likely to be unpaid.

Table 13.1 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 and men employed in the past 12 months by type of earnings, according to age, Maldives 2009

| Age | Currently married women: |  | Percent distribution of currently married women employed in the past 12 months, by type of earnings |  |  |  |  | Total | Number of women |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Percentage employed | Number of women | Cash only | Cash and in-kind | In-kind only | Not paid | Missing |  |  |
| 15-19 | 43.6 | 111 | 93.5 | 0.0 | 0.0 | 6.5 | 0.0 | 100.0 | 48 |
| 20-24 | 47.6 | 1,188 | 94.9 | 0.1 | 0.1 | 4.5 | 0.3 | 100.0 | 566 |
| 25-29 | 44.7 | 1,446 | 95.8 | 0.9 | 0.3 | 2.4 | 0.6 | 100.0 | 646 |
| 30-34 | 45.7 | 1,193 | 97.0 | 0.6 | 0.0 | 1.8 | 0.6 | 100.0 | 545 |
| 35-39 | 48.4 | 1,065 | 96.6 | 1.6 | 0.1 | 1.7 | 0.0 | 100.0 | 515 |
| 40-44 | 47.4 | 884 | 97.2 | 0.3 | 0.2 | 2.3 | 0.0 | 100.0 | 419 |
| 45-49 | 43.1 | 612 | 98.6 | 0.0 | 0.0 | 1.3 | 0.2 | 100.0 | 264 |
| Total | 46.2 | 6,500 | 96.4 | 0.7 | 0.1 | 2.5 | 0.3 | 100.0 | 3,004 |

### 13.1.1 Women's Control over Their Own Earnings and Relative Magnitude of Women's Earnings

Currently married and employed women who earn cash for their work were asked who the main decision-maker is with regard to the use of their earnings. In addition, they were asked the
relative magnitude of their earnings compared with their husband/partner's earnings. This information may provide some insight into women's empowerment in the family and the extent of their control over decision-making in the household. It is expected that employment and earnings are more likely to empower women if women themselves control their earnings and perceive their earnings as significant relative to those of a husband/partner.

Table 13.2 shows, for currently married women who earned cash in the past 12 months, their control over their own earnings and their perception of the magnitude of their earnings relative to those of a husband/partner. Two in three women report that they and their husband jointly decide on how their earnings are to be spent, and 29 percent report that they are the main decision-maker in the allocation of their cash income. Only 4 percent of women report that their husband makes the decision on how earnings are to be used.

Table 13.2 Control over women's cash earnings and relative magnitude of women's earnings: Women
Percent distribution of currently married women age 15-49 who received cash earnings for employment in the 12 months preceding the survey by person who decides how wife's cash earnings are used and by whether she earned more or less than her husband, according to background characteristics, Maldives 2009

| Background characteristic | Person who decides how the wife's cash earnings are used: |  |  |  |  | Total | Women's cash earnings compared with husband's cash earnings: |  |  |  |  | Total | Number <br> of women |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Mainly wife | Wife and husband jointly | Mainly husband | Other | Missing |  | More | Less | About the same | Husband has no earnings | Don't know/ Missing |  |  |
| Age |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 15-19 | 25.0 | 62.7 | 8.8 | 3.5 | 0.0 | 100.0 | 6.9 | 73.7 | 14.1 | 2.9 | 2.4 | 100.0 | 45 |
| 20-24 | 20.6 | 73.0 | 3.1 | 3.3 | 0.0 | 100.0 | 13.6 | 64.0 | 16.5 | 3.6 | 2.3 | 100.0 | 538 |
| 25-29 | 25.1 | 71.2 | 2.3 | 1.3 | 0.1 | 100.0 | 15.9 | 65.1 | 15.4 | 1.4 | 2.3 | 100.0 | 625 |
| 30-34 | 31.2 | 64.3 | 3.7 | 0.8 | 0.1 | 100.0 | 13.8 | 70.1 | 12.6 | 1.2 | 2.3 | 100.0 | 533 |
| 35-39 | 33.2 | 62.5 | 3.5 | 0.8 | 0.0 | 100.0 | 15.6 | 74.0 | 7.4 | 1.9 | 1.1 | 100.0 | 506 |
| 40-44 | 36.9 | 58.6 | 4.2 | 0.3 | 0.0 | 100.0 | 13.2 | 72.5 | 9.6 | 3.3 | 1.3 | 100.0 | 409 |
| 45-49 | 25.7 | 67.9 | 5.7 | 0.0 | 0.7 | 100.0 | 13.7 | 71.3 | 9.5 | 2.8 | 2.7 | 100.0 | 260 |
| Number of living children |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 0 | 23.8 | 69.3 | 3.3 | 3.6 | 0.0 | 100.0 | 14.7 | 62.8 | 16.2 | 3.7 | 2.6 | 100.0 | 554 |
| 1-2 | 28.9 | 67.0 | 3.0 | 1.0 | 0.1 | 100.0 | 15.1 | 66.1 | 14.4 | 2.2 | 2.2 | 100.0 | 1,270 |
| 3-4 | 29.6 | 66.9 | 3.1 | 0.4 | 0.0 | 100.0 | 14.3 | 75.1 | 8.4 | 0.8 | 1.3 | 100.0 | 598 |
| 5+ | 31.2 | 62.1 | 5.9 | 0.4 | 0.4 | 100.0 | 11.9 | 76.5 | 7.5 | 2.7 | 1.4 | 100.0 | 492 |
| Residence |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Urban | 22.8 | 73.4 | 3.4 | 0.2 | 0.2 | 100.0 | 10.9 | 67.3 | 16.9 | 2.2 | 2.8 | 100.0 | 931 |
| Rural | 31.1 | 63.4 | 3.7 | 1.8 | 0.1 | 100.0 | 15.9 | 69.9 | 10.2 | 2.3 | 1.6 | 100.0 | 1,985 |
| Region |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Malé | 22.8 | 73.4 | 3.4 | 0.2 | 0.2 | 100.0 | 10.9 | 67.3 | 16.9 | 2.2 | 2.8 | 100.0 | 931 |
| North | 34.6 | 59.6 | 4.8 | 1.0 | 0.0 | 100.0 | 9.5 | 80.1 | 8.6 | 1.1 | 0.7 | 100.0 | 476 |
| North Central | 29.1 | 65.4 | 3.8 | 1.6 | 0.1 | 100.0 | 10.4 | 75.2 | 8.4 | 3.7 | 2.2 | 100.0 | 471 |
| Central | 20.9 | 72.4 | 4.8 | 1.9 | 0.0 | 100.0 | 16.4 | 69.3 | 10.6 | 2.6 | 1.1 | 100.0 | 243 |
| South Central | 28.2 | 66.6 | 2.4 | 2.7 | 0.2 | 100.0 | 30.5 | 57.8 | 10.0 | 0.9 | 0.8 | 100.0 | 402 |
| South | 38.5 | 56.7 | 2.7 | 2.0 | 0.0 | 100.0 | 15.2 | 64.2 | 14.4 | 3.3 | 3.0 | 100.0 | 393 |
| Education |  |  |  |  |  |  |  |  |  |  |  |  |  |
| No formal education | 30.2 | 63.8 | 5.5 | 0.3 | 0.3 | 100.0 | 11.9 | 76.7 | 7.5 | 2.6 | 1.4 | 100.0 | 667 |
| Primary | 35.9 | 60.2 | 2.3 | 1.6 | 0.0 | 100.0 | 12.4 | 76.2 | 7.4 | 2.2 | 1.7 | 100.0 | 826 |
| Secondary | 25.7 | 69.2 | 3.4 | 1.7 | 0.1 | 100.0 | 15.1 | 64.7 | 15.4 | 2.4 | 2.4 | 100.0 | 1,150 |
| More than secondary | 10.6 | 84.3 | 4.0 | 1.1 | 0.0 | 100.0 | 22.0 | 44.9 | 29.5 | 1.2 | 2.3 | 100.0 | 221 |
| Wealth quintile |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Lowest | 32.4 | 62.2 | 3.9 | 1.5 | 0.0 | 100.0 | 10.7 | 77.8 | 6.8 | 2.8 | 1.9 | 100.0 | 540 |
| Second | 30.7 | 63.2 | 4.0 | 1.9 | 0.2 | 100.0 | 18.8 | 69.2 | 9.1 | 1.7 | 1.3 | 100.0 | 559 |
| Middle | 32.8 | 61.5 | 3.5 | 2.1 | 0.0 | 100.0 | 15.5 | 67.2 | 13.1 | 2.5 | 1.7 | 100.0 | 601 |
| Fourth | 24.9 | 70.5 | 3.6 | 1.0 | 0.0 | 100.0 | 16.7 | 64.3 | 16.0 | 2.1 | 0.9 | 100.0 | 555 |
| Highest | 22.4 | 74.3 | 3.0 | 0.0 | 0.3 | 100.0 | 10.5 | 67.6 | 15.9 | 2.3 | 3.7 | 100.0 | 660 |
| Total | 28.5 | 66.6 | 3.6 | 1.3 | 0.1 | 100.0 | 14.3 | 69.1 | 12.4 | 2.3 | 2.0 | 100.0 | 2,915 |

Note: Total includes 52 women with information missing on level of formal education

Table 13.2 also shows that the majority of women in all subgroups report that they decide jointly with their husbands how the cash earnings they receive for the work they do will be used. The proportion reporting that decisions about how a woman's earnings are used are made jointly with the husband is highest among women with more than secondary education (84 percent). Women from the

South region are most likely to report that they themselves mainly control how they will use the cash they earn ( 39 percent), Women age 15-19 are most likely to report that the husband mainly decides how the woman's cash income will be used ( 9 percent).

With regard to the magnitude of woman's earnings, Table 13.2 shows that 69 percent of women earn less than their husband, 12 percent earn about the same as their husband, and 14 percent earn more than their husband. Women are most likely to earn about the same or more than their husband if they live in the South Central region (41 percent) or have more than a secondary education (51 percent).

### 13.1.2 Control over Husband's Earnings

Table 13.3 looks at control over men's cash earnings from the perspective of the woman. Among married women whose husbands earned cash, 77 percent report that they and their husbands decide jointly how the husband's earnings are to be used, 15 percent report that mainly their husbands decide how their cash earnings are to be used, and 8 percent report that mainly they make the decision.

| Table 13.3 Control over men's cash earnings |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percent distributions of currently married women 15-49 whose husbands receive cash earnings, by person who decides how men's cash earnings are used, according to background characteristics, Maldives 2009 |  |  |  |  |  |  |  |
| Background characteristic | Mainly wife | Husband and wife jointly | Mainly husband | Other | Missing | Total | Number |
| Age |  |  |  |  |  |  |  |
| 15-19 | (0.0) | (72.4) | (27.6) | (0.0) | (0.0) | 100.0 | 44 |
| 20-24 | 4.6 | 82.3 | 12.9 | 0.3 | 0.0 | 100.0 | 518 |
| 25-29 | 4.7 | 83.1 | 11.5 | 0.4 | 0.3 | 100.0 | 612 |
| 30-34 | 5.2 | 76.9 | 17.8 | 0.1 | 0.0 | 100.0 | 525 |
| 35-39 | 9.8 | 74.4 | 15.2 | 0.6 | 0.0 | 100.0 | 497 |
| 40-44 | 13.6 | 69.4 | 16.6 | 0.3 | 0.0 | 100.0 | 392 |
| 45-49 | 13.8 | 69.8 | 16.5 | 0.0 | 0.0 | 100.0 | 249 |
| Number of living children |  |  |  |  |  |  |  |
| 0 | 3.4 | 78.0 | 18.1 | 0.5 | 0.0 | 100.0 | 531 |
| 1-2 | 6.3 | 78.9 | 14.5 | 0.2 | 0.1 | 100.0 | 1,240 |
| 3-4 | 8.2 | 77.9 | 13.6 | 0.4 | 0.0 | 100.0 | 592 |
| 5+ | 15.1 | 70.2 | 14.3 | 0.4 | 0.0 | 100.0 | 473 |
| Residence |  |  |  |  |  |  |  |
| Urban | 6.6 | 77.1 | 15.9 | 0.4 | 0.0 | 100.0 | 903 |
| Rural | 8.1 | 77.1 | 14.5 | 0.2 | 0.1 | 100.0 | 1,934 |
| Region |  |  |  |  |  |  |  |
| Malé | 6.6 | 77.1 | 15.9 | 0.4 | 0.0 | 100.0 | 903 |
| North | 8.6 | 71.7 | 19.5 | 0.2 | 0.0 | 100.0 | 470 |
| North Central | 9.0 | 75.9 | 14.8 | 0.3 | 0.0 | 100.0 | 452 |
| Central | 5.4 | 82.1 | 12.0 | 0.4 | 0.0 | 100.0 | 235 |
| South Central | 6.5 | 81.7 | 11.4 | 0.3 | 0.0 | 100.0 | 397 |
| South | 9.7 | 77.0 | 12.8 | 0.0 | 0.5 | 100.0 | 380 |
| Education |  |  |  |  |  |  |  |
| No formal education | 12.6 | 73.3 | 13.8 | 0.3 | 0.0 | 100.0 | 643 |
| Primary | 9.2 | 73.9 | 16.5 | 0.4 | 0.0 | 100.0 | 807 |
| Secondary | 5.3 | 78.8 | 15.6 | 0.2 | 0.2 | 100.0 | 1,122 |
| More than secondary | 0.4 | 89.7 | 9.1 | 0.8 | 0.0 | 100.0 | 214 |
| Wealth quintile |  |  |  |  |  |  |  |
| Lowest | 9.0 | 76.0 | 14.4 | 0.2 | 0.3 | 100.0 | 524 |
| Second | 9.7 | 77.4 | 12.5 | 0.4 | 0.0 | 100.0 | 548 |
| Middle | 7.2 | 77.2 | 15.5 | 0.1 | 0.0 | 100.0 | 586 |
| Fourth | 6.3 | 78.6 | 14.7 | 0.5 | 0.0 | 100.0 | 543 |
| Highest | 6.2 | 76.1 | 17.3 | 0.3 | 0.0 | 100.0 | 638 |
| Total | 7.6 | 77.1 | 15.0 | 0.3 | 0.1 | 100.0 | 2,837 |

Note: Total includes 52 women with information missing on level of formal education. Figures in parentheses are based on 25-49 unweighted cases.

The majority of women in all subgroups report that they decide jointly with their husband how his cash earnings will be used. The groups in which women are most likely to say that they themselves mainly decide on how the husband's earnings will be used include women age 40-49, women with 5 or more children, and women with no formal education (13-15 percent). Women are most likely to say that the husband mainly decides on how his earnings will be used if they are age 3034, are from the North region, or have no children (18-20 percent).

### 13.1.3 Control over Women's and Husband's Cash Earnings by Magnitude of Women's Earnings

Table 13.4 shows that husband and wife jointly are most likely to decide on the use of a wife's cash earnings if the wife's income is the same as the husband's and least likely if the husband has no cash earnings or did not work ( 79 percent compared with 61 percent, respectively). Decisions about how the husband's cash earnings will be used are most likely to be made jointly if the woman has the same income as the husband and least likely to be made jointly if the woman herself has no cash earnings ( 82 percent compared with 71 percent, respectively).

Table 13.4 Women's control over her own earnings and over those of her husband
Percent distribution of currently married women age 15-49 with cash earnings in the past 12 months by person who decides how the woman's cash earnings are used and 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 woman's and husband's cash earnings, Maldives 2009

|  | 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 | Mainly wife | Wife and husband jointly | Mainly husband | Other | Missing | Total | Number of women |
| More than husband | 22.8 | 72.2 | 3.4 | 1.7 | 0.0 | 100.0 | 417 | 7.1 | 77.4 | 15.3 | 0.2 | 0.0 | 100.0 | 412 |
| Less than husband | 31.1 | 63.8 | 3.8 | 1.3 | 0.0 | 100.0 | 2,014 | 8.1 | 76.6 | 15.0 | 0.3 | 0.0 | 100.0 | 2,013 |
| Same as husband | 17.3 | 78.6 | 3.6 | 0.5 | 0.0 | 100.0 | 360 | 3.7 | 81.8 | 13.8 | 0.7 | 0.0 | 100.0 | 356 |
| Husband has no cash earnings/ did not work | 36.2 | 61.1 | 2.1 | 0.6 | 0.0 | 100.0 | 66 | na | na | na | na | na | na | 0 |
| Woman has no cash earnings | na | na | na | na | na | na | 0 | 13.3 | 71.4 | 13.5 | 1.8 | 0.0 | 100.0 | 89 |
| Woman did not work in past 12 months | na | na | na | na | na | na | 0 | 8.9 | 79.5 | 11.0 | 0.2 | 0.3 | 100.0 | 3,423 |
| Don't know/missing | (38.0) | (52.9) | (0.0) | (3.5) | (5.6) | 100.0 | 57 | (17.4) | (59.5) | (19.9) | (0.0) | (3.2) | 100.0 | 56 |
| Total ${ }^{1}$ | 28.5 | 66.6 | 3.6 | 1.3 | 0.1 | 100.0 | 2,915 | 8.4 | 78.3 | 12.8 | 0.3 | 0.2 | 100.0 | 6,349 |

Note: Total includes 52 women with information missing on level of formal education. Figures in parentheses are based on 25-49 unweighted cases.
na $=\operatorname{Not}$ Applicable.
${ }^{1}$ Excludes cases where a woman or her husband has no earnings and includes cases where a woman does not know whether she earned more or less than her husband/partner

### 13.2 Women's Empowerment

In addition to educational attainment, employment status, and control over earnings, the 2009 MDHS collected information on some direct measures of women's autonomy and status. Specifically, questions were asked about women's participation in household decision-making, their acceptance of wife beating, and their opinions of the conditions under which a wife should be able to deny sex to her husband. Such information provides insight into women's control over their environment and their attitudes towards gender roles, both of which are relevant to understanding women's demographic and health behaviour.

The first measure-women's participation in decision-making-requires little explanation because the ability to make decisions about one's own life is of obvious importance to women's empowerment. The other two measures derive from the notion that gender equity is essential to empowerment. Responses that indicate a view that the beating of wives by husbands is justified
reflect a low status of women. They signify acceptance of norms that give men the right to use force against women, which is a violation of women's human rights. Similarly, beliefs about whether and when a woman can refuse to have sex with her husband reflect issues of gender equity regarding sexual rights and bodily integrity. Besides yielding an important measure of empowerment, information about women's attitudes towards sexual rights is useful for improving and monitoring reproductive health programmes that depend on women's willingness and ability to control their own sexual lives.

### 13.2.1 Women's Participation in Household Decision Making

To assess women's decision-making autonomy, information was sought on women's participation in three different types of household decisions: on the respondent's own health care, on making major household purchases, and on making household purchases for daily needs. Having a final say in decision-making processes is the highest degree of autonomy. Women are considered to participate in a decision if they alone or jointly with their husband have the final say in that decision.

Table 13.5 shows the percent distribution of currently married women according to the person in the household who usually makes decisions concerning these matters. Fifty-six percent of women say that they make decisions about their health care jointly with their husband, 23 percent say the husband mainly makes these decisions, and 20 percent say they themselves are mainly responsible for health care decisions. Forty-seven percent of married women say that decisions about major household purchases are shared between wife and husband, 32 percent say that the husband mainly makes the decision, and 11 percent say that they mainly make the decision. Six in ten women ( 60 percent) say that they are in charge of purchases of daily household needs; among the remaining women, the majority report making these decisions jointly with their husband.

Table 13.5 Women's participation in decision-making
Percent distribution of currently married women by person who usually makes decisions about three kinds of issues, Maldives 2009

| Decision | Mainly wife | Wife and husband jointly | Mainly husband | Someone else | Other | Missing | Total | Number of women |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Own health care | 20.4 | 55.6 | 22.7 | 0.8 | 0.3 | 0.2 | 100.0 | 6,500 |
| Major household purchases | 10.9 | 46.9 | 31.7 | 8.6 | 1.8 | 0.1 | 100.0 | 6,500 |
| Purchases of daily household needs | 59.8 | 18.3 | 10.0 | 9.5 | 2.1 | 0.2 | 100.0 | 6,500 |

Women may have a say in some decisions but not in others. To assess a woman's overall decision-making autonomy, the decisions in which she participates-that is, in which she alone has the final say or does so jointly with her husband or partner-are added together. The total number of decisions in which a woman participates is a measure of her empowerment. Figure 13.1 shows the percentage of currently married women according to the number of decisions in which they participate, either alone or in conjunction with their husbands. Overall, 47 percent of women say that they participate in all decision-making regarding their household. At the other extreme, 8 percent of women say that they have no say in household decision-making.

Figure 13.1 Number of Decisions in Which Women Participate


MDHS 2009
Table 13.6 shows how women's participation in decision-making varies by background characteristics. There is no clear correlation between age and involvement in the specific decisions. The percentage of women participating in all three decisions increases from 34 percent among women age 15-19 to 52 percent among women age 30-44 and then declines to 45 percent among women age 45-49. Women who are employed for cash are slightly more likely to participate in all decisions. Women who live with their husbands and women with husbands who are at least five years younger have higher rates of participation in all household decision-making than other women. The likelihood that a married woman is involved in all decisions is highest among women with 3-4 living children. Urban woman are more likely than rural women to have a say in all of the decisions. Looking at regional variations, the proportion of currently married women participating in all decisions is highest in the Central and the South regions ( 53 percent). Participation in decision-making increases with an increase in a woman's education, and 44 percent of women with no formal education participate in all specified decisions compared with 55 percent of women with more than secondary education. The proportion of currently married women who participate in all three decisions increases from 46 percent for women in the lowest wealth quintile to 56 percent for women in the highest wealth quintile).

| Table 13.6 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, Maldives 2009 |  |  |  |  |  |  |
| Background characteristic | Own health care | Making major household purchases | Making purchases for daily household needs | Percentage who participate in all three decisions | Percentage who participate in none of the three decisions | Number of women |
| Age |  |  |  |  |  |  |
| 15-19 | 68.9 | 43.0 | 66.7 | 33.6 | 9.3 | 111 |
| 20-24 | 75.6 | 51.2 | 65.2 | 38.4 | 10.4 | 1,188 |
| 25-29 | 78.6 | 59.2 | 74.4 | 47.1 | 7.7 | 1,446 |
| 30-34 | 80.7 | 59.9 | 81.4 | 51.6 | 6.3 | 1,193 |
| 35-39 | 75.3 | 60.4 | 85.7 | 49.3 | 5.6 | 1,065 |
| 40-44 | 73.8 | 60.8 | 86.6 | 51.8 | 7.5 | 884 |
| 45-49 | 67.2 | 56.4 | 82.3 | 45.3 | 10.2 | 612 |
| Employment (past 12 months) |  |  |  |  |  |  |
| Not employed | 75.0 | 56.7 | 78.5 | 46.9 | 8.9 | 3,492 |
| Employed for cash | 77.5 | 59.1 | 78.2 | 47.1 | 6.1 | 2,915 |
| Employed not for cash | 70.1 | 54.6 | 65.8 | 43.3 | 17.6 | 79 |
| Husband living with respondent |  |  |  |  |  |  |
| Yes | 76.1 | 58.9 | 78.9 | 48.0 | 7.8 | 5,226 |
| No | 75.9 | 52.9 | 75.0 | 42.7 | 7.8 | 1,260 |
| Missing | 68.7 | 50.3 | 84.1 | 42.5 | 15.9 | 14 |
| Age difference with husband |  |  |  |  |  |  |
| Husband 10+ years older | 74.8 | 58.4 | 82.3 | 48.5 | 7.7 | 864 |
| Husband 5-9 years older | 76.2 | 55.7 | 80.2 | 45.7 | 7.2 | 1,817 |
| Husband -/+ 4 years younger/older | 77.0 | 58.5 | 76.0 | 47.3 | 8.1 | 3,557 |
| Husband 5+ years younger | 74.1 | 70.8 | 82.9 | 54.5 | 6.0 | 97 |
| Don't know/missing | 61.6 | 53.3 | 77.9 | 39.4 | 11.4 | 166 |
| Number of living children |  |  |  |  |  |  |
| 0 | 72.6 | 47.7 | 62.0 | 34.8 | 12.2 | 946 |
| 1-2 | 79.9 | 60.5 | 77.4 | 49.2 | 6.8 | 2,908 |
| 3-4 | 74.5 | 59.5 | 84.6 | 50.5 | 6.8 | 1,486 |
| 5+ | 71.0 | 56.7 | 85.0 | 46.7 | 8.0 | 1,160 |
| Residence |  |  |  |  |  |  |
| Urban | 78.4 | 64.7 | 79.0 | 53.0 | 7.4 | 2,122 |
| Rural | 74.9 | 54.4 | 77.8 | 44.0 | 8.0 | 4,378 |
| Region |  |  |  |  |  |  |
| Malé | 78.4 | 64.7 | 79.0 | 53.0 | 7.4 | 2,122 |
| North | 73.0 | 52.6 | 80.3 | 41.6 | 7.1 | 1,009 |
| North Central | 74.7 | 49.8 | 73.7 | 39.2 | 9.4 | 967 |
| Central | 82.9 | 60.8 | 77.0 | 53.3 | 6.8 | 563 |
| South Central | 71.8 | 46.9 | 76.5 | 35.8 | 7.8 | 789 |
| South | 74.8 | 62.4 | 80.4 | 52.0 | 8.5 | 1,051 |
| Education |  |  |  |  |  |  |
| No education | 70.0 | 56.1 | 83.5 | 45.8 | 9.3 | 1,488 |
| Primary | 75.8 | 56.7 | 82.3 | 46.7 | 6.6 | 2,216 |
| Secondary | 78.0 | 58.4 | 71.7 | 46.3 | 8.1 | 2,409 |
| More than secondary | 88.6 | 65.2 | 72.4 | 55.9 | 8.2 | 316 |
| Wealth quintile |  |  |  |  |  |  |
| Lowest | 72.7 | 54.8 | 79.5 | 43.5 | 7.8 | 1,167 |
| Second | 74.3 | 54.4 | 79.1 | 44.3 | 8.6 | 1,278 |
| Middle | 77.8 | 54.2 | 77.4 | 45.1 | 7.4 | 1,363 |
| Fourth | 75.7 | 60.8 | 77.3 | 48.9 | 7.6 | 1,311 |
| Highest | 79.1 | 64.0 | 77.6 | 52.2 | 7.6 | 1,381 |
| Total | 76.0 | 57.8 | 78.1 | 46.9 | 7.8 | 6,500 |

### 13.2.2 Attitudes towards Wife Beating

Violence against women has serious consequences for their mental and physical well-being, including their reproductive and sexual health (WHO, 1999). One of the most common forms of violence against women worldwide is abuse by a husband or partner (Heise et al., 1999).

The MDHS gathered information on women's attitudes towards wife beating, a proxy for women's perception of their status. Women who believe that a husband is justified in hitting or beating his wife for any of the specified reasons may believe themselves to be low in status both absolutely and relative to men. Such a perception could act as a barrier to accessing health care for themselves and their children, affect their attitude towards contraceptive use, and influence their general well-being. Women were asked whether a husband is justified in beating his wife under a series of circumstances: if the wife burns the food, argues with him, goes out without telling him, neglects the children, or refuses sexual relations. Table 13.7 summarizes women's attitudes towards wife beating in these five specific circumstances. The table also shows the percentage of women who agree that wife beating is justified in at least one of the circumstances. Acceptance of wife beating ranges from 6 percent (burn the food) to 19 percent (refuse to have sexual intercourse). Thirty-one percent of women agree with at least one of the specified reasons that purportedly justify a husband's beating his wife.

| 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, Maldives 2009 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Husband is justified in hitting or beating his wife if she: |  |  |  |  | Percentage who agree with at least one specified reason | Number |
| Background characteristic | Burns the food | Argues with him | Goes out without telling him | Neglects the children | Refuses to have sexual intercourse with him |  |  |
| Age |  |  |  |  |  |  |  |
| 15-19 | 7.9 | 21.3 | 16.9 | 27.8 | 17.4 | 40.7 | 119 |
| 20-24 | 3.7 | 17.0 | 10.2 | 18.9 | 15.9 | 31.1 | 1,268 |
| 25-29 | 3.1 | 13.8 | 10.0 | 14.7 | 15.1 | 26.3 | 1,539 |
| 30-34 | 5.1 | 13.9 | 10.0 | 14.8 | 17.8 | 25.7 | 1,287 |
| 35-39 | 6.4 | 16.4 | 12.3 | 15.9 | 19.7 | 29.3 | 1,185 |
| 40-44 | 10.0 | 21.5 | 18.2 | 23.8 | 26.1 | 37.5 | 1,013 |
| 45-49 | 14.1 | 23.6 | 22.6 | 24.5 | 27.1 | 40.2 | 721 |
| Employment (past 12 months) |  |  |  |  |  |  |  |
| Not employed | 6.6 | 17.3 | 13.0 | 18.4 | 19.0 | 30.9 | 3,742 |
| Employed for cash | 6.0 | 16.9 | 13.1 | 18.0 | 19.7 | 30.8 | 3,279 |
| Employed not for cash | 3.2 | 14.4 | 8.3 | 17.8 | 21.7 | 28.0 | 85 |
| Marital status |  |  |  |  |  |  |  |
| Married | 6.2 | 17.0 | 13.0 | 18.2 | 19.2 | 30.6 | 6,500 |
| Divorced/separated/widowed | 7.0 | 17.6 | 13.1 | 18.2 | 20.7 | 32.9 | 631 |
| Number of living children |  |  |  |  |  |  |  |
| 0 | 4.7 | 16.9 | 12.5 | 17.9 | 16.3 | 30.7 | 1,040 |
| 1-2 | 3.6 | 13.4 | 8.8 | 14.3 | 14.9 | 25.4 | 3,183 |
| 3-4 | 7.6 | 17.9 | 14.3 | 18.2 | 22.3 | 32.6 | 1,636 |
| 5+ | 12.6 | 25.0 | 22.1 | 27.9 | 28.9 | 41.7 | 1,272 |
| Residence |  |  |  |  |  |  |  |
| Urban | 2.4 | 9.6 | 6.2 | 9.0 | 9.8 | 17.6 | 2,368 |
| Rural | 8.2 | 20.7 | 16.4 | 22.7 | 24.0 | 37.3 | 4,763 |
| Region |  |  |  |  |  |  |  |
| Malé | 2.4 | 9.6 | 6.2 | 9.0 | 9.8 | 17.6 | 2,368 |
| North | 8.4 | 20.9 | 15.9 | 24.0 | 25.3 | 37.1 | 1,067 |
| North Central | 9.5 | 23.3 | 20.0 | 26.6 | 29.8 | 42.7 | 1,038 |
| Central | 6.3 | 15.0 | 13.7 | 17.9 | 21.3 | 32.6 | 615 |
| South Central | 6.0 | 17.9 | 13.6 | 18.3 | 21.3 | 32.2 | 853 |
| South | 9.5 | 23.3 | 16.9 | 23.8 | 21.2 | 39.0 | 1,190 |
| Education |  |  |  |  |  |  |  |
| No formal education | 12.3 | 24.6 | 22.0 | 27.4 | 29.6 | 42.8 | 1,668 |
| Primary | 7.1 | 18.0 | 13.7 | 18.5 | 21.4 | 31.9 | 2,464 |
| Secondary | 2.6 | 12.8 | 8.2 | 13.7 | 12.6 | 24.7 | 2,584 |
| More than secondary | 0.6 | 6.1 | 2.0 | 5.7 | 6.2 | 10.2 | 333 |
| Wealth quintile |  |  |  |  |  |  |  |
| Lowest | 9.2 | 22.6 | 20.5 | 24.9 | 26.0 | 40.1 | 1,300 |
| Second | 8.1 | 20.6 | 14.6 | 22.4 | 24.6 | 36.7 | 1,396 |
| Middle | 7.8 | 18.8 | 14.6 | 21.3 | 22.7 | 36.1 | 1,488 |
| Fourth | 5.1 | 15.9 | 10.9 | 15.4 | 15.4 | 27.2 | 1,447 |
| Highest | 1.8 | 8.2 | 5.4 | 7.9 | 8.9 | 15.3 | 1,499 |
| Total | 6.3 | 17.0 | 13.0 | 18.2 | 19.3 | 30.8 | 7,131 |

Note: Total includes 81 women with information missing on level of formal education and 25 women with information missing on employment in past 12 months.

Acceptance of wife beating varies by the woman's age. The youngest and oldest women are more likely than other women to agree that a husband is justified in beating a wife in any of the specified circumstances. However, women age 20 and older increasingly accept that a husband is justified in abusing his wife for all specified reasons. Acceptance of wife beating varies little by the woman's employment or marital status. The proportion of women who justify wife beating in at least some circumstances increases with the number of living children. Rural women are more than twice as likely as urban women to justify wife beating ( 37 percent and 18 percent, respectively). As expected, the proportion of women agreeing with at least one of the given reasons for beating a wife varies by region, ranging from 18 percent in the Malé region to 43 percent in the North Central region. The likelihood that a woman perceives wife beating as justified in some circumstances decreases markedly with the woman's level of education (from 43 percent for women with no education to 10 percent for women with more than secondary education). Women in the highest wealth quintile are the least likely to agree with the specified reasons for wife beating, while women in the lowest quintile are the most likely ( 15 percent and 40 percent, respectively).

### 13.3 Women's Empowerment Indicators

The two sets of empowerment indicators, namely women's participation in making household decisions and their attitude towards wife beating can be summarized into two separate indices. The first index shows the number of decisions (see Table 13.5 for the list of decisions) in which women participate alone or jointly with their husband/partner. This index ranges in value from 0 to 4 and is positively related to women's empowerment. It reflects the degree of decision-making control that women are able to exercise in areas that affect their own lives and environments.

The second index, which ranges in value from 0 to 5 , is the total number of reasons (see Table 13.8 for the list of reasons) for which the respondent feels that a husband is justified in beating his wife. A lower score on this indicator is interpreted as reflecting a greater sense of entitlement and selfesteem and a higher status of women.

Table 13.8 shows how these indicators relate to each other. In general, the expectation is that women who participate in making household decisions are also more likely to disagree with wife beating. This pattern is confirmed by the data; the percentage of women who disagree with reasons that justify wife beating increases with the number of decisions in which women participate. Similarly, the percentage of women who participate in all household decisions decreases as the number of reasons that justify wife beating increases.

| Table 13.8 Indicators of women's empowerment |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Percentage of women age 15-49 who participate in all decision making, and the percentage who disagree with all reasons for justifying wife-beating, by value on each of the indicators of women's empowerment, Maldives 2009 |  |  |  |  |
| Empowerment indicator | Percentage who participate in all decision making | Number of women | Percentage who disagree with all the reasons justifying wife beating | Number of women |
| Number of decisions in which women participate |  |  |  |  |
| 0 | na | na | 63.6 | 508 |
| 1-2 | na | na | 66.6 | 2,941 |
| 3 | na | na | 73.1 | 3,052 |
| Number of reasons for which wife beating is justified |  |  |  |  |
| 0 | 49.4 | 4,514 | na | na |
| 1-2 | 42.2 | 1,197 | na | na |
| 3-4 | 40.8 | 529 | na | na |
| 5 | 38.4 | 261 | na | na |
| na $=$ Not applicable |  |  |  |  |
| ${ }^{1}$ See Table 13.5 for the list of decisions. |  |  |  |  |
| ${ }^{2}$ See Table 13.6 for the list of reasons. |  |  |  |  |

### 13.4 Current Use of Contraception By Women's Empowerment Status

A woman's ability to control her fertility and the contraceptive method she chooses are likely to be affected by her status, self-image, and sense of empowerment. A woman who feels that she is unable to control other aspects of her life may be less likely to feel that she can make decisions regarding fertility. She may also feel the need to choose methods that are easier to conceal from her husband or that do not depend on his cooperation.

Table 13.9 shows the relationship of each of the two indicators of women's empowerment with current use of contraceptive methods among currently married women age 15-49 in Maldives. There are no significant variations in the use of contraception according to the number of decisions a woman participates in. Women who have no say in household decisions are slightly more likely to use temporary modern methods, and women who participate in 3 decisions are more likely to use female sterilization. It is interesting to note that the prevalence of female sterilization increases with an increase in the number of reasons a woman agrees to as justifying wife beating. On the other hand, use of male condoms decreases with the number of reasons that a woman accepts as justifying wife beating. Women who do not agree that a husband is justified to beat his wife for any of the specified reasons are almost twice as likely to use a male condom as women who that all of the five reasons for justify wife beating.

Table 13.9 Current use of contraception by women's status
Percent distribution of currently married women age 15-49 by current contraceptive method, according to selected indicators of women's status, Maldives 2009

| Empowerment indicator | Any method | Any modern method | Modern methods |  |  |  | Any traditional method | $\begin{aligned} & \text { Not } \\ & \text { currently } \\ & \text { using } \\ & \hline \end{aligned}$ | Total | Number of women |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Female sterili- <br> zation | Male sterilization | Temporary modern female methods | Male condom |  |  |  |  |
| Number of decisions in which women participate |  |  |  |  |  |  |  |  |  |  |
| 0 | 31.0 | 24.6 | 9.1 | 0.3 | 6.8 | 8.4 | 6.4 | 69.0 | 100.0 | 508 |
| 1-2 | 32.9 | 24.7 | 8.9 | 0.3 | 6.3 | 9.1 | 8.2 | 67.1 | 100.0 | 2,941 |
| 3 | 37.1 | 29.6 | 11.3 | 0.7 | 8.1 | 9.6 | 7.5 | 62.9 | 100.0 | 3,052 |
| Number of reasons for which wife beating is justified |  |  |  |  |  |  |  |  |  |  |
| 0 | 34.2 | 26.7 | 9.3 | 0.4 | 6.9 | 10.1 | 7.6 | 65.8 | 100.0 | 4,514 |
| 1-2 | 35.2 | 25.6 | 10.0 | 0.5 | 7.2 | 7.9 | 9.6 | 64.8 | 100.0 | 1,197 |
| 3-4 | 36.9 | 30.8 | 13.2 | 0.7 | 10.0 | 6.9 | 6.1 | 63.1 | 100.0 | 529 |
| 5 | 36.7 | 30.7 | 17.1 | 1.3 | 6.5 | 5.8 | 6.0 | 63.3 | 100.0 | 261 |
| Total | 34.7 | 27.0 | 10.1 | 0.5 | 7.2 | 9.3 | 7.8 | 65.3 | 100.0 | 6,500 |

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 13.5 for the list of decisions.
${ }^{3}$ See Table 13.6 for the list of reasons.

### 13.5 Ideal Family Size and Unmet Need by Women’s Status

Women's fertility preferences are commonly lower than those of their partners. As a woman becomes more empowered to negotiate fertility decision-making, she has more control over contraceptive use and thus her chances of becoming pregnant and giving birth. Table 13.10 shows women's ideal family size and their unmet need for family planning by the two indicators of women's empowerment. The data indicate that there are small differences in the mean ideal number of children depending on the number of decisions in which a woman participates. However, the mean ideal number of children increases with the number of reasons the woman uses to justify wife beating; it is 3.1 children for women who disagree with any reason for a husband to abuse his wife and 3.5 children for women who agree with five reasons for wife beating.

| 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, Maldives 2009 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Mean ideal number of children | Number of women | Percentag women for |  | married need g | Number of women |
| Empowerment indicator |  |  | $\begin{gathered} \hline \text { For } \\ \text { spacing } \\ \hline \end{gathered}$ | For limiting | Total |  |
| Number of decisions in which women participate |  |  |  |  |  |  |
| 0 | 3.1 | 435 | 17.1 | 12.5 | 29.7 | 508 |
| 1-2 | 3.1 | 2,551 | 14.4 | 12.7 | 27.2 | 2,941 |
| 3 | 3.1 | 2,649 | 15.0 | 13.8 | 28.8 | 3,052 |
| Number of reasons for which wife beating is justified |  |  |  |  |  |  |
| 0 | 3.1 | 4,357 | 14.6 | 13.1 | 27.8 | 4,514 |
| 1-2 | 3.2 | 1,140 | 18.4 | 11.6 | 30.0 | 1,197 |
| 3-4 | 3.3 | 477 | 13.8 | 14.8 | 28.6 | 529 |
| 5 | 3.5 | 210 | 5.9 | 19.1 | 25.0 | 261 |
| Total | 3.1 | 6,185 | 14.9 | 13.2 | 28.1 | 6,500 |
| ${ }^{1}$ Mean excludes respondents who gave non-numeric responses. <br> ${ }^{2}$ See table 7.3.1 for the definition of unmet need for family planning. <br> ${ }^{3}$ Restricted to currently married women. See Table 13.5 for the list of decisions. <br> ${ }^{4}$ See Table 13.6.1 for the list of reasons. |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |

Table 13.10 also shows that in general there is no clear pattern in the association between unmet need for family planning services and the two women empowerment indicators. Unmet need does not vary much by the number of decisions in which a woman participates. On the other hand, unmet need for spacing births among women who agree with no reason for wife beating is 15 percent in contrast with 6 percent for women who agree with five reasons. Unmet need for limiting births increases from 13 percent for women who disagree with any reason for wife abuse compared with 19 percent for women who agree with all reasons for wife beating.

### 13.6 Women's Status and Reproductive Health Care

Table 13.11 examines whether women's use of antenatal, delivery, and postnatal care services from health workers varies by their level of empowerment as measured by the three indicators of empowerment. 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 to better meet their own reproductive health goals, including the goal of safe motherhood.

Table 13.11 indicates that coverage of antenatal care and delivery assistance by a health professional varies little by the woman's empowerment status. However, postnatal care attendance by a health professional in the first two days after delivery increases slightly with an increase in the number of household decisions in which women participate. Similarly, two in three women ( 67 percent) who were attended by a health professional for postnatal care agree with no reason for wife beating compared with 60 percent of women who agree with all 5 reasons.

| Table 13.11 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, Maldives 2009 |  |  |  |  |
| Empowerment indicator | Received antenatal care from health personnel | Received delivery assistance from health personnel | Received postnatal care from health personnel within the first two days since delivery | Number of women with a child born in the past five years |
| Number of decisions in which women participate |  |  |  |  |
| 0 | 97.8 | 93.4 | 59.8 | 222 |
| 1-2 | 99.5 | 96.0 | 66.7 | 1,318 |
| 3 | 99.7 | 96.6 | 67.1 | 1,501 |
| Number of reasons for which wife beating is justified |  |  |  |  |
| 0 | 99.5 | 96.4 | 66.6 | 2,256 |
| 1-2 | 99.4 | 95.6 | 65.6 | 598 |
| 3-4 | 98.5 | 92.1 | 64.0 | 248 |
| 5 | 97.3 | 94.1 | 60.4 | 88 |
| Total | 99.3 | 95.9 | 66.0 | 3,190 |
| Note: 'Health personnel' includes doctor, nurse, midwife, or auxiliary nurse or auxiliary midwife. ${ }^{1}$ Includes deliveries in a health facility and not in a health facility <br> ${ }^{2}$ Restricted to currently married women. See Table 13.5 for the list of decisions. <br> ${ }^{3}$ See Table 13.6 for the list of reasons. |  |  |  |  |

### 13.7 Early Childhood Mortality Rates by Women's Status

A woman is empowered if she has access to information, makes decisions, and acts effectively in her interest and in the interest of those who depend on her. In most cases women are the primary caretakers of their children, and children of empowered women are expected to have better health and chances of survival.

Table 13.12 shows information on the impact of women's empowerment on infant and child mortality. The data show that women's participation in household decisions has a positive effect on their children's survival; childhood mortality rates decrease with increasing numbers of decisions in which mothers participate.

## Table 13.12 Early childhood mortality rates by women's status

Infant, child, and under-five mortality rates for the 10-year period preceding the survey, by indicators of women's status, Maldives 2009

|  | Infant | Child | Under-five |
| :---: | :---: | :---: | :---: |
|  | mortality | mortality | mortality |
| Empowerment indicator | $\left({ }_{1} q_{0}\right)$ | $\left({ }_{4} q_{1}\right)$ | $\left(_{5} q_{0}\right)$ |

Number of decisions in which
women participate
0
$1-2$

3

## Number of reasons for which

 wife beating is justified| 0 | 20 | 3 | 23 |
| :--- | ---: | ---: | ---: |
| $1-2$ | 26 | 6 | 32 |
| $3-4$ | 18 | 8 | 25 |
| 5 | 57 | 16 | 72 |

${ }^{1}$ Restricted to currently married women.
${ }^{2}$ See Table 13.5 for the list of decisions.
${ }^{3}$ See Table 13.6 for the list of reasons

There is a clear pattern in the relationship between another indicator of women's empowerment-reasons for justifying wife beating-and infant and under- 5 mortality. For example, the under- 5 mortality rate is lowest for children whose mother does not accept any reason for beating a wife (23 deaths per 1,000 live births) and highest for children whose mother accepts all reasons for wife beating ( 72 deaths per 1,000 live births).

## DEMOGRAPHIC AND HEALTH INDICATORS ON MEN

In the Maldives DHS (MDHS), half of the households selected for the ever-married sample of women were also selected for a survey of men and youth. In these households, all ever-married men, never-married women age $15-24$, and never-married men age $15-24$, who were either usual residents of the household or visitors present in the household on the night before the survey, were eligible to be interviewed. The survey was limited to Maldivian citizens; non-Maldivians were included in the survey only if they were the spouse, son, or daughter of a Maldivian. This chapter discusses the findings of a subset of interviews conducted only with ever-married men age 15-64. Results of interviews with never-married women and never-married men are presented in Chapter 15.

### 14.1 Response Rates For Men's Survey

Table 14.1 shows response rates for the ever-married men's survey component of the 2009 MDHS. A total of 3,752 households were selected in the sample for the men's survey, of which 3,559 were found to be occupied at the time of data collection. The difference between the number of households selected and the number occupied usually occurs because some structures are found to be vacant or non-existent. A total of 3,204 occupied households were successfully interviewed, yielding a household response rate of 90 percent.

In the MDHS households selected for the men's survey, a total of 3,224 ever-married men age 15-64 were identified as eligible for the individual interview; interviews were completed with 1,727 men, yielding a male response rate of 54 percent. The urban response rate of 47 percent is lower than the 55 percent response rate among rural respondents. The low response rate suggests that the men who participated in the survey may not represent all ever-married men in Maldives, especially those in urban areas or Malé.

| Number of households, number of interviews, and response rates, according to residence (unweighted), Maldives 2009 |  |  |  |
| :---: | :---: | :---: | :---: |
|  | Resi | nce |  |
| Result | Urban (Malé) | Rural | Total |
| Households selected for male intervi |  |  |  |
| Households selected | 601 | 3,151 | 3,752 |
| Households occupied | 566 | 2,993 | 3,559 |
| Households interviewed | 463 | 2,741 | 3,204 |
| Household response rate ${ }^{1}$ | 0.82 | 0.92 | 0.90 |
| Individual interviews: ever-married men 15-64 |  |  |  |
| Number of eligible men | 579 | 2,645 | 3,224 |
| Number of eligible men interviewed | 274 | 1,453 | 1,727 |
| Eligible man response rate ${ }^{2}$ | 47.3 | 54.9 | 53.6 |
| ${ }^{1}$ Household interviewed/household occupied |  |  |  |

### 14.2 Characteristics Of Survey Respondents

The distribution of ever-married men age 15-49 by background characteristics is shown in Table 14.2. The largest proportions of men are in age group 30-34 and age group 35-39 ( 20 percent each). Nearly all men ( 95 percent) are currently married.

Four in ten ever-married male MDHS respondents live in urban areas. The same proportion lives in the Malé region. The remaining respondents are distributed across the five other regions of the Maldives. After Malé, the regions with the largest proportions of respondents in the men's survey are the South ( 15 percent) and North Central regions ( 14 percent). The Central region has the smallest proportion of respondents in the men's survey.

Overall, 22 percent of ever-married men have never received any formal education. Thirtyfour percent of men have attended primary school (without having gone on to secondary school), and 34 percent have attended secondary school (without continuing to higher education). Seven percent of men have received education beyond secondary school. The percentage of men interviewed rises with the wealth quintile, suggesting that wealthier males may be somewhat overrepresented among the men's survey respondents.

### 14.3 Educational Attainment by Background Characteristics

Table 14.3 presents a detailed distribution of educational attainment. The general pattern evident in Table 14.3 indicates a decrease in the proportion of men with no education from the oldest to the youngest cohorts. For example, only 1 percent of young men age 15-24 have no formal education compared with 59 percent of men age $45-49$. Three in five men age $15-24$ have acquired some secondary education compared with only 9 percent of men age 45-49. Overall, the median years of school completed for men age 15-49 is 6.7 years.

| Percent distribution of ever-married men age 15-49 by selected background characteristics, Maldives 2009 |  |  |  |
| :---: | :---: | :---: | :---: |
| Background characteristic | Weighted percent | Weighted | Unweighted |
| Age |  |  |  |
| 15-19 | 0.2 | 3 | 5 |
| 20-24 | 8.3 | 115 | 132 |
| 25-29 | 18.4 | 255 | 248 |
| 30-34 | 19.9 | 276 | 271 |
| 35-39 | 19.6 | 272 | 251 |
| 40-44 | 17.5 | 243 | 236 |
| 45-49 | 16.1 | 224 | 225 |
| Marital status |  |  |  |
| Married | 94.6 | 1,312 | 1,306 |
| Divorced/separated | 5.1 | 71 | 57 |
| Widowed | 0.3 | 4 | 5 |
| Residence |  |  |  |
| Urban | 38.0 | 527 | 223 |
| Rural | 62.0 | 860 | 1,145 |
| Region |  |  |  |
| Malé | 38.0 | 527 | 223 |
| North | 12.9 | 178 | 158 |
| North Central | 14.1 | 196 | 230 |
| Central | 9.0 | 125 | 254 |
| South Central | 11.2 | 156 | 299 |
| South | 14.8 | 205 | 204 |
| Education |  |  |  |
| No formal education | 22.4 | 311 | 355 |
| Primary | 33.9 | 470 | 500 |
| Secondary | 33.9 | 470 | 410 |
| More than secondary | 7.3 | 101 | 63 |
| Wealth quintile |  |  |  |
| Lowest | 14.9 | 206 | 264 |
| Second | 16.9 | 235 | 323 |
| Middle | 21.5 | 298 | 396 |
| Fourth | 20.3 | 282 | 228 |
| Highest | 26.4 | 366 | 157 |
| Total 15-49 | 100.0 | 1,388 | 1,368 |
| 50-64 | na | 339 | 359 |
| Total men 15-64 | na | 1,727 | 1,727 |

Note: Total includes 35 men with information missing on education level. Education categories refer to the highest level of education attended, whether or not that level was completed.
na $=$ not applicable

The MDHS data indicate that educational opportunities vary by urban-rural residence. Urban men have higher rates of school attendance than their rural counterparts. Ten percent of urban men have not attended school compared with 30 percent of men in rural areas. Comparison of the median number of years of education completed shows that urban men have a median of 8.6 years of schooling compared with 6.3 years for rural men.

School attendance varies among ever-married men in Maldives. The lowest level is observed in North region, where 36 percent of the men have never attended school, while the highest is found in Malé, where only 10 percent of ever-married men have never gone to school. Educational attainment increases as household economic status increases. Four in ten men in the poorest households have no formal education compared with one in ten men in the richest households.

Table 14.3 Educational attainment
Percent distribution of ever-married men age 15-49 by highest level of schooling attended or completed, and median grade completed, according to background characteristics, Maldives 2009

| Background characteristic | Highest level of schooling |  |  |  |  |  |  | Total | Median years completed | Number of men |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | No formal education | Some primary | Completed primary | Some secondary | Completed secondary | More than secondary | Unknown Certificate |  |  |  |
| Age |  |  |  |  |  |  |  |  |  |  |
| 15-24 | 1.4 | 3.5 | 15.3 | 60.0 | 6.5 | 11.4 | 2.0 | 100.0 | 9.3 | 117 |
| 15-19 | * | * | * | * | * | * | * | 100.0 | * | 3 |
| 20-24 | 1.5 | 3.5 | 15.6 | 59.1 | 6.6 | 11.6 | 2.0 | 100.0 | 9.3 | 115 |
| 25-29 | 0.4 | 8.6 | 19.4 | 56.9 | 5.7 | 7.2 | 1.7 | 100.0 | 8.9 | 255 |
| 30-34 | 3.5 | 15.9 | 31.8 | 30.5 | 2.9 | 11.7 | 3.8 | 100.0 | 6.9 | 276 |
| 35-39 | 17.4 | 13.0 | 30.4 | 28.4 | 1.2 | 6.3 | 3.3 | 100.0 | 6.6 | 272 |
| 40-44 | 49.0 | 13.1 | 17.0 | 13.3 | 2.4 | 3.6 | 1.5 | 100.0 | 3.6 | 243 |
| 45-49 | 59.1 | 7.7 | 16.4 | 8.6 | 1.0 | 4.8 | 2.3 | 100.0 | 0.0 | 224 |
| Residence |  |  |  |  |  |  |  |  |  |  |
| Urban | 9.7 | 8.3 | 19.9 | 39.4 | 5.8 | 15.2 | 1.8 | 100.0 | 8.6 | 527 |
| Rural | 30.2 | 12.9 | 24.5 | 25.7 | 1.3 | 2.4 | 3.0 | 100.0 | 6.3 | 860 |
| Region |  |  |  |  |  |  |  |  |  |  |
| Malé | 9.7 | 8.3 | 19.9 | 39.4 | 5.8 | 15.2 | 1.8 | 100.0 | 8.6 | 527 |
| North | 36.1 | 10.7 | 23.3 | 22.8 | 0.5 | 3.0 | 3.6 | 100.0 | 6.1 | 178 |
| North Central | 24.8 | 12.6 | 25.3 | 26.3 | 2.6 | 2.6 | 5.7 | 100.0 | 6.4 | 196 |
| Central | 30.6 | 17.0 | 22.3 | 23.9 | 1.0 | 3.4 | 1.8 | 100.0 | 6.1 | 125 |
| South Central | 26.2 | 16.7 | 28.4 | 24.8 | 0.2 | 1.4 | 2.3 | 100.0 | 6.4 | 156 |
| South | 33.2 | 9.6 | 23.3 | 29.4 | 1.6 | 1.8 | 1.0 | 100.0 | 6.4 | 205 |
| Wealth quintile |  |  |  |  |  |  |  |  |  |  |
| Lowest | 39.8 | 16.8 | 28.0 | 11.3 | 0.7 | 0.9 | 2.5 | 100.0 | 5.2 | 206 |
| Second | 29.6 | 17.2 | 24.0 | 24.3 | 0.1 | 1.8 | 2.8 | 100.0 | 6.2 | 235 |
| Middle | 23.6 | 9.9 | 24.9 | 33.4 | 2.5 | 2.6 | 3.2 | 100.0 | 6.7 | 298 |
| Fourth | 18.2 | 6.4 | 24.8 | 36.0 | 3.9 | 9.1 | 1.6 | 100.0 | 7.2 | 282 |
| Highest | 10.3 | 8.6 | 15.8 | 40.2 | 5.8 | 16.8 | 2.5 | 100.0 | 8.8 | 366 |
| Total 15-49 | 22.4 | 11.1 | 22.8 | 30.9 | 3.0 | 7.3 | 2.5 | 100.0 | 6.7 | 1,388 |
| 50-64 | 71.1 | 5.9 | 7.4 | 9.8 | 0.6 | 2.7 | 2.5 | 100.0 | na | 339 |
| Total men 15-64 | 32.0 | 10.1 | 19.8 | 26.8 | 2.5 | 6.4 | 2.5 | 100.0 | 6.5 | 1,727 |

Note: An asterisk indicates that an estimate is based on fewer than 25 cases and has been suppressed.
na $=$ not applicable
${ }^{1}$ Completed $7{ }^{\text {th }}$ grade at the primary level
${ }^{2}$ Completed $5^{\text {th }}$ grade at the secondary level

### 14.4 Access to Mass Media

The 2009 MDHS collected information on the exposure of respondents to newspaper, television, radio, and the Internet (Table 14.4). Almost all ever-married men age 15-49 (97 percent) watch television at least once a week, 74 percent listen to the radio, 52 percent read a newspaper, and 39 percent use the Internet at least once a week.

Exposure to radio increases with age while use of the Internet shows the opposite association. The rate of television watching does not vary across subgroups of men. In general, younger men, men in urban areas, and those men who live in Malé have higher rates of media exposure than other men.

