

# Uganda



AIDS Indicator  
Survey (AIS)

2011





# UGANDA AIDS INDICATOR SURVEY 2011

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**USAID**  
FROM THE AMERICAN PEOPLE



UGANDANS AND AMERICANS  
IN PARTNERSHIP TO FIGHT HIV/AIDS



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**UKaid**  
from the Department for  
International Development



This report presents findings from the 2011 Uganda AIDS Indicator Survey (UAIS) carried out by the Ministry of Health. The Demographic and Health Surveys division at ICF International provided financial and technical assistance for the survey through a contract with the U.S. Agency for International Development (USAID)/Uganda. Financial and technical assistance was also provided by the U.S. Centers for Disease Control and Prevention (CDC), especially in the area of HIV and syphilis testing. Financial support was provided by the Government of Uganda, the U.S. Agency for International Development (USAID), the President's Emergency Fund for AIDS Relief, the World Health Organisation (WHO), and DFID and DANIDA through the Partnership Fund. The Uganda Bureau of Statistics also partnered in the implementation of the survey. The Uganda Virus Research Institute conducted central laboratory tests. 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 central coordination office, field staff, district officials, communities, and survey respondents, without whom the survey would not have been possible.

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# FOREWORD

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It is now three decades since the first case of acquired immune deficiency syndrome (AIDS) was reported in Uganda. Over the years, the country has experienced a big burden of AIDS. The national human immunodeficiency virus (HIV) surveillance system established in the mid-1980s to track the epidemic has documented more than 2 million people in the country who have been infected by the HIV virus. A large proportion of them have died from AIDS-related conditions. Furthermore, mathematical projection estimates have shown that approximately 130,000 new HIV infections occur annually in Uganda. To address this high burden, a national prevention strategy is being implemented and various approaches are used to monitor the progress of the national response.

In line with the national HIV surveillance system, the Ministry of Health, in collaboration with its Health Development Partners, conducted the 2011 Uganda AIDS Indicator Survey (UAIS 2011). The main aim of this nationwide survey was to obtain national and regional estimates of the prevalence of HIV and syphilis, their risk factors, the extent of programme coverage, and indicators of behaviour, knowledge, and attitudes. The survey was conducted on a nationally representative sample of 11,340 households, including 12,153 women and 9,588 men age 15-59, as well as about 10,000 children age 0-4. The survey involved individual interviews and blood sample analysis.

This report constitutes the latest, most comprehensive national HIV and AIDS information for Uganda. Information is wide ranging and includes data on HIV-related knowledge, attitudes, and behaviours, patient care, and biomarker indicators. The survey results demonstrate both the strengths and challenges of Uganda's response. Furthermore, the results demonstrate indisputably that HIV infection remains a significant health problem for Uganda; for this reason, the report should serve as a call to action for all stakeholders. The report should be used as a resource to inform the process of planning and policy formulation as well as the monitoring and evaluation of HIV and AIDS programmes. All categories of HIV and AIDS stakeholders, whether policymakers, programme staff, the general public, or those affiliated with academia and research institutions, will find the report to be useful.

Finally, the Ministry of Health, along with our dedicated international partners, takes the publication of this report, which shows the current burden of the HIV and AIDS epidemic, as an opportunity to recommit ourselves to continued scale-up of proven HIV interventions, to the goal of universal access to antiretroviral treatment, and to our shared vision of a future free of HIV.

Thank you,

Dr. Christine Ondo  
**MINISTER OF HEALTH**



## Key Findings

- The 2011 UAIS covered over 11,000 households and almost 22,000 women and men age 15-59 throughout Uganda.
- The survey provides HIV/AIDS indicators for the country as a whole, for urban and rural areas separately, and for each of 10 geographic regions.
- The survey included testing for HIV and syphilis, with both rapid and laboratory tests for adults, CD4 counts for those who tested positive for HIV, and HIV testing for children under age 5.
- The survey was implemented by the Ministry of Health from early February to early September 2011.

## 1.1 BACKGROUND INFORMATION

Uganda has endured a severe HIV/AIDS epidemic for over a quarter of a century. Beginning in the late 1980s, a comprehensive and multi-sectoral national response was designed and implemented. Over the years, the national response led to declining trends in both HIV prevalence and incidence. This success story, however, followed a period of soaring HIV prevalence during the 1980s. HIV prevalence peaked around 1992 and steadily declined. In the latter half of the 1990s, there were declines in both prevalence and incidence. However, according to available surveillance data, HIV prevalence stabilized from 2000-2007 in most parts of the country (MOH, 2009). In recent times, there has been increased support for HIV/AIDS control programmes by government and development partners.

A population-based, HIV serological survey conducted in 2004-05 established that 6 percent of adults age 15-49 and less than one percent of children under age 5 were HIV positive (MOH and ORC Macro, 2006). The prevalence of HIV in the country was heterogeneous among groups, with women and urban residents disproportionately affected. In addition, there were marked geographical differences, with Kampala and the central and mid-northern parts of the country most affected. There were also variations in HIV prevalence by socioeconomic and sociodemographic characteristics. Estimates of HIV incidence obtained from mathematical modelling indicated that over 120,000 new infections occur annually (Hladik et al., 2007). Analysis of the trends in HIV prevalence and incidence in Uganda over the last 8 years suggests that the declines observed during the 1990s have levelled off. This appears to coincide with declines in protective sexual behaviour and increased risk-taking behaviour in the general population (Opio et al., 2007; Opio et al., 2008). Furthermore, analysis of factors associated with HIV incidence and prevalence indicates that HIV risk factors appear to have changed (MOH, 2007). The Mode of Transmission study shows that there is increased risk of HIV infection among married and cohabiting couples (Uganda AIDS Commission and UNAIDS, 2009).

Over the last 20 years, Uganda has piloted and implemented various HIV prevention, care, treatment, and support interventions. Currently, a National HIV Prevention Strategy (NPS) is being implemented. The NPS consists of a combination of structural, behavioural, and biological interventions stressing abstinence, being faithful, and condom use, referred to as 'ABC'. These interventions include the promotion of safe sexual

behaviour through abstinence, mutual faithfulness among uninfected partners, and risk reduction through consistent condom use, especially with casual partners and partners of unknown or discordant HIV sero-status. Other interventions include prevention of mother-to-child transmission, promotion of safe medical circumcision, provision of treatment for sexually transmitted infections, promotion of knowledge of HIV status through counselling and testing programmes, and promotion of medical infection control through precautions such as safe blood transfusion and hygienic injections. Interventions for care and support include positive living through testing and counselling, home and facility-based HIV/AIDS care, treatment of opportunistic infections, co-trimoxazole prophylaxis, and antiretroviral therapy. Recent intervention efforts include increased focus on HIV-prevention among HIV-infected individuals (Bunnell, et al., 2008).

To inform the design and implementation of these interventions, the Ministry of Health collects data to provide strategic information. The main sources of data about HIV/AIDS consist of the routine morbidity reports produced through the Health Management Information System (HMIS), the HIV/AIDS surveillance system, periodic household and facility surveys, and special studies.

The antenatal-care-based HIV sentinel surveillance is the main source of HIV/AIDS prevalence data in Uganda. This surveillance system was established in Uganda in 1989, primarily to monitor the magnitude of and trends in HIV infection (Kirungi, et al., 2006; Asimwe-Okiror, et al., 1997). Currently there are 30 HIV sentinel sites widely distributed throughout the country taking into consideration rural and urban representation. More than 90 percent of pregnant women in Uganda attend an antenatal clinic at least once during pregnancy, indicating that ANC sentinel surveillance data are representative of pregnant women in the country (UBOS and Macro International, 2007). Furthermore, data from the 2004-05 Uganda HIV/AIDS Sero-Behavioural Survey indicated a close correlation between HIV prevalence estimates from the survey with those from an ANC-based HIV prevalence survey conducted over the same period of time (Musinguzi, et al., 2009). Antenatal sero-prevalence surveys are conducted annually in Uganda.

Demographic and Health Surveys (DHS) have been important sources of information on HIV/AIDS in Uganda. These surveys complement routine HIV/AIDS data sources in providing strategic information to guide programmes. The DHS surveys are based on nationally representative household samples, providing national and subnational estimates of a range of demographic and health indicators. In Uganda, five DHS surveys have been conducted, in 1988-89, 1995, 2000-01, 2006, and 2011. The data collected in the DHS surveys include HIV/AIDS knowledge and attitudes, sexual behaviour, and coverage of HIV prevention, care, and treatment programmes. The sexual behaviour information collected includes indicators to measure higher-risk sex, multiple partnerships, primary and secondary abstinence, condom use, prevalence of symptoms of sexually transmitted infections, and health-seeking behaviour. The data on programme coverage includes prevention of mother-to-child transmission, use of counselling and testing services, and knowledge of sources for obtaining condoms.

Population-based serological surveys have provided invaluable HIV/AIDS information that has guided programme plans and implementation. In 1987 and 2004-05, population-based serological surveys were conducted on nationally representative samples. These surveys also provided data on a range of biological markers. For example, the 2004-05 UHSBS included testing for HIV, syphilis, and genital herpes (HSV-2). Information obtained from these surveys has formed a basis for the National Strategic Plan 2010-2015 (NSP 2010-2015) and the Health Sector HIV/AIDS strategic plan.

The HIV/AIDS programme in Uganda also derives data on the dynamics and impact of HIV/AIDS and the potential impact of HIV control interventions from standard mathematical models and projections. In these models, estimates are obtained from triangulation of HIV surveillance and population survey data with population demographic parameters. The models currently used include the Estimation and Projection Package



(EPP) (Brown, et al., 2005) and Spectrum (Stover et al., 2006). Based on these models, the programme estimates the numbers of new HIV infections that occur annually, the number of people living with HIV, the number in need of anti-retroviral therapy, the burden of HIV/AIDS morbidity and mortality, and the number of infections averted through existing programmes.

Additional sources of HIV/AIDS data include special studies, longitudinal cohort studies, and data from programmes such as HIV counselling and testing services, blood transfusions, and prevention of mother-to-child transmission services. A historical database on voluntary counselling and testing shows trends in HIV prevalence that closely match those in antenatal care HIV surveillance, especially in the major towns (Baryarama, et al., 2004). In Uganda, there are two large-scale cohort studies: the Medical Research Council Kyamulibwa project and the Rakai Health Sciences project, both of which have been operating for about two decades. They provide vital natural history HIV/AIDS data together with annual sero-prevalence and sero-conversion data. They have also included community-based, randomized HIV prevention trials, such as a study to assess the effect of treatment of sexually transmitted infections on incidence of HIV (Wawer et al., 1999; Kamali et al., 2003) and a multi-country study to assess the protective effect of male circumcision in reducing HIV acquisition (Gray et al., 2007). Recently, a sub-national study conducted by the Rakai Health Sciences Project showed that scaling up medical circumcision in Rakai district led to a reduction of HIV acquisition by circumcised men (Gray et al., 2012). Furthermore, analysis of HIV trends in a population-based cohort in Rakai recently showed a rise in HIV prevalence, but a decline in HIV incidence (Wawer et al., 2012). The increase in HIV prevalence is partly explained by prolonged survival of HIV infected persons due to widespread use of antiretroviral drugs.

## **1.2 OBJECTIVES OF THE SURVEY**

The 2011 Uganda AIDS Indicator Survey (AIS) is a nationally representative, population-based, HIV serological survey. The survey was designed to obtain national and sub-national estimates of the prevalence of HIV and syphilis infection as well as information about other indicators of programme coverage, such as knowledge, attitudes, and sexual behaviour related to HIV/AIDS. Data collection took place from 8 February to the first few days of September 2011.

The UAIS was implemented by the Ministry of Health. ICF International provided financial and technical assistance for the survey through a contract with USAID/Uganda. 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 President's Emergency Fund for AIDS Relief (PEPFAR), the World Health Organisation (WHO), the UK Department for International Development (DFID), and the Danish International Development Agency (DANIDA) through the Partnership Fund. The Uganda Bureau of Statistics also partnered in the implementation of the survey. Central testing was conducted at the Uganda Virus Research Institute, with CDC conducting CD4 counts, polymerase chain reaction (PCR) testing for children, and quality control tests.

The survey provided information on knowledge, attitudes, and behaviour regarding HIV/AIDS and indicators of coverage and access to other programmes, for example, HIV testing, access to antiretroviral therapy, services for treating sexually transmitted infections, and coverage of interventions to prevent mother-to-child transmission of HIV. The survey also collected information on the prevalence of HIV and syphilis and their social and demographic variations in the country. The overall goal of the survey was to provide programme managers and policymakers involved in HIV/AIDS programmes with strategic information to effectively plan, implement, and evaluate HIV/AIDS interventions.

The information obtained from the survey will help programme implementers to monitor and evaluate existing programmes and design new strategies for combating the HIV/AIDS epidemic in Uganda. The survey data will in addition be used to make population projections and to calculate indicators developed by the UN General Assembly Special Session (UNGASS), USAID, PEPFAR, the UNAIDS Programme, WHO, the Uganda Health Sector Strategic and Investment Plan, and the Uganda AIDS Commission.

The specific objectives of the 2011 UAIS were to provide information on:

- Prevalence and distribution of HIV and syphilis
- Indicators of knowledge, attitudes, and behaviour related to HIV/AIDS and other sexually transmitted infections
- HIV/AIDS programme coverage indicators
- Levels of CD4 T-lymphocyte counts among HIV-positive adults to quantify HIV treatment needs and to calibrate model-based estimates
- HIV prevalence that can be used to calibrate and improve the sentinel surveillance system
- Risk factors for HIV and syphilis infections in Uganda.

### **1.3 SAMPLE DESIGN AND IMPLEMENTATION**

The sample for the 2011 UAIS covered the population residing in households. A representative probability sample of 11,750 households was selected for the survey. The sample was constructed to allow for separate estimates for HIV/AIDS indicators for each of 10 geographic regions. The regions were created for the survey and do not represent administrative units of the country. Other than Kampala, each region comprised between 8 and 15 contiguous administrative districts of Uganda that share similar languages and cultural characteristics. Because of its unique character as an entirely urban district and capital city of Uganda, Kampala comprised a separate region. The 10 regions were comprised of the following districts<sup>1</sup>:

- Central 1: Bukomansimbi, Gomba, Lwengo, Lyantonde, Kalangala, Kalungu, Masaka, Mpigi, Rakai, Sembabule, and Wakiso.
- Central 2: Buikwe, Buvuma, Kayunga, Kiboga, Kyankwanzi, Luwero, Mityana, Mubende, Mukono, Nakaseke, and Nakasongola.
- Kampala: Kampala district.
- East-Central: Bugiri, Buyende, Iganga, Jinja, Kaliro, Kamuli, Luuka, Mayuge, and Namutumba
- Mid Eastern: Budaka, Bududa, Bukwa, Bulambuli, Busia, Butaleja, Kapchorwa, Kibuku, Kween, Manafwa, Mbale, Pallisa, Sironko, and Tororo.
- North East: Abim, Amudat, Amuria, Bukedea, Kaabong, Kaberamaido, Katakwi, Kotido, Kumi, Moroto, Nakapiripirit, Napak, Nora, Serere, and Soroti.

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<sup>1</sup> The 2011 UAIS regions are similar to those used for the 2004-05 Uganda HIV/AIDS Sero-Behavioural Survey, but the 2004-05 Central region is divided into two regions, and two districts from the 2004-05 East Central region are transferred to Central 2 region. Thus comparisons by region across these two surveys need to be made cautiously.

- West Nile: Arua, Adjumani, Koboko, Moyo, Nebbi, Maracha, Yumbe, and Zombo.
- Mid Northern: Agago, Alebtong, Amolatar, Amuru, Apac, Dokolo, Gulu, Kitgum, Kole, Lamwo, Lira, Otuke, Oyam, and Pader.
- South Western: Buhweju, Bushenyi, Ibanda, Isingiro, Kabale, Kanungu, Kiruhura, Kisoro, Mbarara, Mitooma, Ntungamo, Rubirizi, Rukungiri, and Sheema.
- Mid Western: Buliisa, Bundibugyo, Hoima, Kabarole, Kamwenge, Kasese, Kibaale, Kiryandongo, Kyegegwa, Kyenjojo and Masindi.

The sample was allocated equally across all 10 regions, so as to allow a sufficient size to produce reliable estimates in each region. Since the sample was not allocated in proportion to the size of each region, the UAIS sample is not self-weighting at the national level. Consequently, weighting factors have been applied to the data to produce nationally representative estimates.

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 470 clusters was selected (47 in each region), comprised of 79 urban and 391 rural points. The second stage of selection involved the systematic sampling of 25 households per cluster from a list of households in each cluster that was produced by the Uganda Bureau of Statistics prior to the UAIS data collection.

All women and men age 15-59 years 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 for interviews. All women and men who were interviewed were asked to voluntarily give a blood sample for testing. In addition, blood samples were drawn from children under age 5 after obtaining consent from their parents or caretaker.

## **1.4 QUESTIONNAIRES**

Two questionnaires were used to collect data: the Household Questionnaire and the Individual Questionnaire for women and men age 15-59. The contents of the questionnaires were based on the model AIDS Indicator Survey questionnaires developed by the MEASURE DHS programme and on the questionnaires used in the 2004-05 Uganda HIV/AIDS Sero-Behavioural Survey (UHSBS). The two questionnaires were loaded onto personal digital assistants (PDAs) that were used to conduct the interviews.

In consultation with stakeholders from government agencies and local and international organisations, the questionnaires were revised to reflect HIV/AIDS issues relevant to Uganda. The questionnaires were then translated from English into six local languages—Ateso-Karamajong, Luganda, Lugbara, Luo, Runyankole-Rukiga, and Runyoro-Rutoro. They were further refined after the pretest and training of the field staff.

The Household Questionnaire on PDAs 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. An important purpose of the Household Questionnaire was to identify women and men who were eligible for the individual interview. The Household Questionnaire was also used to collect information on characteristics of the household's dwelling unit, such as the source of water, type of toilet facilities, materials used to construct the house, ownership of various durable goods, and ownership of land and farm animals. Information was also collected on adult chronic illness and deaths in the household during the 12 months before the survey.

The Individual Questionnaire on PDAs was used to collect information from all women and men age 15-59 and covered the following topics:

- Background characteristics (including education, media exposure, occupation, and religion)
- Reproduction
- Antenatal care and breastfeeding for recent births (women only)
- Marriage and sexual activity (including sexual violence)
- Knowledge of and attitudes towards HIV/AIDS
- Prior testing for HIV, results of prior testing, and whether taking medication
- Recent injections received
- Prevalence and attitudes towards male circumcision
- Knowledge and prevalence of other sexually transmitted infections (STIs).

In addition to the questionnaires, two paper forms were used to record results of home-based testing: a Field Test Result Form for Adults and a Field Test Result Form for Children. These forms were used by the teams' laboratory technicians to obtain informed consent and record the results of the home-based testing and any treatment provided to respondents.

All aspects of the UAIS data collection were pretested in October 2010. For this, four teams were formed, each with one supervisor, two female interviewers, two male interviewers, three laboratory technicians, and two HIV/AIDS counsellors. Team members were trained for two weeks and then proceeded to conduct the pretest in four locations: Hoima in the west, Lira in the north, Soroti in the east, and Wakiso, just outside of Kampala city. The four clusters were selected by the Uganda Bureau of Statistics to exclude clusters that had been selected for the main survey and to represent a range of languages. Interviews were conducted using the PDAs. The lessons learned from the pretest were used to finalise the survey instruments and logistical arrangements for the survey.

## **1.5 BIOMARKERS**

One of the main objectives of the survey was to provide up-to-date estimates of the prevalence of HIV and syphilis infections in the country. The survey was also designed to provide information on CD4 levels among HIV-positive adults.

### **1.5.1 Blood Collection**

All adults age 15-59 who were interviewed were asked to voluntarily provide a blood sample for testing for HIV and syphilis. Blood samples were also requested from all children under age 5 for HIV testing. In the households, home-based HIV and syphilis testing was conducted, and results were provided to respondents. For respondents who were reactive for the syphilis test in the household, confirmation was conducted in field laboratories the same evening (see Box). For those who tested HIV-positive in the home, CD4 counts were done later in a central laboratory and respondents were advised that they could obtain their CD4 results from a nearby health facility approximately 6 weeks after the interview.

<b>Biomarker Testing in the UAIS</b>				
<b>No.</b>	<b>Biomarker</b>	<b>Population</b>	<b>Type of test</b>	<b>Sample</b>
1	Syphilis	15-59 years	Bioline syphilis rapid test and if positive, RPR test in field lab—results returned to respondents Subsequent EIA testing at UVRI (Qunati-Flexx-Anti-Treponema Screen)	Venous blood
2a	HIV	0-4 years	Home-based rapid tests (Determine, Statpak, UniGold)—results returned for those 18-59 months Dried blood spots (DBS) for all children Subsequent PCR testing for those <18 months who tested HIV+ on Determine rapid test	Finger prick (heel prick for <6 months)
2b	HIV	15-59 years	Home-based rapid tests (Determine, Statpak, UniGold)—results returned for those who consented for venous blood draw (backup DBS prepared in the field) Dried blood spots for those who refused venous blood draw Subsequent EIA testing at UVRI (Murex and Vironostika Uniform II+O, and ANILAB as a tie breaker)	Venous blood; finger prick for respondents who prefer it to venous blood draw
2c	CD4	15-59 years who test HIV+ on rapid test	BD TruCount at CDC-Uganda	Venous blood held at ambient temperature and tested within 5-7 days

To collect and test blood samples, three laboratory technicians and two HIV counsellors were included on each of the 20 field teams. The laboratory technicians were recruited from public and private health facilities. To obtain informed consent for blood collection, the laboratory technician explained the procedure, the confidentiality of the data, the fact that respondents could obtain their HIV and syphilis results immediately if they wished, that they would be provided with counselling before and after the rapid tests, that those testing positive for syphilis could be treated the following day after confirmatory testing, and that, if they tested positive for HIV, they could obtain their CD4 count from a nearby health facility. Respondents were also told that they could opt for all, only some, or none of the tests and that they could decide for each test if they wanted the results given to them or not. Laboratory technicians also asked for permission to store leftover blood for future unspecified tests. Finally, they asked respondents if they had any questions and gave them a card with contact information for the three principal investigators of the survey and the chair of the ethics committee in case they wanted to ask further questions or lodge a complaint. For non-emancipated respondents age 15-17 (i.e., those who still live with other adults), laboratory technicians also sought consent of the parent or guardian in addition to the respondent.

After obtaining consent, laboratory technicians proceeded to draw blood from the arm by venipuncture using an evacuated tube collection system. Three tubes of blood were collected:

- Tube 1: 5 millilitres (ml) of blood was collected into an EDTA Vacutainer tube (with anticoagulant) from which all the rapid tests (HIV and syphilis) were performed in the field.
- Tube 2: 5 ml of blood was collected into an SST Vacutainer tube (no anticoagulant) from which serum was obtained for storage and transport to the central laboratory (UVRI)

- Tube 3: 2 ml of blood was collected into a special blood collection tube (BD Vacutainer CD4 Stabilisation Blood Collection System) designed to stabilize CD4 cells for up to 7 days at 30° C.

The laboratory technician placed labels with the same alphanumeric bar codes onto all three tubes as well as onto the Field Test Results Form for that respondent and onto field control forms. They noted the results of the home-based tests on a Participation, Results, and Referral Card that was left with all respondents who consented to the testing. Respondents who tested positive for HIV were also provided with a Retrieval Card that contained the same bar code label that the laboratory technician placed on the venous blood tubes. They were instructed where and when to go to present the card in order to obtain the results of the laboratory testing of their CD4 level.

In cases where respondents were willing to participate but refused the venous blood draw and in cases where the venipuncture process did not prove feasible, such as with subjects who had very small veins, respondents were offered the rapid tests based on finger-prick blood samples.

For children under age 5, laboratory technicians administered informed consent to the child's parent or guardian. Children were only tested for HIV using a finger-prick capillary blood sample for the same algorithm of rapid tests that were used for adults. Results were given to the parent or guardian and, for children under 18 months, the parent was given a card and told where they could obtain the results of the more definitive polymerase chain reaction (PCR) testing performed at the central laboratory.

The protocol for the blood specimen collection and analysis was developed jointly by all parties to the survey. It was reviewed and approved by the Science and Ethics Committee of the Uganda Virus Research Institute (UVRI), ICF Macro's Institutional Review Board, and a review committee at the Centers for Disease Control and Prevention (CDC) in Atlanta. It was also cleared by the Ethics Committee of the Uganda National Council of Science and Technology.

### **1.5.2 Home-Based Testing for HIV and Syphilis**

Home-based rapid HIV testing was conducted based on existing national protocols. For adults, an aliquot of blood was obtained from the EDTA Vacutainer tube and applied to the Determine rapid HIV test platform. In the case of children, the blood samples were obtained directly from the finger-prick using a Microtainer tube. Those testing negative on Determine were categorized as HIV-negative. Adult respondents and children above 18 months who tested positive on Determine were retested using Stat-pak for confirmation. Any discrepancy between the two test results was resolved using Uni-gold as a tie-breaker. Test results were returned to the respondents by the HIV counsellors on the team during post-test counselling. Adult respondents who were HIV positive were offered CD4 testing, which was done at the CDC laboratory in Entebbe. For those respondents, a counsellor advised them to use the Retrieval Card to get the results of the CD4 T-cell counts at a nearby health facility after about six weeks. In the interim, the counsellor also referred them for chronic HIV/AIDS care including co-trimoxazole prophylaxis from a nearby facility, in line with current MOH guidelines.

In the case of children, HIV results were provided in the household for those age 18-59 months. For those under age 18 months with a positive Determine test, the counsellor advised the parent or guardian that the test results were not definitive. They were given a Retrieval Card and referred to a nearby health facility for the results after about six weeks. In such cases, the laboratory technician marked the dried blood spot for that child 'for PCR' and dispatched it to the central laboratory for polymerase chain reaction (PCR) testing.

Syphilis testing was only performed for adults. An aliquot of blood was obtained from the EDTA Vacutainer tube and tested using the Bioline syphilis rapid diagnostic test at the same time as the rapid HIV

testing. For those whose syphilis test was positive, a qualitative rapid plasma reagin (RPR) test (on undiluted plasma) was conducted in a field-based laboratory that evening. Results were returned to respondents the following day, and those with reactive RPR results were offered treatment according to national treatment guidelines. Drugs for treatment included Benzathine penicillin (2.4 million units by deep intramuscular injection) or doxycycline (100 mg tablets/capsules twice daily for 14 days) for those who were hyper-sensitive to penicillin. For participants who were pregnant and hyper-sensitive to penicillin, erythromycin (250 mg tablets for 14 days) was used instead. All teams carried emergency Ana-Packs for management of anaphylactic shock. As part of the syphilis treatment, field workers counselled respondents to inform their sexual partners of the possible transmission of the illness and to encourage them to get tested for syphilis.

Before starting work in a given area, each team arranged 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 lab supplies such as pipettes, gloves, and tubes.

In the field laboratories, the laboratory technicians performed the RPR syphilis test for any respondents who had tested positive on the home-based Bioline syphilis test. They also centrifuged the blood and transferred the plasma to microvials labelled with the same bar code identification. Packed blood cells in the EDTA Vacutainer tubes were transferred to microvials and labelled with bar codes for long-term storage. Microvials containing plasma and packed blood cells were stored in liquid nitrogen tanks, and their location within the tank was recorded on a pre-printed specimen inventory form. All dried blood spots were air-dried overnight in plastic boxes and stored at ambient temperature in ziplock bags containing desiccants. The CD4 sample tubes from those who tested HIV-positive were placed in a special container. Laboratory technicians called the central office to alert them to any CD4 samples. The central office dispatcher then arranged for one of the ten sample retrieval vehicles to transport the samples to the CDC laboratory in Entebbe for CD4 testing within 5 to 7 days. Other blood specimens were also transported periodically from the field to the HIV Reference Laboratory (HRL) at the Uganda Virus Research Institute (UVRI) in Entebbe in liquid nitrogen tanks.

### 1.5.3 Central Laboratory Testing

Specimens received at UVRI were checked against the specimen shipping forms and registered electronically using bar-code readers. Specimens were assigned unique laboratory numbers during the registration process. Laboratory testing and storage were carried out using those reference numbers.

**HIV:** Plasma specimens from the venous blood draw were tested first with the Murex HIV 1.2.0 (Abbott) assay. All samples found to be HIV-reactive with Murex were re-tested with Vironostika HIV Uni-Form II Plus-O to confirm their sero-status. Discordant results were resolved using ANILAB Systems HIV EIA. For quality control, all positive specimens and 5 percent of negative specimens were re-tested using the same testing algorithm in the CDC/Uganda laboratory. The purpose of quality control testing was solely to document the quality of the original testing; quality assurance test results were not used to correct original test results.

The CD4 T-cell count testing of HIV-positives was implemented within a 7-day window after specimen collection (current specifications for the CD4 stabilisation tubes). These tests were conducted at the CDC/Uganda laboratory.

The dried blood spots (DBS) prepared in the field from anticoagulated blood were stored in freezers at temperatures of -20° C at the UVRI laboratory. The DBS samples from adults were tested only if the serum samples were lost in transit or if respondents did not provide a venous blood sample. Serum was eluted from 6

mm discs punched from the DBS and tested following the same algorithm described previously. For quality control, all positive specimens and 5 percent of negative specimens were re-tested at the CDC/Uganda laboratory using the same testing algorithm. DBS specimens from children under 18 months who tested HIV positive were tested for HIV-DNA (Cobas AmpliPrep/Cobas Taqman HIV-1 Qual Test) at the CDC/Uganda laboratory. Results for these children were returned to designated health facilities so that parents could retrieve results.

**Syphilis:** All adult serum specimens, regardless of field result, were screened at the central laboratory with the Qunati-Flexx-Anti-Treponema Screen EIA. Reactive specimens were re-tested on RPR to detect active syphilis infection. The RPR card test was used in dilutions of 1:8. For quality control, all positive and 5 percent of negative specimens were re-tested with the same algorithm at the CDC/Uganda Laboratory.

Biomarker results shown in this report are based on the centralised testing of blood specimens at the Uganda Virus Research Institute and CDC/Uganda.

#### **1.5.4 Quality Control Testing**

As mentioned above, primary testing was implemented by the HIV Reference Laboratory (HRL) at UVRI. Both internal and external quality control measures were taken throughout the laboratory testing for HIV and syphilis in order to ensure the quality of the testing procedures. For HIV testing, to ensure internal quality, both positive and negative serum controls provided by the manufacturer of each of the HIV assays were included on each microtiter plate of samples tested. A plate was comprised of 80 samples and 16 controls. In addition to the manufacturer's controls, dried blood spot controls prepared by CDC/Atlanta that were negative, low positive, and high positive were included in duplicate on each plate of samples. A 'run' (complete testing of all samples and controls on the microtiter plate) was considered valid if all controls met all the quality control parameters.

For external quality control, all samples that tested positive and 5 percent of samples that tested negative at HRL were selected for re-testing at the CDC/Uganda laboratory in Entebbe. For HIV, a total of 2,156 samples (1,913 serum samples and 245 dried blood spot samples) were re-tested. CDC used a similar algorithm and the same HIV assays as those used by HRL/UVRI. Of the 1,551 positive samples submitted to CDC, 1,436 were confirmed positive and 115 were found to be negative. Of the 605 negative samples submitted to CDC, 598 were confirmed negative and 7 were found to be positive. Based on the outcome of the external quality control testing, the concordance for samples tested by HRL/UVRI and CDC was 94 percent [2034/2156]. The results provided by UVRI were considered final and used to calculate the national prevalence of HIV in Uganda.

### **1.6 TRAINING AND DATA COLLECTION**

The survey was coordinated by a survey director and two deputy directors based at the Ministry of Health headquarters. In the central office, a field coordinator and laboratory coordinator linked the central level functions with the survey implementation in the field. In addition, four regional supervisory teams—each comprised of a specialist in interviewing and fieldwork management, laboratory techniques, and HIV counselling—coordinated data collection activities in Eastern, Western, Northern, and Central sectors of the country. Two PDA programmers supported data management for the survey. They were based in the central office but visited teams in the field to check on the pace and quality of the data collection and resolve technical problems.

The training of field staff for the UAIS was held at the Hotel Africana in Kampala from 17-29 January 2011. During the two weeks prior to the start of training, the UAIS management team, along with other senior



trainers, interviewed short-listed candidates for the various positions. A total of some 250 trainees were recruited, consisting of 120 supervisor/interviewer candidates, 80 laboratory technicians, and 50 HIV counsellors. Trainers were senior staff from the UAIS project and staff from the Uganda Bureau of Statistics, UVRI, the Ministry of Health, and ICF Macro. After two days of plenary sessions that provided an overview of the survey design and explanations of the administrative issues, participants were divided into six groups—three for supervisors/interviewers, two for laboratory technicians, and one for counsellors. Many of the trainers and trainees had participated in the 2004–05 Uganda HIV/AIDS Sero-Behavioural Survey (UHSBS), the 2006 Uganda Demographic and Health Survey (UDHS), or the 2009 Uganda Malaria Indicator Survey (UMIS).

For supervisors and interviewers, training consisted of an overview of the survey and its objectives, techniques of interviewing, field procedures, a detailed description of the Household Questionnaire and the Individual Questionnaire, use of the personal digital assistants (PDAs), instructions for transferring information between team members, mock interviews, and periodic tests. Trainees were divided into language groups to review the questionnaires in their local languages. Two days were set aside for practice interviewing in sites close to Kampala; the interviewing was interspersed with discussions of the experience. A few days before the end of training, project staff appointed regional and team supervisors. They were provided a half-day of special training on how to supervise and how to receive, store, and transfer data on the tablet computers that were provided to the team supervisors.

The lab technicians were trained on blood draw procedures (for both venous and capillary blood), specimen processing in the field lab, storage and transport of specimens, rapid HIV and syphilis testing, lab safety procedures, labelling of samples, and consent administration. In addition, the nurse-interviewers were trained on how to administer syphilis treatment.

HIV counsellors were trained on how to administer pre- and post-test counselling, how to counsel respondents on their test results, and how to maintain privacy as well as encourage test result disclosure to partners.

Twenty teams carried out data collection for the survey. Each team consisted of one supervisor, four interviewers (two female and two male), three laboratory technicians, and two HIV counsellors. On each team, at least two of the interviewers were health personnel capable of treatment and referral. The laboratory technicians were responsible for drawing blood samples, carrying out HIV and syphilis testing, and preparing samples for shipment to UVRI. The HIV counsellors were responsible for performing pre-test and post-test counselling and referral of clients who required further care. Because of their size and the amount of equipment and supplies, each team had two vehicles.

Data collection took place over a seven-month period, from 7 February to very early September 2011.

## **1.7 DATA PROCESSING**

Because all interviews were conducted using PDAs, data entry was minimal. Paper forms were used to record the results of the blood draw and the home-based HIV and syphilis testing. These results were entered in the field by the team supervisor. Interviewers transferred completed household and adult questionnaires to the team supervisor using Bluetooth technology. For the first time in a national survey, a ‘real-time’ web-based data management system developed by the DHS programme at ICF was implemented. The system transferred encrypted data from the field to the central office via the Internet. It also delivered system updates to the field from the central office. The system was completely automated and required little action on the part of team supervisors. Supervisors were equipped with GPRS modems, which were used to access the web. The system required supervisors to connect the modem to their tablets to transmit data to the Central Office.

The CDC office in Entebbe worked with the UVRI to program a system to track blood samples as they were received at the laboratory and were tested. Bar code labels on the samples were scanned upon receipt, and sequential lab numbers were assigned to ease tracking of samples. Final checking of the complete survey dataset and production of tables were done by ICF.

## 1.8 RESPONSE RATES

Table 1 shows response rates for the 2011 UAIS. A total of 11,750 households were selected in the sample, of which 11,434 were found to be occupied at the time of the fieldwork. The shortfall is largely due to structures that were vacant or destroyed (see Appendix A). Among the occupied households, 11,340 were interviewed, yielding a household response rate of 99 percent.

In the households interviewed in the survey, a total of 12,374 eligible women age 15-59 were identified, of whom 12,153 were interviewed, yielding a response rate of 98 percent. With regard to the male survey results, 9,983 eligible men age 15-59 were identified, of whom 9,588 were interviewed, yielding a response rate of 96 percent. Response rates were only slightly lower in urban than in rural areas.

The principal reason for non-response among both eligible men and women was the failure to find 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.

<b>Table 1.1 Results of the household and individual interviews</b>			
Number of households, number of interviews, and response rates, according to residence (unweighted), Uganda 2011			
Result	Residence		Total
	Urban	Rural	
<b>Household interviews</b>			
Households selected	2,350	9,400	11,750
Households occupied	2,278	9,156	11,434
Households interviewed	2,250	9,090	11,340
Household response rate <sup>1</sup>	98.8	99.3	99.2
<b>Interviews with women age 15-59</b>			
Number of eligible women	2,536	9,838	12,374
Number of eligible women interviewed	2,480	9,673	12,153
Eligible women response rate <sup>2</sup>	97.8	98.3	98.2
<b>Interviews with men age 15-59</b>			
Number of eligible men	1,938	8,045	9,983
Number of eligible men interviewed	1,849	7,739	9,588
Eligible men response rate <sup>2</sup>	95.4	96.2	96.0

<sup>1</sup> Households interviewed/households occupied  
<sup>2</sup> Respondents interviewed/eligible respondents

## Key Findings

- More than 7 in 10 Ugandan households use improved sources of drinking water, but only 16 percent have improved, unshared toilet facilities.
- Two-thirds of households live in dwellings with dirt floors; more than one-third have walls made of mud and poles.
- Very few households (14 percent) have electricity.
- One-fifth of households report that in the year before the survey, they often or always had problems in meeting their food needs.
- Over half of households have at least one mobile phone.
- Over half of the Ugandan population is under age 15.
- Twelve percent of children under age 18 are orphaned (i.e., one or both parents have died).

This chapter presents information on the social, economic, and demographic characteristics of the population in the households interviewed in the 2011 Uganda AIDS Indicator Survey (UAIS). For the purpose of the 2011 UAIS, a household was defined as a person or group of persons, related or unrelated, who live together and share a common source of food. The Household Questionnaire (see Appendix E) included a schedule to collect basic demographic and socioeconomic information (e.g., age, sex, and education attainment) for all usual residents and visitors who spent the night preceding the interview. This method of data collection allows the analysis of the results for either the *de jure* (usual residents) or *de facto* (those who are there at the time of the survey) populations. The Household Questionnaire also obtained information on housing facilities (e.g., sources of water supply and sanitation facilities) and household possessions. Finally, results regarding the level of orphanhood and fostering of children under age 18 are presented.

The information in this chapter is intended to facilitate interpretation of the key demographic, socioeconomic, and health indices presented later in the report. It is also intended to help assess the representativeness of the survey sample.

## 2.1 HOUSEHOLD CHARACTERISTICS

Basic utilities, sources of drinking water, sanitation facilities, type of cooking fuel, housing structure, and number of persons living in dwelling spaces are physical characteristics of a household that are used to assess the general well-being and socioeconomic status of household members. Millennium Development Goal 7 (MDG 7), which focuses on environmental sustainability, is measured according to the percentage of the population using solid fuels, the percentage with sustainable access to an improved water source, and the percentage with access to improved sanitation. This section provides information from the 2011 UAIS on household drinking water, household sanitation facilities, housing characteristics, and possession of basic amenities and utilities.

## 2.1.1 Water and Sanitation

The source of drinking water is important because unsafe sources can contain waterborne pathogens that cause diarrhoea, which is still an important cause of child deaths in Uganda (UBOS et al., 2008). 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 diseases.

Table 2.1 shows that more than 7 in 10 Ugandan households (72 percent) have water sources considered to be safe. Urban households are greatly advantaged—94 percent have improved sources of drinking water compared with 67 percent of rural households. Over 70 percent of urban households have water piped either into their dwelling or from a public tap, while rural households are most likely to get drinking water from a protected well or tubewell (37 percent) or from a protected spring (21 percent). There has been some progress over the past five years in the proportion of households with improved sources of drinking water, which has increased from 67 percent of house-holds in the 2006 Uganda DHS to 72 percent of house-holds in the 2011 UAIS.

<b>Table 2.1 Household drinking water</b>						
Percent distribution of households and de jure population by source of drinking water and time to obtain drinking water, according to residence, Uganda 2011						
Characteristic	Households			Population		
	Urban	Rural	Total	Urban	Rural	Total
<b>Source of drinking water</b>						
<b>Improved source</b>						
Piped into dwelling/yard/plot	20.8	1.7	5.4	21.2	1.4	4.5
Public tap/standpipe	51.2	6.7	15.5	46.3	6.3	12.5
Tube well/ borehole/protected well	11.5	37.2	32.1	14.2	38.2	34.4
Protected spring	9.2	20.5	18.3	11.2	20.7	19.2
Rain water	0.5	0.6	0.6	0.6	0.6	0.6
Bottled water	0.9	0.1	0.2	0.3	0.0	0.1
<b>Non-improved source</b>						
Open well	3.3	12.3	10.5	3.3	12.1	10.7
Unprotected spring	0.4	7.2	5.8	0.5	7.2	6.1
Tanker truck/cart with drum	0.1	0.0	0.1	0.2	0.0	0.1
Surface water	0.9	12.5	10.2	0.9	12.5	10.7
<b>Other source</b>						
	1.4	1.3	1.3	1.3	1.1	1.1
Total	100.0	100.0	100.0	100.0	100.0	100.0
Percentage using any improved source of drinking water	94.0	66.7	72.1	93.8	67.1	71.3
<b>Time to obtain drinking water (round trip)</b>						
Water on premises	29.0	5.1	9.8	28.3	4.5	8.2
Less than 30 minutes	47.9	32.0	35.1	44.0	30.5	32.6
30 minutes or longer	22.5	62.5	54.6	27.5	64.7	58.8
Don't know/missing	0.5	0.4	0.5	0.3	0.3	0.3
Total	100.0	100.0	100.0	100.0	100.0	100.0
Number	2,247	9,093	11,340	8,280	44,560	52,840

Table 2.1 also shows that drinking water is generally not readily accessible. More than half of households spend 30 minutes or longer to get drinking water, while only 10 percent have drinking water on the premises. Accessing drinking water takes longer in rural areas than in urban areas.

Table 2.2 shows information on household toilet facilities. Only 16 percent of Ugandan households have improved toilet facilities (flush toilet, ventilated, improved pit toilet, pit toilet with a slab, and composting toilet) that are not shared with other households. An additional 21 percent of households have sanitary toilets that they share with other households. The remaining 63 percent of households either have non-improved toilet facilities (54 percent) or no facilities whatsoever (9 percent). Urban households are more likely than rural households to have improved hygienic toilet facilities—either shared or not shared, although the most common facility for urban households is a pit latrine with a slab that is shared with other households (46 percent).

Table 2.2 Household sanitation facilities

Percent distribution of households and de jure population by type of toilet/latrine facilities, according to residence, Uganda 2011

Type of toilet/latrine facility	Households			Population		
	Urban	Rural	Total	Urban	Rural	Total
<b>Improved, not shared facility</b>						
Flush toilet	4.9	0.1	1.0	5.2	0.1	0.9
Ventilated improved pit (VIP) latrine	3.2	1.2	1.6	4.2	1.4	1.8
Pit latrine with slab	11.7	13.7	13.3	16.1	14.8	15.0
Composting toilet	0.1	0.1	0.1	0.1	0.2	0.2
<b>Shared facility<sup>1</sup></b>						
Flush toilet	4.9	0.0	1.0	3.9	0.0	0.7
Ventilated improved pit (VIP) latrine	8.4	1.3	2.7	7.8	1.1	2.2
Pit latrine with slab	46.1	9.5	16.7	40.2	7.7	12.7
Composting toilet	0.7	0.1	0.2	0.6	0.1	0.2
<b>Non-improved facility</b>						
Pit latrine without slab/open pit	18.1	62.2	53.5	20.1	64.0	57.1
No facility/bush/field	1.7	11.2	9.4	1.8	10.2	8.8
Other	0.1	0.5	0.4	0.1	0.5	0.4
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
<b>Number</b>	<b>2,247</b>	<b>9,093</b>	<b>11,340</b>	<b>8,280</b>	<b>44,560</b>	<b>52,840</b>

<sup>1</sup> Facilities that would be considered improved if they were not shared by two or more households

The availability of sanitary facilities has expanded over time. The proportion of households with improved, unshared toilet facilities has increased from 9 percent in 2006 to 16 percent in 2011. The proportion of households with no toilet has declined from 12 percent in 2006 to 9 percent in 2011.

## 2.1.2 Housing Characteristics

To assess socioeconomic conditions in Uganda, household respondents were asked a number of questions on issues related to their household environment. These included questions about the building materials of the household dwelling unit, access to electricity, type of cooking fuel, and source of lighting.

The type of housing materials can help to distinguish broad socioeconomic levels of households. Survey results show that two-thirds of Ugandan households (67 percent) have dirt or earthen floors, with another 31 percent having cement floors (Table 2.3). Dirt 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 over time, from 78 percent in 2004-05 to 77 percent in 2006 and to 67 percent in 2011. The proportion of households with cement floors has increased from 20 percent in 2004-05 to 31 percent in 2011.

Table 2.3 Housing characteristics

Percent distribution of households by type of material used for flooring, roofing, and walls and number of rooms used for sleeping, according to residence, Uganda 2011

Housing characteristic	Residence		
	Urban	Rural	Total
<b>Flooring material</b>			
Earth, sand, dung	18.2	79.5	67.4
Cement	79.6	18.8	30.9
Other	2.2	1.6	1.8
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
<b>Main roof material</b>			
Thatched	6.8	37.3	31.2
Iron sheets	86.0	61.7	66.5
Tiles	4.0	0.1	0.8
Other	3.2	1.0	1.4
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
<b>Main wall material</b>			
Thatched/straw	0.1	1.1	0.9
Mud and poles	9.4	44.1	37.3
Un-burnt bricks	2.9	13.8	11.6
Un-burnt bricks with plaster	7.1	6.5	6.6
Burnt bricks with mud	2.9	8.3	7.3
Cement blocks	4.5	0.9	1.6
Stone	0.2	0.1	0.1
Timber	0.7	0.7	0.7
Burnt bricks with cement	69.1	23.3	32.4
Other	3.1	1.1	1.5
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
<b>Rooms used for sleeping</b>			
One	53.6	35.6	39.2
Two	22.8	31.9	30.1
Three or more	17.1	28.3	26.1
Missing	6.4	4.2	4.7
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
<b>Number</b>	<b>2,247</b>	<b>9,093</b>	<b>11,340</b>

With regard to roofing material, 67 percent of households in Uganda have roofs made of iron sheets, while 31 percent have thatched roofs. Urban households are more likely than rural households to have metal roofs and far less likely to have thatched roofs.

Table 2.3 also shows the distribution of households by the main type of material used in the wall of the dwelling. Almost four in ten Ugandan households live in dwellings with walls made of mud and poles or sticks, while 32 percent live in dwellings with walls made of burnt bricks with cement. Unburnt bricks are another common material in wall construction. Almost 70 percent of urban households live in dwellings with walls made of burnt bricks with cement, while the most common wall material for rural households is mud and poles (44 percent).

Almost four in ten Ugandan households use only one room for sleeping. The proportion of households with only one room for sleeping has declined from 47 percent in 2006 to 39 percent in 2011.

Access to electricity not only opens a household to a wider number of consumer appliances but also is a measure of socioeconomic level. As shown in Table 2.4, only 14 percent of Ugandan households have electricity, slightly higher than the proportion found in 2004-05 and 2006 (9 percent each). There are large differences by residence, with over half of urban households being electrified, compared with only 4 percent of rural households.

Over three-quarters of Ugandan households use wood for cooking. Urban households, however, are much more likely to use charcoal for cooking, while rural households almost exclusively rely on wood. As for lighting, most households use paraffin wick lamps, especially in rural areas. Over half of urban households have electric lights.

**Table 2.4 Household fuel and lighting**

Percent distribution of households by availability of electricity and type of cooking fuel and percentage using solid fuel for cooking; and percent distribution by source of lighting, according to residence, Uganda 2011

Housing characteristic	Residence		Total
	Urban	Rural	
<b>Electricity</b>			
Yes	57.2	3.5	14.2
No	42.8	96.5	85.8
Total	100.0	100.0	100.0
<b>Cooking fuel</b>			
Electricity	3.8	0.3	1.0
Charcoal	71.2	8.0	20.5
Wood	17.6	90.7	76.2
Other	3.8	0.4	1.1
No food cooked in household	3.6	0.6	1.2
Total	100.0	100.0	100.0
Percentage using solid fuel for cooking <sup>1</sup>	88.9	98.8	96.8
<b>Source of lighting</b>			
Electricity	55.9	3.9	14.2
Solar	1.0	1.4	1.3
Gas	0.1	0.0	0.0
Paraffin - hurricane lamp	13.6	11.8	12.1
Paraffin - pressure lamp	1.2	1.0	1.0
Paraffin - wick lamp	20.6	73.9	63.3
Firewood	0.2	2.7	2.2
Candles	5.8	2.0	2.8
Other	1.7	3.4	3.1
Total	100.0	100.0	100.0
Number	2,247	9,093	11,340

<sup>1</sup> Includes charcoal and wood

**Table 2.5 Household remoteness**

Percent distribution of households by distance to nearest market, distance to nearest health facility, and most likely means of transport to health facility by residence, Uganda 2011

Distance/means of transport	Residence		Total
	Urban	Rural	
<b>Distance to nearest market</b>			
0 km	59.7	20.5	28.3
1-4 km	36.4	45.9	44.1
5-9 km	2.8	22.4	18.6
10-14 km	0.2	5.8	4.7
15+ km	0.1	3.8	3.1
Does not know	0.7	1.5	1.3
Total	100.0	100.0	100.0
<b>Distance to nearest health facility</b>			
0 km	48.5	15.2	21.8
1-4 km	44.9	50.1	49.0
5-9 km	5.0	25.8	21.7
10-14 km	0.4	4.8	3.9
15+ km	0.0	3.1	2.5
Does not know	1.2	1.1	1.1
Total	100.0	100.0	100.0
<b>Means of transport to facility</b>			
Car/motorcycle	19.6	12.0	13.5
Public transport	9.9	2.2	3.7
Walking	66.6	63.7	64.2
Bicycle	3.9	21.8	18.3
Other	0.0	0.3	0.3
Total	100.0	100.0	100.0
Number	2,247	9,093	11,340

<sup>1</sup> Most likely means of transport

### 2.1.3 Household Remoteness

In the 2011 UAIS, households were asked how far it was to the nearest marketplace and the nearest health facility. They were also asked how they would most likely get to the health facility if they needed to go there. The results are shown in Table 2.5.

Over 90 percent of Ugandan households are within 10 kilometres (6 miles) of a market and 93 percent are within 10 kilometres of a health facility. As expected, urban households tend to be closer than rural households to markets and health facilities.

Walking is the main means of transport to health facilities (cited by 64 percent of household respondents), followed by bicycles (18 percent) and cars or motorcycles (14 percent). Rural households are more likely than urban households to use bicycles, whereas urban households are more likely to use cars or motorcycles than rural households.

### 2.1.4 Household Food Security

Availability of a sufficient quantity of food is a basic necessity of life. The UAIS included questions about how many meals the household usually has per day, how many days in the previous week the household ate meat, and how often in the year before the survey the household had problems satisfying food needs. Results are shown in Table 2.6.

Most Ugandan households usually have two meals a day (55 percent), while 30 percent have three meals each day and 13 percent have only one meal a day. Urban households tend to have more meals per day than rural households. Half of households reported that they did not eat meat in the week before the survey (50 percent). Rural households are almost twice as likely as urban households to report that they did not eat meat in the week before the survey.

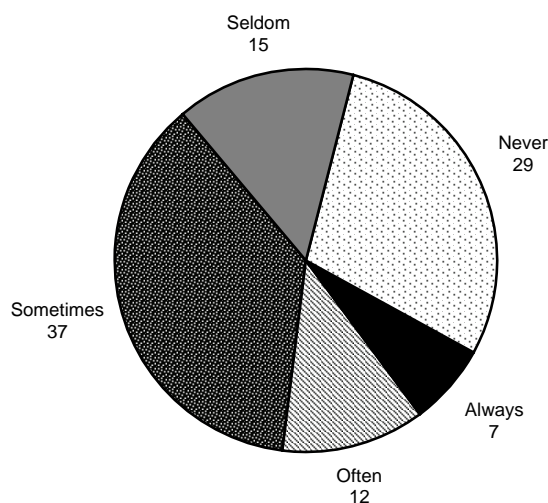
Only 29 percent of Ugandan households report that they never had problems satisfying their food needs in the year before the survey. Fifteen percent said they seldom had problems, 37 percent said they sometimes had problems, 12 percent said they often had problems, and 7 percent said they always had problems with food sufficiency (Figure 2.1). Rural households are more likely than urban households to have problems meeting household food needs; more than one in five rural households often or always has problems satisfying food needs.

**Table 2.6 Household food security**

Percent distribution of households by usual number of meals per day, number of days the household ate meat during the past week, and frequency of problems in satisfying the food needs of the household in the past year, by residence, Uganda 2011

Indicator	Residence		Total
	Urban	Rural	
<b>Usual number of meals per day</b>			
1	10.7	13.6	13.0
2	39.9	58.3	54.7
3	43.3	26.8	30.0
4+	6.1	1.3	2.3
Total	100.0	100.0	100.0
<b>Number of days ate meat in the past week</b>			
0	29.6	55.0	50.0
1	20.8	20.9	20.9
2	20.3	13.3	14.7
3	14.7	5.9	7.7
4+	14.7	4.9	6.8
Total	100.0	100.0	100.0
<b>Problems satisfying household food needs in past year</b>			
Never	40.0	25.9	28.7
Seldom	15.8	15.3	15.4
Sometimes	33.3	37.9	37.0
Often	7.7	13.4	12.2
Always	3.3	7.5	6.7
Total	100.0	100.0	100.0
Number	2,247	9,093	11,340

**Figure 2.1 Frequency of problems satisfying household food needs**



Note: Refers to the 12 months before the survey

Uganda AIS 2011

### 2.1.5 Household Possessions

Another indication of a household's socioeconomic status is the durable assets that it owns. Ownership of some durable goods is itself of interest. For example, information on ownership of radios, televisions, and cell phones is useful in planning educational outreach programmes, while data on refrigerators may be useful for nutrition programmes. These results are also used to create a wealth index (see next section). Table 2.7 shows the proportion of households that report owning specific items.

Of the list of items asked about in the 2011 UAIS, the most commonly owned durable goods are beds (owned by 82 percent of households), chairs (81 percent of households), and tables (68 percent). Sixty-six percent of households own a radio, and well over half (57 percent) own a mobile phone. Over one-quarter of Ugandan households own a cupboard, while about one-fifth own a sofa set, a bank account, a watch, or a clock. Around one in ten households owns a cassette player or a television, while very few households own a refrigerator (4 percent) or a land-line telephone (2 percent).

**Table 2.7 Household possessions**

Percentage of households possessing various household effects, means of transportation, agricultural land, and livestock/farm animals by residence, Uganda 2011

Possession	Residence		Total
	Urban	Rural	
<b>Household effects</b>			
Radio	76.1	63.2	65.7
Cassette player	27.6	6.6	10.8
Television	45.8	3.4	11.8
Mobile telephone	86.1	49.2	56.5
Non-mobile telephone	4.8	1.5	2.1
Refrigerator	17.3	1.2	4.4
Table	76.1	65.5	67.6
Chairs	76.1	82.0	80.8
Sofa set	52.5	15.3	22.6
Bed	91.2	79.1	81.5
Cupboard	50.0	21.3	27.0
Clock	41.9	12.4	18.3
Watch	34.2	14.2	18.2
Bank account	48.9	14.3	21.2
<b>Means of transport</b>			
Bicycle	18.1	42.4	37.6
Animal drawn cart	0.2	0.5	0.4
Motorcycle/scooter	9.7	6.7	7.3
Car/truck	7.0	1.4	2.5
Boat with a motor	0.4	0.6	0.6
Boat with no motor	0.5	1.4	1.2
Ownership of agricultural land	25.3	79.5	68.8
Use of agricultural land not owned	10.8	33.4	28.9
Ownership of farm animals <sup>1</sup>	28.7	73.3	64.5
Number	2,247	9,093	11,340

<sup>1</sup> Cattle, horses, donkeys, mules, goats, sheep, pigs, or chickens



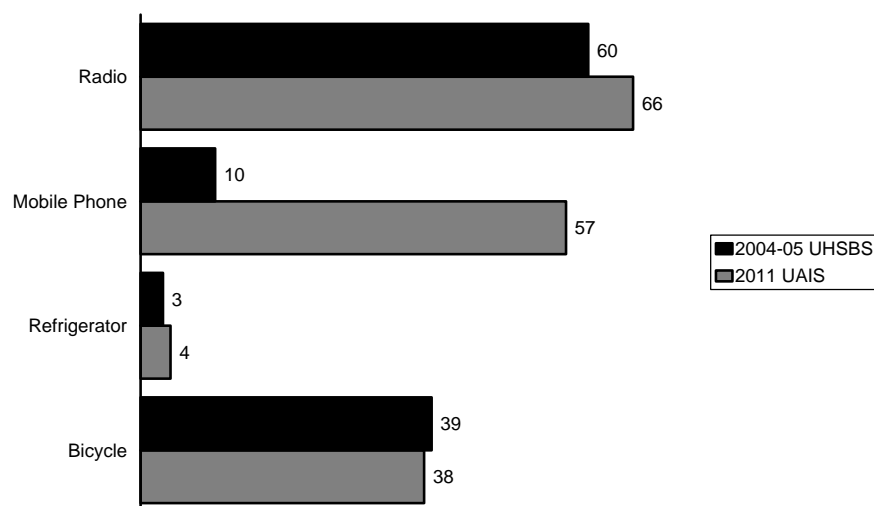
While 38 percent of households own a bicycle, ownership of motor vehicles is rare, with only 7 percent of households owning a motorcycle and 3 percent having a car or lorry. Even smaller percentages of households own any kind of a boat or an animal-drawn cart.

More than two-thirds of Ugandan households own agricultural land, while almost 30 percent of households use agricultural land that they do not own. Ownership of farm animals is common (65 percent of households).

All of the items except chairs, bicycles, animal-drawn carts, boats, agricultural land, and farm animals are more prevalent among urban households than among rural households. For example, 86 percent of urban households own a mobile telephone, compared with only 49 percent of rural households. Similarly, 46 percent of urban households have a television, compared with 3 percent of rural households.

Comparison with data from the 2004-05 UHSBS shows an astounding increase in ownership of mobile phones, from 10 to 57 percent of households (Figure 2.2). Ownership of radios has increased somewhat, while ownership of refrigerators and bicycles has not changed much over time.

**Figure 2.2 Trends in ownership of selected household assets, Uganda, 2004-05 and 2011**



Uganda AIS 2011

## 2.2 WEALTH INDEX

In addition to standard background characteristics, most of the results in this report are shown by wealth quintiles, an indicator of the economic status of households. Although the UAIS did not collect data on consumption or income, it did collect detailed information on dwelling and household characteristics, access to a variety of consumer goods and services, and ownership of assets, all of which can be used as a measure of economic status. The wealth index is a measure that has been used in many DHS and other country-level surveys to indicate inequalities in household characteristics, in the use of health and other services, and in 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 via principal components analysis. In the form used for this report, which takes better account of urban-rural differences in the scores and indicators of wealth than the version used in previous surveys, the wealth index is created in three steps. In the first step, a subset of indicators common to both urban and rural areas is used to create wealth scores for households in both areas. Categorical variables to be used are transformed into separate dichotomous (0-1) indicators. These indicators and those that are continuous are then analysed using principal components analysis to produce a common factor score for each household. In a second step, separate factor scores are produced for households in urban and in rural areas using area-specific indicators. The third step combines the separate area-specific factor scores to produce a nationally applicable combined wealth index by adjusting the area-specific score through regression on the common factor scores. This three-step procedure permits greater adaptability of the wealth index in both urban and rural areas. The resulting combined wealth index has a mean of zero and a standard deviation of one. National-level wealth quintiles are obtained by assigning the household score to each de jure household member, ranking each person in the population by their score, and then dividing the ranking into five equal parts, from quintile one (lowest-poorest) to quintile five (highest-wealthiest), each having approximately 20 percent of the population.

Table 2.8 shows the distribution across the five wealth quintiles of the population of urban and rural areas and in each region. These distributions indicate the degree to which wealth is evenly (or unevenly) distributed by geographic areas.

Residence/region	Wealth quintile					Total	Number of persons
	Lowest	Second	Middle	Fourth	Highest		
<b>Residence</b>							
Urban	1.7	2.2	4.3	14.5	77.2	100.0	8,280
Rural	23.4	23.3	22.9	21.0	9.4	100.0	44,560
<b>Region</b>							
Central 1	5.4	11.0	18.9	26.8	37.8	100.0	5,683
Central 2	9.1	18.5	20.5	30.6	21.3	100.0	5,496
Kampala	0.0	0.0	0.9	3.8	95.3	100.0	2,765
East Central	15.1	18.5	26.9	25.5	14.0	100.0	5,660
Mid Eastern	21.3	30.7	23.0	16.4	8.6	100.0	5,847
North East	47.9	20.9	12.1	11.5	7.7	100.0	5,027
West Nile	38.4	24.5	15.3	14.1	7.7	100.0	3,550
Mid Northern	46.5	24.3	12.9	9.9	6.4	100.0	5,768
South Western	6.0	20.9	29.0	28.0	16.0	100.0	6,384
Mid Western	12.3	21.5	26.0	21.2	18.9	100.0	6,660
Total	20.0	20.0	20.0	20.0	20.0	100.0	52,840

By definition, the population as a whole is equally distributed by wealth quintile, but there are quite large differences by residence and region. For example, an overwhelming majority of urban residents (77 percent) are from the richest quintile. Similarly, almost all residents of Kampala (95 percent) fall in the wealthiest quintile. On the other hand, inhabitants of North East, Mid Northern, and West Nile regions are disproportionately more likely to fall into the poorest quintile.

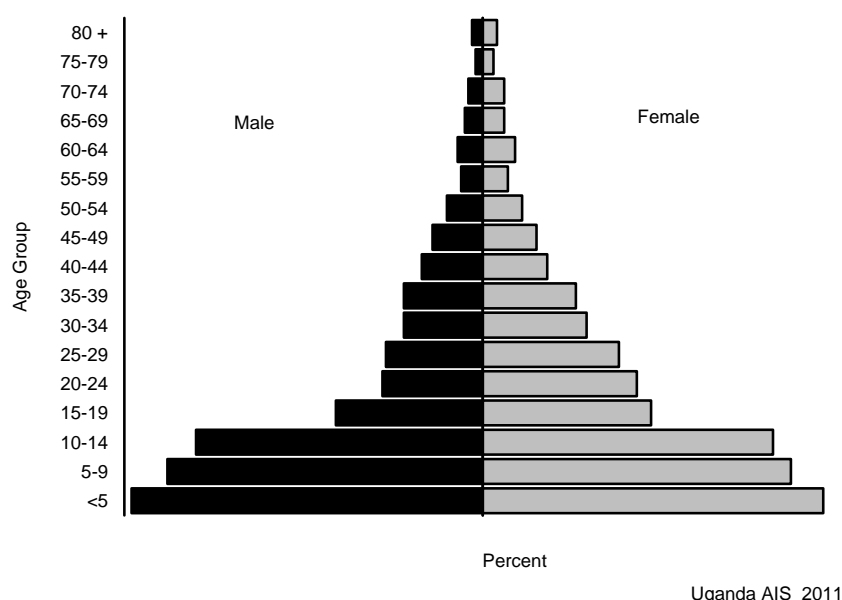
## 2.3 HOUSEHOLD POPULATION BY AGE, SEX, AND RESIDENCE

Like many countries with high fertility, Uganda has a much larger proportion of its population in the younger age groups than in the older age groups (Figure 2.3). Table 2.9 shows how the distribution of the household population declines gradually by each older five-year age group. A remarkably high proportion of the household population (53 percent) consists of children under age 15; however, there is an implausibly sharp drop between the proportion age 10-14 and the proportion age 15-19, which probably indicates some deliberate transference by interviewers of people in the household from the eligible age range for the

individual interview so as to reduce their work load. This conclusion is supported by the fact that the number of 14 year-olds reported in the interviewed households is about 45 percent greater than the number of 15 year-olds (Appendix Table C.1).

Individuals age 15-59 represent 42 percent of the population, while those age 60 and over account for less than 5 percent of the population. The age distribution reflects Uganda's high fertility (UBOS and Macro International, 2007) 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 2011 is similar to that reported in both the 2006 UDHS and the 2004-05 UHSBS.

**Figure 2.3 Population pyramid**



**Table 2.9 Household population by age, sex, and residence**

Percent distribution of the de facto household population by five-year age groups, according to sex and residence, Uganda 2011

Age	Urban			Rural			Total		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
<5	20.1	14.8	17.2	20.8	18.8	19.8	20.7	18.2	19.4
5-9	15.5	12.9	14.1	18.9	17.1	18.0	18.4	16.4	17.4
10-14	12.0	13.2	12.7	17.7	15.8	16.7	16.8	15.4	16.1
15-19	10.0	12.4	11.3	8.4	8.2	8.3	8.6	8.9	8.8
20-24	9.6	12.8	11.4	5.1	7.3	6.3	5.8	8.2	7.1
25-29	9.7	10.5	10.1	5.0	6.6	5.8	5.7	7.2	6.5
30-34	6.3	7.0	6.7	4.4	5.2	4.8	4.7	5.5	5.1
35-39	5.7	5.0	5.3	4.5	4.9	4.7	4.7	4.9	4.8
40-44	3.7	3.0	3.3	3.6	3.4	3.5	3.6	3.4	3.5
45-49	2.3	2.3	2.3	3.2	3.1	3.1	3.0	3.0	3.0
50-54	1.8	2.0	1.9	2.2	2.2	2.2	2.2	2.1	2.1
55-59	1.0	1.0	1.0	1.4	1.5	1.4	1.3	1.4	1.3
60-64	0.9	1.1	1.0	1.5	1.8	1.7	1.4	1.7	1.6
65-69	0.5	0.7	0.6	1.1	1.3	1.2	1.0	1.2	1.1
70-74	0.3	0.7	0.5	1.0	1.1	1.0	0.9	1.1	1.0
75-79	0.2	0.4	0.3	0.5	0.6	0.6	0.5	0.6	0.5
80 +	0.3	0.3	0.3	0.8	0.8	0.8	0.7	0.7	0.7
Don't know/missing	0.0	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number	3,867	4,564	8,431	21,468	23,312	44,780	25,334	27,876	53,210

## 2.4 HOUSEHOLD COMPOSITION

Table 2.10 shows that 65 percent of Ugandan households are headed by men, with a lower percentage in urban than in rural households (57 percent vs. 67 percent, respectively). The proportion of female-headed households has increased from 29 percent in 2004-05 to 30 percent in 2006 to 35 percent in 2011.

Table 2.10 also shows the distribution of households by size. Ugandan households tend to be rather large, with almost one-quarter having seven or more members. The mean household size is 4.7, which is less than the 5.0 reported in the 2006 UDHS or the 5.2 reported in the 2004-05 UHSBS. Rural households are substantially larger on average than urban households (4.9 vs. 3.7, respectively).

Almost 3 in 10 households include a foster child, i.e., a child who is not living with either a biological mother or father. Four percent of households include a child who has lost both biological parents (a 'double orphan'), while 15 percent include a child who has lost only one parent.

## 2.5 BIRTH REGISTRATION

The 2011 UAIS Household Questionnaire included a question about whether children under age 5 had a birth certificate and if not, whether the child's birth had ever been registered. Table 2.11 shows the results by background characteristics of the child.

Results indicate that the births of two-fifths of children under age 5 were registered. One-fifth of children under age 5 had a birth certificate, while another one-fifth did not have a certificate even though the birth was reported as registered.

The proportion of children under age 5 whose births have been registered does not vary substantially by age or sex of the child. Urban children are somewhat more likely than rural children to have had their births registered. Birth registration is highest in Mid Northern, Kampala, East Central, and North East regions and lowest in the Mid Eastern region.

There has been an increase in the proportion of children under age 5 whose births are registered, from 21 percent in 2006 to 39 percent in 2011.

**Table 2.10 Household composition**

Percent distribution of households by sex of head of household and by household size; mean size of household, and percentage of households with orphans and foster children under 18 years of age, according to residence, Uganda 2011

Characteristic	Residence		Total
	Urban	Rural	
<b>Household headship</b>			
Male	56.7	67.4	65.2
Female	43.3	32.6	34.8
Total	100.0	100.0	100.0
<b>Number of usual members</b>			
1	20.9	10.8	12.7
2	16.8	10.2	11.5
3	14.2	12.7	13.0
4	16.1	14.3	14.7
5	11.5	13.5	13.1
6	8.5	12.2	11.5
7	5.2	9.6	8.8
8	3.3	7.2	6.4
9+	3.5	9.5	8.3
Total	100.0	100.0	100.0
Mean size of households	3.7	4.9	4.7
<b>Percentage of households with orphans and foster children under 18 years of age</b>			
Foster children <sup>1</sup>	26.4	29.0	28.5
Double orphans	3.4	3.9	3.8
Single orphans <sup>2</sup>	12.3	15.0	14.5
Foster and/or orphan children	29.4	34.2	33.2
Number of households	2,247	9,093	11,340

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

<sup>1</sup> Foster children are those under age 18 living in households with neither their mother nor their father present.

<sup>2</sup> Includes children with one dead parent and an unknown survival status of the other parent.

**Table 2.11 Birth registration of children under age 5**

Percentage of de jure children under five years of age whose births are registered with the civil authorities, according to background characteristics, Uganda 2011

Background characteristic	Children whose births are registered			
	Percentage who had a birth certificate	Percentage who did not have a birth certificate	Percentage registered	Number of children
<b>Age</b>				
<2	17.5	20.2	37.6	3,692
2-4	21.7	18.0	39.7	6,440
<b>Sex</b>				
Male	19.4	19.3	38.7	5,164
Female	20.9	18.3	39.2	4,968
<b>Residence</b>				
Urban	30.7	22.4	53.1	1,419
Rural	18.4	18.2	36.6	8,713
<b>Region</b>				
Central 1	18.5	10.0	28.6	1,089
Central 2	14.1	16.5	30.5	1,066
Kampala	27.2	24.1	51.3	454
East Central	21.3	25.4	46.7	1,159
Mid Eastern	11.5	10.8	22.3	1,162
North East	22.7	22.4	45.1	1,069
West Nile	8.2	33.7	41.9	654
Mid Northern	36.0	40.2	76.2	1,041
South Western	20.7	6.9	27.6	1,120
Mid Western	21.3	10.4	31.7	1,316
<b>Wealth quintile</b>				
Lowest	14.6	21.6	36.2	2,160
Second	15.8	19.4	35.3	2,195
Middle	17.8	16.6	34.4	2,099
Fourth	22.8	18.0	40.8	1,897
Highest	32.1	18.2	50.3	1,780
<b>Total</b>	<b>20.1</b>	<b>18.8</b>	<b>39.0</b>	<b>10,132</b>

## 2.6 CHILDREN'S LIVING ARRANGEMENTS AND ORPHANHOOD

In the UAIS, information was collected for all children under age 18 as to whether they were living with one or both of their biological parents and whether either or both parents were still alive. Table 2.12 shows the percent distribution of children under age 18 by living arrangement and survivorship of biological parents.

Results show that only half of children under age 18 (51 percent) are living with both parents, while 23 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 9 percent of children under age 18 have lost their biological fathers, 4 percent have lost their mothers, and 2 percent have lost both parents ('double orphans'). Altogether, 12 percent of children have lost one or both parents (i.e., they are considered to be orphans).

Table 2.12 Children's living arrangements and orphanhood

Percent distribution of de jure children under 18 years of age by living arrangements and survival status of parents, the percentage of children not living with a biological parent, and the percentage of children with one or both parents dead, according to background characteristics, Uganda 2011

Background characteristic	Living with mother but not with father		Living with father but not with mother		Not living with either parent					Missing information on father/mother	Total	Percent-age not living with a bio-logical parent	Percent-age with one or both parents dead <sup>1</sup>	Number of children	
	Living with both parents	Father alive	Father dead	Mother alive	Mother dead	Both alive	Only father alive	Only mother alive	Both dead						
<b>Age</b>															
0-4	59.8	23.9	1.8	2.8	0.3	9.1	0.5	0.8	0.4	0.8	100.0	10.8	3.8	10,132	
<2	64.4	28.5	1.1	1.3	0.0	3.6	0.3	0.3	0.1	0.4	100.0	4.2	1.8	3,692	
2-4	57.1	21.2	2.1	3.6	0.4	12.3	0.6	1.2	0.6	0.9	100.0	14.6	4.9	6,440	
5-9	51.6	16.8	3.5	6.0	0.8	14.7	1.5	2.6	1.5	0.9	100.0	20.3	10.1	9,172	
10-14	44.7	14.9	6.5	6.6	1.4	14.9	2.3	4.6	3.2	0.8	100.0	25.1	18.2	8,544	
15-17	36.7	12.3	8.9	5.8	1.8	18.2	2.3	6.8	6.2	1.0	100.0	33.5	26.2	2,860	
<b>Sex</b>															
Male	51.7	18.1	4.1	5.5	1.0	12.2	1.4	3.0	2.2	0.8	100.0	18.7	11.9	15,528	
Female	50.3	18.3	4.4	4.7	0.7	14.3	1.5	3.0	1.9	0.8	100.0	20.7	11.7	15,180	
<b>Residence</b>															
Urban	35.2	27.5	3.7	6.8	0.8	16.7	2.1	3.9	2.4	0.9	100.0	25.1	13.1	4,184	
Rural	53.5	16.7	4.3	4.9	0.9	12.7	1.3	2.8	2.0	0.8	100.0	18.9	11.5	26,524	
<b>Region</b>															
Central 1	42.4	18.3	3.1	7.3	1.4	18.1	2.0	4.2	2.1	1.1	100.0	26.5	13.0	3,206	
Central 2	45.0	20.9	4.1	5.2	1.1	16.1	2.0	2.7	1.7	1.1	100.0	22.5	11.8	3,254	
Kampala	28.8	35.4	2.6	7.3	0.9	17.8	1.6	2.6	1.8	1.0	100.0	23.9	9.8	1,265	
East Central	54.3	16.4	3.2	5.7	0.6	14.5	1.3	2.1	1.4	0.5	100.0	19.3	8.6	3,442	
Mid Eastern	61.5	12.0	2.9	3.4	0.7	11.7	1.6	2.9	2.4	0.9	100.0	18.5	10.5	3,439	
North East	59.5	16.8	4.4	3.5	0.8	8.6	1.0	3.0	1.9	0.5	100.0	14.5	11.2	3,104	
West Nile	46.2	18.4	3.8	7.7	0.6	15.7	1.7	3.5	1.6	0.6	100.0	22.6	11.5	2,088	
Mid Northern	60.3	11.1	6.9	4.1	1.1	7.1	1.4	3.9	3.3	0.8	100.0	15.7	16.7	3,400	
South Western	48.2	23.2	5.2	3.4	0.6	12.6	1.0	2.1	2.8	1.0	100.0	18.4	11.8	3,670	
Mid Western	48.2	19.7	4.9	5.9	1.0	14.0	1.0	3.0	1.3	0.8	100.0	19.3	11.4	3,841	
<b>Wealth quintile</b>															
Lowest	53.7	18.1	6.2	4.3	0.8	9.0	1.6	3.1	2.4	0.8	100.0	16.1	14.2	6,329	
Second	57.0	14.9	4.5	4.8	0.6	11.8	1.2	3.1	1.4	0.8	100.0	17.5	11.0	6,303	
Middle	54.4	16.7	4.0	4.8	1.0	13.2	1.1	2.4	1.6	0.8	100.0	18.3	10.2	6,428	
Fourth	48.5	18.0	4.0	5.4	1.0	15.2	1.6	3.0	2.5	0.9	100.0	22.2	12.0	6,286	
Highest	39.6	24.2	2.4	6.5	1.1	17.7	1.7	3.5	2.4	0.8	100.0	25.3	11.3	5,362	
Total <15	52.5	18.8	3.8	5.0	0.8	12.7	1.4	2.6	1.6	0.8	100.0	18.3	10.3	27,848	
Total <18	51.0	18.2	4.3	5.1	0.9	13.2	1.4	3.0	2.0	0.8	100.0	19.7	11.8	30,708	

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

<sup>1</sup> Includes children with father dead, mother dead, both dead, and those with one parent dead but missing information on survival status of the other parent.

