## Uganda

## UCANDA

HIV/AIDS
Sero-Behavioural Survey 2004-05

# UGANDA HIV/AIDS SERO-BEHAVIOURAL SURVEY 2004-2005 

Ministry of Health<br>Kampala, Uganda

ORC Macro
Calverton Maryland, USA

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This report presents findings from the 2004-05 Uganda HIV/AIDS Sero-Behavioural Survey (UHSBS) carried out by the Ministry of Health. ORC Macro provided financial and technical assistance for the survey through the United States Agency for International Development (USAID)-funded MEASURE DHS programme, which is designed to assist developing countries to collect data on fertility, family planning, maternal and child health, and HIV/AIDS. Financial and technical assistance was also provided by the U.S. Centers for Disease Control and Prevention (CDC). Financial support was provided by the Government of Uganda, the U.S. Agency for International Development (USAID), the U.S. President's Emergency Plan for AIDS Relief, and the Government of Japan through the Japan International Cooperation Agency (JICA). Additional support was provided by the Uganda Bureau of Statistics, the World Health Organisation, the AIDS Integrated Model (AIM) project, UNAIDS, Makerere University, the Uganda AIDS Commission, and the Uganda Global Fund for AIDS, TB, and Malaria. The opinions expressed in this report do not necessarily reflect the views of the donor organisations. It is also important to acknowledge the contribution of the office and field staff, district officials, communities, and survey respondents, without whom the survey would not have been possible.

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## FOREWORD

Uganda has been affected by the HIV/AIDS epidemic since the early 1980s. This epidemic which started in the Rakai district located in the southwestern part of the country has now spread countrywide, with all parts of the country experiencing the brunt of the scourge.

In response to the epidemic, a national multisectoral response was put in place. In addition, a system for monitoring the magnitude and dynamics of the HIV epidemic and impact of interventions in the country was instituted. This system consists of surveillance of antenatal clinic and sexually transmitted infection clinic attendees, periodic population-based surveys, and mathematical projections.

In line with the above, the Uganda HIV/AIDS Sero-Behavioural Survey was conducted in 2004-2005 to provide additional data that can be used to inform strategic planning, programme evaluation, policy formulation and calibration of the sentinel surveillance system. The main aim of the survey was to obtain national and sub-national estimates of the prevalence of HIV, syphilis, herpes simplex virus type 2, and Hepatitis B, and their risk factors, programme coverage, as well as the indicators of behaviour, knowledge, and attitudes. The survey was conducted on a nationally representative sample consisting of 10,430 households distributed in 417 enumeration areas. During the survey, individual interviews were conducted and biological samples were taken. In all, over 8,000 adult women, 7,000 adult men, and 8,000 children aged $0-4$ years were sampled.

This report presents comprehensive information on the HIV/AIDS situation in Uganda based on the results of the survey. The information ranges from biological to behavioural indicators and is now available for public use. Advantage should be taken of the availability of this invaluable information to inform the process of policy formulation, planning, monitoring and evaluation of the HIV/AIDS programme in Uganda. The report will be useful to all HIV/AIDS stakeholders, be those at policy level, programme level, community level, academia and research institutions.

Major General (Rtd.) Jim K. Muhwezi; MP
MINISTER OF HEALTH

## UGANDA



This map shows the districts of Uganda as they were when the Uganda HIV/AIDS Sero-Behavioural Survey 2004-05 was designed. The regions shown on the map were created for survey analysis purposes.

## INTRODUCTION

### 1.1 BACKGROUND INFORMATION

Uganda has braved a severe and devastating epidemic of HIV infection and AIDS for almost a quarter of a century. The epidemic started on the shores of Lake Victoria in Rakai district, the initial epicentre of the illness. Thereafter, HIV infection spread quickly, initially in major urban areas and along highways. By 1986, HIV had reached all districts in the country, resulting in what is classified as a generalised epidemic. HIV infection continued to spread relentlessly throughout the 1980s and early 1990s and soon gave rise to a wave of AIDS as more HIV-infected people succumbed to opportunistic infections arising from their suppressed immune systems. As in other countries in sub-Saharan Africa, Uganda's HIV/AIDS epidemic is predominantly spread through heterosexual contact.

Throughout the 25 years of the epidemic, people living in urban areas have had higher prevalence relative to those in rural areas. In all, it is estimated that about 2 million people were infected by HIV during this period, of whom about 1 million have died and another 1 million are living with the infection today.

The impact of the disease has been mainly felt through the escalating morbidity and mortality that disproportionately affects women and men during the prime of their productive life. The consequences of the epidemic span across all spheres of life (individuals and communities nationwide). It has imposed a severe and unsustainable burden on the meager health sector resources, as funds are diverted from other areas to HIV prevention and AIDS care and treatment services. HIV infection has also given rise to an epidemic of opportunistic infections, including tuberculosis (TB). Treatment of some of these opportunistic infections is more expensive than that of AIDS.

The HIV/AIDS epidemic has also had far-reaching social consequences. By depriving families and communities of their most productive population, it has caused untold suffering to individuals and communities. At the community level, mortality of individuals in the prime of their productive lives has imposed unsustainable strains on the extended family structure, leading to a massive burden of orphans and other vulnerable children that are now estimated at almost 2 million in the country, as well as other social consequences such as child- and widow-headed households. Morbidity and mortality of parents has severely affected the schooling of children, especially girls who are forced prematurely into the labour market, further aggravating the vicious cycle of vulnerability.

The micro- and macro-economic consequences are diverse. Economic productivity has been adversely affected by the premature death of women and men during their most productive age, leaving orphans and widows. The loss of critical human capital has affected industrial and private sector growth, and the development of institutional capacity, all of which require skilled workers and leaders. Morbidity and mortality also results in the loss of skilled manpower for teaching, medical care, agricultural production, and other professions that are not easily replaced. Indeed, it is for this reason that the attainment of human development in areas of economic growth, poverty reduction, and improved quality of life indicators is below what it would have been in the absence of AIDS. The demographic consequences of the epidemic are reflected in the quality of life indices in the country, such as infant mortality and life expectancy, that are currently lower than what would have been achieved in the absence of HIV.

Uganda realised the gravity of the epidemic right from the outset and mounted public health interventions to counter its spread. The first National AIDS Control Programme in the world was started by the Ministry of Health, Uganda. The programme piloted and implemented several interventions to avert the further spread of HIV. Specifically, the programme initiated public education campaigns about the epidemic, promoted safer sexual behaviour, including abstinence, mutual faithfulness, and condom use, ensured safe blood transfusion in health facilities, and initiated programmes for care and treatment for infected individuals. It also implemented surveillance activities to monitor the magnitude and dynamic of HIV infection. The interventions evolved over time as more knowledge about the epidemiology of the epidemic emerged. As a consequence, it appears that after the seemingly relentless spread of HIV infection in the late 1980s and early 1990s, the epidemic peaked in the early 1990s, particularly in urban areas with antenatal prevalence ranging between $25-30$ percent in the most affected urban areas. Subsequently, antenatal HIV sero-prevalence steadily declined throughout the remainder of the 1990s in both urban and rural areas, but particularly in urban areas. However, there is emerging evidence that during the early part of this decade, HIV sero-prevalence has stabilised at 5-10 percent in urban areas and below 5 percent in rural areas.

Hepatitis B is a global public health concern, with high endemicity in sub-Saharan Africa, China, Southeast Asia, the Amazon basin, and many of the Pacific islands. In Uganda, the prevalence of hepatitis B in the general population was previously unknown, although small studies and data from the national blood bank estimated the prevalence to be $8-16$ percent. Moreover, the data are obtained from a highly selected group of people who are thought not to be at risk of HIV infection. For this reason, hepatitis B testing was incorporated into the UHSBS. Similarly, data on the prevalence of syphilis and herpes simplex type 2 were also unavailable from the general population, so these two biomarkers were also added as part of the survey.

As in other countries in Africa, most knowledge about the magnitude and dynamics of HIV and syphilis infection in Uganda is based on antenatal HIV surveillance and a few sub-national, populationbased studies. While providing useful information for informing strategic planning and evaluation of programmes, these data sources are either limited in geographical coverage or the population groups that they cover, and therefore the data that are obtained may not be fully generalisable to the whole country.

The 2004-05 Uganda HIV/AIDS Sero-Behavioural Survey (UHSBS) was designed to provide accurate national and sub-national estimates of HIV infection and behavioural risk factors as well as other programme indicators to guide strategic planning and evaluation of programmes, and to complement and calibrate estimates obtained from other sources. The UHSBS was implemented by the Ministry of Health (MOH). ORC Macro provided financial and technical assistance for the survey through the USAIDfunded MEASURE DHS programme. Financial and technical assistance was also provided by the U.S. Centers for Disease Control and Prevention (CDC). Financial support was provided by the Government of Uganda, the U.S. Agency for International Development (USAID), the U.S. President's Emergency Plan for AIDS Relief, and the Government of Japan through the Japan International Cooperation Agency (JICA). Additional support was provided by the Uganda Bureau of Statistics, the World Health Organisation (WHO), the AIDS Integrated Model (AIM) Project, UNAIDS, Makerere University, and the Uganda Global Fund for AIDS, TB, and Malaria Project.

### 1.2 National Policy on HIV/AIDS

From the outset of the epidemic, the Uganda Government recognised the gravity of the problem it posed and initiated public health strategies for containment. Recognising that the majority of new infections were transmitted through heterosexual contact, the strategy to contain the spread of the epidemic sought to address sexual behaviour risk factors to avert further HIV transmission by promoting primary and secondary sexual abstinence, mutual faithfulness among married or cohabiting partners, and
condom use, especially in higher-risk sexual encounters. This approach to prevention, colloquially known as the 'ABC' (abstinence, being faithful, and condom use) approach has continued to form the backbone of HIV prevention strategy in the country to this day. The ABC strategy has since been expanded to the ABC Plus, to include voluntary counselling and testing (VCT), prevention of mother-to-child transmission of the virus (PMTCT), antiretroviral treatment (ART), and HIV/AIDS care and support services.

In addition to recognising the public health consequences of the problem, the government recognised that its impact transcended the sphere of public health, requiring the involvement of all spheres of public life in the country comprising public, civil society, nongovernmental organisations, communities, and individuals. Consequently, the multisectoral approach to HIV prevention and control including care and support services was adopted as early as 1990 and currently forms one of the pillars of the national response. This policy underscores the concerted involvement of all individuals, communities, public and private sectors, including civil society and community-based organisations, in the effort to contain the epidemic. It calls for concerted efforts by all stakeholders according to their mandates and areas of comparative advantage and capacities. In line with this, a multisectoral coordinating body, the Uganda AIDS Commission, was created by statute of Parliament in 1992 and placed under the office of the President to coordinate the harmonised implementation of the multisectoral approach. Furthermore, the Government recognised the importance of political leadership and commitment at all levels of governance in all efforts to prevent the epidemic and mitigate its impact. Involvement of political leadership is the second pillar in the national response. The government also adopted a policy of openness about the epidemic as one of the pillars of the national response, which is vital to fighting stigma and discrimination. Finally, the Ugandan response received unprecedented support and involvement of development partners at all levels of governance and civil society.

The Uganda government recognises the developmental challenges of the epidemic and has taken concrete steps to address it. HIV control is one of the developmental priorities addressed in the country's Poverty Eradication Action Plan (PEAP) and the National Vision for 2025. The National AIDS Policy, which is currently in draft form, provides for a framework for addressing the multidimensional challenges of the epidemic by a variety of stakeholders in a coordinated way. The policy emphasises the main HIV/AIDS concerns in the development agenda in the country by all sectors and sections of society. It also provides for protection of the rights of vulnerable individuals and populations, and mitigation of the impact of the epidemic at the individual and community levels and also on micro- and macro-economic development. It also provides a framework for strengthening the capacity of institutions and communities to overcome the social and economic challenges of the epidemic. The policy also provides a framework for strengthened monitoring and evaluation of HIV/AIDS programmes, conducting research, and for resource mobilisation. Indeed, this report of the UHSBS will be an invaluable source of information for the monitoring and evaluation of HIV/AIDS programmes in Uganda.

### 1.3 Objectives of the Survey

The UHSBS is a nationally representative, population-based survey designed to obtain national and sub-national data on the prevalence of HIV and other sexually transmitted infections (STIs) and their social and demographic variations in the country. The survey also obtained information on knowledge, attitudes, and behaviour regarding HIV/AIDS. Data collection took place from 14 August 2004 until late January 2005.

The overall goal of the survey was to provide programme managers and policymakers involved in HIV/AIDS programmes with strategic information needed to monitor and evaluate existing programmes and to effectively design new strategies for combating the epidemic in Uganda. The survey data will also be used to make population projections and to calculate indicators of the UN General Assembly Special

Session (UNGASS), USAID, the President's Emergency Plan for AIDS Relief, UNAIDS, WHO, the Uganda Health Sector Strategic Plan, and the HIV/AIDS National Strategic Framework.

The specific objectives of the 2004-05 UHSBS were the following:

- To obtain accurate estimates of the magnitude and variation in HIV prevalence in Uganda
- To obtain accurate information on behavioural and care indicators related to HIV/AIDS and other sexually transmitted infections
- To obtain accurate information on other HIV/AIDS programme indicators
- To provide information on HIV prevalence to calibrate and improve the sentinel surveillance system
- To determine the magnitude and distribution of syphilis, herpes simplex 2, and hepatitis B infection.


### 1.4 Sample Size and Design

The sample for the 2004-05 UHSBS covered the population residing in households in the country. A representative probability sample of 10,425 households was selected for the UHSBS, and an additional 12 households were found during field work for a total of 10,437 . The sample was constructed to allow for separate estimates for key indicators for each of nine regions created for the survey, consisting of eight groups of the (then) 56 districts in Uganda, and Kampala, the capital, as a region on its own. The regions were delineated as follows:

1 Central: Kalangala, Kiboga, Luwero, Masaka, Mpigi, Mubende, Nakasongola, Rakai, Sembabule, and Wakiso
2 Kampala
3 East Central: Bugiri, Iganga, Jinja, Kamuli, Kayunga, Mayuge, and Mukono
4 Eastern: Busia, Kapchorwa, Mbale, Pallisa, Sironko, and Tororo
5 Northeast: Kaberamaido, Katakwi, Kotido, Kumi, Moroto, Nakapiripirit, and Soroti
6 North Central: Apac, Gulu, Kitgum, Lira, and Pader
7 West Nile: Adjumani, Arua, Moyo, Nebbi, and Yumbe
8 Western: Bundibugyo, Hoima, Kabarole, Kamwenge, Kasese, Kibaale, Kyenjojo, and Masindi
9 Southwest: Bushenyi, Kabale, Kanungu, Kisoro, Mbarara, Ntungamo, and Rukungiri.
The sample was allocated roughly equally across all nine regions to allow a sufficient size in each to produce reliable results. Since the sample was not allocated in proportion to the size of each region, the UHSBS sample is not self-weighting at the national level. Consequently, weighting factors have been applied to the data to produce nationally representative results.

The survey utilised a two-stage sample design. The first stage involved selecting sample points or clusters from a list of enumeration areas (EAs) covered in the 2002 Population Census. A total of 417 clusters composed of 74 urban and 343 rural points were selected. The second stage of selection involved the systematic sampling of households from the census list of households in each cluster. Twenty-five households were selected in each EA.

All women and men aged 15-59 who were either permanent residents of the households in the sample or visitors present in the household on the night before the survey were eligible to be interviewed in the survey. Unlike most studies in which the age category reflects the reproductive age group 15-49,
the upper age cutoff in this survey was extended to 59 years so as to include the segment of the population that remains sexually active up to that age. Nevertheless, since most of the internationally accepted HIV/AIDS indicators are based on the population aged 15-49, most of the results presented in this report reflect this age group.

All women and men who were interviewed were asked to voluntarily give a blood sample for testing. Blood samples were also drawn from children under age five years after obtaining consent from their parents or caretakers. Children aged 5-14 years were not enrolled in the survey because other studies have shown a very low HIV prevalence in this age group.

### 1.5 Questionnaires

Two questionnaires were used in the survey, a Household Questionnaire and an Individual Questionnaire for women and men aged 15-59. The contents of these questionnaires were based on the model AIDS Indicator Survey questionnaires developed by the MEASURE DHS programme.

In consultation with a spectrum of government agencies and local and international organisations, the MOH and MEASURE DHS adapted the model questionnaires to reflect issues in HIV/AIDS relevant to Uganda. These questionnaires were then translated from English into six local languages-AtesoKaramajong, Luganda, Lugbara, Luo, Runyankole-Rukiga, and Runyoro-Rutoro. The questionnaires were further refined after the pretest and training of the field staff.

The Household Questionnaire was used to list all the usual members and visitors in the selected households. Some basic information was collected on the characteristics of each person listed, including age, sex, education, relationship to the head of the household, and orphanhood among children under age 18 years. The main purpose of the Household Questionnaire was to identify women and men who were eligible for the individual interview. The Household Questionnaire also collected information on characteristics of the household's dwelling unit, such as the source of water, type of toilet facilities, materials used for the floor of the house, ownership of various durable goods, and ownership of mosquito nets. Information was also collected on whether the household had received specific types of care and support in the preceding 12 months for any chronically ill adults, any household members who died, and any orphans and vulnerable children. The Household Questionnaire was also used to record respondents' consent to volunteer to give blood samples. The blood collection and testing procedures are described in the next section.

The Individual Questionnaire was used to collect information from all women and men aged 1559 and it covered the following topics:

- Background characteristics (e.g., education, media exposure, occupation, religion)
- Reproduction
- Marriage and sexual activity
- Husband's background (for women)
- Knowledge and attitudes towards HIV/AIDS
- Knowledge and prevalence of other sexually transmitted infections (STIs)

All aspects of the UHSBS data collection were pretested in June 2004. For this, five teams were formed, each with 1 supervisor, 2 female interviewers, 2 male interviewers and 2 laboratory technicians. Team members were trained for ten days and then proceeded to conduct the survey in the various districts in which their native language was spoken. In total, 300 individual interviews were completed in the pretest. The lessons learnt from the pretest were used to finalise the survey instruments and logistical arrangements for the survey.

### 1.6 BIOMARKERS

All women and men aged 15-59 who were interviewed were asked to voluntarily provide a blood sample for subsequent testing for HIV, syphilis, herpes simplex virus 2, and hepatitis B. Blood samples were also requested for all children under five for testing for HIV and hepatitis B. The protocol for the blood specimen collection and analysis was developed jointly by all parties to the survey. It was reviewed and approved by ORC Macro's Institutional Review Board and the Science and Ethics Committee of the Uganda Virus Research Institute (UVRI) and was also cleared by the Ethics Committee of the Uganda National Council of Science and Technology and the Centers for Disease Control and Prevention (CDC) in Atlanta. The protocol allows for the merging of the test results to the socio-demographic and behavioural data collected in the individual questionnaires, provided that the information that could potentially identify an individual is destroyed before the linking is effected. This required that cluster and household codes be deleted from the data file and that the back page of the Household Questionnaire that contains the bar code labels be destroyed prior to merging the test results with the individual data file. This report contains the results of the analysis of the fully linked dataset.

For the purposes of blood sample collection, two laboratory technicians were included in each of the 18 field teams. The laboratory technicians were recruited from Ministry of Health, nongovernmental, and private health facilities. As part of the informed consent for blood sampling, the laboratory technician explained the procedure, the fact that the equipment used was sterile and clean, the confidentiality of the data, and the tests to be performed on the blood. Respondents were also informed that they could obtain their syphilis results the following day if they wanted, that those testing positive for syphilis would be treated, and that the other test results could not be linked or made available to the respondent. The laboratory technician was instructed to ask respondents if they had any questions and then ask if they consented to the blood draw, if they wanted to receive their syphilis results the following day, and if they consented to having their blood sample be stored for future unspecified tests.

After obtaining consent, the laboratory technician drew a venous blood sample in a 4.5 ml EDTA Vacutainer tube. If respondents refused the venous blood draw, they were given an option to provide a dried blood spot sample on a filter paper card from a finger prick using a single-use, spring-loaded, sterile lancet. For children under five and youth aged 15-17 years, consent was sought from their parents or guardians to take a dried blood spot sample. Blood tubes and filter paper dried blood spot samples were labeled with a bar-coded identification label, which was also pasted on the Household Questionnaire on the line number for that respondent and on various other laboratory forms.

Before starting work in a given area, each team made arrangements to establish a temporary field laboratory, usually setting up their mobile equipment in a spare room in a laboratory attached to a hospital or health centre. Each team carried cold boxes, centrifuges, a generator, a liquid nitrogen tank, and routine laboratory supplies such as pipettes, gloves, test tubes. In the temporary field laboratory, a number of procedures were carried out on the blood samples. In the case of specimens from adults, the laboratory technicians first made a back-up dried blood spot from the venous blood samples. They then centrifuged the blood and transferred the plasma to microvials, labeled with the same bar code identification. A small aliquot was removed and tested for syphilis using the rapid plasma reagin (RPR) card test. Results were recorded on a preprinted laboratory results form that was given on the morning of the next day to the interviewer on the team who was designated to return the syphilis results to the respective respondents. Packed blood cells remaining in the EDTA Vacutainer tubes were transferred to microvials labeled with the bar code for long-term storage. Microvials containing plasma and packed blood cells were stored in liquid nitrogen tanks and their location within the tank recorded on a preprinted specimen inventory form. All dried blood spots were air-dried overnight in plastic boxes and stored at ambient temperature in lots of 20 separated by glassine paper in ziplock bags containing desiccants. Specimens were periodically
collected from the field and taken to the Uganda Virus Research Institute (UVRI). Recharged liquid nitrogen tanks and resupplies were also provided to the teams.

Syphilis results were provided to respondents who provided a venous blood sample and who indicated that they would like to get their results. At least one of the interviewers on each team was a nurse who was designated to provide the results at the respondent's home the following day. Respondents testing positive for syphilis were treated with a single injection of benzathine penicillin. Anyone who indicated being allergic to penicillin was treated with erythromycin tablets in line with national treatment guidelines.

Specimens received at UVRI were checked against the specimen shipping forms and were then registered electronically using a bar code reader. Each specimen was assigned a unique laboratory number during the registration process, and laboratory testing and storage in the repository were carried out against that number. Specimens were subjected to the following tests:

HIV: Plasma specimens from the venous blood draw were tested with a two HIV EIA parallel testing algorithm—Murex 1.2.0 (Abbott) and Vironostica Uniform II Plus O (Biomerieux)—in accordance with WHO guidelines, with repeat testing for specimens with 'grey zone' or discordant results on the two assays; Western blot was carried out to resolve specimens with repeatedly discordant results using WHO interpretative criteria. For quality control, all positive specimens and 5 percent of negative specimens were retested by the CDC laboratory in Entebbe using the same testing algorithm; specimens with discordant results were resolved by repeating the testing algorithm. Samples with discrepant results between the two laboratories were sent to Nakasero Blood Bank for 'tie-breaker' testing.

Dried blood spot specimens from children and from adults who declined the venous blood sample were tested for HIV by eluting serum from 6 mm discs punched from the blood spots. They were tested with a two HIV EIA parallel testing algorithm—Murex 1.2.0 (Abbott) and Vironostika Uniform II Plus O (Biomerieux). Specimens with unambiguously positive or negative results on both assays were reported without further testing, while all others were tested by Western blot using WHO interpretative criteria. Specimens from children less than 18 months of age with a positive or ambiguous result were further tested for HIV DNA using a polymerase chain reaction (PCR) test (Roche HIV DNA 1.5 kit).

Syphilis: All plasma specimens, regardless of the field result, were screened with the the rapid plasma reagin (RPR) test at a dilution of $1: 8$; reactive specimens were titrated at doubling dilutions and reported as positive after review by a second reader. All specimens positive on RPR and 10 percent of negative specimens were also tested with the treponemal pallidum haemaglutination assay (TPHA) test. For quality control, all positive specimens and 5 percent of negative specimens were tested using this algorithm. Specimens with discordant results were resolved by repeat testing on the same assays or were reported as indeterminate. Moreover, all positive samples and 5 percent of the negatives were retested by CDC-Uganda lab.

Herpes simplex-2: Specimens were tested on an HSV-2 EIA (Kalon Biological HSV Type 2 IgG indirect ELISA). Specimens with results in the defined 'grey zone' were tested again and because there is no reliable confirmatory assay, those that remain 'grey zone' were reported as 'indeterminate.' For quality control, a proportion of the positive specimens and 10 percent of negative specimens were re-tested and specimens with discordant results are reported as indeterminate. Moreover, all positive samples and 5 percent of the negatives were retested by CDC-Uganda lab.

Hepatitis B: Testing for Hepatitis B was performed on a nationally representative sub-sample of 6035 specimens from adults (a 1-in-3 subsample). The samples were tested with ELISA anti HBc. The number of specimens positive on this assay indicates the overall prevalence of HBV infection (resolved,
chronic, and active). Specimens positive for anti HBc were tested using HBsAg ELISA that gives the prevalence of chronic HBV infection (the algorithm adopted by CDC for determining the prevalence of hepatitis B infection among the general population). For quality control, 5 percent of positive specimens and 5 percent of negative specimens were retested at the CDC-Uganda laboratory. Specimens with results discordant between the two laboratories were resolved by repeat testing using all available assays or were reported as indeterminate.

### 1.7 Voucher System for Voluntary Counselling and Testing

Respondents who agreed to provide a venous blood sample were offered the opportunity to get the results of the syphilis test that was performed in the field laboratory. However, respondents were not offered the results of any of the other tests, including HIV.

To assist respondents who wanted to know their HIV status, survey respondents were given a voucher for a free voluntary counselling and testing (VCT) visit, as well as an educational pamphlet that summarised available services and benefits of testing. The vouchers could either be used at a nearby health facility or at an outreach point established by the UHSBS project. As part of the VCT voucher system, UHSBS project staff identified and visited health facilities that were located close to each of the sample points selected for the survey. If these facilities did not already offer VCT services, provision was made to assist the facilities to provide it during the survey period. Facilities were provided with rapid HIV test kits and other supplies and forms needed to provide VCT services. A VCT supervisor was appointed in each district and, within each of the identified facilities, two counsellors and a laboratory person were enrolled to assist with the survey. These teams were responsible for making VCT services available at the facilities and, in cases in which the selected sample spot was located far from the facility, for providing outreach VCT services in locations close to the spot. At the end of the data collection phase, UHSBS staff compiled data from all the facilities on the number of vouchers that were utilised. Unfortunately, data on voucher utilization were missing from many of the facilities, making it difficult to estimate the rate of uptake of the free voucher.

### 1.8 Home-based Counseling and Testing Study

After the data collection for the main UHSBS was completed, a small home-based study was implemented to test the feasibility of providing respondents with their HIV results at home. The study was implemented in 33 clusters outside of the original 417 selected for the main survey, with 11 clusters each in three regions, namely, West Nile, Western, and Central. Six of the 18 teams used for the main survey were selected to implement the home-based study.

The home-based survey was implemented almost exactly like the main UHSBS except that adult respondents in the survey were told that they could get their HIV results the following day if they wanted them. In order to provide the HIV results, 4 counselors and 1 more laboratory technician were added to each team. The extra laboratory technician performed two rapid HIV tests in the field laboratory on the plasma samples at the same time as the syphilis testing was done. They provided the HIV test results using a blinded set of field forms to the counselors who provided the results to the respondents the following day. HIV results were not provided for children, since they had only provided dried blood spot samples.

In 8 of the 33 clusters covered in the home-based study, a qualitative study was implemented to explore how and why respondents accepted the blood draw and consented to a home visit by a counsellor to learn their test results. Results from the home-based study and the companion qualitative study are not addressed in this report, but will be released in other reports (Yoder et al., 2006).

### 1.9 Training

The training of field staff for the UHSBS was held from 21 July to 6 August 2004. A total of 140 candidates for supervisors and interviewers were trained at the Hotel Africana in Kampala, while 46 laboratory technicians were trained at Tal Cottages in Kampala. Trainers were senior staff from the UHSBS project, assisted by staff from the Uganda Bureau of Statistics, UVRI, Ministry of Health, Makerere University, and ORC Macro.

Because of their large number, trainees for team supervisors and interviewers were divided into three groups, each with two assigned trainers. Training consisted of an overview of the survey and its objectives, techniques of interviewing, field procedures, a detailed description of all sections of the household and individual questionnaires, mock interviews between pairs of trainees, and three tests. During the second week, trainees were divided into language groups to review the questionnaires in their local languages. That week was also taken up with three days of practice in three sites close to Kampala, interspersed with discussions of the experience. A few days before the end of training, project staff identified individuals to be appointed as regional and team supervisors and these individuals were provided a half-day of special training.

The laboratory technicians were trained on blood draw procedures (for both venous and capillary blood), specimen processing in the field lab, storage and transportation of specimens, syphilis testing, lab safety procedures, labeling of samples, and consent administration. The training included a visit to the Acute Care Division of Mulago Hospital for further practice on infants and children. The laboratory technicians joined the interviewer and supervisor trainees for two days of field practice during the last few days of training. The nurse-interviewers were also trained on how to administer syphilis treatment.

An average of two training sessions were held in each of the nine designated regions for the counsellors and lab persons on the VCT teams. Training consisted of a general introduction to the survey, understanding the survey protocols, and how to use rapid HIV kits.

### 1.10 MObilisation and Fieldwork

Prior to the start of fieldwork, UHSBS staff arranged for numerous activities designed to promote awareness of the survey and encourage participation. Posters and brochures were printed and distributed to local officials in the areas that fell within the sample. TV and radio spots and talk shows were conducted to raise awareness of the general public to the survey. Teams from the survey office visited local officials immediately before the commencement of the survey to alert them to the survey. Advocacy and mobilisation activities continued throughout the survey period to encourage participation. The purpose of the survey, its design, implementation, utilisation of survey data, and the need for community participation were discussed, as well as issues of confidentiality and reasons for anonymity of HIV testing. Finally, when the survey was launched, UHSBS staff arranged for a press briefing and 'flagging off' of the teams by the Minister of Health and other senior MOH officials. The ceremony was covered by the news media, which also helped to advocate for the survey.

Eighteen teams carried out data collection for the survey. Each team consisted of one supervisor, two female interviewers, two male interviewers, two laboratory technicians and one driver. UHSBS staff coordinated and supervised fieldwork activities, assisted by occasional visits by staff from ORC Macro. Data collection took place over a five-month period, from 14 August 2004 to the end of January 2005.

### 1.11 Data Processing

The processing of the UHSBS questionnaires began shortly after the fieldwork commenced. Completed questionnaires were returned periodically from the field to the UHSBS project office in

Kampala, where they were entered and edited by data processing personnel specially trained for this task. Data were entered using ORC Macro's CSPro computer programme. All data were entered twice (100 percent verification). The concurrent processing of the data was a distinct advantage for data quality, because UHSBS staff were able to advise field teams of errors detected during data entry. The data entry and editing phase of the survey was completed in early March 2005.

Laboratory testing at the HIV Reference Laboratory (HRL) at the UVRI began shortly after the data collection. Priority was given to the HIV testing, followed by syphilis testing, Hepatitis B testing and herpes simplex. Testing included quality control testing at the CDC laboratory in Entebbe.

### 1.12 Response Rates

Table 1.1 shows response rates for the UHSBS. A total of 10,437 households were selected in the sample, of which 9,842 were found to be occupied at the time of the fieldwork. The shortfall is largely a result of structures that were vacant or destroyed. Of existing households, 9,529 were interviewed, yielding a household response rate of 97 percent.

In the households interviewed in the survey, a total of 11,454 eligible women aged 15-59 were identified, of whom 10,826 were interviewed, yielding a response rate of 95 percent. With regard to the male survey results, 9,905 eligible men aged $15-59$ were identified, of whom 8,830 were successfully interviewed, yielding a response rate of 89 percent. The response rate for both sexes combined is 92 percent.

Although respondents aged 15-59 were eligible for individual interviews, the focus of the analysis in this report is on those aged $15-49$. Table 1.1 shows that response rates for women and men aged 15-49 are very slightly lower than for those aged 15-59.

The principal reason for nonresponse among both eligible men and women was the nonavailability of individuals at home despite repeated visits to the household. The lower response rate for men reflects the more frequent and longer absence of men from the households. Response rates are lower in urban than rural areas, especially for men.

Table 1.1
Results of household and individual interviews, Uganda 2004-2005

|  | Residence |  |
| :--- | :--- | :--- |
| Result | Urban Rural Total |  |

Household interviews

| Households selected | 1,853 | 8,584 | 10,437 |
| :--- | ---: | ---: | ---: |
| Households occupied | 1,742 | 8,100 | 9,842 |
| Households interviewed | 1,666 | 7,863 | 9,529 |
| Household response rate | 95.6 | 97.1 | 96.8 |

Interviews with women 15-59

| Number of eligible women | 2,117 | 9,337 | 11,454 |
| :--- | ---: | ---: | ---: |
| Number of eligible women interviewed | 1,913 | 8,913 | 10,826 |
| Eligible woman response rate | 90.4 | 95.5 | 94.5 |

Interviews with men 15-59

| Number of eligible men | 1,852 | 8,053 | 9,905 |
| :--- | :--- | :--- | :--- |
| Number of eligible men interviewed | 1,463 | 7,367 | 8,830 |

$\begin{array}{llll}\text { Eligible man response rate } & 79.0 & 91.5 & 89.1\end{array}$
Interviews with women and men 15-59

| Number of eligible individuals | 3,969 | 17,390 | 21,359 |
| :--- | ---: | ---: | ---: |
| Number of eligible individuals <br> interviewed | 3,376 | 16,280 | 19,656 |
| Eligible individual response rate | 85.1 | 93.6 | 92.0 |

Interviews with women 15-49

| Number of eligible women | 2,021 | 8,540 | 10,561 |
| :--- | ---: | ---: | ---: |
| Number of eligible women interviewed | 1,827 | 8,146 | 9,973 |
| Eligible |  |  |  |


| Interviews with men 15-49 |  |  |  |
| :--- | ---: | ---: | ---: |
| $\quad$ Number of eligible men | 1,763 | 7,270 | 9,033 |
| Number of eligible men interviewed | 1,387 | 6,622 | 8,009 |
| Eligible man response rate | 78.7 | 91.1 | 88.7 |
| Interviews with women and men $\mathbf{1 5 - 4 9}$   <br> Number of eligible individuals <br> Number of eligible individuals <br> interviewed 3,784 15,810 19,594 <br> $\quad$ Eligible individual response rate 3,214 14,768 17,982$\quad 84.9$ | 93.4 | 91.8 |  |

## CHARACTERISTICS OF HOUSEHOLDS AND HOUSEHOLD SUPPORT

### 2.1 Key Findings

- Fourteen percent of children under age 18 are orphans (i.e., they have lost one or both biological parents). The level of orphanhood has not changed in recent years.
- Three in five households get their water from a source considered as safe; almost three-fourths use traditional pit latrines. Nine percent of households have electricity.
- Ugandan households consist of an average of 5.2 members, somewhat higher than the 4.8 members found in 2000-01.


### 2.2 Introduction

This chapter presents information on the social, economic, and demographic characteristics of the household population, focusing mainly on such background characteristics as age, sex, educational attainment, parental survivorship, children's living arrangements, place of residence, and socioeconomic conditions of households. The information provided is intended to facilitate interpretation of the key demographic, socioeconomic, and health indices, as well as the trends in these indices. It is also intended to assist in the assessment of the representativeness of the survey.

Information regarding housing characteristics, such as the type of housing and household amenities and assets, is also presented in this chapter. Finally, results regarding the level of orphanhood and fostering of children under age 18 are presented, as well as data on care and support of vulnerable children and ill adults.

In the UHSBS, a household was defined as a person or a group of persons who usually live and eat together. The Household Questionnaire was used to collect information on all usual residents and visitors who spent the night preceding the interview in the household. This method allows calculation of either the de jure (usual residents) or de facto (those there at the time of the survey) population.

One of the background characteristics used throughout this report is an index of socioeconomic status. The wealth quintile is a measure of relative household wealth that relies on straightforward questions as opposed to more elaborate income and expenditure questions. It has been tested in a number of countries in relation to inequities in household income, use of health services, and health outcomes (Rutstein et al., 2000). It is an indicator of the level of wealth that is consistent with expenditure and income measures (Rutstein, 1999).

The wealth index was constructed using household asset data and principal components analysis. Asset information collected in the UHSBS Household Questionnaire covers household ownership of a number of consumer items ranging from a television to a bicycle or car, as well as dwelling characteristics such as source of drinking water, type of sanitation facilities, and type of flooring material. Each asset was assigned a weight (factor score) generated through principal component analysis and the resulting asset scores were standardised to a normal distribution with a mean of zero and standard deviation of one (Rutstein and Johnson, 2004). Each household was then assigned a score for each asset, and the scores
were summed for each household; individuals were ranked according to the total score of the household in which they resided. The sample was then divided into quintiles from one (lowest) to five (highest).

### 2.3 Household Population by Age, Sex, and Residence

Like many countries with high fertility rates, Uganda has a much larger proportion of its population in the younger age groups than in the older age groups. Table 2.1 shows how the distribution of the household population declines gradually with each older five-year age group. The data also indicate slightly higher percentages of males than females under age 20 and slightly lower percentages of males than females at ages 20-39. A remarkably high proportion of the household population ( 53 percent) consists of children under age 15. Individuals aged 15-49 represent 38 percent of the population, while those age 50 and over account for only 9 percent of the population. The age distribution reflects Uganda's high fertility (UBOS and ORC Macro, 2001) that produces a large base of youth. The age distribution differs substantially by residence, with fewer children in urban areas than in rural areas. The age distribution in 2004-05 is almost identical to that in 2000-01 (UBOS and ORC Macro, 2001).

Table 2.1
Household population by age, sex, and residence, Uganda 2004-05

| Age group | Urban |  |  | Rural |  |  | Total |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male | Female | Total | Male | Female | Total | Male | Female | Total |
| 0-4 | 16.9 | 15.4 | 16.1 | 19.7 | 19.3 | 19.5 | 19.4 | 18.8 | 19.1 |
| 5-9 | 14.2 | 13.4 | 13.8 | 19.4 | 17.8 | 18.6 | 18.9 | 17.3 | 18.0 |
| 10-14 | 14.7 | 13.9 | 14.3 | 17.2 | 15.1 | 16.1 | 16.9 | 14.9 | 15.9 |
| 15-19 | 12.2 | 13.5 | 12.9 | 9.3 | 8.3 | 8.8 | 9.7 | 8.9 | 9.3 |
| 20-24 | 9.6 | 12.4 | 11.1 | 5.4 | 7.6 | 6.6 | 5.9 | 8.2 | 7.1 |
| 25-29 | 9.2 | 10.2 | 9.7 | 5.1 | 6.9 | 6.0 | 5.6 | 7.3 | 6.4 |
| 30-34 | 7.7 | 6.4 | 7.0 | 5.1 | 5.6 | 5.4 | 5.4 | 5.7 | 5.6 |
| 35-39 | 5.0 | 4.4 | 4.7 | 4.0 | 4.4 | 4.2 | 4.1 | 4.4 | 4.3 |
| 40-44 | 3.5 | 2.7 | 3.1 | 3.3 | 3.3 | 3.3 | 3.3 | 3.2 | 3.3 |
| 45-49 | 2.3 | 2.6 | 2.4 | 2.4 | 2.5 | 2.4 | 2.4 | 2.5 | 2.4 |
| 50-54 | 1.4 | 1.5 | 1.5 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 |
| 55-59 | 1.2 | 0.9 | 1.0 | 1.5 | 1.3 | 1.4 | 1.5 | 1.3 | 1.4 |
| 60-64 | 0.8 | 1.0 | 0.9 | 1.4 | 2.2 | 1.8 | 1.3 | 2.1 | 1.7 |
| 65-69 | 0.4 | 0.6 | 0.5 | 1.4 | 1.4 | 1.4 | 1.3 | 1.3 | 1.3 |
| 70-74 | 0.4 | 0.6 | 0.5 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| 75-79 | 0.3 | 0.3 | 0.3 | 0.6 | 0.4 | 0.5 | 0.6 | 0.4 | 0.5 |
| $80+$ | 0.3 | 0.2 | 0.2 | 0.7 | 0.6 | 0.7 | 0.7 | 0.6 | 0.6 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Number | 2,747 | 3,012 | 5,759 | 21,503 | 22,533 | 44,036 | 24,250 | 25,544 | 49,794 |

### 2.4 Household Composition

Table 2.2 shows that 71 percent of Ugandan households are headed by men, with a slightly lower percentage in urban than in rural households ( 66 and 71 percent, respectively).

More than one in four Ugandan households consists of four members, while one-fifth consist of five members. The mean size of households in Uganda is 5.2 persons, somewhat larger than the 4.8 persons per household found in 2000-01. Urban households are smaller than rural households (4.3 and 5.3 , respectively).

Table 2.2
Household composition, Uganda 2004-05

|  | Residence |  |  |
| :--- | ---: | ---: | ---: |
| Characteristic | Urban | Rural | Total |
| Sex of head of household |  |  |  |
| Male | 65.8 | 71.4 | 70.6 |
| Female | 34.2 | 28.6 | 29.4 |
| Total | 100.0 | 100.0 | 100.0 |
| Number of usual members |  |  |  |
| 1 | 16.5 | 9.4 | 10.4 |
| 2 | 13.4 | 8.5 | 9.1 |
| 3 | 14.4 | 11.4 | 11.8 |
| 4 | 26.8 | 28.0 | 27.8 |
| 5 | 15.8 | 22.0 | 21.1 |
| 6 | 7.9 | 12.9 | 12.2 |
| $7+$ | 5.0 | 7.8 | 7.4 |
| Total | 100.0 | 100.0 | 100.0 |
| Mean size | 4.3 | 5.3 | 5.2 |
| Mean number of women 15-49 | 1.2 | 1.0 | 1.1 |
| Mean number of men $15-49$ | 1.0 | 0.9 | 0.9 |
| Number of households |  |  |  |

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

### 2.5 Education Attainment of Household Population

Educational attainment is a key determinant of an individual's life style and status. It also affects many aspects of human life, including those related to demographic and health issues. This study, like many others, shows that educational attainment is strongly associated with awareness, knowledge, attitudes, and behaviour related with HIV/AIDS. Tables 2.3.1 and 2.3.2 show the percent distribution of women and men age five and older by the highest level of education attained.

There are differences in educational attainment between women and men, especially as age increases. Twenty-six percent of women in Uganda have never been to school, compared with 15 percent of men. The proportion with no education increases steadily for both sexes starting with those in their 20s. Those with only some primary education account for 57 percent of females and 61 percent of males. The percentage of females attaining higher education levels is also lower than males. For example, the percentage who completed primary school only is 6 percent among females and 8 percent among males. Eleven percent of women have attended secondary school, compared with 15 percent of men.

Educational attainment is substantially higher in urban areas than in rural areas, with the median number of years of schooling for females being 6.0 in urban areas and 2.6 in rural areas. Among males, the difference is 5.5 in urban areas and 1.9 in rural areas. Level of education differs significantly among regions. The region with the highest educational attainment is Kampala for both females and males, while the region with the lowest is Northeast.

| Table 2.3.1 |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Highest level of education attended by female household population age 5 and over (percent distribution), Uganda 2004-05 |  |  |  |  |  |  |  |  |
| Background characteristic | No education | Some primary | Complete primary ${ }^{1}$ | Secondary+ | Missing | Total | Number | Median number of years |
| Age |  |  |  |  |  |  |  |  |
| 5-9 | 30.5 | 68.4 | 0.0 | 0.0 | 1.2 | 100.0 | 4,407 | 0.0 |
| 10-14 | 3.8 | 91.8 | 2.0 | 2.2 | 0.2 | 100.0 | 3,816 | 2.8 |
| 15-19 | 6.1 | 52.0 | 12.1 | 29.7 | 0.2 | 100.0 | 2,267 | 5.5 |
| 20-24 | 16.9 | 44.0 | 12.7 | 26.2 | 0.2 | 100.0 | 2,091 | 5.0 |
| 25-29 | 22.4 | 46.5 | 11.5 | 19.2 | 0.4 | 100.0 | 1,855 | 3.9 |
| 30-34 | 30.1 | 44.8 | 10.9 | 14.1 | 0.1 | 100.0 | 1,461 | 3.0 |
| 35-39 | 32.9 | 44.0 | 12.4 | 10.4 | 0.3 | 100.0 | 1,128 | 2.7 |
| 40-44 | 42.6 | 35.3 | 10.3 | 11.0 | 0.8 | 100.0 | 828 | 1.5 |
| 45-49 | 42.3 | 37.4 | 8.6 | 10.9 | 0.8 | 100.0 | 643 | 1.5 |
| 50-54 | 50.3 | 35.6 | 5.8 | 7.1 | 1.2 | 100.0 | 535 | 0.0 |
| 55-59 | 55.1 | 35.1 | 5.3 | 3.6 | 1.0 | 100.0 | 327 | 0.0 |
| 60-64 | 70.2 | 21.7 | 1.8 | 1.3 | 5.0 | 100.0 | 534 | 0.0 |
| 65+ | 75.0 | 17.6 | 0.8 | 1.3 | 5.4 | 100.0 | 837 | 0.0 |
| Residence |  |  |  |  |  |  |  |  |
| Urban | 10.0 | 44.3 | 10.6 | 34.7 | 0.4 | 100.0 | 2,549 | 5.5 |
| Rural | 27.7 | 58.3 | 5.8 | 7.3 | 0.9 | 100.0 | 18,18 | 1.6 |
| Region |  |  |  |  |  |  |  |  |
| Central | 16.1 | 59.1 | 7.9 | 16.3 | 0.6 | 100.0 | 3,461 | 3.0 |
| Kampala | 7.9 | 35.8 | 11.6 | 44.3 | 0.5 | 100.0 | 1,012 | 6.5 |
| East Central | 20.7 | 57.6 | 7.7 | 13.4 | 0.6 | 100.0 | 3,338 | 2.5 |
| Eastern | 25.0 | 61.2 | 5.7 | 7.8 | 0.3 | 100.0 | 2,018 | 2.1 |
| Northeast | 46.4 | 44.3 | 4.0 | 4.1 | 1.2 | 100.0 | 1,671 | 0.0 |
| North Central | 30.4 | 59.1 | 5.1 | 4.3 | 1.1 | 100.0 | 2,230 | 1.3 |
| West Nile | 33.1 | 57.6 | 3.2 | 4.2 | 1.8 | 100.0 | 1,869 | 0.8 |
| Western | 27.5 | 59.9 | 5.0 | 7.1 | 0.6 | 100.0 | 2,388 | 1.8 |
| Southwest | 26.3 | 58.1 | 7.6 | 6.8 | 1.1 | 100.0 | 2,744 | 1.6 |
| Wealth quintile |  |  |  |  |  |  |  |  |
| Lowest | 40.4 | 53.2 | 3.0 | 2.4 | 1.1 | 100.0 | 3,800 | 0.2 |
| Second | 30.5 | 59.1 | 5.1 | 4.1 | 1.2 | 100.0 | 4,546 | 1.2 |
| Middle | 27.0 | 61.2 | 5.9 | 5.3 | 0.7 | 100.0 | 3,966 | 1.6 |
| Fourth | 20.3 | 61.5 | 7.4 | 10.0 | 0.8 | 100.0 | 4,112 | 2.3 |
| Highest | 10.6 | 48.0 | 10.4 | 30.5 | 0.5 | 100.0 | 4,308 | 5.0 |
| Total | 25.5 | 56.6 | 6.4 | 10.7 | 0.8 | 100.0 | 20,732 | 2.0 |

${ }^{1}$ Completed standard 7 at the primary level.

Results show that educational attainment is considerably higher for those in the higher wealth quintiles. For example, the proportion of women with no education declines from 40 percent among those in the lowest quintile to 11 percent among those in the highest quintile.

These results show little change in educational attainment since 2000-01, although there has been a decline since 2000-01 in the proportion of children who have no education, which may reflect the impact of the introduction of universal basic education.

Table 2.3.2
Highest level of education attended by male household population age 5 and over (percent distribution), Uganda 2004-05

| Background characteristic | No education | Some primary | Complete primary ${ }^{1}$ | Secondary+ | Missing | Total | Number | Median number of years |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Age |  |  |  |  |  |  |  |  |
| 5-9 | 31.8 | 66.9 | 0.0 | 0.0 | 1.2 | 100.0 | 4,572 | 0.0 |
| 10-14 | 3.0 | 92.9 | 2.1 | 1.8 | 0.1 | 100.0 | 4,106 | 2.6 |
| 15-19 | 3.4 | 54.8 | 11.3 | 30.2 | 0.2 | 100.0 | 2,342 | 5.5 |
| 20-24 | 6.1 | 37.6 | 14.8 | 41.4 | 0.2 | 100.0 | 1,433 | 6.4 |
| 25-29 | 10.0 | 43.2 | 15.0 | 31.6 | 0.1 | 100.0 | 1,355 | 5.6 |
| 30-34 | 10.3 | 43.9 | 16.2 | 29.0 | 0.6 | 100.0 | 1,310 | 5.6 |
| 35-39 | 12.1 | 45.9 | 13.5 | 27.9 | 0.6 | 100.0 | 999 | 5.3 |
| 40-44 | 14.9 | 44.4 | 17.9 | 22.3 | 0.4 | 100.0 | 812 | 5.3 |
| 45-49 | 16.8 | 41.2 | 19.6 | 22.0 | 0.4 | 100.0 | 575 | 5.1 |
| 50-54 | 16.1 | 43.7 | 19.6 | 20.2 | 0.5 | 100.0 | 515 | 4.9 |
| 55-59 | 20.8 | 47.1 | 15.8 | 15.6 | 0.7 | 100.0 | 354 | 3.9 |
| 60-64 | 28.0 | 46.4 | 10.1 | 10.0 | 5.6 | 100.0 | 323 | 3.3 |
| 65+ | 42.3 | 43.4 | 4.5 | 4.9 | 4.8 | 100.0 | 844 | 0.9 |
| Residence |  |  |  |  |  |  |  |  |
| Urban | 6.1 | 44.4 | 8.4 | 40.3 | 0.8 | 100.0 | 2,283 | 5.9 |
| Rural | 16.4 | 62.6 | 8.1 | 12.1 | 0.8 | 100.0 | 17,263 | 2.6 |
| Region |  |  |  |  |  |  |  |  |
| Central | 12.0 | 63.6 | 6.6 | 17.2 | 0.6 | 100.0 | 3,468 | 3.0 |
| Kampala | 5.3 | 34.0 | 9.4 | 50.2 | 1.2 | 100.0 | 909 | 6.9 |
| East Central | 13.8 | 61.1 | 7.6 | 16.8 | 0.7 | 100.0 | 2,977 | 2.9 |
| Eastern | 15.4 | 62.6 | 7.3 | 14.4 | 0.3 | 100.0 | 2,057 | 3.0 |
| Northeast | 32.3 | 49.0 | 7.1 | 9.5 | 2.0 | 100.0 | 1,539 | 1.5 |
| North Central | 14.6 | 60.8 | 11.5 | 12.6 | 0.6 | 100.0 | 2,059 | 3.4 |
| West Nile | 12.7 | 64.7 | 7.7 | 13.4 | 1.5 | 100.0 | 1,796 | 2.9 |
| Western | 17.5 | 62.2 | 8.8 | 11.2 | 0.3 | 100.0 | 2,241 | 2.5 |
| Southwest | 14.1 | 65.6 | 9.0 | 10.4 | 0.9 | 100.0 | 2,502 | 2.4 |
| Wealth quintile |  |  |  |  |  |  |  |  |
| Lowest | 25.6 | 61.4 | 6.1 | 5.8 | 1.1 | 100.0 | 3,433 | 1.7 |
| Second | 18.1 | 63.2 | 8.6 | 9.5 | 0.7 | 100.0 | 4,178 | 2.4 |
| Middle | 14.7 | 66.4 | 8.5 | 9.7 | 0.8 | 100.0 | 3,857 | 2.5 |
| Fourth | 11.9 | 64.2 | 9.2 | 14.2 | 0.5 | 100.0 | 3,978 | 3.1 |
| Highest | 7.0 | 47.8 | 8.3 | 35.9 | 1.0 | 100.0 | 4,100 | 5.3 |
| Total | 15.2 | 60.5 | 8.2 | 15.4 | 0.8 | 100.0 | 19,546 | 2.9 |

${ }^{1}$ Completed standard 7 at the primary level.

### 2.6 Household Characteristics

To assess the socioeconomic conditions in Uganda, household respondents were asked a number of questions on issues related to their household environment. These included access to electricity, the source of drinking water, sanitary facility, and type of flooring material.

Access to electricity not only opens a household to a wider number of consumer appliances, but also is a measure of socioeconomic level. Only 9 percent of Ugandan households have electricity, the same proportion found in 2000-01. There are huge differences by residence, with almost half of urban households being electrified, compared with only 3 percent of rural households (Table 2.4).

Source of drinking water is important because unsafe sources can contain waterborne diseases, including diarrhoea and dysentery. Sources of water expected to be relatively disease-free are piped water, protected or covered wells, boreholes, and protected springs. Other sources, like open wells, unprotected springs, rivers, streams, ponds, and lakes are more likely to carry pathogens that cause these diseases. Table 2.4 shows that three in five (61 percent) households have water sources considered to be safe. Urban households are greatly advantaged- 90 percent have access to safe water, compared with 57 percent of rural households.

Another important aspect of household health is the type of toilet facility. This survey shows that the vast majority of Ugandan households (85 percent) still use pit latrines of some type. This proportion is similar by residence ( 89 percent of urban households and 85 percent of rural households), with equal proportions of both urban and rural households (63 percent) using covered traditional pit latrines. Urban households are somewhat more likely than rural households to use covered ventilated pit latrines, while rural households are more likely to use uncovered pit latrines. Thirteen percent of all households report having no toilet facility at all, almost all of which are rural households. In contrast, 10 percent of urban households have flush toilets, compared with less than 1 percent of rural households.

There has been some improvement in the availability of sanitary facilities over time, with the proportion of households having no toilet declining from 17 percent in 2000-01 to 13 percent in 2004-05.

The type of flooring material can also distinguish between socioeconomic levels of households. Survey results show that almost three in ten (58 percent) Ugandan households have dirt or earthen floors, with an additional 20 percent having floors made of dung and another 20 percent with cement floors. Dirt and dung floors are much more common in rural areas, while a large majority of urban households have cement floors. The proportion of households with earth or dung floors has declined slightly over time, from 80 percent in 2000-01 to 78 percent in 2004-05. The proportion of households with concrete floors has increased from 13 to 20 percent.

### 2.7 Household Durable Goods

Another indication of a household's socioeconomic status is the durable assets that it owns. Ownership of some durable goods is of interest on their own. For example, information on radio ownership is useful in planning educational outreach programmes. Data on refrigerators and cookers may be useful for nutrition programmes. These results are also used in creating the wealth quintile.

The most commonly owned durable goods are mattresses ( 76 percent of households), radios ( 60 percent), bicycles ( 39 percent), and clocks ( 23 percentTable 2.5). Surprisingly, 10 percent of Ugandan households have a mobile phone. Only 4 percent of Ugandan households have a colour television, while 3 percent have a black and white television. Only 3 percent own a refrigerator. Motor vehicles are also rare, with only 3 percent of households owning a motorcycle and 2 percent having a car or lorry. Ownership of livestock and poultry is common (half of households). Nine percent of Ugandan households own none of the selected items.

All of the items except bicycles, livestock, and poultry are more prevalent among urban than rural households. For example, 45 percent of urban households own a mobile telephone, compared with only 5 percent of rural households. Similarly, 61 percent of urban households have clocks, compared with 17 percent of rural households.

Table 2.5
Household possession of durable goods, Uganda 2004-05

|  | Residence |  |  |
| :--- | ---: | ---: | ---: |
| Consumer goods | Urban | Rural | Total |
| Clock | 60.6 | 17.2 | 23.1 |
| Mattress | 94.7 | 73.0 | 76.0 |
| Black and white |  |  |  |
| $\quad$ television | 11.9 | 1.3 | 2.8 |
| Colour television | 22.2 | 1.3 | 4.1 |
| Radio | 82.3 | 56.3 | 59.8 |
| Mobile phone | 45.1 | 4.6 | 10.1 |
| Land line | 3.2 | 0.1 | 0.5 |
| Refrigerator | 18.8 | 0.9 | 3.3 |
| Cooker | 7.5 | 0.3 | 1.3 |
| Bicycle | 23.6 | 41.7 | 39.3 |
| Motorcycle/scooter | 4.4 | 2.4 | 2.6 |
| Car/lorry | 10.1 | 0.9 | 2.2 |
| Livestock | 18.1 | 53.6 | 48.8 |
| Poultry | 20.4 | 55.6 | 50.8 |
| None of the above | 2.2 | 9.9 | 8.9 |
| Number of households | 1,302 | 8,227 | 9,529 |

Comparison with data from the 2000-01 UDHS shows an increase in ownership of radios, from 52 to 60 percent of households. Ownership of other goods has not changed much over time.

### 2.8 Ownership of Mosquito Nets

A key intervention for the prevention of malaria transmission is the use of mosquito nets while sleeping, especially ones that have been treated with insecticide. Since the UHSBS focused on issues related to HIV/AIDS, detailed questions about mosquito nets were not included. However, the Household Questionnaire included questions on whether the household had any mosquito nets and if so, how many.

One in four households has at least one mosquito net and 12 percent own more than one net (Table 2.6). The mean number of nets per household is 0.5 .

Ownership of mosquito nets is considerably higher in urban areas than in rural areas. Similarly, net ownership is by far the highest in Kampala (67 percent of households), followed by Northeast region ( 40 percent). Households in the mountainous and less malaria-prone areas like the Southwest ( 13 percent), Western ( 18 percent), and Eastern regions (19 percent) are less likely to own a mosquito net. Mosquito net ownership increases with wealth, especially at the highest wealth quintile.

Mosquito net coverage has increased considerably. The proportion of households that have at least one mosquito net has doubled from 13 percent in 2000-01 to 26 percent in 2004-05.

Table 2.6
Mosquito net coverage, Uganda 2004-05

| Residence/ region | $\underline{\text { Percentage of households with: }}$ |  | Mean number of nets per household | Number of households |
| :---: | :---: | :---: | :---: | :---: |
|  | At least one mosquito net | More than one mosquito net |  |  |
| Residence |  |  |  |  |
| Urban | 60.1 | 33.7 | 1.2 | 1,302 |
| Rural | 20.5 | 8.7 | 0.4 | 8,227 |
| Region |  |  |  |  |
| Central | 24.6 | 13.3 | 0.5 | 1,790 |
| Kampala | 67.2 | 37.1 | 1.4 | 575 |
| East Central | 23.7 | 9.4 | 0.4 | 1,395 |
| Eastern | 18.9 | 6.1 | 0.3 | 995 |
| Northeast | 40.1 | 21.5 | 0.8 | 729 |
| North Central | 27.3 | 12.3 | 0.5 | 955 |
| West Nile | 29.8 | 16.7 | 0.6 | 680 |
| Western | 18.2 | 6.3 | 0.3 | 1,132 |
| Southwest | 13.0 | 3.9 | 0.2 | 1,277 |
| Wealth quintile |  |  |  |  |
| Lowest | 14.1 | 5.2 | 0.2 | 1,831 |
| Second | 16.9 | 6.2 | 0.3 | 2,025 |
| Middle | 16.6 | 6.1 | 0.3 | 1,837 |
| Fourth | 24.6 | 9.3 | 0.4 | 1,841 |
| Highest | 55.9 | 32.6 | 1.2 | 1,994 |
| Total | 26.0 | 12.1 | 0.5 | 9,529 |

### 2.9 Orphanhood and Children's Living Arrangements

Table 2.7 provides information regarding the living arrangements of children under age 18 , including those who live with neither biological parent and those whose biological parents have died (orphans), as well as those who live with one parent or the other.

Fifty-four percent of children under 18 are living with both parents, while 20 percent live with their mothers and not their fathers, 6 percent live with their fathers and not their mothers, and 20 percent live with neither parent. Younger children are more likely than older ones to live with both parents.

The table also provides data on the extent of orphanhood, the proportion of children whose natural father or mother has died. The study reveals that 12 percent of children under 18 have lost their biological fathers, 6 percent have lost their mothers, and 3 percent have lost both parents. Altogether, 14 percent of children have lost one or both parents (i.e., they are considered to be orphans). Three percent have lost both parents ('double orphans').

Table 2.7 shows that the level of ophanhood is higher in urban areas, where 19 percent of children under age 18 have lost one or both parents, than in rural areas ( 14 percent). In terms of regional variation, North Central (20 percent), Kampala (18 percent), Southwest (16 percent), and Central (16 percent) regions have the highest percentages of children under 18 years having lost one or both of their biological parents. This is consistent with the regional variation in HIV prevalence (see Chapter 8). Eastern region has by far the lowest percent of children under 18 years having lost one or both of their biological parents ( 9 percent). The high level of orphanhood in the northern region may also be explained by the long running civil strife in that area. The level of orphanhood has remained constant since 2000-01 at 14 percent of children under 18 .

Table 2.7
Living arrangements and survival status of parents for children under 18 (percent distribution), Uganda 2004-05

| 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/ mother | Total | Percentage orphaned | $\begin{gathered} \text { Number } \\ \text { of } \\ \text { children } \\ <18 \\ \hline \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Father alive | Father dead | Mother alive | Mother dead | Both alive | Only father alive | Only mother alive | Both dead |  |  |  |  |
| Age |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 0-1 | 70.5 | 23.4 | 1.9 | 0.3 | 0.1 | 2.2 | 0.2 | 0.3 | 0.0 | 1.2 | 100.0 | 2.4 | 3,517 |
| 2-4 | 62.3 | 17.1 | 3.1 | 3.3 | 0.3 | 10.8 | 0.6 | 1.0 | 0.5 | 1.0 | 100.0 | 5.5 | 5,883 |
| 5-9 | 53.8 | 12.8 | 5.1 | 5.2 | 1.0 | 13.9 | 1.7 | 3.6 | 2.1 | 0.8 | 100.0 | 13.5 | 8,952 |
| 10-14 | 45.5 | 11.2 | 7.7 | 6.2 | 2.0 | 13.8 | 2.6 | 5.3 | 4.7 | 0.9 | 100.0 | 22.3 | 7,896 |
| 15-17 | 36.7 | 9.7 | 9.1 | 5.6 | 2.5 | 17.3 | 2.9 | 6.9 | 7.2 | 2.0 | 100.0 | 28.7 | 2,848 |
| $<15$ | 55.4 | 14.7 | 5.0 | 4.4 | 1.0 | 11.6 | 1.5 | 3.1 | 2.2 | 0.9 | 100.0 | 12.9 | 26,249 |
| Sex |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Male | 53.9 | 14.2 | 5.6 | 4.9 | 1.3 | 11.2 | 1.6 | 3.5 | 2.9 | 1.0 | 100.0 | 14.9 | 14,811 |
| Female | 53.3 | 14.2 | 5.3 | 4.2 | 1.1 | 13.3 | 1.7 | 3.5 | 2.5 | 1.1 | 100.0 | 14.0 | 14,285 |
| Residence |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Urban | 41.6 | 16.8 | 5.0 | 5.8 | 1.2 | 15.5 | 2.4 | 5.4 | 4.6 | 1.7 | 100.0 | 18.6 | 2,899 |
| Rural | 54.9 | 13.9 | 5.5 | 4.4 | 1.2 | 11.8 | 1.6 | 3.3 | 2.5 | 1.0 | 100.0 | 14.0 | 26,198 |
| Region |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Central | 46.9 | 14.4 | 4.7 | 6.3 | 1.4 | 15.6 | 2.4 | 4.1 | 3.4 | 0.9 | 100.0 | 15.9 | 5,014 |
| Kampala | 42.6 | 17.5 | 4.3 | 5.5 | 1.5 | 14.8 | 2.4 | 4.2 | 5.2 | 2.0 | 100.0 | 17.7 | 1,001 |
| East Central | 51.3 | 15.2 | 3.9 | 5.9 | 0.5 | 15.0 | 1.5 | 3.8 | 2.1 | 0.7 | 100.0 | 11.9 | 4,786 |
| Eastern | 64.3 | 8.9 | 2.4 | 5.1 | 1.0 | 11.7 | 1.3 | 2.7 | 1.7 | 1.0 | 100.0 | 9.0 | 2,935 |
| Northeast | 63.7 | 12.6 | 8.1 | 2.1 | 1.2 | 7.1 | 0.9 | 2.8 | 1.1 | 0.5 | 100.0 | 14.0 | 2,366 |
| North Central | 55.6 | 11.8 | 7.0 | 2.9 | 1.5 | 9.1 | 2.0 | 4.5 | 4.7 | 0.9 | 100.0 | 19.7 | 3,196 |
| West Nile | 50.6 | 14.5 | 4.8 | 5.7 | 1.0 | 13.1 | 1.7 | 5.0 | 2.1 | 1.4 | 100.0 | 14.7 | 2,673 |
| Western | 54.1 | 17.3 | 5.4 | 4.4 | 1.3 | 10.5 | 1.0 | 2.7 | 2.3 | 1.0 | 100.0 | 12.7 | 3,374 |
| Southwest | 53.7 | 16.0 | 8.4 | 1.9 | 1.4 | 10.5 | 1.7 | 1.7 | 2.9 | 1.7 | 100.0 | 16.2 | 3,752 |
| Wealth quintile |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Lowest | 54.5 | 14.0 | 6.7 | 3.0 | 1.1 | 12.0 | 1.7 | 3.5 | 2.4 | 1.1 | 100.0 | 15.5 | 5,182 |
| Second | 55.5 | 13.8 | 6.4 | 4.3 | 1.2 | 11.3 | 1.4 | 2.7 | 2.1 | 1.2 | 100.0 | 13.9 | 6,536 |
| Middle | 58.3 | 13.5 | 5.5 | 4.4 | 1.1 | 9.5 | 1.3 | 3.1 | 2.4 | 0.9 | 100.0 | 13.4 | 5,984 |
| Fourth | 55.0 | 12.8 | 4.8 | 5.2 | 1.3 | 12.8 | 1.7 | 3.1 | 2.4 | 0.8 | 100.0 | 13.3 | 5,975 |
| Highest | 43.8 | 17.2 | 3.6 | 5.6 | 1.1 | 15.8 | 2.3 | 5.1 | 4.4 | 1.2 | 100.0 | 16.4 | 5,419 |
| Total | 53.6 | 14.2 | 5.4 | 4.5 | 1.2 | 12.2 | 1.7 | 3.5 | 2.7 | 1.0 | 100.0 | 14.4 | 29,097 |

Orphans are usually considered to be at a disadvantage compared with children whose parents are still alive. To assess whether orphans are educationally disadvantaged, an indicator was devised that compares the proportion of children 10-14 who are attending school among those whose parents are both dead to those whose parents are both alive and who are living with one of them. The results indicate that among children aged 10-14 whose parents are both alive and who are living with one or both parents, 94 percent are in school, compared with 89 percent of children who have lost both parents ('double orphaned') (data not shown). The ratio of school attendance among orphaned to non-orphaned children is 0.9. This implies that double orphans have a disadvantage in school attendance compared with children who are living with one or both parents. Disaggregation of this index by background characteristics is hampered by the small number of orphans in many categories.

### 2.10 Care and Support for Orphans and Vulnerable Children

The survey also included questions about care and support that was given to households with orphans and vulnerable children (OVCs). In this context, an orphan was defined as a child under the age of 18 , one or both of whose parents had died. A vulnerable child was defined as a child under 18 , one or both of whose parents was living in the same household, had been very sick for at least three months
during the 12 months preceding the survey or a child living in a household in which an adult aged 15-59 has either been very ill or died in the preceding 12 months. ${ }^{1}$ In the case of orphans and vulnerable children, questions were added as to whether the household had received any free, external support (other than from family or friends) for each such child during the 12 months before the survey. Several types of support were detailed: medical support, social/spiritual/emotional support (e.g., companionship, counselling), material support (e.g., clothes, food, money), practical support (e.g., help with housework, legal services), and support with schooling. Results are shown in Table 2.8.

Table 2.8
External support for households with orphans and vulnerable children (OVC), Uganda 2004-05

| Background characteristic | Percentage of OVCs aged 0-17 who live in households that received in the 12 months preceding the survey, free, external: |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Medical support | $\begin{aligned} & \text { Social, } \\ & \text { emotional } \\ & \text { support } \\ & \hline \end{aligned}$ | Material support | Practical support | School support ${ }^{1}$ | Any support | All five types of support ${ }^{2}$ | No support | $\begin{gathered} \hline \text { Number of } \\ \text { OVCs aged } \\ 0-17 \\ \hline \end{gathered}$ |
| Age |  |  |  |  |  |  |  |  |  |
| 0-4 | 9.2 | 3.3 | 2.1 | 1.0 | na | 12.4 | 0.2 | 87.6 | 674 |
| 5-9 | 10.3 | 4.9 | 2.3 | 0.5 | 13.7 | 22.5 | 0.1 | 77.5 | 1,432 |
| 10-14 | 11.4 | 5.3 | 4.1 | 1.2 | 19.4 | 26.1 | 0.3 | 73.9 | 1,964 |
| 15-17 | 11.8 | 5.3 | 4.0 | 0.6 | 13.8 | 22.7 | 0.0 | 77.3 | 884 |
| Sex |  |  |  |  |  |  |  |  |  |
| Male | 11.5 | 5.0 | 4.0 | 1.0 | 14.7 | 23.7 | 0.3 | 76.3 | 2,567 |
| Female | 10.1 | 4.9 | 2.5 | 0.7 | 13.5 | 21.5 | 0.1 | 78.5 | 2,387 |
| Residence |  |  |  |  |  |  |  |  |  |
| Urban | 5.5 | 2.1 | 3.4 | 1.0 | 8.9 | 13.9 | 0.0 | 86.1 | 640 |
| Rural | 11.7 | 5.3 | 3.2 | 0.8 | 14.9 | 23.9 | 0.2 | 76.1 | 4,314 |
| Region |  |  |  |  |  |  |  |  |  |
| Central | 4.1 | 1.9 | 3.0 | 0.8 | 8.5 | 13.3 | 0.4 | 86.7 | 891 |
| Kampala | 3.9 | 1.9 | 5.0 | 0.6 | 8.3 | 12.7 | 0.0 | 87.3 | 200 |
| East Central | 3.4 | 4.5 | 2.7 | 1.9 | 9.1 | 14.0 | 0.2 | 86.0 | 707 |
| Eastern | 18.3 | 13.7 | 5.1 | 1.2 | 34.1 | 47.3 | 0.3 | 52.7 | 309 |
| Northeast | 0.6 | 1.0 | 1.2 | 0.0 | 7.1 | 8.3 | 0.0 | 91.7 | 364 |
| North Central | 11.8 | 5.3 | 2.3 | 1.2 | 10.3 | 18.5 | 0.3 | 81.5 | 817 |
| West Nile | 34.8 | 7.1 | 2.1 | 0.1 | 29.3 | 45.2 | 0.0 | 54.8 | 492 |
| Western | 7.7 | 7.3 | 3.4 | 0.8 | 15.2 | 26.4 | 0.0 | 73.6 | 512 |
| Southwest | 15.8 | 4.3 | 6.0 | 0.5 | 16.0 | 29.0 | 0.0 | 71.0 | 661 |
| Wealth quintile |  |  |  |  |  |  |  |  |  |
| Lowest | 15.2 | 5.6 | 3.0 | 0.4 | 17.6 | 27.4 | 0.0 | 72.6 | 975 |
| Second | 9.5 | 3.9 | 1.6 | 0.8 | 12.3 | 19.7 | 0.2 | 80.3 | 1,069 |
| Middle | 12.6 | 5.2 | 4.9 | 0.5 | 14.4 | 26.3 | 0.0 | 73.7 | 961 |
| Fourth | 11.7 | 4.4 | 4.3 | 1.6 | 15.3 | 23.3 | 0.2 | 76.7 | 901 |
| Highest | 6.0 | 5.4 | 2.9 | 1.1 | 11.5 | 17.2 | 0.4 | 82.8 | 1,048 |
| Total | 10.9 | 4.9 | 3.3 | 0.9 | 14.1 | 22.6 | 0.2 | 77.4 | 4,954 |

Note: All five types of support can be received by those aged 5-17, four types of support (excluding school) can be received by those aged 0-4.
${ }^{1}$ School support received by those aged 5-17.
${ }^{2}$ Those aged 0-4 included in this column if received four types of support (excluding school).
na $=$ Not applicable
OVC = Orphans and vulnerable children, i.e., children aged 0-17 whose mother or father has died or who are living in a household in which a person aged 18-59 has been very sick for at least 3 months during the 12 months preceding the survey, or in which a person aged 18-59 has died in the preceding 12 months. This definition differs slightly from the standard because it omits children whose parents have been very ill in the past 12 months but who do not live in the same household, since such questions were not included in the UHSBS.