Exposure to mass media increases with men's education and wealth status. For example, the percentage of men who were exposed to at least one of the three media (radio, television or newspaper) at least once a week ranges from 40 percent for men in the lowest wealth quintile to 68 percent for men in the highest wealth quintile .

| Table 14.4 Exposure to mass media: Men |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percentage of ever-married men age 15-49 who are exposed to specific media on a weekly basis, by background characteristics, Maldives 2009 |  |  |  |  |  |  |  |
| Background characteristic | Reads a newspaper at least once a week | Watches television at least once a week | Listens to radio at least once a week | Uses Internet at least once a week | At least three media at least once a week ${ }^{1}$ | No media at least once a week ${ }^{1}$ | Number |
| Age |  |  |  |  |  |  |  |
| 15-19 | * | * | * | * | * | * | 3 |
| 20-24 | 47.2 | 98.5 | 63.4 | 53.2 | 51.5 | 0.6 | 115 |
| 25-29 | 59.3 | 99.3 | 68.4 | 56.9 | 63.6 | 0.3 | 255 |
| 30-34 | 58.5 | 94.1 | 66.8 | 47.7 | 59.1 | 1.5 | 276 |
| 35-39 | 56.2 | 97.4 | 70.8 | 39.0 | 55.9 | 0.7 | 272 |
| 40-44 | 47.8 | 97.3 | 81.5 | 25.3 | 45.8 | 1.0 | 243 |
| 45-49 | 36.7 | 97.2 | 90.7 | 14.2 | 39.7 | 0.7 | 224 |
| Residence |  |  |  |  |  |  |  |
| Urban | 68.4 | 97.0 | 60.1 | 58.7 | 66.6 | 0.4 | 527 |
| Rural | 41.6 | 97.2 | 82.5 | 26.7 | 45.0 | 1.1 | 860 |
| Region |  |  |  |  |  |  |  |
| Malé | 68.4 | 97.0 | 60.1 | 58.7 | 66.6 | 0.4 | 527 |
| North | 49.4 | 94.3 | 89.1 | 27.5 | 52.5 | 1.7 | 178 |
| North Central | 40.9 | 99.7 | 86.0 | 23.1 | 44.0 | 0.3 | 196 |
| Central | 23.8 | 97.2 | 79.5 | 20.6 | 26.8 | 2.4 | 125 |
| South Central | 36.0 | 97.8 | 79.3 | 25.8 | 40.7 | 0.6 | 156 |
| South | 50.7 | 97.1 | 77.7 | 33.9 | 53.7 | 0.9 | 205 |
| Education |  |  |  |  |  |  |  |
| No education | 31.1 | 95.0 | 90.8 | 3.5 | 28.7 | 1.3 | 311 |
| Primary | 47.9 | 96.9 | 78.9 | 22.5 | 48.1 | 1.3 | 470 |
| Secondary | 63.7 | 98.6 | 62.5 | 64.6 | 66.7 | 0.2 | 470 |
| More than secondary | 75.0 | 97.4 | 50.1 | 94.0 | 84.9 | 0.0 | 101 |
| Wealth quintile |  |  |  |  |  |  |  |
| Lowest | 37.1 | 96.5 | 89.9 | 12.8 | 39.9 | 0.6 | 206 |
| Second | 36.9 | 97.6 | 84.1 | 18.5 | 38.0 | 0.8 | 235 |
| Middle | 44.5 | 97.1 | 77.6 | 33.0 | 48.0 | 1.6 | 298 |
| Fourth | 59.7 | 98.4 | 66.3 | 50.3 | 61.1 | 0.5 | 282 |
| Highest | 69.4 | 96.3 | 61.5 | 62.5 | 68.4 | 0.5 | 366 |
| Total 15-49 | 51.8 | 97.2 | 74.0 | 38.9 | 53.2 | 0.8 | 1,388 |
| 50-64 | 44.8 | 94.3 | 89.9 | 15.6 | 44.9 | 1.3 | 339 |
| Total men 15-64 | 50.4 | 96.6 | 77.1 | 34.3 | 51.6 | 0.9 | 1,727 |
| Note: Total includes 35 men with information missing on education level. An asterisk indicates that an estimate is based on fewer than 25 cases and has been suppressed. <br> Education categories refer to the highest level of education attended, whether or not that level was completed. <br> ${ }^{1}$ Radio, television, or newspaper |  |  |  |  |  |  |  |

### 14.5 Employment

The 2009 MDHS asked ever-married men detailed questions about their employment status. Men who said that they were currently working and those who reported that they worked sometime during the 12 months preceding the survey are considered to have been employed. Additional information was collected on the type of work that the men did, the continuity of their work throughout the year, for whom they worked, and the form in which they received their earnings.

Overall, 93 percent of ever-married men were employed in the 12 months preceding the survey (Table 14.5). The variations in employment status across subgroups of men is generally small, with the exception that a much lower proportion of separated, divorced, or widowed men are currently employed than other men.

Table 14.5 Employment status
Percent distribution of ever-married men age $15-49$ by employment status, according to background characteristics, Maldives 2009

|  | Employ <br> 12 month <br> the | ed in the s preceding survey | Not employed in the 12 months | Missing/ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Background characteristic | Currently employed ${ }^{1}$ | Not currently employed | preceding the survey | don't <br> know | Total | Number of men |

Age
$15-19$
$20-24$
$25-29$
$30-34$
$35-39$
$40-44$
$45-49$
Marital status
Married or living together
Divorced/separated/widowed
Number of living children

| Number of living children |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 0 | 91.7 | 4.2 | 4.1 | 0.0 | 100.0 | 229 |
| $1-2$ | 96.0 | 2.6 | 1.1 | 0.4 | 100.0 | 641 |
| $3-4$ | 91.3 | 6.9 | 1.8 | 0.0 | 100.0 | 301 |
| $5+$ | 89.0 | 8.3 | 1.5 | 1.3 | 100.0 | 216 |
| Residence |  |  |  |  |  |  |
| $\quad$ Urban | 96.4 | 1.5 | 1.2 | 0.9 | 100.0 | 527 |
| Rural | 91.3 | 6.6 | 2.1 | 0.0 | 100.0 | 860 |
| Region |  |  |  |  |  |  |
| $\quad$ Malé | 96.4 | 1.5 | 1.2 | 0.9 | 100.0 | 527 |
| North | 89.6 | 7.0 | 3.3 | 0.0 | 100.0 | 178 |
| North Central | 90.6 | 6.2 | 3.2 | 0.0 | 100.0 | 196 |
| Central | 95.9 | 3.5 | 0.6 | 0.0 | 100.0 | 125 |
| South Central | 92.5 | 6.6 | 0.9 | 0.0 | 100.0 | 156 |
| South | 89.4 | 8.5 | 2.1 | 0.0 | 100.0 | 205 |
| Education |  |  |  |  |  |  |
| $\quad$ No formal education | 90.9 | 6.0 | 2.2 | 0.9 | 100.0 | 311 |
| Primary | 92.5 | 5.4 | 2.1 | 0.0 | 100.0 | 470 |
| Secondary | 94.0 | 3.8 | 1.7 | 0.5 | 100.0 | 470 |
| More than secondary | 98.3 | 1.7 | 0.0 | 0.0 | 100.0 | 101 |
| Wealth quintile |  |  |  |  |  |  |
| Lowest | 89.3 | 7.3 | 3.4 | 0.0 | 100.0 | 206 |
| Second | 91.0 | 6.1 | 2.9 | 0.0 | 100.0 | 235 |
| Middle | 92.9 | 5.5 | 1.6 | 0.0 | 100.0 | 298 |
| Fourth | 93.8 | 4.5 | 0.7 | 1.0 | 100.0 | 282 |
| Highest | 96.6 | 1.7 | 1.1 | 0.6 | 100.0 | 366 |
| Total 15-49 | 93.2 | 4.7 | 1.8 | 0.4 | 100.0 | 1,388 |
| 50-64 | 89.8 | 2.9 | 6.8 | 0.5 | 100.0 | 339 |
| Total men 15-64 | 92.5 | 4.3 | 2.8 | 0.4 | 100.0 | 1,727 |

[^13]
### 14.6 KNOWLedGe Of CONTRACEPTION

Table 14.6 shows that knowledge of family planning methods is virtually universal among all ever-married men and currently married men in Maldives. Almost all currently married men age 15-49 interviewed in the MDHS know at least one modern family planning method (99 percent). The male condom is the most widely recognized method ( 99 percent). More than 90 percent of men are also aware of the pill (94 percent) and female sterilization (93 percent), and 87-88 percent know about male sterilization and injectables. Almost eight in ten married men have heard of at least one traditional method of contraception. The mean number of methods known by men is 7.7 .

### 14.7 Ideal Number of Children

In the 2009 MDHS, each ever-married man was asked to choose, regardless of his current situation, the number of children he would have if he could start anew. Overall, 16 percent of respondents did not give a response to the question, 28 percent stated that their ideal number of children is two, 21 percent said that they wanted three children, and 18 percent wanted to have four children.

Table 14.7 shows that the number of living children and ideal family size are correlated; men who have a small number of children more often than other men want a small number of children. As parity increases, the ideal number of children also increases. Whereas men who have six or more children want to have 7.2 children, men with no children only want to have 2.6 children.

| Table 14.7 Ideal number of children |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percent distribution of ever-married men $15-49$ by ideal number of children, and mean ideal number of children for all evermarried men and for currently married men, according to number of living children, Maldives 2009 |  |  |  |  |  |  |  |  |
| Ideal number of children | Number of living children ${ }^{1}$ |  |  |  |  |  |  | Total |
|  | 0 | 1 | 2 | 3 | 4 | 5 | 6+ |  |
| 0 | 0.0 | 0.3 | 1.3 | 2.2 | 0.6 | 0.0 | 0.8 | 0.8 |
| 1 | 3.1 | 3.3 | 0.0 | 0.0 | 1.2 | 0.0 | 0.0 | 1.4 |
| 2 | 57.5 | 38.9 | 35.4 | 11.3 | 4.9 | 0.4 | 2.4 | 27.7 |
| 3 | 18.5 | 29.7 | 24.2 | 23.9 | 10.1 | 10.7 | 4.7 | 20.9 |
| 4 | 8.8 | 11.7 | 18.7 | 27.5 | 39.8 | 17.4 | 12.1 | 17.9 |
| 5 | 2.4 | 3.9 | 6.5 | 12.6 | 12.1 | 39.4 | 2.3 | 8.1 |
| 6+ | 2.7 | 0.2 | 1.9 | 3.3 | 6.2 | 18.7 | 41.3 | 7.1 |
| Non-numeric responses | 7.0 | 12.0 | 12.0 | 19.2 | 25.0 | 13.5 | 36.3 | 16.1 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Number | 176 | 386 | 286 | 187 | 131 | 81 | 142 | 1,388 |
| Mean ideal number children for: ${ }^{2}$ |  |  |  |  |  |  |  |  |
| Ever-married men 15-49 | 2.6 | 2.7 | 3.0 | 3.7 | 4.1 | 5.2 | 7.2 | 3.5 |
| Number | 164 | 340 | 251 | 151 | 98 | 70 | 90 | 1,164 |
| Currently married men 15-49 | 2.5 | 2.7 | 3.0 | 3.7 | 4.2 | 5.2 | 7.1 | 3.5 |
| Number | 140 | 329 | 242 | 140 | 90 | 67 | 85 | 1,092 |
| Mean ideal number children for men 15-64: ${ }^{2}$ |  |  |  |  |  |  |  |  |
| Ever-married men 15-64 | 2.6 | 2.7 | 3.1 | 3.6 | 4.2 | 5.2 | 6.8 | 3.7 |
| Number | 167.5 | 345.2 | 265.3 | 171.4 | 117.9 | 88.5 | 177.4 | 1,341.0 |
| Currently married men 15-64 | 2.5 | 2.7 | 3.1 | 3.6 | 4.3 | 5.2 | 6.7 | 3.7 |
| Number | 143.0 | 334.7 | 255.5 | 160.1 | 109.6 | 85.7 | 172.3 | 1,260.9 |

[^14]
### 14.8 AIDS-related Knowledge, Attitudes, and Behaviour

### 14.8.1 Awareness of HIV/AIDS

The 2009 MDHS respondents were asked whether they had heard of HIV or AIDS. Those who reported having heard of AIDS were asked a number of questions about whether and how HIV/AIDS could be avoided. Table 14.8 shows that awareness of AIDS is nearly universal (98 percent) among ever-married men age 15-49 in the Maldives. At least 95 percent of respondents have heard of AIDS in nearly all subgroups shown in the table.

### 14.8.2 Methods of HIV Prevention

AIDS prevention programmes focus their messages and efforts on three important aspects of behaviour: condom use, staying faithful to one partner, and delaying first sexual intercourse in young persons (i.e., abstinence). Table 14.9 shows the percentage of evermarried men age 15-49 who, in response to prompted questions, agreed that specific actions would help an individual to avoid AIDS. More than eight in ten men recognize the use of condoms, abstaining from sex, and limiting sex to one partner who is not HIV positive as ways of avoiding AIDS. Three in four men recognize that using condoms and limiting sex to one partner who is not HIV positive are ways to prevent transmission of HIV.

Overall, differentials in the levels of knowledge of the various modes of prevention are small. Among the largest differentials are the differences in the proportions who recognize condom use as a method of preventing HIV transmission by education; 81 percent of men with no formal education say that the risk of HIV transmission can be reduced by using condoms compared with 91 percent of men with more than secondary education. However, the educational differentials are not uniform, and no clear pattern is observed with regard to knowledge of other prevention methods.

Table 14.8 Knowledge of AIDS
Percentage of ever-married men age 15-49 who have heard of AIDS, by background characteristics, Maldives 2009

|  |  | Number of |
| :--- | :---: | :---: |
| Background <br> characteristic | Has heard <br> of AIDS | ever-married |
| men |  |  |

Age

| $15-24$ | 97.8 | 117 |
| :---: | ---: | ---: |
| $15-19$ | $*$ | 3 |
| $20-24$ | 97.7 | 115 |
| $25-29$ | 99.7 | 255 |
| $30-39$ | 98.7 | 548 |
| $40-49$ | 96.2 | 467 |

Marital status

| Married <br> Divorced/separated/ <br> widowed | 98.2 | 1,312 |
| :--- | ---: | ---: |

Residence

| Urban | 97.7 | 527 |
| :--- | :--- | :--- |
| Rural | 98.2 | 860 |

Region

| Malé | 97.7 | 527 |
| :--- | :--- | :--- |
| North | 97.4 | 178 |
| North Central | 98.6 | 196 |
| Central | 99.0 | 125 |
| South Central | 98.4 | 156 |
| South | 97.7 | 205 |

Education

| No formal education | 95.6 | 311 |
| :--- | ---: | ---: |
| Primary | 97.7 | 470 |
| Secondary | 99.3 | 470 |
| More than secondary | 100.0 | 101 |
|  |  |  |
| Wealth quintile | 96.3 | 206 |
| $\quad$ Lowest | 98.7 | 235 |
| Second | 97.8 | 298 |
| Middle | 98.8 | 282 |
| Fourth | 98.0 | 366 |
| Highest | 98.0 | 1,388 |
| Total 15-49 | 91.6 | 339 |
| 50-64 | 96.7 | 1,727 |
| Total men 15-64 |  |  |

Note: Total includes 35 men with information missing on education level. An asterisk indicates that an estimate is based on fewer than 25 cases and has been suppressed.
$\left.\begin{array}{|llllll}\hline \text { Table 14.9 Knowledge of HIV prevention methods } \\ \text { Percentage of ever-married men age } & \text { 15-49 who, in response to prompted questions, say that }\end{array}\right]$

Note: Total includes 35 men with information missing on education level. An asterisk indicates that an estimate is based on fewer than 25 cases and has been suppressed.

### 14.8.3 Comprehensive Knowledge about HIV/AIDS

A person is considered to have comprehensive knowledge if she or he (1) knows that using condoms during sexual intercourse and having just one faithful, HIV-negative partner can reduce the chance of getting HIV, (2) knows that a healthy-looking person can have HIV, and (3) rejects the two most common local misconceptions about HIV transmission or prevention: that HIV can be transmitted by mosquito bites or by sharing food with a person who has HIV or AIDS. Table 14.10 shows that the majority of ever-married men age 15-49 were aware that AIDS cannot be transmitted by mosquito bites ( 72 percent), by sharing food with a person who has AIDS ( 86 percent) or by witchcraft or other supernatural means ( 88 percent). Seventy-eight percent of men correctly reported that a healthy-looking person can be infected HIV.

The results show that 44 percent of ever-married men age $15-49$ have a comprehensive knowledge of AIDS. Urban men, those who live in Malé and the South Central region, men age 30-39, men who are divorced/separated or widowed, men with more than secondary education, and men who live in the wealthiest households are more knowledgeable about AIDS than other men.

## Table 14.10 Comprehensive knowledge about AIDS

Percentage of ever-married men age 15-49 who say that a healthy-looking person can have the AIDS virus and who, in response to prompted questions, correctly reject local misconceptions about AIDS transmission or prevention, and the percentage with a comprehensive knowledge about AIDS by background characteristics, Maldives 2009

| Background characteristic | Percentage of respondents who say that: |  |  |  | Percentage who say that a healthy looking person can have the AIDS virus and who reject the two most common local misconceptions ${ }^{1}$ |  | Number of men |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | A healthylooking person can have the AIDS virus | AIDS cannot be transmitted by mosquito bites | AIDS cannot be transmitted by supernatural means | A person cannot become infected by sharing food with a person who has AIDS |  | Percentage with a comprehensive knowledge about AIDS $^{2}$ |  |
| Age |  |  |  |  |  |  |  |
| 15-24 | 71.9 | 65.2 | 82.3 | 70.3 | 46.9 | 40.3 | 117 |
| 15-19 | * | * | * | * | * | * | 3 |
| 20-24 | 71.9 | 65.1 | 82.3 | 70.0 | 47.1 | 40.7 | 115 |
| 25-29 | 81.2 | 73.5 | 90.2 | 90.0 | 55.2 | 42.1 | 255 |
| 30-39 | 81.3 | 78.1 | 89.8 | 90.5 | 60.6 | 48.3 | 548 |
| 40-49 | 73.7 | 66.6 | 86.6 | 82.2 | 46.9 | 39.7 | 467 |
| Marital status |  |  |  |  |  |  |  |
| Married | 77.7 | 72.0 | 88.4 | 86.0 | 53.4 | 43.1 | 1,312 |
| Divorced/separated/ widowed | 81.5 | 76.7 | 83.9 | 83.8 | 60.7 | 52.2 | 75 |
| Residence |  |  |  |  |  |  |  |
| Urban | 83.6 | 75.9 | 88.7 | 88.3 | 59.1 | 47.6 | 527 |
| Rural | 74.5 | 70.1 | 87.9 | 84.4 | 50.6 | 41.1 | 860 |
| Region |  |  |  |  |  |  |  |
| Malé | 83.6 | 75.9 | 88.7 | 88.3 | 59.1 | 47.6 | 527 |
| North | 80.1 | 67.2 | 84.2 | 87.3 | 51.4 | 39.7 | 178 |
| North Central | 73.8 | 74.3 | 92.5 | 84.1 | 53.6 | 46.0 | 196 |
| Central | 74.8 | 73.0 | 94.0 | 81.3 | 55.3 | 46.8 | 125 |
| South Central | 83.1 | 69.8 | 87.6 | 83.6 | 56.5 | 48.1 | 156 |
| South | 63.7 | 66.9 | 83.0 | 84.9 | 39.6 | 28.9 | 205 |
| Education |  |  |  |  |  |  |  |
| No formal education | 69.9 | 59.8 | 82.1 | 76.9 | 39.0 | 35.7 | 311 |
| Primary | 76.9 | 72.3 | 91.3 | 87.2 | 55.2 | 42.9 | 470 |
| Secondary | 80.9 | 76.9 | 88.6 | 88.2 | 57.3 | 45.2 | 470 |
| More than secondary | 90.3 | 87.0 | 88.0 | 92.0 | 73.4 | 58.7 | 101 |
| Wealth quintile |  |  |  |  |  |  |  |
| Lowest | 77.1 | 62.0 | 83.6 | 78.7 | 45.7 | 39.7 | 206 |
| Second | 70.7 | 72.7 | 90.3 | 86.4 | 51.7 | 43.6 | 235 |
| Middle | 74.8 | 70.0 | 89.7 | 85.9 | 53.2 | 43.2 | 298 |
| Fourth | 83.1 | 77.7 | 86.4 | 86.4 | 56.3 | 43.5 | 282 |
| Highest | 81.7 | 75.5 | 89.6 | 89.3 | 58.3 | 46.1 | 366 |
| Total 15-49 | 77.9 | 72.3 | 88.2 | 85.9 | 53.8 | 43.6 | 1,388 |
| 50-64 | 72.5 | 47.1 | 75.3 | 70.3 | 31.5 | 21.5 | 339 |
| Total men 15-64 | 76.9 | 67.3 | 85.7 | 82.8 | 49.4 | 39.3 | 1,727 |

Note: Total includes 35 men with information missing on education level. An asterisk indicates that an estimate is based on fewer than 25 cases and has been suppressed.
${ }^{1}$ Two most common local misconceptions are: people can get AIDS from mosquito bites and sharing food with a person who has AIDS.
${ }^{2}$ Comprehensive knowledge means knowing that consistent use of a condom during sexual intercourse and having just one uninfected faithful partner can reduce the chance of getting the AIDS virus, knowing that a healthy-looking person can have the AIDS virus, and rejecting the two most common local misconceptions about AIDS transmission or prevention.

### 14.8.4 Attitudes towards People Living with AIDS

In the MDHS, to assess the level of stigma, survey respondents who had heard of AIDS were asked (1) if they would be willing to care for a relative sick with AIDS in their own households, (2) if they would be willing to buy fresh vegetables from a market vendor who had the AIDS virus, (3) if they thought a female or a male teacher who has the AIDS virus but is not sick should be allowed to continue teaching, and (4) if they would want to keep a family member's infection with the AIDS virus a secret.

The results shown in Table 14.11 indicate that most ever-married men age 15-49 are willing to care for a relative with the AIDS virus at home ( 92 percent), and 86 percent will buy fresh vegetables from a shopkeeper infected with the AIDS virus. Two in three men would allow a female teacher or a male teacher with the AIDS virus to keep teaching ( 66 percent each). Three in four men said that they would not keep secret the status of a family member infected by the AIDS virus, and 43 percent of men expressed accepting attitudes on all five indicators, indicating that some degree of stigma is associated with HIV/AIDS within Maldivian society.

| Among ever-married men age 15-49 who have heard of HIV/AIDS, percentage expressing specific accepting attitudes towards people with HIV/AIDS, by background characteristics, Maldives 2009 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Percentage of respondents who: |  |  |  |  |  |  |
| Background characteristic | Are willing to care for a family member with the AIDS virus in the respondent's home | Would buy fresh vegetables from shopkeeper who has the AIDS virus | Say that a female teacher with the AIDS virus and is not sick should be allowed to continue teaching | Say that a male teacher with the AIDS virus and 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 five indicators | Number of respondents who have heard of AIDS |
| Age |  |  |  |  |  |  |  |
| 15-24 | 93.6 | 79.4 | 58.8 | 58.8 | 81.5 | 38.6 | 115 |
| 15-19 | 81.6 | 84.4 | 66.0 | 66.0 | 100.0 | 66.0 | 3 |
| 20-24 | 93.8 | 79.3 | 58.6 | 58.6 | 81.1 | 38.0 | 112 |
| 25-29 | 92.0 | 88.5 | 67.5 | 66.7 | 73.4 | 45.2 | 254 |
| 30-39 | 93.4 | 90.5 | 72.7 | 71.6 | 74.0 | 46.7 | 541 |
| 40-49 | 91.2 | 79.7 | 60.6 | 61.1 | 77.5 | 38.9 | 449 |
| Marital status |  |  |  |  |  |  |  |
| Married/Living together | 92.9 | 85.2 | 67.0 | 66.7 | 75.8 | 43.7 | 1,288 |
| Divorced/separated/widowed | 84.8 | 93.0 | 57.8 | 56.2 | 73.5 | 34.3 | 72 |
| Residence |  |  |  |  |  |  |  |
| Urban | 93.3 | 87.4 | 66.2 | 66.2 | 70.5 | 42.0 | 515 |
| Rural | 91.9 | 84.6 | 66.8 | 66.1 | 78.9 | 43.9 | 845 |
| Region |  |  |  |  |  |  |  |
| Malé | 93.3 | 87.4 | 66.2 | 66.2 | 70.5 | 42.0 | 515 |
| North | 93.0 | 86.5 | 69.0 | 67.6 | 83.7 | 48.9 | 174 |
| North Central | 93.3 | 83.1 | 67.4 | 67.4 | 76.5 | 43.5 | 193 |
| Central | 93.8 | 80.8 | 70.8 | 70.4 | 76.7 | 47.2 | 124 |
| South Central | 92.6 | 83.7 | 65.7 | 65.2 | 80.1 | 44.8 | 153 |
| South | 87.8 | 87.2 | 62.8 | 61.6 | 77.4 | 37.1 | 201 |
| Education |  |  |  |  |  |  |  |
| No education | 89.8 | 74.6 | 58.0 | 58.3 | 83.3 | 36.7 | 298 |
| Primary | 91.8 | 88.2 | 68.6 | 67.3 | 79.2 | 47.1 | 460 |
| Secondary | 93.7 | 88.8 | 67.4 | 67.3 | 68.6 | 41.6 | 467 |
| More than secondary | 94.8 | 88.1 | 78.8 | 78.8 | 71.8 | 53.2 | 101 |
| Unknown - Certificate | 97.8 | 97.1 | 65.2 | 65.2 | 70.5 | 39.5 | 35 |
| Wealth quintile |  |  |  |  |  |  |  |
| Lowest | 94.0 | 84.5 | 61.0 | 60.4 | 84.5 | 41.6 | 199 |
| Second | 90.8 | 85.3 | 69.7 | 68.7 | 78.4 | 45.8 | 232 |
| Middle | 92.3 | 85.0 | 68.5 | 67.9 | 75.6 | 44.2 | 292 |
| Fourth | 89.2 | 84.3 | 66.5 | 66.9 | 75.3 | 41.5 | 279 |
| Highest | 95.2 | 88.1 | 66.2 | 65.7 | 69.4 | 42.8 | 359 |
| Total 15-49 | 92.4 | 85.6 | 66.6 | 66.1 | 75.7 | 43.2 | 1,360 |
| 50-64 | 87.8 | 66.1 | 52.2 | 52.1 | 83.2 | 36.6 | 311 |
| Total men 15-64 | 91.6 | 82.0 | 63.9 | 63.5 | 77.1 | 41.9 | 1,670 |

Note: Total includes 35 men with information missing on education level. An asterisk indicates that an estimate is based on fewer than 25 cases and has been suppressed.

### 14.8.5 Multiple sexual partners

Information on sexual behaviour is important in designing and monitoring intervention programmes to control the spread of HIV. The 2009 MDHS included questions about the respondent's sexual partners over his lifetime. Table 14.12 shows, among evermarried men age 15-49 years who had sexual intercourse, the percentage who have had more than one sexual partner during their lifetime. The table also shows the mean number of lifetime sexual partners among these men.

Thirty-six percent of men report having had sex with more than one partner in a lifetime. These men have on average 2.3 partners. The mean number of lifetime sexual partners increases with age from 1.7 among men age $15-24$ to 2.9 among men age 40-49. The mean number of lifetime sexual partners is highest among men who are divorced, separated, or widowed (3.9). Urban men, men in the South, and men with no formal education have higher proportions of multiple partners compared with other men.

### 14.8.6 Knowledge of Place for HIV Testing

Knowledge of HIV status helps HIVnegative individuals make specific decisions to reduce risk and increase safer sex practices so that they can remain disease free. For those who are HIV infected, knowledge of their status allows them to take action to protect their sexual partners, to access treatment, and to plan for the future.

Table 14.12 Lifetime sexual partners
Among ever-married men who have ever had sexual intercourse, the percentage who had 2 or more sexual partners during their lifetime and the mean number of sexual partners during their lifetime, by background characteristics, Maldives 2009

|  | Among respondents who <br> ever had sexual <br> intercourse |  |  |
| :--- | :---: | :---: | :---: |
|  | Percentage <br> who had 2 <br> partners | Mean number <br> of sexual <br> partners in <br> lifetime | Number of <br> Background <br> characteristic |


| characteristic | partners | lifetime | men |
| :--- | :---: | :---: | :---: |
| Age |  |  |  |
| 15-24 | 22.0 | 1.7 | 98 |



| $20-24$ | 22.0 | 1.8 | 96 |
| :--- | ---: | ---: | ---: |
| $25-29$ | 29.9 | 2.0 | 219 |
| $30-39$ | 31.2 | 2.2 | 463 |
| $40-49$ | 48.4 | 2.9 | 388 |

Marital status
Married
Divorced/separated/
widowed
Residence
Urban
Rural
Region
Malé

| North | 33.6 | 1.6 | 158 |
| :--- | :--- | :--- | :--- |
| North Central | 23.0 | 1.5 | 184 |
| Central | 26.1 | 1.7 | 110 |


| Central | 26.1 | 1.7 | 134 |
| :--- | :--- | :--- | :--- |
| South Central | 38.0 | 3.2 | 169 |
| South | 50.8 | 3.3 |  |

Education

| No formal education | 41.7 | 2.1 | 260 |
| :--- | :--- | :--- | ---: |
| Primary | 35.9 | 2.1 | 415 |
| Secondary | 35.8 | 2.9 | 380 |
| $\quad$ More than secondary | 21.5 | 2.0 | 82 |
| Wealth quintile    <br> $\quad$ Lowest 33.2 2.3 180 <br> Second 34.5 2.2 201 <br> Middle 33.9 2.3 259 <br> Fourth 41.0 1.9 244 <br> Highest 36.0 2.8 283 <br> Total 15-49 35.9 2.3 1,168 <br> 50-64 61.1 2.9 267 <br> Total 15-64 40.6 2.4 1,435 |  |  |  |

Note: Total includes 35 men with information missing on education level. An asterisk indicates that an estimate is based on fewer than 25 cases and has been suppressed.

To assess the awareness and coverage of HIV testing services, MDHS respondents were asked whether they knew a place where they could go to be tested. Table 14.13 presents the results of these questions. Overall, 84 percent of ever-married men age 15-49 know where to go to get an HIV test. This knowledge varies by the men's characteristics. Married men, men who live in urban areas, and Malé residents are more knowledgeable than other men about the source for HIV testing. Knowledge of place for HIV testing increases with increasing education and wealth status.

| Table 14.13 Knowledge of place for HIV testing |  |  |
| :---: | :---: | :---: |
| Percentage of ever-married men age 15-49 who know where to get an HIV test, according to background characteristics, Maldives 2009 |  |  |
| Background characteristic | Percentage who know where to get an HIV test | Number of men |
| Age |  |  |
| 15-24 | 83.0 | 117 |
| 15-19 | * | 3 |
| 20-24 | 83.3 | 115 |
| 25-29 | 89.5 | 255 |
| 30-39 | 87.5 | 548 |
| 40-49 | 76.2 | 467 |
| Marital status |  |  |
| Married | 84.1 | 1,312 |
| Divorced/separated/ widowed | 76.6 | 75 |
| Residence |  |  |
| Urban | 91.9 | 527 |
| Rural | 78.7 | 860 |
| Region |  |  |
| Malé | 91.9 | 527 |
| North | 75.3 | 178 |
| North Central | 80.5 | 196 |
| Central | 73.2 | 125 |
| South Central | 72.5 | 156 |
| South | 88.0 | 205 |
| Education |  |  |
| No formal education | 67.8 | 311 |
| Primary | 83.5 | 470 |
| Secondary | 91.2 | 470 |
| More than secondary | 97.6 | 101 |
| Wealth quintile |  |  |
| Lowest | 70.0 | 206 |
| Second | 76.3 | 235 |
| Middle | 83.5 | 298 |
| Fourth | 88.5 | 282 |
| Highest | 92.6 | 366 |
| Total 15-49 | 83.7 | 1,388 |
| 50-64 | 67.2 | 339 |
| Total men 15-64 | 80.4 | 1,727 |

Note: Total includes 35 men with information missing on education level. An asterisk indicates that an estimate is based on fewer than 25 cases and has been suppressed.

### 14.9 Self-Reporting of Sexually Transmitted Infections

In the 2009 MDHS, ever-married men were asked if they have had a disease they contracted through sexual contact in the past 12 months or if they have had symptoms associated with sexually transmitted infections (STIs): a bad-smelling, abnormal discharge from the penis or a genital sore or ulcer. Table 14.14 shows that 1 percent of ever-married men report having an STI and 1 percent of ever-married men age 15-49 report having STI symptoms. Men with more than secondary education report the highest infection rates (8 percent) followed by widowed, divorced, and separated men ( 5 percent).

Table 14.14 Self-reported prevalence of sexually-transmitted infections (STIs) and STIs symptoms

Among ever-married men age 15-49 who ever had sexual intercourse, the percentage reporting having an STI and/or symptoms of an STI in the past 12 months, by background characteristics, Maldives 2009

| Background characteristic | Percentage of men who reported having in the past 12 months: |  |  |  | Number of men who ever had sexual intercourse |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | STI | Bad- smelling/ abnormal genital discharge | Genital sore/ulcer | STI/genital discharge/ sore or ulcer |  |
| Age |  |  |  |  |  |
| 15-24 | 0.9 | 2.3 | 1.3 | 3.2 | 117 |
| 15-19 | * | * | * | * | 3 |
| 20-24 | 0.9 | 2.4 | 1.4 | 3.3 | 115 |
| 25-29 | 1.4 | 0.2 | 1.1 | 1.7 | 255 |
| 30-39 | 1.6 | 1.1 | 0.2 | 2.6 | 548 |
| 40-49 | 1.0 | 1.1 | 0.7 | 2.5 | 467 |
| Marital status |  |  |  |  |  |
| Married | 1.4 | 0.8 | 0.7 | 2.3 | 1,312 |
| Divorced/separated/ widowed | 0.0 | 5.1 | 0.0 | 5.1 | 75 |
| Residence |  |  |  |  |  |
| Urban | 1.4 | 0.9 | 0.7 | 2.6 | 527 |
| Rural | 1.2 | 1.1 | 0.6 | 2.3 | 860 |
| Region |  |  |  |  |  |
| Malé | 1.4 | 0.9 | 0.7 | 2.6 | 527 |
| North | 0.0 | 0.9 | 0.9 | 0.9 | 178 |
| North Central | 2.2 | 0.4 | 0.5 | 2.6 | 196 |
| Central | 0.0 | 1.8 | 0.7 | 2.5 | 125 |
| South Central | 1.7 | 0.5 | 0.5 | 2.2 | 156 |
| South | 1.8 | 2.1 | 0.3 | 3.3 | 205 |
| Education |  |  |  |  |  |
| No formal education | 1.2 | 1.2 | 0.5 | 2.3 | 311 |
| Primary | 0.4 | 0.6 | 0.3 | 1.1 | 470 |
| Secondary | 1.3 | 1.7 | 0.6 | 2.8 | 470 |
| More than secondary | 6.1 | 0.0 | 2.5 | 7.9 | 101 |
| Total 15-49 | 1.3 | 1.0 | 0.6 | 2.4 | 1,388 |
| 50-64 | 0.2 | 1.5 | 0.2 | 1.7 | 339 |
| Total men 15-64 | 1.1 | 1.1 | 0.5 | 2.3 | 1,727 |

Note: Total includes 35 men with information missing on education level. An asterisk indicates that an estimate is based on fewer than 25 cases and has been suppressed.

### 14.10 Prevalence of Medical Injections

Non-sterile 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 2009 MDHS were asked if they had received an injection in the past 12 months, and if so, the number of injections. Overall, 35 percent of ever-married men age 15-49 reported having had a medical injection in the past 12 months (Table 14.15). On average, men received 2.2 injections over the 12 -month period.

Respondents who had received an injection in the past 12 months were asked where they had obtained their last injection. Their responses are summarized in Figure 14.1. More than three in four men went to a public facility, and 22 percent went to a private medical facility. Among facilities in the public sector, the government health centre is the most often-used facility.

When asked whether the last injection used a new syringe taken from an unopened package, 93 percent of men confirmed this was the case (Table 14.15). Hygienic compliance was most often reported by men who were attended by a community health worker and private doctor. Indhira Gandhi Memorial Hospital shows a lower compliance for maintaining sterility of medical instruments than other public sector sources (data not shown).

## Table 14.15 Prevalence of medical injections

Percentage of ever-married men age 15-49 who received at least one medical injection in the past 12 months, the average number of medical injections per person in the past 12 months, and among those who received a medical injection, the percentage of last medical injections for which the syringe and needle were taken from a new, unopened package, by background characteristics, Maldives 2009

| Background characteristic | Percentage who received a medical injection in the past 12 months ${ }^{1}$ | Average number of medical injections per person in the past 12 months | Number of evermarried men | For last injection, syringe and needle taken from a new, unopened package | Number of men receiving medical injections in the past 12 months |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Age |  |  |  |  |  |
| 15-24 | 34.3 | 1.4 | 117 | (95.6) | 40 |
| 15-19 | * | * | 3 | * | 1 |
| 20-24 | 34.2 | 1.4 | 115 | (95.4) | 39 |
| 25-29 | 32.1 | 1.5 | 255 | 91.6 | 82 |
| 30-39 | 37.0 | 1.4 | 548 | 92.8 | 203 |
| 40-49 | 33.6 | 3.9 | 467 | 92.9 | 157 |
| Residence |  |  |  |  |  |
| Urban | 30.9 | 2.4 | 527 | 89.9 | 163 |
| Rural | 37.0 | 2.2 | 860 | 94.4 | 319 |
| Region |  |  |  |  |  |
| Malé | 30.9 | 2.4 | 527 | 89.9 | 163 |
| North | 38.6 | 2.2 | 178 | 96.9 | 69 |
| North Central | 34.9 | 2.3 | 196 | 92.5 | 68 |
| Central | 39.4 | 2.2 | 125 | 97.2 | 49 |
| South Central | 39.9 | 2.4 | 156 | 90.9 | 62 |
| South | 34.1 | 1.8 | 205 | 95.0 | 70 |
| Education |  |  |  |  |  |
| No formal education | 34.4 | 4.1 | 311 | 92.7 | 107 |
| Primary | 35.1 | 2.5 | 470 | 94.3 | 165 |
| Secondary | 35.8 | 1.2 | 470 | 92.3 | 169 |
| More than secondary | 31.2 | 0.7 | 101 | * | 31 |
| Wealth quintile |  |  |  |  |  |
| Lowest | 37.3 | 2.0 | 206 | 93.9 | 77 |
| Second | 40.9 | 2.6 | 235 | 93.6 | 96 |
| Middle | 34.3 | 1.8 | 298 | 97.2 | 102 |
| Fourth | 29.6 | 2.0 | 282 | 91.9 | 83 |
| Highest | 33.6 | 2.7 | 366 | 88.7 | 123 |
| Total 15-49 | 34.7 | 2.2 | 1,388 | 92.9 | 482 |
| 50-64 | 35.1 | 2.6 | 1,727 | 92.3 | 607 |
| Total 15-64 | 37.6 | 2.6 | 1,727 | 93.2 | 650 |

Note: Total includes 9 men with information missing on formal education level. Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that an estimate is based on fewer than 25 cases and has been suppressed.
${ }^{1}$ Medical injections are those given by a doctor, nurse, pharmacist, dentist, or other health worker.

Figure 14.1 Type of Facility Where Last Medical Injection Was Received


MDHS 2009

### 14.11 Men's Attitude towards Empowerment of Women

The 2009 MDHS also obtained information from ever-married men on several measures of women's status and empowerment. Specifically, men were asked questions about women's participation in specific household decisions, on their degree of acceptance of wife beating, and on their opinions about when a wife should be able to refuse sex with her husband.

### 14.11.1 Men's View of Women's Participation in Decision Making

To assess women's decision-making autonomy, information was collected on from men women's participation in decisions concerning four areas: a respondent's own health care, large household purchases, household purchases for daily needs, what to do with the money wife earns and how many children to have. Table 14.16 shows the distribution of currently married men age 15-49 by the person they think should have the final say in making specific decisions. The data show that, for household purchases for daily needs most men feel that wives should have a greater say, while one in ten men think that husbands should be the main decision maker. For the remaining decisions (major household purchases, what to do with the wife's income, and how many children a couple should have) a large proportion of men think that wives and husbands should make the decision together. In fact, 82 percent of men think that family size should be decided jointly by a husband and his wife.

| Table 14.16 Women's participation in decision making according to men |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percent distribution of currently married men $15-49$ by person who they think should have a greater say in making decisions about four kinds of issues, Maldives 2009 |  |  |  |  |  |  |  |
| Decision | Wife | Wife and husband equally | Husband |  | Missing | Total | Number of men |
| Major household purchases | 27.9 | 52.4 | 18.7 | 0.6 | 0.4 | 100.0 | 1,312 |
| Purchases of daily household needs | 60.4 | 28.9 | 9.5 | 0.8 | 0.4 | 100.0 | 1,312 |
| What to do with the money wife earns | 33.7 | 48.7 | 5.1 | 11.7 | 0.8 | 100.0 | 1,312 |
| How many children to have | 3.3 | 82.2 | 7.9 | 5.9 | 0.7 | 100.0 | 1,312 |

Table 14.17 is presented to show the variations in married men's attitudes towards their wife's participation in specific household decisions. The results indicate that the majority of men (80 percent or higher) think that a wife, alone or jointly with her husband, should have a say in each of the four decisions. This is particularly true for purchasing daily household needs. Overall, 61 percent of married men age 15-64 agree that a wife should participate in all four of the specified decisions, and very few (4 percent) say that they should not participate in any of the decisions.

There are small variations across subgroups of men. Interestingly, the degree of independence a woman should have in making household decisions, as perceived by men, declines with increasing age and wealth status. However, men with more than secondary education more often say that a wife should be involved in all the specified decisions than men with less education.


Note: Total includes 9 men with information missing on employment. An asterisk indicates that an estimate is based on fewer than 25 cases and has been suppressed.

### 14.11.2 Attitudes towards Wife Beating

To assess a women's degree of acceptance of wife beating, the 2009 MDHS asked evermarried men, 'Sometimes a husband is annoyed or angered by things that his wife does. In your opinion, is a husband justified in hitting or beating his wife in the following situations?' The five situations presented to men for their opinion were: she burns the food, she argues with him, she goes out without telling him, she neglects the children, and she refuses to have sex with him. The first five columns in Table 14.8 show how men's acceptance of wife beating varies in each situation. The last column shows the percentage of ever-married men who feel that a husband is justified in beating his wife for at least one of the specified reasons.

| Table 14.18 Attitude towards wife beating |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percentage of ever-married men age 15-49 who agree that a husband is justified in hitting or beating his wife for specific reasons, by background characteristics, Maldives 2009 |  |  |  |  |  |  |  |
|  | Husband is justified in hitting or beating his wife if she: |  |  |  |  | Percentage who agree with at least one specified reason | Number |
| Background characteristic | Burns the food | Argues with him | Goes out without telling him | Neglects the children | Refuses to have sexual intercourse with him |  |  |
| Age |  |  |  |  |  |  |  |
| 15-19 | * | * | * | * | * | * | 3 |
| 20-24 | 1.0 | 8.0 | 2.0 | 11.4 | 1.8 | 14.9 | 115 |
| 25-29 | 1.0 | 6.1 | 2.2 | 7.4 | 2.9 | 12.4 | 255 |
| 30-34 | 2.5 | 9.2 | 4.6 | 9.3 | 4.4 | 12.8 | 276 |
| 35-39 | 3.0 | 10.0 | 5.9 | 9.8 | 7.4 | 15.1 | 272 |
| 40-44 | 0.0 | 6.5 | 6.3 | 10.0 | 2.8 | 16.8 | 243 |
| 45-49 | 4.4 | 8.4 | 7.8 | 12.3 | 6.1 | 14.6 | 224 |
| Employment (past 12 months) |  |  |  |  |  |  |  |
| Not employed | 0.0 | 8.6 | 0.0 | 8.6 | 0.0 | 8.6 | 25 |
| Employed for cash | 2.1 | 8.1 | 5.1 | 9.9 | 4.6 | 14.5 | 1,355 |
| Marital status |  |  |  |  |  |  |  |
| Married | 2.0 | 8.4 | 5.1 | 9.8 | 4.5 | 14.5 | 1,312 |
| Divorced/separated/widowed | 3.0 | 4.0 | 4.4 | 10.5 | 3.4 | 11.5 | 75 |
| Number of living children |  |  |  |  |  |  |  |
| 0 | 1.0 | 5.9 | 2.2 | 7.7 | 2.8 | 12.4 | 229 |
| 1-2 | 1.9 | 8.7 | 4.5 | 9.9 | 4.7 | 14.4 | 641 |
| 3-4 | 1.9 | 7.8 | 4.5 | 8.3 | 5.1 | 13.3 | 301 |
| 5+ | 3.7 | 9.4 | 10.2 | 14.0 | 4.7 | 17.6 | 216 |
| Residence |  |  |  |  |  |  |  |
| Urban | 2.7 | 7.9 | 3.9 | 7.9 | 5.5 | 12.8 | 527 |
| Rural | 1.7 | 8.2 | 5.7 | 11.0 | 3.8 | 15.3 | 860 |
| Region |  |  |  |  |  |  |  |
| Malé | 2.7 | 7.9 | 3.9 | 7.9 | 5.5 | 12.8 | 527 |
| North | 1.6 | 9.2 | 8.1 | 15.8 | 6.2 | 20.0 | 178 |
| North Central | 2.4 | 9.7 | 7.7 | 10.6 | 3.5 | 17.5 | 196 |
| Central | 1.1 | 6.6 | 3.4 | 8.9 | 3.1 | 12.6 | 125 |
| South Central | 2.7 | 12.6 | 6.2 | 13.3 | 5.5 | 20.4 | 156 |
| South | 0.5 | 3.7 | 2.7 | 6.7 | 1.4 | 7.0 | 205 |
| Education |  |  |  |  |  |  |  |
| No formal education | 2.3 | 9.3 | 8.6 | 15.2 | 3.6 | 18.5 | 311 |
| Primary | 3.2 | 8.5 | 6.1 | 9.4 | 5.6 | 13.8 | 470 |
| Secondary | 1.4 | 7.0 | 2.2 | 7.3 | 4.2 | 13.0 | 470 |
| More than secondary | 0.0 | 8.0 | 1.0 | 5.3 | 2.6 | 8.0 | 101 |
| Wealth quintile |  |  |  |  |  |  |  |
| Lowest | 1.1 | 8.6 | 5.6 | 12.3 | 4.1 | 15.8 | 206 |
| Second | 2.9 | 9.2 | 4.9 | 11.3 | 3.7 | 15.4 | 235 |
| Middle | 1.2 | 7.1 | 7.0 | 9.5 | 3.6 | 14.1 | 298 |
| Fourth | 2.2 | 9.7 | 3.6 | 10.5 | 4.7 | 14.6 | 282 |
| Highest | 2.6 | 6.8 | 4.3 | 7.3 | 5.7 | 12.9 | 366 |
| Total 15-49 | 2.1 | 8.1 | 5.0 | 9.8 | 4.5 | 14.3 | 1,388 |
| 50-64 | 3.2 | 7.0 | 7.0 | 9.3 | 6.2 | 11.5 | 339 |
| Total men 15-64 | 2.3 | 7.9 | 5.4 | 9.7 | 4.8 | 13.8 | 1,727 |
| Note: Total includes 9 men with information missing on employment and 35 men with information missing on formal education level. An asterisk indicates that an estimate is based on fewer than 25 cases and has been suppressed. Medical injections are those given by a doctor, nurse, pharmacist, dentist, or other health worker |  |  |  |  |  |  |  |

As shown in Table 14.18, very small percentages of ever-married men age 15-49 agree to each of the reasons justifying a husband beating his wife. Men most often agree that a husband has the right to beat his wife if she neglects the children (10 percent). Agreement with other reasons justifying a husband to beat his wife is 2 percent if she burns the food, 8 percent if the wife argues with her husband, 5 percent if she goes out without telling him, and 5 percent if she refuses to have sexual intercourse with him

The likelihood that a man justifies wife beating in at least one of the specified situations varies across age groups. Men with five or more living children have the highest rates of agreement with at least one reason justifying wife beating compared with men with 1-2 living children (18 percent compared with 12 percent). Residence appears to influence men's attitudes towards wife beating. Men in rural areas agree with at least one reason justifying wife beating more often than men in urban areas. The proportions of men who agree with at least one reason for a husband to beat his wife are highest in the North and South Central regions ( 20 percent each) and lowest in the South region (7 percent). Education and wealth quintile have a negative relationship with men's agreement with any reason for a husband to hit or beat his wife.

### 14.11.3 Attitudes towards Refusing Sexual Intercourse with Husband

The extent of control women have over when and with whom they have sexual intercourse is an indicator of women's empowerment and has implications for demographic and health outcomes. In the 2009 MDHS, ever-married men were asked whether a wife is justified in refusing to have sexual intercourse with her husband under three circumstances: she knows her husband has a sexually transmitted disease (STD); she is tired or not in the mood; and she knows her husband has sex with other women.

Table 14.19 shows the percentage of ever-married men age $15-49$ who believe that a wife is justified in refusing sexual intercourse with a husband in three specific circumstances. Most men (88 percent or higher) agree with each of the specified reasons for a wife to withhold sexual intercourse from her husband. Overall, 81 percent of men agree with all of the specified reasons for a wife to refuse sexual intercourse with her husband, and 3 percent agree with none of the reasons.

Male agreement with any of the specified reasons for a wife to refuse sexual intercourse with her husband does not vary substantially and shows no uniform pattern.

| Table 14.19 Attitude towards refusing sexual intercourse with husband |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percentage of ever-married men age 15-49 who believe that a wife is justified in refusing to have sexual intercourse with her husband in specific circumstances, by background characteristics, Maldives 2009 |  |  |  |  |  |  |
|  | Wife is justified in refusing intercourse with her husband if she: |  |  | Percentage who agree with all of the specified reasons | Percentage who agree with none of the specified reasons | Number of evermarried men |
| Background characteristic | Knows husband has a sexually transmitted disease | Knows husband has intercourse with other women | Is tired or not in the mood |  |  |  |
| Age |  |  |  |  |  |  |
| 15-19 | * | * | * | * | * | 3 |
| 20-24 | 90.9 | 86.1 | 91.4 | 77.5 | 2.3 | 115 |
| 25-29 | 96.0 | 84.5 | 91.1 | 79.6 | 2.2 | 255 |
| 30-34 | 96.3 | 92.3 | 91.3 | 85.3 | 2.0 | 276 |
| 35-39 | 90.1 | 87.3 | 89.6 | 79.0 | 4.2 | 272 |
| 40-44 | 96.0 | 89.1 | 94.7 | 84.7 | 1.1 | 243 |
| 45-49 | 88.1 | 87.5 | 88.4 | 77.8 | 5.4 | 224 |
| Employment (past 12 months) |  |  |  |  |  |  |
| Not employed | * | * | * | * | * | 25 |
| Employed for cash | 93.6 | 88.3 | 91.5 | 81.4 | 2.5 | 1,355 |
| Marital status |  |  |  |  |  |  |
| Married | 93.6 | 88.2 | 91.3 | 81.4 | 2.6 | 1,312 |
| Divorced/separated/widowed | 87.5 | 85.1 | 87.8 | 75.0 | 7.3 | 75 |
| Number of living children |  |  |  |  |  |  |
| 0 | 94.9 | 85.7 | 90.7 | 79.0 | 2.0 | 229 |
| 1-2 | 93.5 | 88.6 | 91.8 | 83.1 | 3.1 | 641 |
| 3-4 | 91.9 | 90.1 | 88.7 | 79.9 | 3.1 | 301 |
| $5+$ | 92.5 | 85.7 | 92.6 | 78.7 | 2.9 | 216 |
| Residence |  |  |  |  |  |  |
| Urban | 94.4 | 89.1 | 92.7 | 84.6 | 3.1 | 527 |
| Rural | 92.5 | 87.3 | 90.1 | 78.8 | 2.8 | 860 |
| Region |  |  |  |  |  |  |
| Malé | 94.4 | 89.1 | 92.7 | 84.6 | 3.1 | 527 |
| North | 91.9 | 86.7 | 91.5 | 78.1 | 2.3 | 178 |
| North Central | 96.2 | 89.1 | 94.3 | 84.1 | 0.5 | 196 |
| Central | 94.7 | 84.8 | 89.1 | 76.1 | 2.2 | 125 |
| South Central | 94.4 | 91.3 | 87.2 | 81.9 | 3.1 | 156 |
| South | 86.7 | 84.5 | 87.7 | 73.8 | 5.3 | 205 |
| Education |  |  |  |  |  |  |
| No formal education | 90.4 | 87.3 | 90.2 | 77.8 | 3.6 | 311 |
| Primary | 94.4 | 89.4 | 91.6 | 82.8 | 2.4 | 470 |
| Secondary | 92.9 | 87.3 | 91.0 | 80.8 | 3.4 | 470 |
| More than secondary | 99.3 | 87.1 | 92.5 | 83.4 | 0.7 | 101 |
| Wealth quintile |  |  |  |  |  |  |
| Lowest | 89.7 | 85.0 | 88.5 | 74.6 | 4.2 | 206 |
| Second | 91.9 | 87.6 | 92.9 | 82.0 | 4.2 | 235 |
| Middle | 96.0 | 91.2 | 89.5 | 81.7 | 0.4 | 298 |
| Fourth | 91.8 | 87.7 | 90.8 | 80.0 | 2.4 | 282 |
| Highest | 95.0 | 87.5 | 92.9 | 84.3 | 3.7 | 366 |
| Total 15-49 | 93.2 | 88.0 | 91.1 | 81.0 | 2.9 | 1,388 |
| 50-64 | 94.0 | 88.2 | 89.3 | 81.3 | 3.8 | 339 |
| Total men 15-64 | 93.4 | 88.0 | 90.7 | 81.1 | 3.1 | 1,727 |

Note: Total includes 8 men with information missing on employment and 40 men with information missing on formal education level. An asterisk indicates that an estimate is based on fewer than 25 cases and has been suppressed.

Table 14.20 shows the percentage of ever-married men age $15-49$ who think that a husband has the right to take certain actions when his wife refuses to have sexual intercourse with him when he wants her to. The four specified actions are: get angry and reprimand her, refuse her financial support, use force to have sexual intercourse, or have sexual intercourse with another woman. Overall, less than 1 percent of men agree that a man has the right to take all four of the specified actions if his wife refuses to have sexual intercourse with him, while 75 percent think that a man does not have the right to take any of the actions. Looking at specific actions, the highest proportion (20 percent) is for men who think that a husband has a right to get angry and reprimand his wife.