Table 2.12 shows that the proportion of children who are not living with a biological parent and the proportion with one or both parents dead both increase with the age of the child. The proportion of children who do not live with a biological parent is relatively high in urban areas, presumably because children leave home for the city in order to attend school. Central 1, Central 2, Kampala, and West Nile regions have higher than average proportions of children not living with a biological parent. Regional variations in the proportion of children whose parent has died are modest except for the Mid Northern region, which stands out with a high proportion. The proportion of children under 18 who are not living with a biological parent tends to increase as wealth quintile increases. This could be due to children being placed with wealthier relatives in order to go to school.

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 age 10-14 who are attending school among those whose parents are both dead with the proportion among those whose parents are both alive and who are living with at least one of them. As shown in Table 2.13, the results indicate that among children age 10-14 whose parents are both alive and who are living

with one or both parents, 96 percent attended school during the 2011 school year, compared with 84 percent of children who have lost both parents ('double orphans'). The ratio of school attendance among orphaned to non-orphaned children is 0.88. This implies that double orphans have a disadvantage in school attendance compared with children who are living with one or both parents.

**Table 2.13 School attendance by survivorship of parents**

Among de jure children age 10-14, the percentage attending school by parental survival and the ratio of the percentage attending, by parental survival, according to background characteristics, Uganda 2011

Background characteristic	Percentage attending school by survivorship of parents				
	Both parents deceased	Number	Both parents alive and living with at least one parent	Number	Ratio <sup>1</sup>
<b>Sex</b>					
Male	82.7	152	95.3	2,890	0.87
Female	85.8	124	95.7	2,773	0.90
<b>Residence</b>					
Urban	(91.9)	36	96.7	637	(0.95)
Rural	82.9	241	95.3	5,026	0.87
<b>Wealth quintile</b>					
Lowest	69.8	69	91.1	1,103	0.77
Second	(82.3)	37	95.0	1,190	(0.87)
Middle	(89.1)	49	96.9	1,224	(0.92)
Fourth	91.6	65	97.1	1,254	0.94
Highest	(89.7)	55	97.6	892	(0.92)
Total	84.1	276	95.5	5,663	0.88

Note: Table is based only on children who usually live in the household. Figures in parentheses are based on 25-49 unweighted cases.

<sup>1</sup> Ratio of the percentage with both parents deceased to the percentage with both parents alive and living with a parent

## 2.7 EDUCATIONAL ATTAINMENT OF HOUSEHOLD POPULATION

Educational attainment is a key determinant of an individual's lifestyle and status. It also affects many aspects of human life, including those related to demographic and health issues. This survey, like many others, indicates that educational attainment is strongly associated with awareness, knowledge, attitudes, and behaviour related to HIV/AIDS. Tables 2.14.1 and 2.14.2 show the percent distribution of women and men age 6 and older by the highest level of education attained.

There are differences in educational attainment between women and men. Overall, 20 percent of women in Uganda have never been to school, compared with 11 percent of men. Those with only some primary education account for 57 percent of women and 59 percent of men. The percentage of women attaining higher education levels is also lower than the percentage of men. For example, 16 percent of women have attended secondary school or higher, compared with 21 percent of men.

The proportion with no education increases steadily for both sexes, starting with those in their teens. Educational attainment is substantially higher in urban areas than in rural areas, with the median number of years of schooling for women being 6.0 in urban areas and 2.7 in rural areas. Among men, the difference is 6.7 in urban areas and 3.4 in rural areas. Level of education differs significantly among regions. The region with the highest educational attainment is Kampala for both women and men, while the region with the lowest is West Nile for women and North East for men.

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 34 percent among those in the lowest quintile to 7 percent among those in the highest quintile.

These results show some modest improvement in educational attainment among women. For example, the proportion of women age 6 and over with no education has declined from 23 percent in 2006 to 20 percent in 2011. The corresponding change for men was from 12 percent in 2006 to 11 percent in 2011.

Table 2.14.1 Educational attainment of the female household population

Percent distribution of the de facto female household population age six and over by highest level of schooling attended or completed and median years completed, according to background characteristics, Uganda 2011

Background characteristic	No education	Some primary	Completed primary <sup>1</sup>	Some secondary	Completed secondary <sup>2</sup>	More than secondary	Don't know/missing	Total	Number	Median years completed
<b>Age</b>										
6-9	24.5	75.1	0.3	0.0	0.0	0.0	0.0	100.0	3,684	0.2
10-14	3.1	89.5	3.0	4.2	0.0	0.1	0.1	100.0	4,295	3.1
15-19	4.0	48.0	10.7	34.3	1.4	1.3	0.3	100.0	2,485	5.9
20-24	6.9	36.7	18.2	27.5	3.2	7.0	0.4	100.0	2,295	6.3
25-29	13.7	44.8	13.3	18.8	2.3	6.9	0.3	100.0	2,015	5.3
30-34	20.2	47.0	10.6	14.5	0.7	6.3	0.7	100.0	1,533	4.2
35-39	25.6	47.7	9.9	12.4	0.4	3.4	0.7	100.0	1,374	3.7
40-44	31.3	43.4	11.3	10.9	0.1	1.7	1.2	100.0	934	3.1
45-49	34.3	44.2	11.9	7.7	0.1	1.6	0.2	100.0	823	2.4
50-54	41.0	35.8	11.4	8.1	0.0	3.3	0.5	100.0	591	1.6
55-59	48.1	36.9	6.9	5.6	0.2	1.8	0.6	100.0	387	0.3
60-64	55.6	32.3	5.1	4.2	0.2	2.0	0.7	100.0	477	0.0
65+	76.1	20.1	0.9	1.0	0.1	0.9	0.9	100.0	1,008	0.0
<b>Residence</b>										
Urban	8.9	40.7	9.5	28.3	3.3	8.6	0.7	100.0	3,773	6.0
Rural	21.7	59.9	7.5	9.0	0.3	1.3	0.3	100.0	18,145	2.7
<b>Region</b>										
Central 1	11.9	52.5	10.8	18.9	1.9	3.3	0.8	100.0	2,332	4.4
Central 2	18.0	55.4	9.0	14.7	0.5	1.6	0.9	100.0	2,263	3.6
Kampala	5.5	31.5	10.8	35.8	4.3	10.9	1.1	100.0	1,277	7.0
East Central	15.8	63.7	5.5	12.8	0.2	1.9	0.1	100.0	2,249	3.2
Mid Eastern	19.8	59.3	8.9	10.5	0.3	1.2	0.1	100.0	2,384	3.0
North East	30.6	55.2	5.8	6.4	0.0	1.9	0.1	100.0	2,028	2.1
West Nile	24.4	64.4	3.5	5.8	0.2	1.6	0.1	100.0	1,462	1.8
Mid Northern	25.1	61.2	6.3	5.1	0.5	1.6	0.3	100.0	2,376	2.4
South Western	19.8	56.5	10.0	10.2	1.0	2.4	0.2	100.0	2,820	3.0
Mid Western	20.8	57.8	7.1	11.4	0.3	2.4	0.2	100.0	2,729	2.7
<b>Wealth quintile</b>										
Lowest	34.1	58.9	3.7	2.9	0.0	0.2	0.2	100.0	4,282	1.2
Second	23.8	63.7	6.8	5.1	0.0	0.3	0.2	100.0	4,210	2.3
Middle	19.7	62.7	8.5	8.2	0.2	0.4	0.3	100.0	4,258	2.8
Fourth	14.1	58.9	9.6	14.8	0.3	1.9	0.5	100.0	4,490	3.7
Highest	7.4	40.4	10.4	28.8	3.3	9.1	0.6	100.0	4,679	6.2
<b>Total</b>	<b>19.5</b>	<b>56.6</b>	<b>7.9</b>	<b>12.3</b>	<b>0.8</b>	<b>2.5</b>	<b>0.4</b>	<b>100.0</b>	<b>21,918</b>	<b>3.1</b>

Note: Total includes 18 women with missing information on age.

<sup>1</sup> Completed 7 grade at the primary level

<sup>2</sup> Completed 6 grade at the secondary level



Table 2.14.2 Educational attainment of the male household population

Percent distribution of the de facto male household population age six and over by highest level of schooling attended or completed and median years completed, according to background characteristics, Uganda 2011

Background characteristic	No education	Some primary	Completed primary <sup>1</sup>	Some secondary	Completed secondary <sup>2</sup>	More than secondary	Don't know/missing	Total	Number	Median years completed
<b>Age</b>										
6-9	24.9	74.8	0.1	0.0	0.0	0.1	0.0	100.0	3,713	0.2
10-14	3.4	91.3	1.9	3.3	0.0	0.0	0.0	100.0	4,267	2.9
15-19	2.7	50.8	9.7	34.8	1.0	0.7	0.2	100.0	2,179	5.8
20-24	4.5	33.0	15.2	31.3	6.3	8.9	0.9	100.0	1,473	6.7
25-29	5.9	31.7	15.9	27.0	4.9	13.2	1.3	100.0	1,450	6.7
30-34	7.6	39.1	15.9	22.9	3.1	9.5	1.9	100.0	1,186	6.1
35-39	8.9	43.6	16.2	19.9	0.9	8.9	1.5	100.0	1,182	5.7
40-44	10.3	41.0	15.0	22.0	1.2	9.2	1.2	100.0	914	5.8
45-49	13.6	39.6	18.2	17.5	1.6	7.2	2.3	100.0	769	5.5
50-54	14.8	38.9	20.2	15.2	0.5	8.0	2.4	100.0	548	5.6
55-59	16.5	35.8	20.0	15.1	2.3	10.2	0.2	100.0	331	5.8
60-64	19.1	42.1	11.7	19.6	0.0	6.6	0.8	100.0	348	4.9
65+	36.8	45.6	5.4	6.5	0.1	4.1	1.5	100.0	775	2.4
<b>Residence</b>										
Urban	5.7	37.7	7.5	27.9	5.3	14.4	1.5	100.0	2,952	6.7
Rural	12.4	62.4	8.9	12.5	0.7	2.5	0.6	100.0	16,204	3.4
<b>Region</b>										
Central 1	9.4	54.1	10.3	18.3	2.2	4.7	0.9	100.0	2,119	4.3
Central 2	14.3	56.9	9.2	14.6	0.5	2.9	1.6	100.0	1,984	3.4
Kampala	3.9	27.7	8.4	32.3	7.1	18.2	2.5	100.0	1,015	8.6
East Central	10.1	65.1	6.3	14.4	1.1	2.2	0.8	100.0	2,079	3.5
Mid Eastern	11.7	60.6	9.9	13.7	1.1	2.8	0.2	100.0	2,168	3.8
North East	19.1	56.8	7.9	11.5	0.7	3.7	0.3	100.0	1,707	3.1
West Nile	9.2	65.5	8.8	12.2	0.6	3.3	0.3	100.0	1,301	3.2
Mid Northern	10.8	59.8	10.3	13.3	1.5	4.0	0.4	100.0	2,118	4.0
South Western	11.1	62.9	8.4	12.2	0.9	4.1	0.5	100.0	2,248	3.3
Mid Western	10.9	62.0	7.6	14.0	0.8	4.2	0.5	100.0	2,417	3.4
<b>Wealth quintile</b>										
Lowest	19.4	65.7	7.4	6.2	0.3	0.5	0.4	100.0	3,659	2.5
Second	12.8	66.7	8.8	10.0	0.3	1.1	0.3	100.0	3,836	3.0
Middle	11.3	63.2	9.6	13.3	0.6	1.5	0.5	100.0	3,838	3.4
Fourth	8.9	59.3	9.6	16.9	1.1	3.3	1.0	100.0	3,913	4.0
Highest	5.0	38.8	8.1	27.1	4.6	14.9	1.4	100.0	3,909	6.6
<b>Total</b>	<b>11.4</b>	<b>58.6</b>	<b>8.7</b>	<b>14.9</b>	<b>1.4</b>	<b>4.3</b>	<b>0.7</b>	<b>100.0</b>	<b>19,156</b>	<b>3.7</b>

Note: Total includes 19 men with missing information on age.

<sup>1</sup> Completed 7 grade at the primary level

<sup>2</sup> Completed 6 grade at the secondary level



**Key Findings:**

- The bulk of Ugandan adults have had at least some education; nevertheless, 14 percent of women and 6 percent of men age 15-49 have had no education at all.
- Women are disadvantaged in terms of educational attainment compared with men; however, gender differences in education are disappearing among younger adults.
- Radio is by far the most popular of the mass media—72 percent of women and 87 percent of men age 15-49 listen to the radio weekly.
- Sixty-six percent of women and 85 percent of men age 15-49 are currently employed.
- Men tend to marry about 5 years later than women; the median age at marriage is 18 for women and 23 for men.

The purpose of this chapter is to provide a demographic and socioeconomic profile of the individual women and men interviewed in the 2011 Uganda AIDS Indicator Survey (UAIS). This information helps in the interpretation of findings presented later in the report and provides an indication of the representativeness of the survey. The chapter first describes basic background characteristics such as age, marital status, religion, ethnicity, and wealth status. It then provides more detailed information on education, media exposure, employment, occupation, and marital status.

Although women and men age 15-59 were interviewed in the survey, the tables in this report present data for those age 15-49. Data for those age 50-59 and 15-59 are presented at the bottom of the tables as row totals. This facilitates comparison with data from other sources such as the 2004-05 Uganda HIV/AIDS Sero-Behavioural Survey (UHSBS) and the 2006 Uganda Demographic and Health Survey (UDHS).

### 3.1 BACKGROUND CHARACTERISTICS

The distribution of women and men age 15-49 years by background characteristics is shown in Table 3.1. The proportions of both women and men decrease with increasing age, reflecting the comparatively young age structure of the Ugandan population. Also of note are the lower proportions of men than women who are age 20-29. A similar dearth of men in their twenties was evident in the 2004-05 UHSBS and the 2006 UDHS and may result from higher male migration out of the country and higher male attendance in institutions such as the armed forces and prisons, which are not covered in the survey.

About 4 in 10 respondents are Catholic, while just over one-third are Protestant, and 13 percent are Muslim. Nine percent of women and 6 percent of men are Pentecostal. In terms of ethnic composition, the most common group is Baganda, which accounts for 17 percent of women and men. Banyankore and Basoga follow, with each accounting for about 9 to 10 percent of the population.

Table 3.1 Background characteristics of respondents

Percent distribution of women and men age 15-49 by selected background characteristics, Uganda 2011

Background characteristic	Women			Men		
	Weighted percent	Weighted number	Unweighted number	Weighted percent	Weighted number	Unweighted number
<b>Age</b>						
15-19	22.0	2,458	2,451	23.7	2,072	2,089
20-24	19.4	2,163	2,164	16.1	1,406	1,392
25-29	17.4	1,942	1,921	15.5	1,354	1,335
30-34	13.2	1,478	1,464	13.3	1,160	1,164
35-39	12.1	1,355	1,361	12.9	1,129	1,117
40-44	8.5	948	945	10.2	890	887
45-49	7.3	816	842	8.3	722	734
<b>Religion</b>						
Catholic	40.3	4,498	4,626	41.5	3,627	3,673
Anglican/Protestant	33.6	3,752	3,602	35.0	3,060	2,934
SDA	1.6	180	156	1.6	136	125
Pentecostal	8.6	954	931	5.8	506	481
Other Christian	2.3	253	244	2.4	210	220
Muslim	12.8	1,431	1,500	12.7	1,112	1,195
Other	0.8	92	89	1.0	84	90
<b>Ethnicity</b>						
Baganda	16.7	1,867	1,879	16.9	1,474	1,465
Banyankore	10.9	1,216	1,029	10.1	884	732
Iteso	7.6	844	892	7.6	665	675
Lugbara/Madi	4.8	536	808	4.8	419	631
Basoga	9.1	1,020	1,012	9.2	806	807
Langi	5.8	650	675	6.8	590	610
Bakiga	6.3	699	593	5.3	467	385
Karimojong	2.1	230	271	1.5	127	142
Acholi	4.6	517	471	4.8	421	408
Bagisu/Sabiny	5.8	642	662	6.7	582	616
Alur/Jopadhola	5.0	557	635	4.6	403	468
Banyoro	3.9	430	416	4.7	414	386
Batoro	3.4	381	291	3.7	322	264
Other	14.1	1,572	1,514	13.3	1,160	1,129
<b>Marital status</b>						
Never married	23.7	2,641	2,620	36.9	3,227	3,235
Married	50.8	5,672	5,739	48.4	4,226	4,269
Living together	12.8	1,425	1,342	8.8	768	682
Divorced/separated	9.0	1,007	1,025	5.4	467	487
Widowed	3.7	415	422	0.5	46	45
<b>Residence</b>						
Urban	21.2	2,365	2,352	19.9	1,739	1,746
Rural	78.8	8,795	8,796	80.1	6,995	6,972
<b>Region</b>						
Central 1	10.8	1,206	1,018	11.6	1,009	804
Central 2	10.4	1,162	1,089	10.2	888	842
Kampala	7.8	875	1,184	7.7	674	924
East Central	10.3	1,153	1,143	10.7	933	938
Mid Eastern	10.1	1,133	1,151	10.9	950	979
North East	8.2	919	1,027	7.8	683	708
West Nile	6.4	712	1,148	6.3	548	876
Mid Northern	9.9	1,106	1,067	10.9	950	942
South Western	12.7	1,414	1,104	10.8	947	747
Mid Western	13.3	1,480	1,217	13.2	1,151	958
<b>Education</b>						
No education	14.0	1,566	1,629	5.6	485	468
Primary incomplete	46.8	5,218	5,245	42.7	3,727	3,720
Primary complete	12.4	1,388	1,329	14.1	1,230	1,235
Secondary or higher	26.8	2,988	2,945	37.7	3,292	3,295
<b>Wealth quintile</b>						
Lowest	17.0	1,894	2,126	17.2	1,504	1,648
Second	18.1	2,024	2,050	18.7	1,632	1,676
Middle	18.4	2,056	1,993	19.1	1,667	1,633
Fourth	20.5	2,292	2,165	19.5	1,706	1,609
Highest	25.9	2,894	2,814	25.5	2,226	2,152
Total 15-49	100.0	11,160	11,148	100.0	8,735	8,718
Total 15-59	na	12,153	12,153	na	9,588	9,588

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

Sixty-four percent of women are married or living in an informal union with a man, compared with 57 percent of men. Because men marry later in life than women, over one-third of men (37 percent) age 15-49 have never married, compared with less than one-quarter (24 percent) of the women. On the other hand, women are more likely than men to be widowed (4 percent vs. less than 1 percent) and more likely to be divorced or separated (9 percent vs. 5 percent, respectively). This pattern is probably due to the greater likelihood that men will re-marry.

The vast majority (79 to 80 percent) of adult women and men live in rural areas. Respondents are fairly evenly distributed by region, with West Nile having the smallest share, accounting for just 6 percent of respondents. The vast majority of respondents (86 percent of women and almost 95 percent of men) have had at least some formal education, with 14 percent of women and 6 percent of men age 15-49 having never attended school. However, 47 percent of women and 43 percent of men have only attended some primary school, without completing it. Women are considerably disadvantaged in education compared with men. For example, 38 percent of men have attended secondary school or higher, compared with only 27 percent of women.

### 3.2 EDUCATIONAL ATTAINMENT OF RESPONDENTS

Tables 3.2.1 and 3.2.2 show the distribution of female and male respondents by highest level of school attended according to selected background characteristics. As mentioned previously, men are better educated than women.

Table 3.2.1 Educational attainment: Women

Percent distribution of women age 15-49 by highest level of schooling attended or completed, and median years completed, according to background characteristics, Uganda 2011

Background characteristic	Highest level of schooling						Total	Median years completed	Number of women
	No education	Some primary	Completed primary <sup>1</sup>	Some secondary	Completed secondary <sup>2</sup>	More than secondary			
<b>Age</b>									
15-24	3.7	44.8	14.0	31.2	1.8	4.5	100.0	6.1	4,621
15-19	2.0	48.6	11.7	34.7	1.3	1.7	100.0	6.0	2,458
20-24	5.7	40.5	16.5	27.2	2.3	7.8	100.0	6.2	2,163
25-29	11.2	47.3	13.1	19.1	2.0	7.4	100.0	5.4	1,942
30-34	20.4	50.5	9.0	13.6	0.6	6.0	100.0	3.9	1,478
35-39	22.9	49.3	12.1	11.8	0.4	3.5	100.0	3.7	1,355
40-44	29.4	47.0	10.8	10.0	0.1	2.8	100.0	3.1	948
45-49	35.0	45.3	10.7	7.5	0.0	1.6	100.0	2.2	816
<b>Residence</b>									
Urban	4.8	26.0	12.9	38.9	4.0	13.3	100.0	7.7	2,365
Rural	16.5	52.3	12.3	16.0	0.4	2.4	100.0	4.7	8,795
<b>Region</b>									
Central 1	5.9	37.8	16.7	30.5	1.7	7.4	100.0	6.3	1,206
Central 2	12.7	44.8	14.3	24.4	1.1	2.8	100.0	5.5	1,162
Kampala	2.6	18.7	14.2	43.1	5.8	15.6	100.0	8.6	875
East Central	10.9	54.9	7.9	22.1	0.4	3.6	100.0	5.2	1,153
Mid Eastern	14.4	47.7	16.5	18.8	0.5	2.1	100.0	5.2	1,133
North East	27.0	50.1	7.7	11.5	0.2	3.6	100.0	3.7	919
West Nile	18.4	60.5	6.8	11.1	0.4	2.8	100.0	3.5	712
Mid Northern	20.1	56.7	10.5	9.2	0.7	2.7	100.0	4.2	1,106
South Western	13.2	45.6	15.9	19.1	1.5	4.7	100.0	5.3	1,414
Mid Western	16.6	50.1	10.5	18.7	0.4	3.6	100.0	4.6	1,480
<b>Wealth quintile</b>									
Lowest	29.5	58.1	6.8	5.0	0.2	0.4	100.0	2.7	1,894
Second	19.1	59.8	11.3	9.2	0.1	0.5	100.0	4.1	2,024
Middle	15.1	56.1	13.1	14.5	0.3	0.9	100.0	4.6	2,056
Fourth	8.8	46.5	15.8	24.8	0.5	3.6	100.0	5.7	2,292
Highest	3.8	23.7	13.8	40.8	3.8	14.0	100.0	8.0	2,894
Total 15-49	14.0	46.8	12.4	20.9	1.2	4.7	100.0	5.2	11,160
50-59	42.2	39.1	9.2	6.9	0.1	2.5	100.0	1.5	993
Total 15-59	16.3	46.1	12.2	19.7	1.1	4.5	100.0	5.0	12,153

<sup>1</sup> Completed Grade 7 at the primary level

<sup>2</sup> Completed 6 years at the secondary level

Table 3.2.2 Educational attainment: Men

Percent distribution of men age 15-49 by highest level of schooling attended or completed, and median years completed, according to background characteristics, Uganda 2011

Background characteristic	Highest level of schooling						Total	Median years completed	Number of men
	No education	Some primary	Completed primary <sup>1</sup>	Some secondary	Completed secondary <sup>2</sup>	More than secondary			
<b>Age</b>									
15-24	1.8	44.7	11.5	34.7	2.6	4.8	100.0	6.3	3,479
15-19	1.3	52.1	8.8	36.2	1.0	0.7	100.0	5.8	2,072
20-24	2.5	33.7	15.4	32.5	5.1	10.9	100.0	6.8	1,406
25-29	5.6	32.2	16.2	28.2	4.7	13.1	100.0	6.7	1,354
30-34	5.6	43.3	15.1	22.2	2.9	10.9	100.0	6.1	1,160
35-39	9.0	45.1	16.1	20.1	1.2	8.5	100.0	5.6	1,129
40-44	9.7	45.0	15.6	19.6	1.3	8.8	100.0	5.6	890
45-49	13.1	45.0	16.1	16.8	1.5	7.5	100.0	5.2	722
<b>Residence</b>									
Urban	1.8	18.5	8.4	41.9	7.8	21.7	100.0	9.7	1,739
Rural	6.5	48.7	15.5	23.4	1.3	4.6	100.0	5.6	6,995
<b>Region</b>									
Central 1	4.1	39.8	13.9	28.4	5.1	8.6	100.0	6.4	1,009
Central 2	7.8	45.0	14.1	27.0	1.1	5.0	100.0	5.8	888
Kampala	1.5	13.3	8.6	42.6	10.2	23.8	100.0	10.3	674
East Central	5.6	48.2	11.8	28.1	2.3	3.9	100.0	5.8	933
Mid Eastern	7.4	42.9	17.2	25.7	2.1	4.7	100.0	6.0	950
North East	11.6	39.0	15.4	25.0	1.0	8.0	100.0	5.9	683
West Nile	4.1	47.3	15.8	25.1	1.1	6.6	100.0	5.9	548
Mid Northern	2.5	44.4	17.6	25.5	1.8	8.2	100.0	6.2	950
South Western	6.4	48.0	13.3	23.7	1.3	7.3	100.0	5.7	947
Mid Western	4.8	50.1	12.7	23.6	0.9	7.7	100.0	5.6	1,151
<b>Wealth quintile</b>									
Lowest	11.7	58.9	14.8	12.9	0.5	1.2	100.0	4.7	1,504
Second	7.3	54.0	16.1	20.1	0.4	2.1	100.0	5.2	1,632
Middle	5.8	47.8	16.7	25.5	1.0	3.2	100.0	5.8	1,667
Fourth	3.5	41.2	15.3	32.0	1.8	6.2	100.0	6.3	1,706
Highest	1.5	20.7	9.3	39.2	7.3	22.0	100.0	9.6	2,226
Total 15-49	5.6	42.7	14.1	27.1	2.6	8.0	100.0	6.1	8,735
50-59	14.2	40.1	19.9	16.0	1.1	8.7	100.0	5.6	853
Total 15-59	6.3	42.4	14.6	26.1	2.4	8.1	100.0	6.1	9,588

<sup>1</sup> Completed Grade 7 at the primary level

<sup>2</sup> Completed 6 years at the secondary level

Younger respondents are more likely to have attended school and to have reached a higher level of education than older respondents. For example, only 2 percent of women age 15-19 have never attended school, compared with 35 percent of women age 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 age 45-49, the proportion of women who have ever attended secondary school is substantially lower than for men (9 percent and 26 percent, respectively), while among the younger respondents age 15-19, these percentages are identical, at 38 percent for women and men.

Respondents living in urban areas are better educated than respondents in rural areas. Among urban respondents, 5 percent of women 15-49 and 2 percent of men have never attended school, compared with 17 percent of women and 7 percent of men in rural areas. Education also differs by region. North East region has the highest proportion of women (27 percent) and men (12 percent) with no formal education, while Kampala has the lowest proportion who have never attended school (3 percent of women and 2 percent of men) and by far the highest proportion to attend secondary school or higher (65 percent of women and 77 percent of men).

Regarding the relationship between education and wealth, the data show that the percentage of women age 15-49 who have never attended school drops from 30 percent in the lowest wealth quintile to 4 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 strongly related to educational attainment for men.

### 3.3 EXPOSURE TO MASS MEDIA

Information about HIV/AIDS is often carried by mass media. Having access to mass media is essential to increase peoples' awareness and knowledge of HIV/AIDS, which may eventually affect societal norms and influence individual attitudes and behaviour. In the 2011 UAIS, access to mass media was assessed by asking respondents whether they read a newspaper, listen to the radio, or watch television almost every day, at least once a week, less than once a week, or not at all.

In general, men have more exposure to mass media than women (see Tables 3.3.1 and 3.3.2 and Figure 3.1). For example, only 17 percent of women age 15-49 watch television at least once a week, compared with 27 percent of men. More than twice as many women as men say they do not access any of the types of media asked about at least once a week (25 percent of women and 11 percent of men).

**Table 3.3.1 Exposure to mass media: Women**

Percentage of women age 15-49 who are exposed to specific media on a weekly basis, by background characteristics, Uganda 2011

Background characteristic	Reads a newspaper at least once a week	Watches television at least once a week	Listens to the radio at least once a week	Accesses all three media at least once a week	Accesses none of the three media at least once a week	Number of women
<b>Age</b>						
15-19	18.0	18.4	72.9	6.4	22.6	2,458
20-24	16.3	21.3	74.5	9.0	22.2	2,163
25-29	13.1	18.5	74.3	7.0	23.9	1,942
30-34	11.1	15.3	70.0	5.9	27.8	1,478
35-39	8.4	13.5	68.3	4.5	29.6	1,355
40-44	8.6	10.1	71.1	4.1	27.8	948
45-49	5.0	7.9	68.3	2.3	31.0	816
<b>Residence</b>						
Urban	33.4	56.4	82.6	23.2	9.9	2,365
Rural	7.5	5.8	69.2	1.7	29.5	8,795
<b>Region</b>						
Central 1	20.0	31.6	82.8	11.5	13.4	1,206
Central 2	17.7	16.1	82.9	6.3	15.2	1,162
Kampala	37.1	80.8	84.1	29.5	4.4	875
East Central	9.7	9.5	73.5	3.6	25.8	1,153
Mid Eastern	8.5	7.1	59.9	2.4	37.4	1,133
North East	5.1	3.5	50.1	0.9	49.1	919
West Nile	11.3	3.5	70.6	1.8	27.0	712
Mid Northern	9.3	4.7	66.6	1.9	32.1	1,106
South Western	7.8	9.4	71.9	3.7	26.6	1,414
Mid Western	8.7	9.3	74.2	4.1	24.2	1,480
<b>Education</b>						
No education	0.8	3.3	51.8	0.1	47.6	1,566
Primary incomplete	5.1	7.6	69.8	1.1	28.6	5,218
Primary complete	12.0	17.7	77.6	4.8	20.0	1,388
Secondary or higher	33.6	38.5	84.0	19.0	10.5	2,988
<b>Wealth quintile</b>						
Lowest	3.0	0.8	44.1	0.1	55.1	1,894
Second	4.0	1.9	65.2	0.3	33.9	2,024
Middle	5.5	3.0	75.2	0.7	23.7	2,056
Fourth	11.2	6.8	80.0	2.3	18.3	2,292
Highest	32.5	54.3	86.5	21.4	6.7	2,894
Total 15-49	13.0	16.5	72.0	6.2	25.4	11,160
50-59	7.2	9.2	68.3	3.7	30.6	993
Total 15-59	12.5	15.9	71.7	6.0	25.8	12,153

Table 3.3.2 Exposure to mass media: Men

Percentage of men age 15-49 who are exposed to specific media on a weekly basis, by background characteristics, Uganda 2011

Background characteristic	Reads a newspaper at least once a week	Watches television at least once a week	Listens to the radio at least once a week	Accesses all three media at least once a week	Accesses none of the three media at least once a week	Number of men
<b>Age</b>						
15-19	19.0	27.6	85.1	9.8	11.9	2,072
20-24	26.8	36.5	90.2	18.3	7.2	1,406
25-29	28.4	33.8	89.2	18.8	9.1	1,354
30-34	24.2	26.7	89.0	14.2	8.6	1,160
35-39	19.8	21.1	85.3	11.4	13.2	1,129
40-44	21.6	17.2	86.2	9.7	11.9	890
45-49	15.6	14.6	86.2	7.9	13.3	722
<b>Residence</b>						
Urban	54.9	69.5	91.7	41.9	2.4	1,739
Rural	14.4	16.3	86.2	6.1	12.6	6,995
<b>Region</b>						
Central 1	33.7	39.7	90.3	21.7	6.3	1,009
Central 2	22.8	25.2	94.4	11.6	3.7	888
Kampala	62.4	84.0	90.5	52.1	2.0	674
East Central	13.1	25.4	88.9	5.5	9.5	933
Mid Eastern	13.2	13.6	80.6	6.7	18.1	950
North East	27.1	19.9	73.2	14.4	25.2	683
West Nile	12.8	14.8	91.4	6.3	8.2	548
Mid Northern	18.6	14.1	85.2	8.3	13.7	950
South Western	13.9	20.7	87.5	6.5	10.8	947
Mid Western	16.5	21.3	89.6	7.9	8.8	1,151
<b>Education</b>						
No education	2.1	7.1	72.5	0.7	26.9	485
Primary incomplete	6.9	15.6	84.7	2.5	13.9	3,727
Primary complete	17.0	20.6	89.0	8.8	9.8	1,230
Secondary or higher	45.3	45.0	91.8	28.8	4.6	3,292
<b>Wealth quintile</b>						
Lowest	5.7	7.4	73.3	2.0	25.5	1,504
Second	10.2	10.1	85.0	2.8	14.1	1,632
Middle	10.2	13.6	88.5	3.7	10.2	1,667
Fourth	21.6	20.9	92.9	7.4	5.8	1,706
Highest	52.8	67.0	93.3	39.9	1.8	2,226
Total 15-49	22.5	26.9	87.3	13.2	10.6	8,735
50-59	17.4	11.7	83.9	6.7	15.1	853
Total 15-59	22.0	25.6	87.0	12.6	11.0	9,588

Radio is the medium that is by far the most widely used by both men and women. Seventy-two percent of women and 87 percent of men report that they listen to the radio at least once a week. Newspapers are the least commonly used type of media.

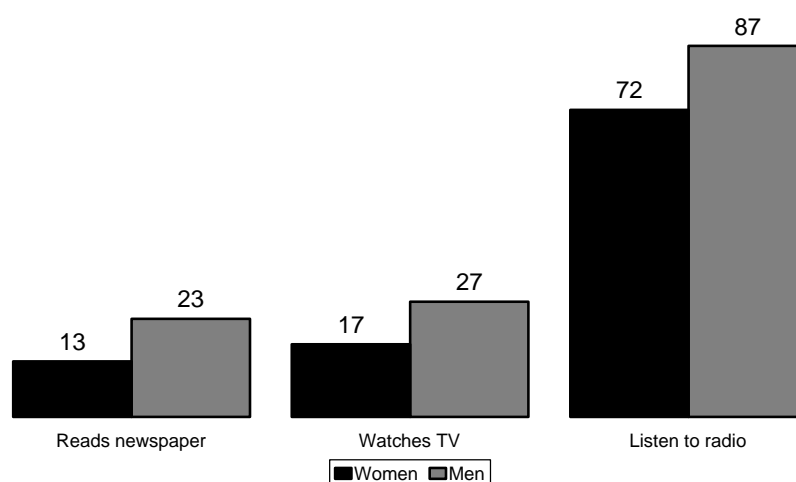
Women and men in younger age groups report greater exposure to all three media types. Among women age 15-19, 18 percent read a newspaper weekly, compared with 5 percent of women age 45-49. Urban women and men have much greater access to all three sources of media than rural women and men. Television is the medium with the greatest disparity between rural and urban areas. Only 6 percent of women in rural areas watch television weekly compared with 56 percent of urban women. Kampala has the highest proportion of both women and men who report exposure to each of the three media sources, except for radio exposure among men, where the level is highest among men in Central 2 and West Nile regions.



Exposure to mass media increases substantially with education and wealth. Newspaper is the medium most sensitive to changes in level of education, due to the link between education and literacy. Over 45 percent of men with secondary or higher education read a newspaper at least once a week, compared with 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 reading a newspaper and watching television once a week than those in the fourth quintile. Exposure to radio is also strongly related to level of education and wealth.

Compared with results from the 2004-05 UHSBS, weekly exposure to newspapers has declined, exposure to television has increased, and exposure to radio has remained fairly stable.

**Figure 3.1 Exposure to mass media at least once a week among women and men age 15-49**



Uganda AIS 2011

### 3.4 EMPLOYMENT AND OCCUPATION

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. Tables 3.4.1 and 3.4.2 show results for women and men, respectively.

Sixty-six percent of women and 85 percent of men age 15-49 were employed at the time of the survey. The proportion of women and men age 15-49 who are currently working generally increases with age. Women and men who never married are the least likely to be currently employed, while there is little difference in current employment between respondents who are married or living together and those who are divorced, separated, or widowed. Women in rural areas are more likely to be currently employed (68 percent) than those in urban areas (55 percent), but the difference for men is much less pronounced (86 percent vs. 82 percent).

**Table 3.4.1 Employment status: Women**

Percent distribution of women age 15-49 by employment status, according to background characteristics, Uganda 2011

Background characteristic	Employed in the 12 months preceding the survey		Not employed in the 12 months preceding the survey	Total	Number of women
	Currently employed <sup>1</sup>	Not currently employed			
<b>Age</b>					
15-19	39.9	4.2	55.8	100.0	2,458
20-24	64.6	5.2	30.2	100.0	2,163
25-29	71.0	5.3	23.7	100.0	1,942
30-34	73.7	5.7	20.6	100.0	1,478
35-39	77.1	4.4	18.5	100.0	1,355
40-44	79.8	3.3	17.0	100.0	948
45-49	80.6	5.2	14.2	100.0	816
<b>Marital status</b>					
Never married	41.0	3.8	55.2	100.0	2,641
Married or living together	72.5	4.8	22.7	100.0	7,097
Divorced/separated/widowed	75.9	6.8	17.3	100.0	1,422
<b>Number of living children</b>					
0	43.0	4.0	53.0	100.0	2,752
1-2	68.6	5.4	26.0	100.0	2,786
3-4	75.1	4.8	20.1	100.0	2,320
5+	74.8	5.0	20.2	100.0	3,302
<b>Residence</b>					
Urban	55.0	5.6	39.4	100.0	2,365
Rural	68.3	4.6	27.1	100.0	8,795
<b>Region</b>					
Central 1	66.8	6.6	26.6	100.0	1,206
Central 2	57.2	3.2	39.7	100.0	1,162
Kampala	52.7	4.2	43.1	100.0	875
East Central	43.3	4.6	52.1	100.0	1,153
Mid Eastern	80.9	1.7	17.4	100.0	1,133
North East	48.9	3.4	47.6	100.0	919
West Nile	76.3	6.7	17.0	100.0	712
Mid Northern	72.7	6.3	21.0	100.0	1,106
South Western	87.7	1.5	10.8	100.0	1,414
Mid Western	62.3	9.6	28.2	100.0	1,480
<b>Education</b>					
No education	68.7	5.0	26.3	100.0	1,566
Primary incomplete	68.4	5.4	26.2	100.0	5,218
Primary complete	70.4	4.0	25.6	100.0	1,388
Secondary or higher	56.3	4.1	39.6	100.0	2,988
<b>Wealth quintile</b>					
Lowest	66.1	4.8	29.2	100.0	1,894
Second	70.6	5.7	23.8	100.0	2,024
Middle	69.3	4.9	25.8	100.0	2,056
Fourth	64.0	4.7	31.3	100.0	2,292
Highest	59.9	4.3	35.8	100.0	2,894
Total 15-49	65.5	4.8	29.7	100.0	11,160
50-59	78.9	5.8	15.3	100.0	993
Total 15-59	66.6	4.9	28.5	100.0	12,153

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

**Table 3.4.2 Employment status: Men**

Percent distribution of men age 15-49 by employment status, according to background characteristics, Uganda 2011

Background characteristic	Employed in the 12 months preceding the survey		Not employed in the 12 months preceding the survey	Total	Number of men
	Currently employed <sup>1</sup>	Not currently employed			
<b>Age</b>					
15-19	57.8	3.1	39.1	100.0	2,072
20-24	85.5	2.4	12.1	100.0	1,406
25-29	95.7	1.2	3.1	100.0	1,354
30-34	95.9	2.6	1.5	100.0	1,160
35-39	96.0	1.5	2.5	100.0	1,129
40-44	95.8	1.4	2.8	100.0	890
45-49	96.5	2.1	1.5	100.0	722
<b>Marital status</b>					
Never married	66.1	2.9	30.9	100.0	3,227
Married or living together	96.4	1.6	1.9	100.0	4,994
Divorced/separated/widowed	95.7	2.6	1.7	100.0	514
<b>Number of living children</b>					
0	68.8	2.8	28.3	100.0	3,476
1-2	95.3	1.9	2.8	100.0	1,544
3-4	95.6	2.1	2.4	100.0	1,325
5+	96.8	1.4	1.8	100.0	2,389
<b>Residence</b>					
Urban	82.0	1.4	16.6	100.0	1,739
Rural	86.0	2.4	11.6	100.0	6,995
<b>Region</b>					
Central 1	88.8	1.2	10.0	100.0	1,009
Central 2	86.2	4.9	8.8	100.0	888
Kampala	80.9	0.9	18.2	100.0	674
East Central	84.7	1.0	14.3	100.0	933
Mid Eastern	73.8	2.8	23.5	100.0	950
North East	83.1	0.4	16.5	100.0	683
West Nile	86.8	4.1	9.0	100.0	548
Mid Northern	79.4	4.9	15.7	100.0	950
South Western	91.8	1.1	7.1	100.0	947
Mid Western	93.5	0.9	5.7	100.0	1,151
<b>Education</b>					
No education	89.7	2.0	8.3	100.0	485
Primary incomplete	86.6	2.3	11.2	100.0	3,727
Primary complete	90.3	2.1	7.6	100.0	1,230
Secondary or higher	81.1	2.1	16.8	100.0	3,292
<b>Wealth quintile</b>					
Lowest	83.2	3.1	13.6	100.0	1,504
Second	85.9	2.8	11.3	100.0	1,632
Middle	86.6	2.5	11.0	100.0	1,667
Fourth	86.6	1.8	11.6	100.0	1,706
Highest	83.9	1.1	15.0	100.0	2,226
Total 15-49	85.2	2.2	12.6	100.0	8,735
50-59	93.6	2.8	3.6	100.0	853
Total 15-59	86.0	2.2	11.8	100.0	9,588

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

Women and men with secondary or higher education are less likely to be currently employed than those in other education categories, perhaps because they tend to be younger and perhaps still in school. There is no consistent relationship between employment status and wealth quintile.

Tables 3.5.1 and 3.5.2 show the types of occupations for women and men who worked in the year before the survey. They show that about half of employed women and men work in agricultural occupations, followed by jobs in the sales and services sector. Women are more likely than men to be employed in sales and services jobs. Very few employed people work in clerical jobs or in domestic service positions. Urban respondents are more likely to work in sales and services than rural respondents, and they are less likely to work in agriculture. Those with no education are more likely to work in agricultural jobs, while those with secondary or higher education are more likely than those with less education to work in professional, technical, or managerial jobs and, especially among women, in sales and services.

Table 3.5.1 Occupation: Women

Percent distribution of women age 15-49 employed in the 12 months preceding the survey by occupation, according to background characteristics, Uganda 2011

Background characteristic	Professional/technical/managerial	Clerical	Sales and services	Skilled manual	Unskilled manual	Domestic service	Agriculture	Total	Number of women
<b>Age</b>									
15-19	1.2	0.1	28.2	4.0	6.6	7.9	52.0	100.0	970
20-24	5.6	1.3	33.6	5.1	2.7	1.8	49.9	100.0	1,487
25-29	7.4	1.1	35.4	4.3	3.3	1.2	47.4	100.0	1,478
30-34	5.6	0.4	34.4	5.8	2.1	1.1	50.6	100.0	1,173
35-39	5.2	0.3	33.1	4.0	2.3	0.5	54.5	100.0	1,104
40-44	3.0	0.4	33.3	6.1	3.2	0.3	53.8	100.0	787
45-49	2.7	0.1	29.7	3.3	1.1	0.6	62.4	100.0	701
<b>Marital status</b>									
Never married	8.3	1.4	31.1	5.7	7.1	8.2	38.2	100.0	1,045
Married or living together	4.2	0.5	32.2	4.3	2.3	0.6	55.8	100.0	5,480
Divorced/separated/widowed	4.4	0.4	38.1	5.5	3.0	2.5	46.1	100.0	1,175
<b>Number of living children</b>									
0	7.7	1.8	31.3	5.3	5.8	6.6	41.5	100.0	1,159
1-2	5.9	0.7	36.8	4.8	2.9	2.4	46.4	100.0	2,054
3-4	6.3	0.6	33.9	4.7	2.6	0.5	51.4	100.0	1,852
5+	1.6	0.1	29.9	4.4	2.3	0.4	61.2	100.0	2,635
<b>Residence</b>									
Urban	12.0	2.7	55.9	6.3	4.9	6.0	12.2	100.0	1,412
Rural	3.2	0.2	27.8	4.3	2.6	1.0	60.9	100.0	6,288
<b>Region</b>									
Central 1	4.6	1.0	42.0	8.0	2.7	3.2	38.4	100.0	883
Central 2	5.4	0.9	39.8	5.4	1.8	1.3	45.3	100.0	697
Kampala	11.7	2.1	66.2	4.8	4.5	8.6	2.0	100.0	490
East Central	6.9	0.7	38.5	4.4	2.2	1.3	45.9	100.0	552
Mid Eastern	3.1	0.1	15.1	1.8	2.8	0.5	76.6	100.0	879
North East	4.9	0.1	19.3	2.8	11.7	2.0	59.1	100.0	465
West Nile	3.0	0.4	35.9	11.2	2.3	1.4	45.8	100.0	589
Mid Northern	2.4	0.7	12.6	4.2	0.9	0.7	78.6	100.0	869
South Western	5.8	0.3	31.0	2.7	4.1	0.9	55.3	100.0	1,226
Mid Western	3.4	0.5	40.7	3.8	1.4	2.0	48.1	100.0	1,052
<b>Education</b>									
No education	0.3	0.0	25.8	2.6	1.8	0.7	68.8	100.0	1,154
Primary incomplete	0.7	0.0	30.6	4.1	3.0	2.0	59.6	100.0	3,802
Primary complete	2.0	0.2	36.2	7.3	2.7	2.9	48.7	100.0	1,014
Secondary or higher	18.4	2.7	41.0	5.8	4.3	2.0	25.8	100.0	1,729
<b>Wealth quintile</b>									
Lowest	0.3	0.0	19.9	3.8	2.7	0.2	73.0	100.0	1,332
Second	0.6	0.0	22.2	3.9	2.5	0.9	69.9	100.0	1,509
Middle	2.5	0.0	26.4	4.2	3.1	0.9	62.9	100.0	1,501
Fourth	4.5	0.5	39.0	5.9	2.3	1.0	46.8	100.0	1,534
Highest	13.7	2.2	51.6	5.4	4.4	5.6	17.1	100.0	1,823
Total 15-49	4.8	0.6	32.9	4.7	3.1	1.9	52.0	100.0	7,700
50-59	4.5	0.3	23.7	3.9	4.6	0.5	62.6	100.0	842
Total 15-59	4.8	0.6	32.0	4.6	3.2	1.8	53.0	100.0	8,542

Table 3.5.2 Occupation: Men

Percent distribution of men age 15-49 employed in the 12 months preceding the survey by occupation, according to background characteristics, Uganda 2011

Background characteristic	Professional/technical/managerial	Clerical	Sales and services	Skilled manual	Unskilled manual	Domestic service	Agriculture	Total	Number of men
<b>Age</b>									
15-19	2.4	0.1	19.0	8.3	11.8	3.5	54.8	100.0	895
20-24	7.4	0.4	16.8	15.6	12.1	0.8	46.9	100.0	1,179
25-29	10.6	0.3	17.2	16.2	12.1	0.1	43.6	100.0	1,306
30-34	11.3	0.3	14.7	14.2	10.6	0.0	48.9	100.0	1,141
35-39	10.7	0.0	15.8	12.2	10.2	0.0	51.1	100.0	1,101
40-44	10.4	0.2	15.9	6.8	8.8	0.1	57.9	100.0	865
45-49	8.3	0.3	11.7	7.8	11.2	0.0	60.6	100.0	712
<b>Marital status</b>									
Never married	7.4	0.4	18.6	11.9	12.8	2.3	46.6	100.0	1,802
Married or living together	10.0	0.2	15.1	12.2	10.0	0.0	52.4	100.0	4,891
Divorced/separated/widowed	3.8	0.0	16.5	13.3	15.2	0.0	51.2	100.0	505
<b>Number of living children</b>									
0	7.6	0.4	18.4	12.2	12.3	1.9	47.2	100.0	2,065
1-2	11.2	0.2	17.5	15.3	12.4	0.1	43.3	100.0	1,496
3-4	9.1	0.3	14.9	12.7	11.3	0.1	51.6	100.0	1,292
5+	8.5	0.2	13.7	10.1	8.9	0.0	58.6	100.0	2,346
<b>Residence</b>									
Urban	21.1	0.7	26.6	26.8	15.1	1.4	8.3	100.0	1,354
Rural	6.1	0.1	13.6	8.9	10.1	0.4	60.8	100.0	5,845
<b>Region</b>									
Central 1	11.4	0.2	13.7	22.2	12.9	0.0	39.6	100.0	865
Central 2	7.3	0.0	14.2	10.1	14.7	0.0	53.7	100.0	779
Kampala	22.6	1.2	33.2	24.4	12.5	2.6	3.7	100.0	508
East Central	6.3	0.0	16.2	13.0	10.7	0.0	53.9	100.0	747
Mid Eastern	6.2	0.3	22.9	7.7	6.6	0.2	56.2	100.0	725
North East	10.4	0.1	7.8	11.3	18.8	3.2	48.3	100.0	505
West Nile	8.5	0.4	18.6	8.0	4.9	0.0	59.5	100.0	473
Mid Northern	5.1	0.2	4.4	10.1	3.9	0.4	75.8	100.0	762
South Western	5.7	0.4	17.3	9.0	14.6	0.7	52.2	100.0	799
Mid Western	10.0	0.1	16.5	8.6	11.1	0.2	53.6	100.0	1,035
<b>Education</b>									
No education	1.6	0.0	13.6	5.6	11.3	0.9	67.0	100.0	443
Primary incomplete	2.7	0.0	13.9	10.3	11.6	0.5	61.1	100.0	3,143
Primary complete	5.0	0.1	17.2	11.9	10.1	0.2	55.6	100.0	1,120
Secondary or higher	19.9	0.7	18.7	16.0	10.7	0.8	33.1	100.0	2,493
<b>Wealth quintile</b>									
Lowest	1.4	0.0	9.3	4.0	8.7	0.7	75.9	100.0	1,246
Second	2.9	0.0	11.7	7.0	9.2	0.5	68.7	100.0	1,383
Middle	4.4	0.3	13.7	8.1	10.6	0.1	62.8	100.0	1,395
Fourth	8.3	0.2	18.2	14.8	13.6	0.1	44.7	100.0	1,406
Highest	23.0	0.6	24.2	23.4	12.5	1.4	14.9	100.0	1,769
Total 15-49	8.9	0.2	16.0	12.2	11.0	0.6	50.9	100.0	7,199
50-59	8.7	0.1	13.0	6.7	8.4	0.1	63.0	100.0	823
Total 15-59	8.9	0.2	15.7	11.7	10.8	0.5	52.1	100.0	8,021

### 3.5 MARITAL STATUS

Table 3.6 shows the distribution of women and men by marital status, according to age group. Almost two-thirds (64 percent) of women age 15-49 are currently married (51 percent married and 13 percent living with a partner). Almost one-quarter of women age 15-49 have never married, while 9 percent are either divorced or separated, and 4 percent are widowed. The percentage of women who have never married declines rapidly between age 15 and age 39. The proportion married increases with age until the 35-39, age group, where it peaks at 83 percent.

Over half of men age 15-49 are currently married (57 percent), with 48 percent married and 9 percent living with a partner. Men are much less likely to be either separated (4 percent) or widowed (less than 1 percent) than women (8 percent separated and 4 percent widowed).

Table 3.6 Current marital status

Percent distribution of women and men age 15-49 by current marital status, according to age, Uganda 2011

Age	Marital status						Total	Percentage of respondents currently in union	Number of respondents
	Never married	Married	Living together	Divorced	Separated	Widowed			
WOMEN									
15-19	77.2	13.5	5.4	0.3	3.5	0.1	100.0	18.9	2,458
20-24	22.8	51.1	16.5	0.6	8.4	0.7	100.0	67.5	2,163
25-29	6.8	63.9	17.1	0.8	10.0	1.3	100.0	81.1	1,942
30-34	3.7	68.1	13.1	1.7	9.6	3.7	100.0	81.3	1,478
35-39	1.9	68.1	14.9	1.1	8.3	5.7	100.0	83.0	1,355
40-44	2.2	62.1	13.4	1.9	10.5	9.9	100.0	75.5	948
45-49	2.3	58.4	9.8	2.5	9.0	18.0	100.0	68.2	816
50-54	2.9	50.1	5.7	2.6	11.2	27.5	100.0	55.8	609
55-59	2.9	43.4	6.3	3.3	11.4	32.8	100.0	49.7	384
Total 15-49	23.7	50.8	12.8	1.0	8.0	3.7	100.0	63.6	11,160
Total 15-59	22.0	50.6	12.2	1.2	8.3	5.8	100.0	62.8	12,153
MEN									
15-19	97.5	1.5	0.5	0.1	0.4	0.0	100.0	2.1	2,072
20-24	60.6	28.5	6.0	0.6	4.2	0.0	100.0	34.5	1,406
25-29	17.8	59.8	14.9	1.1	6.4	0.2	100.0	74.6	1,354
30-34	6.1	71.0	14.0	1.3	7.2	0.4	100.0	85.0	1,160
35-39	1.6	76.2	13.8	1.3	6.3	0.8	100.0	89.9	1,129
40-44	1.1	80.9	10.5	1.2	4.6	1.8	100.0	91.4	890
45-49	2.2	80.2	8.4	1.7	5.5	1.9	100.0	88.6	722
50-54	1.2	78.9	9.1	1.7	5.6	3.4	100.0	88.1	522
55-59	1.1	78.2	9.1	1.2	7.4	3.1	100.0	87.3	331
Total 15-49	36.9	48.4	8.8	0.9	4.4	0.5	100.0	57.2	8,735
Total 15-59	33.8	51.1	8.8	1.0	4.6	0.8	100.0	59.9	9,588

### 3.6 POLYGYNY

Polygyny (multiple wives) was measured in the UAIS by asking currently married women, 'Does your husband/partner have other wives or does he live with other women as if married?' Currently married men were asked, 'Do you have more than one wife or woman you live with as if married?'

Table 3.7 shows that 25 percent of married women and 16 percent of married men age 15-49 are in polygynous unions. The prevalence of polygynous unions increases with age. Women and men living in rural areas are more likely to be in polygynous unions than those living in urban areas. Both women and men who live in East Central region are far more likely to be in polygynous unions than those living in other regions, while those living in South Western region and Kampala are least likely to be in polygynous unions.

Higher educational attainment is generally associated with lower levels of polygyny among both women and men. Wealth quintile is not strongly associated with polygyny for women or men.

The proportion of married women age 15-49 who are in polygynous unions is slightly lower than the levels found in the 2004-05 UHSBS (33 percent) and the 2006 UDHS (28 percent). The proportion of married men age 15-49 who are in polygynous unions declined from 22 percent in the 2004-05 UHSBS to 16 percent in the 2006 UDHS and the 2011 UAIS.

Table 3.7 Number of women's co-wives and men's wives

Percent distribution of currently married women age 15-49 by number of co-wives, according to background characteristics, and percent distribution of currently married men age 15-49 by number of wives, according to background characteristics, Uganda 2011.

Background characteristic	Married women 15-49					Married men 15-49				
	Number of co-wives				Total	Number of women	Number of wives			Number of men
	0	1	2+	Does not know			1	2+	Total	
<b>Age</b>										
15-19	85.3	9.9	1.3	3.5	100.0	465	(97.3)	(2.7)	100.0	43
20-24	79.9	14.2	2.9	3.0	100.0	1,460	93.4	6.6	100.0	486
25-29	70.5	20.1	4.0	5.4	100.0	1,575	90.6	9.4	100.0	1,011
30-34	67.0	20.9	6.2	5.8	100.0	1,201	85.1	14.8	100.0	985
35-39	66.4	21.3	8.4	3.9	100.0	1,125	79.9	20.1	100.0	1,016
40-44	64.4	22.0	9.9	3.8	100.0	715	77.3	22.7	100.0	813
45-49	61.6	24.8	11.0	2.6	100.0	557	77.3	22.7	100.0	640
<b>Residence</b>										
Urban	70.8	15.4	5.1	8.7	100.0	1,218	88.5	11.4	100.0	839
Rural	70.8	19.9	6.0	3.3	100.0	5,879	82.9	17.1	100.0	4,155
<b>Region</b>										
Central 1	72.3	15.9	4.3	7.4	100.0	757	86.7	13.3	100.0	596
Central 2	75.9	12.2	4.5	7.3	100.0	725	86.1	13.8	100.0	505
Kampala	71.2	13.9	2.1	12.8	100.0	420	94.2	5.8	100.0	275
East Central	60.8	28.0	10.2	1.0	100.0	793	73.5	26.5	100.0	557
Mid Eastern	74.3	18.2	4.5	3.0	100.0	776	84.8	15.2	100.0	532
North East	67.4	20.5	9.1	2.9	100.0	685	84.6	15.4	100.0	459
West Nile	67.4	23.7	7.4	1.6	100.0	466	86.3	13.7	100.0	325
Mid Northern	70.6	24.0	4.2	1.1	100.0	725	78.9	21.1	100.0	585
South Western	80.5	13.0	2.2	4.4	100.0	861	91.7	8.3	100.0	540
Mid Western	66.5	21.0	8.6	3.9	100.0	889	79.0	21.0	100.0	618
<b>Education</b>										
No education	64.5	23.4	8.8	3.3	100.0	1,224	78.3	21.7	100.0	370
Primary incomplete	71.4	19.7	6.0	2.9	100.0	3,524	82.7	17.3	100.0	2,138
Primary complete	73.6	16.0	4.4	6.0	100.0	901	83.3	16.6	100.0	856
Secondary or higher	73.2	15.9	3.8	7.2	100.0	1,448	86.7	13.2	100.0	1,630
<b>Wealth quintile</b>										
Lowest	69.6	22.0	6.6	1.8	100.0	1,345	82.2	17.7	100.0	966
Second	73.7	18.6	5.0	2.8	100.0	1,402	84.3	15.7	100.0	1,043
Middle	71.0	21.1	5.0	3.0	100.0	1,381	82.1	17.9	100.0	987
Fourth	70.5	17.4	7.8	4.3	100.0	1,376	82.6	17.4	100.0	890
Highest	69.6	16.9	4.9	8.7	100.0	1,593	87.1	12.8	100.0	1,107
Total 15-49	70.8	19.1	5.8	4.3	100.0	7,097	83.8	16.2	100.0	4,994
Total 50-59	70.3	19.5	7.6	2.6	100.0	531	78.1	21.9	100.0	749
Total 15-59	70.8	19.1	5.9	4.1	100.0	7,628	83.0	16.9	100.0	5,743

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

### 3.7 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. Table 3.8 shows the percentages of women and men who first married by specific ages. The data show that 17 percent of women age 20-49 said they got married before their 15th birthday and almost half said they married before age 18. The median age at first marriage among women is just over 18. The median age at first marriage among women age 20-49 was stable at age 17.8 in 2000-01, age 17.7 in 2004-05, and age 17.8 in 2006, but rose to age 18.3 in 2011.

Unlike women, less than one-quarter of men marry before reaching age 20. The median age at marriage among men age 25-49 is 23.1.

**Table 3.8 Age at first marriage**

Percentage of women and men age 15-49 who were first married by specific exact ages and median age at first marriage, according to current age, Uganda 2011

Current age	Percentage first married by exact age:					Percentage never married	Number of respondents	Median age at first marriage
	15	18	20	22	25			
<b>WOMEN</b>								
15-19	3.5	na	na	na	na	77.2	2,458	a
20-24	11.4	41.0	62.8	na	na	22.8	2,163	18.8
25-29	15.7	44.0	62.3	76.7	89.6	6.8	1,942	18.6
30-34	20.5	52.6	70.9	80.3	88.3	3.7	1,478	17.8
35-39	19.8	48.4	69.2	81.1	90.3	1.9	1,355	18.1
40-44	22.2	53.3	70.3	81.5	88.0	2.2	948	17.6
45-49	15.3	44.8	65.7	76.5	87.3	2.3	816	18.5
20-49	16.7	46.5	66.2	na	na	8.6	8,702	18.3
25-49	18.5	48.3	67.3	79.1	88.9	3.9	6,539	18.2
<b>MEN</b>								
15-19	0.2	na	na	na	na	97.5	2,072	a
20-24	0.9	6.0	17.1	na	na	60.6	1,406	a
25-29	2.1	10.6	22.7	40.8	69.2	17.8	1,354	22.9
30-34	4.0	12.1	24.1	41.5	62.0	6.1	1,160	23.1
35-39	2.9	10.6	24.2	40.0	62.1	1.6	1,129	23.3
40-44	2.0	11.5	24.8	41.9	62.6	1.1	890	22.9
45-49	1.5	9.2	22.2	39.1	61.1	2.2	722	23.4
20-49	2.2	9.9	22.2	na	na	18.1	6,662	a
25-49	2.6	10.9	23.6	40.8	63.8	6.7	5,256	23.1

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

na = Not applicable due to censoring

a = Omitted because less than 50 percent of the women or men began living with their spouse or partner for the first time before reaching the beginning of the age group

Table 3.9 shows differentials in the median age at first marriage according to background characteristics. Among women age 25-49, age at marriage is highest among urban residents, those living in Kampala, those with at least some secondary education, and those in the highest wealth quintile.



**Table 3.9. Median age at first marriage by background characteristics**

Median age at first marriage among women age 20-49 and age 25-49, and median age at first marriage among men age 25-49, according to background characteristics, Uganda 2011

Background characteristic	Women age		Men age
	20-49	25-49	25-49
<b>Residence</b>			
Urban	19.9	19.6	a
Rural	18.0	17.9	22.6
<b>Region</b>			
Central 1	18.6	18.4	23.7
Central 2	18.1	18.0	23.4
Kampala	a	20.7	a
East Central	17.2	16.9	23.1
Mid Eastern	18.1	18.1	22.5
North East	18.4	18.5	22.3
West Nile	18.1	18.1	22.7
Mid Northern	17.5	17.5	22.1
South Western	19.1	18.7	23.6
Mid Western	18.1	17.9	22.4
<b>Education</b>			
No education	17.3	17.2	22.9
Primary incomplete	17.5	17.6	22.2
Primary complete	18.5	18.5	22.2
Secondary or higher	a	21.0	24.6
<b>Wealth quintile</b>			
Lowest	17.8	17.9	22.1
Second	17.7	17.7	22.3
Middle	17.9	17.7	22.7
Fourth	18.1	17.9	22.8
Highest	a	19.8	a
Total	18.3	18.2	23.1

Note: The age at first marriage is defined as the age at which the respondent began living with her/his first spouse/partner  
a = Omitted because less than 50 percent of the respondents began living with their spouse/partners for the first time before reaching the beginning of the age group



## Key Findings

- Ninety-nine percent of Ugandans age 15-49 have heard of AIDS.
- Awareness of the modes of HIV transmission is high, with over 90 percent of adults knowing that having only one uninfected, faithful partner can reduce the chances of getting the AIDS virus.
- Rejection of misconceptions related to HIV is also widespread; 88 percent of women and 90 percent of men know that a healthy-looking person may be HIV positive, and almost four in five persons know that HIV cannot be transmitted by sharing food with someone who has the virus.
- Comprehensive knowledge about HIV has increased somewhat since 2004-05.

**A**cquired Immune Deficiency Syndrome (AIDS) is caused by a human immunodeficiency virus (HIV) that weakens the immune system, thereby making the body susceptible to opportunistic diseases that often lead to death. The predominant mode of HIV transmission is through sexual 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 direct contact with infected blood and nonsterile injections.

Information obtained from the Uganda AIDS Indicator Survey (UAIS) provides an assessment of the level of knowledge regarding transmission of the virus. Survey respondents were asked if they had ever heard of AIDS, if they knew about several possible means of transmission of the virus, and if they were aware of mother-to-child transmission. Respondents were also asked about misconceptions regarding transmission or prevention of the AIDS virus, such as whether a healthy-looking person can have the AIDS virus, if the virus can be transmitted by mosquito bites or by supernatural means, and whether a person can become infected by sharing food with a person who has the virus.

## 4.1 AWARENESS OF HIV/AIDS

Survey results indicate that almost all Ugandan women and men age 15-49 have heard of AIDS (Table 4.1). Over 95 percent of respondents in all age groups, regions, urban and rural residence groups, and education levels have heard of AIDS, with the exception of men in North East region (90 percent). Overall, the level of awareness of AIDS has remained high among both women and men since 2004-05.

Table 4.1 Knowledge of AIDS

Percentage of women and men age 15-49 who have heard of AIDS, by background characteristics, Uganda 2011

Background characteristic	Women		Men	
	Have heard of AIDS	Number of women	Have heard of AIDS	Number of men
<b>Age</b>				
15-24	98.9	4,621	97.9	3,479
15-19	98.8	2,458	97.6	2,072
20-24	99.1	2,163	98.3	1,406
25-29	99.7	1,942	98.5	1,354
30-39	99.6	2,833	98.9	2,289
40-49	99.4	1,764	98.7	1,612
<b>Marital status</b>				
Never married	98.7	2,641	98.0	3,227
Ever had sex	99.6	1,202	99.4	1,663
Never had sex	98.0	1,440	96.5	1,563
Married/Living together	99.5	7,097	98.6	4,994
Divorced/Separated/Widowed	99.5	1,422	98.7	514
<b>Residence</b>				
Urban	99.6	2,365	99.1	1,739
Rural	99.2	8,795	98.2	6,995
<b>Region</b>				
Central 1	99.8	1,206	99.8	1,009
Central 2	99.2	1,162	97.9	888
Kampala	99.3	875	99.4	674
East Central	99.6	1,153	99.0	933
Mid Eastern	99.3	1,133	98.2	950
North East	97.7	919	89.8	683
West Nile	99.9	712	99.4	548
Mid Northern	99.4	1,106	99.5	950
South Western	98.9	1,414	99.0	947
Mid Western	99.8	1,480	99.9	1,151
<b>Education</b>				
No education	98.6	1,566	92.9	485
Primary incomplete	99.2	5,218	98.5	3,727
Primary complete	99.8	1,388	98.7	1,230
Secondary or higher	99.7	2,988	99.0	3,292
<b>Wealth quintile</b>				
Lowest	98.3	1,894	95.9	1,504
Second	99.6	2,024	98.8	1,632
Middle	99.2	2,056	98.7	1,667
Fourth	99.5	2,292	98.9	1,706
Highest	99.6	2,894	99.2	2,226
Total 15-49	99.3	11,160	98.4	8,735
50-59	99.3	993	98.9	853
Total 15-59	99.3	12,153	98.4	9,588

## 4.2 KNOWLEDGE OF MEANS OF PREVENTING HIV TRANSMISSION

Abstaining from sex, being faithful to one uninfected partner, and using condoms are important ways to avoid the spread of HIV. To ascertain the depth of knowledge about modes of HIV transmission, respondents were asked specific questions about whether it is possible for people to reduce their chances of getting the AIDS virus 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 sexual intercourse at all. Table 4.2 shows the percentages of women and men who answer affirmatively in response to each of these questions.

Table 4.2 Knowledge of HIV prevention methods

Percentage of women and men age 15-49 who, in response to prompted questions, say that people can reduce the risk of getting the AIDS virus by using condoms every time they have sexual intercourse, by having one sexual partner who is not infected and has no other partners, by not having sexual intercourse at all, and by having male circumcision, by background characteristics, Uganda 2011

Background characteristic	Women					Men						
	Using condoms <sup>1</sup>	Limiting sexual intercourse to one uninfected partner <sup>2</sup>	Using condoms and limiting sexual intercourse to one uninfected partner <sup>2</sup>	Not having sexual intercourse at all	Male circumcision	Number of women	Using condoms <sup>1</sup>	Limiting sexual intercourse to one uninfected partner <sup>2</sup>	Using condoms and limiting sexual intercourse to one uninfected partner <sup>2</sup>	Not having sexual intercourse at all	Male circumcision	Number of men
<b>Age</b>												
15-24	80.3	89.9	75.2	88.1	45.2	4,621	82.1	88.7	77.2	88.4	53.5	3,479
15-19	77.4	88.0	71.6	86.9	43.5	2,458	78.2	86.0	72.2	87.6	52.0	2,072
20-24	83.6	92.1	79.2	89.5	47.3	2,163	87.9	92.7	84.5	89.5	55.7	1,406
25-29	82.1	90.8	76.9	89.7	45.5	1,942	89.1	93.6	85.4	88.5	53.0	1,354
30-39	77.4	89.9	71.5	88.6	40.5	2,833	86.1	92.7	82.3	88.3	49.3	2,289
40-49	73.4	90.5	68.9	88.7	38.0	1,764	81.1	92.1	77.4	88.2	45.4	1,612
<b>Marital status</b>												
Never married	78.1	88.0	72.6	87.3	42.9	2,641	81.8	88.3	76.6	88.4	53.4	3,227
Ever had sex	88.6	92.0	83.1	89.8	48.4	1,202	89.7	92.6	85.0	90.6	57.5	1,663
Never had sex	69.4	84.7	63.9	85.2	38.3	1,440	73.4	83.8	67.7	86.0	49.0	1,563
Married/Living together	78.8	90.9	73.7	88.8	42.7	7,097	85.3	93.0	81.8	88.6	49.3	4,994
Divorced/ Separated/ Widowed	80.0	90.1	74.4	90.0	44.2	1,422	85.9	90.8	80.5	85.4	48.9	514
<b>Residence</b>												
Urban	86.3	91.0	79.9	88.3	49.4	2,365	88.9	93.9	85.4	89.7	55.1	1,739
Rural	76.8	89.9	71.9	88.7	41.2	8,795	82.8	90.5	78.4	88.0	49.8	6,995
<b>Region</b>												
Central 1	89.7	90.2	82.4	90.9	55.8	1,206	93.1	94.7	89.3	92.5	58.9	1,009
Central 2	84.5	87.5	76.8	87.0	54.6	1,162	88.8	92.3	85.6	87.7	59.4	888
Kampala	87.3	88.5	78.5	86.7	51.0	875	89.6	94.0	86.2	88.5	58.1	674
East Central	91.6	97.1	89.9	96.0	55.8	1,153	83.9	89.1	78.7	86.7	59.1	933
Mid Eastern	78.0	92.1	74.2	92.8	37.7	1,133	79.0	88.3	75.2	87.6	47.1	950
North East	67.4	90.4	65.2	88.8	31.4	919	75.5	84.6	72.8	85.4	44.6	683
West Nile	59.8	80.6	50.8	84.1	23.7	712	79.3	93.3	77.2	91.7	41.2	548
Mid Northern	65.4	81.9	57.1	79.2	19.9	1,106	80.0	88.9	73.2	84.8	27.3	950
South Western	77.3	94.5	74.6	90.7	45.8	1,414	84.4	95.4	81.7	93.9	59.2	947
Mid Western	78.7	92.7	75.1	87.5	43.6	1,480	83.7	90.8	77.4	85.4	50.0	1,151
<b>Education</b>												
No education	58.4	84.4	53.0	83.2	27.3	1,566	68.9	84.4	65.9	76.3	41.2	485
Primary incomplete	77.9	89.5	72.5	88.2	40.4	5,218	80.8	88.9	75.7	87.1	46.6	3,727
Primary complete	85.4	92.6	79.6	89.2	48.2	1,388	86.0	93.0	82.4	90.0	49.7	1,230
Secondary or higher	88.0	93.3	83.3	92.0	53.1	2,988	89.2	94.0	85.6	90.9	57.4	3,292
<b>Wealth quintile</b>												
Lowest	65.6	84.6	59.9	83.8	28.0	1,894	74.4	85.3	68.7	82.9	37.5	1,504
Second	74.4	89.8	69.6	89.7	36.5	2,024	81.8	91.4	77.9	89.4	48.2	1,632
Middle	77.5	90.6	72.9	88.6	41.9	2,056	83.4	90.2	78.6	87.5	50.6	1,667
Fourth	83.1	92.4	78.2	90.9	48.5	2,292	87.8	92.1	83.7	90.0	55.0	1,706
Highest	88.0	92.0	82.0	89.2	53.6	2,894	89.7	95.0	86.7	90.5	58.8	2,226
Total 15-49	78.8	90.2	73.5	88.6	43.0	11,160	84.0	91.2	79.8	88.3	50.8	8,735
50-59	61.6	85.7	55.5	88.2	32.6	993	75.7	92.0	72.3	88.9	43.7	853
Total 15-59	77.4	89.8	72.1	88.6	42.1	12,153	83.3	91.2	79.2	88.4	50.2	9,588

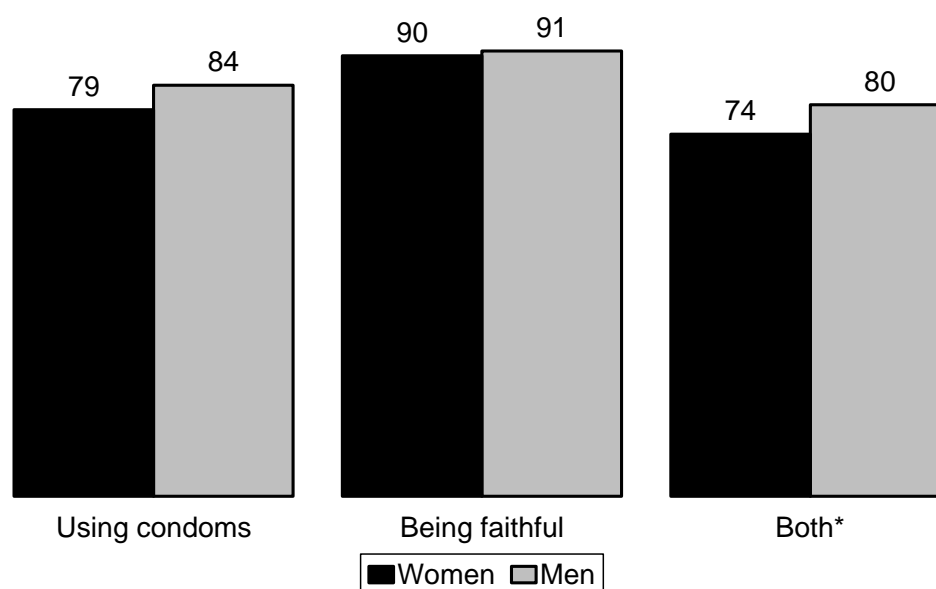
na = Not applicable

<sup>1</sup> Using condoms every time they have sexual intercourse

<sup>2</sup> Partner who has no other partners

The results show that knowledge of HIV prevention methods is widespread. About four in five respondents (79 percent of women and 84 percent of men age 15-49) indicate that the chance of getting the AIDS virus can be reduced by using condoms every time they have sex (Figure 4.1). Over 90 percent of women and men say that people can reduce their chances of getting the AIDS virus by limiting sex to one partner who is not infected and who has no other partners. Knowledge of both of these means of avoiding HIV transmission is also high, with 74 percent of women and 80 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—89 percent among women and 88 percent of men. Forty-three percent of women and 51 percent of men agree that male circumcision helps to prevent HIV infection. For each of these knowledge indicators, men are slightly more informed than women, especially about condom use.

**Figure 4.1 Knowledge of means of HIV transmission among women and men age 15-49**



Note: Knows that using condoms every time and limiting sex to one uninfected, faithful partner reduce chance of getting HIV.

Uganda AIS 2011

Respondents in their twenties are most likely to know the major ways to avoid getting HIV, while those in their forties are least likely. Similarly, women and men who have never married, but who have been sexually active, are most likely to know about both condom use and faithfulness as means of avoiding HIV. Urban residents, women living in East Central region, and men living in Central 1 region are more knowledgeable than other respondents. Women in West Nile and Mid Northern regions and men in North East and Mid Northern regions are least informed about both condom use and faithfulness as ways to avoid getting HIV. Both education and wealth quintile are strongly correlated with knowledge about AIDS prevention.

In addition to knowing effective ways to avoid contracting HIV, it is likewise useful to identify incorrect beliefs about AIDS, in order to eliminate popular misconceptions. Common misconceptions about AIDS include the idea that all HIV-positive people appear ill and the belief that the virus can be transmitted through mosquito bites, by sharing food with someone who is infected, or by witchcraft or other supernatural means. Respondents were asked about each misconception.

Data shown in Tables 4.3.1 and 4.3.2 indicate that the vast majority of Ugandan adults know that people with HIV do not necessarily show signs of illness. Eighty-eight percent of women and 90 percent of men age 15-49 know that a healthy-looking person can have the virus that causes AIDS (Figure 4.2).