The data show that care and support services are not widespread in Uganda. Less than one in four OVCs (23 percent) receives any kind of free, external support. Only 14 percent of OVCs receive

[^0]assistance with schooling, while 11 percent receive medical assistance. Only 5 percent receive social or emotional support, 3 percent receive material support, and less than 1 percent receive practical support. Support services are more prevalent in rural areas than in urban areas and are especially common in Eastern and West Nile regions. The prevalence of care and support services varies erratically by wealth quintile.

### 2.11 Care and Support for Chronically Ill Adults

Table 2.9 shows the percentage of women and men aged 18 - 59 who were very ill for 3 or more months during the 12 months preceding the survey and whose households received free, external support in caring for these people within the 12 months preceding the survey. Also included are households that reported the death of someone in the 12 months preceding the survey who had been ill for at least three or more months before death.

The table shows that among chronically ill adults, 20 percent live in households that received medical support for them, 19 percent received social/emotional support, 6 percent received material support, and 4 percent received practical support. Less than 1 percent received all four types of support.

Looking at the place of residence, the survey data reveal that each type of support except practical support is slightly more common for adults living in rural areas than in urban areas. Support also appears to be more common in Eastern and West Nile regions and least common in Northeast, North Central, and Central regions.

It should also be pointed out that, although the intent of the question was to obtain data on the extent of care and support provided to those ill with AIDS, data from the survey indicate that less than 20 percent of adults who were reported to have been very ill for at least 3 months in the 12 months preceding the survey tested HIV positive.

Table 2.9
External support for chronically ill adults, Uganda 2004-05

| Background characteristic | Among women and men aged 18-59 who were very ill for 3 or more months during the past 12 months and persons aged 18-59 who were ill for 3 or more months before death, percentage whose households received, in the 12 months preceding the survey, free external: |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Medical support | Social, emotional support | Material support | Practical support | All four types of support | No support | Number of chronically ill persons |
| Age |  |  |  |  |  |  |  |
| 18-19 | (12.6) | (17.6) | (3.6) | (4.1) | (0.0) | (75.3) | 34 |
| 20-29 | 20.1 | 16.6 | 5.4 | 4.8 | 1.3 | 70.8 | 214 |
| 30-39 | 21.4 | 15.6 | 5.0 | 3.5 | 0.5 | 68.8 | 319 |
| 40-49 | 21.2 | 23.7 | 6.9 | 2.3 | 0.8 | 64.8 | 254 |
| 50-59 | 18.6 | 23.0 | 6.9 | 5.0 | 1.0 | 63.7 | 171 |
| Sex |  |  |  |  |  |  |  |
| Male | 23.8 | 21.8 | 5.9 | 3.3 | 0.9 | 63.0 | 475 |
| Female | 17.0 | 17.0 | 5.9 | 4.2 | 0.7 | 71.7 | 517 |
| Residence |  |  |  |  |  |  |  |
| Urban | 16.5 | 18.3 | 5.4 | 4.8 | 3.7 | 74.7 | 102 |
| Rural | 20.7 | 19.4 | 5.9 | 3.6 | 0.5 | 66.7 | 890 |
| Region |  |  |  |  |  |  |  |
| Central | 22.1 | 17.2 | 4.6 | 3.2 | 0.0 | 70.5 | 159 |
| Kampala | (21.2) | (17.3) | (9.6) | (7.7) | (3.8) | (69.2) | 29 |
| East Central | 19.3 | 15.5 | 7.3 | 3.5 | 0.9 | 67.8 | 142 |
| Eastern | 24.9 | 32.5 | 9.0 | 8.8 | 1.3 | 52.8 | 75 |
| Northeast | 8.7 | 13.6 | 3.5 | 1.2 | 0.0 | 79.0 | 58 |
| North Central | 15.9 | 13.8 | 6.2 | 3.6 | 1.1 | 75.8 | 244 |
| West Nile | 40.3 | 27.3 | 4.3 | 5.1 | 0.6 | 48.1 | 103 |
| Western | 12.4 | 28.6 | 7.0 | 1.3 | 0.0 | 63.3 | 81 |
| Southwest | 18.3 | 19.4 | 3.5 | 2.4 | 1.2 | 69.6 | 100 |
| Wealth quintile |  |  |  |  |  |  |  |
| Lowest | 20.6 | 13.6 | 6.3 | 2.1 | 0.0 | 71.1 | 218 |
| Second | 21.0 | 19.2 | 5.9 | 3.3 | 0.5 | 66.3 | 252 |
| Middle | 19.2 | 21.9 | 5.0 | 2.9 | 0.9 | 64.3 | 206 |
| Fourth | 19.2 | 13.6 | 5.9 | 6.5 | 1.3 | 71.5 | 170 |
| Highest | 21.2 | 30.6 | 6.2 | 4.9 | 1.8 | 64.2 | 146 |
| Total | 20.3 | 19.3 | 5.9 | 3.8 | 0.8 | 67.5 | 992 |

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

## CHARACTERISTICS OF RESPONDENTS

### 3.1 Key Findings

- Ugandan women continue to marry at a young age (median age of 18 ).
- Twenty-three percent of women and 8 percent of men aged 15-49 have never attended school.
- One-quarter of Ugandan men aged 15-49 are circumcised.
- Ten percent of women and 5 percent of men aged 15-49 have ever been widowed.


### 3.2 INTRODUCTION

This chapter describes some demographic and socioeconomic characteristics of the respondents sampled in the UHSBS. Examining characteristics like age, residence, education, marital status, employment, religion, and ethnicity indicates changes in these traits over time as well as differences in HIV-related knowledge, attitudes, behaviour, and prevalence among Ugandans. Although women and men aged 15-59 were interviewed individually in the survey, this report focuses on age group 15-49, because all the HIV indicators agreed to by Ugandan and international organisations are based on this age group.

### 3.3 Background Characteristics

Table 3.1 shows the distribution of UHSBS respondents by age group. The larger proportions in younger age groups reflect adult mortality and Uganda's past high fertility, which causes each succeeding generation to be larger than the one before. Also of note are the lower proportions of men aged 20-34 than women. A similar dearth of men in their 20s was evident in the 2000-01 UDHS and may result from higher male outmigration and higher participation of men than women in these age groups in institutions such as the armed forces and prisons, which are not covered in the survey.

Table 3.1
Age distribution of respondents, Uganda 2004-05

|  | Women |  |  |  |  | Men |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Age | Weighted <br> percent | Weighted <br> number | Unweighted <br> number |  | Weighted <br> percent | Weighted <br> number | Unweighted <br> number |  |
| $15-19$ | 20.2 | 2,186 | 2,176 |  | 23.4 | 2,070 | 2,042 |  |
| $20-24$ | 17.9 | 1,933 | 1,945 |  | 14.3 | 1,262 | 1,261 |  |
| $25-29$ | 16.3 | 1,764 | 1,809 |  | 13.8 | 1,220 | 1,228 |  |
| $30-34$ | 13.5 | 1,457 | 1,469 |  | 13.6 | 1,200 | 1,209 |  |
| $35-39$ | 10.0 | 1,085 | 1,074 |  | 10.4 | 916 | 917 |  |
| $40-44$ | 8.0 | 870 | 864 |  | 8.9 | 788 | 800 |  |
| $45-49$ | 6.0 | 647 | 636 |  | 6.3 |  | 554 | 552 |
| $50-54$ | 5.0 | 544 | 520 |  | 5.3 | 470 | 457 |  |
| $55-59$ | 3.2 | 342 | 333 |  | 4.0 | 350 | 364 |  |
| Total 15-49 | 91.8 | 9,941 | 9,973 |  | 90.7 | 8,010 | 8,009 |  |
| Total 15-59 | 100.0 | 10,826 | 10,826 |  | 100.0 | 8,830 | 8,830 |  |

The distribution of respondents aged 15-49 by background characteristics is shown in Table 3.2. Sixty-four percent of women are married or living in an informal union, compared with only 53 percent of men. Because men marry later in life than women, more than one-third of the surveyed men (39 percent) have never married, compared with only one-fifth ( 22 percent) of women. On the other hand, women are four times as likely as men to be widowed (less than 6 percent and 1 percent, respectively) and more likely to be divorced or separated (8 and 7 percent, respectively). Twelve percent of women 15-49 were pregnant at the time of the survey.

The vast majority ( 85 percent) of respondents live in rural areas. Central and East Central regions are the most heavily populated, accounting for roughly one-third of the respondents. Most of the respondents (more than three-quarters) have had at least some formal education, with 23 percent of women and 8 percent of men aged 15-49 having never attended school. However, 46-47 percent of women and men have only attended some primary school, without completing it. Women are considerably disadvantaged in education compared with men. For example, 45 percent of men have completed primary or more, compared with only 31 percent of women. With regard to religion, more than 4 in 10 respondents are Catholic, just more than one-third are Protestant, and 13-14 percent are Muslim.

In terms of ethnic composition, the most common group is Baganda, with 18 percent of women and men. Banyankore is the second most common group, with 10 percent of women and men, followed by Basoga, which has 10 percent of the female respondents and 9 percent of male respondents. Men are more likely than women to be currently employed. Among men aged 15-49, 69 percent are currently employed, compared with 62 percent of women.

Table 3.2
Background characteristics of respondents, Uganda, 2004-05

| Background characteristic | Women 15-49 |  |  | Men 15-49 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Weighted percent distribution | Weighted number | Unweighted number | Weighted percent distribution | Weighted number | Unweighted number |
| Marital status |  |  |  |  |  |  |
| Never married | 22.3 | 2,220 | 2,238 | 39.2 | 3,140 | 3,103 |
| Married | 64.0 | 6,358 | 6,406 | 52.9 | 4,237 | 4,300 |
| Widowed | 5.8 | 581 | 565 | 1.3 | 100 | 97 |
| Divorced | 7.9 | 781 | 764 | 6.6 | 532 | 509 |
| Pregnancy status |  |  |  |  |  |  |
| Pregnant | 11.5 | 1,147 | 1,161 | na | na | na |
| Not pregnant | 87.1 | 8,660 | 8,682 | na | na | na |
| Unsure | 1.3 | 134 | 130 | na | na | na |
| Residence |  |  |  |  |  |  |
| Urban | 15.2 | 1,508 | 1,827 | 15.0 | 1,200 | 1,387 |
| Rural | 84.8 | 8,433 | 8,146 | 85.0 | 6,809 | 6,622 |
| Region |  |  |  |  |  |  |
| Central | 16.7 | 1,656 | 942 | 18.1 | 1,451 | 844 |
| Kampala | 6.7 | 668 | 1,099 | 6.8 | 547 | 811 |
| East Central | 15.6 | 1,555 | 1,169 | 14.3 | 1,146 | 877 |
| Eastern | 8.6 | 857 | 915 | 9.6 | 770 | 822 |
| Northeast | 8.3 | 829 | 1,246 | 7.6 | 610 | 913 |
| North Central | 9.8 | 970 | 1,034 | 9.9 | 795 | 868 |
| West Nile | 9.6 | 958 | 1,451 | 9.2 | 735 | 1,148 |
| Western | 11.5 | 1,140 | 1,058 | 11.8 | 945 | 906 |
| Southwest | 13.2 | 1,309 | 1,059 | 12.6 | 1,012 | 820 |
| Education |  |  |  |  |  |  |
| No education | 22.7 | 2,255 | 2,494 | 8.3 | 668 | 713 |
| Primary incomplete | 46.2 | 4,596 | 4,490 | 46.5 | 3,723 | 3,632 |
| Primary complete | 11.2 | 1,115 | 1,042 | 14.1 | 1,133 | 1,147 |
| Secondary+ | 19.7 | 1,957 | 1,927 | 30.9 | 2,477 | 2,506 |
| Employment |  |  |  |  |  |  |
| Currently employed | 61.6 | 6,121 | 6,252 | 69.4 | 5,555 | 5,423 |
| Employed in last 12 months | 7.9 | 782 | 701 | 8.3 | 661 | 730 |
| Not employed in last 12 months | 30.5 | 3,029 | 3,008 | 22.3 | 1,788 | 1,851 |
| Ethnicity |  |  |  |  |  |  |
| Baganda | 17.8 | 1,773 | 1,478 | 17.5 | 1,398 | 1,110 |
| Banyankore | 10.2 | 1,010 | 846 | 10.2 | 818 | 683 |
| Iteso | 6.4 | 634 | 788 | 6.5 | 522 | 652 |
| Lugbara/Madi | 8.0 | 792 | 1,191 | 7.6 | 607 | 939 |
| Basoga | 9.7 | 967 | 829 | 9.2 | 735 | 631 |
| Langi | 5.3 | 525 | 564 | 5.8 | 463 | 513 |
| Bakiga | 6.8 | 680 | 587 | 7.2 | 580 | 496 |
| Karimojong | 3.2 | 316 | 548 | 2.7 | 213 | 369 |
| Acholi | 4.8 | 480 | 508 | 4.5 | 359 | 387 |
| Bagisu/Sabiny | 4.5 | 446 | 448 | 5.9 | 471 | 467 |
| Alur/Jopadhola | 5.2 | 514 | 560 | 5.5 | 442 | 486 |
| Banyara | 3.3 | 325 | 279 | 3.4 | 272 | 240 |
| Batoro | 2.5 | 245 | 246 | 2.7 | 219 | 221 |
| All others | 12.5 | 1,234 | 1,101 | 11.4 | 909 | 815 |
| Religion |  |  |  |  |  |  |
| Catholic | 41.9 | 4,161 | 4,334 | 41.9 | 3,359 | 3,505 |
| Anglican/Protestant | 34.1 | 3,388 | 3,235 | 36.7 | 2,939 | 2,821 |
| Pentecostal | 6.0 | 600 | 585 | 3.9 | 315 | 313 |
| Other Christian | 2.7 | 264 | 257 | 2.9 | 229 | 202 |
| Muslim | 13.9 | 1,382 | 1,406 | 13.2 | 1,055 | 1,048 |
| Other/None/Missing | 1.5 | 147 | 156 | 1.3 | 112 | 120 |
| Total | 100.0 | 9,941 | 9,973 | 100.0 | 8,010 | 8,009 |

Note: Totals include a small number of cases with education missing; Primary complete $=$ completed standard 7 ;
secondary $+=$ attended secondary, whether or not that level was completed. na $=$ not applicable

### 3.4 Educational Attainment

Tables 3.3.1 and 3.3.2 show the distribution of respondents by highest level of school attended. As mentioned previously, men are better educated than women.

Younger respondents are more likely to have attended school and to have reached a higher level than older respondents. For example, only 5 percent of women 15-19 have never attended school, compared with 43 percent of women 45-49. Education among women has increased faster than education among men, helping to reduce the gender gap in education among younger respondents. For example, among respondents aged 45-49, 21 percent of men and 10 percent of women attended secondary school or higher, while among respondents aged 15-19, these percentages increase to 33 percent for men and 31 percent for women.

Respondents living in urban areas are better educated than respondents in rural areas. Among urban respondents, 6 percent of women 15-49 and 1 percent of men have never attended school, compared with 26 percent of women and 10 percent of men in rural areas. Education also differs by region. Northeast region has the highest proportion of women (47 percent) and men ( 26 percent) with no formal education. Kampala has the lowest percentage who have never attended school (4 percent of women and 2 percent of men) and the highest percentage to attend secondary school or higher.

Table 3.3.1
Educational attainment by background characteristics: women 15-49, Uganda 2004-05

| Background characteristic | Highest level of schooling attended or completed |  |  |  | Total | Number of women | Median years of schooling |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | No education | Primary incomplete | Primary complete ${ }^{1}$ | Secondary+ |  |  |  |
| Age |  |  |  |  |  |  |  |
| 15-19 | 5.4 | 50.9 | 12.8 | 30.8 | 100.0 | 2,186 | 5.6 |
| 20-24 | 17.2 | 46.1 | 12.1 | 24.4 | 100.0 | 1,933 | 4.7 |
| 25-29 | 22.1 | 47.7 | 10.5 | 19.4 | 100.0 | 1,764 | 3.8 |
| 30-34 | 28.9 | 47.4 | 9.7 | 14.0 | 100.0 | 1,457 | 3.0 |
| 35-39 | 32.0 | 44.3 | 11.6 | 11.6 | 100.0 | 1,085 | 2.7 |
| 40-44 | 42.5 | 39.0 | 9.3 | 8.9 | 100.0 | 870 | 1.5 |
| 45-49 | 42.6 | 37.1 | 10.6 | 9.6 | 100.0 | 647 | 1.3 |
| Residence |  |  |  |  |  |  |  |
| Urban | 6.4 | 27.7 | 14.6 | 51.2 | 100.0 | 1,508 | 7.0 |
| Rural | 25.6 | 49.5 | 10.6 | 14.0 | 100.0 | 8,433 | 3.5 |
| Region |  |  |  |  |  |  |  |
| Central | 10.3 | 46.9 | 14.2 | 28.6 | 100.0 | 1,656 | 5.5 |
| Kampala | 4.4 | 20.4 | 16.0 | 59.1 | 100.0 | 668 | 7.8 |
| East Central | 17.8 | 42.0 | 13.8 | 26.3 | 100.0 | 1,555 | 5.1 |
| Eastern | 18.6 | 54.7 | 9.7 | 16.8 | 100.0 | 857 | 4.1 |
| Northeast | 47.3 | 39.0 | 6.0 | 7.3 | 100.0 | 829 | 0.2 |
| North Central | 27.2 | 55.6 | 8.1 | 9.0 | 100.0 | 970 | 2.9 |
| West Nile | 34.0 | 53.5 | 5.8 | 6.5 | 100.0 | 958 | 2.2 |
| Western | 25.4 | 51.3 | 9.2 | 13.6 | 100.0 | 1,140 | 3.2 |
| Southwest | 26.6 | 46.0 | 14.2 | 13.0 | 100.0 | 1,309 | 3.6 |
| Wealth quintile |  |  |  |  |  |  |  |
| Lowest | 38.0 | 50.8 | 6.0 | 5.0 | 100.0 | 1,610 | 1.8 |
| Second | 29.7 | 53.2 | 9.1 | 7.8 | 100.0 | 2,038 | 2.9 |
| Middle | 25.7 | 53.3 | 10.4 | 10.2 | 100.0 | 1,849 | 3.2 |
| Fourth | 19.5 | 48.6 | 13.0 | 18.7 | 100.0 | 2,000 | 4.4 |
| Highest | 7.1 | 30.1 | 15.4 | 47.3 | 100.0 | 2,443 | 6.7 |
| Total 15-49 | 22.7 | 46.2 | 11.2 | 19.7 | 100.0 | 9,941 | 4.1 |
| Total 15-59 | 25.0 | 45.5 | 10.8 | 18.4 | 100.0 | 10,826 | 3.9 |

[^1]Regarding the relationship between education and wealth, the data show that the percentage of women 15-49 who have never attended school drops from 38 percent in the lowest wealth quintile to 7 percent in the highest wealth quintile. The proportion of women who completed primary school increases with wealth, as does the proportion attending secondary school or higher. Wealth is also a factor in education for men, though it is less significant than for women.

Table 3.3.2
Educational attainment by background characteristics: men 15-49, Uganda 2004-05

| Background characteristic | Highest level of schooling attended or completed |  |  |  | Total | Number of men | Median years of schooling |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | No education | Primary incomplete | Primary complete ${ }^{1}$ | Secondary+ |  |  |  |
| Age |  |  |  |  |  |  |  |
| 15-19 | 2.5 | 53.2 | 11.4 | 32.7 | 100.0 | 2,070 | 5.7 |
| 20-24 | 5.0 | 38.3 | 13.8 | 42.9 | 100.0 | 1,262 | 6.4 |
| 25-29 | 9.6 | 44.0 | 14.0 | 32.4 | 100.0 | 1,220 | 5.7 |
| 30-34 | 10.0 | 46.0 | 15.9 | 28.1 | 100.0 | 1,200 | 5.5 |
| 35-39 | 11.9 | 48.5 | 12.8 | 26.6 | 100.0 | 916 | 5.1 |
| 40-44 | 14.7 | 46.6 | 17.3 | 21.2 | 100.0 | 788 | 5.1 |
| 45-49 | 16.6 | 42.7 | 19.4 | 21.2 | 100.0 | 554 | 4.8 |
| Residence |  |  |  |  |  |  |  |
| Urban | 1.4 | 24.7 | 11.1 | 62.5 | 100.0 | 1,200 | 8.1 |
| Rural | 9.6 | 50.3 | 14.7 | 25.4 | 100.0 | 6,809 | 5.3 |
| Region |  |  |  |  |  |  |  |
| Central | 8.3 | 49.2 | 10.4 | 32.2 | 100.0 | 1,451 | 5.4 |
| Kampala | 1.6 | 19.5 | 11.8 | 67.0 | 100.0 | 547 | 8.4 |
| East Central | 8.2 | 41.5 | 13.4 | 36.8 | 100.0 | 1,146 | 6.0 |
| Eastern | 7.1 | 47.6 | 13.2 | 31.5 | 100.0 | 770 | 5.7 |
| Northeast | 26.4 | 41.0 | 12.2 | 20.0 | 100.0 | 610 | 4.3 |
| North Central | 3.5 | 46.2 | 23.1 | 27.1 | 100.0 | 795 | 6.0 |
| West Nile | 4.2 | 54.3 | 14.2 | 27.3 | 100.0 | 735 | 5.4 |
| Western | 10.1 | 53.3 | 13.1 | 23.4 | 100.0 | 945 | 4.9 |
| Southwest | 7.4 | 53.4 | 17.4 | 21.8 | 100.0 | 1,012 | 5.0 |
| Wealth quintile |  |  |  |  |  |  |  |
| Lowest | 17.4 | 55.7 | 12.5 | 14.2 | 100.0 | 1,209 | 4.3 |
| Second | 10.3 | 53.7 | 15.9 | 19.8 | 100.0 | 1,628 | 5.0 |
| Middle | 8.5 | 53.8 | 16.3 | 21.4 | 100.0 | 1,506 | 5.1 |
| Fourth | 6.3 | 49.5 | 15.2 | 29.1 | 100.0 | 1,669 | 5.6 |
| Highest | 2.8 | 27.0 | 11.3 | 58.8 | 100.0 | 1,998 | 7.8 |
| Total 15-49 | 8.3 | 46.5 | 14.1 | 30.9 | 100.0 | 8,010 | 5.6 |
| Total 15-59 | 9.2 | 46.3 | 14.6 | 29.8 | 100.0 | 8,830 | 5.6 |

[^2]
### 3.5 Employment Status

Respondents were asked whether they were employed at the time of the survey, and if not, whether they were employed in the 12 months preceding the survey. Those who had not worked were asked what they had been doing for most of the time over the previous year. Table 3.4 shows that 62 percent of women and 69 percent of men aged 15-49 were employed at the time of the survey.

The proportion of women aged 15-49 currently working increases with age until age group $30-34$. From age 30 to 44 the proportion of women currently working remains relatively stable and then decreases slightly at ages 45-49. Among men, the proportion currently working increases through age 24 and then plateaus at about 87 percent. Women in rural areas are more likely to be currently employed (64 percent) than those in urban areas ( 50 percent), but roughly the same proportion of men in urban and rural areas are currently employed.

Women with more education are less likely to be currently employed. Men with no education through completed primary are roughly equally likely to be currently employed, while a lower percentage of men with

Table 3.4
Percentage currently employed, Uganda 2004-05

| Background characteristic | Women 15-49 |  | Men 15-49 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Percentage currently employed | Number of women | Percentage currently employed | Number of men |
| Age |  |  |  |  |
| 15-19 | 31.7 | 2,186 | 29.5 | 2,070 |
| 20-24 | 61.8 | 1,933 | 69.2 | 1,262 |
| 25-29 | 70.5 | 1,764 | 86.8 | 1,220 |
| 30-34 | 74.5 | 1,457 | 87.4 | 1,200 |
| 35-39 | 73.5 | 1,085 | 87.7 | 916 |
| 40-44 | 74.1 | 870 | 86.7 | 788 |
| 45-49 | 71.9 | 647 | 86.2 | 554 |
| Residence |  |  |  |  |
| Urban | 50.3 | 1,508 | 68.8 | 1,200 |
| Rural | 63.6 | 8,433 | 69.5 | 6,809 |
| Education |  |  |  |  |
| No education | 68.1 | 2,255 | 75.8 | 668 |
| Primary incomplete | 65.1 | 4,596 | 72.2 | 3,723 |
| Primary complete | 59.7 | 1,115 | 78.1 | 1,133 |
| Secondary+ | 46.8 | 1,957 | 59.4 | 2,477 |
| Wealth quintile |  |  |  |  |
| Lowest | 66.6 | 1,610 | 66.0 | 1,209 |
| Second | 64.6 | 2,038 | 68.0 | 1,628 |
| Middle | 66.7 | 1,849 | 73.3 | 1,506 |
| Fourth | 62.9 | 2,000 | 69.3 | 1,669 |
| Highest | 50.8 | 2,443 | 69.5 | 1,998 |
| Total 15-49 | 61.6 | 9,941 | 69.4 | 8,010 |
| Total 15-59 | 62.4 | 10,826 | 70.8 | 8,830 | secondary education or higher are currently working. There is no consistent relationship between employment status and wealth quintile. Among women who were not employed in the last 12 months, the primary activities were housework/child care and going to school (data not shown). Men not employed in the last 12 months were most likely to be going to school.

The proportion of women currently working has decreased since 2000-01 (from 73 to 62 percent), while the proportion of men currently working has increased from 63 to 69 percent. This implies an increase in the female unemployment rate over time, although changes in the wording of the questions could also account for differences.

### 3.6 Marital Status

Marriage is an important factor of exposure of women and men to sexual intercourse, which is the primary means of HIV infection in Uganda. In this report, the term 'married' refers to both formal and informal unions, such as living together. An informal union is one in which the man and woman live together for some time, intending to have a lasting relationship, but do not have a formal civil or religious ceremony. The UHSBS classifies marital status into four categories: never married, currently married, widowed, and divorced.

Almost two in three women 15-49 (64 percent) are currently married (Table 3.5). More than one in five has never married, 6 percent are widowed, and 8 percent are divorced or separated. The percentage of women who have never married declines rapidly between age 15 and 30 . The proportion married increases with age until the 25-29 age group, where it peaks at 82 percent.

About half of men aged 15-49 are currently married (53 percent). Across all age groups, men are more likely than women to have never married. Men tend to marry at older ages than women. For example, while 61 percent of men aged 20-24 have never married, only 20 percent of women aged 20-24 fall into this group. Men are much less likely to be widowed (1 percent) than women ( 6 percent).

A comparison of data from the 2004-05 UHSBS and the 2000-01 UDHS shows age at first marriage to be increasing, especially among young women. In 2004-05, 76 percent of women aged 15-19 and 20 percent of women aged 20-24 have never married; this compares to 68 percent of women aged 15-19 and 15 percent of women aged 20-24 never having married in

Table 3.5
Current marital status of respondents, Uganda 2004-05

| Age | Current marital status |  |  |  | Total | Number |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Never married | Married | Widowed | Divorced/ Separated |  |  |
| WOMEN |  |  |  |  |  |  |
| 15-19 | 76.4 | 19.8 | 0.3 | 3.6 | 100.0 | 2,186 |
| 20-24 | 19.6 | 70.7 | 1.0 | 8.7 | 100.0 | 1,933 |
| 25-29 | 5.7 | 82.1 | 3.7 | 8.4 | 100.0 | 1,764 |
| 30-34 | 2.3 | 79.6 | 7.0 | 11.2 | 100.0 | 1,457 |
| 35-39 | 1.8 | 77.4 | 12.1 | 8.6 | 100.0 | 1,085 |
| 40-44 | 1.2 | 77.2 | 13.3 | 8.4 | 100.0 | 870 |
| 45-49 | 1.2 | 68.2 | 21.7 | 8.9 | 100.0 | 647 |
| 50-54 | 1.3 | 58.4 | 28.0 | 12.3 | 100.0 | 544 |
| 55-59 | 1.4 | 52.5 | 31.4 | 14.7 | 100.0 | 342 |
| Total 15-49 | 22.3 | 64.0 | 5.8 | 7.9 | 100.0 | 9,941 |
| Total 15-59 | 20.6 | 63.3 | 7.8 | 8.3 | 100.0 | 10,826 |
| MEN |  |  |  |  |  |  |
| 15-19 | 97.0 | 2.0 | 0.0 | 1.0 | 100.0 | 2,070 |
| 20-24 | 60.9 | 32.3 | 0.1 | 6.7 | 100.0 | 1,262 |
| 25-29 | 19.8 | 69.6 | 0.7 | 9.8 | 100.0 | 1,220 |
| 30-34 | 4.8 | 85.5 | 1.4 | 8.3 | 100.0 | 1,200 |
| 35-39 | 2.7 | 84.5 | 3.0 | 9.8 | 100.0 | 916 |
| 40-44 | 3.2 | 85.3 | 3.2 | 8.3 | 100.0 | 788 |
| 45-49 | 2.8 | 84.2 | 3.6 | 9.3 | 100.0 | 554 |
| 50-54 | 1.3 | 86.2 | 4.3 | 8.2 | 100.0 | 470 |
| 55-59 | 1.7 | 82.6 | 8.2 | 7.5 | 100.0 | 350 |
| Total 15-49 | 39.2 | 52.9 | 1.3 | 6.6 | 100.0 | 8,010 |
| Total 15-59 | 35.7 | 55.9 | 1.7 | 6.8 | 100.0 | 8,830 |

Note: The percentage widowed consists of those who have married but are not currently married and who had a previous spouse who died. The percentage divorced/separated consists of those who have married, are not currently married, and did not have a previous spouse who died. Thus, a divorced person who had a prior marriage end in death would be classified as widowed. 2000-01.

### 3.7 Polygyny

Polygyny was measured in the UHSBS by asking currently married women, "Besides yourself, does your husband/partner have other wives or does he live with any other women as if married?" Currently married men were asked, "At this time, do you have more than one wife or woman with whom you are living as if married?"

Table 3.6 shows that 33 percent of women and 22 percent of men are in polygynous unions. The prevalence of polygynous unions increases with age. Women living in rural areas are more likely to be in polygynous unions (33 percent) than women living in urban areas ( 25 percent). Women living in Kampala followed by Southwest region were least likely to be in polygynous unions. These patterns are similar among men.

Higher education is associated with lower rates of polygyny among women. Only one in four married women with secondary or higher education is in a polygynous union, compared with 39 percent of married women with no education. The relationship between education and polygyny is not as strong for men. Wealth is not associated with polygyny for women or men.

The proportion of women and men in polygynous unions is similar in the 2000-01 UDHS and the 2004-05 UHSBS.

Table 3.6
Polygynous marriages, Uganda 2004-05

| Background characteristic | Married women 15-49 |  | Married men 15-49 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Percentage in polygynous marriage | Number of women | Percentage in polygynous marriage | Number of men |
| Age |  |  |  |  |
| 15-19 | 20.9 | 432 | (5.7) | 41 |
| 20-24 | 23.4 | 1,367 | 9.6 | 408 |
| 25-29 | 30.6 | 1,448 | 14.9 | 850 |
| 30-34 | 35.8 | 1,159 | 22.6 | 1,026 |
| 35-39 | 42.9 | 840 | 25.2 | 774 |
| 40-44 | 37.9 | 671 | 29.5 | 672 |
| 45-49 | 41.2 | 441 | 25.7 | 466 |
| Residence |  |  |  |  |
| Urban | 24.6 | 732 | 18.3 | 509 |
| Rural | 33.5 | 5,626 | 22.0 | 3,728 |
| Region |  |  |  |  |
| Central | 28.5 | 937 | 18.3 | 662 |
| Kampala | 18.7 | 299 | 11.6 | 204 |
| East Central | 43.4 | 990 | 27.7 | 634 |
| Eastern | 29.0 | 615 | 19.7 | 403 |
| Northeast | 39.9 | 622 | 25.4 | 417 |
| North Central | 33.3 | 705 | 28.7 | 520 |
| West Nile | 40.6 | 607 | 22.7 | 384 |
| Western | 31.9 | 780 | 21.1 | 510 |
| Southwest | 19.5 | 803 | 12.4 | 503 |
| Education |  |  |  |  |
| No education | 38.5 | 1,772 | 28.1 | 487 |
| Primary incomplete | 31.9 | 3,055 | 20.2 | 1,992 |
| Primary complete | 29.4 | 691 | 24.6 | 678 |
| Secondary+ | 24.6 | 826 | 19.0 | 1,076 |
| Wealth quintile |  |  |  |  |
| Lowest | 33.6 | 1,068 | 22.6 | 726 |
| Second | 30.1 | 1,357 | 18.4 | 893 |
| Middle | 31.5 | 1,300 | 23.0 | 871 |
| Fourth | 33.6 | 1,312 | 22.9 | 885 |
| Highest | 34.0 | 1,322 | 20.9 | 864 |
| Total 15-49 | 32.5 | 6,358 | 21.5 | 4,237 |
| Total 15-59 | 32.6 | 6,855 | 22.3 | 4,932 |

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

### 3.8 Respondents Who Have Ever Been Widowed

Table 3.7 shows the proportion of respondents who have ever been widowed. This information differs from current marital status presented in Table 3.5. If a woman who was widowed has since remarried, in Table 2.6 she is included with the currently married group rather than widowed, whereas in Table 3.7, she is included among those who have ever been widowed. Men and women ever widowed gives an indication of adult mortality and the effect of HIV/AIDS, because some of the husbands and wives who died may have had AIDS, especially those who died at younger ages.

Ten percent of women aged 15-49 and 5 percent of men have ever been widowed. Among those aged 15-59, the proportions are slightly higher- 12 percent of women and 6 percent of men.

The likelihood of being widowed increases with age. Less than 1 percent of women aged 15-19 have ever been widowed, compared with 30 percent of women aged 45-49. Nonetheless, the proportion of men and women who have been widowed at younger ages is substantial. Seven percent of women and 2 percent of men aged 25-29 have ever been widowed. Among respondents aged $30-34$, the proportions who have ever been widowed rise to 12 percent for women and 5 percent for men.

The proportion of respondents widowed is slightly higher in rural areas than urban areas. North Central has the highest percentage of respondents who have been widowed ( 14 percent of women and 8 percent of men aged 15-49). Kampala and Northeast have the lowest percentage of respondents ever widowed. The likelihood of having been widowed decreases with level of education but not with wealth.

Table 3.7
Percentage ever widowed, Uganda 2004-05

|  | Women 15-49 |  | Men 15-49 |  |
| :---: | :---: | :---: | :---: | :---: |
| Background characteristic | Percentage everwidowed | Number of women | Percentage everwidowed | $\begin{array}{c}\text { Number } \\ \text { of } \\ \text { men }\end{array}$ |


| Age |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: |
| $15-19$ | 0.5 | 2,186 | 0.0 | 2,070 |
| $20-24$ | 2.2 | 1,933 | 1.0 | 1,262 |
| $25-29$ | 7.0 | 1,764 | 2.3 | 1,220 |
| $30-34$ | 12.4 | 1,457 | 5.4 | 1,200 |
| $35-39$ | 20.1 | 1,085 | 9.7 | 916 |
| $40-44$ | 22.6 | 870 | 13.2 | 788 |
| $45-49$ | 29.9 | 647 | 17.6 | 554 |

## Residence

| Urban | 8.5 | 1,508 | 3.9 | 1,200 |
| :--- | ---: | ---: | ---: | ---: |
| Rural | 9.9 | 8,433 | 5.1 | 6,809 |
|  |  |  |  |  |
| Region | 8.9 | 1,656 | 3.9 | 1,451 |
| Central | 6.3 | 668 | 3.9 | 547 |
| Kampala | 10.5 | 1,555 | 5.1 | 1,146 |
| East Central | 8.8 | 857 | 5.7 | 770 |
| Eastern | 8.4 | 829 | 3.2 | 610 |
| Northeast | 14.4 | 970 | 7.5 | 795 |
| $\quad$ North Central | 12.4 | 958 | 4.5 | 735 |
| West Nile | 8.5 | 1,140 | 5.0 | 945 |
| Western | 8.5 | 1,309 | 5.5 | 1,012 |

## Education

| No education | 16.2 | 2,255 | 6.4 | 668 |
| :--- | ---: | ---: | ---: | ---: |
| Primary incomplete | 9.3 | 4,596 | 5.2 | 3,723 |
| Primary complete | 8.5 | 1,115 | 5.8 | 1,133 |
| Secondary + | 3.9 | 1,957 | 3.8 | 2,477 |


| Wealth quintile |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: |
| $\quad$ Lowest | 9.3 | 2,002 | 4.1 | 1,555 |
| Second | 10.4 | 2,101 | 5.7 | 1,680 |
| Middle | 10.2 | 1,837 | 5.4 | 1,505 |
| Fourth | 9.7 | 1,778 | 5.4 | 1,492 |
| Highest | 9.0 | 2,221 | 4.3 | 1,777 |
|  |  |  |  |  |
| Total 15-49 | 9.7 | 9,941 | 4.9 | 8,010 |
| Total 15-59 | 12.1 | 10,826 | 6.4 | 8,830 |

### 3.9 Age at First Marriage

Age at first marriage may be associated with the spread of HIV, because those who marry at younger ages may be exposed earlier to the risk of contracting the virus. Tables 3.8.1 and 3.8.2 show the percentage of women and men who first married by specific ages. The data show that about one-fifth of Ugandan girls marry before their fifteenth birthday and more than half marry before age 18. The median age at first marriage among women is just under 18. There has been no significant change in the median age at first marriage among women since the 2000-01 UDHS (17.8 years for women 20-49; 17.7 years for women 20-24).

In contrast, less than one-third of men marry before reaching age 20. The median age at marriage among men is almost 22.

Table 3.8.1
Age at first marriage for women, Uganda 2004-05

| Current age | Percentage first married by exact age: |  |  |  |  | Percentage never married | Number of women | Median age at first marriage |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 15 | 18 | 20 | 22 | 25 |  |  |  |
| 15-19 | 5.3 | na | na | na | na | 76.4 | 2,186 | a |
| 20-24 | 16.6 | 51.4 | 70.3 | na | na | 19.6 | 1,933 | 17.9 |
| 25-29 | 17.9 | 53.1 | 71.0 | 82.8 | 91.3 | 5.7 | 1,764 | 17.8 |
| 30-34 | 21.9 | 56.2 | 73.9 | 84.6 | 91.6 | 2.3 | 1,457 | 17.4 |
| 35-39 | 20.1 | 52.8 | 72.3 | 82.8 | 91.0 | 1.8 | 1,085 | 17.7 |
| 40-44 | 19.5 | 50.2 | 70.1 | 82.2 | 89.4 | 1.2 | 870 | 18.0 |
| 45-49 | 22.1 | 55.0 | 72.5 | 79.9 | 87.3 | 1.2 | 647 | 17.4 |
| 20-49 | 19.2 | 53.1 | 71.6 | na | na | 7.1 | 7,755 | 17.7 |
| 25-49 | 20.0 | 53.6 | 72.0 | 82.9 | 90.6 | 3.0 | 5,822 | 17.7 |

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

Table 3.8.2
Age at first marriage for men, Uganda 2004-05

| Current age | Percentage first married by exact age: |  |  |  |  | Percentage never married | Number of men | Median age at first marriage |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 20 | 22 | 25 | 28 | 30 |  |  |  |
| 20-24 | 23.2 | na | na | na | na | 60.9 | 1,262 | a |
| 25-29 | 31.6 | 51.4 | 72.1 | na | na | 19.8 | 1,220 | 21.8 |
| 30-34 | 33.6 | 54.0 | 76.0 | 88.2 | 92.7 | 4.8 | 1,200 | 21.5 |
| 35-39 | 30.2 | 50.5 | 72.2 | 86.0 | 89.8 | 2.7 | 916 | 21.9 |
| 40-44 | 25.3 | 47.6 | 71.7 | 82.7 | 86.8 | 3.2 | 788 | 22.2 |
| 45-49 | 27.4 | 47.4 | 70.6 | 81.4 | 87.9 | 2.8 | 554 | 22.3 |
| 25-49 | 30.3 | 50.8 | 72.9 | na | na | 7.8 | 4,678 | 21.9 |

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

### 3.10 Characteristics of Couples

The 2004-05 UHSBS interviewed men and women in the same households. The data were linked for more than 4,000 cohabitating couples and are shown in Table 3.9. The wife is older than the husband in only 7 percent of couples. In one in four couples, the husband is ten or more years older than the wife. In 7 percent of couples, neither the wife nor husband has any formal education. Both wife and husband are educated in 65 percent of couples. Where education status is discordant within the relationship, it is more common for the husband to have attended school when his wife has not.

### 3.11 Media Exposure of Respondents

Information about HIV/AIDS is often carried by mass media. Having access to mass media is

Table 3.9
Age and education differences among couples, Uganda 2004-05

|  | Percent <br> distri- <br> bution | Number <br> of <br> couples |
| :--- | ---: | ---: |
| Age/education differences |  |  |
| Age | 6.7 | 285 |
| Wife older | 35.2 | 1,495 |
| Husband older 0-4 years | 33.4 | 1,415 |
| Husband older 5-9 years | 15.8 | 671 |
| Husband older 10-14 years | 8.9 | 376 |
| Husband older 15 years + |  |  |
| Education | 7.2 | 306 |
| Husband and wife both none | 21.8 | 924 |
| Husband some education, wife none | 5.2 | 219 |
| Wife some education, husband none | 65.4 | 2,775 |
| Husband and wife both some education | 0.4 | 19 |
| Education missing for one or both |  |  |
| Total | 100.0 | 4,243 | essential in increasing peoples' awareness and knowledge of HIV/AIDS, which may eventually affect societal norms and influence individuals' attitudes and behaviour. In the 2004-05 UHSBS, access to mass media was assessed by asking how often a respondent reads a newspaper, listens to the radio, or watches television.

In general, men have more exposure to mass media than women (see Tables 3.10.1 and 3.10.2). More than twice as many women as men say they do not have access to any of the types of media asked about (28 and 13 percent, respectively). Radio is by far the most widely used medium by both men and women. Seven in 10 women and 86 percent of men reported that they listen to the radio at least once a week. Television is the least common form of media.

Women and men in younger age groups report greater exposure to all three sources of media. Among women aged $15-19$, 74 percent listen to the radio weekly compared with 65 percent of women aged 40-44. Men aged 15-19 report less access to mass media than men aged 20-24, who have greater exposure than every other age group. Urban women and men have greater access to all three sources of media than rural women and men. Television is the medium with the greatest disparity between rural and urban areas. Only 4 percent of women in rural areas watch television weekly compared with 43 percent of urban women. Kampala has the highest proportion of residents who report exposure to each of the three media sources.

Exposure to mass media increases with education and with wealth. Newspaper is the medium most sensitive to changes in level of education, because of the link between education and literacy. Fiftyfive percent of men with secondary education or higher read a newspaper at least once per week, compared with 13 percent of men with incomplete primary education and 2 percent of men with no formal education. Television is the medium most sensitive to increases in wealth. Both women and men in the highest wealth quintile have a much stronger probability of watching television once a week than those in the next highest quintile. Exposure to radio varies least with level of education or wealth.

Compared with the 2000-01 UDHS findings, exposure to newspaper and television remains the same while exposure to radio has increased. For example, weekly radio listening increased from 53 to 70 percent among women 15-49. The increase could be a result of the fact that in the 2000-01 UDHS, respondents were asked how often they accessed each type of media in the four weeks preceding the survey as opposed to 'usually.'

Table 3.10.1
Exposure of women to mass media, Uganda 2004-05

| Background characteristic | Percentage of women 15 to 49 who usually, at least once a week: |  |  |  |  | Number of women |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Read a newspaper | Watch television | Listen to the radio | Access all three media | Access no media |  |
| Age |  |  |  |  |  |  |
| 15-19 | 24.4 | 12.3 | 73.5 | 6.1 | 21.7 | 2,186 |
| 20-24 | 14.4 | 11.1 | 72.4 | 5.5 | 26.2 | 1,933 |
| 25-29 | 12.6 | 11.0 | 69.7 | 5.2 | 29.2 | 1,764 |
| 30-34 | 9.3 | 7.6 | 68.2 | 3.0 | 30.8 | 1,457 |
| 35-39 | 9.9 | 7.3 | 66.2 | 4.1 | 33.0 | 1,085 |
| 40-44 | 8.2 | 5.1 | 65.4 | 3.4 | 33.5 | 870 |
| 45-49 | 8.7 | 4.8 | 66.0 | 2.2 | 32.7 | 647 |
| Residence |  |  |  |  |  |  |
| Urban | 40.2 | 42.5 | 88.8 | 22.1 | 8.1 | 1,508 |
| Rural | 9.5 | 3.6 | 66.4 | 1.5 | 31.8 | 8,433 |
| Region |  |  |  |  |  |  |
| Central | 22.8 | 15.8 | 79.7 | 8.1 | 17.3 | 1,656 |
| Kampala | 42.7 | 54.4 | 92.8 | 26.3 | 4.2 | 668 |
| East Central | 16.6 | 11.0 | 81.3 | 5.4 | 17.1 | 1,555 |
| Eastern | 7.5 | 3.6 | 61.6 | 1.4 | 37.2 | 857 |
| Northeast | 5.9 | 1.7 | 44.6 | 0.7 | 55.0 | 829 |
| North Central | 9.1 | 3.8 | 70.7 | 2.3 | 28.9 | 970 |
| West Nile | 15.3 | 0.9 | 44.3 | 0.5 | 48.6 | 958 |
| Western | 5.9 | 1.8 | 68.9 | 1.2 | 30.6 | 1,140 |
| Southwest | 5.4 | 2.7 | 72.1 | 0.9 | 27.3 | 1,309 |
| Education |  |  |  |  |  |  |
| No education | 0.2 | 1.1 | 50.6 | 0.0 | 49.2 | 2,255 |
| Primary incomplete | 7.5 | 4.8 | 68.7 | 0.9 | 29.4 | 4,596 |
| Primary complete | 16.0 | 12.5 | 82.2 | 5.0 | 16.1 | 1,115 |
| Secondary+ | 44.8 | 28.6 | 87.7 | 18.7 | 8.2 | 1,957 |
| Wealth quintile |  |  |  |  |  |  |
| Lowest | 5.2 | 0.6 | 36.5 | 0.1 | 60.8 | 1,610 |
| Second | 6.4 | 1.1 | 60.1 | 0.2 | 37.9 | 2,038 |
| Middle | 5.9 | 1.3 | 70.4 | 0.2 | 28.4 | 1,849 |
| Fourth | 10.7 | 2.0 | 80.3 | 1.1 | 18.2 | 2,000 |
| Highest | 35.5 | 34.7 | 90.9 | 17.8 | 6.7 | 2,443 |
| Total 15-49 | 14.1 | 9.5 | 69.8 | 4.7 | 28.2 | 9,941 |
| Total 15-59 | 13.3 | 9.0 | 69.2 | 4.4 | 29.0 | 10,826 |

Table 3.10.2
Exposure of men to mass media, Uganda 2004-05

| Background characteristic | Percentage of men 15 to 49 who usually, at least once a week: |  |  |  |  | Number of$\qquad$ men |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Read a newspaper | Watch television | Listen to the radio | Access all three media | Access no media |  |
| Age |  |  |  |  |  |  |
| 15-19 | 28.5 | 19.0 | 87.1 | 10.8 | 10.7 | 2,070 |
| 20-24 | 34.4 | 23.1 | 91.1 | 15.2 | 8.0 | 1,262 |
| 25-29 | 27.9 | 19.6 | 86.7 | 12.7 | 12.2 | 1,220 |
| 30-34 | 23.2 | 13.2 | 84.7 | 8.6 | 14.5 | 1,200 |
| 35-39 | 20.4 | 11.3 | 83.5 | 8.3 | 15.7 | 916 |
| 40-44 | 20.5 | 11.6 | 86.3 | 8.7 | 13.2 | 788 |
| 45-49 | 22.7 | 8.8 | 80.3 | 7.2 | 19.2 | 554 |
| Residence |  |  |  |  |  |  |
| Urban | 67.4 | 55.0 | 95.4 | 43.2 | 2.8 | 1,200 |
| Rural | 19.2 | 9.8 | 84.8 | 5.0 | 14.2 | 6,809 |
| Region |  |  |  |  |  |  |
| Central | 35.1 | 29.8 | 95.7 | 19.1 | 3.7 | 1,451 |
| Kampala | 74.1 | 66.5 | 96.8 | 53.1 | 1.4 | 547 |
| East Central | 22.2 | 18.0 | 92.4 | 9.3 | 6.7 | 1,146 |
| Eastern | 22.9 | 10.9 | 87.2 | 6.4 | 11.8 | 770 |
| Northeast | 10.8 | 4.1 | 64.6 | 1.9 | 34.1 | 610 |
| North Central | 16.3 | 4.6 | 67.4 | 3.7 | 31.5 | 795 |
| West Nile | 31.6 | 10.2 | 86.1 | 5.7 | 11.8 | 735 |
| Western | 15.0 | 5.1 | 88.0 | 2.9 | 11.4 | 945 |
| Southwest | 20.0 | 5.5 | 86.4 | 2.7 | 11.9 | 1,012 |
| Education |  |  |  |  |  |  |
| No education | 1.5 | 4.6 | 68.3 | 0.5 | 31.2 | 668 |
| Primary incomplete | 13.1 | 9.0 | 83.7 | 3.2 | 15.1 | 3,723 |
| Primary complete | 22.3 | 12.3 | 87.5 | 6.8 | 11.5 | 1,133 |
| Secondary+ | 55.0 | 33.1 | 94.6 | 26.7 | 4.1 | 2,477 |
| Wealth quintile |  |  |  |  |  |  |
| Lowest | 11.2 | 3.6 | 68.9 | 1.5 | 29.3 | 1,209 |
| Second | 13.1 | 5.0 | 79.7 | 1.8 | 19.1 | 1,628 |
| Middle | 15.5 | 5.6 | 87.3 | 2.4 | 11.8 | 1,506 |
| Fourth | 22.4 | 9.6 | 92.5 | 4.0 | 6.9 | 1,669 |
| Highest | 58.1 | 47.9 | 96.5 | 35.5 | 2.2 | 1,998 |
| Total 15-49 | 26.4 | 16.5 | 86.3 | 10.7 | 12.5 | 8,010 |
| Total 15-59 | 25.5 | 15.7 | 85.7 | 10.1 | 13.3 | 8,830 |

### 3.12 Traditional Tattooing and Cutting and Male Circumcision

Table 3.11 shows that traditional tattooing and cutting of the skin is common in Uganda. If the tools are not sterilised, these practices carry a risk of spreading HIV. Forty-four percent of women and 34 percent of men report they have undergone traditional tattooing or cutting of the skin. Older women and men were more likely to have experienced this tradition. Women and men in rural areas are more likely to have traditional tattooing or cutting than those in urban areas. West Nile region has the highest proportion of women ( 61 percent) who have undergone these practices. Southwest region has the highest proportion of men (74 percent).

Among women, tattooing and cutting decreases with level of education. Among men, tattooing and cutting is highest among men with incomplete and complete primary education and lowest among men with secondary education or higher.

Muslim, Catholic, and Anglican/Protestant women have tattooing or cutting in roughly equal proportions ( $44-45$ percent). Men in the three major religious groups also share similar proportions of tattooing or cutting.

Table 3.11
Traditional tattooing or skin cutting and male circumcision, Uganda 2004-05

| Background characteristic | Women 15-49 |  | Men 15-49 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Percentage with tattooing or skin cutting | Number of women | Percentage circumcised | Percentage with tattooing or skin cutting | Number of men |
| Age |  |  |  |  |  |
| 15-19 | 35.9 | 2,186 | 21.8 | 28.1 | 2,070 |
| 20-24 | 41.0 | 1,933 | 27.1 | 30.5 | 1,262 |
| 25-29 | 45.2 | 1,764 | 22.5 | 34.4 | 1,220 |
| 30-34 | 46.6 | 1,457 | 26.6 | 36.7 | 1,200 |
| 35-39 | 50.0 | 1,085 | 26.0 | 39.8 | 916 |
| 40-44 | 53.3 | 870 | 28.3 | 41.8 | 788 |
| 45-49 | 53.0 | 647 | 25.6 | 40.3 | 554 |
| Residence |  |  |  |  |  |
| Urban | 39.8 | 1,508 | 36.0 | 24.5 | 1,200 |
| Rural | 45.1 | 8,433 | 22.9 | 36.0 | 6,809 |
| Region |  |  |  |  |  |
| Central | 37.4 | 1,656 | 23.6 | 20.5 | 1,451 |
| Kampala | 36.3 | 668 | 37.9 | 15.3 | 547 |
| East Central | 53.3 | 1,555 | 34.7 | 36.6 | 1,146 |
| Eastern | 40.2 | 857 | 54.7 | 36.7 | 770 |
| Northeast | 52.8 | 829 | 4.9 | 16.1 | 610 |
| North Central | 38.7 | 970 | 2.4 | 25.8 | 795 |
| West Nile | 60.5 | 958 | 29.1 | 49.0 | 735 |
| Western | 22.3 | 1,140 | 29.9 | 26.2 | 945 |
| Southwest | 55.0 | 1,309 | 7.6 | 74.2 | 1,012 |
| Education |  |  |  |  |  |
| No education | 51.3 | 2,255 | 23.2 | 32.4 | 668 |
| Primary incomplete | 44.5 | 4,596 | 24.0 | 37.2 | 3,723 |
| Primary complete | 41.8 | 1,115 | 22.5 | 37.9 | 1,133 |
| Secondary+ | 37.2 | 1,957 | 27.6 | 28.8 | 2,477 |
| Ethnicity |  |  |  |  |  |
| Baganda | 37.8 | 1,773 | 31.3 | 17.4 | 1,398 |
| Banyankore | 53.7 | 1,010 | 9.1 | 62.0 | 818 |
| Iteso | 33.7 | 634 | 7.1 | 22.9 | 522 |
| Lugbara/Madi | 54.9 | 792 | 36.5 | 49.5 | 607 |
| Basoga | 53.5 | 967 | 35.0 | 44.1 | 735 |
| Langi | 47.6 | 525 | 1.8 | 36.2 | 463 |
| Bakiga | 42.6 | 680 | 7.3 | 54.7 | 580 |
| Karimojong | 83.6 | 316 | 6.0 | 5.8 | 213 |
| Acholi | 27.4 | 480 | 4.8 | 11.0 | 359 |
| Bagisu/Sabiny | 47.9 | 446 | 80.0 | 26.1 | 471 |
| Alur/Jopadhola | 55.8 | 514 | 18.2 | 41.6 | 442 |
| Banyara | 22.9 | 325 | 15.3 | 19.1 | 272 |
| Batoro | 15.8 | 245 | 22.2 | 16.9 | 219 |
| All others | 38.6 | 1,228 | 36.7 | 34.8 | 896 |
| Religion |  |  |  |  |  |
| Catholic | 45.1 | 4,161 | 9.5 | 32.9 | 3,359 |
| Anglican/Protestant | 44.2 | 3,388 | 17.2 | 37.2 | 2,939 |
| Pentecostal | 39.7 | 600 | 19.8 | 33.4 | 315 |
| Other Christian | 38.4 | 263 | 24.1 | 26.2 | 229 |
| Muslim | 44.1 | 1,382 | 97.3 | 34.5 | 1,055 |
| Other/None/Missing | 52.2 | 147 | 19.3 | 16.6 | 113 |
| Total 15-49 | 44.3 | 9,941 | 24.8 | 34.3 | 8,010 |
| Total 15-59 | 45.2 | 10,826 | 24.9 | 34.7 | 8,830 |

Note: Totals include some categories with too few cases to show separately.

Trends in tattooing and cutting of the skin by ethnicity differ by gender. The Karimojong group has the highest percentage of women ( 84 percent) and lowest percentage of men ( 6 percent) with tattooing or cutting. Alur/Jopadhola, Lugbara/Madi, Banyankore, and Basoga all have similar proportions of women with tattooing or cutting of the skin (54-56 percent). The Batoro group has the lowest percentage of women with tattooing and cutting ( 16 percent). Among men, the highest proportion with tattooing and cutting are from the Banyankore group, followed by the Bakiga and Lugbara/Madi.

Circumcision is practiced in many societies in Uganda. The relationship between male circumcision and the risk of contracting HIV remains unclear. Table 3.11 shows that one-quarter of Ugandan men aged 15-49 are circumcised. There is almost no difference in circumcision by age group, implying that there has been little change in the prevalence of the practice over time. The slightly lower prevalence among men aged 15-19 could be the result of a decline in the practice, but it might also be because some of the youngest men have not yet been circumcised.

Male circumcision is more common among urban than rural men. It is also much more common among men in Eastern region ( 55 percent), as well as in Kampala ( 38 percent) and East Central region ( 35 percent). Less than 10 percent of men in North Central, Northeast, and Southwest regions are circumcised. Male circumcision is highest among Muslim men, 97 percent of whom have been circumcised. Prevalence is lowest among Catholic men (10 percent).

The Bagisu are the most likely to circumcise men ( 80 percent), followed by Lugbara/Madi, Basoga, and Baganda, roughly one-third of whom have been circumcised. Ethnic groups with the lowest proportion of men circumcised include the Langi, Acholi, Karimojong, Ateso, and Bakiga.

### 3.13 Contraceptive Use Among Women

Information about use of contraceptive methods was collected from female respondents aged 1549 by asking them if they were currently doing something or using any method to delay or avoid getting pregnant. Table 3.12 shows the level and key differentials in the current use of contraception by method as reported by currently married women. Contraceptive methods are grouped into two types in the table, namely modern and traditional methods. Modern methods include female sterilisation, pill, IUD, injectables, implants, male condom, and lactational amenorrhoea (LAM). Traditional methods include periodic abstinence (rhythm method), withdrawal, and other methods.

Seventeen percent of all women and 20 percent of currently married women are currently using any method of contraception (Table 3.12). Unmarried sexually active women are more likely than currently married women to be using a method of contraception ( 36 and 20 percent, respectively). Modern methods of contraception are more commonly used (19 percent of married women) than are traditional methods (1 percent). Of the modern methods, injectables are by far the most widely used (used by 10 percent of currently married women), followed by the pill ( 3 percent) and LAM ( 3 percent). Contraceptive prevalence peaks among women aged 30-34 and is lowest for women aged 15-19 and 45-49.

The data show a slight decline in contraceptive use by currently married women from 23 percent in 2000-01 to 20 percent currently. The decline is entirely a result of the drop in use of traditional methods (from 4 to 1 percent). The use of modern methods has remained more or less constant at 18-19 percent. There has been a substantial increase in use of injectables (from 6 to almost 10 percent of married women), with a slight decline in reported use of LAM.

Table 3.12
Current contraceptive use among women 15-49 by age (percent distribution), Uganda 2004-05

| Age | Any method | Modern method |  |  |  |  |  |  |  | Traditional method |  |  |  | Not <br> cur- <br> rently <br> using | Total | Number of women |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Any modern method | Female steri-lisation | Pill | IUD | Injectables | $\begin{aligned} & \text { Im- } \\ & \text { plants } \end{aligned}$ | Male condom | $\mathrm{LAM}^{1}$ | Any traditional method | Periodic abstinence | Withdrawal | Folk method |  |  |  |
| ALL WOMEN |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 15-19 | 7.2 | 6.8 | 0.0 | 0.9 | 0.0 | 2.0 | 0.0 | 3.2 | 0.8 | 0.4 | 0.3 | 0.0 | 0.1 | 92.8 | 100.0 | 2,186 |
| 20-24 | 18.6 | 18.0 | 0.1 | 3.2 | 0.0 | 9.4 | 0.1 | 2.3 | 2.8 | 0.6 | 0.3 | 0.1 | 0.3 | 81.4 | 100.0 | 1,933 |
| 25-29 | 20.9 | 20.3 | 0.6 | 3.8 | 0.0 | 10.5 | 0.6 | 2.1 | 2.5 | 0.5 | 0.3 | 0.2 | 0.1 | 79.1 | 100.0 | 1,764 |
| 30-34 | 21.5 | 20.6 | 1.0 | 2.9 | 0.1 | 11.8 | 0.4 | 1.4 | 3.0 | 0.9 | 0.3 | 0.3 | 0.3 | 78.5 | 100.0 | 1,457 |
| 35-39 | 20.1 | 18.5 | 2.8 | 2.7 | 0.4 | 8.9 | 0.7 | 1.1 | 1.8 | 1.6 | 0.6 | 0.3 | 0.7 | 79.9 | 100.0 | 1,085 |
| 40-44 | 17.2 | 15.3 | 3.9 | 1.4 | 0.7 | 6.9 | 0.1 | 1.2 | 1.1 | 2.0 | 0.4 | 0.5 | 1.1 | 82.8 | 100.0 | 870 |
| 45-49 | 10.9 | 9.5 | 3.9 | 0.9 | 0.2 | 4.0 | 0.0 | 0.3 | 0.0 | 1.5 | 0.5 | 0.6 | 0.4 | 89.1 | 100.0 | 647 |
| Total | 16.5 | 15.6 | 1.2 | 2.4 | 0.1 | 7.7 | 0.3 | 2.0 | 1.9 | 0.9 | 0.3 | 0.2 | 0.3 | 83.5 | 100.0 | 9,941 |
| CURRENTLY MARRIED WOMEN |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 15-19 | 12.4 | 12.1 | 0.0 | 2.5 | 0.0 | 5.2 | 0.0 | 0.9 | 3.5 | 0.3 | 0.2 | 0.0 | 0.2 | 87.6 | 100.0 | 432 |
| 20-24 | 19.3 | 18.8 | 0.1 | 3.4 | 0.0 | 10.4 | 0.1 | 1.0 | 3.7 | 0.5 | 0.2 | 0.1 | 0.2 | 80.7 | 100.0 | 1,367 |
| 25-29 | 20.1 | 19.5 | 0.8 | 3.9 | 0.0 | 10.2 | 0.5 | 1.0 | 3.0 | 0.6 | 0.3 | 0.2 | 0.1 | 79.9 | 100.0 | 1,448 |
| 30-34 | 22.6 | 21.5 | 1.2 | 3.1 | 0.1 | 12.2 | 0.4 | 1.1 | 3.3 | 1.1 | 0.4 | 0.3 | 0.4 | 77.4 | 100.0 | 1,159 |
| 35-39 | 21.7 | 19.9 | 2.8 | 2.8 | 0.4 | 10.0 | 0.8 | 0.9 | 2.2 | 1.8 | 0.7 | 0.4 | 0.7 | 78.3 | 100.0 | 840 |
| 40-44 | 20.8 | 18.7 | 5.0 | 1.7 | 0.9 | 8.3 | 0.1 | 1.2 | 1.3 | 2.1 | 0.3 | 0.6 | 1.2 | 79.2 | 100.0 | 671 |
| 45-49 | 14.4 | 12.8 | 5.2 | 1.0 | 0.3 | 5.7 | 0.0 | 0.4 | 0.0 | 1.6 | 0.4 | 0.8 | 0.4 | 85.6 | 100.0 | 441 |
| Total | 19.7 | 18.7 | 1.7 | 3.0 | 0.2 | 9.7 | 0.3 | 1.0 | 2.7 | 1.0 | 0.3 | 0.3 | 0.4 | 80.3 | 100.0 | 6,358 |
| SEXUALLY ACTIVE UNMARRIED WOMEN ${ }^{2}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 15-19 | 29.7 | 29.1 | 0.0 | 4.1 | 0.0 | 5.6 | 0.0 | 19.3 | 0.0 | 0.6 | 0.6 | 0.0 | 0.0 | 70.3 | 100.0 | 98 |
| 20-24 | 40.1 | 39.1 | 0.0 | 6.0 | 0.0 | 18.5 | 0.0 | 14.6 | 0.0 | 1.0 | 1.0 | 0.0 | 0.0 | 59.9 | 100.0 | 78 |
| 25-29 | 49.3 | 49.3 | 0.0 | 9.9 | 0.0 | 23.8 | 0.0 | 15.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 50.7 | 100.0 | 80 |
| Total | 35.5 | 35.1 | 0.2 | 6.0 | 0.0 | 16.0 | 0.0 | 12.7 | 0.2 | 0.4 | 0.4 | 0.0 | 0.0 | 64.5 | 100.0 | 378 |

[^3]Table 3.13 shows contraceptive use by background characteristics. There is wide variation in use of a modern method of contraception by residence. Forty percent of women in urban areas are currently using a modern method, compared with only 16 percent of respondents in rural areas. Among the nine regions, use of a modern contraceptive ranges from 8 percent in West Nile to 42 percent in Kampala.

Modern contraceptive use increases dramatically with education. While only 9 percent of women with no education are currently using a modern method, 39 percent of women with secondary education or higher do so. Among the lowest 4 wealth quintiles, use of a modern contraceptive method increases from 10 to 16 percent. However, 37 percent of women in the highest wealth quintile are currently using a modern method of contraception. Use of contraception also varies by the number of children a woman has. Three percent of women with no children currently use a modern contraceptive method, compared with 18 percent of women with one to two children. Surprisingly, contraceptive use does not increase much above this level for women with higher numbers of children.

Table 3.13
Current contraceptive use among married women 15-49 by background characteristics (percent distribution), Uganda 2004-05

| Background characteristic | Any method | Modern method |  |  |  |  |  |  |  | Traditional method |  |  |  | Not currently using | Total | Number of married women |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Any modern method | Female sterilisation | Pill | IUD | Injectables | Implant | Male condom | $\mathrm{LAM}^{1}$ | Any traditional method | Periodic abstinence | Withdrawal | Folk method |  |  |  |
| Residence |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Urban | 41.3 | 39.7 | 1.7 | 10.5 | 1.1 | 19.8 | 1.1 | 3.5 | 1.9 | 1.7 | 0.8 | 0.5 | 0.4 | 58.7 | 100.0 | 732 |
| Rural | 16.9 | 16.0 | 1.7 | 2.0 | 0.1 | 8.4 | 0.2 | 0.6 | 2.9 | 0.9 | 0.3 | 0.3 | 0.4 | 83.1 | 100.0 | 5,626 |
| Region |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Central | 28.6 | 26.7 | 3.7 | 5.1 | 0.6 | 13.2 | 0.2 | 1.7 | 2.2 | 1.8 | 0.7 | 0.4 | 0.7 | 71.4 | 100.0 | 937 |
| Kampala | 42.9 | 41.7 | 2.2 | 13.8 | 1.8 | 16.3 | 1.2 | 4.9 | 1.4 | 1.2 | 0.8 | 0.0 | 0.4 | 57.1 | 100.0 | 299 |
| East Central | 21.5 | 20.3 | 1.2 | 3.7 | 0.0 | 11.6 | 0.4 | 1.3 | 2.0 | 1.2 | 0.1 | 0.5 | 0.5 | 78.5 | 100.0 | 990 |
| Eastern | 22.7 | 22.3 | 2.1 | 1.7 | 0.0 | 10.6 | 0.0 | 0.6 | 7.3 | 0.5 | 0.2 | 0.0 | 0.3 | 77.3 | 100.0 | 615 |
| Northeast | 15.6 | 15.3 | 0.6 | 0.7 | 0.1 | 4.0 | 0.1 | 0.2 | 9.6 | 0.3 | 0.1 | 0.0 | 0.2 | 84.4 | 100.0 | 622 |
| North Central | 12.0 | 11.8 | 1.6 | 0.8 | 0.0 | 7.2 | 0.3 | 0.8 | 0.8 | 0.3 | 0.3 | 0.0 | 0.0 | 88.0 | 100.0 | 705 |
| West Nile | 8.3 | 7.8 | 0.3 | 0.6 | 0.0 | 4.6 | 0.2 | 0.6 | 1.4 | 0.5 | 0.2 | 0.0 | 0.3 | 91.7 | 100.0 | 607 |
| Western | 16.4 | 15.8 | 0.8 | 3.9 | 0.0 | 9.7 | 0.3 | 0.5 | 0.6 | 0.6 | 0.0 | 0.3 | 0.3 | 83.6 | 100.0 | 780 |
| Southwest | 18.0 | 15.8 | 2.1 | 1.1 | 0.2 | 10.9 | 0.6 | 0.0 | 0.9 | 2.3 | 0.6 | 1.0 | 0.6 | 82.0 | 100.0 | 803 |
| Education |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| No education | 9.9 | 9.1 | 1.2 | 0.7 | 0.1 | 4.4 | 0.1 | 0.3 | 2.3 | 0.8 | 0.2 | 0.3 | 0.3 | 90.1 | 100.0 | 1,772 |
| Primary incomplete | 17.9 | 16.8 | 1.6 | 2.1 | 0.1 | 8.7 | 0.2 | 0.6 | 3.5 | 1.1 | 0.3 | 0.3 | 0.5 | 82.1 | 100.0 | 3,055 |
| Primary complete | 28.6 | 27.8 | 2.1 | 5.2 | 0.0 | 16.3 | 0.3 | 1.6 | 2.3 | 0.8 | 0.4 | 0.3 | 0.1 | 71.4 | 100.0 | 691 |
| Secondary+ | 40.1 | 38.7 | 2.8 | 9.3 | 1.0 | 19.7 | 1.2 | 3.2 | 1.3 | 1.5 | 0.8 | 0.2 | 0.4 | 59.9 | 100.0 | 826 |
| Number of living children |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 0 | 2.8 | 2.8 | 0.0 | 0.8 | 0.0 | 1.1 | 0.0 | 0.9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 97.2 | 100.0 | 374 |
| 1-2 | 18.6 | 17.9 | 0.4 | 3.8 | 0.2 | 9.2 | 0.3 | 1.3 | 2.7 | 0.7 | 0.4 | 0.2 | 0.1 | 81.4 | 100.0 | 1,742 |
| 3-4 | 20.6 | 20.0 | 1.1 | 3.5 | 0.4 | 10.5 | 0.5 | 0.9 | 3.1 | 0.6 | 0.2 | 0.1 | 0.3 | 79.4 | 100.0 | 1,814 |
| 5+ | 22.5 | 20.8 | 3.3 | 2.4 | 0.1 | 10.9 | 0.3 | 0.8 | 2.9 | 1.7 | 0.4 | 0.6 | 0.7 | 77.5 | 100.0 | 2,427 |
| Wealth quintile |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Lowest | 10.4 | 10.2 | 1.0 | 0.7 | 0.0 | 4.3 | 0.2 | 0.2 | 3.8 | 0.2 | 0.1 | 0.0 | 0.1 | 89.6 | 100.0 | 1,068 |
| Second | 14.5 | 13.6 | 1.2 | 1.4 | 0.0 | 7.2 | 0.1 | 0.4 | 3.3 | 1.0 | 0.4 | 0.3 | 0.3 | 85.5 | 100.0 | 1,357 |
| Middle | 16.3 | 14.7 | 1.3 | 1.1 | 0.1 | 7.7 | 0.2 | 0.7 | 3.7 | 1.6 | 0.3 | 0.5 | 0.8 | 83.7 | 100.0 | 1,300 |
| Fourth | 17.2 | 16.4 | 1.7 | 1.9 | 0.2 | 10.1 | 0.1 | 0.5 | 1.7 | 0.8 | 0.3 | 0.3 | 0.2 | 82.8 | 100.0 | 1,312 |
| Highest | 38.6 | 37.1 | 3.1 | 9.3 | 0.6 | 18.3 | 1.0 | 3.0 | 1.5 | 1.5 | 0.5 | 0.5 | 0.5 | 61.4 | 100.0 | 1,322 |
| Total | 19.7 | 18.7 | 1.7 | 3.0 | 0.2 | 9.7 | 0.3 | 1.0 | 2.7 | 1.0 | 0.3 | 0.3 | 0.4 | 80.3 | 100.0 | 6,358 |

${ }^{1}$ Refers to lactational amenorrhoea method.