Table 14.20 Men's attitude towards a husband's rights when his wife refuses to have sexual intercourse
Percentage of ever-married men age 15-49 who consider that a husband has the right to certain behaviours when a woman refuses to have sex with him when he wants her to, by background characteristics, Maldives 2009

| Background characteristic | When a woman refuses to have sex with her husband, he has the right to: |  |  |  | Percentage who agree with all of the specified reasons | Percentage who agree with none of the specified reasons | Number of evermarried men |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Get angry and reprimand her | Refuse her financial support | Use force to have sex | Have sex with another woman |  |  |  |
| Age |  |  |  |  |  |  |  |
| 15-19 | * | * | * | * | * | * | 5 |
| 20-24 | 18.2 | 6.1 | 0.8 | 1.5 | 0.0 | 78.0 | 132 |
| 25-29 | 15.3 | 8.1 | 1.6 | 2.8 | 0.0 | 78.6 | 248 |
| 30-34 | 21.0 | 11.1 | 3.3 | 2.2 | 0.7 | 75.3 | 271 |
| 35-39 | 23.5 | 15.9 | 3.6 | 3.6 | 0.8 | 70.5 | 251 |
| 40-44 | 19.5 | 9.7 | 2.1 | 3.4 | 0.4 | 76.7 | 236 |
| 45-49 | 20.9 | 10.7 | 4.4 | 5.3 | 0.4 | 73.3 | 225 |
| Employment (past 12 months) |  |  |  |  |  |  |  |
| Not employed | * | * | * | * | * | * | 22 |
| Employed for cash | 20.3 | 10.8 | 2.9 | 3.3 | 0.4 | 74.8 | 1,337 |
| Marital status |  |  |  |  |  |  |  |
| Married | 19.7 | 10.3 | 2.9 | 3.1 | 0.5 | 75.7 | 1,306 |
| Divorced/separated/widowed | 25.8 | 19.4 | 1.6 | 4.8 | 0.0 | 62.9 | 62 |
| Number of living children |  |  |  |  |  |  |  |
| 0 | 20.4 | 8.1 | 0.5 | 3.3 | 0.0 | 75.8 | 211 |
| 1-2 | 17.4 | 9.9 | 3.4 | 2.2 | 0.3 | 77.2 | 597 |
| 3-4 | 24.0 | 12.9 | 1.5 | 4.2 | 0.6 | 71.9 | 334 |
| $5+$ | 20.4 | 11.9 | 5.8 | 4.4 | 0.9 | 73.9 | 226 |
| Residence |  |  |  |  |  |  |  |
| Urban | 20.6 | 9.9 | 0.9 | 5.8 | 0.9 | 74.0 | 223 |
| Rural | 19.8 | 10.8 | 3.2 | 2.7 | 0.3 | 75.4 | 1,145 |
| Region |  |  |  |  |  |  |  |
| Malé | 20.6 | 9.9 | 0.9 | 5.8 | 0.9 | 74.0 | 223 |
| North | 25.9 | 15.2 | 5.1 | 3.8 | 0.6 | 70.3 | 158 |
| North Central | 14.8 | 7.8 | 1.7 | 3.0 | 0.4 | 80.9 | 230 |
| Central | 23.2 | 12.2 | 3.5 | 1.6 | 0.4 | 72.0 | 254 |
| South Central | 19.1 | 12.7 | 4.0 | 4.0 | 0.0 | 73.2 | 299 |
| South | 17.6 | 6.4 | 2.0 | 1.0 | 0.5 | 80.4 | 204 |
| Education |  |  |  |  |  |  |  |
| No education | 21.1 | 10.4 | 3.9 | 4.5 | 0.6 | 75.5 | 355 |
| Primary | 21.4 | 12.6 | 3.4 | 2.8 | 0.8 | 72.8 | 500 |
| Secondary | 19.5 | 9.0 | 1.5 | 2.7 | 0.0 | 76.3 | 410 |
| More than secondary | 9.5 | 7.9 | 0.0 | 1.6 | 0.0 | 82.5 | 63 |
| Wealth quintile |  |  |  |  |  |  |  |
| Lowest | 20.8 | 13.3 | 4.2 | 2.7 | 0.4 | 72.3 | 264 |
| Second | 22.6 | 11.8 | 4.0 | 3.4 | 0.3 | 73.7 | 323 |
| Middle | 18.7 | 9.3 | 2.5 | 2.8 | 0.5 | 77.3 | 396 |
| Fourth | 17.5 | 9.6 | 1.8 | 3.5 | 0.4 | 75.4 | 228 |
| Highest | 19.7 | 8.9 | 0.6 | 4.5 | 0.6 | 77.1 | 157 |
| Total 15-49 | 20.0 | 10.7 | 2.9 | 3.2 | 0.4 | 75.1 | 1,368 |
| 50-64 | 24.8 | 8.9 | 5.6 | 3.6 | 1.7 | 71.3 | 359 |
| Total men 15-64 | 21.0 | 10.3 | 3.4 | 3.3 | 0.7 | 74.3 | 1,727 |

[^15]
## YOUTH-RELATED ISSUES

### 15.1 INTRODUCTION

One in four Maldivians belongs to the 15-24 age group. In number, they increased from 45,000 in 1995 to more than 75,000 in 2006 (MPND, 2006). In the immediate future, a steady increase in the number of persons entering the labour market and beginning their reproductive years can be expected. This group needs services to facilitate a successful transition to adulthood, including those services that specifically address reproductive and sexual health.

Half of the households selected for the evermarried sample of women of the 2009 MDHS were selected for the male and young adults survey. In these households, all never-married women and never-married men age $15-24$, who were either usual residents of the household or visitors present in the household on the night before the survey, were eligible to be interviewed. The MDHS was limited to Maldivian citizens; non-Maldivians were included in the survey only if they were the spouse, son, or daughter of a Maldivian.

The objective for involving the youth in the survey was to assess their knowledge and attitudes regarding issues of reproductive health, marriage and childbearing, sexual activity, and HIV/AIDS. The survey also collected information on tobacco, alcohol, and drug use. Prior to conducting these interviews, informed consent was obtained from the youth. For those who were under 18 years of age consent was obtained first from the youth's parents or guardians.

Table 15.1 Results of the household and individual interviews

Number of households, number of interviews, and response rates, according to residence (unweighted), Maldives 2009

| Result | Residence |  |
| :--- | :--- | :--- |
|  | Urban Rural Total |  |

Households selected for youth
urvey
$\begin{array}{llll}\text { Households selected } & 601 & 3,162 & 3,763\end{array}$
Households occupied 566

| Households interviewed | 481 | 2,758 | 3,239 |
| :--- | :--- | :--- | :--- |

$\begin{array}{llll}\text { Household response rate }^{1} & 85.0 & 91.6 & 90.5\end{array}$
Interviews with women 15-24
Number of respondents
Number of eligible women interviewed

333 1,191 1,524
$260 \quad 953 \quad 1,213$
$\begin{array}{llll}\text { Eligible women response rate }{ }^{2} & 78.1 & 80.0 & 79.6\end{array}$
Interviews with men 15-24
Number of respondents
Number of eligible men interviewed

349 1,332 1,681

Eligible men response rate
$60.2 \quad 61.3$
${ }^{1}$ Households interviewed/households occupied
${ }^{2}$ Respondents interviewed/eligible respondents

A total of 3,205 never-married women and men age 15-24 (youth) were identified as eligible for individual interview. Interviews were completed with 2,240 youth, comprising 1,213 women and 1,027 men. The response rate was higher for female youth ( 80 percent) than for male youth (61 percent). For both women and men, the response rate was slightly higher in rural than in urban areas.

### 15.2 Respondent's Characteristics

This section provides information on the demographic and socioeconomic characteristics of the young adult respondents in this survey. The main background characteristics that are used in subsequent chapters to distinguish subgroups of young adults by their knowledge, attitudes, and behaviour in the area of reproductive health are age, residence (urban-rural), and level of education. As shown in Table 15.2, the number of never-married women and men age 15-24 who have no formal education is fewer than 25 , which prevents any estimates about this group from appearing in subsequent tables.

There are more females than males in the sample; 54 percent and 46 percent, respectively. Seventy-three percent of the women and 69 percent of the men are in the younger age group (15-19). Respondents are more often found in rural areas ( 58 percent) than in urban areas ( 42 percent). Most of the respondents have a secondary or higher education ( 95 percent of women and 90 percent of men).

| Table 15.2 Background characteristics of respondents |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percent distribution of never-married women and men age 15-24 by background characteristics, Maldives 2009 |  |  |  |  |  |  |
|  | Women |  |  | Men |  |  |
| Background characteristic | Weighted percent | Weighted | Unweighted | Weighted percent | Weighted | Unweighted |
| Age |  |  |  |  |  |  |
| 15 | 12.7 | 154 | 160 | 10.6 | 108 | 116 |
| 16 | 16.8 | 203 | 225 | 18.7 | 192 | 195 |
| 17 | 16.4 | 198 | 193 | 13.5 | 139 | 145 |
| 18 | 14.6 | 177 | 182 | 15.8 | 162 | 147 |
| 19 | 12.5 | 151 | 149 | 10.3 | 106 | 115 |
| 15-19 | 72.8 | 883 | 909 | 68.9 | 707 | 718 |
| 20 | 8.5 | 103 | 95 | 9.7 | 100 | 91 |
| 21 | 8.2 | 99 | 93 | 7.9 | 82 | 80 |
| 22 | 5.5 | 66 | 59 | 6.9 | 71 | 70 |
| 23 | 3.3 | 40 | 38 | 3.7 | 38 | 41 |
| 24 | 1.7 | 21 | 19 | 2.9 | 29 | 27 |
| 20-24 | 27.2 | 330 | 304 | 31.1 | 320 | 309 |
| Residence |  |  |  |  |  |  |
| Urban | 41.9 | 508 | 260 | 42.2 | 433 | 210 |
| Rural | 58.1 | 705 | 953 | 57.8 | 594 | 817 |
| Education |  |  |  |  |  |  |
| No formal education | 0.4 | 5 | 6 | 0.2 | 2 | 4 |
| Primary | 3.7 | 45 | 60 | 9.6 | 99 | 122 |
| Secondary | 89.0 | 1,080 | 1,088 | 87.4 | 897 | 875 |
| More than secondary | 5.6 | 68 | 47 | 2.1 | 21 | 18 |
| Total | 100.0 | 1,213 | 1,213 | 100.0 | 1,027 | 1,027 |

### 15.3 Current Activity

In Table 15.3, young, never-married women and men are distinguished by the type of activity they were involved in during the seven days before the survey (i.e., going to school, holding a job, going to school and holding a job, or neither going to school nor holding a job). Thirty-six percent of never-married women age 15-24 and one in three never-married men age 15-24 attend school only, and one in three women and 39 percent of men work only. A small percentage of women and men go to school as well as hold a job (4 percent of women and 8 percent of men, respectively). A sizable proportion of women and men are neither attending school nor working ( 27 percent of women and 20 percent of men).

As expected, the youngest respondents have the highest rates of school attendance, whereas the oldest respondents have the highest rates of working. Urban respondents are less often in school and more often at work than rural respondents.

Better-educated women have higher rates of school attendance, while women with less education have higher rates of working. Among men, there is no clear pattern in the realtionship between level of education and school attendance. Better-educated men work less. The rate of women attending school while holding a job increases with increasing education level. Men show the opposite pattern.

The proportion of women who are neither attending school nor working decreases with increasing education level; 36 percent of women with a primary education have stopped school and do not work compared with only 13 percent of women with more than secondary education. Men show the opposite pattern: 9 percent of men with primary education are neither attending school nor working, while the corresponding proportion for men with secondary education is 21 percent.

Table 15.3 Current activity
Percent distribution of never-married women and men age $15-24$ by current activity, according to background characteristics, Maldives 2009

| Background characteristic | Current activity |  |  |  |  | Total | Number |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Attending school only | Working only | Attending school and working | Neither attending school nor working | Other |  |  |
| WOMEN |  |  |  |  |  |  |  |
| Age |  |  |  |  |  |  |  |
| 15-19 | 46.2 | 23.4 | 3.8 | 26.5 | 0.1 | 100.0 | 883 |
| 20-24 | 8.2 | 56.9 | 5.6 | 29.2 | 0.0 | 100.0 | 330 |
| Residence |  |  |  |  |  |  |  |
| Urban | 29.7 | 35.1 | 6.1 | 29.1 | 0.0 | 100.0 | 508 |
| Rural | 40.3 | 30.6 | 3.0 | 25.9 | 0.1 | 100.0 | 705 |
| Education |  |  |  |  |  |  |  |
| No formal education | * | * | * | * | * | 100.0 | 5 |
| Primary | 46.3 | 16.5 | 0.0 | 35.8 | 1.4 | 100.0 | 45 |
| Secondary | 36.5 | 32.0 | 3.6 | 27.9 | 0.0 | 100.0 | 1,080 |
| More than secondary | (26.5) | (41.3) | (19.4) | (12.8) | (0.0) | 100.0 | 68 |
| Total | 35.9 | 32.5 | 4.3 | 27.3 | 0.1 | 100.0 | 1,213 |
| MEN |  |  |  |  |  |  |  |
| Age |  |  |  |  |  |  |  |
| 15-19 | 44.8 | 24.3 | 9.8 | 20.5 | 0.5 | 100.0 | 707 |
| 20-24 | 6.6 | 70.3 | 4.5 | 18.6 | 0.1 | 100.0 | 320 |
| Residence |  |  |  |  |  |  |  |
| Urban | 22.6 | 42.9 | 8.9 | 25.1 | 0.4 | 100.0 | 433 |
| Rural | 40.4 | 35.5 | 7.6 | 16.1 | 0.4 | 100.0 | 594 |
| Education |  |  |  |  |  |  |  |
| No formal education | * | * | * | * | * | 100.0 | 2 |
| Primary | 29.5 | 50.1 | 11.0 | 9.4 | 0.0 | 100.0 | 99 |
| Secondary | 33.9 | 37.1 | 7.9 | 20.7 | 0.4 | 100.0 | 897 |
| More than secondary | * | * | * | * | * | 100.0 | 21 |
| Total | 32.9 | 38.6 | 8.2 | 19.9 | 0.4 | 100.0 | 1,027 |

Note: Total includes 15 women and 8 men with information missing on level of education. Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that an estimate is based on fewer than 25 unweighted cases and has been suppressed.

### 15.4 Media Exposure

Table 15.4 shows that television is the most popular mass media among young people age 15-24; 98 percent of women and 96 percent of men report watching television at least once a week. Printed materials are the least popular ( 38 percent of women and 39 percent of men). Women more often than men listen to the radio at least once a week. However, use of the Internet is more popular among young men than among young women. Twelve percent of women and 15 percent of men are exposed at least once a week to the four media: radio, television, printed materials, and the Internet.

In general, for both women and men, those who are older, those living in urban areas, and those who have completed secondary education have the most exposure to the media.

| Percentage of never-married women and men age 15-24 who usually read a newspaper at least once a week, watch TV at least once a week, listen to the radio at least once a week, and use the Internet at least once a week, by background characteristics, Maldives 2009 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Exposure to mass media |  |  |  |  |  |  |
| Background characteristic | Reads newspaper/ magazine at least once a week | Watches TV at least once a week | Listens to a radio at least once a week | Uses the internet at least once a week | All four media | $\begin{gathered} \text { No } \\ \text { media } \end{gathered}$ | Number |
| WOMEN |  |  |  |  |  |  |  |
| Age |  |  |  |  |  |  |  |
| 15-19 | 35.4 | 97.9 | 69.9 | 36.2 | 9.9 | 0.6 | 883 |
| 20-24 | 46.3 | 97.6 | 62.9 | 51.6 | 18.5 | 0.0 | 330 |
| Residence |  |  |  |  |  |  |  |
| Urban | 45.7 | 97.2 | 54.8 | 62.6 | 18.7 | 0.0 | 508 |
| Rural | 33.1 | 98.3 | 77.6 | 24.3 | 7.5 | 0.8 | 705 |
| Education |  |  |  |  |  |  |  |
| No formal education | * | * | * | * | * | * | 5 |
| Primary | 30.4 | 95.5 | 71.2 | 10.0 | 2.7 | 2.9 | 45 |
| Secondary | 37.3 | 98.0 | 68.6 | 38.3 | 11.2 | 0.4 | 1,080 |
| More than secondary | (57.2) | (96.4) | (56.7) | (90.6) | (32.2) | (0.0) | 68 |
| Total | 38.3 | 97.8 | 68.0 | 40.3 | 12.2 | 0.4 | 1,213 |
| MEN |  |  |  |  |  |  |  |
| Age |  |  |  |  |  |  |  |
| 15-19 | 35.7 | 96.7 | 54.8 | 53.9 | 11.1 | 0.4 | 707 |
| 20-24 | 47.1 | 94.3 | 54.7 | 68.4 | 23.6 | 0.6 | 320 |
| Residence |  |  |  |  |  |  |  |
| Urban | 56.5 | 92.7 | 43.3 | 84.5 | 23.2 | 0.4 | 433 |
| Rural | 26.6 | 98.4 | 63.1 | 39.3 | 9.0 | 0.5 | 594 |
| Education |  |  |  |  |  |  |  |
| No formal education | * | * | * | * | * | * | 2 |
| Primary | 17.1 | 98.0 | 66.3 | 24.6 | 6.5 | 0.4 | 99 |
| Secondary | 40.3 | 95.8 | 54.0 | 61.7 | 15.4 | 0.5 | 897 |
| More than secondary | * | * | * | * | * | * | 21 |
| Total | 39.2 | 96.0 | 54.8 | 58.4 | 15.0 | 0.5 | 1,027 |

Note: Total includes 15 women and 8 men with information missing on level of education. Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that an estimate is based on fewer than 25 unweighted cases and has been suppressed.

### 15.5 Knowledge of the Fertile Period

Correct knowledge of a woman's monthly reproductive cycle and the specific days when a woman is most likely to conceive leads to the success of the practice of periodic abstinence as a family planning method. Basic knowledge of the mechanisms of human reproduction is important. In the 2009 MDHS, all never-married respondents age 15-24 were asked about their knowledge of a woman's fertile period in the menstrual cycle. First, they were asked whether there are certain days from one menstrual period to the next when a woman is more likely to become pregnant if she has sexual relations. Those who responded positively to this question were further asked when this time is; whether it is just before her period begins, during her period, right after her period has ended, or halfway between periods.

Data in Table 15.5 show that knowledge about the fertile period is deficient in young women as well as young men; more than half of the respondents age 15-19 cannot respond to the question (51 percent among women and 53 percent among men). Only 16 percent of women and 11 percent of men gave the correct response, that a woman has the greatest chance of becoming pregnant halfway between her periods. Older respondents are more knowledgeable about the fertile period than younger respondents. Only 8 percent of men age 15-19 gave the correct answer.

| Table 15.5 Knowledge of the fertile period |
| :--- |
| Percent distribution of never-married women and men age $15-24$ who know that there are certain |
| days in a woman's menstrual cycle when she is more likely to become pregnant, by perceived fertile |
| period, according to age, Maldives 2009 |

### 15.6 Knowledge of Family Planning Methods

In the 2009 MDHS data on knowledge of family planning methods were obtained by first asking the respondent to name the ways that a couple can delay or avoid a pregnancy. If the respondent did not spontaneously mention a particular contraceptive method, the interviewer probed by describing a method and asking the respondent if she or he recognized it. Descriptions were included in the questionnaire for ten modern family planning methods: female sterilization, male sterilization, the pill, the intrauterine device (IUD), injectables, implants, condom, periodic abstinence, withdrawal, and emergency contraception.

Data in Table 15.6 indicate that knowledge of contraceptive methods is widespread among never-married young adults in Maldives; more than 90 percent of young women and men have heard of a method of family planning. Knowledge about contraceptive methods is equal among women and men (94 percent and 93 percent, respectively). Almost all never-married young adults who have heard of at least one contraceptive method have heard of modern methods. Knowledge of traditional methods is limited (44 percent of women and 51 percent of men). On average, never-married women and men know about 5.5 methods.

The most commonly known methods among unmarried women age 15-24 are male condoms (86 percent), followed closely by female sterilization (85 percent). As expected, for unmarried men age $15-24$, the most commonly known method is condoms ( 91 percent). Knowledge of the pill and female sterilization among men is also high (74 percent each). The least familiar family planning method among young women is emergency contraception (27 percent), possibly because it was only introduced in 2007. For men, the least known family planning method is implants (27 percent), also because it was only introduced in 2006 and only available in Malé. Implants were cited by 37 percent of women.

Higher proportions of never-married women and men age 20-24 have heard of family planning methods compared with their younger counterparts (age 15-19). For example, knowledge of modern contraceptive methods among never-married women age 15-19 is 93 percent, compared with 96 percent for never-married women age 20-24.

| Table 15.6 Knowledge of contraceptive methods |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percentage of never-married women and men age 15-24 who know specific contraceptive methods by age, Maldives 2009 |  |  |  |  |  |  |
|  |  | Women |  |  | Men |  |
| Contraceptive method | 15-19 | 20-24 | Total | 15-19 | 20-24 | Total |
| Any method | 92.6 | 96.0 | 93.5 | 92.0 | 95.4 | 93.1 |
| Any modern method | 92.6 | 96.0 | 93.5 | 92.0 | 95.4 | 93.1 |
| Female sterilization | 82.6 | 90.6 | 84.8 | 69.2 | 84.5 | 73.9 |
| Male sterilization | 50.3 | 64.8 | 54.2 | 53.7 | 70.2 | 58.9 |
| Pill | 75.3 | 85.7 | 78.2 | 69.7 | 83.4 | 73.9 |
| IUD | 42.4 | 60.5 | 47.3 | 35.6 | 55.0 | 41.7 |
| Injectables | 64.2 | 75.4 | 67.2 | 56.5 | 71.9 | 61.3 |
| Implants | 31.4 | 51.6 | 36.9 | 22.8 | 36.0 | 26.9 |
| Male condom | 83.2 | 92.6 | 85.8 | 88.7 | 94.8 | 90.6 |
| Emergency contraception | 25.0 | 32.8 | 27.1 | 25.9 | 37.0 | 29.3 |
| Any traditional method | 38.6 | 59.5 | 44.2 | 46.4 | 62.1 | 51.3 |
| Rhythm | 30.7 | 51.0 | 36.2 | 31.6 | 38.9 | 33.8 |
| Withdrawal | 24.3 | 39.6 | 28.4 | 37.5 | 54.7 | 42.8 |
| Folk method | 1.7 | 3.6 | 2.2 | 2.1 | 4.2 | 2.7 |
| Number | 883 | 330 | 1,213 | 707 | 320 | 1,027 |
| Mean number of methods known | 5.1 | 6.5 | 5.5 | 4.9 | 6.3 | 5.4 |

### 15.7 Decision about Marriage

In the 2009 MDHS, never-married women and men age 15-24 were asked who is going to choose the person they are going to marry: their parents, themselves, or their parents together with them. These findings are presented in Table 15.7.

Data in the table show that higher proportions of women compared with men say that they and their parents jointly are the primary decision-makers about their future husband (59 and 38 percent, respectively). On the other hand, more men than women say that they themselves will decide whom they will marry ( 58 and 36 percent, respectively). This may be because men do not need parental consent for marriage. Although parents still play a role in determining their future spouse, few respondents report that their parents alone will mainly decide whom their future spouse will be (4 percent for women and 3 percent for men).

Women age 15-19 in higher proportions than women age 20-24 say that they, together with their parents, are going to make the decision about whom they will marry ( 61 percent compared with 51 percent). Men show a similar pattern ( 40 percent and 35 percent, respectively).

The involvement of parents in making the decision about a future partner varies by the respondent's residence and education; more urban respondents than rural residents say that they themselves will make a decision on whom to marry. Although a women's education does not have a strong relationship with her attitude about who will make the decision about a marriage partner, men with secondary education more often than men with primary education say that they want to make the decision themselves.

| Table 15.7 Decision on whom to marry |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percent distribution of never-married women and men age 15-24 by who makes the decision on whom the respondent will marry, according to background characteristics, Maldives, 2009 |  |  |  |  |  |  |  |
|  | Decision-maker |  |  |  |  | Total | Number |
| Background characteristic | Mainly parents | Mainly self | Parents and self jointly | Other | Don't know/ missing |  |  |
| WOMEN |  |  |  |  |  |  |  |
| Age |  |  |  |  |  |  |  |
| 15-19 | 4.4 | 32.9 | 61.4 | 0.7 | 0.6 | 100.0 | 883 |
| 20-24 | 3.7 | 45.5 | 50.8 | 0.0 | 0.0 | 100.0 | 330 |
| Residence |  |  |  |  |  |  |  |
| Urban | 3.4 | 41.0 | 54.0 | 0.9 | 0.7 | 100.0 | 508 |
| Rural | 4.8 | 32.9 | 61.8 | 0.2 | 0.3 | 100.0 | 705 |
| Education |  |  |  |  |  |  |  |
| No formal education | * | * | * | * | * | 100.0 | 5 |
| Primary | 9.5 | 36.5 | 54.0 | 0.0 | 0.0 | 100.0 | 45 |
| Secondary | 4.2 | 36.8 | 57.9 | 0.6 | 0.5 | 100.0 | 1,080 |
| More than secondary | (0.0) | (32.8) | (67.2) | (0.0) | (0.0) | 100.0 | 68 |
| Total | 4.2 | 36.3 | 58.5 | 0.5 | 0.5 | 100.0 | 1,213 |
| MEN |  |  |  |  |  |  |  |
| Age |  |  |  |  |  |  |  |
| 15-19 | 3.5 | 56.0 | 39.7 | 0.1 | 0.6 | 100.0 | 707 |
| 20-24 | 3.1 | 61.4 | 34.7 | 0.6 | 0.2 | 100.0 | 320 |
| Residence |  |  |  |  |  |  |  |
| Urban | 2.1 | 62.9 | 34.7 | 0.0 | 0.4 | 100.0 | 433 |
| Rural | 4.3 | 53.9 | 40.6 | 0.5 | 0.6 | 100.0 | 594 |
| Education |  |  |  |  |  |  |  |
| No formal education | * | * | * | * | * | 100.0 | 2 |
| Primary | 2.2 | 50.6 | 47.2 | 0.0 | 0.0 | 100.0 | 99 |
| Secondary | 3.7 | 58.0 | 37.6 | 0.3 | 0.4 | 100.0 | 897 |
| More than secondary | * | * | * | * | * | 100.0 | 21 |
| Total | 3.4 | 57.7 | 38.1 | 0.3 | 0.5 | 100.0 | 1,027 |

Note: Total includes 15 women and 8 men with information missing on level of education. Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that an estimate is based on fewer than 25 unweighted cases and has been suppressed.

### 15.8 Decision on Number of Children

The 2009 MDHS respondents were also asked, 'Who do you think should mainly decide how many children a couple should have, the husband, the wife, or both together?' Table 15.8 presents the findings. Overall, nearly all respondents say that husband and wife together should make the decision on the number of children they are going to have ( 97 percent of women and 97 percent of men).

Individual decision-making on number of children is not popular among either women or men. For instance, only 2 percent each of women and men think that a husband alone should decide the number of children. Similarly, less than 1 percent each of women and men think that a wife alone should decide the number of children.

There is little variation across age groups and residence. However, the variation is notable across education levels. The proportion of never-married women and men who say that husband and wife jointly should decide on the number of children that they will have increases with their education level. For instance, this opinion is expressed by 92 percent of women with primary education compared with 97 percent of women with more than secondary education.

| Table 15.8 Decision on number of children |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percent distribution of never-married women and men age $15-24$ by who they think should make the decision on the number of children to have, according to background characteristics, Maldives, 2009 |  |  |  |  |  |  |  |
|  | Decision-maker |  |  |  |  |  |  |
| Background characteristic | Mainly husband | Mainly wife | Wife and husband jointly | Other | Don't know/ missing | Total | Number |
| WOMEN |  |  |  |  |  |  |  |
| Age |  |  |  |  |  |  |  |
| 15-19 | 1.4 | 0.5 | 96.8 | 0.4 | 0.9 | 100.0 | 883 |
| 20-24 | 2.6 | 1.5 | 95.9 | 0.0 | 0.0 | 100.0 | 330 |
| Residence |  |  |  |  |  |  |  |
| Urban | 1.8 | 1.2 | 95.9 | 0.0 | 1.1 | 100.0 | 508 |
| Rural | 1.7 | 0.5 | 97.0 | 0.5 | 0.3 | 100.0 | 705 |
| Education |  |  |  |  |  |  |  |
| No formal education | * | * | * | * | * | 100.0 | 5 |
| Primary | 6.3 | 1.4 | 92.4 | 0.0 | 0.0 | 100.0 | 45 |
| Secondary | 1.5 | 0.6 | 96.8 | 0.4 | 0.7 | 100.0 | 1,080 |
| More than secondary | (0.0) | (3.4) | (96.6) | (0.0) | (0.0) | 100.0 | 68 |
| Total | 1.7 | 0.8 | 96.6 | 0.3 | 0.6 | 100.0 | 1,213 |
| MEN |  |  |  |  |  |  |  |
| Age |  |  |  |  |  |  |  |
| 15-19 | 1.7 | 1.1 | 96.3 | 0.3 | 0.6 | 100.0 | 707 |
| 20-24 | 1.3 | 0.4 | 98.0 | 0.0 | 0.3 | 100.0 | 320 |
| Residence |  |  |  |  |  |  |  |
| Urban | 0.3 | 0.3 | 99.0 | 0.0 | 0.4 | 100.0 | 433 |
| Rural | 2.5 | 1.2 | 95.3 | 0.4 | 0.6 | 100.0 | 594 |
| Education |  |  |  |  |  |  |  |
| No formal education | * | * | * | * | * | 100.0 | 2 |
| Primary | 5.9 | 2.4 | 90.3 | 0.0 | 1.4 | 100.0 | 99 |
| Secondary | 1.2 | 0.7 | 97.6 | 0.2 | 0.3 | 100.0 | 897 |
| More than secondary | * | * | * | * | * | 100.0 | 21 |
| Total | 1.6 | 0.9 | 96.8 | 0.2 | 0.5 | 100.0 | 1,027 |

Note: Total includes 15 women and 8 men with information missing on level of education. Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that an estimate is based on fewer than 25 unweighted cases and has been suppressed.

### 15.9 Discussion on Reproductive Health

One of the objectives of the 2009 MDHS was to find out the sources from which young adults in Maldives obtained information on reproductive health. In the survey, respondents were asked whether they had discussed with anyone issues related to human reproduction and sexuality. Table 15.9 shows that one in four women ( 25 percent) and 22 percent of men had not talked about reproductive health and sexuality with anyone.

Among those who talked, respondents more often talked with friends of the same sex; 57 percent of female respondents talked with their female friends and 66 percent of male respondents talked with their male friends. In addition to friends, the majority of the women who discussed reproductive health issues more often talked with persons of the same sex (e.g., mothers or sisters). Men, on the other hand, are more open to talking about reproductive health with persons of the opposite sex, such as female friends or girlfriends (34-35 percent each).

| Table 15.9 Discussion of reproductive health |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percentage of never-married youth age 15-24 by person with whom they talked about reproductive health, by background characteristics, Maldives 2009 |  |  |  |  |  |  |  |  |  |  |  |  |
| Background characteristic | Discuss reproductive health with: |  |  |  |  |  |  |  |  |  |  | Number |
|  | Mother | Father | Brother | Sister | Male friend | Female friend | Boyfriend/ girlfriend | Female teacher | Male teacher | Health provider | $\begin{aligned} & \hline \text { No } \\ & \text { one } \\ & \hline \end{aligned}$ |  |
| WOMEN |  |  |  |  |  |  |  |  |  |  |  |  |
| Age |  |  |  |  |  |  |  |  |  |  |  |  |
| 15-19 | 24.6 | 0.6 | 1.7 | 32.1 | 6.0 | 53.8 | 12.9 | 34.9 | 12.2 | 17.3 | 27.4 | 883 |
| 20-24 | 22.3 | 1.6 | 1.4 | 44.0 | 12.5 | 66.2 | 40.6 | 40.6 | 16.0 | 29.7 | 19.9 | 330 |
| Residence |  |  |  |  |  |  |  |  |  |  |  |  |
| Urban | 31.5 | 1.7 | 2.3 | 47.8 | 11.9 | 63.5 | 26.2 | 37.2 | 13.9 | 21.3 | 19.4 | 508 |
| Rural | 18.5 | 0.3 | 1.2 | 26.4 | 4.8 | 52.6 | 16.2 | 35.9 | 12.7 | 20.2 | 29.6 | 705 |
| Education |  |  |  |  |  |  |  |  |  |  |  |  |
| No education | * | * | * | * | * | * | * | * | * | * | * | 5 |
| Primary | 12.9 | 1.3 | 0.0 | 21.5 | 2.3 | 50.4 | 13.9 | 26.8 | 7.8 | 22.0 | 36.3 | 45 |
| Secondary | 23.3 | 0.9 | 1.6 | 33.7 | 7.0 | 55.8 | 18.8 | 35.5 | 12.7 | 19.4 | 25.8 | 1,080 |
| More than secondary | (40.9) | (0.0) | (4.1) | (70.5) | (24.7) | (86.3) | (52.3) | (59.4) | (28.5) | (41.1) | (4.6) | 68 |
| Total | 23.9 | 0.9 | 1.7 | 35.3 | 7.8 | 57.2 | 20.4 | 36.4 | 13.2 | 20.6 | 25.3 | 1,213 |
|  |  |  |  |  |  | MEN |  |  |  |  |  |  |
| Age |  |  |  |  |  |  |  |  |  |  |  |  |
| 15-19 | 3.3 | 2.3 | 11.5 | 3.9 | 60.8 | 26.8 | 24.1 | 20.0 | 31.2 | 8.3 | 25.1 | 707 |
| 20-24 | 1.5 | 1.3 | 11.3 | 4.7 | 78.1 | 49.9 | 58.3 | 16.6 | 29.3 | 21.8 | 15.0 | 320 |
| Residence |  |  |  |  |  |  |  |  |  |  |  |  |
| Urban | 4.1 | 1.7 | 14.9 | 6.3 | 71.8 | 43.6 | 46.7 | 25.3 | 30.9 | 15.9 | 16.1 | 433 |
| Rural | 1.7 | 2.2 | 8.9 | 2.6 | 62.0 | 27.0 | 26.1 | 14.3 | 30.4 | 10.1 | 26.1 | 594 |
| Education |  |  |  |  |  |  |  |  |  |  |  |  |
| No education | * | * | * | * | * | * | * | * | * | * | * | 2 |
| Primary | 3.6 | 2.7 | 7.3 | 2.9 | 61.6 | 25.3 | 25.8 | 9.3 | 20.1 | 13.3 | 27.6 | 99 |
| Secondary | 2.4 | 1.9 | 11.5 | 4.2 | 66.7 | 34.5 | 35.7 | 19.8 | 31.8 | 11.7 | 21.0 | 897 |
| More than secondary | * | * | * | * | * | * | * | * | * | * | * | 21 |
| Total | 2.7 | 2.0 | 11.5 | 4.2 | 66.1 | 34.0 | 34.8 | 19.0 | 30.6 | 12.5 | 21.9 | 1,027 |

Note: Total includes 15 women and 8 men with information missing on level of education. Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that an estimate is based on fewer than 25 unweighted cases and has been suppressed.

The role of teachers in imparting knowledge about reproductive health is significant. Both men and women talked with teachers of the same sex more often than they talked with teachers of the opposite sex. More than one-third of young, never-married women reported talking with a female teacher while 13 percent had talked to a male teacher. Among young, never-married men, 31 percent had talked with a male teacher, and 19 percent had talked with a female teacher.

Health service providers play a less significant role as a source of information on reproductive health (21 percent for women and 13 percent for men). Overall, for both women and men, the younger, rural, and less educated respondents discussed reproductive health less often than other respondents.

### 15.10 Use of Tobacco

Tobacco smoking is associated with major health problems. Information about smoking behaviour can be used to predict the prevalence of noncommunicable diseases such as cardiovascular diseases, diabetes, chronic obstructive pulmonary diseases, and cancer (Truelsen and Bonita, 2002). An understanding of the full impact of tobacco use on a population's health requires data on frequency or level of exposure to tobacco smoke, duration of exposure, and quantity or magnitude of exposure. Data for female youth are not presented because fewer than 25 women reported to smoke. Table 15.10 provides information on smoking behaviour among young men.

| Table 15.10 Cigarette smoking |  |  |
| :---: | :---: | :---: |
| Percentage of never-married men age 15-24 who are currently smoking by background characteristics, Maldives 2009 |  |  |
| Background characteristic | Percent | Number |
| Age |  |  |
| 15-19 | 19.8 | 707 |
| 20-24 | 42.0 | 320 |
| Residence |  |  |
| Urban | 22.7 | 433 |
| Rural | 29.6 | 594 |
| Education |  |  |
| No formal education | * | 2 |
| Primary | 39.8 | 99 |
| Secondary | 25.4 | 897 |
| More than secondary | * | 21 |
| Total | 26.7 | 1,027 |

Note: Total includes 8 men with information missing on level of education. An asterisk indicates that an estimate is based on fewer than 25 unweighted cases and has been suppressed.

Comparison across subgroups of men reveals that smoking is more common among older men, rural men, and less educated men.

### 15.11 Knowledge of AIDS

Table 15.11 shows the percentages of never-married women and men age $15-24$ who have heard of AIDS. Overall, 96 percent each of women and men say that they have heard of AIDS. Older respondents, those who live in urban areas, and those with higher education report higher rates of having heard of AIDS.

| Table 15.11 Knowledge of AIDS |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Percentage of never-married women and men age 15-24 by who have heard of AIDS, by background characteristics, Maldives, 2009 |  |  |  |  |
|  | Women |  | Men |  |
| Background characteristic | Has heard of AIDS | Number | $\begin{aligned} & \hline \text { Has heard } \\ & \text { of AIDS } \\ & \hline \end{aligned}$ | Number |
| Age |  |  |  |  |
| 15-19 | 95.1 | 883 | 95.0 | 707 |
| 20-24 | 97.2 | 330 | 98.5 | 320 |
| Ever had sexual intercourse |  |  |  |  |
| Yes | 100.0 | 43 | 98.6 | 101 |
| No | 97.3 | 586 | 97.3 | 466 |
| Residence |  |  |  |  |
| Urban | 99.6 | 508 | 99.3 | 433 |
| Rural | 92.8 | 705 | 93.7 | 594 |
| Education |  |  |  |  |
| No formal education | * | 5 | * | 2 |
| Primary | 83.3 | 45 | 88.7 | 99 |
| Secondary | 96.1 | 1,080 | 96.7 | 897 |
| More than secondary | (100.0) | 68 | * | 21 |
| Total | 95.7 | 1,213 | 96.1 | 1,027 |
| Note: Total includes 15 women and 8 men with information missing on level of education. Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that an estimate is based on fewer than 25 unweighted cases and has been suppressed. |  |  |  |  |

### 15.12 Knowledge of HIV Prevention Methods

HIV is mainly transmitted through heterosexual contact between an infected partner and an uninfected partner. Consequently, HIV prevention programs focus their messages and efforts on three important aspects of behaviour: use of condoms, limiting the number of sexual partners or staying faithful to one partner, and delaying sexual debut for young persons (abstinence). To ascertain whether the programs have effectively communicated these messages, MDHS respondents were asked specific questions about whether it is possible to reduce the chances of getting HIV by using a condom at every sexual encounter, limiting sexual intercourse to one uninfected partner, and abstaining from sex.

Table 15.12 shows the levels of knowledge of various HIV prevention methods by background characteristics. Six in ten never-married women age 15-24 and 76 percent of nevermarried men age 15-24 know that using condoms can reduce the risk of contracting HIV. This knowledge is higher for respondents in urban areas and those with higher education.

More than three in four young, never-married women and men say that limiting sexual intercourse to one uninfected partner can prevent them from getting the AIDS virus (78 percent and 77 percent, respectively). Fifty-one percent of women and 62 percent of men say that using condoms and limiting sexual intercourse to one uninfected partner can reduce the risk of getting HIV. Additionally, 73 percent of women and 78 percent of men say that not having sexual intercourse at all can reduce the risk of contracting HIV. Knowledge for all four prevention methods is highest among those age 20-24 and those with a high level of education.

## Table 15.12 Knowledge of HIV prevention methods

Percentage of never-married youth 15-25 who, in response to prompted questions, say that people can reduce the risk of getting the AIDS virus by using condoms every time they have sexual intercourse, by having one uninfected sex partner who has no other partners, and by abstaining from sexual intercourse, by background characteristics, Maldives 2009

|  | Women |  |  |  |  | Men |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Background characteristic | Using condoms | Limiting sexual intercourse to one uninfected partner | Using condoms and limiting sexual intercourse to one uninfected partner | Abstaining from sexual intercourse | Number | Using condoms | Limiting sexual intercourse to one uninfected partner | Using condoms and limiting sexual intercourse to one uninfected partner | Abstaining from sexual intercourse | Number |
| Age |  |  |  |  |  |  |  |  |  |  |
| 15-19 | 55.2 | 76.5 | 47.1 | 71.6 | 883 | 71.7 | 72.8 | 56.6 | 75.3 | 707 |
| 20-24 | 68.8 | 81.9 | 61.2 | 77.6 | 330 | 85.0 | 86.2 | 74.8 | 84.7 | 320 |
| Ever had sexual intercourse |  |  |  |  |  |  |  |  |  |  |
| Yes | 77.2 | 85.7 | 68.0 | 84.6 | 43 | 89.5 | 83.9 | 75.3 | 85.5 | 101 |
| No | 63.4 | 84.0 | 57.5 | 75.7 | 586 | 81.3 | 81.7 | 68.7 | 82.7 | 466 |
| Residence |  |  |  |  |  |  |  |  |  |  |
| Urban | 65.9 | 77.4 | 53.4 | 75.7 | 508 | 87.8 | 79.7 | 71.5 | 84.0 | 433 |
| Rural | 53.9 | 78.4 | 49.1 | 71.4 | 705 | 67.1 | 75.0 | 55.6 | 74.1 | 594 |
| Education |  |  |  |  |  |  |  |  |  |  |
| No formal education | * | * | * | * | 5 | * | * | * | * | 2 |
| Primary | 49.2 | 61.5 | 34.7 | 61.2 | 45 | 63.9 | 68.4 | 49.6 | 71.6 | 99 |
| Secondary | 57.8 | 78.8 | 50.6 | 73.0 | 1,080 | 76.5 | 77.5 | 62.9 | 78.3 | 897 |
| More than secondary | (86.6) | (82.3) | (68.9) | (84.2) | 68 | * | * | * | * | 21 |
| Total | 58.9 | 78.0 | 50.9 | 73.2 | 1,213 | 75.8 | 77.0 | 62.3 | 78.3 | 1,027 |

Note: Total includes 15 women and 8 men with information missing on level of education. Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that an estimate is based on fewer than 25 unweighted cases and has been suppressed.

Respondents in the 2009 MDHS individual interviews were asked a series of questions designed to obtain information on knowledge, attitudes, and personal experiences regarding a variety of adult health issues: tuberculosis, tobacco use, exercise, diabetes, hypertension, heart attack, and stroke.

### 16.1 Knowledge and Attitudes Regarding Tuberculosis

Respondents were asked if they had ever heard of tuberculosis (TB), knew how TB was spread, and believed the disease was curable. Additionally, respondents were asked whether or not they would want other people to know if a family member had TB.

Table 16.1 shows that knowledge of TB among women in Maldives is almost universal (96 percent, with small variations across background characteristics. Among ever-married women, knowledge of TB increases slightly with educational attainment. For example, 95 percent of women with no formal education have heard of TB compared with 99 percent of women with more than secondary education.

Table 16.1 Knowledge and attitude concerning tuberculosis
Percentage of ever-married women age 15-49 who have heard of tuberculosis (TB), and among women who have heard of TB, the percentage who know that TB is spread through the air by coughing, 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, Maldives 2009

| Background characteristic | $\underline{\text { Among all respondents }}$ |  | Among respondents who have heard of TB, the percentage who |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Percentage who have heard of TB | Number of evermarried women | Percentage who report that TB is spread through the air by coughing | Percentage who believe that TB can be cured | Percentage who would want a family member's TB kept secret | Number of women who have heard of TB |
| Age |  |  |  |  |  |  |
| 15-19 | 94.3 | 119 | 49.4 | 72.9 | 5.4 | 112 |
| 20-24 | 95.3 | 1,268 | 60.8 | 89.6 | 6.7 | 1,208 |
| 25-29 | 97.2 | 1,539 | 76.0 | 94.3 | 8.5 | 1,496 |
| 30-34 | 96.9 | 1,287 | 79.2 | 96.8 | 8.1 | 1,246 |
| 35-39 | 96.3 | 1,185 | 79.1 | 97.1 | 6.6 | 1,140 |
| 40-44 | 95.8 | 1,013 | 74.1 | 98.8 | 7.2 | 970 |
| 45-49 | 94.9 | 721 | 75.0 | 96.6 | 5.5 | 684 |
| Residence |  |  |  |  |  |  |
| Urban | 95.8 | 2,368 | 80.4 | 95.3 | 8.6 | 2,268 |
| Rural | 96.3 | 4,763 | 70.3 | 94.7 | 6.6 | 4,589 |
| Region |  |  |  |  |  |  |
| Malé | 95.8 | 2,368 | 80.4 | 95.3 | 8.6 | 2,268 |
| North | 96.1 | 1,067 | 71.7 | 96.6 | 5.4 | 1,025 |
| North Central | 97.8 | 1,038 | 63.9 | 94.4 | 8.3 | 1,015 |
| Central | 97.2 | 615 | 74.3 | 93.0 | 6.7 | 598 |
| South Central | 96.9 | 853 | 77.6 | 96.6 | 6.8 | 827 |
| South | 94.5 | 1,190 | 67.2 | 92.9 | 6.0 | 1,124 |
| Education |  |  |  |  |  |  |
| No formal education | 95.0 | 1,668 | 72.5 | 97.5 | 6.0 | 1,585 |
| Primary | 95.2 | 2,464 | 73.9 | 95.1 | 6.6 | 2,346 |
| Secondary | 97.4 | 2,584 | 72.2 | 92.9 | 7.9 | 2,516 |
| More than secondary | 99.4 | 333 | 84.9 | 95.8 | 11.0 | 331 |
| Wealth quintile |  |  |  |  |  |  |
| Lowest | 95.5 | 1,300 | 68.7 | 95.0 | 5.4 | 1,241 |
| Second | 96.6 | 1,396 | 71.1 | 94.5 | 5.7 | 1,349 |
| Middle | 96.5 | 1,488 | 71.9 | 95.6 | 7.5 | 1,436 |
| Fourth | 96.4 | 1,447 | 74.6 | 94.0 | 8.9 | 1,395 |
| Highest | 95.7 | 1,499 | 80.9 | 95.3 | 8.5 | 1,435 |
| Total | 96.2 | 7,131 | 73.6 | 94.9 | 7.3 | 6,858 |

Three in four women (74 percent) who have heard of TB correctly say that TB is spread through the air when coughing or sneezing. Correct knowledge of how TB is spread generally increases with age. Knowledge varies across regions, ranging from 64 percent in the North Central region to 80 percent in Malé for women. Knowledge of the way TB is spread generally increases with educational attainment Sixty-nine percent of women in the lowest wealth quintile have correct knowledge compared with 81 percent of women in the highest wealth quintile.

Overall, 95 percent of women believe that TB can be cured. Belief in the possibility that TB can be cured varies only by age. More than 95 percent of women age 30-49 believe that TB can be cured compared with 73 percent of women age 15-19.

Wanting to keep a family member's illness a secret is a sign of stigma against persons with TB. Only 7 percent of women and men in Maldives say they would want to keep secret a family member's TB illness. Women living in urban areas and women with more than secondary education are slightly more likely to want to keep the illness a secret.

Table 16.2 provides additional information on the modes by which women in Maldives believe TB can be transmitted. Among women who have heard of TB, 74 percent of women say TB is spread through the air by coughing, 43 percent say that TB is spread by sharing utensils, 10 percent say that TB is spread by touching a person with the disease; and 13 percent of women say that TB is spread through food.

| Among ever-married women age 15-49 who heard of tuberculosis, the percentage who cite specific TB transmission modes, by background characteristics, Maldives 2009 |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | TB modes of transmission |  |  |  |  |  |  |  |  |  |
| Background characteristic | Through air when coughing | By sharing utensils | By touching a person with TB | Through food | Through sexual contact | Through mosquito bites | Through blood contact/ transfusions | Other | Don't know | Number of women |
| Age |  |  |  |  |  |  |  |  |  |  |
| 15-19 | 49.4 | 23.0 | 11.3 | 9.1 | 7.3 | 3.6 | 2.4 | 0.0 | 42.8 | 112 |
| 20-24 | 60.8 | 26.3 | 6.9 | 7.6 | 4.6 | 1.6 | 0.7 | 1.7 | 27.1 | 1,208 |
| 25-29 | 76.0 | 36.1 | 7.9 | 10.7 | 2.9 | 1.2 | 0.7 | 1.6 | 15.6 | 1,496 |
| 30-34 | 79.2 | 43.8 | 9.6 | 12.2 | 2.7 | 0.8 | 1.0 | 1.4 | 12.0 | 1,246 |
| 35-39 | 79.1 | 50.0 | 12.6 | 16.6 | 2.9 | 1.6 | 1.0 | 1.1 | 8.4 | 1,140 |
| 40-44 | 74.1 | 55.9 | 12.8 | 19.6 | 4.5 | 2.0 | 0.5 | 1.5 | 7.7 | 970 |
| 45-49 | 75.0 | 58.8 | 13.6 | 18.6 | 4.1 | 1.7 | 0.0 | 0.4 | 8.4 | 684 |
| Residence |  |  |  |  |  |  |  |  |  |  |
| Urban | 80.4 | 44.1 | 9.7 | 13.5 | 2.3 | 1.4 | 0.7 | 1.4 | 10.6 | 2,268 |
| Rural | 70.3 | 42.4 | 10.4 | 13.4 | 4.2 | 1.5 | 0.8 | 1.3 | 16.3 | 4,589 |
|  |  |  |  |  |  |  |  |  |  |  |
| Malé | 80.4 | 44.1 | 9.7 | 13.5 | 2.3 | 1.4 | 0.7 | 1.4 | 10.6 | 2,268 |
| North | 71.7 | 42.1 | 9.9 | 3.9 | 3.2 | 0.9 | 0.5 | 1.0 | 14.9 | 1,025 |
| North Central | 63.9 | 44.0 | 13.3 | 20.6 | 4.9 | 1.4 | 0.9 | 0.9 | 19.7 | 1,015 |
| Central | 74.3 | 43.1 | 9.4 | 12.1 | 3.7 | 1.6 | 0.8 | 1.3 | 15.8 | 598 |
| South Central | 77.6 | 43.1 | 12.1 | 17.6 | 5.7 | 2.8 | 0.5 | 2.0 | 11.3 | 827 |
| South | 67.2 | 40.1 | 7.4 | 13.2 | 3.7 | 1.2 | 1.1 | 1.4 | 18.3 | 1,124 |
| Education |  |  |  |  |  |  |  |  |  |  |
| No formal education | 72.5 | 54.7 | 12.3 | 16.9 | 4.7 | 1.3 | 0.4 | 1.0 | 10.1 | 1,585 |
| Primary | 73.9 | 43.1 | 10.8 | 13.2 | 3.0 | 0.9 | 0.9 | 1.3 | 14.8 | 2,346 |
| Secondary | 72.2 | 35.0 | 8.2 | 11.4 | 3.7 | 2.2 | 0.8 | 1.6 | 17.6 | 2,516 |
| More than secondary | 84.9 | 44.1 | 8.3 | 14.4 | 0.7 | 0.6 | 0.9 | 1.4 | 9.3 | 331 |
| Wealth quintile |  |  |  |  |  |  |  |  |  |  |
| Lowest | 68.7 | 41.7 | 9.4 | 11.1 | 4.3 | 0.8 | 0.6 | 1.2 | 17.0 | 1,241 |
| Second | 71.1 | 43.2 | 11.1 | 13.8 | 4.0 | 2.2 | 0.8 | 1.6 | 15.9 | 1,349 |
| Middle | 71.9 | 43.3 | 10.6 | 14.7 | 4.5 | 1.6 | 0.9 | 0.9 | 15.6 | 1,436 |
| Fourth | 74.6 | 42.0 | 8.7 | 13.4 | 3.4 | 0.9 | 0.4 | 1.4 | 14.8 | 1,395 |
| Highest | 80.9 | 44.3 | 10.8 | 13.9 | 1.8 | 1.8 | 0.9 | 1.7 | 9.2 | 1,435 |
| Total | 73.6 | 42.9 | 10.1 | 13.4 | 3.6 | 1.5 | 0.7 | 1.3 | 14.4 | 6,858 |

Note: Total includes 79 cases for which information on woman's formal education level is missing.

### 16.2 Use of Tobacco

Tobacco leaves are used in various ways. They are dried and rolled into cigarettes and cigars for smoking, shredded and inserted into pipes (also for smoking), and finely pulverised for inhalation as snuff. Smoking has been shown to have significant adverse health effects, including an increased risk of respiratory and cardiovascular illnesses, both for the individual smoker and for other people exposed to second-hand, or environmental, tobacco smoke (WHO, 2002). Information on women's use of tobacco was collected during the 2009 MDHS. Table 16.3 shows that 91 percent of women do not use tobacco. Among women who use tobacco, 2 percent smoke cigarettes and 7 percent use other forms of tobacco. Tobacco use varies by background characteristics. For example, older women are much more likely to use tobacco than younger women. Tobacco use increases from 1 percent among women age 15-19 to 25 percent among women age 45-49. Tobacco use is also more common among women in the Central region, women with no formal education and women in the lowest wealth quintile than among other women. Less than 5 percent of women who are pregnant or breastfeeding report using cigarettes or other tobacco.

| Table 16.3 Use of tobacco |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Percentage of ever-married women age 15-49 who smoke cigarettes or a pipe or use other tobacco products, according to background characteristics and maternity status, Maldives 2009 |  |  |  |  |
| Background characteristic | Cigarettes | Other tobacco | Does not use tobacco | Number of women |
| Age |  |  |  |  |
| 15-19 | 0.6 | 0.8 | 98.6 | 119 |
| 20-24 | 0.9 | 0.7 | 98.3 | 1,268 |
| 25-29 | 1.0 | 0.9 | 98.1 | 1,539 |
| 30-34 | 2.4 | 4.2 | 93.7 | 1,287 |
| 35-39 | 2.7 | 8.8 | 88.7 | 1,185 |
| 40-44 | 3.7 | . 15.0 | 81.3 | 1,013 |
| 45-49 | 4.7 | 20.7 | 74.9 | 721 |
| Residence |  |  |  |  |
| Urban | 3.3 | 3.9 | 92.7 | 2,368 |
| Rural | 1.7 | 8.2 | 90.3 | 4,763 |
| Region |  |  |  |  |
| Malé | 3.3 | 3.9 | 92.7 | 2,368 |
| North | 0.9 | 6.6 | 92.6 | 1,067 |
| North Central | 0.6 | 9.8 | 89.6 | 1,038 |
| Central | 6.6 | 4.7 | 89.3 | 615 |
| South Central | 1.7 | 14.0 | 84.8 | 853 |
| South | 1.1 | 5.8 | 93.1 | 1,190 |
| Education |  |  |  |  |
| No formal education | 3.8 | 18.3 | 78.1 | 1,668 |
| Primary | 2.4 | 6.7 | 91.1 | 2,464 |
| Secondary | 1.1 | 0.3 | 98.5 | 2,584 |
| More than secondary | 3.4 | 0.0 | 96.6 | 333 |
| Maternity status |  |  |  |  |
| Pregnant | .1.0 | 2.6 | 96.7 | 522 |
| Breastfeeding (not pregnant) | 1.0 | 3.3 | 95.6 | 1,674 |
| Neither | 2.8 | 8.4 | 88.9 | 4,935 |
| Wealth quintile |  |  |  |  |
| Lowest | 2.3 | 12.4 | 85.6 | 1,300 |
| Second | 1.7 | 9.2 | 89.3 | 1,396 |
| Middle | 1.8 | 5.5 | 92.7 | 1,488 |
| Fourth | 2.1 | 4.5 | 93.2 | 1,447 |
| Highest | 3.4 | 3.0 | 93.7 | 1,499 |
| Total | 2.3 | 6.8 | 91.1 | 7,131 |

Note: Total includes 81 cases for which information on woman's formal education level is missing

### 16.3 Physical Activity

Table 16.4 shows that 61 percent of women did not walk, run, or engage in any physical activity for at least 20 minutes in the week before the survey. Among women who did engage in physical activity, 21 percent did it for five to seven days, 6 percent for three to four days, and 7 percent for one to two days. Physical activity increases with age. Urban women and women in Malé are engaged in physical activity more often than women in other areas. Women with the highest education and wealth status are engaged in physical activity more often than other women.

| Table 16.4 Physical activity |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percent distribution of ever-married women 15-49, who walked, ran, or engaged in other physical activity for at least 20 minutes in the week before the survey, by number of days engaged in physical activity, according to background characteristics, Maldives 2009 |  |  |  |  |  |  |  |  |
| Background characteristic | Number of days engaged in physical activity |  |  |  |  |  | Total | Number of women |
|  | 0 | 1-2 | 3-4 | 5-7 | Don't know | Missing |  |  |
| Age |  |  |  |  |  |  |  |  |
| 15-19 | 75.8 | 14.3 | 2.5 | 4.0 | 2.7 | 0.7 | 100.0 | 119 |
| 20-24 | 68.7 | 7.0 | 5.4 | 13.2 | 5.6 | 0.1 | 100.0 | 1,268 |
| 25-29 | 67.4 | 7.0 | 5.1 | 15.6 | 4.9 | 0.0 | 100.0 | 1,539 |
| 30-34 | 55.8 | 5.9 | 8.3 | 22.5 | 7.5 | 0.0 | 100.0 | 1,287 |
| 35-39 | 59.7 | 4.4 | 5.1 | 24.6 | 6.2 | 0.0 | 100.0 | 1,185 |
| 40-44 | 51.9 | 8.2 | 5.8 | 28.3 | 5.3 | 0.5 | 100.0 | 1,013 |
| 45-49 | 53.6 | 6.4 | 5.6 | 28.6 | 5.6 | 0.1 | 100.0 | 721 |
| Residence |  |  |  |  |  |  |  |  |
| Urban | 50.6 | 7.8 | 7.4 | 21.9 | 12.0 | 0.2 | 100.0 | 2,368 |
| Rural | 65.9 | 6.0 | 5.0 | 20.3 | 2.7 | 0.1 | 100.0 | 4,763 |
| Region |  |  |  |  |  |  |  |  |
| Malé | 50.6 | 7.8 | 7.4 | 21.9 | 12.0 | 0.2 | 100.0 | 2,368 |
| North | 66.3 | 6.9 | 4.0 | 20.0 | 2.8 | 0.1 | 100.0 | 1,067 |
| North Central | 71.1 | 5.9 | 6.8 | 15.6 | 0.6 | 0.0 | 100.0 | 1,038 |
| Central | 72.6 | 5.6 | 5.7 | 15.0 | 1.0 | 0.1 | 100.0 | 615 |
| South Central | 63.6 | 4.6 | 4.3 | 21.3 | 6.0 | 0.1 | 100.0 | 853 |
| South | 59.1 | 6.5 | 4.7 | 26.7 | 3.0 | 0.1 | 100.0 | 1,190 |
| Education |  |  |  |  |  |  |  |  |
| No formal education | 59.7 | 5.4 | 5.2 | 25.4 | 4.1 | 0.2 | 100.0 | 1,668 |
| Primary | 60.5 | 5.5 | 5.9 | 22.0 | 5.9 | 0.1 | 100.0 | 2,464 |
| Secondary | 63.2 | 7.9 | 5.9 | 16.6 | 6.3 | 0.1 | 100.0 | 2,584 |
| More than secondary | 52.4 | 10.4 | 6.6 | 22.0 | 8.7 | 0.0 | 100.0 | 333 |
| Wealth quintile |  |  |  |  |  |  |  |  |
| Lowest | 66.7 | 5.6 | 4.1 | 21.7 | 1.9 | 0.1 | 100.0 | 1,300 |
| Second | 66.9 | 5.9 | 5.3 | 18.6 | 3.2 | 0.1 | 100.0 | 1,396 |
| Middle | 64.5 | 5.9 | 4.4 | 21.9 | 3.3 | 0.1 | 100.0 | 1,488 |
| Fourth | 56.3 | 6.9 | 8.8 | 21.0 | 6.8 | 0.2 | 100.0 | 1,447 |
| Highest | 50.8 | 8.6 | 6.3 | 21.0 | 13.1 | 0.2 | 100.0 | 1,499 |
| Total | 60.8 | 6.6 | 5.8 | 20.8 | 5.8 | 0.1 | 100.0 | 7,131 |

### 16.4 Blood Pressure, Diabetes, Heart Attack, and Stroke

The MDHS also includes information collected about the respondents' experience with blood pressure, diabetes, heart attack, and stroke. Four percent of the ever-married women age 15-49 interviewed in the MDHS reported that they had been diagnosed with high blood pressure.