**Table 4.3.1 Comprehensive knowledge about AIDS: Women**

Percentage of women age 15-49 who say that a healthy-looking person can have the AIDS virus and who, in response to prompted questions, correctly reject local misconceptions about transmission or prevention of the AIDS virus, and the percentage with a comprehensive knowledge about AIDS by background characteristics, Uganda 2011

Background characteristic	Percentage of women who say that:				Percentage who say that a healthy-looking person can have the AIDS virus and who reject the two most common local misconceptions <sup>1</sup>		Number of women
	A healthy-looking person can have the AIDS virus	The AIDS virus cannot be transmitted by mosquito bites	The AIDS virus cannot be transmitted by witchcraft or other supernatural means	A person cannot become infected by sharing food with a person who has the AIDS virus	Percentage with a comprehensive knowledge about AIDS <sup>2</sup>		
<b>Age</b>							
15-24	86.0	59.9	82.8	76.7	47.1	38.6	4,621
15-19	82.9	61.2	82.4	78.1	46.8	36.3	2,458
20-24	89.4	58.4	83.2	75.0	47.5	41.3	2,163
25-29	89.4	54.5	82.8	73.1	43.7	37.1	1,942
30-39	88.6	52.6	80.0	72.4	42.0	34.1	2,833
40-49	88.9	48.8	77.2	70.6	40.2	31.4	1,764
<b>Marital status</b>							
Never married	84.6	65.8	82.6	79.6	52.2	41.6	2,641
Ever had sex	88.9	65.0	84.2	79.7	53.6	46.9	1,202
Never had sex	81.1	66.5	81.3	79.5	51.0	37.1	1,440
Married/Living together	88.9	52.3	80.9	72.6	41.8	34.4	7,097
Divorced/Separated/Widowed	87.3	51.3	79.9	70.5	40.8	34.2	1,422
<b>Residence</b>							
Urban	93.5	68.8	87.3	82.8	58.8	49.9	2,365
Rural	86.1	51.7	79.6	71.7	40.2	32.4	8,795
<b>Region</b>							
Central 1	95.5	56.9	87.2	76.7	49.2	41.8	1,206
Central 2	91.9	52.2	85.1	73.0	41.9	36.0	1,162
Kampala	95.1	73.7	87.0	79.5	61.7	52.3	875
East Central	93.0	48.5	83.5	70.6	40.7	38.6	1,153
Mid Eastern	82.3	47.8	77.0	70.3	35.0	31.0	1,133
North East	82.1	47.2	66.2	67.6	35.7	29.4	919
West Nile	79.9	42.7	67.9	70.7	29.8	17.2	712
Mid Northern	80.3	46.2	83.9	79.4	36.5	24.3	1,106
South Western	90.7	67.7	81.1	75.1	57.3	45.1	1,414
Mid Western	83.5	63.1	85.0	75.4	46.5	37.4	1,480
<b>Education</b>							
No education	78.1	40.0	71.6	62.2	27.4	19.0	1,566
Primary incomplete	86.2	47.4	78.1	69.3	36.1	28.5	5,218
Primary complete	92.2	60.4	86.0	76.9	48.7	40.5	1,388
Secondary or higher	93.3	74.9	89.4	87.2	64.9	56.3	2,988
<b>Wealth quintile</b>							
Lowest	78.6	39.7	71.3	65.8	28.5	20.7	1,894
Second	83.7	50.0	78.3	70.2	37.2	28.6	2,024
Middle	86.2	51.8	79.0	70.6	39.8	32.0	2,056
Fourth	91.6	56.8	84.1	76.0	46.4	39.1	2,292
Highest	94.3	70.7	89.0	82.9	60.6	52.0	2,894
Total 15-49	87.7	55.3	81.2	74.0	44.2	36.1	11,160
50-59	83.3	41.5	72.6	66.2	31.3	21.4	993
Total 15-59	87.3	54.2	80.5	73.4	43.1	34.9	12,153

<sup>1</sup> Two most common local misconceptions: AIDS can be transmitted by mosquito bites and sharing food

<sup>2</sup> Comprehensive knowledge means knowing that consistent use of condom during sexual intercourse and having just one uninfected faithful partner can reduce the chance of getting the AIDS virus, knowing that a healthy-looking person can have the AIDS virus, and rejecting the two most common local misconceptions about transmission or prevention of the AIDS virus.

Table 4.3.2 Comprehensive knowledge about AIDS: Men

Percentage of men age 15-49 who say that a healthy-looking person can have the AIDS virus and who, in response to prompted questions, correctly reject local misconceptions about transmission or prevention of the AIDS virus, and the percentage with a comprehensive knowledge about AIDS by background characteristics, Uganda 2011

Background characteristic	Percentage of men who say that:				Percentage who say that a healthy-looking person can have the AIDS virus and who reject the two most common local misconceptions <sup>1</sup>	Percentage with a comprehensive knowledge about AIDS <sup>2</sup>	Number of men
	A healthy-looking person can have the AIDS virus	The AIDS virus cannot be transmitted by mosquito bites	The AIDS virus cannot be transmitted by witchcraft or other supernatural means	A person cannot become infected by sharing food with a person who has the AIDS virus			
<b>Age</b>							
15-24	86.4	59.7	83.4	79.0	47.5	39.3	3,479
15-19	83.4	58.7	82.1	77.9	45.6	36.1	2,072
20-24	90.7	61.1	85.3	80.7	50.3	44.0	1,406
25-29	92.3	62.7	85.5	82.6	54.3	48.7	1,354
30-39	92.9	57.8	84.0	80.7	51.4	45.9	2,289
40-49	91.6	53.5	81.9	79.3	47.5	40.7	1,612
<b>Marital status</b>							
Never married	86.4	62.6	83.6	80.0	50.4	41.6	3,227
Ever had sex	90.9	62.9	87.2	81.6	51.7	45.4	1,663
Never had sex	81.6	62.4	79.8	78.3	49.0	37.6	1,563
Married/Living together	92.1	56.3	83.9	80.3	49.3	43.5	4,994
Divorced/Separated/Widowed	90.9	53.8	80.7	78.8	47.8	42.5	514
<b>Residence</b>							
Urban	94.2	72.6	88.7	88.5	65.8	58.3	1,739
Rural	88.9	55.0	82.3	78.0	45.6	38.9	6,995
<b>Region</b>							
Central 1	93.4	57.6	93.4	82.6	49.5	46.2	1,009
Central 2	92.2	61.6	91.3	75.8	51.2	46.7	888
Kampala	96.3	76.5	95.1	88.8	71.3	63.6	674
East Central	91.9	50.5	91.0	77.1	43.1	36.5	933
Mid Eastern	81.3	51.1	80.1	76.9	38.6	32.2	950
North East	83.1	53.1	73.3	74.8	47.9	44.7	683
West Nile	91.9	57.5	76.8	79.9	49.3	40.2	548
Mid Northern	88.5	61.4	77.4	89.5	54.5	43.1	950
South Western	91.7	60.2	74.9	72.8	48.2	40.4	947
Mid Western	90.0	58.9	80.8	82.5	48.2	39.8	1,151
<b>Education</b>							
No education	81.0	40.5	68.7	61.1	30.6	27.2	485
Primary incomplete	87.3	47.1	80.5	72.5	36.3	30.1	3,727
Primary complete	91.8	55.7	83.5	81.8	47.9	41.6	1,230
Secondary or higher	93.6	75.2	89.3	90.8	68.1	59.8	3,292
<b>Wealth quintile</b>							
Lowest	83.0	44.6	75.2	73.2	35.6	28.3	1,504
Second	89.7	52.0	80.6	78.2	43.7	36.6	1,632
Middle	89.3	57.1	82.7	77.1	46.0	39.4	1,667
Fourth	91.3	60.9	86.2	80.6	51.2	45.0	1,706
Highest	94.3	71.9	90.2	87.9	64.9	57.8	2,226
Total 15-49	90.0	58.5	83.6	80.1	49.6	42.7	8,735
50-59	91.0	58.0	81.9	75.4	49.4	39.7	853
Total 15-59	90.0	58.5	83.4	79.7	49.6	42.5	9,588

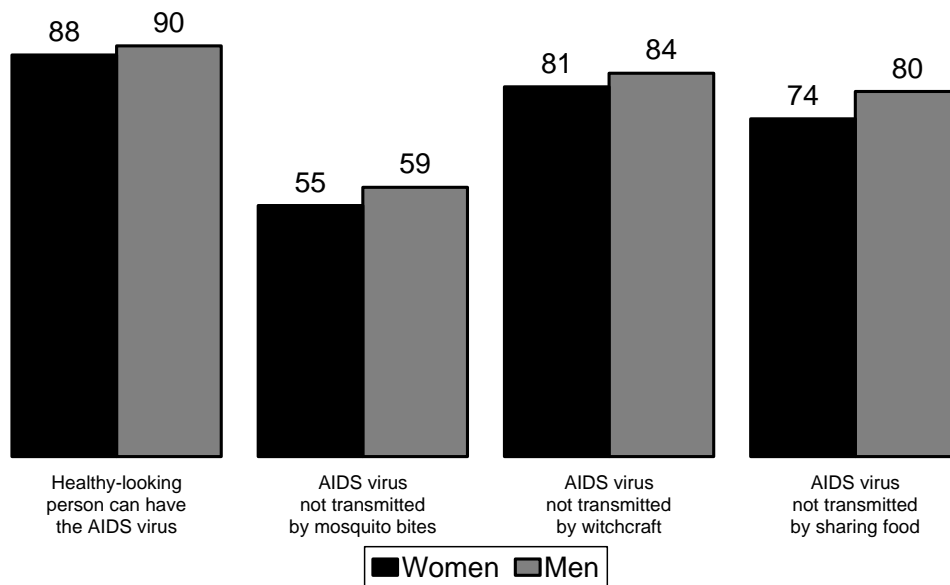
<sup>1</sup> Two most common local misconceptions: AIDS can be transmitted by mosquito bites and sharing food.

<sup>2</sup> Comprehensive knowledge means knowing that consistent use of condom during sexual intercourse and having just one uninfected faithful partner can reduce the chance of getting the AIDS virus, knowing that a healthy-looking person can have the AIDS virus, and rejecting the two most common local misconceptions about transmission or prevention of the AIDS virus.



Considerably fewer respondents understand that the AIDS virus is not transmitted by mosquito bites; 55 percent of women and 59 percent of men know that AIDS cannot be transmitted by mosquito bites. Knowledge that HIV is not transmitted by witchcraft or other supernatural means is widespread; 81 percent of women and 84 percent of men reject this rumour. Similarly, 74 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.

**Figure 4.2 Rejection of misconceptions about HIV transmission among women and men age 15-49**

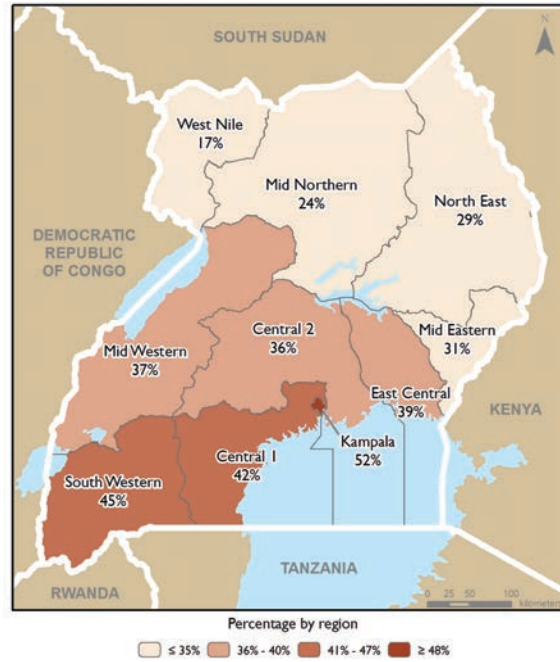


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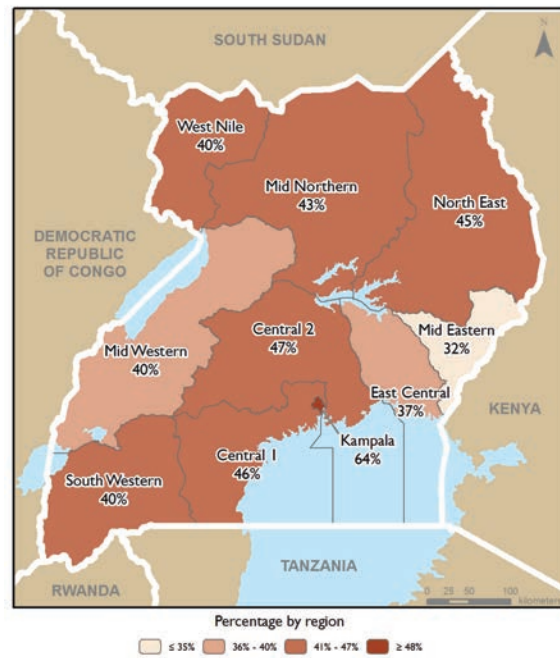
An indicator of comprehensive knowledge about HIV combines several individual indicators previously discussed. It is the percentage of respondents who say: (1) that people can reduce the chances of getting the AIDS virus by using a condom every time they have sex, and (2) that people can reduce the chances of getting the AIDS virus by having sex with just one partner who is not infected and who has no other partners, and (3) that people cannot get the AIDS virus from mosquito bites, and (4) that people cannot get the AIDS virus from sharing food with a person who has AIDS, and (5) that a healthy-looking person can have the AIDS virus. As shown in the next-to-last columns of Tables 4.3.1 and 4.3.2, only 36 percent of women and 43 percent of men age 15-49 have such comprehensive knowledge about HIV/AIDS.

Comprehensive knowledge about HIV and AIDS tends to be slightly lower among the youngest and oldest age groups. Sexually active, never-married respondents are somewhat more likely than those in other marital status categories to have comprehensive knowledge of HIV. The same is true for women and men who live in urban areas and in Kampala (Maps 4.1 and 4.2). The proportion of respondents with comprehensive knowledge of HIV and AIDS increases with increasing educational attainment and wealth quintile (Figure 4.3).

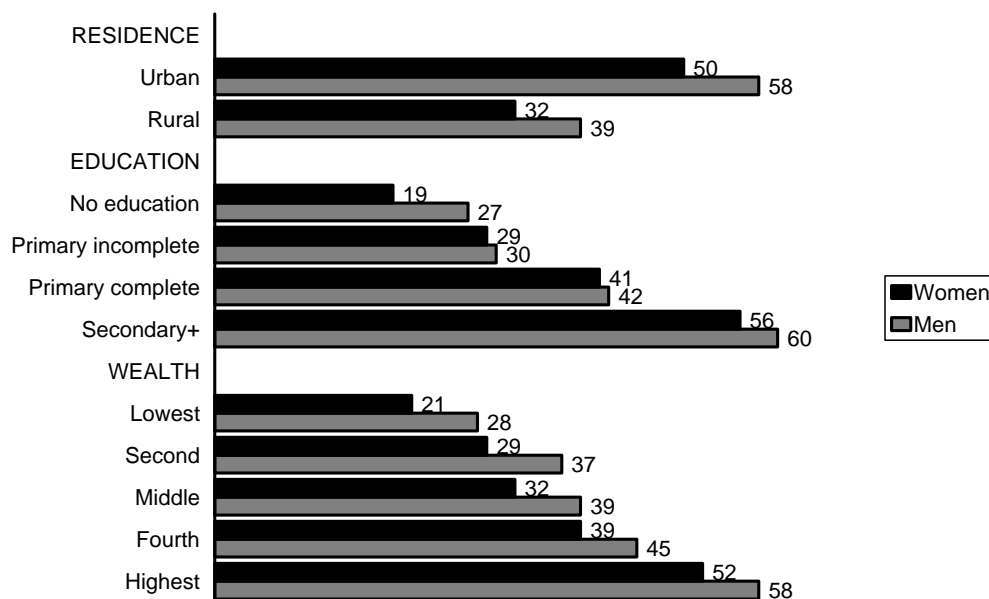
**Map 4.1 Percentage with comprehensive knowledge about AIDS: women 15-49**



**Map 4.2 Percentage with comprehensive knowledge about AIDS: men 15-49**



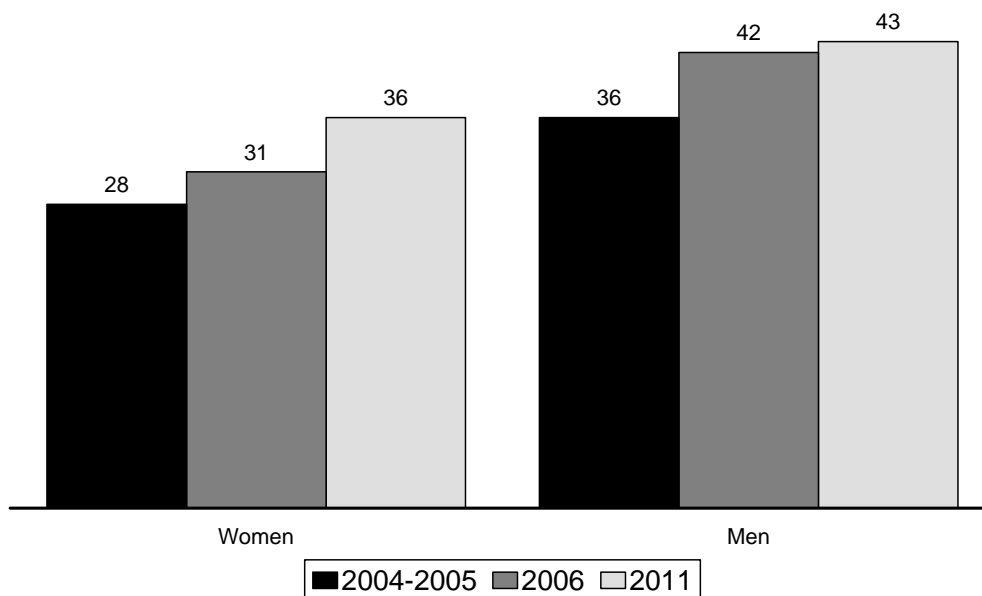
**Figure 4.3 Differentials in comprehensive knowledge of HIV among women and men 15-49, Uganda 2011**



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There has been a modest increase in comprehensive knowledge of HIV and AIDS over time. For example, the proportion of women age 15-49 with comprehensive knowledge increased from 28 percent in 2004-05 to 31 percent in 2006 and to 36 percent in 2011. Similarly, the proportion of men age 15-49 with comprehensive knowledge increased from 36 percent in 2004-05 to 42 percent in 2006 and to 43 percent in 2011 (Figure 4.4).

**Figure 4.4 Trends in comprehensive knowledge of HIV among women and men 15-49, Uganda 2011**



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### 4.3 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 anti-retroviral drugs is critical to achieving this goal.

All women and men interviewed in the 2011 UAIS were asked if the virus that causes AIDS can be transmitted from a mother to a child during pregnancy, delivery, or breastfeeding. They were also asked if there are any special drugs that a doctor or nurse can give to a woman infected with the AIDS virus to reduce the risk of transmission to the baby. The international indicator is focused on knowledge of mother-to-child transmission by breastfeeding; it is shown in Table 4.4 for women and men.

Table 4.4 Knowledge of prevention of mother- to-child transmission of HIV

Percentage of women and men age 15-49 who know that HIV can be transmitted from mother to child by breastfeeding and that the risk of mother to child transmission (MTCT) of HIV can be reduced by mother taking special drugs during pregnancy, by background characteristics, Uganda 2011

Background characteristic	Women				Men			
	Percentage who know that:			Number of women	Percentage who know that:			Number of men
	HIV can be transmitted by breast-feeding	Risk of MTCT can be reduced by mother taking special drugs during pregnancy	HIV can be transmitted by breastfeeding and risk of MTCT can be reduced by mother taking special drugs during pregnancy		HIV can be transmitted by breast-feeding	Risk of MTCT can be reduced by mother taking special drugs during pregnancy	HIV can be transmitted by breast-feeding and risk of MTCT can be reduced by mother taking special drugs during pregnancy	
<b>Age</b>								
15-24	84.8	67.8	62.6	4,621	76.4	55.1	47.2	3,479
15-19	80.6	59.9	54.4	2,458	72.5	49.8	41.5	2,072
20-24	89.6	76.8	72.0	2,163	82.0	62.9	55.7	1,406
25-29	89.2	79.7	74.7	1,942	84.6	68.6	62.8	1,354
30-39	85.9	77.4	70.4	2,833	80.5	68.9	59.8	2,289
40-49	82.6	70.7	64.5	1,764	77.4	66.2	57.2	1,612
<b>Marital status</b>								
Never married	81.3	62.5	56.8	2,641	76.2	55.2	47.2	3,227
Ever had sex	88.9	75.5	69.4	1,202	81.2	62.8	54.1	1,663
Never had sex	74.9	51.6	46.2	1,440	70.9	47.2	39.7	1,563
Married/Living together	87.1	76.1	70.4	7,097	80.9	68.3	60.2	4,994
Divorced/Separated/Widowed	85.7	75.2	69.3	1,422	76.7	58.2	50.4	514
<b>Currently pregnant</b>								
Pregnant	88.5	76.2	71.5	1,276	na	na	na	0
Not pregnant or not sure	85.1	72.3	66.4	9,884	na	na	na	0
<b>Residence</b>								
Urban	90.0	80.6	75.0	2,365	82.1	68.8	60.6	1,739
Rural	84.3	70.7	64.9	8,795	78.1	61.4	53.3	6,995
<b>Region</b>								
Central 1	88.1	85.7	77.9	1,206	76.7	75.2	62.5	1,009
Central 2	86.1	73.5	67.3	1,162	73.7	62.5	51.9	888
Kampala	91.2	80.3	75.4	875	82.7	65.3	57.3	674
East Central	79.0	80.6	68.3	1,153	72.0	67.4	53.4	933
Mid Eastern	76.1	62.7	58.3	1,133	73.5	45.8	40.3	950
North East	86.5	71.3	68.0	919	78.4	66.5	62.2	683
West Nile	82.0	49.4	44.9	712	83.9	56.4	52.2	548
Mid Northern	90.1	68.1	65.2	1,106	89.9	70.2	66.2	950
South Western	90.8	75.3	72.4	1,414	80.7	65.3	57.0	947
Mid Western	84.4	72.1	64.9	1,480	80.3	54.4	47.5	1,151
<b>Education</b>								
No education	79.2	59.7	54.6	1,566	64.1	49.9	41.2	485
Primary incomplete	83.8	70.7	64.8	5,218	76.8	57.4	50.0	3,727
Primary complete	88.5	78.6	72.7	1,388	79.4	64.2	55.1	1,230
Secondary or higher	90.3	80.4	74.8	2,988	83.4	70.5	62.1	3,292
<b>Wealth quintile</b>								
Lowest	81.5	60.0	55.7	1,894	77.6	55.5	49.7	1,504
Second	83.2	68.9	63.9	2,024	78.6	59.3	52.7	1,632
Middle	83.4	71.9	65.0	2,056	76.5	59.7	50.2	1,667
Fourth	87.9	76.0	70.2	2,292	78.9	66.1	56.8	1,706
Highest	89.3	81.9	75.5	2,894	81.9	70.4	61.6	2,226
Total 15-49	85.5	72.8	67.0	11,160	78.9	62.9	54.8	8,735
50-59	78.6	61.4	54.5	993	75.2	64.6	56.1	853
Total 15-59	85.0	71.8	66.0	12,153	78.6	63.0	54.9	9,588

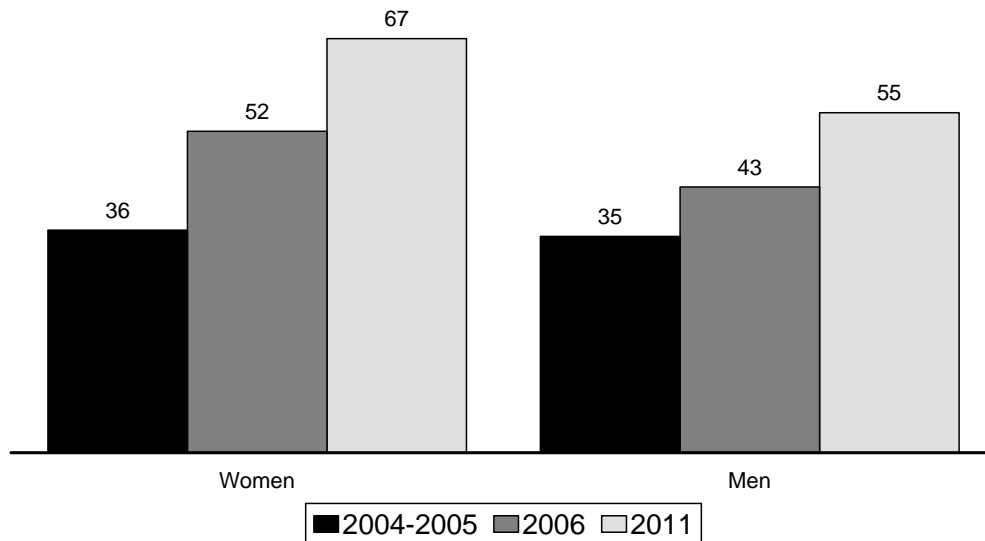
na = Not applicable

More than four in five women (86 percent) and 79 percent of men age 15-49 know that HIV can be transmitted from a mother to her child by breastfeeding. Knowledge about antiretroviral drugs is somewhat less widespread; 73 percent of women and 63 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 67 percent of women and 55 percent of men know that HIV can be transmitted through breastfeeding and that the risk can be reduced by special drugs.

Knowledge of mother-to-child transmission and of antiretroviral drugs is lower among younger and older respondents than among those in their late twenties. Those who are currently married and those who have never married but have had sex tend to be more knowledgeable than those who have never had sex. Urban residents, women in Central 1 region, and men in Mid Northern region are more knowledgeable than other respondents. Information programmes might want to target residents of West Nile, Mid Eastern, and Mid Western regions. There is a steady increase in knowledge of mother-to-child transmission by education and wealth quintile among both women and men.

There has been a huge increase in the level of knowledge of mother-to-child transmission of HIV through breastfeeding. The proportion of women age 15-49 who know that HIV can be transmitted by breastfeeding and who know that the risk can be reduced by the mother taking special drugs has increased from 36 percent in 2004-05 to 52 percent in 2006 to 67 percent in 2011. Among men, the proportion has increased from 35 percent in 2004-05 to 43 percent in 2006 and to 55 percent in 2011 (Figure 4.5).

**Figure 4.5 Trends in knowledge of mother-to-child transmission\* among women and men 15-49, Uganda 2011**



Note: Percentage who know that HIV can be transmitted by breastfeeding and can be reduced by special drugs for pregnant women.

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**Key Findings**

- A large majority of Ugandan adults have accepting attitudes towards those with HIV; over 90 percent would care for a relative with HIV in their own homes, and about 80 percent think an HIV-positive female teacher should be allowed to continue teaching.
- Nevertheless, about one in five adults believes that people with HIV should be ashamed of themselves and should be blamed for bringing the disease into the community.
- There is widespread acceptance of the ability of a woman to negotiate safer sexual relations with her husband, either by refusing to have sex or asking him to use a condom if she knows he has a sexually transmitted infection.
- About two-thirds of adults believe children age 12-14 should be taught about condom use to avoid HIV; over 90 percent believe children should be taught to abstain from sexual relations until marriage.

**T**his chapter covers issues related to attitudes towards HIV as assessed in the 2011 Uganda AIDS Indicator Survey (UAIS). Specifically, it includes indicators of the level of acceptance and negative attitudes towards people living with HIV, as well as findings related to the ability to negotiate safer sex, attitudes towards teaching youth about condom use and abstinence until marriage, and perceptions about the likelihood of getting HIV.

### 5.1 ACCEPTING ATTITUDES TOWARDS THOSE LIVING WITH HIV

The HIV epidemic has generated fear, anxiety, and prejudice towards people living with the virus. In Uganda, efforts have been made to reduce the stigma towards those living with the disease. To assess the level of stigma, UAIS respondents who had heard of AIDS were asked if they would be willing to care for a family member sick with AIDS in their own households and if they would be willing to buy fresh vegetables 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 fourth question asked, if a member of the family got infected with the virus that causes AIDS, whether they would want it to remain secret or not. Tables 5.1.1 and 5.1.2 show the results for women and men.

Survey results show that over 90 percent of Ugandan women and men age 15-49 say they would be willing to care in their own household for a relative who is sick with AIDS. Fewer women (72 percent) and men (80 percent) say they would buy fresh vegetables from a vendor if they knew that he or she were HIV-positive. About 8 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 32 percent of women and 44 percent of men say that if a member of their family got infected with the virus, they would not necessarily want it to remain a secret.

Table 5.1.1. Accepting attitudes toward those living with HIV/AIDS: Women

Among women age 15-49 who have heard of AIDS, percentage expressing specific accepting attitudes toward people with HIV/AIDS, by background characteristics, Uganda 2011

Background characteristic	Percentage of women who:					Percentage expressing attitudes on all four indicators	Number of women who have heard of AIDS
	Are willing to care for a family member with AIDS in the respondent's home	Would buy fresh vegetables from shopkeeper who has the AIDS virus	Say that a female teacher who has the AIDS virus but is not sick should be allowed to continue teaching	Would not want to keep secret that a family member got infected with the AIDS virus			
<b>Age</b>							
15-24	89.7	71.3	76.9	30.5	18.2	4,571	
15-19	86.3	69.0	73.7	30.8	16.8	2,428	
20-24	93.5	73.8	80.5	30.3	19.7	2,142	
25-29	93.9	73.8	80.3	33.2	21.3	1,936	
30-39	93.8	72.3	79.4	34.7	21.4	2,821	
40-49	92.5	70.0	76.3	32.7	19.1	1,754	
<b>Marital status</b>							
Never married	88.4	73.1	76.9	31.0	18.9	2,608	
Ever had sex	92.9	79.0	83.4	28.7	20.3	1,197	
Never had sex	84.6	68.2	71.4	32.9	17.8	1,411	
Married/Living together	92.9	70.7	78.0	32.9	19.7	7,059	
Divorced/Separated/Widowed	93.2	74.7	80.2	32.2	21.3	1,414	
<b>Residence</b>							
Urban	95.8	84.2	88.3	32.4	25.0	2,355	
Rural	90.8	68.4	75.3	32.4	18.3	8,727	
<b>Region</b>							
Central 1	96.4	80.0	84.4	26.2	20.6	1,203	
Central 2	96.6	74.0	80.8	22.4	13.7	1,153	
Kampala	96.5	86.3	90.4	27.4	21.5	868	
East Central	95.4	65.2	77.0	14.0	7.9	1,149	
Mid Eastern	93.7	67.7	82.7	32.0	18.7	1,125	
North East	80.5	70.2	75.0	31.8	19.7	898	
West Nile	85.5	66.0	70.3	52.5	30.4	711	
Mid Northern	92.9	78.5	71.7	59.0	34.9	1,098	
South Western	86.1	63.5	72.7	35.2	17.1	1,399	
Mid Western	92.5	69.5	76.0	30.9	18.4	1,477	
<b>Education</b>							
No education	85.2	59.4	67.1	33.4	16.0	1,544	
Primary incomplete	90.7	66.1	73.6	33.2	17.9	5,174	
Primary complete	94.6	77.9	82.8	31.2	20.8	1,385	
Secondary or higher	96.2	85.1	89.1	31.0	24.2	2,979	
<b>Wealth quintile</b>							
Lowest	86.3	63.0	67.1	40.2	20.3	1,862	
Second	90.5	66.1	73.3	33.3	17.9	2,015	
Middle	90.6	66.4	74.4	30.8	17.5	2,040	
Fourth	93.4	73.4	81.3	29.7	18.4	2,280	
Highest	96.3	83.9	88.4	29.9	23.2	2,884	
Total 15-49	91.9	71.8	78.0	32.4	19.7	11,082	
50-59	92.3	66.0	72.3	34.4	18.1	986	
Total 15-59	91.9	71.3	77.6	32.5	19.6	12,068	



Table 5.1.2 Accepting attitudes toward those living with HIV/AIDS: Men

Among men age 15-49 who have heard of AIDS, percentage expressing specific accepting attitudes toward people with HIV/AIDS, by background characteristics, Uganda 2011

Background characteristic	Percentage of men who:					Number of men who have heard of AIDS
	Are willing to care for a family member with AIDS in the respondent's home	Would buy fresh vegetables from shopkeeper who has the AIDS virus	Say that a female teacher who has the AIDS virus but is not sick should be allowed to continue teaching	Would not want to keep secret that a family member got infected with the AIDS virus	Percentage expressing accepting attitudes on all four indicators	
<b>Age</b>						
15-24	89.8	75.8	75.5	39.4	25.7	3,406
15-19	86.3	70.4	71.2	37.4	22.2	2,023
20-24	95.0	83.8	81.9	42.4	30.9	1,382
25-29	94.6	83.6	83.7	44.5	32.1	1,334
30-39	96.0	83.6	82.1	46.4	33.9	2,265
40-49	95.3	81.3	81.8	51.0	37.6	1,591
<b>Marital status</b>						
Never married	89.4	75.6	75.6	39.1	25.3	3,162
Ever had sex	92.7	80.2	78.7	40.3	27.0	1,654
Never had sex	85.7	70.7	72.2	37.8	23.3	1,509
Married/Living together	95.6	83.2	82.5	47.6	35.0	4,926
Divorced/Separated/Widowed	93.0	77.2	78.1	42.9	29.7	507
<b>Residence</b>						
Urban	96.3	87.3	88.5	40.7	33.0	1,724
Rural	92.4	78.3	77.5	45.1	30.6	6,871
<b>Region</b>						
Central 1	96.0	83.1	81.2	30.4	23.1	1,007
Central 2	96.8	81.3	79.4	25.6	18.0	870
Kampala	96.5	85.6	89.3	39.2	31.6	670
East Central	94.7	81.0	79.8	36.0	25.9	924
Mid Eastern	86.2	68.3	76.5	50.1	30.0	933
North East	94.5	79.7	85.7	49.5	35.7	613
West Nile	89.6	77.3	70.6	53.3	40.8	545
Mid Northern	96.4	88.2	88.0	72.6	59.2	946
South Western	91.2	74.4	77.3	48.8	27.3	938
Mid Western	90.6	81.6	71.6	40.9	25.5	1,150
<b>Education</b>						
No education	90.8	67.2	69.0	37.1	20.1	451
Primary incomplete	90.9	72.8	71.7	41.9	25.4	3,671
Primary complete	93.9	81.7	80.8	48.7	34.5	1,214
Secondary or higher	95.8	89.4	89.7	46.1	37.7	3,259
<b>Wealth quintile</b>						
Lowest	90.7	73.8	75.1	50.9	33.3	1,443
Second	91.4	76.9	76.4	47.1	32.0	1,612
Middle	93.0	77.7	76.4	42.6	28.4	1,645
Fourth	93.3	81.8	79.0	42.8	29.2	1,687
Highest	96.2	87.0	88.0	40.0	32.3	2,209
Total 15-49	93.2	80.1	79.7	44.2	31.1	8,595
50-59	93.4	76.7	80.8	46.8	32.3	844
Total 15-59	93.2	79.8	79.8	44.4	31.2	9,439

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 20 percent of women and 31 percent of men express positive attitudes on all four indicators. It is also interesting that for all four indicators, women are less likely than men to express accepting attitudes towards people with HIV or AIDS.

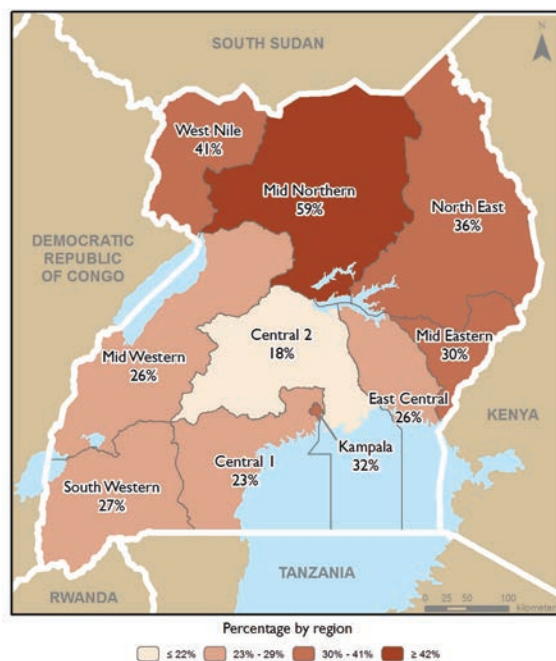
The composite measure of accepting attitudes shows some modest differences across background characteristics. For example, older men tend to be more accepting of people with HIV; however differences among women by age are minimal. Married men tend to be more accepting of people with HIV than those in other marital categories, but there is no difference among women by marital status. Urban women and men are somewhat more likely than rural respondents to express accepting attitudes on all four issues examined.

Interestingly, women and men in Mid Northern region are the most likely to express accepting attitudes on all four of the indicators, while women in East Central and men in Central 2 regions are the least likely (Maps 5.1 and 5.2). Education is positively related to accepting attitudes; however, the wealth quintile is not.

**Map 5.1 Percentage with accepting attitudes on four indicators: Women 15-49**

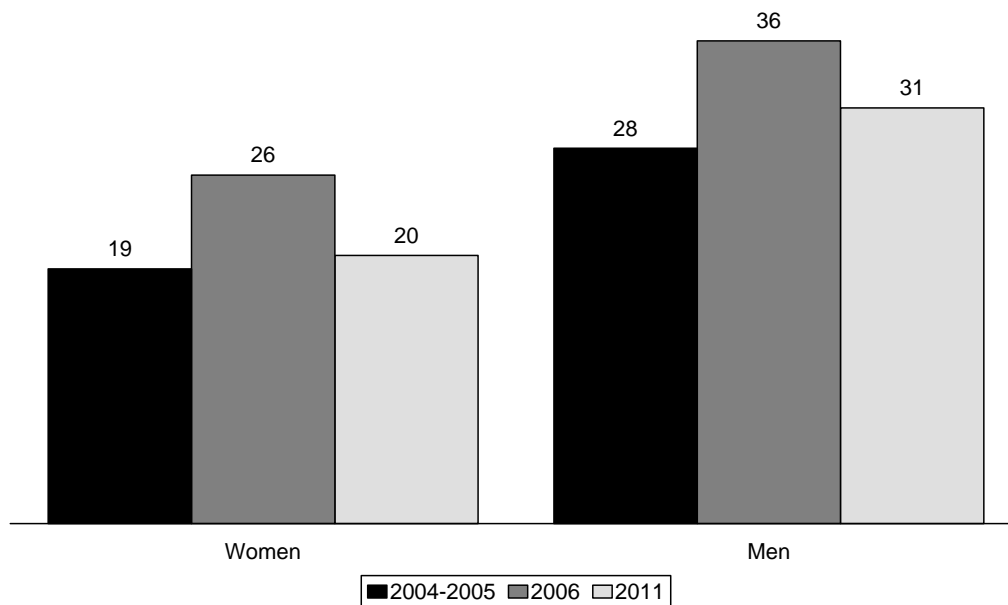


**Map 5.2 Percentage with accepting attitudes on four indicators: Men 15-49**



As shown in Figure 5.1, the proportion of adults expressing accepting attitudes on all four of the indicators increased somewhat between 2004-05 and 2006, but then declined slightly in 2011.

**Figure 5.1 Trends in accepting attitudes towards people with HIV among women and men 15-49, Uganda**



Note: Percentage expressing accepting attitudes on four indicators (See Tables 6.1.1 and 6.1.2)

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## 5.2 NEGATIVE ATTITUDES TOWARDS THOSE LIVING WITH HIV

Stigma refers to the fact that, in some societies, people living with HIV 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, 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 hinder people from seeking counselling and testing for HIV, as well as care and support services.

In addition to the standard indicators about acceptance of people with HIV, respondents in the 2011 UAIS were asked two additional questions relating to negative attitudes towards those living with HIV. Specifically, they were asked if they agreed or disagreed with two statements: ‘People with the AIDS virus should be ashamed of themselves’ and ‘People with the AIDS virus should be blamed for bringing the disease into the community’. Results are shown in Table 5.2.

Table 5.2 Negative attitudes toward those living with HIV/AIDS

Percentage of women and men 15-49 who agree that people with the AIDS virus should be ashamed of themselves and percentage who agree that people with the AIDS virus should be blamed for bringing the disease into the community, by background characteristics, Uganda 2011

Background characteristic	Women			Men		
	Agree that people with HIV should be ashamed of themselves	Agree that people with HIV should be blamed for bringing the disease to the community	Number	Agree that people with HIV should be ashamed of themselves	Agree that people with HIV should be blamed for bringing the disease to the community	Number
<b>Age</b>						
15-24	17.5	19.9	4,621	25.3	26.2	3,479
15-19	19.8	21.8	2,458	27.4	29.3	2,072
20-24	14.9	17.6	2,163	22.3	21.7	1,406
25-29	14.4	15.7	1,942	19.4	18.3	1,354
30-39	16.5	17.6	2,833	19.8	19.2	2,289
40-49	16.6	16.9	1,764	19.1	20.7	1,612
<b>Marital status</b>						
Never married	17.8	19.6	2,641	24.7	25.7	3,227
Married or living together	16.5	18.0	7,097	20.1	19.9	4,994
Divorced/separated/widowed	15.0	15.9	1,422	19.7	21.2	514
<b>Residence</b>						
Urban	13.2	12.8	2,365	18.0	16.4	1,739
Rural	17.5	19.5	8,795	22.7	23.5	6,995
<b>Region</b>						
Central 1	24.8	28.5	1,206	26.9	24.4	1,009
Central 2	22.0	15.3	1,162	36.2	30.7	888
Kampala	13.0	13.0	875	17.3	15.4	674
East Central	3.3	5.3	1,153	20.2	22.8	933
Mid Eastern	19.6	21.5	1,133	27.5	30.7	950
North East	17.5	19.8	919	23.2	17.4	683
West Nile	10.8	14.3	712	33.0	43.8	548
Mid Northern	12.1	15.5	1,106	8.7	7.3	950
South Western	13.6	20.8	1,414	14.5	23.6	947
Mid Western	24.3	22.4	1,480	16.2	13.3	1,151
<b>Education</b>						
No education	19.1	21.8	1,566	25.8	27.7	485
Primary incomplete	18.3	20.1	5,218	27.0	26.8	3,727
Primary complete	14.8	17.4	1,388	20.6	22.2	1,230
Secondary or higher	13.1	13.0	2,988	15.8	16.0	3,292
<b>Wealth quintile</b>						
Lowest	19.1	21.3	1,894	23.5	25.2	1,504
Second	16.0	19.4	2,024	23.8	25.1	1,632
Middle	19.5	20.9	2,056	22.0	24.0	1,667
Fourth	15.9	16.9	2,292	24.2	22.8	1,706
Highest	13.8	14.0	2,894	17.2	16.0	2,226
Total 15-49	16.6	18.1	11,160	21.8	22.1	8,735
50-59	18.6	20.3	993	19.7	20.7	853
Total 15-59	16.8	18.3	12,153	21.6	22.0	9,588

Overall, about one-fifth of women and men agree with both statements. Differences by background characteristics are not large. There is a slight tendency for older respondents to be less likely to have negative attitudes towards those with HIV. Urban women and men are also less likely than rural residents to have negative attitudes. Women in East Central region and men in Mid Northern region are far less likely than those in other regions to agree with the negative statements about people with HIV. There is a slight tendency for negative attitudes to decline with increasing educational attainment and increasing wealth quintile, but the pattern is not uniform.

### 5.3 PERSONAL KNOWLEDGE OF DISCRIMINATION RELATED TO HIV/AIDS

The 2011 UAIS also included questions about respondents' personal knowledge of discrimination regarding HIV. Respondents were asked if they know someone who (1) was denied health services; (2) was denied involvement in social events, religious services, or community events; (3) was verbally abused or teased in the previous 12 months because he or she was suspected to have HIV or actually had HIV. Finally, they were also asked if they know someone who is suspected to have HIV or actually has HIV. Results from these questions are shown in Table 5.3.

Table 5.3 Personal knowledge of people living with HIV/AIDS and discrimination

Percentage of women and men age 15-49 who know someone who, in the previous 12 months, has been denied health services; or has been denied involvement in social events, religious services or community events; or who has been verbally abused or teased because he or she is suspected to have HIV and percentage of women and men age 15-49 who know someone who is suspected to have HIV, by background characteristics, Uganda 2011

Background characteristic	Women					Men				
	Percentage who know someone, who in the previous 12 months:				Number of women	Percentage who know someone, who in the previous 12 months:				Number of men
	Was denied health services because he/she is suspected to have or has HIV	Was denied involvement in social, religious or community events because he/she is suspected to have or has HIV	Was verbally abused or teased because he/she is suspected to have or has HIV	Percentage who know someone who is suspected to have or has HIV		Was denied health services because he/she is suspected to have or has HIV	Was denied involvement in social, religious or community events because he/she is suspected to have or has HIV	Was verbally abused or teased because he/she is suspected to have or has HIV	Percentage who know someone who is suspected to have or has HIV	
<b>Age</b>										
15-24	5.4	3.8	17.3	60.7	4,621	5.2	4.1	14.6	57.5	3,479
15-19	5.0	3.9	16.4	57.5	2,458	4.6	3.7	13.5	52.3	2,072
20-24	5.9	3.6	18.2	64.4	2,163	6.1	4.8	16.1	65.3	1,406
25-29	7.2	4.1	19.1	67.6	1,942	6.5	4.3	17.3	66.6	1,354
30-39	7.3	4.9	20.2	67.8	2,833	8.1	4.5	19.6	68.6	2,289
40-49	7.7	5.6	20.5	69.2	1,764	6.3	5.1	17.9	69.8	1,612
<b>Marital status</b>										
Never married	5.3	3.9	16.5	59.2	2,641	5.1	4.1	14.3	56.2	3,227
Ever had sex	6.5	3.7	18.3	69.1	1,202	5.5	4.5	16.7	66.5	1,663
Never had sex	4.3	4.2	15.0	51.0	1,440	4.7	3.7	11.9	45.2	1,563
Married/Living together	6.9	4.3	19.2	66.3	7,097	7.0	4.5	18.5	68.9	4,994
Divorced/Separated/ Widowed	7.2	5.9	21.4	69.7	1,422	7.9	5.5	18.1	67.5	514
<b>Residence</b>										
Urban	4.6	3.0	17.9	66.8	2,365	6.4	4.0	16.1	61.4	1,739
Rural	7.1	4.8	19.1	64.6	8,795	6.4	4.5	17.1	64.8	6,995
<b>Region</b>										
Central 1	10.1	2.8	19.5	68.4	1,206	10.7	7.2	16.1	64.5	1,009
Central 2	5.0	3.6	17.9	65.1	1,162	7.9	3.0	12.2	59.2	888
Kampala	4.2	1.7	16.5	65.8	875	6.9	6.0	11.8	60.1	674
East Central	2.8	2.5	8.8	74.0	1,153	8.7	6.1	27.8	68.1	933
Mid Eastern	12.1	10.2	30.2	67.0	1,133	6.1	4.2	15.9	60.5	950
North East	6.1	3.5	10.5	61.3	919	4.6	3.0	11.9	64.9	683
West Nile	4.8	6.3	12.9	56.9	712	2.2	1.5	19.6	80.3	548
Mid Northern	7.2	2.9	28.2	67.3	1,106	4.3	3.3	26.1	63.5	950
South Western	8.4	7.3	19.9	60.9	1,414	3.8	2.8	13.6	58.5	947
Mid Western	3.8	2.9	19.5	62.1	1,480	6.5	5.5	13.2	66.7	1,151
<b>Education</b>										
No education	6.8	5.6	19.0	54.3	1,566	8.7	4.9	17.6	57.7	485
Primary incomplete	6.6	4.1	20.0	65.6	5,218	7.0	4.6	17.1	62.7	3,727
Primary complete	7.4	4.4	17.4	69.8	1,388	5.7	4.5	18.2	68.3	1,230
Secondary or higher	5.9	4.3	17.3	67.7	2,988	5.6	4.1	16.1	65.1	3,292
<b>Wealth quintile</b>										
Lowest	5.9	3.4	17.3	58.9	1,894	5.5	4.7	18.7	61.0	1,504
Second	7.7	5.7	19.8	63.4	2,024	5.5	3.4	17.2	63.4	1,632
Middle	7.6	5.5	19.2	63.9	2,056	7.6	5.7	16.7	64.9	1,667
Fourth	7.1	5.1	21.2	70.3	2,292	6.9	4.2	17.9	68.3	1,706
Highest	4.9	2.8	17.1	67.0	2,894	6.3	4.2	15.0	62.9	2,226
Total 15-49	6.6	4.4	18.8	65.1	11,160	6.4	4.4	16.9	64.1	8,735
50-59	8.7	4.1	22.0	67.7	993	5.5	2.9	16.5	69.9	853
Total 15-59	6.7	4.4	19.1	65.3	12,153	6.3	4.3	16.9	64.6	9,588

Only a small proportion of respondents (6 to 7 percent) know someone who was denied health services because they were suspected of having HIV. Even fewer (4 percent of women and men) know someone who was denied participation in social, religious, or community events because they were suspected of being HIV-positive. Somewhat larger proportions of respondents (19 percent of women and 17 percent of men) know someone who was verbally abused or teased because they either had HIV or were suspected to have it. Almost two-thirds of respondents know someone with HIV or someone they believe has HIV.

Differences in these proportions by background characteristics are not large. Older women and men are somewhat more likely to know someone with HIV than younger respondents. Discrimination against people with HIV is reported by more women in Mid Eastern region than any other region; among men, the pattern varies by region depending on the indicator. It is interesting to note that women in West Nile region are the least likely to say they know someone who is either suspected or known to be HIV-positive, while men in West Nile are the most likely to say so.

#### **5.4 ATTITUDES TOWARDS NEGOTIATING SAFER SEXUAL RELATIONS**

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 2011 UAIS were asked if they think a wife is justified in refusing to have sex with her husband under three circumstances: (1) if she knows he has a sexually transmitted infection; (2) if she is tired or not in the mood; and (3) if she knows he has sex with other women. They were also asked if they think that a woman is justified in asking her husband to use a condom if she knows that he has a sexually transmitted infection.

As shown in Table 5.4, about three-quarters or more of both women and men agree that a woman is justified in taking each of the four actions, indicating widespread acceptance of the ability of women to negotiate safer sex with their husbands. The largest proportions of both women and men believe that a woman is justified in asking her husband to use a condom if she knows he has a sexually transmitted infection. Both women and men are least supportive of a woman's right to refuse sex if she knows he has sex with other women. For each of the situations asked about, women were somewhat less likely than men to feel that a wife is justified in negotiating safer sex.

Urban women and men are more likely than rural respondents to accept women's rights to negotiate in each of the four specified circumstances. Regionally, women in Central 1 and East Central regions tend to be the most likely to support women's rights to negotiate sexual relations, while men in Central 1, Central 2, and Kampala regions are most likely to support such rights. The proportion of both women and men who support women's ability to negotiate in each of the specified circumstances increases with education level and wealth quintile.

Table 5.4 Attitudes toward negotiating safer sexual relations with husband

Percentage of women and men age 15-49 who believe that a woman is justified in refusing to have sexual intercourse with her husband or in asking that they use a condom if she knows that he has sexually transmitted infection (STI), and percentage who believe that a woman is justified in refusing to have sexual intercourse if she is tired or not in the mood or if she knows that her husband has sexual intercourse with other women, by background characteristics, Uganda 2011

Background characteristic	Women					Men				
	Refusing to have sexual intercourse with her husband if she knows he has an STI	Asking that they use a condom if she knows that her husband has an STI	Refusing to have sexual intercourse with her husband if she is tired or not in the mood	Refusing to have sexual intercourse with her husband if she knows he has sex with other women	Number of women	Refusing to have sexual intercourse with her husband if she knows he has an STI	Asking that they use a condom if she knows that her husband has an STI	Refusing to have sexual intercourse with her husband if she is tired or not in the mood	Refusing to have sexual intercourse with her husband if she knows he has sex with other women	Number of men
<b>Age</b>										
15-24	75.9	83.2	77.3	75.7	4,621	75.4	83.2	76.5	77.5	3,479
15-19	73.1	80.2	73.7	75.0	2,458	71.1	79.0	70.9	75.3	2,072
20-24	79.1	86.5	81.3	76.5	2,163	81.8	89.3	84.6	80.6	1,406
25-29	80.0	87.2	81.0	74.9	1,942	85.4	91.2	88.1	80.1	1,354
30-39	78.8	81.4	80.2	72.1	2,833	84.9	90.2	86.5	81.7	2,289
40-49	80.2	79.5	79.5	72.1	1,764	83.5	86.1	85.2	80.3	1,612
<b>Marital status</b>										
Never married	75.0	81.0	74.2	76.3	2,641	74.6	82.4	75.9	77.2	3,227
Ever had sex	82.2	89.2	81.1	79.2	1,202	82.9	90.3	83.6	80.5	1,663
Never had sex	69.0	74.2	68.5	73.9	1,440	65.8	74.0	67.7	73.7	1,563
Married/Living together	78.8	83.2	80.8	73.2	7,097	84.7	89.6	87.1	81.0	4,994
Divorced/Separated/Widowed	80.0	84.3	79.2	74.5	1,422	84.0	87.3	79.4	79.2	514
<b>Residence</b>										
Urban	82.5	89.5	84.5	78.2	2,365	88.0	92.7	88.4	87.3	1,739
Rural	76.9	81.0	77.6	73.0	8,795	79.2	85.3	81.0	77.6	6,995
<b>Region</b>										
Central 1	87.1	94.7	90.9	84.4	1,206	90.6	93.9	92.1	88.1	1,009
Central 2	82.5	88.6	82.1	78.6	1,162	90.2	96.1	89.4	89.0	888
Kampala	86.1	92.8	83.5	81.7	875	89.6	94.0	91.6	90.6	674
East Central	90.9	94.7	89.0	78.6	1,153	82.6	85.8	84.9	79.6	933
Mid Eastern	76.5	80.6	80.0	79.6	1,133	78.9	83.1	77.9	77.2	950
North East	63.8	54.5	66.6	57.0	919	74.9	83.0	83.5	80.8	683
West Nile	78.2	59.9	79.2	72.1	712	88.1	86.5	66.5	77.1	548
Mid Northern	49.7	64.6	59.8	52.8	1,106	61.6	77.0	74.4	68.9	950
South Western	85.1	93.6	75.2	70.7	1,414	88.9	95.1	87.6	79.3	947
Mid Western	76.8	87.2	81.4	80.6	1,480	70.3	76.6	75.0	69.3	1,151
<b>Education</b>										
No education	71.1	66.8	73.8	65.5	1,566	78.5	77.5	79.9	73.8	485
Primary incomplete	76.8	81.0	77.5	72.7	5,218	78.1	83.5	79.0	76.6	3,727
Primary complete	79.0	89.1	78.9	76.8	1,388	81.1	87.8	83.1	78.7	1,230
Secondary or higher	83.3	91.6	84.6	79.9	2,988	84.4	91.6	86.7	83.9	3,292
<b>Wealth quintile</b>										
Lowest	66.6	67.6	71.4	64.1	1,894	72.3	78.9	75.2	73.3	1,504
Second	75.8	77.3	76.5	72.5	2,024	76.9	82.3	77.5	74.7	1,632
Middle	79.3	84.0	78.3	75.6	2,056	80.7	85.9	82.0	77.2	1,667
Fourth	80.7	87.5	80.5	74.7	2,292	82.7	90.7	85.9	81.6	1,706
Highest	84.1	92.2	85.1	80.2	2,894	88.5	93.2	89.0	87.4	2,226
Total 15-49	78.0	82.8	79.0	74.1	11,160	80.9	86.8	82.5	79.5	8,735
50-59	78.0	73.6	77.3	71.4	993	85.3	83.0	85.3	81.9	853
Total 15-59	78.0	82.1	78.9	73.9	12,153	81.3	86.5	82.8	79.7	9,588

## 5.5 EDUCATING YOUTH ABOUT CONDOM USE AND POSTPONING SEX UNTIL MARRIAGE

Condom use is one of the main strategies for combating the spread of AIDS; however, educating young people about using condoms is sometimes controversial because some say it promotes early sexual experimentation. Promoting abstinence before marriage is another strategy to curtail the spread of HIV. To gauge attitudes towards condom and abstinence education, 2011 UAIS respondents were asked if they thought that children age 12-14 should be taught about using a condom to avoid getting AIDS and if they thought that children age 12-14 should be taught to wait until they get married to have sex in order to avoid getting AIDS. Results are tabulated for respondents age 18-49 in Table 5.5.

**Table 5.5 Adult support of education for youth to prevent AIDS**

Percentage of women and men age 18-49 who agree that children age 12-14 years should be taught about using a condom to avoid AIDS and percentage who agree that children age 12-24 years should be taught to wait until they get married to have sexual intercourse to avoid AIDS, by background characteristics, Uganda 2011

Background characteristic	Women			Men		
	Taught to use condoms	Taught to wait until marriage to have sex	Number	Taught to use condoms	Taught to wait until marriage to have sex	Number
<b>Age</b>						
18-24	67.2	93.6	3,523	67.3	94.4	2,547
18-19	64.6	92.9	1,180	63.7	94.5	995
20-24	68.6	94.0	2,343	69.6	94.3	1,552
25-29	65.4	95.2	2,065	68.2	95.2	1,481
30-39	59.9	93.8	3,013	67.3	95.2	2,448
40-49	54.3	94.0	1,860	63.5	94.9	1,722
<b>Marital status</b>						
Never married	68.6	94.0	1,276	66.5	94.2	1,906
Married or living together	62.1	93.9	6,985	67.2	95.3	4,988
Divorced/separated/widowed	61.9	94.8	1,403	71.1	93.3	514
<b>Residence</b>						
Urban	65.5	95.8	2,028	68.6	96.7	1,525
Rural	62.3	93.6	7,636	67.0	94.4	5,883
<b>Region</b>						
Central 1	72.2	96.7	1,059	70.3	97.3	888
Central 2	66.2	96.2	1,019	75.4	96.0	765
Kampala	75.7	96.7	762	68.9	97.7	588
East Central	65.6	92.7	988	71.5	93.1	767
Mid Eastern	63.4	91.7	976	67.3	97.5	756
North East	56.5	91.8	831	63.3	85.3	587
West Nile	42.9	87.7	617	69.9	96.3	476
Mid Northern	59.9	88.8	952	61.1	93.3	802
South Western	55.2	98.1	1,207	63.5	97.3	804
Mid Western	66.2	96.3	1,255	63.2	93.8	974
<b>Education</b>						
No education	49.8	91.9	1,546	59.9	88.1	474
Primary incomplete	64.5	93.7	4,432	69.3	94.8	2,940
Primary complete	64.4	95.5	1,238	66.7	94.9	1,120
Secondary or higher	67.8	95.4	2,449	66.7	96.1	2,873
<b>Wealth quintile</b>						
Lowest	58.0	90.6	1,695	65.4	90.8	1,302
Second	59.3	93.4	1,788	67.9	95.0	1,392
Middle	62.7	94.4	1,758	66.7	94.8	1,375
Fourth	64.5	95.2	1,923	67.3	95.9	1,384
Highest	68.0	95.8	2,501	68.5	96.8	1,955
Total 18-49	62.9	94.1	9,664	67.3	94.9	7,408
50-59	56.8	93.0	993	61.1	95.0	853
Total 18-59	62.4	94.0	10,657	66.6	94.9	8,261



The data show that close to two-thirds of adults age 18-49 agree that children age 12-14 should be taught about using a condom to avoid AIDS. Over 94 percent of women and men agree that children age 12-14 should be taught to wait until marriage to have sex. Differences by background characteristics are not large. Less likely to support condom education for youth are those in their forties and women in West Nile region. Similarly, women and men with no education and those in the lowest wealth quintile are less likely than others to support education for youth on condom use or abstinence.

## 5.6 PERCEIVED RISK OF GETTING HIV

To assess people's perceptions of their risk of getting HIV, respondents were asked whether the chances that they could get HIV were high or low. Table 5.6 shows the results for women and men.

Table 5.6 Perceived chances of getting HIV

Percent distribution of women and men age 15-49 by their chances of getting HIV, by background characteristics, Uganda 2011

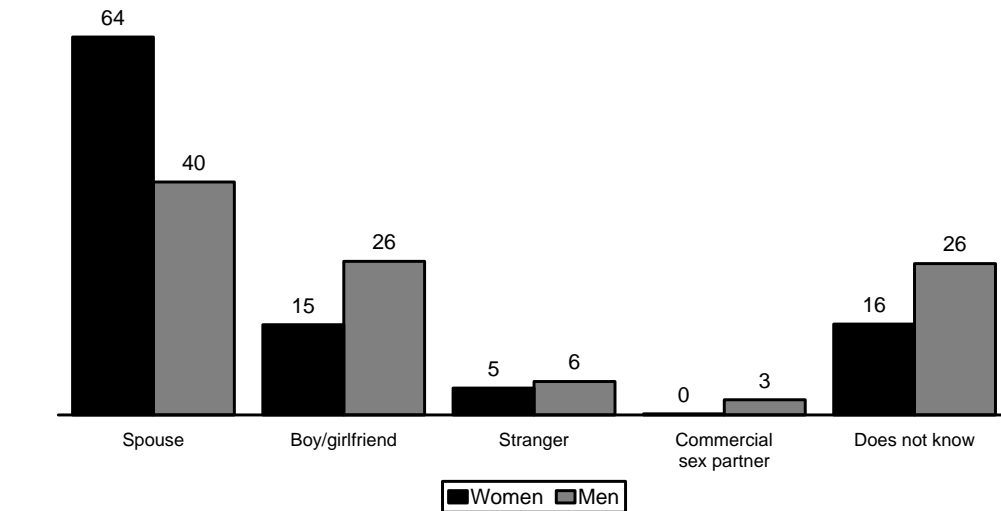
Background characteristic	Women					Men						
	High	Low	Don't know	Reports already having HIV	Total	Number of women	High	Low	Don't know	Reports already having HIV	Total	Number of men
<b>Age</b>												
15-24	26.9	58.2	12.8	2.2	100.0	4,621	17.0	69.8	10.6	2.5	100.0	3,479
15-19	22.5	62.9	12.7	1.8	100.0	2,458	13.4	71.7	12.3	2.5	100.0	2,072
20-24	31.9	52.7	12.9	2.6	100.0	2,163	22.3	67.0	8.2	2.5	100.0	1,406
25-29	35.0	48.0	12.5	4.5	100.0	1,942	21.7	67.3	8.7	2.3	100.0	1,354
30-39	32.4	47.2	13.7	6.6	100.0	2,833	23.0	62.8	9.4	4.8	100.0	2,289
40-49	27.9	50.7	14.0	7.3	100.0	1,764	20.7	62.3	10.9	6.1	100.0	1,612
<b>Marital status</b>												
Never married	21.7	63.8	11.8	2.7	100.0	2,641	16.0	71.0	10.6	2.4	100.0	3,227
Ever had sex	29.9	56.7	10.3	3.1	100.0	1,202	21.3	69.1	8.7	1.0	100.0	1,663
Never had sex	15.0	69.8	13.0	2.3	100.0	1,440	10.4	73.0	12.7	3.8	100.0	1,563
Married/Living together	34.0	48.8	13.9	3.4	100.0	7,097	22.1	64.3	9.5	4.1	100.0	4,994
Divorced/separated/ widowed	24.6	49.8	12.2	13.5	100.0	1,422	24.6	54.7	11.9	8.8	100.0	514
<b>Residence</b>												
Urban	27.0	56.4	11.0	5.7	100.0	2,365	21.4	67.6	7.7	3.3	100.0	1,739
Rural	30.7	51.4	13.7	4.2	100.0	8,795	19.7	65.9	10.6	3.8	100.0	6,995
<b>Region</b>												
Central 1	28.0	51.8	14.6	5.6	100.0	1,206	26.6	65.5	4.8	3.1	100.0	1,009
Central 2	37.1	46.7	11.3	4.9	100.0	1,162	23.1	58.3	14.2	4.3	100.0	888
Kampala	27.1	59.4	8.6	4.9	100.0	875	16.2	70.6	10.7	2.6	100.0	674
East Central	25.7	55.6	15.3	3.4	100.0	1,153	21.3	70.0	6.7	2.1	100.0	933
Mid Eastern	37.3	45.9	13.8	3.1	100.0	1,133	25.4	62.6	9.2	2.8	100.0	950
North East	25.0	61.5	8.5	5.0	100.0	919	11.1	67.7	8.0	13.2	100.0	683
West Nile	22.5	53.1	22.4	2.0	100.0	712	11.0	77.1	9.2	2.8	100.0	548
Mid Northern	36.2	36.6	21.3	5.9	100.0	1,106	22.0	62.5	12.4	3.1	100.0	950
South Western	31.2	48.8	14.2	5.7	100.0	1,414	25.3	66.0	5.2	3.5	100.0	947
Mid Western	25.4	65.3	5.4	3.8	100.0	1,480	12.2	67.4	18.1	2.3	100.0	1,151
<b>Education</b>												
No education	27.0	50.3	16.0	6.7	100.0	1,566	20.3	59.8	10.8	9.1	100.0	485
Primary incomplete	31.5	49.4	14.4	4.7	100.0	5,218	20.1	64.0	12.2	3.7	100.0	3,727
Primary complete	31.3	51.0	13.1	4.6	100.0	1,388	19.7	66.6	9.6	4.0	100.0	1,230
Secondary or higher	27.8	59.5	9.6	3.1	100.0	2,988	19.9	69.5	7.7	2.9	100.0	3,292
<b>Wealth quintile</b>												
Lowest	30.0	49.5	15.7	4.8	100.0	1,894	19.1	61.8	13.0	6.2	100.0	1,504
Second	33.2	48.7	14.6	3.5	100.0	2,024	18.9	65.6	12.2	3.3	100.0	1,632
Middle	30.2	51.2	14.5	4.1	100.0	2,056	21.5	64.6	10.7	3.1	100.0	1,667
Fourth	29.2	54.1	11.4	5.2	100.0	2,292	20.8	67.4	8.4	3.4	100.0	1,706
Highest	27.7	56.6	10.9	4.8	100.0	2,894	19.7	69.9	7.2	3.2	100.0	2,226
Total 15-49	29.9	52.5	13.2	4.5	100.0	11,160	20.0	66.2	10.1	3.7	100.0	8,735
50-59	15.8	65.5	13.2	5.5	100.0	993	13.9	72.4	9.4	4.3	100.0	853
Total 15-59	28.7	53.5	13.2	4.6	100.0	12,153	19.5	66.8	10.0	3.8	100.0	9,588

Roughly one in four Ugandan adults—30 percent of women and 20 percent of men—perceive themselves at high risk of getting infected with HIV. Just over half of women age 15-49 say they are at low risk of getting HIV, while 13 percent say they do not know and 5 percent report that they are HIV-positive. Men age 15-49 are much more likely than women to report having a low risk of getting HIV (66 percent), while 10 percent say they do not know their risk and 4 percent report that they are already living with HIV.

Respondents who have never been married and have not had sex are the least likely to believe they have a high risk of getting HIV. Women and men in West Nile and North East regions have the lowest proportions who believe they are at high risk of getting HIV. Respondents with more education and in higher wealth quintiles are more likely to think they have a low chance of getting HIV. It is interesting to note that respondents who are divorced, widowed, or separated and those with no education are relatively more likely to report that they are already living with HIV. Also notable is the fact that 2 percent of women and 4 percent of men who have never had sex say that they are HIV-positive. This could either be due to non-sexual transmission of HIV or to reluctance on the part of some respondents to admit to having had sexual intercourse.

Respondents were asked, if they were to get HIV, from whom they thought they would most likely get the infection. As shown in Figure 5.2, by far the most common response was the husband or wife of the respondent; 64 percent of women and 40 percent of men perceive their spouses as the most likely source of any possible HIV infection. Respondents are also likely to report boyfriends and girlfriends as a likely means of getting HIV. Sizeable proportions of respondents said they did not know from whom they might get HIV.

**Figure 5.2 Most likely person to get HIV from among women and men age 15-49**



Note: Excludes those who report that they are HIV-positive

Uganda AIS 2011

**Key Findings**

- The median age at first sexual intercourse is 17 for women and 18 for men.
- Over half of women and men age 15-49 have had sex in the four weeks before the survey.
- Only 3 percent of women age 15-19 report having two or more sexual partners in the 12 months before the survey; this contrasts with 19 percent of men.
- Women have a mean of two sexual partners in their lifetimes, which compares with seven lifetime partners for men.
- 15 percent of women report that they have ever been physically forced to have sex against their will.

This chapter presents data on sexual behaviour and reported levels of sexually transmitted infections (STIs). Indicators of sexual behaviour include age at first sex, recent sexual activity, and the number of recent and lifetime sexual partners. Behaviours such as sex with multiple, concurrent partners and paying or receiving money to have sex are considered high-risk sexual behaviours. This chapter also includes information on reporting of symptoms of STIs and the prevalence of medical injections.

## 6.1 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 most individuals are first exposed to the risk of infection with the virus. Table 6.1 shows the percentage of respondents who had sex by specific ages and the percentage who never had sex, as well as the median age at first sex.

Seventeen percent of women age 20-49 had sex by age 15, while 62 percent in this age group had sex before age 18. The percentage of women who first had sex by age 15 has decreased over the years; among those age 30-49, 17 to 19 percent of women had had sex by age 15, compared with only 11 percent of women currently age 15-19. The median age at first sex is 17.1 years for women in the age group 20-49.

Men tend to initiate sexual activity later than women. Only 8 percent of men age 20-49 had sex before age 15, and only 42 percent had sex by age 18. The median age at first sex is 18.4 years for men age 20-49.

Table 6.2 shows the variation in the median age at first sexual intercourse by background characteristics for women and men. Although urban women tend to initiate sexual activity slightly later than rural women, there is no difference in the median age at first sex between urban and rural men. By region, women and men in South Western region tend to start sexual activity at an older age than residents of other regions, while women and men in East Central region have the lowest median ages at first sexual intercourse.

The median age at first sex tends to increase with higher educational attainment, especially among women. It is also highest among women in the highest wealth quintile. The median age at first sex does not vary by wealth of men, however.

**Table 6.1 Age at first sexual intercourse**

Percentage of women and men age 15-49 who had first sexual intercourse by specific exact ages, percentage who never had sexual intercourse, and median age at first sexual intercourse, according to current age, Uganda 2011

Current age	Percentage who had first sexual intercourse by exact age:					Percentage who never had sexual intercourse	Number	Median age at first sexual intercourse
	15	18	20	22	25			
<b>WOMEN</b>								
15-19	11.4	na	na	na	na	52.7	2,458	a
20-24	15.0	59.1	85.0	na	na	5.6	2,163	17.4
25-29	14.9	58.3	82.8	92.1	97.8	0.7	1,942	17.4
30-34	19.0	67.3	87.2	93.9	96.4	0.4	1,478	16.7
35-39	17.2	65.4	87.1	94.1	97.2	0.1	1,355	16.8
40-44	19.3	64.8	85.2	94.0	96.7	0.0	948	16.8
45-49	17.4	63.9	85.1	92.3	96.4	0.0	816	16.9
20-49	16.7	62.4	85.2	na	na	1.7	8,702	17.1
25-49	17.2	63.5	85.3	93.2	97.0	0.3	6,539	17.0
15-24	13.1	na	na	na	na	30.7	4,621	a
<b>MEN</b>								
15-19	12.9	na	na	na	na	63.9	2,072	a
20-24	10.5	45.1	72.3	na	na	13.9	1,406	18.3
25-29	8.2	40.8	70.1	85.2	95.1	1.8	1,354	18.5
30-34	6.3	42.1	68.9	84.4	92.2	0.9	1,160	18.5
35-39	7.6	41.2	67.5	84.6	93.1	0.4	1,129	18.4
40-44	6.5	42.8	68.2	86.3	93.7	0.1	890	18.4
45-49	8.7	39.7	69.3	83.1	90.7	0.3	722	18.5
20-49	8.1	42.2	69.6	na	na	3.6	6,662	18.4
25-49	7.4	41.4	68.8	84.8	93.2	0.8	5,256	18.4
15-24	11.9	na	na	na	na	43.7	3,479	a

na = Not applicable due to censoring

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

**Table 6.2 Median age at first sexual intercourse by background characteristics**

Median age at first sexual intercourse among women and men age 20-49 and age 25-49, according to background characteristics, Uganda 2011

Background characteristic	Women age		Men age	
	20-49	25-49	20-49	25-49
<b>Residence</b>				
Urban	17.6	17.5	18.4	18.5
Rural	17.0	16.9	18.4	18.4
<b>Region</b>				
Central 1	17.0	16.9	18.4	18.4
Central 2	16.9	16.8	18.7	18.6
Kampala	17.7	17.7	18.4	18.5
East Central	15.9	15.8	17.7	17.7
Mid Eastern	16.3	16.2	18.2	18.2
North East	17.6	17.7	18.7	18.7
West Nile	17.4	17.3	18.5	18.6
Mid Northern	17.2	17.1	18.6	18.7
South Western	18.5	18.3	19.2	19.4
Mid Western	16.9	16.7	17.8	17.8
<b>Education</b>				
No education	16.6	16.5	18.3	18.3
Primary incomplete	16.7	16.6	18.3	18.3
Primary complete	17.3	17.1	18.4	18.5
Secondary or higher	18.2	18.3	18.6	18.7
<b>Wealth quintile</b>				
Lowest	16.9	16.9	18.4	18.4
Second	16.8	16.8	18.3	18.4
Middle	16.9	16.7	18.4	18.4
Fourth	17.0	16.8	18.4	18.4
Highest	17.7	17.6	18.5	18.6
Total	17.1	17.0	18.4	18.4

## 6.2 RECENT SEXUAL ACTIVITY

Tables 6.3.1 and 6.3.2 show the percent distribution of women and men by timing of their most recent sexual intercourse, according to background characteristics. Results indicate that over half of women age 15-49 had sex within the four weeks before the survey, while 22 percent had sex within the previous year but not in the previous four weeks, 12 percent last had sex more than a year before the survey, and 13 percent had never had sex (Figure 6.1). Men age 15-49 are more likely than women to have had sex in the four weeks before the survey but are also more likely to have never had sex (18 percent).