### 3.14 Number of Children Ever Born

Table 3.14 shows that the mean number of children ever born to all female respondents is 3.7 children. The mean number of living children is 3 . Among currently married women, the mean number of children ever born is 4.8 , and the mean number of living children is 3.9 . As expected, the mean number of children ever born and living increases with age. This table shows fertility in Uganda continues at high levels. For example, 56 percent of women aged 25-29 have given birth to at least four children while 16 percent have given birth to six or more children.

Table 3.14
Number of children ever born (percent distribution) among all women and currently married women, Uganda 2004-05

| Age | Number of children ever born |  |  |  |  |  |  |  |  |  |  | Total | Number of <br> women | Mean <br> number of children ever born | Mean number of living children |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10+ |  |  |  |  |
| ALL WOMEN |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 15-19 | 78.9 | 14.8 | 5.1 | 0.9 | 0.2 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 2,186 | 0.29 | 0.25 |
| 20-24 | 17.5 | 21.4 | 25.2 | 20.2 | 10.3 | 3.7 | 1.4 | 0.1 | 0.1 | 0.1 | 0.1 | 100.0 | 1,933 | 2.04 | 1.72 |
| 25-29 | 5.0 | 7.8 | 11.8 | 19.3 | 22.5 | 17.2 | 9.7 | 4.5 | 1.4 | 0.6 | 0.2 | 100.0 | 1,764 | 3.73 | 3.17 |
| 30-34 | 2.2 | 3.9 | 6.7 | 8.2 | 13.2 | 18.5 | 18.5 | 14.1 | 8.0 | 4.2 | 2.5 | 100.0 | 1,457 | 5.25 | 4.36 |
| 35-39 | 2.5 | 3.8 | 4.9 | 3.2 | 7.0 | 11.2 | 14.2 | 13.4 | 16.2 | 11.2 | 12.4 | 100.0 | 1,085 | 6.51 | 5.25 |
| 40-44 | 1.9 | 3.5 | 3.4 | 4.3 | 5.8 | 7.9 | 10.8 | 11.9 | 14.9 | 11.0 | 24.7 | 100.0 | 870 | 7.23 | 5.60 |
| 45-49 | 2.7 | 3.5 | 3.4 | 3.8 | 4.4 | 7.6 | 7.6 | 13.4 | 14.0 | 11.4 | 28.0 | 100.0 | 647 | 7.46 | 5.71 |
| Total | 22.6 | 10.3 | 10.2 | 9.7 | 9.5 | 8.9 | 7.7 | 6.3 | 5.4 | 3.7 | 5.7 | 100.0 | 9,941 | 3.72 | 3.02 |
| CURRENTLY MARRIED WOMEN |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 15-19 | 28.5 | 43.8 | 22.4 | 3.4 | 1.1 | 0.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 432 | 1.07 | 0.90 |
| 20-24 | 4.7 | 19.9 | 30.1 | 24.7 | 13.3 | 5.0 | 1.9 | 0.1 | 0.1 | 0.1 | 0.1 | 100.0 | 1,367 | 2.48 | 2.10 |
| 25-29 | 2.0 | 6.4 | 11.0 | 19.9 | 24.3 | 18.4 | 10.7 | 4.9 | 1.6 | 0.7 | 0.1 | 100.0 | 1,448 | 3.96 | 3.37 |
| 30-34 | 1.2 | 3.1 | 4.8 | 7.4 | 12.0 | 18.8 | 20.6 | 15.6 | 9.3 | 4.7 | 2.7 | 100.0 | 1,159 | 5.54 | 4.62 |
| 35-39 | 1.9 | 2.5 | 4.4 | 2.9 | 5.4 | 10.6 | 14.1 | 14.1 | 16.5 | 12.6 | 15.0 | 100.0 | 840 | 6.86 | 5.57 |
| 40-44 | 1.9 | 3.5 | 2.7 | 3.8 | 3.5 | 6.7 | 10.7 | 11.7 | 15.7 | 11.5 | 28.4 | 100.0 | 671 | 7.53 | 5.88 |
| 45-49 | 2.5 | 2.2 | 2.7 | 2.7 | 3.0 | 6.3 | 7.3 | 12.4 | 15.1 | 12.0 | 33.7 | 100.0 | 441 | 7.95 | 6.12 |
| Total | 4.2 | 10.1 | 12.4 | 12.4 | 11.9 | 11.3 | 10.1 | 8.0 | 7.0 | 4.8 | 7.8 | 100.0 | 6,358 | 4.77 | 3.90 |

### 3.15 Birth Registration

The UHSBS included a question for all women who had given birth in the five years preceding the survey as to whether their most recent birth had been registered. It is important to note that the question did not describe what was meant by registration, so it is possible that the results are not highly accurate. Data in Table 3.15 show that 41 percent of births in the last five years are reported to have been registered. Although similar data were collected in the 2000-01 UDHS, it is not possible to establish trends. ${ }^{1}$

Birth registration is higher in urban areas and among births to mothers in the highest wealth quintile. West Nile region has the highest rate of birth registration, with 82 percent of births registered. Older births are slightly more likely to be registered than those born more recently.

A follow-on question in the survey established that, of women who said their most recent birth in the previous five years had been registered, 42 percent said the birth was registered at a health centre, 34 percent said the birth was registered at a hospital, and 15 percent said they registered the birth with the local authorities (data not shown). Whereas hospitals and local councils do register births, registration at health centres is less common and may indicate some over-reporting of the level of birth registration.

[^4]Table 3.15
Birth registration, Uganda 2004-05

| Background characteristic | Percentage registered ${ }^{1}$ | Number of births in the 5 years before survey ${ }^{1}$ |
| :---: | :---: | :---: |
| Years before survey |  |  |
| < 2 years | 39.5 | 3,717 |
| 2-4 years | 43.6 | 2,000 |
| Residence |  |  |
| Urban | 60.3 | 685 |
| Rural | 38.3 | 5,032 |
| Region |  |  |
| Central | 46.5 | 933 |
| Kampala | 58.8 | 285 |
| East Central | 29.2 | 905 |
| Eastern | 35.6 | 524 |
| Northeast | 31.6 | 480 |
| North Central | 48.1 | 640 |
| West Nile | 82.1 | 543 |
| Western | 17.1 | 689 |
| Southwest | 36.7 | 717 |
| Wealth quintile |  |  |
| Lowest | 38.9 | 974 |
| Second | 38.3 | 1,245 |
| Middle | 36.0 | 1,182 |
| Fourth | 36.7 | 1,162 |
| Highest | 54.8 | 1,154 |
| Total | 40.9 | 5,717 |

${ }^{1}$ If a woman had more than one birth in the five years preceding the survey, the data refer to only the most recent birth.

### 4.1 Key Findings

- Ninety-nine percent of Ugandans aged 15-49 have heard of AIDS.
- The radio is by far the most important source of information about HIV/AIDS.
- Awareness of the modes of HIV transmission is high, with almost 90 percent of adults knowing that having only one uninfected, faithful partner can reduce the chances of getting AIDS.
- Rejection of misconceptions related to HIV is also widespread; 74 percent of women and 84 percent of men know that a healthy-looking person may be HIV positive and four in five know that HIV cannot be transmitted by sharing food with someone who has AIDS.


### 4.2 INTRODUCTION

Acquired Immune Deficiency Syndrome (AIDS) is caused by a human immunodeficiency virus (HIV) that weakens the immune system, making the body susceptible to opportunistic diseases that often lead to death. The predominant mode of HIV transmission is through heterosexual contact, followed in magnitude 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.

Information obtained from the UHSBS provides an assessment of the level of knowledge regarding transmission of the AIDS virus among Ugandan adults. Survey respondents were asked if they had ever heard of AIDS, about their main source of information, about specific means of transmission of the virus, and if they were aware of mother-to-child transmission. Respondents were also asked about HIV discordance within couples, antiretroviral therapy, and stages of mother-to-child HIV transmission.

### 4.3 Awareness of AIDS

Survey results indicate that 99 percent of Ugandan women and men aged 15-49 have heard of AIDS (Table 4.1), with more than 90 percent of respondents in all age groups, regions, residence and education groups having heard of AIDS (data not shown). Overall, the level of awareness of AIDS for both women and men has not changed since 2000-01.

Table 4.1
Awareness of AIDS and main source of information, Uganda 2004-05

| Awareness/source | Women <br> $15-49$ | Men <br> $15-49$ | Both <br> sexes |
| :--- | ---: | ---: | ---: |
| Percentage who have heard of AIDS | 98.6 | 99.1 | 98.8 |
| Main source of information (\% distribution) |  |  |  |
| Radio | 52.6 | 59.4 | 55.7 |
| Television | 0.6 | 0.9 | 0.7 |
| Film/drama | 0.6 | 1.4 | 0.9 |
| Newspapers/magazines | 1.0 | 3.3 | 2.0 |
| Brochures/community notices | 1.0 | 0.7 | 0.8 |
| Family | 7.0 | 1.5 | 4.5 |
| Friends/peers | 13.0 | 8.9 | 11.1 |
| Health workers | 13.3 | 11.3 | 12.4 |
| Teachers | 4.6 | 5.9 | 5.2 |
| Political/traditional leaders | 0.4 | 0.4 | 0.4 |
| Religious leaders | 1.5 | 0.8 | 1.2 |
| Seminars/meetings/workshops | 0.5 | 0.9 | 0.7 |
| Direct experience with AIDS patient | 1.2 | 2.4 | 1.7 |
| Other/never heard of AIDS | 2.7 | 2.4 | 2.6 |
|  |  |  |  |
| Total | 100.0 | 100.0 | 100.0 |
| Number of respondents | 9,941 | 8,010 | 17,950 |

By far the most important source of information about AIDS is the radio, cited by 56 percent of respondents. Health workers, friends, teachers, and family are the only other main sources of information. The only major gender difference is that women are more likely than men to cite family as the main source of information about AIDS.

The most important messages obtained from the sources cited were related to the ABC strategy, namely, abstinence, being faithful to one partner, and using condoms, with condom use being slightly more commonly mentioned than the other two messages, especially among men (Table 4.2). The message that AIDS is fatal was also commonly mentioned, by one in ten respondents. Although other messages may also have been widely received, the question asked about the most important message only, so the others were not so commonly cited.

There are only minor differences in the types of messages mentioned by women and men.

### 4.4 Knowledge of Means of Avoiding AIDS

Abstaining from sex, being faithful to

Table 4.2
Most important HIV/AIDS message learned from main source, Uganda 2004-05

|  | Women <br> $15-49$ | Men <br> $15-49$ | Both <br> sexes |
| :--- | ---: | :---: | ---: |
| Message | 21.6 | 20.3 | 21.1 |
| Abstain from sex | 20.7 | 36.6 | 27.8 |
| Use condoms | 28.2 | 21.0 | 25.0 |
| Limit sex to 1 partner/stay faithful | 3.0 | 3.1 | 3.1 |
| Limit number of partners | 1.4 | 1.2 | 1.3 |
| Follow the ABCs |  |  |  |
| Avoid sex with prostitutes/those who | 0.9 | 0.7 | 0.8 |
| have many partners | 0.4 | 0.3 | 0.4 |
| Avoid injections/blood transfusions | 0.3 | 0.1 | 0.2 |
| Antiretroviral drugs available | 0.5 | 0.1 | 0.3 |
| Prevent mother-to-child transmission |  |  |  |
| Avoid discrimination against those | 0.7 | 0.2 | 0.5 |
| with AIDS | 1.0 | 0.5 | 0.8 |
| Anyone can get AIDS | 5.5 | 3.2 | 4.5 |
| Get tested for AIDS | 10.3 | 9.8 | 10.1 |
| AIDS is a killer | 1.2 | 0.6 | 0.9 |
| Don't take chances | 4.3 | 2.3 | 3.4 |
| Other |  |  |  |
| Total |  |  |  |
| Number of respondents | 100.0 | 100.0 | 100.0 | one uninfected partner, and using condoms are important ways to avoid the spread of HIV/AIDS. To ascertain the depth of knowledge about modes of HIV/AIDS transmission, respondents were asked specific questions about whether it is possible for people to reduce their chances of getting AIDS by having just one sexual partner who is not infected and has no other partners, by using a condom at every sexual encounter, and by not having sex at all. Table 4.3 shows the percentage of women and men by their answers to these questions.

The results show that knowledge of HIV prevention methods is widespread. More than 4 in 5 respondents ( 88 percent of women and 90 percent of men) indicate that the chances of getting the AIDS virus can be reduced by limiting sex to one partner who is not infected and who has no other partners. Sixty-eight percent of women and 77 percent of men said that people could reduce their chances of getting the AIDS virus by using condoms every time they have sex. Knowledge of both these means of avoiding HIV transmission is also high, with 63 percent of women and 72 percent of men citing both as ways of reducing the risk of getting the AIDS virus. As expected, the proportion of both women and men who know that abstaining from sex reduces the chances of getting the AIDS virus is high-87 percent among women and 85 percent of men. For each of these knowledge indicators, men are slightly more informed than women, especially about condom use.

Respondents in their early 20 s are most likely to know the major ways to avoid getting HIV/AIDS, while those in their 40s are the least likely. Similarly, women and men who have never married, but who have been sexually active, are the most likely to know about the major means of avoiding HIV. Urban residents and those living in Central, East Central, and Kampala regions are more knowledgeable than other respondents. Women in West Nile and Northeast regions and men in North Central and Northeast regions are the least informed about ways to avoid getting HIV/AIDS. Both education and wealth quintile are strongly correlated with knowledge about AIDS prevention.

Table 4.3
Knowledge of ways to reduce the chances of getting the AIDS virus, Uganda 2004-05

| Background characteristic | Women 15-49 |  |  |  |  | Men 15-49 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Using condoms | Limiting sex to one uninfected, faithful partner | Using condoms and limiting sex ${ }^{1}$ | Abstaining from sex | Number of women | Using condoms | Limiting sex to one uninfected faithful, partner | Using condoms and $\underset{\operatorname{sex}^{1}}{\text { limiting }}$ | Abstaining from sex | Number of men |
| Age |  |  |  |  |  |  |  |  |  |  |
| 15-19 | 70.9 | 86.8 | 64.2 | 86.2 | 2,186 | 79.3 | 86.3 | 71.5 | 85.1 | 2,070 |
| 20-24 | 71.4 | 90.6 | 67.3 | 87.0 | 1,933 | 83.4 | 90.5 | 77.8 | 86.8 | 1,262 |
| 25-29 | 69.6 | 88.6 | 64.7 | 85.8 | 1,764 | 80.0 | 91.0 | 75.5 | 83.2 | 1,220 |
| 30-39 | 66.7 | 87.9 | 61.3 | 86.8 | 2,542 | 76.5 | 90.3 | 71.9 | 84.7 | 2,116 |
| 40-49 | 60.3 | 88.4 | 56.2 | 87.1 | 1,516 | 68.0 | 90.9 | 64.6 | 82.7 | 1,342 |
| 15-24 | 71.2 | 88.6 | 65.7 | 86.6 | 4,119 | 80.9 | 87.8 | 73.9 | 85.7 | 3,332 |
| Marital status |  |  |  |  |  |  |  |  |  |  |
| Never married | 70.4 | 88.2 | 64.9 | 87.1 | 2,220 | 79.9 | 87.5 | 72.8 | 86.0 | 3,140 |
| Ever had sex | 83.1 | 92.0 | 78.4 | 91.6 | 879 | 85.3 | 89.7 | 78.6 | 87.4 | 1,701 |
| Never had sex | 62.1 | 85.6 | 56.1 | 84.2 | 1,342 | 73.6 | 84.9 | 66.0 | 84.4 | 1,439 |
| Currently married | 66.6 | 88.5 | 61.7 | 86.1 | 6,358 | 75.2 | 90.7 | 71.1 | 83.5 | 4,237 |
| Formerly married | 71.3 | 88.1 | 65.5 | 87.8 | 1,362 | 79.6 | 91.4 | 74.7 | 84.5 | 633 |
| Residence |  |  |  |  |  |  |  |  |  |  |
| Urban | 80.9 | 92.8 | 76.4 | 92.8 | 1,508 | 85.4 | 93.4 | 80.9 | 90.4 | 1,200 |
| Rural | 65.8 | 87.6 | 60.5 | 85.5 | 8,433 | 76.0 | 88.8 | 70.5 | 83.6 | 6,809 |
| Region |  |  |  |  |  |  |  |  |  |  |
| Central | 86.4 | 91.3 | 79.7 | 92.8 | 1,656 | 89.8 | 92.6 | 83.6 | 93.5 | 1,451 |
| Kampala | 83.4 | 96.3 | 80.5 | 95.1 | 668 | 88.8 | 96.5 | 85.6 | 96.1 | 547 |
| East Central | 88.4 | 95.0 | 84.9 | 93.9 | 1,555 | 88.5 | 91.9 | 82.9 | 93.2 | 1,146 |
| Eastern | 73.0 | 93.7 | 70.6 | 90.4 | 857 | 85.5 | 92.9 | 80.6 | 95.2 | 770 |
| Northeast | 40.6 | 81.9 | 38.0 | 68.8 | 829 | 60.3 | 80.7 | 58.3 | 72.1 | 610 |
| North Central | 60.4 | 86.3 | 52.6 | 85.6 | 970 | 62.9 | 81.0 | 56.1 | 58.6 | 795 |
| West Nile | 52.6 | 62.4 | 38.0 | 70.4 | 958 | 77.0 | 90.8 | 71.4 | 88.3 | 735 |
| Western | 58.6 | 90.6 | 54.5 | 81.9 | 1,140 | 68.6 | 82.1 | 59.3 | 66.9 | 945 |
| Southwest | 52.4 | 91.9 | 50.7 | 90.9 | 1,309 | 65.1 | 93.6 | 62.6 | 89.6 | 1,012 |
| Education |  |  |  |  |  |  |  |  |  |  |
| No education | 47.6 | 80.2 | 41.8 | 77.9 | 2,255 | 57.3 | 76.9 | 51.7 | 71.0 | 668 |
| Prim. incomplete | 70.1 | 88.7 | 64.5 | 86.8 | 4,596 | 76.5 | 88.5 | 70.3 | 83.9 | 3,723 |
| Primary complete | 77.2 | 92.4 | 72.3 | 90.8 | 1,115 | 78.7 | 91.2 | 73.9 | 84.6 | 1,133 |
| Secondary+ | 81.8 | 94.9 | 78.4 | 93.8 | 1,957 | 83.6 | 93.5 | 79.3 | 89.3 | 2,477 |
| Wealth quintile |  |  |  |  |  |  |  |  |  |  |
| Lowest | 53.0 | 80.5 | 47.0 | 77.3 | 1,610 | 68.8 | 82.9 | 62.9 | 77.9 | 1,209 |
| Second | 61.9 | 85.2 | 56.1 | 83.5 | 2,038 | 74.2 | 87.8 | 68.5 | 81.1 | 1,628 |
| Middle | 67.2 | 88.5 | 61.7 | 87.9 | 1,849 | 76.6 | 90.7 | 71.5 | 83.8 | 1,506 |
| Fourth | 71.6 | 91.6 | 66.8 | 88.9 | 2,000 | 78.8 | 89.8 | 72.9 | 86.7 | 1,669 |
| Highest | 81.0 | 93.5 | 76.9 | 92.4 | 2,443 | 84.7 | 93.5 | 80.2 | 90.2 | 1,998 |
| Total 15-49 | 68.1 | 88.4 | 62.9 | 86.6 | 9,941 | 77.4 | 89.5 | 72.0 | 84.6 | 8,010 |
| Total 15-59 | 66.7 | 88.2 | 61.7 | 86.6 | 10,826 | 76.0 | 89.4 | 70.8 | 84.4 | 8,830 |

${ }^{1}$ Percentage who, in response to a prompted question, say that people can reduce the risk of getting the AIDS virus by using a condom every time they have sex and by having sex with just one partner who is not infected and who has no other partners.

### 4.5 Knowledge of Mother-to-Child Transmission

Current strategies in Uganda call for reducing the mother-to-child transmission of HIV. Increasing the level of general knowledge of transmission of the virus from mother to child and of knowledge about the use of antiretroviral drugs is critical to achieving this goal.

All women and men interviewed in the UHSBS were asked if the virus that causes AIDS can be transmitted from a mother to a child. If the answer was in the affirmative, they were further asked whether the virus could be transmitted during pregnancy, during delivery, and/or during breastfeeding. They were also asked if there are any special drugs that a doctor or nurse can give to a pregnant woman who is infected with the AIDS virus to reduce the risk of transmission to the baby.

More than half of women ( 58 percent) and men ( 55 percent) know that HIV can be transmitted from a mother to her child by breastfeeding (Table 4.4). Knowledge about antiretroviral drugs is only slightly less widespread, 47 percent of women and 52 percent of men know that there are special drugs that a doctor or nurse can give to a pregnant woman infected with the AIDS virus to reduce the risk of transmitting the virus to the baby. The combined indicator shows that only 35 percent of women and men know that HIV can be transmitted through breastfeeding and that the risk can be reduced by special drugs.

Table 4.4
Knowledge of mother-to-child transmission (MTCT), Uganda 2004-05

| Background characteristic | Women 15-49 |  |  |  | Men 15-49 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | HIV can be transmitted by breastfeeding | MTCT can be reduced by mother taking special drugs during pregnancy | Knows both ${ }^{1}$ | Number of women | HIV can be transmitted by breastfeeding | MTCT can be reduced by mother taking special drugs during pregnancy | Knows both ${ }^{1}$ | Number of men |
| Age |  |  |  |  |  |  |  |  |
| 15-19 | 56.3 | 45.1 | 34.3 | 2,186 | 57.3 | 47.7 | 33.9 | 2,070 |
| 20-24 | 60.6 | 51.1 | 39.8 | 1,933 | 56.0 | 53.9 | 36.8 | 1,262 |
| 25-29 | 59.8 | 50.8 | 37.9 | 1,764 | 54.7 | 57.8 | 37.5 | 1,220 |
| 30-39 | 56.6 | 46.3 | 34.4 | 2,542 | 53.2 | 53.0 | 35.5 | 2,116 |
| 40-49 | 54.3 | 43.4 | 31.6 | 1,516 | 53.3 | 48.1 | 32.2 | 1,342 |
| Marital status |  |  |  |  |  |  |  |  |
| Never married | 57.1 | 48.9 | 36.9 | 2,220 | 57.5 | 51.2 | 36.1 | 3,140 |
| Ever had sex | 65.4 | 63.7 | 48.5 | 879 | 59.2 | 55.7 | 40.3 | 1,701 |
| Never had sex | 51.6 | 39.2 | 29.4 | 1,342 | 55.5 | 45.9 | 31.2 | 1,439 |
| Currently married | 57.9 | 46.3 | 34.9 | 6,358 | 52.9 | 51.8 | 34.3 | 4,237 |
| Formerly married | 56.2 | 49.2 | 36.9 | 1,362 | 56.3 | 53.2 | 34.8 | 633 |
| Residence |  |  |  |  |  |  |  |  |
| Urban | 64.4 | 71.9 | 52.1 | 1,508 | 61.1 | 70.3 | 47.7 | 1,200 |
| Rural | 56.3 | 42.9 | 32.7 | 8,433 | 53.9 | 48.4 | 32.8 | 6,809 |
| Region |  |  |  |  |  |  |  |  |
| Central | 66.7 | 73.9 | 55.1 | 1,656 | 64.8 | 76.7 | 53.3 | 1,451 |
| Kampala | 69.5 | 79.4 | 58.4 | 668 | 62.5 | 75.2 | 50.7 | 547 |
| East Central | 63.2 | 61.7 | 45.9 | 1,555 | 57.9 | 60.0 | 40.4 | 1,146 |
| Eastern | 49.3 | 28.1 | 20.3 | 857 | 43.8 | 31.2 | 20.4 | 770 |
| Northeast | 48.6 | 22.9 | 15.5 | 829 | 35.8 | 30.8 | 17.9 | 610 |
| North Central | 52.6 | 29.0 | 21.0 | 970 | 48.7 | 35.2 | 22.1 | 795 |
| West Nile | 40.3 | 16.0 | 11.3 | 958 | 47.6 | 24.4 | 16.4 | 735 |
| Western | 57.2 | 48.2 | 37.5 | 1,140 | 56.0 | 49.1 | 33.6 | 945 |
| Southwest | 60.4 | 43.9 | 36.9 | 1,309 | 62.7 | 57.1 | 41.1 | 1,012 |
| Education |  |  |  |  |  |  |  |  |
| No education | 49.9 | 26.3 | 20.3 | 2,255 | 46.7 | 31.9 | 25.2 | 668 |
| Primary incomplete | 55.2 | 43.9 | 32.2 | 4,596 | 55.2 | 46.3 | 31.9 | 3,723 |
| Primary complete | 61.3 | 60.3 | 44.8 | 1,115 | 52.7 | 53.5 | 34.4 | 1,133 |
| Secondary+ | 69.4 | 72.2 | 56.1 | 1,957 | 57.9 | 64.4 | 42.8 | 2,477 |
| Wealth quintile |  |  |  |  |  |  |  |  |
| Lowest | 45.8 | 27.0 | 18.7 | 1,610 | 45.3 | 32.2 | 21.2 | 1,209 |
| Second | 54.7 | 37.5 | 28.7 | 2,038 | 53.0 | 42.8 | 29.7 | 1,628 |
| Middle | 56.3 | 42.7 | 32.6 | 1,849 | 55.5 | 48.4 | 33.3 | 1,506 |
| Fourth | 59.2 | 48.9 | 36.7 | 2,000 | 56.0 | 55.8 | 37.3 | 1,669 |
| Highest | 67.1 | 71.0 | 54.0 | 2,443 | 61.1 | 69.8 | 47.2 | 1,998 |
| Total 15-49 | 57.5 | 47.3 | 35.6 | 9,941 | 54.9 | 51.7 | 35.0 | 8,010 |
| Total 15-59 | 56.9 | 46.3 | 34.8 | 10,826 | 54.7 | 51.4 | 34.8 | 8,830 |

[^5]Knowledge of mother-to-child transmission and of antiretroviral drugs varies little by age or by marital status, except that those who have never married but have had sex tend to be more knowledgeable than those who have never had sex. Urban residents and those in Central, Kampala, and North Central regions are more knowledgeable than other respondents. Information programmes might want to target residents of West Nile and Northeast regions. There is a steady increase in knowledge of mother-to-child transmission by education and wealth quintile among both women and men.

The percentage of respondents who know that HIV/AIDS can be transmitted from mother to child by breastfeeding has increased since 2000-01 (from 46 to 58 percent among women and from 43 to 55 percent among men).

### 4.6 Rejection of Misconceptions about AIDS Transmission

In addition to knowing about effective ways to avoid contracting HIV/AIDS, it is also useful to be able to identify incorrect beliefs about AIDS to eliminate misconceptions. Common misconceptions about AIDS include the idea that all HIV-infected people 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 these four misconceptions.

Data shown in Tables 4.5 .1 and 4.5.2 indicate that the vast majority of Ugandan adults know that people infected with HIV do not necessarily show signs of infection. Seventy-four percent of women and 84 percent of men know that a healthy-looking person can have the virus that causes AIDS.

Considerably fewer respondents understand that the AIDS virus cannot be transmitted by mosquito bites: 56 percent of women and 58 percent of men know that AIDS cannot be transmitted by mosquito bites. Similarly, 77 percent of women and 80 percent of men know that people cannot get the AIDS virus by sharing food with a person who has AIDS.

Looking at all three beliefs together, 39 percent of women and 46 percent of men have correct knowledge on all these issues. Respondents were also asked if they thought that people could get the AIDS virus because of witchcraft or other supernatural means. The vast majority of Ugandans reject this idea, with 85 percent of women and 88 percent of men saying witchcraft is not a means of transmission.

As with many other indicators of HIV/AIDS knowledge, results on rejection of misperceptions regarding HIV/AIDS is higher among respondents in urban areas and in Central, Kampala, and East Central regions. Educational attainment is correlated with rejection of misperceptions. Although there is a correlation between rejection of misperceptions and the wealth quintile, it is not so strong as it is for other indicators and mostly appears among those in the highest quintile.

There has been a slight decline in the some aspects of basic knowledge about HIV/AIDS over the last four years in Uganda. For example, the proportion who know that it is possible for a healthy-looking person to have the AIDS virus has decreased from 77 percent in 2000-01 to 74 percent in 2004-05 among women and from 88 to 84 percent of men. Similarly, the proportion of men who know that HIV cannot be transmitted by mosquito bites has hardly changed (from 56 percent in 2000-01 to 58 percent in 2004-05), and the proportion of men who say that people cannot get the AIDS virus by sharing food with someone who has AIDS has stayed steady at 80 percent. However, the proportion of women who know that HIV cannot be transmitted by insect bites has increased from 45 percent in 2000-01 to 56 percent in 2004-05 and the proportion who say that people cannot get the AIDS virus by sharing food with someone who has AIDS has increased from 67 to 77 percent of women.

Table 4.5.1: Women
Rejection of common misperceptions regarding HIV/AIDS, Uganda 2004-05

| Background characteristic | Percentage of women 15-49 who know that: |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | A healthylooking person can have the AIDS virus | People cannot get the AIDS virus from mosquito bites | People cannot get AIDS by sharing food with a person who has AIDS | A healthylooking person can have AIDS and mosquito bites and sharing food cannot transmit AIDS | People cannot get the AIDS virus through witchcraft or supernatural means | Number of women |
| Age |  |  |  |  |  |  |
| 15-19 | 68.2 | 61.9 | 76.9 | 39.0 | 86.8 | 2,186 |
| 20-24 | 74.9 | 57.4 | 77.4 | 39.5 | 85.6 | 1,933 |
| 25-29 | 77.2 | 54.8 | 78.6 | 40.2 | 84.9 | 1,764 |
| 30-39 | 76.4 | 54.6 | 76.3 | 38.4 | 83.5 | 2,542 |
| 40-49 | 73.5 | 51.2 | 73.7 | 35.2 | 81.5 | 1,516 |
| 15-24 | 71.3 | 59.8 | 77.1 | 39.2 | 86.2 | 4,119 |
| Marital status |  |  |  |  |  |  |
| Never married | 70.8 | 66.7 | 80.7 | 45.0 | 86.9 | 2,220 |
| Ever had sex | 82.3 | 64.9 | 82.6 | 50.9 | 90.1 | 879 |
| Never had sex | 63.4 | 67.9 | 79.4 | 41.1 | 84.7 | 1,342 |
| Currently married | 74.8 | 53.0 | 75.6 | 36.4 | 83.8 | 6,358 |
| Formerly married | 75.4 | 54.6 | 75.1 | 38.2 | 84.3 | 1,362 |
| Residence |  |  |  |  |  |  |
| Urban | 90.2 | 67.4 | 85.9 | 57.2 | 92.1 | 1,508 |
| Rural | 71.1 | 54.3 | 75.0 | 35.2 | 83.2 | 8,433 |
| Region |  |  |  |  |  |  |
| Central | 88.6 | 63.8 | 82.6 | 53.5 | 90.7 | 1,656 |
| Kampala | 96.9 | 68.3 | 87.4 | 62.0 | 94.6 | 668 |
| East Central | 86.2 | 57.6 | 75.9 | 44.3 | 88.4 | 1,555 |
| Eastern | 87.4 | 49.5 | 74.9 | 40.2 | 81.7 | 857 |
| Northeast | 65.0 | 46.5 | 71.5 | 32.4 | 65.6 | 829 |
| North Central | 67.9 | 43.4 | 76.3 | 28.7 | 88.1 | 970 |
| West Nile | 58.6 | 42.9 | 67.1 | 22.7 | 74.2 | 958 |
| Western | 75.6 | 51.6 | 71.6 | 34.6 | 84.5 | 1,140 |
| Southwest | 40.9 | 73.1 | 80.6 | 26.1 | 86.2 | 1,309 |
| Education |  |  |  |  |  |  |
| No education | 60.7 | 45.8 | 66.5 | 24.8 | 71.9 | 2,255 |
| Primary incomplete | 71.6 | 52.0 | 74.1 | 32.9 | 85.1 | 4,596 |
| Primary complete | 82.5 | 64.5 | 84.5 | 47.8 | 91.1 | 1,115 |
| Secondary+ | 90.3 | 73.6 | 89.8 | 62.5 | 94.4 | 1,957 |
| Wealth quintile |  |  |  |  |  |  |
| Lowest | 61.9 | 49.1 | 69.8 | 29.5 | 74.6 | 1,610 |
| Second | 68.0 | 51.3 | 73.7 | 31.6 | 81.3 | 2,038 |
| Middle | 70.7 | 54.1 | 74.6 | 32.8 | 84.7 | 1,849 |
| Fourth | 74.7 | 56.8 | 75.9 | 38.1 | 85.9 | 2,000 |
| Highest | 89.0 | 66.4 | 85.7 | 55.0 | 92.8 | 2,443 |
| Total 15-49 | 74.0 | 56.3 | 76.6 | 38.6 | 84.6 | 9,941 |
| Total 15-59 | 73.7 | 55.2 | 76.0 | 37.7 | 84.2 | 10,826 |

Table 4.5.2: Men
Rejection of common misperceptions regarding HIV/AIDS, Uganda 2004-05

| Background characteristic | Percentage of men 15-49 who know that: |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | A healthylooking person can have the AIDS virus | People cannot get the AIDS virus from mosquito bites | People cannot get AIDS by sharing food with a person who has AIDS | A healthylooking person can have AIDS and mosquito bites and sharing food cannot transmit AIDS | People cannot get the AIDS virus through witchcraft or supernatural means | Number of men |
| Age |  |  |  |  |  |  |
| 15-19 | 77.9 | 61.1 | 79.2 | 43.2 | 87.7 | 2,070 |
| 20-24 | 88.2 | 59.9 | 81.9 | 49.5 | 90.9 | 1,262 |
| 25-29 | 88.0 | 59.3 | 82.6 | 50.5 | 88.9 | 1,220 |
| 30-39 | 86.4 | 55.5 | 80.0 | 46.1 | 87.5 | 2,116 |
| 40-49 | 84.5 | 54.7 | 78.0 | 44.0 | 86.5 | 1,342 |
| 15-24 | 81.8 | 60.6 | 80.2 | 45.6 | 88.9 | 3,332 |
| Marital status |  |  |  |  |  |  |
| Never married | 81.7 | 62.5 | 80.7 | 47.2 | 88.6 | 3,140 |
| Ever had sex | 87.8 | 61.2 | 81.1 | 49.0 | 90.6 | 1,701 |
| Never had sex | 74.6 | 64.1 | 80.1 | 45.2 | 86.3 | 1,439 |
| Currently married | 86.0 | 56.0 | 80.1 | 46.1 | 88.3 | 4,237 |
| Formerly married | 87.1 | 50.3 | 77.9 | 42.1 | 84.8 | 633 |
| Residence |  |  |  |  |  |  |
| Urban | 94.0 | 69.5 | 88.1 | 61.8 | 91.1 | 1,200 |
| Rural | 82.7 | 56.1 | 78.8 | 43.5 | 87.6 | 6,809 |
| Region |  |  |  |  |  |  |
| Central | 95.4 | 59.4 | 80.5 | 51.5 | 91.8 | 1,451 |
| Kampala | 96.7 | 70.2 | 87.8 | 62.4 | 92.2 | 547 |
| East Central | 90.5 | 57.9 | 78.3 | 49.7 | 92.6 | 1,146 |
| Eastern | 87.9 | 54.1 | 78.2 | 44.1 | 88.4 | 770 |
| Northeast | 66.0 | 52.5 | 74.8 | 38.0 | 72.6 | 610 |
| North Central | 91.5 | 55.6 | 84.7 | 48.8 | 93.2 | 795 |
| West Nile | 88.2 | 60.0 | 84.2 | 49.4 | 88.1 | 735 |
| Western | 79.1 | 54.6 | 73.1 | 40.1 | 77.0 | 945 |
| Southwest | 60.2 | 60.0 | 82.5 | 33.8 | 91.1 | 1,012 |
| Education |  |  |  |  |  |  |
| No education | 67.5 | 38.9 | 61.3 | 25.1 | 71.3 | 668 |
| Primary incomplete | 81.2 | 49.0 | 74.9 | 35.7 | 86.8 | 3,723 |
| Primary complete | 85.9 | 62.0 | 85.4 | 49.7 | 92.0 | 1,133 |
| Secondary+ | 93.2 | 75.1 | 90.9 | 66.1 | 92.9 | 2,477 |
| Wealth quintile |  |  |  |  |  |  |
| Lowest | 76.2 | 50.2 | 74.8 | 36.5 | 81.4 | 1,209 |
| Second | 80.5 | 54.7 | 78.3 | 42.0 | 86.2 | 1,628 |
| Middle | 81.9 | 55.2 | 78.7 | 42.2 | 89.2 | 1,506 |
| Fourth | 85.7 | 57.9 | 80.4 | 46.0 | 90.3 | 1,669 |
| Highest | 93.4 | 67.9 | 85.8 | 58.7 | 91.2 | 1,998 |
| Total 15-49 | 84.4 | 58.1 | 80.2 | 46.2 | 88.1 | 8,010 |
| Total 15-59 | 84.2 | 57.4 | 79.7 | 45.6 | 87.9 | 8,830 |

### 4.7 Comprehensive Knowledge about HIV/AIDS

An indicator of comprehensive knowledge about HIV/AIDS combines several individual indicators previously discussed. It is the percentage of respondents aged 15-49 who say that: 1) people can reduce the chances of getting the AIDS virus by using a condom every time they have sex, 2) people can reduce the chances of getting the AIDS virus by having sex with just one partner who is not infected and who has no other partners, 3) that people cannot get the AIDS virus from mosquito bites, 4) that people cannot get the AIDS virus from sharing food with a person who has AIDS, and 5) that a healthylooking person can have the AIDS virus.

As shown in Table 4.6, slightly more than one-fourth of women and one-third of men have such comprehensive knowledge about HIV/AIDS. Sexually active, never-married respondents are more likely than those in other marital status categories to have comprehensive knowledge of HIV/AIDS. The same is true for women and men who live in urban areas, in Kampala, Central, and East Central regions, and those who are better educated and in the higher wealth quintiles.

Table 4.6
Comprehensive knowledge about HIV/AIDS, Uganda 2004-05

| Background characteristic | Women 15-49 |  | Men 15-49 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Comprehensive knowledge ${ }^{1}$ | Number of women | Comprehensive knowledge ${ }^{1}$ | Number of men |
| Age |  |  |  |  |
| 15-19 | 29.0 | 2,186 | 32.5 | 2,070 |
| 20-24 | 30.1 | 1,933 | 39.9 | 1,262 |
| 25-29 | 30.7 | 1,764 | 41.6 | 1,220 |
| 30-39 | 27.0 | 2,542 | 35.4 | 2,116 |
| 40-49 | 24.2 | 1,516 | 32.6 | 1,342 |
| 15-24 | 29.5 | 4,119 | 35.3 | 3,332 |
| Marital status |  |  |  |  |
| Never married | 33.7 | 2,220 | 36.5 | 3,140 |
| Ever had sex | 42.6 | 879 | 40.2 | 1,701 |
| Never had sex | 27.9 | 1,342 | 32.0 | 1,439 |
| Currently married | 26.2 | 6,358 | 35.7 | 4,237 |
| Formerly married | 29.0 | 1,362 | 34.0 | 633 |
| Residence |  |  |  |  |
| Urban | 46.3 | 1,508 | 52.1 | 1,200 |
| Rural | 25.0 | 8,433 | 33.0 | 6,809 |
| Region |  |  |  |  |
| Central | 45.6 | 1,656 | 44.2 | 1,451 |
| Kampala | 52.5 | 668 | 55.4 | 547 |
| East Central | 38.7 | 1,555 | 43.6 | 1,146 |
| Eastern | 31.6 | 857 | 38.1 | 770 |
| Northeast | 13.2 | 829 | 28.4 | 610 |
| North Central | 16.1 | 970 | 29.0 | 795 |
| West Nile | 11.6 | 958 | 37.6 | 735 |
| Western | 20.4 | 1,140 | 24.7 | 945 |
| Southwest | 17.1 | 1,309 | 21.9 | 1,012 |
| Education |  |  |  |  |
| No education | 12.4 | 2,255 | 16.5 | 668 |
| Primary incomplete | 24.0 | 4,596 | 26.3 | 3,723 |
| Primary complete | 37.6 | 1,115 | 39.5 | 1,133 |
| Secondary+ | 51.1 | 1,957 | 53.7 | 2,477 |
| Wealth quintile |  |  |  |  |
| Lowest | 17.3 | 1,610 | 26.4 | 1,209 |
| Second | 21.3 | 2,038 | 31.5 | 1,628 |
| Middle | 23.9 | 1,849 | 31.9 | 1,506 |
| Fourth | 28.5 | 2,000 | 34.9 | 1,669 |
| Highest | 44.4 | 2,443 | 48.8 | 1,998 |
| Total 15-49 | 28.3 | 9,941 | 35.8 | 8,010 |
| Total 15-59 | 27.3 | 10,826 | 35.0 | 8,830 |

[^6]
### 4.8 Perceptions about Discordance

Data in Chapter 8 indicate a not inconsiderable level of HIV discordance among cohabiting Ugandan couples, that is, a situation in which one is HIV positive and the other HIV negative. Ignorance about how common discordance is leads couples to neglect taking precautions even in cases in which they know or suspect that one of them is infected, because they feel the situation is hopeless.

In the UHSBS, respondents were asked two questions: "If a man has the virus that causes AIDS, does his sexual partner always have the AIDS virus, almost always, or only sometimes?" and "If a woman has the virus that causes AIDS, does her sexual partner always have the AIDS virus, almost always, or only sometimes?" Results are shown in Table 4.7.

The data show that three-quarters of both

| Table 4.7 |  |  |
| :--- | :---: | ---: |
| Perceptions about discordance of HIV infection in couples, |  |  |
| Uganda 2004-05 |  |  |
|  | Women | Men |
| Belief | $15-49$ | $15-49$ |
| Believes if a man has the virus, his |  |  |
| sexual partner has the virus: |  |  |
| Always |  |  |
| Almost always | 75.8 | 73.3 |
| Sometimes | 8.5 | 9.0 |
| Don't know/missing | 7.4 | 12.8 |
| Total | 8.3 | 4.9 |
|  | 100.0 | 100.0 |
| Believes if a woman has the virus, her |  |  |
| sexual partner has the virus: |  |  |
| Always | 76.4 | 74.2 |
| Almost always | 8.3 | 8.8 |
| Sometimes | 7.5 | 12.4 |
| Don't know/missing | 7.8 | 4.5 |
|  |  |  |
| Total | 100.0 | 100.0 |
| Number of respondents | 9,941 | 8,010 |

Table 4.7
Perceptions about discordance of HIV infection in couples, Uganda 2004-05

Believes if a man has the virus, his women and men believe that coinfection is inevitable-if one partner is infected, the other always is too. Eight to 9 percent believe that the partner is almost always infected. Only 7-8 percent of women and 1213 percent of men know that if a person is HIV positive, his or her partner is only sometimes infected.

Interestingly, there are very few differences in the responses of female and male respondents. Moreover, respondents do not see any difference in the likelihood of HIV transmission from men to women and from women to men.

### 5.1 Key Findings

- Although Ugandan adults generally have accepting attitudes towards those living with HIV/AIDS, a sizeable minority express discriminatory beliefs.
- Women are slightly less likely than men to express accepting attitudes about people with HIV.
- There is widespread acceptance of the ability of a woman to negotiate safer sex with her husband either by refusing to have sex or in requesting condom use if she knows he has a sexually transmitted infection.
- Six in 10 adults believe children aged 12-14 should be taught about condom use to avoid AIDS.
- More than one in five Ugandan adults believes it is very likely he or she will get HIV.


### 5.2 INTRODUCTION

This chapter covers issues related to attitudes towards HIV/AIDS. Specifically, it includes indicators of the level of stigma towards people living with HIV/AIDS, as well as findings related to the ability to negotiate safer sex, and attitudes towards teaching youth about condom use.

### 5.3 HIV/AIDS-Related Stigma

Stigma refers to the fact that, in some societies, people living with HIV/AIDS are viewed as shameful and the disease is perceived to be a result of personal irresponsibility. If not counteracted, such attitudes fuel prejudice against those living with HIV/AIDS, marginalising and excluding individuals. Ultimately such attitudes allow societies to excuse themselves from the responsibility of caring for and looking after those who are infected. More importantly, stigma leads to secrecy and denial that hinders people from seeking counselling and testing for HIV, as well as care and support services. In Uganda, efforts have been made to reduce fear and discrimination towards those living with HIV/AIDS.

To assess the level of stigma, UHSBS respondents who had heard of AIDS were asked four questions related to their attitudes towards those infected by HIV/AIDS. They were asked if they would be willing to care for a relative sick with AIDS in their own households and if they would be willing to buy sugar, fresh vegetables, or other food from a market vendor who had the AIDS virus. Another question assessed whether respondents thought that a female teacher who has the AIDS virus but is not sick should be allowed to continue teaching. A more personal question concerned, if a member of their family got infected with the virus that causes AIDS, whether they would they want it to remain secret or not. Tables 5.1.1 and 5.1.2 show the results for women and men, respectively.

Survey results show that almost nine in ten Ugandans aged 15-49 say they would be willing to care for a relative who is sick with AIDS in their own household. Far fewer women ( 59 percent) and men (72 percent) say they would buy sugar or fresh vegetables from a vendor if they knew that he/she is HIV positive. About 6 in 10 Ugandans feel that a female teacher who has the AIDS virus but is not sick should be allowed to continue teaching in the school, while 45 percent of women and 53 percent of men say that if a member of their family got infected with the AIDS virus, they would not necessarily want it to remain a secret.

Table 5.1.1: women
Accepting attitudes towards people who are HIV infected, Uganda 2004-05

| Background characteristic | Percentage of women aged 15-49 who say they: |  |  |  | Percentage expressing acceptance on all 4 measures ${ }^{1}$ | Number of women who have heard of HIV/AIDS |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Would be willing to care for a relative sick with HIV in own home | Would buy sugar or fresh vegetables from market vendor with HIV | Believe an HIVpositive female teacher should be allowed to teach | Would not want HIV-positive status of family member to remain secret |  |  |
| Age |  |  |  |  |  |  |
| 15-19 | 82.2 | 57.1 | 59.2 | 40.0 | 15.0 | 2,148 |
| 20-24 | 86.7 | 60.5 | 61.6 | 45.0 | 17.6 | 1,908 |
| 25-29 | 88.5 | 61.8 | 62.8 | 47.0 | 20.9 | 1,740 |
| 30-39 | 86.9 | 59.8 | 61.5 | 47.0 | 20.1 | 2,508 |
| 40-49 | 88.2 | 58.0 | 60.9 | 49.3 | 20.4 | 1,497 |
| 15-24 | 84.3 | 58.7 | 60.4 | 42.4 | 16.3 | 4,056 |
| Marital status |  |  |  |  |  |  |
| Never married | 84.6 | 62.9 | 64.3 | 41.0 | 18.4 | 2,185 |
| Ever had sex | 90.2 | 69.7 | 72.3 | 40.1 | 21.6 | 874 |
| Never had sex | 80.9 | 58.4 | 59.0 | 41.6 | 16.3 | 1,311 |
| Currently married | 86.2 | 57.9 | 60.0 | 46.9 | 18.4 | 6,268 |
| Formerly married | 89.4 | 60.7 | 61.7 | 45.8 | 20.8 | 1,348 |
| Residence |  |  |  |  |  |  |
| Urban | 92.7 | 76.2 | 78.6 | 40.3 | 24.8 | 1,505 |
| Rural | 85.2 | 56.4 | 58.0 | 46.3 | 17.6 | 8,296 |
| Region |  |  |  |  |  |  |
| Central | 87.9 | 70.1 | 69.3 | 35.7 | 20.0 | 1,650 |
| Kampala | 94.0 | 78.3 | 79.5 | 32.6 | 20.3 | 666 |
| East Central | 93.3 | 62.2 | 71.2 | 32.1 | 15.3 | 1,555 |
| Eastern | 80.1 | 58.2 | 57.4 | 44.5 | 16.5 | 848 |
| Northeast | 80.0 | 51.0 | 51.2 | 58.5 | 15.4 | 760 |
| North Central | 79.7 | 53.6 | 56.8 | 81.2 | 28.2 | 962 |
| West Nile | 75.3 | 50.5 | 54.5 | 48.4 | 18.5 | 938 |
| Western | 95.1 | 60.1 | 62.2 | 48.3 | 24.2 | 1,124 |
| Southwest | 85.1 | 48.6 | 44.9 | 42.1 | 12.1 | 1,297 |
| Education |  |  |  |  |  |  |
| No education | 79.8 | 48.1 | 47.5 | 43.0 | 11.5 | 2,160 |
| Primary incomplete | 85.2 | 53.7 | 56.7 | 47.7 | 16.7 | 4,557 |
| Primary complete | 89.4 | 68.0 | 70.3 | 44.1 | 22.4 | 1,111 |
| Secondary+ | 94.4 | 80.3 | 81.5 | 43.2 | 29.1 | 1,955 |
| Wealth quintile |  |  |  |  |  |  |
| Lowest | 80.4 | 49.8 | 49.7 | 47.8 | 13.4 | 1,544 |
| Second | 82.1 | 52.6 | 55.0 | 47.9 | 16.0 | 1,990 |
| Middle | 86.0 | 56.0 | 56.8 | 48.6 | 18.1 | 1,840 |
| Fourth | 87.7 | 59.2 | 61.5 | 44.6 | 18.8 | 1,990 |
| Highest | 92.6 | 73.8 | 76.5 | 40.2 | 24.6 | 2,437 |
| Total 15-49 | 86.3 | 59.4 | 61.2 | 45.4 | 18.7 | 9,801 |
| Total 15-59 | 86.2 | 59.0 | 60.8 | 46.1 | 18.7 | 10,671 |

${ }^{1}$ Say they would be willing to care for a relative sick with AIDS in their own households and would be willing to buy sugar, fresh vegetables, or other food from a market vendor who had the AIDS virus, they think that a female teacher who has the AIDS virus but is not sick should be allowed to continue teaching, and that if a member of their family got infected with the virus that causes AIDS, they would not necessarily want it to remain secret.

Table 5.1.2: men
Accepting attitudes towards people who are HIV infected, Uganda 2004-05

| Background characteristic | Percentage of men aged 15-49 who say they: |  |  |  | Percentage expressing acceptance on all 4 measures ${ }^{1}$ | Number of men who have heard of HIV/AIDS |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Would be willing to care for a relative sick with HIV in own home | Would buy sugar or fresh vegetables from market vendor with HIV | Believe an HIVpositive female teacher should be allowed to teach | Would not want HIV-positive status of family member to remain secret |  |  |
| Age |  |  |  |  |  |  |
| 15-19 | 83.5 | 67.3 | 59.2 | 46.0 | 21.4 | 2,037 |
| 20-24 | 87.7 | 74.6 | 69.1 | 50.8 | 26.9 | 1,253 |
| 25-29 | 90.0 | 74.5 | 68.0 | 54.6 | 30.6 | 1,213 |
| 30-39 | 88.5 | 73.6 | 66.9 | 56.5 | 31.6 | 2,104 |
| 40-49 | 87.8 | 70.5 | 64.9 | 61.0 | 32.0 | 1,332 |
| 15-24 | 85.1 | 70.1 | 63.0 | 47.8 | 23.5 | 3,290 |
| Marital status |  |  |  |  |  |  |
| Never married | 85.4 | 71.5 | 64.2 | 47.5 | 24.6 | 3,094 |
| Ever had sex | 87.7 | 74.2 | 66.5 | 48.3 | 26.7 | 1,689 |
| Never had sex | 82.7 | 68.3 | 61.4 | 46.5 | 21.9 | 1,405 |
| Currently married | 88.6 | 71.8 | 65.5 | 57.3 | 30.5 | 4,213 |
| Formerly married | 86.1 | 72.9 | 66.9 | 55.7 | 30.6 | 633 |
| Residence |  |  |  |  |  |  |
| Urban | 92.3 | 82.5 | 76.6 | 53.9 | 35.5 | 1,199 |
| Rural | 86.3 | 69.9 | 63.0 | 53.3 | 26.9 | 6,740 |
| Region |  |  |  |  |  |  |
| Central | 92.1 | 76.9 | 68.5 | 42.3 | 24.1 | 1,451 |
| Kampala | 93.0 | 86.3 | 78.6 | 53.2 | 35.6 | 546 |
| East Central | 92.2 | 73.6 | 67.3 | 32.2 | 18.6 | 1,146 |
| Eastern | 74.0 | 67.9 | 59.0 | 53.9 | 26.5 | 770 |
| Northeast | 67.5 | 61.8 | 53.8 | 76.5 | 31.4 | 568 |
| North Central | 91.8 | 65.2 | 72.3 | 83.1 | 43.7 | 792 |
| West Nile | 92.5 | 76.2 | 72.5 | 61.3 | 35.2 | 728 |
| Western | 90.6 | 71.6 | 62.1 | 51.6 | 29.0 | 932 |
| Southwest | 81.8 | 65.0 | 53.1 | 52.5 | 22.3 | 1,007 |
| Education |  |  |  |  |  |  |
| No education | 71.8 | 52.7 | 44.4 | 50.9 | 13.5 | 628 |
| Primary incomplete | 84.2 | 64.9 | 57.7 | 51.5 | 22.1 | 3,694 |
| Primary complete | 91.4 | 77.6 | 69.7 | 58.9 | 34.6 | 1,131 |
| Secondary+ | 93.7 | 84.1 | 79.2 | 54.3 | 38.0 | 2,476 |
| Wealth quintile |  |  |  |  |  |  |
| Lowest | 79.8 | 62.3 | 57.9 | 55.0 | 22.7 | 1,175 |
| Second | 85.2 | 66.9 | 59.8 | 58.5 | 27.7 | 1,605 |
| Middle | 86.3 | 69.2 | 60.2 | 55.9 | 27.6 | 1,502 |
| Fourth | 88.3 | 73.5 | 66.0 | 47.9 | 26.2 | 1,664 |
| Highest | 92.8 | 81.7 | 76.5 | 50.9 | 33.9 | 1,994 |
| Total 15-49 | 87.2 | 71.8 | 65.1 | 53.4 | 28.2 | 7,939 |
| Total 15-59 | 86.9 | 71.0 | 64.8 | 54.0 | 28.0 | 8,755 |

${ }^{1}$ Say they would be willing to care for a relative sick with AIDS in their own households and would be willing to buy sugar, fresh vegetables, or other food from a market vendor who had the AIDS virus, they think that a female teacher who has the AIDS virus but is not sick should be allowed to continue teaching, and that if a member of their family got infected with the virus that causes AIDS, they would not necessarily want it to remain secret.

A composite indicator combines all four of these attitudes. As shown in the last column in Tables 5.1.1 and 5.1.2, only 19 percent of women and 28 percent of men express positive attitudes on all four indicators. It is also interesting to note that for all four indicators, women are less likely than men to express accepting attitudes towards people with HIV/AIDS.

The composite measure of accepting attitudes shows some differences across background characteristics. For example, urban women and men are somewhat more likely than rural respondents to express accepting attitudes on all four issues examined. Education is positively related to accepting attitudes. However, the wealth quintile is not. It is only among those in the highest wealth quintile that the proportion reporting accepting attitudes increases. It is also interesting that, although one might consider the capital city to encourage the most open attitudes, other regions appear to be more accepting of those with HIV/AIDS. For example, women in North Central and Western regions and men in North Central are most likely to have accepting attitudes on all four issues.

### 5.4 Attitudes Towards Negotiating Safer Sex

Knowledge about HIV transmission and ways to prevent it are less useful if people feel powerless to negotiate safer sex with their partners. To gauge attitudes towards safer sex, respondents in the UHSBS were asked if they think a wife is justified in refusing to have sex with her husband if she knows he has a disease that can be transmitted through sexual contact. They were also asked if they think that a woman in the same circumstances is justified in asking her husband to use a condom.

As shown in Table 5.2 and Figure 5.1, 72 percent of Ugandan women and 82 percent of men feel that a wife is justified in refusing to have sex with her husband if she knows he has a sexually transmitted disease, while 71 percent of women and 83 percent of men believe that a wife is justified in asking that they use a condom if she knows that her husband has a sexually transmitted infection. Nearly 90 percent of women and men agree with at least one statement, indicating widespread acceptance of the ability of women to negotiate safer sex with their husbands. Women are somewhat less likely than men to feel that a wife is justified in negotiating safer sex.

Figure 5.1 Attitudes Towards Negotiating Safer Sex among Women and Men 15-49


Table 5.2
Attitudes towards negotiating safer sex, Uganda 2004-05

| Background characteristic | Percentage of respondents aged 15-49 who say that when a wife knows her husband has a sexually transmitted infection, she is justified in: |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Women |  |  |  | Men |  |  |  |
|  | Refusing to have sex | Asking that they use a condom | Refusing sex or asking to use a condom | Number of women | Refusing to have sex | Asking that they use a condom | Refusing sex or asking to use a condom | Number of men |
| Age |  |  |  |  |  |  |  |  |
| 15-19 | 70.8 | 71.2 | 83.6 | 2,186 | 82.2 | 83.5 | 90.2 | 2,070 |
| 20-24 | 73.5 | 74.5 | 86.7 | 1,933 | 83.1 | 85.5 | 92.3 | 1,262 |
| 25-29 | 72.7 | 72.8 | 86.2 | 1,764 | 82.5 | 85.2 | 91.5 | 1,220 |
| 30-39 | 72.0 | 69.1 | 83.7 | 2,542 | 82.0 | 83.1 | 90.9 | 2,116 |
| 40-49 | 71.3 | 64.1 | 83.0 | 1,516 | 82.5 | 79.9 | 88.9 | 1,342 |
| Marital status |  |  |  |  |  |  |  |  |
| Never married | 72.4 | 71.8 | 83.8 | 2,220 | 83.0 | 83.8 | 90.9 | 3,140 |
| Ever had sex | 78.3 | 81.3 | 91.4 | 879 | 85.7 | 87.7 | 93.1 | 1,701 |
| Never had sex | 68.5 | 65.5 | 78.8 | 1,342 | 79.7 | 79.2 | 88.2 | 1,439 |
| Currently married | 71.3 | 70.0 | 84.7 | 6,358 | 81.9 | 83.5 | 90.6 | 4,237 |
| Formerly married | 75.0 | 70.5 | 85.5 | 1,362 | 82.5 | 80.3 | 90.4 | 633 |
| Residence |  |  |  |  |  |  |  |  |
| Urban | 83.6 | 85.0 | 94.7 | 1,508 | 85.7 | 86.1 | 94.6 | 1,200 |
| Rural | 70.0 | 67.9 | 82.8 | 8,433 | 81.8 | 82.9 | 90.0 | 6,809 |
| Education |  |  |  |  |  |  |  |  |
| No education | 63.8 | 57.6 | 75.1 | 2,255 | 65.7 | 66.0 | 72.4 | 668 |
| Primary incomplete | 70.7 | 69.9 | 84.8 | 4,596 | 80.4 | 82.3 | 90.0 | 3,723 |
| Primary complete | 78.3 | 78.7 | 89.7 | 1,115 | 85.1 | 86.0 | 92.8 | 1,133 |
| Secondary+ | 81.6 | 82.4 | 92.6 | 1,957 | 88.5 | 88.5 | 95.7 | 2,477 |
| Wealth quintile |  |  |  |  |  |  |  |  |
| Lowest | 64.5 | 58.2 | 76.0 | 1,610 | 75.3 | 76.5 | 84.1 | 1,209 |
| Second | 68.0 | 65.6 | 81.3 | 2,038 | 80.5 | 79.1 | 88.1 | 1,628 |
| Middle | 71.0 | 68.3 | 84.2 | 1,849 | 83.5 | 84.4 | 92.0 | 1,506 |
| Fourth | 72.2 | 72.8 | 85.3 | 2,000 | 83.7 | 86.4 | 91.7 | 1,669 |
| Highest | 81.2 | 82.5 | 92.7 | 2,443 | 86.2 | 87.7 | 94.9 | 1,998 |
| Total 15-49 | 72.1 | 70.5 | 84.6 | 9,941 | 82.4 | 83.4 | 90.7 | 8,010 |
| Total 15-59 | 71.3 | 69.2 | 83.8 | 10,826 | 82.3 | 82.7 | 90.4 | 8,830 |

### 5.5 Attitudes Towards Educating Youth about Condom Use

Condom use is one of the main strategies for combating the spread of AIDS. However, educating young people about using condoms is sometimes controversial, with some saying it promotes early sexual experimentation. To gauge attitudes towards condom education, UHSBS respondents were asked if they thought that children aged $12-14$ should be taught about using a condom to avoid AIDS. Results are tabulated for respondents aged 18-49 in Table 5.3.

The data show that roughly 6 in 10 adults agree that children aged $12-14$ should be taught about using a condom to avoid AIDS. A higher proportion of men than women believe that children should be taught about condom use. Differences by background characteristics are not large. Those in their 40s are less likely to support condom education for youth, as are those with no education, and those in the lowest wealth quintiles.

### 5.6 Perceived Risk of Getting HIV

To assess people's perceptions of their risk of getting HIV, respondents were asked whether the chance they might get the virus that causes AIDS was very likely, somewhat likely, not likely, or no chance at all. Tables 5.4.1 and 5.4.2 show the results for women and men, respectively.

More than 1 in 5 Ugandan adults-21 percent of women and 23 percent of men-perceive themselves at high risk of getting infected with the virus that causes AIDS, while slightly more than one-third perceive their risk as moderate. About one-fifth of respondents think they are not likely to get HIV, while 12 percent of women and men say they have no risk of getting AIDS. More than one in ten respondents said they were not sure of their chances of getting HIV. Women and men perceive roughly equal risks of getting infected with HIV.

Table 5.3
Support of education for youth about condom use to prevent AIDS, Uganda 2004-05

|  | Percentage of those aged 18-49 who <br> agree that children aged <br> should be taught about using |  |  |  |
| :--- | ---: | ---: | ---: | ---: |
|  | a condom to avoid AIDS |  |  |  |

Younger and older respondents are less likely to believe they are at high risk of getting the AIDS virus than respondents in their twenties and thirties. Similarly, those who have never married are less likely to think they are at high risk of getting the AIDS virus. Urban respondents, especially women, are more likely than rural respondents to say they are very likely to get HIV.
Table 5.4.1: women
Perceived chance of getting the HIV virus, Uganda 2004-05

| Background characteristic | Among women aged 15-49, perceived chances of getting the AIDS virus (percent distribution) |  |  |  |  |  | Total | Number of women |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Very likely (high risk) | Somewhat likely (moderate risk) | Not likely (low risk) | No chance at all | Already has HIV or AIDS | Not sure/ depends/ missing |  |  |
| Age |  |  |  |  |  |  |  |  |
| 15-19 | 14.4 | 25.2 | 24.0 | 26.0 | 0.0 | 10.4 | 100.0 | 2,186 |
| 20-24 | 22.0 | 39.8 | 18.2 | 7.5 | 0.1 | 12.4 | 100.0 | 1,933 |
| 25-29 | 23.8 | 43.1 | 14.8 | 5.2 | 0.5 | 12.6 | 100.0 | 1,764 |
| 30-34 | 25.0 | 38.0 | 15.4 | 6.0 | 0.5 | 15.1 | 100.0 | 1,457 |
| 35-39 | 23.7 | 37.9 | 15.1 | 7.8 | 1.1 | 14.5 | 100.0 | 1,085 |
| 40-44 | 21.3 | 32.7 | 18.9 | 9.3 | 1.1 | 16.7 | 100.0 | 870 |
| 45-49 | 19.3 | 31.0 | 18.5 | 15.3 | 1.1 | 14.9 | 100.0 | 647 |
| Marital status |  |  |  |  |  |  |  |  |
| Never married | 16.2 | 24.4 | 23.5 | 27.3 | 0.0 | 8.7 | 100.0 | 2,220 |
| Married | 22.0 | 39.8 | 16.6 | 6.7 | 0.3 | 14.5 | 100.0 | 6,358 |
| Widowed | 23.8 | 28.6 | 16.6 | 10.0 | 4.4 | 16.6 | 100.0 | 581 |
| Divorced | 24.2 | 37.3 | 17.0 | 8.7 | 0.6 | 12.3 | 100.0 | 781 |
| Residence |  |  |  |  |  |  |  |  |
| Urban | 29.2 | 35.7 | 14.4 | 12.2 | 1.1 | 7.4 | 100.0 | 1,508 |
| Rural | 19.6 | 35.5 | 18.9 | 11.6 | 0.4 | 14.2 | 100.0 | 8,433 |
| Region |  |  |  |  |  |  |  |  |
| Central | 26.1 | 41.1 | 14.2 | 14.3 | 0.4 | 3.8 | 100.0 | 1,656 |
| Kampala | 36.0 | 32.8 | 14.7 | 12.6 | 1.0 | 2.7 | 100.0 | 668 |
| East Central | 32.3 | 40.5 | 17.5 | 7.3 | 0.5 | 1.9 | 100.0 | 1,555 |
| Eastern | 12.0 | 29.6 | 20.1 | 9.2 | 0.3 | 28.8 | 100.0 | 857 |
| Northeast | 14.4 | 20.0 | 28.6 | 2.3 | 0.2 | 34.6 | 100.0 | 829 |
| North Central | 9.7 | 51.3 | 5.1 | 9.9 | 0.9 | 23.1 | 100.0 | 970 |
| West Nile | 8.8 | 27.8 | 17.7 | 19.0 | 0.5 | 26.2 | 100.0 | 958 |
| Western | 16.3 | 27.3 | 24.7 | 18.5 | 0.3 | 12.9 | 100.0 | 1,140 |
| Southwest | 25.0 | 38.7 | 22.4 | 10.5 | 0.3 | 3.2 | 100.0 | 1,309 |
| Education |  |  |  |  |  |  |  |  |
| No education | 19.1 | 32.5 | 18.0 | 10.1 | 0.7 | 19.5 | 100.0 | 2,255 |
| Primary incomplete | 18.8 | 35.3 | 19.0 | 12.1 | 0.4 | 14.4 | 100.0 | 4,596 |
| Primary complete | 28.1 | 36.3 | 14.8 | 11.3 | 0.9 | 8.8 | 100.0 | 1,115 |
| Secondary+ | 24.5 | 38.8 | 18.3 | 12.7 | 0.2 | 5.5 | 100.0 | 1,957 |
| Wealth quintile |  |  |  |  |  |  |  |  |
| Lowest | 16.2 | 28.7 | 20.4 | 12.4 | 0.3 | 22.0 | 100.0 | 1,610 |
| Second | 17.2 | 34.0 | 19.0 | 12.6 | 0.5 | 16.6 | 100.0 | 2,038 |
| Middle | 18.2 | 39.1 | 18.5 | 11.4 | 0.2 | 12.5 | 100.0 | 1,849 |
| Fourth | 21.9 | 37.8 | 17.6 | 11.0 | 0.5 | 11.2 | 100.0 | 2,000 |
| Highest | 28.7 | 36.6 | 16.3 | 11.1 | 0.7 | 6.5 | 100.0 | 2,443 |
| Total 15-49 | 21.0 | 35.5 | 18.2 | 11.7 | 0.5 | 13.2 | 100.0 | 9,941 |
| Total 15-59 | 20.3 | 34.6 | 18.6 | 12.7 | 0.5 | 13.3 | 100.0 | 10,826 |

The distribution of respondents' perceptions of the risk of getting AIDS by region shows that the largest proportions of those who think they are at high risk are in Kampala, East Central, and Central regions, and among men in Southwest. However, in some regions, large proportions of respondents say they are unable to assess their risk of getting infected. The proportion of respondents who think they are at high risk of becoming infected with the AIDS virus increases with education and wealth quintile.