Table 16.5 shows that among women who had been diagnosed with high blood pressure, more than half (56 percent) took medication and 82 percent cut down on salt consumption to lower blood pressure. Efforts to lower blood

Table 16.5 Actions taken to lower blood pressure
Percent distribution of ever-married women age 15-49 who were told by a doctor or health professional on two or more visits that she had high blood pressure, by various actions to treat the illness, Maldives 2009

Actions taken to lower
blood pressure
Taking prescribed medication 56.0
Controlling weight/los
Cutting down on salt in diet
Exercising
Stopped smoking
72.3
52.0

Number
280
pressure included control or loss of weight (72 percent), exercise (52 percent), and smoking cessation (50 percent).

Three percent of the MDHS respondents reported that they had been diagnosed with diabetes. Figure 16.1 shows that 45 percent of women were first diagnosed with diabetes when they were age 30-39, 28 percent were diagnosed at age 40 or later, and 21 percent were diagnosed at age 20-29.

Figure 16.1 Age When First Diagnosed with Diabetes


MDHS 2009

In the MDHS, women who had been diagnosed with diabetes were asked whether they were taking medication to treat the disease. Table 16.6 shows that 10 percent of the women reported taking insulin and 47 percent took pills to lower their blood sugar.

Two percent of women indicated that they have been told by a doctor or other health professional that they had had a heart attack or myocardial infarction at some point prior to the survey, and 2 percent have been told that they have had a stroke (data not shown).

Table 16.6 Actions taken to lower diabetes

Percentage of ever-married women age 15-49 who are taking insulin and the percentage taking pills to lower blood sugar, Maldives 2009
Actions taken to
lower blood sugar Percent
Taking insulin 10.1
Taking pills

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Table A. 1 Sample implementation: Women
Percent distribution of households and eligible women by results of the household and individual interviews, and household, eligible women and overall response rates, according to urban-rural residence and region, Maldives 2009

| Result | Residence |  | Region |  |  |  |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Urban | Rural | Malé | North | North Central | Central | South Central | South |  |
| Selected households |  |  |  |  |  |  |  |  |  |
| Completed (C) | 78.5 | 87.1 | 78.5 | 84.4 | 88.5 | 89.8 | 89.3 | 83.1 | 85.7 |
| Household present but no competent respondent at home HP) | 8.2 | 4.4 | 8.2 | 5.9 | 2.7 | 2.6 | 3.6 | 7.5 | 5.0 |
| Postponed (P) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.0 |
| Refused (R) | 5.8 | 3.2 | 5.8 | 2.7 | 2.9 | 3.0 | 2.2 | 5.0 | 3.6 |
| Dwelling not found (DNF) | 1.7 | 0.4 | 1.7 | 0.6 | 0.1 | 0.0 | 0.3 | 0.8 | 0.6 |
| Household absent (HA) | 1.6 | 2.7 | 1.6 | 3.2 | 2.8 | 2.7 | 3.2 | 1.8 | 2.6 |
| Dwelling vacant/address not a dwelling (DV) | 2.2 | 1.4 | 2.2 | 2.2 | 2.2 | 1.2 | 0.7 | 0.8 | 1.5 |
| Dwelling destroyed (DD) | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.0 | 0.2 | 0.1 |
| Other (O) | 1.9 | 0.7 | 1.9 | 0.8 | 0.6 | 0.6 | 0.7 | 0.6 | 0.9 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Number of sampled households | 1,202 | 6,313 | 1,202 | 1,092 | 1,289 | 1,132 | 1,512 | 1,288 | 7,515 |
| Household response rate (HRR) ${ }^{1}$ | 83.4 | 91.6 | 83.4 | 90.1 | 93.9 | 94.2 | 93.6 | 85.9 | 90.3 |
| Eligible women |  |  |  |  |  |  |  |  |  |
| Completed (EWC) | 78.9 | 86.5 | 78.9 | 85.6 | 91.4 | 85.9 | 87.9 | 80.7 | 85.3 |
| Not at home (EWNH) | 8.9 | 6.0 | 8.9 | 7.3 | 2.2 | 5.9 | 6.1 | 8.5 | 6.4 |
| Postponed (EWP) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 |
| Refused (EWR) | 11.0 | 5.8 | 11.0 | 5.7 | 5.7 | 6.2 | 4.0 | 8.2 | 6.6 |
| Partly completed (EWPC) | 0.5 | 0.2 | 0.5 | 0.3 | 0.1 | 0.1 | 0.1 | 0.4 | 0.2 |
| Incapacitated (EWI) | 0.5 | 0.9 | 0.5 | 0.6 | 0.5 | 0.9 | 1.1 | 1.2 | 0.8 |
| Other (EWO) | 0.2 | 0.7 | 0.2 | 0.4 | 0.1 | 0.9 | 0.8 | 1.1 | 0.6 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Number of women | 1,320 | 7,042 | 1,320 | 1,121 | 1,378 | 1,501 | 1,755 | 1,287 | 8,362 |
| Eligible women response rate (EWRR) ${ }^{2}$ | 78.9 | 86.5 | 78.9 | 85.6 | 91.4 | 85.9 | 87.9 | 80.7 | 85.3 |
| Overall response rate (ORR) ${ }^{3}$ | 65.8 | 79.2 | 65.8 | 77.2 | 85.8 | 80.9 | 82.3 | 69.3 | 77.0 |

${ }^{1}$ Using the number of households falling into specific response categories, the household response rate (HRR) is calculated as:

$$
\frac{100 * \mathrm{C}}{\mathrm{C}+\mathrm{HP}+\mathrm{P}+\mathrm{R}+\mathrm{DNF}}
$$

${ }^{2}$ Using the number of eligible women falling into specific response categories, the eligible woman response rate (EWRR) is calculated as:

$$
\frac{100 \text { * EWC }}{\mathrm{EWC}+\mathrm{EWNH}+\mathrm{EWP}+\mathrm{EWR}+\mathrm{EWPC}+\mathrm{EWI}+\mathrm{EWO}}
$$

${ }^{3}$ The overall response rate (ORR) is calculated as:

$$
\mathrm{ORR}=\mathrm{HRR} * \mathrm{EWRR} / 100
$$

Table A. 2 Sample implementation: Men
Percent distribution of households and eligible men by results of the household and individual interviews, and household, eligible men and overall response rates, according to urban-rural residence and region, Maldives 2009

| Result | Residence |  | Region |  |  |  |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Urban | Rural | Malé | North | North Central | Central | South <br> Central | South |  |
| Selected households |  |  |  |  |  |  |  |  |  |
| Completed (C) | 77.0 | 87.0 | 77.0 | 83.5 | 87.7 | 90.1 | 89.3 | 83.8 | 85.4 |
| Household present but no competent respondent at home (HP) | 9.3 | 4.3 | 9.3 | 6.0 | 2.6 | 2.3 | 3.0 | 7.8 | 5.1 |
| Postponed (P) | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.5 | 0.1 |
| Refused (R) | 6.2 | 3.3 | 6.2 | 3.1 | 3.6 | 2.8 | 2.1 | 5.0 | 3.8 |
| Dwelling not found (DNF) | 1.7 | 0.3 | 1.7 | 0.7 | 0.2 | 0.0 | 0.4 | 0.2 | 0.5 |
| Household absent (HA) | 1.8 | 2.8 | 1.8 | 3.3 | 2.8 | 2.7 | 3.8 | 1.4 | 2.7 |
| Dwelling vacant/address not a dwelling (DV) | 1.7 | 1.6 | 1.7 | 2.6 | 2.5 | 1.4 | 0.8 | 0.8 | 1.6 |
| Dwelling destroyed (DD) | 0.2 | 0.1 | 0.2 | 0.0 | 0.3 | 0.2 | 0.0 | 0.2 | 0.1 |
| Other (O) | 2.2 | 0.5 | 2.2 | 0.7 | 0.3 | 0.5 | 0.5 | 0.5 | 0.8 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Number of sampled households | 601 | 3,151 | 601 | 546 | 644 | 563 | 757 | 641 | 3,752 |
| Household response rate (HRR) ${ }^{1}$ | 81.8 | 91.6 | 81.8 | 89.4 | 93.2 | 94.6 | 94.2 | 86.2 | 90.0 |
| Eligible men |  |  |  |  |  |  |  |  |  |
| Completed (EMC) | 47.3 | 54.9 | 47.3 | 52.9 | 56.7 | 51.7 | 57.0 | 56.1 | 53.6 |
| Not at home (EMNH) | 36.6 | 25.8 | 36.6 | 34.5 | 18.1 | 23.9 | 28.2 | 26.0 | 27.8 |
| Postponed (EMP) | 0.5 | 0.0 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 |
| Refused (EMR) | 14.2 | 15.4 | 14.2 | 9.2 | 23.7 | 18.1 | 11.2 | 14.0 | 15.2 |
| Partly completed (EMPC) | 0.2 | 0.5 | 0.2 | 1.0 | 0.0 | 0.8 | 0.5 | 0.4 | 0.5 |
| Incapacitated (EMI) | 0.5 | 1.3 | 0.5 | 1.7 | 0.4 | 1.7 | 1.8 | 0.9 | 1.2 |
| Other (EMO) | 0.7 | 2.0 | 0.7 | 0.7 | 1.2 | 3.8 | 1.4 | 2.6 | 1.8 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Number of men | 579 | 2,645 | 579 | 403 | 515 | 602 | 660 | 465 | 3,224 |
| Eligible men response rate (EMRR) ${ }^{2}$ | 47.3 | 54.9 | 47.3 | 52.9 | 56.7 | 51.7 | 57.0 | 56.1 | 53.6 |
| Overall response rate (ORR) ${ }^{3}$ | 38.7 | 50.3 | 38.7 | 47.3 | 52.9 | 48.9 | 53.6 | 48.4 | 48.2 |

${ }^{1}$ Using the number of households falling into specific response categories, the household response rate (HRR) is calculated as:

$$
\frac{100^{*} \mathrm{C}}{\mathrm{C}+\mathrm{HP}+\mathrm{P}+\mathrm{R}+\mathrm{DNF}}
$$

${ }^{2}$ Using the number of eligible women falling into specific response categories, the eligible woman response rate (EWRR) is calculated as:

$$
\frac{100 * E W C}{E W C+E W N H+E W P+E W R+E W P C+E W I+E W O}
$$

${ }^{3}$ The overall response rate (ORR) is calculated as:

$$
\mathrm{ORR}=\mathrm{HRR} * \mathrm{EWRR} / 100
$$

The estimates from a sample survey are affected by two types of errors: nonsampling errors and sampling errors. Nonsampling errors are the results of mistakes made in implementing data collection and data processing, such as failure to locate and interview the correct household, misunderstanding of the questions on the part of either the interviewer or the respondent, and data entry errors. Although numerous efforts were made during the implementation of the Maldives Demographic and Health Survey 2009 (2009 MDHS) 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 2009 MDHS is only one of many samples that could have been selected from the same population, using the same design and expected size. Each of these samples would yield results that differ somewhat from the results of the actual sample selected. Sampling errors are a measure of the variability between all possible samples. Although the degree of variability is not known exactly, it can be estimated from the survey results.

A sampling error is usually measured in terms of the standard error for a particular statistic (mean, percentage, etc.), which is the square root of the variance. The standard error can be used to calculate confidence intervals within which the true value for the population can reasonably be assumed to fall. For example, for any given statistic calculated from a sample survey, the value of that statistic will fall within a range of plus or minus two times the standard error of that statistic in 95 percent of all possible samples of identical size and design.

If the sample of respondents had been selected as a simple random sample, it would have been possible to use straightforward formulas for calculating sampling errors. However, the 2009 MDHS sample is the result of a multistage stratified design, and, consequently, it was necessary to use more complex formulae. The computer software used to calculate sampling errors for the 2009 MDHS is a Macro SAS procedure. This procedure used the Taylor linearization method of variance estimation for survey estimates that are means or proportions. The Jackknife repeated replication method is used for variance estimation of more complex statistics such as fertility and mortality rates.

The Taylor linearization method treats any percentage or average as a ratio estimate, $r=y / x$, where $y$ represents the total sample value for variable $y$, and $x$ represents the total number of cases in the group or subgroup under consideration. The variance of $r$ is computed using the formula given below, with the standard error being the square root of the variance:

$$
S E^{2}(r)=\operatorname{var}(r)=\frac{1-f}{x^{2}} \sum_{h=1}^{H}\left[\frac{m_{h}}{m_{h}-1}\left(\sum_{i=1}^{m_{h}} z_{h i}^{2}-\frac{z_{h}^{2}}{m_{h}}\right)\right]
$$

in which

$$
z_{h i}=y_{h i}-r x_{h i}, \text { and } z_{h}=y_{h}-r x_{h}
$$

where $h$
$y_{h i} \quad$ is the sum of the weighted values of variable $y$ in the $i^{\text {th }}$ cluster in the $h^{\text {th }}$ stratum, $x_{h i} \quad$ is the sum of the weighted number of cases in the $i^{\text {th }}$ cluster in the $h^{\text {th }}$ stratum, and
$f \quad$ is the overall sampling fraction, which is so small that it is ignored.

The Jackknife repeated replication method derives estimates of complex rates from each of several replications of the parent sample and calculates standard errors for these estimates using simple formulae. Each replication considers all but one clusters in the calculation of the estimates. Pseudo-independent replications are thus created. In the 2009 MDHS, there were 270 non-empty clusters. Hence, 270 replications were created. The variance of a rate $r$ is calculated as follows:

$$
S E^{2}(r)=\operatorname{var}(r)=\frac{1}{k(k-1)} \sum_{i=1}^{k}\left(r_{i}-r\right)^{2}
$$

in which

$$
r_{i}=k r-(k-1) r_{(i)}
$$

where $r$ is the estimate computed from the full sample of 270 clusters,
$r_{(i)} \quad$ is the estimate computed from the reduced sample of 269 clusters ( $i^{\text {th }}$ cluster excluded), and
$k \quad$ is the total number of clusters.
In addition to the standard error, the design effect (DEFT) for each estimate is calculated, 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 is due to the use of a more complex and less statistically efficient design. The relative standard error and confidence limits for the estimates are also calculated.

Sampling errors for the 2009 MDHS are calculated for selected variables considered to be of primary interest. The results are presented in this appendix for the country as a whole, for urban and rural areas, for the three geographical regions, and for each of the six geographical/administrative 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. 10 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 ( $\mathrm{SE} / \mathrm{R}$ ), and the 95 percent confidence limits ( $\mathrm{R} \pm 2 \mathrm{SE}$ ) for each variable. The DEFT is considered undefined when the standard error considering simple random sample is zero (when the estimate is close to 0 or 1 ). In the case of the total fertility rate, the number of unweighted cases is not relevant, as there is no known unweighted value for woman-years of exposure to child-bearing.

The confidence interval (e.g., as calculated for children ever born to women aged 40-49) can be interpreted as follows: the overall average from the national sample is 4.985 and its standard error is 0.080 . Therefore, to obtain the 95 percent confidence limits, one adds and subtracts twice the standard error to the sample estimate, i.e., $4.985 \pm 2 \times 0.080$. There is a high probability ( 95 percent) that the true average number of children ever born to all women aged 40 to 49 is between 4.824 and 5.146 .

For the total sample, the value of the DEFT, averaged over all variables, is 1.276 . This means that, due to multistage clustering of the sample, the average standard error is increased by a factor of 1.276 over that in an equivalent simple random sample.

Table B. 1 List of selected variables for sampling errors, Maldives 2009

| Variable | Estimate | Base population |
| :---: | :---: | :---: |
| Urban residence | Proportion | Ever-married women 15-49 |
| No education | Proportion | Ever-married women 15-49 |
| Secondary education or higher | Proportion | Ever-married women 15-49 |
| Net attendance ratio | Ratio | Household population 6-12 years |
| Currently married/in union | Proportion | All women 15-49 |
| Married before age 20 | Proportion | All women 20-49 |
| Currently pregnant | Proportion | All women 15-49 |
| Children ever born | Mean | All women 15-49 |
| Children surviving | Mean | All women 15-49 |
| Children ever born to women age 40-49 | Mean | All women 40-49 |
| Knows any contraceptive method | Proportion | Currently married women 15-49 |
| Knows a modern method | Proportion | Currently married women 15-49 |
| Ever used any contraceptive method | Proportion | Currently married women 15-49 |
| Currently using any method | Proportion | Currently married women 15-49 |
| Currently using a modern method | Proportion | Currently married women 15-49 |
| Currently using a traditional method | Proportion | Currently married women 15-49 |
| Currently using pill | Proportion | Currently married women 15-49 |
| Currently using 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 withdrawal | Proportion | Currently married women 15-49 |
| Currently using periodic abstinence | Proportion | Currently married women 15-49 |
| Using public sector source | Proportion | Current users of modern method |
| Want no more children | Proportion | Currently married women 15-49 |
| Want to delay birth at least 2 years | Proportion | Currently married women 15-49 |
| Ideal family size | Mean | Ever-married women 15-49 |
| Mothers protected against tetanus for last birth | Proportion | Women with a live birth in past five years |
| Mothers received medical assistance at delivery | Proportion | Births occurring 1-59 months before survey |
| Had diarrhoea in the past 2 weeks | Proportion | Children under 5 |
| Treated with oral rehydration salts (ORS) | Proportion | Children under 5 with diarrhoea in past 2 weeks |
| Taken to a health provider | Proportion | Children under 5 with diarrhoea in past 2 weeks |
| Vaccination card seen | Proportion | Children 12-23 months |
| Received BCG vaccination | Proportion | Children 12-23 months |
| Received DPT vaccination (3 doses) | Proportion | Children 12-23 months |
| Received polio vaccination (3 doses) | Proportion | Children 12-23 months |
| Received measles vaccination | Proportion | Children 12-23 months |
| Received all basic vaccinations | Proportion | Children 12-23 months |
| Height-for-age (-2SD) | Proportion | Children under 5 who are measured |
| Weight-for-height (-2SD) | Proportion | Children under 5 who are measured |
| Weight-for-age (-2SD) | Proportion | Children under 5 who are measured |
| BMI < 18.5 | Proportion | Ever-married women 15-49 who were measured |
| Has heard about HIV/AIDS | Proportion | Ever-married women 15-49 |
| Knows about condoms to prevent AIDS | Proportion | Ever-married women 15-49 |
| Knows about limiting partners to prevent AIDS | Proportion | Ever-married women 15-49 |
| Comprehensive knowledge on HIV transmission | Proportion | Ever-married women 15-49 |
| Total fertility rate (past 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 |

[^16]Table B. 2 Sampling errors for National sample, Maldives 2009

| Variable | Value (R) | Standard error (SE) | Number of cases |  | Design effect (DEFT) | Relative error (SE/R) | Confidence limits |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Weight- |  |  |  |  |
|  |  |  | (N) | (WN) |  |  | R-2SE | R+2SE |
| Urban residence | 0.332 | 0.012 | 7131 | 7131 | 2.140 | 0.036 | 0.308 | 0.356 |
| No education | 0.234 | 0.006 | 7131 | 7131 | 1.177 | 0.025 | 0.222 | 0.246 |
| Secondary education or higher | 0.409 | 0.008 | 7131 | 7131 | 1.402 | 0.020 | 0.393 | 0.425 |
| Net attendance ratio | 0.825 | 0.006 | 5777 | 5504 | 1.179 | 0.007 | 0.814 | 0.837 |
| Currently married/in union | 0.626 | 0.021 | 10591 | 10388 | 1.130 | 0.033 | 0.584 | 0.668 |
| Married before age 20 | 0.496 | 0.008 | 8294 | 8232 | 1.262 | 0.016 | 0.480 | 0.511 |
| Currently pregnant | 0.050 | 0.003 | 10591 | 10388 | 1.150 | 0.058 | 0.044 | 0.056 |
| Children ever born | 1.845 | 0.064 | 10591 | 10388 | 1.081 | 0.035 | 1.716 | 1.974 |
| Children surviving | 1.738 | 0.060 | 10591 | 10388 | 1.073 | 0.035 | 1.618 | 1.858 |
| Children ever born to women age 40-49 | 4.985 | 0.080 | 1768 | 1762 | 1.369 | 0.016 | 4.824 | 5.146 |
| Knows any contraceptive method | 0.993 | 0.001 | 6558 | 6500 | 1.284 | 0.001 | 0.990 | 0.996 |
| Knows a modern method | 0.993 | 0.001 | 6558 | 6500 | 1.267 | 0.001 | 0.990 | 0.995 |
| Ever used any contraceptive method | 0.602 | 0.010 | 6558 | 6500 | 1.672 | 0.017 | 0.581 | 0.622 |
| Currently using any method | 0.347 | 0.008 | 6558 | 6500 | 1.369 | 0.023 | 0.331 | 0.363 |
| Currently using a modern method | 0.270 | 0.007 | 6558 | 6500 | 1.354 | 0.028 | 0.255 | 0.285 |
| Currently using a traditional method | 0.078 | 0.004 | 6558 | 6500 | 1.291 | 0.055 | 0.069 | 0.086 |
| Currently using pill | 0.046 | 0.003 | 6558 | 6500 | 1.273 | 0.071 | 0.040 | 0.053 |
| Currently using IUD | 0.008 | 0.002 | 6558 | 6500 | 1.351 | 0.182 | 0.005 | 0.011 |
| Currently using condoms | 0.093 | 0.004 | 6558 | 6500 | 1.253 | 0.048 | 0.084 | 0.102 |
| Currently using injectables | 0.012 | 0.002 | 6558 | 6500 | 1.311 | 0.146 | 0.009 | 0.016 |
| Currently using female sterilization | 0.101 | 0.005 | 6558 | 6500 | 1.297 | 0.048 | 0.091 | 0.110 |
| Currently using withdrawal | 0.042 | 0.003 | 6558 | 6500 | 1.281 | 0.075 | 0.036 | 0.049 |
| Currently using periodic abstinence | 0.034 | 0.003 | 6558 | 6500 | 1.287 | 0.084 | 0.029 | 0.040 |
| Used public sector source | 0.631 | 0.013 | 1871 | 1809 | 1.160 | 0.021 | 0.605 | 0.657 |
| Want no more children | 0.478 | 0.007 | 6558 | 6500 | 1.202 | 0.016 | 0.463 | 0.493 |
| Want to delay birth at least 2 years | 0.215 | 0.007 | 6558 | 6500 | 1.303 | 0.031 | 0.202 | 0.228 |
| Ideal family size | 3.127 | 0.024 | 6112 | 6185 | 1.421 | 0.008 | 3.080 | 3.174 |
| Mothers protected against tetanus for last birth | 0.821 | 0.008 | 3263 | 3190 | 1.251 | 0.010 | 0.804 | 0.838 |
| Mothers received medical assistance at delivery | 0.948 | 0.006 | 3817 | 3736 | 1.546 | 0.006 | 0.936 | 0.960 |
| Had diarrhoea in the past 2 weeks | 0.044 | 0.005 | 3761 | 3682 | 1.381 | 0.108 | 0.035 | 0.054 |
| Treated with oral rehydration salts (ORS) | 0.570 | 0.053 | 188 | 163 | 1.330 | 0.093 | 0.464 | 0.675 |
| Taken to a health provider | 0.836 | 0.033 | 188 | 163 | 1.103 | 0.039 | 0.770 | 0.902 |
| Vaccination card seen | 0.890 | 0.015 | 843 | 822 | 1.344 | 0.017 | 0.860 | 0.920 |
| Received BCG vaccination | 0.994 | 0.003 | 843 | 822 | 1.135 | 0.003 | 0.987 | 1.000 |
| Received DPT vaccination (3 doses) | 0.979 | 0.006 | 843 | 822 | 1.127 | 0.006 | 0.967 | 0.990 |
| Received polio vaccination (3 doses) | 0.970 | 0.008 | 843 | 822 | 1.293 | 0.008 | 0.955 | 0.986 |
| Received measles vaccination | 0.945 | 0.010 | 843 | 822 | 1.205 | 0.011 | 0.925 | 0.965 |
| Received all basic vaccinations | 0.929 | 0.011 | 843 | 822 | 1.231 | 0.012 | 0.906 | 0.952 |
| Height-for-age (-2SD) | 0.189 | 0.010 | 2577 | 2513 | 1.283 | 0.054 | 0.168 | 0.209 |
| Weight-for-height (-2SD) | 0.106 | 0.007 | 2577 | 2513 | 1.062 | 0.063 | 0.093 | 0.120 |
| Weight-for-age (-2SD) | 0.173 | 0.009 | 2577 | 2513 | 1.133 | 0.051 | 0.155 | 0.191 |
| BMI $<18.5$ | 0.075 | 0.005 | 5144 | 5173 | 1.273 | 0.062 | 0.065 | 0.084 |
| Has heard about HIV/AIDS | 0.969 | 0.003 | 7131 | 7131 | 1.321 | 0.003 | 0.963 | 0.974 |
| Knows about condoms to prevent AIDS | 0.793 | 0.006 | 7131 | 7131 | 1.322 | 0.008 | 0.780 | 0.805 |
| Knows about limiting partners | 0.918 | 0.005 | 7131 | 7131 | 1.504 | 0.005 | 0.908 | 0.928 |
| Comprehensive knowledge on HIV transmission | 0.415 | 0.009 | 7131 | 7131 | 1.474 | 0.021 | 0.398 | 0.432 |
| Total fertility rate (past 3 years) | 2.542 | 0.058 | na | 31085 | 1.141 | 0.023 | 2.427 | 2.657 |
| Neonatal mortality (past 0-4 years) | 10.154 | 2.243 | 3836 | 3756 | 1.311 | 0.221 | 5.667 | 14.640 |
| Post-neonatal mortality (past 0-4 years) | 4.022 | 1.049 | 3829 | 3749 | 0.987 | 0.261 | 1.925 | 6.120 |
| Infant mortality (past 0-4 years) | 14.176 | 2.442 | 3837 | 3757 | 1.222 | 0.172 | 9.293 | 19.059 |
| Child mortality (past 0-4 years) | 2.817 | 0.788 | 3524 | 3462 | 0.844 | 0.280 | 1.241 | 4.392 |
| Under-five mortality (past 0-4 years) | 16.953 | 2.566 | 3844 | 3762 | 1.176 | 0.151 | 11.821 | 22.084 |

na $=$ Not applicable

|  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Table B.3 Sampling errors for Urban sample, Maldives 2009 |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |

na $=$ Not applicable

|  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Table B.4 Sampling errors for Rural sample, Maldives 2009 |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |

na $=$ Not applicable

| Table B. 5 Sampling errors for Malé sample, Maldives 2009 |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Variable | Value <br> (R) | Standard error (SE) | Number of cases |  | Design effect (DEFT) | Relative error (SE/R) | Confidence limits |  |
|  |  |  | Un- | Weight- |  |  |  |  |
|  |  |  | (N) | (WN) |  |  | R-2SE | $\mathrm{R}+2 \mathrm{SE}$ |
| Urban residence | 1.000 | 0.000 | 1041 | 2368 | na | 0.000 | 1.000 | 1.000 |
| No education | 0.122 | 0.009 | 1041 | 2368 | 0.928 | 0.077 | 0.103 | 0.141 |
| Secondary education or higher | 0.581 | 0.017 | 1041 | 2368 | 1.123 | 0.030 | 0.547 | 0.616 |
| Net attendance ratio | 0.827 | 0.016 | 637 | 1349 | 1.072 | 0.020 | 0.794 | 0.860 |
| Currently married/in union | 0.551 | 0.078 | 1717 | 3851 | 0.925 | 0.142 | 0.394 | 0.708 |
| Married before age 20 | 0.394 | 0.016 | 1313 | 2961 | 1.140 | 0.041 | 0.362 | 0.426 |
| Currently pregnant | 0.036 | 0.007 | 1717 | 3851 | 0.947 | 0.187 | 0.022 | 0.049 |
| Children ever born | 1.335 | 0.192 | 1717 | 3851 | 0.915 | 0.144 | 0.950 | 1.720 |
| Children surviving | 1.283 | 0.185 | 1717 | 3851 | 0.913 | 0.144 | 0.914 | 1.653 |
| Children ever born to women age 40-49 | 3.747 | 0.135 | 259 | 595 | 1.052 | 0.036 | 3.477 | 4.018 |
| Knows any contraceptive method | 0.994 | 0.003 | 935 | 2122 | 1.089 | 0.003 | 0.989 | 1.000 |
| Knows a modern method | 0.993 | 0.003 | 935 | 2122 | 1.055 | 0.003 | 0.988 | 0.999 |
| Ever used any contraceptive method | 0.567 | 0.022 | 935 | 2122 | 1.357 | 0.039 | 0.523 | 0.611 |
| Currently using any method | 0.336 | 0.017 | 935 | 2122 | 1.088 | 0.050 | 0.303 | 0.370 |
| Currently using a modern method | 0.256 | 0.015 | 935 | 2122 | 1.039 | 0.058 | 0.227 | 0.286 |
| Currently using a traditional method | 0.080 | 0.008 | 935 | 2122 | 0.928 | 0.103 | 0.063 | 0.096 |
| Currently using pill | 0.018 | 0.004 | 935 | 2122 | 0.984 | 0.239 | 0.009 | 0.026 |
| Currently using lUD | 0.014 | 0.004 | 935 | 2122 | 1.053 | 0.289 | 0.006 | 0.022 |
| Currently using condoms | 0.101 | 0.008 | 935 | 2122 | 0.857 | 0.084 | 0.084 | 0.118 |
| Currently using injectables | 0.007 | 0.003 | 935 | 2122 | 1.093 | 0.431 | 0.001 | 0.013 |
| Currently using female sterilization | 0.101 | 0.010 | 935 | 2122 | 1.051 | 0.103 | 0.080 | 0.121 |
| Currently using withdrawal | 0.031 | 0.005 | 935 | 2122 | 0.956 | 0.175 | 0.020 | 0.042 |
| Currently using periodic abstinence | 0.047 | 0.007 | 935 | 2122 | 0.989 | 0.146 | 0.033 | 0.061 |
| Used public sector source | 0.396 | 0.030 | 255 | 570 | 0.985 | 0.076 | 0.336 | 0.457 |
| Want no more children | 0.479 | 0.015 | 935 | 2122 | 0.923 | 0.032 | 0.448 | 0.509 |
| Want to delay birth at least 2 years | 0.184 | 0.013 | 935 | 2122 | 1.029 | 0.071 | 0.158 | 0.210 |
| Ideal family size | 2.808 | 0.046 | 936 | 2128 | 1.113 | 0.016 | 2.716 | 2.900 |
| Mothers protected against tetanus for last birth | 0.844 | 0.019 | 423 | 964 | 1.053 | 0.022 | 0.807 | 0.881 |
| Mothers received medical assistance at delivery | 0.990 | 0.004 | 494 | 1123 | 0.984 | 0.004 | 0.981 | 0.999 |
| Had diarrhoea in the past 2 weeks | 0.037 | 0.012 | 487 | 1106 | 1.315 | 0.326 | 0.013 | 0.061 |
| Treated with oral rehydration salts (ORS) | 0.546 | 0.167 | 17 | 41 | 1.339 | 0.306 | 0.211 | 0.881 |
| Taken to a health provider | 0.939 | 0.062 | 17 | 41 | 1.088 | 0.066 | 0.815 | 1.063 |
| Vaccination card seen | 0.852 | 0.038 | 108 | 243 | 1.056 | 0.045 | 0.776 | 0.929 |
| Received BCG vaccination | 1.000 | 0.000 | 108 | 243 | na | 0.000 | 1.000 | 1.000 |
| Received DPT vaccination (3 doses) | 0.982 | 0.012 | 108 | 243 | 0.934 | 0.012 | 0.958 | 1.006 |
| Received polio vaccination (3 doses) | 0.957 | 0.021 | 108 | 243 | 1.054 | 0.022 | 0.915 | 0.999 |
| Received measles vaccination | 0.935 | 0.027 | 108 | 243 | 1.007 | 0.029 | 0.881 | 0.989 |
| Received all basic vaccinations | 0.914 | 0.029 | 108 | 243 | 0.983 | 0.032 | 0.856 | 0.973 |
| Height-for-age (-2SD) | 0.157 | 0.019 | 349 | 721 | 0.957 | 0.121 | 0.119 | 0.194 |
| Weight-for-height (-2SD) | 0.072 | 0.014 | 349 | 721 | 0.995 | 0.199 | 0.043 | 0.100 |
| Weight-for-age (-2SD) | 0.109 | 0.017 | 349 | 721 | 0.948 | 0.153 | 0.076 | 0.143 |
| $\mathrm{BMI}<18.5$ | 0.053 | 0.008 | 728 | 1657 | 0.945 | 0.148 | 0.037 | 0.069 |
| Has heard about HIV/AIDS | 0.975 | 0.005 | 1041 | 2368 | 1.053 | 0.005 | 0.965 | 0.985 |
| Knows about condoms to prevent AIDS | 0.824 | 0.012 | 1041 | 2368 | 1.052 | 0.015 | 0.800 | 0.849 |
| Knows about limiting partners | 0.929 | 0.010 | 1041 | 2368 | 1.287 | 0.011 | 0.909 | 0.950 |
| Comprehensive knowledge on HIV transmission | 0.508 | 0.020 | 1041 | 2368 | 1.264 | 0.039 | 0.469 | 0.547 |
| Total fertility rate (past 3 years) | 2.128 | 0.110 | na | 11276 | 0.961 | 0.052 | 1.907 | 2.348 |
| Neonatal mortality (past 0-9 years) | 19.642 | 6.573 | 877 | 2016 | 1.047 | 0.335 | 6.497 | 32.788 |
| Post-neonatal mortality (past 0-9 years) | 3.305 | 1.880 | 872 | 2003 | 0.943 | 0.569 | 0.000 | 7.066 |
| Infant mortality (past 0-9 years) | 22.948 | 7.564 | 877 | 2016 | 1.147 | 0.330 | 7.819 | 38.076 |
| Child mortality (past 0-9 years) | 0.503 | 0.504 | 808 | 1866 | na | 1.003 | 0.000 | 1.511 |
| Under-five mortality (past 0-9 years) | 23.439 | 7.546 | 877 | 2016 | 1.147 | 0.322 | 8.346 | 38.531 |

[^17]| Variable | Value <br> (R) | Standard error (SE) | Number of cases |  | Design effect (DEFT) | Relative error (SE/R) | Confidence limits |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Un- | Weight- |  |  |  |  |
|  |  |  | (N) | (WN) |  |  | R-2SE | $\mathrm{R}+2 \mathrm{SE}$ |
| Urban residence | 0.000 | 0.000 | 960 | 1067 | na | na | 0.000 | 0.000 |
| No education | 0.296 | 0.018 | 960 | 1067 | 1.190 | 0.059 | 0.261 | 0.331 |
| Secondary education or higher | 0.295 | 0.024 | 960 | 1067 | 1.636 | 0.082 | 0.246 | 0.343 |
| Net attendance ratio | 0.842 | 0.013 | 862 | 968 | 1.080 | 0.015 | 0.816 | 0.867 |
| Currently married/in union | 0.621 | 0.058 | 1473 | 1623 | 1.016 | 0.093 | 0.506 | 0.737 |
| Married before age 20 | 0.495 | 0.028 | 1124 | 1244 | 1.070 | 0.057 | 0.438 | 0.552 |
| Currently pregnant | 0.059 | 0.009 | 1473 | 1623 | 1.136 | 0.154 | 0.041 | 0.077 |
| Children ever born | 1.852 | 0.188 | 1473 | 1623 | 1.026 | 0.102 | 1.475 | 2.228 |
| Children surviving | 1.749 | 0.179 | 1473 | 1623 | 1.037 | 0.103 | 1.390 | 2.108 |
| Children ever born to women age 40-49 | 5.529 | 0.189 | 221 | 245 | 1.188 | 0.034 | 5.151 | 5.908 |
| Knows any contraceptive method | 0.991 | 0.004 | 909 | 1009 | 1.157 | 0.004 | 0.984 | 0.998 |
| Knows a modern method | 0.991 | 0.004 | 909 | 1009 | 1.157 | 0.004 | 0.984 | 0.998 |
| Ever used any contraceptive method | 0.659 | 0.024 | 909 | 1009 | 1.527 | 0.036 | 0.611 | 0.707 |
| Currently using any method | 0.394 | 0.023 | 909 | 1009 | 1.416 | 0.058 | 0.348 | 0.440 |
| Currently using a modern method | 0.282 | 0.024 | 909 | 1009 | 1.573 | 0.083 | 0.235 | 0.330 |
| Currently using a traditional method | 0.112 | 0.015 | 909 | 1009 | 1.437 | 0.135 | 0.082 | 0.142 |
| Currently using pill | 0.065 | 0.009 | 909 | 1009 | 1.158 | 0.146 | 0.046 | 0.084 |
| Currently using lUD | 0.009 | 0.003 | 909 | 1009 | 0.934 | 0.317 | 0.003 | 0.015 |
| Currently using condoms | 0.125 | 0.016 | 909 | 1009 | 1.471 | 0.129 | 0.092 | 0.157 |
| Currently using injectables | 0.024 | 0.007 | 909 | 1009 | 1.427 | 0.303 | 0.009 | 0.038 |
| Currently using female sterilization | 0.057 | 0.008 | 909 | 1009 | 0.979 | 0.133 | 0.042 | 0.072 |
| Currently using withdrawal | 0.067 | 0.012 | 909 | 1009 | 1.424 | 0.177 | 0.043 | 0.090 |
| Currently using periodic abstinence | 0.045 | 0.009 | 909 | 1009 | 1.243 | 0.190 | 0.028 | 0.062 |
| Used public sector source | 0.729 | 0.033 | 258 | 289 | 1.179 | 0.045 | 0.664 | 0.795 |
| Want no more children | 0.462 | 0.018 | 909 | 1009 | 1.088 | 0.039 | 0.426 | 0.498 |
| Want to delay birth at least 2 years | 0.250 | 0.016 | 909 | 1009 | 1.118 | 0.064 | 0.218 | 0.282 |
| Ideal family size | 3.218 | 0.071 | 798 | 890 | 1.636 | 0.022 | 3.076 | 3.360 |
| Mothers protected against tetanus for last birth | 0.790 | 0.024 | 440 | 489 | 1.247 | 0.031 | 0.741 | 0.839 |
| Mothers received medical assistance at delivery | 0.911 | 0.017 | 518 | 578 | 1.291 | 0.019 | 0.877 | 0.944 |
| Had diarrhoea in the past 2 weeks | 0.053 | 0.012 | 514 | 575 | 1.227 | 0.231 | 0.028 | 0.077 |
| Treated with oral rehydration salts (ORS) | 0.615 | 0.068 | 26 | 30 | 0.727 | 0.111 | 0.479 | 0.751 |
| Taken to a health provider | 0.887 | 0.053 | 26 | 30 | 0.877 | 0.060 | 0.781 | 0.994 |
| Vaccination card seen | 0.978 | 0.012 | 129 | 145 | 0.932 | 0.012 | 0.954 | 1.002 |
| Received BCG vaccination | 0.990 | 0.009 | 129 | 145 | 1.089 | 0.009 | 0.972 | 1.009 |
| Received DPT vaccination (3 doses) | 0.984 | 0.011 | 129 | 145 | 1.013 | 0.011 | 0.961 | 1.006 |
| Received polio vaccination (3 doses) | 0.990 | 0.009 | 129 | 145 | 1.089 | 0.009 | 0.972 | 1.009 |
| Received measles vaccination | 0.940 | 0.019 | 129 | 145 | 0.912 | 0.020 | 0.902 | 0.978 |
| Received all basic vaccinations | 0.940 | 0.019 | 129 | 145 | 0.912 | 0.020 | 0.902 | 0.978 |
| Height-for-age (-2SD) | 0.157 | 0.019 | 350 | 387 | 0.970 | 0.124 | 0.118 | 0.196 |
| Weight-for-height (-2SD) | 0.118 | 0.019 | 350 | 387 | 1.125 | 0.165 | 0.079 | 0.157 |
| Weight-for-age (-2SD) | 0.184 | 0.027 | 350 | 387 | 1.286 | 0.145 | 0.130 | 0.237 |
| $\mathrm{BMI}<18.5$ | 0.113 | 0.016 | 724 | 809 | 1.352 | 0.141 | 0.081 | 0.144 |
| Has heard about HIV/AIDS | 0.950 | 0.010 | 960 | 1067 | 1.378 | 0.010 | 0.931 | 0.969 |
| Knows about condoms to prevent AIDS | 0.748 | 0.019 | 960 | 1067 | 1.359 | 0.025 | 0.710 | 0.786 |
| Knows about limiting partners . . | 0.909 | 0.011 | 960 | 1067 | 1.171 | 0.012 | 0.887 | 0.931 |
| Comprehensive knowledge on HIV transmission | 0.351 | 0.018 | 960 | 1067 | 1.199 | 0.053 | 0.314 | 0.388 |
| Total fertility rate (past 3 years) | 2.683 | 0.152 | na | 4869 | 0.930 | 0.057 | 2.379 | 2.987 |
| Neonatal mortality (past 0-9 years) | 9.766 | 4.516 | 1004 | 1124 | 1.387 | 0.462 | 0.733 | 18.799 |
| Post-neonatal mortality (past 0-9 years) | 3.139 | 1.850 | 1010 | 1131 | 1.045 | 0.589 | 0.000 | 6.838 |
| Infant mortality (past 0-9 years) | 12.905 | 4.619 | 1005 | 1125 | 1.237 | 0.358 | 3.666 | 22.143 |
| Child mortality (past 0-9 years) | 7.712 | 2.484 | 990 | 1106 | 0.856 | 0.322 | 2.744 | 12.680 |
| Under-five mortality (past 0-9 years) | 20.517 | 4.953 | 1009 | 1130 | 1.127 | 0.241 | 10.612 | 30.423 |

na $=$ Not applicable

Table B. 7 Sampling errors for North Central sample, Maldives 2009

| Variable | Value <br> (R) | Standard error (SE) | Number of cases |  | Design effect (DEFT) | Relative error (SE/R) | Confidence limits |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |
|  |  |  | (N) | (WN) |  |  | R-2SE | $\mathrm{R}+2 \mathrm{SE}$ |
| Urban residence | 0.000 | 0.000 | 1259 | 1038 | na | na | 0.000 | 0.000 |
| No education | 0.352 | 0.016 | 1259 | 1038 | 1.177 | 0.045 | 0.320 | 0.383 |
| Secondary education or higher | 0.295 | 0.016 | 1259 | 1038 | 1.259 | 0.055 | 0.263 | 0.328 |
| Net attendance ratio | 0.835 | 0.011 | 1054 | 938 | 1.022 | 0.013 | 0.814 | 0.857 |
| Currently married/in union | 0.644 | 0.046 | 1763 | 1501 | 0.983 | 0.071 | 0.553 | 0.736 |
| Married before age 20 | 0.532 | 0.015 | 1423 | 1171 | 1.142 | 0.028 | 0.502 | 0.561 |
| Currently pregnant | 0.061 | 0.007 | 1763 | 1501 | 1.027 | 0.119 | 0.046 | 0.075 |
| Children ever born | 2.070 | 0.142 | 1763 | 1501 | 0.877 | 0.069 | 1.786 | 2.354 |
| Children surviving | 1.950 | 0.130 | 1763 | 1501 | 0.852 | 0.066 | 1.690 | 2.209 |
| Children ever born to women age 40-49 | 5.684 | 0.157 | 343 | 280 | 1.227 | 0.028 | 5.371 | 5.997 |
| Knows any contraceptive method | 0.995 | 0.002 | 1173 | 967 | 1.104 | 0.002 | 0.990 | 1.000 |
| Knows a modern method | 0.995 | 0.002 | 1173 | 967 | 1.104 | 0.002 | 0.990 | 1.000 |
| Ever used any contraceptive method | 0.654 | 0.020 | 1173 | 967 | 1.460 | 0.031 | 0.613 | 0.694 |
| Currently using any method | 0.374 | 0.017 | 1173 | 967 | 1.201 | 0.045 | 0.340 | 0.408 |
| Currently using a modern method | 0.283 | 0.016 | 1173 | 967 | 1.197 | 0.056 | 0.251 | 0.314 |
| Currently using a traditional method | 0.092 | 0.010 | 1173 | 967 | 1.212 | 0.112 | 0.071 | 0.112 |
| Currently using pill | 0.075 | 0.011 | 1173 | 967 | 1.487 | 0.153 | 0.052 | 0.098 |
| Currently using lUD | 0.003 | 0.002 | 1173 | 967 | 1.505 | 0.796 | 0.000 | 0.008 |
| Currently using condoms | 0.080 | 0.010 | 1173 | 967 | 1.229 | 0.122 | 0.061 | 0.100 |
| Currently using injectables | 0.019 | 0.004 | 1173 | 967 | 1.022 | 0.215 | 0.011 | 0.027 |
| Currently using female sterilization | 0.103 | 0.010 | 1173 | 967 | 1.102 | 0.095 | 0.084 | 0.123 |
| Currently using withdrawal | 0.058 | 0.008 | 1173 | 967 | 1.205 | 0.142 | 0.042 | 0.075 |
| Currently using periodic abstinence | 0.033 | 0.005 | 1173 | 967 | 0.895 | 0.141 | 0.024 | 0.043 |
| Used public sector source | 0.787 | 0.024 | 341 | 280 | 1.060 | 0.030 | 0.740 | 0.834 |
| Want no more children | 0.473 | 0.014 | 1173 | 967 | 0.966 | 0.030 | 0.445 | 0.502 |
| Want to delay birth at least 2 years | 0.199 | 0.015 | 1173 | 967 | 1.295 | 0.076 | 0.169 | 0.229 |
| Ideal family size . | 3.305 | 0.062 | 1055 | 867 | 1.550 | 0.019 | 3.181 | 3.429 |
| Mothers protected against tetanus for last birth | 0.798 | 0.018 | 558 | 466 | 1.069 | 0.023 | 0.762 | 0.835 |
| Mothers received medical assistance at delivery | 0.889 | 0.027 | 647 | 539 | 2.024 | 0.031 | 0.834 | 0.944 |
| Had diarrhoea in the past 2 weeks | 0.030 | 0.007 | 636 | 530 | 1.044 | 0.233 | 0.016 | 0.044 |
| Treated with oral rehydration salts (ORS) | 0.424 | 0.123 | 20 | 16 | 1.091 | 0.290 | 0.178 | 0.669 |
| Taken to a health provider | 0.759 | 0.118 | 20 | 16 | 1.210 | 0.155 | 0.523 | 0.994 |
| Vaccination card seen | 0.961 | 0.019 | 129 | 105 | 1.105 | 0.020 | 0.923 | 0.999 |
| Received BCG vaccination | 1.000 | 0.000 | 129 | 105 | na | 0.000 | 1.000 | 1.000 |
| Received DPT vaccination (3 doses) | 1.000 | 0.000 | 129 | 105 | na | 0.000 | 1.000 | 1.000 |
| Received polio vaccination (3 doses) | 0.993 | 0.007 | 129 | 105 | 0.936 | 0.007 | 0.979 | 1.007 |
| Received measles vaccination | 0.962 | 0.016 | 129 | 105 | 0.960 | 0.017 | 0.929 | 0.994 |
| Received all basic vaccinations | 0.955 | 0.017 | 129 | 105 | 0.925 | 0.018 | 0.921 | 0.989 |
| Height-for-age (-2SD) | 0.227 | 0.025 | 604 | 543 | 1.474 | 0.112 | 0.177 | 0.278 |
| Weight-for-height (-2SD) | 0.145 | 0.012 | 604 | 543 | 0.838 | 0.084 | 0.121 | 0.169 |
| Weight-for-age (-2SD) | 0.244 | 0.018 | 604 | 543 | 0.981 | 0.072 | 0.208 | 0.279 |
| $\mathrm{BMI}<18.5$ | 0.082 | 0.010 | 1095 | 903 | 1.212 | 0.122 | 0.062 | 0.102 |
| Has heard about HIV/AIDS | 0.978 | 0.004 | 1259 | 1038 | 0.965 | 0.004 | 0.970 | 0.986 |
| Knows about condoms to prevent AIDS | 0.731 | 0.017 | 1259 | 1038 | 1.389 | 0.024 | 0.697 | 0.766 |
| Knows about limiting partners | 0.939 | 0.007 | 1259 | 1038 | 1.013 | 0.007 | 0.926 | 0.953 |
| Comprehensive knowledge on HIV transmission | 0.347 | 0.019 | 1259 | 1038 | 1.420 | 0.055 | 0.309 | 0.385 |
| Total fertility rate (past 3 years) | 2.530 | 0.133 | na | 4503 | 0.835 | 0.053 | 2.264 | 2.797 |
| Neonatal mortality (past 0-9 years) | 17.440 | 3.538 | 1286 | 1074 | 0.936 | 0.203 | 10.364 | 24.517 |
| Post-neonatal mortality (past 0-9 years) | 6.576 | 2.140 | 1286 | 1075 | 0.942 | 0.325 | 2.295 | 10.857 |
| Infant mortality (past 0-9 years) | 24.017 | 3.788 | 1286 | 1074 | 0.888 | 0.158 | 16.440 | 31.593 |
| Child mortality (past 0-9 years) | 5.734 | 2.006 | 1255 | 1048 | 0.965 | 0.350 | 1.722 | 9.745 |
| Under-five mortality (past 0-9 years) | 29.613 | 4.449 | 1289 | 1076 | 0.957 | 0.150 | 20.714 | 38.511 |

na $=$ Not applicable

Table B. 8 Sampling errors for Central sample, Maldives 2009

| Variable | Value (R) | Standard error (SE) | Number of cases |  | Design effect (DEFT) | Relative error (SE/R) | Confidence limits |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Weight- |  |  |  |  |
|  |  |  | (N) | (WN) |  |  | R-2SE | $\mathrm{R}+2 \mathrm{SE}$ |
| Urban residence | 0.000 | 0.000 | 1290 | 615 | na | na | 0.000 | 0.000 |
| No education | 0.279 | 0.014 | 1290 | 615 | 1.113 | 0.050 | 0.252 | 0.307 |
| Secondary education or higher | 0.299 | 0.025 | 1290 | 615 | 1.970 | 0.084 | 0.249 | 0.349 |
| Net attendance ratio | 0.806 | 0.014 | 987 | 493 | 1.194 | 0.017 | 0.778 | 0.833 |
| Currently married/in union | 0.666 | 0.061 | 1842 | 845 | 0.946 | 0.092 | 0.544 | 0.788 |
| Married before age 20 | 0.652 | 0.016 | 1357 | 649 | 1.282 | 0.024 | 0.620 | 0.684 |
| Currently pregnant | 0.063 | 0.009 | 1842 | 845 | 1.153 | 0.143 | 0.045 | 0.081 |
| Children ever born | 2.151 | 0.190 | 1842 | 845 | 0.870 | 0.088 | 1.772 | 2.531 |
| Children surviving | 2.001 | 0.176 | 1842 | 845 | 0.869 | 0.088 | 1.650 | 2.353 |
| Children ever born to women age 40-49 | 5.893 | 0.163 | 288 | 132 | 1.190 | 0.028 | 5.567 | 6.219 |
| Knows any contraceptive method | 0.996 | 0.002 | 1186 | 563 | 1.045 | 0.002 | 0.992 | 1.000 |
| Knows a modern method | 0.996 | 0.002 | 1186 | 563 | 1.045 | 0.002 | 0.992 | 1.000 |
| Ever used any contraceptive method | 0.709 | 0.022 | 1186 | 563 | 1.692 | 0.031 | 0.664 | 0.754 |
| Currently using any method | 0.420 | 0.016 | 1186 | 563 | 1.117 | 0.038 | 0.388 | 0.452 |
| Currently using a modern method | 0.331 | 0.016 | 1186 | 563 | 1.172 | 0.048 | 0.299 | 0.363 |
| Currently using a traditional method | 0.089 | 0.010 | 1186 | 563 | 1.164 | 0.108 | 0.069 | 0.108 |
| Currently using pill | 0.054 | 0.008 | 1186 | 563 | 1.230 | 0.149 | 0.038 | 0.070 |
| Currently using lUD | 0.004 | 0.002 | 1186 | 563 | 0.975 | 0.458 | 0.000 | 0.007 |
| Currently using condoms | 0.114 | 0.012 | 1186 | 563 | 1.274 | 0.103 | 0.091 | 0.138 |
| Currently using injectables | 0.007 | 0.003 | 1186 | 563 | 1.229 | 0.439 | 0.001 | 0.012 |
| Currently using female sterilization | 0.137 | 0.014 | 1186 | 563 | 1.430 | 0.104 | 0.108 | 0.166 |
| Currently using withdrawal | 0.061 | 0.009 | 1186 | 563 | 1.312 | 0.150 | 0.043 | 0.079 |
| Currently using periodic abstinence | 0.026 | 0.006 | 1186 | 563 | 1.305 | 0.232 | 0.014 | 0.038 |
| Used public sector source | 0.630 | 0.023 | 405 | 192 | 0.970 | 0.037 | 0.584 | 0.677 |
| Want no more children | 0.474 | 0.013 | 1186 | 563 | 0.926 | 0.028 | 0.447 | 0.501 |
| Want to delay birth at least 2 years | 0.242 | 0.013 | 1186 | 563 | 1.078 | 0.055 | 0.215 | 0.269 |
| Ideal family size | 3.371 | 0.064 | 1088 | 518 | 1.553 | 0.019 | 3.243 | 3.500 |
| Mothers protected against tetanus for last birth | 0.772 | 0.030 | 612 | 293 | 1.744 | 0.038 | 0.713 | 0.831 |
| Mothers received medical assistance at delivery | 0.895 | 0.031 | 716 | 343 | 2.380 | 0.035 | 0.832 | 0.958 |
| Had diarrhoea in the past 2 weeks | 0.078 | 0.012 | 708 | 339 | 1.157 | 0.149 | 0.055 | 0.102 |
| Treated with oral rehydration salts (ORS) | 0.569 | 0.084 | 56 | 27 | 1.261 | 0.148 | 0.401 | 0.737 |
| Taken to a health provider | 0.726 | 0.071 | 56 | 27 | 1.187 | 0.098 | 0.584 | 0.868 |
| Vaccination card seen | 0.882 | 0.031 | 170 | 82 | 1.274 | 0.036 | 0.820 | 0.945 |
| Received BCG vaccination | 0.986 | 0.010 | 170 | 82 | 1.112 | 0.010 | 0.967 | 1.006 |
| Received DPT vaccination (3 doses) | 0.943 | 0.019 | 170 | 82 | 1.062 | 0.020 | 0.905 | 0.980 |
| Received polio vaccination (3 doses) | 0.923 | 0.025 | 170 | 82 | 1.229 | 0.027 | 0.873 | 0.973 |
| Received measles vaccination | 0.925 | 0.018 | 170 | 82 | 0.895 | 0.019 | 0.889 | 0.961 |
| Received all basic vaccinations | 0.878 | 0.035 | 170 | 82 | 1.416 | 0.040 | 0.807 | 0.949 |
| Height-for-age (-2SD) | 0.209 | 0.029 | 492 | 235 | 1.557 | 0.141 | 0.150 | 0.267 |
| Weight-for-height (-2SD) | 0.141 | 0.019 | 492 | 235 | 1.233 | 0.134 | 0.103 | 0.179 |
| Weight-for-age (-2SD) | 0.180 | 0.021 | 492 | 235 | 1.147 | 0.116 | 0.138 | 0.222 |
| BMI $<18.5$ | 0.069 | 0.012 | 930 | 440 | 1.399 | 0.169 | 0.046 | 0.092 |
| Has heard about HIV/AIDS | 0.977 | 0.004 | 1290 | 615 | 1.012 | 0.004 | 0.969 | 0.986 |
| Knows about condoms to prevent AIDS | 0.819 | 0.014 | 1290 | 615 | 1.335 | 0.017 | 0.790 | 0.847 |
| Knows about limiting partners | 0.910 | 0.013 | 1290 | 615 | 1.576 | 0.014 | 0.885 | 0.935 |
| Comprehensive knowledge on HIV transmission | 0.421 | 0.018 | 1290 | 615 | 1.314 | 0.043 | 0.385 | 0.457 |
| Total fertility rate (past 3 years) | 2.819 | 0.135 | na | 2485 | 0.961 | 0.048 | 2.550 | 3.089 |
| Neonatal mortality (past 0-9 years) | 18.637 | 4.701 | 1311 | 640 | 1.149 | 0.252 | 9.235 | 28.040 |
| Post-neonatal mortality (past 0-9 years) | 11.400 | 2.893 | 1310 | 638 | 0.953 | 0.254 | 5.613 | 17.186 |
| Infant mortality (past 0-9 years) | 30.037 | 5.814 | 1311 | 640 | 1.124 | 0.194 | 18.410 | 41.665 |
| Child mortality (past 0-9 years) | 3.958 | 1.984 | 1262 | 621 | 1.161 | 0.501 | 0.000 | 7.925 |
| Under-five mortality (past 0-9 years) | 33.876 | 6.428 | 1311 | 640 | 1.168 | 0.190 | 21.021 | 46.732 |