Table 6.3.1 Recent sexual activity: Women

Percent distribution of women age 15-49 by timing of last sexual intercourse, according to background characteristics, Uganda 2011

Background characteristic	Timing of last sexual intercourse				Total	Number of women
	Within the past 4 weeks	Within 1 year <sup>1</sup>	One or more years	Never had sexual intercourse		
<b>Age</b>						
15-19	19.8	20.0	7.5	52.7	100.0	2,458
20-24	59.5	27.0	7.9	5.6	100.0	2,163
25-29	66.4	24.1	8.7	0.7	100.0	1,942
30-34	66.2	22.0	11.4	0.4	100.0	1,478
35-39	66.4	20.1	13.3	0.1	100.0	1,355
40-44	58.3	18.5	23.2	0.0	100.0	948
45-49	51.9	18.4	29.7	0.0	100.0	816
<b>Marital status</b>						
Never married	8.5	24.1	12.9	54.5	100.0	2,641
Married or living together	77.5	18.5	4.0	0.0	100.0	7,097
Divorced/separated/widowed	13.6	36.3	50.0	0.0	100.0	1,422
<b>Marital duration<sup>2</sup></b>						
0-4 years	78.4	19.8	1.8	0.0	100.0	1,505
5-9 years	80.7	17.2	2.1	0.0	100.0	1,203
10-14 years	76.8	20.3	2.9	0.0	100.0	984
15-19 years	78.9	17.2	4.0	0.0	100.0	729
20-24 years	75.9	19.9	4.2	0.0	100.0	628
25+ years	73.1	18.0	8.9	0.0	100.0	615
Married more than once	76.1	17.4	6.5	0.0	100.0	1,434
<b>Residence</b>						
Urban	44.6	25.7	14.6	15.1	100.0	2,365
Rural	55.3	21.1	11.3	12.3	100.0	8,795
<b>Region</b>						
Central 1	56.1	22.1	10.8	11.1	100.0	1,206
Central 2	54.9	22.9	11.1	11.2	100.0	1,162
Kampala	43.0	26.1	13.5	17.5	100.0	875
East Central	56.8	23.3	9.8	10.0	100.0	1,153
Mid Eastern	55.4	20.7	10.6	13.4	100.0	1,133
North East	52.6	26.0	12.4	9.0	100.0	919
West Nile	44.4	27.0	15.0	13.6	100.0	712
Mid Northern	54.3	20.6	12.9	12.2	100.0	1,106
South Western	50.8	17.8	13.7	17.6	100.0	1,414
Mid Western	55.7	19.8	11.5	13.0	100.0	1,480
<b>Education</b>						
No education	59.6	21.0	17.5	1.9	100.0	1,566
Primary incomplete	56.1	20.9	10.9	12.1	100.0	5,218
Primary complete	55.7	22.5	11.5	10.3	100.0	1,388
Secondary or higher	42.9	24.7	11.2	21.2	100.0	2,988
<b>Wealth quintile</b>						
Lowest	54.0	24.0	13.2	8.8	100.0	1,894
Second	57.8	20.4	11.6	10.2	100.0	2,024
Middle	56.6	19.8	9.9	13.8	100.0	2,056
Fourth	50.0	22.7	12.0	15.3	100.0	2,292
Highest	48.9	23.2	13.0	14.9	100.0	2,894
Total 15-49	53.0	22.1	12.0	12.9	100.0	11,160
Total 50-59	29.3	14.0	56.4	0.3	100.0	993
Total 15-59	51.1	21.4	15.6	11.9	100.0	12,153

<sup>1</sup> Excludes women who had sexual intercourse within the last 4 weeks

<sup>2</sup> Excludes women who are not currently married

Table 6.3.2 Recent sexual activity: Men

Percent distribution of men age 15-49 by timing of last sexual intercourse, according to background characteristics, Uganda 2011

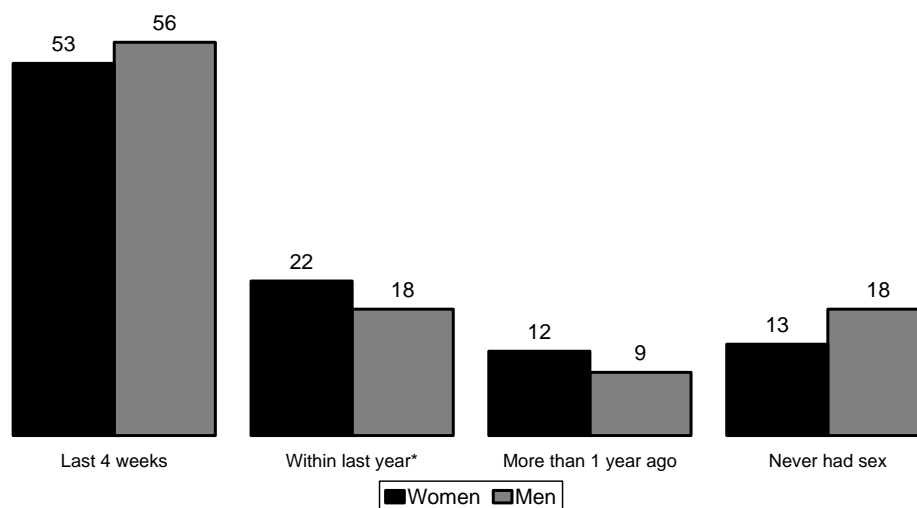
Background characteristic	Timing of last sexual intercourse				Total	Number of men
	Within the past 4 weeks	Within 1 year <sup>1</sup>	One or more years	Never had sexual intercourse		
<b>Age</b>						
15-19	7.8	15.5	12.7	63.9	100.0	2,072
20-24	43.8	29.7	12.6	13.9	100.0	1,406
25-29	70.9	20.6	6.7	1.8	100.0	1,354
30-34	78.5	15.7	4.8	0.9	100.0	1,160
35-39	82.0	13.1	4.5	0.4	100.0	1,129
40-44	83.0	10.9	6.1	0.1	100.0	890
45-49	80.3	12.3	7.1	0.3	100.0	722
<b>Marital status</b>						
Never married	12.1	23.0	16.5	48.5	100.0	3,227
Married or living together	86.8	12.0	1.2	0.0	100.0	4,994
Divorced/separated/widowed	32.7	37.7	29.6	0.0	100.0	514
<b>Marital duration<sup>2</sup></b>						
0-4 years	84.4	14.7	0.9	0.0	100.0	1,137
5-9 years	87.1	12.2	0.7	0.0	100.0	846
10-14 years	87.3	11.9	0.7	0.0	100.0	765
15-19 years	86.6	11.7	1.8	0.0	100.0	585
20-24 years	89.5	8.8	1.6	0.0	100.0	453
25+ years	86.7	10.9	2.4	0.0	100.0	271
Married more than once	88.0	10.4	1.6	0.0	100.0	938
<b>Residence</b>						
Urban	50.8	21.6	10.3	17.2	100.0	1,739
Rural	57.3	16.5	8.1	18.1	100.0	6,995
<b>Region</b>						
Central 1	57.1	21.1	8.6	13.3	100.0	1,009
Central 2	56.0	16.4	11.1	16.5	100.0	888
Kampala	45.9	22.5	11.3	20.3	100.0	674
East Central	58.7	16.3	7.7	17.3	100.0	933
Mid Eastern	54.5	16.2	6.4	23.0	100.0	950
North East	55.5	20.8	5.0	18.6	100.0	683
West Nile	56.5	19.6	8.9	15.0	100.0	548
Mid Northern	59.6	15.0	7.1	18.4	100.0	950
South Western	55.0	11.0	11.8	22.1	100.0	947
Mid Western	58.1	19.1	7.8	15.0	100.0	1,151
<b>Education</b>						
No education	72.2	12.7	10.0	5.1	100.0	485
Primary incomplete	55.9	15.2	7.6	21.3	100.0	3,727
Primary complete	66.7	16.4	6.6	10.3	100.0	1,230
Secondary or higher	49.8	21.4	10.1	18.8	100.0	3,292
<b>Wealth quintile</b>						
Lowest	58.7	17.8	7.6	15.9	100.0	1,504
Second	60.9	15.1	7.7	16.4	100.0	1,632
Middle	59.4	15.1	6.7	18.8	100.0	1,667
Fourth	51.9	17.9	9.6	20.6	100.0	1,706
Highest	51.4	20.8	10.2	17.5	100.0	2,226
Total 15-49	56.0	17.6	8.5	17.9	100.0	8,735
Total 50-59	73.5	12.9	13.2	0.4	100.0	853
Total 15-59	57.6	17.1	8.9	16.3	100.0	9,588

<sup>1</sup> Excludes men who had sexual intercourse within the last 4 weeks

<sup>2</sup> Excludes men who are not currently married

Among women, the level of recent sexual activity increases to its highest level in the 25-39 age groups and then declines. In the younger age groups, recent sexual activity among men is lower than that of women. Recent sexual activity then continues to increase to 83 percent among men in the 40-44 age group. Women and men who are currently married or living together are far more likely to have had sex in the previous four weeks than respondents who have never married or who are divorced, separated, or widowed; over three-quarters of currently married women and 87 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 (12 percent) than among women (9 percent). Among currently married respondents, recent sexual activity levels do not vary much by the duration of marriage.

**Figure 6.1 Timing of most recent sexual intercourse among women and men age 15-49**



Note: Excludes the last four weeks

Uganda AIS 2011

Rural women and men are more likely to have had sex in the four weeks prior to the survey than urban respondents. Respondents in Kampala are least likely to have had sex in the four weeks before the survey. Women and men with more education are less likely than those with less education to have had sex in the last four weeks, which may be related to the fact that better-educated respondents tend to be younger and not yet married. Those in the highest two wealth quintiles are somewhat less likely to have had sex recently than respondents in the lower quintiles.

### 6.3 MULTIPLE SEXUAL PARTNERS

Women and men interviewed in the 2011 Uganda AIDS Indicator Survey (UAIS) 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, condom use with each partner, and the total number of sexual partners in their lives.

Tables 6.4.1 and 6.4.2 show that a much larger proportion of men than women report having two or more sexual partners in the 12 months before the survey. Almost one in five of all men age 15-49 (19 percent) report having two or more sexual partners in the previous year, compared with only 3 percent of all women. Proportions are higher among those who had sexual intercourse in the 12 months before the survey. Among those with two or more partners, condom use at the last sexual intercourse is almost the same among women (16 percent) and men (15 percent). The mean number of lifetime sexual partners among those who have ever had sex is just over two for women and seven for men.

Table 6.4.1 Multiple sexual partners: Women

Among all women age 15-49 and among women age 15-49 who had sexual intercourse in the 12 months before the survey, the percentage who had sexual intercourse with more than one sexual partner in the past 12 months; among those having more than one partner in the past 12 months, the percentage reporting that a condom was used at last intercourse; and the mean number of sexual partners during their lifetime for women who ever had sexual intercourse, by background characteristics, Uganda 2011

Background characteristic	All women		Among women who had sex in the past 12 months		Among women who had 2+ partners in the past 12 months		Among women who ever had sexual intercourse <sup>1</sup>	
	Percentage who had 2+ partners in the past 12 months	Number of women	Percentage who had 2+ partners in the past 12 months	Number of women	Percentage who reported using a condom during last sexual intercourse	Number of women	Mean number of sexual partners in lifetime	Number of women
<b>Age</b>								
15-24	3.1	4,621	5.0	2,848	24.2	143	2.1	3,193
15-19	2.2	2,458	5.5	979	25.5	54	1.8	1,160
20-24	4.1	2,163	4.8	1,869	23.4	90	2.2	2,033
25-29	3.5	1,942	3.8	1,759	12.8	68	2.4	1,916
30-39	3.0	2,833	3.4	2,475	11.0	84	2.5	2,804
40-49	2.1	1,764	2.9	1,302	(0.0)	38	2.9	1,749
<b>Marital status</b>								
Never married	2.7	2,641	8.2	860	37.7	71	2.1	1,194
Married or living together	2.7	7,097	2.8	6,814	7.1	194	2.3	7,062
Divorced/Separated/ Widowed	4.8	1,422	9.6	710	17.8	68	3.0	1,406
<b>Residence</b>								
Urban	4.4	2,365	6.3	1,663	30.1	105	2.8	1,991
Rural	2.6	8,795	3.4	6,721	9.2	228	2.3	7,670
<b>Region</b>								
Central 1	4.2	1,206	5.4	943	(10.8)	51	2.9	1,068
Central 2	3.3	1,162	4.3	904	(18.9)	39	2.8	1,029
Kampala	5.4	875	7.8	604	23.3	47	3.0	714
East Central	4.6	1,153	5.8	924	20.6	53	2.7	1,034
Mid Eastern	3.8	1,133	5.0	862	(12.1)	43	3.2	959
North East	1.5	919	1.9	722	*	14	1.9	836
West Nile	1.3	712	1.8	508	*	9	1.9	611
Mid Northern	1.9	1,106	2.5	828	*	21	1.7	966
South Western	0.9	1,414	1.3	971	*	12	1.7	1,164
Mid Western	3.0	1,480	3.9	1,118	(8.2)	44	2.3	1,280
<b>Education</b>								
No education	2.1	1,566	2.6	1,262	(6.2)	33	2.2	1,520
Primary incomplete	3.1	5,218	4.1	4,017	8.1	164	2.4	4,559
Primary complete	3.3	1,388	4.2	1,085	(22.6)	46	2.5	1,241
Secondary or higher	3.0	2,988	4.5	2,021	30.0	90	2.5	2,341
<b>Wealth quintile</b>								
Lowest	2.4	1,894	3.1	1,477	(5.7)	46	2.1	1,718
Second	2.6	2,024	3.4	1,583	3.6	53	2.2	1,801
Middle	2.7	2,056	3.5	1,569	18.9	55	2.3	1,762
Fourth	2.7	2,292	3.7	1,667	17.8	62	2.5	1,934
Highest	4.0	2,894	5.6	2,087	22.9	116	2.7	2,446
Total 15-49	3.0	11,160	4.0	8,384	15.8	333	2.4	9,661
50-59	0.4	993	1.0	430	*	4	2.8	967
Total 15-59	2.8	12,153	3.8	8,814	15.6	337	2.4	10,628

Note: Figures in parentheses are based on 25-49 unweighted cases; an asterisk denotes a figure based on fewer than 25 unweighted cases that has been suppressed.

<sup>1</sup> Means are calculated excluding respondents who gave non-numeric responses.



Table 6.4.2 Multiple sexual partners: Men

Among all men age 15-49 and among men age 15-49 who had sexual intercourse in the 12 months before the survey, the percentage who had sexual intercourse with more than one sexual partner in the past 12 months; among those having more than one partner in the past 12 months, the percentage reporting that a condom was used at last intercourse; and the mean number of sexual partners during their lifetime for men who ever had sexual intercourse, by background characteristics, Uganda 2011

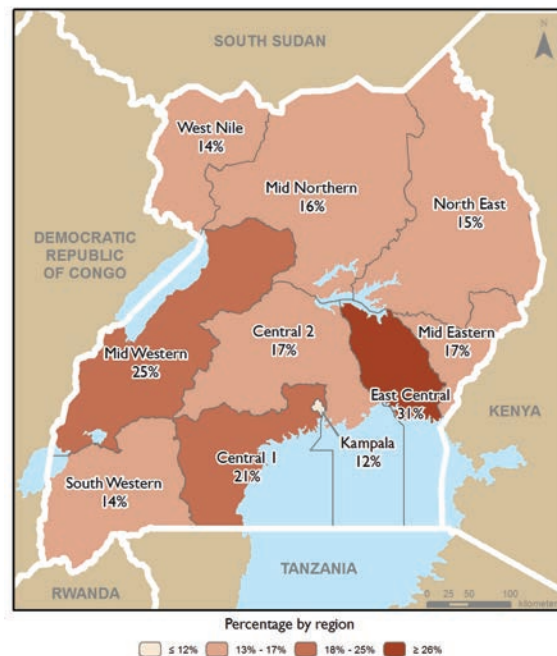
Background characteristic	All men		Among men who had sex in the past 12 months		Among men who had 2+ partners in the past 12 months		Among men who ever had sexual intercourse <sup>1</sup>	
	Percentage who had 2+ partners in the past 12 months	Number of men	Percentage who had 2+ partners in the past 12 months	Number of men	Percentage who reported using a condom during last sexual intercourse	Number of men	Mean number of sexual partners in lifetime	Number of men
<b>Age</b>								
15-24	9.9	3,479	22.7	1,517	30.7	344	4.5	1,918
15-19	4.7	2,072	20.0	484	31.7	97	2.8	737
20-24	17.6	1,406	23.9	1,033	30.3	247	5.6	1,181
25-29	22.0	1,354	24.1	1,240	14.3	298	6.2	1,283
30-39	26.2	2,289	27.7	2,167	10.8	599	8.0	2,134
40-49	24.1	1,612	25.8	1,504	7.3	388	10.2	1,462
<b>Marital status</b>								
Never married	7.6	3,227	21.8	1,132	41.2	247	4.3	1,634
Married or living together	25.9	4,994	26.3	4,933	8.6	1,295	7.9	4,687
Divorced/Separated/ Widowed	17.2	514	24.4	362	32.4	88	9.8	476
<b>Residence</b>								
Urban	18.6	1,739	25.7	1,260	28.4	324	8.0	1,341
Rural	18.7	6,995	25.3	5,168	11.4	1,306	6.9	5,457
<b>Region</b>								
Central 1	21.2	1,009	27.2	789	30.1	214	9.0	819
Central 2	17.0	888	23.4	644	13.0	151	7.3	688
Kampala	11.5	674	16.8	461	33.1	78	7.5	496
East Central	30.6	933	40.7	701	12.2	285	8.4	760
Mid Eastern	16.6	950	23.5	671	9.2	158	8.1	711
North East	15.1	683	19.7	522	7.0	103	5.1	545
West Nile	13.8	548	18.1	417	18.7	76	6.6	462
Mid Northern	15.6	950	20.9	709	7.8	148	5.3	741
South Western	13.8	947	21.0	626	9.7	131	5.6	709
Mid Western	24.9	1,151	32.2	889	12.9	286	7.5	865
<b>Education</b>								
No education	18.6	485	21.9	412	5.8	90	7.5	438
Primary incomplete	18.1	3,727	25.5	2,651	10.9	675	7.3	2,780
Primary complete	22.5	1,230	27.1	1,023	12.3	277	7.0	1,039
Secondary or higher	17.8	3,292	25.1	2,342	21.9	587	6.9	2,541
<b>Wealth quintile</b>								
Lowest	15.9	1,504	20.8	1,150	4.8	240	5.9	1,216
Second	17.9	1,632	23.6	1,239	8.8	292	6.3	1,299
Middle	19.7	1,667	26.4	1,241	9.6	328	7.4	1,291
Fourth	19.0	1,706	27.3	1,190	15.2	324	7.8	1,282
Highest	20.0	2,226	27.7	1,608	27.7	445	8.0	1,710
Total 15-49	18.7	8,735	25.4	6,427	14.8	1,630	7.1	6,798
50-59	18.0	853	20.8	737	4.7	153	12.2	738
Total 15-59	18.6	9,588	24.9	7,164	13.9	1,783	7.6	7,535

<sup>1</sup> Means are calculated excluding respondents who gave non-numeric responses.

There is little variation by background characteristics in the proportion of all women with two or more sexual partners in the 12 months before the survey. The proportion is less than 5 percent among all groups except women in Kampala and East Central, where it is 5 percent. The results regarding condom use at last sex among women who had two or more sexual partners in the previous 12 months must be interpreted with caution due to the small numbers of women, but it appears that younger women, never-married women, urban women, and women with more education and a higher wealth quintile are more likely than other women with multiple partners to have used a condom at last sex. The mean number of lifetime partners among women who have ever had sex does not vary strongly by background characteristics, though it is slightly higher among older women and those in urban areas.

Among all men, the percentage with two or more sexual partners in the 12 months before the survey increases from 5 percent among men age 15-19 to 26 percent among men age 30-39. Men who are currently married or living together with a partner are far more likely to report having multiple partners in the previous 12 months (26 percent) than men who are never-married (8 percent) or who are divorced, widowed, or separated (17 percent). To a large extent, the higher level of multiple partnerships among married men could be due to polygynous unions because 16 percent of married men report having more than one wife (Chapter 3). Men in East Central and Mid Western regions are more likely than men in other regions to report having two or more sexual partners in the previous 12 months (Map 6.1). There are only minor differences in the level of multiple partnerships by education and wealth quintile among men.

**Map 6.1 Percentage of men 15-49 with more than one sexual partner in previous 12 months**



Among men with two or more partners in the previous 12 months, those who are more likely to have used a condom at last sex include younger men, never-married and previously married men, urban men, men in Kampala and Central 1 regions, and men who have more education and wealth. For men who have ever had sex, the number of lifetime sexual partners increases with age and wealth. It is also higher among men who are divorced, separated, or widowed and among men in Central 1 region.

## 6.4 CONCURRENT SEXUAL PARTNERS

According to UNAIDS, concurrent sexual partnerships are defined as ‘overlapping sexual partnerships where intercourse with one partner occurs between two acts of intercourse with another partner’ (UNAIDS, 2009). If an individual has multiple sexual partners in the same year, it is important to know whether these partnerships are serial or concurrent. Concurrent sexual partnerships are theoretically more risky than serial partnerships because concurrent partnerships can create large, interconnected sexual networks whose members are at heightened risk of infection.

The 2011 UAIS collected information on the time since the first and most recent sexual intercourse with each sexual partner in the 12 months before the survey. This information is used to determine if sexual intercourse with one partner occurred between two acts of intercourse with another partner, i.e., whether two partnerships are concurrent. There are two indicators to measure concurrent sexual partnerships. Point prevalence of concurrent sexual partnerships is defined as the proportion of women and men age 15-49 with more than one ongoing sexual partnership at the point in time six months before the survey. Cumulative prevalence of concurrent sexual partnerships is defined as the proportion of women and men age 15-49 who have had any overlapping sexual partnerships in the 12 months before the survey (UNAIDS, 2009). A partnership that consists of a single sexual encounter is considered overlapping if it occurs during another ongoing partnership. The point prevalence is generally lower than the cumulative prevalence because the point prevalence only includes relationships ongoing on a particular day rather than over an entire year. Among men, overlapping polygynous unions are considered concurrent partnerships in both the point prevalence and the cumulative prevalence indicators.

Table 6.5 shows that only about 2 percent of women age 15-49 had concurrent sexual partnerships in the 12 months before the survey, by either the point prevalence or cumulative prevalence definition. Among women who reported having two or more partners in the previous 12 months, over two-thirds (68 percent) had concurrent partnerships.

**Table 6.5 Point prevalence and cumulative prevalence of concurrent sexual partners**

Percentage of all women and men age 15-49 who had concurrent sexual partners six months before the survey (point prevalence<sup>1</sup>), and percentage of all women and all men 15-49 who had any concurrent sexual partners during the 12 months before the survey (cumulative prevalence<sup>2</sup>), and among women and men age 15-49 who had multiple sexual partners during the 12 months before the survey, percentage who had concurrent sexual partners, Uganda 2011

Background characteristic	Among all respondents			Among respondents who had multiple partners in the 12 months before the survey	
	Point prevalence of concurrent sexual partners <sup>1</sup>	Cumulative prevalence of concurrent sexual partners <sup>2</sup>	Number of respondents	Percentage who had concurrent sexual partners <sup>2</sup>	Number of respondents
<b>WOMEN</b>					
<b>Age</b>					
15-24	0.2	2.1	4,621	66.4	143
15-19	0.1	1.4	2,458	63.8	54
20-24	0.2	2.8	2,163	68.0	90
25-29	0.5	2.2	1,942	62.5	68
30-39	0.8	2.1	2,833	70.2	84
40-49	0.3	1.7	1,764	(79.0)	38
<b>Marital status</b>					
Never married	0.1	1.7	2,641	64.4	71
Married or living together	0.6	2.0	7,097	74.3	194
Divorced/Separated/Widowed	0.2	2.6	1,422	53.9	68
<b>Residence</b>					
Urban	0.4	3.5	2,365	77.7	105
Rural	0.4	1.6	8,795	63.5	228
Total 15-49	0.4	2.0	11,160	68.0	333
50-59	0.1	0.3	993	*	4
Total 15-59	0.4	1.9	12,153	68.0	337

*Continued...*

Table 6.5—Continued

MEN					
<b>Age</b>					
15-24	0.3	6.3	3,479	63.5	344
15-19	0.1	3.0	2,072	63.4	97
20-24	0.5	11.2	1,406	63.5	247
25-29	2.4	16.6	1,354	75.3	298
30-39	7.6	22.1	2,289	84.5	599
40-49	11.3	21.4	1,612	89.1	388
<b>Marital status</b>					
Never married	0.2	4.8	3,227	63.2	247
Married or living together	7.7	21.8	4,994	83.9	1,295
Divorced/Separated/Widowed	1.3	10.3	514	59.7	88
<b>Type of union</b>					
Polygynous	33.0	62.9	808	84.8	599
Non-polygynous	2.8	13.8	4,184	83.1	695
Not in union	0.4	5.6	3,740	62.3	335
<b>Residence</b>					
Urban	2.8	13.9	1,739	74.9	324
Rural	5.0	15.0	6,995	80.6	1,306
Total 15-49	4.5	14.8	8,735	79.5	1,630
50-59	10.4	16.7	853	92.7	153
Total 15-59	5.1	15.0	9,588	80.6	1,783

Note: Two sexual partners are considered to be concurrent if the date of the most recent sexual intercourse with the earlier partner is after the date of the first sexual intercourse with the later partner. Figures in parentheses are based on 25-49 unweighted cases; an asterisk denotes a figure based on fewer than 25 unweighted cases that has been suppressed. Total includes 2 men missing information about type of union.

<sup>1</sup> The percentage of respondents who had two (or more) sexual partners that were concurrent at the point in time six months before the survey

<sup>2</sup> The percentage of respondents who had two (or more) sexual partners that were concurrent anytime during the 12 months preceding the survey

Among men, 5 percent had concurrent sexual partnerships, according to the point prevalence indicator, while 15 percent had concurrent sexual partnerships, according to the cumulative prevalence indicator. According to the cumulative prevalence indicator, the proportion of men with concurrent sexual partnerships increases from 3 percent of men age 15-19 to 22 percent of men in their thirties. It is highest among married men, mainly because of men who have more than one wife (polygynous unions). Looking just at men who had multiple partners during the previous 12 months, 80 percent of them had concurrent partnerships.

## 6.5 HIGHER RISK SEXUAL INTERCOURSE

Condom use is an important tool in controlling the transmission of HIV and other sexually transmitted infections. Although truly effective protection would require condom use at every sexual act, some encounters entail greater risk than others. One category of sexual activity that is considered to be of 'higher risk' is sex with a nonmarital, noncohabiting partner. Table 6.6 shows the proportion of women and men age 15-49 who engaged in higher risk sex in the 12 months before the survey as well as the proportion of those who used condoms the most recent time they had higher risk sex.

The results show that, among respondents age 15-49 who were sexually active in the preceding 12 months, 17 percent of women and 34 percent of men engaged in sex with a non-marital, non-cohabiting partner. Of them, 29 percent of women and 38 percent of men reported using condoms at the most recent high-risk sex.

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 due in part to differences in the age and marital status composition of the respondents. In Kampala—where higher risk sex is most prevalent—condom use at last higher risk sex is also more prevalent than in other regions.

Table 6.6 Higher risk sex

Among women and men age 15-49 who had sexual intercourse in the 12 months before the survey, percentage who had higher risk sex in the 12 months preceding the survey and among those, the percentage who used a condom at the last higher risk sexual intercourse, according to background characteristics, Uganda 2011

Background characteristic	Women				Men			
	Percentage engaging in higher risk sex in the last 12 months	Number who had sex in the last 12 months	Percentage who used condom at last higher risk sex	Number who had higher risk sex in last 12 months	Percentage engaging in higher risk sex in the last 12 months	Number who had sex in the last 12 months	Percentage who used condom at last higher risk sex	Number who had higher risk sex in last 12 months
<b>Age</b>								
15-19	49.2	979	33.8	482	92.6	484	31.5	448
20-24	21.2	1,869	29.5	396	60.4	1,033	41.9	624
25-29	10.5	1,759	30.1	185	33.9	1,240	42.0	420
30-39	8.9	2,475	24.1	221	22.3	2,167	38.9	483
40-49	8.3	1,302	19.0	108	14.0	1,504	28.8	211
<b>Marital status</b>								
Never married <sup>1</sup>	95.0	860	33.6	817	98.3	1,132	39.0	1,113
Married or living together	2.9	6,814	29.3	200	16.5	4,933	37.7	812
Divorced/Separated/Widowed	52.7	710	20.2	374	72.5	362	33.6	262
<b>Residence</b>								
Urban	28.3	1,663	39.7	471	47.2	1,260	51.9	594
Rural	13.7	6,721	24.1	921	30.8	5,168	32.6	1,592
<b>Region</b>								
Central 1	21.3	943	29.5	201	40.7	789	46.9	321
Central 2	21.7	904	29.1	196	34.4	643	43.1	222
Kampala	32.5	604	38.6	197	49.3	461	62.2	227
East Central	16.6	924	31.8	153	38.6	700	25.2	271
Mid Eastern	15.8	862	27.4	136	29.1	671	26.6	195
North East	9.9	722	25.3	71	20.0	522	34.1	104
West Nile	8.4	508	(28.9)	43	26.3	417	42.2	110
Mid Northern	12.3	828	34.0	102	22.0	708	46.5	156
South Western	7.6	971	25.3	74	28.8	626	31.5	180
Mid Western	19.6	1,118	21.6	219	45.0	889	27.2	400
<b>Education</b>								
No education	6.3	1,262	12.0	80	18.4	412	14.2	76
Primary incomplete	13.5	4,017	22.3	542	31.0	2,651	30.9	821
Primary complete	16.3	1,085	22.4	177	29.0	1,023	32.8	297
Secondary or higher	29.3	2,021	40.4	593	42.4	2,342	46.9	993
<b>Wealth quintile</b>								
Lowest	8.8	1,477	16.2	130	20.8	1,150	26.5	239
Second	12.7	1,583	16.6	200	26.0	1,239	28.6	323
Middle	13.1	1,569	24.6	205	32.5	1,241	27.6	403
Fourth	19.7	1,667	33.4	328	40.0	1,190	37.8	476
Highest	25.2	2,087	36.9	527	46.4	1,607	51.1	746
Total 15-49	16.6	8,384	29.4	1,391	34.0	6,427	37.9	2,186
50-59	8.1	430	(22.5)	35	10.8	737	17.9	79
Total 15-59	16.2	8,814	29.2	1,426	31.6	7,164	37.2	2,266

Note: Higher risk sex is defined as sex with a non-marital, non-cohabiting partner. Numbers in parentheses are based on 25-49 unweighted cases.

<sup>1</sup> 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.

The prevalence of higher risk sexual behaviour increases 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. The same pattern is evident by wealth quintile.

The level and patterns of higher risk sex in 2011 parallel those found in the 2004-05 UHSBS. For example, the proportion of sexually active women age 15-49 who engaged in higher risk sex in the 12 months before the survey increased only slightly from 15 percent in 2004-05 to 17 percent in 2011. Among men, the proportion declined from 37 percent to 34 percent between the two surveys. However, condom use among those engaging in higher risk sex has declined sharply. In 2004-05, 47 percent of women age 15-49 who had

higher risk sex in the 12 months before the survey said they used a condom at the most recent higher risk sex. By 2011, this proportion had declined to 29 percent. Among men, the proportion using condoms at the most recent higher risk sex declined from 53 percent in 2004-05 to 38 percent in 2011.

## 6.6 TRANSACTIONAL SEX

Transactional sex is the exchange of money, favours, or gifts for sexual intercourse. This type of sexual intercourse is associated with a greater risk of contracting HIV and other sexually transmitted infections because of compromised power relations and the likelihood of having multiple partners as a result.

Women interviewed in the 2011 UAIS who had had sexual intercourse in the 12 months before the survey were asked if they had ever given sex in exchange for goods or services and if so, whether this had happened in the 12 months before the survey and whether a condom was used at the most recent such encounter. They were also asked the same set of questions with regard to whether they had given sex in exchange for money. Results are shown in Table 6.7.

Only 3 percent of women who had sex in the 12 months before the

survey reported that they had ever given sex in exchange for goods or services and only 2 percent said they had given sex in exchange for goods or services in the 12 months before the survey. Similarly, 3 percent of women said they ever gave sex in exchange for money and only 1 percent said they had done so in the previous 12 months.

Table 6.7 Transactional sex among women

Among women age 15-49 who had sexual intercourse in the past 12 months, percentage who ever gave sex in exchange for goods or services, percentage who gave sex in exchange for goods or services in the past 12 months, percentage who ever gave sex in exchange for money and percentage who gave sex in exchange for money in the past 12 months, according to background characteristics, Uganda, 2011

Background characteristic	Percentage who ever gave sex in exchange for goods or services	Percentage who gave sex in exchange for goods or services in the past 12 months	Percentage who ever gave sex in exchange for money	Percentage who gave sex in exchange for money in the past 12 months	Number of women who had sex in the past 12 months
<b>Age</b>					
15-24	4.1	2.7	4.0	2.5	2,848
15-19	5.3	3.7	6.0	4.1	979
20-24	3.5	2.2	2.9	1.7	1,869
25-29	3.2	1.7	2.0	1.2	1,759
30-39	2.4	1.1	1.7	0.7	2,475
40-49	2.2	1.0	1.9	0.8	1,302
<b>Marital status</b>					
Never married	5.7	4.2	5.8	4.9	860
Married/Living together	2.3	0.9	1.7	0.6	6,814
Divorced/Separated/ Widowed	7.9	6.6	6.7	5.0	710
<b>Residence</b>					
Urban	3.4	1.8	2.6	1.4	1,663
Rural	3.0	1.7	2.5	1.4	6,721
<b>Region</b>					
Central 1	3.6	1.2	3.3	0.9	943
Central 2	6.1	3.1	3.7	2.1	904
Kampala	3.5	1.4	2.8	1.3	604
East Central	1.0	0.5	1.4	0.4	924
Mid Eastern	4.1	3.6	3.8	3.5	862
North East	0.3	0.3	0.7	0.4	722
West Nile	0.7	0.7	1.0	0.3	508
Mid Northern	1.0	0.6	1.0	0.7	828
South Western	3.0	1.3	2.5	1.3	971
Mid Western	5.6	3.5	4.0	2.5	1,118
<b>Education</b>					
No education	2.4	1.5	2.0	1.2	1,262
Primary incomplete	3.1	1.8	2.6	1.5	4,017
Primary complete	4.0	2.4	4.2	2.1	1,085
Secondary or higher	3.1	1.5	1.9	1.1	2,021
<b>Wealth quintile</b>					
Lowest	1.8	1.0	2.2	1.1	1,477
Second	2.9	1.7	2.2	1.3	1,583
Middle	3.6	2.1	3.2	1.9	1,569
Fourth	3.6	2.2	2.7	1.6	1,667
Highest	3.5	1.7	2.4	1.2	2,087
Total 15-49	3.1	1.7	2.6	1.4	8,384
50-59	1.6	0.3	1.0	0.4	430
Total 15-59	3.0	1.7	2.5	1.4	8,814

Younger women—especially those age 15-19—are slightly more likely than older women to engage in transactional sex. Women who are divorced, separated, or widowed are also more likely to give sex in exchange for goods, services, or money than women who are currently married or living with a man. Women in Central 2, Mid Eastern, and Mid Western regions are somewhat more likely to engage in transactional sex than women in other regions.

It is encouraging to note that 38 percent of women age 15-49 who gave sex in exchange for goods or services in the 12 months before the survey said they used a condom at the last such encounter (data not shown). Similarly, 34 percent of women who gave sex in exchange for money in the previous 12 months said they used a condom. The proportion of women who report that they engaged in transactional sex is so small that it is not possible to show data on condom use by background characteristics.

Men interviewed in the 2011 UAIS were asked if they had paid anyone in exchange for having sexual intercourse in the 12 months before the survey. Respondents who had engaged in paid sexual intercourse in the previous 12 months were asked if they had used a condom the last time they paid someone for sex. Results are shown in Table 7.3.

Overall, only 2 percent of men reported that they paid for sex in the 12 months before the survey. Men who are divorced, separated, or widowed (6 percent) are more likely to have paid for sex than men who are currently married (2 percent) or have never married (2 percent). Men in Mid Western region are more likely to have paid for sex in the previous 12 months than men in other regions; those in North East and Mid Northern regions are the least likely to have paid for sex.

**Table 6.8 Payment for sexual intercourse and condom use at last paid sexual intercourse among men**

Percentage of men age 15-49 who ever paid for sexual intercourse and percentage who paid for sexual intercourse in the past 12 months, and among them, the percentage reporting that a condom was used the last time they paid for sexual intercourse, by background characteristics, Uganda 2011

Background characteristic	Among all men		Among men who paid for sex in the past 12 months	
	Percentage who paid for sexual intercourse in the past 12 months	Number of men	Percentage reporting condom use at last paid sexual intercourse	Number of men
<b>Age</b>				
15-24	2.3	3,479	52.1	79
15-19	1.2	2,072	*	24
20-24	3.9	1,406	(53.9)	54
25-29	2.9	1,354	(58.0)	39
30-39	2.4	2,289	46.4	55
40-49	2.2	1,612	(35.3)	36
<b>Marital status</b>				
Never married	1.8	3,227	53.3	57
Married or living together	2.4	4,994	51.7	119
Divorced/separated/widowed	6.3	514	(30.5)	32
<b>Residence</b>				
Urban	2.8	1,739	(71.6)	49
Rural	2.3	6,995	41.9	160
<b>Region</b>				
Central 1	3.0	1,009	(69.9)	30
Central 2	2.9	888	*	26
Kampala	2.4	674	*	16
East Central	2.1	933	*	20
Mid Eastern	2.2	950	*	21
North East	0.5	683	*	3
West Nile	2.2	548	*	12
Mid Northern	0.5	950	*	5
South Western	1.7	947	*	16
Mid Western	5.2	1,151	(32.0)	60
<b>Education</b>				
No education	2.7	485	*	13
Primary incomplete	2.4	3,727	50.3	89
Primary complete	3.4	1,230	(41.9)	42
Secondary or higher	1.9	3,292	60.4	64
<b>Wealth quintile</b>				
Lowest	1.6	1,504	*	24
Second	1.5	1,632	*	25
Middle	3.4	1,667	(38.5)	57
Fourth	2.8	1,706	(42.5)	47
Highest	2.5	2,226	68.2	55
Total 15-49	2.4	8,735	48.8	208
50-59	0.6	853	*	5
Total 15-59	2.2	9,588	48.3	213

Almost half of men who paid for sex in the 12 months before the survey reported that they used a condom the last time they had paid sex. Differences in condom use at the last paid sex are difficult to interpret due to the small numbers of men who reported paying for sex.

## 6.7 ALCOHOL USE DURING SEX

Alcohol can reduce inhibitions and lead to impaired judgement and increased risk-taking behaviour. To investigate the extent of alcohol use and sexual activity, respondents in the 2011 UAIS were asked—for each of their sexual partners in the previous 12 months—whether they or their partner drank alcohol the last time they had sex and if so, whether they or their partner or both were drunk. Results are shown in Tables 6.9.1 and 6.9.2.

Table 6.9.1 Alcohol use during sex: Women

Among women age 15-49 who had sexual intercourse in the past 12 months, percentage who reported having sexual intercourse when either they or their partner drank alcohol and percentage who reported having sex when either one of the partners was drunk, both were drunk, or neither was drunk, according to background characteristics, Uganda, 2011

Background characteristic	Among those who had sex in the past 12 months, percentage who had sex when:				Number who had sex in the past 12 months
	Either woman or partner drank alcohol	One was drunk	Both were drunk	Neither was drunk	
<b>Age</b>					
15-24	14.2	11.2	2.2	0.8	2,848
15-19	9.3	7.5	1.3	0.4	979
20-24	16.8	13.2	2.7	1.0	1,869
25-29	21.3	16.2	4.2	0.9	1,759
30-39	29.7	22.9	5.4	1.5	2,475
40-49	36.4	27.3	7.5	1.5	1,302
<b>Marital status</b>					
Never married	12.0	8.6	2.1	1.2	860
Married/Living together	25.1	19.4	4.6	1.2	6,814
Divorced/Separated/Widowed	24.8	18.6	5.5	0.7	710
<b>Residence</b>					
Urban	15.8	10.9	4.4	0.6	1,663
Rural	25.7	20.0	4.4	1.3	6,721
<b>Region</b>					
Central 1	16.8	14.3	1.6	0.9	943
Central 2	18.7	16.0	2.2	0.6	904
Kampala	13.2	8.6	4.0	0.6	604
East Central	15.2	11.5	3.3	0.4	924
Mid Eastern	26.9	18.1	6.8	2.0	862
North East	35.6	17.1	18.2	0.2	722
West Nile	28.3	22.5	3.9	1.9	508
Mid Northern	36.2	29.1	2.7	4.4	828
South Western	29.0	26.4	2.2	0.4	971
Mid Western	20.3	17.7	2.2	0.5	1,118
<b>Education</b>					
No education	36.0	23.7	11.0	1.4	1,262
Primary incomplete	25.5	20.6	3.6	1.3	4,017
Primary complete	19.0	16.5	1.6	1.0	1,085
Secondary or higher	15.0	11.1	3.3	0.7	2,021
<b>Wealth quintile</b>					
Lowest	36.5	24.8	9.9	1.7	1,477
Second	27.3	22.0	3.5	1.8	1,583
Middle	24.6	20.5	3.2	0.9	1,569
Fourth	18.7	15.7	2.4	0.7	1,667
Highest	15.3	11.0	3.6	0.7	2,087
Total 15-49	23.7	18.2	4.4	1.1	8,384
50-59	39.7	28.0	9.6	2.2	430
Total 15-59	24.5	18.7	4.6	1.2	8,814



About one-quarter of women and men who had sex in the 12 months before the survey said that either they or one of their sexual partners had taken alcohol the last time they had sex and 17 to 18 percent said that one of them was drunk. Respondents that are more likely to engage in alcohol drinking are those who are older, those who live in rural areas, those with less education, and those in the lower wealth quintiles. Respondents who are currently or formerly married are also more likely to mix alcohol and sex than respondents who have never married. Women and men in Mid Northern region are the most likely to report that they drank alcohol during a sexual encounter in the previous year. Respondents in Kampala, East Central, Central 1, and Central 2 regions are the least likely to mix alcohol and sex.

**Table 6.9.2 Alcohol use during sex: Men**

Among men age 15-49 who had sexual intercourse in the past 12 months, percentage who reported having sexual intercourse when either they or their partner drank alcohol and percentage who reported having sex when either one of the partners was drunk, both were drunk, or neither was drunk, according to background characteristics, Uganda, 2011

Background characteristic	Among those who had sex in the past 12 months, percentage who had sex when:				Number who had sex in the past 12 months
	Either man or partner drank alcohol	One was drunk	Both were drunk	Neither was drunk	
<b>Age</b>					
15-24	11.8	9.2	2.0	0.6	1,517
15-19	7.5	7.3	0.2	0.0	484
20-24	13.8	10.1	2.8	0.8	1,033
25-29	20.2	14.4	4.5	1.3	1,240
30-39	28.3	18.5	7.9	1.8	2,167
40-49	35.5	23.8	10.1	1.6	1,504
<b>Marital status</b>					
Never married	11.0	7.5	3.0	0.5	1,132
Married/Living together	26.6	18.8	6.3	1.5	4,933
Divorced/Separated/Widowed	38.5	18.1	18.1	2.3	362
<b>Residence</b>					
Urban	19.3	10.8	6.8	1.7	1,260
Rural	25.8	18.2	6.2	1.3	5,168
<b>Region</b>					
Central 1	21.2	10.0	8.4	2.8	789
Central 2	15.7	10.5	2.4	2.8	643
Kampala	13.3	8.7	3.3	1.3	461
East Central	14.2	10.1	3.9	0.2	700
Mid Eastern	30.7	20.3	9.3	1.1	671
North East	26.9	13.2	12.2	1.6	522
West Nile	33.8	27.9	5.9	0.0	417
Mid Northern	39.6	33.6	5.8	0.3	708
South Western	23.1	16.6	4.7	1.7	626
Mid Western	26.3	17.8	7.1	1.3	889
<b>Education</b>					
No education	33.3	20.1	11.4	1.8	412
Primary incomplete	28.3	19.8	6.7	1.7	2,651
Primary complete	25.8	18.9	5.4	1.5	1,023
Secondary or higher	18.1	11.9	5.4	0.9	2,342
<b>Wealth quintile</b>					
Lowest	38.4	26.8	10.3	1.3	1,150
Second	26.2	19.5	5.3	1.5	1,239
Middle	23.5	16.6	6.1	0.8	1,241
Fourth	19.1	13.0	4.5	1.6	1,190
Highest	18.1	10.4	6.0	1.7	1,607
Total 15-49	24.5	16.8	6.4	1.4	6,427
50-59	29.9	18.5	9.6	1.7	737
Total 15-59	25.1	17.0	6.7	1.4	7,164

## 6.8 FORCED AND COERCED SEX

The UAIS included questions relating to sexual violence. Specifically, women and men were asked if they were ever physically forced to have sex against their will and if so, whether this had happened in the previous 12 months. They were further asked if they were ever coerced to have sex against their will but without the use of physical force. In order to reduce the risk that others in the household might take reprisals against the respondent, the questions on sexual violence were administered to only one randomly selected woman or man per household. Results are shown in Tables 6.10.1 and 6.10.2 for women and men, respectively.

**Table 6.10.1 Forced or coercive sex: Women**

Percentage of women age 15-49 who were ever physically forced to have sex against their will, percentage who were physically forced to have sex against their will in the past 12 months, percentage who were ever coerced to have sex against their will but without the use of physical force and percentage who were coerced to have sex against their will in the past 12 months, according to background characteristics, Uganda, 2011

Background characteristic	Ever physically forced to have sex against her will	Physically forced to have sex against her will in the past 12 months	Ever coerced to have sex against her will but without physical force	Coerced to have sex against her will but without physical force in the past 12 months	Number
<b>Age</b>					
15-24	12.2	5.8	13.8	8.7	1,400
15-19	8.8	4.0	9.4	6.0	612
20-24	14.8	7.2	17.2	10.8	789
25-29	15.4	6.2	17.4	9.2	762
30-39	15.4	5.3	16.8	8.8	1,057
40-49	19.7	5.8	19.0	7.5	616
<b>Marital status</b>					
Never married	10.5	3.7	9.7	4.8	594
Ever had sex	17.6	6.4	17.6	8.5	296
Never had sex	3.5	1.0	1.9	1.2	298
Married/Living together	15.1	6.4	16.8	9.5	2,786
Divorced/Separated/Widowed	19.2	4.3	21.0	8.3	454
<b>Residence</b>					
Urban	17.3	6.2	17.7	9.8	792
Rural	14.3	5.6	15.8	8.3	3,042
<b>Region</b>					
Central 1	16.5	4.8	25.3	13.6	449
Central 2	20.4	11.4	20.8	14.7	390
Kampala	17.4	4.6	17.1	10.3	301
East Central	12.4	2.2	10.1	3.4	400
Mid Eastern	18.2	10.6	14.5	7.2	373
North East	9.3	2.2	7.3	1.0	348
West Nile	14.8	5.9	18.9	9.8	240
Mid Northern	10.8	5.5	10.6	6.1	392
South Western	19.5	6.9	10.8	3.8	478
Mid Western	9.5	3.1	24.8	15.6	464
<b>Education</b>					
No education	11.3	3.9	12.4	5.9	580
Primary incomplete	16.6	6.9	17.4	9.8	1,838
Primary complete	16.6	5.9	15.9	8.8	496
Secondary or higher	12.9	4.6	16.2	7.9	920
<b>Wealth quintile</b>					
Lowest	9.4	3.6	10.8	5.1	715
Second	16.3	6.9	16.4	9.1	748
Middle	17.2	6.1	16.7	9.2	722
Fourth	16.4	7.7	18.2	10.3	718
Highest	15.0	4.5	18.2	9.3	932
Total 15-49	14.9	5.7	16.2	8.6	3,834
50-59	14.9	3.7	14.9	5.2	360
Total 15-59	14.9	5.6	16.1	8.3	4,194

Table 6.10.2 Forced or coercive sex: Men

Percentage of men age 15-49 who were ever physically forced to have sex against their will, percentage who were physically forced to have sex against their will in the past 12 months, percentage who were ever coerced to have sex against their will but without the use of physical force and percentage who were coerced to have sex against their will in the past 12 months, according to background characteristics, Uganda, 2011

Background characteristic	Ever physically forced to have sex against her will	Physically forced to have sex against her will in the past 12 months	Ever coerced to have sex against her will but without physical force	Coerced to have sex against her will but without physical force in the past 12 months	Number
<b>Age</b>					
15-24	4.1	2.1	6.3	4.0	1,079
15-19	3.4	2.3	4.2	2.9	571
20-24	4.9	1.9	8.7	5.3	509
25-29	3.6	2.3	7.2	5.1	618
30-39	2.4	1.0	6.9	3.0	1,088
40-49	2.8	0.9	6.5	1.9	677
<b>Marital status</b>					
Never married	3.5	1.9	5.3	3.5	960
Ever had sex	4.3	2.3	7.8	5.2	523
Never had sex	2.6	1.5	2.4	1.6	437
Married/Living together	2.9	1.3	7.2	3.3	2,284
Divorced/Separated/Widowed	5.4	3.1	7.9	5.4	218
<b>Residence</b>					
Urban	3.1	2.2	7.9	4.6	683
Rural	3.2	1.4	6.4	3.2	2,779
<b>Region</b>					
Central 1	6.7	2.8	12.2	7.8	403
Central 2	4.4	3.2	7.4	4.7	377
Kampala	4.0	2.9	4.7	2.8	240
East Central	2.6	0.3	4.2	0.8	369
Mid Eastern	6.2	4.3	8.6	4.9	362
North East	0.4	0.0	1.3	0.2	285
West Nile	1.3	0.0	2.1	0.0	210
Mid Northern	0.8	0.8	2.3	2.0	376
South Western	3.6	1.1	8.2	3.9	400
Mid Western	1.1	0.0	10.8	4.7	441
<b>Education</b>					
No education	2.0	1.4	1.5	1.5	209
Primary incomplete	3.2	1.5	6.4	3.3	1,491
Primary complete	1.8	1.0	7.9	3.9	500
Secondary or higher	4.0	1.9	7.4	3.8	1,262
<b>Wealth quintile</b>					
Lowest	2.7	1.5	4.7	2.7	640
Second	2.2	0.8	4.0	2.1	663
Middle	2.0	0.7	5.0	2.5	644
Fourth	6.0	2.8	10.0	5.7	646
Highest	3.1	1.8	9.1	4.3	868
Total 15-49	3.2	1.6	6.7	3.5	3,462
50-59	2.7	0.0	4.0	0.9	341
Total 15-59	3.2	1.4	6.5	3.3	3,803

Results show that 15 percent of women have ever been physically forced to have sex against their will and 16 percent have ever been coerced to have sex but without physical force. Six percent of women say they were physically forced to have sex in the 12 months before the survey, while 9 percent said they were coerced to have sex in the previous 12 months. Experience of forced sex and coerced sex is more common among older women and those who are divorced, separated or widowed; however, for the 12 months before the survey, the proportions of women experiencing forced and coerced sex are highest for women in their twenties and those who are currently married or have never married but have had sex. Interestingly, a small proportion of women who say they never had sex reported that they had been forced or coerced to have sex against their will. Women in Central 2 region are the most likely to report that they were ever physically forced to have sex

against their will and also the most likely to report that they were forced to have sex in the previous 12 months. Women in Central 1, Mid Western, and Central 2 regions are the most likely to experience coerced sex.

Men are far less likely than women to report experiencing sexual violence. Only 3 percent of men have ever been physically forced to have sex against their will and 7 percent have ever been coerced to have sex. Differentials in sexual violence among men by background characteristics are mostly small. Men in Central 1 and Mid Eastern regions have experienced the highest levels of sexual violence.

## 6.9 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. Due to 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 6.11, 36 percent of women and 18 percent of men who ever had sex report they either had an STI or had symptoms of an STI (a bad-smelling or abnormal genital discharge or a genital sore or ulcer) in the 12 months preceding the survey.

**Table 6.11 Self-reported prevalence of sexually-transmitted infections (STIs) and STI symptoms**

Among women and men age 15-49 who ever had sexual intercourse, the percentage reporting having an STI and/or symptoms of an STI in the past 12 months, by background characteristics, Uganda 2011

Background characteristic	Women					Men				
	Percentage who reported having in the past 12 months:				Number of women who ever had sexual intercourse	Percentage who reported having in the past 12 months:				Number of men who ever had sexual intercourse
	STI	Bad smelling/ abnormal genital discharge	Genital sore or ulcer	STI/ genital discharge/ sore or ulcer		STI	Bad smelling/ abnormal genital discharge	Genital sore or ulcer	STI/ genital discharge/ sore or ulcer	
<b>Age</b>										
15-24	15.8	23.2	20.3	33.5	3,203	9.1	8.3	9.8	16.4	1,958
15-19	11.2	20.6	17.2	29.4	1,162	3.9	5.4	6.2	11.3	748
20-24	18.5	24.7	22.1	35.8	2,041	12.4	10.0	12.0	19.5	1,210
25-29	20.7	28.5	24.3	39.1	1,928	11.7	9.9	12.3	19.2	1,330
30-39	19.9	25.9	23.5	37.5	2,824	12.5	8.7	14.2	21.0	2,274
40-49	18.0	23.1	22.3	34.2	1,764	8.2	7.0	11.2	16.6	1,609
<b>Marital status</b>										
Never married, had sex	12.4	19.7	17.6	29.4	1,202	6.8	6.1	7.3	13.3	1,663
Married/Living together	19.2	25.8	23.3	37.2	7,097	11.0	8.6	13.1	19.4	4,994
Divorced/Separated/ Widowed	19.2	25.8	21.7	34.7	1,422	17.7	14.2	16.0	24.9	514
<b>Male circumcision</b>										
Circumcised	na	na	na	na	na	11.0	8.5	9.4	17.3	1,998
Not circumcised	na	na	na	na	na	10.3	8.4	12.9	18.8	5,173
<b>Residence</b>										
Urban	20.6	26.8	22.2	38.8	2,008	10.0	7.4	10.7	17.1	1,440
Rural	17.8	24.6	22.4	35.2	7,712	10.6	8.7	12.3	18.7	5,732
<b>Region</b>										
Central 1	23.7	34.7	32.7	50.6	1,073	15.4	11.8	16.0	25.0	875
Central 2	23.2	29.7	26.2	43.7	1,033	10.8	9.2	16.3	23.6	742
Kampala	21.4	27.8	23.4	39.8	722	9.0	6.3	11.0	17.0	537
East Central	17.7	30.6	23.6	41.3	1,038	12.8	8.4	13.3	22.6	772
Mid Eastern	11.3	13.0	10.6	19.2	981	11.0	9.8	8.8	15.7	732
North East	11.8	16.1	12.0	22.6	837	8.0	9.3	9.4	12.1	556
West Nile	8.7	7.7	9.2	16.4	615	5.6	4.1	5.1	8.7	466
Mid Northern	13.0	21.2	21.3	28.9	971	4.0	4.9	5.1	9.3	776
South Western	21.2	28.4	21.2	37.2	1,165	11.7	8.5	15.5	20.2	738
Mid Western	24.8	30.3	33.2	45.8	1,288	12.4	9.0	14.3	22.2	979

Continued...

Table 6.11—Continued

Background characteristic	Women					Men				
	Percentage who reported having in the past 12 months:				Number of women who ever had sexual intercourse	Percentage who reported having in the past 12 months:				Number of men who ever had sexual intercourse
	STI	Bad smelling/ abnormal genital discharge	Genital sore or ulcer	STI/ genital discharge/ sore or ulcer		STI	Bad smelling/ abnormal genital discharge	Genital sore or ulcer	STI/ genital discharge/ sore or ulcer	
<b>Education</b>										
No education	14.1	20.5	19.7	30.7	1,535	13.4	9.0	11.9	19.9	461
Primary incomplete	19.0	26.5	24.0	37.2	4,584	10.6	9.2	13.5	19.9	2,933
Primary complete	21.2	27.2	23.8	38.7	1,245	10.1	10.3	11.9	18.7	1,103
Secondary or higher	18.4	24.1	20.3	35.3	2,356	9.9	6.6	10.3	16.3	2,674
<b>Wealth quintile</b>										
Lowest	12.4	19.8	17.3	27.4	1,727	7.1	7.2	9.2	13.2	1,264
Second	16.3	21.7	20.2	31.4	1,818	10.4	8.5	11.0	17.1	1,365
Middle	19.4	27.0	22.9	38.1	1,772	11.0	9.9	12.8	20.2	1,353
Fourth	20.6	28.1	26.9	41.0	1,941	13.5	9.5	16.0	23.4	1,354
Highest	21.7	27.4	23.7	39.6	2,462	10.3	7.3	10.9	18.0	1,835
Total 15-49	18.4	25.0	22.4	35.9	9,720	10.5	8.4	12.0	18.4	7,171
50-59	11.5	14.2	15.9	24.4	990	8.6	6.8	11.6	16.4	850
Total 15-59	17.7	24.0	21.8	34.8	10,711	10.3	8.2	11.9	18.2	8,021

na = Not applicable

The likelihood of reporting an STI or symptoms of an STI is highest among women age 25-29 and men age 30-39. Women and men who had never married but who had sex are least likely to report having an STI or symptoms of an STI in the 12 months before the survey. Urban and rural residents have roughly the same probability of reporting STI symptoms.

Respondents in Central 1 region are most likely to report having had an STI or symptoms of an STI in the previous 12 months (51 percent of women and 25 percent of men). Respondents in West Nile region are least likely to report STI symptoms (16 percent of women and 9 percent of men). There is no clear pattern in the prevalence of STIs or STI symptoms by education or wealth quintile.

Among women age 15-49 who have ever had sex, the proportion who report having had an STI or symptoms of an STI in the 12 months before the survey has fluctuated from 33 percent in 2004-05 to 22 percent in 2006 and to 36 percent in 2011. Similarly, the proportion among men has changed from 21 percent in 2004-05 to 13 percent in 2006 and to 18 percent in 2011.

## 6.10 PREVALENCE OF INJECTIONS

When given with nonsterile equipment, injections pose a risk of infection with HIV and other diseases. Table 6.12 shows that 40 percent of women and 25 percent of men age 15-49 reported receiving an injection in the 12 months preceding the survey, with an average of two injections per respondent. Almost all respondents report that for their most recent injection, the syringe and needle were taken from a new, unopened package (96 percent of women and men).

The data show little variation in the use of injections by background characteristics. Married women and women in urban areas are slightly more likely than other women to have received an injection in the previous 12 months. The likelihood of receiving an injection also increases with level of education and wealth among women, but the patterns are less clear among men. Differences by region are shown in Maps 6.2 and 6.3 for women and men, respectively.

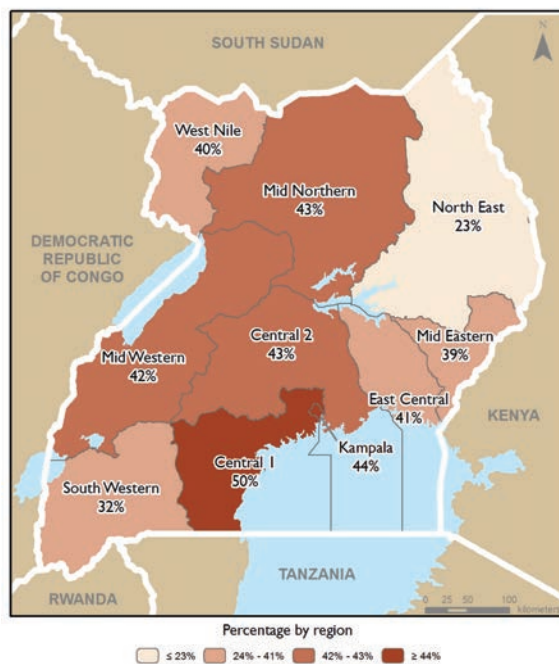
Table 6.12 Prevalence of medical injections

Percentage of women and men age 15-49 who received at least one medical injection in the past 12 months, the mean number of medical injections per person in the past 12 months, and among those who received a medical injection, the percentage of last medical injections for which the syringe and needle were taken from a new, unopened package, by background characteristics, Uganda 2011

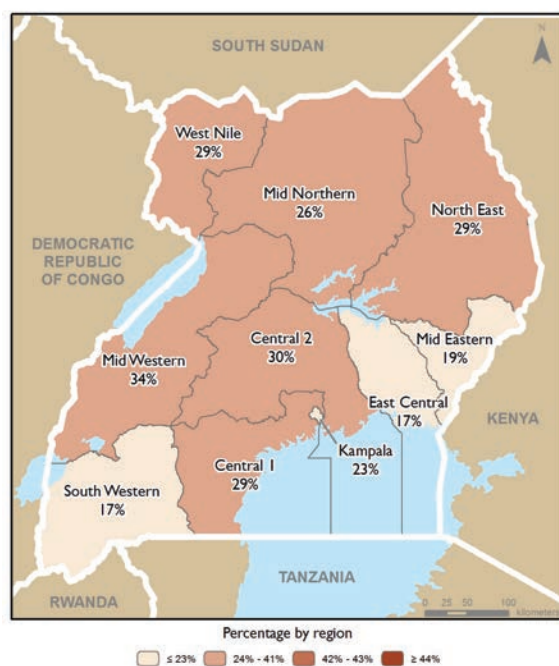
Background characteristic	Women					Men				
	Percentage who received a medical injection in the past 12 months	Mean number of medical injections per person in the past 12 months	Number of women	For last injection, syringe and needle taken from a new, unopened package	Number of women receiving medical injections in the past 12 months	Percentage who received a medical injection in the past 12 months	Mean number of medical injections per person in the past 12 months	Number of men	For last injection, syringe and needle taken from a new, unopened package	Number of men receiving medical injections in the past 12 months
<b>Age</b>										
15-24	37.5	1.9	4,621	96.7	1,735	22.4	1.3	3,479	95.8	781
15-19	31.0	1.6	2,458	96.5	763	20.7	1.1	2,072	95.4	429
20-24	45.0	2.3	2,163	96.9	972	25.0	1.5	1,406	96.4	352
25-29	45.3	2.3	1,942	97.6	879	26.8	1.9	1,354	95.9	363
30-39	42.6	2.4	2,833	95.9	1,208	28.8	2.2	2,289	97.1	660
40-49	34.6	2.2	1,764	94.6	611	25.3	1.9	1,612	96.2	407
<b>Marital status</b>										
Never married	29.9	1.4	2,641	96.7	790	22.4	1.2	3,227	95.5	723
Ever had sex	35.5	1.4	1,202	96.6	427	25.8	1.4	1,663	95.4	429
Never had sex	25.2	1.5	1,440	96.7	363	18.8	1.0	1,563	95.7	294
Married/Living together	43.8	2.5	7,097	96.3	3,112	26.8	2.0	4,994	96.7	1,340
Divorced/Separated/Widowed	37.4	2.1	1,422	96.4	531	28.9	2.1	514	96.5	148
<b>Residence</b>										
Urban	44.5	2.4	2,365	97.0	1,052	27.0	1.9	1,739	96.6	470
Rural	38.4	2.1	8,795	96.2	3,381	24.9	1.7	6,995	96.2	1,741
<b>Region</b>										
Central 1	49.7	2.3	1,206	97.4	599	29.1	1.7	1,009	95.7	294
Central 2	42.8	2.5	1,162	97.9	498	30.0	1.9	888	96.8	266
Kampala	44.1	2.5	875	96.0	386	23.0	1.3	674	95.1	155
East Central	40.8	1.9	1,153	96.2	471	16.7	1.0	933	95.4	156
Mid Eastern	38.7	1.8	1,133	94.5	439	18.8	1.1	950	95.1	179
North East	23.1	1.1	919	97.0	213	29.3	2.2	683	99.6	200
West Nile	39.9	1.5	712	97.0	284	29.1	1.6	548	97.8	160
Mid Northern	42.5	3.1	1,106	98.4	470	26.4	1.7	950	96.2	251
South Western	31.8	1.7	1,414	94.3	450	17.0	1.2	947	95.8	161
Mid Western	42.2	3.0	1,480	95.3	625	33.8	3.1	1,151	95.8	390
<b>Education</b>										
No education	34.6	2.5	1,566	95.9	543	22.1	1.4	485	95.5	107
Primary incomplete	38.9	2.1	5,218	96.3	2,029	25.0	1.6	3,727	96.0	932
Primary complete	41.7	2.2	1,388	95.3	579	23.1	1.7	1,230	95.3	284
Secondary or higher	42.9	2.2	2,988	97.1	1,283	27.0	1.9	3,292	97.1	887
<b>Wealth quintile</b>										
Lowest	35.4	2.0	1,894	95.7	671	22.6	1.2	1,504	97.4	340
Second	36.5	1.9	2,024	95.1	738	25.4	1.7	1,632	94.3	415
Middle	38.7	2.1	2,056	96.2	797	22.5	1.3	1,667	95.3	375
Fourth	41.6	2.1	2,292	97.0	954	25.8	2.5	1,706	96.2	439
Highest	44.0	2.6	2,894	97.1	1,273	28.9	1.8	2,226	97.7	642
Total 15-49	39.7	2.2	11,160	96.4	4,433	25.3	1.7	8,735	96.3	2,211
50-59	31.4	2.3	993	93.6	312	27.6	2.6	853	97.0	236
Total 15-59	39.0	2.2	12,153	96.2	4,744	25.5	1.8	9,588	96.4	2,447

Note : Medical injections are those given by a doctor, nurse, pharmacist, dentist or other health worker

**Map 6.2 Percentage who had an injection in previous 12 months: Women 15-49**



**Map 6.3 Percentage who had an injection in previous 12 months: Men 15-49**







**Key Findings**

- Young people are as likely as older adults to know how to prevent HIV infection, and they reject major misconceptions about HIV transmission just as often.
- Only 12 to 13 percent of young women and men say they had sex before age 15; however, by age 18, 60 percent of young women and 47 percent of young men have initiated sexual activity.
- Among never-married youth, 31 percent of women and 32 percent of men age 15-24 had sex in the 12 months prior to the survey. Less than half of young women (42 percent) and men (46 percent) who had premarital sex in the year before the survey reported using a condom the last time they had sex.

This chapter addresses HIV-related knowledge and sexual behaviour among youth age 15-24. Special attention is paid to members of this group because they are at an age when they are more likely to experiment with sexual activity and engage in high-risk sexual behaviour. In addition to knowledge of HIV transmission, data are presented in this chapter on youth who have sex at young ages, abstinence among never-married youth, multiple sexual partners, age differences between sexual partners, and coverage of voluntary counselling and testing for HIV.

## 7.1 COMPREHENSIVE KNOWLEDGE ABOUT HIV AMONG YOUNG PEOPLE

Young respondents interviewed in the 2011 Uganda AIDS Indicator Survey (UAIS) were asked the same set of questions on facts and beliefs about HIV transmission as older respondents. As shown in Tables 4.2, 4.3.1, and 4.3.2, young people are generally just as likely as older adults to know how to prevent HIV infection and to reject major misconceptions about the illness (see Chapter 4).

Table 7.1 shows the level of the composite indicator, 'comprehensive knowledge', among young people by selected background characteristics. Youth who are defined as having comprehensive knowledge are those (1) who agree with prompted questions regarding whether people can reduce their chances of contracting HIV by having just one faithful, uninfected sexual partner and by consistently using condoms during sexual intercourse; (2) who know that a healthy-looking person can have the AIDS virus; and (3) who know that HIV cannot be transmitted by mosquito bites or by sharing food with a person who has HIV.

Almost 40 percent of young women and men age 15-24 have comprehensive knowledge about HIV and AIDS (39 percent for each sex). Knowledge increases slightly with age and is higher among never-married youth who have had sex than among those never-married youth who never had sex. It is also higher among those who have never married in comparison with those who have been married. Young people in urban areas are more likely than rural youth to have comprehensive knowledge about HIV and AIDS. Those in Kampala are also more likely to have comprehensive knowledge than those in other regions. The proportion with comprehensive knowledge increases steadily with education.

**Table 7.1 Comprehensive knowledge about AIDS and of a source of condoms among young people**

Percentage of women and men age 15-24 with comprehensive knowledge about AIDS and percentage who know of a source of condoms, by background characteristics, Uganda 2011

Background characteristic	Women 15-24			Men 15-24		
	Percentage with comprehensive knowledge of AIDS <sup>1</sup>	Percentage who know a condom source <sup>2</sup>	Number of women	Percentage with comprehensive knowledge of AIDS <sup>1</sup>	Percentage who know a condom source <sup>2</sup>	Number of men
<b>Age</b>						
15-19	36.3	57.2	2,458	36.1	68.6	2,072
15-17	35.6	50.4	1,496	33.5	61.7	1,327
18-19	37.5	67.7	962	40.7	80.9	746
20-24	41.3	72.7	2,163	44.0	90.5	1,406
20-22	41.2	71.4	1,330	43.8	89.7	872
23-24	41.4	74.7	832	44.3	91.7	535
<b>Marital status</b>						
Never married	40.7	59.7	2,389	40.3	75.3	2,872
Ever had sex	45.9	76.2	972	43.1	91.7	1,352
Never had sex	37.2	48.4	1,417	37.7	60.7	1,521
Ever married	36.4	69.4	2,232	34.6	87.6	606
<b>Residence</b>						
Urban	49.7	79.6	1,112	55.2	88.3	740
Rural	35.2	59.6	3,509	35.0	74.5	2,739
<b>Region</b>						
Central 1	39.8	86.0	503	33.9	82.3	351
Central 2	41.4	66.7	457	42.0	77.0	324
Kampala	50.4	86.7	430	60.5	88.2	308
East Central	41.0	76.5	468	36.2	90.9	396
Mid Eastern	36.8	64.0	465	29.2	66.3	428
North East	31.9	39.8	333	45.1	59.2	229
West Nile	20.0	46.0	278	38.6	82.3	202
Mid Northern	27.7	44.2	465	41.7	58.0	367
South Western	46.5	59.2	559	37.7	78.2	386
Mid Western	40.2	62.3	663	36.4	86.8	488
<b>Education</b>						
No education	15.4	35.3	173	18.1	57.9	62
Primary incomplete	27.4	51.9	2,071	26.7	68.1	1,554
Primary complete	37.8	70.5	646	34.2	80.2	399
Secondary or higher	54.7	80.0	1,731	54.9	87.4	1,465
<b>Total</b>	<b>38.6</b>	<b>64.4</b>	<b>4,621</b>	<b>39.3</b>	<b>77.4</b>	<b>3,479</b>

<sup>1</sup> Comprehensive knowledge means knowing that consistent use of condom during sexual intercourse and having just one uninfected faithful partner can reduce the chance of getting the AIDS virus, knowing that a healthy-looking person can have the AIDS virus, and rejecting the two most common local misconceptions about transmission or prevention of the AIDS virus. The components of comprehensive knowledge are presented in Tables 4.2, 4.3.1, and 4.3.2

<sup>2</sup> For this table, the following responses are not considered sources for condoms: friends, family members and home

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. Table 7.1 shows that two-thirds of young women (64 percent) and three-quarters of young men (77 percent) know a source for condoms. Knowledge of a condom source is higher among youth age 20-24 than those age 15-19. Never-married youth who have ever had sex are most likely to know a source for condoms. Youth in urban areas, those in Kampala and East Central region, and those with more education are more likely to know a source for condoms. For young women, knowledge of a condom source increases from 35 percent among those with no education to 80 percent among those with at least some secondary education.

There has been an increase in the level of comprehensive knowledge about HIV among Ugandan youth. The proportion of young women with comprehensive knowledge increased from 30 percent in 2004-05 to 32 percent in 2006 and to 39 percent in 2011. Among young men, the proportion increased from 35 percent in 2004-05 to 38 percent in 2006 and to 39 percent in 2011. Knowledge of a condom source increased between 2004-05 and 2006, after which it has fallen back. For example, the proportion of young women who know a condom source was 53 percent in 2004-05, 70 percent in 2006, and 64 percent in 2011. Proportions among young men were 77 percent in 2004-05, 90 percent in 2006, and 77 percent in 2011.

## 7.2 EARLY INITIATION OF SEXUAL INTERCOURSE

Table 7.2 shows the percentage of young women and men who had sexual intercourse before reaching age 15 and age 18, according to background characteristics. The table shows that 13 percent of women and 12 percent of men age 15-24 reported that they had sex before they turned age 15, while 60 percent of women and 47 percent of men age 18-24 said they had sex before age 18.

Table 7.2 Age at first sexual intercourse among youth

Percentage of women and men age 15-24 who had sexual intercourse before age 15 and percentage of women and men age 18-24 who had sexual intercourse before age 18, by background characteristics, Uganda 2011

Background characteristic	Women age 15-24		Women age 18-24		Men age 15-24		Men age 18-24	
	Percentage who had sexual intercourse before age 15	Number of women 15-24	Percentage who had sexual intercourse before age 18	Number of women 18-24	Percentage who had sexual intercourse before age 15	Number of men 15-24	Percentage who had sexual intercourse before age 18	Number of men 18-24
<b>Age</b>								
15-19	11.4	2,458	na	na	12.9	2,072	na	na
15-17	11.5	1,496	na	na	12.5	1,327	na	na
18-19	11.3	962	62.7	962	13.5	746	49.8	746
20-24	15.0	2,163	59.1	2,163	10.5	1,406	45.1	1,406
20-22	14.4	1,330	61.2	1,330	9.9	872	46.7	872
23-24	16.1	832	55.8	832	11.4	535	42.6	535
<b>Marital status</b>								
Never married	7.7	2,389	39.4	1,024	11.4	2,872	44.7	1,552
Ever married	18.9	2,232	70.3	2,101	14.0	606	52.0	600
<b>Knows condom source<sup>1</sup></b>								
Yes	14.4	2,976	62.7	2,223	13.4	2,694	49.7	1,876
No	10.7	1,644	54.1	902	6.7	785	26.9	276
<b>Residence</b>								
Urban	10.8	1,112	55.0	775	11.6	740	44.6	526
Rural	13.8	3,509	61.9	2,350	12.0	2,739	47.4	1,627
<b>Region</b>								
Central 1	15.6	503	65.8	356	10.0	351	46.2	230
Central 2	12.7	457	66.8	313	13.6	324	43.7	201
Kampala	8.5	430	54.3	318	10.4	308	46.9	222
East Central	22.3	468	75.6	303	19.3	396	55.9	230
Mid Eastern	17.8	465	67.2	308	10.6	428	50.2	235
North East	15.1	333	65.3	244	4.2	229	37.3	133
West Nile	9.3	278	55.0	183	7.1	202	49.8	130
Mid Northern	8.1	465	59.6	311	9.8	367	43.0	219
South Western	5.1	559	32.7	352	8.2	386	35.2	243
Mid Western	15.5	663	61.5	438	18.2	488	54.0	311
<b>Education</b>								
No education	18.8	173	61.6	153	14.5	62	(51.4)	51
Primary incomplete	17.8	2,071	70.5	1,284	14.0	1,554	48.6	767
Primary complete	13.1	646	63.3	496	13.0	399	48.4	289
Secondary or higher	6.9	1,731	47.6	1,192	9.2	1,465	44.7	1,045
<b>Total</b>	13.1	4,621	60.2	3,125	11.9	3,479	46.7	2,152

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

na = Not available

<sup>1</sup> For this table, the following responses are not considered a source for condoms: friends, family members and home

Ever-married women and men are more likely to initiate sexual activity at an early age than never-married youth. Early sexual initiation is somewhat more likely among those who know of a source for condoms. Young people in rural areas are slightly more likely to have early initiation of sexual activity than urban youth. East Central region stands out as having the highest proportions of youth having sex at early ages. Education is related to age at first sex for young people. Among women age 15-24 with no education, 19 percent had sex before age 15, compared with only 7 percent of young women with at least some secondary school education. Among women, a roughly similar pattern pertains for having sex before age 18. Education is only weakly associated with age at first sex for young men.

The proportions of young women and men who initiated sex before age 15 and before age 18 have hardly changed at all since 2004-05. For example, the proportion of women age 15-24 that had sex by age 15 was 14 percent in 2004-05, 16 percent in 2006, and 13 percent in 2011.

### 7.3 CONDOM USE AT FIRST SEXUAL INTERCOURSE

Table 7.3 shows the percentage of young women and men who used a condom the first time they had sexual intercourse, according to background characteristics. The table shows that over one-third of young people who ever had sex reported that they used a condom the first time they had sex.

Women age 15-19 are more likely than women in their early twenties to have used a condom the first time they had sex; the reverse is true among men. Condom use at first sex is substantially higher among never-married youth, those who know of a condom source, those who live in urban areas, and those in Kampala. It increases with education level.

**Table 7.3 Condom use at first sex**

Among women and men age 15-24 who have ever had sex, the percentage who used a condom the first time they ever had sex, according to background characteristics, Uganda AIS 2011

Background characteristic	Women 15-24 who ever had sex		Men 15-24 who ever had sex	
	Percent who used a condom at first sex	Number 15-24 who ever had sex	Percent who used a condom at first sex	Number 15-24 who ever had sex
<b>Age</b>				
15-19	42.1	1,126	29.4	743
15-17	44.5	442	21.4	310
18-19	40.6	684	35.1	433
20-24	31.1	1,932	37.1	1,193
20-22	33.5	1,167	40.1	701
23-24	27.5	765	32.8	492
<b>Marital status</b>				
Never married	55.5	972	38.2	1,352
Ever married	25.7	2,087	24.5	584
<b>Knows condom source<sup>1</sup></b>				
Yes	40.0	2,212	36.2	1,752
No	22.6	846	14.1	185
<b>Residence</b>				
Urban	52.8	748	50.1	450
Rural	29.5	2,311	29.3	1,487
<b>Region</b>				
Central 1	39.2	369	43.4	224
Central 2	44.2	325	35.9	184
Kampala	55.7	282	52.9	175
East Central	40.7	327	26.7	238
Mid Eastern	27.0	298	22.2	211
North East	37.0	210	43.2	104
West Nile	31.0	161	38.5	117
Mid Northern	29.7	328	43.1	194
South Western	18.4	318	21.2	175
Mid Western	30.2	439	26.5	314
<b>Education</b>				
No education	7.5	117	18.4	42
Primary incomplete	22.6	1,358	21.0	761
Primary complete	31.6	490	30.2	274
Secondary or higher	55.3	1,093	47.8	859
<b>Total</b>	<b>35.2</b>	<b>3,059</b>	<b>34.1</b>	<b>1,936</b>

<sup>1</sup> For this table, the following responses are not considered a source for condoms: friends, family members and home

## 7.4 ABSTINENCE AND PREMARITAL SEX

The time between initiation of sexual activity and marriage often carries a higher risk of exposure to HIV since relationships may be less stable. Table 7.4 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 who had sex, the percentage who used a condom at their most recent sexual intercourse.