Table 5.4.2: men
Perceived chance of getting the HIV virus, Uganda 2004-05

| Background characteristic | Among men aged 15-49, perceived chances of getting the AIDS virus (percent distribution) |  |  |  |  |  | Total | Number of men |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Very likely (high risk) | Somewhat likely (moderate risk) | Not likely (low risk) | No chance at all | Already has HIV or AIDS | Not sure/ depends/ missing |  |  |
| Age |  |  |  |  |  |  |  |  |
| 15-19 | 19.7 | 28.0 | 20.6 | 22.0 | 0.0 | 9.6 | 100.0 | 2,070 |
| 20-24 | 23.8 | 37.4 | 17.3 | 10.3 | 0.0 | 11.2 | 100.0 | 1,262 |
| 25-29 | 25.6 | 38.6 | 14.6 | 8.0 | 0.1 | 13.1 | 100.0 | 1,220 |
| 30-34 | 26.2 | 38.5 | 15.0 | 6.6 | 0.2 | 13.5 | 100.0 | 1,200 |
| 35-39 | 26.4 | 36.6 | 14.8 | 7.9 | 0.5 | 14.0 | 100.0 | 916 |
| 40-44 | 22.9 | 35.7 | 15.3 | 9.8 | 0.8 | 15.6 | 100.0 | 788 |
| 45-49 | 20.9 | 31.7 | 18.5 | 12.9 | 1.0 | 15.1 | 100.0 | 554 |
| Marital status |  |  |  |  |  |  |  |  |
| Never married | 21.5 | 31.3 | 18.9 | 18.6 | 0.0 | 9.7 | 100.0 | 3,140 |
| Married | 23.9 | 36.8 | 15.9 | 8.4 | 0.3 | 14.7 | 100.0 | 4,237 |
| Widowed | 30.1 | 35.5 | 11.9 | 3.6 | 6.9 | 12.0 | 100.0 | 100 |
| Divorced | 28.9 | 37.4 | 15.2 | 7.9 | 0.0 | 10.6 | 100.0 | 532 |
| Residence |  |  |  |  |  |  |  |  |
| Urban | 26.9 | 42.3 | 15.6 | 8.2 | 0.3 | 6.5 | 100.0 | 1,200 |
| Rural | 22.8 | 33.3 | 17.2 | 13.0 | 0.2 | 13.5 | 100.0 | 6,809 |
| Region |  |  |  |  |  |  |  |  |
| Central | 31.9 | 47.0 | 11.0 | 8.9 | 0.1 | 1.0 | 100.0 | 1,451 |
| Kampala | 27.0 | 47.7 | 16.5 | 7.3 | 0.0 | 1.5 | 100.0 | 547 |
| East Central | 41.1 | 32.0 | 13.9 | 9.3 | 0.4 | 3.2 | 100.0 | 1,146 |
| Eastern | 11.6 | 36.6 | 22.5 | 12.1 | 0.6 | 16.6 | 100.0 | 770 |
| Northeast | 2.6 | 32.8 | 28.1 | 12.2 | 0.0 | 24.2 | 100.0 | 610 |
| North Central | 10.2 | 24.2 | 12.0 | 11.2 | 0.1 | 42.2 | 100.0 | 795 |
| West Nile | 2.0 | 29.7 | 23.5 | 15.7 | 0.3 | 28.8 | 100.0 | 735 |
| Western | 12.3 | 24.5 | 26.1 | 25.8 | 0.6 | 10.7 | 100.0 | 945 |
| Southwest | 46.7 | 33.9 | 9.0 | 9.0 | 0.1 | 1.2 | 100.0 | 1,012 |
| Education |  |  |  |  |  |  |  |  |
| No education | 23.1 | 23.6 | 20.2 | 12.2 | 0.2 | 20.6 | 100.0 | 668 |
| Primary incomplete | 22.0 | 34.0 | 17.2 | 13.9 | 0.3 | 12.7 | 100.0 | 3,723 |
| Primary complete | 23.0 | 34.8 | 15.3 | 11.4 | 0.1 | 15.3 | 100.0 | 1,133 |
| Secondary+ | 25.9 | 38.6 | 16.5 | 10.3 | 0.3 | 8.5 | 100.0 | 2,477 |
| Wealth quintile |  |  |  |  |  |  |  |  |
| Lowest | 15.7 | 28.9 | 19.9 | 14.1 | 0.2 | 21.1 | 100.0 | 1,209 |
| Second | 20.0 | 28.9 | 18.9 | 14.3 | 0.1 | 17.7 | 100.0 | 1,628 |
| Middle | 23.2 | 32.5 | 17.1 | 13.7 | 0.3 | 13.2 | 100.0 | 1,506 |
| Fourth | 24.4 | 38.5 | 16.7 | 11.2 | 0.3 | 8.9 | 100.0 | 1,669 |
| Highest | 30.1 | 41.2 | 13.8 | 9.3 | 0.3 | 5.3 | 100.0 | 1,998 |
| Total 15-49 | 23.4 | 34.7 | 17.0 | 12.3 | 0.3 | 12.4 | 100.0 | 8,010 |
| Total 15-59 | 23.1 | 34.3 | 17.1 | 12.6 | 0.3 | 12.6 | 100.0 | 8,830 |

### 6.1 Key Findings

- Since 2000-01, the proportion of women aged 15-19 who have never had sex has increased from 48 to 54 percent, and the proportion of men aged 15-19 who never had sex decreased from 61 to 58 percent.
- There has been an increase in multiple partnering. The proportion of sexually active respondents who reported having had two or more sexual partners in the previous 12 months increased from 2 to 4 percent between 2000-01 and 2004-05 for women and from 25 to 29 percent for men.
- Fifteen percent of women and 37 percent of men aged 15-49 who were sexually active in the 12 months preceding the survey engaged in sex with a nonmarital, noncohabiting partner.
- Thirteen percent of women and 11 percent of men aged 15-49 have ever been tested for HIV and received their results.


### 6.2 INTRODUCTION

This chapter presents data on sexual behaviours related to the spread of HIV/AIDS and other sexually transmitted infections (STIs). These indicators of sexual behaviours include age at first sex and number of sexual partners. Behaviours such as sex with nonmarital, noncohabitating partners, and paying or receiving money to have sex are considered high-risk sexual behaviours. This chapter also includes respondent reports of symptoms of STIs, seeking treatment for STIs, and the extent of voluntary counselling and testing (VCT) for HIV.

### 6.3 Age at First Sexual Intercourse

Sexual intercourse is the most common mode of HIV transmission in Uganda. Looking at age at first sex is one way to understand when individuals are first exposed to the risk of infection with the virus. Table 6.1 shows median age at first sex and the percentage of respondents who had sex by specific ages.

One in five women aged 20-49 had sex by age 15, while two-thirds had sex before age 18. The percentage of women who had sex by age 15 has decreased from 22 percent among women now aged $45-49$ to 12 percent of women aged 15-19. The median age at first sex is 17.1 years for women in the 20-24 age group compared with 16.6 to 16.7 years for older women, implying a recent increase in age at first sex.

Among men in the 20-44 age groups, the percentage who had sex by age 15 ranges from 11 to 12 percent. However, among men aged $15-19,16$ percent had sex by age 15 . Although there is now a larger group of young men initiating sex at a very early age than women, a lower proportion of men 20-24 initiate sex by ages 18 and 20 than women. Thus, the data show that in general men still start sexual activity later than women.

Comparing the 2004-05 UHSBS data with that from previous surveys shows a steady increase over time in the proportion of women aged 15-19 who have never had sex, from 38 percent in 1995 to 48 percent in 2000-01 and to 54 percent in 2004-05. The proportion of men aged 15-19 who have never had sex varies from 52 percent in 1995 to 61 percent in 2000-01 and to 58 percent in 2004-05. The median age at first sex among those aged 20-24 has increased slightly among women since 2000-01, from 16.7 to 17.1 years, while it has declined slightly among men, from 18.8 to 18.3 years.

Table 6.1
Age at first sexual intercourse, Uganda 2004-05

| Current age | Percentage who had first sexual intercourse by exact age: |  |  |  |  | Percentage who never had intercourse | Number of individuals | Median age at first intercourse |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 15 | 18 | 20 | 22 | 25 |  |  |  |
| WOMEN |  |  |  |  |  |  |  |  |
| 15-19 | 12.2 | na | na | na | na | 54.4 | 2,186 | a |
| 20-24 | 17.0 | 63.6 | 87.1 | na | na | 6.5 | 1,933 | 17.1 |
| 25-29 | 18.7 | 67.5 | 87.4 | 95.2 | 98.0 | 1.1 | 1,764 | 16.7 |
| 30-34 | 21.1 | 68.6 | 89.3 | 95.1 | 98.4 | 0.3 | 1,457 | 16.6 |
| 35-39 | 22.6 | 66.0 | 87.2 | 94.4 | 98.4 | 0.1 | 1,085 | 16.6 |
| 40-44 | 20.6 | 65.3 | 87.0 | 95.1 | 97.3 | 0.0 | 870 | 16.7 |
| 45-49 | 22.0 | 66.6 | 87.0 | 93.6 | 97.3 | 0.2 | 647 | 16.6 |
| 20-49 | 19.8 | 66.2 | 87.6 | na | na | 2.0 | 7,755 | 16.8 |
| MEN |  |  |  |  |  |  |  |  |
| 15-19 | 16.3 | na | na | na | na | 57.8 | 2,070 | a |
| 20-24 | 10.8 | 45.0 | 71.6 | na | na | 14.9 | 1,262 | 18.3 |
| 25-29 | 11.5 | 44.9 | 69.8 | 84.7 | 94.5 | 2.8 | 1,220 | 18.3 |
| 30-34 | 11.9 | 45.6 | 70.7 | 85.3 | 93.9 | 0.7 | 1,200 | 18.3 |
| 35-39 | 10.6 | 42.0 | 67.6 | 83.5 | 90.9 | 0.3 | 916 | 18.5 |
| 40-44 | 11.5 | 41.7 | 67.4 | 85.2 | 92.1 | 0.6 | 788 | 18.5 |
| 45-49 | 9.4 | 40.1 | 68.5 | 86.3 | 93.1 | 0.7 | 554 | 18.5 |
| 20-49 | 11.1 | 43.8 | 69.6 | na | na | 4.1 | 5,940 | 18.4 |

${ }^{\text {a }}$ Omitted because less than 50 percent of respondents had had sex before the start of the age group
na $=$ Not applicable

### 6.4 Recent Sexual Activity

Table 6.2 presents the percent distribution of women and men by timing of last sex, according to their background characteristics. Fourteen percent of women aged 15-49 and 18 percent of men aged 15-49 have never had sex. Among women, 22 percent had sex in the past year and 12 percent had their last sexual encounter one or more years ago. Among men, 18 percent had sex in the past year while 12 percent last had sex more than one year ago. Slightly more than half of men and women reported sexual activity in the four weeks preceding the survey.

Among women, the level of recent sexual activity increases to its highest level in the 25-29 age group and then declines. In the younger age groups, recent sexual activity among men is lower than that of women. Men and women in the 25-29 age group have similar levels of recent sexual activity ( 69 percent). Recent sexual activity then continues to increase to 80 percent among men in the 30-34 age group before starting a gradual decline. Women and men who are currently married are most likely to have recent sexual activity. Three in four currently married women and 85 percent of currently married men had sex in the four weeks preceding the survey. Among respondents who have never married, recent sexual activity is more prevalent among men (11 percent) than among women (8 percent).

Rural women and men are more likely to have had sex in the four weeks preceding the survey than urban respondents. Women and men with more education are less likely than those with less education to have had sex in the past four weeks, which may be related to the fact that better-educated respondents tend to be younger and not yet married.

Table 6.2
Recent sexual activity, Uganda 2004-05

| Background characteristic | Women 15-49 |  |  |  |  | Men 15-49 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Percent distribution by timing of last sexual intercourse ${ }^{1}$ |  |  |  | Number of women | Percent distribution by timing of last sexual intercourse ${ }^{1}$ |  |  |  | Number of men |
|  | In the past 4 weeks | Within 1 year | One or more years | Never had sexual intercourse |  | In the past 4 weeks | Within <br> 1 year | One or more years | Never had sexual intercourse |  |
| Age |  |  |  |  |  |  |  |  |  |  |
| 15-19 | 19.7 | 17.6 | 8.1 | 54.4 | 2,186 | 9.1 | 16.4 | 16.4 | 57.8 | 2,070 |
| 20-24 | 59.4 | 25.4 | 8.5 | 6.5 | 1,933 | 39.6 | 26.9 | 18.3 | 14.9 | 1,262 |
| 25-29 | 69.4 | 21.7 | 7.7 | 1.1 | 1,764 | 68.6 | 20.6 | 7.8 | 2.8 | 1,220 |
| 30-34 | 64.2 | 24.1 | 11.4 | 0.3 | 1,457 | 80.2 | 13.3 | 5.4 | 0.7 | 1,200 |
| 35-39 | 62.5 | 22.6 | 14.7 | 0.1 | 1,085 | 76.3 | 17.3 | 6.0 | 0.3 | 916 |
| 40-44 | 59.2 | 18.4 | 22.0 | 0.0 | 870 | 75.8 | 14.5 | 9.0 | 0.6 | 788 |
| 45-49 | 47.2 | 19.2 | 33.4 | 0.2 | 647 | 72.2 | 14.6 | 12.1 | 0.7 | 554 |
| 15-24 | 38.4 | 21.3 | 8.3 | 31.9 | 4,119 | 20.6 | 20.4 | 17.1 | 41.6 | 3,332 |
| Marital status |  |  |  |  |  |  |  |  |  |  |
| Never married | 7.6 | 18.8 | 13.1 | 60.4 | 2,220 | 11.4 | 21.3 | 21.3 | 45.8 | 3,140 |
| Currently married | 76.4 | 19.8 | 3.6 | 0.0 | 6,358 | 85.4 | 12.9 | 1.4 | 0.0 | 4,237 |
| Formerly married | 15.3 | 33.9 | 50.6 | 0.0 | 1,362 | 32.4 | 36.4 | 31.0 | 0.0 | 633 |
| Residence |  |  |  |  |  |  |  |  |  |  |
| Urban | 44.5 | 23.4 | 16.5 | 15.5 | 1,508 | 44.2 | 22.9 | 15.4 | 17.0 | 1,200 |
| Rural | 54.2 | 21.2 | 11.4 | 13.1 | 8,433 | 53.6 | 17.2 | 10.9 | 18.1 | 6,809 |
| Region |  |  |  |  |  |  |  |  |  |  |
| Central | 52.8 | 21.8 | 11.8 | 13.2 | 1,656 | 47.6 | 20.0 | 14.4 | 17.9 | 1,451 |
| Kampala | 43.2 | 23.7 | 17.5 | 15.4 | 668 | 40.8 | 25.4 | 13.9 | 19.7 | 547 |
| East Central | 53.0 | 22.9 | 12.5 | 11.6 | 1,555 | 55.1 | 17.1 | 11.1 | 16.7 | 1,146 |
| Eastern | 59.5 | 21.2 | 8.2 | 10.6 | 857 | 55.4 | 22.4 | 9.9 | 11.8 | 770 |
| Northeast | 50.4 | 26.1 | 11.5 | 11.9 | 829 | 54.7 | 19.1 | 9.5 | 15.5 | 610 |
| North Central | 55.3 | 24.8 | 12.3 | 7.6 | 970 | 60.3 | 19.4 | 9.5 | 10.3 | 795 |
| West Nile | 41.5 | 24.2 | 17.0 | 17.3 | 958 | 45.6 | 19.9 | 12.2 | 22.3 | 735 |
| Western | 61.4 | 17.1 | 7.8 | 13.5 | 1,140 | 56.0 | 15.1 | 10.1 | 18.6 | 945 |
| Southwest | 52.7 | 14.9 | 12.7 | 19.6 | 1,309 | 52.7 | 8.8 | 11.6 | 26.9 | 1,012 |
| Education |  |  |  |  |  |  |  |  |  |  |
| No education | 60.4 | 21.7 | 14.5 | 3.4 | 2,255 | 68.1 | 14.5 | 8.7 | 8.4 | 668 |
| Primary incomp. | 54.1 | 21.5 | 10.1 | 14.2 | 4,596 | 52.8 | 17.2 | 10.3 | 19.5 | 3,723 |
| Primary compl. | 51.4 | 20.9 | 13.8 | 13.8 | 1,115 | 58.2 | 18.1 | 10.1 | 13.5 | 1,133 |
| Secondary+ | 41.2 | 21.6 | 13.5 | 23.5 | 1,957 | 44.4 | 20.2 | 14.8 | 20.2 | 2,477 |
| Total 15-49 | 52.7 | 21.5 | 12.2 | 13.5 | 9,941 | 52.2 | 18.0 | 11.5 | 18.0 | 8,010 |
| Total 15-59 | 50.9 | 20.6 | 15.9 | 12.4 | 10,826 | 53.9 | 17.8 | 11.8 | 16.3 | 8,830 |

${ }^{1}$ Percentages may not add to 100 due to a small number with missing information.

### 6.5 Multiple Sexual Partners

Women and men interviewed in the 2004-05 UHSBS were asked questions about the number of partners with whom they had had sex in the 12 months preceding the survey, the type of relationship they had with these partners, and the number of sexual partners in their whole life.

More than seven in ten respondents reported that they had had sex in the 12 months preceding the survey. Among respondents who were sexually active in the 12 months preceding the survey, only 4 percent of women reported having had more than one sexual partner, compared with 29 percent of men (Tables 6.3.1 and 6.3.2). Sexually active young women aged 15-19 are more likely to report having multiple partners in the previous year ( 8 percent) than women in other age groups, while there is little difference in multiple partnerships by age group among men. Women who have had sex in the past 12 months and who are formerly married or never married are more likely to have had multiple partners in
the past year than those who are currently married. Among men, those who have never married are least likely to have had multiple partners in the past year, while the formerly married are most likely.

Sexually active women and men in urban areas are slightly more likely to have had more than one partner in the past 12 months than those in rural areas. The results for education show that women and men who have secondary education or higher are more likely to have multiple partners than those with lower levels of education. Among sexually active men, the likelihood of having multiple partners in the past 12 months increases with each wealth quintile. Among sexually active women, those in the highest wealth quintile are most likely to have had sex with more than one person in the past 12 months, but there is no clear pattern among women in the lower wealth quintiles.

Table 6.3.1
Multiple sex partnerships among women, Uganda 2004-05

| Background characteristic | Among all women 15-49 |  | Among women who had sex in the past 12 months |  | Among women who ever had sex |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Percentage who had 2+ partners in the past 12 months | Number of women who had sex in the past 12 months |  |  |
|  | Percentage who had sex in the past 12 months | Number of women |  |  | Mean number of lifetime sexual partners | Number of women who ever had sex |
| Age |  |  |  |  |  |  |
| 15-19 | 37.3 | 2,186 | 7.6 | 816 | 1.7 | 996 |
| 20-24 | 84.8 | 1,933 | 3.8 | 1,639 | 1.9 | 1,807 |
| 25-29 | 91.2 | 1,764 | 3.2 | 1,609 | 2.2 | 1,745 |
| 30-39 | 86.9 | 2,542 | 3.1 | 2,208 | 2.4 | 2,536 |
| 40-49 | 72.8 | 1,516 | 3.3 | 1,105 | 2.7 | 1,515 |
| 15-24 | 59.6 | 4,119 | 5.1 | 2,455 | 1.8 | 2,803 |
| Marital status |  |  |  |  |  |  |
| Never married | 26.4 | 2,220 | 7.5 | 586 | 1.8 | 879 |
| Currently married | 96.2 | 6,358 | 2.6 | 6,119 | 2.2 | 6,358 |
| Formerly married | 49.3 | 1,362 | 11.3 | 671 | 2.9 | 1,362 |
| Residence |  |  |  |  |  |  |
| Urban | 67.9 | 1,508 | 5.8 | 1,024 | 2.7 | 1,274 |
| Rural | 75.3 | 8,433 | 3.5 | 6,353 | 2.2 | 7,325 |
| Region |  |  |  |  |  |  |
| Central | 74.6 | 1,656 | 6.7 | 1,235 | 2.7 | 1,437 |
| Kampala | 67.0 | 668 | 7.3 | 448 | 2.7 | 566 |
| East Central | 75.9 | 1,555 | 5.8 | 1,181 | 2.7 | 1,374 |
| Eastern | 80.7 | 857 | 4.7 | 691 | 2.9 | 766 |
| Northeast | 76.5 | 829 | 1.8 | 634 | 1.8 | 730 |
| North Central | 80.1 | 970 | 1.5 | 777 | 1.9 | 896 |
| West Nile | 65.7 | 958 | 1.6 | 630 | 1.7 | 793 |
| Western | 78.7 | 1,140 | 1.8 | 897 | 2.2 | 986 |
| Southwest | 67.6 | 1,309 | 1.8 | 884 | 1.5 | 1,052 |
| Education |  |  |  |  |  |  |
| No education | 82.1 | 2,255 | 2.5 | 1,851 | 1.9 | 2,180 |
| Primary incomplete | 75.6 | 4,596 | 4.2 | 3,474 | 2.4 | 3,944 |
| Primary complete | 72.4 | 1,115 | 3.2 | 807 | 2.4 | 961 |
| Secondary+ | 62.8 | 1,957 | 5.1 | 1,229 | 2.4 | 1,496 |
| Wealth quintile |  |  |  |  |  |  |
| Lowest | 73.3 | 1,610 | 3.5 | 1,180 | 2.0 | 1,389 |
| Second | 73.4 | 2,038 | 3.4 | 1,496 | 2.1 | 1,742 |
| Middle | 78.1 | 1,849 | 3.0 | 1,445 | 2.2 | 1,650 |
| Fourth | 75.5 | 2,000 | 3.7 | 1,511 | 2.3 | 1,732 |
| Highest | 71.4 | 2,443 | 5.1 | 1,744 | 2.6 | 2,086 |
| Total 15-49 | 74.2 | 9,941 | 3.8 | 7,376 | 2.2 | 8,599 |
| Total 15-59 | 71.6 | 10,826 | 3.7 | 7,748 | 2.3 | 9,483 |

As for the mean number of lifetime sexual partners, women reported a mean of 2.2, compared with 6.7 for men. As might be expected, the mean number of partners increases with age. Mean number of lifetime sexual partners is also higher in urban areas. Women with no education have a lower number of partners than all other education levels, but there is no pattern in number of lifetime partners among men by education.

There appears to be a slight trend towards an increase in multiple partnering over the past four years. The proportion of women who had sex in the 12 months preceding the survey and who reported having more than one partner in that time period increased from 2 percent in 2000-01 to 4 percent in 2004-05. The proportion of sexually active men reporting multiple partners rose from 25 to 29 percent.

Table 6.3.2
Multiple sex partnerships among men, Uganda 2004-05

| Background characteristic | Among all men 15-49 |  | Among men who had sex in the past 12 months |  | Among men who ever had sex |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Percentage who had 2+ partners in the past 12 months | $\qquad$ who had sex in the past 12 months |  |  |
|  | Percentage who had sex in the past 12 months | Number of men |  |  | Mean number of lifetime sexual partners | Number of men who ever had sex |
| Age |  |  |  |  |  |  |
| 15-19 | 25.5 | 2,070 | 21.3 | 528 | 2.8 | 873 |
| 20-24 | 66.5 | 1,262 | 32.6 | 840 | 4.6 | 1,073 |
| 25-29 | 89.3 | 1,220 | 29.2 | 1,089 | 5.5 | 1,186 |
| 30-39 | 93.5 | 2,116 | 31.6 | 1,980 | 7.5 | 2,105 |
| 40-49 | 88.8 | 1,342 | 26.9 | 1,192 | 10.6 | 1,333 |
| 15-24 | 41.1 | 3,332 | 28.3 | 1,368 | 3.8 | 1,947 |
| Marital status |  |  |  |  |  |  |
| Never married | 32.6 | 3,140 | 25.8 | 1,025 | 3.8 | 1,701 |
| Currently married | 98.4 | 4,237 | 29.8 | 4,168 | 7.4 | 4,237 |
| Formerly married | 68.8 | 633 | 32.5 | 435 | 9.3 | 633 |
| Residence |  |  |  |  |  |  |
| Urban | 67.1 | 1,200 | 34.4 | 806 | 7.3 | 996 |
| Rural | 70.8 | 6,809 | 28.5 | 4,822 | 6.6 | 5,575 |
| Region |  |  |  |  |  |  |
| Central | 67.6 | 1,451 | 38.0 | 980 | 7.8 | 1,191 |
| Kampala | 66.2 | 547 | 34.6 | 362 | 7.1 | 439 |
| East Central | 72.2 | 1,146 | 39.4 | 827 | 7.9 | 954 |
| Eastern | 77.8 | 770 | 36.5 | 599 | 7.8 | 679 |
| Northeast | 73.8 | 610 | 13.8 | 450 | 4.0 | 515 |
| North Central | 79.6 | 795 | 24.3 | 633 | 6.0 | 713 |
| West Nile | 65.5 | 735 | 27.7 | 482 | 5.2 | 571 |
| Western | 71.2 | 945 | 21.7 | 673 | 6.8 | 769 |
| Southwest | 61.5 | 1,012 | 18.0 | 622 | 5.5 | 740 |
| Education |  |  |  |  |  |  |
| No education | 82.5 | 668 | 23.2 | 551 | 6.4 | 612 |
| Primary incomplete | 70.0 | 3,723 | 29.7 | 2,605 | 7.0 | 2,995 |
| Primary complete | 76.3 | 1,133 | 27.6 | 864 | 6.6 | 980 |
| Secondary+ | 64.6 | 2,477 | 31.8 | 1,601 | 6.3 | 1,976 |
| Wealth quintile |  |  |  |  |  |  |
| Lowest | 71.8 | 1,209 | 23.1 | 867 | 5.5 | 990 |
| Second | 69.1 | 1,628 | 25.0 | 1,126 | 6.0 | 1,317 |
| Middle | 73.1 | 1,506 | 28.4 | 1,101 | 7.3 | 1,261 |
| Fourth | 71.7 | 1,669 | 31.5 | 1,196 | 7.1 | 1,387 |
| Highest | 66.9 | 1,998 | 35.7 | 1,338 | 7.1 | 1,617 |
| Total 15-49 | 70.3 | 8,010 | 29.3 | 5,628 | 6.7 | 6,571 |
| Total 15-59 | 71.7 | 8,830 | 28.5 | 6,330 | 7.2 | 7,390 |

### 6.6 Condom Use at Last Sex and Reasons for Non-Use

Respondents who had sex in the past 12 months were asked whether they used a condom at last sex. Table 6.4 shows that men ( 16 percent) were more likely to have used a condom than women ( 9 percent). Respondents aged $15-19$ were by far the most likely age group to have used a condom at last sex ( 27 percent of women and 47 percent of men).

As might be expected, nevermarried respondents were most likely to have used a condom at last sex ( 53 percent among women and 55 percent among men), while currently married respondents were least likely (4 and 5 percent, respectively). Respondents in urban areas were roughly three times more likely than those in rural areas to have used a condom at last sex. Kampala, Central, and East Central regions have much higher rates of condom use at last sex than other regions.

Condom use at last sex also varies by education status and wealth. The greatest differences are seen between the highest category and all other categories. Onefourth of respondents with secondary education or higher used a condom at last sex, compared with only 3 to 6 percent of those with no education. Similarly, the proportion of those in the highest wealth quintile who used a condom at last sex is at least double the proportion in the next highest quintile.

Reasons for not using a condom at last sex differ between men and women (Table 6.5). Almost three-quarters of men said they trusted their partners did not have a disease. This is the predominant reason given by men for not using a condom. By comparison, only 40 percent of women cited trust that their partners did not have a disease as a reason for not using a condom. Women gave a wider variety of reasons for not using a condom than men. Almost one-quarter said they did not use a condom because they do not like them (compared with only 7 percent of men); 16 percent of women said their partner refused to use a condom (compared with 2 percent of men); and 15 percent said they had no knowledge of condoms (compared with 7 percent of men).

Table 6.5
Reasons for not using a condom at last sex, Uganda 2004-05

| Reason for nonuse | Among those having sex in the 12 months preceding the survey and did not use a condom at last sex |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Women 15-49 |  |  | Men 15-49 |  |  |
|  | All women | Last sex with husband/ live-in partner | Last sex with noncohabiting partner | All men | Last sex with wife/ live-in partner | Last sex with noncohabiting partner |
| No knowledge of condoms | 15.2 | 15.5 | 11.4 | 7.1 | 6.8 | 9.3 |
| No knowledge of condom source | 7.5 | 7.7 | 4.8 | 2.7 | 2.6 | 3.9 |
| Condom source not accessible | 4.2 | 4.1 | 5.4 | 4.7 | 3.4 | 13.3 |
| Did not have condom at the time | 9.1 | 8.6 | 15.1 | 9.6 | 5.8 | 34.0 |
| Cost too much | 0.6 | 0.6 | 0.5 | 1.4 | 0.9 | 4.6 |
| Too messy/ inconvenient | 3.1 | 2.9 | 5.1 | 3.0 | 2.9 | 3.8 |
| Condoms not effective | 1.9 | 2.0 | 0.6 | 1.3 | 1.3 | 1.7 |
| Does not like condoms | 23.5 | 23.5 | 24.1 | 7.0 | 6.8 | 8.5 |
| Wanted to get pregnant | 6.2 | 6.2 | 5.7 | 8.5 | 9.1 | 4.9 |
| Trusts partner does not have a disease | 40.1 | 41.5 | 23.3 | 73.4 | 79.9 | 31.0 |
| Respondent does not have a disease | 3.0 | 3.2 | 1.5 | 7.2 | 7.8 | 3.8 |
| Partner insisted on not using | 15.8 | 15.3 | 22.6 | 2.4 | 1.8 | 6.4 |
| Religious prohibition | 1.4 | 1.5 | 0.0 | 1.5 | 1.6 | 0.6 |
| Other | 10.2 | 10.4 | 7.6 | 7.3 | 7.5 | 5.8 |
| Number of women/men | 6,696 | 6,178 | 518 | 4,713 | 4,084 | 630 |

Note: Multiple responses were allowed.

Almost 9 out of 10 respondents who did not use a condom at last sex reported that their last sexual partner was a spouse or cohabiting partner. Therefore, the responses for all respondents who did not use a condom at last sex closely match responses for respondents whose last sex was with a spouse/partner. Different patterns emerge when looking at respondents whose last sexual partner was not a spouse or cohabiting partner. Among women, almost equal proportions (23 and 24 percent) cite dislike of condoms, trust that their partner does not have a disease, and partner's refusal to use a condom as reasons for nonuse. Other reasons given by women whose last sex was with a noncohabiting partner include not having a condom at the time and lack of knowledge about condoms. Among men whose last sex was with a noncohabiting partner, not having a condom is the leading response ( 34 percent), followed by trust that their partner does not have a disease ( 31 percent). Thirteen percent of men who did not use a condom in their last sex with a noncohabiting partner said that they did not know a place to get condoms, while 9 percent said they did not know about condoms at all.

### 6.7 Higher-risk Sex

Condom use is an important tool in the fight to curtail the spread of HIV/AIDS. Although truly effective protection would require condom use at every sexual encounter, the most important sexual encounters to cover are those considered to be 'higher risk.' In the context of this survey, higher-risk sex is defined as sex with a nonmarital, noncohabiting partner in the 12 months preceding the survey. Table 6.6 shows for women and men who were sexually active in the 12 months preceding the survey, the proportion who engage in higher-risk sex and among those, the proportion who used a condom during their last sexual encounter with such partners.

The results show that, among respondents aged 15-49 who were sexually active in the preceding 12 months, 15 percent of women and 37 percent of men engage in sex with a nonmarital, noncohabiting partner. Of them, 47 percent of women and 53 percent of men reported using condoms at the most recent higher-risk sex.

Table 6.6
Higher-risk sex and condom use at last higher-risk sex in the 12 months preceding the survey, Uganda 2004-05

| Background characteristic | Women 15-49 |  |  |  | Men 15-49 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Among those who had sex in the past 12 months |  | Among those who had higher-risk sex in the past 12 months |  | Among those who had sex in the past 12 months |  | Among those who had higher-risk sex in the past 12 months |  |
|  | Percentage engaging in higher-risk sex in the past 12 months | Number of women who had sex in the past 12 months | Percentage who used condom at last higherrisk sex | Number of women who had higherrisk sex in the past 12 months | Percentage engaging in higher-risk sex in the past 12 months | Number of men who had sex in the past 12 months | Percentage who used condom at last higherrisk sex | Number of men who had higherrisk sex in the past 12 months |
| Age |  |  |  |  |  |  |  |  |
| 15-19 | 45.4 | 816 | 55.6 | 371 | 92.3 | 528 | 50.5 | 487 |
| 20-24 | 16.2 | 1,639 | 49.1 | 266 | 63.0 | 840 | 59.4 | 529 |
| 25-29 | 10.2 | 1,609 | 51.7 | 164 | 34.7 | 1,089 | 59.1 | 378 |
| 30-39 | 10.2 | 2,208 | 32.6 | 226 | 24.2 | 1,980 | 52.2 | 478 |
| 40-49 | 9.3 | 1,105 | 31.5 | 102 | 15.9 | 1,192 | 35.5 | 189 |
| Marital status |  |  |  |  |  |  |  |  |
| Never married ${ }^{1}$ | 93.2 | 586 | 55.4 | 546 | 98.3 | 1,025 | 56.0 | 1,008 |
| Currently married | 3.0 | 6,119 | 48.0 | 183 | 18.3 | 4,168 | 52.4 | 761 |
| Formerly married | 59.5 | 671 | 34.3 | 399 | 67.4 | 435 | 46.8 | 293 |
| Residence |  |  |  |  |  |  |  |  |
| Urban | 29.0 | 1,024 | 64.7 | 297 | 52.6 | 806 | 73.7 | 424 |
| Rural | 13.1 | 6,353 | 40.3 | 832 | 34.0 | 4,822 | 48.1 | 1,638 |
| Region |  |  |  |  |  |  |  |  |
| Central | 26.6 | 1,235 | 50.6 | 329 | 50.1 | 980 | 68.1 | 491 |
| Kampala | 34.6 | 448 | 66.3 | 155 | 60.7 | 362 | 78.5 | 220 |
| East Central | 18.9 | 1,181 | 55.9 | 223 | 38.7 | 827 | 55.8 | 320 |
| Eastern | 15.4 | 691 | 36.7 | 107 | 48.0 | 599 | 42.7 | 288 |
| Northeast | 8.6 | 634 | 28.0 | 54 | 18.5 | 450 | 35.9 | 83 |
| North Central | 11.2 | 777 | 17.2 | 87 | 28.1 | 633 | 34.4 | 178 |
| West Nile | 5.5 | 630 | 43.2 | 35 | 29.0 | 482 | 45.8 | 139 |
| Western | 9.9 | 897 | 39.0 | 89 | 29.4 | 673 | 50.0 | 198 |
| Southwest | 5.6 | 884 | 29.2 | 50 | 23.3 | 622 | 26.2 | 145 |
| Education |  |  |  |  |  |  |  |  |
| No education | 6.2 | 1,851 | 26.6 | 115 | 19.3 | 551 | 36.4 | 107 |
| Primary incomplete | 13.6 | 3,474 | 36.7 | 473 | 35.8 | 2,605 | 44.4 | 932 |
| Primary complete | 17.1 | 807 | 42.8 | 138 | 31.3 | 864 | 47.7 | 270 |
| Secondary+ | 32.7 | 1,229 | 65.6 | 402 | 46.9 | 1,601 | 69.1 | 752 |
| Wealth quintile |  |  |  |  |  |  |  |  |
| Lowest | 12.1 | 1,180 | 32.3 | 142 | 25.3 | 867 | 39.7 | 220 |
| Second | 12.3 | 1,496 | 33.1 | 183 | 30.7 | 1,126 | 41.5 | 345 |
| Middle | 10.4 | 1,445 | 34.1 | 150 | 32.1 | 1,101 | 44.3 | 354 |
| Fourth | 14.3 | 1,511 | 43.6 | 216 | 38.5 | 1,196 | 46.5 | 460 |
| Highest | 25.1 | 1,744 | 63.0 | 437 | 51.1 | 1,338 | 73.1 | 683 |
| Total 15-49 | 15.3 | 7,376 | 46.7 | 1,128 | 36.6 | 5,628 | 53.4 | 2,062 |
| Total 15-59 | 14.9 | 7,748 | 46.1 | 1,151 | 34.0 | 6,330 | 52.1 | 2,153 |

${ }^{1}$ Evidently, a few respondents who had sex in the 12 months preceding the survey and who were recorded as never having been married nevertheless reported having only sexual partners who were either a spouse or cohabiting partner. This is why the proportion is not quite 100.0 percent.

By the definition used here, all premarital sex is higher-risk sex. Consequently, the prevalence of higher-risk sex is greater among the youngest respondents and among those who have never married or who used to be married. Among women, condom use at last higher-risk sex is also highest among younger women, while among men, it is highest among those in their twenties. Urban women and men are more likely than rural respondents to engage in higher-risk sex and also more likely to use condoms when having higher-risk sex. Differences in the extent of higher-risk sex by region could be a result of differences in the age and marital status composition of the respondents. It is encouraging that in those regions where higher-risk sex is more prevalent (i.e., Kampala, Central, East Central and Eastern regions) condom use at last higher-risk sex is also more prevalent.

There is a tendency for the prevalence of higher-risk sexual behaviour to increase with education. However, the likelihood of having used a condom during the most recent higher-risk sexual encounter also increases steadily with education level for both sexes. Differences by wealth quintile are not strong, except at the highest quintile, where both higher-risk sex and condom use are also the highest.

### 6.8 Sex with Prostitutes

Respondents in the 2004-05 UHSBS were asked about paid sex. Men were asked, "In the past 12 months, did you pay anyone to have sex?" Women were asked, "In the past 12 months, did any man pay you to have sex?" Women who receive payment for sex may have numerous partners. They are at high risk for contracting HIV/AIDS and other sexually transmitted infections and then passing them on to subsequent partners.

The survey results show that less than one-half of one percent of women 15-49 said they had been paid to have sex in the past 12 months, while one percent of men 15-49 reported they engage in paid sex in the 12 months preceding the survey (data not shown). Given the small numbers, it would be misleading to present any breakdown by characteristics. However, it should be noted that 56 percent of men used a condom the last time they paid for sex.

### 6.9 HIV COUNSELLING AND TESting

## VCT coverage

Awareness of HIV status can motivate individuals to further protect themselves against infection or to protect their partners from acquiring the disease. However, survey data indicate that the vast majority of Ugandans have never been tested for HIV and do not know their status. As shown in Table 6.7, only 13 percent of women aged 15-49 and 11 percent of men 15-49 have been tested for HIV and received their results. An additional 2 percent of respondents were tested but never received their test results. Individuals may be exposed to risk of infection with HIV repeatedly over time. For this reason, it may be important for an individual to be tested multiple times. Four percent of women and men have been tested in the 12 months preceding the survey.

Men and women aged 25-29 are in the age group most likely to have been tested for HIV. HIV testing is most common among respondents in urban areas and those in Kampala and Central regions. Higher education level and wealth are associated with a higher likelihood of having received an HIV test.

Over recent years, the proportion of women aged 15-49 who have ever been tested for HIV (regardless of whether they received results) has increased from 8 percent in 2000-01 to 15 percent in 2004-05, while the proportion of men 15-49 tested has remained constant at about 12 percent.

Table 6.7
Coverage of prior HIV testing, Uganda 2004-05

| Background characteristic | Women 15-49 |  |  |  | Men 15-49 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Percentage ever tested for HIV and received results | Percentage ever tested and did not receive results | Percentage tested and received results in past 12 months | Number of women | Percentage ever tested for HIV and received results | Percentage ever tested and did not receive results | Percentage tested and received results in past 12 months | Number of men |
| Age |  |  |  |  |  |  |  |  |
| 15-19 | 7.2 | 1.7 | 2.9 | 2,186 | 3.7 | 0.9 | 1.9 | 2,070 |
| 20-24 | 14.8 | 2.3 | 4.7 | 1,933 | 13.1 | 1.9 | 5.2 | 1,262 |
| 25-29 | 16.8 | 2.9 | 3.9 | 1,764 | 14.4 | 2.4 | 4.5 | 1,220 |
| 30-39 | 14.0 | 1.9 | 4.1 | 2,542 | 13.8 | 1.7 | 4.4 | 2,116 |
| 40-49 | 11.0 | 1.3 | 4.8 | 1,516 | 11.5 | 1.8 | 3.7 | 1,342 |
| 15-24 | 10.8 | 2.0 | 3.7 | 4,119 | 7.3 | 1.3 | 3.2 | 3,332 |
| Marital status |  |  |  |  |  |  |  |  |
| Never married | 9.4 | 1.6 | 4.7 | 2,220 | 8.0 | 1.3 | 3.3 | 3,140 |
| Ever had sex | 17.2 | 2.2 | 7.8 | 879 | 12.0 | 1.5 | 4.8 | 1,701 |
| Never had sex | 4.3 | 1.3 | 2.6 | 1,342 | 3.2 | 1.0 | 1.5 | 1,439 |
| Currently married | 12.5 | 2.2 | 3.3 | 6,358 | 12.7 | 1.8 | 4.3 | 4,237 |
| Formerly married | 18.9 | 1.8 | 6.3 | 1,362 | 12.0 | 2.5 | 3.0 | 633 |
| Residence |  |  |  |  |  |  |  |  |
| Urban | 31.0 | 2.5 | 8.9 | 1,508 | 24.3 | 1.0 | 8.5 | 1,200 |
| Rural | 9.4 | 1.9 | 3.2 | 8,433 | 8.4 | 1.8 | 3.0 | 6,809 |
| Region |  |  |  |  |  |  |  |  |
| Central | 16.4 | 2.2 | 4.6 | 1,656 | 13.0 | 1.7 | 3.3 | 1,451 |
| Kampala | 36.6 | 2.9 | 9.4 | 668 | 26.3 | 1.2 | 8.6 | 547 |
| East Central | 10.3 | 1.1 | 3.4 | 1,555 | 9.9 | 1.9 | 3.1 | 1,146 |
| Eastern | 8.9 | 2.0 | 4.6 | 857 | 9.0 | 1.6 | 3.9 | 770 |
| Northeast | 5.8 | 1.0 | 1.9 | 829 | 7.9 | 2.1 | 3.4 | 610 |
| North Central | 13.9 | 2.6 | 4.3 | 970 | 11.2 | 1.5 | 5.3 | 795 |
| West Nile | 10.8 | 1.5 | 4.4 | 958 | 8.2 | 2.2 | 4.1 | 735 |
| Western | 8.9 | 3.6 | 3.1 | 1,140 | 7.7 | 1.6 | 2.6 | 945 |
| Southwest | 9.2 | 1.6 | 2.5 | 1,309 | 7.8 | 1.2 | 2.5 | 1,012 |
| Education |  |  |  |  |  |  |  |  |
| No education | 6.1 | 1.8 | 2.4 | 2,255 | 5.2 | 1.4 | 2.7 | 668 |
| Primary incomplete | 9.7 | 1.9 | 3.2 | 4,596 | 6.1 | 1.4 | 2.2 | 3,723 |
| Primary complete | 18.1 | 1.7 | 4.2 | 1,115 | 9.7 | 1.6 | 3.3 | 1,133 |
| Secondary+ | 24.1 | 2.7 | 7.6 | 1,957 | 19.8 | 2.2 | 6.7 | 2,477 |
| Wealth quintile |  |  |  |  |  |  |  |  |
| Lowest | 5.8 | 1.2 | 2.3 | 1,610 | 5.0 | 1.7 | 2.0 | 1,209 |
| Second | 8.6 | 1.7 | 3.3 | 2,038 | 6.6 | 1.7 | 3.0 | 1,628 |
| Middle | 8.2 | 2.3 | 2.5 | 1,849 | 6.4 | 2.0 | 2.3 | 1,506 |
| Fourth | 11.1 | 2.5 | 3.4 | 2,000 | 10.5 | 1.8 | 3.9 | 1,669 |
| Highest | 25.3 | 2.3 | 7.5 | 2,443 | 21.1 | 1.3 | 6.7 | 1,998 |
| Total 15-49 | 12.7 | 2.0 | 4.0 | 9,941 | 10.8 | 1.7 | 3.8 | 8,010 |
| Total 15-59 | 12.1 | 1.9 | 3.9 | 10,826 | 10.7 | 1.6 | 3.8 | 8,830 |

## Reasons for not seeking voluntary counselling and testing

To increase the proportion of people who know their HIV status, it is important to know why people do not go for voluntary counselling and testing (VCT). Therefore, respondents in the UHSBS who had never been tested for HIV were asked why not. Results are shown in Table 6.8.

The most common reason given by both women and men is that they do not need to get tested or that they have a low risk of having HIV. About one-third of women and almost half of men cite this reason. The next most common reason for not getting tested-given by about 20 percent of women and men-is not knowing where to go. Eighteen percent of women and 13 percent of men say they have never been tested because it costs too much. Not wanting to know the test results is also a fairly common reason for not getting tested, being cited by 16 percent of women and 9 percent of men.

## HIV testing during antenatal care visits

In theory, all women should be counselled about HIV during antenatal care (ANC) and offered a test. Treatment exists that can significantly reduce the chance of an infant becoming infected with HIV from an infected mother during childbirth. Even where treatment is not available, new mothers infected with HIV should receive counselling on infant feeding practices best for their baby and on future pregnancy choices.

In the UHSBS, only 28 percent of women 15-49 who gave birth in the two years preceding the survey said they were counselled on HIV during ANC (Table 6.9). Almost 6 percent were offered and received an HIV test, but 1 in 7 women tested never received their test result. Only 2 percent of women who gave birth in the past two years were counselled, offered an HIV test, received the test, and found out their test results.

Women in urban areas were more likely to have received HIV counselling and testing during ANC. Prevalence of these services varied greatly by region. Respondents in Kampala were much more likely to receive counselling ( 76 percent) than respondents in other regions. Respondents in Northeast region were least likely to receive HIV counselling and testing during ANC (19 percent counselled and 3 percent tested).

Table 6.9
HIV testing during antenatal care, Uganda 2004-05

| Background characteristic | Among women 15 to 49 who gave birth in the two years preceding the survey, percentage who were: |  |  |  | Number of women who gave birth in the past 2 years |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Counselled during antenatal care visit ${ }^{1}$ | Tested during antenatal care visit and: |  | Tested, counselled, and know results |  |
|  |  | Received results ${ }^{2}$ | $\begin{gathered} \text { No } \\ \text { results }^{2} \end{gathered}$ |  |  |
| Age |  |  |  |  |  |
| 15-19 | 28.2 | 4.3 | 1.4 | 2.1 | 386 |
| 20-24 | 28.1 | 5.6 | 0.6 | 2.5 | 1,102 |
| 25-29 | 29.3 | 4.5 | 1.0 | 1.8 | 1,006 |
| 30-39 | 27.4 | 4.7 | 0.8 | 1.8 | 1,063 |
| 40-49 | 24.0 | 3.5 | 0.0 | 1.5 | 175 |
| Residence |  |  |  |  |  |
| Urban | 61.7 | 10.2 | 1.1 | 6.4 | 394 |
| Rural | 24.1 | 4.2 | 0.8 | 1.5 | 3,338 |
| Region |  |  |  |  |  |
| Central | 23.5 | 5.6 | 1.4 | 1.8 | 604 |
| Kampala | 76.1 | 13.4 | 1.6 | 9.3 | 150 |
| East Central | 21.3 | 5.8 | 0.4 | 1.7 | 603 |
| Eastern | 20.7 | 5.0 | 1.1 | 1.8 | 352 |
| Northeast | 19.2 | 2.8 | 0.4 | 1.7 | 307 |
| North Central | 31.6 | 4.0 | 0.5 | 2.6 | 421 |
| West Nile | 25.8 | 3.6 | 0.4 | 1.0 | 358 |
| Western | 31.6 | 3.4 | 1.4 | 0.9 | 473 |
| Southwest | 33.7 | 4.2 | 0.5 | 1.9 | 464 |
| Total | 28.1 | 4.8 | 0.8 | 2.0 | 3,732 |

${ }^{1}$ A woman is considered to have received counselling only if she was spoken to about all three of the following: transmission of HIV to babies, preventing the virus, and getting tested for the virus.
${ }^{2}$ Only women who either asked for or were offered the test are included. Women who were required to take the test are excluded from this measure.

### 6.10 Communication about HiV with Partners

Tables 6.10.1 and 6.10.2 show the percentage of men and women who have ever discussed HIV with any of their partners, and the percentage who know the HIV status of their partner or partners. These data show that discussion of HIV between partners and knowledge of partner's status are low. Eightythree percent of respondents have never discussed HIV with any sexual partner, and 89 percent do not know the HIV status of any of their partners. These percentages are similar among men and women.

Table 6.10.1
Partner communication about HIV among women, Uganda 2004-05

| Background characteristic | Among women aged 15-49 who have ever had sex, percentage who: |  |  |  |  |  |  |  |  | Total | Number of women |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Have discussed AIDS with: |  |  |  |  | Know HIV status of: |  |  |  |  |  |
|  | All spouses/ partners | Some spouses/ partners | No spouses/ partners | Missing | Total | All spouses/ partners | Some spouses/ partners | No spouses/ partners | Missing |  |  |
| Age |  |  |  |  |  |  |  |  |  |  |  |
| 15-19 | 5.9 | 9.8 | 83.0 | 1.4 | 100.0 | 9.0 | 1.2 | 88.4 | 1.3 | 100.0 | 996 |
| 20-24 | 5.4 | 11.9 | 81.3 | 1.5 | 100.0 | 9.2 | 1.0 | 88.5 | 1.3 | 100.0 | 1,807 |
| 25-29 | 4.5 | 12.8 | 80.9 | 1.8 | 100.0 | 8.9 | 1.1 | 88.4 | 1.6 | 100.0 | 1,745 |
| 30-34 | 3.7 | 10.9 | 83.7 | 1.7 | 100.0 | 6.9 | 1.4 | 90.3 | 1.4 | 100.0 | 1,452 |
| 35-39 | 4.4 | 8.5 | 85.2 | 1.9 | 100.0 | 7.6 | 0.8 | 89.9 | 1.7 | 100.0 | 1,084 |
| 40-44 | 5.2 | 7.2 | 85.6 | 2.0 | 100.0 | 6.9 | 1.1 | 90.1 | 1.9 | 100.0 | 870 |
| 45-49 | 4.5 | 5.6 | 88.9 | 1.0 | 100.0 | 5.7 | 1.3 | 92.3 | 0.7 | 100.0 | 645 |
| Marital status |  |  |  |  |  |  |  |  |  |  |  |
| Never married | 9.0 | 11.2 | 78.5 | 1.3 | 100.0 | 13.3 | 1.7 | 84.0 | 1.0 | 100.0 | 879 |
| Married | 4.2 | 10.1 | 83.9 | 1.8 | 100.0 | 7.6 | 0.8 | 90.1 | 1.5 | 100.0 | 6,358 |
| Widowed | 5.7 | 9.5 | 83.2 | 1.6 | 100.0 | 9.0 | 1.6 | 87.8 | 1.6 | 100.0 | 581 |
| Divorced | 3.9 | 11.5 | 83.6 | 1.0 | 100.0 | 5.3 | 2.8 | 90.9 | 0.9 | 100.0 | 781 |
| Residence |  |  |  |  |  |  |  |  |  |  |  |
| Urban | 8.8 | 26.5 | 64.4 | 0.3 | 100.0 | 18.5 | 2.4 | 78.9 | 0.1 | 100.0 | 1,274 |
| Rural | 4.0 | 7.5 | 86.6 | 1.9 | 100.0 | 6.2 | 0.9 | 91.2 | 1.7 | 100.0 | 7,325 |
| Region |  |  |  |  |  |  |  |  |  |  |  |
| Central | 5.6 | 12.8 | 81.2 | 0.4 | 100.0 | 9.4 | 0.7 | 89.6 | 0.3 | 100.0 | 1,437 |
| Kampala | 9.9 | 32.2 | 57.5 | 0.4 | 100.0 | 23.8 | 1.0 | 75.1 | 0.2 | 100.0 | 566 |
| East Central | 4.8 | 6.7 | 87.9 | 0.6 | 100.0 | 7.6 | 1.5 | 90.4 | 0.4 | 100.0 | 1,374 |
| Eastern | 2.7 | 8.6 | 87.6 | 1.0 | 100.0 | 4.7 | 1.6 | 92.9 | 0.9 | 100.0 | 766 |
| Northeast | 1.7 | 4.8 | 84.5 | 8.9 | 100.0 | 3.0 | 0.5 | 87.8 | 8.7 | 100.0 | 730 |
| North Central | 6.1 | 11.8 | 80.9 | 1.2 | 100.0 | 9.2 | 1.0 | 88.7 | 1.0 | 100.0 | 896 |
| West Nile | 7.1 | 9.1 | 80.9 | 2.7 | 100.0 | 9.1 | 1.9 | 86.8 | 2.2 | 100.0 | 793 |
| Western | 1.8 | 7.2 | 89.2 | 1.7 | 100.0 | 3.8 | 1.0 | 93.9 | 1.4 | 100.0 | 986 |
| Southwest | 4.0 | 7.3 | 88.4 | 0.3 | 100.0 | 6.4 | 0.9 | 92.4 | 0.3 | 100.0 | 1,052 |
| Education |  |  |  |  |  |  |  |  |  |  |  |
| No education | 2.9 | 4.7 | 88.0 | 4.4 | 100.0 | 4.1 | 1.0 | 90.7 | 4.2 | 100.0 | 2,180 |
| Primary incomplete | 4.2 | 8.2 | 86.8 | 0.8 | 100.0 | 6.2 | 1.0 | 92.2 | 0.6 | 100.0 | 3,944 |
| Primary complete | 5.4 | 14.0 | 79.9 | 0.6 | 100.0 | 9.9 | 0.9 | 88.8 | 0.4 | 100.0 | 961 |
| Secondary+ | 8.5 | 21.6 | 69.3 | 0.6 | 100.0 | 17.6 | 1.8 | 80.4 | 0.2 | 100.0 | 1,496 |
| Wealth quintile |  |  |  |  |  |  |  |  |  |  |  |
| Lowest | 3.3 | 5.5 | 86.6 | 4.5 | 100.0 | 4.2 | 1.1 | 90.3 | 4.4 | 100.0 | 1,389 |
| Second | 3.6 | 6.3 | 87.6 | 2.5 | 100.0 | 5.1 | 0.7 | 92.0 | 2.2 | 100.0 | 1,742 |
| Middle | 3.7 | 6.5 | 88.9 | 0.8 | 100.0 | 5.5 | 0.9 | 93.1 | 0.5 | 100.0 | 1,650 |
| Fourth | 5.2 | 8.7 | 85.6 | 0.5 | 100.0 | 7.7 | 1.1 | 90.7 | 0.5 | 100.0 | 1,732 |
| Highest | 7.1 | 21.1 | 71.2 | 0.6 | 100.0 | 15.3 | 1.7 | 82.7 | 0.3 | 100.0 | 2,086 |
| Total 15-49 | 4.8 | 10.3 | 83.3 | 1.6 | 100.0 | 8.0 | 1.1 | 89.4 | 1.4 | 100.0 | 8,599 |
| Total 15-59 | 4.6 | 9.6 | 84.1 | 1.6 | 100.0 | 7.7 | 1.0 | 89.8 | 1.5 | 100.0 | 9,483 |

There is little difference in discussion of HIV with partners by age group. Similarly, knowledge of partner's status does not vary by age. Respondents in urban areas are more likely than those in rural areas to discuss HIV with partners and to know their partner's status. Around two-thirds of urban respondents have never discussed HIV with a partner, compared with 86-87 percent of rural respondents. Four in five urban residents do not know the HIV status of any partner, compared with 91 percent of rural respondents.

Higher education and wealth are associated with more discussion of HIV with partners and knowledge of partner status. Almost 9 in 10 respondents with no education have never discussed HIV with any sexual partner, compared with 7 in 10 respondents with secondary education or higher. Less than 1 in 10 respondents with no education knows the HIV status of any partner, compared with almost 2 in 10 of respondents with secondary education or higher. Among respondents in the highest wealth quintile, 7 to 8 percent have discussed HIV with all sexual partners, compared with 4 to 6 percent of respondents in the lower quintiles. Furthermore, 15 percent in the highest quintile know the HIV status of all partners, compared with 4 to 7 percent of respondents in the other quintiles.

Table 6.10.2
Partner communication about HIV among men, Uganda 2004-05

| Background characteristic | Among men aged 15-49 who have ever had sex, percentage who: |  |  |  |  |  |  |  |  |  | Number of men |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Have discussed AIDS with: |  |  |  |  | Know HIV status of: |  |  |  | Total |  |
|  | All spouses/ partners | Some spouses/ partners | No spouses/ partners | Missing | Total | All spouses/ partners | Some spouses/ partners | No spouses/ partners | Missing |  |  |
| Age |  |  |  |  |  |  |  |  |  |  |  |
| 15-19 | 5.8 | 3.8 | 89.2 | 1.2 | 100.0 | 6.8 | 1.4 | 90.8 | 1.0 | 100.0 | 873 |
| 20-24 | 6.8 | 10.7 | 81.9 | 0.7 | 100.0 | 8.9 | 2.8 | 87.6 | 0.7 | 100.0 | 1,073 |
| 25-29 | 5.8 | 11.0 | 82.7 | 0.5 | 100.0 | 9.2 | 1.4 | 88.9 | 0.4 | 100.0 | 1,186 |
| 30-34 | 5.8 | 13.4 | 80.1 | 0.7 | 100.0 | 10.0 | 2.1 | 87.4 | 0.5 | 100.0 | 1,191 |
| 35-39 | 4.2 | 10.0 | 85.0 | 0.7 | 100.0 | 6.9 | 2.1 | 90.3 | 0.7 | 100.0 | 913 |
| 40-44 | 5.0 | 10.7 | 83.2 | 1.1 | 100.0 | 7.2 | 3.0 | 88.7 | 1.0 | 100.0 | 783 |
| 45-49 | 5.2 | 8.8 | 85.0 | 1.0 | 100.0 | 8.6 | 1.7 | 88.7 | 1.0 | 100.0 | 550 |
| Marital status |  |  |  |  |  |  |  |  |  |  |  |
| Never married | 6.3 | 8.2 | 84.5 | 1.0 | 100.0 | 8.3 | 2.1 | 88.7 | 1.0 | 100.0 | 1,701 |
| Married | 5.4 | 11.1 | 82.8 | 0.7 | 100.0 | 8.8 | 2.0 | 88.6 | 0.6 | 100.0 | 4,237 |
| Widowed | 7.2 | 10.7 | 77.9 | 4.3 | 100.0 | 7.8 | 1.7 | 86.2 | 4.3 | 100.0 | 100 |
| Divorced | 4.3 | 7.9 | 87.8 | 0.0 | 100.0 | 5.6 | 2.6 | 91.7 | 0.0 | 100.0 | 532 |
| Residence |  |  |  |  |  |  |  |  |  |  |  |
| Urban | 8.3 | 23.3 | 68.0 | 0.4 | 100.0 | 16.8 | 4.0 | 79.1 | 0.2 | 100.0 | 996 |
| Rural | 5.1 | 7.7 | 86.3 | 0.9 | 100.0 | 6.9 | 1.7 | 90.6 | 0.8 | 100.0 | 5,575 |
| Region |  |  |  |  |  |  |  |  |  |  |  |
| Central | 9.1 | 12.3 | 78.4 | 0.1 | 100.0 | 12.8 | 2.9 | 84.4 | 0.0 | 100.0 | 1,191 |
| Kampala | 9.1 | 27.2 | 63.3 | 0.5 | 100.0 | 19.5 | 6.3 | 73.7 | 0.5 | 100.0 | 439 |
| East Central | 5.5 | 9.9 | 84.4 | 0.1 | 100.0 | 7.6 | 2.4 | 89.8 | 0.1 | 100.0 | 954 |
| Eastern | 1.7 | 7.2 | 91.1 | 0.0 | 100.0 | 3.6 | 0.8 | 95.5 | 0.1 | 100.0 | 679 |
| Northeast | 2.1 | 7.9 | 85.1 | 4.9 | 100.0 | 3.1 | 1.6 | 90.7 | 4.6 | 100.0 | 515 |
| North Central | 3.8 | 8.8 | 87.0 | 0.4 | 100.0 | 6.0 | 0.4 | 93.6 | 0.0 | 100.0 | 713 |
| West Nile | 8.6 | 5.7 | 84.7 | 1.0 | 100.0 | 9.8 | 1.7 | 87.7 | 0.9 | 100.0 | 571 |
| Western | 4.9 | 7.9 | 86.2 | 1.0 | 100.0 | 6.9 | 2.0 | 90.2 | 1.0 | 100.0 | 769 |
| Southwest | 4.1 | 7.5 | 87.6 | 0.8 | 100.0 | 6.6 | 1.3 | 91.3 | 0.8 | 100.0 | 740 |
| Education |  |  |  |  |  |  |  |  |  |  |  |
| No education | 3.6 | 4.4 | 88.7 | 3.2 | 100.0 | 4.9 | 1.3 | 90.5 | 3.2 | 100.0 | 612 |
| Primary incomplete | 4.8 | 6.2 | 88.3 | 0.7 | 100.0 | 5.9 | 1.9 | 91.6 | 0.6 | 100.0 | 2,995 |
| Primary complete | 4.9 | 9.2 | 85.4 | 0.5 | 100.0 | 6.9 | 2.3 | 90.4 | 0.4 | 100.0 | 980 |
| Secondary+ | 7.8 | 18.2 | 73.7 | 0.3 | 100.0 | 14.0 | 2.5 | 83.3 | 0.2 | 100.0 | 1,976 |
| Wealth quintile |  |  |  |  |  |  |  |  |  |  |  |
| Lowest | 4.9 | 4.2 | 89.1 | 1.8 | 100.0 | 6.0 | 1.0 | 91.2 | 1.8 | 100.0 | 990 |
| Second | 4.1 | 6.0 | 88.4 | 1.5 | 100.0 | 5.4 | 1.4 | 91.9 | 1.2 | 100.0 | 1,317 |
| Middle | 5.9 | 6.6 | 87.2 | 0.4 | 100.0 | 7.2 | 1.9 | 90.6 | 0.3 | 100.0 | 1,261 |
| Fourth | 4.2 | 9.2 | 86.3 | 0.3 | 100.0 | 5.8 | 2.3 | 91.5 | 0.3 | 100.0 | 1,387 |
| Highest | 8.2 | 20.5 | 70.9 | 0.4 | 100.0 | 15.3 | 3.2 | 81.3 | 0.3 | 100.0 | 1,617 |
| Total 15-49 | 5.6 | 10.1 | 83.5 | 0.8 | 100.0 | 8.4 | 2.1 | 88.8 | 0.7 | 100.0 | 6,571 |
| Total 15-59 | 5.5 | 9.9 | 83.8 | 0.8 | 100.0 | 8.3 | 2.0 | 89.0 | 0.7 | 100.0 | 7,390 |

### 6.11 Prevalence Of Sexually Transmitted Infections

All respondents who ever had sex were asked if they had had a sexually transmitted infection (STI) or symptoms of an STI in the 12 months preceding the survey. It is important to point out that a respondent's self report of STI symptoms is not the same as a clinical diagnosis. In addition, if a respondent does not report symptoms of an STI, it does not mean that he or she does not have one. Because of the stigma associated with STIs, individuals may underreport the prevalence of STIs and their symptoms. Furthermore, it is possible to have an STI with no symptoms, especially in women.

According to Table 6.10, 33 percent of women and 21 percent of men who ever had sex report they had symptoms of an STI or a genital discharge or a genital sore/ulcer in the 12 months preceding the survey. This represents a sizeable increase since 2000-01, when only 17 percent of women aged 15-49 and 6 percent of men aged 15-49 who ever had sex reported symptoms of an STI.

The likelihood of reporting symptoms of an STI is highest among women aged 20-39 and men aged 25-49. Never-married women and men were least likely to report symptoms of an STI. Formerly married women and men were slightly more likely to report STI symptoms than those who are currently married. Women in urban areas are more likely to report symptoms of an STI than women in rural areas. Among men, those in urban and rural areas have roughly the same probability of reporting STI symptoms.

Respondents in East Central region were most likely to report STI symptoms (44 percent of women and 29 percent of men). Respondents in Northeast region, on the other hand, are least likely to report STI symptoms ( 14 percent of women and 8 percent of men). Reporting of STI symptoms increases with level of education among men and women, with the exception of a slight decrease between complete primary and secondary education or higher. Among women, reporting of STI symptoms increases with each wealth quintile. Among men, reporting of STI symptoms increases from the lowest through the fourth quintile before decreasing slightly between the fourth and the highest quintiles. Circumcised men are slightly less likely to report having had an STI than those who are not circumcised. Women and men with traditional tattooing or cutting of skin are more likely to report symptoms of an STI than those without.

Respondents in the 2004-05 UHSBS who reported having an STI or symptoms of an STI in the 12 months preceding the survey were asked if they sought treatment. Figure 6.1 shows that 56 percent of women and 61 percent of men sought treatment. Most sought treatment from a health facility as opposed to a shop or pharmacy, or a traditional healer.

Table 6.11
Prevalence of sexually transmitted infections (STI) and STI symptoms, Uganda 2004-05

| Background characteristic | Among women who ever had sex, percentage who reported having in the past 12 months: |  |  |  |  | Among men who ever had sex, percentage who reported having in the past 12 months: |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | An STI | An abnormal genital discharge | A genital sore/ ulcer | An STI or discharge or genital sore/ ulcer | Number of women who ever had sex | An STI | An abnormal genital discharge | A genital sore/ ulcer | An STI or discharge or genital sore/ ulcer | Number of men who ever had sex |
| Age |  |  |  |  |  |  |  |  |  |  |
| 15-19 | 10.2 | 16.0 | 16.2 | 26.3 | 996 | 6.8 | 9.7 | 6.2 | 14.4 | 873 |
| 20-24 | 17.7 | 22.2 | 17.5 | 33.0 | 1,807 | 10.2 | 13.0 | 7.2 | 19.0 | 1,073 |
| 25-29 | 18.4 | 22.4 | 20.9 | 35.0 | 1,745 | 13.6 | 16.9 | 9.2 | 23.4 | 1,186 |
| 30-39 | 16.5 | 23.8 | 19.8 | 35.3 | 2,536 | 12.7 | 16.4 | 7.4 | 22.5 | 2,105 |
| 40-49 | 11.4 | 19.4 | 16.3 | 28.9 | 1,515 | 10.8 | 15.5 | 5.5 | 20.6 | 1,333 |
| Marital status |  |  |  |  |  |  |  |  |  |  |
| Never married | 12.9 | 14.8 | 13.6 | 25.7 | 879 | 8.0 | 10.1 | 6.6 | 15.2 | 1,701 |
| Currently married | 15.4 | 21.6 | 18.5 | 32.8 | 6,358 | 12.2 | 16.5 | 6.7 | 22.2 | 4,237 |
| Formerly married | 17.8 | 25.5 | 21.6 | 35.9 | 1,362 | 13.8 | 16.8 | 11.4 | 24.7 | 633 |
| Residence |  |  |  |  |  |  |  |  |  |  |
| Urban | 20.4 | 22.0 | 20.1 | 36.5 | 1,274 | 12.3 | 15.5 | 8.2 | 21.2 | 996 |
| Rural | 14.7 | 21.4 | 18.2 | 31.9 | 7,325 | 11.1 | 14.7 | 7.0 | 20.5 | 5,575 |
| Region |  |  |  |  |  |  |  |  |  |  |
| Central | 24.6 | 29.1 | 25.1 | 42.9 | 1,437 | 15.5 | 20.6 | 7.9 | 26.0 | 1,191 |
| Kampala | 18.6 | 19.5 | 19.5 | 33.2 | 566 | 12.9 | 17.8 | 8.0 | 23.0 | 439 |
| East Central | 20.8 | 27.3 | 22.4 | 44.3 | 1,374 | 15.0 | 21.2 | 10.1 | 28.7 | 954 |
| Eastern | 10.3 | 10.4 | 14.1 | 20.9 | 766 | 8.0 | 9.5 | 8.7 | 16.5 | 679 |
| Northeast | 2.9 | 10.8 | 6.9 | 14.1 | 730 | 3.4 | 6.1 | 2.6 | 8.0 | 515 |
| North Central | 6.6 | 16.9 | 14.9 | 25.5 | 896 | 6.9 | 10.4 | 8.3 | 17.5 | 713 |
| West Nile | 8.9 | 19.0 | 17.8 | 28.4 | 793 | 6.5 | 7.4 | 5.2 | 12.6 | 571 |
| Western | 21.1 | 30.1 | 19.4 | 37.3 | 986 | 12.7 | 14.6 | 6.1 | 21.2 | 769 |
| Southwest | 14.6 | 18.3 | 17.8 | 28.9 | 1,052 | 13.6 | 17.2 | 4.8 | 21.3 | 740 |
| Education |  |  |  |  |  |  |  |  |  |  |
| No education | 10.4 | 18.2 | 16.1 | 26.1 | 2,180 | 8.8 | 13.8 | 5.4 | 17.1 | 612 |
| Primary incomplete | 15.4 | 22.9 | 19.8 | 34.2 | 3,944 | 12.0 | 15.7 | 7.9 | 21.8 | 2,995 |
| Primary complete | 19.4 | 25.1 | 19.5 | 36.8 | 961 | 11.1 | 15.9 | 8.7 | 22.5 | 980 |
| Secondary+ | 20.8 | 20.6 | 17.7 | 35.0 | 1,496 | 11.0 | 13.4 | 5.8 | 19.1 | 1,976 |
| Wealth quintile |  |  |  |  |  |  |  |  |  |  |
| Lowest | 7.5 | 16.1 | 14.5 | 23.5 | 1,389 | 7.6 | 11.5 | 6.2 | 16.5 | 990 |
| Second | 12.8 | 20.4 | 16.8 | 29.4 | 1,742 | 8.8 | 12.8 | 5.7 | 17.6 | 1,317 |
| Middle | 15.2 | 22.0 | 19.9 | 33.7 | 1,650 | 10.5 | 14.7 | 6.7 | 20.3 | 1,261 |
| Fourth | 18.6 | 24.4 | 20.8 | 35.8 | 1,732 | 13.6 | 17.6 | 9.2 | 24.6 | 1,387 |
| Highest | 20.8 | 23.3 | 19.6 | 37.7 | 2,086 | 14.1 | 16.3 | 7.5 | 22.5 | 1,617 |
| Circumcised |  |  |  |  |  |  |  |  |  |  |
| Yes | na | na | na | na | na | 10.5 | 12.6 | 7.6 | 18.7 | 1,725 |
| No | na | na | na | na | na | 11.6 | 15.6 | 7.0 | 21.3 | 4,846 |
| Tattoos, skin cuts |  |  |  |  |  |  |  |  |  |  |
| Yes | 16.7 | 22.7 | 20.8 | 35.3 | 3,932 | 13.1 | 17.3 | 7.9 | 23.3 | 2,336 |
| No | 14.5 | 20.5 | 16.6 | 30.3 | 4,667 | 10.3 | 13.5 | 6.7 | 19.1 | 4,235 |
| Total 15-49 | 15.5 | 21.5 | 18.5 | 32.6 | 8,599 | 11.3 | 14.9 | 7.1 | 20.6 | 6,571 |
| Total 15-59 | 15.0 | 20.9 | 17.7 | 31.4 | 9,483 | 10.9 | 14.8 | 7.0 | 20.3 | 7,390 |

Figure 6.1 Sources of Treatment for Sexually Transmitted Infections and Their Symptoms


### 6.12 Injections, Blood Transfusions, and Contact with Blood

When given with nonsterile equipment, injections and blood transfusions pose risk of infection with HIV and other diseases. An additional risk of infection comes from blood transfusions when the blood is not properly screened. Table 6.11 shows that 51 percent of women and 38 percent of men reported receiving an injection in the 12 months preceding the survey, with an average number of injections per respondent of two. Five percent of women and 2 percent of men report ever receiving a blood transfusion.