na $=$ Not applicable

| Variable | Value (R) | Standard error (SE) | Number of cases |  | Design effect (DEFT) | Relative error (SE/R) | Confidence limits |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Weight- |  |  |  |  |
|  |  |  | (N) | (WN) |  |  | R-2SE | R+2SE |
| Urban residence | 0.000 | 0.000 | 1543 | 853 | na | na | 0.000 | 0.000 |
| No education | 0.309 | 0.012 | 1543 | 853 | 1.049 | 0.040 | 0.284 | 0.333 |
| Secondary education or higher | 0.316 | 0.020 | 1543 | 853 | 1.659 | 0.062 | 0.277 | 0.356 |
| Net attendance ratio | 0.838 | 0.009 | 1257 | 706 | 0.907 | 0.011 | 0.820 | 0.856 |
| Currently married/in union | 0.707 | 0.037 | 1983 | 1116 | 1.110 | 0.052 | 0.633 | 0.780 |
| Married before age 20 | 0.580 | 0.017 | 1675 | 926 | 1.410 | 0.029 | 0.546 | 0.613 |
| Currently pregnant | 0.053 | 0.006 | 1983 | 1116 | 1.049 | 0.107 | 0.042 | 0.065 |
| Children ever born | 2.243 | 0.136 | 1983 | 1116 | 1.134 | 0.061 | 1.971 | 2.515 |
| Children surviving | 2.079 | 0.124 | 1983 | 1116 | 1.123 | 0.060 | 1.830 | 2.328 |
| Children ever born to women age 40-49 | 5.370 | 0.140 | 400 | 222 | 1.209 | 0.026 | 5.089 | 5.651 |
| Knows any contraceptive method | 0.993 | 0.002 | 1437 | 789 | 1.088 | 0.002 | 0.988 | 0.998 |
| Knows a modern method | 0.992 | 0.002 | 1437 | 789 | 1.013 | 0.002 | 0.987 | 0.997 |
| Ever used any contraceptive method | 0.579 | 0.023 | 1437 | 789 | 1.777 | 0.040 | 0.532 | 0.625 |
| Currently using any method | 0.317 | 0.015 | 1437 | 789 | 1.184 | 0.046 | 0.288 | 0.346 |
| Currently using a modern method | 0.250 | 0.013 | 1437 | 789 | 1.169 | 0.053 | 0.223 | 0.277 |
| Currently using a traditional method | 0.067 | 0.008 | 1437 | 789 | 1.177 | 0.116 | 0.051 | 0.082 |
| Currently using pill | 0.069 | 0.009 | 1437 | 789 | 1.273 | 0.123 | 0.052 | 0.086 |
| Currently using IUD | 0.005 | 0.002 | 1437 | 789 | 1.144 | 0.408 | 0.001 | 0.010 |
| Currently using condoms | 0.074 | 0.009 | 1437 | 789 | 1.341 | 0.126 | 0.055 | 0.092 |
| Currently using injectables | 0.009 | 0.003 | 1437 | 789 | 1.067 | 0.300 | 0.004 | 0.014 |
| Currently using female sterilization | 0.086 | 0.009 | 1437 | 789 | 1.265 | 0.109 | 0.067 | 0.104 |
| Currently using withdrawal | 0.045 | 0.006 | 1437 | 789 | 1.116 | 0.136 | 0.033 | 0.057 |
| Currently using periodic abstinence | 0.022 | 0.004 | 1437 | 789 | 1.159 | 0.203 | 0.013 | 0.031 |
| Used public sector source | 0.790 | 0.026 | 379 | 200 | 1.232 | 0.033 | 0.739 | 0.842 |
| Want no more children | 0.492 | 0.015 | 1437 | 789 | 1.143 | 0.031 | 0.462 | 0.523 |
| Want to delay birth at least 2 years | 0.231 | 0.013 | 1437 | 789 | 1.189 | 0.057 | 0.204 | 0.257 |
| Ideal family size . | 3.357 | 0.052 | 1336 | 756 | 1.456 | 0.015 | 3.254 | 3.461 |
| Mothers protected against tetanus for last birth | 0.798 | 0.016 | 720 | 390 | 1.078 | 0.021 | 0.765 | 0.830 |
| Mothers received medical assistance at delivery | 0.966 | 0.006 | 836 | 453 | 0.881 | 0.006 | 0.954 | 0.977 |
| Had diarrhoea in the past 2 weeks | 0.053 | 0.011 | 817 | 442 | 1.382 | 0.207 | 0.031 | 0.076 |
| Treated with oral rehydration salts (ORS) | 0.661 | 0.105 | 40 | 24 | 1.446 | 0.159 | 0.451 | 0.871 |
| Taken to a health provider | 0.831 | 0.077 | 40 | 24 | 1.331 | 0.092 | 0.678 | 0.984 |
| Vaccination card seen | 0.900 | 0.024 | 184 | 104 | 1.109 | 0.027 | 0.851 | 0.948 |
| Received BCG vaccination | 0.990 | 0.010 | 184 | 104 | 1.385 | 0.010 | 0.969 | 1.010 |
| Received DPT vaccination (3 doses) | 0.990 | 0.010 | 184 | 104 | 1.385 | 0.010 | 0.969 | 1.010 |
| Received polio vaccination (3 doses) | 0.981 | 0.013 | 184 | 104 | 1.307 | 0.013 | 0.954 | 1.007 |
| Received measles vaccination | 0.961 | 0.016 | 184 | 104 | 1.108 | 0.016 | 0.930 | 0.992 |
| Received all basic vaccinations | 0.952 | 0.017 | 184 | 104 | 1.112 | 0.018 | 0.917 | 0.987 |
| Height-for-age (-2SD) | 0.209 | 0.020 | 455 | 280 | 1.066 | 0.094 | 0.169 | 0.248 |
| Weight-for-height (-2SD) | 0.102 | 0.015 | 455 | 280 | 1.065 | 0.147 | 0.072 | 0.132 |
| Weight-for-age (-2SD) | 0.199 | 0.018 | 455 | 280 | 0.992 | 0.092 | 0.162 | 0.235 |
| BMI $<18.5$ | 0.086 | 0.009 | 998 | 604 | 1.090 | 0.108 | 0.067 | 0.104 |
| Has heard about HIV/AIDS | 0.970 | 0.006 | 1543 | 853 | 1.445 | 0.007 | 0.957 | 0.982 |
| Knows about condoms to prevent AIDS | 0.794 | 0.014 | 1543 | 853 | 1.374 | 0.018 | 0.765 | 0.822 |
| Knows about limiting partners | 0.891 | 0.015 | 1543 | 853 | 1.852 | 0.017 | 0.861 | 0.920 |
| Comprehensive knowledge on HIV transmission | 0.419 | 0.016 | 1543 | 853 | 1.289 | 0.039 | 0.386 | 0.451 |
| Total fertility rate (past 3 years) | 2.962 | 0.136 | na | 3348 | 1.062 | 0.046 | 2.689 | 3.235 |
| Neonatal mortality (past 0-9 years) | 22.766 | 3.878 | 1570 | 864 | 0.978 | 0.170 | 15.010 | 30.522 |
| Post-neonatal mortality (past 0-9 years) | 9.716 | 3.352 | 1570 | 864 | 1.319 | 0.345 | 3.011 | 16.421 |
| Infant mortality (past 0-9 years) | 32.482 | 5.938 | 1572 | 864 | 1.257 | 0.183 | 20.605 | 44.359 |
| Child mortality (past 0-9 years) | 9.069 | 2.764 | 1533 | 846 | 1.087 | 0.305 | 3.540 | 14.598 |
| Under-five mortality (past 0-9 years) | 41.257 | 6.364 | 1575 | 867 | 1.154 | 0.154 | 28.528 | 53.985 |


| Table B.10 Sampling errors for South sample, Maldives 2009 |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |
|  |  |  |  |  |  |

na $=$ Not applicable

| Table C. 1 Household age distribution |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Single-year age distribution of the de facto household population by sex (weighted), Maldives 2009 |  |  |  |  |
| Age | Women |  | Men |  |
|  | Number | Percent | Number | Percent |
| 0 | 485 | 2.3 | 518 | 2.7 |
| 1 | 458 | 2.2 | 453 | 2.4 |
| 2 | 383 | 1.8 | 377 | 2.0 |
| 3 | 384 | 1.8 | 386 | 2.0 |
| 4 | 351 | 1.7 | 381 | 2.0 |
| 5 | 359 | 1.7 | 361 | 1.9 |
| 6 | 304 | 1.4 | 309 | 1.6 |
| 7 | 348 | 1.7 | 373 | 2.0 |
| 8 | 380 | 1.8 | 417 | 2.2 |
| 9 | 420 | 2.0 | 427 | 2.3 |
| 10 | 363 | 1.7 | 387 | 2.0 |
| 11 | 407 | 1.9 | 404 | 2.1 |
| 12 | 468 | 2.2 | 502 | 2.6 |
| 13 | 493 | 2.4 | 532 | 2.8 |
| 14 | 496 | 2.4 | 517 | 2.7 |
| 15 | 474 | 2.3 | 444 | 2.3 |
| 16 | 521 | 2.5 | 545 | 2.9 |
| 17 | 549 | 2.6 | 494 | 2.6 |
| 18 | 562 | 2.7 | 521 | 2.7 |
| 19 | 535 | 2.5 | 445 | 2.3 |
| 20 | 510 | 2.4 | 391 | 2.1 |
| 21 | 481 | 2.3 | 363 | 1.9 |
| 22 | 522 | 2.5 | 385 | 2.0 |
| 23 | 514 | 2.4 | 336 | 1.8 |
| 24 | 444 | 2.1 | 306 | 1.6 |
| 25 | 458 | 2.2 | 331 | 1.7 |
| 26 | 422 | 2.0 | 293 | 1.5 |
| 27 | 376 | 1.8 | 308 | 1.6 |
| 28 | 389 | 1.9 | 301 | 1.6 |
| 29 | 375 | 1.8 | 258 | 1.4 |
| 30 | 369 | 1.8 | 331 | 1.7 |
| 31 | 284 | 1.4 | 179 | 0.9 |
| 32 | 386 | 1.8 | 245 | 1.3 |
| 33 | 283 | 1.3 | 215 | 1.1 |
| 34 | 262 | 1.3 | 226 | 1.2 |
| 35 | 318 | 1.5 | 231 | 1.2 |
| 36 | 301 | 1.4 | 216 | 1.1 |
| 37 | 315 | 1.5 | 201 | 1.1 |
| 38 | 291 | 1.4 | 225 | 1.2 |
| 39 | 229 | 1.1 | 224 | 1.2 |
| 40 | 283 | 1.3 | 247 | 1.3 |
| 41 | 171 | 0.8 | 138 | 0.7 |
| 42 | 248 | 1.2 | 202 | 1.1 |
| 43 | 238 | 1.1 | 170 | 0.9 |
| 44 | 213 | 1.0 | 136 | 0.7 |
| 45 | 189 | 0.9 | 207 | 1.1 |
| 46 | 184 | 0.9 | 131 | 0.7 |
| 47 | 195 | 0.9 | 144 | 0.8 |
| 48 | 171 | 0.8 | 209 | 1.1 |
| 49 | 103 | 0.5 | 154 | 0.8 |
| 50 | 262 | 1.3 | 214 | 1.1 |
| 51 | 152 | 0.7 | 94 | 0.5 |
| 52 | 165 | 0.8 | 123 | 0.7 |
| 53 | 130 | 0.6 | 116 | 0.6 |
| 54 | 86 | 0.4 | 102 | 0.5 |
| 55 | 121 | 0.6 | 134 | 0.7 |
| 56 | 89 | 0.4 | 90 | 0.5 |
| 57 | 73 | 0.3 | 56 | 0.3 |
| 58 | 90 | 0.4 | 92 | 0.5 |
| 59 | 65 | 0.3 | 73 | 0.4 |
| 60 | 71 | 0.3 | 59 | 0.3 |
| 61 | 44 | 0.2 | 48 | 0.3 |
| 62 | 54 | 0.3 | 63 | 0.3 |
| 63 | 89 | 0.4 | 79 | 0.4 |
| 64 | 53 | 0.3 | 52 | 0.3 |
| 65 | 204 | 1.0 | 200 | 1.1 |
| 66 | 79 | 0.4 | 89 | 0.5 |
| 67 | 103 | 0.5 | 115 | 0.6 |
| 68 | 60 | 0.3 | 67 | 0.4 |
| 69 | 38 | 0.2 | 37 | 0.2 |
| 70+ | 440 | 2.1 | 602 | 3.2 |
| Don't know | 17 | 0.1 | 58 | 0.3 |
| Total | 20,977 | 100.0 | 18,965 | 100.0 |

## Table C.2.1 Age distribution of eligible and interviewed women

De facto household population of women age 10-54, interviewed women age 15-49, and percentage of eligible women who were interviewed (weighted), by five-year age groups, Maldives 2009

| Age group | Household population of women age$10-54$ | Ever-married women age$10-54$ | Interviewed women age 15-49 |  | Percentage of eligible women interviewed |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Number | Percent |  |
| 10-14 | 2,228 | 0 | na | na | na |
| 15-19 | 2,641 | 140 | 119 | 1.7 | 85.0 |
| 20-24 | 2,470 | 1,517 | 1,270 | 18.3 | 83.7 |
| 25-29 | 2,020 | 1,800 | 1,482 | 21.4 | 82.4 |
| 30-34 | 1,585 | 1,503 | 1,223 | 17.6 | 81.4 |
| 35-39 | 1,454 | 1,420 | 1,191 | 17.2 | 83.9 |
| 40-44 | 1,154 | 1,139 | 982 | 14.2 | 86.2 |
| 45-49 | 843 | 829 | 671 | 9.7 | 80.9 |
| 50-54 | 796 | 787 | na | na | na |
| 15-49 | 12,167 | 8,347 | 6,938 | 100.0 | 83.1 |

Note: The de facto population includes all residents and nonresidents who stayed in the household the night before the interview. Weights for both household population of women and interviewed women are household weights. Age is based on the household schedule.
na $=$ Not applicable

## Table C.2.2 Age distribution of eligible and interviewed men

De facto household population of men age 10-64, interviewed men age 15-59 and percent of eligible men who were interviewed (weighted), Maldives 2009

| Age group | Household population of men age 10-64 | Ever-married women age10-64 | Interviewed men age 15-59 |  | Percentage of eligible men interviewed |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Number | Percent |  |
| 10-14 | 1,141 | 0 | na | na | na |
| 15-19 | 1,251 | 5 | 3 | 0.2 | 59.4 |
| 20-24 | 898 | 248 | 129 | 7.5 | 52.0 |
| 25-29 | 719 | 526 | 251 | 14.5 | 47.7 |
| 30-34 | 573 | 535 | 290 | 16.8 | 54.2 |
| 35-39 | 526 | 509 | 260 | 15.0 | 51.1 |
| 40-44 | 442 | 430 | 228 | 13.2 | 52.9 |
| 45-49 | 392 | 388 | 217 | 12.6 | 56.0 |
| 50-54 | 309 | 308 | 154 | 8.9 | 49.9 |
| 55-59 | 210 | 208 | 119 | 6.9 | 57.3 |
| 60-64 | 139 | 139 | na | na | na |
| 15-59 | 5,320 | 3,156 | 1,727 | 100.0 | 54.7 |

Note: The de facto population includes all residents and nonresidents who stayed in the household the night before the interview. Weights for both household population of women and interviewed women are household weights. Age is based on the household schedule.
na $=$ Not applicable

| Percentage of observations missing information for selected demographic and health questions (weighted), Maldives 2009 |  |  |  |
| :---: | :---: | :---: | :---: |
| Subject | Reference group | Percentage with information missing | Number of cases |
| Birth date | Births in past 15 years |  |  |
| Month only |  | 4.29 | 10,618 |
| Month and year |  | 1.48 | 10,618 |
| Age at death | Dead children born in past 15 years | 0.60 | 349 |
| Age/date at first union ${ }^{1}$ | Ever-married women age 15-49 | 0.97 | 7,131 |
|  | Ever-married men age 15-49 | 2.96 | 1,727 |
| Respondent's education | All women age 15-49 | 0.00 | 7,131 |
|  | All men age 15-49 | 0.00 | 1,727 |
| Diarrhoea in past 2 weeks | Living children age 0-59 months | 0.13 | 3,682 |
| Anthropometry | From Household Questionnaire Living children age 0-59 months |  |  |
| Height |  | 31.76 | 4,217 |
| Weight |  | 26.47 | 4,217 |
| Height or weight |  | 32.05 | 4,217 |
| ${ }^{1}$ 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), Maldives 2009

| Calendar <br> 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 |
| 2009 | 259 | 3 | 261 | 19.8 | 100.0 | 99.8 | 92.1 | 0.0 | 90.3 | na | na | na |
| 2008 | 840 | 11 | 850 | 10.0 | 89.8 | 99.9 | 103.0 | 40.0 | 101.9 | na | na | na |
| 2007 | 812 | 8 | 820 | 19.9 | 100.0 | 99.9 | 101.0 | 581.7 | 102.3 | 107.1 | 80.4 | 106.7 |
| 2006 | 677 | 9 | 685 | 19.9 | 89.6 | 99.8 | 94.7 | 304.1 | 95.9 | 93.1 | 98.1 | 93.1 |
| 2005 | 643 | 10 | 652 | 19.9 | 100.0 | 99.9 | 102.5 | 330.1 | 104.1 | 97.8 | 72.2 | 97.3 |
| 2004 | 638 | 18 | 656 | 19.7 | 81.4 | 99.2 | 118.9 | 207.4 | 120.6 | 103.4 | 158.1 | 104.4 |
| 2003 | 591 | 13 | 605 | 19.8 | 61.7 | 98.9 | 97.9 | 212.8 | 99.5 | 95.6 | 59.5 | 94.4 |
| 2002 | 599 | 27 | 626 | 15.9 | 65.2 | 94.6 | 107.3 | 136.2 | 108.4 | 99.1 | 134.0 | 100.2 |
| 2001 | 618 | 27 | 644 | 16.3 | 41.6 | 94.0 | 107.1 | 196.8 | 109.7 | 93.7 | 100.1 | 94.0 |
| 2000 | 719 | 26 | 745 | 13.7 | 42.2 | 91.9 | 103.3 | 52.6 | 101.0 | 114.7 | 84.8 | 113.3 |
| 2005- |  |  |  |  |  |  |  |  |  |  |  |  |
| 2009 | 3,230 | 39 | 3,269 | 19.9 | 95.0 | 99.9 | 99.7 | 148.1 | 100.2 | na | na | na |
| 2000- |  |  |  |  |  |  |  |  |  |  |  |  |
| 2004 | 3,164 | 111 | 3,276 | 17.0 | 56.3 | 95.6 | 106.7 | 133.1 | 107.5 | na | na | na |
| 1995- |  |  |  |  |  |  |  |  |  |  |  |  |
| 1999 | 3,377 | 173 | 3,550 | 11.3 | 40.6 | 88.8 | 102.7 | 101.2 | 102.7 | na | na | na |
| 1990- |  |  |  |  |  |  |  |  |  |  |  |  |
| 1994 | 3,716 | 230 | 3,946 | 35.9 | 27.7 | 82.5 | 99.1 | 110.8 | 99.8 | na | na | na |
| <1989 | 4,568 | 558 | 5,126 | '4.8 | 18.5 | 68.7 | 108.3 | 122.9 | 109.7 | na | na | na |
| All | 18,055 | 1,111 | 19,166 | 38.5 | 30.4 | 85.2 | 103.5 | 118.4 | 104.3 | na | na | na |

na $=$ Not applicable
${ }^{1}$ Both year and month of birth given
${ }^{2}(\mathrm{Bm} / \mathrm{Bf}) \times 100$, where Bm and Bf are the numbers of male and female births, respectively
${ }^{3}[2 B x /(B x-1+B x+1)] x 100$, 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 one month of age by age at death in days and the percentage of neonatal deaths reported to occur at ages 0-6 days, for five-year periods of birth preceding the survey (weighted), Maldives 2009

| Age at death (days) | Number of years preceding the survey |  |  |  | $\begin{aligned} & \text { Total } \\ & 0-19 \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 0-4 | 5-9 | 10-14 | 15-19 |  |
| <1 | 20 | 43 | 46 | 45 | 154 |
| 1 | 9 | 9 | 8 | 16 | 43 |
| 2 | 1 | 5 | 3 | 4 | 13 |
| 3 | 2 | 6 | 6 | 12 | 26 |
| 4 | 1 | 0 | 7 | 6 | 14 |
| 5 | 2 | 0 | 2 | 5 | 8 |
| 6 | 1 | 0 | 1 | 0 | 2 |
| 7 | 0 | 2 | 3 | 11 | 17 |
| 8 | 0 | 1 | 3 | 2 | 5 |
| 9 | 0 | 0 | 2 | 2 | 4 |
| 10 | 0 | 1 | 1 | 1 | 3 |
| 11 | 2 | 0 | 0 | 2 | 3 |
| 12 | 0 | 0 | 1 | 0 | 1 |
| 13 | 1 | 0 | 0 | 1 | 2 |
| 14 | 0 | 3 | 0 | 2 | 5 |
| 15 | 0 | 2 | 1 | 2 | 5 |
| 16 | 0 | 0 | 0 | 3 | 3 |
| 17 | 0 | 0 | 0 | 2 | 2 |
| 19 | 0 | 1 | 0 | 0 | 1 |
| 20 | 0 | 0 | 2 | 1 | 3 |
| 21 | 0 | 0 | 0 | 1 | 2 |
| 23 | 0 | 0 | 0 | 0 | 0 |
| 24 | 0 | 1 | 1 | 0 | 2 |
| 25 | 0 | 0 | 0 | 3 | 3 |
| 28 | 0 | 0 | 1 | 0 | 1 |
| $31+$ | 1 | 0 | 1 | 0 | 2 |
| Total 0-30 | 38 | 73 | 90 | 120 | 321 |
| Percent early neonatal ${ }^{1}$ | 92.6 | 85.7 | 82.1 | 73.2 | 80.8 |

${ }^{1} \leq 6$ days / $\leq 30$ days

## Table C. 6 Reporting of age at death in months

Distribution of reported deaths under two years of age by age at death in months and the percentage of infant deaths reported to occur at age under one month, for five-year periods of birth preceding the survey, Maldives 2009

|  | Number of years preceding <br> the survey |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Age at death <br> (months) | $0-4$ | $5-9$ | $10-14$ | $15-19$ | $0-19$ |
| $<1^{\text {a }}$ | 38 | 73 | 90 | 120 | 321 |
| 1 | 5 | 3 | 7 | 8 | 22 |
| 2 | 0 | 4 | 5 | 4 | 13 |
| 3 | 3 | 1 | 8 | 12 | 24 |
| 4 | 1 | 3 | 3 | 3 | 9 |
| 5 | 0 | 2 | 2 | 5 | 10 |
| 6 | 1 | 1 | 1 | 7 | 10 |
| 7 | 0 | 5 | 2 | 5 | 11 |
| 8 | 0 | 3 | 3 | 1 | 6 |
| 9 | 2 | 3 | 3 | 5 | 13 |
| 10 | 1 | 0 | 1 | 2 | 3 |
| 11 | 1 | 3 | 3 | 1 | 8 |
| 12 | 0 | 1 | 1 | 3 | 5 |
| 13 | 0 | 0 | 0 | 0 | 0 |
| 15 | 0 | 0 | 0 | 0 | 0 |
| 16 | 0 | 1 | 0 | 1 | 1 |
| 18 | 0 | 0 | 3 | 4 | 7 |
| 19 | 0 | 0 | 2 | 0 | 3 |
| 20 | 0 | 0 | 0 | 1 | 1 |
| 21 | 0 | 0 | 0 | 1 | 1 |
| 23 | 0 | 1 | 0 | 0 | 1 |
| 1 year | 0 | 1 | 9 | 5 | 16 |
| Total $0-11$ | 52 | 101 | 127 | 171 | 450 |
| Percent neonatal ${ }^{1}$ | 73.4 | 72.9 | 70.8 | 70.4 | 71.4 |
| 1 |  |  |  |  |  |

${ }^{1}$ Under one month / under one year
${ }^{\text {a }}$ Includes deaths under one month reported in days

Table C. 7 Nutritional status of children based on NCHS/CDC/WHO International Reference Population
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, Maldives 2009

| Background characteristic | Height-for-age |  |  | Weight-for-height |  |  |  | Weight-for-age |  |  |  | $\begin{gathered} \text { Number } \\ \text { of } \\ \text { children } \\ \hline \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Percentage below -3 SD | Percentage below $-2 \mathrm{SD}^{1}$ | $\begin{gathered} \hline \text { Mean } \\ \text { Z- } \\ \text { score } \\ \text { (SD) } \\ \hline \end{gathered}$ | Percentage below -3 SD | Per- centage below $-2 \mathrm{SD}^{1}$ | Percentage above +2 SD | Mean <br> Z-score (SD) | Percentage below -3 SD | Per- centage below $-2 \mathrm{SD}^{1}$ | Percentage above +2 SD | Mean <br> Z-score (SD) |  |
| Age in months |  |  |  |  |  |  |  |  |  |  |  |  |
| <6 | 2.3 | 10.4 | (0.4) | 0.8 | 4.8 | 6.2 | 0.1 | 0.3 | 4.7 | 3.5 | (0.2) | 223 |
| 6-8 | 5.5 | 14.8 | (0.7) | 0.9 | 6.9 | 5.4 | (0.1) | 2.2 | 7.1 | 3.1 | (0.7) | 156 |
| 9-11 | 8.8 | 23.9 | (1.1) | 1.1 | 12.5 | 4.4 | (0.4) | 4.2 | 26.2 | 1.9 | (1.2) | 155 |
| 12-17 | 6.8 | 25.3 | (1.2) | 0.9 | 6.4 | 3.9 | (0.4) | 2.4 | 24.8 | 1.8 | (1.1) | 267 |
| 18-23 | 8.2 | 26.3 | (1.2) | 1.8 | 9.0 | 5.5 | (0.5) | 1.7 | 19.6 | 2.6 | (1.0) | 261 |
| 24-35 | 4.1 | 14.2 | (0.7) | 0.9 | 10.5 | 2.5 | (0.8) | 5.2 | 28.1 | 1.7 | (1.1) | 474 |
| 36-47 | 3.7 | 14.5 | (0.7) | 1.2 | 9.3 | 5.5 | (0.7) | 3.7 | 23.8 | 3.2 | (1.0) | 497 |
| 48-59 | 3.3 | 13.3 | (0.7) | 0.2 | 10.8 | 5.0 | (0.6) | 2.6 | 21.1 | 2.9 | (0.9) | 478 |
| Sex |  |  |  |  |  |  |  |  |  |  |  |  |
| Male | 5.8 | 16.8 | (0.8) | 1.0 | 9.3 | 4.7 | (0.5) | 2.7 | 20.3 | 2.5 | (1.0) | 1,270 |
| Female | 3.7 | 16.8 | (0.8) | 0.8 | 9.0 | 4.7 | (0.5) | 3.5 | 22.0 | 2.7 | (0.9) | 1,242 |
| Birth interval in months ${ }^{\text {2 }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| First birth ${ }^{3}$ | 3.8 | 15.1 | (0.7) | 1.1 | 7.8 | 5.9 | (0.4) | 2.5 | 15.8 | 3.5 | (0.8) | 951 |
| <24 | 6.5 | 19.3 | (1.0) | 1.1 | 10.2 | 2.8 | (0.7) | 4.7 | 28.3 | 2.2 | (1.3) | 174 |
| 24-47 | 4.6 | 18.5 | (0.9) | 0.8 | 8.3 | 4.0 | (0.5) | 2.6 | 21.3 | 1.2 | (1.0) | 399 |
| 48+ | 3.8 | 15.2 | (0.8) | 0.5 | 11.7 | 3.6 | (0.7) | 3.1 | 24.7 | 2.2 | (1.0) | 758 |
| Size at birth ${ }^{2,4}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Very small | 14.5 | 31.6 | (1.6) | 1.7 | 14.4 | 4.7 | (0.6) | 10.1 | 41.5 | 0.0 | (1.6) | 87 |
| Small | 5.0 | 25.1 | (1.2) | 3.1 | 14.3 | 1.5 | (0.9) | 4.7 | 32.4 | 0.7 | (1.5) | 213 |
| Average or larger | 3.6 | 14.4 | (0.7) | 0.6 | 8.6 | 4.9 | (0.5) | 2.4 | 18.5 | 2.9 | (0.9) | 1,977 |
| Missing | 0.0 | 0.0 | (1.1) | 0.0 | 0.0 | 0.0 | (0.7) | 0.0 | 0.0 | 0.0 | (1.3) | 1 |
| Mother's interview status |  |  |  |  |  |  |  |  |  |  |  |  |
| Interviewed | 4.1 | 16.0 | (0.8) | 0.8 | 9.4 | 4.5 | (0.5) | 2.9 | 20.7 | 2.6 | (0.9) | 2,282 |
| Not interviewed but in household | 12.4 | 26.2 | (1.1) | 2.2 | 6.8 | 6.5 | (0.5) | 4.9 | 27.6 | 2.7 | (1.1) | 202 |
| Not interviewed, and not in the household | 3.1 | 11.1 | (0.9) | 0.0 | 7.3 | 0.0 | (0.5) | 3.1 | 16.1 | 2.9 | (1.0) | 28 |
| Mother's nutritional status ${ }^{5}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Thin (BMI<18.5) | 5.5 | 20.1 | (1.1) | 1.9 | 13.8 | 1.8 | (1.0) | 5.4 | 29.9 | 0.0 | (1.5) | 185 |
| Normal (BMI 18.5-24.9) | 3.7 | 16.2 | (0.8) | 1.0 | 9.4 | 3.3 | (0.6) | 2.6 | 21.2 | 1.7 | (1.0) | 1,170 |
| Overweight/ obese ( $\mathrm{BMI} \geq 25$ ) | 5.5 | 16.0 | (0.8) | 0.7 | 8.2 | 6.3 | (0.4) | 2.8 | 19.0 | 3.8 | (0.8) | 959 |
| Missing | 7.3 | 21.6 | (0.8) | 0.3 | 8.1 | 9.6 | (0.2) | 4.1 | 21.8 | 3.8 | (0.7) | 154 |
| Residence |  |  |  |  |  |  |  |  |  |  |  |  |
| Urban | 3.5 | 14.2 | (0.6) | 0.0 | 5.9 | 5.5 | (0.3) | 0.7 | 13.2 | 2.5 | (0.7) | 722 |
| Rural | 5.3 | 17.9 | (0.9) | 1.3 | 10.4 | 4.3 | (0.6) | 4.0 | 24.4 | 2.6 | (1.1) | 1,791 |
| Region |  |  |  |  |  |  |  |  |  |  |  |  |
| Malé | 3.5 | 14.2 | (0.6) | 0.0 | 5.9 | 5.5 | (0.3) | 0.7 | 13.2 | 2.5 | (0.7) | 722 |
| North | 3.7 | 14.1 | (0.8) | 0.5 | 9.4 | 4.3 | (0.6) | 2.6 | 22.5 | 3.6 | (1.0) | 387 |
| North Central | 6.5 | 21.0 | (1.0) | 1.8 | 13.3 | 2.4 | (0.8) | 5.1 | 29.1 | 1.7 | (1.3) | 542 |
| Central | 6.8 | 18.7 | (0.8) | 1.8 | 10.9 | 4.7 | (0.6) | 4.7 | 20.8 | 1.5 | (1.0) | 235 |
| South Central | 5.7 | 17.8 | (0.9) | 0.8 | 9.0 | 4.9 | (0.5) | 3.6 | 23.0 | 2.8 | (1.0) | 281 |
| South | 3.9 | 16.7 | (0.8) | 1.5 | 8.0 | 6.8 | (0.4) | 3.8 | 22.7 | 3.6 | (0.8) | 346 |
| Mother's education ${ }^{6}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| No education | 7.1 | 22.3 | (1.1) | 0.2 | 12.8 | 4.9 | (0.7) | 4.2 | 31.8 | 3.3 | (1.3) | 321 |
| Primary | 5.4 | 18.5 | (0.9) | 1.5 | 10.9 | 4.2 | (0.7) | 4.4 | 25.1 | 1.5 | (1.1) | 939 |
| Secondary | 3.7 | 14.8 | (0.7) | 0.8 | 6.8 | 4.7 | (0.4) | 2.0 | 16.0 | 2.8 | (0.8) | 1,085 |
| More than secondary | 4.8 | 10.3 | (0.3) | 0.0 | 8.3 | 8.5 | (0.3) | 0.0 | 11.1 | 6.2 | (0.5) | 115 |
| Unknown - Certificate | 6.3 | 6.3 | (0.2) | 0.0 | 3.6 | 3.1 | (0.3) | 0.0 | 11.6 | 6.4 | (0.4) | 24 |
| Wealth quintile |  |  |  |  |  |  |  |  |  |  |  |  |
| Lowest | 5.9 | 20.0 | (1.0) | 1.4 | 11.3 | 4.1 | (0.7) | 5.2 | 27.3 | 2.4 | (1.2) | 509 |
| Second | 5.7 | 20.3 | (1.0) | 1.2 | 9.6 | 4.2 | (0.5) | 4.4 | 24.3 | 2.1 | (1.1) | 532 |
| Middle | 4.5 | 14.8 | (0.8) | 1.1 | 11.5 | 3.3 | (0.7) | 3.0 | 24.8 | 2.3 | (1.0) | 517 |
| Fourth | 4.0 | 13.5 | (0.6) | 0.4 | 5.8 | 5.8 | (0.3) | 1.9 | 15.2 | 3.9 | (0.6) | 477 |
| Highest | 3.6 | 14.9 | (0.6) | 0.3 | 7.2 | 6.1 | (0.4) | 0.4 | 13.1 | 2.4 | (0.7) | 477 |
| Total | 4.8 | 16.8 | (0.8) | 0.9 | 9.1 | 4.7 | (0.5) | 3.1 | 21.2 | 2.6 | (1.0) | 2,512 |

Note: Table is based on children who slept in the household the night before the interview. Each of the indices is expressed in standard deviation units (SD) from the median of the NCHS/CDC/WHO Child Growth Standards. 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 (SD) from the International Reference Population median
${ }^{2}$ Excludes children whose mothers were not interviewed
${ }^{3}$ First born twins (triplets, etc.) are counted as first births because they do not have a previous birth interval
${ }^{4}$ Includes children whose mothers are deceased
${ }^{5}$ Excludes children whose mothers were not weighed and measured. Mother's nutritional status in terms of BMI (Body Mass Index) is presented in Table 11.10
${ }^{6}$ 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 2009 MALDIVES DEMOGRAPHIC AND HEALTH SURVEY 

## Appendix $\boldsymbol{D}$

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Ms. Fathmath Leena
Ms. Fathmath Maisa
Ms. Fathmath Shuwaina
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Ms. Fathmath Usha
Ms. Hawa Riyasa
Ms. Hawwa Hanaan
Ms. Liusha Ali
Ms. Maajidha Hassan
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Ms. Mariyam Shama
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## 2008 MALDIVES DEMOGRAPHIC AND HEALTH SURVEY household questionnaire



SUPERVISOR

# SECTION 1 : GENERAL INFORMATION Introduction and Consent 

Hello. My name is $\qquad$ and I am working with Ministry of Health. We are conducting a national survey about various health issues. We would very much appreciate your participation in this survey. The survey usually takes between 10 and 15 minutes to complete.

As part of the survey we would first like to ask some questions about your household. All of the answers you give will be confidential and will not be shared with anyone other than the members of our survey team. Participation in the survey is completely voluntary. If we should come to 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. However, we hope you will participate in the survey since your views are important.

At this time, do you want to ask me anything about the survey?

May I begin the interview now?

Signature of interviewer: $\qquad$ Date: $\qquad$

RESPONDENT AGREES TO BE INTERVIEWED 1 RESPONDENT DOES NOT AGREE TO BE INTERVIEWED 2 END

RECORD THE TIME.









HOUSEHOLD CHARACTERISTICS

| $\begin{gathered} \text { NO. } \\ \text { q. } \end{gathered}$ | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP 9 |
| :---: | :---: | :---: | :---: |
| 101 | What is the main source of drinking water for members of your household? |  |  |
| 102 | What is the main source of water used by your household for other purposes such as cooking and handwashing? |  | $\longrightarrow 106$ |
| 103 | Where is that water source located? |  |  |
| 104 | How long does it take to go there, get water, and come back? | minutes $\qquad$ $\square$ $\square$ $\square$ DON'T KNOW 998 |  |
| 105 | Who usually goes to this source to fetch the water for your household? | ADULT WOMAN <br> ADULT MAN $\qquad$ <br> FEMALE CHILD <br> UNDER 15 YEARS OLD $\qquad$ <br> MALE CHILD <br> UNDER 15 YEARS OLD $\qquad$ <br> OTHER $\qquad$ 6 |  |
| 106 | Do you do anything to the water to make it safer to drink? |  |  |


| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 107 | What do you usually do to make the water safer to drink? <br> Anything else? <br> RECORD ALL MENTIONED. |  |  |
| 108 | During the past six months, has your household ever experienced a shortage in drinking water? |  |  |
| 109 | What kind of toilet facility do members of your household usually use? |  | $\rightarrow 112$ |
| 110 | Do you share this toilet facility with other households? |  | $\rightarrow 112$ |
| 111 | How many households use this toilet facility? | NO. OF HOUSEHOLDS IF LESS THAN $10 \ldots$ <br> 10 OR MORE HOUSEHOLDS |  |
| 112 | Does your household have: <br> Electricity? <br> A radio? <br> A television? <br> Satellite/cable TV connection? <br> A computer? <br> Internet connection? <br> A mobile telephone? <br> A non-mobile telephone? <br> A refrigerator? <br> Air conditioner? <br> Washing machine? |  |  |


| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 113 | What type of fuel does your household mainly use for cooking? |  | $\begin{gathered} {[116} \\ \longrightarrow 118 \end{gathered}$ |
| 114 | In this household, is food cooked on an open fire, an open stove or a closed stove? |  | $116$ |
| 115 | Does this (fire/stove) have a chimney, a hood, or neither of these? |  |  |
| 116 | Is the cooking usually done in the house, in a separate building, or outdoors? | IN THE HOUSE IN A SEPARATE BUILDING OUTDOORS OTHER | $\rightarrow 118$ |
| 117 | Do you have a separate room which is used as a kitchen? |  |  |
| 118 | MAIN MATERIAL OF THE FLOOR RECORD OBSERVATION. |  |  |
| 119 | MAIN MATERIAL OF THE ROOF RECORD OBSERVATION. |  |  |


| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP $_{6}$ |
| :---: | :---: | :---: | :---: |
| 120 | MAIN MATERIAL OF THE EXTERIOR WALLS. RECORD OBSERVATION |  |  |
| 121 | How many rooms in this household are used for sleeping? | ROOMS .................................................... |  |
| 122 | Does any member of this household own: <br> A watch? <br> A bicycle? <br> A motorcycle or motor scooter? <br> A car or truck? <br> A pickup/lorry? <br> A fishing boat? <br> Any other boat? |  |  |
| 123 | Does any member of this household have a bank account? |  |  |
| 124 | Were members of your household displaced due to the tsunami? |  | $\rightarrow 127$ |
| 125 | Were they displaced on this island or to another island? | ON THIS ISLAND   <br> TO ANOTHER ISLAND ........................................................................................$~$ 1 |  |
| 126 | Which type of shelters or houses are they living in now? Are they living in temporary shelters or in their own damaged house or their own but renovated/repaired houses or reconstructed new houses or are they living with host families? |  |  |
| 127 | Due to the tsunami, did your household provide shelter to another family or household? |  | $\rightarrow 129$ |
| 128 | For how many people did this household provide shelter? <br> DO NOT INCLUDE USUAL MEMBERS OF THE HOUSEHOLD | NUMBER SHELTERED .-........................ |  |
| 129 | How many members of this household received benefits after the tsunami? | NUMBER WHO RECEIVED BENEFITS $\square \square$ |  |

HEALTH EXPENDITURES

| $\underset{\text { NO. }}{\text { NO. }}$ | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP ${ }_{\text {\% }}$ |
| :---: | :---: | :---: | :---: |
| 201 | Were any members of this household currently covered by a health welfare plan or assistance at any time in the past year? <br> IF YES: How many household members were covered by a plan? | NUMBER OF HH MEMBERS COVERED $\square$ <br>  | $\xrightarrow{\longrightarrow} 203$ |
| 202 | To what type(s)of health welfare plan/assistance does (did) the household member(s) belong? <br> RECORD ALL MENTIONED. |  |  |
| 202A | In total, how much do members of your household pay for the insurance premiums/contributions to the plan per month? | TOTAL $\qquad$ $\square$ $\square$ $\square$ $\square$ $\square$ DON'T KNOW |  |
| 203 | During the past year, did any member of your household die? |  | $\longrightarrow 205$ |
| 204 | Before their death, was (were) the person(s) hospitalized at any time during the past year? |  |  |
| 205 | Were any (other) persons who lived in this household hospitalized at any time during the past year? |  |  |
| 206 | CHECK 204 AND 205: <br> ADMITTED IN THE HOSPITAL ATLEAST ONCE <br> CODE 1 (YES) IN (a) QS. 204 AND/OR 205 $\square$ | WAS NOT ADMITTED IN THE HOSPITAL CODE 2 (NO) IN BOTH QS. 204 AND 205 | $\rightarrow 212$ |
| 207 | In total, how many separate times were members of your household hospitalized during the past year(including any times that the person(s) who died were hospitalized)? | TOTAL NUMBER OF HOSPITALIZATIONS <br> DON'T KNOW $\qquad$ |  |
| 208 | Now I am going to ask some questions about how much your hous <br> Please include the amount charged by the hospital itself as well workers who provided care in the hospital and the costs for any medications during the hospital stay. <br> PLEASE EXCLUDE ANY COSTS WHICH WERE PAID BY A HEAL <br> Try to be as exact as possible. If you are not sure, however, ple was paid for (all of) the(se) hospital stay(s). | sehold paid in total for (all of) the(se) hospital stays. <br> any fees paid directly to the doctors or other health boratory tests, other medical tests or procedures, and <br> LTH WELFARE PLAN/ASSISTANCE. <br> se give me your best estimate of the total amount that |  |


| NO. $9$ | QUESTIONS AND FILTERS |  | CODING CATEGORIES |  | SKIP ${ }_{6}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 209 | CHECK 201: <br> HAS HEALTH WELFARE/ ASSISTANCE <br> How much in total was your household charged for the hospital stay(s) excluding any costs that may have been covered by a health welfare plan/assistance? | NO ONE <br> HAS HEALTH WELFARE/ ASSISTANCE $\square$ <br> How much in total was your household charged for the hospital stay(s) ? | TOTAL $\qquad$ $\square$ $\square$ DON'T KNOW | $9999998$ |  |
| 210 | Was (were) the hospital(s) on this island? |  | YES, ON THIS ISLAND <br> NO, ON ANOTHER ISLAND <br> No, ABROAD | 1 <br> $\ldots$ <br> 2 <br> $\ldots \ldots \ldots$. | $\rightarrow 212$ |
| 211 | In total, how much did your household pay for travel costs that were incurred due to the(se) hospital stays? <br> Please include the cost of transporting the patient(s) to and from this island to the hospital and transport and accommodation costs for other household members who may have accompanied the patients(s). |  | TOTAL <br> DON'T KNOW | $99998$ |  |
| 212 | Now I would like to ask you some questions about any health care expenses that your household has had during the past month. In answering these questions, please do not include expenses relating to a hospital stay. |  |  |  |  |
| 213 | Did anyone in your household visit a health care provider during the past month for treatment of any illness or injury or for preventative care (e.g., an immunization or antenatal care)? |  | YES <br> NO | $\begin{array}{ll} 1 \\ \ldots \ldots \ldots . . . . & 1 \\ \ldots \end{array}$ | $\rightarrow 301$ |
| 214 | In total, how many visits did members of your household make to a health care provider during the past month? |  | TOTAL NUMBER OF VISITS DON'T KNOW | 98 |  |
| 215 | CHECK 201: |  | TOTAL <br> DON'T KNOW |  |  |
| 216 | We would also like to know about other health care costs your household may have had during the past month, e.g., for laboratory tests, other medical tests or procedures, or prescription drugs. <br> Please tell me about such costs only if they were paid for separately and not included in the fee for the provider visit(s) that you have just told me about. <br> Do not include any expenses associated with a hospital stay or expenses that were paid by a health welfare plan |  |  |  |  |
| 217 | Did any member of your household have laboratory test(s) done? |  | YES <br> NO | $\begin{aligned} & 1 \\ & 2 \end{aligned}$ | $\longrightarrow 220$ |
| 218 | In total, how many times did members of your household have laboratory tests during the past month? |  | TOTAL NUMBER OF TIMES DON'T KNOW | 98 |  |


| NO. 8 | QUESTIONS AND FILTERS |  | CODING CATEGOR | SKIP ${ }_{8}$ |
| :---: | :---: | :---: | :---: | :---: |
| 219 | CHECK 201: <br> HAS HEALTH WELFARE <br> How much in total was your household charged for the(se) lab test(s) excluding any costs that may have been covered by a health welfare plan? |  | TOTAL DON'T KNOW. |  |
| 220 | Did any member of your household tests, e.g., an X-ray during the pas | have any other medical month? | YES. NO | $\rightarrow 223$ |
| 221 | In total, how many times did memb other medical tests during the pas | ers of your household have month? | TOTAL NUMBER OF TIMES DON'T KNOW |  |
| 222 | CHECK 201: <br> HAS HEALTH WELFARE <br> How much in total was your household charged for the(se) test(s) excluding any costs that may have been covered by a health welfare plan? |  | TOTAL <br> DON'T KNOW |  |
| 223 | Did any member of your household during the past month? | obtain prescription drugs | $\begin{aligned} & \text { YES } \\ & \text { NO } \end{aligned}$ | $\rightarrow 226$ |
| 224 | In total, how many times did memb prescriptions filled during the past | ers of your household have month? | TOTAL NUMBER OF TIMES DON'T KNOW |  |
| 225 | CHECK 201: <br> HAS HEALTH WELFARE <br> How much in total was your household charged for the(se) prescription drugs excluding any costs that may have been covered by a health welfare plan? |  | TOTAL <br> DON'T KNOW |  |
| 226 | Did any member of your househol (over-the-counter) drugs during the | obtain non-prescription last month? | $\begin{aligned} & \text { YES } \\ & \text { NO } \end{aligned}$ | $\longrightarrow 229$ |
| 227 | In total, how many times did memb obtain non-prescription (over-the-c the past month? | ers of your household ounter) drugs during | TOTAL NUMBER OF TIMES DON'T KNOW |  |
| 228 | CHECK 201: <br> HAS HEALTH WELFARE <br> How much in total was your household charged for the(se) non-prescription drugs excluding any costs that may have been covered by a health welfare plan? |  | TOTAL DON'T KNOW |  |



## CARE AND SUPPORT FOR OLDER ADULTS

| NO. 8 | QUESTIONS AND FILTERS |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| 301 | AT LEAST ONE USUAL HOUSEHOLD MEMBER AGE 65 OR OLDER |  | ALL USUAL HOUSEHOLD MEMBERS UNDER AGE 65 | $\longrightarrow 317$ |
|  | CHECK QUESTIONS 1, 2, 5 AND 7. RECORD THE NAME(S) AND LINE NUMBER(S) OF ALL USUAL HOUSEHOLD MEMBERS AGE 65 AND OLDER AT THE TOP OF THE TABLE BELOW. IF THERE ARE MORE THAN THREE OLDER ADULTS, USE ADDITIONAL QUESTIONNAIRE. |  |  |  |
| 303 | LINE NUMBER FROM QUESTION 1 | OLDER ADULT 1 <br> LINE NUMBER | OLDER ADULT 2 <br> LINE NUMBER | OLDER ADULT 3 <br> LINE NUMBER |
| 304 | NAME FROM QUESTION 2 | NAME | NAME $\longrightarrow$ | NAME |
| 305 | We are interested in learning about the types of care and support that adults age 65 and older are receiving in order to improve programs for the elderly. |  |  |  |
|  | BEGIN WITH THE FIRST OLDER ADULT LISTED IN QUESTION 304 AND ASK ALL RELEVANT QUESTIONS BEFORE GOING ON TO THE NEXT OLDER ADULT. |  |  |  |
| 306 | How would you describe (NAME)'s level of physical activity? Is he/she usually not active at all, somewhat active, moderately active or very active? | NOT ACTIVE AT ALL… <br> SOMEWHAT .............. | NOT ACTIVE AT ALL… <br> SOMEWHAT .............. <br>  <br> MODERATELY ............ |  |
| 307 | Does (NAME) require assistance with personal care like bathing, dressing, and eating? <br> IF YES: Does he/she need help always, most of the time, only sometimes? |  |  |  |
| 308 | Does (NAME) need medical care, e.g., giving medications or changing dressings? |  |  |  |
| 309 | Does (NAME) need help with household activities like cooking, doing laundry and cleaning? |  |  |  |
| 310 | Does (NAME) need help to go outside the house? |  |  |  |
| 311 | Does (NAME) need to be watched over because he/she may hurt him/herself or others? |  |  |  |
| 312 | CHECK 306-311: |  |  |  |


HEIGHT AND WEIGHT MEASURMENTS

| CHILDREN AGE 0-5 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 401 | CHECK COLUMN 12. RECORD THE LINE NUMBER AND AGE FOR ALL ELIGIBLE CHILDREN 0-5 YEARS IN QUESTION 402. IF MORE THAN FIVE CHILDREN, USE ADDITIONAL QUESTIONN A FINAL OUTCOME MUST BE RECORDED FOR THE WEIGHT AND HEIGHT MEASUREMENT IN 408. |  |  |  |  |  |
|  |  | LINE NO NAME <br> CHILD 1 $\qquad$ $\square$ $\qquad$ | CHILD 2 | CHILD 3 | CHILD 4 | CHILD 5 |
| 402 | LINE NUMBER FROM COLUMN 12 NAME FROM COLUMN 2 |  | LINE NO <br> NAME $\square$ | LINE NO. <br> NAME $\square$ | LINE NO. <br> NAME $\square$ | LINE NO <br> NAME $\square$ |
| 403 | IF MOTHER INTERVIEWED, COPY MONTH AND YEAR FROM BIRTH HISTORY AND ASK DAY; IF MOTHER NOT INTERVIEWED, ASK: <br> What is (NAME'S) birth date? | DAY <br> MONTH <br> YEAR $\square$ $\square$ | DAY <br> MONTH <br> YEAR $\qquad$ $\square$ $\square$ $\square$ $\square$ |  | DAY <br> MONTH <br> YEAR $\qquad$ $\square$ $\square$ $\square$ $\square$ | DAY <br> MONTH <br> YEAR $\qquad$ $\square$ $\square$ |
| 404 | CHECK 403: <br> CHILD BORN IN JANUARY 2003 OR LATER? | YES $\cdot \ldots \ldots$ NO $\ldots$ (GO TO 403 FOR NEXT CHILD OR, IF NO MORE, GO TO 410) | YES $\ldots \ldots$ NO (GO TO 403 FOR NEXT CHILD OR, IF NO MORE, GO TO 410) | YES $\ldots$ NO (GO TO 403 FOR NEXT CHILD OR, IF NO MORE, GO TO 410) | YES $\cdot \cdots$ 1 <br> NO  <br> (GO TO 403 FOR NEXT  <br> CHILD OR, IF NO  <br> MORE, GO TO 410)  | YES $\cdots$ NO (GO TO 403 FOR NEXT CHILD OR, IF NO MORE, GO TO 410) |
| 405 | WEIGHT IN KILOGRAMS |  |  | $\square \square \cdot \square \mathrm{k} .$ | $\mathrm{k} \phi$ |  |
| 406 | HEIGHT IN CENTIMETERS |  | $\text { 1. } \quad . \cdots \square \square \square \square \square \square$ | $\text { 1. } \cdots \square \square \square \cdot \square M$ | $\text { 1. } \cdots \square \square \square \cdot \square M$ | $\cdots \square \square \square \square \square \square$ $\square$ |
| 407 | MEASURED LYING DOWN OR STANDING UP? | LYING DOWN $\cdots \quad . \quad 1$ <br> STANDING UP <br> $\cdots \quad 2$ | LYING DOWN $\cdots \quad 1$ <br> STANDING UP $\cdots \quad 2$ | LYING DOWN $\ldots \quad 1$ <br> STANDING UP $\cdots$ | LYING DOWN <br> STANDING UP <br> ST. | LYING DOWN … <br> STANDING UP <br> $\cdots . \quad 1$ |
| 408 | RESULT OF WEIGHT AND HEIGHT MEASUREMENT |  |  |  |  |  |
| 409 |  | GO BACK TO 403 IN NEXT COLUMN IN THIS QUESTIONNAIRE OR IN THE FIRST COLUMN OF THE ADDITIONAL QUESTIONNAIRE(S); IF NO MORE CHILDREN, GO TO 410. |  |  |  |  |

HEIGHT AND WEIGHT MEASURMENTS


(1)

## SECTION 1 : RESPONDENT'S BACKGROUND

## Introduction and Consent

## INFORMED CONSENT

Hello. My name is $\qquad$ and I am working with the Ministry of Health. We are conducting a national survey that asks women, men and youth about various health issues. We would very much appreciate your participation in this survey. This information will help the government to plan health services. The survey usually takes between 30 and 60 minutes to complete. Whatever information you provide will be kept strictly confidential and will not be shared with anyone other than members of our survey team.

Participation in this survey is voluntary, and if we should come to 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. However, we hope that you will participate in this survey since your views are important.

At this time, do you want to ask me anything about the survey?

May I begin the interview now?