Table 7.4 Premarital sexual intercourse and condom use during premarital sexual intercourse among young people

Among never-married women and men age 15-24, the percentage who have never had sexual intercourse, the percentage who had sexual intercourse in the past 12 months, and, among those who had premarital sexual intercourse in the past 12 months, the percentage who used a condom at the last sexual intercourse, by background characteristics, Uganda 2011

Background characteristic	Never-married women age 15-24					Never-married men age 15-24				
	Percentage who have never had sexual intercourse	Percentage who had sexual intercourse in the past 12 months	Number of never married women	Among women who had sexual intercourse in the past 12 months:		Percentage who have never had sexual intercourse	Percentage who had sexual intercourse in the past 12 months	Number of never married men	Among men who had sexual intercourse in the past 12 months:	
				Percentage who used a condom at last sexual intercourse	Number of women				Percentage who used a condom at last sexual intercourse	Number of men
<b>Age</b>										
15-19	68.3	23.6	1,897	46.3	447	65.6	21.5	2,020	38.3	433
15-17	76.6	18.3	1,365	47.6	250	76.9	13.3	1,321	29.5	175
18-19	47.0	37.0	532	44.6	197	44.1	36.9	700	44.2	258
20-24	24.7	58.6	492	36.2	288	23.0	57.4	852	52.9	489
20-22	28.1	55.0	360	36.1	198	25.5	55.4	635	51.8	352
23-24	15.5	68.3	132	36.4	90	15.7	63.4	217	55.6	137
<b>Knows condom source<sup>1</sup></b>										
Yes	48.1	39.9	1,427	44.3	570	42.7	39.8	2,163	47.4	862
No	76.0	17.2	962	35.5	166	84.1	8.6	710	26.1	61
<b>Residence</b>										
Urban	49.4	41.0	703	50.4	288	43.6	38.2	657	61.7	251
Rural	63.5	26.5	1,686	37.2	447	55.7	30.3	2,216	40.2	672
<b>Region</b>										
Central 1	53.4	39.2	248	40.2	97	42.8	41.6	295	52.7	123
Central 2	55.6	36.9	233	44.5	86	53.4	29.6	263	52.5	78
Kampala	52.5	39.4	278	48.3	110	47.6	37.5	279	75.0	105
East Central	51.3	34.0	225	36.6	77	47.9	32.5	326	42.5	106
Mid Eastern	63.7	27.1	237	41.7	64	59.5	27.8	359	29.8	100
North East	60.4	25.8	135	(55.6)	35	69.1	27.5	178	(44.1)	49
West Nile	74.4	17.9	130	(51.4)	23	50.2	38.6	158	56.0	61
Mid Northern	62.3	30.0	217	(47.1)	65	59.9	25.6	289	47.4	74
South Western	71.4	15.7	335	(28.4)	53	61.1	20.0	338	22.2	68
Mid Western	54.2	35.9	351	39.2	126	43.7	41.3	388	37.3	160
<b>Education</b>										
No education	(73.0)	(23.6)	30	*	7	(50.2)	(37.4)	*	22.5	13
Primary incomplete	67.8	23.6	932	29.5	220	62.1	26.1	1,255	39.5	327
Primary complete	55.2	31.9	255	31.2	82	44.2	41.5	276	37.9	115
Secondary or higher	53.1	36.4	1,172	51.3	426	46.1	35.8	1,306	53.2	468
<b>Total</b>	<b>59.3</b>	<b>30.8</b>	<b>2,389</b>	<b>42.3</b>	<b>735</b>	<b>52.9</b>	<b>32.1</b>	<b>2,872</b>	<b>46.0</b>	<b>923</b>

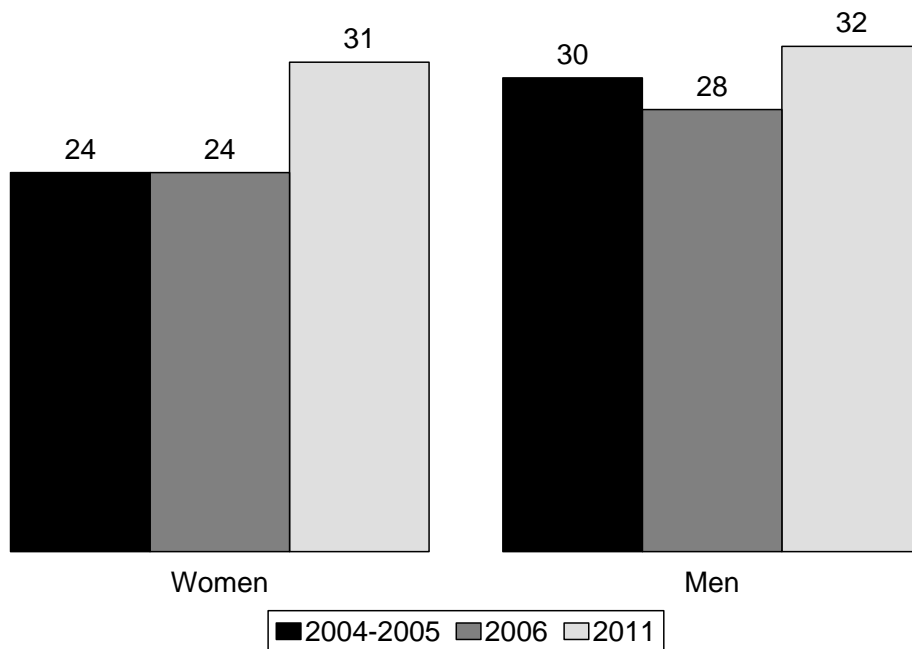
Note: Figures in parentheses are based on 25-49 unweighted cases; an asterisk denotes a figure based on fewer than 25 unweighted cases that has been suppressed.

<sup>1</sup> For this table, the following responses are not considered a source for condoms: friends, family members and home

Almost 6 in 10 never-married women age 15-24 report that they have never had sex, slightly higher than the 53 percent of never-married young men. The percentage of unmarried youths who report that they have never had sex drops substantially from the 15-19 age group to the 20-24 age group. Primary abstinence is higher among those who do not know a source for condoms and for rural youth. It is highest among women in West Nile region and among men in North East region. The proportion of never-married youth who have never had sex decreases as education level increases. This may be due to the fact that youth with higher levels of education are likely to be older. Comparison of data with previous surveys shows very little change in the proportion of youth who have never had sex.

Among never-married youth, 31 percent of women and 32 percent of men age 15-24 had sex in the 12 months prior to the survey. The proportion of never-married young men and women who have been sexually active in the past 12 months more than doubles between age groups 15-19 and 20-24. Premarital sexual activity is more common among youth in urban areas and among youth with higher levels of education. As shown in Figure 7.1, changes in the level of premarital sex over the recent past are not large.

**Figure 7.1 Trends in premarital sex among youth**

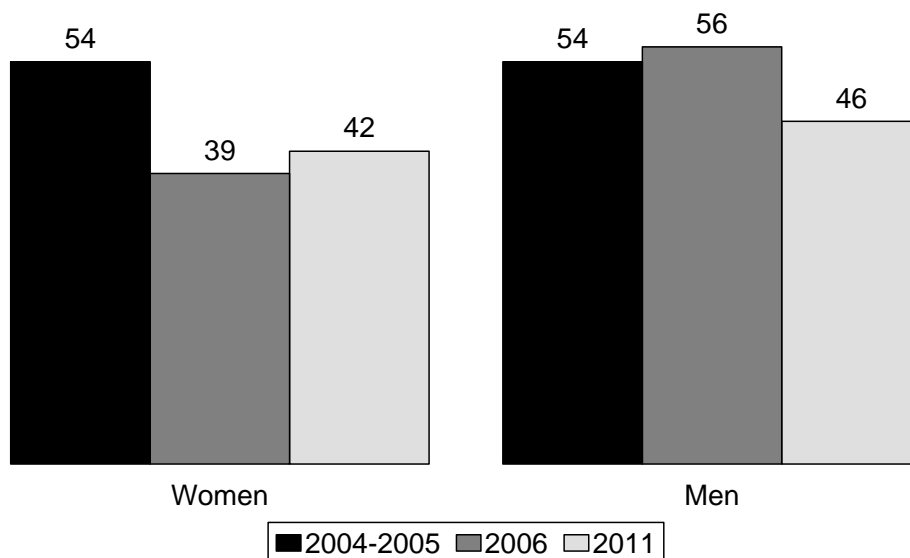


Note: Percentage of never-married women and men 15-24 who had sex in the 12 months before the survey

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Less than half of young women (42 percent) and men (46 percent) who had premarital sex in the year before the survey reported using a condom the last time they had sex. Condom use at last sex is higher among urban youth and those with higher levels of education. As shown in Figure 7.2, the proportion of youth who had premarital sex in the year before the survey and who said they used a condom the last time they had sex has declined somewhat since 2004-05, though the pattern fluctuates.

**Figure 7.2 Trends in condom use at last premarital sex among youth**



Note: Among never-married women and men 15-24 who had sex in the 12 months before the survey, percentage who used a condom at last sex.

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## 7.5 MULTIPLE SEXUAL PARTNERS AMONG YOUTH

Table 7.5 shows the proportion of women and men age 15-24 who reported that they had two or more sexual partners in the 12 months before the survey and, among those, the proportion who used a condom the last time they had sex. Overall, only 3 percent of young women reported having two or more partners, compared with 10 percent of young men. Among those who had two or more sexual partners in the 12 months before the survey, 24 percent of women and 31 percent of men said they used a condom the last time they had sex.

There are only minor differences by background characteristics in the proportion of young women who had two or more partners. Among men, the level rises with age and is higher among men who have married than among never-married young men. It is also higher among men who know a condom source, urban young men, and those in East Central and Mid Western regions. Young men who have completed primary school are more likely to have had two or more partners in the past 12 months than those with less education.

Analysis of differentials in condom use at last sex among young women with two or more sexual partners in the 12 months before the survey is difficult because of the small number of women reporting multiple partners. Among young men with two or more partners, condom use is higher among never-married men, men in urban areas, and men who have at least some secondary education than among other young men with multiple partners.

Table 7.5 Multiple sexual partners in the past 12 months among young people

Among all young women and men age 15-24, the percentage who had sexual intercourse with more than one sexual partner in the past 12 months, and among those having more than one partner in the past 12 months, the percentage reporting that a condom was used at last intercourse, by background characteristics, Uganda 2011

Background characteristic	Among all women age 15-24		Among women age 15-24 who had 2+ partners in the past 12 months		Among all men age 15-24		Among men age 15-24 who had 2+ partners in the past 12 months	
	Percentage who had 2+ partners in the past 12 months	Number of women	Percentage who reported using a condom at last intercourse	Number of women	Percentage who had 2+ partners in the past 12 months	Number of men	Percentage who reported using a condom at last intercourse	Number of men
<b>Age</b>								
15-19	2.2	2,458	25.5	54	4.7	2,072	31.7	97
15-17	1.4	1,496	*	21	2.3	1,327	(40.1)	30
18-19	3.4	962	(12.4)	32	9.0	746	27.9	67
20-24	4.1	2,163	23.4	90	17.6	1,406	30.3	247
20-22	4.0	1,330	19.8	53	15.8	872	34.3	138
23-24	4.4	832	(28.6)	37	20.5	535	25.3	110
<b>Marital status</b>								
Never married	2.4	2,389	41.9	56	7.3	2,872	39.2	210
Ever married	3.9	2,232	12.8	87	22.1	606	17.3	134
<b>Knows condom source<sup>1</sup></b>								
Yes	3.7	2,976	27.2	111	12.3	2,694	31.5	331
No	1.9	1,644	(13.9)	32	1.7	785	*	13
<b>Residence</b>								
Urban	4.4	1,112	(38.5)	49	11.5	740	49.6	85
Rural	2.7	3,509	16.7	94	9.5	2,739	24.5	259
<b>Region</b>								
Central 1	5.3	503	*	27	13.3	351	(35.0)	47
Central 2	4.0	457	*	18	6.7	324	*	22
Kampala	4.6	430	*	20	8.5	308	(55.1)	26
East Central	4.4	468	*	20	17.1	396	31.6	68
Mid Eastern	2.5	465	*	12	7.2	428	(30.8)	31
North East	1.1	333	*	4	6.8	229	*	15
West Nile	2.1	278	*	6	9.6	202	(33.1)	19
Mid Northern	2.2	465	*	10	4.1	367	*	15
South Western	1.1	559	*	6	8.2	386	*	32
Mid Western	3.2	663	*	21	14.2	488	22.5	69
<b>Education</b>								
No education	2.1	173	*	4	8.0	62	*	5
Primary incomplete	3.4	2,071	7.0	71	8.1	1,554	25.6	126
Primary complete	3.0	646	*	19	15.8	399	20.2	63
Secondary or higher	2.9	1,731	(41.5)	50	10.2	1,465	40.5	150
Total 15-24	3.1	4,621	24.2	143	9.9	3,479	30.7	344

Note: Figures in parentheses are based on 25-49 unweighted cases; an asterisk denotes a figure based on fewer than 25 unweighted cases that has been suppressed.

<sup>1</sup> For this table, the following responses are not considered a source for condoms: friends, family members and home

## 7.6 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. In order to assess age differences between sexual partners, young women who had sex in the 12 months prior to the survey were asked the ages of all their sexual partners in the last 12 months. If they did not know the ages of their partners, they were asked if their partners were older or younger than they were, and if older, whether they were 10 or more years older than they were.



As shown in Table 8.5, 13 percent of women age 15-19 who had sex in the 12 months preceding the survey had sex with a partner who was 10 or more years older. Girls who have been married are more likely to have older partners than those who have never been married. The proportion of sexually active girls who had sexual intercourse with a partner who was 10 or more years older decreases as education level increases.

**Table 7.6 Age-mixing in sexual relationships among women age 15-19**

Among women of age 15-19 who had sexual intercourse in the past 12 months, percentage who had sexual intercourse with a partner who was 10 or more years older than themselves, by background characteristics, Uganda 2011

Background characteristic	Women 15-19 who had sexual intercourse in the past 12 months	
	Percentage who had sexual intercourse with a man 10+ years older	Number of women
<b>Age</b>		
15-17	10.1	377
18-19	14.2	602
<b>Marital status</b>		
Never married	7.8	447
Ever married	16.7	532
<b>Knows condom source<sup>1</sup></b>		
Yes	12.7	677
No	12.5	301
<b>Residence</b>		
Urban	16.9	217
Rural	11.5	761
<b>Region</b>		
Central 1	19.7	108
Central 2	6.6	122
Kampala	17.9	64
East Central	10.5	126
Mid Eastern	12.4	89
North East	9.7	69
West Nile	5.0	47
Mid Northern	10.4	106
South Western	13.9	73
Mid Western	16.4	175
<b>Education</b>		
No education	(24.3)	29
Primary incomplete	13.5	508
Primary complete	15.7	136
Secondary or higher	8.8	305
<b>Total</b>	<b>12.7</b>	<b>979</b>

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

<sup>1</sup> For this table, the following responses are not considered a source for condoms: friends, family members and home



**Key Findings**

- Among Ugandan adults, 7.3 percent are HIV-positive, with prevalence being higher among women (8.2 percent) than among men (6.1 percent).
- HIV prevalence increased slightly from the level of 6.4 percent in 2004-05.
- HIV prevalence is highest among women and men in Central 1 region and lowest among those in Mid Eastern region.
- HIV is much more common among women and men who are widowed, divorced, or separated than among those who are married or never-married.
- Six percent of co-habiting couples in Uganda are discordant, i.e., one partner is HIV-positive and the other is HIV-negative.
- Less than one percent of children under age 5 tested positive for HIV.

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 in order to inform programme strategic planning, monitoring, and evaluation. There are a number of recognised limitations in estimating HIV prevalence from the sentinel surveillance system because it represents only pregnant women in a limited number of sentinel clinics. The inclusion of HIV testing in the 2004-05 Uganda HIV Sero-Behavioural Survey (UHSBS) and again in the 2011 Uganda AIDS Indicator Survey (UAIS) offers the opportunity to better understand the magnitude and pattern of the infection in the Ugandan general population of reproductive age as well as to track trends over time among this group. Tracking new infections—incidence—is a better measure of the dynamics of the epidemic but there are limitations on how it can be tracked.

This chapter presents information on HIV testing coverage among eligible survey respondents, the prevalence of HIV infection among those tested, and the factors associated with HIV infection in the population. The methodology of blood specimen collection and testing used in the UAIS is described in Chapter 1.

**8.1 COVERAGE RATES FOR HIV TESTING**

Table 8.1 shows the percent distribution of women and men age 15-49 who were eligible for HIV testing by testing status, according to residence and region. Of all respondents age 15-49 who were eligible, 96 percent were interviewed and tested for HIV. Three percent were not interviewed, and only 1 percent were interviewed and refused to provide a blood sample for testing. A tiny fraction of eligible women and men was interviewed but either was absent when the laboratory technician was available to do the testing or was missing HIV test results for some other reason.

Coverage levels for the HIV testing in the UAIS are higher for women (97 percent) than men (94 percent), mainly because men are more likely not to have been interviewed (4 percent) than women

(2 percent). Coverage levels for HIV testing do not vary much by urban-rural residence. They are lower in North East region for both women and men, but especially low for men, mainly due to higher-than-average levels of non-interview but also due to higher levels of refusal to provide blood samples.

**Table 8.1 Coverage of HIV testing by residence and region**

Percent distribution of women and men age 15-49 eligible for HIV testing by testing status, according to residence and region (unweighted), Uganda 2011

Background characteristic	Testing status					Total	Number
	Interviewed and:				Not interviewed and not tested		
	HIV tested in central lab	Refused to provide blood sample	Absent at the time of blood collection	Other/missing <sup>1</sup>			
<b>WOMEN</b>							
<b>Residence</b>							
Urban	96.3	1.3	0.0	0.2	2.1	100.0	2,403
Rural	96.9	1.0	0.1	0.3	1.7	100.0	8,950
<b>Region</b>							
Central 1	97.1	1.1	0.0	0.1	1.7	100.0	1,036
Central 2	98.5	0.4	0.0	0.2	1.0	100.0	1,100
Kampala	95.5	1.2	0.1	0.1	3.1	100.0	1,222
East Central	98.2	0.4	0.0	0.2	1.2	100.0	1,157
Mid Eastern	99.0	0.3	0.1	0.0	0.7	100.0	1,159
North East	93.3	2.6	0.1	0.7	3.3	100.0	1,062
West Nile	95.4	1.4	0.3	0.3	2.7	100.0	1,180
Mid Northern	95.8	1.1	0.2	0.8	2.1	100.0	1,090
South Western	96.6	1.4	0.1	0.8	1.1	100.0	1,116
Mid Western	98.1	0.6	0.0	0.1	1.1	100.0	1,231
Total 15-49	96.8	1.0	0.1	0.3	1.8	100.0	11,353
Total 15-59	96.7	1.1	0.1	0.3	1.8	100.0	12,374
<b>MEN</b>							
<b>Residence</b>							
Urban	93.1	2.0	0.2	0.3	4.5	100.0	1,828
Rural	94.3	1.4	0.1	0.3	3.9	100.0	7,252
<b>Region</b>							
Central 1	93.9	1.7	0.0	0.0	4.4	100.0	841
Central 2	97.0	0.7	0.0	0.2	2.1	100.0	860
Kampala	93.7	1.8	0.0	0.3	4.2	100.0	965
East Central	95.5	0.7	0.1	0.4	3.3	100.0	970
Mid Eastern	97.2	0.7	0.3	0.3	1.5	100.0	994
North East	87.6	3.2	0.0	0.4	8.8	100.0	776
West Nile	92.5	1.6	0.3	0.4	5.1	100.0	923
Mid Northern	92.1	2.3	0.2	0.7	4.7	100.0	988
South Western	95.6	1.3	0.0	0.4	2.7	100.0	768
Mid Western	94.8	1.3	0.2	0.0	3.7	100.0	995
Total 15-49	94.1	1.5	0.1	0.3	4.0	100.0	9,080
Total 15-59	94.2	1.5	0.1	0.3	4.0	100.0	9,983
<b>BOTH SEXES</b>							
<b>Residence</b>							
Urban	94.9	1.6	0.1	0.2	3.1	100.0	4,231
Rural	95.7	1.2	0.1	0.3	2.7	100.0	16,202
<b>Region</b>							
Central 1	95.7	1.3	0.0	0.1	2.9	100.0	1,877
Central 2	97.8	0.5	0.0	0.2	1.5	100.0	1,960
Kampala	94.7	1.5	0.0	0.2	3.6	100.0	2,187
East Central	96.9	0.6	0.0	0.3	2.2	100.0	2,127
Mid Eastern	98.1	0.5	0.2	0.1	1.1	100.0	2,153
North East	90.9	2.9	0.1	0.5	5.6	100.0	1,838
West Nile	94.2	1.5	0.3	0.3	3.8	100.0	2,103
Mid Northern	94.0	1.7	0.2	0.8	3.3	100.0	2,078
South Western	96.2	1.4	0.1	0.6	1.8	100.0	1,884
Mid Western	96.6	0.9	0.1	0.0	2.3	100.0	2,226
Total 15-49	95.6	1.2	0.1	0.3	2.8	100.0	20,433
Total 15-59	95.6	1.3	0.1	0.3	2.8	100.0	22,357

<sup>1</sup> Includes: 1) other results of blood collection (e.g. technical problem in the field), 2) lost specimens, 3) non corresponding bar codes, and 4) other lab results such as blood not tested for technical reason, not enough blood to complete the algorithm, etc.

Table 8.2 shows coverage of HIV testing by age group, education, and wealth quintile. Overall, the proportion of eligible respondents who were interviewed and for whom there are HIV test results from the central laboratory varies very little by age, education, or wealth. It increases slightly with age, but only for women. Coverage is slightly lower among women and men with no education than among those with some education.

Table 8.2 Coverage of HIV testing by selected background characteristics

Percent distribution of women and men age 15-49 eligible for HIV testing by testing status, according to selected background characteristics (unweighted), Uganda 2011

Background characteristic	Testing status					Total	Number
	Interviewed and:				Not interviewed and not tested		
	HIV tested in central lab	Refused to provide blood sample	Absent at the time of blood collection	Other/missing <sup>1</sup>			
<b>WOMEN</b>							
<b>Age</b>							
15-24	96.1	1.1	0.1	0.3	2.4	100.0	4,728
15-19	95.1	1.2	0.1	0.4	3.2	100.0	2,533
20-24	97.3	1.0	0.1	0.2	1.4	100.0	2,195
25-29	97.2	0.9	0.1	0.5	1.3	100.0	1,947
30-34	97.0	1.3	0.1	0.3	1.3	100.0	1,484
35-39	97.0	1.1	0.1	0.1	1.7	100.0	1,385
40-44	97.3	0.9	0.1	0.5	1.2	100.0	956
45-49	98.0	0.6	0.0	0.1	1.3	100.0	853
<b>Education</b>							
No education	93.6	1.8	0.1	0.3	4.2	100.0	1,700
Primary incomplete	97.7	0.8	0.0	0.3	1.1	100.0	5,306
Primary complete	98.0	0.9	0.3	0.2	0.6	100.0	1,337
Secondary or higher	96.3	1.1	0.1	0.3	2.2	100.0	3,010
<b>Wealth quintile</b>							
Lowest	95.1	1.5	0.1	0.4	2.9	100.0	2,190
Second	97.4	0.8	0.2	0.2	1.4	100.0	2,079
Middle	97.7	0.6	0.1	0.2	1.3	100.0	2,020
Fourth	97.6	0.8	0.0	0.3	1.3	100.0	2,193
Highest	96.2	1.4	0.0	0.3	2.0	100.0	2,871
Total	96.8	1.0	0.1	0.3	1.8	100.0	11,353
<b>MEN</b>							
<b>Age</b>							
15-24	93.9	1.4	0.2	0.5	4.0	100.0	3,628
15-19	93.9	1.2	0.3	0.6	4.0	100.0	2,177
20-24	93.9	1.6	0.1	0.4	4.1	100.0	1,451
25-29	94.4	1.4	0.1	0.1	4.0	100.0	1,391
30-34	93.7	2.1	0.0	0.2	4.0	100.0	1,213
35-39	93.9	1.7	0.0	0.3	4.1	100.0	1,165
40-44	94.7	1.7	0.2	0.1	3.3	100.0	917
45-49	94.4	1.0	0.0	0.4	4.2	100.0	766
<b>Education</b>							
No education	83.6	3.4	0.0	0.6	12.5	100.0	535
Primary incomplete	95.3	1.3	0.1	0.3	3.0	100.0	3,837
Primary complete	94.7	1.6	0.1	0.3	3.3	100.0	1,277
Secondary or higher	94.1	1.4	0.2	0.3	4.0	100.0	3,431
<b>Wealth quintile</b>							
Lowest	92.8	1.9	0.1	0.5	4.7	100.0	1,730
Second	94.4	1.4	0.1	0.3	3.8	100.0	1,743
Middle	96.1	0.9	0.0	0.1	2.9	100.0	1,681
Fourth	94.4	1.4	0.2	0.4	3.5	100.0	1,668
Highest	93.0	1.8	0.2	0.3	4.7	100.0	2,258
Total	94.1	1.5	0.1	0.3	4.0	100.0	9,080

<sup>1</sup> Includes: (1) other results of blood collection (e.g., technical problem in the field), (2) lost specimens, (3) noncorresponding bar codes, and (4) other lab results such as blood not tested for technical reason, not enough blood to complete the algorithm, etc.

## 8.2 HIV PREVALENCE BY AGE AND SEX

The survey results show that 7.3 percent of Ugandan adults age 15-49 tested HIV-positive (Table 8.3). HIV prevalence is higher for women than men; overall, 8.3 percent of women have HIV compared with 6.1 percent of men. Prevalence for women is higher than for men at every age group except in the 40-44 age group, where it is marginally lower (Figure 8.1). For both sexes, HIV infection levels are highest among those in their thirties and forties and are lowest in the 15-19 age group—3.0 percent among women and 1.7 percent among men (Figure 8.1). Prevalence of HIV for both women and men increases with age until it reaches a peak, which for women is attained at age 35-39 (12.1 percent) and for men at age 40-44 (11.3 percent).

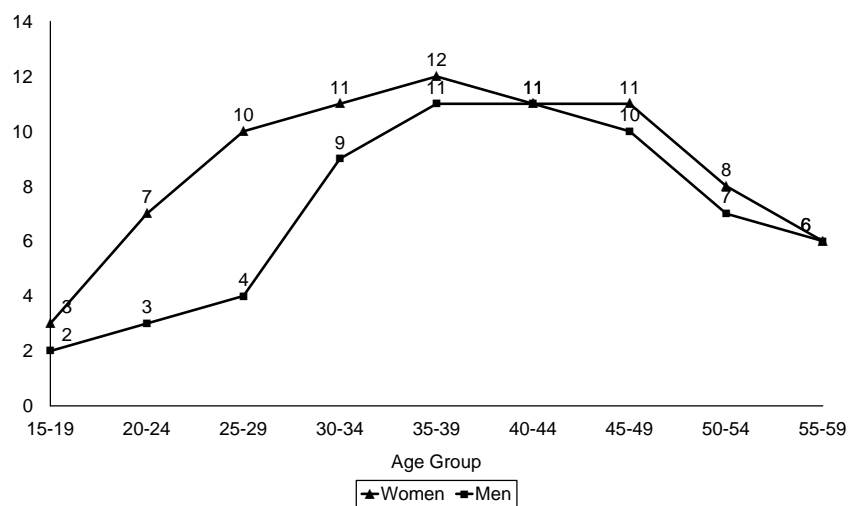
**Table 8.3 HIV prevalence by age**

Among de facto women and men age 15-59 who were interviewed and tested, the percentage HIV positive, by age, Uganda 2011

Age	Women		Men		Both sexes	
	Percentage HIV positive	Number	Percentage HIV positive	Number	Percentage HIV positive	Number
15-24	4.9	4,504	2.1	3,450	3.7	7,954
15-19	3.0	2,393	1.7	2,055	2.4	4,448
20-24	7.1	2,111	2.8	1,395	5.4	3,506
25-29	9.8	1,897	4.0	1,350	7.4	3,246
30-34	11.0	1,434	9.1	1,144	10.2	2,578
35-39	12.1	1,326	11.0	1,123	11.6	2,448
40-44	10.7	921	11.3	883	11.0	1,805
45-49	10.5	801	10.2	723	10.4	1,524
50-54	7.7	593	6.5	520	7.1	1,114
55-59	5.5	366	5.8	331	5.7	696
Total 15-49	8.3	10,883	6.1	8,673	7.3	19,556
50-59	6.9	959	6.3	851	6.6	1,810
Total 15-59	8.2	11,842	6.1	9,524	7.3	21,366

Note: Prevalence is based on the central laboratory results, not the home-based rapid test performed in the field.

**Figure 8.1 HIV prevalence by sex and age**



Uganda AIS 2011

### 8.3 TRENDS IN HIV PREVALENCE

Results from the 2011 UAIS show a slight increase in HIV prevalence since the 2004-05 UHSBS, from 6.4 to 7.3 percent of adults age 15-49 (Table 8.4). The proportion of women age 15-49 that are HIV-positive increased from 7.5 to 8.3 percent, while the proportion among men increased from 5.0 to 6.1 percent. Given the expansion of programmes to promote healthy living and provide antiretroviral treatment to extend the lives of those with HIV, it would be expected that HIV prevalence would rise over time.

**Table 8.4 Trends in HIV prevalence by age**

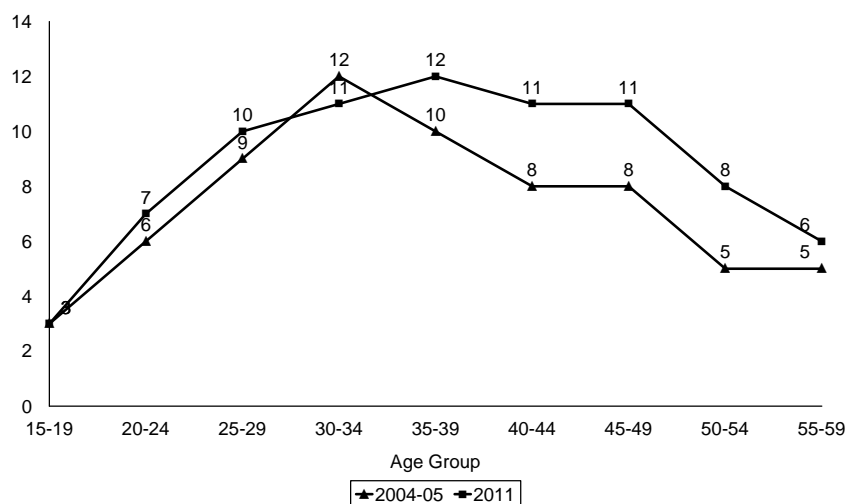
Among de facto women and men age 15-59 who were interviewed and tested, the percentage HIV positive, by age, Uganda 2004-05 and 2011

Age	Women				Men				Both sexes			
	2004-05		2011		2004-05		2011		2004-05		2011	
	Percent-age HIV positive	Number tested	Percent-age HIV positive	Number tested	Percent-age HIV positive	Number tested	Percent-age HIV positive	Number tested	Percent-age HIV positive	Number tested	Percent-age HIV positive	Number tested
15-19	2.6	2,062	3.0	2,393	0.3	1,932	1.7	2,055	1.5	3,994	2.4	4,448
20-24	6.3	1,803	7.1	2,111	2.4	1,184	2.8	1,395	4.7	2,987	5.4	3,506
25-29	8.7	1,679	9.8	1,897	5.9	1,123	4.0	1,350	7.6	2,802	7.4	3,246
30-34	12.1	1,374	11.0	1,434	8.1	1,139	9.1	1,144	10.3	2,513	10.2	2,578
35-39	9.9	1,029	12.1	1,326	9.2	868	11.0	1,123	9.6	1,897	11.6	2,448
40-44	8.4	823	10.7	921	9.3	745	11.3	883	8.8	1,568	11.0	1,805
45-49	8.2	621	10.5	801	6.9	524	10.2	723	7.6	1,145	10.4	1,524
50-54	5.4	513	7.7	593	6.9	452	6.5	520	6.1	965	7.1	1,114
55-59	4.9	322	5.5	366	5.8	332	5.8	331	5.4	654	5.7	696
Total 15-49	7.5	9,391	8.3	10,883	5.0	7,515	6.1	8,673	6.4	16,906	7.3	19,556
Total 15-59	7.3	10,227	8.2	11,842	5.2	8,298	6.1	9,524	6.3	18,525	7.3	21,366

Note: Prevalence is based on the central laboratory results.

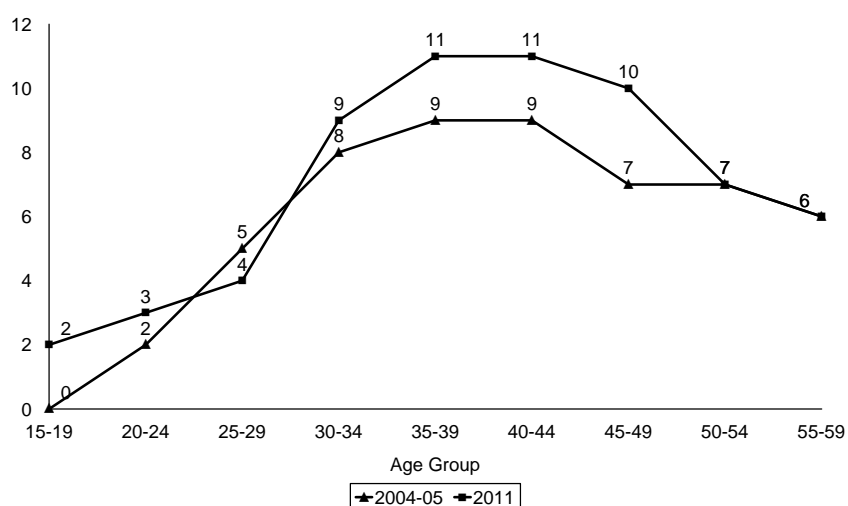
Figures 8.2 and 8.3 show trends in HIV prevalence between 2004-05 and 2011 for women and men separately by age group. The graphs indicate that the small increase in HIV prevalence is concentrated in the late thirties and forties.

**Figure 8.2 Trends in HIV prevalence among women by age**



Uganda AIS 2011

**Figure 8.3 Trends in HIV prevalence among men by age**



Uganda AIS 2011

## 8.4 HIV PREVALENCE BY SOCIOECONOMIC CHARACTERISTICS

Some adults are much more likely than others to be living with HIV. As shown in Table 8.5, 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 13 percent of adults HIV-positive. Rates are also high among the Banyankore, the Acholi, the Bakiga, and the Baganda (all 9 percent). Those with relatively low infection levels are the Karimojong (3 percent) and the Lugbara/Madi (4 percent). Differences in HIV infection by religion are minimal, with only slightly lower rates among Muslims than Christians. HIV prevalence is higher among those who are employed (8 percent) than those who are not (5 percent). This is true for women and men.

**Table 8.5 HIV prevalence by socioeconomic characteristics**

Percentage HIV positive among women and men age 15-49 who were tested, by socioeconomic characteristics, Uganda 2011

Background characteristic	Women		Men		Both sexes	
	Percentage HIV positive	Number	Percentage HIV positive	Number	Percentage HIV positive	Number
<b>Ethnicity</b>						
Baganda	10.7	1,818	6.2	1,461	8.7	3,279
Banyankore	10.5	1,192	7.1	885	9.1	2,077
Iteso	6.3	837	5.9	668	6.1	1,504
Lugbara/Madi	4.6	521	3.5	411	4.1	932
Basoga	6.4	991	4.6	802	5.6	1,792
Langi	9.6	636	4.9	588	7.4	1,224
Bakiga	9.6	683	8.2	462	9.0	1,144
Karimojong	3.5	213	3.2	119	3.4	332
Acholi	10.7	501	7.1	409	9.1	910
Bagisu/Sabiny	5.7	623	4.0	580	4.9	1,203
Alur/Jopadhola	5.3	542	5.5	401	5.4	943
Banyoro	6.8	419	5.8	413	6.3	832
Batoro	15.1	372	10.2	319	12.9	691
Other	7.2	1,536	7.2	1,156	7.2	2,692
<b>Religion</b>						
Catholic	8.7	4,376	6.8	3,603	7.8	7,979
Anglican/Protestant	8.3	3,668	6.5	3,023	7.5	6,691
SDA	7.3	174	7.9	136	7.5	310
Pentecostal	8.4	933	4.3	511	6.9	1,444
Other Christian	8.7	247	3.7	211	6.4	458
Muslim	7.3	1,396	3.6	1,106	5.7	2,502
Other/None	9.2	89	9.7	83	9.5	172

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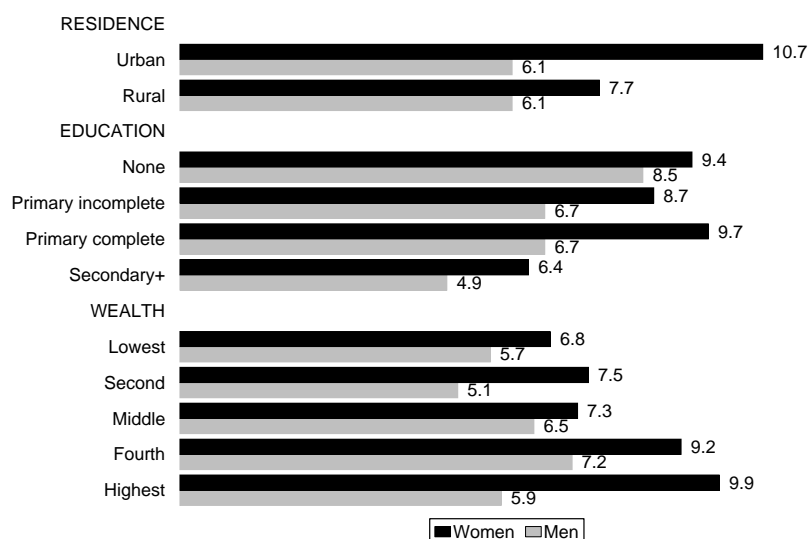


**Table 8.5—Continued**

Background characteristic	Women		Men		Both sexes	
	Percentage HIV positive	Number	Percentage HIV positive	Number	Percentage HIV positive	Number
<b>Employment (last 12 months )</b>						
Not employed	5.7	3,216	3.1	1,089	5.0	4,305
Employed	9.4	7,667	6.5	7,584	8.0	15,251
<b>Residence</b>						
Urban	10.7	2,299	6.1	1,710	8.7	4,009
Rural	7.7	8,584	6.1	6,963	7.0	15,547
<b>Region</b>						
Central 1	12.5	1,173	8.4	1,003	10.6	2,176
Central 2	9.7	1,132	8.0	884	9.0	2,016
Kampala	9.5	855	4.1	669	7.1	1,524
East Central	6.7	1,120	4.8	925	5.8	2,045
Mid Eastern	4.4	1,103	3.8	943	4.1	2,046
North East	5.3	904	5.2	683	5.3	1,587
West Nile	4.7	692	5.0	541	4.9	1,232
Mid Northern	10.1	1,075	6.3	935	8.3	2,011
South Western	9.0	1,389	6.6	946	8.0	2,335
Mid Western	9.1	1,440	7.1	1,143	8.2	2,584
<b>Education</b>						
No education	9.4	1,521	8.5	476	9.2	1,997
Primary incomplete	8.7	5,106	6.7	3,714	7.9	8,820
Primary complete	9.7	1,351	6.7	1,219	8.3	2,570
Secondary or higher	6.4	2,905	4.9	3,264	5.6	6,169
<b>Wealth quintile</b>						
Lowest	6.8	1,841	5.7	1,496	6.3	3,337
Second	7.5	1,979	5.1	1,626	6.4	3,606
Middle	7.3	2,014	6.5	1,672	6.9	3,686
Fourth	9.2	2,241	7.2	1,687	8.4	3,928
Highest	9.9	2,807	5.9	2,192	8.2	4,999
Total 15-49	8.3	10,883	6.1	8,673	7.3	19,556
50-59	6.9	959	6.3	851	6.6	1,810
Total 15-59	8.2	11,842	6.1	9,524	7.3	21,366

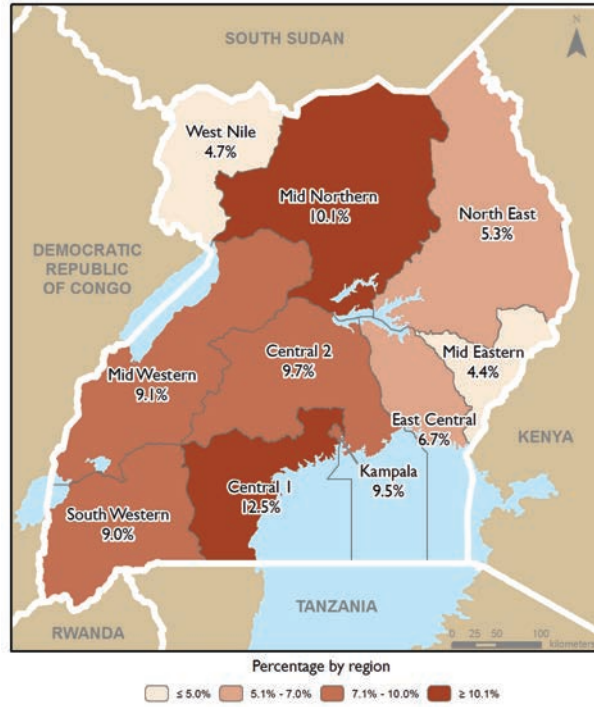
Ugandan women in urban areas are more likely to be living with HIV than those in rural areas (11 and 8 percent, respectively); unlike in the 2004-05 survey, there is no urban-rural differential in HIV infection among men (Figure 8.4). HIV prevalence varies by region (Maps 8.1, 8.2, and 8.3). Overall, Central 1 and Central 2 regions both have HIV prevalence levels of 9 percent or higher. Regions with relatively low levels of HIV-positive adults include Mid Eastern (4 percent) and West Nile (5 percent). In all regions except West Nile, women have a higher prevalence of HIV infection than men.

**Figure 8.4 Socioeconomic differentials in HIV prevalence, Uganda 2011**

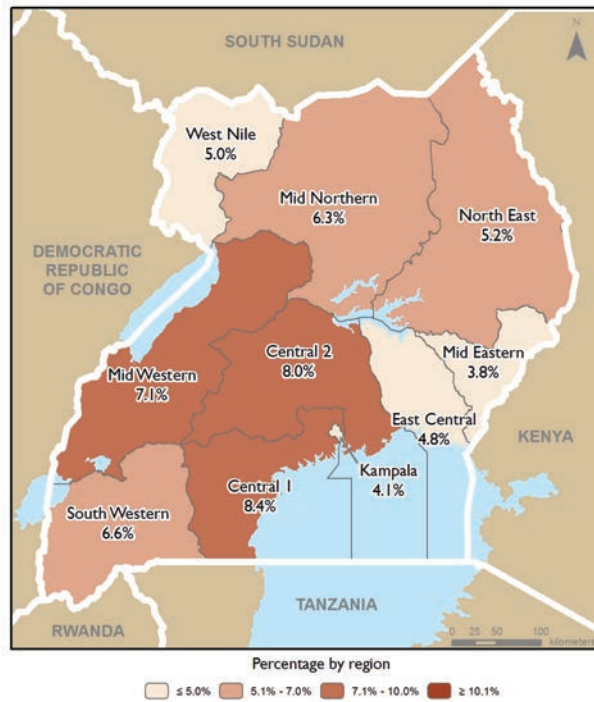


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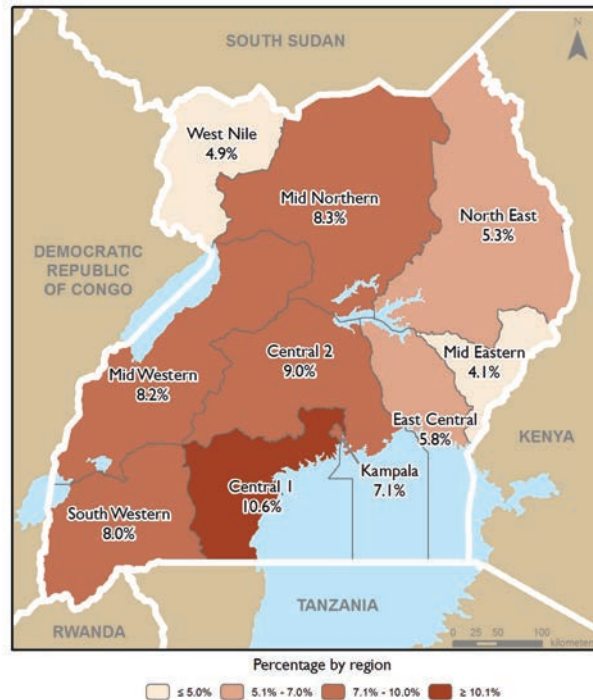
**Map 8.1 Percentage HIV-positive: Women 15-49**



**Map 8.2 Percentage HIV-positive: Men 15-49**



**Map 8.3 Percentage HIV-positive: Both sexes 15-49**



When educational background is considered, the results show that HIV prevalence generally decreases as the level of education increases, though the pattern is not even among women. There is no consistent pattern of HIV infection by wealth quintile for men and only a slight tendency to increase for women (Figure 8.4).

## 8.5 HIV PREVALENCE BY DEMOGRAPHIC CHARACTERISTICS

Table 8.6 shows HIV prevalence according to various demographic and social characteristics. The proportion of adults who are living with HIV varies considerably by marital status. As expected, those who have never married and never had sex are the least likely to be infected. Nevertheless, a small proportion (2 percent) of these respondents is HIV-positive, suggesting either errors in reporting on sexual behaviour or nonsexual transmission of the virus, perhaps through unsterile injections or blood transfusions. Respondents who are divorced or separated, and especially those who are widowed, are the most likely to be HIV positive. Almost one-third of widowed adults are living with HIV.

There is a small difference in HIV prevalence for those in polygynous and non-polygynous marriages (9 percent and 7 percent, respectively). Those who are not currently in union include those who have never married as well as those who are widowed, divorced, and separated.

HIV prevalence varies by travel status, e.g., the number of times respondents have travelled away from their usual residence and the duration of absences. HIV prevalence is higher among respondents who slept away from home five or more times in the past 12 months (10 percent) than among those who slept away one to four times (7 percent) or not at all (7 percent). With respect to the duration of time away from home over the previous year, HIV prevalence is 8 percent for those who were away for more than one month as well as for those who were away for less than one month; it is 7 percent for those who were not away from home at all.

**Table 8.6 HIV prevalence by demographic characteristics**

Percentage HIV positive among women and men age 15-49 who were tested, by demographic characteristics, Uganda 2011

Demographic characteristic	Women		Men		Both sexes	
	Percentage HIV positive	Number	Percentage HIV positive	Number	Percentage HIV positive	Number
<b>Marital status</b>						
Never married	3.9	2,576	2.0	3,194	2.8	5,770
Ever had sexual intercourse	6.4	1,178	2.1	1,643	3.9	2,821
Never had sexual intercourse	1.8	1,398	1.9	1,552	1.8	2,950
Married/living together	7.2	6,924	7.6	4,963	7.4	11,887
Divorced or separated	17.8	979	14.9	468	16.9	1,447
Widowed	32.4	405	(31.4)	47	32.3	452
<b>Type of union</b>						
In polygynous union	8.4	1,730	9.1	800	8.6	2,530
In non-polygynous union	6.7	4,900	7.4	4,161	7.0	9,060
Not currently in union	10.2	3,959	4.0	3,709	7.2	7,669
<b>Times slept away from home in past 12 months</b>						
None	7.9	5,806	5.8	5,268	6.9	11,073
1-2	8.1	3,065	5.7	1,387	7.3	4,452
3-4	8.2	1,216	6.2	845	7.3	2,060
5+	12.6	797	7.8	1,174	9.8	1,971
<b>Time away in past 12 months</b>						
Away for more than 1 month	9.1	1,304	6.8	1,207	8.0	2,511
Away only for less than 1 month	8.7	3,773	6.4	2,198	7.9	5,972
Not away	7.9	5,806	5.8	5,268	6.9	11,073
<b>Currently pregnant</b>						
Pregnant	5.5	1,241	na	na	na	na
Not pregnant or not sure	8.7	9,643	na	na	na	na
<b>ANC for last birth in the past 3 years</b>						
Any ANC	6.7	4,898	na	na	na	na
ANC provided by the public sector	6.6	4,228	na	na	na	na
ANC provided by other than the public sector	7.9	670	na	na	na	na
No ANC, but birth in last 3 years	7.4	168	na	na	na	na
No birth in last 3 years	9.7	5,817	na	na	na	na
Total 15-49	8.3	10,883	6.1	8,673	7.3	19,556
50-59	6.9	959	6.3	851	6.6	1,810
Total 15-59	8.2	11,842	6.1	9,524	7.3	21,366

Note: Figures in parentheses are based on 25-49 unweighted cases. Total includes 294 women and 2 men whose type of marital union is not stated.

na = Not applicable

ANC = Antenatal care

Women who are not pregnant have a higher prevalence of infection (9 percent) than those who are pregnant (6 percent). The HIV prevalence among women who are currently pregnant provides a useful benchmark for comparison with rates among pregnant women tested as part of the antenatal care sentinel surveillance system.

The comparison is also made for women who gave birth in the three years before the survey and received antenatal care from a public facility or from a non-public facility, as opposed to those who did not receive care or those who did not give birth during the time period. The data show that those who had antenatal care from a public source for a recent birth are slightly less likely to be HIV-infected than those who had antenatal care from a non-public source or those who had no antenatal care for a birth in the previous three years.

## 8.6 HIV PREVALENCE BY SEXUAL BEHAVIOUR

Table 8.7 examines the prevalence of HIV infection according to several sexual behaviours among respondents who have had sexual intercourse. While reviewing these results, it is important to remember that responses about sexual risk behaviours may be subject to reporting bias. Also, indicators of sexual behaviour in the last 12 months do not reflect prior behaviours that affect lifetime sexual risk. Nor is it possible from the

data to know the sequence of events, between HIV infection and the stated behaviour, e.g., whether condom use predates or post-dates HIV transmission.

Overall, the data show a slight tendency for HIV levels 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 age 15 (10 percent) and decreases to 6 percent among women who delayed first sex until age 20 or older. Among men, the opposite pattern prevails.

Table 8.7 HIV prevalence by sexual behaviour

Percentage HIV positive among women and men age 15-49 who ever had sex and were tested for HIV, by sexual behaviour characteristics, Uganda 2011

Sexual behaviour characteristic	Women		Men		Both sexes	
	Percentage HIV positive	Number	Percentage HIV positive	Number	Percentage HIV positive	Number
<b>Age at first sexual intercourse</b>						
<15	10.4	1,682	6.4	798	9.1	2,480
15-17	9.4	4,633	6.6	2,657	8.4	7,290
18-19	9.6	2,040	7.0	1,890	8.4	3,930
20+	6.3	1,061	7.9	1,775	7.3	2,836
<b>Multiple sexual partners and partner concurrency in past 12 months</b>						
0	16.5	1,305	6.1	746	12.7	2,050
1	7.9	7,853	6.8	4,749	7.5	12,602
2+	14.1	328	8.2	1,626	9.2	1,954
Has concurrent partners <sup>1</sup>	9.5	(44)	7.0	397	7.2	441
None of the partners are concurrent	14.8	284	8.6	1,229	9.8	1,513
<b>Condom use at last sexual intercourse in past 12 months</b>						
Used condom	16.9	777	11.6	955	14.0	1,732
Did not use condom	7.2	7,404	6.3	5,420	6.9	12,824
No sexual intercourse in last 12 months	16.5	1,305	6.1	746	12.7	2,050
<b>Number of lifetime partners</b>						
1	5.2	3,496	2.6	861	4.7	4,357
2	8.0	2,767	4.2	1,042	7.0	3,809
3-4	13.2	2,463	5.6	2,034	9.8	4,498
5-9	20.2	568	7.0	1,662	10.4	2,230
10+	23.7	133	12.9	1,154	14.1	1,287
<b>Paid for sexual intercourse in past 12 months</b>						
Yes	na	na	15.8	64	na	na
No (No paid sex or no sex in last 12 months)	na	na	6.9	7,057	na	na
<b>Alcohol use during sex</b>						
Either partner drank alcohol	10.0	1,937	11.2	1,559	10.5	3,496
Either partner was drunk	10.1	1,849	11.1	1,477	10.5	3,326
Neither was drunk	7.6	88	12.9	82	10.1	170
No alcohol use	7.6	6,248	5.8	4,820	6.8	11,068
No sex in last 12 months	16.5	1,301	6.1	742	12.7	2,043
<b>Higher risk sex in past 12 months</b>						
Had higher risk sex	12.4	1,363	6.8	2,167	9.0	3,530
Had sex, not higher risk	7.3	6,821	7.3	4,213	7.3	11,034
No sex in past 12 months	16.5	1,301	6.1	742	12.7	2,043
Total 15-49	9.3	9,485	7.0	7,121	8.3	16,606
50-59	6.9	956	6.3	848	6.6	1,804
Total 15-59	9.1	10,442	6.9	7,969	8.2	18,410

Note: Figures in parentheses are based on 25-49 unweighted cases. Total includes 70 women and 1 man who are missing age at first sexual intercourse and 58 women and 369 men who are missing the number of lifetime partners.

na = Not applicable

<sup>1</sup> A respondent is considered to have had concurrent partners if he or she had overlapping sexual partnerships with two or more people during the 12 months before the survey. (Respondents with concurrent partners include polygynous men who had overlapping sexual partnerships with two or more wives).

HIV prevalence by the number of sexual partners in the 12 months before the survey does not show the expected patterns. Overall, prevalence is highest for those who have ever had sex but who did not have sex at all in the previous 12 months (13 percent). Those who had two or more sexual partners in the previous 12 months are only slightly more likely to have HIV (9 percent) than those who had only one partner (8 percent). For those whose sexual partnerships overlapped (concurrent), HIV prevalence is actually lower (7 percent) than it is for those who had two or more partners that did not overlap (10 percent). As mentioned above, it is not possible to trace any causal relationships with regard to sexual behaviour and HIV prevalence because it is not known whether the behaviour preceded or post-dated the HIV infection.

Similarly, HIV prevalence is higher among those who said they used a condom the last time they had sex (14 percent) than among those who said they did not use a condom (7 percent). This relationship could be the result of those who know they have HIV using condoms to protect their sexual partners.

HIV prevalence shows the expected relationship with the number of lifetime sexual partners, rising steadily with the number of partners, especially for women. Among women, prevalence increases from 5 percent among those who have had only one sexual partner in their lifetime to 24 percent among those who have had ten or more partners. Among men, HIV prevalence increases from 3 percent among those with only one lifetime partner to 13 percent among those with ten or more partners.

Among men who said they paid for sexual intercourse in the 12 months before the survey, 16 percent are HIV-positive, as opposed to 7 percent of those who either did not have sex in the previous 12 months or had sex, but not paid sex.

Alcohol use in conjunction with sexual activity is correlated with HIV prevalence. Those who had sex in the 12 months before the survey but did not use alcohol at the last sexual encounter with any partner are less likely to be HIV positive (7 percent) than those who used alcohol (10 to 11 percent), regardless of whether either partner was drunk or not. Respondents who did not have sex at all in the previous year are the most likely to be HIV positive (13 percent).

Differences in HIV infection according to higher risk sexual activity are minor. For both sexes combined, those who had higher risk sex in the previous 12 months are only slightly more likely to have HIV than those who had sex, but not higher risk sex (9 percent and 7 percent, respectively). The difference is larger among women (12 percent for those who had higher risk sex and 7 percent for those who had sex but not higher risk sex), while it disappears among men (7 percent for both categories).

## **8.7 HIV PREVALENCE AMONG YOUTH**

Generally, cases of HIV infection among youth age 15–24 represent more recent infections and serve as an important indicator for detecting trends in both prevalence and incidence. Table 8.8 shows HIV prevalence levels among youth according to background characteristics. Overall, 4 percent of those age 15–24 are living with HIV. However, there is a gender gap; HIV prevalence among women age 15–24 years is 5 percent, while among men, it is only 2 percent. Prevalence rises rapidly with age, especially among women.

Looking at marital status, the lowest levels of infection are found among young people who have never married. As is true with older adults as well, HIV prevalence is considerably higher among young people who are divorced, separated, or widowed than among those who are currently married or have never married. There are no meaningful differences in HIV prevalence by whether a young woman is pregnant or not or by urban-rural residence for young women or young men. Young women and men in Central 1 and Mid Northern regions are more likely to be HIV-positive than those living elsewhere, especially those in Mid Eastern and West Nile regions (Maps 8.4, 8.5, and 8.6). The proportion of young men in Kampala who are HIV positive is notably low (less than one percent). Differences in HIV prevalence among young adults by education level and wealth quintile are not large.

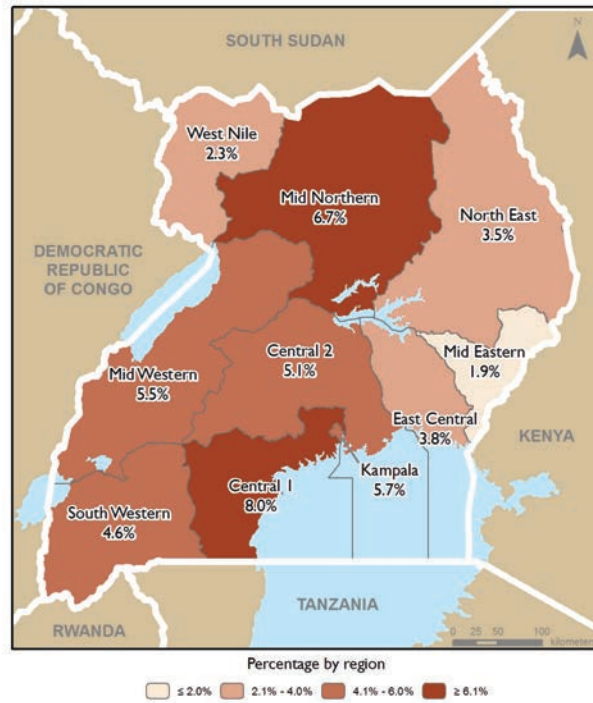
Table 8.8 HIV prevalence among young people by background characteristics

Percentage HIV-positive among women and men age 15-24 who were tested for HIV, by background characteristics, Uganda 2011

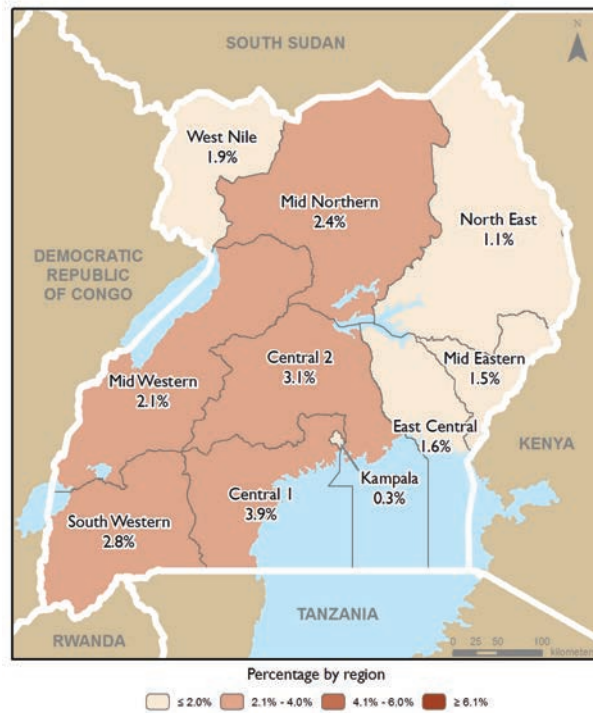
Background characteristic	Women		Men		Both sexes	
	Percentage HIV positive	Number	Percentage HIV positive	Number	Percentage HIV positive	Number
<b>Age</b>						
15-19	3.0	2,393	1.7	2,055	2.4	4,448
15-17	1.6	1,459	1.8	1,315	1.7	2,773
18-19	5.1	934	1.5	740	3.5	1,674
20-24	7.1	2,111	2.8	1,395	5.4	3,506
20-22	7.1	1,297	2.3	863	5.2	2,160
23-24	7.0	814	3.6	532	5.7	1,346
<b>Respondent's current age</b>						
15	2.3	486	0.9	465	1.6	952
16	1.0	470	2.0	421	1.4	891
17	1.4	502	2.5	429	1.9	931
18	4.9	505	1.9	407	3.6	912
19	5.4	429	1.1	333	3.5	762
20	4.6	493	2.5	313	3.8	806
21	9.6	395	2.2	269	6.6	664
22	7.7	409	2.0	281	5.4	690
23	6.6	392	3.1	241	5.3	633
24	7.4	422	4.1	291	6.1	713
<b>Marital status</b>						
Never married	2.8	2,332	1.7	2,848	2.2	5,180
Ever had sex	4.2	955	1.5	1,339	2.6	2,294
Never had sex	1.8	1,377	1.9	1,509	1.9	2,886
Married/Living together	6.2	1,875	3.6	523	5.6	2,399
Divorced/Separated/Widowed	13.2	297	7.2	78	11.9	375
<b>Currently pregnant</b>						
Pregnant	6.1	552	na	na	na	na
Not pregnant or not sure	4.7	3,952	na	na	na	na
<b>Residence</b>						
Urban	5.9	1,082	1.6	724	4.2	1,806
Rural	4.6	3,422	2.3	2,726	3.5	6,148
<b>Region</b>						
Central 1	8.0	486	3.9	351	6.3	837
Central 2	5.1	443	3.1	325	4.3	768
Kampala	5.7	422	0.3	307	3.4	729
East Central	3.8	457	1.6	396	2.8	852
Mid Eastern	1.9	454	1.5	424	1.7	878
North East	3.5	326	1.1	228	2.6	554
West Nile	2.3	268	1.9	199	2.1	467
Mid Northern	6.7	453	2.4	350	4.9	803
South Western	4.6	548	2.8	384	3.9	933
Mid Western	5.5	646	2.1	486	4.0	1,132
<b>Education</b>						
No education	3.2	164	0.0	58	2.3	222
Primary incomplete	5.3	2,029	2.2	1,549	4.0	3,577
Primary complete	6.2	630	2.9	395	4.9	1,025
Secondary or higher	4.0	1,682	1.9	1,448	3.1	3,130
<b>Wealth quintile</b>						
Lowest	4.5	669	1.1	538	3.0	1,207
Second	4.5	797	1.4	600	3.2	1,397
Middle	2.8	789	3.6	667	3.2	1,455
Fourth	5.7	940	2.6	727	4.3	1,666
Highest	5.9	1,310	1.8	919	4.2	2,229
Total 15-24	4.9	4,504	2.1	3,450	3.7	7,954

na = Not applicable

**Map 8.4 Percentage HIV-positive: Women 15-24**



**Map 8.5 Percentage HIV-positive: Men 15-24**





**Map 8.6 Percentage HIV-positive: Both sexes 15-24**

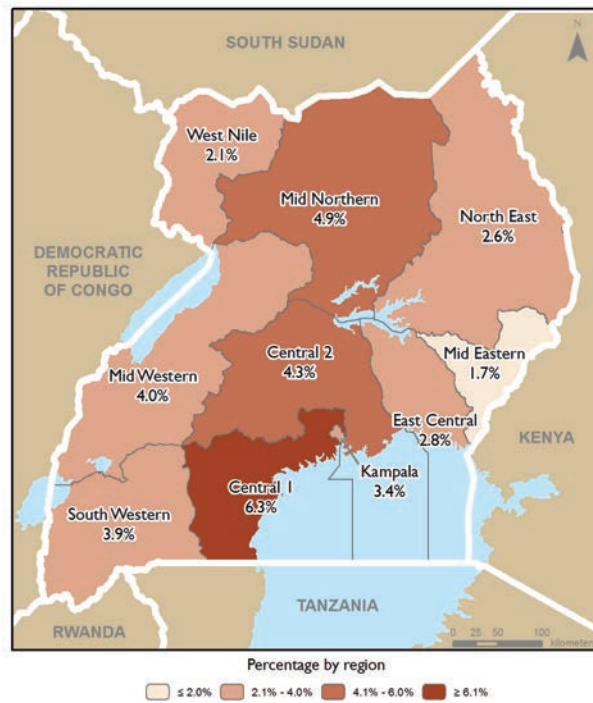


Table 8.9 shows HIV prevalence among young adults age 15-24 that have ever had sexual intercourse, according to indicators of sexual behaviour. Among both young women and men, HIV prevalence is slightly higher among those who say they had two or more sexual partners in the 12 months preceding the survey than among those who had only one or none. Condom use has an erratic relationship with HIV prevalence.

Among young people, HIV prevalence is slightly lower among those who did not use alcohol when they had sex in the past 12 months than among those who reported that either they or their partners were drunk. With regard to higher risk sex, differences in HIV prevalence are small. Those who had sex in the past 12 months but did not have sex with a non-marital, non-cohabiting partner (higher risk sex) are slightly more likely to have HIV than those who had higher risk sex.

Among young women, there is a clear relationship between HIV prevalence and age mixing of partners. Women age 15-24 who had sex in the previous 12 months with a man who was ten or more years older than she are considerably more likely to be HIV positive (10 percent) than women who did not (6 percent).

Table 8.9 HIV prevalence among young people by sexual behaviour

Percentage HIV-positive among women and men age 15-24 who have ever had sex and were tested for HIV, by sexual behaviour characteristics, Uganda 2011

Sexual behaviour characteristic	Women		Men		Both sexes	
	Percentage HIV positive	Number	Percentage HIV positive	Number	Percentage HIV positive	Number
<b>Number of partners in past 12 months</b>						
0	6.6	350	1.0	441	3.4	791
1	6.1	2,636	2.2	1,156	4.9	3,792
2+	9.0	141	4.2	344	5.6	485
<b>Condom use at last sex in past 12 months</b>						
Used condom	4.9	432	2.5	493	3.6	926
Did not use condom	6.5	2,345	2.7	1,006	5.3	3,351
No sex in past 12 months	6.6	350	1.0	441	3.4	791
<b>Condom use at first sex</b>						
Used condom	6.8	1,066	1.6	650	4.9	1,716
Did not use condom	5.9	2,061	2.6	1,290	4.6	3,351
<b>Alcohol use during sex</b>						
Either partner was drunk	6.9	370	6.2	165	6.7	535
Neither was drunk	(0.0)	21	*	9	(3.0)	29
No alcohol use	6.2	2,387	2.2	1,327	4.7	3,714
No sex in past 12 months	6.6	350	1.0	440	3.4	789
<b>Higher risk sex in past 12 months</b>						
Had higher risk sex	6.5	859	2.3	1,061	4.2	1,921
Had sex, not higher risk	6.1	1,918	3.5	440	5.6	2,358
No sex in past 12 months	6.6	350	1.0	440	3.4	789
<b>Age mixing</b>						
Had sex in past 12 months with a man 10+ years older	9.7	542	na	na	na	na
Did not have sex in past 12 months with a man 10+ years older	5.5	2,585	na	na	na	na
Total	6.2	3,127	2.3	1,941	4.7	5,068

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.  
na = Not applicable

## 8.8 HIV PREVALENCE AND OTHER SEXUALLY TRANSMITTED INFECTIONS

Many studies have demonstrated that sexually transmitted infections (STIs) are a co-factor for HIV transmission. Management and treatment of STIs may potentially play an important role in the reduction of HIV transmission. As discussed in Chapter 6, 36 percent of women and 18 percent of men who ever had sex report they either had an STI or had symptoms of an STI (a bad-smelling or abnormal genital discharge or a genital sore or ulcer) in the 12 months preceding the survey.

Table 8.10 shows the variation in HIV prevalence by whether respondents report that they had an STI or symptoms of an STI in the 12 months before the survey. The results imply a link between the two variables, with the proportion of women and men who are HIV-positive being twice as high among those who had an STI or STI symptom in the 12 months before the survey than among those who did not.

**Table 8.10 HIV prevalence by sexually transmitted infections**

Percentage HIV positive among women and men age 15-49 who ever had sexual intercourse and who were tested for HIV, by whether they had an STI in the past 12 months, Uganda 2011

Sexually transmitted infection in past 12 months	Women		Men		Both sexes	
	Percentage HIV positive	Number	Percentage HIV positive	Number	Percentage HIV positive	Number
Had STI or STI symptoms	13.0	3,412	12.6	1,321	12.9	4,733
No STI, no symptoms	7.1	5,880	5.8	5,683	6.5	11,562
Does not know/missing	10.8	194	3.1	117	7.9	311
Total 15-49	9.3	9,485	7.0	7,121	8.3	16,606

## 8.9 HIV PREVALENCE AMONG COHABITING COUPLES

As part of the 2011 UAIS, some 4,724 (unweighted) cohabiting couples were both interviewed and tested for HIV. Table 8.11 shows that for 90 percent of cohabiting couples, both partners are HIV-negative, while for 3 percent, both partners are HIV-positive. Data also show that 6 percent of cohabiting couples are discordant, that is, one partner has HIV and the other does not. In 3 percent of couples, the male partner has HIV and the woman does not, while in another 3 percent of couples, the woman has HIV and the man does not. Discordance is more common among couples in which the man is 10 or more years older than the woman. It is also high among the very small number of couples in which the woman has had multiple partners in the 12 months before the survey and the man has not. Discordance is relatively high among couples in Central 1 region.

Table 8.11 HIV prevalence among couples

Percent distribution of couples living in the same household, both of whom were tested for HIV, by HIV status, according to background characteristics, Uganda 2011

Background characteristic	Both HIV positive	Man HIV positive, woman HIV negative	Woman HIV positive, man HIV negative	Both HIV negative	Total	Number
<b>Woman's age</b>						
15-19	2.3	2.9	0.7	94.1	100.0	331
20-29	2.9	2.7	3.5	90.9	100.0	2,011
30-39	4.4	3.9	3.1	88.6	100.0	1,475
40-49	3.1	4.0	2.7	90.2	100.0	734
50-59	3.6	1.9	1.9	92.7	100.0	154
<b>Man's age</b>						
15-19	(0.0)	(4.0)	(0.0)	(96.0)	100.0	30
20-29	2.1	1.3	3.1	93.4	100.0	1,175
30-39	4.4	3.7	2.6	89.3	100.0	1,637
40-49	4.0	4.5	3.6	87.9	100.0	1,219
50-59	2.1	3.2	2.9	91.8	100.0	645
<b>Age difference between partners</b>						
Woman older	9.4	2.7	3.7	84.2	100.0	318
Same age/man older by 0-4 years	2.6	1.9	2.8	92.7	100.0	1,636
Man older by 5-9 years	2.3	3.7	2.5	91.5	100.0	1,679
Man older by 10-14 years	4.3	5.6	3.0	87.0	100.0	685
Man older by 15+ years	5.4	3.1	5.3	86.2	100.0	387
<b>Type of union</b>						
Non-polygynous	3.4	3.2	2.8	90.6	100.0	3,589
Polygynous	3.5	3.1	4.0	89.5	100.0	960
<b>Multiple partners in past 12 months<sup>1</sup></b>						
Both no	3.2	3.2	2.7	90.9	100.0	3,372
Man yes, woman no	3.6	3.2	3.4	89.8	100.0	1,229
Woman yes, man no	3.7	7.7	10.9	77.7	100.0	71
Both yes	(13.0)	(3.5)	(3.0)	(80.5)	100.0	34
<b>Concurrent sexual partners in past 12 months<sup>2</sup></b>						
Both no	3.5	3.2	3.0	90.3	100.0	4,251
Man yes, woman no	2.4	3.7	2.6	91.2	100.0	434
Woman yes, man no	*	*	*	*	100.0	15
Both yes	*	*	*	*	100.0	5
<b>Residence</b>						
Urban	5.1	4.0	2.7	88.2	100.0	636
Rural	3.2	3.1	3.0	90.7	100.0	4,070
<b>Region</b>						
Central 1	5.3	4.6	6.6	83.4	100.0	491
Central 2	3.5	4.5	1.9	90.0	100.0	466
Kampala	5.8	4.0	4.0	86.2	100.0	181
East Central	2.9	3.0	3.1	91.0	100.0	544
Mid Eastern	1.9	1.5	2.7	93.9	100.0	578
North East	1.2	3.6	1.6	93.6	100.0	430
West Nile	1.9	2.8	1.4	93.9	100.0	304
Mid Northern	4.1	2.4	1.8	91.7	100.0	554
South Western	3.8	3.7	1.7	90.8	100.0	539
Mid Western	4.3	3.2	4.9	87.7	100.0	618
<b>Woman's education</b>						
No education	3.7	4.8	2.8	88.6	100.0	830
Primary incomplete	3.5	2.9	2.7	90.9	100.0	2,455
Primary complete	3.8	3.7	2.2	90.3	100.0	576
Secondary or higher	2.5	2.4	4.7	90.4	100.0	845
<b>Man's education</b>						
No education	3.4	2.6	2.4	91.5	100.0	369
Primary incomplete	3.8	3.5	2.9	89.8	100.0	2,085
Primary complete	3.4	3.3	2.1	91.2	100.0	849
Secondary or higher	2.9	2.9	3.8	90.4	100.0	1,403

Continued...

Table 8.11—Continued

Background characteristic	Both HIV positive	Man HIV positive, woman HIV negative	Woman HIV positive, man HIV negative	Both HIV negative	Total	Number
<b>Wealth quintile</b>						
Lowest	3.2	2.5	1.4	92.9	100.0	907
Second	3.6	2.7	2.3	91.5	100.0	1,054
Middle	3.0	2.7	3.3	91.0	100.0	993
Fourth	3.6	4.4	4.1	87.9	100.0	880
Highest	3.7	4.2	4.0	88.1	100.0	873
Total couples	3.4	3.2	3.0	90.3	100.0	4,706

Note: Table is based on couples for which a valid test result (positive or negative) is available for both partners. Total includes 157 couples for whom the type of union is missing. 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.

<sup>1</sup> A respondent is considered to have had multiple sexual partners in the past 12 months if he or she had sexual intercourse with 2 or more people during this time period. (Respondents with multiple partners include polygynous men who had sexual intercourse with 2 or more wives.)

<sup>2</sup> A respondent is considered to have had concurrent partners if he or she had overlapping sexual partnerships with two or more people during the 12 months before the survey. (Respondents with concurrent partners include polygynous men who had overlapping sexual partnerships with two or more wives).

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 many 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.

## 8.10 HIV PREVALENCE AMONG CHILDREN UNDER AGE 5

One of the objectives of the 2011 UAIS was to ascertain the HIV prevalence among children under age 5. As mentioned in Chapter 1, this involves more detailed testing, since 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 infected. In order 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 (PCR) test. For this reason, parents/guardians of children under 18 months whose children tested positive on the first rapid HIV test done at the home (Determine) were told that the test indicated that the child may have the virus, but that additional testing at a central laboratory was necessary. They were given a card with the bar code label for the child and were told that they could take the card to a specific health facility in about 6 weeks to get the definite result of the laboratory HIV test for their child.

Table 8.12 shows that of all the eligible children under age 5, a valid HIV test result was obtained for 97 percent. One percent of children were not tested because their parent or guardian refused the test, while another 1 percent was not available for testing and for another 1 percent, testing was not done due to technical problems or because the sample was lost. Coverage levels for testing of children are uniformly high across all characteristics of children. The only exception is for children whose mothers were not tested for HIV in the survey, either because they were not in the household, or they refused testing, or they were not tested for some other reason.

Table 8.12 Coverage of HIV testing among children under age 5

Percent distribution of children under age five eligible for HIV testing by testing status, according to background characteristics (unweighted), Uganda 2011

Background characteristic	HIV testing status				Total	Number
	Tested with valid results	Refused	Absent/ other	Missing/ technical problem		
<b>Sex</b>						
Male	97.1	1.3	0.9	0.7	100.0	5,212
Female	96.9	1.3	0.8	1.1	100.0	5,044
<b>Residence</b>						
Urban	96.7	1.9	0.8	0.6	100.0	1,437
Rural	97.0	1.2	0.8	0.9	100.0	8,819
<b>Region</b>						
Central 1	98.5	0.4	0.3	0.7	100.0	950
Central 2	98.5	0.3	0.3	1.0	100.0	1,040
Kampala	96.3	2.8	0.6	0.3	100.0	652
East Central	97.7	0.3	1.2	0.8	100.0	1,195
Mid Eastern	98.8	0.4	0.3	0.5	100.0	1,183
North East	93.5	4.0	2.0	0.4	100.0	1,162
West Nile	96.5	1.0	1.8	0.7	100.0	1,062
Mid Northern	96.1	1.7	0.9	1.3	100.0	1,038
South Western	95.6	1.8	0.2	2.3	100.0	867
Mid Western	97.9	0.7	0.5	0.8	100.0	1,107
<b>Wealth quintile</b>						
Lowest	95.1	2.4	1.4	1.1	100.0	2,439
Second	98.0	0.5	0.9	0.6	100.0	2,239
Middle	97.7	0.8	0.6	0.9	100.0	2,033
Fourth	97.7	0.9	0.5	0.9	100.0	1,800
Highest	96.7	1.8	0.6	0.8	100.0	1,745
<b>Mother's HIV status</b>						
Positive	96.7	1.0	0.4	2.0	100.0	511
Negative	98.0	0.7	0.6	0.8	100.0	8,173
Missing/Not tested/dead	92.0	4.6	2.3	1.1	100.0	1,572
<b>Mother's survival</b>						
Alive	97.0	1.3	0.8	0.9	100.0	10,126
Dead	97.4	0.9	0.9	0.9	100.0	115
<b>Total</b>	<b>97.0</b>	<b>1.3</b>	<b>0.8</b>	<b>0.9</b>	<b>100.0</b>	<b>10,256</b>

Note: Total includes 15 children for whom mother's survival status is missing.

Table 8.13 shows that only a tiny fraction of children under age 5 are HIV-positive—less than 1 percent (0.7 percent). This is identical to the level found in the 2004-05 UHSBS. Moreover, differences in HIV prevalence among children under 5 by background characteristics are mostly negligible. Prevalence is slightly higher among children whose mothers are widowed (3 percent), those whose mothers are also HIV-positive (8 percent), and those whose mothers have died (4 percent).