The data show little variation in the use of injections and blood transfusions by background characteristics. Having received an injection in the past 12 months varied by education among men and women. For women, the proportion who have received an injection in the past 12 months ranges from 44 percent among those with no education to 55 percent among those with secondary education or higher. For men, the proportion ranges from 29 percent among those with no education to 39 percent of those with secondary education or higher. Prevalence of blood transfusions increased with age among women, from 3 percent among women aged 15-19 to 9 percent among women 45-49. The percentage of women who have received a blood transfusion also varied by region from 3 percent in Northeast to 8 percent in Southwest.

Table 6.12
Injections and blood transfusions, Uganda 2004-05

| Background characteristic | Women 15-49 |  |  |  | Men 15-49 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Percentage who received an injection in the past 12 months | Average number injections per person per year | Percentage who ever received a blood transfusion | Number of women | Percentage who received an injection in the past 12 months | Average number injections per person per year | Percentage who ever received a blood transfusion | Number of men |
| Age |  |  |  |  |  |  |  |  |
| 15-19 | 48.0 | 1.9 | 2.5 | 2,186 | 40.1 | 1.4 | 2.0 | 2,070 |
| 20-24 | 51.6 | 2.2 | 4.2 | 1,933 | 34.0 | 1.7 | 2.8 | 1,262 |
| 25-29 | 54.6 | 2.5 | 3.8 | 1,764 | 37.3 | 2.1 | 2.3 | 1,220 |
| 30-34 | 54.4 | 2.7 | 5.5 | 1,457 | 37.9 | 2.1 | 1.9 | 1,200 |
| 35-39 | 51.1 | 2.7 | 5.8 | 1,085 | 37.7 | 2.0 | 1.0 | 916 |
| 40-44 | 47.3 | 2.9 | 5.5 | 870 | 38.0 | 2.3 | 2.4 | 788 |
| 45-49 | 50.6 | 3.2 | 9.1 | 647 | 40.4 | 2.4 | 3.3 | 554 |
| 15-24 | 49.7 | 2.0 | 3.3 | 4,119 | 37.8 | 1.5 | 2.3 | 3,332 |
| Residence |  |  |  |  |  |  |  |  |
| Urban | 54.0 | 2.8 | 4.8 | 1,508 | 38.0 | 2.0 | 2.3 | 1,200 |
| Rural | 50.8 | 2.4 | 4.5 | 8,433 | 37.9 | 1.9 | 2.1 | 6,809 |
| Region |  |  |  |  |  |  |  |  |
| Central | 51.5 | 2.5 | 4.5 | 1,656 | 39.4 | 2.0 | 2.6 | 1,451 |
| Kampala | 48.8 | 2.6 | 5.5 | 668 | 34.8 | 1.7 | 2.5 | 547 |
| East Central | 59.7 | 2.9 | 4.8 | 1,555 | 41.3 | 2.2 | 2.9 | 1,146 |
| Eastern | 55.7 | 3.3 | 3.4 | 857 | 40.5 | 2.0 | 1.9 | 770 |
| Northeast | 44.0 | 2.7 | 2.7 | 829 | 33.4 | 1.9 | 0.7 | 610 |
| North Central | 50.8 | 2.5 | 3.9 | 970 | 39.0 | 2.1 | 2.4 | 795 |
| West Nile | 62.6 | 1.7 | 3.5 | 958 | 43.0 | 1.8 | 2.4 | 735 |
| Western | 50.1 | 2.3 | 3.9 | 1,140 | 30.4 | 1.4 | 1.4 | 945 |
| Southwest | 37.0 | 1.6 | 7.7 | 1,309 | 37.0 | 1.6 | 2.0 | 1,012 |
| Education |  |  |  |  |  |  |  |  |
| No education | 44.2 | 2.1 | 4.6 | 2,255 | 29.1 | 1.7 | 1.2 | 668 |
| Primary incomplete | 52.6 | 2.5 | 4.1 | 4,596 | 38.4 | 1.9 | 1.9 | 3,723 |
| Primary complete | 53.6 | 2.5 | 5.5 | 1,115 | 38.6 | 1.9 | 2.0 | 1,133 |
| Secondary+ | 54.9 | 2.8 | 5.0 | 1,957 | 39.3 | 2.0 | 2.9 | 2,477 |
| Total 15-49 | 51.3 | 2.4 | 4.5 | 9,941 | 37.9 | 1.9 | 2.2 | 8,010 |
| Total 15-59 | 50.4 | 2.5 | 4.9 | 10,826 | 38.0 | 1.9 | 2.3 | 8,830 |

Table 6.13 shows that a very low percentage of respondents have ever been immunised against yellow fever. Only 1 percent of women and 2 percent of men have ever received this immunisation. Respondents were also asked whether they had contact with the blood of other persons at work or at home. The results in Table 6.13 indicate that only 7 percent of women and men come into contact with the blood of other persons at home or at work.

Table 6.13
Yellow fever immunisations and contact with blood, Uganda 2004-05

| Background characteristic | Percentage of women 15-49 |  |  | Percentage of men 15-49 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Ever immunised for yellow fever | Who have contact with blood of others at home or work | Number of women | Ever immunised for yellow fever | Who have contact with blood of others at home or work | Number of men |
| Age |  |  |  |  |  |  |
| 15-19 | 1.2 | 3.8 | 2,186 | 1.4 | 4.4 | 2,070 |
| 20-24 | 1.2 | 5.3 | 1,933 | 1.6 | 6.3 | 1,262 |
| 25-29 | 1.6 | 7.4 | 1,764 | 1.3 | 7.9 | 1,220 |
| 30-34 | 1.2 | 8.0 | 1,457 | 2.0 | 7.5 | 1,200 |
| 35-39 | 1.2 | 8.4 | 1,085 | 2.8 | 8.8 | 916 |
| 40-44 | 1.4 | 10.6 | 870 | 2.9 | 8.5 | 788 |
| 45-49 | 2.4 | 12.7 | 647 | 4.1 | 7.0 | 554 |
| Residence |  |  |  |  |  |  |
| Urban | 2.3 | 3.6 | 1,508 | 3.9 | 5.9 | 1,200 |
| Rural | 1.2 | 7.6 | 8,433 | 1.6 | 7.0 | 6,809 |
| Region |  |  |  |  |  |  |
| Central | 0.9 | 3.5 | 1,656 | 1.1 | 3.3 | 1,451 |
| Kampala | 2.2 | 1.7 | 668 | 5.3 | 2.7 | 547 |
| East Central | 1.2 | 7.9 | 1,555 | 1.6 | 3.8 | 1,146 |
| Eastern | 1.2 | 8.7 | 857 | 0.6 | 3.2 | 770 |
| Northeast | 0.2 | 5.8 | 829 | 0.6 | 12.4 | 610 |
| North Central | 1.0 | 9.3 | 970 | 1.3 | 2.6 | 795 |
| West Nile | 5.6 | 8.3 | 958 | 3.5 | 22.9 | 735 |
| Western | 0.2 | 14.5 | 1,140 | 2.9 | 12.0 | 945 |
| Southwest | 0.9 | 3.6 | 1,309 | 2.4 | 3.5 | 1,012 |
| Education |  |  |  |  |  |  |
| No education | 1.3 | 7.8 | 2,255 | 1.0 | 9.7 | 668 |
| Primary incomplete | 1.1 | 7.6 | 4,596 | 1.2 | 6.8 | 3,723 |
| Primary complete | 0.9 | 6.0 | 1,115 | 1.8 | 5.4 | 1,133 |
| Secondary+ | 2.4 | 5.4 | 1,957 | 3.6 | 6.7 | 2,477 |
| Wealth quintile |  |  |  |  |  |  |
| Lowest | 1.4 | 6.9 | 1,610 | 1.0 | 10.4 | 1,209 |
| Second | 1.4 | 7.9 | 2,038 | 1.0 | 7.6 | 1,628 |
| Middle | 1.0 | 8.9 | 1,849 | 1.7 | 5.5 | 1,506 |
| Fourth | 1.0 | 6.7 | 2,000 | 1.6 | 6.4 | 1,669 |
| Highest | 1.9 | 5.1 | 2,443 | 3.9 | 5.2 | 1,998 |
| Total 15-49 | 1.4 | 7.0 | 9,941 | 2.0 | 6.8 | 8,010 |
| Total 15-59 | 1.4 | 7.6 | 10,826 | 2.1 | 6.8 | 8,830 |

## SEXUAL BEHAVIOUR INDICATORS AMONG YOUTH

### 7.1 Key Findings

- Half of never-married men and 64 percent of never-married women aged 15-24 have never had sex.
- Fourteen percent of both women and men aged 15-24 say they had sex before age 15 .
- Twenty-nine percent of young women and 33 percent of young men who have initiated sexual activity said they used a condom the first time they had sex.
- Fourteen percent of young women and 11 percent of young men who have had sex in the previous 12 months have been tested in the previous year and know their results.


### 7.2 INTRODUCTION

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

### 7.3 HIV/AIDS-Related Knowledge Among Youth

Knowledge of how HIV is transmitted is one of several factors that enables people to protect themselves from the virus. Correct knowledge can also reduce stigma and discrimination against people living with HIV/AIDS. Young respondents were asked the same set of questions on facts and beliefs about HIV transmission as all other respondents. As shown in Tables 4.3, 4.5.1, 4.5.2, and 4.6, young people are generally just as likely as older adults to know about the major means of avoiding HIV/AIDS and to reject the major misconceptions (see Chapter 4).

Table 7.1 shows the level of the composite indicator, 'comprehensive knowledge,' among young people by background characteristics. Youth defined as having comprehensive knowledge are those who agree with prompted questions that individuals can reduce their chances of contracting HIV by having sex with only one faithful, uninfected partner and by using condoms, those who know that a healthy-looking person can have the AIDS virus, and those who know that HIV cannot be transmitted by mosquito bites or sharing food with a person who has HIV.

Thirty percent of young women and 35 percent of young men have comprehensive knowledge of HIV/AIDS. Knowledge increases with education and wealth. Urban youth have greater knowledge than rural youth, and knowledge varies greatly by region. More than half of youth in Kampala ( 52 percent of women and 53 percent of men) have comprehensive knowledge compared with less than 20 percent of young men and women in Southwest region. Notably, among never-married young women, those who ever had sex report much higher knowledge than those who never had sex.

Table 7.1
Comprehensive knowledge about AIDS among youth, Uganda 2004-05

| Background characteristic | Women 15-24 |  | Men 15-24 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Percentage with comprehensive knowledge ${ }^{1}$ | Number of women | Percentage with comprehensive knowledge ${ }^{1}$ | Number of men |
| Age |  |  |  |  |
| 15-19 | 29.0 | 2,186 | 32.5 | 2,070 |
| 15-17 | 27.9 | 1,364 | 29.8 | 1,300 |
| 18-19 | 30.7 | 821 | 37.2 | 770 |
| 20-24 | 30.1 | 1,933 | 39.9 | 1,262 |
| 20-22 | 30.6 | 1,267 | 40.3 | 823 |
| 23-24 | 29.2 | 666 | 39.1 | 438 |
| Marital status |  |  |  |  |
| Never married | 32.9 | 2,049 | 35.4 | 2,776 |
| Ever had sex | 42.5 | 733 | 38.6 | 1,391 |
| Never had sex | 27.6 | 1,316 | 32.2 | 1,385 |
| Currently married | 26.2 | 1,799 | 34.2 | 449 |
| Formerly married | 25.4 | 271 | 38.2 | 107 |
| Residence |  |  |  |  |
| Urban | 46.0 | 725 | 47.8 | 546 |
| Rural | 26.0 | 3,393 | 32.9 | 2,785 |
| Region |  |  |  |  |
| Central | 45.9 | 730 | 40.6 | 649 |
| Kampala | 51.6 | 339 | 52.9 | 259 |
| East Central | 38.8 | 655 | 40.6 | 477 |
| Eastern | 33.8 | 333 | 38.9 | 323 |
| Northeast | 16.6 | 309 | 32.8 | 211 |
| North Central | 17.1 | 350 | 31.7 | 273 |
| West Nile | 13.3 | 396 | 39.5 | 329 |
| Western | 17.5 | 468 | 23.1 | 355 |
| Southwest | 17.2 | 538 | 19.6 | 454 |
| Education |  |  |  |  |
| No education | 10.9 | 451 | 13.3 | 115 |
| Primary incomplete | 21.4 | 2,004 | 25.6 | 1,586 |
| Primary complete | 35.9 | 513 | 36.8 | 410 |
| Secondary+ | 48.1 | 1,146 | 49.6 | 1,217 |
| Wealth quintile |  |  |  |  |
| Lowest | 18.6 | 612 | 28.5 | 432 |
| Second | 21.5 | 802 | 33.4 | 669 |
| Middle | 26.0 | 700 | 29.7 | 592 |
| Fourth | 27.6 | 855 | 34.5 | 711 |
| Highest | 44.4 | 1,150 | 44.1 | 929 |
| Total | 29.5 | 4,119 | 35.3 | 3,332 |

${ }^{1}$ Comprehensive knowledge means agreeing, in response to prompted questions, that people can reduce their chances of getting the AIDS virus by having sex with only one faithful, uninfected partner and by using condoms consistently, and knowing that a healthy-looking person can have the AIDS virus and that HIV cannot be transmitted by mosquito bites or by sharing food with a person who has AIDS.

### 7.4 Knowledge of Condom Sources Among Youth

Condom use among young people plays an important role in the prevention of transmission of HIV and other sexually transmitted infections, as well as unwanted pregnancies. Knowing a place to get condoms helps youth to obtain and use condoms. Table 7.2 shows that groups with the highest knowledge of a source for condoms are usually the same groups who are most likely to have ever used a condom.

Table 7.2
Knowledge of a source for condoms and ever use of condoms among youth, Uganda 2004-05

| Background characteristic | Women 15-24 |  |  |  | Men 15-24 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Knows a source for condoms ${ }^{1}$ | Number of women aged 15-24 | Ever used a condom | Number of women 15-24 who ever had sex | Knows a source for condoms ${ }^{1}$ | $\begin{gathered} \hline \text { Number of } \\ \text { men } \\ \text { aged } \\ 15-24 \\ \hline \end{gathered}$ | Ever used a condom | Number of men 15-24 who ever had sex |
| Age |  |  |  |  |  |  |  |  |
| 15-19 | 48.8 | 2,186 | 57.0 | 996 | 70.5 | 2,070 | 51.1 | 873 |
| 15-17 | 45.9 | 1,364 | 61.7 | 403 | 64.8 | 1,300 | 41.1 | 418 |
| 18-19 | 53.6 | 821 | 53.9 | 593 | 80.2 | 770 | 60.3 | 456 |
| 20-24 | 56.7 | 1,933 | 41.4 | 1,807 | 86.3 | 1,262 | 68.5 | 1,073 |
| 20-22 | 56.1 | 1,267 | 44.2 | 1,158 | 86.8 | 823 | 67.3 | 675 |
| 23-24 | 57.8 | 666 | 36.3 | 649 | 85.4 | 438 | 70.6 | 398 |
| Marital status |  |  |  |  |  |  |  |  |
| Never married | 52.2 | 2,049 | 73.9 | 733 | 75.0 | 2,776 | 60.5 | 1,391 |
| Ever had sex | 75.9 | 733 | 73.9 | 733 | 88.4 | 1,391 | 60.5 | 1,391 |
| Never had sex | 39.0 | 1,316 | na | na | 61.6 | 1,385 | na | na |
| Currently married | 52.1 | 1,799 | 36.4 | 1,799 | 84.4 | 449 | 60.2 | 449 |
| Formerly married | 57.4 | 271 | 43.5 | 271 | 81.9 | 107 | 65.2 | 107 |
| Residence |  |  |  |  |  |  |  |  |
| Urban | 79.8 | 725 | 81.5 | 500 | 91.8 | 546 | 75.1 | 350 |
| Rural | 46.7 | 3,393 | 39.4 | 2,303 | 73.5 | 2,785 | 57.6 | 1,597 |
| Region |  |  |  |  |  |  |  |  |
| Central | 69.6 | 730 | 68.2 | 511 | 90.3 | 649 | 75.4 | 402 |
| Kampala | 84.6 | 339 | 84.8 | 240 | 92.2 | 259 | 89.5 | 154 |
| East Central | 70.5 | 655 | 64.6 | 478 | 82.4 | 477 | 68.7 | 295 |
| Eastern | 59.1 | 333 | 44.0 | 243 | 85.4 | 323 | 57.6 | 235 |
| Northeast | 23.3 | 309 | 26.3 | 211 | 53.6 | 211 | 43.8 | 124 |
| North Central | 38.0 | 350 | 30.3 | 278 | 65.9 | 273 | 52.8 | 192 |
| West Nile | 24.6 | 396 | 26.7 | 233 | 65.7 | 329 | 59.0 | 174 |
| Western | 39.6 | 468 | 32.6 | 317 | 66.1 | 355 | 53.4 | 186 |
| Southwest | 41.2 | 538 | 14.6 | 292 | 68.3 | 454 | 24.4 | 184 |
| Education |  |  |  |  |  |  |  |  |
| No education | 22.4 | 451 | 11.7 | 383 | 48.9 | 115 | 43.6 | 72 |
| Primary incomplete | 42.0 | 2,004 | 36.6 | 1,359 | 69.3 | 1,586 | 50.1 | 877 |
| Primary complete | 62.5 | 513 | 58.7 | 360 | 72.5 | 410 | 57.4 | 261 |
| Secondary+ | 78.4 | 1,146 | 80.6 | 697 | 89.9 | 1,217 | 76.5 | 734 |
| Total 15-24 | 52.5 | 4,119 | 46.9 | 2,803 | 76.5 | 3,332 | 60.7 | 1,947 |

${ }^{1}$ Friends, family members, and home are not considered sources for condoms.
na $=$ Not applicable
More than half of women ( 53 percent) and three-quarters of men ( 77 percent) aged 15-24 report knowing a source for condoms. About half of all youth-47 percent of women and 61 percent of menhave ever used a condom. Knowledge of a source for condoms and ever use of a condom were higher among youth aged 20-24 years than among youth aged 15-19. Never-married youth who have ever had sex are most likely to know a source for condoms. Never-married women who have ever had sex are the group of women most likely to have ever used a condom, whereas among young men, those who were formerly married are most likely to have used a condom.

Youth living in urban areas and those with higher education are more likely to know of a source for condoms and to have ever used a condom. For young women, knowledge of a source of condoms increases from 22 percent among those with no education to 78 percent among those with some secondary education, and ever use of a condom increases from 12 percent to 81 percent. Percentages for men show a similar pattern. Although rates of condom use are generally higher among young men than young women,
women with complete primary and some secondary education are more likely to have used a condom at some time than young men with the same education levels.

### 7.5 Percentage Ever Married

Data on age at first marriage among all respondents interviewed is presented in Chapter 3. Table 7.3 shows the percentage of women and men aged 15-24 who have ever been married by single year of age.

The results show a steep increase in the percentage ever married by age, from 2 percent of women and less than 1 percent of men aged 15 to almost 90 percent of women and 63 percent of men aged 24 . The data confirm the fact that men marry at a later age than women. More than half of women age 19 have married compared with only 7 percent of men.

### 7.6 Age at First Sexual Experience

Because heterosexual intercourse is the primary path of HIV transmission in Uganda, age at first intercourse marks the time at which most individuals first risk exposure to the virus. Tables 7.4 through 7.7 and Figure 7.1 all show data on age at first sex.

Table 7.4 shows the proportion of youth who have ever had sex according to their age at the time of the survey. This table shows that the percentage of youth who ever had sex increases steadily with age.

Seventeen percent of young women aged 15 at the time of the survey had ever had sex, compared

| Table 7.3 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Percentage of youth who have ever been married, Uganda 2004-05 |  |  |  |  |
|  | Women 15-24 |  | Men 15-24 |  |
| Current age | Percentage who have ever married | Number of women | Percentage who have ever married | Number of men |
| 15 | 2.0 | 512 | 0.3 | 434 |
| 16 | 8.4 | 461 | 0.6 | 444 |
| 17 | 18.1 | 391 | 2.2 | 421 |
| 18 | 41.3 | 453 | 6.1 | 439 |
| 19 | 56.9 | 368 | 6.6 | 331 |
| 20 | 68.9 | 547 | 18.7 | 329 |
| 21 | 74.4 | 312 | 26.7 | 203 |
| 22 | 85.9 | 408 | 44.4 | 291 |
| 23 | 88.0 | 301 | 48.5 | 186 |
| 24 | 89.0 | 364 | 62.6 | 253 |
| Total | 50.1 | 4,119 | 16.7 | 3,332 |

Percentage of youth who have ever been married, Uganda 2004-05

Table 7.4
Percentage of youth who have ever had sex, Uganda 2004-05

| Current age | Women 15-24 |  | Men 15-24 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Percentage who have ever had sex | Number of women | Percentage who have ever had sex | Number of men |
| 15 | 16.5 | 512 | 23.3 | 434 |
| 16 | 30.1 | 461 | 32.2 | 444 |
| 17 | 45.3 | 391 | 41.1 | 421 |
| 18 | 65.1 | 453 | 54.7 | 439 |
| 19 | 80.5 | 368 | 65.1 | 331 |
| 20 | 87.7 | 547 | 76.6 | 329 |
| 21 | 91.6 | 312 | 80.6 | 203 |
| 22 | 96.1 | 408 | 89.0 | 291 |
| 23 | 96.4 | 301 | 89.0 | 186 |
| 24 | 98.4 | 364 | 92.3 | 253 |
| Total | 68.0 | 4,119 | 58.4 | 3,332 | with 98 percent of women aged 24. A higher percentage of young women aged 17 and older have ever had sex than young men. The difference in sexual experience between the genders is greatest at age 19. However, among youth aged 15 and 16, men are more likely to have had sex than women.

Table 7.5 shows the percentage of young women and men who had sexual intercourse before reaching age 15 and age 18, by background characteristics. Because some of those who are aged 15-19 are under age 18 and may still initiate sex before reaching age 18, the proportion who had sex before age 18 can only be shown for those aged 18-24.

Table 7.5
Percentage of youth aged 15-24 who had sex by age 15 and by age 18, by background characteristics, Uganda 2004-05

| Background characteristic | Women 15-24 |  |  |  | Men 15-24 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Percentage who had sex before age 15 | Number of women 15-24 | Percentage who had sex before age 18 | Number of women 18-24 | Percentage who had sex before age 15 | Number of men 15-24 | Percentage who had sex before age 18 | Number of men 18-24 |
| Age |  |  |  |  |  |  |  |  |
| 15-19 | 12.2 | 2,186 | a | a | 16.3 | 2,070 | a | a |
| 15-17 | 10.1 | 1,364 | a | a | 17.5 | 1,300 | a | a |
| 18-19 | 15.6 | 821 | 60.5 | 821 | 14.2 | 770 | 49.6 | 770 |
| 20-24 | 17.0 | 1,933 | 63.6 | 1,933 | 10.8 | 1,262 | 45.0 | 1,262 |
| 20-22 | 15.3 | 1,267 | 62.0 | 1,267 | 11.2 | 823 | 45.7 | 823 |
| 23-24 | 20.2 | 666 | 66.7 | 666 | 9.9 | 438 | 43.6 | 438 |
| Marital status |  |  |  |  |  |  |  |  |
| Never married | 7.2 | 2,049 | 35.5 | 804 | 14.5 | 2,776 | 42.6 | 1,490 |
| Ever married | 21.6 | 2,070 | 73.9 | 1,950 | 12.7 | 556 | 58.2 | 542 |
| Residence |  |  |  |  |  |  |  |  |
| Urban | 12.1 | 725 | 62.1 | 494 | 11.8 | 546 | 44.8 | 374 |
| Rural | 14.9 | 3,393 | 62.8 | 2,260 | 14.6 | 2,785 | 47.2 | 1,658 |
| Region |  |  |  |  |  |  |  |  |
| Central | 20.2 | 730 | 74.1 | 449 | 11.8 | 649 | 45.3 | 418 |
| Kampala | 12.0 | 339 | 60.6 | 244 | 10.7 | 259 | 43.3 | 182 |
| East Central | 22.2 | 655 | 77.2 | 423 | 20.3 | 477 | 55.8 | 268 |
| Eastern | 22.7 | 333 | 71.3 | 214 | 22.4 | 323 | 72.2 | 197 |
| Northeast | 5.2 | 309 | 46.8 | 230 | 7.1 | 211 | 39.3 | 132 |
| North Central | 16.0 | 350 | 74.9 | 259 | 18.3 | 273 | 51.7 | 186 |
| West Nile | 9.6 | 396 | 47.5 | 255 | 12.0 | 329 | 40.9 | 201 |
| Western | 10.2 | 468 | 60.6 | 328 | 10.8 | 355 | 42.5 | 206 |
| Southwest | 5.1 | 538 | 41.3 | 353 | 12.3 | 454 | 29.7 | 242 |
| Education |  |  |  |  |  |  |  |  |
| No education | 20.1 | 451 | 67.1 | 391 | 12.3 | 115 | 53.5 | 81 |
| Primary incomplete | 17.4 | 2,004 | 69.6 | 1,261 | 16.2 | 1,586 | 48.9 | 806 |
| Primary complete | 10.7 | 513 | 64.0 | 340 | 15.5 | 410 | 50.2 | 261 |
| Secondary+ | 8.8 | 1,146 | 48.5 | 757 | 11.2 | 1,217 | 43.2 | 883 |
| Wealth quintile |  |  |  |  |  |  |  |  |
| Lowest | 13.5 | 612 | 58.8 | 396 | 13.1 | 432 | 41.8 | 246 |
| Second | 13.0 | 802 | 60.5 | 517 | 13.0 | 669 | 45.4 | 414 |
| Middle | 15.1 | 700 | 65.9 | 492 | 18.4 | 592 | 48.3 | 333 |
| Fourth | 17.4 | 855 | 64.5 | 574 | 15.2 | 711 | 49.8 | 444 |
| Highest | 13.2 | 1,150 | 62.8 | 774 | 12.0 | 929 | 46.5 | 594 |
| Knows source of condoms ${ }^{1}$ |  |  |  |  |  |  |  |  |
| Yes | 17.2 | 2,163 | 65.8 | 1,536 | 15.4 | 2,549 | 49.5 | 1,707 |
| No | 11.3 | 1,956 | 58.7 | 1,218 | 10.2 | 783 | 32.0 | 325 |
| Total | 14.4 | 4,119 | 62.7 | 2,754 | 14.2 | 3,332 | 46.7 | 2,032 |

${ }^{1}$ Friends, family members, and home are not considered sources for condoms.
${ }^{\text {a }}$ Not calculated because respondents aged 15-17 have not reached age 18 and could still alter the results for the whole age group.

Fourteen percent of young women and men had sex before they turned age 15 , and 63 percent of women and 47 percent of young men had sex before age 18. Among women, there is some evidence of a trend towards postponing early sex, because only 12 percent of women aged 15-19 at the time of the survey said they had sex before 15 , compared with 17 percent among women aged 20-24. Among men, the opposite pattern pertains, with 16 percent of those aged 15-19 reporting that they had sex before age 15 , compared with only 11 percent of men aged 20-24.

Figure 7.1 Sex Before Age 15 and 18 among Youth


Regarding marital status, ever-married women aged $15-24$ were more likely to initiate sexual activity before age 15 than those who have never married. For young men, the opposite is true, although the proportions are close. With regard to initiating sex before age 18, those who have ever married are much more likely to have had sex before 18 than those who have never married.

Urban-rural residence is not closely related to early sexual initiation. Age at first sex does vary by region, however. The percentage of young women aged 15-24 who had sex by age 15 ranges from 5 percent in Southwest and Northeast to 23 percent in Eastern region. Among young men, the percentage who had sex by age 15 varies from 7 percent in Northeast to 22 percent in Eastern region.

Wealth quintile shows little association with the proportion who had sex by age 15 or age 18 . Early sexual initiation is slightly more likely among those who know of a source for condoms.

Education is closely related to age at first sex for young women. Among women 15-24 with no education, 20 percent had sex before age 15, compared with only 9 percent of young women with at least some secondary school. A similar pattern pertains to having sex before age 18. Education is only weakly associated with age at first sex for young men.

Orphans and vulnerable children (OVC) are likely to be at greater risk in various aspects of life, including early sexual initiation. To assess this risk, Table 7.6 shows the proportion of youth aged 15-17 who had sex before age 15 according to whether they are orphans or vulnerable children or neither. The data show that youth who are orphans or vulnerable children are slightly more likely to have sex by age 15 than other youth. Young women classified as OVC are 1.5 times more likely to initiate sex before age 15 than other young women, while young men who are OVC are 1.1 times as likely.

Table 7.6
Percentage of youth aged 15-17 who had sex by age 15 by OVC status, Uganda 2004-05

|  | Women 15-17 |  |  | Men 15-17 |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  | Percentage who <br> had sex before <br> age 15 | Number of <br> women |  | Percentage who <br> had sex before | Number of |
| OVC status | 14.6 | age 15 | men 15-17 |  |  |
| Orphan | 2.1 | 325 |  | 18.0 | 369 |
| Vulnerable (non-orphan) | 13.6 | 28 |  | 21.8 | 27 |
| OVC | 8.9 | 353 |  | 18.3 | 396 |
| Non-OVC | 1.53 | 1,011 |  | 17.2 | 904 |
| Ratio OVC/non-OVC | 10.1 | na |  | 1.06 | na |
| Total 15-17 | 1,364 |  | 17.5 | 1,300 |  |

OVC = orphans and vulnerable children, i.e., children aged $0-17$ whose mother or father has died or who are living in a household in which a person aged 18-59 has been very sick for at least three months during the 12 months preceding the survey or in which a person aged 1859 has died in the preceding 12 months. This definition differs slightly from the standard because it omits children whose parents have been very ill in the past 12 months but who do not live in the same household, since such questions were not included in the UHSBS.
na $=$ Not applicable

### 7.7 Condom Use at First Sex

Another way to reduce risk of exposure of young people to HIV is early and consistent condom use. Condom use at first sex serves as an indicator of reduced risk of exposure at the beginning of sexual activity.

Among respondents aged 15-24 who ever had sex, 29 percent of young women and 33 percent of young men said they used a condom the first time they had sex (Table 7.7). Younger women are more likely to have used a condom at first sex. More than half of young women aged 15-17 used a condom at first sex compared with 17 percent of women aged 23-24. Among men, the relationship between age and condom use is less clear. It can be noted, however, that young men aged 15-17 were less likely than all other age groups to have used a condom at first sex. Never-married young women and men were more likely to have used a condom at first sex than those who have ever been married.

Urban youth are more likely to use condoms at first sex. Kampala is the region with highest use of condom at first sex ( 64 percent of young women and 57 percent of young men). The Southwest region has the lowest percentage of youth who used a condom at first sex, with only 7 percent of young women and 12 percent of young men reporting that they used a condom at first sex. Education is strongly associated with condom use at first sex. Women with some secondary education or higher were almost 10 times as likely as women with no education to use a condom at first sex. For men, those with some secondary education were more than twice as likely as those with no education to use a condom at first sex. Knowing a place to get condoms is strongly related to use of them at first sex. However, the relationship may be circular because those who do not know a source cannot obtain condoms.

Table 7.7
Condom use at first sex among young women and men, Uganda 2004-05

| Background characteristic | Women 15-24 who ever had sex |  | Men 15-24 who ever had sex |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Percentage who used a condom at first sex | Number of women 15-24 who ever had sex | Percentage who used a condom at first sex | Number of men 15-24 who ever had sex |
| Age |  |  |  |  |
| 15-19 | 42.1 | 996 | 31.0 | 873 |
| 15-17 | 50.9 | 403 | 26.0 | 418 |
| 18-19 | 36.2 | 593 | 35.6 | 456 |
| 20-24 | 21.8 | 1,807 | 34.0 | 1,073 |
| 20-22 | 24.3 | 1,158 | 35.6 | 675 |
| 23-24 | 17.4 | 649 | 31.1 | 398 |
| Marital status |  |  |  |  |
| Never married | 58.5 | 733 | 36.9 | 1,391 |
| Ever married | 18.6 | 2,070 | 22.0 | 556 |
| Residence |  |  |  |  |
| Urban | 57.9 | 500 | 46.5 | 350 |
| Rural | 22.8 | 2,303 | 29.6 | 1,597 |
| Region |  |  |  |  |
| Central | 42.4 | 511 | 43.9 | 402 |
| Kampala | 63.8 | 240 | 56.6 | 154 |
| East Central | 42.3 | 478 | 38.4 | 295 |
| Eastern | 25.4 | 243 | 22.3 | 235 |
| Northeast | 17.9 | 211 | 25.8 | 124 |
| North Central | 12.5 | 278 | 22.3 | 192 |
| West Nile | 12.1 | 233 | 30.9 | 174 |
| Western | 18.9 | 317 | 29.9 | 186 |
| Southwest | 6.6 | 292 | 11.9 | 184 |
| Education |  |  |  |  |
| No education | 6.0 | 383 | 18.7 | 72 |
| Primary incomplete | 18.9 | 1,359 | 23.1 | 877 |
| Primary complete | 34.9 | 360 | 24.8 | 261 |
| Secondary+ | 58.5 | 697 | 48.3 | 734 |
| Knows source of condoms ${ }^{1}$ |  |  |  |  |
| Yes | 40.4 | 1,649 | 36.9 | 1,696 |
| No | 12.7 | 1,153 | 3.8 | 251 |
| Total 15-24 | 29.0 | 2,803 | 32.6 | 1,947 |

${ }^{1}$ Friends, family members, and home are not considered sources for condoms.

### 7.8 Abstinence and Premarital SeX

The time between initiation of sexual activity and marriage can bring risk of exposure to HIV. Table 7.8 shows the percentage of never-married youth who have never had sex, the percentage who had sex in the 12 months preceding the survey, and among those, the percentage who used a condom at most recent sex.

Half of never-married men aged 15-24 have never had sex, compared with 64 percent of young women. The percentage of never-married youths who report that they have never had sex drops substantially from the 15-19 age group to the 20-24 age group.

Table 7.8
Premarital sex and condom use during premarital sex among youth, Uganda 2004-05

|  | Never-married women 15-24 |  |  |  |  | Never-married men 15-24 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Background characteristic | Percentage who never had sex | Percentage who had sex in past 12 months | Number of nevermarried women 15-24 | Of those who had sex in the past 12 months, percentage who used a condom at last sex | Number of women 1524 who had sex in past 12 months | Percentage who never had sex | Percentage who had sex in past 12 months | Number of nevermarried men 15-24 | Of those who had sex in the past 12 months, percentage who used a condom at last sex | Number of men 15-24 who had sex in past 12 months |
| Age |  |  |  |  |  |  |  |  |  |  |
| 15-19 | 71.3 | 19.5 | 1,669 | 57.1 | 325 | 59.6 | 23.4 | 2,008 | 50.0 | 470 |
| 20-24 | 33.2 | 45.8 | 380 | 48.7 | 174 | 24.5 | 47.7 | 768 | 59.0 | 366 |
| Residence |  |  |  |  |  |  |  |  |  |  |
| Urban | 49.8 | 33.1 | 454 | 67.9 | 150 | 40.9 | 33.7 | 481 | 70.8 | 162 |
| Rural | 68.3 | 21.9 | 1,595 | 48.3 | 349 | 51.8 | 29.4 | 2,295 | 49.9 | 674 |
| Region |  |  |  |  |  |  |  |  |  |  |
| Central | 53.9 | 30.4 | 406 | 62.4 | 123 | 45.6 | 31.4 | 540 | 68.6 | 170 |
| Kampala | 44.9 | 36.4 | 221 | 66.7 | 80 | 46.4 | 33.6 | 226 | 81.4 | 76 |
| East Central | 55.0 | 31.7 | 323 | 63.8 | 102 | 45.0 | 34.2 | 406 | 57.6 | 139 |
| Eastern | 55.0 | 25.9 | 164 | 57.5 | 42 | 32.4 | 50.3 | 272 | 47.0 | 137 |
| Northeast | 74.9 | 21.2 | 131 | 25.8 | 28 | 55.8 | 21.3 | 156 | 38.2 | 33 |
| North Central | 60.2 | 28.0 | 119 | 13.9 | 33 | 38.5 | 38.6 | 211 | 40.1 | 81 |
| West Nile | 84.8 | 10.8 | 192 | 46.0 | 21 | 56.6 | 25.2 | 275 | 50.4 | 69 |
| Western | 73.7 | 22.8 | 205 | 40.8 | 47 | 59.9 | 23.9 | 283 | 51.5 | 68 |
| Southwest | 85.6 | 7.6 | 287 | 44.4 | 22 | 66.2 | 15.6 | 408 | 21.1 | 63 |
| Education |  |  |  |  |  |  |  |  |  |  |
| No education | 71.7 | 18.7 | 96 | 23.9 | 18 | 57.4 | 31.3 | 74 | 43.4 | 23 |
| Primary incomplete | 73.4 | 18.9 | 880 | 39.9 | 166 | 55.2 | 28.7 | 1,285 | 42.5 | 369 |
| Primary complete | 62.4 | 23.9 | 245 | 49.7 | 58 | 45.3 | 33.6 | 329 | 54.7 | 111 |
| Secondary+ | 54.2 | 30.9 | 827 | 66.5 | 256 | 44.6 | 30.6 | 1,083 | 67.5 | 331 |
| Knows source of condoms ${ }^{1}$ |  |  |  |  |  |  |  |  |  |  |
| Yes | 48.0 | 35.8 | 1,069 | 62.1 | 383 | 41.0 | 36.1 | 2,082 | 58.5 | 752 |
| No | 81.9 | 11.9 | 979 | 28.2 | 117 | 76.7 | 12.1 | 694 | 12.8 | 84 |
| Total 15-24 | 64.2 | 24.4 | 2,049 | 54.2 | 499 | 49.9 | 30.1 | 2,776 | 53.9 | 836 |

${ }^{1}$ Friends, family members, and home are not considered sources for condoms.

Among never-married youths, 24 percent of women and 30 percent of men aged 15-24 had sex in the 12 months preceding the survey. The proportion of never-married young men and women who have been sexually active in the past 12 months doubles between the age groups 15-19 and 20-24. Premarital sexual activity is more common among youths in urban areas and among youths with higher levels of education.

More than half of young men and women (54 percent) who have had sex in the past year reported using a condom at last sex. As with premarital sex, condom use at last sex is higher among urban youth and those with higher levels of education.

### 7.9 Higher-risk Sex and Condom Use Among Youth

The most common way HIV is transmitted in Uganda is through unprotected sex with an infected partner. Sex with a nonmarital, noncohabitating partner is considered higher-risk sex. Sex with a nonmarital partner carries greater risk of infection, especially when youths have a high number of such sexual partners. Each new partner brings new risk of infection. Use of a condom with a nonmarital, noncohabiting partner reduces risk of HIV infection from these partners.

Table 7.9 shows the proportion of women and men aged $15-24$ who engaged in higher-risk sex in the past 12 months and those who used a condom at last higher-risk sex. A little more than half of young women and men report using a condom at last higher-risk sex. While the younger women within the 1524 age group are more likely to have used a condom than the older women, the opposite is true of young men. The percentage of young men who engaged in higher-risk sex in the past 12 months and who used a condom at last higher-risk sex increased steadily from 44 percent among 15- to 17-year-olds to 62 percent among 23- to 24 -year-olds.

Looking at condom use by never-married and ever-married youth shows a similar trend. Nevermarried women are more likely to have used a condom at last higher-risk sex than ever-married women, whereas never-married men are slightly less likely to have used a condom at last higher-risk sex than ever-married men. Both young women and young men in urban areas were more likely to use a condom at last higher-risk sex than youths in rural areas. Higher education and knowing a source for condoms are also associated with increased probability of having used a condom at higher-risk sex.

Table 7.9
Higher-risk sex and condom use at last higher-risk sex among youth in the past 12 months, Uganda 2004-05

| Background characteristic | Women 15-24 |  |  |  | Men 15-24 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Among those who had sex in the past 12 months: |  | Among those who had higher-risk sex in the past 12 months: |  | Among those who had sex in the past 12 months: |  | Among those who had higher-risk sex in the past 12 months: |  |
|  | Percentage engaging in higher-risk sex in the past 12 months ${ }^{1}$ | Number of women who had sex in the past 12 months | Percentage who report using a condom at last higherrisk sex ${ }^{1}$ | Number of women who had higherrisk intercourse in past 12 months ${ }^{1}$ | Percentage engaging in higher-risk sex in the past 12 months ${ }^{1}$ | Number of women who had sex in the past 12 months | Percentage who report using a condom at last higherrisk sex ${ }^{1}$ | Number of men who had higher-risk intercourse in past 12 months ${ }^{1}$ |
| Age |  |  |  |  |  |  |  |  |
| 15-19 | 45.4 | 816 | 55.6 | 371 | 92.3 | 528 | 50.5 | 487 |
| 15-17 | 66.7 | 316 | 56.5 | 211 | 96.1 | 214 | 43.6 | 206 |
| 18-19 | 32.0 | 500 | 54.5 | 160 | 89.7 | 314 | 55.5 | 281 |
| 20-24 | 16.2 | 1,639 | 49.1 | 266 | 63.0 | 840 | 59.4 | 529 |
| 20-22 | 16.9 | 1,049 | 50.3 | 177 | 71.2 | 514 | 58.1 | 366 |
| 23-24 | 15.0 | 589 | 46.7 | 88 | 49.9 | 325 | 62.3 | 162 |
| Marital status |  |  |  |  |  |  |  |  |
| Never married | 94.8 | 499 | 56.8 | 473 | 98.3 | 836 | 54.7 | 822 |
| Ever married | 8.3 | 1,956 | 41.7 | 163 | 36.5 | 532 | 56.9 | 194 |
| Residence |  |  |  |  |  |  |  |  |
| Urban | 42.9 | 405 | 66.9 | 174 | 89.2 | 225 | 70.5 | 201 |
| Rural | 22.6 | 2,050 | 47.7 | 462 | 71.3 | 1,143 | 51.3 | 815 |
| Region |  |  |  |  |  |  |  |  |
| Central | 40.1 | 435 | 54.6 | 174 | 84.4 | 273 | 69.2 | 231 |
| Kampala | 50.2 | 190 | 64.3 | 95 | 88.1 | 107 | 79.3 | 94 |
| East Central | 32.1 | 425 | 63.3 | 137 | 77.8 | 206 | 60.1 | 160 |
| Eastern | 27.8 | 208 | 53.9 | 58 | 85.8 | 186 | 44.3 | 160 |
| Northeast | 14.2 | 191 | 31.5 | 27 | 48.0 | 86 | 44.6 | 41 |
| North Central | 17.1 | 251 | 17.5 | 43 | 65.9 | 143 | 41.5 | 94 |
| West Nile | 14.6 | 197 | 45.0 | 29 | 71.9 | 121 | 50.0 | 87 |
| Western | 16.6 | 305 | 47.4 | 51 | 60.5 | 138 | 50.7 | 84 |
| Southwest | 9.1 | 254 | 42.1 | 23 | 60.7 | 106 | 22.6 | 65 |
| Education |  |  |  |  |  |  |  |  |
| No education | 8.7 | 354 | 35.8 | 31 | 40.7 | 61 | 43.0 | 25 |
| Primary incomplete | 20.9 | 1,223 | 38.6 | 256 | 71.6 | 656 | 43.9 | 470 |
| Primary complete | 23.6 | 312 | 50.4 | 74 | 72.3 | 188 | 52.5 | 136 |
| Secondary+ | 49.0 | 562 | 68.7 | 276 | 83.3 | 460 | 70.8 | 384 |
| Knows source of condoms ${ }^{2}$ |  |  |  |  |  |  |  |  |
| Yes | 34.5 | 1,427 | 59.9 | 493 | 76.6 | 1,200 | 59.5 | 919 |
| No | 14.0 | 1,028 | 28.9 | 143 | 57.7 | 168 | 13.1 | 97 |
| Wealth quintile |  |  |  |  |  |  |  |  |
| Lowest | 21.9 | 351 | 35.9 | 77 | 61.4 | 164 | 38.5 | 101 |
| Second | 18.8 | 453 | 43.9 | 85 | 68.4 | 261 | 48.5 | 178 |
| Middle | 18.9 | 455 | 40.3 | 86 | 71.7 | 247 | 48.2 | 177 |
| Fourth | 23.6 | 535 | 51.2 | 126 | 74.1 | 319 | 47.4 | 236 |
| Highest | 39.7 | 661 | 65.8 | 263 | 85.9 | 377 | 73.3 | 324 |
| Total 15-24 | 25.9 | 2,455 | 52.9 | 636 | 74.3 | 1,368 | 55.1 | 1,016 |

${ }^{1}$ Sexual intercourse with a person who is neither married to nor living with the respondent
${ }^{2}$ Friends, family members, and home are not considered sources for condoms.

### 7.10 Abstinence, Being Faithful, and Condom Use among Youth

The acronym 'ABC' represents a prominent message to youth on behaviours to follow to prevent HIV infection: abstinence, be faithful, use condoms. Figure 7.2 presents data on the effectiveness of the ABC strategy. Among youth aged 15-24, 32 percent of young women and 42 percent of young men have been abstinent up to the time of the survey. As expected, the percentage of young women and men who have not had sex drops significantly between the 15-19 age group and the 20-24 age group.

Among all young women, 9 percent have had sex but had not in the past year, the majority ( 57 percent) were faithful to one sexual partner in the past year, and 3 percent had more than one partner. Among young men, 17 percent have had sex but not within the past year, 29 percent were faithful to one partner in the past year, and 12 percent had more than one partner. Among youth who were sexually active in the 12 months preceding the survey, most did not use a condom at last sex. A higher proportion of young men used a condom at last sex than young women.

Figure 7.2 Abstinence, Being Faithful, and Using Condoms (ABC) among Young Women and Men


Note: Data are for partners in the 12 months preceding the survey;
UHSBS 2004-05 condom use refers to most recent sexual encounter.

### 7.11 Age Differences Between Sexual Partners

Examining age differences between young women and their partners is important because young women may have less power to negotiate sex and condom use with older men. Older men are also more likely to be infected with HIV than younger men (WHO, 2004; Chapter 8). To assess age differences between sexual partners, women aged 15-19 who had sex in the 12 months preceding the survey were asked the ages of all partners in the past 12 months. If they did not know the ages of their partners, they were asked if their partners were older or younger than they, and if older, whether they were 10 or more years older than they were.

As shown in Table 7.10, 10 percent of women aged $15-19$ who had higher-risk sex in the 12 months preceding the survey had sex with a partner who was 10 or more years older. Age groups 15-17 and 18-19 have roughly the same proportion of young women who had sex with a nonmarital, noncohabitating partner more than 10 years older. Marital status is important in age mixing in sexual relationships, however. Ever-married women were more than three times more likely than nevermarried women to have had higher-risk sex with a partner who was more than 10 years older.

Urban and rural women aged 15-19 were almost equally likely to have had higher-risk sex with a partner more than 10 years older ( 10 and 9 percent, respectively).

| Table 7.10 |  |  |
| :---: | :---: | :---: |
| Age-mixing in higher-risk sexual relationships among young women 15-19, Uganda 2004-05 |  |  |
|  Among women <br>  $15-19$ who had <br> higher-risk sex  <br> in the past  <br>  12 months, <br>  percentage <br>  who had sex <br>  with a man 10 <br> or more years  <br> older  |  | Number of women 15-19 having higherrisk sex in the past 12 months |
| Age |  |  |
| 15-17 | 9.4 | 211 |
| 18-19 | 9.9 | 160 |
| Marital status |  |  |
| Never married | 7.3 | 318 |
| Ever married | 23.9 | 53 |
| Residence |  |  |
| Urban | 10.3 | 92 |
| Rural | 9.4 | 278 |
| Education |  |  |
| No education | * | 10 |
| Primary incomplete | 13.8 | 166 |
| Primary complete | (5.9) | 42 |
| Secondary+ | 6.1 | 152 |
| Total 15-19 | 9.6 | 371 |
| Note: Numbers in parentheses are based on 25-49 unweighted cases; an asterisk denotes a figure based on fewer than 25 unweighted cases that has been suppressed. |  |  | Education also shows no strong relationship with age mixing in sexual relationships. Young women with incomplete primary education were most likely to have had higher-risk sex with a partner more than 10 years older than themselves ( 14 percent), while those with complete primary education and secondary education or higher were least likely ( 6 percent).

### 7.12 Alcohol Use During Sex among Youth

Having sex under the influence of alcohol can impair judgment and increase risky sexual behaviour. Respondents who had sex in the 12 months preceding the survey were asked for each partner if they or their partner drank alcohol the last time they had sex. Fourteen percent of women and 5 percent of men aged 15-24 reported that they or their partners drank alcohol the last time they had sex with any partner in the 12 months preceding the survey. Results are shown in Table 7.11.

Table 7.11
Sex while drinking alcohol among youth, Uganda 2004-05

| Background characteristic | Women 15-24 |  | Men 15-24 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Percentage who had sex in past 12 months when respondent and/or partner was drinking | Number of women | Percentage who had sex in past 12 months when respondent and/or partner was drinking | Number of men |
| Age |  |  |  |  |
| 15-19 | 6.0 | 2,186 | 1.9 | 2,070 |
| 15-17 | 3.0 | 1,364 | 0.9 | 1,300 |
| 18-19 | 11.1 | 821 | 3.6 | 770 |
| 20-24 | 23.2 | 1,933 | 11.1 | 1,262 |
| 20-22 | 21.0 | 1,267 | 9.2 | 823 |
| 23-24 | 27.2 | 666 | 14.6 | 438 |
| Marital status |  |  |  |  |
| Never married | 2.5 | 2,049 | 2.4 | 2,776 |
| Ever had sex | 6.9 | 733 | 4.8 | 1,391 |
| Never had sex | 0.0 | 1,316 | 0.0 | 1,385 |
| Currently married | 26.0 | 1,799 | 18.8 | 449 |
| Formerly married | 22.6 | 271 | 25.7 | 107 |
| Residence |  |  |  |  |
| Urban | 9.0 | 725 | 4.5 | 546 |
| Rural | 15.1 | 3,393 | 5.5 | 2,785 |
| Region |  |  |  |  |
| Central | 7.3 | 730 | 2.4 | 649 |
| Kampala | 7.9 | 339 | 5.5 | 259 |
| East Central | 11.3 | 655 | 3.3 | 477 |
| Eastern | 17.6 | 333 | 9.3 | 323 |
| Northeast | 37.1 | 309 | 14.2 | 211 |
| North Central | 25.6 | 350 | 10.3 | 273 |
| West Nile | 9.0 | 396 | 4.9 | 329 |
| Western | 15.3 | 468 | 3.9 | 355 |
| Southwest | 10.2 | 538 | 3.3 | 454 |
| Education |  |  |  |  |
| No education | 30.1 | 451 | 12.6 | 115 |
| Primary incomplete | 15.5 | 2,004 | 5.3 | 1,586 |
| Primary complete | 12.9 | 513 | 5.4 | 410 |
| Secondary+ | 5.7 | 1,146 | 4.7 | 1,217 |
| Wealth quintile |  |  |  |  |
| Lowest | 19.9 | 612 | 7.7 | 432 |
| Second | 14.5 | 802 | 5.3 | 669 |
| Middle | 19.1 | 700 | 4.9 | 592 |
| Fourth | 12.7 | 855 | 4.5 | 711 |
| Highest | 8.6 | 1,150 | 5.3 | 929 |
| Total 15-24 | 14.1 | 4,119 | 5.4 | 3,332 |

Having sex after drinking was more common among youth in the 20-24 age group than the 15-19 age group, though it is important to remember that more youth in the older age group have had sex in the past 12 months. These data do not necessarily mean that a higher proportion of sexual acts involve alcohol at the older ages. Young women and men who have ever been married are more likely to drink alcohol in association with sex than sexually active youth who have never been married.

The practice of having sex in relation to drinking alcohol is more common in rural areas than in urban areas. Northeast and North Central regions had the highest proportion of young women and men
who reported that they or their partners drank alcohol at last sex. Youth with no education were much more likely than those with any education to combine sexual activity with drinking alcohol. Young men and women with incomplete primary education were about half as likely to do so as youth with no education. Lower wealth is also associated with a higher probability of having sex while drinking.

### 7.13 Forced Sex among Youth

Young women and young men aged 15-24 who have ever had sex were asked about use of force the first time they had sex. The question asked if they were forced to have sex, if both partners agreed, or if they forced their partner to have sex. It is important to note that the definition of 'force' is subjective and may have been interpreted differently by different respondents.

Nine percent of all women aged 15-24 reported that they were forced the first time they had sex (Table 7.12). The vast majority either have not had sex or reported no force at first sex. Young men were much less likely than women to have been forced the first time they had sex (1 percent), but slightly more likely to have forced their partner at first sex (1 percent).

The proportion of young women and young men who were forced the first time they had sex increases with age. It is important to remember, however, that the proportion of youth who have had sex also increases with age. Table 7.12 does not show the proportion of first sexual experiences that were forced. Ever-married young women and men are more likely to have been forced the first time they had sex than those who have never been married. The proportion of youth who live in rural areas who were forced at first sex is slightly higher than those who live in urban areas.

Table 7.12
Use of force at first sex among youth (percent distribution), Uganda 2004-05

|  | Women 15-24 |  |  |  |  |  | Men 15-24 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Background characteristic | Forced | Both agreed | Respondent forced partner | Never had sex/ missing | Total | Number of women | Forced | Both agreed | Respondent forced partner | Never had sex/ missing | Total | Number of men |
| Age |  |  |  |  |  |  |  |  |  |  |  |  |
| 15-19 | 6.9 | 37.7 | 0.1 | 55.2 | 100.0 | 2,186 | 1.3 | 39.0 | 1.1 | 58.5 | 100.0 | 2,070 |
| 15-17 | 5.3 | 23.3 | 0.2 | 71.2 | 100.0 | 1,364 | 1.0 | 29.5 | 1.0 | 68.6 | 100.0 | 1,300 |
| 18-19 | 9.6 | 61.7 | 0.1 | 28.6 | 100.0 | 821 | 1.9 | 55.1 | 1.4 | 41.6 | 100.0 | 770 |
| 20-24 | 11.8 | 78.3 | 0.2 | 9.8 | 100.0 | 1,933 | 1.0 | 79.8 | 2.0 | 17.2 | 100.0 | 1,262 |
| 20-22 | 11.3 | 77.7 | 0.2 | 10.8 | 100.0 | 1,267 | 1.2 | 77.8 | 1.6 | 19.3 | 100.0 | 823 |
| 23-24 | 12.7 | 79.3 | 0.1 | 7.9 | 100.0 | 666 | 0.6 | 83.5 | 2.6 | 13.3 | 100.0 | 438 |
| Marital status |  |  |  |  |  |  |  |  |  |  |  |  |
| Never married | 5.8 | 29.5 | 0.1 | 64.6 | 100.0 | 2,049 | 1.1 | 47.1 | 1.1 | 50.7 | 100.0 | 2,776 |
| Ever married | 12.5 | 83.7 | 0.3 | 3.5 | 100.0 | 2,070 | 1.8 | 91.2 | 3.0 | 4.0 | 100.0 | 556 |
| Residence |  |  |  |  |  |  |  |  |  |  |  |  |
| Urban | 8.2 | 59.1 | 0.3 | 32.5 | 100.0 | 725 | 1.2 | 60.3 | 1.4 | 37.1 | 100.0 | 546 |
| Rural | 9.4 | 56.2 | 0.1 | 34.2 | 100.0 | 3,393 | 1.2 | 53.3 | 1.5 | 44.0 | 100.0 | 2,785 |
| Total 15-24 | 9.2 | 56.8 | 0.2 | 33.9 | 100.0 | 4,119 | 1.2 | 54.4 | 1.4 | 42.9 | 100.0 | 3,332 |

### 7.14 Voluntary HIV Counselling and Testing among Youth

Awareness of HIV status can motivate individuals to further protect themselves against infection or to protect their partners from acquiring the disease. It is particularly important to measure testing behaviour among youth. Not only are they especially vulnerable to infection, but they also may experience barriers to accessing testing services because of their young age.

Table 7.13 shows that women aged $15-24$ are slightly more likely than men of the same age to have been tested for HIV. Fourteen percent of young women and 11 percent of young men who had sex in the 12 months preceding the survey were tested in the past 12 months and know their results. Young women and men in the 20-24 age group were more likely to have been tested for HIV than those in the $15-19$ age group. While 15 percent of women and 13 percent of men aged 20-24 have been tested, only 13 percent of women and 7 percent of men aged 15-19 have been so.

Differences in testing by marital status are very small. Urban youth are more likely to be tested than rural youth. Testing behaviour is more common among youth with higher education. Four percent women and none of the men aged $15-24$ with no education have been tested for HIV compared with 25 percent of young women and 19 percent of young men with at least some secondary schooling.

Table 7.13
Voluntary HIV testing among youth, Uganda 2004-05

| Background characteristic | Among women 15-24 who had sex in the past 12 months: |  | Among men 15-24 who had sex in the past 12 months: |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Percentage who were tested and received results in the past 12 months | Number of respondents aged 15-24 who had sex in the past 12 months | Percentage who were tested and received results in the past 12 months | Number of respondents aged 15-24 who had sex in the past 12 months |
| Age |  |  |  |  |
| 15-19 | 12.6 | 816 | 7.0 | 528 |
| 15-17 | 7.6 | 316 | 6.0 | 214 |
| 18-19 | 15.8 | 500 | 7.6 | 314 |
| 20-24 | 15.0 | 1,639 | 13.2 | 840 |
| 20-22 | 14.5 | 1,049 | 10.8 | 514 |
| 23-24 | 15.9 | 589 | 16.9 | 325 |
| Marital status |  |  |  |  |
| Never married | 15.4 | 499 | 10.2 | 836 |
| Ever married | 13.9 | 1,956 | 11.7 | 532 |
| Residence |  |  |  |  |
| Urban | 33.4 | 405 | 18.4 | 225 |
| Rural | 10.4 | 2,050 | 9.3 | 1,143 |
| Education |  |  |  |  |
| No education | 4.2 | 354 | 0.0 | 61 |
| Primary incomplete | 10.7 | 1,223 | 6.5 | 656 |
| Primary complete | 19.0 | 312 | 10.2 | 188 |
| Secondary+ | 25.4 | 562 | 18.5 | 460 |
| Total 15-24 | 14.2 | 2,455 | 10.8 | 1,368 |

### 8.1 Key Findings

- Six percent of Ugandan adults aged 15-49 are infected with HIV and prevalence among women is higher ( 8 percent) than among men ( 5 percent).
- Regions with the highest HIV prevalence are Central region and Kampala (9 percent) and North Central region (8 percent).
- HIV prevalence increases with wealth.
- Five percent of cohabiting couples in Uganda are discordant, i.e., one partner is HIV positive and the other is HIV negative.
- Eighty-six percent of women and men aged 15-49 agreed to provide blood samples for HIV testing. Response rates were 89 percent among eligible women and 83 percent among eligible men.


### 8.2 INTRODUCTION

Understanding the distribution of HIV infection within a population and analysis of the social, biological, and behavioural factors associated with HIV infection offer new insights about the HIV epidemic in Uganda that will help shape future interventions.

In Uganda, national HIV prevalence estimates have been derived primarily from sentinel surveillance among pregnant women. The HIV sentinel surveillance system was established in 1989 to provide information on the magnitude and trends of HIV infection in the country to inform programme strategic planning, monitoring, and evaluation. The system was initially set up in six sites mainly located in urban areas. The number of sites was gradually expanded to the current 25 sentinel sites. Twenty-four of the sites are based in antenatal clinics (ANC) while one site is located in an STI referral clinic in Kampala. These sentinel sites are widely distributed in the country, taking into consideration rural-urban representation. In 2005, antenatal HIV sentinel surveillance was conducted in all 25 sites.

There are a number of recognised limitations in estimating HIV rates in the general adult populations from data derived exclusively from pregnant women attending selected sentinel clinics. Perhaps the most important limitation is that ANC data omit men altogether. Although the rate of HIV infection in pregnant women has been shown to be a reasonable proxy for the level in the combined male and female adult population in a number of settings, it has also been shown to be very different in other settings, which makes it risky to make assumptions about the male infection rate. The system also does not capture any information on HIV prevalence in nonpregnant women, nor in women who either do not attend clinics for pregnancy care or who receive ANC at facilities not represented in the surveillance system. Pregnant women are also more at risk for HIV infection than women who may be avoiding both HIV and pregnancy through the use of condoms or women who are less sexually active and therefore less likely to become pregnant or expose themselves to HIV. There may also be biases in the ANC surveillance data because HIV infection reduces fertility and because knowledge of HIV status may influence fertility choice. Moreover, ANC data do not include socioeconomic characteristics of those tested, which are useful in exploring the nature of the epidemic. Finally, although the ANC system covers
a minimum of 250 pregnant women in each site, which results in a sizeable overall sample, the women are identified from a small number (25) of sites, which limits the representativeness of the results. On the other hand, results from the UHSBS are pulled from the 417 sample points throughout the country.

Thus, although the information from the ANC surveillance system has been very useful for monitoring trends of HIV in Uganda, the inclusion of HIV testing in the 2004-05 UHSBS offers the opportunity to better understand the magnitude and pattern of the infection in the general reproductiveage population in Uganda. The UHSBS results are in turn expected to improve the calibration of annual sentinel surveillance data, so that trends in HIV infection can be more accurately measured in the intervals between household surveys.

### 8.3 Coverage of HIV Testing

Tables 8.1 and 8.2 present coverage rates for HIV testing for eligible women, men and both sexes combined. The response rates are presented by urban-rural residence and by region. For these tables, respondents are divided into several categories, namely:

1. Those who were interviewed, consented to the blood draw, and were tested with a valid HIV result
2. Those who were not interviewed individually, but were tested (including those who may have been interviewed but the questionnaire was lost)
3. Those who were interviewed and refused the testing when asked for informed consent
4. Those who were absent, including those who were interviewed but absent for testing and those who were absent for the interview
5. Those for whom there is no HIV test result for some other reason, such as a mismatch between the questionnaires and the blood samples or a technical problem in taking or testing the blood

As shown in Table 8.1, 86 percent of eligible women and men aged 15-49 agreed to provide blood samples for HIV testing. Response rates were 89 percent among eligible women and 83 percent among eligible men. Five percent of eligible respondents refused the HIV testing, while 6 percent were absent. Two percent of eligible respondents fall in the 'other' category, meaning that the HIV test result is either missing or not able to be matched to the respondent, or that the respondent consented to being tested but for some technical reason, was not able to give a blood sample (inadequate supplies or sample damage) or the sample could not be tested.

Response rates are higher for women than men, with men more likely to be absent ( 9 percent) than women ( 4 percent). Coverage rates for HIV testing are higher in rural than urban areas. Eighty-nine percent of eligible respondents in rural areas were tested, compared with 76 percent of those in urban areas. Both absence and refusals were lower in rural than urban areas. By region, coverage is highest in East Central region ( 93 percent) and lowest in Kampala ( 72 percent).

Table 8.1
Coverage of HIV testing among eligible women and men aged 15-49 by residence and region, Uganda 2004-05 (unweighted percent distribution)

| Testing status | Residence |  | Region |  |  |  |  |  |  |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Urban | Rural | Central | Kampala | East Central | Eastern | Northeast | North Central | West Nile | Western | Southwest |  |
| WOMEN |  |  |  |  |  |  |  |  |  |  |  |  |
| Tested | 82.5 | 90.8 | 90.1 | 78.1 | 94.9 | 90.2 | 91.9 | 85.1 | 91.0 | 92.2 | 89.5 | 89.2 |
| Interviewed | 82.2 | 90.3 | 90.1 | 78.0 | 94.7 | 89.7 | 91.1 | 84.2 | 90.5 | 92.0 | 88.8 | 88.8 |
| Not interviewed | 0.2 | 0.5 | 0.0 | 0.1 | 0.2 | 0.5 | 0.8 | 0.9 | 0.5 | 0.2 | 0.6 | 0.4 |
| Refused | 8.1 | 4.1 | 5.7 | 10.4 | 2.0 | 5.9 | 3.6 | 6.2 | 1.2 | 4.7 | 6.0 | 4.9 |
| Absent for testing | 7.1 | 3.2 | 2.6 | 8.5 | 2.7 | 2.7 | 3.2 | 6.8 | 4.7 | 1.6 | 1.8 | 4.0 |
| Interviewed | 0.2 | 0.4 | 0.5 | 0.2 | 0.4 | 0.4 | 0.9 | 0.7 | 0.3 | 0.0 | 0.1 | 0.4 |
| Not interviewed | 6.9 | 2.8 | 2.1 | 8.3 | 2.2 | 2.3 | 2.3 | 6.1 | 4.4 | 1.6 | 1.7 | 3.6 |
| Missing/tech.problem | 2.3 | 1.8 | 1.6 | 3.0 | 0.4 | 1.2 | 1.2 | 1.9 | 3.1 | 1.6 | 2.8 | 1.9 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Number | 2,021 | 8,540 | 972 | 1,241 | 1,203 | 950 | 1,297 | 1,126 | 1,560 | 1,093 | 1,119 | 10,561 |
| MEN |  |  |  |  |  |  |  |  |  |  |  |  |
| Tested | 69.5 | 86.5 | 84.4 | 65.2 | 90.0 | 85.5 | 85.3 | 79.0 | 87.0 | 88.7 | 84.9 | 83.2 |
| Interviewed | 69.4 | 86.0 | 83.9 | 65.2 | 89.5 | 85.4 | 84.4 | 78.5 | 86.6 | 88.5 | 84.2 | 82.8 |
| Not interviewed | 0.1 | 0.5 | 0.4 | 0.0 | 0.5 | 0.1 | 0.9 | 0.5 | 0.4 | 0.2 | 0.6 | 0.4 |
| Refused | 9.6 | 4.5 | 7.4 | 10.5 | 2.5 | 5.7 | 4.6 | 9.1 | 1.3 | 3.9 | 5.0 | 5.5 |
| Absent for testing | 16.7 | 6.9 | 6.1 | 19.6 | 6.2 | 7.2 | 8.8 | 10.2 | 8.1 | 5.4 | 5.8 | 8.8 |
| Interviewed | 0.4 | 0.7 | 0.7 | 0.2 | 0.5 | 0.9 | 1.5 | 0.9 | 0.5 | 0.4 | 0.2 | 0.6 |
| Not interviewed | 16.3 | 6.2 | 5.5 | 19.4 | 5.7 | 6.3 | 7.4 | 9.3 | 7.6 | 4.9 | 5.6 | 8.1 |
| Missing/tech.problem | 4.3 | 2.2 | 2.1 | 4.7 | 1.3 | 1.6 | 1.3 | 1.7 | 3.7 | 2.1 | 4.3 | 2.6 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Number | 1,763 | 7,270 | 915 | 1,087 | 952 | 899 | 1,019 | 989 | 1,275 | 971 | 926 | 9,033 |
| TOTAL |  |  |  |  |  |  |  |  |  |  |  |  |
| Tested | 76.4 | 88.8 | 87.3 | 72.1 | 92.8 | 87.9 | 89.0 | 82.2 | 89.2 | 90.6 | 87.4 | 86.4 |
| Interviewed | 76.3 | 88.3 | 87.1 | 72.0 | 92.4 | 87.6 | 88.1 | 81.5 | 88.7 | 90.4 | 86.7 | 86.0 |
| Not interviewed | 0.2 | 0.5 | 0.2 | 0.0 | 0.4 | 0.3 | 0.9 | 0.7 | 0.5 | 0.2 | 0.6 | 0.4 |
| Refused | 8.8 | 4.3 | 6.5 | 10.4 | 2.2 | 5.8 | 4.1 | 7.6 | 1.2 | 4.3 | 5.5 | 5.2 |
| Absent for testing | 11.6 | 4.9 | 4.3 | 13.7 | 4.2 | 4.9 | 5.7 | 8.4 | 6.2 | 3.3 | 3.6 | 6.2 |
| Interviewed | 0.3 | 0.6 | 0.6 | 0.2 | 0.5 | 0.6 | 1.2 | 0.8 | 0.4 | 0.2 | 0.1 | 0.5 |
| Not interviewed | 11.3 | 4.3 | 3.7 | 13.5 | 3.8 | 4.3 | 4.5 | 7.6 | 5.9 | 3.1 | 3.5 | 5.7 |
| Missing/tech.problem | 3.2 | 2.0 | 1.9 | 3.8 | 0.8 | 1.4 | 1.3 | 1.8 | 3.4 | 1.8 | 3.5 | 2.2 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Number | 3,784 | 15,810 | 1,887 | 2,328 | 2,155 | 1,849 | 2,316 | 2,115 | 2,835 | 2,064 | 2,045 | 19,594 |

Table 8.2 shows coverage of HIV testing by background characteristics. The response rates are consistent across age groups, showing a slight tendency to rise with age. Coverage is slightly lower than average among women with some secondary education and among men with no education and those with some secondary education. Similarly both women and men in the highest quintile of the wealth index were the least likely to be tested, both because of higher levels of refusal and absence.

In almost every category of background characteristics, women were more likely to be tested than men. It is important to note, however, that the main reason for this is the higher percentage of eligible women who were interviewed in the survey. The rate of refusal for HIV testing is only marginally higher among men than among women ( 6 and 5 percent, respectively). As noted in Chapter 1, it is more difficult to find men at home to be interviewed.