Signature of interviewer: $\qquad$ Date: $\qquad$

RESPONDENT AGREES TO BE INTERVIEWED $1 \quad$ RESPONDENT DOES NOT AGREE TO BE INTERVIEWED 2 ESD $\downarrow$

| NO. $9$ | QUESTIONS AND FILTERS | CODING CATEGOR |  | SKIP $\%$ |
| :---: | :---: | :---: | :---: | :---: |
| 101 | RECORD THE TIME |  |  |  |
| 102 | In what month and year were you born? | MONTH <br> DON'T KNOW MONTH <br> YEAR <br> DON'T KNOW YEAR | $\square$ <br> 98 <br> 9998 |  |
| 103 | How old were you at your last birthday? <br> COMPARE AND CORRECT 102 AND/OR 103 IF INCONSISTENT. | AGE IN COMPLETED YEARS | $\qquad$ |  |
| 104 | What is your current marital status? | MARRIED $\qquad$ <br> WIDOWED <br> DIVORCED <br> SEPARATED |  |  |
| 105 | Have you ever attended school? | YES <br> NO $\qquad$ | $\begin{aligned} & 1 \\ & 2 \end{aligned}$ | $\longrightarrow 108$ |


| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES |  | SKIP ${ }^{\text {¢ }}$ |
| :---: | :---: | :---: | :---: | :---: |
| 106 | What is the highest level of school you attended? | NON-FORMAL EDUCATION <br> PRESCHOOL <br> PRIMARY <br> ‘O' LEVEL <br> 'A' LEVEL <br> DIPLOMA <br> FIRST DEGREE $\qquad$ <br> MASTER'S CERTIFICATE/ABOVE <br> CERTIFICATE | 00 01 02 03 04 05 06 07 08 |  |
| 107 | What is the highest (grade/form/year) you completed at that level? | GRADE/FORM/YEAR ........................ $\square$ |  |  |
| 108 | Do you read a newspaper or magazine almost everyday, at least once a week, less than once a week or not at all? | ALMOST EVERY DAY <br> AT LEAST ONCE A WEEK <br> LESS THAN ONCE A WEEK <br> NOT AT ALL <br> CANNOT READ | $\begin{aligned} & 1 \\ & 2 \\ & 3 \\ & 4 \\ & 5 \end{aligned}$ | $\rightarrow 110$ |
| 109 | Do you use the internet almost every day, at least once a week, less than once a week or not at all? | ALMOST EVERY DAY <br> AT LEAST ONCE A WEEK <br> LESS THAN ONCE A WEEK <br> NOT AT ALL | $\begin{aligned} & 1 \\ & 2 \\ & 3 \\ & 4 \end{aligned}$ |  |
| 110 | Do you listen to the radio almost every day, at least once a week, less than once a week or not at all? | ALMOST EVERY DAY <br> AT LEAST ONCE A WEEK <br> LESS THAN ONCE A WEEK <br> NOT AT ALL | $\begin{aligned} & 1 \\ & 2 \\ & 3 \\ & 4 \end{aligned}$ |  |
| 111 | Do you watch television almost every day, at least once a week, less than once a week or not at all? | ALMOST EVERY DAY <br> AT LEAST ONCE A WEEK <br> LESS THAN ONCE A WEEK <br> NOT AT ALL | $\begin{aligned} & 1 \\ & 2 \\ & 3 \\ & 4 \end{aligned}$ |  |

SECTION 2. REPRODUCTION

| $\begin{gathered} \text { NO. } \\ \text { an } \end{gathered}$ | QUESTIONS AND FILTERS | CODING CATEGORIES |  | SKIP ${ }^{4}$ |
| :---: | :---: | :---: | :---: | :---: |
| 201 | Now I would like to ask about all the births you have had during your life. Have you ever given birth? | YES NO | 1 2 | $\longrightarrow 206$ |
| 202 | Do you have any sons or daughters to whom you have given birth who are now living with you? | $\begin{aligned} & \text { YES } \\ & \text { NO } \end{aligned}$ | 1 2 | $\longrightarrow 204$ |
| 203 | How many sons live with you? <br> And how many daughters live with you? <br> IF NONE, RECORD '00'. | SONS AT HOME DAUGHTERS AT HOME |  |  |
| 204 | Do you have any sons or daughters to whom you have given birth who are alive but do not live with you? | YES NO |  | $\longrightarrow 206$ |
| 205 | How many sons are alive but do not live with you? <br> And how many daughters are alive but do not live with you? <br> IF NONE, RECORD '00'. | SONS ELSEWHERE <br> DAUGHTERS ELSEWHERE |  |  |
| 206 | Have you ever given birth to a boy or girl who was born alive but later died? <br> IF NO, PROBE: Any baby who cried or showed signs of life but did not survive? | YES <br> NO |  | $\longrightarrow 208$ |
| 207 | How many boys have died? <br> How many girls have died? <br> IF NONE, RECORD '00'. | BOYS DEAD <br> GIRLS DEAD |  |  |
| 208 | SUM ANSWERS TO 203, 205, AND 207, AND ENTER TOTAL. IF NONE, RECORD '00’. | TOTAL BIRTHS |  |  |
| 209 | Just to make sure that I have this right: you have had in TOTAL $\qquad$ births during your life. Is that correct? <br> YES $\square$ NO $\square$ <br> PROBE AND CORRECT 201-208 AS NECESSARY. |  |  |  |
| $210$ | CHECK 208: <br> ONE OR MORE BIRTHS | NO BIRTHS |  | $\longrightarrow 226$ |



| LINE NUMBER |  |  | 08 | 09 | 10 | 11 | 12 | 13 | 14 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 212 | What name was given to your next baby? | (NAME) |  |  |  |  |  |  |  |
| 213 | Were any of these births twins? | SINGLE MULTIPLE | $\begin{aligned} & 1 \\ & 2 \end{aligned}$ | $\begin{aligned} & 1 \\ & 2 \end{aligned}$ | $\begin{aligned} & 1 \\ & 2 \end{aligned}$ | $\begin{aligned} & 1 \\ & 2 \end{aligned}$ | $\begin{aligned} & 1 \\ & 2 \end{aligned}$ | $\begin{aligned} & 1 \\ & 2 \end{aligned}$ | $\begin{aligned} & 1 \\ & 2 \end{aligned}$ |
| 214 | Is (NAME) a boy or a girl? | $\begin{aligned} & \text { BOY } \\ & \text { GIRL } \end{aligned}$ | $\begin{aligned} & 1 \\ & 2 \end{aligned}$ | $\begin{aligned} & 1 \\ & 2 \end{aligned}$ | $\begin{aligned} & 1 \\ & 2 \end{aligned}$ | $\begin{aligned} & 1 \\ & 2 \end{aligned}$ | $\begin{aligned} & 1 \\ & 2 \end{aligned}$ | $\begin{aligned} & 1 \\ & 2 \end{aligned}$ | $\begin{aligned} & 1 \\ & 2 \end{aligned}$ |
| 215 | In what month and year was (NAME) born? <br> PROBE: What is his/her birthday? | MONTH <br> YEAR $\infty$ |  |  |  |  |  |  |  |
| 216 | Is (NAME) still alive? | $\begin{aligned} & \text { YES } \\ & \text { NO } \end{aligned}$ |  |  |  |  |  |  |  |
| 217 | IF ALIVE: <br> How old was (NAME) at his/her last birthday? <br> RECORD AGE IN COMPLETED YEARS. | $\begin{aligned} & \text { AGE IN } \\ & \text { YEARS } \end{aligned}$ | $\square$ |  |  |  |  |  |  |
| 218 | IF ALIVE: <br> Is (NAME) living with you? | $\begin{aligned} & \text { YES } \\ & \text { NO } \end{aligned}$ | $\begin{aligned} & 1 \\ & 2 \end{aligned}$ | $\begin{aligned} & 1 \\ & 2 \end{aligned}$ | $\begin{aligned} & 1 \\ & 2 \end{aligned}$ | $\begin{aligned} & 1 \\ & 2 \end{aligned}$ | $\begin{aligned} & 1 \\ & 2 \end{aligned}$ | $\begin{aligned} & 1 \\ & 2 \end{aligned}$ | $\begin{aligned} & 1 \\ & 2 \end{aligned}$ |
| 219 | IF ALIVE: <br> RECORD HOUSEHOLD LINE NUMBER OF CHILD <br> (RECORD '00' IF CHILD NOT LISTED IN HOUSEHOLD). | LINE NUMBER |  |  |  |  |  |  |  |
| 220 | IF DEAD: <br> How old was (NAME) when he/she died? <br> IF ' 1 YEAR', PROBE: How many months old was (NAME)? RECORD DAYS IF LESS THAN 1 MONTH; MONTHS IF LESS THAN TWO YEARS; OR YEARS | DAYS <br> MONTHS <br> YEARS | 1 <br> 2 <br> 3 $\square$ $\square$ | 1 $\square$ <br> 2 <br> 3 $\square$ | 1 <br> 2 <br> 3 $\square$ $\square$ | 1 <br> 2 <br> 3 $\square$ $\square$ | 1 <br> 2 <br> 3 $\square$ $\square$ | 1 <br> 2 <br> 3 $\square$ $\square$ | 1 <br> 2 <br> 3 |
| 221 | Were there any other live births between (NAME OF PREVIOUS BIRTH) and (NAME),including any children who died after birth? | $\begin{aligned} & \text { YES } \\ & \text { NO } \end{aligned}$ |  | 17 <br> $\rightarrow \substack{\text { ADD } \\ \rightarrow \\ \text { BIRTH } \\ \text { NEXT } \\ \text { BIRTH }}$ |  | $\xrightarrow{1} \rightarrow \substack{\text { ADD } \\ \text { BIRTH } \\ \hline \\ \rightarrow \\ \text { NEXT } \\ \text { BIRTH }}$ | $\begin{aligned} & 1 \\ & \rightarrow \substack{\text { ADD } \\ \text { BIRTH } \\ \hline \\ \hline} \end{aligned} \begin{gathered} \text { NEXT } \\ \text { BIRTH } \end{gathered}$ | $\begin{aligned} & 1 \\ & \rightarrow \substack{\text { ADD } \\ \text { BIRTH } \\ \hline \\ \hline} \end{aligned}$ | 17 <br> $\rightarrow$ADD <br> $\rightarrow$ |

(6)

| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES |  | SKIP |
| :---: | :---: | :---: | :---: | :---: |
| 222 | Have you had any live births since the birth of (NAME OF LAST BIRTH)? <br> IF YES, RECORD BIRTH(S) IN TABLE. | YES <br> NO | 1 2 |  |
| 223 | COMPARE 208 WITH NUMBER OF BIRTHS IN BIRTH HISTORY <br> NUMBERS ARE SAME $\square$ NUMBERS <br> CHECK: FOR EACH BIRTH: YEAR OF BIRTH IS RECORDED <br> FOR EACH BIRTH SINCE JANUARY 2003: MONTH AN <br> FOR EACH LIVING CHILD: CURRENT AGE IS RECORD FOR EACH DEAD CHILD: AGE AT DEATH IS RECORD <br> FOR AGE AT DEATH 12 MONTHS OR 1 YEAR: PROBE | ND MARK: <br> RE DIFFERENT <br> (PROBE AND R <br> YEAR OF BIRTH ARE RECORDED <br> D $\qquad$ $\qquad$ <br> DETERMINE EXACT NUMBER OF MONTHS. |  |  |
| 224 | CHECK 215 AND ENTER THE NUMBER OF BIRTHS IN 2003 OR IF NONE, RECORD '00’ AND SKIP TO 226 | ATER. |  |  |
| 225 | FOR EACH BIRTH SINCE JANUARY 2003, ENTER ‘B’ IN THE N CALENDAR. WRITE THE NAME OF THE CHILD TO THE LEFT NUMBER OF MONTHS THE PREGNANCY LASTED AND RECO ACCORDING TO THE DURATION OF PREGNANCY. (NOTE: TH THE NUMBER OF MONTHS THAT THE PREGNANCY LASTED). | ITH OF BIRTH IN THE FIRST COLUMN OF THE 'B' CODE. FOR EACH BIRTH, ASK THE 'P' IN EACH OF THE PRECEDING MONTHS NUMBER OF 'P's MUST BE ONE LESS THAN |  |  |
| 226 | Are you pregnant now? | YES $\qquad$ <br> NO <br> UNSURE | $\begin{aligned} & 1 \\ & 2 \\ & 8 \end{aligned}$ | $\rightarrow 229$ |
| 227 | How many months pregnant are you? <br> RECORD NUMBER OF COMPLETED MONTHS. ENTER 'P's IN THE CALENDAR, BEGINNING WITH THE MONTH OF INTERVIEW AND EARLIER MONTHS TO EQUAL THE TOTAL NUMBER OF COMPLETED MONTHS. | MONTHS |  |  |
| 228 | At the time you became pregnant, did you want to become pregnant then, did you want to wait until later, or did you not want to have any (more) children at all? | THEN <br> LATER <br> NOT AT ALL | $\begin{aligned} & 1 \\ & 2 \\ & 3 \end{aligned}$ |  |
| 229 | Have you ever had a pregnancy that miscarried, was aborted, or ended in a stillbirth? | YES NO | $\begin{aligned} & 1 \\ & 2 \end{aligned}$ | $\rightarrow 237$ |
| 230 | When did the last such pregnancy end? | MONTH <br> YEAR $\square$ |  |  |
| 231 | CHECK 230: <br> LAST PREGNANCY ENDED IN JANUARY 2003 OR LATER | LAST PREGNANCY ENDED BEFORE JANUARY 2003 |  | $\rightarrow 237$ |
| 232 | How many months pregnant were you when the last such pregnancy ended? <br> RECORD NUMBER OF COMPLETED MONTHS. <br> ENTER 'T' IN THE CALENDAR, IN THE MONTH THAT THE PREGNANCY TERMINATED AND 'P' FOR THE REMAINING NUMBER OF COMPLETED MONTHS. | MONTHS $\qquad$ $\square$ |  |  |
| 233 | Since January 2003, have you had any other pregnancies that did not result in a live birth? | YES <br> NO $\qquad$ | $\begin{aligned} & 1 \\ & 2 \end{aligned}$ | $\rightarrow 235$ |



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. |  | 302 Have you ever used (METHOD)? |
| :---: | :---: | :---: | :---: |
| Which ways or methods have you heard about? |  |  |  |
| FOR METHODS NOT MENTIONED SPONTANEOUSLY, ASK: |  |  |  |
| Have you ever heard of (METHOD)? |  |  |  |
| CIRCLE CODE 1 IN 301 FOR EACH METHOD MENTIONED SPONTANEOUSLY. <br> THEN PROCEED DOWN COLUMN 301, READING THE NAME AND DESCRIPTION OF EACH METHOD NOT MENTIONED SPONTANEOUSLY. <br> CIRCLE CODE 1 IF METHOD IS RECOGNIZED, AND CODE 2 IF NOT RECOGNIZED. THEN FOR EACH METHOD WITH CODE 1 CIRCLED IN 301, ASK 302. |  |  |  |
| 01 | FEMALE STERILIZATION Women can have an operation to avoid having any more children. | $\begin{aligned} & \text { YES ............................................ } 1 \\ & \text { NO ...................................................... } \end{aligned}$ | Have you ever had an operation to avoid having any more children? |
| 02 | MALE STERILIZATION Men can have an operation to avoid having any more children. |  | Have you ever had a partner who had an operation to avoid having any more children? $\begin{aligned} & \text { YES ............................................ } 1 \\ & \text { NO …............................................. } 2 \end{aligned}$ |
| 03 | PILL Women can take a pill every day to avoid becoming pregnant. | YES …..................................... 1 NO ..................................................... 21 | YES ....................................... 1 NO ............................................... 2 |
| 04 | IUD Women can have a loop or coil placed inside them by a doctor or a nurse. |  |  |
| 05 | INJECTABLES Women can have an injection by a health provider that stops them from becoming pregnant for one or more months. |  |  |
| 06 | IMPLANTS Women can have several small rods placed in their upper arm by adoctor or nurse which can prevent pregnancy for one or more years. |  |  |
| 07 | CONDOM Men can put a rubber sheath on their penis before sexual intercourse. |  |  |
| 08 | RHYTHM METHOD Every month that a woman is sexually active she can avoid pregnancy by not having sexual intercourse on the days of the month she is most likely to get pregnant. | $\begin{aligned} & \text { YES .......................................... } 1 \\ & \text { NO .............................................. } 2 \text { ך } \end{aligned}$ |  |
| 09 | WITHDRAWAL Men can be careful and pull out before climax. |  |  |
| 10 | EMERGENCY CONTRACEPTION As an emergency measure after unprotected sexual intercourse, women can take special pills at any time within 5 days to prevent pregnancy. |  | YES …................................... 1 NO ............................................. 2 |
| 11 | Have you heard of any other ways or methods that women or men can use to avoid pregnancy? | YES …........................... 1 |  |
| 303 | CHECK 302: <br> NOT A SINGLE "YES" (NEVER USED) | AT LEAST ONE "YES" (EVER USED) | $\longrightarrow 307$ |



| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 314 | In what facility did the sterilization take place? <br> PROBE TO IDENTIFY THE TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE. <br> IF UNABLE TO DETERMINE IF HOSPITAL, HEALTH CENTER OR CLINIC IS PUBLIC OR PRIVATE MEDICAL, WRITE THE NAME OF THE PLACE. <br> (NAME OF PLACE) | PUBLIC SECTOR <br> INDHIRA GANDHI MEMORIAL HOSPITAL <br> GOVT. REGIONAL HOSPITAL <br> GOVT. ATOLL HOSPITAL <br> GOVT. HEALTH CENTER <br> OTHER PUBLIC |  |
| 315 | CHECK 311/311A: <br> CODE 'A' CIRCLED $\square$ <br> Before your sterilization operation, were you told that you would not be able to have any (more) children because of the operation? <br> CODE 'A' NOT CIRCLED <br> Before the sterilization operation, was your husband/ partner told that he would not be able to have any (more) children because of the operation? |  |  |
| 316 | How much did you/your husband pay in total for the sterilization, including any consultation you/he may have had? |  |  |
| 317 $317 A$ | In what month and year was the sterilization performed? <br> Since what month and year have you been using (CURRENT METHOD) without stopping? <br> PROBE: For how long have you been using (CURRENT METHOD) now without stopping? | MONTH $\qquad$ $\square$ <br> YEAR $\square$ $\square$ $\square$ $\square$ |  |
|  | CHECK 317/317A, 215 AND 230: <br> ANY BIRTH OR PREGNANCY TERMINATION AFTER MONTH A YEAR OF START OF USE OF CONTRACEPTION IN 317/317A? <br> GO BACK TO 317/317A, PROBE AND RECORD MONTH AND Y USE OF CURRENT METHOD (MUST BE AFTER LAST BIRTH | YES NO <br> EAR AT START OF CONTINUOS R PREGNANCY TERMINATION). |  |


| NO. $9$ | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 319 | CHECK 317/317A: <br> YEAR IS 2003 OR LATER $\square$ <br> ENTER CODE FOR METHOD USED IN MONTH OF INTERVIEW IN THE CALENDER AND IN EACH MONTH BACK TO THE DATE STARTED USING. | YEAR IS 2002 OR EARLIER <br> ENTER CODE FOR METHOD USED IN MONTH OF INTERVIEW IN THE CALENDAR AND EACH MONTH BACK TO JANUARY 2003. <br> IP TO | $\rightarrow 329$ |
| 320 | I would like to ask you some questions about the times you or yo pregnant during the last few years. <br> COLUMN 1- SEGMENTS OF CONTRACEPTIVE USE SINCE JA <br> USE CALENDER TO PROBE FOR EARLIER PERIODS OF USE USE, BACK TO JANUARY 2003. <br> USE NAMES OF CHILDREN, DATES OF BIRTH, AND PERIOD <br> RECORD PERIODS OF USE AND NON-USE IN COLUMN 1 OF METHOD WAS USED, ENTER THE CODE FOR THE METHOD METHOD WAS USED. <br> ILLUSTRATIVE QUESTIONS FOR COLUMN 1 <br> * When was the last time you used a meth <br> * When did you start using that method? H <br> * How long did you use the method then? <br> COLUMN 2-REASON FOR DISCONTINUATION <br> FOR EACH PERIOD OF USE, ASK WHY SHE STOPPED USIN DISCONTINUATION IN COLUMN 2 OF THE CALENDAR IN TH TERMINATED. <br> IF A PREGNANCY FOLLOWED, ASK IF SHE BECAME PREGN OR WHETHER SHE DELIBERATELY STOPPED USING THE M <br> THE NUMBER OF CODES ENTERED IN COLUMN 2 MUST BE OF CONTRACEPTIVE USE IN COLUMN 1. <br> ILLUSTRATIVE QUESTIONS FOR COLUMN 2 <br> * Why did you stop using the (method)? <br> * Did you become pregnant while using ( $m$ other reason? | usband may have used a method to avoid getting <br> ARY 2003. <br> ND NON-USE, STARTING WITH MOST RECENT <br> F PREGNANCY AS REFERENCE POINTS. <br> E CALENDAR. FOR EACH MONTH IN WHICH A NTER ' 0 ' IN THOSE MONTHS WHEN NO <br> ? Which method was that? long after the birth of (NAME)? <br> HE METHOD AND RECORD THE REASON FOR ONTH IN WHICH THE SEGMENT OF USE WAS <br> T UNINTENTIONALLY WHILE USING THE METHOD HOD TO GET PREGNANT. <br> E SAME AS THE NUMBER OF COMPLETE SEGMENTS <br> od), or did you stop to get pregnant, or stop for some |  |
| 321 | CHECK 311/311A: <br> CIRCLE METHOD CODE: <br> IF MORE THAN ONE METHOD CODE CIRCLED IN 311/311A, CIRCLE CODE FOR HIGHEST METHOD IN LIST. |  | $\begin{array}{\|} \longrightarrow & 331 \\ \longrightarrow 324 \\ & 324 \end{array}$ $\begin{array}{\|l} \longrightarrow 322 A \\ \longrightarrow 331 \\ \longrightarrow \end{array} 331$ |





## SECTION 4. PREGNANCY AND POSTNATAL CARE



|  |  | LAST BIRTH | NEXT-TO-LAST BIRTH | SECOND-FROM <br> LAST BIRTH |
| :---: | :---: | :---: | :---: | :---: |
| NO. | QUESTIONS AND FILTERS | NAME | NAME | NAME |
| 408 | Where did you receive antenatal care for this pregnancy? <br> Anywhere else? <br> PROBE TO IDENTIFY TYPE(S) OF SOURCE(S) AND CIRCLE THE APPROPRIATE CODE(S). <br> IF UNABLE TO DETERMINE IF A HOSPITAL, HEALTH CENTER, OR CLINIC IS PUBLIC OR PRIVATE MEDICAL, WRITE THE NAME OF THE PLACE. |  |  |  |
| 409 | How many months pregnant were you when you first received antenatal care for this pregnancy? | MONTHS $\qquad$ $\square$ $\square$ <br> DON'T KNOW $\qquad$ 98 |  |  |
| 410 | How many times did you receive antenatal care during this pregnancy? | NUMBER OF <br> TIMES $\square$ <br> DON'T KNOW |  |  |
| 411 | As part of your antenatal care during this pregnancy, were any of the following done at least once? <br> Were you weighed? <br> Was your blood pressure measured? <br> Did you give a urine sample? <br> Did you give a blood sample? <br> Was a sonogram done? <br> Were you counseled about HIV/AIDS? |  |  |  |
| 412 | During (any of) your antenatal care visit(s), were you told about the signs of pregnancy complications? |  |  |  |
| 413 | Were you told where to go if you had any of these complications? |  |  |  |


|  |  | LAST BIRTH | NEXT-TO-LAST BIRTH | SECOND-FROM <br> LAST BIRTH |
| :---: | :---: | :---: | :---: | :---: |
| NO. | QUESTIONS AND FILTERS | NAME | NAME | NAME |
| 414 | During this pregnancy, were you given an injection in the arm to prevent the baby from getting tetanus, that is, convulsions after birth? |  |  |  |
| 415 | During this pregnancy, how many times did you get this tetanus injection? | TIMES $\qquad$ $\square$ <br> DON'T KNOW $\qquad$ |  |  |
| 416 | CHECK 415: |  |  |  |
| 417 | At any time before this pregnancy, did you receive any tetanus injections, either to protect yourself or another baby? | $\begin{aligned} & \text { YES } \\ & \text { NO } \\ & \\ & \text { (SKIP TO 421) } \end{aligned} \underbrace{2}$ |  |  |
| 418 | Before this pregnancy, how many other times did you receive a tetanus injection? <br> IF 7 OR MORE TIMES, RECORD ' 7 '. | TIMES $\qquad$ $\square$ $\square$ <br> DON'T KNOW $\qquad$ |  |  |
| 419 | In what month and year did you receive the last tetanus injection before this pregnancy? | MONTH DK MONTH YEAR DK YEAR |  |  |
| 420 | How many years ago did you receive that tetanus injection? | YEARS <br> AGO $\qquad$ $\square$ $\square$ |  |  |
| 421 | During this pregnancy, were you given or did you buy any iron tablets or iron syrup? |  |  |  |
| 422 | During the whole pregnancy, for how many days did you take the tablets or syrup? <br> IF ANSWER IS NOT NUMERIC, PROBE FOR APPROXIMATE NUMBER OF DAYS. | DAYS $\qquad$ $\square$ $\square$ $\square$ <br> DON'T KNOW $\qquad$ 998 |  |  |
| 423 | During this pregnancy, did you take any drug for intestinal worms? |  |  |  |



|  |  | LAST BIRTH | NEXT-TO-LAST BIRTH | SECOND-FROM <br> LAST BIRTH |
| :---: | :---: | :---: | :---: | :---: |
| NO. | QUESTIONS AND FILTERS | NAME ...................................... | NAME ................................. | NAME |
| 430 | Where did you give birth to (NAME)? <br> PROBE TO IDENTIFY THE TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE. <br> IF UNABLE TO DETERMINE IF A HOSPITAL, HEALTH CENTER, OR CLINIC IS PUBLIC OR PRIVATE MEDICAL, WRITE THE NAME OF THE PLACE. <br> (NAME OF PLACE) |  | HOME |  |
| 431 | How long after (NAME) was delivered did you stay there? <br> IF LESS THAN ONE DAY, RECORD HOURS. <br> IF LESS THAN ONE WEEK, RECORD DAYS. |  |  |  |
| 432 | Was (NAME) delivered by caesarean section? |  |  |  |
| 433 | Before you were discharged after (NAME) was born, did any health care provider check on your health? |  |  | YES  <br>  $($ SKIP TO 449) <br> NO  <br> NO  |
| 434 | How long after delivery did the first check take place? <br> IF LESS THAN ONE DAY, RECORD HOURS. <br> IF LESS THAN ONE WEEK, RECORD DAYS. |  |  |  |


|  |  | LAST BIRTH | NEXT-TO-LAST BIRTH | SECOND-FROM LAST BIRTH |
| :---: | :---: | :---: | :---: | :---: |
| NO. | QUESTIONS AND FILTERS | NAME | NAME | NAME |
| 435 | Who checked on your health at that time? <br> PROBE FOR MOST QUALIFIED PERSON. |  |  |  |
| 436 | After you were discharged did any health care provider or a traditional birth attendant check on your health? |  | $\begin{aligned} & \text { YES } \\ & \text { NO (SKIP TO 449) } \leftarrow[1 \\ & \text { NO } \end{aligned}$ |  |
| 437 | Why didn't you deliver in a health facility? <br> PROBE: Any other reason? <br> RECORD ALL MENTIONED. |  |  |  |
| 438 | After (NAME) was born, did any health care provider or a traditional birth attendant check on your health? |  |  |  |
| 439 | How long after delivery did the first check take place? <br> IF LESS THAN ONE DAY, RECORD HOURS. <br> IF LESS THAN ONE WEEK, RECORD DAYS. |  |  |  |


|  |  | LAST BIRTH | NEXT-TO-LAST BIRTH | SECOND-FROM <br> LAST BIRTH |
| :---: | :---: | :---: | :---: | :---: |
| NO. | QUESTIONS AND FILTERS | NAME | NAME | NAME |
| 440 | Who checked on your health at that time? <br> PROBE FOR MOST QUALIFIED PERSON. |  |  |  |
| 441 | Where did this first check take place? <br> PROBE TO IDENTIFY TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE. <br> IF UNABLE TO DETERMINE IF A HOSPITAL, HEALTH CENTER, OR CLINIC IS PUBLIC OR PRIVATE MEDICAL, WRITE THE NAME OF THE PLACE. <br> (NAME OF PLACE) |  |  |  |
| 442 | CHECK 436: |  |  |  |
| 443 | In the two months after (NAME) was born, did any health care provider or a traditional birth attendant check on his/her health? |  |  |  |
| 444 | How many hours, days, or weeks after the birth of (NAME) did the first check take place? <br> IF LESS THAN ONE DAY, RECORD HOURS. <br> IF LESS THAN ONE WEEK, RECORD DAYS. | HRS AFTER <br> BIRTH <br> 1 $\square$ <br> DAYS AFTER <br> BIRTH $\qquad$ 2 <br> WEEKS AFTER <br> 3 $\square$ <br> DON'T KNOW $\qquad$ 998 |  |  |


|  |  | LAST BIRTH | NEXT-TO-LAST BIRTH | SECOND-FROM LAST BIRTH |
| :---: | :---: | :---: | :---: | :---: |
| NO. | QUESTIONS AND FILTERS | NAME ................. | NAME | NAME |
| 445 | Who checked on (NAME)'s health at that time? <br> PROBE FOR MOST QUALIFIED PERSON. |  |  |  |
| 446 | Where did this first check of (NAME) take place? <br> PROBE TO IDENTIFY TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE. <br> IF UNABLE TO DETERMINE IF A HOSPITAL, HEALTH CENTER, OR CLINIC IS PUBLIC OR PRIVATE MEDICAL, WRITE THE NAME OF THE PLACE. <br> (NAME OF PLACE) |  |  |  |
| 447 | In the first two months after delivery, did you receive a vitamin A dose (like this/any of these)? <br> SHOW COMMON TYPES OF AMPULES/CAPSULES/SYRUPS. |  |  |  |
| 448 | Has your menstrual period returned since the birth of (NAME)? |  |  |  |
| 449 | Did your period return between the birth of (NAME) and your next pregnancy? |  |  |  |


|  |  | LAST BIRTH | NEXT-TO-LAST BIRTH | SECOND-FROM LAST BIRTH |
| :---: | :---: | :---: | :---: | :---: |
| NO. | QUESTIONS AND FILTERS | NAME | NAME | NAME |
| 450 | For how many months after the birth of (NAME) did you not have a period? |  | MONTHS $\qquad$ $\square$ <br> DON'T KNOW $\qquad$ 98 | MONTHS $\qquad$ $\square$ <br> DON'T KNOW $\qquad$ 98 |
| 451 | CHECK 226: <br> IS RESPONDENT PREGNANT? |  |  |  |
| 452 | Have you begun to have sexual intercourse again since the birth of (NAME)? |  |  |  |
| 453 | For how many months after the birth of (NAME) did you not have sexual intercourse? | MONTHS $\qquad$ $\square$ <br> DON'T KNOW $\qquad$ 98 | MONTHS $\qquad$ $\square$ $\square$ <br> DON'T KNOW $\qquad$ 98 | MONTHS $\qquad$ $\square$ <br> DON'T KNOW $\qquad$ 98 |
| 454 | Did you ever breastfeed (NAME)? |  |  |  |
| 455 | How long after birth did you first put (NAME) to the breast? <br> IF LESS THAN 1 HOUR, RECORD '00' HOURS. <br> IF LESS THAN 24 HOURS, RECORD HOURS. OTHERWISE, RECORD DAYS. |  |  |  |
| 456 | In the first three days after delivery, was (NAME) given anything to drink other than breast milk? |  |  |  |
| 457 | What was (NAME) given to drink? <br> Anything else? <br> RECORD ALL LIQUIDS MENTIONED. |  |  |  |
| 458 | CHECK 404: <br> IS CHILD LIVING? |  |  |  |


|  |  | LAST BIRTH | NEXT-TO-LAST BIRTH | SECOND-FROM <br> LAST BIRTH |
| :---: | :---: | :---: | :---: | :---: |
| NO. | QUESTIONS AND FILTERS | NAME | NAME | NAME |
| 459 | Are you still breastfeeding (NAME)? |  |  |  |
| 460 | For how many months did you breastfeed (NAME)? | MONTHS $\qquad$ $\square$ $\square$ <br> DON'T KNOW $\qquad$ 98 |  |  |
| 461 | CHECK 404: <br> IS CHILD LIVING? |  |  |  |
| 462 | How many times did you breastfeed last night between sunset and sunrise? <br> IF ANSWER IS NOT NUMERIC, PROBE FOR APPROXIMATE NUMBER. | NUMBER OF NIGHT TIME FEEDINGS |  |  |
| 463 | How many times did you breastfeed yesterday during the daylight hours? <br> IF ANSWER IS NOT NUMERIC, PROBE FOR APPROXIMATE NUMBER. | NUMBER OF DAYLIGHT FEEDINGS |  |  |
| 464 | Did (NAME) drink anything from a bottle with a nipple yesterday or last night? |  |  |  |
| 465 |  | 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 AND HEALTH AND CHILD'S AND WOMAN'S NUTRITION



|  |  | LAST BIRTH | NEXT-TO-LAST BIRTH | SECOND-FROM <br> LAST BIRTH |
| :---: | :---: | :---: | :---: | :---: |
| NO. | QUESTIONS AND FILTERS | NAME | NAME | NAME |
| 506A | CHECK 506: | BCG TO MEASLES OTHER ALL RECORDED | BCG TO MEASLES OTHER ALL RECORDED <br> (GO TO 512) | BCG TO MEASLES OTHER ALL RECORDED <br> (GO TO 512) |
| 507 | Has (NAME) received any vaccinations that are not recorded on this card? <br> RECORD 'YES' ONLY IF RESPONDENT MENTIONS BCG, POLIO 0-3, DPT 1-3, AND/OR MEASLES VACCINES. |  |  |  |
| 508 | Did (NAME) ever receive any vaccinations to prevent him/her from getting diseases, including vaccinations received in a national immunization campaign? |  | $\begin{aligned} & \text { YES } \\ & \text { NO } \quad \begin{array}{l} \text { (SKIP TO 512) } \end{array} \mathbb{L}^{2} \\ & \text { DON'T KNOW } \end{aligned}$ |  |
| $\begin{gathered} 509 \\ 509 \mathrm{~A} \end{gathered}$ | Please tell me if (NAME) received any of the following vaccinations: <br> A BCG vaccination against tuberculosis, that is, an injection in the arm or shoulder that usually causes a scar? |  |  |  |
| 509B | Polio vaccine, that is, drops in the mouth? |  |  |  |
| 509C | Was the first polio vaccine received in the first two weeks after birth or later? |  | FIRST 2 WEEKS  <br> LATER  <br> LA............................... 1 | FIRST 2 WEEKS $\cdots . . . . . . . . . . . . ~$ 1 <br> LATER $\cdots$ $\cdots$ |
| 509D | How many times was the polio vaccine received? | NUMBER OF TIMES ....... $\square$ | NUMBER OF TIMES ....... | NUMBER OF TIMES ...... |
| 509E | A DPT vaccination, that is, an injection given in the thigh or buttocks, sometimes at the same time as polio drops? | $\begin{aligned} & \text { YES } \ldots \ldots \\ & \text { NO } \\ & \text { (SKIP TO 509G) } \\ & \text { DON'T KNOW } \end{aligned}$ | $\begin{aligned} & \text { YES } \\ & \text { NO } \quad \text { (SKIP TO 509G) } \\ & \text { DON'T KNOW } \end{aligned}$ |  |
| 509F | How many times was a DPT vaccination received? | NUMBER OF TIMES $\cdots \cdots$ | NUMBER OF TIMES - .-.... | NUMBER OF TIMES -.... |


|  |  | LAST BIRTH | NEXT-TO-LAST BIRTH | SECOND-FROM <br> LAST BIRTH |
| :---: | :---: | :---: | :---: | :---: |
| NO. | QUESTIONS AND FILTERS | NAME | NAME | NAME |
| 509G | $A$ Hepatitis $B$ vaccination, that is, an injection given in the thigh or buttocks, sometimes at the same time as DPT and polio drops? |  |  | $\begin{aligned} & \text { YES } \\ & \text { NO } \quad \text { (SKIP TO 509J) } \downarrow \text { [ } \\ & \text { DON'T KNOW } \end{aligned}$ |
| 509H | How many times was a Hep B vaccination received? | NUMBER OF TIMES ....... | NUMBER OF TIMES .-..... | NUMBER OF TIMES |
| 509J | A measles injection or an MMR injection - that is, a shot in the arm at the age of 9 months or older - to prevent him/her from getting measles? |  |  |  |
| 512 | CHECK 506: <br> DATE SHOWN FOR VITAMIN 'A' DOSE |  |  |  |
| 513 | According to (NAME)'s health card, he/she received a vitamin 'A' dose (like this/any of these) in (MONTH AND YEAR OF MOST RECENT DOSE FROM CARD). <br> Has (NAME) received another vitamin 'A' dose since then? <br> SHOW COMMON TYPES OF AMPULES/CAPSULES/SYRUPS. |  |  |  |
| 514 | Has (NAME) ever received <br> a vitamin 'A' dose (like this/any of these)? <br> SHOW COMMON TYPES OF AMPULES/CAPSULES/SYRUPS. |  |  |  |
| 515 | Did (NAME) receive a vitamin ' $A$ ' dose within the last six months? |  |  |  |
| 517 | Has (NAME) taken any drug for intestinal worms in the last six months? |  |  |  |
| 518 | Has (NAME) had diarrhea in the last 2 weeks? | YES ...................................... 1 NO $\ldots \ldots . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . ~$ 2 |  |  |
| 519 | When (NAME) had diarrhea, was there any blood in the stools? |  |  |  |


|  |  | LAST BIRTH | NEXT-TO-LAST BIRTH | $\begin{aligned} & \text { SECOND-FROM } \\ & \text { LAST BIRTH } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: |
| NO. | QUESTIONS AND FILTERS | NAME | NAME | NAME |
| 520 | Now I would like to know how much (NAME) was given to drink during the diarrhea (including breastmilk). <br> 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? |  |  |  |
| 521 | When (NAME) had diarrhea, was he/she given less than usual to eat, about the same amount, more than usual, or nothing to eat? <br> IF LESS, PROBE: Was he/she given much less than usual to eat or somewhat less? |  |  |  |
| 522 | Did you seek advice or treatment for the diarrhea from any source? |  |  |  |
| 523 | Where did you seek advice or treatment? <br> Anywhere else? <br> PROBE TO IDENTIFY EACH TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE(S). <br> IF UNABLE TO DETERMINE IF A HOSPITAL, HEALTH CENTER, OR CLINIC IS PUBLIC OR PRIVATE MEDICAL, WRITE THE NAME OF THE PLACE. <br> (NAME OF PLACE(S)) |  |  |  |
| 524 | CHECK 523: |  |  |  |


|  |  | LAST BIRTH | NEXT-TO-LAST BIRTH | SECOND-FROM LAST BIRTH |
| :---: | :---: | :---: | :---: | :---: |
| NO. | QUESTIONS AND FILTERS | NAME | NAME | NAME |
| 525 | Where did you first seek advice or treatment? <br> USE LETTER CODE FROM 523. | FIRST PLACE .................. | FIRST PLACE $\cdots$................. | FIRST PLACE …............... |
| 526 | How many days after the diarrhea began did you first seek advice or treatment for (NAME)? <br> IF THE SAME DAY, RECORD '00'. | DAYS .... ${ }_{\text {- }}^{\text {- }}$ | DAYS ................. | DAYS .-............... |
| 527 | Does (NAME) still have diarrhea? |  |  |  |
| 528 | Was he/she given any of the following to drink at any time since he/she started having the diarrhea <br> a) A fluid made from a special ORS packet? <br> b) A pre-packaged ORS liquid? <br> c) A government-recommended homemade fluid? |  | YES    <br> FLUID FROM NO DK  <br> ORS PKT $\cdots \cdots$ 1 2 8 <br> ORS LQD $\cdots \cdots$ 1 2$) 8$ |  YES NO DK <br> FLUID FROM    <br> ORS PKT $\cdots \cdots$ 1 2 8 <br> ORS LQD $\cdots \cdots$ 1 2$) 8$ |
| 529 | Was anything (else) given to treat the diarrhea? |  |  | $\begin{aligned} & \text { YES } \\ & \text { NO } \quad \text { (SKIP TO 533) } \&\left[^{2}\right. \\ & \text { DON'T KNOW } \end{aligned}$ |
| 530 | what (else) was given to treat the diarrhea? <br> Anything else? <br> RECORD ALL TREATMENTS GIVEN. |  |  |  |
| 531 | CHECK 530: <br> GIVEN ZINC? |  |  |  |


|  |  | LAST BIRTH | NEXT-TO-LAST BIRTH | SECOND-FROM LAST BIRTH |
| :---: | :---: | :---: | :---: | :---: |
| NO. | QUESTIONS AND FILTERS | NAME | NAME | NAME |
| 532 | How many times was (NAME) given zinc? | TIMES $\qquad$ $\square$ $\square$ $\square$ <br> DON'T KNOW $\qquad$ 98 | TIMES $\qquad$ $\square$ <br> DON'T KNOW $\qquad$ 98 | TIMES $\qquad$ $\square$ $\square$ <br> DON'T KNOW $\qquad$ 98 |
| 533 | Has (NAME) been ill with a fever at any time in the last 2 weeks? |  |  |  |
| 534 | Has (NAME) had an illness with a cough at any time in the last 2 weeks? |  |  |  |
| 535 | When (NAME) had an illness with a cough, did he/she breathe faster than usual with short, rapid breaths or have difficulty breathing? |  |  |  |
| 536 | Was the fast or difficult breathing due to a problem in the chest or to a blocked or runny nose? |  |  |  |
| 537 | CHECK 533: <br> HAD FEVER? |  |  |  |
| 538 | 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? <br> IF LESS PROBE: Was he/she given much less than usual to drink or somewhat less? |  |  |  |
| 539 | 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? <br> IF LESS PROBE: Was he/she given much less than usual to eat or somewhat less? |  |  |  |


|  |  | LAST BIRTH | NEXT-TO-LAST BIRTH | $\begin{aligned} & \hline \text { SECOND-FROM } \\ & \text { LAST BIRTH } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: |
| NO. | QUESTIONS AND FILTERS | NAME | NAME ........................... | NAME |
| 540 | Did you seek advice or treatment for the illness from any source? |  |  |  |
| 541 | Where did you seek advice or treatment? <br> Anywhere else? <br> PROBE TO IDENTIFY EACH TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE(S). <br> IF UNABLE TO DETERMINE IF A HOSPITAL, HEALTH CENTER, OR CLINIC IS PUBLIC OR PRIVATE MEDICAL, WRITE THE NAME OF THE PLACE. <br> (NAME OF PLACE(S)) |  |  |  |
| 542 | CHECK 541: |  | ONLY ONE CODE <br> TWO OR MORE CIRCLED CODES CIRCLED $\square$ <br> (SKIP TO 544) |  |
| 543 | Where did you first seek advice or treatment? <br> USE LETTER CODE FROM 541. | FIRST PLACE - ................. | FIRST PLACE - .a. | FIRST PLACE |
| 544 | How many days after the illness began did you first seek advice or treatment for (NAME)? <br> IF THE SAME DAY, RECORD '00'. | DAYS …… $\cdots \cdots \cdots \cdots \cdots \cdots$ | DAYS ..................... $\square$ | DAYS .-...................- |
| 545 | Is (NAME) still sick with a (fever/ cough)? |  |  |  |


|  |  | LAST BIRTH | NEXT-TO-LAST BIRTH | SECOND-FROM <br> LAST BIRTH |
| :---: | :---: | :---: | :---: | :---: |
| NO. | QUESTIONS AND FILTERS | NAME | NAME | NAME |
| 546 | At any time during the illness, did (NAME) take any drugs for the illness? |  | $\begin{aligned} & \text { YES } \\ & \text { NO } \\ & \text { (GO BACK TO 503 } \\ & \text { IN NEXT COLUMN; } \\ & \text { OR, IF NO MORE } \\ & \text { BIRTHS, GO TO 573) } \\ & \text { DON'T KNOW } \end{aligned}\left[_{8}^{1}\right.$ | YES $\cdots \cdots \cdots a n$ NO (GO TO 503 IN NEXT-TO-LAST COLUMN OF NEW QUESTIONNAIRE; OR IF NO MORE BIRTHS, GO TO 573) DON'T KNOW |
| 547 | What drugs did (NAME) take? <br> Any other drugs? <br> RECORD ALL MENTIONED. | ANTIBIOTIC DRUGS <br> PILL/SYRUP $\qquad$ <br> INJECTION $\qquad$ $\qquad$ <br> OTHER DRUGS <br> (SPECIFY) | ANTIBIOTIC DRUGS <br> PILL/SYRUP $\qquad$ A <br> INJECTION $\qquad$ OTHER DRUGS $\qquad$ <br> (SPECIFY) | ANTIBIOTIC DRUGS |
| 548 | CHECK 547: <br> CODE 'A' CIRCLED? |  |  | (GO TO 503 IN NEXT-TO-LAST COLUMN OF NEW QUESTIONNAIRE; OR IF NO MORE BIRTHS, GO TO 573) |
| 549 | Did you already have (NAME OF DRUG FROM 547) at home when the child became ill? | HAD ANTIBIOTIC PILL/ <br> SYRUP AT HOME $\qquad$ 1 <br> NO ANTIBIOTIC <br> PILL/SYRUP AT HOME … 2 | HAD ANTIBIOTIC PILL/ <br> SYRUP AT HOME $\qquad$ 1 <br> NO ANTIBIOTIC <br> PILL/SYRUP AT HOME … 2 | HAD ANTIBIOTIC PILL/ <br> SYRUP AT HOME $\qquad$ 1 <br> NO ANTIBIOTIC <br> PILL/SYRUP AT HOME -․ 2 |
| 572 |  | GO BACK TO 503 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 573. | GO BACK TO 503 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 573. | GO TO 503 IN NEXT-TO-LAST COLUMN OF NEW QUESTIONNAIRE; OR, IF NO MORE BIRTHS, GO TO 573. |




## SECTION 6. MARRIAGE AND SEXUAL ACTIVITY



| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP ${ }^{\text {¢ }}$ |
| :---: | :---: | :---: | :---: |
| 611 | Where is that? <br> Any other place? <br> PROBE TO IDENTIFY EACH TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE(S). <br> IF UNABLE TO DETERMINE IF HOSPITAL, HEALTH CENTER OR CLINIC IS PUBLIC OR PRIVATE MEDICAL, WRITE THE NAME OF PLACE. <br> (NAME OF PLACE(S)) |  <br> PRIVATE MEDICAL SECTOR <br> PRIVATE HOSPITAL/CLINIC H <br> PHARMACY ..................................................... I <br> PRIVATE DOCTOR …...................................... J <br> OTHER PRIVATE MEDICAL <br> OTHER SOURCE |  |
| 612 | If you wanted to, could you yourself get a condom? |  |  |

## SECTION 7. FERTILITY PREFERENCES

| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP 6 |
| :---: | :---: | :---: | :---: |
| 701 | CHECK 311/311A: <br> NEITHER STERILIZED | HE OR SHE STERILIZED | $\rightarrow 708$ |
| 702 | CHECK 226: <br> NOT PREGNANT OR UNSURE <br> Now I have some questions about the future. <br> Would you like to have (a/another) child, or would you prefer not to have any (more) children? <br> PREGNANT $\square$ <br> Now I have some questions about the future. <br> After the child you are expecting now, would you like to have another child, or would you prefer not have any more children? |  | $\begin{array}{r} \longrightarrow 704 \\ \longrightarrow 708 \\ \longrightarrow 705 \\ \longrightarrow 704 \end{array}$ |
| 703 | CHECK 226: |  | $\rightarrow 708$ |
| 704 | CHECK 310: USING A CONTRACEPTIVE METHOD? <br> NOT ASKED $\square$ NO, N CURRENTLY USI | YES, CURRENTLY USING | $\rightarrow 708$ |
| 705 | Do you think you will use a contraceptive method to delay or avoid pregnancy at any time in the future? |  | $\longrightarrow 707$ |
| 706 | Which contraceptive method would you prefer to use? |  |  |



| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP ${ }_{\text {9 }}$ |
| :---: | :---: | :---: | :---: |
| 712 | Does your husband know that you are using a method of family planning? |  |  |
| 713 | Would you say that using contraception is mainly your decision, mainly your husband's decision, or did you both decide together? |  |  |
| 714 | CHECK 311/311A: <br> NEITHER STERILIZED | HE OR SHE STERILIZED | $\rightarrow 801$ |
| 715 | Does your husband want the same number of children that you want, or does he want more or fewer than you want? |  |  |

## SECTION 8. HUSBAND'S BACKGROUND AND WOMAN'S WORK




SECTION 9. HIVIAIDS


| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 911 | Where is that? <br> Any other place? <br> PROBE TO IDENTIFY EACH TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE(S). <br> IF UNABLE TO DETERMINE IF HOSPITAL, HEALTH CENTER OR CLINIC IS PUBLIC OR PRIVATE MEDICAL, WRITE THE NAME OF THE PLACE. <br> (NAME OF PLACE) | $\begin{aligned} & \text { PUBLIC SECTOR } \\ & \text { INDHIRA GANDHI MEMORIAL HOSPITAL } \\ & \text { GOVT. REGIONAL HOSPITAL } \\ & \text { GOVT. ATOLL HOSPITAL } \\ & \text { GOVT. HEALTH CENTER } \\ & \text { GOVT. HEALTH POST } \\ & \text { GOVT. VCT SITE } \\ & \text { OTHER PUBLIC } \\ & \\ & \end{aligned}$ <br> PRIVATE MEDICAL SECTOR <br> PRIVATE HOSPITAL/CLINIC/ <br> PRIVATE DOCTOR $\qquad$ <br> PHARMACY $\qquad$ <br> OTHER PRIVATE MEDICAL <br> OTHER |  |
| 912 | Would you buy fresh vegetables from a shopkeeper or vendor if you knew that this person had the AIDS virus? |  |  |
| 913 | If a member of your family got infected with the AIDS virus, would you want it to remain a secret or not? |  |  |
| 914 | If a member of your family became sick with AIDS, would you be willing to care for her or him in your own household? |  |  |
| 915 | 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? |  |  |
| 915A | In your opinion, if a male teacher has the AIDS virus but is not sick, should he be allowed to continue teaching in the school? | SHOULD BE ALLOWED $\ldots . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . ~$ |  |
| 916 | CHECK 701: <br> HEARD ABOUT AIDS $\square$ <br> Apart from AIDS, have you heard about other infections that can be transmitted through sexual contact? <br> NOT HEARD ABOUT AIDS $\square$ <br> Have you heard about infections that can be transmitted through sexual contact? |  | $\longrightarrow 918$ |



## SECTION 10. OTHER HEALTH ISSUES

| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES |  | SKIP |
| :---: | :---: | :---: | :---: | :---: |
| 1001 | Have you ever heard of an illness called tuberculosis or TB? |  | $\begin{aligned} & 1 \\ & 2 \end{aligned}$ | $\longrightarrow 1005$ |
| 1002 | How does tuberculosis spread from one person to another? PROBE: Any other ways? RECORD ALL MENTIONED. | THROUGH THE AIR WHEN COUGHINGOR SNEEZINGTHROUGH SHARING UTENSILSTHROUGH TOUCHING A PERSON WITH TBTHROUGH FOODTHROUGH SEXUAL CONTACTTHROUGH MOSQUITO BITESTHOTHER(SPECIFY) |  |  |
| 1003 | Can tuberculosis be cured? | YES $\qquad$ <br> NO <br> DON'T KNOW | $\begin{aligned} & 1 \\ & 2 \\ & 8 \end{aligned}$ |  |
| 1004 | If a member of your family got tuberculosis, would you want it to remain a secret or not? | YES, REMAIN A SECRET <br> NO <br> DON'T KNOW/NOT SURE/DEPENDS | $\begin{aligned} & 1 \\ & 2 \\ & 8 \end{aligned}$ |  |
| 1005 | Now I would like to ask you some other questions relating to health matters. <br> Have you had an injection for any reason in the last 12 months? | NUMBER OF INJECTIONS <br> NONE |  | $\rightarrow 1009$ |
|  | IF NUMBER OF INJECTIONS IS GREATER THAN 90, OR DAILY FOR 3 MONTHS OR MORE, RECORD '90'. <br> IF NON-NUMERIC ANSWER, PROBE TO GET AN ESTIMATE. | NONE$00$ |  |  |
| 1006 | Among these injections, how many were administered by a doctor, a nurse, a pharmacist, a dentist, or any other health worker? <br> IF NUMBER OF INJECTIONS IS GREATER THAN 90, OR DAILY FOR 3 MONTHS OR MORE, RECORD ' 90 '. <br> IF NON-NUMERIC ANSWER, PROBE TO GET AN ESTIMATE. | NONE$00$ |  | $\longrightarrow 1009$ |


| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP ${ }^{\text {¢ }}$ |
| :---: | :---: | :---: | :---: |
| 1007 | The last time you had an injection given to you by a health worker, where did you go to get the injection? <br> PROBE TO IDENTIFY EACH TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE. <br> IF UNABLE TO DETERMINE IF HOSPITAL, HEALTH CENTER OR CLINIC IS PUBLIC OR PRIVATE MEDICAL, WRITE THE NAME OF THE PLACE. <br> (NAME OF PLACE) | PUBLIC SECTOR <br> INDHIRA GANDHI MEMORIAL HOSPITAL <br> GOVT. REGIONAL HOSPITAL $\qquad$ <br> GOVT. ATOLL HOSPITAL $\qquad$ <br> GOVT. HEALTH CENTER $\qquad$ 14 <br> GOVT. HEALTH POST $\qquad$ <br> COMMUNITY/FAMILY HEALTH WORKER <br> OTHER PUBLIC <br> (SPECIFY) <br> PRIVATE MEDICAL SECTOR <br> PRIVATE HOSPITAL/CLINIC $\qquad$ 21 <br> PRIVATE DOCTOR $\qquad$ <br> DENTAL OFFICE/CLINIC ............................... 23 <br> PHARMACY $\qquad$ <br> OTHER PRIVATE MEDICAL <br> (SPECIFY) <br> OTHER PLACE <br> AT HOME $\qquad$ <br> OTHER |  |
| 1008 | Did the person who gave you that injection take the syringe and needle from a new, unopened package? | YES <br> NO <br> DON'T KNOW |  |
| 1009 | On how many days this week, did you walk, run, or engage in other various physical activity for at least 20 minutes? <br> IF NONE RECORD '00'. | NUMBER OF DAYS $\square$ $\square$ <br> DON'T KNOW / UNSURE |  |
| 1010 | Do you currently smoke cigarettes? | YES $\qquad$ <br> NO | $\longrightarrow 1012$ |
| 1011 | In the last 24 hours, how many cigarettes did you smoke? | CIGARETTES $\quad$.................................... $\square$ |  |
| 1012 | Do you currently smoke or use any other type of tobacco? | YES NO | $\longrightarrow 1014$ |
| 1013 | What (other) type of tobacco do you currently smoke or use? <br> RECORD ALL MENTIONED | HOOKA <br> BIDI <br> CIGAR <br> PIPE <br> CHEWING TOBACCO <br> SNUFF <br> OTHER |  |


| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES |  |  | SKIP ${ }^{\text {g }}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1014 | Many different factors can prevent women from getting medical advice or treatment for themselves. When you are sick and want to get medical advice or treatment, is each of the following a big problem or not? <br> Getting permission to go? | $\begin{array}{cc}\text { BIG } & \text { NOTA BIG } \\ \text { PROBLEM } & \text { PROBLEM }\end{array}$ |  |  |  |
|  |  | PERMISSION TO GO ...................... | .. 1 | 2 |  |
|  | Getting money needed for treatment? | GETTING MONEY .-................ | - 1 | 2 |  |
|  | The distance to the health facility? | DISTANCE ................................... | - 1 | 2 |  |
|  | Having to take transport? | TAKING TRANSPORT | - 1 | 2 |  |
|  | Not wanting to go alone? | GO ALONE ................................... | .. 1 | 2 |  |
|  | Concern that there may not be a female health provider? | NO FEMALE PROVIDER - .-............ | - 1 | 2 |  |
|  | Concern that there may not be any health provider? |  | - 1 | 2 |  |
|  | Concern that there may be no drugs available? | NO DRUGS .-............................ | - 1 | 2 |  |

SECTION 11. BLOOD PRESSURE, DIABETES, HEART ATTACK AND STROKE


## INTERVIEWER'S OBSERVATIONS

TO BE FILLED IN AFTER COMPLETING INTERVIEW

COMIMENTS ABOUT RESPONDENT:
0
$\qquad$
$\qquad$
$\qquad$ COMIMENTS ON SPECIFIC QUESTIONS:
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$

ANY OTHER COIVIMIENTS:

SUPERVISOR'S OBSERVATIONS

NAME OF SUPERVISOR:
DATE:
EDITOR'S OBSERVATIONS
$\qquad$
$\qquad$
$\qquad$
$\qquad$

## CALENDAR

## INSTRUCTIONS

COL. 1 BIRTHS, PREGNANCIES, CONTRACEPTIVE USE

B BIRTHS
P PREGNANCIES
T TERMINATIONS

0 NO METHOD
1 FEMALE STERILIZATION
2 MALE STERILIZATION
3 PILL
4 IUD
5 INJECTABLES
6 IMPLANTS
7 CONDOM
8 DIAPHRAGM
9 FOAM OR JELLY
J RHYTHM METHOD
K WITHDRAWAL
X OTHER
(SPECIFY)

COL. 2 DISCONTINUATION OF CONTRACEPTIVE USE

0 INFREQUENT SEX / HUSBAND AWAY
1 BECAME PREGNANT WHILE USING
2 WANTED TO BECOME PREGNANT
3 HUSBAND DISAPPROVED
4 WANTED MORE EFFECTIVE METHOD
5 HEALTH CONCERNS
6 SIDE EFFECTS
7 LACK OF ACCESS / TOO FAR
8 COST TOO MUCH
9 INCONVENIENT TO USE
F FATALISTIC
A DIFFICULT TO GET PREGNANT / MENOPAUSAL
D MARITAL SEPARATION
X OTHER
(SPECIFY)
Z DON'T KNOW


## SECTION 1 : RESPONDENT'S BACKGROUND

## Introduction and Consent

## INFORMED CONSENT

Hello. My name is $\qquad$ and I am working with the Ministry of Health. We are conducting a national survey that asks women, men and youth about various health issues. We would very much appreciate your participation in this survey. This information will help the government to plan health services. The survey usually takes between 15 and 20 minutes to complete. Whatever information you provide will be kept strictly confidential and will not be shared with anyone other than members of our survey team.