**Table 8.13 HIV prevalence among children under age 5**

Among de facto children under age 5 who were tested, the percentage HIV positive, by background characteristics, Uganda 2011

Background characteristic	HIV-positive	Number of children
<b>Age</b>		
<18 months	0.6	2,771
18-59 months	0.7	7,175
<b>Sex</b>		
Male	0.7	5,067
Female	0.6	4,879
<b>Mother's education</b>		
No education	0.7	1,422
Primary incomplete	0.5	4,356
Primary complete	0.7	1,178
Secondary or higher	0.4	1,674
Missing/ Not interviewed/dead	1.3	1,317
<b>Mother's marital status</b>		
Never married	0.7	308
Married	0.4	7,511
Widowed	3.3	172
Divorced/separated	1.2	637
Missing/ Not interviewed/dead	1.3	1,318
<b>Residence</b>		
Urban	0.7	1,402
Rural	0.7	8,544
<b>Region</b>		
Central 1	1.3	1,081
Central 2	0.4	1,066
Kampala	0.2	451
East Central	0.8	1,147
Mid Eastern	0.5	1,137
North East	0.4	1,045
West Nile	0.5	635
Mid Northern	0.7	1,016
South Western	1.2	1,095
Mid Western	0.4	1,273
<b>Wealth quintile</b>		
Lowest	0.8	2,084
Second	0.7	2,172
Middle	0.6	2,055
Fourth	0.5	1,883
Highest	0.8	1,752
<b>Mother's HIV status</b>		
Positive	8.1	505
Negative	0.1	8,026
Missing/ Not tested/dead	1.2	1,415
<b>Mother's survival</b>		
Alive	0.6	9,819
Dead	4.3	111
<b>Total</b>	<b>0.7</b>	<b>9,946</b>

Note: Children under 18 months are only considered HIV-positive if they had a positive PCR test. Total includes 16 children for whom mother's survival status is missing.





**Key Findings**

- The proportion of adults age 15-49 who have ever been tested for HIV and received results has increased enormously since 2004-05—from 13 to 66 percent for women and from 11 percent to 45 percent for men.
- Only 40 percent of those who tested HIV-positive in the survey knew that they were positive; the remainder is roughly evenly split between those who reported that their previous HIV test was negative and those who had never been tested for HIV.
- One-third of HIV-positive adults have CD4 levels below the standard cutoff of 350 for eligibility for antiretroviral treatment.
- The proportion of those eligible for ARVs who are taking them could be as high as 50 percent.
- One-quarter of men in Uganda have been circumcised. Although the level has not changed recently, there is an unmet need for circumcision, with almost half of uncircumcised men saying they would like to be circumcised.

This chapter presents information related to coverage of HIV programmes. As mentioned in Chapter 1, the Uganda government has instituted programmes to provide voluntary counseling and HIV testing among the general population and specifically among pregnant women. There are also programmes for those who are living with HIV to provide them with treatment such as cotrimoxazole to suppress opportunistic infections and anti-retroviral drugs when their condition warrants such treatment. Finally, the government encourages safe medical circumcision of men, based on research that it reduces the risk of HIV acquisition.

**9.1 COVERAGE OF HIV COUNSELING AND TESTING**

Awareness of HIV status can motivate individuals to further protect themselves against infection or to protect their partners. Knowledge of one's HIV status is considered to be a key motivating factor for behaviour change and a critical link to obtaining care, treatment, and support services for infected individuals. To assess awareness and coverage of prior HIV testing behaviour, respondents were asked if they knew where to get an HIV test and whether they had ever been tested for HIV. If they had been tested for HIV, respondents were asked if they had received the results of their last test. Tables 9.1.1, 9.1.2, and 9.1.3 show information about prior testing for women, men, and both sexes combined, respectively.

Overall, 92 percent of women age 15-49 know where they can get an HIV test. Women age 15-19 and those who have not yet initiated sexual activity are less likely than other women to know where to get tested for HIV. Knowledge of a place to get an HIV test increases with level of education and with wealth quintile. It is also higher among urban women and women in Central 1 and Kampala regions.

Two-thirds of women age 15-49 in Uganda (66 percent) have ever been tested for HIV and received the results. An additional four percent have been tested but did not receive the results. The percentage who have ever been tested and received results is higher among women in their twenties, those who have ever been

married, urban women, women in Mid Northern, North East, and Kampala regions (Map 9.1), and women with higher education and wealth levels.

**Table 9.1.1 Coverage of prior HIV testing: Women**

Percentage of women age 15-49 who know where to get an HIV test, percent distribution of women age 15-49 by testing status and by whether they received the results of the last test, and the percentage of women ever tested, according to background characteristics, Uganda 2011

Background characteristic	Percent distribution of women by testing status and by whether they received the results of the last test				Total	Percentage ever tested <sup>2</sup>	Number of women
	Percentage who know where to get an HIV test	Ever tested and received results	Ever tested, did not receive results	Never tested <sup>1</sup>			
<b>Age</b>							
15-24	88.9	57.9	3.8	38.3	100.0	61.7	4,621
15-19	83.3	40.8	3.2	56.0	100.0	44.0	2,458
20-24	95.3	77.4	4.5	18.1	100.0	81.9	2,163
25-29	96.8	80.8	4.5	14.8	100.0	85.2	1,942
30-39	95.3	71.9	5.4	22.8	100.0	77.2	2,833
40-49	92.0	60.0	4.0	36.0	100.0	64.0	1,764
<b>Marital status</b>							
Never married	84.3	42.3	2.5	55.2	100.0	44.8	2,641
Ever had sex	93.4	64.9	3.0	32.1	100.0	67.9	1,202
Never had sex	76.8	23.4	2.1	74.5	100.0	25.5	1,440
Married/Living together	95.0	73.6	5.1	21.4	100.0	78.6	7,097
Divorced/Separated/Widowed	94.5	70.4	4.3	25.3	100.0	74.7	1,422
<b>Residence</b>							
Urban	96.6	76.3	2.4	21.3	100.0	78.7	2,365
Rural	91.3	62.9	4.9	32.2	100.0	67.8	8,795
<b>Region</b>							
Central 1	96.8	71.1	4.6	24.3	100.0	75.7	1,206
Central 2	92.5	67.1	2.8	30.0	100.0	70.0	1,162
Kampala	96.4	75.4	1.9	22.6	100.0	77.4	875
East Central	93.0	56.4	6.5	37.1	100.0	62.9	1,153
Mid Eastern	84.6	48.5	8.7	42.8	100.0	57.2	1,133
North East	91.4	76.2	3.3	20.5	100.0	79.5	919
West Nile	89.7	63.4	4.1	32.5	100.0	67.5	712
Mid Northern	93.7	76.6	4.7	18.7	100.0	81.3	1,106
South Western	93.7	63.7	3.2	33.1	100.0	66.9	1,414
Mid Western	91.7	63.7	3.5	32.9	100.0	67.1	1,480
<b>Education</b>							
No education	88.8	58.8	6.5	34.7	100.0	65.3	1,566
Primary incomplete	90.3	63.0	4.9	32.0	100.0	68.0	5,218
Primary complete	94.7	68.5	3.9	27.6	100.0	72.4	1,388
Secondary or higher	97.0	72.9	2.4	24.7	100.0	75.3	2,988
<b>Wealth quintile</b>							
Lowest	88.9	62.8	6.0	31.2	100.0	68.8	1,894
Second	89.3	61.2	5.1	33.8	100.0	66.2	2,024
Middle	91.1	59.7	6.1	34.3	100.0	65.7	2,056
Fourth	94.4	65.5	3.4	31.1	100.0	68.9	2,292
Highest	96.3	75.5	2.3	22.2	100.0	77.8	2,894
Total 15-49	92.4	65.8	4.3	29.9	100.0	70.1	11,160
50-59	86.5	48.5	3.1	48.4	100.0	51.6	993
Total 15-59	91.9	64.4	4.2	31.4	100.0	68.6	12,153

<sup>1</sup> Includes 'don't know/missing'

<sup>2</sup> Due to a problem with the 2011 UAIS Individual Questionnaire, data on time since last HIV test are not available for some women. Women who had a birth in the five years before the survey and who said they had an HIV test during antenatal care were not asked if the test was in the 12 months before the survey. Those who said they were tested after the pregnancy were asked if the test was in the 12 months before the survey, so only those who were not tested later are missing data on the timing of the prenatal test. This makes it difficult to estimate the percentage tested in the 12 months before the survey.

Among men, 91 percent know where to get an HIV test, almost the same as for women. Similar to the pattern for women, men age 15-19 and those who have not yet initiated sexual activity are less likely to know where to get an HIV test. Knowledge of a source for HIV testing is higher among urban than rural men and increases with education level and wealth. Men in Mid Eastern region are by far the least likely to know of a place to get an HIV test (77 percent).

Table 9.1.2 Coverage of prior HIV testing: Men

Percentage of men age 15-49 who know where to get an HIV test, percent distribution of men age 15-49 by testing status and by whether they received the results of the last test, the percentage of men ever tested, and the percentage of men age 15-49 who were tested in the past 12 months and received the results the last test, according to background characteristics, Uganda 2011

Background characteristic	Percent distribution of men by testing status and by whether they received the results of the last test				Total	Percentage ever tested	Percentage who have been tested for HIV in the past 12 months and received the results of the last test	Number of men
	Percentage who know where to get an HIV test	Ever tested and received results	Ever tested, did not receive results	Never tested <sup>1</sup>				
<b>Age</b>								
15-24	85.2	30.9	2.1	67.0	100.0	33.0	17.1	3,479
15-19	79.8	20.7	1.5	77.8	100.0	22.2	11.3	2,072
20-24	93.1	46.0	2.9	51.1	100.0	48.9	25.5	1,406
25-29	95.6	58.3	2.8	38.9	100.0	61.1	31.3	1,354
30-39	94.8	54.8	2.4	42.8	100.0	57.2	28.9	2,289
40-49	92.9	49.6	2.2	48.2	100.0	51.8	21.3	1,612
<b>Marital status</b>								
Never married	84.7	30.5	1.8	67.7	100.0	32.3	16.8	3,227
Ever had sex	91.8	40.6	2.6	56.8	100.0	43.2	22.6	1,663
Never had sex	77.1	19.8	1.0	79.3	100.0	20.7	10.5	1,563
Married/Living together	94.5	53.6	2.7	43.7	100.0	56.3	27.4	4,994
Divorced/Separated/Widowed	92.4	49.8	2.1	48.1	100.0	51.9	22.4	514
<b>Residence</b>								
Urban	94.3	58.6	1.8	39.6	100.0	60.4	30.4	1,739
Rural	89.8	41.5	2.4	56.1	100.0	43.9	21.4	6,995
<b>Region</b>								
Central 1	93.8	51.8	2.7	45.5	100.0	54.5	27.2	1,009
Central 2	90.8	48.2	2.6	49.2	100.0	50.8	24.5	888
Kampala	91.8	57.5	1.8	40.7	100.0	59.3	27.6	674
East Central	92.7	33.5	2.0	64.5	100.0	35.5	17.9	933
Mid Eastern	77.1	24.5	2.6	72.9	100.0	27.1	12.3	950
North East	81.9	49.9	2.5	47.7	100.0	52.3	26.4	683
West Nile	95.1	51.2	2.3	46.5	100.0	53.5	27.6	548
Mid Northern	94.1	61.3	2.0	36.6	100.0	63.4	38.8	950
South Western	92.7	39.8	1.2	58.9	100.0	41.1	16.2	947
Mid Western	95.8	39.4	3.1	57.5	100.0	42.5	18.1	1,151
<b>Education</b>								
No education	81.9	32.4	2.3	65.3	100.0	34.7	14.0	485
Primary incomplete	87.2	35.0	2.6	62.4	100.0	37.6	17.8	3,727
Primary complete	92.2	47.4	2.2	50.4	100.0	49.6	23.3	1,230
Secondary or higher	95.5	56.9	2.0	41.1	100.0	58.9	30.5	3,292
<b>Wealth quintile</b>								
Lowest	85.4	40.6	2.0	57.5	100.0	42.5	20.7	1,504
Second	89.2	38.1	2.9	58.9	100.0	41.1	20.7	1,632
Middle	90.7	40.4	2.5	57.0	100.0	43.0	19.4	1,667
Fourth	92.0	42.6	1.9	55.5	100.0	44.5	22.0	1,706
Highest	94.5	57.8	2.2	40.0	100.0	60.0	30.3	2,226
Total 15-49	90.7	44.9	2.3	52.8	100.0	47.2	23.2	8,735
50-59	90.5	45.4	1.9	52.6	100.0	47.4	23.3	853
Total 15-59	90.7	44.9	2.3	52.8	100.0	47.2	23.2	9,588

<sup>1</sup> Includes 'don't know/missing'

Fewer than half of men age 15-49 (45 percent) have ever been tested for HIV and received the results. An additional 2 percent were tested but did not receive the results. Those more likely to have been tested and received results include men in their late twenties and early thirties, those who are currently married, urban men, men in Mid Northern region (Map 9.2), and men who completed primary school or higher or are in the highest wealth quintile. Almost one-quarter of men say they have been tested in the 12 months before the survey and received the results. Men who are more likely to have been tested recently include those in their late twenties, those who are currently married, those in urban areas, those in Mid Northern region, those with more education, and those in the highest wealth quintile.

Looking at results for both sexes combined (Table 9.1.3) indicates that although over 90 percent of Ugandan adults age 15-49 know where to get an HIV test, only 57 percent have been tested and received the results.

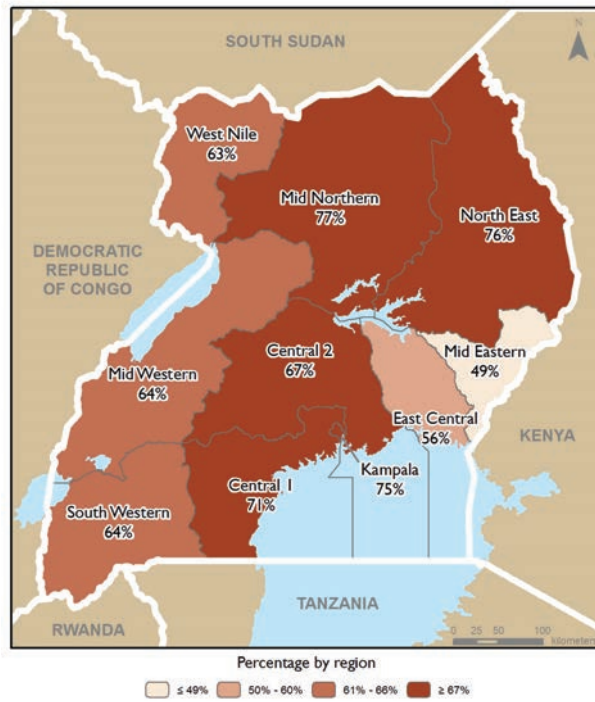
**Table 9.1.3 Coverage of prior HIV testing: Both sexes (women and men combined)**

Percentage of women and men age 15-49 who know where to get an HIV test, percent distribution of women and men age 15-49 by testing status and by whether they received the results of the last test, and the percentage of women and men ever tested, according to background characteristics, Uganda 2011

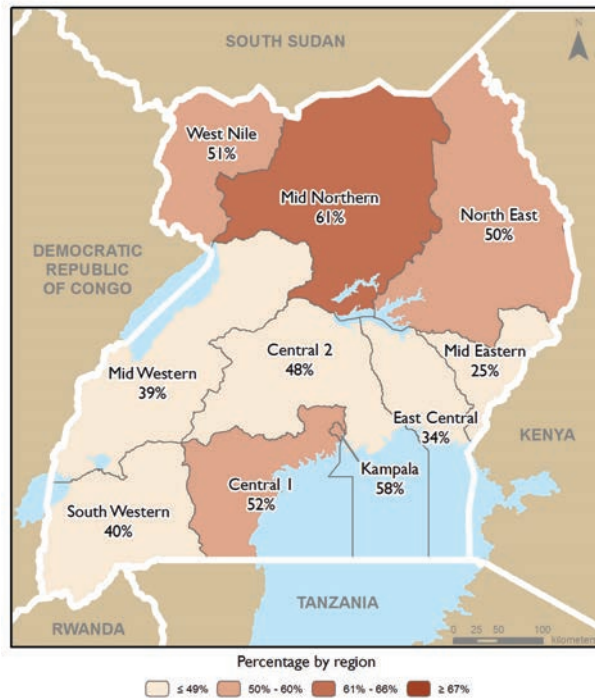
Background characteristic	Percentage who know where to get an HIV test	Percent distribution of women and men by testing status and by whether they received the results of the last test			Total	Percentage ever tested	Number of women and men
		Ever tested and received results	Ever tested, did not receive results	Never tested <sup>1</sup>			
<b>Age</b>							
15-24	87.3	46.3	3.1	50.6	100.0	49.4	8,099
15-19	81.7	31.6	2.4	66.0	100.0	34.0	4,530
20-24	94.4	65.0	3.9	31.1	100.0	68.9	3,569
25-29	96.3	71.5	3.8	24.7	100.0	75.3	3,297
30-39	95.1	64.2	4.0	31.7	100.0	68.3	5,122
40-49	92.4	55.0	3.2	41.8	100.0	58.2	3,377
<b>Marital status</b>							
Never married	84.5	35.8	2.1	62.1	100.0	37.9	5,868
Ever had sex	92.5	50.8	2.7	46.4	100.0	53.6	2,865
Never had sex	76.9	21.5	1.5	77.0	100.0	23.0	3,003
Married/Living together	94.8	65.3	4.1	30.6	100.0	69.4	12,091
Divorced/Separated/Widowed	93.9	65.0	3.7	31.3	100.0	68.7	1,935
<b>Residence</b>							
Urban	95.6	68.8	2.2	29.1	100.0	70.9	4,104
Rural	90.6	53.4	3.8	42.8	100.0	57.2	15,791
<b>Region</b>							
Central 1	95.4	62.3	3.7	33.9	100.0	66.1	2,215
Central 2	91.8	58.9	2.7	38.4	100.0	61.6	2,051
Kampala	94.4	67.6	1.9	30.5	100.0	69.5	1,549
East Central	92.9	46.2	4.5	49.4	100.0	50.6	2,087
Mid Eastern	81.2	37.6	5.9	56.5	100.0	43.5	2,082
North East	87.4	65.0	2.9	32.1	100.0	67.9	1,603
West Nile	92.0	58.1	3.3	38.6	100.0	61.4	1,260
Mid Northern	93.9	69.5	3.5	27.0	100.0	73.0	2,056
South Western	93.3	54.1	2.4	43.5	100.0	56.5	2,361
Mid Western	93.5	53.1	3.3	43.6	100.0	56.4	2,631
<b>Education</b>							
No education	87.1	52.5	5.5	42.0	100.0	58.0	2,051
Primary incomplete	89.0	51.4	4.0	44.7	100.0	55.3	8,945
Primary complete	93.5	58.6	3.1	38.3	100.0	61.7	2,618
Secondary or higher	96.2	64.5	2.2	33.3	100.0	66.7	6,281
<b>Wealth quintile</b>							
Lowest	87.3	53.0	4.2	42.8	100.0	57.2	3,398
Second	89.3	50.9	4.1	45.0	100.0	55.0	3,656
Middle	90.9	51.0	4.5	44.5	100.0	55.5	3,723
Fourth	93.4	55.7	2.8	41.5	100.0	58.5	3,998
Highest	95.5	67.8	2.3	29.9	100.0	70.1	5,120
Total 15-49	91.7	56.6	3.5	40.0	100.0	60.0	19,895
50-59	88.3	47.1	2.6	50.4	100.0	49.6	1,846
Total 15-59	91.4	55.8	3.4	40.8	100.0	59.2	21,741

<sup>1</sup> Includes 'don't know/missing'

**Map 9.1 Percentage ever tested for HIV and received results: Women 15-49**

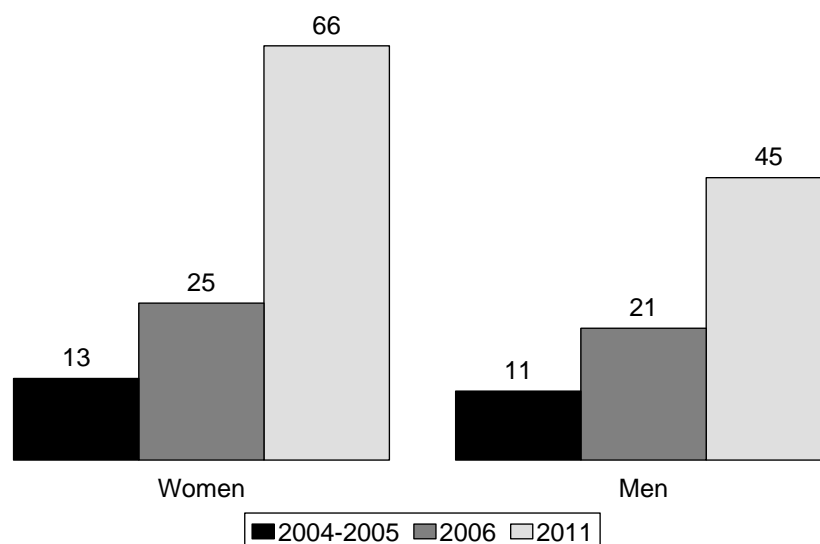


**Map 9.2 Percentage ever tested for HIV and received results: Men 15-49**



Despite the large gap between knowledge of a place to get tested and the proportion of adults who have ever had an HIV test, the survey indicates that the level of HIV testing has increased tremendously in the past six to seven years in Uganda. As shown in Figure 9.1, the proportion of women age 15-49 who have ever been tested for HIV and received the results has increased five times since 2004-05, from 13 percent to 66 percent. The increase among men has been somewhat more modest, from 11 percent in 2004-05 to 45 percent in 2011.

**Figure 9.1 Trends in prior HIV testing, Uganda**



Note: Percentage of women and men 15-49 who were ever tested for HIV and received results

Uganda 2011 AIS

## 9.2 HIV COUNSELING AND TESTING AMONG YOUTH

It is particularly important to measure behaviour regarding HIV testing among youth. Not only are youth especially vulnerable to infection, but they also may experience barriers to accessing testing services due to their young age.

Table 9.2 shows that women age 15-24 who were sexually active in the 12 months before the survey are almost twice as likely as men of the same age to have ever been tested for HIV and received the results. Seventy-four percent of sexually active young women and 43 percent of sexually active young men said they have ever been tested and received their results. Young women and men in the 20-24 age group were much more likely to have been tested for HIV than those in the 15-19 age group. Although 63 percent of sexually active women age 15-19 have ever been tested for HIV and received the results, the proportion climbs to 80 percent for women age 20-24.

Ever-married youth are more likely to have ever had an HIV test than never-married young women and men. Urban youth are more likely to be tested than rural youth. Testing behaviour is more common among youth with higher education. For example, only 60 percent of young women age 15-24 with no education have ever been tested for HIV and received the results, compared with 81 percent of young women with at least some secondary schooling. Data on HIV testing in the 12 months before the survey are available for men. It shows that almost one-quarter of young, sexually active men age 15-24 had an HIV test in the 12 months before the survey and received the results. Differentials are similar to those described above; however, the differences for recent testing are less pronounced.

**Table 9.2 Recent HIV tests among young people**

Among young women and young men age 15-24 who have had sexual intercourse in the past 12 months, the percentage who have ever had an HIV test and received the results of the test, and among young men age 15-24 who have had sexual intercourse in the past 12 months, the percentage who have had an HIV test and received results in the past 12 months, by background characteristics, Uganda 2011

Background characteristic	Among women age 15-24 who have had sexual intercourse in the past 12 months:		Among men age 15-24 who have had sexual intercourse in the past 12 months:		
	Percentage who have ever been tested for HIV and received results	Number of women	Percentage who have ever been tested for HIV and received results	Percentage who have been tested for HIV and received results in the past 12 months	Number of men
<b>Age</b>					
15-19	63.4	979	28.3	16.3	484
15-17	52.0	377	24.8	17.7	181
18-19	70.6	602	30.4	15.4	303
20-24	79.9	1,869	49.1	28.1	1,033
20-22	79.1	1,116	45.9	27.7	582
23-24	81.1	753	53.3	28.7	451
<b>Marital status</b>					
Never married	63.2	735	39.8	23.6	923
Ever married	78.1	2,113	46.7	25.5	594
<b>Knows condom source<sup>1</sup></b>					
Yes	77.0	2,050	43.5	25.3	1,382
No	67.2	798	32.1	14.6	135
<b>Residence</b>					
Urban	84.3	672	54.3	34.2	333
Rural	71.1	2,176	39.2	21.6	1,185
<b>Education</b>					
No education	59.8	134	(30.3)	(9.8)	38
Primary incomplete	70.3	1,305	33.0	18.6	621
Primary complete	76.1	451	43.6	25.0	234
Secondary or higher	80.7	957	52.3	30.7	624
<b>Total</b>	<b>74.2</b>	<b>2,848</b>	<b>42.5</b>	<b>24.4</b>	<b>1,517</b>

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

<sup>1</sup> For this table, the following responses are not considered a source for condoms: friends, family members and home

### 9.3 HIV PREVALENCE BY PRIOR HIV TEST RESULTS

In the 2011 UAIS, respondents who said that they had ever been tested for HIV were asked to disclose the result of their last HIV test to the interviewer. Table 9.3 shows the proportion of women and men who tested positive in the 2011 UAIS, according to the HIV status reported by the respondent.

Those who have ever been tested for HIV are more likely to be HIV positive than those who have not been tested. Among women who had ever been tested for HIV, 10 percent are HIV-positive—regardless of whether they received the results or not—compared with only 5 percent of women who had not been previously tested before the survey. Among men who had been tested before the survey, 8 percent tested positive in the 2011 UAIS, compared with 5 percent of men who were not previously tested. These results are very plausible, suggesting that people who think they might have HIV are more motivated to get tested.

Among women who were previously tested and who reported that their last HIV test result was positive, 96 percent tested positive in the 2011 UAIS. For men, only 89 percent of those who reported that they were positive actually tested positive in the 2011 UAIS. This means that 4 percent of women and 11 percent of men who reported to the interviewer that they were HIV-positive had negative or indeterminate HIV test results in the 2011 UAIS. The possible reasons for this difference cannot be fully explained without further investigation. It is possible that a combination of false positives with regard to previous testing and false negatives with regard to testing within the 2011 UAIS for these respondents may contribute to the difference.

Due to the high sensitivity and specificity of the HIV tests used in Uganda, this is likely to be a small number of cases. Without repeat interviews, testing, or both, it is not possible to know the cause of these differences.

**Table 9.3 HIV prevalence by self-reported prior HIV testing**

Among women and men age 15-49 who were tested in the Uganda AIS, percentage who tested positive for HIV, according to self-reported HIV status, Uganda 2011

Self-reported HIV status from testing prior to the survey	Women		Men		Both sexes	
	Percentage HIV positive	Number	Percentage HIV positive	Number	Percentage HIV positive	Number
Previously tested, received results	9.7	7,189	7.8	3,888	9.0	11,077
Positive	95.6	419	88.6	190	93.4	609
Negative	4.3	6,716	3.5	3,666	4.0	10,382
Refused to answer, other	11.5	53	(21.1)	32	15.1	85
Did not receive results	9.6	444	7.9	202	9.1	646
Not previously tested	5.2	3,250	4.6	4,582	4.8	7,833
Total 15-49	8.3	10,883	6.1	8,673	7.3	19,556

HIV prevalence is 4 percent among both women and men who reported that their last HIV test result prior to the survey was negative. There are a few possible reasons for this difference. First, respondents could have seroconverted since their last HIV test. Second, respondents could knowingly report a false negative HIV status due to discomfort about disclosing that they are HIV-positive to the survey interviewer. Third, the respondent could have received a false negative on the prior HIV test or a false positive on the 2011 UAIS HIV test. The third possibility is likely to be very small, given the high sensitivity and specificity of HIV tests. The proportion of respondents who seroconverted between their last HIV test and the survey is also likely to be small, given the estimated incidence rates of HIV and the relatively short duration between the date of the last HIV test and the 2011 UAIS survey for the majority of respondents.<sup>1</sup> It is not possible from the survey data alone to sort out the reasons for the difference.

Table 9.4 shows the percent distribution of women and men age 15-49 by self-reported HIV status, according to whether they tested HIV-positive or HIV-negative in the 2011 UAIS. Table 9.4 differs from Table 9.3 in that the denominators represent different groups of people. In Table 9.3, the denominators for the percentages are the number of respondents self-reporting their HIV status. For example, among women who self-reported their HIV status as positive, 96 percent were found to be HIV-positive in the 2011 UAIS testing. In Table 9.4, the denominators are the number of respondents who are HIV-positive or HIV-negative, according to the 2011 UAIS testing. For example, 44 percent of the women who are HIV-positive in the 2011 UAIS self-reported that they were positive.

As shown in Table 9.4, it appears that only 44 percent of HIV-positive women and 32 percent of HIV-positive men know that they are positive. Although many adults do not know their status because they have never been tested for HIV, it is troubling that 32 percent of HIV-positive women and 24 percent of HIV-positive men report that they were previously tested and the result was negative. Some of these respondents may have sero-converted between their most recent HIV test and the 2011 UAIS testing. It is also likely that some respondents were unwilling to disclose to the interviewer that they knew they were HIV-positive and therefore reported that their most recent test results were negative. There is also the possibility that the prior test was not accurate (a false negative) or that the 2011 UAIS results were not accurate (a false positive).

<sup>1</sup> Due to a problem with the 2011 UAIS Individual Questionnaire, data on time since last HIV test is not available for some women. Women who had a birth in the five years before the survey and who said they had an HIV test during antenatal care were not asked if the test was in the 12 months before the survey. Those who said they were tested after the pregnancy, were asked if the test was in the 12 months before the survey, so only those who were not tested later are missing data on the timing of the antenatal test.



**Table 9.4** Prior HIV testing by current HIV status

Percent distribution of women and men age 15-49 who tested HIV positive and who tested HIV negative in the Uganda AIS by self-reported HIV status, Uganda 2011

Self-reported HIV status from testing prior to the survey	Women		Men		Both sexes	
	HIV positive	HIV negative	HIV positive	HIV negative	HIV positive	HIV negative
Previously tested, received results	76.5	64.8	57.3	44.0	69.5	55.5
Positive	44.2	0.2	31.8	0.3	39.6	0.2
Negative	31.7	64.2	24.2	43.4	28.9	54.9
Refused or DK result	0.7	0.4	1.3	0.3	0.9	0.4
Did not receive results	4.8	4.3	3.0	2.3	4.2	3.4
Not previously tested	18.6	30.9	39.6	53.7	26.4	41.1
Total	100.0	100.0	100.0	100.0	100.0	100.0
Number	907	9,976	529	8,144	1,436	18,120

Among HIV-negative respondents, 64 percent of women and 43 percent of men had been tested before the survey and reported that the results of the prior test were negative.

In summary, Tables 9.3 and 9.4 show that there is poor agreement between current HIV status as determined by the 2011 UAIS test result and the HIV status reported by respondents. Therefore, self-reported HIV status is not an accurate reflection of actual HIV status.

## 9.4 USE OF COTRIMOXAZOLE

HIV attacks the immune system, reducing the ability of the body to fight infections. Cotrimoxazole (Septrin) is a medicine that is often given to those who test positive for HIV as a means of preventing opportunistic infections. UAIS respondents who reported that they had been previously tested for HIV and that the result was positive were asked if they were taking septrin or cotrimoxazole daily. Table 9.5 shows the distribution of respondents age 15-49 who tested positive in the survey by their self-reported status and whether or not they were taking cotrimoxazole daily.

**Table 9.5** Coverage of cotrimoxazole

Percent distribution of women and men age 15-49 who tested HIV-positive in the UAIS by self-reported HIV status and use of cotrimoxazole, Uganda 2011

Prior test results and use of cotrimoxazole	Percentage
Self-reported HIV positive	
Taking cotrimoxazole	32.3
Not taking cotrimoxazole	7.1
Does not know	0.2
Self-reported HIV negative	29.0
Refused to answer/DK if positive or negative	5.0
No prior testing	26.4
Total	100.0
Number of women and men who tested HIV positive	1,436

Results show that only one-third of HIV-positive adults report that they are taking cotrimoxazole daily. This low estimate is due to the fact that as noted previously, 29 percent of HIV-positive adults were previously tested and told they were HIV-negative and 26 percent were never tested before the survey. Of those who knew they were HIV-positive, the vast majority said they were taking cotrimoxazole daily.

## 9.5 PRIOR CD4 TESTING COVERAGE

Measuring the level of CD4 cells is a means of assessing the body's ability to fight off infections. Current policy in Uganda is to provide antiretroviral (ARV) treatment to those whose CD4 levels drop below 350 cells per microlitre. Consequently, those who test HIV positive are encouraged to get tests for CD4 levels in order to know whether they require ARV medicine or not. Table 9.6 shows the distribution of women and men age 15-49 who self-reported that they were HIV-positive by whether they were ever offered and received a CD4 test.

It is encouraging that of those who report that they are HIV positive, 70 percent say they were offered a CD4 test, 28 percent say they were not offered the test and a small proportion say they do not know. Almost all of those who were offered the CD4 test reported that they had the test; fully two-thirds of respondents (67 percent) who self-report HIV positive say they have had a CD4 test.

## 9.6 CD4 CELLS TEST RESULTS FROM THE SURVEY

As mentioned in Chapter 1, one of the three tubes of blood collected from consenting adults in the 2011 UAIS was a special container for CD4 cells testing. The CD4 tubes for respondents who tested HIV positive on the home-based rapid test algorithm were placed in a special container. Laboratory technicians called the central office to alert them so that they could send transport to pick up the CD4 sample tubes as soon as possible. Table 9.7 shows the distribution of women and men age 15-49 who tested HIV-positive in the central laboratory and who had a CD4 result by the CD4 level, according to whether the respondents reported that they were taking antiretroviral (ARV) drugs or not. Overall, almost one-third of HIV-positive adults have a CD4 level below 350, the cut-off the Ministry of Health recommends for initiating ARV treatment. There is little difference by gender, with 31 percent of women and 34 percent of men having CD4 levels below 350. Those who report that they are taking ARVs are more likely to have CD-4 levels below the 350 cut-off than those who do not report that they are taking ARVs.

Table 9.6 Prior CD4 testing

Among women and men age 15-49 who report that they previously tested positive for HIV, percent distribution by whether they were ever offered a CD4 test and percent distribution who ever received the CD4 test, Uganda, 2011

Offered/Received CD4 test	Percentage
Were offered a CD4 test	70.2
Had the CD4 test	66.5
Did not have the CD4 test	3.3
Does not know if had the CD4 test	0.4
Was not offered a CD4 test	28.2
Does not know if offered CD4 test or not	1.5
Total	100.0
Number of women and men 15-49 who report being HIV-positive	614

Table 9.7 CD4 levels among those HIV-positive

Among women and men age 15-49 who tested HIV-positive in the UAIS and for whom CD4 results are available, percent distribution by CD4 level, according to whether taking ARVs or not, Uganda, 2011

CD4 level per $\mu\text{L}$ <sup>1</sup>	Women			Men			Both sexes		
	Taking ARVs	Not taking ARVs	Total	Taking ARVs	Not taking ARVs	Total	Taking ARVs	Not taking ARVs	Total
<100	3.7	3.1	3.3	10.4	2.4	3.9	5.6	2.9	3.5
100-199	8.1	7.4	7.6	28.8	8.3	12.2	14.1	7.8	9.2
200-249	2.6	7.0	5.9	3.6	7.3	6.6	2.9	7.1	6.2
250-349	18.0	13.3	14.5	11.6	10.9	11.0	16.2	12.4	13.2
350-499	27.5	23.2	24.2	22.5	28.5	27.4	26.1	25.1	25.3
500-599	15.4	15.4	15.4	8.9	11.9	11.3	13.5	14.1	14.0
600+	24.6	30.6	29.1	14.4	30.7	27.7	21.6	30.6	28.6
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Percentage below 350	32.4	30.9	31.2	54.3	28.9	33.7	38.8	30.1	32.1
Number	182	561	743	75	326	401	257	887	1,144

<sup>1</sup> CD-4 results are not available for 20 percent of respondents 15-49. Most of the shortfall consists of respondents who tested HIV-negative on the home-based rapid test and HIV-positive in the central laboratory, however some may be due to samples reaching the central laboratory too late to be tested for CD-4 or to other logistical problems.

## 9.7 ARV ELIGIBILITY AND USE

One objective of the CD4 testing component of the UAIS was to estimate the proportion of adults eligible to be taking ARVs and the proportion of those who are actually taking them. Table 9.8 shows the distribution of HIV-positive women and men by eligibility status and use of ARVs, using a CD4 cutoff of 350 cells per  $\mu\text{L}$ . The first column consists of all HIV-positive individuals who report they are currently taking ARVs, regardless of their CD4 result.

Table 9.8 Eligibility for and use of ARVs by background characteristics

Among women and men age 15-49 who tested HIV-positive in the UAIS, percent distribution by eligibility for and current use of ARVs, Uganda 2011

Background characteristic	Eligible and using <sup>1</sup>	Eligible and not using <sup>2</sup>	Not eligible <sup>3</sup>	Other (No CD4 results)	Total	Number of HIV-positive women and men
<b>Sex</b>						
Women	21.2	19.1	42.8	16.9	100.0	907
Men	15.3	18.3	43.4	23.0	100.0	529
<b>Residence</b>						
Urban	24.2	23.0	44.9	7.9	100.0	349
Rural	17.4	17.4	42.4	22.8	100.0	1,086
<b>Region</b>						
Central 1	15.2	18.1	50.3	16.3	100.0	231
Central 2	15.8	24.1	35.8	24.3	100.0	181
Kampala	25.7	19.0	45.9	9.4	100.0	109
East Central	12.9	21.3	40.2	25.6	100.0	120
Mid Eastern	17.4	17.3	32.5	32.8	100.0	84
North East	28.5	13.7	38.6	19.2	100.0	84
West Nile	28.5	16.9	25.5	29.1	100.0	60
Mid Northern	20.3	23.3	44.6	11.8	100.0	168
South Western	21.6	13.2	44.2	21.0	100.0	188
Mid Western	17.2	18.0	49.7	15.1	100.0	213
<b>Education</b>						
No education	24.1	21.2	36.6	18.1	100.0	184
Primary incomplete	17.5	19.5	42.1	20.8	100.0	694
Primary complete	18.1	16.1	52.0	13.9	100.0	213
Secondary or higher	20.1	17.7	42.6	19.5	100.0	345
<b>Wealth quintile</b>						
Lowest	15.5	15.2	46.8	22.4	100.0	211
Second	20.0	19.1	37.4	23.4	100.0	231
Middle	15.0	20.6	40.2	24.3	100.0	256
Fourth	19.3	18.5	43.3	18.9	100.0	329
Highest	22.8	19.6	45.7	12.0	100.0	408
Total	19.1	18.8	43.0	19.2	100.0	1,436

<sup>1</sup> Those who were tested in the UAIS as being HIV-positive and who self-report that they are HIV-positive and are taking ARVs

<sup>2</sup> Those who were tested in the UAIS as being HIV-positive with a CD4 count <= 350, and they either report that they are not taking ARVs or they are missing or not applicable for the question on ARVs.

<sup>3</sup> Those who were tested in the UAIS as being HIV-positive and who had a CD4 count > 350 (and are not taking ARVs)

As shown in Table 9.8, 19 percent of HIV-positive respondents reported they are using ARVs, and an additional 19 percent are not using ARVs although they have a CD4 level below 350. According to this information, ARV coverage among those eligible would be 50 percent. However, the table also shows that CD4 results are not available for nearly one in five HIV-positive respondents which complicates the interpretation of the ARV coverage data. In order to understand the magnitude of the impact this missing data could have on the coverage estimate, it is possible to calculate the ARV coverage rate assuming first that none of the individuals missing CD4 results was eligible for ARVs and then assuming that all of the individuals missing CD4 results were eligible for ARVs. Under the assumption that none of the individuals missing CD4 results was eligible to receive ARVs, the ARV coverage rate would still be 50 percent. However, under the assumption that all of the individuals in this category were eligible for ARVs, the coverage rate would be just 33 percent. Using the first definition of coverage, Figure 9.2 shows ARV coverage rates for women and men age 15-49 by gender, residence and wealth quintile. Differentials are remarkably small.

**Figure 9.2 Differentials in ARV coverage**



Note: Based on those with complete information; excludes 19 percent of HIV-positive individuals for whom no CD4 results were available.

Uganda AIS 2011

Respondents who reported that they were taking ARVs were asked where they obtained the medication and how far it was from their home. They were also asked how long they had been taking ARVs. Results are shown in Table 9.9.

Over three-quarters of self-reported HIV-positive respondents who were taking ARVs daily obtain their medicine from a public sector source, either a government hospital or health centre. Almost one-quarter say that they get treatment from a non-governmental source, such as facilities affiliated with a religious organisation.

A large majority of those taking ARVs say that the source of treatment is within 10 kilometres of their home. Nevertheless, 10 percent of respondents say they get ARVs from a source that is 50 kilometres or farther from their home.

About one-fifth of respondents who are taking ARVs say they have been taking ARVs for less than one year, while almost one-third have been taking them for 1-2 years. One-fifth have been taking ARVs for 5 years or more.

**Table 9.9 Source of ARVs and duration of use**

Among women and men age 15-49 who report that they are currently taking ARVs daily, percent distribution by source of ARVs, distance to the source of ARVs, and duration of taking ARVs, Uganda, 2011

Indicator	Percentage
<b>Source of ARVs</b>	
Public sector	77.2
Government hospital	46.5
Government health centre/clinic	30.7
Mission, church facility	22.8
Total	100.0
<b>Distance to source of ARVs</b>	
0-9 kilometers	63.2
10-19 kilometers	10.1
20-29 kilometers	6.7
30-39 kilometers	3.2
40-49 kilometers	3.0
50+ kilometers	10.1
Does not know, missing	3.8
Total	100.0
<b>Duration of ARV treatment</b>	
0-5 months	12.1
6-11 months	8.0
1-2 years	32.1
3-4 years	27.9
5+ years	19.9
Total	100.0
Number of women and men 15-49 who report taking ARVs	281

## 9.8 TESTING AND COUNSELING DURING PREGNANCY

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 counseling on infant feeding practices best for their baby and on future pregnancy choices. In the 2011 UAIS, women who had given birth in the two years before the survey and had received antenatal care for the last birth were asked if anyone had talked to them about HIV, how to prevent infection from the virus, and how to get tested for HIV. They were also asked if they were tested for HIV as part of their antenatal care and if they were tested for syphilis during the pregnancy. Results are shown in Table 9.10.

Results show that seven in ten women received HIV counselling during antenatal care for their most recent birth. Seventy-two percent were tested for HIV and received the results, while 5 percent said they were tested but did not receive the results. Only 20 percent of women with a birth in the two years before the survey said they had been tested for syphilis during the pregnancy.

Table 9.10 Pregnant women counseled and tested for HIV and syphilis

Among all women age 15-49 who gave birth in the two years preceding the survey, the percentage who received HIV pretest counseling, the percentage who received an HIV test during antenatal care for their most recent birth by whether they received their results or not, and percentage who received a syphilis test during pregnancy for their most recent birth, according to background characteristics, Uganda 2011

Background characteristic	Percentage who received counseling on HIV during antenatal care <sup>1</sup>	Percentage who were tested for HIV during antenatal care and who:		Percentage who received pretest counseling, had an HIV test, and who received results	Percentage who were tested for syphilis during pregnancy	Number of women who gave birth in the past two years <sup>2</sup>
		Received results	Did not receive results			
<b>Age</b>						
15-24	70.6	74.2	5.3	62.1	22.4	1,557
15-19	73.2	73.5	6.0	61.8	21.9	436
20-24	69.7	74.4	5.0	62.2	22.7	1,121
25-29	72.9	75.7	3.8	63.9	20.1	1,016
30-39	66.8	68.1	5.1	55.9	17.1	1,192
40-49	62.4	63.5	3.1	48.0	19.8	205
<b>Marital status</b>						
Never married	76.6	77.9	6.7	69.0	25.0	228
Ever had sex	76.6	77.9	6.7	69.0	25.0	228
Married/Living together	69.4	71.9	4.7	59.5	19.7	3,363
Divorced/Separated/ Widowed	67.6	71.0	3.9	58.3	20.7	379
<b>Residence</b>						
Urban	85.9	91.1	1.9	81.5	36.4	622
Rural	66.6	68.7	5.3	55.9	17.0	3,348
<b>Region</b>						
Central 1	72.7	77.2	3.3	64.2	33.7	437
Central 2	67.7	75.8	2.7	60.1	25.6	456
Kampala	84.2	88.2	3.2	80.1	35.8	205
East Central	60.5	52.3	7.5	44.4	17.3	436
Mid Eastern	60.1	58.5	10.7	47.0	9.7	404
North East	71.0	79.8	4.3	64.0	10.0	390
West Nile	74.6	73.2	4.9	61.0	14.8	254
Mid Northern	75.9	76.3	5.5	66.0	20.2	407
South Western	73.5	78.5	2.2	66.4	16.7	451
Mid Western	66.4	70.9	3.3	57.6	20.9	533
<b>Education</b>						
No education	55.8	58.5	7.5	42.6	12.4	573
Primary incomplete	66.0	68.4	5.0	55.4	16.7	2,017
Primary complete	76.1	79.7	3.2	68.5	22.1	527
Secondary or higher	83.6	85.6	3.1	77.1	32.0	853
<b>Wealth quintile</b>						
Lowest	59.0	62.9	5.8	47.5	10.5	848
Second	64.8	66.2	5.6	54.1	13.8	847
Middle	66.8	66.6	5.3	55.7	18.7	769
Fourth	73.6	77.6	4.6	64.0	23.2	730
Highest	85.5	89.2	2.2	80.4	35.8	776
Total 15-49	69.6	72.2	4.7	60.0	20.1	3,970

<sup>1</sup> In this context, 'counseling' means that someone talked with the respondent about all three of the following topics: (1) babies getting HIV from their mother, (2) preventing the virus, and (3) getting tested for the virus.

<sup>2</sup> Denominator for percentages includes women who did not receive antenatal care for their last birth in the past two years.

Some women are more likely to get counselling for HIV, testing for HIV, and testing for syphilis than other women. They include urban women, women in Kampala, and women with higher levels of education and wealth.

Women who said they had been tested for HIV during antenatal care for their most recent birth in the two years before the survey were asked what the result of that test was and, if positive, they were asked if they had been offered ARVs to reduce the risk of passing on the AIDS virus

Table 9.11 Prevention of mother-to-child transmission (PMTCT) of HIV	
Among women 15-49 who had a birth in the two years before the survey for which they received antenatal care and who reported that they tested HIV-positive during antenatal care, percentage who reported receiving various PMTCT services for themselves and their babies, Uganda, 2011	
ARV use during labour and delivery for HIV-positive mothers	Percentage
Percentage of mothers who were offered ARVs during pregnancy, labour or delivery (or who were already taking ARVs)	79.9
Percentage of mothers who took ARVs during pregnancy or during labour and delivery	79.9
Percentage whose baby took ARVs	48.4
Percentage whose baby was ever tested for HIV	42.0
Number of women with a birth in previous two years who reported they tested HIV-positive during antenatal care	65

to the unborn baby. As shown in Table 9.11, a large majority of the women (80 percent) said they were offered ARVs, all of whom said they took the medicine. Almost half said that their baby was given ARVs. Results should be viewed cautiously as they depend on women being willing to divulge their HIV status to the interviewer. Another reason for caution is that the data are based on only 69 women (unweighted number) who reported testing positive during their recent pregnancy. Only 42 percent of recent HIV-positive mothers said that their child had ever been tested for HIV.

## 9.9 MALE CIRCUMCISION

### 9.9.1 Prevalence of Male Circumcision

Circumcision is practised in many societies in Uganda. Table 9.12 shows that one-quarter of Ugandan men age 15-49 (26 percent) are circumcised, almost unchanged from the level of 25 percent found in the 2004-05 UHSBS.

There are only slight differences in the prevalence of circumcision by age group, implying that there has been little change in the prevalence of the practice over time. The lower prevalence among men age 15-19 could be due to a decline in the practice, but it might also be due to the fact that some of the youngest men have not yet been circumcised.

Male circumcision is more common among urban men (37 percent) than rural men (24 percent). It is also much more common among men in Mid Eastern region (53 percent), East Central region (42 percent), and Kampala (35 percent) than among men in other regions (Map 9.3). Less than 10 percent of men in North East, Mid Northern, and South Western regions are circumcised.

As expected, male circumcision is higher among Muslim men, 98 percent of whom have been circumcised. Prevalence is lowest among Catholic men (13 percent). It is far more prevalent among the Bagisu/Sabiny ethnic group (81 percent) and the Basoga (41 percent) than among other groups, especially the Acholi and Langi, only 2 percent of whom are circumcised.

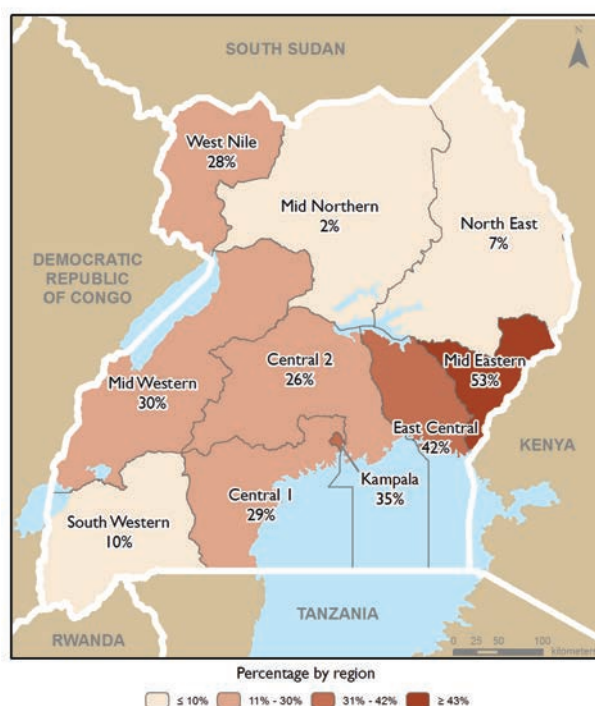
The practice of male circumcision is related to wealth. Men from the lowest wealth quintile are least likely to be circumcised (17 percent), compared with those in the highest quintile, 35 percent of whom have been circumcised.

**Table 9.12 Male circumcision**

Percentage of men age 15-49 who report having been circumcised, by background characteristics, Uganda 2011

Background characteristic	Percentage circumcised	Number of men
<b>Age</b>		
15-24	26.3	3,479
15-19	23.4	2,072
20-24	30.7	1,406
25-29	29.7	1,354
30-39	26.8	2,289
40-49	23.3	1,612
<b>Residence</b>		
Urban	37.0	1,739
Rural	23.8	6,995
<b>Region</b>		
Central 1	28.7	1,009
Central 2	26.4	888
Kampala	35.2	674
East Central	41.9	933
Mid Eastern	53.1	950
North East	6.7	683
West Nile	27.7	548
Mid Northern	1.6	950
South Western	9.9	947
Mid Western	29.9	1,151
<b>Religion</b>		
Catholic	13.2	3,627
Anglican/Protestant	18.2	3,060
SDA	29.2	136
Pentecostal	16.7	506
Other Christian	19.7	210
Muslim	97.9	1,112
Other	23.8	84
<b>Ethnicity</b>		
Baganda	29.8	1,474
Banyankore	13.7	884
Iteso	8.4	665
Lugbara/Madi	29.9	419
Basoga	41.2	806
Langi	2.1	590
Bakiga	9.7	467
Karimojong	4.9	127
Acholi	1.7	421
Bagisu/Sabiny	81.1	582
Alur/Jopadhola	15.5	403
Banyoro	26.0	414
Batoro	18.6	322
Other	39.8	1,160
<b>Wealth quintile</b>		
Lowest	17.1	1,504
Second	24.3	1,632
Middle	26.6	1,667
Fourth	25.1	1,706
Highest	35.2	2,226
Total 15-49	26.4	8,735
50-59	28.9	853
Total 15-59	26.7	9,588

**Map 9.3 Percentage of men age 15-49 who are circumcised**



### 9.9.2 Age and Place of Male Circumcision

Men who reported being circumcised were asked how old they were when they were circumcised and where they were circumcised. As shown in Table 9.13, about one-quarter of men said they were circumcised as infants under one year of age, and another quarter were circumcised at age 15-19. Only 14 percent of men said they were circumcised at age 20 or older. Two-thirds of circumcised men said they were circumcised at home, while 21 percent were circumcised at a health care facility.

**Table 9.13 Characteristics of circumcision**

Among men age 15-49 who report having been circumcised, percent distribution by age at circumcision and place circumcised, Uganda 2011

Age/Place of circumcision	Percentage
<b>Age at circumcision</b>	
Under 1 year	24.8
1-4 years	8.0
5-9 years	10.8
10-14 years	13.0
15-19 years	23.9
20 or older	13.5
Does not know	6.0
Total	100.0
<b>Place of circumcision</b>	
Health care facility	21.3
Home	64.6
Mosque, religious provider	7.3
Elsewhere	2.0
Does not know	4.8
Total	100.0
Number of circumcised men	2,309



### 9.9.3 Attitudes about Male Circumcision

To assess interest in circumcision, men who said they had not been circumcised were asked if they would like to be circumcised. As shown in Table 9.14, 46 percent said they would like to have the operation, while 50 percent said they would not, and 4 percent said they were not sure.

In addition, both women and men were asked if they would recommend the practice to their uncircumcised male relatives. Results shown in Table 9.15 show very positive attitudes towards circumcision, with about 70 percent of women and men saying they would recommend the operation. Men who have themselves been circumcised are by far the most likely to recommend that their male relatives get circumcised (98 percent); however, 63 percent of uncircumcised men also say they would recommend the operation. Urban women and men and those with more education and in the higher wealth quintiles are more likely to say they would recommend circumcision to their male relatives.

Table 9.14 Desire for circumcision

Among men age 15-49 who report not having been circumcised, percent distribution by desire to be circumcised, Uganda 2011

Would like to be circumcised	Percentage
Yes	45.9
No	50.2
Not sure, does not know	3.8
Total	100.0
Number of uncircumcised men	6,426

Table 9.15 Attitudes toward male circumcision

Among women and men age 15-49, percent distribution by whether they would recommend that their uncircumcised male relatives and friends go for male circumcision, by background characteristics, Uganda 2011

Background characteristic	Women					Men				
	Yes	No	Not sure/DK	Total	Number	Yes	No	Not sure/DK	Total	Number
<b>Age</b>										
15-24	68.6	19.3	12.1	100.0	4,621	73.2	21.6	5.3	100.0	3,479
15-19	64.7	21.2	14.1	100.0	2,458	69.7	25.0	5.3	100.0	2,072
20-24	73.0	17.2	9.8	100.0	2,163	78.3	16.6	5.2	100.0	1,406
25-29	74.5	14.7	10.7	100.0	1,942	75.1	19.3	5.6	100.0	1,354
30-39	68.8	17.2	13.9	100.0	2,833	71.3	22.2	6.6	100.0	2,289
40-49	66.2	18.4	15.4	100.0	1,764	67.0	25.4	7.6	100.0	1,612
<b>Marital status</b>										
Never married	66.5	19.4	14.1	100.0	2,641	73.1	21.4	5.5	100.0	3,227
Ever had sex	75.8	15.2	9.1	100.0	1,202	79.7	15.5	4.7	100.0	1,663
Never had sex	58.9	22.9	18.2	100.0	1,440	65.9	27.7	6.3	100.0	1,563
Married/Living together	69.8	17.5	12.6	100.0	7,097	71.0	22.6	6.5	100.0	4,994
Divorced/Separated/Widowed	71.9	16.5	11.6	100.0	1,422	72.2	21.6	6.2	100.0	514
<b>Male circumcision</b>										
Circumcised	na	na	na	na	na	97.7	0.7	1.6	100.0	2,309
Not circumcised	na	na	na	na	na	62.5	29.8	7.7	100.0	6,426
<b>Residence</b>										
Urban	82.3	10.2	7.6	100.0	2,365	80.2	13.3	6.5	100.0	1,739
Rural	65.8	19.9	14.2	100.0	8,795	69.7	24.3	6.0	100.0	6,995
<b>Region</b>										
Central 1	87.2	7.4	5.4	100.0	1,206	79.3	15.0	5.8	100.0	1,009
Central 2	83.7	12.1	4.1	100.0	1,162	77.7	13.9	8.4	100.0	888
Kampala	88.6	7.4	4.0	100.0	875	84.8	8.6	6.7	100.0	674
East Central	96.6	1.6	1.9	100.0	1,153	88.0	9.9	2.1	100.0	933
Mid Eastern	77.7	12.2	10.1	100.0	1,133	87.9	10.7	1.4	100.0	950
North East	44.7	27.5	27.8	100.0	919	48.7	45.5	5.7	100.0	683
West Nile	40.4	32.0	27.5	100.0	712	68.6	26.1	5.3	100.0	548
Mid Northern	34.6	37.3	28.1	100.0	1,106	36.4	56.0	7.5	100.0	950
South Western	52.9	27.3	19.9	100.0	1,414	65.1	26.8	8.1	100.0	947
Mid Western	75.2	17.7	7.1	100.0	1,480	76.8	14.1	9.0	100.0	1,151
<b>Education</b>										
No education	50.7	26.7	22.6	100.0	1,566	62.5	28.0	9.5	100.0	485
Primary incomplete	66.9	18.9	14.1	100.0	5,218	68.6	24.9	6.5	100.0	3,727
Primary complete	73.6	14.3	12.1	100.0	1,388	69.6	24.0	6.4	100.0	1,230
Secondary or higher	81.3	12.9	5.8	100.0	2,988	77.7	17.3	5.0	100.0	3,292
<b>Wealth quintile</b>										
Lowest	48.2	29.1	22.7	100.0	1,894	56.1	37.4	6.5	100.0	1,504
Second	62.5	22.3	15.3	100.0	2,024	66.1	27.2	6.8	100.0	1,632
Middle	67.5	17.4	15.0	100.0	2,056	72.6	21.3	6.0	100.0	1,667
Fourth	73.7	15.3	11.0	100.0	2,292	77.9	17.5	4.6	100.0	1,706
Highest	85.7	9.8	4.5	100.0	2,894	81.4	12.1	6.5	100.0	2,226
Total 15-49	69.3	17.8	12.8	100.0	11,160	71.8	22.1	6.1	100.0	8,735
50-59	59.9	21.5	18.6	100.0	993	67.0	25.9	7.1	100.0	853
Total 15-59	68.6	18.1	13.3	100.0	12,153	71.4	22.4	6.2	100.0	9,588

na = Not applicable

## 9.9.4 HIV Prevalence and Male Circumcision

In the recent past, several studies in sub-Saharan Africa—including clinical trials in Uganda, South Africa, and Kenya (Gray et al., 2007; Auvert et al., 2005; and Bailey et al., 2007)—have documented that male circumcision provides some protection against acquisition of HIV and other STIs. Although the research supporting circumcision's protective effects is compelling, it is important to emphasise that circumcised men can still become infected with HIV and can infect their sexual partners.

As shown in Table 9.16, men age 15-49 who have been circumcised are slightly less likely to be HIV-positive than those who are not circumcised (4.5 percent versus 6.7 percent). The fact that this holds true for almost every sub-category of background characteristic implies that the pattern might be due to the circumcision and not to 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, HIV prevalence is lower among circumcised than uncircumcised men at every age group and for all educational levels and wealth quintiles. It is also true for all the ethnic groups for which there are a sizeable number of circumcised and uncircumcised respondents.

Table 9.16 HIV prevalence by male circumcision

Among men age 15-49 who were tested for HIV, the percentage HIV positive by whether circumcised, according to background characteristics, Uganda 2011

Background characteristic	Circumcised		Not circumcised	
	Percentage HIV positive	Number of men	Percentage HIV positive	Number of men
<b>Age</b>				
15-19	0.4	484	2.1	1,571
20-24	1.1	424	3.5	971
25-29	3.3	402	4.3	948
30-34	7.7	315	9.7	830
35-39	8.6	290	11.9	832
40-44	9.5	218	11.8	666
45-49	8.2	155	10.7	568
<b>Religion</b>				
Catholic	5.7	473	7.0	3,131
Anglican/Protestant	5.5	547	6.7	2,476
SDA	(0.0)	40	11.2	95
Pentecostal	3.3	85	4.5	426
Other Christian	(3.7)	42	3.7	169
Moslem	3.6	1,083	(1.2)	24
Other/None	*	18	9.7	64
<b>Ethnicity</b>				
Baganda	4.3	434	7.0	1,027
Banyankore	3.7	120	7.6	765
Iteso	4.4	57	6.0	611
Lugbara/Madi	2.0	122	4.1	289
Basoga	4.2	327	4.9	475
Langi	*	11	5.0	577
Bakiga	(10.6)	46	7.9	416
Karimojong	*	5	2.2	114
Acholi	*	7	6.8	401
Bagisu/Sabiny	4.5	472	1.7	108
Alur/Jopadhola	3.2	63	5.9	337
Banyoro	1.9	106	7.1	307
Batoro	(5.8)	60	11.3	259
Other	5.3	456	8.5	700
<b>Residence</b>				
Urban	5.6	635	6.4	1,074
Rural	4.0	1,652	6.7	5,311

Continued...

Table 9.16—Continued

<b>Region</b>				
Central 1	6.9	285	9.0	718
Central 2	5.7	233	8.8	651
Kampala	2.3	237	5.1	432
East Central	3.8	383	5.5	542
Mid Eastern	3.6	505	4.1	439
North East	(4.0)	46	5.3	637
West Nile	3.7	149	5.5	392
Mid Northern	*	15	6.3	921
South Western	6.7	93	6.6	853
Mid Western	4.6	341	8.2	802
<b>Education</b>				
No education	5.2	112	9.4	364
Primary incomplete	5.8	868	6.9	2,845
Primary complete	4.3	316	7.5	903
Secondary or higher	3.3	991	5.5	2,273
<b>Wealth quintile</b>				
Lowest	5.2	255	5.8	1,240
Second	3.9	394	5.4	1,232
Middle	4.5	443	7.2	1,229
Fourth	3.9	421	8.3	1,267
Highest	4.8	775	6.6	1,418
Total 15-49	4.5	2,287	6.7	6,385
50-59	3.3	249	7.5	602
Total 15-59	4.4	2,536	6.7	6,988

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.



## Key Findings

- Two percent of Ugandan adults have syphilis, a very slight decline from 3 percent measured in 2005-05.
- There is no difference in syphilis prevalence by gender or urban-rural residence, and differences by most other characteristics are minor.
- Syphilis is much more common among the Karimojong (8 percent) than among other ethnic groups.

In addition to HIV tests, the 2011 UAIS included both rapid and laboratory testing for syphilis. Adult survey respondents who consented to the syphilis testing were offered a home-based rapid test which, if positive, was followed up with a more detailed test performed that evening in the field laboratory. As discussed in Chapter 1, respondents who tested positive were offered treatment. Further testing was performed at the HIV Reference Laboratory (HRL) at the Uganda Virus Research Institute in Entebbe. The results presented in this chapter are based on the HRL results. The inclusion of syphilis testing in the 2004-05 Uganda HIV Sero-Behavioural Survey (UHSBS) and again in the 2011 UAIS offers the opportunity to track trends over time. This chapter presents information on the syphilis testing coverage rates among eligible survey respondents, the prevalence of infection among those tested, and the differentials in infection levels by background characteristics.

## 10.1 COVERAGE RATES FOR SYPHILIS TESTING

Table 10.1 shows the percent distribution of women and men age 15-49 who were eligible for syphilis testing by testing status, according to residence and region. Of all respondents age 15-49 who were eligible, 96 percent were interviewed and tested for syphilis. Three percent were not interviewed, and only 1 percent were interviewed and refused to provide a blood sample for testing. A tiny fraction of eligible women and men were interviewed but either were absent when the laboratory technician was available to do the testing or were missing syphilis test results for some other reason.

As is true for HIV testing, coverage rates for the syphilis testing in the UAIS are higher for women (97 percent) than men (94 percent), mainly because men are more likely not to have been interviewed (4 percent) than women (2 percent). Coverage rates for testing do not vary by urban-rural residence. They are lower in North East region for women and especially for men, mainly due to higher-than-average levels of non-interview but also due to higher levels of refusal to provide blood samples.

Table 10.1 Coverage of syphilis testing by residence and region

Percent distribution of women and men age 15-49 eligible for syphilis testing by testing status, according to residence and region (unweighted), Uganda 2011

Residence/region	Testing status					Total	Number
	Interviewed and:				Not interviewed and not tested		
	Syphilis tested in central laboratory	Refused to provide blood sample	Absent at the time of blood collection	Other/missing <sup>1</sup>			
<b>WOMEN</b>							
<b>Residence</b>							
Urban	96.5	1.3	0.0	0.1	2.1	100.0	2,403
Rural	97.1	1.0	0.1	0.1	1.7	100.0	8,950
<b>Region</b>							
Central 1	97.1	1.1	0.0	0.1	1.7	100.0	1,036
Central 2	98.5	0.4	0.0	0.1	1.0	100.0	1,100
Kampala	95.6	1.2	0.1	0.0	3.1	100.0	1,222
East Central	98.4	0.4	0.0	0.0	1.2	100.0	1,157
Mid Eastern	99.0	0.3	0.1	0.0	0.7	100.0	1,159
North East	93.6	2.6	0.1	0.4	3.3	100.0	1,062
West Nile	95.5	1.4	0.3	0.2	2.7	100.0	1,180
Mid Northern	96.4	1.1	0.2	0.2	2.1	100.0	1,090
South Western	97.4	1.4	0.1	0.0	1.1	100.0	1,116
Mid Western	98.1	0.6	0.0	0.1	1.1	100.0	1,231
Total 15-49	97.0	1.0	0.1	0.1	1.8	100.0	11,353
Total 15-59	96.9	1.1	0.1	0.1	1.8	100.0	12,374
<b>MEN</b>							
<b>Residence</b>							
Urban	93.4	2.0	0.2	0.0	4.5	100.0	1,828
Rural	94.5	1.4	0.1	0.1	3.9	100.0	7,252
<b>Region</b>							
Central 1	93.9	1.7	0.0	0.0	4.4	100.0	841
Central 2	97.2	0.7	0.0	0.0	2.1	100.0	860
Kampala	94.0	1.8	0.0	0.0	4.2	100.0	965
East Central	95.9	0.7	0.1	0.0	3.3	100.0	970
Mid Eastern	97.4	0.7	0.3	0.1	1.5	100.0	994
North East	87.8	3.2	0.0	0.3	8.8	100.0	776
West Nile	92.8	1.6	0.3	0.1	5.1	100.0	923
Mid Northern	92.4	2.3	0.2	0.4	4.7	100.0	988
South Western	96.0	1.3	0.0	0.0	2.7	100.0	768
Mid Western	94.8	1.3	0.2	0.0	3.7	100.0	995
Total 15-49	94.3	1.5	0.1	0.1	4.0	100.0	9,080
Total 15-59	94.4	1.5	0.1	0.1	4.0	100.0	9,983
<b>BOTH SEXES</b>							
<b>Residence</b>							
Urban	95.1	1.6	0.1	0.0	3.1	100.0	4,231
Rural	96.0	1.2	0.1	0.1	2.7	100.0	16,202
<b>Region</b>							
Central 1	95.7	1.3	0.0	0.1	2.9	100.0	1,877
Central 2	98.0	0.5	0.0	0.1	1.5	100.0	1,960
Kampala	94.9	1.5	0.0	0.0	3.6	100.0	2,187
East Central	97.2	0.6	0.0	0.0	2.2	100.0	2,127
Mid Eastern	98.2	0.5	0.2	0.0	1.1	100.0	2,153
North East	91.1	2.9	0.1	0.3	5.6	100.0	1,838
West Nile	94.3	1.5	0.3	0.1	3.8	100.0	2,103
Mid Northern	94.5	1.7	0.2	0.3	3.3	100.0	2,078
South Western	96.8	1.4	0.1	0.0	1.8	100.0	1,884
Mid Western	96.6	0.9	0.1	0.0	2.3	100.0	2,226
Total 15-49	95.8	1.2	0.1	0.1	2.8	100.0	20,433
Total 15-59	95.7	1.3	0.1	0.1	2.8	100.0	22,357

<sup>2</sup>Includes: 1) other results of blood collection (e.g. technical problem in the field), 2) lost specimens, 3) non corresponding bar codes, and 4) other lab results such as blood not tested for technical reason, not enough blood to complete the algorithm, etc.

Table 10.2 shows coverage of syphilis testing by age group, education, and wealth quintile. Overall, the proportion of eligible respondents who were interviewed and for whom there are syphilis test results from the central laboratory varies very little by age, education, or wealth. It increases slightly with age, but only for women. Coverage is slightly lower among women and men with no education than among those with some education.

Table 10.2 Coverage of syphilis testing by selected background characteristics

Percent distribution of women and men age 15-49 eligible for syphilis testing by testing status, according to selected background characteristics (unweighted), Uganda 2011

Background characteristic	Testing status					Total	Number
	Interviewed and:				Not interviewed and not tested		
	Syphilis tested in central laboratory	Refused to provide blood sample	Absent at the time of blood collection	Other/missing <sup>1</sup>			
<b>WOMEN</b>							
<b>Age</b>							
15-24	96.3	1.1	0.1	0.1	2.4	100.0	4,728
15-19	95.3	1.2	0.1	0.1	3.2	100.0	2,533
20-24	97.4	1.0	0.1	0.1	1.4	100.0	2,195
25-29	97.6	0.9	0.1	0.2	1.3	100.0	1,947
30-34	97.2	1.3	0.1	0.1	1.3	100.0	1,484
35-39	97.1	1.1	0.1	0.0	1.7	100.0	1,385
40-44	97.6	0.9	0.1	0.2	1.2	100.0	956
45-49	98.1	0.6	0.0	0.0	1.3	100.0	853
<b>Education</b>							
No education	93.8	1.8	0.1	0.2	4.2	100.0	1,700
Primary incomplete	97.9	0.8	0.0	0.1	1.1	100.0	5,306
Primary complete	98.1	0.9	0.3	0.1	0.6	100.0	1,337
Secondary or higher	96.6	1.1	0.1	0.0	2.2	100.0	3,010
<b>Wealth quintile</b>							
Lowest	95.4	1.5	0.1	0.1	2.9	100.0	2,190
Second	97.5	0.8	0.2	0.1	1.4	100.0	2,079
Middle	97.9	0.6	0.1	0.0	1.3	100.0	2,020
Fourth	97.8	0.8	0.0	0.1	1.3	100.0	2,193
Highest	96.5	1.4	0.0	0.1	2.0	100.0	2,871
Total 15-49	97.0	1.0	0.1	0.1	1.8	100.0	11,353
50-59	96.4	1.9	0.0	0.2	1.6	100.0	1,021
Total 15-59	96.9	1.1	0.1	0.1	1.8	100.0	12,374
<b>MEN</b>							
<b>Age</b>							
15-24	94.2	1.4	0.2	0.2	4.1	100.0	3,628
15-19	94.2	1.2	0.3	0.2	4.0	100.0	2,177
20-24	94.1	1.6	0.1	0.1	4.1	100.0	1,451
25-29	94.5	1.4	0.1	0.1	4.0	100.0	1,391
30-34	93.9	2.1	0.0	0.0	4.0	100.0	1,213
35-39	94.2	1.7	0.0	0.0	4.1	100.0	1,165
40-44	94.8	1.7	0.2	0.0	3.3	100.0	917
45-49	94.8	1.0	0.0	0.0	4.2	100.0	766
<b>Education</b>							
No education	83.7	3.4	0.0	0.4	12.5	100.0	535
Primary incomplete	95.5	1.3	0.1	0.1	3.0	100.0	3,837
Primary complete	94.8	1.6	0.1	0.2	3.3	100.0	1,277
Secondary or higher	94.3	1.4	0.2	0.1	4.0	100.0	3,431
<b>Wealth quintile</b>							
Lowest	92.9	1.9	0.1	0.3	4.7	100.0	1,730
Second	94.7	1.4	0.1	0.0	3.8	100.0	1,743
Middle	96.2	0.9	0.0	0.1	2.9	100.0	1,681
Fourth	94.7	1.4	0.2	0.1	3.5	100.0	1,668
Highest	93.3	1.8	0.2	0.0	4.7	100.0	2,258
Total 15-49	94.3	1.5	0.1	0.1	4.0	100.0	9,080
50-59	95.2	1.0	0.1	0.0	3.7	100.0	903
Total 15-59	94.4	1.5	0.1	0.1	4.0	100.0	9,983

<sup>2</sup> Includes: 1) other results of blood collection (e.g. technical problem in the field), 2) lost specimens, 3) non corresponding bar codes, and 4) other lab results such as blood not tested for technical reason, not enough blood to complete the algorithm, etc.

## 10.2 SYPHILIS PREVALENCE BY AGE AND SEX

Survey results show that only 2 percent of Ugandan adults age 15-49 have syphilis (Table 10.3). Women and men are equally likely to have syphilis. Syphilis prevalence for both women and men increases with age until it reaches a peak, which for women is attained at age 55-59 (4 percent) and for men at age 50-54 (5 percent).

**Table 10.3 Syphilis prevalence by age**

Among the de facto women and men age 15-59 who were interviewed and tested, the percentage syphilis-positive, by age, Uganda 2011

Age	Women		Men		Both sexes	
	Percentage syphilis positive	Number	Percentage syphilis positive	Number	Percentage syphilis positive	Number
15-24	1.4	4,462	1.1	3,372	1.2	7,834
15-19	0.9	2,371	0.6	2,005	0.8	4,376
20-24	1.8	2,090	1.8	1,367	1.8	3,458
25-29	1.9	1,894	2.4	1,316	2.1	3,210
30-34	1.5	1,420	1.9	1,116	1.7	2,536
35-39	2.0	1,310	1.6	1,093	1.8	2,403
40-44	3.2	916	2.1	855	2.7	1,771
45-49	2.5	792	3.5	701	3.0	1,493
50-54	2.1	583	4.8	508	3.4	1,091
55-59	3.7	357	2.9	320	3.3	676
Total 15-49	1.8	10,794	1.8	8,454	1.8	19,247
50-59	2.7	940	4.1	827	3.3	1,767
Total 15-59	1.9	11,733	2.0	9,281	1.9	21,014

Note: Prevalence is based on the central laboratory results, not the tests performed in the field

## 10.3 TRENDS IN SYPHILIS PREVALENCE

Results from the 2011 UAIS show a slight decrease in syphilis prevalence since the 2004-05 UHSBS, from 3 percent to 2 percent of adults age 15-49 (Table 10.4). The decrease was identical among women and men age 15-49. The decrease in syphilis infection is proportionally larger among older adults.

**Table 10.4 Trends in syphilis prevalence by age**

Among de facto women and men age 15-59 who were interviewed and tested, the percentage syphilis-positive, by age, Uganda 2004-05 and 2011

Age	Women				Men				Both sexes			
	2004-05		2011		2004-05		2011		2004-05		2011	
	Per-centage syphilis positive	Number tested	Per-centage syphilis positive	Number tested	Per-centage syphilis positive	Number tested	Per-centage syphilis positive	Number tested	Per-centage syphilis positive	Number tested	Per-centage syphilis positive	Number tested
15-19	1.3	1,979	0.9	2,371	0.9	1,890	0.6	2,005	1.1	3,869	0.8	4,376
20-24	3.0	1,752	1.8	2,090	1.4	1,147	1.8	1,367	2.4	2,899	1.8	3,458
25-29	3.4	1,615	1.9	1,894	2.5	1,091	2.4	1,316	3.0	2,707	2.1	3,210
30-34	3.0	1,339	1.5	1,420	3.5	1,110	1.9	1,116	3.3	2,450	1.7	2,536
35-39	4.9	1,001	2.0	1,310	4.4	842	1.6	1,093	4.7	1,843	1.8	2,403
40-44	5.1	789	3.2	916	6.0	731	2.1	855	5.5	1,520	2.7	1,771
45-49	3.4	604	2.5	792	8.9	510	3.5	701	5.9	1,114	3.0	1,493
50-54	5.8	496	2.1	583	7.8	442	4.8	508	6.7	938	3.4	1,091
55-59	4.9	310	3.7	357	6.8	313	2.9	320	5.9	623	3.3	676
Total 15-49	3.1	9,079	1.8	10,794	3.1	7,323	1.8	8,454	3.1	16,401	1.8	19,247
Total 15-59	3.3	9,885	1.9	11,733	3.5	8,078	2.0	9,281	3.4	17,963	1.9	21,014

Note: Prevalence is based on the central laboratory results.



## 10.4 SYPHILIS PREVALENCE BY SOCIOECONOMIC CHARACTERISTICS

As shown in Table 10.5, differences in syphilis infection are mostly small. The main exception is that the prevalence is considerably higher among the Karimojong, with 8 percent of adults infected with syphilis. Similarly, the level is higher in North East region than in the other regions. There is a slight tendency for syphilis levels to decline with increasing education.