Table 8.2
Coverage of HIV testing among eligible women and men aged 15-49, by background characteristics, Uganda 2004-05 (unweighted)

|  | Tested |  | Refused |  | Absent |  | Missing/technical problem |  |  | Number |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Background characteristic | Interviewed | Not interviewed | Interviewed | Not interviewed | Interviewed | Not interviewed | Interviewed | Not interviewed | Total |  |
| WOMEN |  |  |  |  |  |  |  |  |  |  |
| Age |  |  |  |  |  |  |  |  |  |  |
| 15-19 | 86.8 | 0.6 | 4.0 | 0.9 | 0.6 | 4.9 | 1.1 | 1.3 | 100.0 | 2,356 |
| 20-24 | 86.8 | 0.3 | 5.2 | 0.8 | 0.4 | 4.0 | 1.3 | 1.2 | 100.0 | 2,076 |
| 25-29 | 89.5 | 0.4 | 3.9 | 0.8 | 0.3 | 3.6 | 0.9 | 0.7 | 100.0 | 1,913 |
| 30-34 | 90.8 | 0.3 | 4.7 | 0.4 | 0.4 | 1.9 | 0.7 | 0.7 | 100.0 | 1,520 |
| 35-39 | 89.3 | 0.7 | 3.8 | 0.4 | 0.5 | 3.8 | 1.1 | 0.4 | 100.0 | 1,133 |
| 40-44 | 90.8 | 0.4 | 3.8 | 0.8 | 0.1 | 2.2 | 1.6 | 0.3 | 100.0 | 898 |
| 45-49 | 91.7 | 0.3 | 2.9 | 0.5 | 0.3 | 2.7 | 0.8 | 0.9 | 100.0 | 665 |
| Education |  |  |  |  |  |  |  |  |  |  |
| No education | 89.7 | 1.1 | 3.6 | 0.6 | 0.5 | 2.5 | 1.3 | 0.7 | 100.0 | 2,623 |
| Primary incomplete | 90.3 | 0.3 | 3.6 | 0.8 | 0.4 | 3.2 | 0.9 | 0.7 | 100.0 | 4,721 |
| Primary complete | 90.6 | 0.3 | 4.0 | 0.4 | 0.0 | 3.1 | 0.8 | 0.8 | 100.0 | 1,092 |
| Secondary+ | 83.5 | 0.1 | 6.5 | 0.7 | 0.4 | 5.9 | 1.3 | 1.5 | 100.0 | 2,101 |
| Wealth quintile |  |  |  |  |  |  |  |  |  |  |
| Lowest | 89.7 | 1.0 | 2.5 | 0.6 | 0.7 | 3.4 | 1.3 | 0.9 | 100.0 | 1,997 |
| Second | 90.4 | 0.3 | 4.0 | 0.6 | 0.5 | 3.0 | 0.8 | 0.4 | 100.0 | 2,143 |
| Middle | 90.9 | 0.4 | 3.4 | 0.7 | 0.2 | 3.0 | 0.9 | 0.5 | 100.0 | 1,829 |
| Fourth | 90.4 | 0.5 | 3.8 | 0.5 | 0.3 | 2.5 | 1.1 | 0.8 | 100.0 | 1,874 |
| Highest | 84.3 | 0.1 | 6.4 | 0.9 | 0.3 | 5.3 | 1.1 | 1.5 | 100.0 | 2,718 |
| Total 15-49 | 88.8 | 0.4 | 4.2 | 0.7 | 0.4 | 3.6 | 1.1 | 0.9 | 100.0 | 10,561 |
| Total 15-59 | 88.9 | 0.4 | 4.2 | 0.7 | 0.4 | 3.5 | 1.1 | 0.9 | 100.0 | 11,454 |
| MEN |  |  |  |  |  |  |  |  |  |  |
| Age |  |  |  |  |  |  |  |  |  |  |
| 15-19 | 80.9 | 0.5 | 3.8 | 1.7 | 0.9 | 8.9 | 1.1 | 2.3 | 100.0 | 2,354 |
| 20-24 | 80.1 | 0.7 | 4.9 | 0.8 | 0.8 | 9.8 | 0.8 | 2.1 | 100.0 | 1,456 |
| 25-29 | 81.3 | 0.2 | 5.6 | 0.9 | 0.4 | 9.0 | 1.3 | 1.2 | 100.0 | 1,385 |
| 30-34 | 83.9 | 0.3 | 3.7 | 1.2 | 0.5 | 7.9 | 0.7 | 1.8 | 100.0 | 1,361 |
| 35-39 | 84.9 | 0.5 | 3.9 | 0.8 | 0.3 | 7.2 | 1.1 | 1.4 | 100.0 | 1,017 |
| 40-44 | 87.4 | 0.2 | 4.1 | 0.9 | 0.5 | 5.1 | 0.8 | 1.0 | 100.0 | 863 |
| 45-49 | 87.1 | 0.3 | 4.5 | 0.7 | 0.5 | 6.0 | 0.3 | 0.5 | 100.0 | 597 |
| Education |  |  |  |  |  |  |  |  |  |  |
| No education | 80.0 | 2.0 | 4.2 | 2.5 | 2.2 | 6.6 | 1.1 | 1.5 | 100.0 | 815 |
| Primary incomplete | 85.5 | 0.4 | 3.7 | 0.8 | 0.6 | 6.8 | 0.8 | 1.3 | 100.0 | 4,010 |
| Primary complete | 83.4 | 0.0 | 4.6 | 1.4 | 0.4 | 7.6 | 0.9 | 1.7 | 100.0 | 1,284 |
| Secondary+ | 79.6 | 0.2 | 5.2 | 1.0 | 0.3 | 10.6 | 1.0 | 2.1 | 100.0 | 2,907 |
| Wealth quintile |  |  |  |  |  |  |  |  |  |  |
| Lowest | 84.6 | 0.8 | 2.6 | 1.4 | 0.9 | 7.1 | 1.1 | 1.6 | 100.0 | 1,596 |
| Second | 86.5 | 0.5 | 3.5 | 0.8 | 0.6 | 6.2 | 0.7 | 1.2 | 100.0 | 1,848 |
| Middle | 86.8 | 0.5 | 3.8 | 0.8 | 0.6 | 5.7 | 0.8 | 1.0 | 100.0 | 1,551 |
| Fourth | 86.5 | 0.2 | 4.0 | 1.0 | 0.9 | 5.2 | 1.2 | 0.9 | 100.0 | 1,625 |
| Highest | 73.5 | 0.2 | 6.7 | 1.5 | 0.3 | 14.0 | 0.8 | 3.0 | 100.0 | 2,413 |
| Total 15-49 | 82.8 | 0.4 | 4.4 | 1.1 | 0.6 | 8.1 | 0.9 | 1.7 | 100.0 | 9,033 |
| Total 15-59 | 83.4 | 0.4 | 4.3 | 1.1 | 0.6 | 7.8 | 0.9 | 1.6 | 100.0 | 9,905 |

Note: Totals include some cases for which education is missing.

### 8.4 HIV Prevalence by <br> Age and Sex

Results from the 2004-05 UHSBS indicate that just over 6 percent of Ugandan adults are infected with HIV. ${ }^{1}$ Table 8.3 shows that HIV prevalence among women is higher than among men (8 and 5 percent, respectively).

Age- and sex-specific prevalence of HIV shows that prevalence for both women and men increases with age until it reaches a peak, which for women is attained at ages 30-34 (12 percent) and for men at

Table 8.3
HIV prevalence by age, Uganda 2004-05

| Age | Women |  | Men |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Percentage HIV positive | Number tested | Percentage HIV positive | Number tested | Percentage HIV positive | Number tested |
| 15-19 | 2.6 | 2,062 | 0.3 | 1,932 | 1.5 | 3,994 |
| 20-24 | 6.3 | 1,803 | 2.4 | 1,184 | 4.7 | 2,987 |
| 25-29 | 8.7 | 1,679 | 5.9 | 1,123 | 7.6 | 2,802 |
| 30-34 | 12.1 | 1,374 | 8.1 | 1,139 | 10.3 | 2,513 |
| 35-39 | 9.9 | 1,029 | 9.2 | 868 | 9.6 | 1,897 |
| 40-44 | 8.4 | 823 | 9.3 | 745 | 8.8 | 1,568 |
| 45-49 | 8.2 | 621 | 6.9 | 524 | 7.6 | 1,145 |
| 50-54 | 5.4 | 513 | 6.9 | 452 | 6.1 | 965 |
| 55-59 | 4.9 | 322 | 5.8 | 332 | 5.4 | 654 |
| Total 15-49 | 7.5 | 9,391 | 5.0 | 7,515 | 6.4 | 16,906 |
| Total 15-59 | 7.3 | 10,227 | 5.2 | 8,298 | 6.3 | 18,525 | ages 35-44 ( 9 percent). Women are more highly affected at younger ages compared with men. Prevalence for women is generally higher than for men at ages 15-49 (Figure 8.1), though at ages 40-44, the male rate is marginally higher than the female rate. At ages 50-59, the pattern reverses and prevalence is slightly higher among men than women.

Figure 8.1 HIV Prevalence by Sex and Age


[^7]While the monitoring of the magnitude and trends of HIV prevalence in Uganda is based on the corroboration of data from different sources, the main source of the data has largely been the antenatal clinic (ANC) HIV sentinel surveillance system. Since the late 1980s, this ANC sentinel surveillance system has provided useful information on the annual trends of site specific HIV sero-prevalence. In line with this, a special round of ANC sentinel HIV surveillance was conducted in the first quarter of 2005 involving 24 sentinel sites. The results of this survey indicate that amongst the sentinel sites located in the major urban areas (cities and municipalities), site-specific antenatal HIV sero-prevalence ranged from 5.4 to 12.5 percent, and the median was around 7.2 percent. Amongst sites located in the semi-urban and rural areas, the antenatal HIV sero-prevalence ranged from 1.3 to 7.9 percent, with a median of about 5 percent. When comparisons were made, the results seem to suggest that the regional distribution of the magnitude of antenatal HIV sero-prevalence from the sentinel surveillance system is similar to that observed in the population-based UHSBS.

### 8.5 HIV Prevalence by Other Background Characteristics

As Table 8.4 shows, urban residents have a significantly higher risk of HIV infection (10 percent) than rural residents ( 6 percent). This is true for both sexes, though the urban-rural difference is much stronger for women than for men. Prevalence among urban women is 13 percent compared with 7 percent for rural women, and prevalence among urban men is 7 percent compared with 5 percent for rural men.

| Table 8.4 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| HIV prevalence by background characteristics, Uganda 2004-05 |  |  |  |  |  |  |
|  | Women 15-49 |  | Men 15-49 |  | Total |  |
| Background characteristic | Percentage HIV positive | $\begin{gathered} \text { Number } \\ \text { tested } \end{gathered}$ | Percentage HIV positive | Number tested | Percentage HIV positive | Number tested |
| Residence |  |  |  |  |  |  |
| Urban | 12.8 | 1,435 | 6.7 | 1,096 | 10.1 | 2,531 |
| Rural | 6.5 | 7,956 | 4.7 | 6,419 | 5.7 | 14,375 |
| Region |  |  |  |  |  |  |
| Central | 10.2 | 1,565 | 6.6 | 1,357 | 8.5 | 2,921 |
| Kampala | 11.8 | 634 | 4.5 | 515 | 8.5 | 1,149 |
| East Central | 7.5 | 1,467 | 5.2 | 1,079 | 6.5 | 2,546 |
| Eastern | 6.2 | 813 | 4.4 | 724 | 5.3 | 1,538 |
| Northeast | 3.6 | 779 | 3.2 | 571 | 3.5 | 1,350 |
| North Central | 9.0 | 918 | 7.1 | 743 | 8.2 | 1,661 |
| West Nile | 2.7 | 906 | 1.9 | 690 | 2.3 | 1,597 |
| Western | 7.8 | 1,076 | 5.7 | 884 | 6.9 | 1,961 |
| Southwest | 7.1 | 1,232 | 4.4 | 952 | 5.9 | 2,183 |
| Education |  |  |  |  |  |  |
| No education | 5.8 | 2,129 | 7.5 | 624 | 6.2 | 2,753 |
| Primary incomplete | 7.7 | 4,355 | 4.5 | 3,515 | 6.3 | 7,870 |
| Primary complete | 9.8 | 1,064 | 6.5 | 1,058 | 8.2 | 2,122 |
| Secondary+ | 7.6 | 1,826 | 4.4 | 2,310 | 5.8 | 4,136 |
| Employment |  |  |  |  |  |  |
| Currently working | 8.4 | 5,758 | 6.1 | 5,195 | 7.3 | 10,953 |
| Not working | 6.1 | 3,560 | 2.5 | 2,238 | 4.7 | 5,798 |
| Wealth quintile |  |  |  |  |  |  |
| Lowest | 4.8 | 1,532 | 4.0 | 1,147 | 4.4 | 2,679 |
| Second | 6.6 | 1,911 | 4.2 | 1,541 | 5.5 | 3,453 |
| Middle | 6.7 | 1,760 | 5.1 | 1,418 | 6.0 | 3,177 |
| Fourth | 7.0 | 1,895 | 5.9 | 1,552 | 6.5 | 3,446 |
| Highest | 11.0 | 2,294 | 5.5 | 1,857 | 8.6 | 4,151 |
| Ethnicity |  |  |  |  |  |  |
| Baganda | 10.1 | 1,672 | 5.8 | 1,304 | 8.2 | 2,976 |
| Banyankore | 7.6 | 966 | 5.9 | 776 | 6.9 | 1,742 |
| Iteso | 5.1 | 607 | 4.7 | 495 | 4.9 | 1,101 |
| Lugbara/Madi | 3.2 | 742 | 2.2 | 562 | 2.8 | 1,304 |
| Basoga | 5.6 | 893 | 5.6 | 685 | 5.6 | 1,577 |
| Langi | 11.3 | 478 | 7.3 | 432 | 9.4 | 910 |
| Bakiga | 8.5 | 634 | 4.1 | 538 | 6.5 | 1,172 |
| Karimojong | 2.1 | 284 | 1.1 | 188 | 1.7 | 472 |
| Acholi | 7.1 | 468 | 6.7 | 343 | 6.9 | 810 |
| Bagisu/Sabiny | 7.5 | 426 | 3.5 | 450 | 5.4 | 876 |
| Alur/Jopadhola | 8.0 | 484 | 4.3 | 414 | 6.3 | 899 |
| Banyara | 7.4 | 304 | 6.8 | 247 | 7.1 | 551 |
| Batoro | 16.4 | 230 | 12.8 | 198 | 14.8 | 428 |
| All others | 6.5 | 1,156 | 3.2 | 835 | 5.1 | 1,992 |
| Religion |  |  |  |  |  |  |
| Catholic | 7.1 | 3,922 | 5.4 | 3,145 | 6.3 | 7,067 |
| Anglican/Protestant | 8.4 | 3,178 | 5.5 | 2,754 | 7.1 | 5,933 |
| Other Christian | 7.4 | 820 | 4.5 | 507 | 6.3 | 1,327 |
| Muslim | 6.5 | 1,294 | 3.0 | 974 | 5.0 | 2,268 |
| Other | 7.8 | 103 | 2.4 | 76 | 5.5 | 180 |
| Total 15-49 | 7.5 | 9,391 | 5.0 | 7,515 | 6.4 | 16,906 |
| Total 15-59 | 7.3 | 10,227 | 5.2 | 8,298 | 6.3 | 18,525 |

Note: Totals include some cases with missing information

The HIV epidemic shows regional variations (Figure 8.2). Central, Kampala, and North Central regions all have rates of infection above 8 percent. Regions with low HIV prevalence are West Nile (2 percent) and Northeast (4 percent). In all regions, women have a higher prevalence of HIV infection than men.

HIV prevalence shows an inconsistent relationship with the level of education. It is identical for those with no education and those with incomplete primary education, then it rises among those who completed primary only and then falls among those with at least some secondary education (Table 8.4). Moreover, the pattern for women and men differs. For men, prevalence is highest among those with no education, while women with no education are the least likely to be infected.

# Figure 8.2 HIV Prevalence by Region 



HIV prevalence is higher among those who are working (7 percent) than those who are not (5 percent). This is true for women and men. The data also show a gradual increase in HIV infection with wealth quintile (Figure 8.3). The rates rise from 4 percent among those in the lowest quintile to 9 percent among the wealthiest quintile. The increase occurs for both sexes, although among men, the infection rate falls slightly among those in the highest quintile.

Figure 8.3 HIV Prevalence by Wealth Quintile


There are large differentials in HIV infection by ethnic group. Survey data indicate that the Batoro are the most affected by the HIV epidemic, with 15 percent of adults infected. Rates are also high among the Langi ( 9 percent) and the Baganda ( 8 percent). Those with relatively low infection levels are the Karimojong (2 percent) and the Lugbara/Madi (3 percent). Differences in HIV infection by religion are minimal, with only slightly lower rates among Muslims than Christians.

### 8.6 HIV Prevalence by Sociodemographic Characteristics

HIV prevalence is related to marital status. Table 8.5 and Figure 8.4 show that those who are widowed are by far the most likely to be HIV infected. Almost one-third of women and men who have been widowed are HIV positive, compared with around 6 percent of those who are currently married. Those who are divorced or separated have an intermediate level of HIV infection (14 percent), while those who have never been in a marital union have a relatively low prevalence (2 percent).

A tiny fraction (less than 1 percent) of individuals who report never having been in union and never having had sex are HIV infected, suggesting either errors in reporting on sexual behaviour or nonsexual transmission of HIV infection, such as through blood transfusion or unsterile injections.

There is almost no difference in HIV prevalence for those in polygynous or monogamous marriages. Women who are not in a marital union (which includes those who are widowed, divorced, separated, or never married) are more likely to be HIV infected, while men who are not in a union are less likely to be infected.

Women who are not pregnant have a slightly higher prevalence of infection (8 percent) than those who are pregnant ( 7 percent). The HIV prevalence among women who are currently pregnant provides a useful benchmark for comparison with rates among pregnant women who are tested as part of the ANC sentinel surveillance system.

Table 8.5
HIV prevalence by sociodemographic characteristics, Uganda 2004-05

| Sociodemographic characteristic | Women 15-49 |  | Men 15-49 |  | Total 15-49 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Percentage HIV positive | Number tested | Percentage HIV positive | Number tested | Percentage HIV positive | Number tested |
| Marital status |  |  |  |  |  |  |
| Currently in union | 5.9 | 5,977 | 6.8 | 3,973 | 6.3 | 9,950 |
| Widowed ${ }^{1}$ | 31.2 | 557 | 32.2 | 94 | 31.4 | 651 |
| Divorced/separated | 16.0 | 742 | 10.8 | 500 | 13.9 | 1,241 |
| Never in union | 2.7 | 2,075 | 0.8 | 2,910 | 1.6 | 4,985 |
| Ever had sex | 5.6 | 816 | 1.2 | 1,584 | 2.7 | 2,400 |
| Never had sex | 0.8 | 1,259 | 0.2 | 1,327 | 0.5 | 2,585 |
| Type of union |  |  |  |  |  |  |
| In polygynous union | 5.7 | 1,959 | 7.5 | 858 | 6.2 | 2,818 |
| Not in polygynous union | 6.0 | 4,018 | 6.6 | 3,115 | 6.3 | 7,133 |
| Not currently in union | 10.3 | 3,373 | 3.0 | 3,504 | 6.6 | 6,877 |
| Currently pregnant |  |  |  |  |  |  |
| Pregnant | 6.5 | 1,068 | na | na | na | na |
| Not pregnant/not sure | 7.7 | 8,250 | na | na | na | na |
| Birth in past 3 years |  |  |  |  |  |  |
| None | 8.5 | 4,854 | na | na | na | na |
| Birth and ANC | 6.0 | 3,866 | na | na | na | na |
| Birth and no ANC | 8.4 | 630 | na | na | na | na |
| Total 15-49 | 7.5 | 9,391 | 5.0 | 7,515 | 6.4 | 16,906 |
| Total 15-59 | 7.3 | 10,227 | 5.2 | 8,298 | 6.3 | 18,525 |

[^8]Figure 8.4 HIV Prevalence by Marital Status


The comparison is also made for women who gave birth in the three years before the survey and received ANC as opposed to those who did not or those who did not give birth during the time period. The data show that those who had ANC for a recent birth are slightly less likely to be HIV positive ( 6 percent) than those who either had a birth but did not receive ANC (8 percent) or did not have a birth ( 9 percent).

### 8.7 HIV Prevalence and Male Circumcision

Some research has shown a protective effect of male circumcision on the transmission of HIV. Lack of circumcision is considered a risk factor for HIV infection, in part because of physiological differences that increase the susceptibility to HIV infection among uncircumcised men (Agot et al., 2004; Auvert et al., 2001). In the UHSBS, men were asked whether they were circumcised. The data can be examined in relationship to HIV status.

As shown in Table 8.6, men who have been circumcised are slightly less likely to be HIV positive than those who are not circumcised (4 and 6 percent, respectively). The fact that this holds true for almost every sub-category of background characteristic implies that the pattern might be a result of the circumcision and not of the fact that circumcised men belong to a community or region that has a lower HIV prevalence for some reason that is unrelated to circumcision practices. For example, for most of the larger ethnic groups, HIV prevalence is lower among circumcised than uncircumcised men. Exceptions are the Lugbara/ Madi, Bagisu/Sabiny, and Alur/Jopadhola, where rates are higher among circumcised men. More sophisticated analysis is needed before being able to determine conclusively that circumcision reduces the risk of HIV transmission.

| Background characteristic | Circumcised men 15-49 |  | Uncircumcised men 15-49 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Percentage HIV positive | Number | Percentage HIV positive | Number |
| Age |  |  |  |  |
| 15-19 | 0.3 | 418 | 0.3 | 1,500 |
| 20-24 | 1.5 | 318 | 2.7 | 856 |
| 25-29 | 2.8 | 256 | 6.9 | 864 |
| 30-34 | 5.2 | 299 | 9.2 | 834 |
| 35-39 | 5.5 | 222 | 10.6 | 641 |
| 40-44 | 8.9 | 213 | 9.3 | 528 |
| 45-49 | 7.3 | 131 | 6.8 | 391 |
| Residence |  |  |  |  |
| Urban | 6.2 | 392 | 7.0 | 703 |
| Rural | 3.1 | 1,467 | 5.2 | 4,910 |
| Region |  |  |  |  |
| Central | 6.2 | 311 | 6.7 | 1,038 |
| Kampala | 2.2 | 195 | 5.9 | 320 |
| East Central | 3.1 | 367 | 6.4 | 705 |
| Eastern | 5.1 | 393 | 3.6 | 330 |
| Northeast | (2.6) | 27 | 3.3 | 537 |
| North Central | * | 19 | 7.0 | 720 |
| West Nile | 2.4 | 206 | 1.6 | 480 |
| Western | 2.3 | 267 | 7.1 | 612 |
| Southwest | 0.0 | 73 | 4.8 | 872 |
| Education |  |  |  |  |
| No education | 2.9 | 142 | 9.1 | 466 |
| Primary incomplete | 3.2 | 841 | 4.9 | 2,653 |
| Primary complete | 5.5 | 235 | 6.8 | 822 |
| Secondary+ | 3.9 | 638 | 4.6 | 1,666 |
| Wealth quintile |  |  |  |  |
| Lowest | 0.9 | 213 | 4.7 | 922 |
| Second | 4.7 | 294 | 4.1 | 1,237 |
| Middle | 1.4 | 352 | 6.4 | 1,057 |
| Fourth | 5.2 | 383 | 6.1 | 1,162 |
| Highest | 4.7 | 616 | 6.0 | 1,235 |
| Ethnicity |  |  |  |  |
| Baganda | 3.6 | 402 | 6.7 | 903 |
| Banyankore | 2.6 | 68 | 6.1 | 707 |
| Iteso | (6.8) | 35 | 4.5 | 458 |
| Lugbara/Madi | 2.8 | 213 | 1.9 | 349 |
| Basoga | 2.7 | 236 | 7.2 | 449 |
| Langi | * | 8 | 7.2 | 424 |
| Bakiga | (10.4) | 42 | 3.6 | 495 |
| Karimojong | * | 11 | 1.2 | 177 |
| Acholi | * | 18 | 6.5 | 325 |
| Bagisu/Sabiny | 4.3 | 359 | 0.0 | 91 |
| Alur/Jopadhola | 6.0 | 73 | 3.9 | 339 |
| Banyara | (7.0) | 38 | 6.8 | 209 |
| Batoro | (7.8) | 44 | 14.3 | 153 |
| All others | 1.8 | 308 | 4.0 | 526 |
| Religion |  |  |  |  |
| Catholic | 7.3 | 303 | 5.1 | 2,837 |
| Anglican/ rotestant | 3.4 | 475 | 6.0 | 2,279 |
| Other Christian | 1.9 | 111 | 5.2 | 396 |
| Muslim | 3.1 | 950 | * | 24 |
| Other | * | 15 | 2.9 | 61 |
| Total 15-49 | 3.7 | 1,858 | 5.5 | 5,613 |
| Total 15-59 | 3.8 | 2,047 | 5.6 | 6,200 |

Note: Totals include some cases with missing information. Numbers in parentheses are based on 25-49 unweighted cases; an asterisk refers to a figure based on fewer than 25 cases that has been suppressed.

### 8.8 HIV Prevalence by Sexual Risk Behaviours

Table 8.7 examines the prevalence of HIV infection according to several sexual behaviours among respondents who have ever had sexual intercourse. In reviewing these results, it is important to remember that responses about sexual risk behaviours may be subject to reporting bias. Also, sexual behaviour in the past 12 months may not adequately reflect lifetime sexual risk. Nor is it possible from the data to know the sequence of events, e.g., whether condom use predates or postdates HIV transmission.

The data show a slight tendency for HIV risk to be lower for those who initiate sex at a later age, though the relationship is only evident among women. For example, HIV prevalence is higher among women who first had sex before reaching age 15 ( 11 percent) and steadily declines to only 6 percent among women who delayed first sex until age 20 or older. Among men, the opposite pattern prevails, although the relationship is muted.

Table 8.7
HIV prevalence by sexual behaviour characteristics, Uganda 2004-05

| Sexual behaviour characteristic | Women 15-49 who ever had sex |  | Men 15-49 who ever had sex |  | Total 15-49 who ever had sex |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Percentage HIV positive | Number | Percentage <br> HIV positive | Number | Percentage <br> HIV positive | Number |
| Age at first sex |  |  |  |  |  |  |
| <15 | 11.4 | 1,417 | 4.3 | 905 | 8.6 | 2,322 |
| 15-17 | 9.1 | 3,652 | 6.4 | 2,193 | 8.1 | 5,845 |
| 18-19 | 7.5 | 1,473 | 6.2 | 1,442 | 6.9 | 2,915 |
| 20+ | 5.6 | 1,549 | 6.6 | 1,611 | 6.1 | 3,160 |
| Higher-risk sex in past $\mathbf{1 2}$ months |  |  |  |  |  |  |
| Had higher-risk sex | 15.4 | 1,068 | 6.3 | 1,947 | 9.6 | 3,015 |
| Had sex, not higher risk | 6.1 | 5,871 | 6.2 | 3,331 | 6.2 | 9,202 |
| No sex in past 12 months | 14.4 | 1,152 | 4.9 | 873 | 10.3 | 2,025 |
| Number of partners in past 12 months |  |  |  |  |  |  |
| 0 | 14.5 | 1,149 | 4.7 | 867 | 10.3 | 2,015 |
| 1 | 7.3 | 6,673 | 5.5 | 3,709 | 6.7 | 10,382 |
| 2 | 14.0 | 249 | 7.8 | 1,198 | 8.9 | 1,447 |
| 3+ | * | 21 | 9.2 | 377 | 9.1 | 398 |
| Number of higher-risk partners in past 12 months |  |  |  |  |  |  |
| 0 | 7.5 | 7,024 | 6.0 | 4,187 | 6.9 | 11,211 |
| 1 | 15.1 | 966 | 6.3 | 1,478 | 9.7 | 2,443 |
| 2 | 20.8 | 87 | 5.5 | 326 | 8.7 | 413 |
| $3+$ | * | 14 | 8.8 | 160 | 8.5 | 174 |
| Any condom use ever |  |  |  |  |  |  |
| Used condom | 12.2 | 2,454 | 6.9 | 3,081 | 9.3 | 5,535 |
| Never used condom | 6.9 | 5,638 | 5.3 | 3,070 | 6.4 | 8,707 |
| Condom use at last sex in past 12 months ${ }^{1}$ |  |  |  |  |  |  |
| Used condom | 14.7 | 631 | 5.9 | 841 | 9.7 | 1,472 |
| Did not use condom | 6.8 | 6,306 | 6.4 | 4,429 | 6.6 | 10,734 |
| Condom use at last higher-risk sex in past 12 months ${ }^{1}$ |  |  |  |  |  |  |
| Used condom | 15.0 | 494 | 5.0 | 1,034 | 8.3 | 1,527 |
| Did not use condom | 15.8 | 572 | 7.9 | 905 | 11.0 | 1,477 |
| No higher-risk sex | 6.1 | 5,871 | 6.2 | 3,331 | 6.2 | 9,202 |
| Total 15-49 | 8.5 | 8,091 | 6.1 | 6,151 | 7.5 | 14,242 |
| Total 15-59 | 8.2 | 8,924 | 6.1 | 6,928 | 7.3 | 15,851 |

[^9]Women who said they had higher-risk sex (i.e., sex with a nonmarital, noncohabiting partner) in the year preceding the survey have a higher prevalence of HIV infection ( 15 percent) than those who said they had sex but not higher-risk sex (6 percent). Interestingly, women who had ever had sex but who said they had not had sex during the 12 months preceding the survey had almost as high prevalence of HIV infection (14 percent) as those who had higher-risk sex. This might be a result of the fact that those who have ever had sex but not during the past 12 months are less likely to be in a marital union, which as seen in Table 8.5, is associated with higher HIV prevalence for women. For men, there is almost no difference by higher-risk sex categories. Prevalence of HIV infection is 6 percent among men who reported having higher-risk sex in the past 12 months, as well as for those who had sex but not higher-risk sex, and it is 5 percent for those did not have sex in the past year.

The number of sexual partners in the 12 months before the survey shows the expected positive relationship with HIV prevalence for men, but not for women. Among men, HIV prevalence increases gradually as the number of partners increases, from 5 percent among those who did not have sex in the past 12 months to 9 percent among men who had three or more partners in the past year. For women, those who did not have sex in the past year were as likely to be HIV-positive as those who had two sexual partners in the past 12 months.

Table 8.7 also shows data on HIV infection levels by the number of higher-risk partners in the past 12 months. For women, HIV prevalence increases as the number of recent higher-risk sexual partners increases, while for men, there is only a weak positive association. Sexually experienced women who report having no higher-risk sex partners in the past 12 months have a prevalence of 8 percent, while prevalence is 15 and 21 percent, respectively, for those who had one or two or more higher-risk sex partners in the past 12 months. For men, prevalence of HIV infection is 6 percent among those with 0,1 , or 2 sexual partners in the past 12 months, and increases to 9 percent among those who report having three or more higher-risk sexual partners.

When used consistently and correctly, condoms are a very effective way of preventing HIV infection, sexually transmitted infections, and unwanted pregnancy. Results from the UHSBS do not show any consistent pattern of HIV infection levels by condom use behaviour. Among women, HIV prevalence is higher among those who have ever used a condom ( 12 percent) than among those who have not ( 7 percent), and is also higher among those who used a condom at last sex ( 15 percent) than among those who did not ( 7 percent). It is about equally as high among those who used a condom at last higherrisk sex as among those who did not ( 15 and 16 percent, respectively). Among men, differences are much smaller, though HIV prevalence is somewhat lower among men who used a condom at the last higher-risk sex (5 percent) than among those who did not (8 percent). It is difficult to sort out the direction of the relationship between condom use and HIV infection. Condoms can be used to protect HIV-negative users from becoming infected, but they can also be used to by HIV-positive individuals to protect their partners. Low prevalence of HIV infection among those reported to have not used a condom at last sex may be associated with the type of relationship; a majority of those who did not use a condom at last sex could be having sex with a husband or wife.

### 8.9 HIV Prevalence by Other Characteristics Related to HIV Risk

Table 8.8 presents variation in HIV prevalence by a number of other characteristics related to HIV risk behaviours among men and women who have ever had sex. As expected, women and men with a recent history of a sexually transmitted infection (STI) or STI symptoms in the 12 months preceding the survey have higher rates of HIV infection than those with none (13 and 5 percent, respectively). The same pattern holds for women and men.

Both women and men who have been tested for HIV in the past are more likely to be HIV positive than those who have never been tested. Among those who have ever had sex, the prevalence of HIV infection among women and men who have ever had an HIV test is 11 percent, compared with 7 percent for those who have never been tested for HIV. Among women who have ever had sex, the level of HIV infection is 14 percent among those who have ever been tested for HIV, compared with 8 percent among those who have never been tested. Among men, 8 percent of those previously tested are HIV positive, compared with 6 percent of those who have never been tested (Table 8.8).

| Table 8.8 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| HIV prevalence by other characteristics related to risk, Uganda 2004-05 |

Table 8.9 provides further information about the relationship between prior HIV testing and the actual HIV status of respondents. The results show that many individuals who are HIV positive have not been tested and do not know their status. Eighty percent of infected respondents ( 77 percent of infected women and 85 percent of infected men) do not know their HIV status, either because they never got tested or because they were tested and did not receive their HIV test results.

Table 8.9
HIV prevalence by prior HIV testing status, Uganda 2004-05

| Prior HIV testing status | Women 15-49 |  | Men 15-49 |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Percentage HIV positive | Percentage HIV negative | Percentage HIV positive | Percentage HIV negative | Percentage HIV positive | Percentage HIV negative |
| Ever tested, knows results of last test | 23.5 | 11.8 | 15.0 | 10.3 | 20.5 | 11.1 |
| Ever tested, does not know results | 2.2 | 2.0 | 2.0 | 1.6 | 2.1 | 1.8 |
| Never tested | 74.4 | 86.2 | 83.0 | 88.1 | 77.4 | 87.1 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Number | 701 | 8,634 | 377 | 7,084 | 1,079 | 15,718 |

### 8.10 Prevalence of HiV Among Youth

Generally, cases of HIV infection among youth aged 15-24 represent more recent infections and serve as an important indicator for detecting trends in both prevalence and incidence. An attempt was made to estimate incidence by subjecting all HIV-positive samples to the BED-assay. However, recent evidence suggests that this test overestimates incidence (UNAIDS, 2005). Consequently, the results are not shown here and will instead be subjected to further analysis. Table 8.10 shows HIV prevalence levels among youth according to several indicators of sexual behaviour. Prevalence of HIV for the $15-24$ age group is 3 percent. However, there is a sizeable gender gap. Prevalence among women age $15-24$ years is 4 percent, while among men, it is only 1 percent. Prevalence rises rapidly with age, especially among women.

Urban youth-both female and male-are more likely to be infected than those in rural areas ( 5 percent versus 3 percent). Young women and men in Kampala, Western, and North Central regions are more likely to be HIV positive than those living elsewhere, especially those in West Nile and Northeast regions.

| Table 8.10 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| HIV prevalence among youth aged 15-24, Uganda 2004-05 |  |  |  |  |  |  |
|  | Women 15-24 |  | Men 15-24 |  | Total 15-24 |  |
| Background characteristic | Percent HIV positive | Number of women | Percent HIV positive | $\begin{gathered} \text { Number of } \\ \text { men } \\ \hline \end{gathered}$ | $\begin{gathered} \hline \text { Percent HIV } \\ \text { positive } \\ \hline \end{gathered}$ | Number |
| Age |  |  |  |  |  |  |
| 15-17 | 1.9 | 1,293 | 0.3 | 1,214 | 1.1 | 2,508 |
| 18-19 | 3.9 | 757 | 0.2 | 707 | 2.1 | 1,465 |
| 20-22 | 5.5 | 1,174 | 2.3 | 762 | 4.3 | 1,935 |
| 23-24 | 7.7 | 623 | 2.5 | 414 | 5.7 | 1,036 |
| Residence |  |  |  |  |  |  |
| Urban | 6.9 | 694 | 1.8 | 506 | 4.8 | 1,200 |
| Rural | 3.8 | 3,153 | 0.9 | 2,591 | 2.5 | 5,744 |
| Region |  |  |  |  |  |  |
| Central | 4.8 | 681 | 1.7 | 602 | 3.4 | 1,284 |
| Kampala | 6.3 | 324 | 0.6 | 248 | 3.8 | 572 |
| East Central | 5.0 | 620 | 0.8 | 445 | 3.3 | 1,064 |
| Eastern | 2.9 | 314 | 1.3 | 304 | 2.1 | 618 |
| Northeast | 2.8 | 286 | 0.4 | 198 | 1.8 | 484 |
| North Central | 5.1 | 323 | 1.9 | 244 | 3.7 | 566 |
| West Nile | 1.3 | 369 | 0.4 | 306 | 0.9 | 676 |
| Western | 5.5 | 442 | 1.5 | 333 | 3.8 | 774 |
| Southwest | 4.2 | 488 | 0.6 | 417 | 2.5 | 906 |
| Marital status |  |  |  |  |  |  |
| Currently in union | 5.7 | 1,673 | 3.9 | 415 | 5.3 | 2,088 |
| Widowed | (38.2) | 25 | * | 1 | (39.7) | 26 |
| Divorced/separated | 10.7 | 227 | 7.5 | 99 | 9.7 | 327 |
| Never in union | 2.0 | 1,922 | 0.4 | 2,582 | 1.1 | 4,504 |
| Ever had sex | 4.1 | 687 | 0.5 | 1,302 | 1.7 | 1,989 |
| Never had sex | 0.9 | 1,235 | 0.2 | 1,281 | 0.5 | 2,515 |
|  |  |  |  |  |  |  |
| Had higher-risk sex | 6.8 | 598 | 1.4 | 951 | 3.5 | 1,549 |
| Had sex, not higher risk | 5.7 | 1,690 | 4.2 | 328 | 5.5 | 2,018 |
| No sex in past 12 months | 5.7 | 325 | 0.6 | 538 | 2.5 | 862 |
| Number of partners in past 12 months |  |  |  |  |  |  |
| 0 | 5.8 | 324 | 0.6 | 537 | 2.6 | 860 |
| 1 | 5.9 | 4,337 | 1.6 | 1,827 | 4.6 | 6,165 |
| $2+$ | 8.7 | 237 | 3.5 | 726 | 4.8 | 963 |
| Number of higher-risk partners in past 12 months ${ }^{1}$ |  |  |  |  |  |  |
| 0 | 5.7 | 3,705 | 2.6 | 1,191 | 5.0 | 4,895 |
| $1$ | 6.5 | 1,088 | 0.9 | 1,395 | 3.3 | 2,483 |
| $2+$ | 10.9 | 105 | 2.7 | 504 | 4.1 | 609 |
| Any condom use ever |  |  |  |  |  |  |
| Used condom | 6.9 | 1,243 | 1.9 | 1,105 | 4.5 | 2,348 |
| Never used condom | 5.2 | 1,369 | 1.3 | 711 | 3.9 | 2,081 |
| Condom use at last sex in past 12 months ${ }^{2}$ |  |  |  |  |  |  |
| Used condom | 6.4 | 350 | 0.6 | 491 | 3.0 | 841 |
| Did not use condom | 6.0 | 1,936 | 3.1 | 782 | 5.2 | 2,717 |
| Condom use at first sex ${ }^{1}$ |  |  |  |  |  |  |
| Used condom | 5.9 | 761 | 1.7 | 586 | 4.1 | 1,348 |
| Did not use condom | 6.0 | 1,851 | 1.7 | 1,230 | 4.3 | 3,082 |
| Total | 4.3 | 3,847 | 1.1 | 3,097 | 2.9 | 6,944 |

[^10]HIV infection is greatest among the small number of youth who are widowed, divorced, or separated, followed by those who are currently married. The lowest levels of infection are found among young people who have never married. Differences in HIV prevalence by whether or not the respondent had higher-risk sex in the past 12 months are difficult to interpret. Among young women, those who had higher-risk sex are slightly more likely to be HIV positive than those who had non-higher-risk sex. The opposite is true for young men. Similarly, there is some evidence that having more sexual partners and more higher-risk sexual partners is related to higher infection rates. However, this is not uniformly true, especially among young men. Condom use also has an inconsistent relationship with HIV prevalence.

### 8.11 HIV Prevalence among Cohabiting Couples

As part of the 2004-05 UHSBS, almost 4,000 cohabiting couples were both tested for HIV. Results show that for 91 percent of cohabiting couples, both partners are HIV negative, while for 3 percent, both partners are HIV positive (Table 8.11). Data also show that 5 percent of cohabiting couples are discordant, that is one partner is infected and the other is not. In 3 percent of couples, the male partner is infected and the woman is not, while in another 2 percent of couples, the woman is infected and the man is not. Discordance is more common among urban couples than rural couples and is especially high among couples who disagree as to whether their union is monogamous or polygynous. There is a much higher level of discordant couples in Kampala than in other regions. Differences by other background characteristics are not large.

The fact that there are more cohabiting couples who are discordant for HIV than there are cohabiting couples who are both infected, represents an unmet HIV prevention need for the country. This is because the vast majority of these cohabiting couples do not mutually know their HIV status and therefore are not empowered to take action to prevent further spread of the disease.

## Table 8.11

HIV prevalence among cohabiting couples, Uganda 2004-05

| Background characteristic | Both partners HIV positive | Man positive, woman negative | Woman positive, man negative | Both partners HIV negative | Other | Total | Number |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Woman's age |  |  |  |  |  |  |  |
| 15-19 | 4.1 | 3.2 | 2.1 | 90.7 | 0.0 | 100.0 | 232 |
| 20-29 | 3.4 | 2.9 | 1.8 | 91.0 | 0.9 | 100.0 | 1,731 |
| 30-39 | 3.7 | 2.8 | 2.2 | 91.0 | 0.3 | 100.0 | 1,209 |
| 40-59 | 2.7 | 2.4 | 1.2 | 93.4 | 0.3 | 100.0 | 725 |
| Man's age |  |  |  |  |  |  |  |
| 15-19 | * | * | * | * | * | 100.0 | 21 |
| 20-29 | 3.0 | 2.0 | 2.6 | 91.6 | 0.8 | 100.0 | 923 |
| 30-39 | 3.4 | 3.2 | 1.7 | 91.1 | 0.5 | 100.0 | 1,452 |
| 40-59 | 3.7 | 2.9 | 1.4 | 91.6 | 0.4 | 100.0 | 1,500 |
| Type of union |  |  |  |  |  |  |  |
| Monogamous | 3.7 | 2.5 | 1.4 | 91.9 | 0.5 | 100.0 | 2,742 |
| Polygynous | 2.4 | 3.3 | 2.0 | 91.9 | 0.4 | 100.0 | 859 |
| Couple disagrees on status | 3.9 | 4.1 | 5.1 | 86.0 | 0.9 | 100.0 | 296 |
| Residence |  |  |  |  |  |  |  |
| Urban | 6.5 | 3.9 | 4.0 | 85.3 | 0.3 | 100.0 | 342 |
| Rural | 3.1 | 2.7 | 1.6 | 92.0 | 0.6 | 100.0 | 3,555 |
| Region |  |  |  |  |  |  |  |
| Central | 4.5 | 4.4 | 1.8 | 88.1 | 1.2 | 100.0 | 575 |
| Kampala | 6.3 | 2.3 | 5.1 | 86.4 | 0.0 | 100.0 | 119 |
| East Central | 2.5 | 3.2 | 2.5 | 91.3 | 0.5 | 100.0 | 576 |
| Eastern | 3.7 | 2.4 | 1.7 | 91.8 | 0.5 | 100.0 | 422 |
| Northeast | 1.3 | 2.1 | 2.2 | 94.4 | 0.1 | 100.0 | 393 |
| North Central | 3.2 | 4.0 | 0.8 | 91.2 | 0.8 | 100.0 | 452 |
| West Nile | 1.0 | 0.7 | 0.7 | 97.4 | 0.2 | 100.0 | 368 |
| Western | 4.0 | 2.7 | 2.7 | 90.5 | 0.2 | 100.0 | 509 |
| Southwest | 5.3 | 2.1 | 1.0 | 90.8 | 0.8 | 100.0 | 482 |
| Woman's education |  |  |  |  |  |  |  |
| No education | 2.7 | 2.0 | 1.5 | 93.4 | 0.5 | 100.0 | 1,141 |
| Primary incomplete | 3.6 | 3.4 | 1.5 | 90.9 | 0.5 | 100.0 | 1,897 |
| Primary complete | 3.8 | 1.1 | 2.9 | 90.6 | 1.5 | 100.0 | 407 |
| Secondary+ | 4.0 | 3.8 | 2.7 | 89.5 | 0.0 | 100.0 | 444 |
| Man's education |  |  |  |  |  |  |  |
| No education | 3.3 | 1.7 | 1.0 | 93.4 | 0.7 | 100.0 | 471 |
| Primary incomplete | 3.2 | 2.7 | 2.0 | 91.6 | 0.5 | 100.0 | 1,859 |
| Primary complete | 3.5 | 3.4 | 1.4 | 90.5 | 1.2 | 100.0 | 659 |
| Secondary+ | 3.8 | 3.0 | 2.3 | 90.9 | 0.0 | 100.0 | 897 |
| Wealth quintile |  |  |  |  |  |  |  |
| Lowest | 2.2 | 1.9 | 0.8 | 94.8 | 0.3 | 100.0 | 688 |
| Second | 2.0 | 3.0 | 1.6 | 92.7 | 0.6 | 100.0 | 847 |
| Middle | 3.9 | 2.8 | 1.7 | 90.9 | 0.8 | 100.0 | 853 |
| Fourth | 3.9 | 3.5 | 2.0 | 90.4 | 0.2 | 100.0 | 843 |
| Highest | 5.2 | 2.6 | 3.1 | 88.3 | 0.8 | 100.0 | 665 |
| Total | 3.4 | 2.8 | 1.8 | 91.4 | 0.5 | 100.0 | 3,896 |

Note: Data refer to only those couples in which both partners were tested. An asterisk indicates a figure that is based on fewer than 25 cases that has been suppressed.

### 8.12 HIV Prevalence among Children Under Five

One of the objectives of the UHSBS was to ascertain the HIV prevalence among children under five. As mentioned in Chapter 1, this involves more detailed testing, because children under 18 months whose mothers are HIV positive are likely to test positive on standard ELISA HIV tests even if they are not themselves carrying the virus. To get accurate data for these young children, it is necessary to do a confirmatory test on all positive cases using a polymerase chain reaction test.

Table 8.12 shows that of all the eligible children under age five, a valid HIV test result was obtained for 88 percent. Six percent of children were not tested because their parent or guardian refused the test, while 4 percent were not available for testing. For 3 percent of eligible children, a test was not done because of technical problems or because the sample was lost.

Differences in coverage levels for children are not large, although the response rates in North Central and Kampala were particularly low (76-77 percent). Coverage is also lower among children whose mothers were not tested and those whose mothers had died.

Table 8.13 shows that only a tiny fraction of children are HIV positive-less than 1 percent. Moreover, there are few differentials by background characteristics of the child or the mother. Prevalence is slightly higher among children in urban areas, and specifically Kampala, than in other areas. Prevalence is also higher among children whose mothers are widowed, divorced, or separated, because as shown in previous tables, HIV infection is also higher among these mothers. In fact, the most striking figure in Table 8.13 is that HIV prevalence is very high ( 10 percent) among children whose mothers are also HIV positive. Because mother-to-child transmission is by far the most likely means of transmission of HIV infection among children, this is hardly surprising. Only a tiny fraction (one-tenth of 1 percent) of children whose mothers are HIV negative are themselves HIV positive. HIV prevalence is also relatively high (4 percent) among children whose mothers have died.

Table 8.12
Coverage of HIV testing among eligible children under age five, Uganda 2004-05

| Background characteristic | HIV testing status |  |  |  | Total | Number of children |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Tested with valid result | Refused | Absent/ other | Missing/ technical problem |  |  |
| Age |  |  |  |  |  |  |
| $<18$ months | 87.4 | 6.9 | 3.1 | 2.5 | 100.0 | 3,099 |
| 18-59 months | 88.0 | 5.3 | 4.2 | 2.5 | 100.0 | 6,418 |
| Sex |  |  |  |  |  |  |
| Male | 87.8 | 5.5 | 4.0 | 2.6 | 100.0 | 4,745 |
| Female | 87.7 | 6.1 | 3.7 | 2.4 | 100.0 | 4,795 |
| Residence |  |  |  |  |  |  |
| Urban | 82.5 | 8.8 | 5.6 | 3.1 | 100.0 | 1,117 |
| Rural | 88.5 | 5.4 | 3.6 | 2.4 | 100.0 | 8,423 |
| Region |  |  |  |  |  |  |
| Central | 89.6 | 6.7 | 1.7 | 2.0 | 100.0 | 940 |
| Kampala | 77.1 | 11.3 | 7.5 | 4.1 | 100.0 | 603 |
| East Central | 97.2 | 1.0 | 1.6 | 0.2 | 100.0 | 1,206 |
| Eastern | 89.2 | 7.3 | 2.3 | 1.3 | 100.0 | 1,014 |
| Northeast | 84.4 | 9.3 | 4.6 | 1.8 | 100.0 | 1,291 |
| North Central | 75.8 | 8.7 | 11.8 | 3.7 | 100.0 | 1,138 |
| West Nile | 89.1 | 2.8 | 3.0 | 5.0 | 100.0 | 1,314 |
| Western | 92.2 | 4.1 | 2.0 | 1.7 | 100.0 | 1,068 |
| Southwest | 91.4 | 4.0 | 1.2 | 3.3 | 100.0 | 966 |
| Wealth quintile |  |  |  |  |  |  |
| Lowest | 86.5 | 6.3 | 4.7 | 2.5 | 100.0 | 1,980 |
| Second | 87.7 | 6.1 | 4.1 | 2.1 | 100.0 | 2,196 |
| Middle | 88.7 | 5.0 | 3.7 | 2.6 | 100.0 | 1,957 |
| Fourth | 90.4 | 4.9 | 2.4 | 2.4 | 100.0 | 1,693 |
| Highest | 85.8 | 6.8 | 4.3 | 3.2 | 100.0 | 1,714 |
| Mother's HIV status |  |  |  |  |  |  |
| Positive | 94.2 | 3.3 | 1.4 | 1.1 | 100.0 | 361 |
| Negative | 93.0 | 2.9 | 2.3 | 1.8 | 100.0 | 7,271 |
| Missing/Not interviewed | 66.8 | 17.6 | 10.2 | 5.5 | 100.0 | 1,908 |
| Mother's survival |  |  |  |  |  |  |
| Alive, not sick | 88.0 | 6.0 | 3.7 | 2.4 | 100.0 | 8,017 |
| Alive, sick | 86.6 | 7.4 | 4.5 | 1.5 | 100.0 | 202 |
| Alive, illness status missing/ not in household | 87.6 | 4.5 | 4.7 | 3.3 | 100.0 | 1,136 |
| Dead | 78.4 | 5.9 | 10.8 | 4.9 | 100.0 | 102 |
| Missing | 84.3 | 7.2 | 2.4 | 6.0 | 100.0 | 83 |
| Total | 87.8 | 5.8 | 3.9 | 2.5 | 100.0 | 9,540 |


| Table 8.13 |  |  |
| :---: | :---: | :---: |
| HIV prevalence among Uganda 2004-05 | children under age five, |  |
| Background characteristic | Percentage HIV positive | Number of children |
| Age |  |  |
| <18 months | 1.0 | 2,666 |
| 18-59 months | 0.5 | 5,689 |
| Sex |  |  |
| Male | 0.7 | 4,148 |
| Female | 0.7 | 4,226 |
| Residence |  |  |
| Urban | 1.5 | 814 |
| Rural | 0.6 | 7,560 |
| Region |  |  |
| Central | 0.8 | 1,444 |
| Kampala | 2.2 | 292 |
| East Central | 1.0 | 1,398 |
| Eastern | 0.6 | 827 |
| Northeast | 0.4 | 758 |
| North Central | 0.8 | 889 |
| West Nile | 0.1 | 732 |
| Western | 0.5 | 1,008 |
| Southwest | 0.5 | 1,026 |
| Mother's education |  |  |
| No education | 0.5 | 1,866 |
| Primary incomplete | 0.6 | 3,688 |
| Primary complete | 1.1 | 815 |
| Secondary+ | 0.9 | 838 |
| Missing/not interviewed | 0.7 | 1,166 |
| Mother's marital status |  |  |
| Never married | 0.6 | 185 |
| Married | 0.5 | 6,284 |
| Widowed | 2.5 | 255 |
| Divorced/separated | 2.1 | 407 |
| Missing/not interviewed | 0.6 | 1,244 |
| Wealth quintile |  |  |
| Lowest | 0.4 | 1,481 |
| Second | 0.4 | 1,891 |
| Middle | 0.4 | 1,802 |
| Fourth | 1.0 | 1,683 |
| Highest | 1.2 | 1,517 |
| Mother's HIV status |  |  |
| Positive | 10.2 | 364 |
| Negative | 0.1 | 6,671 |
| Missing/not interviewed | 0.8 | 1,339 |
| Mother's survival |  |  |
| Alive, not sick | 0.7 | 6,979 |
| Alive, sick | 0.7 | 179 |
| Alive, illness status missing/ not in household | 0.4 | 1,069 |
| Dead | 4.4 | 80 |
| Don't know/missing | 0.0 | 67 |
| Total | 0.7 | 8,374 |

## SYPHILIS PREVALENCE

### 9.1 Key Findings

- Three percent of Ugandan adults aged 15-49 have syphilis, with equal prevalence among women and men.
- There is virtually no urban-rural difference in syphilis prevalence.
- Syphilis is most common in Northeast and North Central regions (5 percent) and least common in West Nile region (1 percent).
- Unlike HIV prevalence, syphilis infection declines slightly with increasing education and wealth.
- Seven percent of cohabiting couples in Uganda are discordant, i.e., one partner is syphilis positive and the other is negative.


### 9.2 Introduction

Obtaining a reliable estimate of the level of syphilis infection among the adult population in Uganda was one of the main objectives of the UHSBS. Syphilis has been demonstrated to greatly enhance HIV transmission, most likely because the presence of genital ulcers provides an easy path for the entry of the HIV virus.

As part of the informed consent statement used in the UHSBS, respondents were asked if they would agree to provide a venous blood sample for testing for HIV, syphilis, herpes, and hepatitis. They were also told that they could receive the results of their syphilis test the following day and be provided with free treatment at home if they tested positive. Syphilis is widely viewed as being a common illness. It also is generally not regarded with the stigma that it often carries in other settings (Yoder et al., 2006). A qualitative study that was linked to the home-based follow-on survey after the UHSBS found that survey respondents were generally pleased at being offered free testing and treatment for syphilis; this was perceived by respondents as an incentive to participate (Yoder et al., 2006).

### 9.3 Coverage of Syphilis Testing

Unlike HIV, syphilis testing requires a venous blood sample and cannot be implemented using dried blood spot samples. As shown in Table 9.1, 97 percent of adults who gave blood provided a venous sample and 3 percent gave a dried blood spot. Differences by gender were minimal, but respondents in urban areas and in Kampala who agreed to provide blood for testing were more likely than others to agree to provide only a blood spot (7 and 9 percent, respectively).

Table 9.1
Type of blood sample provided by women and men aged 15-49 by residence and region, Uganda 2004-05 (unweighted percent distribution)

| Type of blood sample | Residence |  | Region |  |  |  |  |  |  |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Urban | Rural | Central | Kampala | East Central | Eastern | Northeast | North Central | West <br> Nile | Western | Southwest |  |
| WOMEN |  |  |  |  |  |  |  |  |  |  |  |  |
| Venous | 91.5 | 97.3 | 96.3 | 89.3 | 98.8 | 96.5 | 96.7 | 95.1 | 97.2 | 97.0 | 98.4 | 96.3 |
| Blood spot | 8.0 | 2.3 | 3.2 | 10.4 | 0.9 | 2.9 | 2.9 | 4.6 | 2.3 | 2.5 | 1.1 | 3.3 |
| Other, missing | 0.5 | 0.4 | 0.5 | 0.3 | 0.4 | 0.6 | 0.3 | 0.3 | 0.6 | 0.5 | 0.5 | 0.4 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Number giving blood | 1,667 | 7,756 | 876 | 969 | 1,142 | 857 | 1,192 | 958 | 1,420 | 1,008 | 1,001 | 9,423 |
| MEN |  |  |  |  |  |  |  |  |  |  |  |  |
| Venous | 94.7 | 97.7 | 97.2 | 92.9 | 98.8 | 96.6 | 96.7 | 95.3 | 98.3 | 99.3 | 98.9 | 97.2 |
| Blood spot | 5.1 | 1.7 | 2.2 | 6.9 | 1.1 | 2.6 | 3.0 | 4.1 | 1.2 | 0.2 | 0.6 | 2.3 |
| Other, missing | 0.2 | 0.5 | 0.6 | 0.1 | 0.1 | 0.8 | 0.3 | 0.6 | 0.5 | 0.5 | 0.5 | 0.5 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Number giving blood | 1,225 | 6,288 | 772 | 709 | 857 | 769 | 869 | 781 | 1,109 | 861 | 786 | 7,513 |
| TOTAL |  |  |  |  |  |  |  |  |  |  |  |  |
| Venous | 92.9 | 97.5 | 96.7 | 90.8 | 98.8 | 96.6 | 96.7 | 95.2 | 97.7 | 98.1 | 98.6 | 96.7 |
| Blood spot | 6.8 | 2.1 | 2.7 | 8.9 | 1.0 | 2.8 | 3.0 | 4.4 | 1.8 | 1.4 | 0.9 | 2.9 |
| Other, missing | 0.3 | 0.5 | 0.5 | 0.2 | 0.3 | 0.7 | 0.3 | 0.5 | 0.6 | 0.5 | 0.5 | 0.4 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Number giving blood | 2,892 | 14,044 | 1,648 | 1,678 | 1,999 | 1,626 | 2,061 | 1,739 | 2,529 | 1,869 | 1,787 | 16,936 |

### 9.4 Syphilis Prevalence by Age and Sex

Survey results indicate that 3 percent of Ugandan adults are currently infected with syphilis (Table 9.2 and Figure 9.1), with the same level among women and men aged 15-49. Syphilis is slightly more common among younger women than men, but among those aged 30 and over, the disease is more prevalent among men than women.

Prevalence for both women and men generally increases with age. Among women, the highest level occurs at ages $50-54$ (6 percent), while among men, the highest rate is at ages 45-49 (9 percent).

Table 9.2
Syphilis prevalence by age, Uganda 2004-05

| Age | Women |  | Men |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Percentage positive for syphilis | Number tested | Percentage positive for syphilis | Number tested | Percentage positive for syphilis | Number tested |
| 15-19 | 1.3 | 1,979 | 0.9 | 1,890 | 1.1 | 3,869 |
| 20-24 | 3.0 | 1,752 | 1.4 | 1,147 | 2.4 | 2,899 |
| 25-29 | 3.4 | 1,615 | 2.5 | 1,091 | 3.0 | 2,707 |
| 30-34 | 3.0 | 1,339 | 3.5 | 1,110 | 3.3 | 2,450 |
| 35-39 | 4.9 | 1,001 | 4.4 | 842 | 4.7 | 1,843 |
| 40-44 | 5.1 | 789 | 6.0 | 731 | 5.5 | 1,520 |
| 45-49 | 3.4 | 604 | 8.9 | 510 | 5.9 | 1,114 |
| 50-54 | 5.8 | 496 | 7.8 | 442 | 6.7 | 938 |
| 55-59 | 4.9 | 310 | 6.8 | 313 | 5.9 | 623 |
| Total 15-49 | 3.1 | 9,079 | 3.1 | 7,323 | 3.1 | 16,401 |
| Total 15-59 | 3.3 | 9,885 | 3.5 | 8,078 | 3.4 | 17,963 |

The prevalence of current syphilis infection as measured in the survey is substantially lower than that found in a study of 12,800 rural residents aged 15-59 in Rakai, Uganda; that study found that 10 percent of adults were positive for syphilis (Paxton et al., 1998).

Figure 9.1 Syphilis Prevalence by Sex and Age


### 9.5 Prevalence of Syphilis by Background Characteristics

Unlike HIV infection-which is more common among urban than rural residents-there is virtually no urban-rural difference in the level of infection with syphilis (Table 9.3). Regional variations also differ from those for HIV infection. Whereas Northeast has one of the lowest levels of HIV infection, it shows the highest level of syphilis infection (5 percent), followed by North Central region (5 percent). West Nile has the lowest level of both HIV and syphilis infection. However, Kampala has one of the highest levels of HIV infection and one of the lowest levels of syphilis infection (2 percent). It should be noted that the regional differences for syphilis infection are small. It is also worth noting that although syphilis facilitates HIV infection and thus might be expected to be highly correlated with HIV infection, unlike HIV, it is highly treatable. Therefore, differentials in syphilis infection might be expected to be different from HIV infection, since those who have better access to health care can easily be treated for syphilis.

Syphilis prevalence declines with the level of education for both women and men. It is slightly higher among those who are working (4 percent) than those who are not (2 percent). The data also show a steady decline in syphilis infection with wealth quintile.

Differences in syphilis infection by ethnic group show that the Karimojong are the most affected, with 9 percent testing positive. Again, this is the opposite of the results for HIV, which show the Karimojong with the lowest level of HIV infection. The Lugbara/Madi are the least likely to have syphilis (1 percent), followed by the Basoga and Baganda (2 percent). Differences in syphilis infection by religion are minimal.

Table 9.3
Syphilis prevalence by background characteristics, Uganda 2004-05

| Background characteristic | Women 15-49 |  | Men 15-49 |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Percent positive for syphilis | Number tested | Percent positive for syphilis | Number tested | Percent positive for syphilis | Number tested |
| Residence |  |  |  |  |  |  |
| Urban | 2.3 | 1,326 | 2.8 | 1,043 | 2.5 | 2,369 |
| Rural | 3.2 | 7,753 | 3.1 | 6,280 | 3.2 | 14,033 |
| Region |  |  |  |  |  |  |
| Central | 4.0 | 1,513 | 2.9 | 1,318 | 3.5 | 2,831 |
| Kampala | 1.9 | 566 | 2.3 | 480 | 2.0 | 1,046 |
| East Central | 2.3 | 1,455 | 1.8 | 1,066 | 2.1 | 2,521 |
| Eastern | 2.8 | 785 | 3.1 | 706 | 3.0 | 1,491 |
| Northeast | 5.0 | 754 | 4.8 | 549 | 4.9 | 1,303 |
| North Central | 3.4 | 874 | 5.9 | 711 | 4.5 | 1,586 |
| West Nile | 1.2 | 877 | 1.6 | 678 | 1.4 | 1,554 |
| Western | 4.4 | 1,040 | 3.8 | 870 | 4.2 | 1,910 |
| Southwest | 2.6 | 1,215 | 2.5 | 944 | 2.6 | 2,159 |
| Education |  |  |  |  |  |  |
| No education | 4.5 | 2,068 | 5.5 | 605 | 4.7 | 2,673 |
| Primary incomplete | 3.0 | 4,236 | 3.6 | 3,445 | 3.3 | 7,681 |
| Primary complete | 2.7 | 1,029 | 2.2 | 1,032 | 2.4 | 2,062 |
| Secondary+ | 1.9 | 1,731 | 2.0 | 2,231 | 1.9 | 3,962 |
| Employment |  |  |  |  |  |  |
| Currently working | 3.7 | 5,567 | 3.8 | 5,052 | 3.7 | 10,620 |
| Not working | 2.2 | 3,442 | 1.4 | 2,190 | 1.9 | 5,632 |
| Wealth quintile |  |  |  |  |  |  |
| Lowest | 4.6 | 1,480 | 4.1 | 1,117 | 4.4 | 2,597 |
| Second | 3.5 | 1,872 | 3.1 | 1,515 | 3.3 | 3,386 |
| Middle | 3.3 | 1,725 | 3.4 | 1,386 | 3.4 | 3,111 |
| Fourth | 2.8 | 1,846 | 2.9 | 1,522 | 2.9 | 3,368 |
| Highest | 1.9 | 2,157 | 2.3 | 1,783 | 2.1 | 3,939 |
| Ethnicity |  |  |  |  |  |  |
| Baganda | 2.2 | 1,598 | 2.7 | 1,260 | 2.4 | 2,859 |
| Banyankore | 3.0 | 941 | 2.2 | 756 | 2.7 | 1,696 |
| Iteso | 2.7 | 593 | 2.9 | 480 | 2.8 | 1,074 |
| Lugbara/Madi | 0.6 | 721 | 1.3 | 554 | 0.9 | 1,275 |
| Basoga | 1.6 | 881 | 1.9 | 674 | 1.8 | 1,555 |
| Langi | 3.3 | 466 | 5.0 | 416 | 4.1 | 882 |
| Bakiga | 4.0 | 613 | 2.9 | 530 | 3.5 | 1,142 |
| Karimojong | 9.6 | 269 | 7.2 | 175 | 8.6 | 444 |
| Acholi | 4.2 | 441 | 6.9 | 326 | 5.3 | 767 |
| Bagisu/Sabiny | 3.3 | 412 | 3.0 | 445 | 3.1 | 857 |
| Alur/Jopadhola | 4.4 | 467 | 3.5 | 403 | 4.0 | 870 |
| Banyara | 2.5 | 291 | 2.8 | 240 | 2.6 | 531 |
| Batoro | 4.7 | 221 | 5.5 | 196 | 5.1 | 417 |
| All others | 4.4 | 1,121 | 3.0 | 819 | 3.8 | 1,940 |
| Religion |  |  |  |  |  |  |
| Catholic | 3.8 | 3,773 | 3.6 | 3,073 | 3.7 | 6,846 |
| Anglican/Protestant | 2.5 | 3,083 | 2.5 | 2,672 | 2.5 | 5,756 |
| Other Christian | 3.3 | 802 | 3.7 | 499 | 3.5 | 1,301 |
| Muslim | 2.2 | 1,251 | 2.6 | 947 | 2.4 | 2,199 |
| Other | 7.6 | 100 | 6.6 | 74 | 7.2 | 175 |
| Total 15-49 | 3.1 | 9,079 | 3.1 | 7,323 | 3.1 | 16,401 |
| Total 15-59 | 3.3 | 9,885 | 3.5 | 8,078 | 3.4 | 17,963 |

Note: Totals include some cases with missing information

### 9.6 Syphilis Prevalence by Sociodemographic Characteristics

Syphilis prevalence varies by marital status. Table 9.4 shows that those who are widowed are the most likely have syphilis ( 5 percent), while those who have never been in union are the least likely (1 percent). The fact that those who say they have never had sex are equally as likely to have syphilis as those who have never married but have had sex (1 percent for both) is disturbing and may reflect underreporting of sexual experience, nonsexual transmission of the disease, and/or testing errors.

There are no significant differences in syphilis prevalence by type of union (polygynous or not), or for women, by whether they are pregnant or not, or whether they received antenatal care for a birth in the three years preceding the survey or not. Similarly, there is no significant difference in syphilis prevalence among men who are circumcised and those who are not.

Table 9.4
Syphilis prevalence by sociodemographic characteristics, Uganda 2004-05

| Sociodemographic characteristic | Women 15-49 |  | Men 15-49 |  | Total 15-49 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Percentage positive for syphilis | Number tested | Percentage positive for syphilis | Number tested | Percentage positive for syphilis | Number tested |
| Marital status |  |  |  |  |  |  |
| Currently in union | 3.5 | 5,798 | 4.3 | 3,876 | 3.8 | 9,674 |
| Widowed ${ }^{1}$ | 5.5 | 540 | 4.4 | 93 | 5.4 | 634 |
| Divorced/separated | 3.3 | 714 | 4.4 | 480 | 3.8 | 1,194 |
| Never in union | 1.2 | 1,988 | 1.2 | 2,836 | 1.2 | 4,824 |
| Ever had sex | 0.9 | 774 | 1.4 | 1,544 | 1.2 | 2,318 |
| Never had sex | 1.4 | 1,214 | 1.0 | 1,292 | 1.2 | 2,506 |
| Type of union |  |  |  |  |  |  |
| In polygynous union | 3.6 | 1,902 | 5.2 | 837 | 4.1 | 2,739 |
| Not in polygynous union | 3.5 | 3,896 | 4.0 | 3,039 | 3.7 | 6,935 |
| Not currently in union | 2.4 | 3,242 | 1.8 | 3,409 | 2.1 | 6,651 |
| Currently pregnant |  |  |  |  |  |  |
| Pregnant | 2.9 | 1,034 | na | na | 2.9 | 1,034 |
| Not pregnant/ not sure | 3.1 | 7,974 | na | na | 3.1 | 7,974 |
| Births in past 3 years |  |  |  |  |  |  |
| None | 3.1 | 4,672 | na | na | 3.1 | 4,672 |
| Birth and ANC | 3.0 | 3,760 | na | na | 3.0 | 3,760 |
| Birth and no ANC | 4.3 | 608 | na | na | 4.3 | 608 |
| Male circumcision status |  |  |  |  |  |  |
| Circumcised | na | na | 2.7 | 1,821 | 2.7 | 1,821 |
| Not circumcised | na | na | 3.2 | 5,458 | 3.2 | 5,458 |
| Total 15-49 | 3.1 | 9,079 | 3.1 | 7,323 | 3.1 | 16,401 |
| Total 15-59 | 3.3 | 9,885 | 3.5 | 8,078 | 3.4 | 17,963 |

Note: Totals include a small number of cases with missing information.
${ }^{1}$ The category 'widowed' consists of those who are not currently married and who had a previous spouse who died. It may be slightly overestimated to the extent that respondents who are currently divorced but previously widowed are considered widowed instead of divorced.
ANC = antenatal care
na $=$ Not applicable

### 9.7 Syphilis Prevalence by Sexual Risk Behaviours

Table 9.5 examines the prevalence of syphilis infection according to several sexual behaviours among respondents who have ever had sexual intercourse. There are no strong differences for any of the variables examined. There is a slight tendency for syphilis prevalence to increase with the number of sexual partners in the previous 12 months. However, the relationship with the number of higher-risk sexual partners in the previous 12 months is erratic. Differences by condom use variables are also very small.