Participation in this survey is voluntary, and if we should come to 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. However, we hope that you will participate in this survey since your views are important.

At this time, do you want to ask me anything about the survey?

May I begin the interview now?

Signature of interviewer: $\qquad$ Date: $\qquad$


| 102 | In what month and year were you born? | MONTH <br> DON'T KNOW MONTH <br> YEAR <br> DON'T KNOW YEAR |  |
| :---: | :---: | :---: | :---: |
| 103 | How old were you at your last birthday? <br> COMPARE AND CORRECT 102 AND/OR 103 IF INCONSISTENT. | AGE IN COMPLETED YEARS |  |
| 104 | What is your current marital status? | MARRIED <br> WIDOWED <br> DIVORCED <br> SEPARATED |  |
| 105 | Have you ever attended school? | YES <br> NO | $\rightarrow 108$ |


| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES |  | SKIP ${ }^{\text {¢ }}$ |
| :---: | :---: | :---: | :---: | :---: |
| 106 | What is the highest level of school you attended? | NON-FORMAL EDUCATION <br> PRESCHOOL <br> PRIMARY <br> 'O' LEVEL <br> 'A' LEVEL <br> DIPLOMA <br> FIRST DEGREE <br> MASTER'S CERTIFICATE/ABOVE <br> CERTIFICATE | $\begin{aligned} & 00 \\ & 01 \\ & 02 \\ & 03 \\ & 04 \\ & 05 \\ & 06 \\ & 07 \\ & 08 \end{aligned}$ |  |
| 107 | What is the highest (grade/form/year) you completed at that level? | GRADE/FORM/YEAR ....................... $\square$ |  |  |
| 108 | Do you read a newspaper or magazine almost everyday, at least once a week, less than once a week or not at all? | ALMOST EVERY DAY <br> AT LEAST ONCE A WEEK <br> LESS THAN ONCE A WEEK <br> NOT AT ALL <br> CANNOT READ | $\begin{aligned} & 1 \\ & 2 \\ & 3 \\ & 4 \\ & 5 \end{aligned}$ | $\rightarrow 110$ |
| 109 | Do you use the internet almost every day, at least once a week, less than once a week or not at all? | ALMOST EVERY DAY <br> AT LEAST ONCE A WEEK <br> LESS THAN ONCE A WEEK <br> NOT AT ALL | $\begin{aligned} & 1 \\ & 2 \\ & 3 \\ & 4 \end{aligned}$ |  |
| 110 | Do you listen to the radio almost every day, at least once a week, less than once a week or not at all? | ALMOST EVERY DAY <br> AT LEAST ONCE A WEEK <br> LESS THAN ONCE A WEEK <br> NOT AT ALL | $\begin{aligned} & 1 \\ & 2 \\ & 3 \\ & 4 \end{aligned}$ |  |
| 111 | Do you watch television almost every day, at least once a week, less than once a week or not at all? | ALMOST EVERY DAY <br> AT LEAST ONCE A WEEK <br> LESS THAN ONCE A WEEK <br> NOT AT ALL | $\begin{aligned} & 1 \\ & 2 \\ & 3 \\ & 4 \end{aligned}$ |  |

SECTION 2. REPRODUCTION

| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES |  | SKIP |
| :---: | :---: | :---: | :---: | :---: |
| 201 | Now I would like to ask about any children you have had during your life. I am interested in all of the children that are biologically yours, even if they are not living with you now. <br> Have you ever fathered any children with any woman? | YES <br> NO <br> DON'T KNOW | 8 | $206$ |
| 202 | Do you have any sons or daughters that you have fathered who are now living with you? | $\begin{aligned} & \text { YES } \\ & \text { NO } \end{aligned}$ | 2 | $\longrightarrow 204$ |
| 203 | How many sons live with you? <br> And how many daughters live with you? <br> IF NONE, RECORD '00'. | SONS AT HOME <br> DAUGHTERS AT HOME |  |  |
| 204 | Do you have any sons or daughters that you have fathered who are alive but do not live with you? | $\begin{aligned} & \text { YES } \\ & \text { NO } \end{aligned}$ | 1 2 | $\longrightarrow 206$ |
| 205 | How many sons are alive but do not live with you? <br> And how many daughters are alive but do not live with you? <br> IF NONE, RECORD '00'. | SONS ELSEWHERE DAUGHTERS ELSEWHERE |  |  |
| 206 | Have you ever fathered a son or a daughter who was born alive but later died? <br> IF NO, PROBE: Any baby who cried or showed signs of life but did not survive? | YES <br> NO <br> DON'T KNOW | 1 2 8 | $\rightarrow 208$ |
| 207 | How many boys have died? <br> How many girls have died? <br> IF NONE, RECORD '00’. | BOYS DEAD <br> GIRLS DEAD |  |  |
| 208 | SUM ANSWERS TO 203, 205, AND 207, AND ENTER TOTAL. IF NONE, RECORD ‘00’. | TOTAL CHILDREN |  |  |
| 209 | CHECK 208: <br> HAS HAD ONLY <br> HAS HAD MORE <br> ONE CHILD THAN ONE CHILD | HAS NOT HAD ANY CHILDREN |  | $\begin{array}{\|l} \longrightarrow \\ \longrightarrow \\ \\ \\ \\ 3012 \end{array}$ |
| 210 | Did all of the children you have fathered have the same biological mother? | YES <br> NO |  | $\longrightarrow 212$ |
| 211 | In all, how many women have you fathered children with? | NUMBER OF WOMEN .................... |  |  |
| 212 | How old were you when your (first) child was born? | AGE IN YEARS ............................... |  |  |
| 213 | CHECK 203 AND 205: <br> AT LEAST ONE LIVING CHILD | NO LIVING CHILDREN |  | $\rightarrow 301$ |
| 214 | How many years old is your (youngest) child? | AGE IN YEARS ............................ |  |  |
| $215$ | CHECK 214: <br> (YOUNGEST) CHILD IS AGE 0-3 YEARS | (YOUNGEST) CHILD IS 4 YEARS OR OLDER |  | $\longrightarrow 301$ |



## SECTION 3. CONTRACEPTION



| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES |  | SKIP |
| :---: | :---: | :---: | :---: | :---: |
| 303 | In the last few months have you: <br> Heard about family planning on the radio? <br> Seen about family planning on the television? <br> Read about family planning in a newspaper or magazine? |  | $\begin{gathered} \text { NO } \\ 2 \\ 2 \\ 2 \end{gathered}$ |  |
| 304 | In the last few months, have you discussed the practice of family planning with a health worker or health professional? | YES NO | $\begin{aligned} & 1 \\ & 2 \end{aligned}$ |  |
| 305 | Now I would like to ask you about a woman's risk of pregnancy. <br> From one menstrual period to the next, are there certain days when a woman is more likely to become pregnant if she has sexual relations? | YES $\qquad$ <br> NO $\qquad$ <br> DON'T KNOW $\qquad$ | $\begin{aligned} & 1 \\ & 2 \\ & 8 \end{aligned}$ | $\rightarrow 307$ |
| 306 | Is this time just before her period begins, during her period, right after her period has ended, or halfway between two periods? | JUST BEFORE HER PERIOD BEGINS <br> DURING HER PERIOD <br> RIGHT AFTER HER PERIOD HAS ENDED <br> HALFWAY BETWEEN TWO PERIODS <br> OTHER $\qquad$ <br> (SPECIFY) <br> DON'T KNOW $\qquad$ | $\begin{aligned} & 1 \\ & 2 \\ & 3 \\ & 4 \\ & 6 \end{aligned}$ |  |
| 307 | Do you think that a woman who is breastfeeding her baby can become pregnant? | YES $\qquad$ <br> NO <br> DEPENDS <br> DON'T KNOW | $\begin{aligned} & 1 \\ & 2 \\ & 3 \\ & 8 \end{aligned}$ |  |
| 308 | I will now read you some statements about contraception. Please tell me if you agree or disagree with each one. <br> a) Contraception is women's business and a man should not have to worry about it. <br> b) Women who use contraception may become promiscuous. |  | DK <br> 8 <br> 8 |  |
| 309 | CHECK 301 (07) KNOWS MALE CONDOM <br> YES | NO $\square$ |  | $\rightarrow 401$ |
| 310 | Do you know of a place where a person can get condoms? | YES NO | $\begin{aligned} & 1 \\ & 2 \end{aligned}$ | $\rightarrow 401$ |
| 311 | Where is that? <br> Any other place? <br> PROBE TO IDENTIFY EACH TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE. <br> IF UNABLE TO DETERMINE IF HOSPITAL, HEALTH CENTER OR CLINIC IS PUBLIC OR PRIVATE MEDICAL, WRITE THE NAME OF THE PLACE. <br> (NAME OF PLACE) | PUBLIC SECTOR <br> INDHIRA GANDHI MEMORIAL HOSPITAL <br> GOVT. REGIONAL HOSPITAL $\qquad$ <br> GOVT. ATOLL HOSPITAL $\qquad$ <br> GOVT. HEALTH CENTER $\qquad$ <br> GOVT. HEALTH POST $\qquad$ <br> COMMUNITY/FAMILY HEALTH WORKER <br> OTHER PUBLIC $\qquad$ <br> (SPECIFY) <br> PRIVATE MEDICAL SECTOR <br> PRIVATE HOSPITAL/CLINIC $\qquad$ H <br> PHARMACY $\qquad$ I <br> PRIVATE DOCTOR $\qquad$ <br> OTHER PRIVATE MEDICAL <br> OTHER SOURCE <br> SHOP $\qquad$ <br> FRIEND/RELATIVE $\qquad$ <br> OTHER $\qquad$ | A <br> B <br> C <br> D <br> E <br> F <br> G <br> $-$ <br> H <br> I <br> J <br> K <br> L <br> M <br> X |  |


| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES |  | SKIP |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 312 | If you wanted to, could you yourself get a condom? | YES | NO | 1 |  |

SECTION 4. MARRIAGE AND SEXUAL ACTIVITY


| $\begin{gathered} \text { NO. } \\ \text { an } \end{gathered}$ | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 414 | CHECK 104: MARITAL STATUS: CURRENTLY MARRIED | WIDOWED/DIVORCED/SEPARATED $\square$ | $\longrightarrow 501$ |
| 415 | CHECK 302: <br> MAN NOT STERILIZED | MAN STERILIZED $\square$ | $\longrightarrow 501$ |
| 416 | The last time you had sex did you or your wife use any method to avoid or prevent a pregnancy? |  | $501$ |
| 417 | What method did you or your wife use? <br> PROBE: <br> Did you or your wife use any other method to prevent a pregnancy? <br> RECORD ALL MENTIONED. | FEMALE STERILIZATION $\ldots . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . ~$ A |  |

SECTION 5. FERTILITY PREFERENCES


SECTION 6. EMPLOYMENT AND GENDER ROLES

| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 601 | Have you done any work in the last seven days? |  | $\longrightarrow 604$ |
| 602 | Although you did not work in the last seven days, do you have any job or business from which you were absent for leave, illness, vacation, or any other such reason? |  | $\longrightarrow 604$ |
| 603 | Have you done any work in the last 12 months? | YES 1 <br> NO $\ldots$ | $\longrightarrow 611$ |
| 604 | What is your occupation, that is, what kind of work do you mainly do? | $\qquad$ $\qquad$ $\qquad$ |  |
| 605 | Do you do this work for government, for a private company, for someone else, for a member of your family, or are you self-employed? |  |  |
| 606 | Do you usually work throughout the year, or do you work seasonally, or only once in a while? |  |  |
| 607 | Are you paid in cash or kind for this work or are you not paid at all? |  |  |
| 608 | CHECK 104: <br> CURRENTLY MARRIED | WIDOWED/DIVORCED/SEPARATED $\square$ | $\rightarrow 611$ |
| 609 | CHECK 607: <br> CODE 1 OR 2 CIRCLED | OTHER $\square$ | $\rightarrow 611$ |
| 610 | Who usually decides how the money you earn will be used: mainly you, mainly your (wife(wives)), or you and your (wife(wives)) jointly? |  |  |
| 611 | In a couple, who do you think should have the greater say in each of the following decisions: the husband, the wife or both equally: <br> a) Making major household purchases? <br> b) Making purchases for daily household needs? <br> c) Deciding about visits to the wife's family or relatives? <br> d) Deciding what to do with the money she earns for her work? <br> e) Deciding how many children to have? |  HUSBAND WIFE BOTH <br> EQUALLY DON'T KNOW/ <br> DEPENDS <br> a) 1 2 3 8 <br> b) 1 2 3 8 <br> c) 1 2 3 8 <br> d) 1 2 3 8 <br> e) 1 2 3 8 |  |



## SECTION 7. HIVIAIDS and STIs




| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES |  | SKIP |
| :---: | :---: | :---: | :---: | :---: |
| 717 | Now I would like to ask you some questions about your health in the last 12 months. <br> During the last 12 months, have you had a disease which you got through sexual contact? | YES <br> NO <br> DON'T KNOW | 1 2 8 |  |
| 718 | Sometimes men experience an abnormal discharge from their penis. <br> During the last 12 months, have you had an abnormal discharge from your penis? | YES <br> NO $\qquad$ <br> DON'T KNOW $\qquad$ | 1 2 8 |  |
| 719 | Sometimes men have a sore or ulcer near their penis. <br> During the last 12 months, have you had a sore or ulcer near your penis? | YES <br> NO <br> DON'T KNOW | 1 2 8 |  |
| 720 | CHECK 717, 718 AND 719: <br> HAS HAD AN INFECTION (ANY 'YES') | HAS NOT HAD AN INFECTION OR DOES NOT KNOW |  | $\rightarrow 723$ |
| 721 | The last time you had (PROBLEM FROM 717 / 718 / 719), did you seek any kind of advice or treatment? | YES <br> NO $\qquad$ | 1 | $\rightarrow 723$ |
| 722 | Where did you go? <br> Any other place? <br> PROBE TO IDENTIFY EACH TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE(S). <br> IF UNABLE TO DETERMINE IF HOSPITAL, HEALTH CENTER OR CLINIC IS PUBLIC OR PRIVATE MEDICAL, WRITE THE NAME OF THE PLACE. <br> (NAME OF PLACE(S)) | PUBLIC SECTOR <br> INDHIRA GANDHI MEMORIAL HOSPITAL <br> GOVT. REGIONAL HOSPITAL <br> GOVT. ATOLL HOSPITAL <br> GOVT. HEALTH CENTER $\qquad$ <br> GOVT. HEALTH POST $\qquad$ <br> COMMUNITY/FAMILY HEALTH WORKER <br> OTHER PUBLIC <br> PRIVATE MEDICAL SECTOR <br> PRIVATE HOSPITAL/CLINIC <br> PHARMACY <br> PRIVATE DOCTOR $\qquad$ <br> OTHER PRIVATE MEDICAL <br> (SPECIFY) <br> OTHER SOURCE <br> SHOP <br> OTHER | A <br> B <br> C <br> D <br> E <br> F <br> G <br> H <br> I <br> J <br> K <br> L <br> X |  |
| 723 | Husband and wives do not always agree in everything. If a wife knows her husband has a disease that she can get during sexual intercourse, is she justified in refusing to have sex with him? | YES <br> NO <br> DON'T KNOW | 1 2 8 |  |
| 724 | Is a wife justified in refusing to have sex with her husband when she is tired or not in the mood? | YES <br> NO <br> DON'T KNOW | 1 2 8 |  |
| 725 | Is a wife justified in refusing to have sex with her husband when she knows her husband has sex with other women? | YES <br> NO <br> DON'T KNOW | 1 2 8 |  |

SECTION 8. OTHER HEALTH ISSUES

| $\begin{aligned} & \text { NO. } \\ & \text { dis } \end{aligned}$ | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP ${ }^{\text {¢ }}$ |
| :---: | :---: | :---: | :---: |
| 801 | Have you ever heard of an illness called tuberculosis or TB? | YES <br> NO $\qquad$ | $\longrightarrow 805$ |
| 802 | How does tuberculosis spread from one person to another? <br> PROBE: <br> Any other ways? <br> RECORD ALL MENTIONED. | THROUGH THE AIR WHEN COUGHING <br> OR SNEEZING <br> THROUGH SHARING UTENSILS <br> THROUGH TOUCHING A PERSON WITH TB <br> THROUGH FOOD <br> THROUGH SEXUAL CONTACT <br> THROUGH MOSQUITO BITES <br> OTHER $\qquad$ (SPECIFY) <br> DON'T KNOW |  |
| 803 | Can tuberculosis be cured? | YES <br> NO <br> DON'T KNOW |  |
| 804 | If a member of your family got tuberculosis, would you want it to remain a secret or not? | YES, REMAIN A SECRET <br> NO <br> DK/UNSURE/DEPENDS |  |
| 805 | Now I would like to ask you some questions relating to health matters. <br> Have you had an injection for any reason in the last 12 months? <br> IF YES: How many injections have you had? <br> IF NUMBER OF INJECTIONS IS GREATER THAN 90, OR DAILY FOR 3 MONTHS OR MORE, RECORD '90'. <br> IF NON-NUMERIC ANSWER, PROBE TO GET AN ESTIMATE. | NUMBER OF INJECTIONS $\square$ $\square$ <br> NONE $\qquad$ 00 | $\rightarrow 809$ |
| 806 | Among these injections, how many were administered by a doctor, a nurse, a pharmacist, a dentist, or any other health worker? <br> IF NUMBER OF INJECTIONS IS GREATER THAN 90, OR DAILY FOR 3 MONTHS OR MORE, RECORD ' 90 '. <br> IF NON-NUMERIC ANSWER, PROBE TO GET AN ESTIMATE. | NUMBER OF INJECTIONS $\square$ $\square$ <br> NONE $\qquad$ | $\longrightarrow 809$ |


| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 807 | The last time you had an injection given to you by a health worker, where did you go to get the injection? <br> PROBE TO IDENTIFY EACH TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE. <br> IF UNABLE TO DETERMINE IF HOSPITAL, HEALTH CENTER OR CLINIC IS PUBLIC OR PRIVATE MEDICAL, WRITE THE NAME OF THE PLACE. <br> (NAME OF PLACE) | PUBLIC SECTOR <br> INDHIRA GANDHI MEMORIAL HOSPITAL <br> GOVT. REGIONAL HOSPITAL <br> GOVT. ATOLL HOSPITAL $\qquad$ <br> GOVT. HEALTH CENTER $\qquad$ <br> GOVT. HEALTH POST $\qquad$ <br> COMMUNITY/FAMILY HEALTH WORKER <br> OTHER PUBLIC <br> PRIVATE MEDICAL SECTOR <br> PRIVATE HOSPITAL/CLINIC ............................. 21 <br> PRIVATE DOCTOR ........................................ 22 <br> DENTAL OFFICE/CLINIC .................................... 23 <br> PHARMACY ........................................................... 24 <br> OTHER PRIVATE MEDICAL <br> (SPECIFY) <br> OTHER PLACE <br> AT HOME $\qquad$ <br> OTHER $\qquad$ |  |
| 808 | Did the person who gave you that injection take the syringe and needle from a new, unopened package? | YES $\qquad$ <br> NO <br> DON'T KNOW |  |
| 809 | On how many days this week, did you walk, run, or engage in other vigorous physical activity for at lease 20 minutes? <br> IF NONE RECORD '00'. | NUMBER OF DAYS $\square$ $\square$ <br> DON'T KNOW / UNSURE |  |
| 810 | Do you currently smoke cigarettes? | YES <br> NO $\qquad$ | $\rightarrow 812$ |
| 811 | In the last 24 hours, how many cigarettes did you smoke? |  |  |
| 812 | Do you currently smoke or use any other type of tobacco? | YES <br> NO $\qquad$ | $\longrightarrow 901$ |
| 813 | What (other) type of tobacco do you currently smoke or use? <br> RECORD ALL MENTIONED | HOOKA <br> BIDI <br> CIGAR <br> PIPE <br> CHEWING TOBACCO <br> SNUFF <br> OTHER $\qquad$ |  |

SECTION 9. BLOOD PRESSURE, DIABETES, HEART ATTACK AND STROKE


## INTERVIEWER'S OBSERVATIONS

TO BE FILLED IN AFTER COMPLETING INTERVIEW

COMIMENTS ABOUT RESPONDENT:
0
$\qquad$
$\qquad$
$\qquad$ COMIMENTS ON SPECIFIC QUESTIONS:
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$

ANY OTHER COIVIMIENTS:

SUPERVISOR'S OBSERVATIONS

NAME OF SUPERVISOR:
DATE:
EDITOR'S OBSERVATIONS
$\qquad$
$\qquad$
$\qquad$
$\qquad$



## *RESULT CODES:

1 COMPLETED
2 NOT AT HOME
3 POSTPONED
4 REFUSED
5 PARTLY COMPLETED
6 INCAPACITATED
7 OTHER $\qquad$
(specify)


## SECTION 1 : RESPONDENT'S BACKGROUND

## Introduction and Consent

## INFORMED CONSENT

Hello. My name is $\qquad$ and I am working with the Ministry of Health. We are conducting a national survey that asks women, men and youth about various health issues. We would very much appreciate your participation in this survey. This information will help the government to plan health services. The survey usually takes between 15 and 20 minutes to complete. Whatever information you provide will be kept strictly confidential and will not be shared with anyone other than the members of our survey team.

Participation in this survey is voluntary, and if we should come to 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. However, we hope that you will participate in this survey since your views are important.

At this time, do you want to ask me anything about the survey?

May I begin the interview now?

Signature of interviewer: $\qquad$ Date: $\qquad$



| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES |  | SKIP ${ }^{4}$ |
| :---: | :---: | :---: | :---: | :---: |
| 105 | What is the highest level of school you attended? | NON-FORMAL EDUCATION <br> PRESCHOOL <br> PRIMARY <br> ‘O' LEVEL <br> 'A' LEVEL <br> DIPLOMA <br> FIRST DEGREE <br> MASTER'S CERTIFICATE/ABOVE <br> CERTIFICATE | > 00 01 02 03 04 05 06 07 08 |  |
| 106 | What is the highest (grade/form/year) you completed at that level? | GRADE/FORM/YEAR ....................... $\square$ |  |  |
| 107 | Are you currently attending school? | YES NO | $\begin{aligned} & 1 \\ & 2 \end{aligned}$ | $\rightarrow 109$ |
| 108 | What is the main reason you are not currently attending school? | GRADUATED AND DID NOT NEED ADDITIONAL SCHOOLING <br> DID NOT PASS EXAMS <br> DID NOT LIKE SCHOOL/DID NOT WANT TO CONTINUE <br> CARING FOR SIBLINGS/OTHER FAMILY <br> MEMBERS <br> HELP WITH FAMILY BUSINESS <br> NEEDED TO EARN MONEY <br> SCHOOL NOT ACCESSIBLE/TOO FAR <br> COULD NOT PAY SCHOOL FEES <br> OTHER $\qquad$ | 01 <br> 02 <br> 03 <br> 04 <br> 05 <br> 06 <br> 07 <br> 08 <br> 96 |  |
| 109 | Have you done any work in the last seven days? | YES <br> NO | $\begin{aligned} & 1 \\ & 2 \end{aligned}$ | $\rightarrow 111$ |
| 110 | Although you did not work in the last seven days, do you have any job or business from which you were absent for leave, illness, vacation, or any other such reason? | YES NO | $\begin{aligned} & 1 \\ & 2 \end{aligned}$ | $\longrightarrow 111 \mathrm{~A}$ |
| $\begin{gathered} 111 \\ 111 \mathrm{~A} \end{gathered}$ | During the past seven days, about how many hours did you work? <br> How many hours do you usually work during a week? | HOURS WORKED $\qquad$ $\square$ $\square$ <br> 95 HOURS OR MORE $\qquad$ | 95 | $\square 113$ |
| 112 | Have you done any work in the last 12 months? | YES No | $\begin{aligned} & 1 \\ & 2 \end{aligned}$ | $\rightarrow 120$ |
| 113 | What is your occupation, that is, what kind of work do you mainly do? |  |  |  |
| 114 | Do you do this work for government, for a private company, for someone else, for a member of your family, or are you self-employed? | FOR GOVERNMENT FOR PRIVATE COMPANY <br> FOR SOMEONE ELSE <br> FOR FAMILY MEMBER <br> SELF-EMPLOYED | $\begin{aligned} & 1 \\ & 2 \\ & 3 \\ & 4 \\ & 5 \end{aligned}$ |  |


| $\begin{gathered} \text { NO. } \\ \hline \text {. } \end{gathered}$ | QUESTIONS AND FILTERS | CODING CATEGORIES |  | SKIP |
| :---: | :---: | :---: | :---: | :---: |
| 115 | Do you usually work throughout the year, or do you work seasonally, or only once in a while? | THROUGHOUT THE YEAR SEASONALLY/PART OF THE YEAR ONCE IN A WHILE | 1 2 3 |  |
| 117 | Are you paid in cash or kind for this work or are you not paid at all? | CASH ONLY <br> CASH AND KIND <br> IN KIND ONLY <br> NOT PAID | 1 2 3 4 | $\rightarrow 120$ |
| 118 | Do you use the money you earn to help with household expenses or do you keep all of it? | HELP WITH HOUSEHOLD EXPENSES KEEP ALL | 1 2 | $\rightarrow 120$ |
| 119 | About how much of the money that you earn do you give for household expenses, less than half, about half, more than half, nearly all or all? | LESS THAN HALF <br> ABOUT HALF <br> MORE THAN HALF <br> NEARLY ALL/ALL | 1 2 3 4 |  |
| 120 | During this past week did you help with household chores such as house cleaning, washing, shopping, caring for children, or fetching water? | YES NO | $\begin{aligned} & 1 \\ & 2 \end{aligned}$ | $\rightarrow 122$ |
| 121 | During the past seven days, about how many hours did you spend helping with household chores? | HOURS WORKED <br> 95 HOURS OR MORE | 95 |  |
| 122 | Do you read a newspaper or magazine almost every day, at least once a week, less than once a week or not at all? | ALMOST EVERY DAY <br> AT LEAST ONCE A WEEK <br> LESS THAN ONCE A WEEK <br> NOT AT ALL <br> CANNOT READ | $\begin{aligned} & 1 \\ & 2 \\ & 3 \\ & 4 \\ & 5 \end{aligned}$ | $\rightarrow 124$ |
| 123 | Do you use the internet almost every day, at least once a week, less than once a week or not at all? | ALMOST EVERY DAY <br> AT LEAST ONCE A WEEK <br> LESS THAN ONCE A WEEK <br> NOT AT ALL | 1 2 3 4 |  |
| 124 | Do you listen to the radio almost every day, at least once a week, less than once a week or not at all? | ALMOST EVERY DAY <br> AT LEAST ONCE A WEEK <br> LESS THAN ONCE A WEEK <br> NOT AT ALL | 1 2 3 4 |  |
| 125 | Do you watch television almost every day, at least once a week, less than once a week or not at all? | ALMOST EVERY DAY <br> AT LEAST ONCE A WEEK <br> LESS THAN ONCE A WEEK. <br> NOT AT ALL | 1 2 3 4 |  |

## SECTION 2. KNOWLEDGE OF REPRODUCTIVE HEALTH ISSUES



| QUESTIONS AND FILTERS | CODING CATEGORIES |
| :--- | :--- | :--- | :--- |
| 212 | Do you know about family planning, that is, the various ways or methods that a couple can use to delay or avoid a pregnancy. <br> Which ways or methods have you heard about? |
|  | FOR METHODS NOT MENTIONED SPONTANEOUSLY, ASK: |
|  | Have you ever heard of (METHOD)? |
|  | CIRCLE CODE 1 FOR EACH METHOD MENTIONED SPONTANEOUSLY. THEN PROCEED DOWN COLUMN, |
| READING THE NAME AND DESCRIPTION OF EACH METHOD NOT MENTIONED SPONTANEOUSLY. CIRCLE CODE 1 IF |  |
| METHOD IS RECOGNIZED, AND CODE 2 IF NOT RECOGNIZED. |  |


| 01 | FEMALE STERILIZATION Women can have an operation to avoid having any more children. | $\begin{aligned} & \text { YES } \\ & \text { NO } \end{aligned}$ |  | $\begin{aligned} & 1 \\ & 2 \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: |
| 02 | MALE STERILIZATION Men can have an operation to avoid having any more children. | $\begin{aligned} & \text { YES } \\ & \text { NO } \end{aligned}$ |  | $\begin{aligned} & 1 \\ & 2 \end{aligned}$ |
| 03 | PILL Women can take a pill every day to avoid becoming pregnant. | $\begin{aligned} & \text { YES } \\ & \text { NO } \end{aligned}$ |  | $\begin{aligned} & 1 \\ & 2 \end{aligned}$ |
| 04 | IUD Women can have a loop or coil placed inside them by a doctor or a nurse. | $\begin{aligned} & \text { YES } \\ & \text { NO } \end{aligned}$ | $\cdots$ | $\begin{aligned} & 1 \\ & 2 \end{aligned}$ |
| 05 | INJECTABLES Women can have an injection by a health provider that stops them from becoming pregnant for one or more months. | $\begin{aligned} & \text { YES } \\ & \text { NO } \end{aligned}$ | $\cdots$ |  |
| 06 | IMPLANTS Women can have several small rods placed in their upper arm by a doctor or nurse which can prevent pregnancy for one or more years. | $\begin{aligned} & \text { YES } \\ & \text { NO } \end{aligned}$ | $\cdots$ | $\begin{aligned} & 1 \\ & 2 \end{aligned}$ |
| 07 | CONDOM Men can put a rubber sheath on their penis before sexual intercourse. | $\begin{aligned} & \text { YES } \\ & \text { NO } \end{aligned}$ |  | $\begin{aligned} & 1 \\ & 2 \end{aligned}$ |
| 08 | RHYTHM METHOD Every month that a woman is sexually active she can avoid pregnancy by not having sexual intercourse on the days of the month she is most likely to get pregnant. | $\begin{aligned} & \text { YES } \\ & \text { NO } \end{aligned}$ |  | $\begin{aligned} & 1 \\ & 2 \end{aligned}$ |
| 09 | WITHDRAWAL Men can be careful and pull out before climax. | $\begin{aligned} & \text { YES } \\ & \text { NO } \end{aligned}$ |  | $\begin{aligned} & 1 \\ & 2 \end{aligned}$ |
| 10 | EMERGENCY CONTRACEPTION As an emergency measure after sexual intercourse, women can take special pills at any time within 5 days to prevent pregnancy. | $\begin{aligned} & \text { YES } \\ & \text { NO } \end{aligned}$ |  | $\begin{aligned} & 1 \\ & 2 \end{aligned}$ |
| 11 | Have you heard of any other ways or methods that women or men can use to avoid pregnancy? | YES <br> NO |  | 1 $2$ |
| 213 | Would you say that using contraception should mainly be the woman's decision, mainly the man's decision, or they should both decide together? | $\square$ | $\begin{aligned} & 1 \\ & 2 \\ & 3 \\ & 6 \end{aligned}$ |  |
| 214 | CHECK 212: <br> KNOWS ONE OR MORE FAMILY <br> PLANNING METHODS | KNOW LANN |  | $\rightarrow 301$ |


| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP ${ }^{4}$ |
| :---: | :---: | :---: | :---: |
| 215 | Please tell me if you agree or disagree with the following statement. <br> Contraceptive services should be available to unmarried couples. |  |  |
| 216 | If a couple wants to plan their family what contraceptive do you think is best for a couple to use? |  |  |
| 217 | Do you think you will use a contraceptive method to delay or avoid pregnancy at any time after you are married if your (wife/husband) agrees? |  | $\begin{aligned} & \longrightarrow 301 \\ & \longrightarrow 301 \end{aligned}$ |
| 218 | What is the main reason that you think you will not use a contraceptive method at any time in the future? |  |  |

SECTION 3. ATTITUDES ABOUT MARRIAGE AND CHILDBEARING

| $\begin{gathered} \text { NO. } \end{gathered}$ | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP ${ }^{4}$ |
| :---: | :---: | :---: | :---: |
| 301 | Now I am going to ask some questions about marriage and childbearing. <br> In your opinion, what is the best age for a girl to marry? | IDEAL AGE FOR A GIRL TO MARRY $\square$ <br> DON'T KNOW $\qquad$ |  |
| 302 | In your opinion, what is the best age for a boy to marry? | IDEAL AGE FOR A BOY TO MARRY DON'T KNOW |  |
| 303 | Who is going to choose the person you will marry, your parents, yourself, or will you decide together with your parents? |  |  |
| 304 | If you could choose exactly the number of children to have in your whole life, how many would that be? <br> PROBE FOR A NUMERIC RESPONSE. |  | $\begin{array}{r} \longrightarrow 306 \\ \longrightarrow 306 \end{array}$ |
| 305 | How many of these children would you like to be boys, how many would you like to be girls and for how many would the sex not matter? | NUMBER OTHER (SPECIFY) |  |
| 306 | Who do you think should mainly decide how many children a couple should have, the husband, the wife, or both together? |  |  |
| 307 | Please tell me if you agree or disagree with the following: <br> Before they marry, a couple should date and spend some time alone together so they get to know each other well. <br> After a couple marries, they should delay having their first child for at least one year. |  |  |
| 308 | How long do you think a woman should wait after one birth before she has another birth? | MONTHS <br> 1 $\square$ <br> YEARS <br> 2 $\square$ <br> DON'T KNOW <br> 98 |  |

## SECTION 4. SEXUAL ACTIVITY




## SECTION 5. HIVIAIDS

| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES |  |  | SKIP ${ }^{\text {¢ }}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 501 | Now I would like to talk about something else. Have you ever heard of an illness called AIDS? | $\begin{aligned} & \text { YES } \\ & \text { NO } \end{aligned}$ |  | $\begin{aligned} & 1 \\ & 2 \end{aligned}$ | $\rightarrow 517$ |
| 502 | Can people reduce their chances of getting the AIDS virus by having just one uninfected sex partner who has no other sex partners? | YES <br> NO <br> DON'T KNOW |  | 1 2 8 |  |
| 503 | Can people get the AIDS virus from mosquito bites? | YES <br> NO <br> DON'T KNOW |  | 1 2 8 |  |
| 504 | Can people reduce their chance of getting the AIDS virus by using a condom every time they have sex? | YES <br> NO <br> DON'T KNOW |  | 1 2 8 |  |
| 505 | Can people get the AIDS virus by sharing food with a person who has AIDS? | YES <br> NO <br> DON'T KNOW |  | 1 2 8 |  |
| 506 | Can people reduce their chance of getting the AIDS virus by not having sexual intercourse at all? | YES <br> NO <br> DON'T KNOW |  | 1 2 8 |  |
| 507 | Can people get the AIDS virus because of witchcraft or other supernatural means? | YES $\qquad$ <br> NO $\qquad$ <br> DON'T KNOW |  | 1 2 8 |  |
| 508 | Is it possible for a healthy-looking person to have the AIDS virus? | YES <br> NO <br> DON'T KNOW |  | 1 2 8 |  |
| 509 | Can the virus that causes AIDS be transmitted from a mother to her baby: <br> During pregnancy? <br> During delivery? <br> By breastfeeding? | DURING PREGNANCY DURING DELIVERY BREASTFEEDING | YES NO <br> 1 2 <br> 1 2 <br> 1 2 | $\begin{gathered} \text { DK } \\ 8 \\ 8 \\ 8 \end{gathered}$ |  |
| 510 | Do you know of a place where people can go to get tested for the AIDS virus? | YES <br> NO |  | 1 2 | $\longrightarrow 512$ |


| NO. $9$ | QUESTIONS AND FILTERS | CODING CATEGORIES |  | SKIP |
| :---: | :---: | :---: | :---: | :---: |
| 511 | Where is that? <br> Any other place? <br> PROBE TO IDENTIFY EACH TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE(S). <br> IF UNABLE TO DETERMINE IF HOSPITAL, HEALTH CENTER OR CLINIC IS PUBLIC OR PRIVATE MEDICAL, WRITE THE NAME OF THE PLACE. | PUBLIC SECTOR <br> INDHIRA GANDHI MEMORIAL HOSPITAL <br> GOVT. REGIONAL HOSPITAL <br> GOVT. ATOLL HOSPITAL $\qquad$ <br> GOVT. HEALTH CENTER $\qquad$ <br> GOVT. HEALTH POST $\qquad$ <br> GOVT. VCT SITE $\qquad$ <br> OTHER PUBLIC $\qquad$ <br> (SPECIFY) <br> PRIVATE MEDICAL SECTOR <br> PRIVATE HOSPITAL/CLINIC/ <br> PRIVATE DOCTOR $\qquad$ <br> PHARMACY $\qquad$ <br> OTHER PRIVATE MEDICAL $\qquad$ <br> (SPECIFY) <br> OTHER $\qquad$ | A <br> B <br> C <br> D <br> E <br> F <br> G |  |
| 512 | Would you buy fresh vegetables from a shopkeeper or vendor if you knew that this person had the AIDS virus? | YES $\qquad$ <br> NO $\qquad$ <br> DON'T KNOW $\qquad$ | $\begin{aligned} & 1 \\ & 2 \\ & 8 \end{aligned}$ |  |
| 513 | 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 <br> NO <br> DK/UNSURE/DEPENDS | $\begin{aligned} & 1 \\ & 2 \\ & 8 \end{aligned}$ |  |
| 514 | 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 $\square$ <br> NO $\qquad$ <br> DK/UNSURE/DEPENDS | $\begin{aligned} & 1 \\ & 2 \\ & 8 \end{aligned}$ |  |
| 515 | 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 <br> SHOULD NOT BE ALLOWED <br> DK/UNSURE/DEPENDS | $\begin{aligned} & 1 \\ & 2 \\ & 8 \end{aligned}$ |  |
| 516 | In your opinion, if a male teacher has the AIDS virus but is not sick, should he be allowed to continue teaching in the school? | SHOULD BE ALLOWED <br> SHOULD NOT BE ALLOWED <br> DK/UNSURE/DEPENDS | $\begin{aligned} & 1 \\ & 2 \\ & 8 \end{aligned}$ |  |
| 517 | CHECK 501: | YESNO | 1 |  |
|  | HEARD ABOUT AIDS <br> Apart from AIDS, have you heard about other infections that can be transmitted through sexual contact? <br> NOT HEARD ABOUT AIDS $\square$ <br> Have you heard about infections that can be transmitted through sexual contact? |  | 2 |  |

\begin{tabular}{|c|c|c|c|c|}
\hline \[
\begin{gathered}
\text { NO. } \\
\text { an }
\end{gathered}
\] \& QUESTIONS AND FILTERS \& CODING CATEGORIES \& \& SKIP \({ }^{4}\) \\
\hline 518 \& \begin{tabular}{l}
What other sexually transmitted diseases have you heard about? \\
RECORD ALL MENTIONED.
\end{tabular} \& \begin{tabular}{l}
SYPHILIS \\
GONORRHEA \(\qquad\) \\
HEPATITIS B \(\qquad\) \\
HERPES SIMPLEX (HSV-2) \\
OTHER \(\qquad\) \\
(SPECIFY) \\
DON'T KNOW/REMEMBER THE NAME \\
DON'T KNOW \(\qquad\)
\end{tabular} \& A
B
C
D
X

Y
Z \& <br>

\hline 519 \& | If a man has a sexually transmitted disease, what symptoms might he have? |
| :--- |
| RECORD ALL MENTIONED. | \& | ABDOMINAL PAIN |
| :--- |
| GENITAL DISCHARGE/DRIPPING |
| FOUL SMELLING DISCHARGE $\qquad$ |
| BURNING ON URINATION |
| REDNESS/INFLAMMATION IN THE GENITAL AREA |
| SWELLING IN THE GENITAL AREA $\qquad$ |
| GENITAL SORES/ULCERS $\qquad$ |
| GENITAL WARTS $\qquad$ |
| GENITAL ITCHING |
| BLOOD IN URINE |
| LOSS OF WEIGHT |
| OTHER |
| NO SYMPTOM $\qquad$ |
| DON'T KNOW | \& A

B
C
D
E
F
G
H
I
J
K
X

Y
Z \& <br>

\hline 520 \& | If a woman has a sexually transmitted disease, what symptoms might she have? |
| :--- |
| RECORD ALL MENTIONED. | \& | ABDOMINAL PAIN |
| :--- |
| GENITAL DISCHARGE/DRIPPING |
| FOUL SMELLING DISCHARGE |
| BURNING ON URINATION |
| REDNESS/INFLAMMATION IN THE GENITAL AREA |
| SWELLING IN THE GENITAL AREA |
| GENITAL SORES/ULCERS |
| GENITAL WARTS |
| GENITAL ITCHING $\qquad$ |
| BLOOD IN URINE $\qquad$ |
| LOSS OF WEIGHT |
| OTHER $\qquad$ |
| NO SYMPTOM |
| DON'T KNOW $\qquad$ | \& A

B
C
D
E
F
G
H
I
J
K
X

Y
Z \& <br>

\hline 521 \& Do you know where a person can go to get treatment if they think they have a sexually transmitted disease? \& | YES |
| :--- |
| NO | \& \& $\longrightarrow 601$ <br>

\hline
\end{tabular}

| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP 6 |
| :---: | :---: | :---: | :---: |
| 522 | Where can they go? <br> Any other place? <br> PROBE TO IDENTIFY EACH TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE(S). <br> IF UNABLE TO DETERMINE IF HOSPITAL, HEALTH CENTER OR CLINIC IS PUBLIC OR PRIVATE MEDICAL, WRITE THE NAME OF THE PLACE. <br> (NAME OF PLACE) | PUBLIC SECTOR <br> INDHIRA GANDHI MEMORIAL HOSPITAL A <br> GOVT. REGIONAL HOSPITAL $\qquad$ B <br> GOVT. ATOLL HOSPITAL $\qquad$ C <br> GOVT. HEALTH CENTER $\qquad$ D <br> GOVT. HEALTH POST $\qquad$ E <br> COMMUNITY/FAMILY HEALTH WORKER F <br> OTHER PUBLIC <br> PRIVATE MEDICAL SECTOR <br> PRIVATE HOSPITAL/CLINIC $\qquad$ <br> PHARMACY $\qquad$ I <br> PRIVATE DOCTOR $\qquad$ <br> OTHER PRIVATE MEDICAL <br> (SPECIFY) <br> OTHER SOURCE |  |

## SECTION 6. SMOKING, DRINKING AND DRUGS





## INTERVIEWER'S OBSERVATIONS

TO BE FILLED IN AFTER COMPLETING INTERVIEW

COMIMENTS ABOUT RESPONDENT:
0
$\qquad$
$\qquad$
$\qquad$ COMIMENTS ON SPECIFIC QUESTIONS:
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$

ANY OTHER COIVIMIENTS:

SUPERVISOR'S OBSERVATIONS

NAIVE OF SUPERVISOR:
DATE:
EDITOR'S OBSERVATIONS

Sampling errors for the 2009 MDHS are calculated for selected variables considered to be of primary interest. The results are presented in the national report for the country as a whole, for urban and rural areas, for the three geographical regions, and for each of the 6 geographical/administrative regions. This report presents sampling errors for selected variables for each of the atolls. For each variable, the type of statistic (mean, proportion, or rate) and the base population are given in Table F,0.

The estimates from a sample survey are affected by two types of errors: non-sampling errors and sampling errors. Non-sampling errors are the results of mistakes made in implementing data collection and data processing, such as failure to locate and interview the correct household, misunderstanding of the questions on the part of either the interviewer or the respondent, and data entry errors. Although numerous efforts were made during the implementation of the Maldives Demographic and Health Survey 2009 ( 2009 MDHS) to minimize this type of error, non-sampling 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 2009 MDHS is only one of many samples that could have been selected from the same population, using the same design and expected size. Each of these samples would yield results that differ somewhat from the results of the actual sample selected. Sampling errors are a measure of the variability between all possible samples. Although the degree of variability is not known exactly, it can be estimated from the survey results.

A sampling error is usually measured in terms of the standard error for a particular statistic (mean, percentage, etc.), which is the square root of the variance. The standard error can be used to calculate confidence intervals within which the true value for the population can reasonably be assumed to fall. For example, for any given statistic calculated from a sample survey, the value of that statistic will fall within a range of plus or minus two times the standard error of that statistic in 95 percent of all possible samples of identical size and design.

If the sample of respondents had been selected as a simple random sample, it would have been possible to use straightforward formulas for calculating sampling errors. However, the 2009 MDHS sample is the result of a multi-stage stratified design, and, consequently, it was necessary to use more complex formulae. The computer software used to calculate sampling errors for the 2009 MDHS is a Macro SAS procedure. This procedure used the Taylor linearization method of variance estimation for survey estimates that are means or proportions. The Jackknife repeated replication method is used for variance estimation of more complex statistics such as fertility and mortality rates.

The Taylor linearization method treats any percentage or average as a ratio estimate, $r=y / x$, where $y$ represents the total sample value for variable $y$, and $x$ represents the total number of cases in the group or subgroup under consideration. The variance of $r$ is computed using the formula given below, with the standard error being the square root of the variance:

$$
S E^{2}(r)=\operatorname{var}(r)=\frac{1-f}{x^{2}} \sum_{h=1}^{H}\left[\frac{m_{h}}{m_{h}-1}\left(\sum_{i=1}^{m_{h}} z_{h i}^{2}-\frac{z_{h}^{2}}{m_{h}}\right)\right]
$$

in which

$$
z_{h i}=y_{h i}-r x_{h i}, \text { and } z_{h}=y_{h}-r x_{h}
$$

where $h$
$m_{h}$
$y_{h i} \quad$ is the sum of the weighted values of variable $y$ in the $i^{\text {th }}$ cluster in the $h^{\text {th }}$ stratum,
$x_{h i} \quad$ is the sum of the weighted number of cases in the $i^{\text {th }}$ cluster in the $h^{\text {th }}$ stratum, and
$f \quad$ is the overall sampling fraction, which is so small that it is ignored.
The Jackknife repeated replication method derives estimates of complex rates from each of several replications of the parent sample, and calculates standard errors for these estimates using simple formulae. Each replication considers all but one clusters in the calculation of the estimates. Pseudo-independent replications are thus created. In the 2009 MDHS, there were 270 non-empty clusters. Hence, 270 replications were created. The variance of a rate $r$ is calculated as follows:

$$
S E^{2}(r)=\operatorname{var}(r)=\frac{1}{k(k-1)} \sum_{i=1}^{k}\left(r_{i}-r\right)^{2}
$$

in which

$$
r_{i}=k r-(k-1) r_{(i)}
$$

where $r$ is the estimate computed from the full sample of 270 clusters,
$r_{(i)} \quad$ is the estimate computed from the reduced sample of 269 clusters ( $i^{\text {th }}$ cluster excluded), and
$k \quad$ is the total number of clusters.
In addition to the standard error, the design effect (DEFT) for each estimate is calculated, 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. The relative standard error and confidence limits for the estimates are also calculated.

Tables F. 1 through F. 21 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 ( $\mathrm{SE} / \mathrm{R}$ ), and the 95 percent confidence limits ( $\mathrm{R} \pm 2 \mathrm{SE}$ ), for each variable. The DEFT is considered undefined when the standard error considering simple random sample is zero (when the estimate is close to 0 or 1 ).

The confidence interval (e.g., as calculated for Fully immunized, Haa Dhaal atoll, can be interpreted as follows: the overall percent from the Haa Dhaal sample is 89.5 and its standard error is 0.037. Therefore, to obtain the 95 percent confidence limits, one adds and subtracts twice the standard error to the sample estimate, i.e., $89.5 \pm 2 \times 0.037$. There is a high probability ( 95 percent) that the true proportion of children fully immunized in Haa Dhaal is between 82.1 percent and 96.9 percent.

For the total sample, the value of the DEFT, averaged over all variables, is 1.276 . This means that, due to multi-stage clustering of the sample, the average standard error is increased by a factor of 1.276 over that in an equivalent simple random sample.