Table 10.5 Syphilis prevalence by socioeconomic characteristics

Percentage syphilis positive among women and men age 15-49 who were tested, by socioeconomic characteristics, Uganda 2011

Background characteristic	Women		Men		Both sexes	
	Percentage syphilis positive	Number	Percentage syphilis positive	Number	Percentage syphilis positive	Number
<b>Ethnicity</b>						
Baganda	1.8	1,809	1.6	1,423	1.7	3,232
Banyankore	2.0	1,178	2.1	865	2.0	2,043
Iteso	1.6	822	1.4	645	1.5	1,466
Lugbara/Madi	1.4	509	1.2	396	1.3	905
Basoga	1.6	992	0.5	790	1.1	1,782
Langi	2.1	630	2.3	561	2.2	1,191
Bakiga	1.1	669	2.5	447	1.7	1,116
Karimojong	9.3	195	5.6	108	8.0	303
Acholi	1.6	486	3.4	395	2.4	881
Bagisu/Sabiny	0.1	622	1.5	572	0.8	1,194
Alur/Jopadhola	2.7	536	2.2	392	2.5	928
Banyoro	1.1	423	1.4	409	1.3	832
Batoro	3.2	378	3.3	315	3.2	692
Other	1.5	1,546	1.3	1,136	1.4	2,681
<b>Religion</b>						
Catholic	1.9	4,331	2.0	3,503	2.0	7,834
Anglican/Protestant	1.8	3,641	1.9	2,956	1.9	6,597
SDA	0.0	176	1.1	133	0.5	309
Pentecostal	1.4	929	1.5	489	1.5	1,418
Other Christian	2.0	246	1.2	206	1.6	452
Moslem	1.8	1,383	1.0	1,086	1.4	2,470
Other/None	1.9	88	1.3	81	1.6	168
<b>Employment (last 12 months)</b>						
Not employed	1.6	3,316	0.5	1,476	1.2	4,792
Employed	1.9	7,478	2.0	6,978	2.0	14,455
<b>Residence</b>						
Urban	1.9	2,277	1.5	1,666	1.7	3,943
Rural	1.8	8,517	1.8	6,788	1.8	15,304
<b>Region</b>						
Central 1	2.0	1,165	1.7	976	1.9	2,141
Central 2	2.1	1,138	1.6	870	1.9	2,007
Kampala	2.1	850	1.7	648	1.9	1,498
East Central	1.3	1,126	0.9	913	1.2	2,039
Mid Eastern	1.0	1,099	1.3	928	1.1	2,027
North East	3.3	869	1.7	650	2.6	1,519
West Nile	1.2	675	1.5	522	1.3	1,197
Mid Northern	1.8	1,056	2.8	899	2.3	1,955
South Western	1.4	1,359	2.6	921	1.9	2,280
Mid Western	1.8	1,457	1.7	1,127	1.8	2,585
<b>Education</b>						
No education	3.2	1,492	4.2	459	3.4	1,951
Primary incomplete	1.8	5,081	1.7	3,632	1.7	8,713
Primary complete	2.1	1,347	2.1	1,185	2.1	2,532
Secondary or higher	1.0	2,874	1.4	3,178	1.2	6,052
<b>Wealth quintile</b>						
Lowest	2.8	1,807	2.2	1,446	2.5	3,253
Second	1.0	1,972	1.5	1,588	1.2	3,559
Middle	1.5	2,009	2.0	1,637	1.7	3,647
Fourth	1.8	2,226	1.3	1,653	1.6	3,879
Highest	1.9	2,780	1.9	2,130	1.9	4,909
Total 15-49	1.8	10,794	1.8	8,454	1.8	19,247
50-59	2.7	940	4.1	827	3.3	1,767
Total 15-59	1.9	11,733	2.0	9,281	1.9	21,014

## 10.5 SYPHILIS PREVALENCE BY DEMOGRAPHIC CHARACTERISTICS

Table 10.6 shows syphilis prevalence according to various demographic and social characteristics. The proportion of adults with syphilis is higher among respondents who are divorced, separated, or widowed than among those who are currently married. As expected, those who have never married and never had sex are the least likely to be infected. Nevertheless, some respondents who say they have never had sex are syphilis-positive, suggesting possible under-reporting of sexual experience or possibly mother-to-child transmission. Differences by other characteristics are small.

Table 10.6 Syphilis prevalence by demographic characteristics

Percentage syphilis positive among women and men age 15-49 who were tested, by demographic characteristics, Uganda 2011

Demographic characteristic	Women		Men		Both sexes	
	Percentage syphilis positive	Number	Percentage syphilis positive	Number	Percentage syphilis positive	Number
<b>Marital status</b>						
Never married	1.0	2,544	1.0	3,121	1.0	5,665
Ever had sexual intercourse	1.5	1,169	1.4	1,613	1.5	2,782
Never had sexual intercourse	0.6	1,374	0.6	1,509	0.6	2,883
Married/living together	1.9	6,871	2.2	4,831	2.0	11,702
Divorced or separated	2.7	977	3.0	457	2.8	1,434
Widowed	3.1	402	(0.0)	45	2.8	446
<b>Type of union</b>						
In polygynous union	2.2	1,720	2.0	779	2.1	2,500
In non-polygynous union	1.7	4,862	2.2	4,049	2.0	8,911
Not currently in union	1.7	3,923	1.3	3,623	1.5	7,546
<b>Times slept away from home in past 12 months</b>						
None	1.8	5,750	1.6	5,129	1.7	10,878
1-2	1.8	3,037	1.6	1,357	1.7	4,394
3-4	1.5	1,206	2.6	824	1.9	2,030
5+	2.5	801	2.1	1,144	2.3	1,946
<b>Time away in past 12 months</b>						
Away for more than 1 month	2.1	1,288	2.2	1,181	2.2	2,470
Away for less than 1 month	1.7	3,755	1.9	2,144	1.8	5,899
No away	1.8	5,750	1.6	5,129	1.7	10,878
<b>Currently pregnant</b>						
Pregnant	2.4	1,229	na	na	na	na
Not pregnant or not sure	1.7	9,565	na	na	na	na
<b>ANC for last birth in the last 3 years</b>						
Any ANC for birth in past 3 years	1.6	4,878	na	na	na	na
ANC provided by the public sector	1.5	4,208	na	na	na	na
ANC provided by other than the public sector	1.9	670	na	na	na	na
No ANC but had birth in last 3 years	0.5	169	na	na	na	na
No birth in last 3 years	2.0	5,747	na	na	na	na
Total 15-49	1.8	10,794	1.8	8,454	1.8	19,247
50-59	2.7	940	4.1	827	3.3	1,767
Total 15-59	1.9	11,733	2.0	9,281	1.9	21,014

Note: Figures in parentheses are based on 25-49 unweighted cases. Total includes 288 women and 2 men who are not stated as to type of marital union.

na = Not applicable

ANC = antenatal care

## 10.6 SYPHILIS PREVALENCE BY SEXUAL BEHAVIOUR

Table 10.7 examines the prevalence of syphilis infection according to several sexual behaviours among respondents who have had sexual intercourse. While reviewing these results, it is important to remember that indicators of sexual behaviour in the last 12 months do not reflect prior behaviours that affect lifetime sexual risk. Nor is it possible from the data to know the sequence of events, for example, whether condom use predates or post-dates syphilis transmission.

Table 10.7 Syphilis prevalence by sexual behaviour

Percentage syphilis positive among women and men age 15-49 who ever had sex and were tested for syphilis, by sexual behaviour characteristics, Uganda 2011

Sexual behaviour characteristic	Women		Men		Both sexes	
	Percentage syphilis positive	Number	Percentage syphilis positive	Number	Percentage syphilis positive	Number
<b>Age at first sexual intercourse</b>						
<15	2.3	3,322	1.7	1,560	2.1	4,882
16-17	2.1	2,962	2.2	1,822	2.1	4,784
18-19	1.4	2,019	1.8	1,842	1.6	3,861
20+	1.6	1,047	2.5	1,720	2.1	2,768
<b>Multiple sexual partners and partner concurrency in past 12 months</b>						
0	2.1	1,300	1.2	733	1.8	2,033
1	1.8	7,790	2.1	4,627	1.9	12,417
2+	4.2	329	2.3	1,585	2.6	1,915
Has concurrent partners <sup>1</sup>	(2.0)	44	1.5	387	1.6	430
None of the partners are concurrent	4.5	286	2.5	1,199	2.9	1,484
<b>Condom use at last sexual intercourse in past 12 months</b>						
Used condom	1.8	781	1.8	933	1.8	1,714
Did not use condom	2.0	7,339	2.2	5,279	2.1	12,618
No sexual intercourse in last 12 months	2.1	1,300	1.2	733	1.8	2,033
<b>Number of lifetime partners</b>						
1	1.5	3,461	1.1	837	1.4	4,298
2	1.6	2,738	1.6	1,019	1.6	3,758
3-4	2.8	2,462	1.9	1,980	2.4	4,442
5-9	2.5	567	2.3	1,630	2.3	2,197
10+	3.0	133	2.8	1,116	2.8	1,249
<b>Paid for sexual intercourse in past 12 months</b>						
Yes	na	na	2.0	63	na	na
No (No paid sex or no sex in last 12 months)	na	na	2.0	6,882	na	na
<b>Alcohol use during sex</b>						
Either partner drank alcohol	3.0	1,919	3.3	1,519	3.1	3,438
Either partner was drunk	3.2	1,831	3.2	1,438	3.2	3,269
Neither was drunk	0.0	88	4.0	82	1.9	169
No alcohol use	1.6	6,205	1.8	4,697	1.7	10,901
No sex in last 12 months	2.1	1,296	1.2	729	1.8	2,025
<b>Higher risk sex in past 12 months</b>						
Had higher risk sex	2.9	1,358	2.1	2,118	2.4	3,476
Had sex, not higher risk	1.8	6,765	2.1	4,098	1.9	10,863
No sex in past 12 months	2.1	1,296	1.2	729	1.8	2,025
Total 15-49	2.0	9,420	2.0	6,945	2.0	16,364
50-59	2.7	938	4.1	824	3.4	1,762
Total 15-59	2.0	10,358	2.3	7,769	2.1	18,126

Note: Figures in parentheses are based on 25-49 unweighted cases. Total includes 69 women and 1 man who are missing age at first sexual intercourse and 58 women and 362 men who are missing the number of lifetime partners.

na = Not applicable

<sup>1</sup> A respondent is considered to have had concurrent partners if he or she had overlapping sexual partnerships with two or more people during the 12 months before the survey. (Respondents with concurrent partners include polygynous men who had overlapping sexual partnerships with two or more wives).

Overall, the results do not show strong patterns by sexual behaviour. Differences in syphilis levels are small for age at first sex, multiple partners, and condom use at last sex. There is a slight increase in syphilis prevalence by number of lifetime partners. There is no association between syphilis prevalence and whether men paid for sex in the 12 months before the survey. The likelihood of having syphilis is only slightly higher for those who reported practicing risky behaviours such as drinking alcohol and having higher risk sex.

## 10.7 SYPHILIS PREVALENCE AMONG YOUTH

Table 10.8 shows the proportion of young adults age 15-24 who tested positive for syphilis according to background characteristics. Overall, only 1 percent of those age 15-24 have syphilis. Young women are only very slightly more likely than young men to be infected. Prevalence generally rises with age.

Background characteristic	Women		Men		Both sexes	
	Percentage syphilis positive	Number	Percentage syphilis positive	Number	Percentage syphilis positive	Number
<b>Age</b>						
15-19	0.9	2,371	0.6	2,005	0.8	4,376
15-17	0.7	1,441	0.3	1,285	0.5	2,726
18-19	1.4	931	1.0	720	1.2	1,651
20-24	1.8	2,090	1.8	1,367	1.8	3,458
20-22	2.3	1,281	1.9	845	2.1	2,126
23-24	1.1	809	1.8	523	1.4	1,332
<b>Respondent's current age</b>						
15	0.2	480	0.3	452	0.3	932
16	1.2	465	0.4	413	0.8	878
17	0.6	496	0.2	420	0.4	916
18	2.0	505	0.2	395	1.2	900
19	0.6	425	2.0	326	1.2	751
20	1.6	486	2.5	307	2.0	793
21	3.0	391	0.7	265	2.1	656
22	2.3	404	2.2	273	2.3	677
23	1.1	390	2.0	236	1.4	627
24	1.2	419	1.7	286	1.4	705
<b>Marital status</b>						
Never married	0.9	2,303	0.8	2,783	0.9	5,086
Ever had sex	1.5	948	1.0	1,314	1.2	2,261
Never had sex	0.5	1,355	0.6	1,469	0.6	2,824
Married/Living together	1.7	1,865	2.1	513	1.8	2,377
Divorced/Separated/Widowed	2.1	294	4.3	77	2.6	371
<b>Currently pregnant</b>						
Pregnant	3.2	546	na	na	na	na
Not pregnant or not sure	1.1	3,915	na	na	na	na
<b>Residence</b>						
Urban	1.8	1,068	1.1	703	1.5	1,771
Rural	1.2	3,394	1.1	2,669	1.2	6,063
<b>Region</b>						
Central 1	2.8	485	1.4	340	2.2	825
Central 2	1.4	443	0.9	323	1.2	766
Kampala	1.7	417	1.2	295	1.5	712
East Central	0.3	460	0.5	392	0.4	852
Mid Eastern	0.5	455	0.4	419	0.4	874
North East	1.6	310	1.7	218	1.7	527
West Nile	1.4	261	0.9	194	1.2	456
Mid Northern	0.8	444	1.2	335	1.0	780
South Western	1.0	533	2.4	376	1.6	909
Mid Western	1.8	654	0.7	480	1.3	1,134
<b>Education</b>						
No education	1.5	158	6.0	56	2.7	214
Primary incomplete	1.3	2,019	0.9	1,515	1.1	3,534
Primary complete	2.5	624	2.9	388	2.7	1,012
Secondary or higher	0.9	1,661	0.6	1,414	0.8	3,075
<b>Wealth quintile</b>						
Lowest	1.5	657	1.4	522	1.4	1,179
Second	0.5	791	0.8	587	0.6	1,378
Middle	0.7	786	1.0	657	0.8	1,443
Fourth	1.6	927	0.3	715	1.1	1,642
Highest	2.0	1,300	1.8	892	1.9	2,191
<b>Total</b>	<b>1.4</b>	<b>4,462</b>	<b>1.1</b>	<b>3,372</b>	<b>1.2</b>	<b>7,834</b>

na = Not applicable

By marital status, the lowest levels of infection are found among young people who have never married, especially those who never had sex. As is true with older adults as well, syphilis prevalence is higher among young people who are divorced, separated, or widowed than among those who are currently married or have never married. Pregnant women are slightly more likely to be syphilis-positive than non-pregnant women. There are no meaningful differences in syphilis prevalence by urban-rural residence or region for young women or young men. Differences in syphilis prevalence among young adults by education level and wealth quintile are small and inconsistent.

Table 10.9 shows syphilis prevalence among young adults age 15-24 who have ever had sexual intercourse, according to indicators of sexual behaviour. Among both young women and men, syphilis prevalence is slightly higher among those who say they had two or more sexual partners in the 12 months preceding the survey than among those who had only one or none. It is also slightly higher among youth who say they did not use a condom the last time they had sex and among those who say they had sex when either they or their partner was drunk. Young women who had sex with a man who was ten or more years older than she was are slightly more likely to have syphilis than those who did not.

**Table 10.9 Syphilis prevalence among young people by sexual behaviour**

Percentage syphilis-positive among women and men age 15-24 who have ever had sex and were tested for syphilis, by sexual behaviour, Uganda 2011

Sexual behaviour characteristic	Women		Men		Both sexes	
	Percentage syphilis positive	Number	Percentage syphilis positive	Number	Percentage syphilis positive	Number
<b>Number of sexual partners in past 12 months</b>						
0	0.7	1,706	0.7	1,904	0.7	3,611
1	1.6	2,615	1.3	1,130	1.5	3,745
2+	4.0	141	2.4	338	2.9	479
<b>Condom use at last sexual intercourse in past 12 months</b>						
Used condom	1.1	434	1.0	483	1.0	917
Did not use condom	1.9	2,321	1.8	985	1.9	3,306
No sexual intercourse in last 12 months	0.7	1,706	0.7	1,904	0.7	3,611
<b>Condom use at first sex</b>						
Used condom	2.0	1,056	1.2	639	1.7	1,695
Did not use condom	1.2	3,406	1.1	2,733	1.1	6,139
<b>Alcohol use during sex</b>						
Either partner was drunk	2.7	368	3.7	163	3.0	530
Neither was drunk	*	20	*	9	(0.0)	29
No alcohol use	1.6	2,367	1.3	1,298	1.5	3,666
No sex in last 12 months	0.7	1,706	0.7	1,903	0.7	3,609
<b>Higher risk sex in past 12 months</b>						
Had higher risk sex	2.1	851	1.4	1,040	1.7	1,891
Had sex, not higher risk	1.6	1,904	1.9	430	1.6	2,334
No sex in past 12 months	0.7	1,706	0.7	1,903	0.7	3,609
<b>Age mixing</b>						
Had sex in last 12 months with a man 10+ years older	3.4	545	na	na	na	na
Did not have sex in last 12 months with a man 10+ years older	1.1	3,917	na	na	na	na
<b>Total</b>	<b>1.4</b>	<b>4,462</b>	<b>1.1</b>	<b>3,372</b>	<b>1.2</b>	<b>7,834</b>

Note: Figures in parentheses are based on 25-49 unweighted cases; an asterisk denotes a figure based on fewer than 25 unweighted cases that has been suppressed.  
na = Not applicable

## 10.8 SYPHILIS PREVALENCE BY OTHER CHARACTERISTICS

### 10.8.1 Syphilis Prevalence and Other Sexually Transmitted Infections

Table 10.10 shows the variation in syphilis prevalence by whether respondents report that they had a sexually transmitted infection (STI) or symptoms of an STI in the 12 months before the survey. The results show only a slightly higher prevalence of syphilis among those who had an STI or symptoms of an STI than among those with neither.

**Table 10.10 Syphilis prevalence by other characteristics**

Percentage syphilis positive among women and men age 15-49 who ever had sex and were tested for syphilis, by whether had an STI in the past 12 months, Uganda 2011

Sexually transmitted infection in past 12 months	Women		Men		Both sexes	
	Percentage syphilis positive	Number	Percentage syphilis positive	Number	Percentage syphilis positive	Number
Had STI or STI symptoms	2.4	3,408	3.2	1,296	2.6	4,704
No STI, no symptoms	1.7	5,818	1.7	5,533	1.7	11,352
DK/missing	4.0	193	3.2	116	3.7	309
Total 15-49	2.0	9,420	2.0	6,945	2.0	16,364

### 10.8.2 Syphilis Prevalence and Male Circumcision

As with HIV, there is an expected relationship between syphilis and male circumcision. As shown in Table 10.11, men age 15-49 who have been circumcised are only very slightly less likely to have syphilis than those who are not circumcised (2 percent and 1 percent). Differences by sub-groups are very small and do not follow any pattern.

**Table 10.11 Syphilis prevalence by male circumcision**

Among men age 15-49 who were tested for syphilis, the percentage syphilis positive by whether circumcised, according to background characteristics, Uganda 2011

Background characteristic	Circumcised		Not circumcised	
	Percentage syphilis positive	Number	Percentage syphilis positive	Number
<b>Age</b>				
15-19	0.0	477	0.7	1,528
20-24	1.4	418	2.1	950
25-29	2.6	395	2.4	920
30-34	1.6	308	2.0	808
35-39	0.7	281	1.9	811
40-44	0.6	215	2.6	641
45-49	2.9	149	3.7	552
<b>Religion</b>				
Catholic	2.7	464	1.9	3,039
Anglican/Protestant	0.7	534	2.2	2,423
SDA	(0.0)	40	1.6	93
Pentecostal	1.8	84	1.5	405
Other Christian	(5.2)	41	0.2	165
Muslim	0.8	1,063	(7.1)	24
Other/None	*	18	1.8	62

*Continued...*

Table 10.11—Continued

Background characteristic	Circumcised		Not circumcised	
	Percentage syphilis positive	Number	Percentage syphilis positive	Number
<b>Ethnicity</b>				
Baganda	1.1	420	1.8	1,003
Banyankore	3.3	120	1.9	745
Iteso	0.0	55	1.5	589
Lugbara/Madi	0.5	116	1.5	280
Basoga	0.7	323	0.4	468
Langi	*	10	2.3	551
Bakiga	(0.0)	45	2.7	402
Karimojong	*	5	5.9	103
Acholi	*	7	3.5	388
Bagisu/Sabiny	1.4	465	1.6	108
Alur/Jopadhola	1.0	62	2.4	330
Banyoro	1.3	106	1.5	304
Batoro	(0.0)	58	4.0	257
Other	1.9	451	0.9	685
<b>Residence</b>				
Urban	1.6	623	1.5	1,044
Rural	1.2	1,621	2.0	5,166
<b>Region</b>				
Central 1	2.2	280	1.6	697
Central 2	2.1	229	1.4	641
Kampala	1.6	231	1.7	417
East Central	0.4	379	1.3	534
Mid Eastern	1.3	496	1.2	432
North East	(0.0)	44	1.9	606
West Nile	0.8	143	1.7	379
Mid Northern	*	13	2.9	886
South Western	5.5	92	2.3	829
Mid Western	0.0	338	2.5	790
<b>Education</b>				
No education	3.7	110	4.3	349
Primary incomplete	0.7	855	2.0	2,777
Primary complete	2.6	308	1.9	877
Secondary or higher	1.1	971	1.5	2,207
<b>Wealth quintile</b>				
Lowest	0.9	249	2.5	1,197
Second	1.0	388	1.7	1,200
Middle	1.0	435	2.3	1,202
Fourth	0.9	414	1.5	1,239
Highest	1.9	757	1.9	1,373
Total 15-49	1.3	2,244	2.0	6,210
50-59	3.4	246	4.3	582
Total 15-59	1.5	2,489	2.2	6,792

Note: Figures in parentheses are based on 25-49 unweighted cases; an asterisk denotes a figure based on fewer than 25 unweighted cases that has been suppressed.

## 10.9 SYPHILIS PREVALENCE AMONG COHABITING COUPLES

Table 10.12 shows that for 96 percent of cohabiting couples, neither partner has syphilis, while for less than 1 percent, both partners have syphilis. Data also show that 3 percent of cohabiting couples are discordant, that is, one partner has syphilis and the other does not. In 2 percent of couples, the male partner has syphilis and the woman does not, while in another 1 percent of couples, the woman has syphilis and the man does not. Discordance is more common among couples in which either the woman or the man has no education.

Table 10.12 Syphilis prevalence among couples

Percent distribution of couples living in the same household, both of whom were tested for syphilis, by syphilis status, according to background characteristics, Uganda 2011

Background characteristic	Both syphilis positive	Man syphilis positive, woman syphilis negative	Woman syphilis positive, man syphilis negative	Both syphilis negative	Total	Number
<b>Woman's age</b>						
15-19	0.8	1.7	0.0	97.5	100.0	328
20-29	0.3	1.3	1.3	97.2	100.0	1,987
30-39	0.4	2.2	1.3	96.1	100.0	1,447
40-49	1.1	2.4	2.0	94.4	100.0	722
50-59	0.4	2.0	0.0	97.6	100.0	150
<b>Man's age</b>						
15-19	(0.0)	(2.1)	(3.5)	(94.4)	100.0	31
20-29	0.6	1.7	0.6	97.1	100.0	1,168
30-39	0.3	1.2	0.9	97.6	100.0	1,615
40-49	0.5	2.2	2.1	95.2	100.0	1,188
50-59	0.8	3.0	1.6	94.7	100.0	634
<b>Age difference between partners</b>						
Woman older	0.2	2.2	2.2	95.4	100.0	318
Same age/man older by 0-4 years	0.4	1.6	0.4	97.6	100.0	1,616
Man older by 5-9 years	0.8	2.1	1.5	95.7	100.0	1,650
Man older by 10-14 years	0.3	1.5	1.4	96.8	100.0	673
Man older by 15+ years	0.3	1.7	2.7	95.2	100.0	378
<b>Type of union</b>						
Monogamous	0.6	1.8	1.1	96.5	100.0	3,531
Polygynous	0.3	1.3	1.7	96.7	100.0	948
<b>Multiple partners in past 12 months<sup>2</sup></b>						
Both no	0.4	1.9	1.0	96.6	100.0	3,314
Man yes, woman no	0.5	1.5	1.6	96.4	100.0	1,217
Woman yes, man no	3.6	0.0	1.4	95.0	100.0	69
Both yes	(0.0)	(4.1)	(8.7)	(87.2)	100.0	35
<b>Concurrent sexual partners in past 12 months<sup>3</sup></b>						
Both no	0.5	1.9	1.3	96.3	100.0	4,183
Man yes, woman no	0.1	1.0	1.1	97.8	100.0	432
Woman yes, man no	*	*	*	*	100.0	14
Both yes	*	*	*	*	100.0	6
<b>Residence</b>						
Urban	0.6	1.0	0.9	97.5	100.0	623
Rural	0.5	1.9	1.3	96.3	100.0	4,011
<b>Region</b>						
Central 1	0.3	1.3	0.7	97.7	100.0	480
Central 2	0.6	2.0	1.3	96.1	100.0	461
Kampala	0.3	2.8	1.5	95.4	100.0	181
East Central	0.3	1.2	1.6	96.9	100.0	541
Mid Eastern	0.0	1.6	0.8	97.6	100.0	573
North East	0.8	1.0	2.3	96.0	100.0	413
West Nile	0.9	1.8	0.0	97.3	100.0	292
Mid Northern	1.2	3.4	1.0	94.4	100.0	546
South Western	0.2	2.0	1.5	96.3	100.0	521
Mid Western	0.3	1.6	1.7	96.3	100.0	626
<b>Woman's education</b>						
No education	0.9	2.1	2.5	94.5	100.0	812
Primary incomplete	0.5	1.8	1.0	96.7	100.0	2,428
Primary complete	0.0	1.6	1.1	97.2	100.0	570
Secondary or higher	0.3	1.6	1.0	97.1	100.0	824
<b>Man's education</b>						
No education	0.5	5.4	2.4	91.8	100.0	360
Primary incomplete	0.5	1.4	1.4	96.6	100.0	2,057
Primary complete	0.2	1.8	0.8	97.3	100.0	837
Secondary or higher	0.6	1.5	1.0	96.9	100.0	1,380

Continued...



Table 10.12—Continued

Background characteristic	Both syphilis positive	Man syphilis positive, woman syphilis negative	Woman syphilis positive, man syphilis negative	Both syphilis negative	Total	Number
<b>Wealth quintile</b>						
Lowest	0.7	2.4	2.1	94.8	100.0	887
Second	0.2	1.5	1.0	97.3	100.0	1,039
Middle	0.7	2.7	1.0	95.7	100.0	986
Fourth	0.5	1.3	0.9	97.4	100.0	869
Highest	0.3	1.1	1.4	97.1	100.0	853
Total	0.5	1.8	1.3	96.4	100.0	4,634

Note: The table is based on couples for which a valid test result (positive or negative) is available for both partners. Total includes 156 couples for whom type of union is missing. 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.

<sup>2</sup> A respondent is considered to have had multiple sexual partners in the past 12 months if he or she had sexual intercourse with 2 or more people during this time period. (Respondents with multiple partners include polygynous men who had sexual intercourse with 2 or more wives.)

<sup>3</sup> A respondent is considered to have had concurrent partners if he or she had overlapping sexual partnerships with two or more people during the 12 months before the survey. (Respondents with concurrent partners include polygynous men who had overlapping sexual partnerships with two or more wives).



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## A.1 INTRODUCTION

The main objective of the 2011 Uganda AIDS Indicator Survey (UAIS) was to obtain national and sub-national estimates of the prevalence of HIV among adults and children under five and syphilis infection among adults, as well as information about other indicators of programme coverage, such as knowledge, attitudes, and sexual behaviour related to HIV/AIDS. To meet these objectives, the survey sample was designed to produce representative estimates for the country as a whole, for the urban and rural areas separately, and for each of ten regions.

A nationally representative sample of 11,750 households was selected using a two-stage design. All women and men age 15-59 who were usual residents or who slept in the selected households the night before the survey were eligible for the survey. In the selected households, 12,154 women and 9,588 men were successfully interviewed. All women and men who were interviewed were asked to voluntarily give a blood sample for testing. In addition, blood samples were drawn from children under age 5 after obtaining consent from their parents or caretaker. Questions on sexual violence were administered to only one randomly selected woman or man in each household.

## A.2 SAMPLING FRAME

The sampling frame used for 2011 UAIS was the 2002 Population Census, specifically a list of almost 49,000 census enumeration areas (EAs) provided by the Uganda Bureau of Statistics. An EA is a geographic area consisting of about 100 households which served as a counting unit for the census. The frame file contains information about the location (district, county, sub-county, parish), the type of residence, and the number of residential households for each EA.

In order to provide sub-national estimates, the districts were grouped into ten regions. The regions were created for the survey and do not represent administrative units of the country. Each region comprised between 8 and 15 contiguous administrative districts of Uganda that share similar languages and cultural characteristics. Because of its unique character as an entirely urban district and capital city of Uganda, Kampala comprised a separate region. The 10 regions were comprised of the following districts<sup>1</sup>:

- Central 1: Bukomansimbi, Gomba, Lwengo, Lyantonde, Kalangala, Kalungu, Masaka, Mpigi, Rakai, Sembabule, and Wakiso.
- Central 2: Buikwe, Buvuma, Kayunga, Kiboga, Kyankwanzi, Luwero, Mityana, Mubende, Mukono, Nakaseke, and Nakasongola.
- Kampala: Kampala district.
- East-Central: Bugiri, Buyende, Iganga, Jinja, Kaliro, Kamuli, Luuka, Mayuge, and Namutumba
- Mid Eastern: Budaka, Bududa, Bukwa, Bulambuli, Busia, Butaleja, Kapchorwa, Kibuku, Kween, Manafwa, Mbale, Pallisa, Sironko, and Tororo.

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<sup>1</sup> At the time of the 2002 census, Uganda was divided into fewer districts. This reflects the current districts. The 2011 UAIS regions are similar to those used for the 2004-05 Uganda HIV/AIDS Sero-Behavioural Survey, but the 2004-05 Central region is divided into two regions, and two districts from the 2004-05 East Central region are transferred to the Central 2 region. Thus comparisons by region across these two surveys need to be made cautiously.

- North East: Abim, Amudat, Amuria, Bukedea, Kaabong, Kaberamaido, Katakwi, Kotido, Kumi, Moroto, Nakapiripirit, Napak, Nora, Serere, and Soroti.
- West Nile: Arua, Adjumani, Koboko, Moyo, Nebbi, Maracha, Yumbe, and Zombo.
- Mid Northern: Agago, Alebtong, Amolatar, Amuru, Apac, Dokolo, Gulu, Kitgum, Kole, Lamwo, Lira, Otuke, Oyam, and Pader.
- South Western: Buhweju, Bushenyi, Ibanda, Isingiro, Kabale, Kanungu, Kiruhura, Kisoro, Mbarara, Mitooma, Ntungamo, Rubirizi, Rukungiri, and Sheema.
- Mid Western: Buliisa, Bundibugyo, Hoima, Kabarole, Kamwenge, Kasese, Kibaale, Kiryandongo, Kyegegwa, Kyenjojo and Masindi.

Table A.1 shows the distribution of the enumeration areas in the sampling frame by region according to residence. Of the total of 48,715 EAs, only 4,928 (10 percent) were in urban areas and 43,787 (90 percent) were in rural areas. Table A.2 shows the distribution of the census population in the sampling frame by region and residence. By design, the regions were formed to be roughly equal in size; the smallest—Kampala—contained about 5 percent of the country’s population in 2002, while the largest region—South Western—contained about 14 percent.

**Table A.1 Enumeration areas**

Distribution of the enumeration areas in the sampling frame of the 2002 census, by region and residence, Uganda

Region	Number of enumeration areas in frame		
	Urban	Rural	Total
Central 1	122	4,685	4,807
Central 2	202	4,761	4,963
Kampala	2,957	0	2,957
East Central	240	3,415	3,655
Mid Eastern	284	5,019	5,303
North East	151	3,068	3,219
West Nile	147	3,805	3,952
Mid Northern	197	6,205	6,402
South Western	286	8,083	8,369
Mid Western	342	4,746	5,088
Uganda	4,928	43,787	48,715

**Table A.2 Population**

Distribution of the census population in the sampling frame by region and residence, Uganda

Region	Population in frame			Percent of total population	Percent urban
	Urban	Rural	Total		
Central 1	189,900	2,581,716	2,771,616	11.3	6.9
Central 2	284,222	2,330,445	2,614,667	10.7	10.9
Kampala	1,189,142	0	1,189,142	4.9	100.0
East Central	162,251	2,378,413	2,540,664	10.4	6.4
Mid Eastern	186,151	2,288,046	2,474,197	10.1	7.5
North East	112,221	2,014,156	2,126,377	8.7	5.3
West Nile	185,452	1,732,688	1,918,140	7.9	9.7
Mid Northern	260,945	2,248,261	2,509,206	10.3	10.4
South Western	221,508	3,136,751	3,358,259	13.7	6.6
Mid Western	207,595	2,732,221	2,939,816	12.0	7.1
Uganda	2,999,387	21,442,697	24,442,084	100.0	12.3



### A.3 SAMPLE DESIGN AND SELECTION

For the 2011 UAIS, it was estimated that a total sample size of approximately 26,870 adults would be required. This size was based on the HIV prevalence of 6.4 percent among adults as measured in the 2004-05 Uganda HIV/AIDS Sero-Behavioural Survey (UHSBS). The calculations also assumed a 10 percent relative error, a design effect of 1.69, and a response rate for the HIV testing component of 92 percent of adults. With an estimated 2.3 adults age 15-59 per household, it was determined that 11,682 households would be required to obtain the target individual sample in the UAIS. Selecting 25 households per EA resulted in a total of 470 EAs for the sample.

The survey utilised a two-stage stratified sample design. Stratification was achieved by separating each region into urban and rural areas. In total, 19 sampling strata were created because Kampala region is entirely urban. The sample was allocated equally across all 10 regions, so as to allow a sufficient size to produce reliable estimates in each region.

The first stage involved selecting EAs from the census sampling frame. The 470 clusters (47 in each region) were selected with probability proportional to size. The Uganda Bureau of Statistics carried out a household listing operation in all selected EAs before the start of fieldwork. This consisted of teams visiting each of the selected EAs to record all households in the EA, their addresses, and the names of the heads of the households. This list of households served as the sampling frame for the second stage of sample selection.

In the second stage, a fixed number of 25 households was selected in each EA. Table A.3 shows the sample allocation of clusters and households by region, according to residence. Of the 470 selected EAs, 79 are in urban areas and 391 are in rural areas. Of all the selected 11,750 households, 1,975 are in urban areas and 9,775 are in rural areas.

Since the sample was not allocated in proportion to the size of each region, the UAIS sample is not self-weighting at the national level. Consequently, weighting factors have been applied to the data to produce nationally representative estimates.

Table A.4 shows the expected number of completed interviews with women and men age 15-59 by stratum, assuming 1.3 eligible women and 1.0 eligible men per household with a 92 percent response rate.

**Table A.3 Sample allocation of clusters and households**

Sample allocation of clusters and households by region, according to residence, Uganda						
Region	Allocation of clusters			Allocation of households		
	Urban	Rural	Total	Urban	Rural	Total
Central 1	4	43	47	100	1,075	1,175
Central 2	2	45	47	50	1,125	1,175
Kampala	47	0	47	1,175	0	1,175
East Central	5	42	47	125	1,050	1,175
Mid Eastern	3	44	47	75	1,100	1,175
North East	3	44	47	75	1,100	1,175
West Nile	4	43	47	100	1,075	1,175
Mid Northern	3	44	47	75	1,100	1,175
South Western	4	43	47	100	1,075	1,175
Mid Western	4	43	47	100	1,075	1,175
Uganda	79	391	470	1,975	9,775	11,750

**Table A.4 Sample allocation of expected number of completed interviews**

Sample allocation of expected number of completed interviews with women and men by region, according to residence, Uganda

Region	Women 15-59			Men 15-59		
	Urban	Rural	Total	Urban	Rural	Total
Central 1	120	1,286	1,405	92	989	1,081
Central 2	60	1,346	1,405	46	1,035	1,081
Kampala	1,405	0	1,405	1,081	0	1,081
East Central	150	1,256	1,405	115	966	1,081
Mid Eastern	90	1,316	1,405	69	1,012	1,081
North East	90	1,316	1,405	69	1,012	1,081
West Nile	120	1,286	1,405	92	989	1,081
Mid Northern	90	1,316	1,405	69	1,012	1,081
South Western	120	1,286	1,405	92	989	1,081
Mid Western	120	1,286	1,405	92	989	1,081
Uganda	2,362	11,691	14,053	1,817	8,993	10,810

## A.4 SAMPLE IMPLEMENTATION

Table A.5 presents response rates for households, women and men, by residence and region.

Table A.5 Sample implementation

Percent distribution of households, eligible women, and eligible men by results of the interviews, and household, eligible women and men response rates and overall women and men response rates, according to urban-rural residence and region (unweighted), Uganda 2011

Result	Residence		Region										Total
	Urban	Rural	Central 1	Central 2	Kam- pala	East Central	Mid Eastern	North East	West Nile	Mid Northern	South Western	Mid Western	
<b>Selected households</b>													
Completed (C)	95.7	96.7	97.1	98.0	96.6	96.8	98.4	93.1	96.5	97.1	98.4	93.1	96.5
Household present, no competent respondent at home (HP)	0.4	0.3	0.5	0.3	0.2	0.1	0.0	1.0	0.2	0.3	0.2	0.7	0.3
Postponed (P)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0
Refused (R)	0.8	0.3	0.4	0.1	0.9	0.1	0.0	1.2	0.3	0.1	0.1	0.6	0.4
Dwelling not found (DNF)	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.3	0.2	0.1	0.0	0.2	0.1
Household absent (HA)	0.7	0.7	0.3	0.2	0.1	1.0	0.4	1.7	0.9	0.7	0.3	1.4	0.7
Dwelling vacant/address not a dwelling (DV)	1.9	1.3	1.2	1.2	1.8	1.3	0.9	1.4	1.4	1.4	0.8	2.7	1.4
Dwelling destroyed (DD)	0.5	0.6	0.4	0.3	0.5	0.8	0.3	1.1	0.4	0.3	0.3	1.4	0.6
Other (O)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of sampled households	2,350	9,400	1,175	1,175	1,175	1,175	1,175	1,175	1,175	1,175	1,175	1,175	11,750
Household response rate (HRR) <sup>1</sup>	98.8	99.3	99.0	99.7	99.0	99.8	100.0	97.2	99.3	99.5	99.7	98.5	99.2
<b>Eligible women</b>													
Completed (EWC)	97.8	98.3	98.4	98.8	96.7	98.9	99.4	96.9	97.2	98.1	98.9	98.9	98.2
Not at home (EWNH)	0.9	1.0	0.6	0.4	1.1	0.7	0.2	2.1	1.8	1.0	0.8	0.6	0.9
Postponed (EWP)	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Refused (EWR)	0.9	0.3	0.4	0.3	1.6	0.3	0.2	0.9	0.4	0.3	0.3	0.0	0.5
Partly completed (EWPC)	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Incapacitated (EWI)	0.2	0.4	0.5	0.5	0.2	0.1	0.2	0.1	0.6	0.6	0.0	0.5	0.3
Other (EWO)	0.1	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of women	2,536	9,838	1,127	1,196	1,274	1,247	1,274	1,163	1,308	1,199	1,235	1,351	12,374
Eligible women response rate (EWRR) <sup>2</sup>	97.8	98.3	98.4	98.8	96.7	98.9	99.4	96.9	97.2	98.1	98.9	98.9	98.2
Overall women response rate (OWRR) <sup>3</sup>	96.6	97.6	97.5	98.5	95.7	98.7	99.4	94.2	96.5	97.6	98.6	97.4	97.4
<b>Eligible men</b>													
Completed (EMC)	95.4	96.2	95.9	98.0	95.6	96.8	98.6	91.0	94.6	95.5	97.3	96.5	96.0
Not at home (EMNH)	2.6	2.2	1.8	1.2	2.3	2.0	0.6	5.8	3.4	2.8	0.6	2.2	2.2
Refused (EMR)	1.7	0.9	1.5	0.6	1.9	0.6	0.2	2.7	1.1	0.7	1.4	0.7	1.1
Incapacitated (EMI)	0.3	0.7	0.8	0.2	0.3	0.7	0.6	0.6	0.9	1.0	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	100.0	100.0	100.0	100.0
Number of men	1,938	8,045	922	942	1,012	1,073	1,117	865	1,045	1,067	854	1,086	9,983
Eligible men response rate (EMRR) <sup>2</sup>	95.4	96.2	95.9	98.0	95.6	96.8	98.6	91.0	94.6	95.5	97.3	96.5	96.0
Overall men response rate (OMRR) <sup>3</sup>	94.2	95.5	95.0	97.6	94.6	96.7	98.6	88.5	94.0	95.0	97.1	95.0	95.3

<sup>1</sup> Using the number of households falling into specific response categories, the household response rate (HRR) is calculated as:

$$100 * C$$

$$\frac{C + HP + P + R + DNF}{C + HP + P + R + DNF}$$

<sup>2</sup> The eligible women/men response rate (EWRR/EMRR) is equivalent to the percentage of interviews completed (EWC)

<sup>3</sup> The overall women/men response rate (OWRR/OMRR) is calculated as:

$$OWRR = HRR * EWRR/100 \text{ or } OMRR = HRR * EMRR/100$$

Tables A.6 and A.7 show that response rates for the HIV testing component varied very little according to characteristics of those who were interviewed, while Tables A.8 and A.9 show the same for those who ever had sexual intercourse.

**Table A.6 Coverage of HIV testing by social and demographic characteristics: Women**

Percent distribution of interviewed women age 15-49 by HIV testing status, according to social and demographic characteristics (unweighted), Uganda 2011

Characteristic	Testing status				Total	Number
	HIV tested in central lab	Refused to provide blood sample	Absent at the time of blood collection	Other/missing <sup>1</sup>		
<b>Marital status</b>						
Never married	98.4	1.0	0.2	0.4	100.0	2,620
Ever had sexual intercourse	99.1	0.7	0.0	0.3	100.0	1,163
Never had sexual intercourse	97.9	1.3	0.3	0.5	100.0	1,457
Married/living together	98.7	1.0	0.0	0.3	100.0	7,081
Divorced or separated	98.2	1.5	0.1	0.2	100.0	1,025
Widowed	98.1	1.4	0.0	0.5	100.0	422
<b>Type of union</b>						
In polygynous union	99.0	0.5	0.2	0.3	100.0	1,834
In non-polygynous union	98.6	1.1	0.0	0.3	100.0	4,946
Not currently in union	98.3	1.2	0.1	0.3	100.0	4,067
<b>Ever had sexual intercourse</b>						
Yes	98.6	1.0	0.0	0.3	100.0	9,691
No	97.9	1.3	0.3	0.5	100.0	1,457
<b>Currently pregnant</b>						
Pregnant	98.3	1.3	0.1	0.3	100.0	1,288
Not pregnant or not sure	98.6	1.0	0.1	0.3	100.0	9,860
<b>Times slept away from home in past 12 months</b>						
None	98.5	1.1	0.0	0.3	100.0	6,012
1-2	98.7	1.0	0.1	0.3	100.0	3,110
3-4	98.6	1.1	0.1	0.2	100.0	1,222
5+	98.0	1.2	0.4	0.4	100.0	804
<b>Time away in past 12 months</b>						
Away for more than 1 month	98.7	0.7	0.1	0.4	100.0	1,337
Away for less than 1 month	98.5	1.2	0.1	0.2	100.0	3,799
Not away	98.5	1.1	0.0	0.3	100.0	6,012
<b>Ethnicity</b>						
Baganda	98.9	1.0	0.1	0.1	100.0	1,879
Banyankore	98.2	1.7	0.0	0.2	100.0	1,029
Iteso	98.8	0.8	0.0	0.4	100.0	892
Lugbara/Madi	98.1	1.2	0.4	0.2	100.0	808
Basoga	99.3	0.5	0.0	0.2	100.0	1,012
Langi	98.4	0.9	0.0	0.7	100.0	675
Bakiga	97.8	0.7	0.3	1.2	100.0	593
Karimojong	91.5	7.0	0.4	1.1	100.0	271
Acholi	97.9	1.1	0.4	0.6	100.0	471
Bagisu/Sabiny	99.4	0.6	0.0	0.0	100.0	662
Alur/Jopadhola	98.6	1.1	0.0	0.3	100.0	635
Banyoro	99.3	0.7	0.0	0.0	100.0	416
Batoro	99.0	0.7	0.0	0.3	100.0	291
Other	99.1	0.7	0.0	0.1	100.0	1,514
<b>Religion</b>						
Catholic	98.1	1.3	0.1	0.4	100.0	4,626
Anglican/Protestant	98.7	0.9	0.1	0.3	100.0	3,602
SDA	99.4	0.6	0.0	0.0	100.0	156
Pentecostal	98.7	1.0	0.1	0.2	100.0	931
Other Christian	98.8	0.8	0.0	0.4	100.0	244
Muslim	99.3	0.6	0.0	0.1	100.0	1,500
Other/None	97.8	2.2	0.0	0.0	100.0	89
<b>Total</b>	<b>98.5</b>	<b>1.1</b>	<b>0.1</b>	<b>0.3</b>	<b>100.0</b>	<b>11,148</b>

Note: Total includes 301 women whose type of marital union is not stated.

<sup>1</sup> Includes: 1) other results of blood collection (e.g. technical problem in the field), 2) lost specimens, 3) non corresponding bar codes, and 4) other lab results such as blood not tested for technical reason, not enough blood to complete the algorithm, etc.

Table A.7 Coverage of HIV testing by social and demographic characteristics: Men

Percent distribution of interviewed men 15-49 by HIV testing status, according to social and demographic characteristics (unweighted), Uganda 2011

Characteristic	Testing status				Total	Number
	HIV tested in central lab	Refused to provide blood sample	Absent at the time of blood collection	Other/missing <sup>1</sup>		
<b>Marital status</b>						
Never married	97.9	1.4	0.2	0.5	100.0	3,235
Ever had sexual intercourse	97.8	1.3	0.4	0.4	100.0	1,664
Never had sexual intercourse	97.9	1.4	0.1	0.6	100.0	1,571
Married/living together	98.0	1.8	0.1	0.2	100.0	4,951
Divorced or separated	98.6	1.2	0.0	0.2	100.0	487
Widowed	100.0	0.0	0.0	0.0	100.0	45
<b>Type of union</b>						
In polygynous union	97.8	1.7	0.1	0.4	100.0	803
In non-polygynous union	98.0	1.8	0.0	0.2	100.0	4,146
Not currently in union	98.0	1.3	0.2	0.5	100.0	3,767
<b>Ever had sexual intercourse</b>						
Yes	98.0	1.6	0.1	0.3	100.0	7,147
No	97.9	1.4	0.1	0.6	100.0	1,571
<b>Male circumcision</b>						
Circumcised	98.2	1.6	0.1	0.1	100.0	2,392
Not circumcised	97.9	1.6	0.1	0.4	100.0	6,326
<b>Times slept away from home in past 12 months</b>						
None	97.6	1.8	0.1	0.4	100.0	5,336
1-2	98.2	1.4	0.1	0.3	100.0	1,400
3-4	98.8	0.8	0.0	0.4	100.0	844
5+	98.6	1.2	0.1	0.1	100.0	1,138
<b>Time away in past 12 months</b>						
Away for more than 1 month	98.3	1.0	0.2	0.5	100.0	1,200
Away for less than 1 month	98.6	1.3	0.0	0.1	100.0	2,182
Not away	97.6	1.8	0.1	0.4	100.0	5,336
<b>Ethnicity</b>						
Baganda	98.2	1.6	0.0	0.2	100.0	1,465
Banyankore	98.6	1.1	0.0	0.3	100.0	732
Iteso	98.2	1.2	0.3	0.3	100.0	675
Lugbara/Madi	97.0	2.2	0.5	0.3	100.0	631
Basoga	99.0	0.6	0.1	0.2	100.0	807
Langi	97.4	2.0	0.0	0.7	100.0	610
Bakiga	97.9	1.0	0.3	0.8	100.0	385
Karimojong	86.6	12.0	0.0	1.4	100.0	142
Acholi	95.8	2.9	0.5	0.7	100.0	408
Bagisu/Sabiny	98.9	1.0	0.0	0.2	100.0	616
Alur/Jopadhola	98.5	0.6	0.2	0.6	100.0	468
Banyoro	99.0	1.0	0.0	0.0	100.0	386
Batoro	97.7	1.9	0.4	0.0	100.0	264
Other	98.5	1.3	0.0	0.2	100.0	1,129
<b>Religion</b>						
Catholic	97.8	1.6	0.2	0.4	100.0	3,673
Anglican/Protestant	97.6	1.9	0.2	0.3	100.0	2,934
SDA	98.4	1.6	0.0	0.0	100.0	125
Pentecostal	99.4	0.4	0.0	0.2	100.0	481
Other Christian	99.5	0.5	0.0	0.0	100.0	220
Muslim	98.6	1.3	0.0	0.2	100.0	1,195
Other/None	96.7	2.2	0.0	1.1	100.0	90
<b>Total</b>	<b>98.0</b>	<b>1.6</b>	<b>0.1</b>	<b>0.3</b>	<b>100.0</b>	<b>8,718</b>

Note: Total includes 2 men whose type of marital union is not stated.

<sup>1</sup> Includes: 1) other results of blood collection (e.g. technical problem in the field), 2) lost specimens, 3) non corresponding bar codes, and 4) other lab results such as blood not tested for technical reason, not enough blood to complete the algorithm, etc.

**Table A.8 Coverage of HIV testing among interviewed women by sexual behaviour characteristics**

Percent distribution of interviewed women age 15-49 who ever had sexual intercourse by HIV test status, according to sexual behaviour characteristics (unweighted), Uganda 2011

Sexual behaviour characteristic	Testing status				Total	Number
	HIV Tested <sup>1</sup>	Refused to provide blood	Absent at the time of blood collection	Other/missing		
<b>Age at first sexual intercourse</b>						
<15	98.9	0.8	0.0	0.3	100.0	1,757
15-17	98.8	1.0	0.1	0.2	100.0	4,743
18-19	98.8	0.9	0.0	0.3	100.0	2,024
20+	97.7	1.7	0.1	0.5	100.0	1,092
<b>Multiple sexual partners and partner concurrency in past 12 months</b>						
0	98.0	1.6	0.1	0.3	100.0	1,353
1	98.7	1.0	0.0	0.3	100.0	8,010
2+	100.0	0.0	0.0	0.0	100.0	328
Has concurrent partners <sup>2</sup>	100.0	0.0	0.0	0.0	100.0	42
None of the partners are concurrent	100.0	0.0	0.0	0.0	100.0	286
<b>Condom use at last sexual intercourse in past 12 months</b>						
Used condom	98.8	0.9	0.0	0.4	100.0	806
Did not use condom	98.8	0.9	0.0	0.3	100.0	7,532
No sexual intercourse in last 12 months	98.0	1.6	0.1	0.3	100.0	1,349
<b>Number of lifetime partners</b>						
1	98.1	1.4	0.0	0.4	100.0	3,562
2	98.9	0.8	0.1	0.1	100.0	2,849
3-4	99.0	0.9	0.0	0.2	100.0	2,490
5-9	99.1	0.3	0.0	0.5	100.0	584
10+	97.9	1.4	0.0	0.7	100.0	141
<b>Prior HIV testing</b>						
Ever tested	98.6	1.1	0.1	0.3	100.0	7,403
Received results	98.6	1.0	0.1	0.3	100.0	6,962
Did not received results	98.6	1.1	0.0	0.2	100.0	441
Never tested	98.9	0.9	0.0	0.2	100.0	2,288
<b>Total</b>	<b>98.6</b>	<b>1.0</b>	<b>0.0</b>	<b>0.3</b>	<b>100.0</b>	<b>9,691</b>

Note: Total includes 75 women with age at first sex missing, 4 women with condom use at last sex missing, and 65 women with number of lifetime partners missing.

<sup>1</sup> Includes: 1) other results of blood collection (e.g. technical problem in the field), 2) lost specimens, 3) non corresponding bar codes, and 4) other lab results such as blood not tested for technical reason, not enough blood to complete the algorithm, etc.

<sup>2</sup> A respondent is considered to have had concurrent partners if he or she had overlapping sexual partnerships with two or more people during the 12 months before the survey

Table A.9 Coverage of HIV testing among interviewed men by sexual behaviour characteristics

Percent distribution of interviewed men age 15-49 who ever had sexual intercourse by HIV test status, according to sexual behaviour characteristics (unweighted), Uganda 2011

Sexual behaviour characteristic	Testing status				Total	Number
	HIV Tested <sup>1</sup>	Refused to provide blood	Absent at the time of blood collection	Other/missing		
<b>Age at first sexual intercourse</b>						
<15	98.0	1.2	0.2	0.5	100.0	808
15-17	97.7	1.8	0.2	0.3	100.0	2,678
18-19	98.6	1.2	0.1	0.2	100.0	1,863
20+	97.8	1.9	0.1	0.2	100.0	1,796
<b>Multiple sexual partners and partner concurrency in past 12 months</b>						
0	98.2	1.3	0.3	0.3	100.0	764
1	97.8	1.7	0.2	0.3	100.0	4,809
2+	98.4	1.4	0.0	0.2	100.0	1,574
Has concurrent partners <sup>2</sup>	99.0	0.8	0.0	0.3	100.0	385
None of the partners are concurrent	98.2	1.6	0.0	0.2	100.0	1,189
<b>Condom use at last sexual intercourse in past 12 months</b>						
Used condom	97.8	1.6	0.2	0.4	100.0	936
Did not use condom	98.0	1.7	0.1	0.2	100.0	5,447
No sexual intercourse in last 12 months	98.2	1.3	0.3	0.3	100.0	761
<b>Paid for sexual intercourse in past 12 months</b>						
Yes	100.0	0.0	0.0	0.0	100.0	54
No (No paid sex or no sex in last 12 months)	98.0	1.6	0.1	0.3	100.0	7,093
<b>Number of lifetime partners</b>						
1	97.3	1.8	0.6	0.4	100.0	845
2	98.3	1.5	0.1	0.1	100.0	1,070
3-4	97.8	1.8	0.1	0.2	100.0	2,075
5-9	98.2	1.5	0.0	0.3	100.0	1,683
10+	98.3	1.2	0.1	0.4	100.0	1,125
Missing	97.4	2.6	0.0	0.0	100.0	349
<b>Prior HIV testing</b>						
Ever tested	98.0	1.5	0.1	0.3	100.0	3,792
Received results	98.0	1.5	0.1	0.3	100.0	3,616
Did not received results	98.9	1.1	0.0	0.0	100.0	176
Never tested	97.9	1.7	0.1	0.2	100.0	3,355
Total	98.0	1.6	0.1	0.3	100.0	7,147

Note: Total includes 2 men with age at first sex missing and 3 men with condom use at last sex missing.

<sup>1</sup> Includes: 1) other results of blood collection (e.g. technical problem in the field), 2) lost specimens, 3) non corresponding bar codes, and 4) other lab results such as blood not tested for technical reason, not enough blood to complete the algorithm, etc.

<sup>2</sup> A respondent is considered to have had concurrent partners if he or she had overlapping sexual partnerships with two or more people during the 12 months before the survey. (Includes polygynous men who had overlapping sexual partnerships with two or more wives).

## A.5 SAMPLE PROBABILITIES AND SAMPLE WEIGHTS

Due to the non-proportional allocation of the sample to the various regions and the possible differences in response rates, sampling weights are required for any analysis using UAIS data to ensure the actual representative of the survey results at the national level and at the sub-national level. Since the UAIS sample is a two-stage stratified cluster sample, sampling weights were calculated based on sampling probabilities separately for each sampling stage and for each cluster. We use the following notations:

$P_{1hi}$ : first-stage sampling probability of the  $i^{th}$  cluster in stratum  $h$   
 $P_{2hi}$ : second -stage sampling probability within the  $i^{th}$  cluster (households)

Let  $a_h$  be the number of EAs selected in stratum  $h$ ,  $M_{hi}$  the number of households according to the sampling frame in the  $i^{\text{th}}$  EA, and  $\sum M_{hi}$  the total number of households in the stratum. The probability of selecting the  $i^{\text{th}}$  EA in the 2011 UAIS sample is calculated as follows:

$$\frac{a_h M_{hi}}{\sum M_{hi}}$$

Let  $b_{hi}$  be the proportion of households in the selected cluster compared to the total number of households in EA  $i$  in stratum  $h$  if the EA is segmented, otherwise  $b_{hi} = 1$ . Then the probability of selecting cluster  $i$  in the sample is:

$$P_{1hi} = \frac{a_h M_{hi}}{\sum M_{hi}} \times b_{hi}$$

Let  $L_{hi}$  be the number of households listed in the household listing operation in cluster  $i$  in stratum  $h$ , let  $g_{hi}$  be the number of households selected in the cluster. The second stage's selection probability for each household in the cluster is calculated as follows:

$$P_{2hi} = \frac{g_{hi}}{L_{hi}}$$

The overall selection probability of each household in cluster  $i$  of stratum  $h$  is therefore the production of the two stages selection probabilities:

$$P_{hi} = P_{1hi} \times P_{2hi}$$

The sampling weight for each household in cluster  $i$  of stratum  $h$  is the inverse of its overall selection probability:

$$W_{hi} = 1 / P_{hi}$$

A spreadsheet containing all sampling parameters and selection probabilities was prepared to facilitate the calculation of the design weights. Design weights were adjusted for household non-response and as well as for individual non-response to get the sampling weights for households, for women, and for men respectively. The differences of the household sampling weight and the individual sampling weights are introduced by individual non-response. The final sampling weights were normalised in order to give the total number of unweighted cases equal to the total number of weighted cases at national level, for both household weight and individual weight, respectively. The normalised weights are relative weights which are valid for estimating means, proportions and ratios, but not valid for estimating population totals and for pooled data. The sampling weights for HIV and syphilis results are calculated in a similar way, but the normalisation of the weight is different compared to the individual survey weights. The individual HIV and syphilis testing weights are normalised for women and men together at the national level, in order that the prevalence calculated for both sexes together are valid.





The estimates from a sample survey are affected by two types of errors: non-sampling errors and sampling errors. Non-sampling errors are the results of mistakes made in implementing data collection and data processing, such as failure to locate and interview the correct household, misunderstanding of the questions on the part of either the interviewer or the respondent, and data entry errors. Although numerous efforts were made during the implementation of the 2011 Uganda AIDS Indicator Survey (UAIS) to minimise this type of error, non-sampling errors are impossible to avoid and difficult to evaluate statistically.

Sampling errors, on the other hand, can be evaluated statistically. The sample of respondents selected in the 2011 UAIS 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.

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 2011 UAIS sample is the result of a multi-stage stratified design, and, consequently, it was necessary to use more complex formulae. Sampling errors were computed in ISSA, using programmes developed by ICF Macro. These programmes use the Taylor linearisation method of variance estimation for survey estimates that are means, proportions or ratios.

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:

$$SE^2(r) = var(r) = \frac{1-f}{x^2} \sum_{h=1}^H \left[ \frac{m_h}{m_h-1} \left( \sum_{i=1}^{m_h} z_{hi}^2 - \frac{z_h^2}{m_h} \right) \right]$$

in which

$$z_{hi} = y_{hi} - rx_{hi}, \text{ and } z_h = y_h - rx_h$$

where  $h$  represents the stratum which varies from 1 to  $H$ ,

$m_h$  is the total number of clusters selected in the  $h^{\text{th}}$  stratum,

$y_{hi}$  is the sum of the weighted values of variable  $y$  in the  $i^{\text{th}}$  cluster in the  $h^{\text{th}}$  stratum,

$x_{hi}$  is the sum of the weighted number of cases in the  $i^{\text{th}}$  cluster in the  $h^{\text{th}}$  stratum, and

$f$  is the overall sampling fraction, which is so small that it is ignored.

In addition to the standard error, the design effect (DEFT) for each estimate is also calculated. The design effect is defined as the ratio between the standard error using the given sample design and the standard error that would result if a simple random sample had been used. A DEFT value of 1.0 indicates that the sample design is as efficient as a simple random sample, while a value greater than 1.0 indicates the increase in the sampling error due to the use of a more complex and less statistically efficient design (e.g., using stratification, clustering and multi-stage systematic selection). Relative standard errors and confidence limits for the estimates are also calculated.

Sampling errors for the 2011 UAIS 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 ten regions. For each variable, the type of statistic (mean, proportion, or rate) and the base population are given in Table B.1. Tables B.2 through B.14 present the value of the statistic (R), its standard error (SE), the number of un-weighted (N) and weighted (WN) cases, the design effect (DEFT), the relative standard error (SE/R), and the 95 percent confidence limits ( $R \pm 2SE$ ), for each variable. The DEFT is considered undefined when the standard error considering a simple random sample is zero (when the estimate is close to 0 or 1).

The confidence interval (e.g., as calculated for *comprehensive knowledge of HIV transmission among all women age 15-49*) can be interpreted as follows: the overall average from the national sample is 0.361 and its standard error is 0.009. Therefore, to obtain the 95 percent confidence limits, one adds and subtracts twice the standard error to the sample estimate, i.e.,  $0.361 \pm 2 \times 0.009$ . There is a high probability (95 percent) that the true proportion of women with comprehensive knowledge of HIV transmission is between 0.343 and 0.379.

For the total sample, the value of the DEFT, averaged over all variables, is 1.92 for women and 1.80 for men. This means that, due to multi-stage clustering of the sample, the average standard error is increased by a factor of 1.92 for women and 1.80 for men over that in an equivalent simple random sample.

**Table B.1** List of selected variables for sampling errors, Uganda AIS 2011

Variable	Estimate	Base Population
WOMEN		
Urban residence	Proportion	All women 15-49
No education	Proportion	All women 15-49
Secondary school or higher	Proportion	All women 15-49
Never married (in union)	Proportion	All women 15-49
Currently married (in union)	Proportion	All women 15-49
Had sex before age 15	Proportion	All women 15-24
Comprehensive knowledge of HIV transmission-all	Proportion	All women age 15-49
Comprehensive knowledge of HIV transmission-youth	Proportion	All women age 15-24
Accepting attitudes towards people with HIV	Proportion	All women 15-49 who have heard of HIV/AIDS
Had two or more sexual partners in past 12 months	Proportion	All women 15-49
Condom use at last sex among those with 2+ partners	Proportion	All women 15-49 who had 2 or more partners in the past 12 months
Abstinence among youth (never had sex)	Proportion	Never-married women 15-24
Sexually active in past 12 months among never-married youth	Proportion	Never-married women 15-24
Had injection in past 12 months	Proportion	All women 15-49
Ever had an HIV test and received results	Proportion	All women 15-49
HIV prevalence	Proportion	All women 15-49 who were tested for HIV in lab
MEN		
Urban residence	Proportion	All men 15-49
No education	Proportion	All men 15-49
Secondary school or higher	Proportion	All men 15-49
Never married (in union)	Proportion	All men 15-49
Currently married (in union)	Proportion	All men 15-49
Had sex before age 15	Proportion	All men 15-24
Comprehensive knowledge of HIV transmission-all	Proportion	All men age 15-49
Comprehensive knowledge of HIV transmission-youth	Proportion	All men age 15-24
Accepting attitudes towards people with HIV	Proportion	All men 15-49 who have heard of HIV/AIDS
Had two or more sexual partners in past 12 months	Proportion	All men 15-49
Condom use at last sex among those with 2+ partners	Proportion	All men 15-49 who had 2 or more partners in the past 12 months
Abstinence among youth (never had sex)	Proportion	Never-married men 15-24
Sexually active in past 12 months among never-married youth	Proportion	Never-married men 15-24
Had injection in past 12 months	Proportion	All men 15-49
Ever had an HIV test and received results	Proportion	All men 15-49
HIV prevalence	Proportion	All men 15-49 who were tested for HIV in lab
BOTH SEXES		
HIV prevalence	Proportion	All women and men 15-49 who were tested for HIV in lab
HIV prevalence—children under five	Proportion	All children under 5 years tested for HIV in lab

Table B.2 Sampling errors for national sample, Uganda AIS 2011

Variable	R	SE	N-UNWE	N-WEIG	DEFT	SE/R	R-2SE	R+2SE
WOMEN								
Urban residence	0.212	0.024	11148	11160	6.128	0.112	0.164	0.259
No education	0.140	0.007	11148	11160	2.101	0.049	0.126	0.154
Secondary education or higher	0.268	0.012	11148	11160	2.837	0.044	0.244	0.292
Never married (in union)	0.237	0.007	11148	11160	1.652	0.028	0.223	0.250
Currently married (in union)	0.636	0.007	11148	11160	1.565	0.011	0.622	0.650
Sex before 15	0.131	0.006	4615	4621	1.288	0.049	0.118	0.144
Comprehensive knowledge of HIV transmission-all	0.361	0.009	11148	11160	2.006	0.025	0.343	0.379
Comprehensive knowledge of HIV transmission-youth	0.386	0.010	4615	4621	1.448	0.027	0.366	0.407
Accepting attitudes towards people with HIV	0.197	0.007	11065	11082	1.958	0.038	0.182	0.212
Had two or more sexual partners in past 12 months	0.030	0.002	11148	11160	1.233	0.067	0.026	0.034
Condom use at last sex among those with 2+ partners	0.158	0.023	328	333	1.124	0.143	0.113	0.204
Abstinence among youth (never had sex)	0.593	0.014	2372	2389	1.397	0.024	0.565	0.621
Sexually active in past 12 months-never-married youth	0.308	0.013	2372	2389	1.356	0.042	0.282	0.333
Had injection in past 12 months	0.397	0.008	11148	11160	1.769	0.021	0.381	0.414
Ever had an HIV test and received results	0.658	0.010	11148	11160	2.122	0.014	0.639	0.677
HIV prevalence for women 15-49	0.083	0.004	10986	10883	1.385	0.044	0.076	0.091
MEN								
Urban residence	0.199	0.023	8718	8735	5.437	0.117	0.153	0.246
No education	0.056	0.004	8718	8735	1.710	0.076	0.047	0.064
Secondary education or higher	0.377	0.013	8718	8735	2.590	0.036	0.350	0.404
Never married (in union)	0.369	0.008	8718	8735	1.503	0.021	0.354	0.385
Currently married (in union)	0.572	0.008	8718	8735	1.508	0.014	0.556	0.588
Sex before 15	0.119	0.007	3481	3479	1.322	0.061	0.104	0.133
Comprehensive knowledge of HIV transmission-all	0.427	0.009	8718	8735	1.764	0.022	0.409	0.446
Comprehensive knowledge of HIV transmission-youth	0.393	0.011	3481	3479	1.359	0.029	0.370	0.415
Accepting attitudes towards people with HIV	0.311	0.010	8564	8595	1.920	0.031	0.292	0.330
Had two or more sexual partners in past 12 months	0.187	0.007	8718	8735	1.614	0.036	0.173	0.200
Condom use at last sex among those with 2+ partners	0.148	0.014	1574	1630	1.522	0.092	0.121	0.175
Abstinence among youth (never had sex)	0.529	0.014	2873	2872	1.548	0.027	0.501	0.558
Sexually active in past 12 months-never-married youth	0.321	0.013	2873	2872	1.510	0.041	0.295	0.348
Had injection in past 12 months	0.253	0.007	8718	8735	1.547	0.028	0.239	0.268
Ever had an HIV test and received results	0.449	0.011	8718	8735	2.035	0.024	0.427	0.470
HIV prevalence for men 15-49	0.061	0.003	8542	8673	1.244	0.053	0.055	0.067
BOTH SEXES								
HIV prevalence for both sexes 15-49	0.073	0.003	19528	19557	1.543	0.039	0.068	0.079
HIV prevalence for children under five	0.007	0.001	9946	9946	1.158	0.135	0.005	0.009

Table B.3 Sampling errors for urban sample

Variable	R	SE	N-UNWE	N-WEIG	DEFT	SE/R	R-2SE	R+2SE
WOMEN								
No education	0.048	0.007	2352	2365	1.632	0.150	0.034	0.062
Secondary education or higher	0.563	0.022	2352	2365	2.184	0.040	0.519	0.608
Never married (in union)	0.350	0.015	2352	2365	1.537	0.043	0.320	0.381
Currently married (in union)	0.515	0.014	2352	2365	1.331	0.027	0.487	0.542
Sex before 15	0.108	0.014	1097	1112	1.478	0.129	0.080	0.135
Comprehensive knowledge of HIV transmission-all	0.499	0.020	2352	2365	1.912	0.040	0.460	0.538
Comprehensive knowledge of HIV transmission-youth	0.497	0.021	1097	1112	1.407	0.043	0.454	0.539
Accepting attitudes towards people with HIV	0.250	0.019	2340	2355	2.100	0.075	0.212	0.287
Had two or more sexual partners in past 12 months	0.044	0.005	2352	2365	1.213	0.116	0.034	0.055
Condom use at last sex among those with 2+ partners	0.301	0.051	106	105	1.136	0.169	0.200	0.403
Abstinence among youth (never had sex)	0.494	0.025	699	703	1.328	0.051	0.443	0.544
Sexually active in past 12 months-never-married youth	0.410	0.023	699	703	1.238	0.056	0.363	0.456
Had injection in past 12 months	0.445	0.019	2352	2365	1.833	0.042	0.407	0.482
Ever had an HIV test and received results	0.763	0.014	2352	2365	1.629	0.019	0.734	0.792
HIV prevalence for women 15-49	0.107	0.009	2315	2299	1.409	0.085	0.088	0.125
MEN								
No education	0.018	0.004	1746	1739	1.174	0.209	0.010	0.025
Secondary education or higher	0.714	0.023	1746	1739	2.112	0.032	0.668	0.759
Never married (in union)	0.456	0.023	1746	1739	1.918	0.050	0.410	0.502
Currently married (in union)	0.483	0.021	1746	1739	1.772	0.044	0.440	0.525
Sex before 15	0.116	0.015	746	740	1.241	0.126	0.087	0.145
Comprehensive knowledge of HIV transmission-all	0.583	0.017	1746	1739	1.464	0.030	0.548	0.617
Comprehensive knowledge of HIV transmission-youth	0.552	0.025	746	740	1.349	0.045	0.503	0.601
Accepting attitudes towards people with HIV	0.330	0.027	1728	1724	2.356	0.081	0.277	0.384
Had two or more sexual partners in past 12 months	0.186	0.016	1746	1739	1.729	0.087	0.154	0.218
Condom use at last sex among those with 2+ partners	0.284	0.031	288	324	1.169	0.109	0.222	0.346
Abstinence among youth (never had sex)	0.436	0.029	664	657	1.491	0.066	0.379	0.493
Sexually active in past 12 months-never-married youth	0.382	0.029	664	657	1.519	0.075	0.325	0.440
Had injection in past 12 months	0.270	0.012	1746	1739	1.105	0.044	0.246	0.293
Ever had an HIV test and received results	0.586	0.022	1746	1739	1.833	0.037	0.543	0.629
HIV prevalence for men 15-49	0.061	0.007	1703	1710	1.214	0.115	0.047	0.075
BOTH SEXES								
HIV prevalence for both sexes 15-49	0.087	0.007	4018	4009	1.486	0.076	0.074	0.100
HIV prevalence for children under five	0.007	0.003	1390	1402	1.160	0.345	0.002	0.014

Table B.4 Sampling errors for rural sample

Variable	R	SE	N-UNWE	N-WEIG	DEFT	SE/R	R-2SE	R+2SE
WOMEN								
No education	0.165	0.008	8796	8795	1.968	0.047	0.150	0.181
Secondary education or higher	0.188	0.009	8796	8795	2.172	0.048	0.170	0.206
Never married (in union)	0.206	0.006	8796	8795	1.316	0.028	0.195	0.217
Currently married (in union)	0.668	0.007	8796	8795	1.338	0.010	0.655	0.682
Sex before 15	0.138	0.007	3518	3509	1.230	0.052	0.124	0.153
Comprehensive knowledge of HIV transmission-all	0.324	0.009	8796	8795	1.829	0.028	0.306	0.342
Comprehensive knowledge of HIV transmission-youth	0.352	0.011	3518	3509	1.342	0.031	0.330	0.373
Accepting attitudes towards people with HIV	0.183	0.007	8725	8727	1.776	0.040	0.168	0.197
Had two or more sexual partners in past 12 months	0.026	0.002	8796	8795	1.215	0.079	0.022	0.030
Condom use at last sex among those with 2+ partners	0.092	0.020	222	228	1.003	0.212	0.053	0.131
Abstinence among youth (never had sex)	0.635	0.015	1673	1686	1.272	0.024	0.605	0.665
Sexually active in past 12 months-never-married youth	0.265	0.013	1673	1686	1.211	0.049	0.239	0.291
Had injection in past 12 months	0.384	0.009	8796	8795	1.708	0.023	0.367	0.402
Ever had an HIV test and received results	0.629	0.011	8796	8795	2.070	0.017	0.608	0.651
HIV prevalence for women 15-49	0.077	0.004	8671	8584	1.341	0.050	0.069	0.085
MEN								
No education	0.065	0.005	6972	6995	1.667	0.076	0.055	0.075
Secondary education or higher	0.293	0.008	6972	6995	1.506	0.028	0.277	0.310
Never married (in union)	0.348	0.008	6972	6995	1.337	0.022	0.333	0.363
Currently married (in union)	0.594	0.008	6972	6995	1.396	0.014	0.578	0.610
Sex before 15	0.120	0.008	2735	2739	1.342	0.070	0.103	0.136
Comprehensive knowledge of HIV transmission-all	0.389	0.010	6972	6995	1.649	0.025	0.369	0.408
Comprehensive knowledge of HIV transmission-youth	0.350	0.011	2735	2739	1.255	0.033	0.327	0.373
Accepting attitudes towards people with HIV	0.306	0.010	6836	6871	1.780	0.032	0.286	0.326
Had two or more sexual partners in past 12 months	0.187	0.007	6972	6995	1.584	0.040	0.172	0.201
Condom use at last sex among those with 2+ partners	0.114	0.013	1286	1306	1.415	0.110	0.089	0.140
Abstinence among youth (never had sex)	0.557	0.016	2209	2216	1.501	0.028	0.525	0.589
Sexually active in past 12 months-never-married youth	0.303	0.014	2209	2216	1.480	0.048	0.274	0.332
Had injection in past 12 months	0.249	0.008	6972	6995	1.638	0.034	0.232	0.266
Ever had an HIV test and received results	0.415	0.011	6972	6995	1.851	0.026	0.393	0.437
HIV prevalence for men 15-49	0.061	0.004	6839	6963	1.251	0.059	0.054	0.068
BOTH SEXES								
HIV prevalence for both sexes 15-49	0.070	0.003	15510	15547	1.547	0.045	0.064	0.076
HIV prevalence for children under five	0.007	0.001	8556	8544	1.158	0.147	0.005	0.009

Table B.5. Sampling errors for Central 1 region, Uganda AIS 2011

Variable	R	SE	N-UNWE	N-WEIG	DEFT	SE/R	R-2SE	R+2SE
WOMEN								
No education	0.059	0.009	1018	1206	1.253	0.157	0.041	0.078
Secondary education or higher	0.396	0.042	1018	1206	2.738	0.106	0.312	0.480
Never married (in union)	0.235	0.016	1018	1206	1.166	0.066	0.204	0.266
Currently married (in union)	0.628	0.015	1018	1206	1.011	0.024	0.597	0.658
Comprehensive knowledge of HIV transmission-all	0.418	0.023	1018	1206	1.457	0.054	0.373	0.463
Comprehensive knowledge of HIV transmission-youth	0.398	0.031	418	503	1.275	0.077	0.337	0.459
Accepting attitudes towards people with HIV	0.206	0.031	1016	1203	2.408	0.148	0.145	0.268
Had two or more sexual partners in past 12 months	0.042	0.007	1018	1206	1.049	0.157	0.029	0.055
Had injection in past 12 months	0.497	0.016	1018	1206	1.035	0.033	0.464	0.529
Ever had an HIV test and received results	0.711	0.024	1018	1206	1.673	0.033	0.663	0.759
HIV prevalence for women 15-49	0.125	0.014	1006	1173	1.305	0.109	0.098	0.152
MEN								
No education	0.041	0.010	804	1009	1.469	0.251	0.020	0.061
Secondary education or higher	0.422	0.063	804	1009	3.601	0.149	0.296	0.547
Never married (in union)	0.333	0.022	804	1009	1.317	0.066	0.289	0.377
Currently married (in union)	0.590	0.020	804	1009	1.173	0.034	0.550	0.631
Comprehensive knowledge of HIV transmission-all	0.462	0.027	804	1009	1.529	0.058	0.408	0.516
Comprehensive knowledge of HIV transmission-youth	0.339	0.033	287	351	1.171	0.097	0.273	0.404
Accepting attitudes towards people with HIV	0.231	0.014	802	1007	0.920	0.059	0.204	0.259
Had two or more sexual partners in past 12 months	0.212	0.021	804	1009	1.472	0.100	0.170	0.255
Condom use at last sex among those with 2+ partners	0.301	0.058	168	214	1.630	0.192	0.186	0.417
Had injection in past 12 months	0.291	0.017	804	1009	1.046	0.058	0.257	0.324
Ever had an HIV test and received results	0.518	0.033	804	1009	1.869	0.064	0.453	0.584
HIV prevalence for men 15-49	0.084	0.010	790	1003	1.045	0.123	0.063	0.104
BOTH SEXES								
HIV prevalence for both sexes 15-49	0.106	0.010	1796	2176	1.339	0.092	0.087	0.125
HIV prevalence for children under five	0.013	0.004	936	1081	0.985	0.281	0.006	0.020