Table 9.5
Syphilis prevalence by sexual behaviour characteristics, Uganda 2004-05

| Sexual behaviour characteristic | Women 15-49 who ever had sex |  | Men 15-49 who ever had sex |  | Total 15-49 who ever had sex |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Percentage positive for syphilis | Number | Percentage positive for syphilis | Number | Percentage positive for syphilis | Number |
| Age at first sex |  |  |  |  |  |  |
| $<15$ | 3.9 | 1,379 | 2.2 | 881 | 3.3 | 2,260 |
| 15-17 | 2.8 | 3,516 | 3.9 | 2,139 | 3.2 | 5,655 |
| 18-19 | 4.1 | 1,431 | 3.9 | 1,405 | 4.0 | 2,836 |
| 20+ | 3.5 | 1,500 | 3.5 | 1,568 | 3.5 | 3,068 |
| Higher-risk sex in past $\mathbf{1 2}$ months |  |  |  |  |  |  |
| Had higher-risk sex | 3.2 | 1,027 | 3.1 | 1,897 | 3.1 | 2,923 |
| Had sex, not higher risk | 3.4 | 5,696 | 4.1 | 3,250 | 3.7 | 8,946 |
| No sex in past 12 months | 3.4 | 1,104 | 2.7 | 846 | 3.1 | 1,950 |
| Number of partners in past 12 months |  |  |  |  |  |  |
| 0 | 3.4 | 1,100 | 2.6 | 840 | 3.0 | 1,940 |
| 1 | 3.2 | 6,467 | 3.6 | 3,626 | 3.4 | 10,093 |
| 2 | 7.4 | 240 | 4.3 | 1,164 | 4.8 | 1,403 |
| $3+$ | * | 20 | 3.0 | 363 | 2.8 | 383 |
| Number of higher-risk partners in past 12 months |  |  |  |  |  |  |
| 0 | 3.4 | 6,801 | 3.8 | 4,081 | 3.6 | 10,881 |
| 1 | 2.3 | 931 | 3.5 | 1,448 | 3.0 | 2,379 |
| 2 | 13.8 | 82 | 1.4 | 313 | 4.0 | 395 |
| $3+$ | * | 13 | 2.5 | 152 | 2.3 | 165 |
| Any condom use ever |  |  |  |  |  |  |
| Used condom | 2.8 | 2,352 | 2.7 | 2,994 | 2.8 | 5,347 |
| Never used condom | 3.6 | 5,474 | 4.4 | 2,998 | 3.9 | 8,473 |
| Condom use at last sex in past 12 months ${ }^{1}$ |  |  |  |  |  |  |
| Used condom | 2.6 | 605 | 1.6 | 810 | 2.0 | 1,416 |
| Did not use condom | 3.5 | 6,115 | 4.1 | 4,328 | 3.7 | 10,443 |
| Condom use at last higher-risk sex in past 12 months ${ }^{1}$ |  |  |  |  |  |  |
| Used condom | 2.9 | 478 | 2.6 | 1,002 | 2.7 | 1,480 |
| Did not use condom | 3.4 | 546 | 3.6 | 886 | 3.5 | 1,432 |
| No higher-risk sex | 3.4 | 5,696 | 4.1 | 3,250 | 3.7 | 8,946 |
| Total 15-49 | 3.4 | 7,827 | 3.5 | 5,993 | 3.5 | 13,820 |
| Total 15-59 | 3.6 | 8,630 | 4.0 | 6,743 | 3.8 | 15,374 |

Note: Higher-risk sex refers to sex with a nonmarital, noncohabiting partner. An asterisk refers to a figure based on fewer than 25 unweighted cases that has been suppressed.
${ }^{1}$ Refers to those who had sex in the past 12 months.

### 9.8 Syphilis Prevalence by STI Reporting

Table 9.6 shows that respondents who reported that they did not have a sexually transmitted infection (STI) or an STI symptom in the past 12 months were slightly more likely to be infected with syphilis than those who reported having had an STI or an STI symptom. This is contrary to expectation and implies that many people who have syphilis do not have symptoms.

| Table 9.6 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Syphilis prevalence by reporting of sexually transmitted infection (STI) or STI symptom in past 12 months, Uganda 2004-05 |  |  |  |  |  |  |
|  | Women 1 ever h | 5-49 who | Men 15 ever h | -49 who <br> had sex | Total 15 ever h | 49 who d sex |
| STI status | Percentage positive for syphilis | Number of women | Percentage positive for syphilis | Number of men | Percentage positive for syphilis | Number |
| Had STI or STI symptoms | 3.5 | 2,653 | 2.6 | 1,288 | 3.2 | 3,940 |
| No STI, no symptoms | 3.4 | 5,174 | 3.8 | 4,705 | 3.6 | 9,879 |
| Total | 3.4 | 7,827 | 3.5 | 5,993 | 3.5 | 13,820 |
| STI = Sexually transmitted infection |  |  |  |  |  |  |

### 9.9 Syphilis Prevalence among Cohabiting Couples

Table 9.7 shows that there is a relatively high level of ‘discordance’ for syphilis infection among cohabiting couples in Uganda, that is, cases in which only one partner is infected. In 4 percent of couples, the man has syphilis and the woman does not, while in 3 percent of couples, the woman has syphilis and the man does not, for a total of 7 percent of couples being discordant. For a small fraction (less than 1 percent) of cohabiting couples both partners have syphilis. Differences by background characteristics are small.

| Table 9.7 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Syphilis prevalence among cohabiting couples, Uganda 2004-05 |  |  |  |  |  |  |
| Background characteristic | Both partners have syphilis | Man positive, woman negative | Woman positive, man negative | Both partners do not have syphilis | Total | Number |
| Woman's age |  |  |  |  |  |  |
| 15-19 | 0.0 | 1.7 | 1.3 | 97.0 | 100.0 | 214 |
| 20-29 | 0.4 | 2.8 | 2.6 | 94.2 | 100.0 | 1,655 |
| 30-39 | 1.0 | 5.5 | 3.5 | 90.0 | 100.0 | 1,157 |
| 40-59 | 1.1 | 6.1 | 2.4 | 90.4 | 100.0 | 686 |
| Man's age |  |  |  |  |  |  |
| 15-19 | * | * | * | * | 100.0 | 21 |
| 20-29 | 0.3 | 2.0 | 2.6 | 95.1 | 100.0 | 879 |
| 30-39 | 0.7 | 3.8 | 2.8 | 92.7 | 100.0 | 1,382 |
| 40-59 | 1.0 | 6.0 | 2.9 | 90.1 | 100.0 | 1,429 |
| Type of union |  |  |  |  |  |  |
| Monogamous | 0.8 | 4.0 | 2.7 | 92.5 | 100.0 | 2,612 |
| Polygynous | 0.6 | 5.2 | 2.7 | 91.5 | 100.0 | 820 |
| Couple disagrees on status | 0.2 | 3.4 | 3.4 | 93.0 | 100.0 | 279 |
| Residence |  |  |  |  |  |  |
| Urban | 0.3 | 4.1 | 2.3 | 93.4 | 100.0 | 311 |
| Rural | 0.7 | 4.2 | 2.8 | 92.2 | 100.0 | 3,401 |
| Region |  |  |  |  |  |  |
| Central | 0.6 | 4.0 | 3.6 | 91.8 | 100.0 | 557 |
| Kampala | 0.0 | 3.4 | 1.4 | 95.2 | 100.0 | 98 |
| East Central | 0.2 | 2.7 | 3.0 | 94.0 | 100.0 | 565 |
| Eastern | 0.8 | 5.2 | 2.8 | 91.3 | 100.0 | 401 |
| Northeast | 0.9 | 4.6 | 3.0 | 91.4 | 100.0 | 372 |
| North Central | 1.3 | 8.4 | 2.9 | 87.4 | 100.0 | 415 |
| West Nile | 0.5 | 2.0 | 0.9 | 96.6 | 100.0 | 347 |
| Western | 1.1 | 3.6 | 3.5 | 91.8 | 100.0 | 486 |
| Southwest | 0.5 | 3.6 | 2.1 | 93.7 | 100.0 | 471 |
| Woman's education |  |  |  |  |  |  |
| No education | 1.1 | 4.7 | 3.1 | 91.0 | 100.0 | 1,089 |
| Primary incomplete | 0.7 | 4.3 | 2.7 | 92.3 | 100.0 | 1,829 |
| Primary complete | 0.3 | 3.2 | 2.8 | 93.6 | 100.0 | 383 |
| Secondary+ | 0.0 | 3.5 | 1.9 | 94.6 | 100.0 | 405 |
| Man's education |  |  |  |  |  |  |
| No education | 1.5 | 4.2 | 5.8 | 88.5 | 100.0 | 450 |
| Primary incomplete | 0.9 | 4.6 | 2.3 | 92.2 | 100.0 | 1,790 |
| Primary complete | 0.5 | 3.4 | 2.9 | 93.2 | 100.0 | 631 |
| Secondary+ | 0.1 | 4.0 | 2.0 | 93.8 | 100.0 | 831 |
| Wealth quintile |  |  |  |  |  |  |
| Lowest | 1.3 | 4.2 | 2.6 | 91.9 | 100.0 | 651 |
| Second | 0.8 | 4.7 | 3.7 | 90.9 | 100.0 | 812 |
| Middle | 0.6 | 4.2 | 2.3 | 92.9 | 100.0 | 826 |
| Fourth | 0.6 | 4.0 | 3.1 | 92.2 | 100.0 | 812 |
| Highest | 0.2 | 3.8 | 2.0 | 94.1 | 100.0 | 611 |
| Total | 0.7 | 4.2 | 2.8 | 92.3 | 100.0 | 3,711 |
| Note: Data refer to only those couples in which both partners were tested. An asterisk indicates a figure that is based on fewer than 25 cases that has been suppressed. Totals include some cases with missing values. |  |  |  |  |  |  |

### 10.1 Key Findings

- Herpes simplex type 2 is widespread, with 44 percent of Ugandan adults aged 15-49 infected.
- Women (49 percent) are more likely to be infected with herpes than men (38 percent).
- Herpes infection rises rapidly with age; more than two-thirds of those in their 40 s are infected.
- Of all couples in which at least one partner is infected with HSV-2, almost half (45 percent) are discordant.
- One in ten Ugandan adults is infected with hepatitis B; residents of Northeast and North Central regions are particularly affected.
- The likelihood of being infected with hepatitis B declines steadily with increasing education level and wealth quintile.


### 10.2 Introduction

Venous blood samples from adults were also tested for the herpes simplex type 2 virus (HSV-2) and for hepatitis B. Hepatitis B testing was done on only one-third of the adults for whom blood samples were obtained.

Although both herpes simplex type 1 and type 2 can cause oral or genital infections, HSV-1 is most commonly associated with oral infection, while HSV-2 causes predominantly genital infections. Since HSV-2 is almost exclusively sexually transmitted, its seroprevalence can be used as a marker of genital herpes (Stanberry and Rosenthal, 1999). Because it can cause genital ulcers, HSV-2 is also linked to increased risk of HIV transmission (Laeyendecker et al., 2004).

Because HSV-2 testing required a venous blood sample, the response rates were similar to those for syphilis.

### 10.3 Herpes Prevalence by Age and Sex

Survey results indicate that herpes infection is widespread with close to half of Ugandan adults infected with herpes simplex type 2 (HSV-2). As shown in Table 10.1, 49 percent of women and 38 percent of men aged 15-49 are infected.

Table 10.1
Prevalence of herpes simplex type 2 by age and sex, Uganda 2004-05

| Age | Women |  | Men |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Percentage positive for herpes | Number tested | Percentage positive for herpes | Number tested | Percentage positive for herpes | Number tested |
| 15-19 | 20.6 | 1,963 | 17.8 | 1,879 | 19.2 | 3,841 |
| 20-24 | 38.4 | 1,757 | 27.2 | 1,146 | 34.0 | 2,903 |
| 25-29 | 49.6 | 1,612 | 36.9 | 1,092 | 44.5 | 2,704 |
| 30-34 | 61.5 | 1,344 | 46.5 | 1,111 | 54.7 | 2,455 |
| 35-39 | 68.9 | 998 | 53.4 | 847 | 61.8 | 1,846 |
| 40-44 | 73.2 | 788 | 59.5 | 730 | 66.6 | 1,518 |
| 45-49 | 75.1 | 608 | 62.2 | 516 | 69.2 | 1,124 |
| 50-54 | 73.9 | 494 | 67.1 | 442 | 70.7 | 936 |
| 55-59 | 72.6 | 310 | 62.5 | 317 | 67.5 | 627 |
| Total 15-49 | 48.8 | 9,070 | 37.9 | 7,321 | 43.9 | 16,391 |
| Total 15-59 | 50.8 | 9,874 | 40.4 | 8,079 | 46.1 | 17,953 |

Prevalence of HSV-2 increases rapidly with age (Figure 10.1), from about 20 percent of those aged 15-19 to around two-thirds of those aged 40 and over.

Prevalence among women is higher than among men for every age group. By the time women reach their forties, three-fourths of them are infected with HSV-2.

Figure 10.1 Herpes Prevalence by Sex and Age


### 10.4 Prevalence of Herpes by Background Characteristics

As with syphilis infection, there is virtually no urban-rural difference in the level of infection with HSV-2. Central, East Central, and North Central regions all show levels of HSV-2 infection of about 50 percent. As with HIV and syphilis infection, West Nile region has the lowest level of HSV-2 infection, with only 29 percent of adults 15-49 infected.

HSV-2 prevalence declines with the level of education for both women and men, especially among those with at least some secondary education. It is also higher among those who are working ( 50 percent) than those who are not ( 34 percent). Infection with HSV-2 shows an inverted $U$ shape with respect to wealth, with higher rates at the middle wealth quintiles.

Differences in HSV-2 infection by ethnic group show that the Batoro, Banyara, Langi, and Basoga ethnic groups are most affected, with 50 percent or more infected. The Lugbara/Madi are the least likely to have HSV-2 (29 percent), followed by the Karimojong (31 percent). Differences in infection by religion are minimal.

Table 10.2
Prevalence of herpes simplex type 2 by background characteristics, Uganda 2004-05

| Background characteristic | Women 15-49 |  | Men 15-49 |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Percentage positive for herpes | Number tested | Percentage positive for herpes | Number tested | Percentage positive for herpes | Number tested |
| Residence |  |  |  |  |  |  |
| Urban | 49.7 | 1,322 | 34.8 | 1,042 | 43.1 | 2,364 |
| Rural | 48.7 | 7,748 | 38.4 | 6,279 | 44.1 | 14,027 |
| Region |  |  |  |  |  |  |
| Central | 59.2 | 1,508 | 43.4 | 1,318 | 51.8 | 2,826 |
| Kampala | 46.2 | 566 | 31.4 | 479 | 39.4 | 1,045 |
| East Central | 53.9 | 1,448 | 41.2 | 1,066 | 48.5 | 2,515 |
| Eastern | 51.5 | 784 | 40.7 | 700 | 46.4 | 1,484 |
| Northeast | 45.5 | 754 | 38.5 | 553 | 42.5 | 1,307 |
| North Central | 52.6 | 873 | 41.8 | 708 | 47.8 | 1,582 |
| West Nile | 31.7 | 880 | 25.6 | 678 | 29.0 | 1,558 |
| Western | 49.5 | 1,045 | 41.8 | 878 | 46.0 | 1,922 |
| Southwest | 40.5 | 1,212 | 29.5 | 941 | 35.7 | 2,152 |
| Education |  |  |  |  |  |  |
| No education | 53.6 | 2,068 | 42.6 | 613 | 51.1 | 2,680 |
| Primary incomplete | 50.5 | 4,229 | 39.1 | 3,439 | 45.4 | 7,669 |
| Primary complete | 48.2 | 1,030 | 40.5 | 1,031 | 44.3 | 2,061 |
| Secondary+ | 39.3 | 1,727 | 33.5 | 2,230 | 36.0 | 3,956 |
| Employment |  |  |  |  |  |  |
| Currently working | 54.7 | 5,567 | 43.8 | 5,067 | 49.5 | 10,634 |
| Not working | 39.7 | 3,434 | 24.6 | 2,176 | 33.8 | 5,610 |
| Wealth quintile |  |  |  |  |  |  |
| Lowest | 45.6 | 1,483 | 36.4 | 1,124 | 41.6 | 2,607 |
| Second | 47.2 | 1,862 | 38.0 | 1,510 | 43.1 | 3,372 |
| Middle | 51.9 | 1,729 | 40.0 | 1,385 | 46.6 | 3,114 |
| Fourth | 50.3 | 1,845 | 42.4 | 1,521 | 46.7 | 3,367 |
| Highest | 48.7 | 2,150 | 33.2 | 1,780 | 41.7 | 3,930 |
| Ethnicity |  |  |  |  |  |  |
| Baganda | 54.5 | 1,596 | 39.2 | 1,262 | 47.7 | 2,858 |
| Banyankore | 48.7 | 938 | 36.3 | 758 | 43.2 | 1,696 |
| Iteso | 50.9 | 592 | 42.8 | 482 | 47.3 | 1,074 |
| Lugbara/Madi | 30.7 | 722 | 26.2 | 553 | 28.7 | 1,275 |
| Basoga | 55.9 | 876 | 42.4 | 672 | 50.0 | 1,548 |
| Langi | 56.5 | 466 | 44.8 | 416 | 51.0 | 882 |
| Bakiga | 41.9 | 617 | 33.9 | 528 | 38.2 | 1,145 |
| Karimojong | 31.5 | 269 | 30.9 | 177 | 31.2 | 446 |
| Acholi | 49.0 | 439 | 38.1 | 323 | 44.4 | 762 |
| Bagisu/Sabiny | 51.7 | 409 | 39.8 | 441 | 45.5 | 850 |
| Alur/Jopadhola | 48.0 | 469 | 34.8 | 404 | 41.9 | 874 |
| Banyara | 56.6 | 295 | 49.6 | 243 | 53.4 | 538 |
| Batoro | 60.9 | 223 | 46.9 | 195 | 54.4 | 418 |
| All others | 46.9 | 1,113 | 36.0 | 819 | 42.3 | 1,932 |
| Religion |  |  |  |  |  |  |
| Catholic | 47.8 | 3,784 | 38.9 | 3,074 | 43.8 | 6,857 |
| Anglican/Protestant | 51.7 | 3,076 | 38.5 | 2,673 | 45.6 | 5,750 |
| Other Christian | 49.4 | 798 | 36.4 | 496 | 44.4 | 1,294 |
| Muslim | 46.6 | 1,243 | 35.3 | 947 | 41.7 | 2,190 |
| Other | 44.6 | 100 | 31.9 | 74 | 39.2 | 174 |
| Total 15-49 | 48.8 | 9,070 | 37.9 | 7,321 | 43.9 | 16,391 |
| Total 15-59 | 50.8 | 9,874 | 40.4 | 8,079 | 46.1 | 17,953 |

Note: Totals include some cases with missing information.

### 10.5 Prevalence of Herpes by Sociodemographic Characteristics

Table 10.3 shows that those who are widowed are the most likely to test positive for HSV-2 ( 78 percent), while those who have never been in union are the least likely ( 20 percent). Those who are currently in union (52 percent) and those who are divorced or separated (58 percent) have intermediate levels of HSV-2 infection. Because HSV-2 infection rises rapidly with age, some of the relationship with marital status may reflect this age pattern.

A significant finding is that 16 percent of those who have never had sex tested positive for HSV-2. Although some of these respondents might be underreporting their sexual experience, some may have been infected through means other than sexual intercourse. The possibility of testing errors needs to also be investigated.

Those who are in a polygynous union are more likely to be infected with herpes than those who are in a monogamous union ( 60 and 49 percent, respectively). It is disturbing to see that 44 percent of pregnant women have HSV-2, because the virus can cause severe problems at birth. There is little difference in HSV-2 infection levels by whether women received antenatal care for a birth in the three years preceding the survey or not or by whether men are circumcised or not.

Table 10.3
Prevalence of herpes simplex type 2 by socio-emographic characteristics, Uganda 2004-05

| Sociodemographic characteristic | Women 15-49 |  | Men 15-49 |  | Total 15-49 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Percentage positive for herpes | Number tested | Percentage positive for herpes | Number tested | Percentage positive for herpes | Number tested |
| Marital status |  |  |  |  |  |  |
| Currently in union | 54.0 | 5,803 | 48.9 | 3,887 | 51.9 | 9,691 |
| Widowed ${ }^{1}$ | 79.1 | 543 | 69.0 | 94 | 77.6 | 637 |
| Divorced/separated | 64.0 | 716 | 50.3 | 484 | 58.4 | 1,200 |
| Never in union | 20.6 | 1,968 | 20.0 | 2,818 | 20.3 | 4,786 |
| Ever had sex | 29.5 | 770 | 22.6 | 1,541 | 24.9 | 2,311 |
| Never had sex | 14.9 | 1,198 | 16.9 | 1,278 | 16.0 | 2,475 |
| Type of union |  |  |  |  |  |  |
| In polygynous union | 61.0 | 1,910 | 56.4 | 835 | 59.6 | 2,745 |
| Not in polygynous union | 50.6 | 3,894 | 46.8 | 3,052 | 48.9 | 6,945 |
| Not currently in union | 40.1 | 3,228 | 25.7 | 3,396 | 32.7 | 6,624 |
| Currently pregnant |  |  |  |  |  |  |
| Pregnant | 43.9 | 1,038 | na | na | na | na |
| Not pregnant/not sure | 49.6 | 7,960 | na | na | na | na |
| Birth in last 3 years |  |  |  |  |  |  |
| None | 48.3 | 4,657 | na | na | na | na |
| Birth and ANC | 49.4 | 3,767 | na | na | na | na |
| Birth and no ANC | 52.0 | 606 | na | na | na | na |
| Male circumcision status |  |  |  |  |  |  |
| Circumcised | na | na | 37.3 | 1,819 | 37.3 | 1,819 |
| Not circumcised | na | na | 38.4 | 5,459 | 38.4 | 5,459 |
| Total 15-49 | 48.8 | 9,070 | 37.9 | 7,321 | 43.9 | 16,391 |
| Total 15-59 | 50.8 | 9,874 | 40.4 | 8,079 | 46.1 | 17,953 |

[^11]
### 10.6 Prevalence of Herpes by STI Reporting

Table 10.4 shows that respondents who reported that they had a sexually transmitted infection (STI) or an STI symptom in the past 12 months were more likely to test positive for HSV-2 (61 percent) than those who reported having had no STI and no STI symptoms (45 percent). Nevertheless, the data show that many of those who have HSV-2 do not have any symptoms, a finding reflected in other studies (Stanberry and Rosenthal, 1999).

| Table 10.4 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Prevalence of herpes simplex type 2 by reporting of sexually transmitted infection (STI) or STI symptom in the past 12 months, Uganda 2004-05 |  |  |  |  |  |  |
|  | Women 1 ever h | 5-49 who <br> ad sex | Men 15 ever had | 49 who d sex | Total 15 ever had | 49 who <br> d sex |
| STI status | Percentage positive for herpes | Number of women | Percentage positive for herpes | Number of men | Percentage positive for herpes | Number |
| Had STI or STI symptoms | 63.7 | 2,648 | 53.8 | 1,288 | 60.5 | 3,936 |
| No STI, no symptoms | 49.4 | 5,186 | 39.5 | 4,718 | 44.7 | 9,903 |
| Total | 54.2 | 7,833 | 42.6 | 6,006 | 49.2 | 13,839 |
| STI = Sexually transmitted infection |  |  |  |  |  |  |

### 10.7 Prevalence of Herpes among Cohabiting Couples

Table 10.5 shows that among cohabiting couples in Uganda, for approximately one-third, neither partner has herpes, for another 40 percent, both partners have herpes, while the remaining 26 percent of couples are discordant, i.e., one partner is infected and the other is not. Looked at another way, of all couples in which one or both partners are infected with HSV-2, 40 percent are discordant. Discordance is about equally a result of the woman or the man being infected. For example, in 14 percent of couples, the woman is HSV-2-positive and the man is negative, while in 12 percent of couples, the man has HSV-2 and the woman does not.

Differences by background characteristics reflect those for HSV-2 prevalence discussed above. However, although HSV-2 infection does not differ by urban-rural residence, rural couples show a somewhat higher level of discordance than urban couples.

| Table 10.5 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Prevalence of herpes simplex type 2 among cohabiting couples, Uganda 2004-05 |  |  |  |  |  |  |
| Background characteristic | Both partners have herpes | Man positive, woman negative | Woman positive, man negative | Neither partner has herpes | Total | Number |
| Woman's age |  |  |  |  |  |  |
| 15-19 | 22.8 | 17.3 | 11.1 | 48.8 | 100.0 | 212 |
| 20-29 | 30.5 | 15.1 | 13.6 | 40.8 | 100.0 | 1,628 |
| 30-39 | 47.9 | 9.1 | 13.6 | 29.3 | 100.0 | 1,144 |
| 40-59 | 55.4 | 8.4 | 14.8 | 21.4 | 100.0 | 681 |
| Man's age |  |  |  |  |  |  |
| 15-19 | * | * | * | * | 100.0 | 21 |
| 20-29 | 21.7 | 15.6 | 14.9 | 47.8 | 100.0 | 862 |
| 30-39 | 36.9 | 13.0 | 13.5 | 36.6 | 100.0 | 1,365 |
| 40-59 | 54.7 | 9.1 | 13.2 | 23.1 | 100.0 | 1,417 |
| Type of union |  |  |  |  |  |  |
| Monogamous | 37.6 | 12.4 | 13.3 | 36.7 | 100.0 | 2,581 |
| Polygynous | 46.0 | 11.1 | 15.0 | 27.9 | 100.0 | 809 |
| Couple disagrees on status | 46.1 | 12.4 | 13.6 | 27.8 | 100.0 | 274 |
| Residence |  |  |  |  |  |  |
| Urban | 45.7 | 6.6 | 16.6 | 31.2 | 100.0 | 308 |
| Rural | 39.6 | 12.6 | 13.4 | 34.3 | 100.0 | 3,357 |
| Region |  |  |  |  |  |  |
| Central | 49.7 | 11.5 | 14.6 | 24.2 | 100.0 | 552 |
| Kampala | 44.8 | 6.9 | 15.9 | 32.4 | 100.0 | 98 |
| East Central | 42.7 | 12.6 | 16.9 | 27.8 | 100.0 | 559 |
| Eastern | 47.3 | 9.5 | 13.9 | 29.4 | 100.0 | 398 |
| Northeast | 34.9 | 13.3 | 15.6 | 36.3 | 100.0 | 367 |
| North Central | 42.1 | 13.2 | 13.1 | 31.6 | 100.0 | 399 |
| West Nile | 21.0 | 15.1 | 13.3 | 50.6 | 100.0 | 340 |
| Western | 42.7 | 12.6 | 12.9 | 31.8 | 100.0 | 481 |
| Southwest | 32.3 | 11.2 | 8.4 | 48.1 | 100.0 | 470 |
| Woman's education |  |  |  |  |  |  |
| No education | 38.0 | 11.3 | 14.2 | 36.4 | 100.0 | 1,069 |
| Primary incomplete | 41.8 | 13.0 | 13.6 | 31.6 | 100.0 | 1,814 |
| Primary complete | 42.5 | 10.6 | 11.1 | 35.8 | 100.0 | 376 |
| Secondary+ | 35.8 | 11.7 | 15.4 | 37.0 | 100.0 | 401 |
| Man's education |  |  |  |  |  |  |
| No education | 38.1 | 12.2 | 15.1 | 34.6 | 100.0 | 444 |
| Primary incomplete | 40.9 | 12.6 | 12.7 | 33.8 | 100.0 | 1,766 |
| Primary complete | 40.9 | 10.8 | 13.2 | 35.0 | 100.0 | 624 |
| Secondary+ | 38.8 | 12.0 | 15.5 | 33.7 | 100.0 | 820 |
| Wealth quintile |  |  |  |  |  |  |
| Lowest | 35.0 | 12.9 | 15.5 | 36.6 | 100.0 | 637 |
| Second | 38.6 | 12.5 | 10.4 | 38.6 | 100.0 | 799 |
| Middle | 42.0 | 9.3 | 13.9 | 34.8 | 100.0 | 818 |
| Fourth | 42.9 | 14.7 | 13.4 | 28.9 | 100.0 | 803 |
| Highest | 41.3 | 11.2 | 16.3 | 31.3 | 100.0 | 608 |
| Total | 40.1 | 12.1 | 13.7 | 34.1 | 100.0 | 3,665 |

Note: Data refer to only those couples in which both partners were tested. An asterisk indicates a figure that is based on fewer than 25 cases that has been suppressed.

### 10.8 Hepatitis B Infection

A random sample of roughly one-third of adults who provided venous blood samples were tested. This sample provided data for almost 6,000 respondents aged 15-59.

As shown in Table 10.6, 1 in 10 adults in Uganda is infected with hepatitis B. Overall rates are slightly higher for men than women (12 and 9 percent, respectively). There is surprisingly little variation in infection by age group.

Table 10.7 shows that rural respondents have slightly higher levels of hepatitis B infection (11 percent)

Table 10.6
Prevalence of infection with hepatitis B by age and sex, Uganda 2004-05

| Age | Women |  | Men |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Percentage positive for hepatitis B | Number tested | Percentage positive for hepatitis B | Number tested | Percentage positive for hepatitis B | Number tested |
| 15-19 | 9.4 | 622 | 8.2 | 616 | 8.8 | 1,237 |
| 20-24 | 8.7 | 555 | 13.9 | 373 | 10.8 | 928 |
| 25-29 | 8.5 | 554 | 11.6 | 373 | 9.7 | 926 |
| 30-34 | 8.0 | 457 | 15.0 | 373 | 11.2 | 830 |
| 35-39 | 9.3 | 331 | 13.7 | 264 | 11.3 | 595 |
| 40-44 | 11.0 | 253 | 9.8 | 245 | 10.4 | 498 |
| 45-49 | 8.9 | 191 | 13.5 | 170 | 11.1 | 361 |
| 50-54 | 10.5 | 163 | 14.6 | 146 | 12.4 | 308 |
| 55-59 | 8.6 | 95 | 6.8 | 97 | 7.7 | 192 |
| Total 15-49 | 9.0 | 2,961 | 11.8 | 2,413 | 10.2 | 5,375 |
| Total 15-59 | 9.1 | 3,219 | 11.8 | 2,656 | 10.3 | 5,875 | than urban residents (8 percent). With regard to regional differences, respondents in Northeast, North Central, and West Nile regions have considerably higher levels of infection than other respondents (24, 21, and 18 percent, respectively). Residents in Southwest region have the lowest infection rate of 4 percent. Kampala, East Central, Central, and Eastern regions all have lower than average levels of infection.

The likelihood of being infected with hepatitis B declines steadily with increasing education level and wealth quintile. For example, 16 percent of those in the lowest wealth quintile test positive for hepatitis B, compared with only 7 percent of those in the highest wealth quintile. The Karimojong, Langi, and Acholi are the most affected by hepatitis B, all having infection levels of more than 20 percent. The Lugbara/Madi and Iteso also have high levels of infection. Differences by religion are not large.

Table 10.7
Prevalence of infection with hepatitis B by background characteristics, Uganda 2004-05

| Background characteristic | Women 15-49 |  | Men 15-49 |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Percentage positive for hepatitis B | Number tested | Percentage positive for hepatitis B | Number tested | Percentage positive for hepatitis B | Number tested |
| Residence |  |  |  |  |  |  |
| Urban | 7.1 | 438 | 9.1 | 347 | 8.0 | 785 |
| Rural | 9.3 | 2,523 | 12.2 | 2,066 | 10.6 | 4,590 |
| Region |  |  |  |  |  |  |
| Central | 5.5 | 485 | 6.2 | 449 | 5.8 | 935 |
| Kampala | 5.8 | 192 | 5.0 | 158 | 5.5 | 350 |
| East Central | 3.4 | 477 | 8.5 | 330 | 5.5 | 807 |
| Eastern | 4.8 | 264 | 8.8 | 233 | 6.7 | 497 |
| Northeast | 21.7 | 261 | 28.4 | 170 | 24.3 | 430 |
| North Central | 19.4 | 279 | 23.4 | 241 | 21.2 | 520 |
| West Nile | 18.7 | 272 | 18.1 | 228 | 18.4 | 500 |
| Western | 7.8 | 344 | 13.1 | 281 | 10.2 | 625 |
| Southwest | 2.9 | 388 | 5.3 | 321 | 4.0 | 710 |
| Education |  |  |  |  |  |  |
| No education | 12.9 | 659 | 16.5 | 212 | 13.8 | 871 |
| Primary incomplete | 8.4 | 1,416 | 12.4 | 1,124 | 10.2 | 2,540 |
| Primary complete | 8.3 | 327 | 10.3 | 344 | 9.3 | 671 |
| Secondary+ | 6.3 | 552 | 10.1 | 729 | 8.5 | 1,281 |
| Employment |  |  |  |  |  |  |
| Currently working | 9.3 | 1,825 | 11.7 | 1,667 | 10.5 | 3,492 |
| Not working | 8.4 | 1,125 | 11.6 | 730 | 9.6 | 1,855 |
| Wealth quintile |  |  |  |  |  |  |
| Lowest | 14.5 | 485 | 17.6 | 360 | 15.8 | 845 |
| Second | 12.1 | 606 | 13.9 | 494 | 12.9 | 1,100 |
| Middle | 7.9 | 560 | 12.9 | 476 | 10.2 | 1,035 |
| Fourth | 6.1 | 619 | 9.5 | 485 | 7.6 | 1,104 |
| Highest | 5.9 | 692 | 7.5 | 598 | 6.6 | 1,289 |
| Ethnicity |  |  |  |  |  |  |
| Baganda | 4.2 | 512 | 4.5 | 430 | 4.4 | 942 |
| Banyankore | 5.2 | 310 | 7.5 | 268 | 6.3 | 578 |
| Iteso | 15.0 | 198 | 23.8 | 143 | 18.7 | 341 |
| Lugbara/Madi | 18.4 | 231 | 19.8 | 180 | 19.0 | 411 |
| Basoga | 2.4 | 295 | 6.5 | 202 | 4.1 | 497 |
| Langi | 20.5 | 149 | 23.0 | 147 | 21.8 | 296 |
| Bakiga | 3.9 | 197 | 8.1 | 179 | 5.9 | 376 |
| Karimojong | 29.3 | 89 | 28.3 | 59 | 28.9 | 148 |
| Acholi | 18.5 | 150 | 25.0 | 112 | 21.3 | 262 |
| Bagisu/Sabiny | 3.1 | 131 | 8.5 | 147 | 5.9 | 279 |
| Alur/Jopadhola | 8.5 | 169 | 15.3 | 126 | 11.4 | 295 |
| Banyara | 5.6 | 101 | 12.0 | 81 | 8.5 | 182 |
| Batoro | 5.9 | 71 | 5.3 | 57 | 5.7 | 128 |
| All others | 8.0 | 359 | 8.7 | 279 | 8.3 | 638 |
| Religion |  |  |  |  |  |  |
| Catholic | 11.1 | 1,228 | 12.4 | 1,028 | 11.7 | 2,257 |
| Anglican/Protestant | 7.5 | 1,062 | 11.1 | 866 | 9.2 | 1,928 |
| Other Christian | 7.3 | 251 | 15.0 | 173 | 10.4 | 424 |
| Muslim | 5.9 | 384 | 8.3 | 308 | 6.9 | 692 |
| Other | (29.1) | 29 | 25.6 | 30 | 27.4 | 59 |
| Total 15-49 | 9.0 | 2,961 | 11.8 | 2,413 | 10.2 | 5,375 |
| Total 15-59 | 9.1 | 3,219 | 11.8 | 2,656 | 10.3 | 5,875 |

[^12]
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## ESTIMATES OF SAMPLING ERRORS

The estimates from a sample survey are affected by two types of errors: 1) nonsampling errors, and 2 ) sampling errors. Nonsampling errors are the results of mistakes made in implementing data collection and data processing, such as failure to locate and interview the correct household, misunderstanding of the questions on the part of either the interviewer or the respondent, and data entry errors. Although numerous efforts were made during the implementation of the 2004-05 Uganda HIV/AIDS SeroBehavioural Survey (UHSBS) to minimise this type of error, nonsampling errors are impossible to avoid completely and difficult to evaluate statistically.

Sampling errors, on the other hand, can be evaluated statistically. The sample of respondents selected in the 2004-05 UHSBS is only one of many samples that could have been selected from the same population, using the same design and expected size. Each of these samples would yield results that differ somewhat from the results of the actual sample selected. Sampling errors are a measure of the variability between all possible samples. Although the degree of variability is not known exactly, it can be estimated from the survey results.

A sampling error is usually measured in terms of the standard error for a particular statistic (mean, percentage, etc.), which is the square root of the variance. The standard error can be used to calculate confidence intervals within which the true value for the population can reasonably be assumed to fall. For example, for any given statistic calculated from a sample survey, the value of that statistic will fall within a range of plus or minus two times the standard error of that statistic in 95 percent of all possible samples of identical size and design.

If the sample of respondents had been selected as a simple random sample, it would have been possible to use straightforward formulas for calculating sampling errors. However, the 2004-05 UHSBS sample is the result of a multi-stage stratified design, and, consequently, it was necessary to use more complex formulas. The computer software used to calculate sampling errors for the 2004-05 UHSBS is the ISSA Sampling Error Module. This module used the Taylor linearisation method of variance estimation for survey estimates that are means or proportions.

The Taylor linearisation 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 $h \quad$ represents the stratum which varies from 1 to $H$, $m_{h} \quad$ is the total number of clusters selected in the $h^{\text {th }}$ stratum,
$y_{h i} \quad$ 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.

In addition to the standard error, ISSA computes the design effect (DEFT) for each estimate, which is defined as the ratio between the standard error using the given sample design and the standard error that would result if a simple random sample had been used. A DEFT value of 1.0 indicates that the sample design is as efficient as a simple random sample, while a value greater than 1.0 indicates the increase in the sampling error because of the use of a more complex and less statistically efficient design. ISSA also computes the relative error and confidence limits for the estimates.

Sampling errors for the 2004-05 UHSBS 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, and for each of the 9 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 to B. 13 present the value of the statistic (R), its standard error (SE), the number of unweighted (N-UNWE) and weighted (N-WEIG) cases, the design effect (DEFT), the relative standard error (SE/R), and the 95 percent confidence limits ( $\mathrm{R} \pm 2 \mathrm{SE}$ ), for each variable. The DEFT is considered undefined when the standard error considering simple random sample is zero (when the estimate is close to 0 or 1 ).

The confidence interval (e.g., as calculated for condom use at last higher-risk sex) can be interpreted as follows: the overall proportion from the national sample for women 15-49 who reported using a condom at last high-risk sex is 0.467 and its standard error is 0.017 . Therefore, to obtain the 95 percent confidence limits, one adds and subtracts twice the standard error to the sample estimate, i.e., $0.467 \pm 2 \times 0.017$. There is a high probability ( 95 percent) that the true proportion of women who had used a condom at last higher-risk sex is between 0.433 and 0.502 .

Sampling errors are analysed for the national sample of women and men. The relative standard errors (SE/R) at the national level range between 1 percent and 38.5 percent. The highest relative standard errors are for estimates of very low values (e.g., care and support for orphans and vulnerable children). If estimates of very low values (less than 10 percent) were removed, then the average drops to 3 percent. So in general, the relative standard error for most estimates for the country as a whole is small, except for estimates of very small proportions.

For the total sample, the value of the design effect (DEFT), averaged over all variables, is 1.33 which means that, because of multi-stage clustering of the sample, the average standard error is increased by a factor of 1.33 over that in an equivalent simple random sample.

| Variable | Estimate | Base population |
| :---: | :---: | :---: |
| Urban residence | Proportion | All women/men 15-49 |
| No education | Proportion | All women/men 15-49 |
| Secondary or higher education | Proportion | All women/men 15-49 |
| Never married (in union) | Proportion | All women/men 15-49 |
| Currently married (in union) | Proportion | All women/men 15-49 |
| Using any contraceptive method | Proportion | Currently married women 15-49 |
| Using a modern method | Proportion | Currently married women 15-49 |
| Comprehensive knowledge ${ }^{1}$ of HIV transmission - all | Proportion | Women/men 15-49 |
| Comprehensive knowledge ${ }^{1}$ of HIV transmission - youth | Proportion | Women/men 15-24 |
| Had sex before age 18 | Proportion | All women/men 18-24 |
| Had two or more sexual partners in past 12 months | Proportion | Women/men 15-49 who had sex in the past 12 months |
| Had higher-risk sex (with a nonmarital, noncohabiting partner) in the past 12 months | Proportion | Women/men 15-49 who had sex in the past 12 months |
| Condom use at last higher-risk sex - all | Proportion | Women/men 15-49 who had higher-risk sex in past 12 months |
| Condom use at last higher-risk sex - youth | Proportion | All women/men 15-24 who had higher-risk sex in past 12 months |
| Abstinence among youth (never had sex) | Proportion | Never-married women/men 15-24 |
| Sexual activity in past 12 months among nevermarried youth | Proportion | Never-married women/men 15-24 |
| Had medical injections in past 12 months | Proportion | All women/men 15-49 |
| Had HIV test in past 12 months and received results last time | Proportion | All women/men 15-49 |
| Accepting attitudes ${ }^{2}$ towards people with HIV | Proportion | All women/men 15-49 who have heard of HIV/AIDS |
| Care and support for adults (received all types of free, basic external support) | Proportion | Adults age 18-59 who were ill for 3 or more months in the past 12 months and adults $18-59$ who died in the past 12 months and were ill for 3 or more months before death |
| Care and support for orphans and vulnerable children (received all types ${ }^{3}$ of free, basic external support) | Proportion | Children 0-17 whose mother or father died or who live in a household in which a person age $18-59$ was ill for 3 or more months in the past 12 months or in which a person age 18-59 died in the past 12 months |
| HIV prevalence | Proportion | All women/men 15-49 who were tested for HIV |
| Syphilis prevalence | Proportion | All women/men 15-49 who were tested for syphilis |

${ }^{1}$ Percentage who say that people can reduce the risk of getting the AIDS virus by using a condom every time they have sex and by having sex with just one partner who is not infected and who has no other partners, and who say that people cannot get the AIDS virus from mosquito bites or from sharing food with a person who has AIDS, and who say that a healthy-looking person can have the AIDS virus
${ }^{2}$ Percentage who say they would be willing to care for a relative sick with AIDS in their own households and would be willing to buy sugar, fresh vegetables, or other food from a market vendor who had the AIDS virus and they think that a female teacher who has the AIDS virus but is not sick should be allowed to continue teaching, and that if a member of their family got infected with the virus that causes AIDS, they would not necessarily want it to remain secret
${ }^{3}$ Refers to all five types of support for those age 5-17, four types of support (excluding school) for those age 0-4

| Variable | Value (R) | Stand- <br> ard <br> error <br> (SE) | Number of cases |  | Design effect (DEFT) | Relative error (SE/R) | Confidence limits |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Weight- |  |  |  |  |
|  |  |  | (N) | (WN) |  |  | R-2SE | $\mathrm{R}+2 \mathrm{SE}$ |
| WOMEN |  |  |  |  |  |  |  |  |
| Urban residence | 0.152 | 0.005 | 9973 | 9941 | 1.266 | 0.030 | 0.143 | 0.161 |
| No education | 0.227 | 0.009 | 9973 | 9941 | 2.097 | 0.039 | 0.209 | 0.244 |
| With secondary education or higher | 0.197 | 0.007 | 9973 | 9941 | 1.781 | 0.036 | 0.183 | 0.211 |
| Never married (in union) | 0.223 | 0.006 | 9973 | 9941 | 1.403 | 0.026 | 0.212 | 0.235 |
| Currently married (in union) | 0.640 | 0.007 | 9973 | 9941 | 1.363 | 0.010 | 0.626 | 0.653 |
| Currently using any contraceptive method | 0.197 | 0.007 | 6406 | 6358 | 1.466 | 0.037 | 0.183 | 0.212 |
| Currently using a modern method | 0.187 | 0.007 | 6406 | 6358 | 1.467 | 0.038 | 0.173 | 0.201 |
| Had first sex before age 18 . | 0.627 | 0.010 | 2792 | 2754 | 1.118 | 0.016 | 0.606 | 0.647 |
| Had two or more sexual partners in past |  |  |  |  |  |  |  |  |
| 12 months | 0.038 | 0.003 | 7345 | 7376 | 1.291 | 0.076 | 0.032 | 0.044 |
| Had higher risk sex in the past 12 months | 0.153 | 0.005 | 7346 | 7376 | 1.235 | 0.034 | 0.143 | 0.163 |
| Condom use at last high risk sex - all | 0.467 | 0.017 | 1061 | 1128 | 1.127 | 0.037 | 0.433 | 0.502 |
| Comprehensive knowledge of HIV |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Comprehensive knowledge of HIV transmission - youth | 0.295 | 0.009 | 4121 | 4119 | 1.320 | 0.032 | 0.276 | 0.314 |
| Abstinence among youth (never had sex) | 0.642 | 0.012 | 2057 | 2049 | 1.179 | 0.019 | 0.617 | 0.667 |
| Sexual activity in past 12 months (never- |  |  |  |  |  |  |  |  |
| Had medical injections in past 12 months | 0.513 | 0.008 | 9973 | 9941 | 1.648 | 0.016 | 0.496 | 0.529 |
| Had HIV test and received results last time | 0.040 | 0.002 | 9973 | 9941 | 1.269 | 0.062 | 0.035 | 0.045 |
| Accepting attitudes towards people with HIV | 0.187 | 0.007 | 9787 | 9801 | 1.815 | 0.038 | 0.173 | 0.201 |
| HIV prevalence | 0.075 | 0.004 | 9365 | 9328 | 1.318 | 0.050 | 0.068 | 0.083 |
| Syphilis prevalence | 0.031 | 0.002 | 9025 | 8992 | 1.086 | 0.065 | 0.027 | 0.036 |
| MEN |  |  |  |  |  |  |  |  |
| Urban residence | 0.150 | 0.005 | 8009 | 8010 | 1.138 | 0.030 | 0.141 | 0.159 |
| No education | 0.083 | 0.005 | 8009 | 8010 | 1.694 | 0.063 | 0.073 | 0.094 |
| With secondary education or higher | 0.309 | 0.009 | 8009 | 8010 | 1.749 | 0.029 | 0.291 | 0.327 |
| Never married (in union) | 0.392 | 0.007 | 8009 | 8010 | 1.225 | 0.017 | 0.379 | 0.405 |
| Currently married (in union) | 0.529 | 0.007 | 8009 | 8010 | 1.281 | 0.014 | 0.515 | 0.543 |
| Had first sex before age 18 | 0.467 | 0.014 | 2027 | 2032 | 1.230 | 0.029 | 0.440 | 0.495 |
| Had two or more sexual partners in last |  |  |  |  |  |  |  |  |
| 12 months | 0.293 | 0.007 | 5639 | 5623 | 1.209 | 0.025 | 0.279 | 0.308 |
| Had higher risk sex in the past 12 months | 0.366 | 0.008 | 5644 | 5628 | 1.277 | 0.022 | 0.350 | 0.383 |
| Condom use at last high risk sex - all | 0.534 | 0.013 | 1988 | 2062 | 1.178 | 0.025 | 0.507 | 0.560 |
| Condom use at last high risk sex (15-24) | 0.551 | 0.019 | 990 | 1016 | 1.190 | 0.034 | 0.513 | 0.589 |
| Comprehensive knowledge of HIV transmission - all | 0.358 | 0.007 | 8009 | 8010 | 1.357 | 0.020 | 0.344 | 0.373 |
| Comprehensive knowledge of HIV transmission youth | 0.353 | 0.010 | 3303 | 3332 | 1.224 | 0.029 | 0.333 | 0.374 |
| Abstinence among youth (never had sex) | 0.499 | 0.013 | 2744 | 2776 | 1.356 | 0.026 | 0.473 | 0.525 |
| Sexual activity in past 12 months (nevermarried youth) | 0.301 | 0.011 | 2744 | 2776 | 1.269 | 0.037 | 0.279 | 0.323 |
| Had medical injections in past 12 months | 0.379 | 0.007 | 8009 | 8010 | 1.381 | 0.020 | 0.364 | 0.394 |
| Had HIV test and received results last time | 0.038 | 0.003 | 8009 | 8010 | 1.278 | 0.072 | 0.032 | 0.043 |
| Accepting attitudes towards people with HIV | 0.282 | 0.007 | 7904 | 7939 | 1.347 | 0.024 | 0.268 | 0.295 |
| HIV prevalence | 0.050 | 0.003 | 7433 | 7436 | 1.307 | 0.067 | 0.043 | 0.057 |
| Syphilis prevalence | 0.031 | 0.002 | 7215 | 7217 | 1.003 | 0.067 | 0.027 | 0.035 |
| WOMEN AND MEN |  |  |  |  |  |  |  |  |
| Care and support for adults | 0.008 | 0.003 | 1009 | 992 | 0.956 | 0.361 | 0.002 | 0.014 |
| Care and support for orphans and vulnerable children | 0.002 | 0.001 | 5011 | 4954 | 1.176 | 0.385 | 0.000 | 0.004 |


| Variable | Value <br> (R) | Standard error (SE) | Number of cases |  | Design effect (DEFT) | Relative error (SE/R) | Confidence limits |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Weight- |  |  |  |  |
|  |  |  | (N) | (WN) |  |  | R-2SE | $\mathrm{R}+2 \mathrm{SE}$ |
| WOMEN |  |  |  |  |  |  |  |  |
| Urban residence | 1.000 | 0.000 | 1827 | 1508 | na | 0.000 | 1.000 | 1.000 |
| No education | 0.064 | 0.006 | 1827 | 1508 | 1.111 | 0.100 | 0.051 | 0.076 |
| With secondary education or higher | 0.512 | 0.019 | 1827 | 1508 | 1.618 | 0.037 | 0.474 | 0.550 |
| Never married (in union) | 0.348 | 0.015 | 1827 | 1508 | 1.357 | 0.043 | 0.318 | 0.378 |
| Currently married (in union) | 0.485 | 0.016 | 1827 | 1508 | 1.337 | 0.032 | 0.454 | 0.517 |
| Currently using any contraceptive method | 0.413 | 0.021 | 869 | 732 | 1.235 | 0.050 | 0.372 | 0.455 |
| Currently using a modern method | 0.397 | 0.021 | 869 | 732 | 1.266 | 0.053 | 0.354 | 0.439 |
| Had first sex before age 18 | 0.621 | 0.020 | 622 | 494 | 1.028 | 0.032 | 0.581 | 0.661 |
| Had two or more sexual partners in past |  |  |  |  |  |  |  |  |
| 12 months | 0.058 | 0.007 | 1231 | 1024 | 0.995 | 0.115 | 0.045 | 0.071 |
| Had higher risk sex in the past 12 months | 0.290 | 0.014 | 1231 | 1024 | 1.070 | 0.048 | 0.262 | 0.317 |
| Condom use at last high risk sex - all | 0.647 | 0.033 | 374 | 297 | 1.333 | 0.051 | 0.581 | 0.713 |
| Condom use at last high risk sex (15-24) 0.669 0.033 223 174 1.043 0.049 0.603 0.734  <br> Comprehensive knowledge of HIV          |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Comprehensive knowledge of HIV |  |  |  |  |  |  |  |  |
| Abstinence among youth (never had sex) | 0.498 | 0.022 | 561 | 454 | 1.028 | 0.044 | 0.454 | 0.541 |
| Sexual activity in past 12 months (never- |  |  |  |  |  |  |  |  |
| Had medical injections in past 12 months | 0.540 | 0.017 | 1827 | 1508 | 1.455 | 0.031 | 0.506 | 0.574 |
| Had HIV test and received results last time | 0.089 | 0.008 | 1827 | 1508 | 1.127 | 0.084 | 0.074 | 0.104 |
| Accepting attitudes towards people with HIV | 0.248 | 0.016 | 1822 | 1505 | 1.583 | 0.065 | 0.216 | 0.280 |
| HIV prevalence | 0.128 | 0.008 | 1650 | 1423 | 0.936 | 0.061 | 0.113 | 0.144 |
| Syphilis prevalence | 0.023 | 0.007 | 1513 | 1345 | 1.728 | 0.284 | 0.010 | 0.037 |
|  | MEN |  |  |  |  |  |  |  |
| Urban residence | 1.000 | 0.000 | 1387 | 1200 | na | 0.000 | 1.000 | 1.000 |
| No education | 0.014 | 0.003 | 1387 | 1200 | 0.840 | 0.189 | 0.009 | 0.019 |
| With secondary education or higher | 0.625 | 0.030 | 1387 | 1200 | 2.304 | 0.048 | 0.565 | 0.685 |
| Never married (in union) | 0.491 | 0.018 | 1387 | 1200 | 1.346 | 0.037 | 0.455 | 0.527 |
| Currently married (in union) | 0.424 | 0.016 | 1387 | 1200 | 1.173 | 0.037 | 0.393 | 0.455 |
| Had first sex before age 18 | 0.448 | 0.025 | 443 | 374 | 1.043 | 0.055 | 0.399 | 0.497 |
| Had two or more sexual partners in past |  |  |  |  |  |  |  |  |
| 12 months Had higher risk sex in the past 12 months | 0.344 | 0.020 | 918 | 804 | 1.275 | 0.058 | 0.304 | 0.384 |
|  | 0.526 0.737 | 0.015 0.020 | 919 495 | 806 424 | 0.926 0.994 | 0.029 0.027 | 0.496 0.698 | 0.557 0.777 |
| Condom use at last high risk sex - all Condom use at last high risk sex (15-24) | 0.705 | 0.029 0.029 | 231 | 201 | 0.929 0.961 | 0.041 | 0.698 0.648 | 0.777 |
| Comprehensive knowledge of HIV |  |  |  |  |  |  |  |  |
| Comprehensive knowledge of HIV 0.018 |  |  |  |  |  |  |  |  |
| transmission - youth | 0.478 | 0.022 | 645 | 546 | 1.093 | 0.045 | 0.435 | 0.521 |
| Abstinence among youth (never had sex) | 0.409 | 0.030 | 567 | 481 | 1.458 | 0.074 | 0.349 | 0.469 |
| Sexual activity in past 12 months (never- |  |  |  |  |  |  |  |  |
| Had medical injections in past 12 months | 0.380 | 0.018 | 1387 | 1200 | 1.384 | 0.048 | 0.344 | 0.416 |
| Had HIV test and received results last time | 0.085 | 0.010 | 1387 | 1200 | 1.343 | 0.119 | 0.065 | 0.105 |
| Accepting attitudes towards people with HIV | 0.355 | 0.015 | 1385 | 1199 | 1.158 | 0.042 | 0.325 | 0.384 |
| HIV prevalence | 0.067 | 0.008 | 1214 | 1084 | 1.151 | 0.128 | 0.049 | 0.083 |
| Syphilis prevalence | 0.029 | 0.006 | 1148 | 1045 | 1.191 | 0.203 | 0.017 | 0.041 |
| WOMEN AND MEN |  |  |  |  |  |  |  |  |
| Care and support for adults | 0.037 | 0.019 | 123 | 102 | 1.003 | 0.506 | 0.000 | 0.075 |
| Care and support for orphans and vulnerable children | 0.000 | 0.000 | 772 | 640 | na | na | 0.000 | 0.000 |
| $\mathrm{na}=$ Not applicable |  |  |  |  |  |  |  |  |


| Table B.4 Sampling errors for rural sample, Uganda | $2004-05$ |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |


| Variable | Value <br> (R) | Standard error (SE) | Number of cases |  | Design effect (DEFT) | Relative error (SE/R) | Confidence limits |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Weight- |  |  |  |  |
|  |  |  | (N) | (WN) |  |  | R-2SE | $R+2 S E$ |
| WOMEN |  |  |  |  |  |  |  |  |
| Urban residence | 0.150 | 0.015 | 942 | 1656 | 1.306 | 0.102 | 0.119 | 0.180 |
| No education | 0.103 | 0.019 | 942 | 1656 | 1.930 | 0.186 | 0.065 | 0.141 |
| With secondary education or higher | 0.286 | 0.023 | 942 | 1656 | 1.548 | 0.080 | 0.241 | 0.332 |
| Never married (in union) | 0.267 | 0.016 | 942 | 1656 | 1.111 | 0.060 | 0.235 | 0.299 |
| Currently married (in union) | 0.566 | 0.018 | 942 | 1656 | 1.135 | 0.032 | 0.529 | 0.603 |
| Currently using any contraceptive method | 0.286 | 0.022 | 537 | 937 | 1.108 | 0.076 | 0.242 | 0.329 |
| Currently using a modern method | 0.267 | 0.021 | 537 | 937 | 1.112 | 0.080 | 0.225 | 0.310 |
| Had first sex before age 18 | 0.741 | 0.031 | 255 | 449 | 1.133 | 0.042 | 0.679 | 0.804 |
| Had two or more sexual partners in past |  |  |  |  |  |  |  |  |
| Had higher risk sex in the past 12 months | 0.266 | 0.018 | 705 | 1235 | 1.053 | 0.066 | 0.231 | 0.301 |
| Condom use at last high risk sex - all | 0.506 | 0.038 | 185 | 329 | 1.033 | 0.075 | 0.430 | 0.582 |
| Condom use at last high risk sex (15-24) | 0.546 | 0.044 | 98 | 174 | 0.868 | 0.080 | 0.458 | 0.634 |
| Comprehensive knowledge of HIV |  |  |  |  |  |  |  |  |
| Comprehensive knowledge of HIV |  |  |  |  |  |  |  |  |
| transmission - youth | 0.459 | 0.031 | 414 | 730 | 1.259 | 0.067 | 0.397 | 0.520 |
| Abstinence among youth (never had sex) | 0.539 | 0.030 | 230 | 406 | 0.907 | 0.055 | 0.479 | 0.599 |
| Sexual activity in past 12 months (never- |  |  |  |  |  |  |  |  |
| Had medical injections in past 12 months | 0.515 | 0.024 | 942 | 1656 | 1.467 | 0.046 | 0.467 | 0.563 |
| Had HIV test and received results last time | 0.046 | 0.007 | 942 | 1656 | 1.009 | 0.150 | 0.032 | 0.060 |
| Accepting attitudes towards people with HIV | 0.200 | 0.017 | 939 | 1650 | 1.299 | 0.085 | 0.166 | 0.234 |
| HIV prevalence | 0.104 | 0.011 | 856 | 1543 | 0.991 | 0.102 | 0.083 | 0.126 |
| Syphilis prevalence | 0.041 | 0.007 | 837 | 1489 | 1.070 | 0.181 | 0.026 | 0.055 |
| MEN |  |  |  |  |  |  |  |  |
| Urban residence | 0.147 | 0.011 | 844 | 1451 | 0.933 | 0.077 | 0.124 | 0.170 |
| No education | 0.083 | 0.012 | 844 | 1451 | 1.294 | 0.148 | 0.058 | 0.107 |
| With secondary education or higher | 0.322 | 0.031 | 844 | 1451 | 1.920 | 0.096 | 0.260 | 0.384 |
| Never married (in union) | 0.448 | 0.015 | 844 | 1451 | 0.897 | 0.034 | 0.417 | 0.479 |
| Currently married (in union) | 0.457 | 0.017 | 844 | 1451 | 1.002 | 0.038 | 0.422 | 0.491 |
| Had first sex before age 18 | 0.453 | 0.031 | 242 | 418 | 0.958 | 0.068 | 0.391 | 0.514 |
| Had two or more sexual partners in past |  |  |  |  |  |  |  |  |
| 12 months | 0.380 | 0.023 | 569 | 980 | 1.115 | 0.060 | 0.335 | 0.426 |
| Had higher risk sex in the past 12 months | 0.501 | 0.026 | 569 | 980 | 1.247 | 0.052 | 0.449 | 0.553 |
| Condom use at last high risk sex - all | 0.681 | 0.032 | 283 | 491 | 1.138 | 0.046 | 0.618 | 0.744 |
| Condom use at last high risk sex (15-24) | 0.692 | 0.051 | 132 | 231 | 1.253 | 0.073 | 0.591 | 0.793 |
| Comprehensive knowledge of HIV |  |  |  |  |  |  |  |  |
| Comprehensive knowledge of HIV |  |  |  |  |  |  |  |  |
| transmission - youth | 0.406 | 0.030 | 376 | 649 | 1.191 | 0.074 | 0.345 | 0.466 |
| Sexual activity in past 12 months (never- |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Had medical injections in past 12 months | 0.394 | 0.020 | 844 | 1451 | 1.179 | 0.050 | 0.354 | 0.434 |
| Had HIV test and received results last time | 0.033 | 0.006 | 844 | 1451 | 0.960 | 0.179 | 0.021 | 0.045 |
| Accepting attitudes towards people with HIV | 0.241 | 0.019 | 844 | 1451 | 1.258 | 0.077 | 0.204 | 0.278 |
| HIV prevalence | 0.064 | 0.009 | 762 | 1350 | 0.974 | 0.137 | 0.046 | 0.081 |
| Syphilis prevalence | 0.029 | 0.005 | 743 | 1309 | 0.860 | 0.186 | 0.018 | 0.040 |
| WOMEN AND MEN |  |  |  |  |  |  |  |  |
| Care and support for adults | 0.000 | 0.000 | 92 | 159 | na | na | 0.000 | 0.000 |
| Care and support for orphans and vulnerable children | 0.004 | 0.003 | 508 | 891 | 0.966 | 0.696 | 0.000 | 0.009 |
| $\mathrm{na}=$ Not applicable |  |  |  |  |  |  |  |  |


| Table B. 6 Sampling errors for Kampala sample, Uganda $2004-05$ |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |  |


| Variable | Value (R) | Standard error (SE) | Number of cases |  | Design effect (DEFT) | Relative error (SE/R) | Confidence limits |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Weight- |  |  |  |  |
|  |  |  | (N) | (WN) |  |  | R-2SE | $\mathrm{R}+2 \mathrm{SE}$ |
| WOMEN |  |  |  |  |  |  |  |  |
| Urban residence | 0.132 | 0.014 | 1169 | 1555 | 1.403 | 0.105 | 0.104 | 0.160 |
| No education | 0.178 | 0.020 | 1169 | 1555 | 1.821 | 0.114 | 0.138 | 0.219 |
| With secondary education or higher | 0.263 | 0.021 | 1169 | 1555 | 1.650 | 0.081 | 0.220 | 0.305 |
| Never married (in union) | 0.218 | 0.018 | 1169 | 1555 | 1.495 | 0.083 | 0.182 | 0.254 |
| Currently married (in union) | 0.637 | 0.018 | 1169 | 1555 | 1.302 | 0.029 | 0.600 | 0.674 |
| Currently using any contraceptive method | 0.215 | 0.020 | 749 | 990 | 1.320 | 0.092 | 0.176 | 0.255 |
| Currently using a modern method | 0.203 | 0.019 | 749 | 990 | 1.275 | 0.092 | 0.166 | 0.241 |
| Had first sex before age 18 | 0.772 | 0.025 | 317 | 423 | 1.039 | 0.032 | 0.723 | 0.821 |
| Had two or more sexual partners in past |  |  |  |  |  |  |  |  |
| Had higher risk sex in the past 12 months | 0.189 | 0.014 | 891 | 1181 | 1.031 | 0.072 | 0.162 | 0.216 |
| Condom use at last high risk sex - all | 0.559 | 0.047 | 167 | 223 | 1.228 | 0.085 | 0.464 | 0.653 |
| Condom use at last high risk sex (15-24) 0.633 0.054 102 137 1.123 0.085 0.525 0.741 <br> Comprehensive knowledge of HIV         |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Comprehensive knowledge of HIV |  |  |  |  |  |  |  |  |
| transmission - youth | 0.388 | 0.027 | 490 | 655 | 1.226 | 0.070 | 0.334 | 0.442 |
| Abstinence among youth (never had sex) | 0.550 | 0.037 | 240 | 323 | 1.148 | 0.067 | 0.476 | 0.624 |
| Sexual activity in past 12 months (never- |  |  |  |  |  |  |  |  |
| Had medical injections in past 12 months | 0.597 | 0.022 | 1169 | 1555 | 1.563 | 0.038 | 0.552 | 0.642 |
| Had HIV test and received results last time | 0.034 | 0.006 | 1169 | 1555 | 1.185 | 0.184 | 0.022 | 0.047 |
| Accepting attitudes towards people with HIV | 0.153 | 0.026 | 1169 | 1555 | 2.425 | 0.167 | 0.102 | 0.204 |
| HIV prevalence | 0.074 | 0.011 | 1138 | 1462 | 1.343 | 0.143 | 0.053 | 0.095 |
| Syphilis prevalence | 0.024 | 0.005 | 1135 | 1408 | 1.117 | 0.211 | 0.014 | 0.034 |
| MEN |  |  |  |  |  |  |  |  |
| Urban residence | 0.103 | 0.014 | 877 | 1146 | 1.363 | 0.136 | 0.075 | 0.131 |
| No education | 0.082 | 0.010 | 877 | 1146 | 1.107 | 0.125 | 0.062 | 0.103 |
| With secondary education or higher | 0.368 | 0.026 | 877 | 1146 | 1.581 | 0.070 | 0.317 | 0.420 |
| Never married (in union) | 0.378 | 0.021 | 877 | 1146 | 1.255 | 0.054 | 0.337 | 0.419 |
| Currently married (in union) | 0.553 | 0.018 | 877 | 1146 | 1.089 | 0.033 | 0.516 | 0.589 |
| Had first sex before age 18 | 0.558 | 0.044 | 204 | 268 | 1.271 | 0.079 | 0.470 | 0.647 |
| Had two or more sexual partners in past |  |  |  |  |  |  |  |  |
| 12 months . | 0.394 | 0.019 | 635 | 827 | 0.957 | 0.047 | 0.357 | 0.432 |
| Had higher risk sex in the past 12 months | 0.387 | 0.020 | 635 | 827 | 1.057 | 0.053 | 0.346 | 0.428 |
| Condom use at last high risk sex - all | 0.558 | 0.035 | 245 | 320 | 1.085 | 0.062 | 0.489 | 0.627 |
| Condom use at last high risk sex (15-24) | 0.601 | 0.041 | 123 | 160 | 0.917 | 0.068 | 0.520 | 0.683 |
| Comprehensive knowledge of HIV |  |  |  |  |  |  |  |  |
| Comprehensive knowledge of HIV | 0.406 | 0.024 | 364 | 477 | 0.918 | 0.058 | 0.358 | 0.453 |
| Abstinence among youth (never had sex) | 0.450 | 0.040 | 309 | 406 | 1.417 | 0.058 0.089 | 0.358 0.370 | 0.530 |
| Sexual activity in past 12 months (never- |  |  |  |  |  |  |  |  |
| Had medical injections in past 12 months | 0.413 | 0.020 | 877 | 1146 | 1.227 | 0.049 | 0.373 | 0.454 |
| Had HIV test and received results last time | 0.031 | 0.008 | 877 | 1146 | 1.367 | 0.256 | 0.015 | 0.048 |
| Accepting attitudes towards people with HIV | 0.186 | 0.013 | 877 | 1146 | 0.978 | 0.069 | 0.161 | 0.212 |
| HIV prevalence | 0.053 | 0.010 | 851 | 1070 | 1.333 | 0.194 | 0.032 | 0.073 |
| Syphilis prevalence | 0.019 | 0.004 | 845 | 1036 | 0.833 | 0.208 | 0.011 | 0.027 |
| WOMEN AND MEN |  |  |  |  |  |  |  |  |
| Care and support for adults | 0.009 | 0.009 | 108 | 142 | 0.967 | 0.973 | 0.000 | 0.027 |
| Care and support for orphans and vulnerable children | 0.002 | 0.002 | 533 | 707 | 1.037 | 0.995 | 0.000 | 0.006 |


| Variable | Value (R) | Stand- <br> ard <br> error <br> (SE) | Number of cases |  | Design effect (DEFT) | Relative error (SE/R) | Confidence limits |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Weight- |  |  |  |  |
|  |  |  | (N) | (WN) |  |  | R-2SE | R+2SE |
| WOMEN |  |  |  |  |  |  |  |  |
| Urban residence | 0.075 | 0.010 | 915 | 857 | 1.147 | 0.133 | 0.055 | 0.095 |
| No education | 0.186 | 0.019 | 915 | 857 | 1.499 | 0.104 | 0.148 | 0.225 |
| With secondary education or higher | 0.168 | 0.016 | 915 | 857 | 1.286 | 0.095 | 0.136 | 0.200 |
| Never married (in union) | 0.196 | 0.015 | 915 | 857 | 1.134 | 0.076 | 0.166 | 0.226 |
| Currently married (in union) | 0.718 | 0.020 | 915 | 857 | 1.342 | 0.028 | 0.678 | 0.758 |
| Currently using any contraceptive method | 0.227 | 0.022 | 659 | 615 | 1.326 | 0.095 | 0.184 | 0.271 |
| Currently using a modern method | 0.223 | 0.021 | 659 | 615 | 1.316 | 0.096 | 0.180 | 0.265 |
| Had first sex before age 18 . | 0.708 | 0.035 | 230 | 214 | 1.181 | 0.050 | 0.637 | 0.779 |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Had higher risk sex in the past 12 months | 0.154 | 0.021 | 738 | 691 | 1.564 | 0.135 | 0.113 | 0.196 |
| Condom use at last high risk sex - all | 0.367 | 0.042 | 110 | 107 | 0.906 | 0.114 | 0.283 | 0.450 |
| Condom use at last high risk sex (15-24) | 0.539 | 0.060 | 60 | 58 | 0.926 | 0.112 | 0.418 | 0.659 |
| Comprehensive knowledge of HIV |  |  |  |  |  |  |  |  |
| Comprehensive knowledge of HIV |  |  |  |  |  |  |  |  |
| Abstinence among youth (never had sex) | 0.550 | 0.047 | 175 | 164 | 1.234 | 0.085 | 0.457 | 0.643 |
| Sexual activity in past 12 months (never- |  |  |  |  |  |  |  |  |
| Had medical injections in past 12 months | 0.557 | 0.017 | 915 | 857 | 1.037 | 0.031 | 0.523 | 0.591 |
| Had HIV test and received results last time | 0.046 | 0.013 | 915 | 857 | 1.939 | 0.291 | 0.019 | 0.073 |
| Accepting attitudes towards people with HIV | 0.165 | 0.023 | 905 | 848 | 1.840 | 0.138 | 0.119 | 0.210 |
| HIV prevalence | 0.063 | 0.011 | 851 | 811 | 1.286 | 0.175 | 0.041 | 0.084 |
| Syphilis prevalence | 0.028 | 0.006 | 828 | 781 | 1.049 | 0.215 | 0.016 | 0.040 |
| MEN |  |  |  |  |  |  |  |  |
| Urban residence | 0.076 | 0.011 | 822 | 770 | 1.168 | 0.142 | 0.054 | 0.097 |
| No education | 0.071 | 0.012 | 822 | 770 | 1.342 | 0.169 | 0.047 | 0.096 |
| With secondary education or higher | 0.315 | 0.023 | 822 | 770 | 1.393 | 0.072 | 0.270 | 0.361 |
| Never married (in union) | 0.389 | 0.021 | 822 | 770 | 1.232 | 0.054 | 0.347 | 0.431 |
| Currently married (in union) | 0.524 | 0.024 | 822 | 770 | 1.376 | 0.046 | 0.476 | 0.572 |
| Had first sex before age 18 | 0.722 | 0.042 | 210 | 197 | 1.371 | 0.059 | 0.637 | 0.807 |
| Had two or more sexual partners in past 0 |  |  |  |  |  |  |  |  |
| 12 months | 0.365 | 0.023 | 641 | 599 | 1.191 | 0.062 | 0.320 | 0.410 |
| Had higher risk sex in the past 12 months | 0.480 | 0.027 | 641 | 599 | 1.360 | 0.056 | 0.427 | 0.534 |
| Condom use at last high risk sex - all | 0.427 | 0.026 | 303 | 288 | 0.919 | 0.061 | 0.375 | 0.479 |
| Condom use at last high risk sex (15-24) | 0.443 | 0.042 | 169 | 160 | 1.108 | 0.096 | 0.358 | 0.528 |
| Comprehensive knowledge of HIV transmission - all | 0.381 | 0.024 | 822 | 770 | 1.444 | 0.064 | 0.332 | 0.430 |
| Comprehensive knowledge of HIV transmission - youth | 0.389 | 0.035 | 345 | 323 | 1.339 | 0.090 | 0.319 | 0.460 |
| Abstinence among youth (never had sex) | 0.324 | 0.035 | 289 | 272 | 1.265 | 0.108 | 0.254 | 0.394 |
| Sexual activity in past 12 months (nevermarried youth) | 0.503 | 0.027 | 289 | 272 | 0.915 | 0.054 | 0.449 | 0.557 |
| Had medical injections in past 12 months | 0.405 | 0.022 | 822 | 770 | 1.311 | 0.055 | 0.360 | 0.450 |
| Had HIV test and received results last time | 0.039 | 0.012 | 822 | 770 | 1.815 | 0.315 | 0.014 | 0.063 |
| Accepting attitudes towards people with HIV | 0.265 | 0.018 | 822 | 770 | 1.158 | 0.067 | 0.229 | 0.300 |
| HIV prevalence | 0.044 | 0.009 | 759 | 716 | 1.241 | 0.207 | 0.026 | 0.063 |
| Syphilis prevalence | 0.032 | 0.006 | 738 | 695 | 0.969 | 0.195 | 0.019 | 0.044 |
| WOMEN AND MEN |  |  |  |  |  |  |  |  |
| Care and support for adults | 0.013 | 0.013 | 81 | 75 | 1.002 | 0.957 | 0.000 | 0.039 |
| Care and support for orphans and vulnerable children | 0.003 | 0.003 | 319 | 309 | 1.054 | 1.013 | 0.000 | 0.010 |