Table F. 0 List of selected variables for sampling errors, atoll-level data, Maldives DHS 2009

| Variable | Estimate | Base population |
| :--- | :--- | :--- |
| No education | Proportion | Ever-married women 15-49 |
| Secondary education or higher | Proportion | Ever-married women 15-49 |
| Currently married | Proportion | All women 15-49 |
| Married before age 20 | Proportion | All women 20-49 |
| Currently pregnant | Proportion | All women 15-49 |
| Children ever born | Mean | All women 15-49 |
| Children surviving | Mean | All women 15-49 |
| Knows any contraceptive method | Proportion | Currently married women 15-49 |
| Knows a modern method | Proportion | Currently married women 15-49 |
| Ever used any contraceptive method women 15-49 |  |  |
| Currently using any method | Proportion | Currently married women 15-49 |
| Currently using a modern method | Proportion | Currently married women 15-49 |
| Mothers protected against tetanus for last birth | Proportion | Women with a live birth in past five years |
| Fully immunized | Proportion | Children 12-23 months |
| Has heard about HIV/AIDS | Proportion | Ever-married women 15-49 |
| Knows about condoms to prevent HIV/AIDS | Proportion | Ever-married women 15-49 |
| Knows about limiting partners to prevent HIV/AIDS | Proportion | Ever-married women 15-49 |
| Comprehensive knowledge on HIV transmission | Proportion | Ever-married women 15-49 |

Table F. 1 Sampling errors for Male sample, Maldives DHS 2009

| Variable | Value (R) | Standard error (SE) | Number of cases |  | Design effect (DEFT) | Relative error (SE/R) | Confidence limits |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Unweighted (N) | Weight-ed (WN) |  |  |  |  |
|  |  |  |  |  |  |  | R-2SE | $\mathrm{R}+2 \mathrm{SE}$ |
| No education | 0.122 | 0.009 | 1041 | 2368 | 0.928 | 0.077 | 0.103 | 0.141 |
| Secondary education or higher | 0.581 | 0.017 | 1041 | 2368 | 1.123 | 0.030 | 0.547 | 0.616 |
| Currently married | 0.551 | 0.078 | 1717 | 3851 | 0.925 | 0.142 | 0.394 | 0.708 |
| Married before age 20 | 0.394 | 0.016 | 1313 | 2961 | 1.140 | 0.041 | 0.362 | 0.426 |
| Currently pregnant | 0.036 | 0.007 | 1717 | 3851 | 0.947 | 0.187 | 0.022 | 0.049 |
| Children ever born | 1.335 | 0.192 | 1717 | 3851 | 0.915 | 0.144 | 0.950 | 1.720 |
| Children surviving | 1.283 | 0.185 | 1717 | 3851 | 0.913 | 0.144 | 0.914 | 1.653 |
| Knows any contraceptive method | 0.994 | 0.003 | 935 | 2122 | 1.089 | 0.003 | 0.989 | 1.000 |
| Knows a modern method | 0.993 | 0.003 | 935 | 2122 | 1.055 | 0.003 | 0.988 | 0.999 |
| Ever used any contraceptive method | 0.567 | 0.022 | 935 | 2122 | 1.357 | 0.039 | 0.523 | 0.611 |
| Currently using any method | 0.336 | 0.017 | 935 | 2122 | 1.088 | 0.050 | 0.303 | 0.370 |
| Currently using a modern method | 0.256 | 0.015 | 935 | 2122 | 1.039 | 0.058 | 0.227 | 0.286 |
| Mothers protected against tetanus for last birth | 0.844 | 0.019 | 423 | 964 | 1.053 | 0.022 | 0.807 | 0.881 |
| Fully immunized | 0.914 | 0.029 | 108 | 243 | 0.983 | 0.032 | 0.856 | 0.973 |
| Heard about HIV/AIDS | 0.975 | 0.005 | 1041 | 2368 | 1.053 | 0.005 | 0.965 | 0.985 |
| Knows about condoms to prevent HIV/AIDS | 0.824 | 0.012 | 1041 | 2368 | 1.052 | 0.015 | 0.800 | 0.849 |
| Knows about limiting partners | 0.929 | 0.010 | 1041 | 2368 | 1.287 | 0.011 | 0.909 | 0.950 |
| Comprehensive knowledge on HIV transmission | 0.508 | 0.020 | 1041 | 2368 | 1.264 | 0.039 | 0.469 | 0.547 |


| Variable | Value <br> (R) | Standard error (SE) | Number of cases |  | Design effect (DEFT) | Relative error (SE/R) | Confidence limits |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Un- | Weight- |  |  |  |  |
|  |  |  | $(\mathrm{N})$ | (WN) |  |  | R-2SE | $\mathrm{R}+2 \mathrm{SE}$ |
| No education | 0.122 | 0.009 | 1041 | 2368 | 0.928 | 0.077 | 0.103 | 0.141 |
| Secondary education or higher | 0.581 | 0.017 | 1041 | 2368 | 1.123 | 0.030 | 0.547 | 0.616 |
| Currently married | 0.551 | 0.078 | 1717 | 3851 | 0.925 | 0.142 | 0.394 | 0.708 |
| Married before age 20 | 0.394 | 0.016 | 1313 | 2961 | 1.140 | 0.041 | 0.362 | 0.426 |
| Currently pregnant | 0.036 | 0.007 | 1717 | 3851 | 0.947 | 0.187 | 0.022 | 0.049 |
| Children ever born | 1.335 | 0.192 | 1717 | 3851 | 0.915 | 0.144 | 0.950 | 1.720 |
| Children surviving | 1.283 | 0.185 | 1717 | 3851 | 0.913 | 0.144 | 0.914 | 1.653 |
| Knows any contraceptive method | 0.994 | 0.003 | 935 | 2122 | 1.089 | 0.003 | 0.989 | 1.000 |
| Knows a modern method | 0.993 | 0.003 | 935 | 2122 | 1.055 | 0.003 | 0.988 | 0.999 |
| Ever used any contraceptive method | 0.567 | 0.022 | 935 | 2122 | 1.357 | 0.039 | 0.523 | 0.611 |
| Currently using any method | 0.336 | 0.017 | 935 | 2122 | 1.088 | 0.050 | 0.303 | 0.370 |
| Currently using a modern method | 0.256 | 0.015 | 935 | 2122 | 1.039 | 0.058 | 0.227 | 0.286 |
| Mothers protected against tetanus for last birth | 0.844 | 0.019 | 423 | 964 | 1.053 | 0.022 | 0.807 | 0.881 |
| Fully immunized | 0.914 | 0.029 | 108 | 243 | 0.983 | 0.032 | 0.856 | 0.973 |
| Heard about HIV/AIDS | 0.975 | 0.005 | 1041 | 2368 | 1.053 | 0.005 | 0.965 | 0.985 |
| Knows about condoms to prevent HIV/AIDS | 0.824 | 0.012 | 1041 | 2368 | 1.052 | 0.015 | 0.800 | 0.849 |
| Knows about limiting partners | 0.929 | 0.010 | 1041 | 2368 | 1.287 | 0.011 | 0.909 | 0.950 |
| Comprehensive knowledge on HIV transmission | 0.508 | 0.020 | 1041 | 2368 | 1.264 | 0.039 | 0.469 | 0.547 |

Table F. 3 Sampling errors for Haa Dhaal sample, Maldives DHS 2009

| Variable | Value <br> (R) | Standard error (SE) | Number of cases |  | Design effect (DEFT) | Relative error (SE/R) | Confidence limits |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Unweighted (N) | Weighted (WN) |  |  |  |  |
|  |  |  |  |  |  |  | R-2SE | $\mathrm{R}+2 \mathrm{SE}$ |
| No education | 0.320 | 0.035 | 315 | 440 | 1.316 | 0.108 | 0.250 | 0.389 |
| Secondary education or higher | 0.297 | 0.048 | 315 | 440 | 1.842 | 0.160 | 0.202 | 0.393 |
| Currently married | 0.593 | 0.110 | 503 | 699 | 1.020 | 0.186 | 0.372 | 0.813 |
| Married before age 20 | 0.534 | 0.036 | 364 | 508 | 1.369 | 0.067 | 0.462 | 0.606 |
| Currently pregnant | 0.052 | 0.016 | 503 | 699 | 1.172 | 0.308 | 0.020 | 0.084 |
| Children ever born | 1.809 | 0.332 | 503 | 699 | 0.946 | 0.184 | 1.145 | 2.473 |
| Children surviving | 1.719 | 0.319 | 503 | 699 | 0.959 | 0.186 | 1.080 | 2.358 |
| Knows any contraceptive method | 0.990 | 0.005 | 296 | 414 | 0.964 | 0.006 | 0.980 | 1.001 |
| Knows a modern method | 0.990 | 0.005 | 296 | 414 | 0.964 | 0.006 | 0.980 | 1.001 |
| Ever used any contraceptive method | 0.648 | 0.049 | 296 | 414 | 1.758 | 0.076 | 0.549 | 0.746 |
| Currently using any method | 0.413 | 0.050 | 296 | 414 | 1.723 | 0.120 | 0.314 | 0.513 |
| Currently using a modern method | 0.285 | 0.049 | 296 | 414 | 1.847 | 0.171 | 0.188 | 0.383 |
| Mothers protected against tetanus for last birth | 0.879 | 0.033 | 150 | 210 | 1.234 | 0.037 | 0.813 | 0.945 |
| Fully immunized ${ }^{\text {Heard about HIV/AIDS }}$ | 0.879 0.959 | 0.037 0.019 | 47 315 | 66 440 | 0.829 1.670 | 0.041 0.019 | 0.821 0.922 | 0.969 0.997 |
| Knows about condoms to prevent HIV/AIDS | 0.784 | 0.033 | 315 | 440 | 1.413 | 0.042 | 0.718 | 0.850 |
| Knows about limiting partners | 0.907 | 0.022 | 315 | 440 | 1.350 | 0.024 | 0.863 | 0.951 |
| Comprehensive knowledge on HIV transmission | 0.371 | 0.038 | 315 | 440 | 1.406 | 0.104 | 0.294 | 0.447 |

Table F. 4 Sampling errors for Shaviyani sample, Maldives DHS 2009

| Variable | Value (R) | Standard error (SE) | Number of cases |  | Designeffect(DEFT) | Relative error (SE/R) | Confidence limits |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Unweighted (N) | Weighted (WN) |  |  |  |  |
|  |  |  |  |  |  |  | R-2SE | $\mathrm{R}+2 \mathrm{SE}$ |
| No education | 0.269 | 0.025 | 338 | 300 | 1.027 | 0.092 | 0.219 | 0.318 |
| Secondary education or higher | 0.324 | 0.032 | 338 | 300 | 1.264 | 0.100 | 0.260 | 0.389 |
| Currently married | 0.668 | 0.077 | 490 | 437 | 0.992 | 0.115 | 0.515 | 0.821 |
| Married before age 20 | 0.477 | 0.050 | 387 | 347 | 1.067 | 0.104 | 0.378 | 0.576 |
| Currently pregnant | 0.066 | 0.015 | 490 | 437 | 1.161 | 0.226 | 0.036 | 0.096 |
| Children ever born | 1.851 | 0.271 | 490 | 437 | 1.105 | 0.146 | 1.309 | 2.393 |
| Children surviving | 1.714 | 0.245 | 490 | 437 | 1.083 | 0.143 | 1.224 | 2.204 |
| Knows any contraceptive method | 0.994 | 0.006 | 329 | 292 | 1.374 | 0.006 | 0.983 | 1.006 |
| Knows a modern method | 0.994 | 0.006 | 329 | 292 | 1.374 | 0.006 | 0.983 | 1.006 |
| Ever used any contraceptive method | 0.649 | 0.035 | 329 | 292 | 1.323 | 0.054 | 0.579 | 0.719 |
| Currently using any method | 0.332 | 0.026 | 329 | 292 | 1.003 | 0.079 | 0.280 | 0.384 |
| Currently using a modern method | 0.286 | 0.037 | 329 | 292 | 1.462 | 0.128 | 0.213 | 0.360 |
| Mothers protected against tetanus for last birth | 0.720 | 0.044 | 166 | 147 | 1.246 | 0.061 | 0.633 | 0.808 |
| Fully immunized | 0.958 | 0.026 | 49 | 44 | 0.899 | 0.027 | 0.907 | 1.009 |
| Heard about HIV/AIDS | 0.959 | 0.014 | 338 | 300 | 1.298 | 0.015 | 0.930 | 0.987 |
| Knows about condoms to prevent HIV/AIDS | 0.740 | 0.020 | 338 | 300 | 0.855 | 0.028 | 0.699 | 0.781 |
| Knows about limiting partners | 0.913 | 0.017 | 338 | 300 | 1.090 | 0.018 | 0.880 | 0.947 |
| Comprehensive knowledge on HIV transmission | 0.352 | 0.021 | 338 | 300 | 0.813 | 0.060 | 0.310 | 0.395 |

Table F. 5 Sampling errors for Noonu sample, Maldives DHS 2009

| Variable | Value (R) | Standard error (SE) | Number of cases |  | Design effect (DEFT) | Relative error (SE/R) | Confidence limits |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Unweighted (N) | Weighted (WN) |  |  |  |  |
|  |  |  |  |  |  |  | R-2SE | $\mathrm{R}+2 \mathrm{SE}$ |
| No education | 0.312 | 0.023 | 325 | 286 | 0.895 | 0.074 | 0.266 | 0.358 |
| Secondary education or higher | 0.319 | 0.036 | 325 | 286 | 1.405 | 0.114 | 0.246 | 0.392 |
| Currently married | 0.714 | 0.044 | 423 | 375 | 0.822 | 0.061 | 0.627 | 0.801 |
| Married before age 20 | 0.590 | 0.035 | 347 | 305 | 1.366 | 0.059 | 0.521 | 0.660 |
| Currently pregnant | 0.042 | 0.008 | 423 | 375 | 0.778 | 0.188 | 0.026 | 0.058 |
| Children ever born | 2.083 | 0.122 | 423 | 375 | 0.610 | 0.059 | 1.840 | 2.327 |
| Children surviving | 1.971 | 0.104 | 423 | 375 | 0.552 | 0.053 | 1.763 | 2.179 |
| Knows any contraceptive method | 0.997 | 0.003 | 304 | 268 | 1.022 | 0.003 | 0.990 | 1.003 |
| Knows a modern method | 0.997 | 0.003 | 304 | 268 | 1.022 | 0.003 | 0.990 | 1.003 |
| Ever used any contraceptive method | 0.676 | 0.044 | 304 | 268 | 1.647 | 0.066 | 0.587 | 0.765 |
| Currently using any method | 0.434 | 0.034 | 304 | 268 | 1.185 | 0.078 | 0.367 | 0.502 |
| Currently using a modern method | 0.333 | 0.027 | 304 | 268 | 0.999 | 0.081 | 0.279 | 0.388 |
| Mothers protected against tetanus for last birth | 0.849 | 0.035 | 151 | 133 | 1.203 | 0.041 | 0.779 | 0.919 |
| Fully immunized | 1.000 | 0.000 | 35 | 31 | na | 0.000 | 1.000 | 1.000 |
| Heard about HIV/AIDS | 0.991 | 0.005 | 325 | 286 | 0.908 | 0.005 | 0.981 | 1.000 |
| Knows about condoms to prevent HIV/AIDS | 0.672 | 0.043 | 325 | 286 | 1.635 | 0.064 | 0.587 | 0.758 |
| Knows about limiting partners | 0.966 | 0.010 | 325 | 286 | 0.992 | 0.010 | 0.946 | 0.986 |
| Comprehensive knowledge on HIV transmission | 0.317 | 0.036 | 325 | 286 | 1.385 | 0.113 | 0.245 | 0.389 |

na $=$ Not applicable

Table F. 6 Sampling errors for Raa sample, Maldives DHS 2009

| Variable | Value (R) | Standard error (SE) | Number of cases |  | Design effect (DEFT) | Relative error (SE/R) | Confidence limits |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Unweighted (N) | Weight(WN (WN) |  |  |  |  |
|  |  |  |  |  |  |  | R-2SE | $\mathrm{R}+2 \mathrm{SE}$ |
| No education | 0.376 | 0.031 | 341 | 334 | 1.187 | 0.083 | 0.314 | 0.439 |
| Secondary education or higher | 0.285 | 0.026 | 341 | 334 | 1.049 | 0.090 | 0.234 | 0.337 |
| Currently married | 0.611 | 0.090 | 509 | 511 | 1.031 | 0.148 | 0.431 | 0.792 |
| Married before age 20 | 0.525 | 0.025 | 392 | 384 | 0.965 | 0.047 | 0.475 | 0.574 |
| Currently pregnant | 0.071 | 0.013 | 509 | 511 | 0.850 | 0.180 | 0.045 | 0.096 |
| Children ever born | 2.148 | 0.302 | 509 | 511 | 0.917 | 0.141 | 1.544 | 2.753 |
| Children surviving | 1.991 | 0.274 | 509 | 511 | 0.897 | 0.138 | 1.444 | 2.539 |
| Knows any contraceptive method | 0.997 | 0.004 | 319 | 313 | 1.068 | 0.004 | 0.989 | 1.004 |
| Knows a modern method | 0.997 | 0.004 | 319 | 313 | 1.068 | 0.004 | 0.989 | 1.004 |
| Ever used any contraceptive method | 0.648 | 0.038 | 319 | 313 | 1.433 | 0.059 | 0.571 | 0.725 |
| Currently using any method | 0.378 | 0.033 | 319 | 313 | 1.231 | 0.089 | 0.311 | 0.445 |
| Currently using a modern method | 0.242 | 0.033 | 319 | 313 | 1.384 | 0.137 | 0.176 | 0.309 |
| Mothers protected against tetanus for last birth | 0.834 | 0.029 | 156 | 153 | 0.970 | 0.035 | 0.777 | 0.892 |
| Fully immunized | 0.936 | 0.040 | 31 | 30 | 0.909 | 0.043 | 0.855 | 1.016 |
| Heard about HIV/AIDS | 0.980 | 0.007 | 341 | 334 | 0.893 | 0.007 | 0.966 | 0.993 |
| Knows about condoms to prevent HIV/AIDS | 0.727 | 0.031 | 341 | 334 | 1.283 | 0.043 | 0.665 | 0.789 |
| Knows about limiting partners | 0.945 | 0.014 | 341 | 334 | 1.155 | 0.015 | 0.916 | 0.973 |
| Comprehensive knowledge on HIV transmission | 0.308 | 0.034 | 341 | 334 | 1.355 | 0.110 | 0.240 | 0.376 |

Table F. 7 Sampling errors for Baa sample, Maldives DHS 2009

| Variable | Value (R) | Standard error (SE) | Number of cases |  | Design effect (DEFT) | Relative error (SE/R) | Confidence limits |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Unweighted (N) | Weighted (WN) |  |  |  |  |
|  |  |  |  |  |  |  | R-2SE | R+2SE |
| No education | 0.360 | 0.038 | 321 | 233 | 1.397 | 0.104 | 0.285 | 0.435 |
| Secondary education or higher | 0.286 | 0.038 | 321 | 233 | 1.507 | 0.133 | 0.210 | 0.362 |
| Currently married | 0.615 | 0.132 | 493 | 352 | 0.912 | 0.215 | 0.350 | 0.879 |
| Married before age 20 | 0.351 | 0.088 | 493 | 352 | 1.043 | 0.250 | 0.176 | 0.526 |
| Currently pregnant | 0.063 | 0.020 | 493 | 352 | 1.191 | 0.317 | 0.023 | 0.103 |
| Children ever born | 1.939 | 0.467 | 493 | 352 | 0.988 | 0.241 | 1.004 | 2.874 |
| Children surviving | 1.856 | 0.454 | 493 | 352 | 1.002 | 0.244 | 0.949 | 2.763 |
| Knows any contraceptive method | 0.993 | 0.005 | 298 | 216 | 0.993 | 0.005 | 0.983 | 1.003 |
| Knows a modern method | 0.993 | 0.005 | 298 | 216 | 0.993 | 0.005 | 0.983 | 1.003 |
| Ever used any contraceptive method | 0.621 | 0.044 | 298 | 216 | 1.545 | 0.070 | 0.534 | 0.708 |
| Currently using any method | 0.299 | 0.032 | 298 | 216 | 1.222 | 0.109 | 0.234 | 0.364 |
| Currently using a modern method | 0.252 | 0.028 | 298 | 216 | 1.105 | 0.110 | 0.197 | 0.308 |
| Mothers protected against tetanus for last birth | 0.652 | 0.046 | 146 | 107 | 1.166 | 0.071 | 0.560 | 0.744 |
| Fully immunized | 0.966 | 0.034 | 32 | 23 | 1.056 | 0.035 | 0.899 | 1.034 |
| Heard about HIV/AIDS | 0.963 | 0.011 | 321 | 233 | 1.022 | 0.011 | 0.941 | 0.984 |
| Knows about condoms to prevent HIV/AIDS | 0.740 | 0.028 | 321 | 233 | 1.141 | 0.038 | 0.684 | 0.796 |
| Knows about limiting partners | 0.912 | 0.012 | 321 | 233 | 0.734 | 0.013 | 0.889 | 0.935 |
| Comprehensive knowledge on HIV transmission | 0.393 | 0.026 | 321 | 233 | 0.942 | 0.065 | 0.341 | 0.444 |


| Variable | Value (R) | Standard error (SE) | Number of cases |  | Design effect (DEFT) | Relative error (SE/R) | Confidence limits |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Un- |  |  |  |  |  |
|  |  |  | (N) | (WN) |  |  | R-2SE | $\mathrm{R}+2 \mathrm{SE}$ |
| No education | 0.358 | 0.033 | 272 | 184 | 1.141 | 0.093 | 0.291 | 0.424 |
| Secondary education or higher | 0.289 | 0.023 | 272 | 184 | 0.824 | 0.079 | 0.243 | 0.334 |
| Currently married | 0.685 | 0.096 | 362 | 249 | 1.344 | 0.140 | 0.494 | 0.877 |
| Married before age 20 | 0.542 | 0.053 | 318 | 216 | 1.192 | 0.097 | 0.437 | 0.648 |
| Currently pregnant | 0.069 | 0.020 | 362 | 249 | 1.329 | 0.290 | 0.029 | 0.108 |
| Children ever born | 2.189 | 0.348 | 362 | 249 | 1.321 | 0.159 | 1.494 | 2.884 |
| Children surviving | 2.074 | 0.325 | 362 | 249 | 1.309 | 0.156 | 1.425 | 2.723 |
| Knows any contraceptive method | 0.992 | 0.008 | 252 | 171 | 1.361 | 0.008 | 0.977 | 1.007 |
| Knows a modern method | 0.992 | 0.008 | 252 | 171 | 1.361 | 0.008 | 0.977 | 1.007 |
| Ever used any contraceptive method | 0.669 | 0.015 | 252 | 171 | 0.521 | 0.023 | 0.638 | 0.700 |
| Currently using any method | 0.368 | 0.028 | 252 | 171 | 0.906 | 0.075 | 0.312 | 0.423 |
| Currently using a modern method | 0.314 | 0.032 | 252 | 171 | 1.077 | 0.100 | 0.251 | 0.377 |
| Mothers protected against tetanus for last birth | 0.844 | 0.023 | 105 | 73 | 0.656 | 0.027 | 0.799 | 0.890 |
| Fully immunized | 0.905 | 0.046 | 31 | 21 | 0.868 | 0.050 | 0.814 | 0.996 |
| Heard about HIV/AIDS | 0.975 | 0.011 | 272 | 184 | 1.134 | 0.011 | 0.954 | 0.997 |
| Knows about condoms to prevent HIV/AIDS | 0.821 | 0.026 | 272 | 184 | 1.101 | 0.031 | 0.769 | 0.872 |
| Knows about limiting partners | 0.923 | 0.019 | 272 | 184 | 1.162 | 0.020 | 0.886 | 0.961 |
| Comprehensive knowledge on HIV transmission | 0.404 | 0.056 | 272 | 184 | 1.880 | 0.139 | 0.292 | 0.517 |

Table F. 9 Sampling errors for Kaafu sample, Maldives DHS 2009

| Variable | Value (R) | Standard error (SE) | Number of cases |  | Design effect (DEFT) | Relative error (SE/R) | Confidence limits |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Un- | Weight- |  |  |  |  |
|  |  |  | (N) | (WN) |  |  | R-2SE | R+2SE |
| No education | 0.234 | 0.021 | 359 | 255 | 0.930 | 0.089 | 0.192 | 0.275 |
| Secondary education or higher | 0.279 | 0.042 | 359 | 255 | 1.759 | 0.150 | 0.196 | 0.363 |
| Currently married | 0.643 | 0.065 | 499 | 359 | 0.905 | 0.101 | 0.513 | 0.774 |
| Married before age 20 | 0.677 | 0.027 | 374 | 266 | 1.161 | 0.040 | 0.623 | 0.731 |
| Currently pregnant | 0.061 | 0.017 | 499 | 359 | 1.316 | 0.273 | 0.028 | 0.094 |
| Children ever born | 2.125 | 0.199 | 499 | 359 | 0.744 | 0.094 | 1.726 | 2.524 |
| Children surviving | 1.981 | 0.176 | 499 | 359 | 0.706 | 0.089 | 1.630 | 2.333 |
| Knows any contraceptive method | 0.997 | 0.003 | 325 | 231 | 1.038 | 0.003 | 0.990 | 1.003 |
| Knows a modern method | 0.997 | 0.003 | 325 | 231 | 1.038 | 0.003 | 0.990 | 1.003 |
| Ever used any contraceptive method | 0.687 | 0.038 | 325 | 231 | 1.481 | 0.056 | 0.610 | 0.763 |
| Currently using any method | 0.426 | 0.025 | 325 | 231 | 0.912 | 0.059 | 0.376 | 0.476 |
| Currently using a modern method | 0.336 | 0.027 | 325 | 231 | 1.039 | 0.081 | 0.282 | 0.391 |
| Mothers protected against tetanus for last birth | 0.773 | 0.068 | 164 | 114 | 2.044 | 0.088 | 0.637 | 0.909 |
| Fully immunized | 0.948 | 0.035 | 42 | 30 | 1.014 | 0.037 | 0.878 | 1.017 |
| Heard about HIV/AIDS | 0.979 | 0.006 | 359 | 255 | 0.797 | 0.006 | 0.967 | 0.991 |
| Knows about condoms to prevent HIV/AIDS | 0.787 | 0.024 | 359 | 255 | 1.089 | 0.030 | 0.740 | 0.834 |
| Knows about limiting partners | 0.935 | 0.017 | 359 | 255 | 1.307 | 0.018 | 0.901 | 0.969 |
| Comprehensive knowledge on HIV transmission | 0.351 | 0.020 | 359 | 255 | 0.790 | 0.057 | 0.311 | 0.390 |

Table F. 10 Sampling errors for Alif Alif sample, Maldives DHS 2009

| Variable | Value (R) | Standard error (SE) | Number of cases |  | Design effect (DEFT) | Relative error (SE/R) | Confidence limits |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Unweighted (N) | Weight-ed (WN) |  |  |  |  |
|  |  |  |  |  |  |  | R-2SE | $\mathrm{R}+2 \mathrm{SE}$ |
| No education | 0.290 | 0.025 | 311 | 139 | 0.958 | 0.085 | 0.241 | 0.339 |
| Secondary education or higher | 0.284 | 0.048 | 311 | 139 | 1.858 | 0.168 | 0.189 | 0.380 |
| Currently married | 0.675 | 0.116 | 424 | 186 | 0.926 | 0.171 | 0.444 | 0.906 |
| Married before age 20 | 0.684 | 0.039 | 323 | 145 | 1.522 | 0.056 | 0.607 | 0.761 |
| Currently pregnant | 0.069 | 0.015 | 424 | 186 | 0.838 | 0.216 | 0.039 | 0.099 |
| Children ever born | 2.235 | 0.398 | 424 | 186 | 0.915 | 0.178 | 1.440 | 3.031 |
| Children surviving | 2.029 | 0.368 | 424 | 186 | 0.935 | 0.181 | 1.293 | 2.765 |
| Knows any contraceptive method | 0.989 | 0.006 | 280 | 125 | 0.964 | 0.006 | 0.977 | 1.001 |
| Knows a modern method | 0.989 | 0.006 | 280 | 125 | 0.964 | 0.006 | 0.977 | 1.001 |
| Ever used any contraceptive method | 0.643 | 0.054 | 280 | 125 | 1.860 | 0.083 | 0.536 | 0.751 |
| Currently using any method | 0.371 | 0.036 | 280 | 125 | 1.230 | 0.096 | 0.300 | 0.442 |
| Currently using a modern method | 0.289 | 0.034 | 280 | 125 | 1.234 | 0.116 | 0.222 | 0.356 |
| Mothers protected against tetanus for last birth | 0.860 | 0.039 | 154 | 70 | 1.386 | 0.045 | 0.782 | 0.938 |
| Fully immunized | 0.909 | 0.035 | 44 | 20 | 0.808 | 0.039 | 0.839 | 0.979 |
| Heard about HIV/AIDS | 0.961 | 0.011 | 311 | 139 | 1.003 | 0.012 | 0.938 | 0.983 |
| Knows about condoms to prevent HIV/AIDS | 0.793 | 0.030 | 311 | 139 | 1.293 | 0.038 | 0.733 | 0.852 |
| Knows about limiting partners | 0.889 | 0.016 | 311 | 139 | 0.896 | 0.018 | 0.857 | 0.921 |
| Comprehensive knowledge on HIV transmission | 0.433 | 0.034 | 311 | 139 | 1.209 | 0.079 | 0.365 | 0.501 |

Table F. 11 Sampling errors for Alif Dhaal sample, Maldives DHS 2009

| Variable | Value (R) | Standard error (SE) | Number of cases |  | Design effect (DEFT) | Relative error (SE/R) | Confidence limits |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Unweighted (N) | WeightWN (WN) |  |  |  |  |
|  |  |  |  |  |  |  | R-2SE | $\mathrm{R}+2 \mathrm{SE}$ |
| No education | 0.325 | 0.027 | 384 | 197 | 1.127 | 0.083 | 0.271 | 0.379 |
| Secondary education or higher | 0.324 | 0.046 | 384 | 197 | 1.906 | 0.141 | 0.233 | 0.416 |
| Currently married | 0.719 | 0.068 | 502 | 255 | 0.941 | 0.095 | 0.583 | 0.855 |
| Married before age 20 | 0.613 | 0.020 | 414 | 212 | 0.881 | 0.033 | 0.573 | 0.654 |
| Currently pregnant | 0.069 | 0.010 | 502 | 255 | 0.827 | 0.142 | 0.049 | 0.088 |
| Children ever born | 2.245 | 0.175 | 502 | 255 | 0.692 | 0.078 | 1.896 | 2.595 |
| Children surviving | 2.117 | 0.166 | 502 | 255 | 0.701 | 0.079 | 1.784 | 2.450 |
| Knows any contraceptive method | 1.000 | 0.000 | 358 | 183 | na | 0.000 | 1.000 | 1.000 |
| Knows a modern method | 1.000 | 0.000 | 358 | 183 | na | 0.000 | 1.000 | 1.000 |
| Ever used any contraceptive method | 0.797 | 0.028 | 358 | 183 | 1.300 | 0.035 | 0.741 | 0.852 |
| Currently using any method | 0.448 | 0.028 | 358 | 183 | 1.066 | 0.063 | 0.392 | 0.504 |
| Currently using a modern method | 0.353 | 0.027 | 358 | 183 | 1.052 | 0.075 | 0.299 | 0.406 |
| Mothers protected against tetanus for last birth | 0.697 | 0.026 | 192 | 98 | 0.783 | 0.037 | 0.645 | 0.749 |
| Fully immunized | 0.780 | 0.082 | 57 | 30 | 1.505 | 0.106 | 0.615 | 0.944 |
| Knows about condoms to prevent HIV/AIDS | 0.989 0.885 | 0.007 0.022 | 384 384 | 197 | 1.360 | 0.007 0.025 | 0.974 0.842 | 1.003 0.929 |
| Knows about limiting partners | 0.889 | 0.032 | 384 | 197 | 1.966 | 0.036 | 0.826 | 0.953 |
| Comprehensive knowledge on HIV transmission | 0.508 | 0.038 | 384 | 197 | 1.470 | 0.074 | 0.433 | 0.583 |

na $=$ Not applicable

| Variable | Value (R) | Standard error (SE) | Number of cases |  | Design effect (DEFT) | Relative error (SE/R) | Confidence limits |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Un- | Weight- |  |  |  |  |
|  |  |  | (N) | (WN) |  |  | R-2SE | $\mathrm{R}+2 \mathrm{SE}$ |
| No education | 0.331 | 0.038 | 236 | 25 | 1.240 | 0.115 | 0.255 | 0.407 |
| Secondary education or higher | 0.388 | 0.022 | 236 | 25 | 0.704 | 0.058 | 0.343 | 0.433 |
| Currently married | 0.733 | 0.078 | 307 | 32 | 0.901 | 0.106 | 0.577 | 0.888 |
| Married before age 20 | 0.567 | 0.038 | 249 | 26 | 1.221 | 0.067 | 0.491 | 0.643 |
| Currently pregnant | 0.032 | 0.009 | 307 | 32 | 0.883 | 0.293 | 0.013 | 0.051 |
| Children ever born | 2.095 | 0.270 | 307 | 32 | 0.947 | 0.129 | 1.554 | 2.636 |
| Children surviving | 1.958 | 0.252 | 307 | 32 | 0.950 | 0.129 | 1.454 | 2.462 |
| Knows any contraceptive method | 1.000 | 0.000 | 223 | 23 | na | 0.000 | 1.000 | 1.000 |
| Knows a modern method | 1.000 | 0.000 | 223 | 23 | na | 0.000 | 1.000 | 1.000 |
| Ever used any contraceptive method | 0.596 | 0.049 | 223 | 23 | 1.498 | 0.083 | 0.497 | 0.695 |
| Currently using any method | 0.394 | 0.034 | 223 | 23 | 1.045 | 0.087 | 0.326 | 0.463 |
| Currently using a modern method | 0.333 | 0.029 | 223 | 23 | 0.902 | 0.086 | 0.276 | 0.390 |
| Mothers protected against tetanus for last birth | 0.875 | 0.031 | 102 | 11 | 0.952 | 0.036 | 0.812 | 0.937 |
| Fully immunized | 0.957 | 0.036 | 27 | 3 | 0.923 | 0.038 | 0.885 | 1.029 |
| Heard about HIV/AIDS | 0.956 | 0.017 | 236 | 25 | 1.263 | 0.018 | 0.922 | 0.990 |
| Knows about condoms to prevent HIV/AIDS | 0.762 | 0.047 | 236 | 25 | 1.668 | 0.061 | 0.669 | 0.855 |
| Knows about limiting partners | 0.927 | 0.020 | 236 | 25 | 1.182 | 0.022 | 0.886 | 0.967 |
| Comprehensive knowledge on HIV transmission | 0.395 | 0.034 | 236 | 25 | 1.057 | 0.085 | 0.327 | 0.462 |

na $=$ Not applicable

| Variable | Value (R) | Standard error (SE) | Number of cases |  | Design effect (DEFT) | Relative error (SE/R) | Confidence limits |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Un- | Weight- |  |  |  |  |
|  |  |  | $(\mathrm{N})$ | (WN) |  |  | R-2SE | R+2SE |
| No education | 0.286 | 0.038 | 316 | 128 | 1.504 | 0.134 | 0.209 | 0.362 |
| Secondary education or higher | 0.332 | 0.031 | 316 | 128 | 1.156 | 0.092 | 0.271 | 0.393 |
| Currently married | 0.735 | 0.057 | 423 | 170 | 0.921 | 0.077 | 0.622 | 0.849 |
| Married before age 20 | 0.444 | 0.046 | 347 | 141 | 1.705 | 0.103 | 0.353 | 0.535 |
| Currently pregnant | 0.054 | 0.014 | 423 | 170 | 1.186 | 0.257 | 0.026 | 0.081 |
| Children ever born | 1.929 | 0.186 | 423 | 170 | 0.939 | 0.097 | 1.557 | 2.302 |
| Children surviving | 1.820 | 0.171 | 423 | 170 | 0.916 | 0.094 | 1.478 | 2.162 |
| Knows any contraceptive method | 1.000 | 0.000 | 309 | 125 | na | 0.000 | 1.000 | 1.000 |
| Knows a modern method | 1.000 | 0.000 | 309 | 125 | na | 0.000 | 1.000 | 1.000 |
| Ever used any contraceptive method | 0.747 | 0.041 | 309 | 125 | 1.664 | 0.055 | 0.664 | 0.830 |
| Currently using any method | 0.473 | 0.041 | 309 | 125 | 1.440 | 0.087 | 0.391 | 0.555 |
| Currently using a modern method | 0.315 | 0.038 | 309 | 125 | 1.425 | 0.120 | 0.239 | 0.391 |
| Mothers protected against tetanus for last birth | 0.949 | 0.022 | 145 | 58 | 1.200 | 0.023 | 0.905 | 0.993 |
| Fully immunized | 0.970 | 0.026 | 35 | 14 | 0.912 | 0.027 | 0.918 | 1.023 |
| Heard about HIV/AIDS | 0.990 | 0.005 | 316 | 128 | 0.898 | 0.005 | 0.980 | 1.000 |
| Knows about condoms to prevent HIV/AIDS | 0.808 | 0.031 | 316 | 128 | 1.414 | 0.039 | 0.745 | 0.870 |
| Knows about limiting partners | 0.955 | 0.007 | 316 | 128 | 0.573 | 0.007 | 0.942 | 0.969 |
| Comprehensive knowledge on HIV transmission | 0.453 | 0.033 | 316 | 128 | 1.193 | 0.074 | 0.386 | 0.520 |

na $=$ Not applicable

Table F. 14 Sampling errors for Faafu sample, Maldives DHS 2009

| Variable | Value <br> (R) | Standard error (SE) | Number of cases |  | Design effect (DEFT) | Relative error (SE/R) | Confidence limits |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Weight- |  |  |  |  |
|  |  |  | (N) | (WN) |  |  | R-2SE | R+2SE |
| No education | 0.287 | 0.034 | 337 | 100 | 1.376 | 0.118 | 0.219 | 0.355 |
| Secondary education or higher | 0.345 | 0.022 | 337 | 100 | 0.847 | 0.064 | 0.301 | 0.389 |
| Currently married | 0.644 | 0.076 | 493 | 145 | 1.126 | 0.118 | 0.492 | 0.796 |
| Married before age 20 | 0.574 | 0.044 | 400 | 118 | 0.931 | 0.077 | 0.485 | 0.662 |
| Currently pregnant | 0.062 | 0.012 | 493 | 145 | 1.034 | 0.199 | 0.037 | 0.086 |
| Children ever born | 2.344 | 0.297 | 493 | 145 | 1.044 | 0.127 | 1.751 | 2.937 |
| Children surviving | 2.114 | 0.257 | 493 | 145 | 1.012 | 0.122 | 1.599 | 2.629 |
| Knows any contraceptive method | 0.994 | 0.004 | 314 | 93 | 0.943 | 0.004 | 0.986 | 1.002 |
| Knows a modern method | 0.994 | 0.004 | 314 | 93 | 0.943 | 0.004 | 0.986 | 1.002 |
| Ever used any contraceptive method | 0.660 | 0.031 | 314 | 93 | 1.152 | 0.047 | 0.598 | 0.721 |
| Currently using any method | 0.427 | 0.032 | 314 | 93 | 1.156 | 0.076 | 0.363 | 0.492 |
| Currently using a modern method | 0.240 | 0.029 | 314 | 93 | 1.198 | 0.121 | 0.182 | 0.298 |
| Mothers protected against tetanus for last birth | 0.941 | 0.025 | 171 | 51 | 1.408 | 0.027 | 0.890 | 0.992 |
| Fully immunized | 0.945 | 0.043 | 37 | 11 | 1.137 | 0.045 | 0.860 | 1.030 |
| Heard about HIV/AIDS | 0.978 | 0.011 | 337 | 100 | 1.376 | 0.011 | 0.956 | 1.000 |
| Knows about condoms to prevent HIV/AIDS | 0.762 | 0.022 | 337 | 100 | 0.935 | 0.029 | 0.719 | 0.805 |
| Knows about limiting partners | 0.931 | 0.016 | 337 | 100 | 1.176 | 0.017 | 0.899 | 0.964 |
| Comprehensive knowledge on HIV transmission | 0.402 | 0.037 | 337 | 100 | 1.370 | 0.091 | 0.329 | 0.476 |


| Variable | Value (R) | Standard error (SE) | Number of cases |  | Design effect (DEFT) | Relative error (SE/R) | Confidence limits |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Un- | Weight- |  |  |  |  |
|  |  |  | (N) | (WN) |  |  | R-2SE | $\mathrm{R}+2 \mathrm{SE}$ |
| No education | 0.338 | 0.033 | 291 | 118 | 1.187 | 0.098 | 0.272 | 0.404 |
| Secondary education or higher | 0.305 | 0.029 | 291 | 118 | 1.060 | 0.094 | 0.247 | 0.362 |
| Currently married | 0.690 | 0.104 | 383 | 157 | 1.044 | 0.151 | 0.482 | 0.899 |
| Married before age 20 | 0.599 | 0.029 | 323 | 131 | 1.073 | 0.049 | 0.541 | 0.658 |
| Currently pregnant | 0.063 | 0.014 | 383 | 157 | 0.918 | 0.223 | 0.035 | 0.091 |
| Children ever born | 2.201 | 0.337 | 383 | 157 | 0.975 | 0.153 | 1.528 | 2.875 |
| Children surviving | 2.028 | 0.310 | 383 | 157 | 0.975 | 0.153 | 1.408 | 2.648 |
| Knows any contraceptive method | 1.000 | 0.000 | 267 | 108 | na | 0.000 | 1.000 | 1.000 |
| Knows a modern method | 1.000 | 0.000 | 267 | 108 | na | 0.000 | 1.000 | 1.000 |
| Ever used any contraceptive method | 0.628 | 0.049 | 267 | 108 | 1.647 | 0.078 | 0.530 | 0.726 |
| Currently using any method | 0.328 | 0.034 | 267 | 108 | 1.188 | 0.104 | 0.260 | 0.396 |
| Currently using a modern method | 0.294 | 0.031 | 267 | 108 | 1.116 | 0.106 | 0.232 | 0.356 |
| Mothers protected against tetanus for last birth | 0.865 | 0.026 | 131 | 53 | 0.855 | 0.030 | 0.813 | 0.916 |
| Fully immunized | 0.981 | 0.020 | 36 | 14 | 0.861 | 0.020 | 0.941 | 1.020 |
| Heard about HIV/AIDS | 0.987 | 0.006 | 291 | 118 | 0.888 | 0.006 | 0.975 | 0.999 |
| Knows about condoms to prevent HIV/AIDS | 0.797 | 0.018 | 291 | 118 | 0.765 | 0.023 | 0.761 | 0.833 |
| Knows about limiting partners | 0.921 | 0.014 | 291 | 118 | 0.901 | 0.016 | 0.892 | 0.949 |
| Comprehensive knowledge on HIV transmission | 0.482 | 0.017 | 291 | 118 | 0.571 | 0.035 | 0.448 | 0.515 |


| Variable | Value (R) | Standard error (SE) | Number of cases |  | Design effect (DEFT) | Relative error (SE/R) | Confidence limits |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Weight- |  |  |  |  |
|  |  |  | (N) | (WN) |  |  | R-2SE | R+2SE |
| No education | 0.338 | 0.022 | 293 | 211 | 0.810 | 0.066 | 0.293 | 0.382 |
| Secondary education or higher | 0.297 | 0.041 | 293 | 211 | 1.547 | 0.140 | 0.214 | 0.380 |
| Currently married | 0.731 | 0.057 | 374 | 270 | 0.923 | 0.078 | 0.617 | 0.846 |
| Married before age 20 | 0.585 | 0.031 | 318 | 229 | 1.121 | 0.052 | 0.523 | 0.646 |
| Currently pregnant | 0.059 | 0.009 | 374 | 270 | 0.768 | 0.162 | 0.040 | 0.077 |
| Children ever born | 2.272 | 0.220 | 374 | 270 | 0.952 | 0.097 | 1.832 | 2.713 |
| Children surviving | 2.117 | 0.194 | 374 | 270 | 0.907 | 0.092 | 1.729 | 2.506 |
| Knows any contraceptive method | 1.000 | 0.000 | 273 | 197 | na | 0.000 | 1.000 | 1.000 |
| Knows a modern method | 1.000 | 0.000 | 273 | 197 | na | 0.000 | 1.000 | 1.000 |
| Ever used any contraceptive method | 0.484 | 0.059 | 273 | 197 | 1.931 | 0.122 | 0.366 | 0.601 |
| Currently using any method | 0.232 | 0.035 | 273 | 197 | 1.368 | 0.151 | 0.162 | 0.302 |
| Currently using a modern method | 0.204 | 0.033 | 273 | 197 | 1.342 | 0.161 | 0.138 | 0.269 |
| Mothers protected against tetanus for last birth | 0.687 | 0.040 | 137 | 98 | 1.005 | 0.058 | 0.607 | 0.766 |
| Fully immunized | 0.967 | 0.034 | 32 | 23 | 1.058 | 0.035 | 0.900 | 1.034 |
| Heard about HIV/AIDS | 0.993 | 0.004 | 293 | 211 | 0.949 | 0.004 | 0.985 | 1.002 |
| Knows about condoms to prevent HIV/AIDS | 0.818 | 0.033 | 293 | 211 | 1.441 | 0.040 | 0.753 | 0.883 |
| Knows about limiting partners | 0.823 | 0.050 | 293 | 211 | 2.215 | 0.061 | 0.723 | 0.922 |
| Comprehensive knowledge on HIV transmission | 0.399 | 0.022 | 293 | 211 | 0.763 | 0.055 | 0.355 | 0.442 |


| Variable | Value <br> (R) | Standard error (SE) | Number of cases |  | Design effect (DEFT) | Relative error (SE/R) | Confidence limits |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Un- | Weight- |  |  |  |  |
|  |  |  | (N) | (WN) |  |  | R-2SE | $\mathrm{R}+2 \mathrm{SE}$ |
| No education | 0.294 | 0.021 | 306 | 296 | 0.799 | 0.071 | 0.252 | 0.336 |
| Secondary education or higher | 0.318 | 0.044 | 306 | 296 | 1.661 | 0.140 | 0.229 | 0.407 |
| Currently married | 0.691 | 0.068 | 393 | 383 | 0.978 | 0.099 | 0.555 | 0.828 |
| Married before age 20 | 0.613 | 0.036 | 327 | 317 | 1.349 | 0.058 | 0.541 | 0.684 |
| Currently pregnant | 0.041 | 0.011 | 393 | 383 | 1.041 | 0.273 | 0.019 | 0.064 |
| Children ever born | 2.291 | 0.273 | 393 | 383 | 1.026 | 0.119 | 1.745 | 2.836 |
| Children surviving | 2.129 | 0.254 | 393 | 383 | 1.028 | 0.119 | 1.622 | 2.636 |
| Knows any contraceptive method | 0.981 | 0.007 | 274 | 265 | 0.829 | 0.007 | 0.967 | 0.994 |
| Knows a modern method | 0.977 | 0.007 | 274 | 265 | 0.766 | 0.007 | 0.964 | 0.991 |
| Ever used any contraceptive method | 0.521 | 0.042 | 274 | 265 | 1.400 | 0.081 | 0.436 | 0.606 |
| Currently using any method | 0.263 | 0.019 | 274 | 265 | 0.728 | 0.074 | 0.224 | 0.302 |
| Currently using a modern method | 0.239 | 0.019 | 274 | 265 | 0.748 | 0.081 | 0.200 | 0.278 |
| Mothers protected against tetanus for last birth | 0.729 | 0.031 | 136 | 129 | 0.803 | 0.042 | 0.667 | 0.791 |
| Fully immunized | 0.929 | 0.036 | 44 | 42 | 0.911 | 0.038 | 0.858 | 1.000 |
| Heard about HIV/AIDS | 0.934 | 0.017 | 306 | 296 | 1.201 | 0.018 | 0.900 | 0.968 |
| Knows about condoms to prevent HIV/AIDS | 0.780 | 0.029 | 306 | 296 | 1.216 | 0.037 | 0.722 | 0.837 |
| Knows about limiting partners Comprehensive knowledge on HIV transmission | 0.886 0.398 | 0.022 0.039 | 306 | 296 | 1.217 1.393 | 0.025 0.098 | 0.841 0.320 | 0.930 0.476 |


| Variable | Value (R) | Standard error (SE) | Number of cases |  | Design effect (DEFT) | Relative error (SE/R) | Confidence limits |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Un- | Weight- |  |  |  |  |
|  |  |  | (N) | (WN) |  |  | R-2SE | $\mathrm{R}+2 \mathrm{SE}$ |
| No education | 0.232 | 0.026 | 284 | 198 | 1.039 | 0.113 | 0.179 | 0.284 |
| Secondary education or higher | 0.418 | 0.046 | 284 | 198 | 1.561 | 0.110 | 0.326 | 0.510 |
| Currently married | 0.667 | 0.057 | 380 | 265 | 0.896 | 0.086 | 0.553 | 0.782 |
| Married before age 20 | 0.546 | 0.041 | 310 | 217 | 1.438 | 0.074 | 0.465 | 0.627 |
| Currently pregnant | 0.070 | 0.015 | 380 | 265 | 1.115 | 0.210 | 0.041 | 0.100 |
| Children ever born | 2.534 | 0.283 | 380 | 265 | 0.987 | 0.112 | 1.968 | 3.100 |
| Children surviving | 2.280 | 0.260 | 380 | 265 | 1.024 | 0.114 | 1.759 | 2.801 |
| Knows any contraceptive method | 0.992 | 0.006 | 254 | 177 | 0.986 | 0.006 | 0.981 | 1.003 |
| Knows a modern method | 0.992 | 0.006 | 254 | 177 | 0.986 | 0.006 | 0.981 | 1.003 |
| Ever used any contraceptive method | 0.410 | 0.022 | 254 | 177 | 0.707 | 0.053 | 0.366 | 0.454 |
| Currently using any method | 0.233 | 0.021 | 254 | 177 | 0.782 | 0.089 | 0.191 | 0.274 |
| Currently using a modern method | 0.217 | 0.024 | 254 | 177 | 0.928 | 0.111 | 0.169 | 0.266 |
| Mothers protected against tetanus for last birth | 0.807 | 0.032 | 152 | 107 | 0.996 | 0.039 | 0.743 | 0.871 |
| Fully immunized | 1.000 | 0.000 | 38 | 26 | na | 0.000 | 1.000 | 1.000 |
| Heard about HIV/AIDS | 0.938 | 0.018 | 284 | 198 | 1.260 | 0.019 | 0.902 | 0.974 |
| Knows about condoms to prevent HIV/AIDS | 0.831 | 0.027 | 284 | 198 | 1.203 | 0.032 | 0.777 | 0.884 |
| Knows about limiting partners | 0.889 | 0.019 0.041 | 284 | 198 | 1.027 | 0.022 | 0.850 | 0.927 0.369 |
| Comprehensive knowledge on HIV transmission | 0.287 | 0.041 | 284 | 198 | 1.519 | 0.143 | 0.205 | 0.369 |


| Variable | Value (R) | Standard error (SE) | Number of cases |  | Design effect (DEFT) | Relative error (SE/R) | Confidence limits |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Un- | Weight- |  |  |  |  |
|  |  |  | (N) | (WN) |  |  | R-2SE | $\mathrm{R}+2 \mathrm{SE}$ |
| No education | 0.196 | 0.034 | 192 | 266 | 1.183 | 0.173 | 0.128 | 0.264 |
| Secondary education or higher | 0.370 | 0.025 | 192 | 266 | 0.705 | 0.067 | 0.321 | 0.419 |
| Currently married | 0.615 | 0.133 | 285 | 392 | 0.979 | 0.216 | 0.350 | 0.880 |
| Married before age 20 | 0.636 | 0.041 | 207 | 287 | 1.233 | 0.064 | 0.555 | 0.718 |
| Currently pregnant | 0.028 | 0.006 | 285 | 392 | 0.609 | 0.208 | 0.016 | 0.040 |
| Children ever born | 2.213 | 0.485 | 285 | 392 | 0.936 | 0.219 | 1.243 | 3.183 |
| Children surviving | 2.076 | 0.458 | 285 | 392 | 0.944 | 0.221 | 1.160 | 2.991 |
| Knows any contraceptive method | 0.994 | 0.006 | 174 | 241 | 1.014 | 0.006 | 0.983 | 1.006 |
| Knows a modern method | 0.994 | 0.006 | 174 | 241 | 1.014 | 0.006 | 0.983 | 1.006 |
| Ever used any contraceptive method | 0.625 | 0.044 | 174 | 241 | 1.199 | 0.071 | 0.536 | 0.713 |
| Currently using any method | 0.425 | 0.045 | 174 | 241 | 1.206 | 0.107 | 0.334 | 0.516 |
| Currently using a modern method | 0.338 | 0.037 | 174 | 241 | 1.038 | 0.110 | 0.264 | 0.413 |
| Mothers protected against tetanus for last birth | 0.866 | 0.029 | 88 | 122 | 0.804 | 0.034 | 0.807 | 0.924 |
| Fully immunized | 0.950 | 0.054 | 19 | 26 | 1.077 | 0.057 | 0.841 | 1.058 |
| Heard about HIV/AIDS | 0.957 | 0.015 | 192 | 266 | 1.028 | 0.016 | 0.927 | 0.987 |
| Knows about condoms to prevent HIV/AIDS | 0.860 | 0.029 | 192 | 266 | 1.167 | 0.034 | 0.802 | 0.919 |
| Knows about limiting partners | 0.932 | 0.025 | 192 | 266 | 1.351 | 0.026 | 0.883 | 0.982 |
| Comprehensive knowledge on HIV transmission | 0.360 | 0.037 | 192 | 266 | 1.063 | 0.103 | 0.286 | 0.434 |

Table F. 20 Sampling errors for Gnaviyani sample, Maldives DHS 2009

| Variable | Value (R) | Standard error (SE) | Number of cases |  | Design effect (DEFT) | Relative error (SE/R) | Confidence limits |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Unweighted (N) | Weighted (WN) |  |  |  |  |
|  |  |  |  |  |  |  | R-2SE | $\mathrm{R}+2 \mathrm{SE}$ |
| No education | 0.348 | 0.024 | 262 | 217 | 0.821 | 0.069 | 0.300 | 0.397 |
| Secondary education or higher | 0.382 | 0.033 | 262 | 217 | 1.101 | 0.087 | 0.316 | 0.449 |
| Currently married | 0.643 | 0.064 | 361 | 295 | 0.912 | 0.100 | 0.515 | 0.771 |
| Married before age 20 | 0.645 | 0.029 | 272 | 225 | 1.054 | 0.046 | 0.586 | 0.703 |
| Currently pregnant | 0.076 | 0.019 | 361 | 295 | 1.156 | 0.246 | 0.039 | 0.114 |
| Children ever born | 2.062 | 0.270 | 361 | 295 | 1.033 | 0.131 | 1.522 | 2.603 |
| Children surviving | 1.949 | 0.244 | 361 | 295 | 0.989 | 0.125 | 1.461 | 2.436 |
| Knows any contraceptive method | 0.991 | 0.006 | 229 | 190 | 0.921 | 0.006 | 0.979 | 1.002 |
| Knows a modern method | 0.991 | 0.006 | 229 | 190 | 0.921 | 0.006 | 0.979 | 1.002 |
| Ever used any contraceptive method | 0.480 | 0.046 | 229 | 190 | 1.385 | 0.096 | 0.388 | 0.572 |
| Currently using any method | 0.212 | 0.038 | 229 | 190 | 1.397 | 0.179 | 0.137 | 0.288 |
| Currently using a modern method | 0.190 | 0.040 | 229 | 190 | 1.524 | 0.209 | 0.110 | 0.269 |
| Mothers protected against tetanus for last birth | 0.758 | 0.030 | 116 | 98 | 0.762 | 0.040 | 0.697 | 0.818 |
| Fully immunized | 1.000 | 0.000 | 26 | 22 | na | 0.000 | 1.000 | 1.000 |
| Heard about HIV/AIDS | 0.965 | 0.016 | 262 | 217 | 1.418 | 0.017 | 0.933 | 0.997 |
| Knows about condoms to prevent HIV/AIDS | 0.819 | 0.013 | 262 | 217 | 0.558 | 0.016 | 0.792 | 0.846 |
| Knows about limiting partners | 0.925 | 0.016 | 262 | 217 | 1.000 | 0.018 | 0.892 | 0.958 |
| Comprehensive knowledge on HIV transmission | 0.438 | 0.030 | 262 | 217 | 0.984 | 0.069 | 0.377 | 0.498 |

na $=$ Not applicable

Table F. 21 Sampling errors for Seenu sample, Maldives DHS 2009

| Variable | Value (R) | Standard error (SE) | Number of cases |  | $\begin{aligned} & \text { Design } \\ & \text { effect } \\ & \text { (DEFT) } \end{aligned}$ | Relative error (SE/R) | Confidence limits |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Unweighted (N) | Weight-ed (WN) |  |  |  |  |
|  |  |  |  |  |  |  | R-2SE | $\mathrm{R}+2 \mathrm{SE}$ |
| No education | 0.176 | 0.016 | 300 | 509 | 0.725 | 0.091 | 0.144 | 0.208 |
| Secondary education or higher | 0.397 | 0.035 | 300 | 509 | 1.245 | 0.089 | 0.326 | 0.467 |
| Currently married | 0.639 | 0.086 | 405 | 694 | 1.078 | 0.135 | 0.466 | 0.811 |
| Married before age 20 | 0.476 | 0.026 | 333 | 565 | 0.986 | 0.056 | 0.423 | 0.529 |
| Currently pregnant | 0.047 | 0.011 | 405 | 694 | 1.069 | 0.229 | 0.026 | 0.069 |
| Children ever born | 2.080 | 0.347 | 405 | 694 | 1.205 | 0.167 | 1.385 | 2.775 |
| Children surviving | 1.934 | 0.328 | 405 | 694 | 1.227 | 0.169 | 1.279 | 2.590 |
| Knows any contraceptive method | 0.985 | 0.008 | 261 | 443 | 1.073 | 0.008 | 0.969 | 1.001 |
| Knows a modern method | 0.985 | 0.008 | 261 | 443 | 1.073 | 0.008 | 0.969 | 1.001 |
| Ever used any contraceptive method | 0.542 | 0.041 | 261 | 443 | 1.313 | 0.075 | 0.461 | 0.623 |
| Currently using any method | 0.259 | 0.029 | 261 | 443 | 1.065 | 0.112 | 0.201 | 0.317 |
| Currently using a modern method | 0.252 | 0.029 | 261 | 443 | 1.075 | 0.115 | 0.194 | 0.310 |
| Mothers protected against tetanus for last birth | 0.935 | 0.024 | 154 | 263 | 1.213 | 0.026 | 0.886 | 0.983 |
| Fully immunized | 0.881 | 0.057 | 40 | 68 | 1.104 | 0.064 | 0.768 | 0.995 |
| Heard about HIV/AIDS | 0.967 | 0.011 | 300 | 509 | 1.114 | 0.012 | 0.944 | 0.990 |
| Knows about condoms to prevent HIV/AIDS | 0.767 | 0.023 | 300 | 509 | 0.921 | 0.029 | 0.722 | 0.812 |
| Knows about limiting partners | 0.894 | 0.025 | 300 | 509 | 1.401 | 0.028 | 0.844 | 0.944 |
| Comprehensive knowledge on HIV transmission | 0.314 | 0.030 | 300 | 509 | 1.115 | 0.095 | 0.255 | 0.374 |


[^0]:    ${ }^{1}$ Note: For description of the construction of the wealth quintiles, see Section 2.6

[^1]:    ${ }^{1}$ The NAR for primary school is the percentage of the primary-school-age ( $6-12$ years) population that is attending primary school. The NAR for secondary school is the percentage of the secondary-school-age (13-18 years) population that is attending secondary school. By definition the NAR cannot exceed 100 percent.
    ${ }_{2}^{2}$ 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 over-age and under-age 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 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.

[^2]:    ${ }^{1}$ Personal care, medical care, household activities, going outside, and watching over for safety.

[^3]:    Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

[^4]:    ${ }^{1}$ It should be pointed out here that this estimate of primary infertility does not include women who may have had one or more births but who are unable to have more children (i.e., secondary infertility).

[^5]:    Source: Macro International Inc, 2010. MEASURE DHS STATcompiler
    http://www.measuredhs.com, May 4, 2010

[^6]:    Source: Macro International Inc, 2010. MEASURE DHS STATcompiler
    ${ }^{1}$ Among ever-married women

[^7]:    Note: Total includes 43 cases for which information on mother's formal education level is missing. An asterisk indicates that a figure

[^8]:    Note: Total includes 14 cases for which information on woman's employment status and 81 cases for which information on woman's formal education level is missing.

[^9]:    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 not breastfeeding, exclusively breastfed, breastfeeding and consuming plain water, non-milk liquids/juice, other milk, and complementary foods (solids and semi-solids) are hierarchical and mutually exclusive, so their percentages add to 100 percent. Children who receive breast milk and non-milk liquids and who do not receive complementary foods are classified in the non-milk liquid category even though they may also get plain water. Any children who get complementary food are classified in that category as long as they are breastfeeding as well.
    ${ }^{1}$ Based on all children under three years

[^10]:    Note: Breastfeeding status and food consumed refer to a 24-hour period (yesterday and last night). Figures in parentheses are based on 25-49 unweighted cases.
    ${ }^{1}$ Other milk includes fresh, tinned, and powdered cow or other animal milk
    ${ }^{2}$ Does not include plain water
    ${ }^{3}$ Includes fortified baby food
    ${ }^{4}$ Includes pumpkin, orange or yellow squash, carrots, sweet potatoes, dark green leafy vegetables, mangoes, and papayas

[^11]:    ${ }^{1}$ Food groups used in the assessment of minimum standard of feeding practices include milk other than breast milk, foods made from grains, roots, and tubers; fruits and vegetables rich in vitamin A; other fruits and vegetables; eggs; meat, poultry, fish, and shellfish (and organ meats); beans, peas, and nuts; and foods made with oil, fat, or butter.

[^12]:    Note: Total includes cases for which information on mother's formal education level is missing. Figures in parentheses are based on 25-49 unweighted cases.
    An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
    ${ }^{1}$ Includes meat (and organ meat), fish, poultry, eggs, pumpkin, red or yellow yams or squash, carrots, red sweet potatoes, mango, and papaya
    ${ }^{2}$ Includes meat (and organ meat), fish, poultry, eggs
    ${ }^{3}$ In the first two months after delivery
    ${ }^{4}$ Women who reported night blindness but did not report difficulty with vision during the day
    ${ }^{5}$ De-worming for intestinal parasites is commonly done for helminths and for schistosomiasis

[^13]:    Note: Total includes 35 men with information missing on education level. An asterisk indicates that an estimate is based on fewer than 25 cases and has been suppressed.
    1 "Currently employed" is defined as having done work in the past seven days. Includes persons who did not work in the past seven days but who are regularly employed and were absent from work for leave, illness, vacation, or any other such reason.

[^14]:    ${ }^{1}$ The number of living children includes one additional child if respondent's wife is pregnant (or if any wife is pregnant for men with more than one current wife).
    ${ }^{2}$ Means are calculated excluding respondents who gave non-numeric responses.

[^15]:    Note: Total includes 9 men with information missing on employment and 40 men with information missing on formal education level. An asterisk indicates that an estimate is based on fewer than 25 cases and has been suppressed.

[^16]:    ${ }^{1}$ The mortality rates are calculated for 5 years and 10 years before the survey for the national sample and the domain samples, respectively.

[^17]:    na $=$ Not applicable