| Variable | Value (R) | Standard error (SE) | Number of cases |  | Design effect (DEFT) | Relative error (SE/R) | Confidence limits |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Weight- |  |  |  |  |
|  |  |  | (N) | (WN) |  |  | R-2SE | $R+2 S E$ |
| WOMEN |  |  |  |  |  |  |  |  |
| Urban residence | 0.047 | 0.002 | 1246 | 829 | 0.374 | 0.048 | 0.042 | 0.051 |
| No education | 0.473 | 0.055 | 1246 | 829 | 3.867 | 0.116 | 0.364 | 0.582 |
| With secondary education or higher | 0.073 | 0.010 | 1246 | 829 | 1.368 | 0.138 | 0.053 | 0.094 |
| Never married (in union) | 0.172 | 0.014 | 1246 | 829 | 1.349 | 0.084 | 0.143 | 0.201 |
| Currently married (in union) | 0.750 | 0.016 | 1246 | 829 | 1.322 | 0.022 | 0.718 | 0.783 |
| Currently using any contraceptive method | 0.156 | 0.018 | 930 | 622 | 1.525 | 0.116 | 0.120 | 0.192 |
| Currently using a modern method | 0.153 | 0.018 | 930 | 622 | 1.528 | 0.118 | 0.117 | 0.189 |
| Had first sex before age 18 | 0.468 | 0.035 | 340 | 230 | 1.286 | 0.074 | 0.398 | 0.538 |
| Had two or more sexual partners in past |  |  |  |  |  |  |  |  |
| Had higher risk sex in the past 12 months | 0.086 | 0.010 | 954 | 634 | 1.074 | 0.114 | 0.066 | 0.105 |
| Condom use at last high risk sex - all | 0.280 | 0.038 | 78 | 54 | 0.740 | 0.135 | 0.204 | 0.356 |
| Condom use at last high risk sex (15-24) 0.315 0.061 40 27 0.817 0.193 0.193 0.436 <br> Comprehensive knowledge of HIV         |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Comprehensive knowledge of HIV |  |  |  |  |  |  |  |  |
| transmission - youth | 0.166 | 0.023 | 459 | 309 | 1.308 | 0.137 | 0.121 | 0.212 |
| Abstinence among youth (never had sex) | 0.749 | 0.039 | 201 | 131 | 1.256 | 0.051 | 0.671 | 0.826 |
| Sexual activity in past 12 months (never- |  |  |  |  |  |  |  |  |
| Had medical injections in past 12 months | 0.440 | 0.030 | 1246 | 829 | 2.164 | 0.069 | 0.379 | 0.500 |
| Had HIV test and received results last time | 0.019 | 0.005 | 1246 | 829 | 1.254 | 0.255 | 0.009 | 0.029 |
| Accepting attitudes towards people with HIV | 0.154 | 0.015 | 1139 | 760 | 1.402 | 0.097 | 0.124 | 0.184 |
| HIV prevalence | 0.037 | 0.006 | 1192 | 775 | 1.126 | 0.165 | 0.025 | 0.050 |
| Syphilis prevalence | 0.052 | 0.008 | 1149 | 749 | 1.247 | 0.160 | 0.036 | 0.069 |
| MEN |  |  |  |  |  |  |  |  |
| Urban residence | 0.056 | 0.012 | 913 | 610 | 1.552 | 0.211 | 0.032 | 0.080 |
| No education | 0.264 | 0.052 | 913 | 610 | 3.588 | 0.198 | 0.159 | 0.369 |
| With secondary education or higher | 0.200 | 0.021 | 913 | 610 | 1.562 | 0.103 | 0.158 | 0.241 |
| Never married (in union) | 0.286 | 0.019 | 913 | 610 | 1.254 | 0.066 | 0.249 | 0.324 |
| Currently married (in union) | 0.684 | 0.019 | 913 | 610 | 1.237 | 0.028 | 0.645 | 0.722 |
| Had first sex before age 18 | 0.393 | 0.027 | 190 | 132 | 0.756 | 0.068 | 0.339 | 0.447 |
| Had two or more sexual partners in past |  |  |  |  |  |  |  |  |
| 12 months | 0.138 | 0.020 | 678 | 450 | 1.500 | 0.144 | 0.099 | 0.178 |
| Had higher risk sex in the past 12 months | 0.185 | 0.026 | 679 | 450 | 1.725 | 0.139 | 0.134 | 0.237 |
| Condom use at last high risk sex - all | 0.359 | 0.058 | 120 | 83 | 1.317 | 0.161 | 0.243 | 0.475 |
| Condom use at last high risk sex (15-24) 0.446 0.086 59 41 1.311 0.192 0.275 0.617 <br> Comprehensive knowledge of HIV         |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Comprehensive knowledge of HIV transmission - youth | 0.328 | 0.035 | 308 | 211 | 1.289 | 0.105 | 0.259 | 0.397 |
| Abstinence among youth (never had sex) | 0.558 | 0.034 | 230 | 156 | 1.039 | 0.061 | 0.490 | 0.626 |
| Sexual activity in past 12 months (never- |  |  |  |  |  |  |  |  |
| Had medical injections in past 12 months | 0.334 | 0.032 | 913 | 610 | 2.046 | 0.096 | 0.270 | 0.398 |
| Had HIV test and received results last time | 0.034 | 0.009 | 913 | 610 | 1.458 | 0.256 | 0.017 | 0.052 |
| Accepting attitudes towards people with HIV | 0.314 | 0.032 | 839 | 568 | 2.015 | 0.103 | 0.249 | 0.379 |
| HIV prevalence | 0.032 | 0.006 | 861 | 565 | 0.980 | 0.184 | 0.021 | 0.044 |
| Syphilis prevalence | 0.047 | 0.008 | 826 | 550 | 1.053 | 0.170 | 0.031 | 0.063 |
| WOMEN AND MEN |  |  |  |  |  |  |  |  |
| Care and support for adults | 0.000 | 0.000 | 85 | 58 | na | na | 0.000 | 0.000 |
| Care and support for orphans and vulnerable children | 0.000 | 0.000 | 556 | 364 | na | na | 0.000 | 0.000 |
| $\mathrm{na}=$ 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 | $\mathrm{R}+2 \mathrm{SE}$ |
| WOMEN |  |  |  |  |  |  |  |  |
| Urban residence | 0.100 | 0.005 | 1034 | 970 | 0.588 | 0.055 | 0.089 | 0.111 |
| No education | 0.272 | 0.021 | 1034 | 970 | 1.501 | 0.076 | 0.230 | 0.313 |
| With secondary education or higher | 0.090 | 0.015 | 1034 | 970 | 1.666 | 0.165 | 0.061 | 0.120 |
| Never married (in union) | 0.133 | 0.010 | 1034 | 970 | 0.992 | 0.079 | 0.112 | 0.154 |
| Currently married (in union) | 0.726 | 0.018 | 1034 | 970 | 1.334 | 0.025 | 0.689 | 0.763 |
| Currently using any contraceptive method | 0.120 | 0.018 | 750 | 705 | 1.510 | 0.149 | 0.085 | 0.156 |
| Currently using a modern method | 0.118 | 0.017 | 750 | 705 | 1.471 | 0.147 | 0.083 | 0.152 |
| Had first sex before age 18 . | 0.749 | 0.027 | 275 | 259 | 1.016 | 0.036 | 0.696 | 0.802 |
| Had two or more sexual partners in past |  |  |  |  |  |  |  |  |
| 12 months | 0.015 | 0.005 | 828 | 777 | 1.206 | 0.344 | 0.005 | 0.025 |
| Had higher risk sex in the past 12 months | 0.112 | 0.013 | 828 | 777 | 1.200 | 0.118 | 0.085 | 0.138 |
| Condom use at last high risk sex - all | 0.172 | 0.046 | 93 | 87 | 1.171 | 0.268 | 0.080 | 0.265 |
| Condom use at last high risk sex (15-24) 0.175 0.055 46 43 0.974 0.315 0.065 0.285 <br> Comprehensive knowledge of HIV         |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Comprehensive knowledge of HIV |  |  |  |  |  |  |  |  |
| Abstinence among youth (never had sex) | 0.602 | 0.056 | 128 | 119 | 1.288 | 0.093 | 0.490 | 0.713 |
| Sexual activity in past 12 months (never- |  |  |  |  |  |  |  |  |
| Had medical injections in past 12 months | 0.508 | 0.017 | 1034 | 970 | 1.119 | 0.034 | 0.473 | 0.543 |
| Had HIV test and received results last time | 0.043 | 0.009 | 1034 | 970 | 1.416 | 0.208 | 0.025 | 0.061 |
| Accepting attitudes towards people with HIV | 0.282 | 0.025 | 1026 | 962 | 1.749 | 0.087 | 0.233 | 0.331 |
| HIV prevalence | 0.092 | 0.012 | 961 | 918 | 1.304 | 0.132 | 0.068 | 0.117 |
| Syphilis prevalence | 0.035 | 0.007 | 914 | 886 | 1.137 | 0.197 | 0.021 | 0.049 |
| MEN |  |  |  |  |  |  |  |  |
| Urban residence | 0.090 | 0.010 | 868 | 795 | 1.056 | 0.114 | 0.069 | 0.110 |
| No education | 0.035 | 0.005 | 868 | 795 | 0.883 | 0.158 | 0.024 | 0.046 |
| With secondary education or higher | 0.271 | 0.018 | 868 | 795 | 1.179 | 0.066 | 0.235 | 0.307 |
| Never married (in union) | 0.295 | 0.021 | 868 | 795 | 1.344 | 0.071 | 0.253 | 0.336 |
| Currently married (in union) | 0.654 | 0.026 | 868 | 795 | 1.587 | 0.039 | 0.603 | 0.705 |
| Had first sex before age 18 | 0.517 | 0.049 | 203 | 186 | 1.401 | 0.095 | 0.419 | 0.616 |
| Had two or more sexual partners in past 00.043 |  |  |  |  |  |  |  |  |
| 12 months | 0.243 | 0.016 | 690 | 633 | 0.965 | 0.065 | 0.211 | 0.275 |
| Had higher risk sex in the past 12 months | 0.281 | 0.020 | 690 | 633 | 1.166 | 0.071 | 0.241 | 0.321 |
| Condom use at last high risk sex - all | 0.344 | 0.046 | 194 | 178 | 1.338 | 0.133 | 0.253 | 0.436 |
| Condom use at last high risk sex (15-24) | 0.415 | 0.057 | 103 | 94 | 1.163 | 0.137 | 0.302 | 0.529 |
| Comprehensive knowledge of HIV transmission - all | 0.290 | 0.015 | 868 | 795 | 0.999 | 0.053 | 0.259 | 0.321 |
| Comprehensive knowledge of HIV |  |  |  |  |  |  |  |  |
| Abstinence among youth (never had sex) | 0.385 | 0.044 | 231 | 211 | 1.368 | 0.114 | 0.297 | 0.473 |
| Sexual activity in past 12 months (nevermarried youth) | 0.386 | 0.041 | 231 | 211 | 1.277 | 0.106 | 0.304 | 0.468 |
| Had medical injections in past 12 months | 0.390 | 0.016 | 868 | 795 | 0.970 | 0.041 | 0.358 | 0.422 |
| Had HIV test and received results last time | 0.053 | 0.009 | 868 | 795 | 1.226 | 0.176 | 0.035 | 0.072 |
| Accepting attitudes towards people with HIV | 0.437 | 0.019 | 865 | 792 | 1.113 | 0.043 | 0.399 | 0.474 |
| HIV prevalence | 0.071 | 0.012 | 772 | 732 | 1.323 | 0.170 | 0.048 | 0.097 |
| Syphilis prevalence | 0.060 | 0.008 | 727 | 712 | 0.950 | 0.140 | 0.043 | 0.076 |
| WOMEN AND MEN |  |  |  |  |  |  |  |  |
| Care and support for adults | 0.011 | 0.007 | 274 | 244 | 1.064 | 0.610 | 0.000 | 0.024 |
| Care and support for orphans and vulnerable children | 0.005 | 0.003 | 918 | 817 | 1.234 | 0.659 | 0.000 | 0.012 |


| Variable | Value <br> (R) | Standard error (SE) | Number of cases |  | Design effect (DEFT) | Relative error (SE/R) | Confidence limits |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Weight- |  |  |  |  |
|  |  |  | (N) | (WN) |  |  | R-2SE | $\mathrm{R}+2 \mathrm{SE}$ |
| WOMEN |  |  |  |  |  |  |  |  |
| Urban residence | 0.077 | 0.007 | 1451 | 958 | 0.944 | 0.086 | 0.063 | 0.090 |
| No education | 0.340 | 0.028 | 1451 | 958 | 2.239 | 0.082 | 0.284 | 0.396 |
| With secondary education or higher | 0.065 | 0.010 | 1451 | 958 | 1.533 | 0.152 | 0.046 | 0.085 |
| Never married (in union) | 0.205 | 0.014 | 1451 | 958 | 1.329 | 0.069 | 0.177 | 0.234 |
| Currently married (in union) | 0.634 | 0.014 | 1451 | 958 | 1.128 | 0.023 | 0.605 | 0.662 |
| Currently using any contraceptive method | 0.083 | 0.010 | 920 | 607 | 1.062 | 0.116 | 0.064 | 0.103 |
| Currently using a modern method | 0.078 | 0.010 | 920 | 607 | 1.141 | 0.129 | 0.058 | 0.098 |
| Had first sex before age 18 . | 0.475 | 0.033 | 385 | 255 | 1.308 | 0.070 | 0.409 | 0.542 |
| Had two or more sexual partners in past |  |  |  |  |  |  |  |  |
| 12 months | 0.016 | 0.005 | 949 | 630 | 1.139 | 0.293 | 0.007 | 0.025 |
| Had higher risk sex in the past 12 months | 0.055 | 0.010 | 949 | 630 | 1.331 | 0.179 | 0.035 | 0.075 |
| Condom use at last high risk sex - all | 0.432 | 0.077 | 50 | 35 | 1.084 | 0.178 | 0.278 | 0.585 |
| Condom use at last high risk sex (15-24) | 0.450 | 0.086 | 41 | 29 | 1.099 | 0.192 | 0.277 | 0.623 |
| Comprehensive knowledge of HIV transmission - all | 0.116 | 0.014 | 1451 | 958 | 1.676 | 0.122 | 0.087 | 0.144 |
| Comprehensive knowledge of HIV |  |  |  |  |  |  |  |  |
| Abstinence among youth (never had sex) | 0.848 | 0.037 | 293 | 192 | 1.761 | 0.044 | 0.774 | 0.922 |
| Sexual activity in past 12 months (nevermarried youth) | 0.108 | 0.029 | 293 | 192 | 1.588 | 0.267 | 0.050 | 0.166 |
| Had medical injections in past 12 months | 0.626 | 0.041 | 1451 | 958 | 3.198 | 0.065 | 0.544 | 0.707 |
| Had HIV test and received results last time | 0.044 | 0.007 | 1451 | 958 | 1.386 | 0.170 | 0.029 | 0.059 |
| Accepting attitudes towards people with HIV | 0.185 | 0.023 | 1420 | 938 | 2.202 | 0.123 | 0.139 | 0.230 |
| HIV prevalence | 0.027 | 0.005 | 1415 | 899 | 1.157 | 0.198 | 0.016 | 0.037 |
| Syphilis prevalence | 0.012 | 0.003 | 1364 | 866 | 1.008 | 0.249 | 0.006 | 0.018 |
| MEN |  |  |  |  |  |  |  |  |
| Urban residence | 0.068 | 0.007 | 1148 | 735 | 0.975 | 0.107 | 0.053 | 0.082 |
| No education | 0.042 | 0.007 | 1148 | 735 | 1.120 | 0.157 | 0.029 | 0.056 |
| With secondary education or higher | 0.273 | 0.021 | 1148 | 735 | 1.605 | 0.077 | 0.230 | 0.315 |
| Never married (in union) | 0.404 | 0.020 | 1148 | 735 | 1.378 | 0.049 | 0.364 | 0.444 |
| Currently married (in union) | 0.522 | 0.019 | 1148 | 735 | 1.269 | 0.036 | 0.485 | 0.560 |
| Had first sex before age 18 | 0.409 | 0.038 | 313 | 201 | 1.378 | 0.094 | 0.332 | 0.485 |
| Had two or more sexual partners in past |  |  |  |  |  |  |  |  |
| 12 months | 0.277 | 0.023 | 745 | 481 | 1.408 | 0.083 | 0.231 | 0.323 |
| Had higher risk sex in the past 12 months | 0.290 | 0.026 | 746 | 482 | 1.580 | 0.091 | 0.237 | 0.342 |
| Condom use at last high risk sex - all | 0.458 | 0.029 | 210 | 139 | 0.850 | 0.064 | 0.399 | 0.517 |
| Condom use at last high risk sex (15-24) | 0.500 | 0.041 | 131 | 87 | 0.933 | 0.082 | 0.419 | 0.582 |
| Comprehensive knowledge of HIV transmission - all | 0.376 | 0.024 | 1148 | 735 | 1.689 | 0.064 | 0.327 | 0.424 |
| Comprehensive knowledge of HIV transmission - youth | 0.395 | 0.029 | 515 | 329 | 1.355 | 0.074 | 0.336 | 0.453 |
| Abstinence among youth (never had sex) | 0.566 | 0.035 | 430 | 275 | 1.447 | 0.061 | 0.497 | 0.635 |
| Sexual activity in past 12 months (nevermarried youth) | 0.252 | 0.033 | 430 | 275 | 1.576 | 0.131 | 0.186 | 0.318 |
| Had medical injections in past 12 months | 0.430 | 0.024 | 1148 | 735 | 1.657 | 0.056 | 0.381 | 0.478 |
| Had HIV test and received results last time | 0.041 | 0.006 | 1148 | 735 | 1.073 | 0.153 | 0.028 | 0.053 |
| Accepting attitudes towards people with HIV | 0.352 | 0.023 | 1138 | 728 | 1.594 | 0.064 | 0.307 | 0.398 |
| HIV prevalence | 0.019 | 0.003 | 1104 | 685 | 0.874 | 0.196 | 0.011 | 0.025 |
| Syphilis prevalence | 0.016 | 0.004 | 1086 | 664 | 1.059 | 0.257 | 0.008 | 0.024 |
| WOMEN AND MEN |  |  |  |  |  |  |  |  |
| Care and support for adults | 0.006 | 0.006 | 159 | 103 | 0.986 | 1.008 | 0.000 | 0.018 |
| Care and support for orphans and vulnerable children | 0.001 | 0.001 | 787 | 492 | 1.009 | 0.999 | 0.000 | 0.004 |


| Table B.12 Sampling errors for Western sample, Uganda $2004-05$ |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |  |


| Variable | Value <br> (R) | Stand- <br> ard <br> error <br> (SE) | Number of cases |  | Design effect (DEFT) | Relative error (SE/R) | Confidence limits |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Weight- |  |  |  |  |
|  |  |  | (N) | (WN) |  |  | R-2SE | $R+2 S E$ |
| WOMEN |  |  |  |  |  |  |  |  |
| Urban residence | 0.060 | 0.017 | 1059 | 1309 | 2.305 | 0.281 | 0.026 | 0.093 |
| No education | 0.266 | 0.024 | 1059 | 1309 | 1.781 | 0.091 | 0.218 | 0.314 |
| With secondary education or higher | 0.130 | 0.017 | 1059 | 1309 | 1.680 | 0.134 | 0.095 | 0.164 |
| Never married (in union) | 0.242 | 0.017 | 1059 | 1309 | 1.279 | 0.069 | 0.209 | 0.276 |
| Currently married (in union) | 0.614 | 0.018 | 1059 | 1309 | 1.220 | 0.030 | 0.577 | 0.650 |
| Currently using any contraceptive method | 0.180 | 0.025 | 648 | 803 | 1.666 | 0.140 | 0.130 | 0.231 |
| Currently using a modern method | 0.158 | 0.025 | 648 | 803 | 1.749 | 0.159 | 0.108 | 0.208 |
| Had first sex before age 18 | 0.413 | 0.025 | 285 | 353 | 0.839 | 0.059 | 0.364 | 0.462 |
| Had two or more sexual partners in past |  |  |  |  |  |  |  |  |
| Had higher risk sex in the past 12 months | 0.056 | 0.009 | 716 | 884 | 1.016 | 0.156 | 0.039 | 0.074 |
| Condom use at last high risk sex - all | 0.292 | 0.063 | 41 | 50 | 0.881 | 0.217 | 0.166 | 0.419 |
| Condom use at last high risk sex (15-24) | 0.421 | 0.137 | 19 | 23 | 1.182 | 0.327 | 0.146 | 0.696 |
| Comprehensive knowledge of HIV |  |  |  |  |  |  |  |  |
| Comprehensive knowledge of HIV |  |  |  |  |  |  |  |  |
| transmission - youth | 0.172 | 0.019 | 436 | 538 | 1.077 | 0.114 | 0.133 | 0.211 |
| Abstinence among youth (never had sex) | 0.856 | 0.033 | 233 | 287 | 1.418 | 0.038 | 0.791 | 0.922 |
| Sexual activity in past 12 months (never- |  |  |  |  |  |  |  |  |
| Had medical injections in past 12 months | 0.370 | 0.021 | 1059 | 1309 | 1.405 | 0.056 | 0.328 | 0.412 |
| Had HIV test and received results last time | 0.025 | 0.005 | 1059 | 1309 | 1.009 | 0.192 | 0.016 | 0.035 |
| Accepting attitudes towards people with HIV | 0.121 | 0.015 | 1050 | 1297 | 1.500 | 0.125 | 0.091 | 0.151 |
| HIV prevalence | 0.071 | 0.009 | 987 | 1218 | 1.082 | 0.127 | 0.054 | 0.091 |
| Syphilis prevalence | 0.026 | 0.005 | 982 | 1172 | 0.949 | 0.183 | 0.017 | 0.036 |
| MEN |  |  |  |  |  |  |  |  |
| Urban residence | 0.071 | 0.009 | 820 | 1012 | 1.007 | 0.127 | 0.053 | 0.089 |
| No education | 0.074 | 0.008 | 820 | 1012 | 0.931 | 0.116 | 0.057 | 0.090 |
| With secondary education or higher | 0.218 | 0.023 | 820 | 1012 | 1.569 | 0.104 | 0.173 | 0.263 |
| Never married (in union) | 0.425 | 0.020 | 820 | 1012 | 1.184 | 0.048 | 0.384 | 0.466 |
| Currently married (in union) | 0.497 | 0.022 | 820 | 1012 | 1.244 | 0.044 | 0.454 | 0.541 |
| Had first sex before age 18 | 0.297 | 0.036 | 197 | 242 | 1.106 | 0.122 | 0.225 | 0.369 |
| Had two or more sexual partners in past |  |  |  |  |  |  |  |  |
|  | 0.181 | 0.025 | 502 | 620 | 1.464 | 0.139 | 0.130 | 0.231 |
| Had higher risk sex in the past 12 months | 0.233 | 0.020 | 504 | 622 | 1.055 | 0.085 | 0.193 | 0.272 |
| Condom use at last high risk sex - all | 0.262 | 0.044 | 118 | 145 | 1.082 | 0.168 | 0.174 | 0.350 |
| Condom use at last high risk sex (15-24) | 0.226 | 0.060 | 53 | 65 | 1.041 | 0.267 | 0.105 | 0.347 |
| Comprehensive knowledge of HIV |  |  |  |  |  |  |  |  |
| Comprehensive knowledge of HIV |  |  |  |  |  |  |  |  |
| transmission - youth | 0.196 | 0.019 | 369 | 454 | 0.897 | 0.095 | 0.159 | 0.234 |
| Abstinence among youth (never had sex) | 0.662 | 0.036 | 331 | 408 | 1.375 | 0.054 | 0.590 | 0.734 |
| Sexual activity in past 12 months (never- |  |  |  |  |  |  |  |  |
| Had medical injections in past 12 months | 0.370 | 0.023 | 820 | 1012 | 1.352 | 0.062 | 0.324 | 0.416 |
| Had HIV test and received results last time | 0.025 | 0.007 | 820 | 1012 | 1.368 | 0.302 | 0.010 | 0.039 |
| Accepting attitudes towards people with HIV | 0.223 | 0.019 | 816 | 1007 | 1.284 | 0.084 | 0.185 | 0.260 |
| HIV prevalence | 0.046 | 0.009 | 773 | 937 | 1.251 | 0.210 | 0.026 | 0.064 |
| Syphilis prevalence | 0.024 | 0.006 | 769 | 909 | 0.997 | 0.226 | 0.013 | 0.036 |
| WOMEN AND MEN |  |  |  |  |  |  |  |  |
| Care and support for adults | 0.012 | 0.012 | 83 | 100 | 0.982 | 0.976 | 0.000 | 0.036 |
| Care and support for orphans and vulnerable children | 0.000 | 0.000 | 553 | 661 | na | na | 0.000 | 0.000 |
| $\mathrm{na}=$ Not applicable |  |  |  |  |  |  |  |  |


A. HOUSEHOLD SCHEDULE

A1. HEPATITIS B IMMUNIZATIONS

| LINE NUMBER | CHILD'S NAME | IMMUNIZATIONS |  |  |  |  |  |  | DATE OF BIRTH |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| RECORD LINE NO. OF CHILDREN AGE 0-4 YEARS FROM COLUMN 10 IN THE HOUSEHOLD SCHEDULE | RECORD <br> NAME OR INITIALS OF CHILD | Has (NAME) ever received an immunization in the left thigh against hepatitis? | In all, how many doses of the hepatitis vaccine has (NAME) received? <br> IF DON'T KNOW RECORD '8' | Do you have a health card for (NAME) on which his/her vaccinations are recorded? <br> ASK TO SEE THE CARD. <br> RECORD '1' <br> IF CARD <br> SEEN, '2' IF <br> not SEEN. | RECORD <br> NUMBER OF HEPATITIS B DOSES LISTED ON THE CARD. <br> RECORD '0' IF NO DOSES ARE LISTED AND GO TO NEXT CHILD. | DAY, MONTH FIRST | ND YEAR OF SECOND | CINATIONS THIRD | RECORD THE DAY, MONTH, AND YEAR OF BIRTH. <br> IF THE DAY OR MONTH OF BIRTH IS NOT KNOWN, RECORD '98'. <br> YOU MUST RECORD A YEAR OF BIRTH FOR EVERY CHILD WHOSE HEALTH CARD IS SEEN. |
| (19A) | (19B) | (19C) | (19D) | (19E) | (19F) | (19G) | (19H) | (191) | (19J) |
|  |  | $\begin{array}{cc} \text { YES } & \text { NO/DK } \\ 1 & \\ & \\ & 19 \mathrm{E} \end{array}$ |  | SEEN NOT SEEN $1 \text { NEXT } 4{ }^{2}$ |  | DD/MM/YYYY $1 /$ | DD/MM/YYYY $11$ | DD/MM/YYYY $1 /$ | DD/MM/YYYY $11$ |
|  |  | $19 \mathrm{C}$ |  | $1 \text { NEXT } \stackrel{2}{4}$ | $\square$ | 11 | 11 | 11 | 11 |
|  |  | 19 l |  | $1 \text { NEXT } \stackrel{2}{4}$ | $\square$ | 11 | 11 | 11 | 11 |
|  |  | لـ |  | ${ }^{1} \text { NEXT } \stackrel{2}{4}$ |  | 11 | 11 | 11 | 11 |
|  |  | لـ |  | $1 \text { NEXT } \stackrel{2}{4}$ |  | 11 | 11 | 11 | 11 |
|  |  | ${ }^{1} \quad \stackrel{2}{4}$ |  | $1 \text { NEXT } 4{ }^{2}$ | $\square$ | 11 | 11 | 11 | 11 |
| $1$ |  | ${ }^{1} \frac{2}{4} \quad \stackrel{2}{4}$ |  | $1 \text { NEXT } \stackrel{2}{4}$ |  | 11 | 11 | 11 | 11 |
|  |  | لـ | $\square$ | ${ }^{1} \text { NEXT } \stackrel{2}{4}$ | $\square$ | 11 | 11 | 11 | 11 |


| NO. | B. HOUSEHOLD CHARACTERISTICS |  |  |
| :---: | :---: | :---: | :---: |
|  | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| 20 | What is the main source of drinking water for members of your household? |  |  |
| 21 | What kind of toilet facilities does your household have? |  |  |
| 22 | Does your household have: <br> Electricity? <br> A clock? <br> A mattress? <br> A black and white television? <br> A colour television? <br> A radio? <br> A mobile phone? <br> A land line? <br> A refrigerator? <br> A cooker? |  |  |
| 22A | Does your household have any mosquito nets that can be used while sleeping? | $\begin{aligned} & \text { YES . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . } 1 \\ & \text { NO . . . . . . . . . . . . . . . . . . . } 2 \end{aligned}$ | $\longrightarrow 23$ |
| 22B | How many mosquito nets does your household have? <br> IF 7 OR MORE, RECORD ' 7 '. | NUMBER OF NETS . ....... |  |


| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 23 | MAIN MATERIAL OF THE FLOOR. RECORD OBSERVATION. |  |  |
| 24 | Does any member of your household own: <br> A bicycle? <br> A motorcycle or motor scooter? <br> A car or a lorry? <br> Any livestock? <br> Any poultry? |  |  |

## C. SUPPORT FOR VULNERABLE HOUSEHOLDS

## C1. SUPPORT FOR CHRONICALLY ILL PERSONS



| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES |  |  |  | SKIP |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 31 | In the last year, besides any help or support from your relatives, friends or neighbours, has your household received: <br> a) Any material support for (NAME/INITIALS), such as monetary support, clothes or food for which you did not have to pay? <br> b) Any practical support for (NAME/INITIALS), such as help in household work, training for caregivers, or legal services, for which you did not have to pay? <br> c) Any kind of medical support for (NAME/INITIALS), such as medical care or medicine, for which you did not have to pay? <br> d) Any kind of social, spiritual, or emotional support for (NAME/ INITIALS), such as companionship or advice from a counselor which you received at home and for which you did not have to pay? | MATERIAL <br> PRACTICAL $\qquad$ <br> MEDICAL $\qquad$ <br> PSYCHOSOCIAL $\qquad$ | YES <br> 1 <br> 1 <br> 1 <br> 1 | NO <br> 2 <br> 2 <br> 2 <br> 2 | DK 8 8 8 8 8 8 |  |
| 32 | CHECK Q.25: NUMBER OF SICK PERSONS <br> MORE THAN <br> TWO SICK PERSONS | TWO SICK PERSONS |  |  |  | $\longrightarrow 36$ |
| 33 | CHECK COLUMN 11 IN THE HOUSEHOLD SCHEDULE: THIRD SI <br> LINE NUMBER <br> NAME | PERSON <br> ITIALS |  |  |  |  |
| 34 | In the last year, besides any help or support from your relatives, friends or neighbours, has your household received: <br> a) Any material support for (NAME/INITIALS), such as monetary support, clothes or food for which you did not have to pay? <br> b) Any practical support for (NAME/INITIALS), such as help in household work, training for caregivers, or legal services, for which you did not have to pay? <br> c) Any kind of medical support for (NAME/INITIALS), such as medical care or medicine, for which you did not have to pay? <br> d) Any kind of social, spiritual, or emotional support for (NAME/ INITIALS), such as companionship or advice from a counselor which you received at home and for which you did not have to pay? | MATERIAL <br> PRACTICAL $\qquad$ <br> MEDICAL $\qquad$ <br> PSYCHOSOCIAL $\qquad$ | YES <br> 1 <br> 1 <br> 1 <br> 1 | NO <br> 2 <br> 2 <br> 2 <br> 2 | DK 8 8 8 8 8 8 |  |
| 35 | CHECK Q.25: NUMBER OF SICK PERSONS <br> MORE THAN <br> 3 SICK <br> PERSONS <br> FOR MORE THAN THREE SICK PERSONS USE ADDITIONAL QU STARTING WITH Q. 27 FOR THE FOURTH SICK PERSON. | THREE <br> SICK <br> PERSONS $\square$ <br> ONNAIRES, |  |  |  | $\rightarrow 36$ |

## C2. SUPPORT FOR PERSONS WHO HAVE DIED




| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES |  |  |  | SKIP |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 43 | CHECK COLUMN 38D: SECOND PERSON WHO DIED NAME OR INITIALS |  |  |  |  |  |
| 44 | In the last year, besides any help or support from your relatives, friends or neighbors, has your household received: <br> a) Any material support for (NAME/INITIALS), such as monetary support, clothes or food for which you did not have to pay? <br> b) Any practical support for (NAME/INITIALS), such as help in household work, training for caregivers, or legal services, for which you did not have to pay? <br> c) Any kind of medical support for (NAME/INITIALS), such as medical care or medicine, for which you did not have to pay? <br> d) Any kind of social, spiritual, or emotional support for (NAME/ INITIALS), such as companionship or advice from a counselor which you received at home and for which you did not have to pay? | MATERIAL <br> PRACTICAL <br> MEDICAL $\qquad$ <br> PSYCHOSOCIAL | YES <br> 1 <br> 1 <br> 1 <br> 1 | NO <br> 2 <br> 2 <br> 2 <br> 2 | DK <br> 8 <br> 8 <br> 8 <br> 8 |  |
| 45 | CHECK COLUMN 38D: NUMBER OF PERSONS 18-59 WHO HAV <br> MORE THAN TWO PERSONS | AND WERE SICK <br> TWO PERSONS |  |  |  | $\longrightarrow 49$ |
| 46 | CHECK COLUMN 38D: THIRD PERSON WHO DIED <br> NAME OR INITIALS $\qquad$ |  |  |  |  |  |
| 47 | In the last year, besides any help or support from your relatives, friends or neighbors, has your household received: <br> a) Any material support for (NAME/INITIALS), such as monetary support, clothes or food for which you did not have to pay? <br> b) Any practical support for (NAME/INITIALS), such as help in household work, training for caregivers, or legal services, for which you did not have to pay? <br> c) Any kind of medical support for (NAME/INITIALS), such as medical care or medicine, for which you did not have to pay? <br> d) Any kind of social, spiritual, or emotional support for (NAME/ INITIALS), such as companionship or advice from a counselor which you received at home and for which you did not have to pay? | MATERIAL <br> PRACTICAL <br> MEDICAL <br> PSYCHOSOCIAL | YES <br> 1 <br> 1 <br> 1 <br> 1 | 2 <br> 2 <br> 2 <br> 2 | DK 8 8 8 8 8 8 |  |
| 48 | CHECK COLUMN 38D: NUMBER OF PERSONS 18-59 WHO HAV <br> MORE THAN <br> THREE <br> PERSONS <br> FOR MORE THAN THREE PERSONS, USE ADDITIONAL QUEST STARTING WITH Q. 40 FOR THE FOURTH PERSON WHO DIED | AND WERE SICK <br> THREE PERSONS <br> RES, |  |  |  | $\rightarrow 49$ |




\begin{tabular}{|c|c|c|c|c|c|c|}
\hline NO. \& QUESTIONS AND FILTERS \& \multicolumn{4}{|c|}{CODING CATEGORIES} \& SKIP \\
\hline 61 \& \begin{tabular}{l}
CHECK Q. 50 OR 51: NUMBER OF ORPHANS/VULNERABLE CHILDREN \\
MORE THAN THREE CHILDREN
\end{tabular} \& THREE CHILDREN \& \& \& \& \(\rightarrow 68\) \\
\hline 62 \& \begin{tabular}{l}
CHECK HOUSEHOLD SCHEDULE: FOURTH ORPHAN/VULNERABLE CH \\
LINE NUMBER \\
AGE . \\
NAME OR
\end{tabular} \& D \& \& \& \& \\
\hline 63 \& \begin{tabular}{l}
In the last year, besides any help or support from your relatives, friends or neighbors, has your household received: \\
a) IF AGE 5-17, ASK: Any kind of financial or material support for (NAME'S/INITIALS') schooling, such as an allowance, free admission, or free books? \\
b) IF AGE 13-17, ASK: Any financial or material support for (NAME/INITIALS) for vocational or technical training, such as an allowance or tools? \\
c) Any material support for (NAME/INITIALS), such as monetary support, clothes or food for which you did not have to pay? \\
d) Any practical support for (NAME/INITIALS), such as help in household work, training for caregivers, or legal services for which you did not have to pay? \\
e) Any kind of medical support for (NAME/INITIALS), such as medical care or medicine, for which you did not have to pay? \\
f) Any kind of social, spiritual, or emotional support for (NAME/ INITIALS), such as companionship or advice from a counselor which you received at home and for which you did not have to pay?
\end{tabular} \& \begin{tabular}{l}
SCHOOLING \\
VOCATIONAL/TECH \\
MATERIAL \(\qquad\) \\
PRACTICAL \\
MEDICAL \(\qquad\) \\
PSYCHOSOCIAL
\end{tabular} \& \begin{tabular}{l}
YES \\
1 \\
1 \\
1 \\
1 \\
1 \\
1
\end{tabular} \& NO
2

2
2
2
2
2
2
2 \& DK
8
8
8
8
8
8
8
8
8 \& <br>
\hline 64 \& MORE THAN FOUR CHILDREN \& FOUR CHILDREN \& \& \& \& $\rightarrow 68$ <br>

\hline 65 \& \multicolumn{5}{|l|}{| CHECK HOUSEHOLD SCHEDULE: FIFTH ORPHAN/VULNERABLE CHILD |
| :--- |
| AGE . $\square$ NAME OR INITIALS |} \& <br>


\hline 66 \& | In the last year, besides any help or support from your relatives, friends or neighbors, has your household received: |
| :--- |
| a) IF AGE 5-17, ASK: Any kind of financial or material support for (NAME'S/INITIALS') schooling, such as an allowance, free admission, or free books? |
| b) IF AGE 13-17, ASK: Any financial or material support for (NAME/INITIALS) for vocational or technical training, such as an allowance or tools? |
| c) Any material support for (NAME/INITIALS), such as monetary support, clothes or food for which you did not have to pay? |
| d) Any practical support for (NAME/INITIALS), such as help in household work, training for caregivers, or legal services for which you did not have to pay? |
| e) Any kind of medical support for (NAME/INITIALS), such as medical care or medicine, for which you did not have to pay? |
| f) Any kind of social, spiritual, or emotional support for (NAME/ INITIALS), such as companionship or advice from a counselor which you received at home and for which you did not have to pay? | \& | SCHOOLING |
| :--- |
| VOCATIONAL/TECH |
| MATERIAL $\qquad$ |
| PRACTICAL |
| MEDICAL $\qquad$ |
| PSYCHOSOCIAL | \& | YES |
| :--- |
| 1 |
| 1 |
| 1 |
| 1 |
| 1 |
| 1 | \& NO

2

2
2
2
2
2
2
2 \& DK
8
8
8
8
8
8
8
8
8 \& <br>
\hline
\end{tabular}

| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 67 | CHECK Q. 50 OR 51: NUMBER OF ORPHANS/VULNERABLE CHILDREN <br> MORE THAN <br> FIVE CHILDREN <br> FOR MORE THAN FIVE CHILDREN, USE ADDITIONAL QUESTIONNAIRES STARTING WITH Q. 53 FOR THE SIXTH ORPHAN/VULNERABLE CHILD. | FIVE <br> CHILDREN |  |
| 68 | In the last 12 months, has any member of your household received any support for income-generation activities? | YES . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 1 NO . . . . . . . . . . . . . . . 2 |  |

4. BLOOD TESTING DECISIONS
CHECK COLUMNS (8) THROUGH (10): RECORD THE LINE NUMBER, NAME AND AGE OF ALL ELIGIBLE PERSONS







| NO. | QUESTION | FILTERS | CODING CATEGORIES |  | SKIP |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 108 | Do you listen to the radio al less than once a week or no | very day, at least once a week, ? | ALMOST EVERY DAY <br> at least once a week <br> LESS THAN ONCE A WEEK <br> NOT AT ALL | $\begin{aligned} & 1 \\ & 2 \\ & 3 \\ & 4 \end{aligned}$ |  |
| 109 | Do you watch television alm less than once a week or no | ery day, at least once a week, ? | 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 | MALE $\square$ <br> Are you currently working? | FEMALE $\square$ <br> As you know, some women take up jobs for which they are paid in cash or kind. Others sell things, have a small business or work on the family farm or in the family business. <br> Are you currently doing any of these things or any other work? | $\begin{aligned} & \text { YES } \\ & \text { NO } \end{aligned}$ | $\begin{aligned} & 1 \\ & 2 \end{aligned}$ | $\longrightarrow 112$ |
| 111 | Have you done any work in | t 12 months? | $\begin{aligned} & \text { YES } \\ & \text { NO } \end{aligned}$ |  | $\longrightarrow 113$ |
| 112 | What is your occupation, tha mainly do? <br> INTERVIEWER: PROBE TO INFORMATION ON THE KI DOES. | hat kind of work do you <br> AIN DETAILED WORK RESPONDENT |  |  | $\rightarrow 114$ |
| 113 | What have you been doing 12 months? | st of the time over the last | GOING TO SCHOOL/STUDYING LOOKING FOR WORK RETIRED $\qquad$ TOO ILL TO WORK HANDICAPPED, CANNOT WORK HOUSEWORK/CHILD CARE OTHER $\qquad$ | 01 <br> 02 <br> 03 <br> 04 <br> 05 <br> 06 <br> 96 |  |
| 114 | How long have you been living CURRENT PLACE OF RES <br> IF LESS THAN ONE YEAR, | tinuously in (NAME OF CE)? <br> ORD '00' YEARS. | YEARS <br> ALWAYS $\qquad$ <br> VISITOR |  |  |
| 115 | What is your religion? |  | CATHOLIC <br> ANGLICAN/PROTESTANT <br> SDA <br> ORTHODOX <br> PENTECOSTAL <br> OTHER CHRISTIAN <br> MOSLEM <br> BAHAI <br> OTHER NON-CHRISTIAN <br> TRADITIONAL <br> NONE | 01 <br> 02 <br> 03 <br> 04 <br> 05 <br> 06 <br> 07 <br> 08 <br> 09 <br> 10 <br> 11 |  |
| 116 | What is your ethnic group? |  | ETHNIC GROUP |  |  |


| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES |  | SKIP |
| :---: | :---: | :---: | :---: | :---: |
| 117 | Have you ever had a blood transfusion? | $\begin{aligned} & \text { YES } \\ & \text { NO } \end{aligned}$ |  | $\longrightarrow 119$ |
| 118 | When was the last time you had a blood transfusion? |  |  |  |
| 119 | In the last 12 months, have you received any injections that were given to you by a doctor, a nurse, a pharmacist, or another health professional? | YES <br> NO <br> DON'T KNOW |  | $\xrightarrow{\rightarrow} 121$ |
| 120 | In the last 12 months, how many injections have you received from a doctor, a nurse, or another health professional? | NUMBER OF INJECTIONS |  |  |
| 121 | Have you ever had an immunization against yellow fever? | $\begin{aligned} & \text { YES . . . . . . . . } \\ & \text { NO . . . . . } \\ & \text { DON'T KNOW } \end{aligned}$ |  | $\longrightarrow 123$ |
| 122 | When was the last time you had an immunization against yellow fever? | MONTHS AGO $\ldots \ldots . . . .1$ <br> YEARS AGO $\ldots \ldots . . .2$ |  |  |
| 123 | In your work or at home, do you have any contact with the blood of other persons? | AT WORK ONLY <br> AT HOME ONLY <br> AT WORK AND AT HOME <br> NO, NEITHER |  |  |
| 124 | In the last three months, how many times did you seek health care outside of your home? | NONE <br> NUMBER |  | $\longrightarrow 201$ |
| 125 | The last time you went for health care, where did you go? <br> IF SOURCE IS HOSPITAL, HEALTH CENTER, OR CLINIC, WRITE THE NAME OF THE PLACE. PROBE TO IDENTIFY THE TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE. | PUBLIC SECTOR <br> GOVERNMENT HOSPITAL <br> GOVT. HEALTH CENTER <br> FAMILY PLANNING CLINIC <br> MOBILE CLINIC <br> FIELDWORKER <br> OTHER PUBLIC <br> PRIVATE MEDICAL SECTOR <br> PRIVATE HOSPITAL/PRIVATE CLINIC/DOCTOR <br> PHARMACY/DRUG SHOP MOBILE CLINIC FIELDWORKER OTHER PRIVATE MEDICAL <br> OTHER SOURCE <br> SHOP <br> TRADITIONAL HEALER <br> OTHER |  |  |

SECTION 2. REPRODUCTION



| NO. | QUESTIONS AND FILTERS |  | CODING CATEGORIES |  | SKIP |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 301 | MALE <br> Have you ever been married or lived together with a woman as if married? | FEMALE <br> Have you ever been married or lived together with a man as if married? | YES <br> NO | $\begin{array}{ll} \ldots . . & 1 \\ \ldots . . & 2 \end{array}$ | $\longrightarrow 312$ |
| 302 | Are you currently married or living together with a woman as if married? | Are you currently married or living together with a man as if married? | $\begin{aligned} & \text { YES } \\ & \text { NO } \end{aligned}$ | $\begin{array}{ll}  & \\ \ldots \ldots & 1 \\ \ldots \ldots & 2 \end{array}$ | $\longrightarrow 306$ |
| 303 | At this time, do you have more than one wife or woman with whom you are living as if married? | Besides yourself, does your husband/partner have other wives or does he live with any other women as if married? | YES <br> NO | $\begin{array}{ll} \ldots . . & 1 \\ \ldots . . & 2 \end{array}$ | $\longrightarrow 305$ |
| 304 | Altogether, how many wives or live-in partners do you have now? | Including yourself, how many wives or live-in partners does your husband/partner have now? | NUMBER OF WIVES AND LIVE-IN PARTNERS | $\square$ |  |
| 305 | WRITE NAME(S) OR INITIALS NUMBER(S) FROM THE HOU SPOUSE(S) AND LIVE-IN PAR IS NOT LISTED IN THE HOUS <br> Please tell husband (th together with AFTER REC <br> CHECK 303 IF ONE WIF name or initia you are now AFTER REC <br> IF MORE TH <br> Please tell m of your curre woman you <br> AFTER REC | ND THEN RECORD THE LINE HOLD QUESTIONNAIRE FOR ER(S). IF THE PERSON OLD, RECORD '00'. <br> he name or initials of your an you are now living if married). <br> DDING, GO TO 306. <br> D 304: <br> ARTNER: Please tell me the of your wife (the woman ing with as if married). <br> DING, GO TO 306. <br> ONE WIFE/PARTNER: <br> the name or initials of each wives (and/or of each now living with as if married). <br> RING, SKIP TO 307B. | NAME/INITIALS <br> NAME/INITIALS $\qquad$ <br> NAME/INITIALS $\qquad$ <br> NAME/INITIALS $\qquad$ <br> NAME/INITIALS $\qquad$ | LINE NO |  |
| 306 | MALE <br> Have you been married or lived with a woman only once or more than once? | FEMALE $\square$ <br> Have you been married or lived with a man only once or more than once? | ONLY ONCE MORE THAN ONCE | $\begin{array}{ll} \ldots . & 1 \\ \ldots . & 2 \end{array}$ | $\longrightarrow$ 307B |



| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 317 | The last time you had sexual intercourse, was a condom used? | YES . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 2 | $\longrightarrow 319$ |
| 318 | Why wasn't a condom used the last time you had sexual intercourse? <br> PROBE: Any other reasons? <br> RECORD ALL MENTIONED. | NO KNOWLEDGE OF CONDOMS ... A <br> NO KNOWLEDGE OF SOURCE ...... B <br> SOURCE NOT ACCESSIBLE ......... C <br> DID NOT HAVE A CONDOM THEN ... D <br> COST TOO MUCH .................. E <br> TOO MESSY/INCONVENIENT ......... F <br> CONDOMS NOT EFFECTIVE .......... G <br> DOESN'T LIKE CONDOMS ............ H <br> RESPONDENT WANTED TO GET <br> PREGNANT/WANTED PARTNER <br> TO GET PREGNANT <br> TRUST SPOUSE/PARTNER, SPOUSE <br> /PARTNER DOES'NT HAVE DISEASE . J <br> RESPONDENT DOESN'T HAVE A <br> DISEASE ........................... K <br> PARTNER INSISTED ON NOT USING . L <br> RELIGIOUS PROHIBITION ........... M <br> OTHER $\qquad$ X |  |
| 319 | What was your relationship to the person with whom you last had sex? <br> IF BOYFRIEND/GIRLFRIEND: Were you living together as if married at that time? |  | $323$ |
| 320 | CHECK 103: <br> AGE 15-24 <br> AGE 25-59 |  | -323 |
| 321 | How old is this woman/man? | AGE OF PARTNER $\ldots \ldots . . . .$ <br> DON'T KNOW . . . . . . . . . . . . . . . . . . . 98 | $\longrightarrow 323$ |
| 322 | Do you think that she/he is at least 10 years older than you? | YES, 10 OR MORE YEARS OLDER . . . . 1  <br> NO, LESS THAN 10 YEARS OLDER 1 2 <br> OLDER, DON'T KNOW DIFFERENCE $\ldots$ 3 <br> SAME AGE . . . . . . . . . . . . . . . . . . . . . 4  <br> YOUNGER . . . . . . . . . . . . . . . . . . . . 5  <br> DON'T KNOW . . . . . . . . . . . . . 8  |  |
| 323 | The last time you had sexual intercourse, did you or your partner drink alcohol? IF YES: Who was drinking? |  |  |
| 324 | Have you had sex with any other person in the last 12 months? | YES . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 2 | $\longrightarrow 342$ |
| 325 | The last time you had sexual intercourse with another person, was a condom used? | YES . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 2 |  |


| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 326 | What was your relationship to this person at that time? <br> IF BOYFRIEND/GIRLFRIEND: Were you living together as if married? |  | $\xrightarrow{\longrightarrow} 330$ |
| 327 | CHECK 103: <br> AGE 15-24 <br> AGE 25-59 |  | $\rightarrow 330$ |
| 328 | How old is this woman/man? |  | $\longrightarrow 330$ |
| 329 | Do you think that she/he is at least 10 years older than you? |  |  |
| 330 | The last time you had sexual intercourse with this partner, did you or your partner drink alcohol? <br> IF YES: Who was drinking? |  |  |
| 331 | Other than these two people, have you had sex with anyone else in the last 12 months? |  | $\longrightarrow 342$ |
| 332 | The last time you had sexual intercourse with this third person, was a condom used? | YES . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 2 |  |
| 333 | What was your relationship to this person at that time? <br> IF BOYFRIEND/GIRLFRIEND: Were you living together as if married at that time? |  | $\xrightarrow{\longrightarrow} 337$ |
| 334 | CHECK 103: <br> AGE 15-24 <br> AGE 25-59 |  | $\rightarrow 337$ |
| 335 | How old is this woman/man? | AGE OF PARTNER $\square$ <br> DON'T KNOW $98$ | $\longrightarrow 337$ |
| 336 | Do you think that she/he is at least 10 years older than you? |  |  |


| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 337 | The last time you had sexual intercourse with this partner, did you or your partner drink alcohol? <br> IF YES: Who was drinking? |  |  |
| 338 | In total, how many different people have you had sex with in the last 12 months? | NUMBER OF PARTNERS |  |
| 339 | MALE <br> In the last 12 months, did you pay anyone to have sex? <br> FEMALE $\square$ <br> In the last 12 months, did any man pay you to have sex? | YES . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 2 | $\rightarrow 342$ |
| 340 | The last time you paid someone to have sex, was a condom used? <br> The last time you were paid to have sex, was a condom used? | YES . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . | $\longrightarrow 342$ |
| 341 | Do you use a condom all the time or only sometimes when you pay to have sex? <br> Is a condom used all the time or only sometimes when you are paid to have sex? | ALL THE TIME . . . . . . . . . . . . . . . . . . . . . . . 1 ONLY SOMETIMES . . . . . . . . . . 2 |  |
| 342 | In total, how many different people have you had sex with in your lifetime? <br> IF NON-NUMERIC ANSWER, PROBE TO GET AN ESTIMATE. <br> IF NUMBER OF PARTNERS IS GREATER THAN 95, WRITE '95.' | NUMBER OF PARTNERS <br> DON'T KNOW <br> 98 |  |
| 343 | Do you know of a place where a person can get condoms? | YES . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 2 | $\longrightarrow 345$ |
| 344 | Where is that? <br> PROBE: Any other place? <br> RECORD ALL PLACES MENTIONED. |  |  |


| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 345 | ANY 'YES' IN 314, 317, 325, 332, 340 OR $\square$ <br> NEVER IN Q312 <br> OTHER |  | $\rightarrow 400$ |
| 346 | Have you ever used a condom? |  |  |


| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 400 | MALE $\square$ <br> FEMALE |  | $\rightarrow 501$ |
| 401 |  | NEVER <br> MARRIED AND NEVER $\square$ <br> LIVED WITH A MAN |  |
| 402 | How old was your husband/partner on his last birthday? | AGE IN COMPLETED YEARS |  |
| 403 | Did your (last) husband/partner ever attend school? | $\begin{aligned} & \text { YES } \\ & \text { NO } \end{aligned}$ | $\rightarrow 406$ |
| 404 | What was the highest level of school he attended: primary, '0' level, 'A' level, or university or tertiary? | PRIMARY <br> 'O' LEVEL <br> 'A' LEVEL <br> UNIVERSITY/TERTIARY <br> DON'T KNOW | $\rightarrow 406$ |
| 405 | What was the highest (class/year) he completed at that level? | CLASS/YEAR <br> DON'T KNOW |  |
| 406 | CHECK 401: <br> CURRENTLY MARRIED/ FORMERLY MARRIED/ <br> LIVING WITH A MAN LIVED WITH A MAN <br> What is your husband's/ <br> What was your (last) husband's/ partner's occupation? partner's occupation? <br> That is, what kind of work <br> That is, what kind of work did he does he mainly do? mainly do? <br> INTERVIEWER: PROBE TO OBTAIN DETAILED INFORMATION ON THE KIND OF WORK HUSBAND/PARTNER DOES. |  |  |

SECTION 5. HIVIAIDS

| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 501 | Now I would like to talk about something else. Have you ever heard of an illness called AIDS? |  | $\rightarrow 601$ |
| 502 | What are the main channels of communication from which you receive HIV/AIDS information and education? <br> PROBE: Any other channels? <br> RECORD ALL MENTIONED. |  |  |
| 503 |  |  | 505 |
| 504 | From which source have you learned most about HIV or AIDS? |  |  |


| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 505 | What is the most important message you have learned from this source? |  |  |
| 506 | Can people reduce their chances of getting the AIDS virus by having just one sex partner who is not infected and who has no other partners? | YES . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 8 |  |
| 507 | Can people get the AIDS virus from mosquito bites? | YES . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 2 <br> NO . . . . . . . . . . . . . . . . . 8 |  |
| 508 | Can people reduce their chances of getting the AIDS virus by using a condom every time they have sex? | YES . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 8 |  |
| 509 | Can people get the AIDS virus by sharing food with a person who has AIDS? | YES . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 8 |  |
| 510 | Can people reduce their chance of getting the AIDS virus by not having sex at all? | YES . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 8 |  |
| 511 | Can people get the AIDS virus because of witchcraft or other supernatural means? | YES . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 1 <br> NO . . . . . . . . . .  |  |
| 512 | Is there anything (else) a person can do to avoid or reduce the chances of getting AIDS or the virus that causes AIDS? | YES . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . | $\xrightarrow{\longrightarrow} 514$ |


| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 513 | What can a person do? <br> PROBE: Anything else? <br> RECORD ALL WAYS MENTIONED. |  |  |
| 514 | Have you heard of any drugs that can cure a person who has the virus that causes AIDS? | YES . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 2 |  |
| 515 | Have you heard of any drugs that can prolong the life of a person who has the virus that causes AIDS? | YES . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 2 | $\rightarrow 519$ |
| 516 | What drugs do you know about? <br> PROBE: Any other drugs? <br> RECORD ALL MENTIONED. |  |  |
| 517 | CHECK 516: <br> CODE 'A' CIRCLED <br> CODE 'A' NOT CIRCLED |  | $\rightarrow 519$ |
| 518 | For how long should a person with the AIDS virus take ARVs? |  |  |
| 519 | If a man has the virus that causes AIDS, does his sexual partner always have the AIDS virus, almost always, or only sometimes? | ALWAYS . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 2 <br> ALMOST ALWAYS . . . . . . . . . 3 <br> ONLY SOMETIMES . . . . . . . . . . . . 8 |  |
| 520 | If a woman has the virus that causes AIDS, does her sexual partner always have the AIDS virus, almost always, or only sometimes? | ALWAYS . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 2 <br> ALMOST ALWAYS . . . . . . . . . 3 <br> ONLY SOMETIMES . . . . . . . . . . . . 8 |  |
| 521 | Is it possible for a healthy-looking person to have the AIDS virus? | YES . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 8 |  |


| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES |  | SKIP |
| :---: | :---: | :---: | :---: | :---: |
| 522 | Can the virus that causes AIDS be transmitted from a mother to a child? | YES <br> NO <br> DON'T KNOW | $\begin{array}{ll} \ldots . . & 1 \\ \ldots . & 2 \\ \ldots . & 8 \end{array}$ | $\xrightarrow{\longrightarrow} 525$ |
| 523 | Can the virus that causes AIDS be transmitted from a mother to a child: <br> During pregnancy? <br> During delivery? <br> By breastfeeding? |  YES  <br>    <br> DURING PREGNANCY. 1  <br> DURING DELIVERY ... 1  <br> BREASTFEEDING $\ldots$ 1 | NO DK <br>   <br> 2 8 <br> 2 8 <br> 2 8 |  |
| 524 | Are there any special drugs that a doctor or nurse can give to a pregnant woman infected with the AIDS virus to reduce the risk of transmission to the baby? | YES <br> NO <br> DON'T KNOW | $\begin{array}{ll} \ldots . & 1 \\ \ldots . & 2 \\ \ldots . & 8 \end{array}$ |  |
| 525 | If you knew that a market vendor had the AIDS virus, would you buy sugar or fresh vegetables or other food from that person? | YES <br> NO <br> DON'T KNOW | $\begin{array}{ll} \ldots \ldots & 1 \\ \ldots \ldots & 2 \\ \ldots . . & 8 \end{array}$ |  |
| 526 | If a member of your family got infected with the virus that causes AIDS, would you want it to remain a secret or not? | YES, REMAIN A SECRET NO DK/NOT SURE/DEPENDS | $\begin{array}{ll} \ldots \ldots & 1 \\ \ldots \ldots & 2 \\ \ldots \ldots & 8 \end{array}$ |  |
| 527 | If a relative of yours became sick with the virus that causes AIDS, would you be willing to care for her or him in your own household? | YES <br> NO <br> DK/NOT SURE/DEPENDS | $\begin{array}{ll} \ldots & \ldots \\ \ldots & 1 \\ \ldots & 2 \\ \ldots . & 8 \end{array}$ |  |
| 528 | If a female teacher has the AIDS virus but is not sick, should she be allowed to continue teaching in the school? | CAN CONTINUE SHOULD NOT CONTINUE DK/NOT SURE/DEPENDS | $\begin{array}{ll} \ldots . . & 1 \\ \ldots . & 2 \\ \ldots \ldots & 8 \end{array}$ |  |
| 529 | Should children age 12-14 be taught about using a condom to avoid AIDS? | YES <br> NO <br> DK/NOT SURE/DEPENDS | $\begin{array}{ll} \ldots \ldots & 1 \\ \ldots . & 2 \\ \ldots \ldots & 8 \end{array}$ |  |
| 530 | What are the chances that you yourself might get the virus that causes AIDS -- would you say it is very likely, somewhat likely, not likely, or there is no chance at all? | VERY LIKELY SOMEWHAT LIKELY NOT LIKELY NO CHANCE AT ALL ALREADY HAVE HIV OR AID DK/NOT SURE/DEPENDS |   <br> $\ldots$. 1 <br> $\ldots$. 2 <br> $\ldots$. 3 <br> $\ldots$. 4 <br> $\ldots .$. 5 <br> $\ldots .$. 8 |  |
| 531 | MALE $\square$ <br> FEMALE |  |  | $\rightarrow 541$ |
| 532 | CHECK 212 AND 213 : <br> NO BIRTHS (212 BL <br> LAST BIRTH SINCE <br> LAST BIRTH BEF <br> JANUARY 2002/ JANUARY <br> WITHIN PAST 2 YEARS <br> THREE YE | K) <br> RE <br> 2/ <br> S <br> GO |  |  |
| 533 | Now I would like to ask some questions about your last birth. Did you see anyone for antenatal care during that pregnancy? | YES <br> NO | $\begin{array}{ll} \hline \ldots . & 1 \\ \ldots \ldots & 2 \end{array}$ | $\longrightarrow 541$ |



| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 545 | CHECK 302: CURRENTLY MARRIED OR LIVING TOGETHER? <br> YES $\qquad$ <br> NO OR BLANK |  | $\rightarrow 547$ |
| 546 | CHECK 312: EVER HAD SEX? NEVER HAD SEX (CODE '00') $\square$ <br> OTHER $\square$ ANSWER |  | $\rightarrow 548$ |
| 547 | Did you tell (any of) your spouse(s)/partner(s) your HIV status? | YES . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . |  |
| 548 | In your lifetime, how many times have you been tested to see if you have the AIDS virus? | TIMES . . . . . . . . . . . . . . . . ${ }$ | $\rightarrow 550$ |
| 549 | Why have you never had a test for the AIDS virus? <br> PROBE: Any other reason? <br> RECORD ALL MENTIONED. | NO KNOWLEDGE ABOUT HIV TEST . A DON'T KNOW WHERE TO GET ONE . B TEST COSTS TOO MUCH ........... C DON'T NEED TEST/LOW RISK DON'T WANT TO KNOW IF I HAVE <br> THE VIRUS CAN'T GET TREATMENT IF HAVE HII. OTHER $\qquad$ X |  |
| 550 | CHECK 302: CURRENTLY MARRIED OR LIVING TOGETHER? <br> YES $\square$ <br> NO OR BLANK $\square$ |  | $\longrightarrow 552$ |
| 551 | CHECK 312: EVER HAD SEX? <br> NEVER HAD SEX (CODE '00') $\square$ <br> OTHER $\square$ ANSWER |  | $\rightarrow 601$ |
| 552 | CHECK 538 AND 547: <br> 'YES IN EITHER OR BOTH $\square$ <br> OTHER |  | $\rightarrow 554$ |
| 553 | Have you ever discussed AIDS or the virus that causes AIDS with your spouse(s)/(any of) your partner(s)? | YES (WITH ALL) . . . . . . . . . . . . . . . . 1  <br> DISCUSSED WITH SOME $\ldots$ 2 <br> NO, NEVER DISCUSSED $\ldots . . .$. 3 |  |
| 554 | Do you know whether or not your spouse(s)/(any of) your partner(s) has the virus that causes AIDS? | YES, KNOW STATUS (FOR ALL) . . . . 1  <br> YES, KNOW STATUS FOR SOME .. 2 <br> NO, DON'T KNOW STATUS (FOR ANY) 3  |  |


| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 601 | MALE $\square$ FEMALE |  | $\rightarrow 603$ |
| 602 | Some men are circumcised. Are you circumcised? |  |  |
| 603 | Have you ever undergone any (other) traditional practices that involve tattooing or cutting of the skin? |  |  |
| 604 | Apart from AIDS, have you heard about other infections that can be transmitted through sexual contact? |  |  |
| 605 | CHECK 312: <br> HAS HAD SEXUAL <br> HAS NOT HAD SEXUAL INTERCOURSE INTERCOURSE |  | $\rightarrow 613$ |
| 606 |  | UT ED $\square$ CT | $\rightarrow 608$ |
| 607 | Now I would like to ask you some questions about your health in the last 12 months. During the last 12 months, have you had a disease which you got through sexual contact? |  |  |
| 608 | MALE FEMALE <br> Sometimes men experience <br> an abnormal discharge from <br> their penis. Sometimes women experience a <br> bad smelling abnormal genital <br> discharge. <br> During the last 12 months, <br> have you had an abnormal <br> discharge from your penis? During the last 12 months, have you <br> had a a bad smelling abnormal <br> genital discharge? |  |  |
| 609 | Sometimes men have Sometimes women have a genital <br> a sore or ulcer on or near <br> their penis. <br> sure or ulcer.  <br> have the last 12 months, During the last 12 months, have you <br> had a gore or ulcer had a genital sore or ulcer?  <br> on or near your penis? $\quad$. |  |  |
| 610 | CHECK 607, 608, 609: <br> HAS NOT HAD AN INFECTION OR DOES NOT KNOW |  | $\rightarrow 613$ |
| 611 | The last time you had (PROBLEM FROM 607/608/609), did you seek any kind of advice or treatment? |  | $\longrightarrow 613$ |


| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 612 | Where did you go? <br> PROBE: Any other place? <br> RECORD ALL MENTIONED. | PUBLIC SECTOR <br> GOVERNMENT HOSPITAL ... A <br> GOVT. HEALTH CENTER ....... B <br> FAMILY PLANNING CLINIC ... C <br> MOBILE CLINIC ................. D <br> FIELDWORKER .................. E <br> OTHER PUBLIC $\qquad$ F <br> (SPECIFY) <br> PRIVATE MEDICAL SECTOR <br> PRIVATE HOSPITAL/PRIVATE <br> CLINIC/DOCTOR ............ G <br> PHARMACY/DRUG STORE ... H <br> MOBILE CLINIC ................. I <br> FIELDWORKER .................. J <br> OTHER PRIVATE <br> MEDICAL $\qquad$ K <br> OTHER SOURCE <br> SHOP ........................... L <br> TRADITIONAL HEALER .......... M <br> OTHER $\qquad$ X |  |
| 613 | Husbands and wives do not always agree on everything. Please tell me if you think a wife is justified in refusing to have sex with her husband when she knows he has a disease that can her be transmitted through sexual contact? |  |  |
| 614 | When a wife knows her husband has a disease that can be transmitted through sexual contact, is she justified in asking that they use a condom when they have sex? |  |  |
| 615 | RECORD THE TIME. <br> IF TIME IS 1:00 PM OR LATER, ADD 12 TO HOUR. | HOUR <br> MINUTES |  |

## INTERVIEWER'S OBSERVATIONS

TO BE FILLED IN AFTER COMPLETING INTERVIEW
COMMENTS ABOUT RESPONDENT:
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$

COMMENTS ON SPECIFIC QUESTIONS:
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$

ANY OTHER COMMENTS:
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$

SUPERVISOR'S OBSERVATIONS
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$

NAME OF THE SUPERVISOR: $\qquad$ DATE


[^0]:    ${ }^{1}$ The definition of vulnerable children sometimes includes children whose mother or father was very sick in the past 12 months even if they are not living with that parent. However, detailed questions about these categories of children were not included in the UHSBS.

[^1]:    ${ }^{1}$ Completed standard 7

[^2]:    ${ }^{1}$ Completed standard 7

[^3]:    ${ }^{1}$ Refers to lactational amenorrhoea method.
    ${ }^{2}$ Total includes age groups with too few cases to show separately.

[^4]:    ${ }^{1}$ Because of a skip error in the 2000-01 UDHS questionnaire, the results regarding birth registration are erroneous.

[^5]:    ${ }^{1}$ Percentage who say that HIV can be transmitted by breastfeeding and there are special drugs that a doctor or nurse can give to a pregnant woman infected with the AIDS virus to reduce the risk of transmission to the baby.

[^6]:    ${ }^{1}$ Percentage who say that people can reduce the risk of getting the AIDS virus by using a condom every time they have sex and by having sex with just one partner who is not infected and who has no other partners, who say that people cannot get the AIDS virus from mosquito bites or from sharing food with a person who has AIDS, and who say that a healthy-looking person can have the AIDS virus.

[^7]:    ${ }^{1}$ This is somewhat lower than the rate of 7.1 percent positive for women and men aged 15-49 that was included in the UHSBS preliminary report. Some of the difference reflects changes that occurred during external quality control.

[^8]:    Note: Totals include a small number of cases with missing information.
    ANC = antenatal care
    na $=$ Not applicable
    ${ }^{1}$ The category 'widowed' consists of those who are not currently married and who had a previous spouse who died. It may be slightly overestimated to the extent that respondents who are currently divorced but previously widowed are considered widowed instead of divorced.

[^9]:    Note: Higher-risk sex refers to sex with a nonmarital, noncohabiting partner. An asterisk refers to a figure based on fewer
    than 25 unweighted cases that has been suppressed.
    ${ }^{1}$ Refers to those who had sex in the past 12 months.

[^10]:    Note: Higher-risk sex refers to sex with a nonmarital, noncohabiting partner. Numbers in parentheses are based on 2549 unweighted cases; an asterisk refers to a figure based on fewer than 25 unweighted cases that has been suppressed.
    ${ }^{1}$ Refers to those who have ever had sex.
    ${ }^{2}$ Refers to those who had sex in the past 12 months

[^11]:    Note: Totals include a small number of cases with missing information.
    ANC = antenatal care
    na $=$ Not applicable
    ${ }^{1}$ The category 'widowed'consists of those who are not currently married and who had a previous spouse who died. It may be slightly overestimated to the extent that respondents who are currently divorced but previously widowed are considered widowed instead of divorced.

[^12]:    Note: Totals include some cases with missing information. Numbers in parentheses are based on 25-49 cases.