Table B.6 Sampling errors for Central 2 region, Uganda 2011

Variable	R	SE	N-UNWE	N-WEIG	DEFT	SE/R	R-2SE	R+2SE
WOMEN								
No education	0.127	0.025	1089	1162	2.442	0.194	0.078	0.177
Secondary education or higher	0.282	0.029	1089	1162	2.161	0.105	0.223	0.341
Never married (in union)	0.221	0.020	1089	1162	1.550	0.088	0.182	0.260
Currently married (in union)	0.624	0.022	1089	1162	1.515	0.036	0.579	0.668
Comprehensive knowledge of HIV transmission-all	0.360	0.020	1089	1162	1.392	0.056	0.320	0.401
Comprehensive knowledge of HIV transmission-youth	0.414	0.027	427	457	1.127	0.065	0.360	0.468
Accepting attitudes towards people with HIV	0.137	0.017	1080	1153	1.660	0.127	0.103	0.172
Had two or more sexual partners in past 12 months	0.033	0.005	1089	1162	0.888	0.145	0.024	0.043
Had injection in past 12 months	0.428	0.019	1089	1162	1.258	0.044	0.390	0.466
Ever had an HIV test and received results	0.671	0.023	1089	1162	1.582	0.034	0.626	0.716
HIV prevalence for women 15-49	0.097	0.009	1083	1132	1.007	0.093	0.079	0.115
MEN								
No education	0.078	0.018	842	888	1.980	0.234	0.041	0.115
Secondary education or higher	0.331	0.035	842	888	2.141	0.105	0.261	0.400
Never married (in union)	0.343	0.025	842	888	1.519	0.072	0.293	0.393
Currently married (in union)	0.569	0.025	842	888	1.446	0.043	0.520	0.619
Comprehensive knowledge of HIV transmission-all	0.467	0.021	842	888	1.196	0.044	0.426	0.508
Comprehensive knowledge of HIV transmission-youth	0.420	0.032	306	324	1.127	0.076	0.356	0.484
Accepting attitudes towards people with HIV	0.180	0.018	823	870	1.321	0.098	0.145	0.216
Had two or more sexual partners in past 12 months	0.170	0.018	842	888	1.372	0.105	0.134	0.205
Condom use at last sex among those with 2+ partners	0.130	0.022	147	151	0.806	0.173	0.085	0.175
Had injection in past 12 months	0.300	0.021	842	888	1.307	0.069	0.258	0.341
Ever had an HIV test and received results	0.482	0.031	842	888	1.794	0.064	0.420	0.543
HIV prevalence for men 15-49	0.080	0.010	834	884	1.027	0.121	0.061	0.099
BOTH SEXES								
HIV prevalence for both sexes 15-49	0.090	0.007	1917	2016	1.107	0.081	0.075	0.104
HIV prevalence for children under five	0.004	0.004	1024	1066	1.702	0.738	0.000	0.013

Table B.7 Sampling errors for Kampala region

Variable	R	SE	N-UNWE	N-WEIG	DEFT	SE/R	R-2SE	R+2SE
WOMEN								
No education	0.026	0.007	1184	875	1.526	0.271	0.012	0.040
Secondary education or higher	0.644	0.023	1184	875	1.627	0.035	0.599	0.690
Never married (in union)	0.390	0.017	1184	875	1.173	0.043	0.357	0.424
Currently married (in union)	0.480	0.016	1184	875	1.101	0.033	0.448	0.512
Comprehensive knowledge of HIV transmission-all	0.523	0.030	1184	875	2.098	0.058	0.462	0.584
Comprehensive knowledge of HIV transmission-youth	0.504	0.032	576	430	1.515	0.063	0.441	0.567
Accepting attitudes towards people with HIV	0.215	0.021	1175	868	1.758	0.098	0.172	0.257
Had two or more sexual partners in past 12 months	0.054	0.007	1184	875	1.100	0.134	0.040	0.068
Had injection in past 12 months	0.441	0.023	1184	875	1.571	0.051	0.396	0.487
Ever had an HIV test and received results	0.754	0.019	1184	875	1.487	0.025	0.717	0.791
HIV prevalence for women 15-49	0.095	0.012	1167	855	1.373	0.124	0.071	0.118
MEN								
No education	0.015	0.004	924	674	1.097	0.288	0.007	0.024
Secondary education or higher	0.766	0.017	924	674	1.199	0.022	0.732	0.799
Never married (in union)	0.523	0.023	924	674	1.409	0.044	0.476	0.569
Currently married (in union)	0.408	0.024	924	674	1.494	0.059	0.360	0.456
Comprehensive knowledge of HIV transmission-all	0.636	0.027	924	674	1.690	0.042	0.582	0.689
Comprehensive knowledge of HIV transmission-youth	0.605	0.030	401	308	1.240	0.050	0.545	0.666
Accepting attitudes towards people with HIV	0.316	0.028	916	670	1.804	0.088	0.261	0.372
Had two or more sexual partners in past 12 months	0.115	0.013	924	674	1.221	0.111	0.090	0.141
Condom use at last sex among those with 2+ partners	0.331	0.050	117	78	1.149	0.152	0.231	0.431
Had injection in past 12 months	0.230	0.013	924	674	0.969	0.058	0.203	0.256
Ever had an HIV test and received results	0.575	0.023	924	674	1.406	0.040	0.529	0.621
HIV prevalence for men 15-49	0.041	0.007	905	670	1.014	0.163	0.028	0.054
BOTH SEXES								
HIV prevalence for both sexes 15-49	0.071	0.008	2072	1525	1.480	0.117	0.054	0.088
HIV prevalence for children under five	0.002	0.002	628	451	0.714	0.511	0.000	0.006

Table B.8 Sampling errors for East Central region

Variable	R	SE	N-UNWE	N-WEIG	DEFT	SE/R	R-2SE	R+2SE
WOMEN								
No education	0.109	0.013	1143	1153	1.441	0.122	0.083	0.136
Secondary education or higher	0.262	0.031	1143	1153	2.405	0.120	0.199	0.324
Never married (in union)	0.205	0.013	1143	1153	1.087	0.063	0.179	0.231
Currently married (in union)	0.688	0.016	1143	1153	1.182	0.024	0.655	0.720
Comprehensive knowledge of HIV transmission-all	0.386	0.036	1143	1153	2.508	0.094	0.314	0.458
Comprehensive knowledge of HIV transmission-youth	0.410	0.043	464	468	1.879	0.105	0.324	0.496
Accepting attitudes towards people with HIV	0.079	0.009	1138	1149	1.125	0.114	0.061	0.097
Had two or more sexual partners in past 12 months	0.046	0.008	1143	1153	1.358	0.183	0.029	0.063
Had injection in past 12 months	0.408	0.022	1143	1153	1.479	0.053	0.365	0.451
Ever had an HIV test and received results	0.564	0.030	1143	1153	2.016	0.052	0.505	0.624
HIV prevalence for women 15-49	0.067	0.010	1136	1120	1.369	0.151	0.047	0.088
MEN								
No education	0.056	0.013	938	933	1.679	0.225	0.031	0.081
Secondary education or higher	0.344	0.033	938	933	2.111	0.095	0.278	0.409
Never married (in union)	0.374	0.018	938	933	1.117	0.047	0.339	0.410
Currently married (in union)	0.597	0.019	938	933	1.210	0.032	0.558	0.636
Comprehensive knowledge of HIV transmission-all	0.365	0.022	938	933	1.384	0.060	0.322	0.409
Comprehensive knowledge of HIV transmission-youth	0.362	0.030	395	396	1.230	0.082	0.302	0.422
Accepting attitudes towards people with HIV	0.259	0.024	929	924	1.644	0.091	0.212	0.307
Had two or more sexual partners in past 12 months	0.306	0.020	938	933	1.314	0.065	0.266	0.345
Condom use at last sex among those with 2+ partners	0.122	0.021	289	285	1.108	0.175	0.079	0.165
Had injection in past 12 months	0.167	0.016	938	933	1.333	0.097	0.135	0.200
Ever had an HIV test and received results	0.335	0.025	938	933	1.647	0.076	0.284	0.386
HIV prevalence for men 15-49	0.048	0.008	926	925	1.197	0.175	0.031	0.065
BOTH SEXES								
HIV prevalence for both sexes 15-49	0.058	0.008	2062	2045	1.558	0.138	0.042	0.075
HIV prevalence for children under five	0.008	0.003	1167	1147	1.016	0.328	0.003	0.014

Table B.9. Sampling errors for Mid Eastern region, Uganda

Variable	R	SE	N-UNWE	N-WEIG	DEFT	SE/R	R-2SE	R+2SE
WOMEN								
No education	0.144	0.013	1151	1133	1.266	0.091	0.118	0.170
Secondary education or higher	0.214	0.025	1151	1133	2.078	0.118	0.163	0.264
Never married (in union)	0.220	0.014	1151	1133	1.136	0.063	0.192	0.248
Currently married (in union)	0.685	0.017	1151	1133	1.254	0.025	0.651	0.719
Comprehensive knowledge of HIV transmission-all	0.310	0.021	1151	1133	1.519	0.067	0.269	0.352
Comprehensive knowledge of HIV transmission-youth	0.368	0.020	470	465	0.892	0.054	0.328	0.407
Accepting attitudes towards people with HIV	0.187	0.013	1144	1125	1.130	0.070	0.161	0.214
Had two or more sexual partners in past 12 months	0.038	0.006	1151	1133	1.051	0.156	0.026	0.050
Had injection in past 12 months	0.387	0.029	1151	1133	1.988	0.074	0.330	0.444
Ever had an HIV test and received results	0.485	0.032	1151	1133	2.138	0.065	0.422	0.548
HIV prevalence for women 15-49	0.044	0.008	1147	1103	1.328	0.183	0.028	0.060
MEN								
No education	0.074	0.010	979	950	1.223	0.138	0.054	0.095
Secondary education or higher	0.325	0.022	979	950	1.439	0.066	0.282	0.368
Never married (in union)	0.400	0.017	979	950	1.057	0.041	0.367	0.433
Currently married (in union)	0.561	0.018	979	950	1.159	0.033	0.524	0.597
Comprehensive knowledge of HIV transmission-all	0.322	0.021	979	950	1.384	0.064	0.281	0.363
Comprehensive knowledge of HIV transmission-youth	0.292	0.027	442	428	1.251	0.093	0.238	0.346
Accepting attitudes towards people with HIV	0.300	0.018	962	933	1.205	0.059	0.264	0.336
Had two or more sexual partners in past 12 months	0.166	0.014	979	950	1.148	0.082	0.139	0.193
Condom use at last sex among those with 2+ partners	0.092	0.020	159	158	0.877	0.220	0.051	0.132
Had injection in past 12 months	0.188	0.019	979	950	1.510	0.100	0.151	0.226
Ever had an HIV test and received results	0.245	0.026	979	950	1.882	0.106	0.194	0.297
HIV prevalence for men 15-49	0.038	0.009	966	943	1.514	0.244	0.020	0.057
BOTH SEXES								
HIV prevalence for both sexes 15-49	0.041	0.007	2113	2046	1.712	0.180	0.026	0.056
HIV prevalence for children under five	0.005	0.003	1169	1137	1.243	0.522	0.000	0.010

Table B.10. Sampling errors for North East region, Uganda 2011

Variable	R	SE	N-UNWE	N-WEIG	DEFT	SE/R	R-2SE	R+2SE
WOMEN								
No education	0.270	0.049	1027	919	3.512	0.180	0.172	0.367
Secondary education or higher	0.152	0.034	1027	919	3.057	0.225	0.084	0.221
Never married (in union)	0.158	0.014	1027	919	1.224	0.088	0.130	0.186
Currently married (in union)	0.746	0.019	1027	919	1.432	0.026	0.707	0.784
Comprehensive knowledge of HIV transmission-all	0.294	0.032	1027	919	2.249	0.109	0.230	0.358
Comprehensive knowledge of HIV transmission-youth	0.319	0.030	383	333	1.278	0.096	0.258	0.380
Accepting attitudes towards people with HIV	0.197	0.022	1000	898	1.736	0.111	0.154	0.241
Had two or more sexual partners in past 12 months	0.015	0.004	1027	919	1.048	0.265	0.007	0.023
Had injection in past 12 months	0.231	0.025	1027	919	1.935	0.110	0.180	0.282
Ever had an HIV test and received results	0.762	0.026	1027	919	1.930	0.034	0.711	0.813
HIV prevalence for women 15-49	0.053	0.009	991	904	1.291	0.173	0.035	0.072
MEN								
No education	0.116	0.028	708	683	2.333	0.243	0.060	0.172
Secondary education or higher	0.341	0.027	708	683	1.516	0.079	0.287	0.395
Never married (in union)	0.301	0.024	708	683	1.406	0.081	0.252	0.349
Currently married (in union)	0.672	0.024	708	683	1.357	0.036	0.624	0.720
Comprehensive knowledge of HIV transmission-all	0.447	0.049	708	683	2.615	0.109	0.349	0.545
Comprehensive knowledge of HIV transmission-youth	0.451	0.042	233	229	1.285	0.093	0.367	0.535
Accepting attitudes towards people with HIV	0.357	0.023	629	613	1.221	0.065	0.310	0.403
Had two or more sexual partners in past 12 months	0.151	0.027	708	683	2.005	0.179	0.097	0.205
Condom use at last sex among those with 2+ partners	0.070	0.037	101	103	1.445	0.528	0.000	0.143
Had injection in past 12 months	0.293	0.029	708	683	1.686	0.099	0.235	0.351
Ever had an HIV test and received results	0.499	0.029	708	683	1.524	0.057	0.441	0.556
HIV prevalence for men 15-49	0.052	0.007	680	683	0.862	0.141	0.037	0.067
BOTH SEXES								
HIV prevalence for both sexes 15-49	0.053	0.007	1671	1587	1.230	0.127	0.039	0.066
HIV prevalence for children under five	0.004	0.002	1087	1045	0.921	0.362	0.002	0.010

Table B.11. Sampling errors for West Nile region, Uganda

Variable	R	SE	N-UNWE	N-WEIG	DEFT	SE/R	R-2SE	R+2SE
WOMEN								
No education	0.184	0.015	1148	712	1.329	0.083	0.153	0.214
Secondary education or higher	0.143	0.020	1148	712	1.951	0.141	0.103	0.184
Never married (in union)	0.190	0.018	1148	712	1.549	0.094	0.154	0.226
Currently married (in union)	0.654	0.018	1148	712	1.310	0.028	0.618	0.691
Comprehensive knowledge of HIV transmission-all	0.172	0.018	1148	712	1.611	0.104	0.136	0.208
Comprehensive knowledge of HIV transmission-youth	0.200	0.026	450	278	1.382	0.130	0.148	0.252
Accepting attitudes towards people with HIV	0.304	0.024	1147	711	1.738	0.078	0.257	0.351
Had two or more sexual partners in past 12 months	0.013	0.005	1148	712	1.546	0.404	0.002	0.023
Had injection in past 12 months	0.399	0.020	1148	712	1.370	0.050	0.359	0.438
Ever had an HIV test and received results	0.634	0.019	1148	712	1.322	0.030	0.597	0.672
HIV prevalence for women 15-49	0.047	0.008	1126	692	1.255	0.168	0.031	0.063
MEN								
No education	0.041	0.008	876	548	1.178	0.192	0.025	0.057
Secondary education or higher	0.328	0.026	876	548	1.653	0.080	0.275	0.380
Never married (in union)	0.313	0.024	876	548	1.551	0.078	0.265	0.362
Currently married (in union)	0.594	0.025	876	548	1.516	0.042	0.543	0.644
Comprehensive knowledge of HIV transmission-all	0.402	0.024	876	548	1.470	0.061	0.353	0.451
Comprehensive knowledge of HIV transmission-youth	0.386	0.034	328	202	1.280	0.089	0.317	0.455
Accepting attitudes towards people with HIV	0.408	0.024	870	545	1.459	0.060	0.359	0.456
Had two or more sexual partners in past 12 months	0.138	0.014	876	548	1.228	0.104	0.109	0.167
Condom use at last sex among those with 2+ partners	0.187	0.056	121	76	1.569	0.298	0.076	0.299
Had injection in past 12 months	0.291	0.017	876	548	1.080	0.057	0.258	0.324
Ever had an HIV test and received results	0.512	0.025	876	548	1.477	0.049	0.462	0.562
HIV prevalence for men 15-49	0.050	0.010	854	541	1.302	0.194	0.031	0.070
BOTH SEXES								
HIV prevalence for both sexes 15-49	0.049	0.007	1980	1232	1.534	0.153	0.034	0.063
HIV prevalence for children under five	0.005	0.003	1025	635	1.321	0.579	0.000	0.011



Table B.12 Sampling errors for Mid Northern region, Uganda 2011

Variable	R	SE	N-UNWE	N-WEIG	DEFT	SE/R	R-2SE	R+2SE
WOMEN								
No education	0.201	0.026	1067	1106	2.095	0.128	0.150	0.253
Secondary education or higher	0.127	0.029	1067	1106	2.868	0.231	0.068	0.185
Never married (in union)	0.213	0.032	1067	1106	2.556	0.151	0.149	0.277
Currently married (in union)	0.655	0.030	1067	1106	2.060	0.046	0.595	0.715
Comprehensive knowledge of HIV transmission-all	0.243	0.021	1067	1106	1.622	0.088	0.200	0.286
Comprehensive knowledge of HIV transmission-youth	0.277	0.025	445	465	1.161	0.089	0.228	0.326
Accepting attitudes towards people with HIV	0.349	0.020	1059	1098	1.346	0.056	0.310	0.389
Had two or more sexual partners in past 12 months	0.019	0.004	1067	1106	0.894	0.197	0.012	0.027
Had injection in past 12 months	0.425	0.026	1067	1106	1.741	0.062	0.372	0.478
Ever had an HIV test and received results	0.766	0.027	1067	1106	2.046	0.035	0.712	0.819
HIV prevalence for women 15-49	0.101	0.013	1044	1075	1.431	0.132	0.074	0.127
MEN								
No education	0.025	0.006	942	950	1.187	0.244	0.013	0.037
Secondary education or higher	0.355	0.037	942	950	2.397	0.105	0.280	0.430
Never married (in union)	0.330	0.022	942	950	1.429	0.066	0.286	0.374
Currently married (in union)	0.615	0.022	942	950	1.383	0.036	0.571	0.659
Comprehensive knowledge of HIV transmission-all	0.431	0.026	942	950	1.580	0.059	0.380	0.482
Comprehensive knowledge of HIV transmission-youth	0.417	0.033	377	367	1.311	0.080	0.350	0.484
Accepting attitudes towards people with HIV	0.592	0.027	937	946	1.709	0.046	0.537	0.647
Had two or more sexual partners in past 12 months	0.156	0.015	942	950	1.250	0.095	0.126	0.185
Condom use at last sex among those with 2+ partners	0.078	0.026	144	148	1.168	0.336	0.026	0.130
Had injection in past 12 months	0.264	0.019	942	950	1.353	0.074	0.225	0.303
Ever had an HIV test and received results	0.613	0.029	942	950	1.833	0.047	0.555	0.672
HIV prevalence for men 15-49	0.063	0.011	910	935	1.351	0.172	0.042	0.085
BOTH SEXES								
HIV prevalence for both sexes 15-49	0.083	0.010	1954	2011	1.596	0.120	0.063	0.103
HIV prevalence for children under five	0.007	0.003	997	1016	1.030	0.369	0.002	0.014

Table B.13 Sampling errors for South Western region, Uganda 2011

Variable	R	SE	N-UNWE	N-WEIG	DEFT	SE/R	R-2SE	R+2SE
WOMEN								
No education	0.132	0.015	1104	1414	1.437	0.111	0.103	0.162
Secondary education or higher	0.252	0.025	1104	1414	1.887	0.098	0.203	0.301
Never married (in union)	0.263	0.015	1104	1414	1.132	0.057	0.233	0.293
Currently married (in union)	0.609	0.015	1104	1414	1.041	0.025	0.578	0.640
Comprehensive knowledge of HIV transmission-all	0.451	0.027	1104	1414	1.823	0.061	0.396	0.505
Comprehensive knowledge of HIV transmission-youth	0.465	0.037	433	559	1.548	0.080	0.391	0.540
Accepting attitudes towards people with HIV	0.171	0.021	1092	1399	1.803	0.120	0.130	0.212
Had two or more sexual partners in past 12 months	0.009	0.003	1104	1414	1.031	0.333	0.003	0.014
Had injection in past 12 months	0.318	0.022	1104	1414	1.545	0.068	0.275	0.362
Ever had an HIV test and received results	0.637	0.024	1104	1414	1.636	0.037	0.590	0.684
HIV prevalence for women 15-49	0.090	0.011	1078	1389	1.249	0.121	0.069	0.112
MEN								
No education	0.064	0.013	747	947	1.443	0.202	0.038	0.090
Secondary education or higher	0.323	0.033	747	947	1.953	0.104	0.256	0.390
Never married (in union)	0.397	0.022	747	947	1.210	0.055	0.354	0.440
Currently married (in union)	0.571	0.022	747	947	1.198	0.038	0.527	0.614
Comprehensive knowledge of HIV transmission-all	0.404	0.025	747	947	1.418	0.063	0.353	0.455
Comprehensive knowledge of HIV transmission-youth	0.377	0.040	302	386	1.415	0.105	0.298	0.456
Accepting attitudes towards people with HIV	0.273	0.028	740	938	1.714	0.103	0.217	0.329
Had two or more sexual partners in past 12 months	0.138	0.013	747	947	1.001	0.091	0.113	0.164
Condom use at last sex among those with 2+ partners	0.097	0.027	100	131	0.903	0.278	0.043	0.150
Had injection in past 12 months	0.170	0.016	747	947	1.176	0.095	0.137	0.202
Ever had an HIV test and received results	0.398	0.025	747	947	1.368	0.062	0.349	0.447
HIV prevalence for men 15-49	0.066	0.008	734	946	0.900	0.125	0.049	0.082
BOTH SEXES								
HIV prevalence for both sexes 15-49	0.080	0.008	1812	2335	1.249	0.099	0.064	0.096
HIV prevalence for children under five	0.012	0.004	829	1095	1.084	0.344	0.004	0.020

Table B.14. Sampling errors for Mid Western region, Uganda 2011

Variable	R	SE	N-UNWE	N-WEIG	DEFT	SE/R	R-2SE	R+2SE
WOMEN								
No education	0.166	0.019	1217	1480	1.769	0.114	0.128	0.204
Secondary education or higher	0.228	0.037	1217	1480	3.081	0.163	0.154	0.302
Never married (in union)	0.261	0.023	1217	1480	1.808	0.087	0.215	0.306
Currently married (in union)	0.601	0.022	1217	1480	1.541	0.036	0.557	0.644
Comprehensive knowledge of HIV transmission-all	0.374	0.024	1217	1480	1.715	0.064	0.327	0.422
Comprehensive knowledge of HIV transmission-youth	0.402	0.025	549	663	1.173	0.061	0.352	0.451
Accepting attitudes towards people with HIV	0.184	0.015	1214	1477	1.327	0.080	0.154	0.214
Had two or more sexual partners in past 12 months	0.030	0.007	1217	1480	1.358	0.222	0.017	0.043
Had injection in past 12 months	0.422	0.023	1217	1480	1.590	0.053	0.377	0.467
Ever had an HIV test and received results	0.637	0.027	1217	1480	1.941	0.042	0.583	0.690
HIV prevalence for women 15-49	0.091	0.009	1208	1440	1.089	0.099	0.073	0.109
MEN								
No education	0.048	0.010	958	1151	1.507	0.216	0.027	0.069
Secondary education or higher	0.323	0.033	958	1151	2.171	0.102	0.258	0.389
Never married (in union)	0.380	0.025	958	1151	1.583	0.065	0.330	0.430
Currently married (in union)	0.537	0.026	958	1151	1.621	0.049	0.485	0.589
Comprehensive knowledge of HIV transmission-all	0.398	0.026	958	1151	1.617	0.064	0.347	0.449
Comprehensive knowledge of HIV transmission-youth	0.364	0.026	410	488	1.088	0.071	0.312	0.415
Accepting attitudes towards people with HIV	0.255	0.018	956	1150	1.251	0.069	0.220	0.290
Had two or more sexual partners in past 12 months	0.249	0.022	958	1151	1.542	0.087	0.206	0.292
Condom use at last sex among those with 2+ partners	0.129	0.022	228	286	0.975	0.168	0.085	0.172
Had injection in past 12 months	0.338	0.021	958	1151	1.345	0.061	0.297	0.380
Ever had an HIV test and received results	0.394	0.024	958	1151	1.491	0.060	0.347	0.441
HIV prevalence for men 15-49	0.071	0.010	943	1143	1.233	0.145	0.051	0.092
BOTH SEXES								
HIV prevalence for both sexes 15-49	0.082	0.008	2151	2584	1.370	0.099	0.066	0.099
HIV prevalence for children under five	0.004	0.002	1084	1273	0.938	0.394	0.001	0.009

# DATA QUALITY TABLE

# Appendix C

**Table C.1 Household age distribution**

Single-year age distribution of the de facto household population by sex (weighted), Uganda 2011

Age	Women		Age	Men	
	Number	Percent		Number	Percent
0	966	3.5	0	1,033	4.1
1	884	3.2	1	912	3.6
2	989	3.5	2	1,034	4.1
3	1,066	3.8	3	1,075	4.2
4	1,159	4.2	4	1,181	4.7
5	894	3.2	5	944	3.7
6	1,064	3.8	6	1,113	4.4
7	904	3.2	7	917	3.6
8	942	3.4	8	866	3.4
9	773	2.8	9	817	3.2
10	1,028	3.7	10	1,039	4.1
11	726	2.6	11	679	2.7
12	928	3.3	12	934	3.7
13	890	3.2	13	883	3.5
14	723	2.6	14	732	2.9
15	509	1.8	15	489	1.9
16	505	1.8	16	489	1.9
17	476	1.7	17	439	1.7
18	592	2.1	18	441	1.7
19	404	1.4	19	321	1.3
20	635	2.3	20	383	1.5
21	353	1.3	21	255	1.0
22	473	1.7	22	274	1.1
23	449	1.6	23	259	1.0
24	385	1.4	24	303	1.2
25	531	1.9	25	374	1.5
26	386	1.4	26	285	1.1
27	342	1.2	27	258	1.0
28	504	1.8	28	325	1.3
29	252	0.9	29	207	0.8
30	611	2.2	30	405	1.6
31	191	0.7	31	179	0.7
32	331	1.2	32	281	1.1
33	181	0.6	33	158	0.6
34	219	0.8	34	163	0.6
35	386	1.4	35	368	1.5
36	247	0.9	36	202	0.8
37	220	0.8	37	173	0.7
38	346	1.2	38	269	1.1
39	174	0.6	39	170	0.7
40	440	1.6	40	338	1.3
41	99	0.4	41	123	0.5
42	164	0.6	42	237	0.9
43	146	0.5	43	126	0.5
44	86	0.3	44	90	0.4
45	272	1.0	45	246	1.0
46	109	0.4	46	132	0.5
47	142	0.5	47	128	0.5
48	198	0.7	48	158	0.6
49	102	0.4	49	106	0.4
50	217	0.8	50	191	0.8
51	87	0.3	51	78	0.3
52	111	0.4	52	124	0.5
53	96	0.3	53	65	0.3
54	80	0.3	54	91	0.4
55	74	0.3	55	76	0.3
56	106	0.4	56	71	0.3
57	65	0.2	57	53	0.2
58	90	0.3	58	76	0.3
59	52	0.2	59	55	0.2
60	132	0.5	60	76	0.3
61	74	0.3	61	60	0.2
62	110	0.4	62	94	0.4
63	93	0.3	63	57	0.2
64	69	0.2	64	61	0.2
65	136	0.5	65	91	0.4
66	45	0.2	66	38	0.1
67	62	0.2	67	48	0.2
68	65	0.2	68	39	0.2
69	35	0.1	69	38	0.2
70+	665	2.4	70+	520	2.1
Don't know/missing	18	0.1	Don't know/missing	19	0.1
Total	27,876	100.0		25,334	100.0

Note: The de facto population includes all residents and nonresidents who stayed in the household the night before the interview.



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Ms. Aleathea Musah  
Ms. Jacqueline Calnan  
Mr. Katikajjira Hamiidu Ssenyama  
Mr. Bob Okua  
Mr. Ernest Mwebaze  
Mr. Lutwama Geofrey  
Mr. Mwanje Musa  
Ms. Bakunda Kamaranzi  
Mr. Tom Tenywa  
Ms. Rose Apondi  
Mr. Vincent Ndazima

**Central Laboratory Staff**

Mr. Joseph Musaaazi  
Mr. Jimmy Ngomlac  
Mr. Onap William  
Ms. Anyegani Gibson  
Ms. Nalweyiso Harriet

Mr. Otekat Daniel Ecaat  
Ms. Nakanjako Gladys Kiggundu  
Ms. Nassanga Devine  
Mr. Sempiga Henry  
Ms. Kichoncho Juliet

**Regional Supervisors**

Katushabe Juliet  
Rose Tiridri  
Kalema John  
Agaba Richard  
James Okello  
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Okello Denis Ocaya  
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Ferdinand Opolot  
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Solomon Kigozi

**Team Supervisors**

Aduk Euphrasia  
Ajidiru Liberty Brenda  
Alonzi Francis  
Awio Florence  
Bazongere Paul  
Byaino Jonathan A.  
David Okimait  
Kabugo Timothy Godfrey  
Kasimbi Willy  
Karugaba Cyrus M.

Michael Bakibinga  
Nabakiibi Susan  
Nansubuga Margaret  
Nyende Hirome Paul  
Oryongatum George  
Patrick Kusemererwa  
Samuel M. Wangalwa  
Semakula Aliziki  
Shane Kyawe  
Ssekayi Michael L.

### Interviewers

Adengo Oboke Margaret  
Adikin Evelyne  
Agudo Jane Frances  
Ahebwa Nicholas  
Ainebirungi Martin Augar  
Akello Lorna  
Akora Tophas Nyakuni  
Akoth Lydia Kisira  
Akurut Stella  
Alinaitwe Ronald  
Amunyo Ezekiel  
Anecho Maureen  
Anziku Manaseh  
Apiita Ann Grace  
Asako Monica  
Atukwasa Caroline  
Auma Sarah  
Awor Christine Jane  
Ayagalwa Justine  
Bazaale Jennifer  
Biribonwa Alex  
Birungi Betty  
Businge Jonnes  
Busuulwa Robert  
Christine Ayaka-Dezu  
Drichi Charles  
Ekisa Geoffrey  
Etoori Michael  
Eyul Alex

Jacqueline Okello  
Kabenge Anita  
Kaganda Wilson  
Kambugu Stephen  
Kamulegeya Abdul  
Nakyeyune Mary  
Kasi Timothy  
Kirabira Muzafalu  
Kiwanuka Denis  
Komuhangi Carolyn A.  
Kyoziira Allen  
Lango James  
Lubanga J. Zam  
Lulua Godfrey Omuti  
Malamba Samuel  
Mbabali Muhammad  
Mbabazi Peter  
Mutala Shem N.  
Mutambo Fred Paul  
Muyanda Erias  
Muyingo Ismail  
Mwesigwa Alex  
Nabulo Jessica M.  
Naigwe Juliet  
Najjuma Teddy  
Nakayima Resty  
Nakintu Betty K.  
Nakitende Kezia  
Nakubulwa Irene

Namukasa Margaret  
Namutebi Justine  
Nangira Evelyn  
Nantume Keziah  
Nanyunja Justine  
Nansambu Ruth  
Ngweno Odedo Daudi  
Ntambi Samuel  
Ntulume Kenneth  
Nyirabizimana Jennifer  
Ochen-Ochero Robert  
Ogwari Stanry Alex  
Okodel Francis  
Okot Jino  
Ondoga Simon  
Patrick Lukula  
Ssenkungu Lawrence  
Tuwangye Moses  
Uwamahoro Joy  
Wanyana Maureen  
Wajju Annette  
Wangira Denis Okhikha  
Robinah Babirye  
Nakudo George  
Karugaba Cyrus M.  
Semakula Aliziki  
Eddie Rutankundira  
Karungi Clara Gloria

### Counselors

Abigail Cossy Kalala  
Akoberwa Rachel  
Amindre Juliet  
Amony Caroline  
Andera Jenipher Ochwo  
Auma Pauline  
Bainomujinya R.C.  
Emenyat Babu  
Godfrey S. Okiria  
Iga Gloria Perry  
Ipeaju M. Daniel  
Judith Madudu  
Kabatongole Doreen  
Kayeny Charity

Kazigo Winfred  
Kiiiza Lilian Viola  
Kisaakye Ritah  
Kitone Rosemary  
Kiyaga Deogratius  
Mbabazi Betty  
Miiro Moses N.  
Mpasu Kampanya  
Mukiibi Christopher  
Muloni Immaculate  
Naigaga Sydah  
Nakigozi Noor  
Nakkazi Aminah Angella  
Nakubulwa Sarah

Namono Betty  
Nangira Deborah  
Nayiga Faridah  
Okot Wilson  
Okullo Martin Jorian  
Okwakol Suzan  
Otim James Robert  
Owashaba Caroline  
Shaban Kadir  
Ssanyu Scovia  
Sseruyange John  
Kabagenyi Beatrice Jane  
Namuli Mary

### Laboratory Technicians

Achaye Richard Claude  
Acidri Gordon  
Aiga Joseph  
Akello Susan Ongom  
Oder Charles Okello  
Asigachi Abraham  
Asiimwe Innocent  
Asiimwe Ronald  
Atuhaire Bridget  
Bampiiga Godfrey  
Bamusubire Daniel  
Bandoho Bosco  
Bemera Amon  
Dima Achiako Terence  
Ejoku Esae Benard  
Emolu Robert Obong  
Isabirye Richard  
Isabirye Samuel Emmanuel  
Kakeeto Alex  
Kakooza Godfrey

Kanabi Moses  
Kasango Dembe Simon  
Kateeba Ruth  
Katende Andrew  
Kazimoto Enoch Masereka  
Kikooma Majeed  
Kwagonza Leocadia  
Mafabi Derrick  
Maziga John  
Mbusa Nason  
Mubiru Denis  
Mugabe Raymond  
Musisi Ezra  
Mutale Geoffrey  
Mwijukye Julius  
Mwima Moses Were  
Namaganda Dorothy  
Nambalirwa Fatuma  
Nambozo Harriet  
Namukasa Mary Frances

Namuli Lilian  
Namuwaya Vivian  
Nantongo Irene Viola  
Nanyonjo Esther  
Ndagire Irene  
Ochom Emmanuel  
Odokonyero Henry  
Odokonyero Wilfred  
Okech Samuel  
Okurut Tom  
Onencan Mundu Patrick  
Ongom Patrick  
Opio Moses  
Oule Sam Peter  
Pimego Edward  
Silence Zuriat Kyeyune  
Ssali Robert Banabus  
Ssempagala Thaddius  
Ssentongo Freddie  
Tamale Francis

### ICF Staff

Dr. Alfredo Aliaga  
Ms. Sarah Balian  
Mr. Bernard Barrère  
Ms. Elizabeth Britton  
Ms. Anne Cross  
Ms. Joy Fishel  
Mr. Dean Garrett  
Mr. Chris Gramer

Ms. Mercy Guech-Ongey  
Mr. Alex Izmukhambetov  
Ms. Nancy Johnson  
Ms. Anjushree Pradhan  
Ms. Audrey Shenett  
Dr. Ann Way  
Mr. Blake Zachary









IDENTIFICATION																							
DISTRICT _____ SUB-COUNTY/DIVISION _____ PARISH _____ LC1 _____ NAME OF HOUSEHOLD HEAD _____ CLUSTER NUMBER ..... HOUSEHOLD NUMBER ..... REGION ..... KAMPALA=1, SMALL CITY=2, TOWN=3, RURAL=4 ..... SELECT MALE OR FEMALE FOR SEXUAL VIOLENCE SECTION? (MALE=1; FEMALE=2)	<table border="1" style="border-collapse: collapse; width: 100px; height: 100px;"> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> </table>																						
INTERVIEWER VISITS																							
	1	2	3	FINAL VISIT																			
DATE	_____	_____	_____	DAY <table border="1" style="display: inline-table; border-collapse: collapse;"><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr></table> MONTH <table border="1" style="display: inline-table; border-collapse: collapse;"><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr></table> YEAR <table border="1" style="display: inline-table; border-collapse: collapse;"><tr><td>2</td><td>0</td><td>1</td><td>1</td></tr></table> INTERVIEWER NUMBER <table border="1" style="display: inline-table; border-collapse: collapse;"><tr><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td></tr></table> RESULT <table border="1" style="display: inline-table; border-collapse: collapse;"><tr><td> </td></tr></table>									2	0	1	1							
2	0	1	1																				
INTERVIEWER'S NAME	_____	_____	_____																				
RESULT*	_____	_____	_____																				
NEXT VISIT: DATE	_____	_____		TOTAL NUMBER OF VISITS <table border="1" style="display: inline-table; border-collapse: collapse;"><tr><td> </td></tr></table>																			
TIME	_____	_____																					
*RESULT CODES: 1 COMPLETED 2 NO HOUSEHOLD MEMBER AT HOME OR NO COMPETENT RESPONDENT AT HOME AT TIME OF VISIT 3 ENTIRE HOUSEHOLD ABSENT FOR EXTENDED PERIOD OF TIME 4 POSTPONED 5 REFUSED 6 DWELLING VACANT OR ADDRESS NOT A DWELLING 7 DWELLING DESTROYED 8 DWELLING NOT FOUND 9 OTHER _____ <div style="text-align: center;">(SPECIFY)</div>				TOTAL PERSONS IN HOUSEHOLD <table border="1" style="display: inline-table; border-collapse: collapse;"><tr><td> </td><td> </td></tr></table> TOTAL ELIGIBLE WOMEN <table border="1" style="display: inline-table; border-collapse: collapse;"><tr><td> </td><td> </td></tr></table> TOTAL ELIGIBLE MEN <table border="1" style="display: inline-table; border-collapse: collapse;"><tr><td> </td><td> </td></tr></table> TOTAL ELIGIBLE CHILDREN 0-4 YEARS <table border="1" style="display: inline-table; border-collapse: collapse;"><tr><td> </td><td> </td></tr></table> LINE NO. OF RESPONDENT TO HOUSEHOLD QUESTIONNAIRE <table border="1" style="display: inline-table; border-collapse: collapse;"><tr><td> </td><td> </td></tr></table>																			
TEAM SUPERVISOR																							
NAME _____			<table border="1" style="display: inline-table; border-collapse: collapse;"><tr><td> </td><td> </td><td> </td></tr></table>																				
DATE _____			<table border="1" style="display: inline-table; border-collapse: collapse;"><tr><td> </td><td> </td><td> </td></tr></table>																				

## Introduction and Consent

HIV is one of the leading causes of death in this country. Syphilis is also a common sexually transmitted disease. The government would like to know how common HIV and syphilis are in the country so that they can plan for better services for people affected or infected with HIV and syphilis.

Your household has been selected purely by chance from your community.

We will be asking 37,000 people from over 11,000 households all over the country to participate. The survey will last about 6 months and the interviews will not last more than 30 minutes.

You can choose to participate in the survey or not. It is your choice. If you choose not to participate in the survey, there is no problem.

If you choose to participate in the survey, we will ask you some questions about your household (for example number of people living in the household, age and education). This will help us identify the persons aged 15-59 who will be asked questions about their health and those 0-4 years and 15-59 years who will provide blood specimens. Other questions include the services your household can use (such as water source, health units).

It is up to you or your household member whether or not to participate in the survey. You can stop participating in the survey at any time you want for any reason without penalty.

Most of the questions are general in nature. It is fine to skip any question that you don't want to answer. You may also stop the survey at any time without penalty. We do not expect any major risks from participating in this survey.

You may not benefit directly from being part of this survey, but the information you provide us will help the country in providing good services for all. If you provide us with data about your household, we can help understand more about these two illnesses and how to prevent them. We will not offer you money for participating in the survey.

Everything we talk about will be kept secret to the extent allowed by the law. Your test results will be kept secret to the extent allowed by the law. To protect your privacy, we will use a code number to identify you and all specimens. We will keep these records and specimens locked. Only special staff will be able to look at the records or use the specimens. Your name or any other facts that might point to you will not appear when we present this survey or publish its results.

We would like to answer all your questions. If you have any questions now, please ask us. If you have any questions in the future, there are other persons that you can contact.

Ministry of Health:

Dr. Alex Opio: 0414-256683

Dr. Joshua Musinguzi: 0414-256683

Dr. Wilford Kirungi: 0414-256683

If you have any concerns about your rights in this survey, please contact Mr. Tom Lutalo Chairman UVRI Science and Ethics Committee 0414-320272.

RESPONDENT AGREES TO BE INTERVIEWED . . . 1  
↓  
—

RESPONDENT DOES NOT AGREE TO BE INTERVIEWED . . . 2 → END

**HOUSEHOLD SCHEDULE**

LINE NO.	USUAL RESIDENTS AND VISITORS	RELATIONSHIP TO HEAD OF HOUSEHOLD	SEX	RESIDENCE		AGE	IF AGE 15 OR OLDER	ELIGIBILITY	
				MARITAL STATUS	CIRCLE LINE NUMBER OF ALL WOMEN AND MEN AGE 15-59		CIRCLE LINE NUMBER OF ALL CHILDREN AGE 0-4		
	Please give me the names of the persons who usually live in your household and guests of the household who stayed here last night, starting with the head of the household.  AFTER LISTING THE NAMES AND RECORDING THE RELATIONSHIP AND SEX FOR EACH PERSON, ASK QUESTIONS 2A-2C TO BE SURE THAT THE LISTING IS COMPLETE.  THEN ASK APPROPRIATE QUESTIONS IN COLUMNS 5-27 FOR EACH PERSON.	What is the relationship of (NAME) to the head of the household?  SEE CODES BELOW.	Is (NAME) male or female?	Does (NAME) usually live here?	Did (NAME) stay here last night?	How old is (NAME)?	What is (NAME'S) current marital status?  1 = MARRIED OR LIVING TOGETHER 2 = DIVORCED/ SEPARATED 3 = WIDOWED 4 = NEVER-MARRIED AND NEVER LIVED TOGETHER		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(9A)
01		<input type="text"/>	M F 1 2	Y N 1 2	Y N 1 2	IN YEARS <input type="text"/>	<input type="checkbox"/>	01	01
02		<input type="text"/>	1 2	1 2	1 2	<input type="text"/>	<input type="checkbox"/>	02	02
03		<input type="text"/>	1 2	1 2	1 2	<input type="text"/>	<input type="checkbox"/>	03	03
04		<input type="text"/>	1 2	1 2	1 2	<input type="text"/>	<input type="checkbox"/>	04	04
05		<input type="text"/>	1 2	1 2	1 2	<input type="text"/>	<input type="checkbox"/>	05	05
06		<input type="text"/>	1 2	1 2	1 2	<input type="text"/>	<input type="checkbox"/>	06	06
07		<input type="text"/>	1 2	1 2	1 2	<input type="text"/>	<input type="checkbox"/>	07	07
08		<input type="text"/>	1 2	1 2	1 2	<input type="text"/>	<input type="checkbox"/>	08	08
09		<input type="text"/>	1 2	1 2	1 2	<input type="text"/>	<input type="checkbox"/>	09	09
10		<input type="text"/>	1 2	1 2	1 2	<input type="text"/>	<input type="checkbox"/>	10	10

2A) Just to make sure that I have a complete listing. Are there any other persons such as small children or infants that we have not listed?

YES  → ADD TO TABLE NO

2B) Are there any other people who may not be members of your family, such as domestic servants, lodgers, or friends who usually live here?

YES  → ADD TO TABLE NO

2C) Are there any guests or temporary visitors staying here, or anyone else who stayed here last night, who have not been listed?

YES  → ADD TO TABLE NO

**CODES FOR Q.3: RELATIONSHIP TO HEAD OF HH**

- |                                    |                               |
|------------------------------------|-------------------------------|
| 01 = HEAD                          | 09 = NIECE/NEPHEW BY BLOOD    |
| 02 = WIFE OR HUSBAND               | 10 = NIECE/NEPHEW BY MARRIAGE |
| 03 = SON OR DAUGHTER               | 11 = OTHER RELATIVE           |
| 04 = SON-IN-LAW OR DAUGHTER-IN-LAW | 12 = ADOPTED/FOSTER/STEPCHILD |
| 05 = GRANDCHILD                    | 13 = NOT RELATED              |
| 06 = PARENT                        | 98 = DON'T KNOW               |
| 07 = PARENT-IN-LAW                 |                               |
| 08 = BROTHER OR SISTER             |                               |

	IF AGE 18-59 YEARS			IF AGE 0-17 YEARS						
LINE NO.	SICK PERSON			SURVIVORSHIP AND RESIDENCE OF BIOLOGICAL PARENTS						
	Has (NAME) been very sick for at least 3 months during the past 12 months, that is (NAME) was too sick to work or do normal activities?	Is (NAME)'s natural mother alive?	Does (NAME)'s natural mother usually live in this household or was she a guest last night?  IF YES: What is her name? WRITE MOTHER'S LINE NUMBER. IF NO, WRITE '00'.	IF MOTHER NOT LISTED IN HOUSEHOLD  Has (NAME)'s mother been very sick for at least 3 months during the past 12 months, that is she was too sick to work or do normal activities?	Is (NAME)'s natural father alive?	Does (NAME)'s natural father usually live in this household or was he a guest last night?  IF YES: What is his name? WRITE FATHER'S LINE NUMBER. IF NO, WRITE '00'.	IF FATHER NOT LISTED IN HOUSEHOLD  Has (NAME)'s father been very sick for at least 3 months during the past 12 months, that is he was too sick to work or do normal activities?	MOTHER / FATHER DEAD/ SICK  CIRCLE LINE NUMBER IF CHILD'S MOTHER AND/OR FATHER HAS DIED (Q.11B OR 14 = NO) OR BEEN SICK (Q.13 OR 16 = YES).	BOTH PARENTS ALIVE  IF YES TO Q.11B AND Q.14 (BOTH ALIVE), CIRCLE '1'. FOR ALL OTHER CASES, CIRCLE '2'.	CARE TAKER  Who is (NAME)'s main care taker?  WRITE LINE NUMBER. IF NO, WRITE '00'
	(11A)	(11B)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(18A)
	Y N DK	Y N DK		Y N DK	Y N DK		Y N DK			
01	1 2 8	1 2 8 ↓ GO TO 14	<input type="text"/>	1 2 8	1 2 8 ↓ GO TO 17	<input type="text"/>	1 2 8	01	1 2 ↓ GO TO 21	<input type="text"/>
02	1 2 8	1 2 8 ↓ GO TO 14	<input type="text"/>	1 2 8	1 2 8 ↓ GO TO 17	<input type="text"/>	1 2 8	02	1 2 ↓ GO TO 21	<input type="text"/>
03	1 2 8	1 2 8 ↓ GO TO 14	<input type="text"/>	1 2 8	1 2 8 ↓ GO TO 17	<input type="text"/>	1 2 8	03	1 2 ↓ GO TO 21	<input type="text"/>
04	1 2 8	1 2 8 ↓ GO TO 14	<input type="text"/>	1 2 8	1 2 8 ↓ GO TO 17	<input type="text"/>	1 2 8	04	1 2 ↓ GO TO 21	<input type="text"/>
05	1 2 8	1 2 8 ↓ GO TO 14	<input type="text"/>	1 2 8	1 2 8 ↓ GO TO 17	<input type="text"/>	1 2 8	05	1 2 ↓ GO TO 21	<input type="text"/>
06	1 2 8	1 2 8 ↓ GO TO 14	<input type="text"/>	1 2 8	1 2 8 ↓ GO TO 17	<input type="text"/>	1 2 8	06	1 2 ↓ GO TO 21	<input type="text"/>
07	1 2 8	1 2 8 ↓ GO TO 14	<input type="text"/>	1 2 8	1 2 8 ↓ GO TO 17	<input type="text"/>	1 2 8	07	1 2 ↓ GO TO 21	<input type="text"/>
08	1 2 8	1 2 8 ↓ GO TO 14	<input type="text"/>	1 2 8	1 2 8 ↓ GO TO 17	<input type="text"/>	1 2 8	08	1 2 ↓ GO TO 21	<input type="text"/>
09	1 2 8	1 2 8 ↓ GO TO 14	<input type="text"/>	1 2 8	1 2 8 ↓ GO TO 17	<input type="text"/>	1 2 8	09	1 2 ↓ GO TO 21	<input type="text"/>
10	1 2 8	1 2 8 ↓ GO TO 14	<input type="text"/>	1 2 8	1 2 8 ↓ GO TO 17	<input type="text"/>	1 2 8	10	1 2 ↓ GO TO 21	<input type="text"/>

IF AGE 5 YEARS OR OLDER			IF AGE 5-17 YEARS			IF AGE 0-4 YEARS
EDUCATION			BASIC MATERIAL NEEDS			BIRTH REGISTRATION
Has (NAME) ever attended school?	What is the highest level of school (NAME) has attended? ** What is the highest (class/year) (NAME) completed at that level? **  SEE CODES BELOW.	<b>IF AGE 5-24 YEARS</b>	Does (NAME) have a blanket?	Does (NAME) have a pair of shoes?	Does (NAME) have at least two sets of clothes?	Does (NAME) have a birth certificate?  IF NO, PROBE: Has (NAME)'s birth ever been registered with the civil authority?  1 = HAS CERTIFICATE 2 = REGISTERED 3 = NEITHER 8 = DON'T KNOW
		Did (NAME) attend school at any time during the 2011 school year?				
(21)	(22)	(23)	(24)	(25)	(26)	(27)
Y N	LEVEL CLASS	Y N	Y N DK	Y N DK	Y N DK	
1 2 ↓ GO TO 24	<input type="text"/> <input type="text"/>	1 2	1 2 8	1 2 8	1 2 8	<input type="text"/>
1 2 ↓ GO TO 24	<input type="text"/> <input type="text"/>	1 2	1 2 8	1 2 8	1 2 8	<input type="text"/>
1 2 ↓ GO TO 24	<input type="text"/> <input type="text"/>	1 2	1 2 8	1 2 8	1 2 8	<input type="text"/>
1 2 ↓ GO TO 24	<input type="text"/> <input type="text"/>	1 2	1 2 8	1 2 8	1 2 8	<input type="text"/>
1 2 ↓ GO TO 24	<input type="text"/> <input type="text"/>	1 2	1 2 8	1 2 8	1 2 8	<input type="text"/>
1 2 ↓ GO TO 24	<input type="text"/> <input type="text"/>	1 2	1 2 8	1 2 8	1 2 8	<input type="text"/>
1 2 ↓ GO TO 24	<input type="text"/> <input type="text"/>	1 2	1 2 8	1 2 8	1 2 8	<input type="text"/>
1 2 ↓ GO TO 24	<input type="text"/> <input type="text"/>	1 2	1 2 8	1 2 8	1 2 8	<input type="text"/>
1 2 ↓ GO TO 24	<input type="text"/> <input type="text"/>	1 2	1 2 8	1 2 8	1 2 8	<input type="text"/>
1 2 ↓ GO TO 24	<input type="text"/> <input type="text"/>	1 2	1 2 8	1 2 8	1 2 8	<input type="text"/>

**CODES FOR Q. 22: EDUCATION**

**LEVEL**  
0= PRESCHOOL  
1 = PRIMARY  
2 = 'O' LEVEL  
3 = 'A' LEVEL  
4= TERTIARY  
5= UNIVERSITY  
8 = DON'T KNOW

**CLASS:**  
00 = LESS THAN 1 YR COMPLETED  
98 = DON'T KNOW

**HOUSEHOLD CHARACTERISTICS**

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP																																										
100	What is the main source of drinking water for members of your household?	PIPED WATER PIPED INTO DWELLING ..... 11 PIPED INTO YARD/COMPOUND ... 12 PUBLIC TAP ..... 13 WATER FROM OPEN WELL OPEN WELL IN DWELLING ..... 21 OPEN WELL IN YARD/COMPOUND . 22 OPEN PUBLIC WELL ..... 23 WATER FROM COVERED WELL OR BOREHOLE PROTECTED WELL IN DWELLING ..... 31 PROTECTED WELL IN YARD/COMPOUND ..... 32 PROTECTED PUBLIC WELL ..... 33 SURFACE WATER PROTECTED SPRING ..... 41 UNPROTECTED SPRING ..... 42 RIVER/STREAM ..... 43 POND/LAKE ..... 44 DAM ..... 45 RAINWATER ..... 51 WATER TRUCK ..... 61 BOTTLED WATER ..... 71 GRAVITY FLOW SCHEME ..... 81 OTHER ..... 96 (SPECIFY)	→ 102 → 102 → 102 → 102 → 102 → 102																																										
101	How long does it take you to go there, get water, and come back?	MINUTES ..... <input type="text"/> <input type="text"/> <input type="text"/> ON PREMISES ..... 996																																											
102	What kind of toilet facility do members of your household usually use?	FLUSH TOILET ..... 01 VIP LATRINE ..... 02 COVERED PIT LATRINE, NO SLAB ... 03 COVERED PIT LATRINE, WITH SLAB . 04 UNCOVERED PIT LATRINE, NO SLAB . 05 UNCOVERED PIT LATRINE, WITH SLAB 06 COMPOSTING TOILET ..... 07 NO FACILITY/BUSH/FIELD ..... 08 OTHER ..... 96 (SPECIFY)	→ 104																																										
103	Do you share this toilet facility with other households?	YES ..... 1 NO ..... 2																																											
104	Does your household have:	<table border="0"> <thead> <tr> <th></th> <th align="center"><u>YES</u></th> <th align="center"><u>NO</u></th> </tr> </thead> <tbody> <tr> <td>ELECTRICITY .....</td> <td align="center">1</td> <td align="center">2</td> </tr> <tr> <td>RADIO .....</td> <td align="center">1</td> <td align="center">2</td> </tr> <tr> <td>CASSETTE PLAYER .....</td> <td align="center">1</td> <td align="center">2</td> </tr> <tr> <td>TELEVISION .....</td> <td align="center">1</td> <td align="center">2</td> </tr> <tr> <td>MOBILE PHONE .....</td> <td align="center">1</td> <td align="center">2</td> </tr> <tr> <td>FIXED PHONE .....</td> <td align="center">1</td> <td align="center">2</td> </tr> <tr> <td>REFRIGERATOR .....</td> <td align="center">1</td> <td align="center">2</td> </tr> <tr> <td>TABLE .....</td> <td align="center">1</td> <td align="center">2</td> </tr> <tr> <td>CHAIRS .....</td> <td align="center">1</td> <td align="center">2</td> </tr> <tr> <td>SOFA SET .....</td> <td align="center">1</td> <td align="center">2</td> </tr> <tr> <td>BED .....</td> <td align="center">1</td> <td align="center">2</td> </tr> <tr> <td>CUPBOARD .....</td> <td align="center">1</td> <td align="center">2</td> </tr> <tr> <td>CLOCK .....</td> <td align="center">1</td> <td align="center">2</td> </tr> </tbody> </table>		<u>YES</u>	<u>NO</u>	ELECTRICITY .....	1	2	RADIO .....	1	2	CASSETTE PLAYER .....	1	2	TELEVISION .....	1	2	MOBILE PHONE .....	1	2	FIXED PHONE .....	1	2	REFRIGERATOR .....	1	2	TABLE .....	1	2	CHAIRS .....	1	2	SOFA SET .....	1	2	BED .....	1	2	CUPBOARD .....	1	2	CLOCK .....	1	2	
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NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
105	What type of fuel does your household mainly use for cooking?	ELECTRICITY ..... 01 BOTTLED GAS ..... 02 PARAFFIN / KEROSENE ..... 03 CHARCOAL ..... 04 FIREWOOD ..... 05 CROP RESIDUALS, STRAW, GRASS ..... 06 ANIMAL DUNG ..... 07 NO FOOD COOKED IN HOUSEHOLD ..... 95 OTHER _____ 96 (SPECIFY)	
106	What is the main source of energy for lighting in the household?	ELECTRICITY ..... 01 SOLAR ..... 02 GAS ..... 03 PARAFFIN-HURRICANE LAMP ... 04 PARAFFIN-PRESSURE LAMP ..... 05 PARAFFIN-WICK LAMP ..... 06 FIREWOOD ..... 07 CANDLES ..... 08 OTHER _____ 96 (SPECIFY)	
107	MAIN MATERIAL OF THE FLOOR  RECORD OBSERVATION.  CIRCLE ONLY ONE.	<b>NATURAL FLOOR</b> EARTH/SAND ..... 11 EARTH AND DUNG ..... 12 <b>FINISHED FLOOR</b> PARQUET OR POLISHED WOOD 31 MOSAIC OR TILES ..... 33 BRICKS ..... 34 CEMENT ..... 35 STONES ..... 36 OTHER _____ 96 (SPECIFY)	
108	MAIN MATERIAL OF THE ROOF.  RECORD OBSERVATION.  MARK ONLY ONE.	<b>NATURAL ROOFING</b> THATCHED ..... 11 MUD ..... 12 <b>FINISHED ROOFING</b> WOOD/PLANKS ..... 21 IRON SHEETS ..... 22 ASBESTOS ..... 23 TILES ..... 24 TIN ..... 25 CEMENT ..... 26 OTHER _____ 96 (SPECIFY)	
109	MAIN MATERIAL OF THE EXTERIOR WALLS.  RECORD OBSERVATION.          MARK ONLY ONE.	<b>NATURAL WALLS</b> THATCHED/STRAW ..... 11 <b>RUDIMENTARY WALLS</b> MUD AND POLES ..... 21 UN-BURNT BRICKS ..... 22 UN-BURNT BRICKS WITH PLASTER 23 BURNT BRICKS WITH MUD ..... 24 <b>FINISHED WALLS</b> CEMENT BLOCKS ..... 31 STONE ..... 32 TIMBER ..... 33 BURNT BRICKS WITH CEMENT ... 34 OTHER _____ 96 (SPECIFY)	
110	How many rooms in your household are used for sleeping?  (INCLUDING ROOMS OUTSIDE THE MAIN DWELLING)	ROOMS ..... <input type="text"/> <input type="text"/>	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP																											
111	Does any member of your household own or have: a) A watch? b) A bicycle? c) A motorcycle or motor scooter? d) An animal-drawn cart? e) A car or truck? f) A boat with a motor g) A boat without a motor h) A bank account?	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 80%;"></th> <th style="width: 10%; text-align: center;"><u>YES</u></th> <th style="width: 10%; text-align: center;"><u>NO</u></th> </tr> </thead> <tbody> <tr> <td>WATCH .....</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> <tr> <td>BICYCLE .....</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> <tr> <td>MOTORCYCLE/SCOOTER ...</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> <tr> <td>ANIMAL-DRAWN CART .....</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> <tr> <td>CAR/TRUCK .....</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> <tr> <td>BOAT WITH MOTOR .....</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> <tr> <td>BOAT WITH NO MOTOR .....</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> <tr> <td>BANK ACCOUNT .....</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> </tbody> </table>		<u>YES</u>	<u>NO</u>	WATCH .....	1	2	BICYCLE .....	1	2	MOTORCYCLE/SCOOTER ...	1	2	ANIMAL-DRAWN CART .....	1	2	CAR/TRUCK .....	1	2	BOAT WITH MOTOR .....	1	2	BOAT WITH NO MOTOR .....	1	2	BANK ACCOUNT .....	1	2	
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BOAT WITH NO MOTOR .....	1	2																												
BANK ACCOUNT .....	1	2																												
112	How many acres of land for farming or grazing does this household own?  (PUT '0000.0' IF NONE AND 9999.8 IF DOESN'T KNOW)	ACRES FOR FARMING <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>  ACRES FOR GRAZING <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>																												
113	Does the household use land for farming or grazing that it doesn't own?  IF YES: Is it rented, sharecropped, private land provided free, or open access/communal/other?	YES, RENTED ..... 1 YES, SHARECROPPED ..... 2 YES, PRIVATE LAND PROVIDED FREE 3 YES, OPEN ACCESS/COMMUNAL ... 4 NO ..... 5	→ 114A																											
114	How many acres of land are used?  (PUT '0000.0' IF NONE AND 9999.8 IF DOESN'T KNOW)	ACRES FOR FARMING <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>  ACRES FOR GRAZING <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>																												
114A	How many of the following animals/birds does this household own? IF NONE, ENTER '00'. IF MORE THAN 95, ENTER '95'. IF UNKNOWN, ENTER '98'.  a) Local cattle? b) Exotic/Cross cattle? c) Horses, donkeys, or mules? d) Goats? e) Sheep? f) Pigs? g) Chickens?	<table style="width: 100%; border-collapse: collapse;"> <tbody> <tr> <td style="width: 80%;">LOCAL CATTLE .....</td> <td style="width: 10%;"><input type="text"/></td> <td style="width: 10%;"><input type="text"/></td> </tr> <tr> <td>EXOTIC/CROSS CATTLE .....</td> <td><input type="text"/></td> <td><input type="text"/></td> </tr> <tr> <td>HORSES/DONKEYS/MULES</td> <td><input type="text"/></td> <td><input type="text"/></td> </tr> <tr> <td>GOATS .....</td> <td><input type="text"/></td> <td><input type="text"/></td> </tr> <tr> <td>SHEEP .....</td> <td><input type="text"/></td> <td><input type="text"/></td> </tr> <tr> <td>PIGS .....</td> <td><input type="text"/></td> <td><input type="text"/></td> </tr> <tr> <td>CHICKENS .....</td> <td><input type="text"/></td> <td><input type="text"/></td> </tr> </tbody> </table>	LOCAL CATTLE .....	<input type="text"/>	<input type="text"/>	EXOTIC/CROSS CATTLE .....	<input type="text"/>	<input type="text"/>	HORSES/DONKEYS/MULES	<input type="text"/>	<input type="text"/>	GOATS .....	<input type="text"/>	<input type="text"/>	SHEEP .....	<input type="text"/>	<input type="text"/>	PIGS .....	<input type="text"/>	<input type="text"/>	CHICKENS .....	<input type="text"/>	<input type="text"/>							
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CHICKENS .....	<input type="text"/>	<input type="text"/>																												
115	How far is it to the nearest market place? WRITE '00' IF LESS THAN ONE KILOMETRE IF MORE THAN 95 KM, WRITE 95 CIRCLE '98' IF DON'T KNOW	KILOMETRES ..... <input type="text"/> <input type="text"/>  DON'T KNOW ..... 98																												
116	Now I would like to ask you about the food your household eats. How many meals does your household usually have per day?	MEALS ..... <input type="text"/> <input type="text"/>																												
117	In the past week, on how many days did the household eat meat?	DAYS ..... <input type="text"/> <input type="text"/>																												

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
118	How often in the last year did you have problems in satisfying the food needs of the household?	NEVER ..... 1 SELDOM ..... 2 SOMETIMES ..... 3 OFTEN ..... 4 ALWAYS ..... 5	
119	How far is it to the nearest health facility? (IF LESS THAN ONE KILOMETRE, WRITE '00'. IF MORE THAN 95 KM, WRITE 95. IF DON'T KNOW, CIRCLE '98'.)	KILOMETRES ..... <input type="text"/> <input type="text"/> DON'T KNOW ..... 98	
120	If you were to go to this facility, how would you <b>most likely</b> go there?	CAR/MOTORCYCLE ..... 1 PUBLIC TRANSPORT (BUS, TAXI) ... 2 ANIMAL/ANIMAL CART ..... 3 WALKING ..... 4 BICYCLE ..... 5 OTHER _____ 6 (SPECIFY)	

**LIST OF PERSONS WHO HAVE DIED**

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES			SKIP
201	Now I would like to ask you a few more questions about your household. Think back over the past 12 months. Has any usual member of your household died in the last 12 months?	YES .....	1		→ 301
		NO .....	2		
		DON'T KNOW .....	3		
202	How many household members died in the last 12 months?	NUMBER OF DEATHS .....			<input type="text"/>
203	ASK 204-206 AS APPROPRIATE FOR EACH PERSON WHO DIED. IF THERE WERE MORE THAN 3 DEATHS, USE ADDITIONAL QUESTIONNAIRE(S).				
204	What was the name of the person who died (most recently/before him/her)?	NAME 1ST DEATH _____	NAME 2ND DEATH _____	NAME 3RD DEATH _____	
205	Was (NAME) male or female?	MALE ..... 1 FEMALE ..... 2	MALE ..... 1 FEMALE ..... 2	MALE ..... 1 FEMALE ..... 2	
206	How old was (NAME) when (he/she) died?	AGE . <input type="text"/> <input type="text"/>	AGE . <input type="text"/> <input type="text"/>	AGE . <input type="text"/> <input type="text"/>	

**SUPPORT AT THE COMMUNITY LEVEL**

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES			SKIP
301	Does your community have any of the following persons or groups?	COMMUNITY HEALTH WORKER	<u>Y</u> 1	<u>N</u> 2	<u>DK</u> 8
		NGO OFFERING HIV SERVICES	1	2	8
		HIV OR POST TEST CLUB	1	2	8
		HIV WOMEN'S GROUP	1	2	8
		HIV MEN'S GROUP	1	2	8
		HIV YOUTH GROUP	1	2	8
302	How far is your home from the nearest health facility which offers HIV counseling and testing services? (INTERVIEWER: PROBE DISTANCE IN KM AND RECORD RESPONDENTS BEST GUESS)	NUMBER OF KILOMETERS .....	<input type="text"/>	<input type="text"/>	<input type="text"/>
		250 KILOMETERS OR MORE ...	995		
		DON'T KNOW .....	998		

**TABLE FOR SELECTION OF RESPONDENT FOR THE SEXUAL VIOLENCE (SV) QUESTIONS**

**INSTRUCTIONS**

LOOK AT THE LAST DIGIT OF THE QUESTIONNAIRE NUMBER ON THE COVER PAGE. THIS IS THE ROW NUMBER YOU SHOULD CIRCLE. IF THE HH IS SELECTED FOR A **FEMALE** RESPONDENT, CHECK THE TOTAL NUMBER OF ELIGIBLE **WOMEN** ON THE COVER SHEET OF THE HOUSEHOLD QUESTIONNAIRE. THIS IS THE COLUMN NUMBER YOU SHOULD CIRCLE. IF THE HH IS SELECTED FOR A **MALE** RESPONDENT, CHECK THE TOTAL NUMBER OF ELIGIBLE **MEN** ON THE COVER SHEET OF THE HOUSEHOLD QUESTIONNAIRE AND CIRCLE THIS COLUMN NUMBER. FIND THE BOX WHERE THE CIRCLED ROW AND THE CIRCLED COLUMN MEET AND CIRCLE THE NUMBER THAT APPEARS IN THE BOX. THIS IS THE NUMBER OF THE ELIGIBLE WOMAN/MAN WHO WILL BE ASKED THE SEXUAL VIOLENCE QUESTIONS. THEN, GO TO COLUMN (9) AND PUT A \* NEXT TO THE HOUSEHOLD LINE NUMBER OF THE SELECTED ELIGIBLE WOMAN/MAN AND RECORD THIS HOUSEHOLD LINE NUMBER IN THE TWO BOXES AT THE BOTTOM OF THIS TABLE.

**FOR EXAMPLE**, IF THE HOUSEHOLD QUESTIONNAIRE NUMBER IS '3716', GO TO ROW 6 AND CIRCLE THE ROW NUMBER ('6'). IF THE HH IS SELECTED FOR A FEMALE RESPONDENT TO THE SV SECTION AND THERE ARE THREE ELIGIBLE WOMEN IN THE HOUSEHOLD, GO TO COLUMN 3 AND CIRCLE THE COLUMN NUMBER ('3'). DRAW LINES FROM ROW 6 AND COLUMN 3 AND FIND THE BOX WHERE THE TWO MEET, AND CIRCLE THE NUMBER IN IT ('2'). THIS MEANS YOU HAVE TO SELECT THE SECOND ELIGIBLE WOMAN. SUPPOSE THE HOUSEHOLD LINE NUMBERS OF THE THREE ELIGIBLE WOMEN ARE '02', '03', AND '07'; THEN THE ELIGIBLE WOMAN FOR THE SEXUAL VIOLENCE QUESTIONS IS THE SECOND ELIGIBLE WOMAN, I.E., THE WOMAN WITH HOUSEHOLD LINE NUMBER '03'. PUT A \* NEXT TO THIS WOMAN'S LINE NUMBER IN COLUMN (9) OF THE HOUSEHOLD SCHEDULE AND ALSO ENTER THE TWO DIGIT LINE NUMBER IN THE TWO BOXES AT THE BOTTOM OF THIS TABLE.

LAST DIGIT OF THE QUESTIONNAIRE NUMBER	TOTAL NUMBER OF ELIGIBLE WOMEN/MEN IN THE HOUSEHOLD							
	1	2	3	4	5	6	7	8
0	1	2	2	4	3	6	5	4
1	1	1	3	1	4	1	6	5
2	1	2	1	2	5	2	7	6
3	1	1	2	3	1	3	1	7
4	1	2	3	4	2	4	2	8
5	1	1	1	1	3	5	3	1
6	1	2	2	2	4	6	4	2
7	1	1	3	3	5	1	5	3
8	1	2	1	4	1	2	6	4
9	1	1	2	1	2	3	7	5

HOUSEHOLD LINE NUMBER OF PERSON SELECTED FOR SEXUAL VIOLENCE MODULE

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**UGANDA AIDS INDICATOR SURVEY  
QUESTIONNAIRE FOR WOMEN AND MEN 15-59**

IDENTIFICATION																															
DISTRICT: _____	<table border="1" style="width:100%; height:100%; border-collapse: collapse;"> <tr><td style="width:25px; height:25px;"></td><td style="width:25px; height:25px;"></td><td style="width:25px; height:25px;"></td></tr> <tr><td style="width:25px; height:25px;"></td><td style="width:25px; height:25px;"></td><td style="width:25px; height:25px;"></td></tr> <tr><td style="width:25px; height:25px;"></td><td style="width:25px; height:25px;"></td><td style="width:25px; height:25px;"></td></tr> <tr><td style="width:25px; height:25px;"></td><td style="width:25px; height:25px;"></td><td style="width:25px; height:25px;"></td></tr> <tr><td style="width:25px; height:25px;"></td><td style="width:25px; height:25px;"></td><td style="width:25px; height:25px;"></td></tr> <tr><td style="width:25px; height:25px;"></td><td style="width:25px; height:25px;"></td><td style="width:25px; height:25px;"></td></tr> <tr><td style="width:25px; height:25px;"></td><td style="width:25px; height:25px;"></td><td style="width:25px; height:25px;"></td></tr> <tr><td style="width:25px; height:25px;"></td><td style="width:25px; height:25px;"></td><td style="width:25px; height:25px;"></td></tr> <tr><td style="width:25px; height:25px;"></td><td style="width:25px; height:25px;"></td><td style="width:25px; height:25px;"></td></tr> <tr><td style="width:25px; height:25px;"></td><td style="width:25px; height:25px;"></td><td style="width:25px; height:25px;"></td></tr> </table>																														
SUB-COUNTY/DIVISION: _____																															
PARISH: _____																															
LC1: _____																															
NAME OF HOUSEHOLD HEAD: _____																															
CLUSTER NUMBER .....																															
HOUSEHOLD NUMBER .....																															
REGION .....																															
KAMPALA=1, SMALL CITY=2, TOWN=3, RURAL=4 .....																															
NAME (OR INITIALS) AND LINE NUMBER OF RESPONDENT _____																															
SEX OF RESPONDENT (MALE=1, FEMALE=2) .....																															
RESPONDENT SELECTED FOR SV QUESTIONS (YES=1, NO=2) .....																															

INTERVIEWER VISITS								
	1	2	3	FINAL VISIT				
DATE	_____	_____	_____	DAY <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td style="width:25px; height:25px;"></td><td style="width:25px; height:25px;"></td></tr></table>				
				MONTH <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td style="width:25px; height:25px;"></td><td style="width:25px; height:25px;"></td></tr></table>				
INTERVIEWER'S NAME	_____	_____	_____	YEAR <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td style="width:25px; height:25px; text-align: center;">2</td><td style="width:25px; height:25px; text-align: center;">0</td><td style="width:25px; height:25px; text-align: center;">1</td><td style="width:25px; height:25px; text-align: center;">1</td></tr></table>	2	0	1	1
2	0	1	1					
RESULT*	_____	_____	_____	INTERVIEWER NUMBER <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td style="width:25px; height:25px;"></td><td style="width:25px; height:25px;"></td><td style="width:25px; height:25px;"></td><td style="width:25px; height:25px;"></td></tr></table>				
NEXT VISIT: DATE	_____	_____		RESULT <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td style="width:25px; height:25px;"></td></tr></table>				
TIME	_____	_____		TOTAL NUMBER OF VISITS <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td style="width:25px; height:25px;"></td></tr></table>				

**\*RESULT CODES:**

- |               |                    |               |
|---------------|--------------------|---------------|
| 1 COMPLETED   | 4 REFUSED          |               |
| 2 NOT AT HOME | 5 PARTLY COMPLETED | 7 OTHER _____ |
| 3 POSTPONED   | 6 INCAPACITATED    | (SPECIFY)     |

LANGUAGE OF QUESTIONNAIRE <b>ENGLISH</b>	Q LANGUAGE <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td style="width:25px; height:25px; text-align: center;">0</td><td style="width:25px; height:25px; text-align: center;">7</td></tr></table>	0	7
0	7		
NATIVE LANGUAGE OF RESPONDENT _____	N LANGUAGE <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td style="width:25px; height:25px;"></td><td style="width:25px; height:25px;"></td></tr></table>		
TRANSLATOR USED (NOT AT ALL=1; SOMETIMES=2; ALL THE TIME=3)	TRANSLATOR USED? <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td style="width:25px; height:25px;"></td></tr></table>		
LANGUAGE: 01 ATESO-KARAMOJONG      05 RUNYANKOLE-RUKIGA			
02 LUGANDA                              06 RUNYORO-RUTORO			
03 LUGBARA                              07 ENGLISH			
04 LUO                                      08 OTHER/FIELD TRANSLATION			

TEAM SUPERVISOR				
NAME _____	<table border="1" style="display: inline-table;"><tr><td style="width:25px; height:25px;"></td><td style="width:25px; height:25px;"></td><td style="width:25px; height:25px;"></td></tr></table>			
DATE _____				

**SECTION 1 - RESPONDENT'S BACKGROUND**

REQUEST CONSENT FOR THE INTERVIEW.

HIV is one of the leading causes of death in this country. Syphilis is also a common sexually transmitted disease. The government would like to know how common HIV and syphilis are in the country so that they can plan for better services for people affected or infected with HIV and syphilis.

Your household has been selected purely by chance from your community.

We will be asking 37,000 people from over 11,000 households all over the country to participate. The survey will last about 6 months and the interviews will not last more than 30 minutes.

You can choose to participate in the survey or not. It is your choice. If you choose not to participate in the survey, there is no problem.

If you choose to participate in the survey, I will ask you some questions about yourself (for example, your age and education). Other questions are what you think and do related to your health. Some questions are about your personal sexual behaviour. The interview takes about 30 minutes.

It is up to you or your household member whether or not to participate in the survey. You can stop participating in the survey at any time you want for any reason without penalty.

Most of the questions are general in nature but there are some that are personal and may make you uncomfortable. It is fine to skip any question that you don't want to answer. You may also stop the survey at any time without penalty. This will not affect the medical care that you receive. Because we will ask you to give personal information, participation in this survey may risk a loss of privacy. We do not expect major risks from participating in this survey. To minimize risks:

1. All information you share will be kept secret.
2. Your name or identifiable information will NOT be used in any survey materials.
3. Only research team members will have access to your data and specimens.
4. Skilled interviewers will be trained to protect your privacy.

You may not benefit directly from being part of this survey, but the information you provide will help the country in providing good services for all. If you provide us with data about yourself, we can help understand more about these two illnesses and how to prevent them. We will not offer you money for participating in the survey.

Everything we talk about will be kept secret to the extent allowed by the law. Your test results will be kept secret to the extent allowed by the law. To protect your privacy, we will use a code number to identify you and all specimens. We will keep these records and specimens locked. Only special staff will be able to look at the records or use the specimens. Your name or any other facts that might point to you will not appear when we present this survey or publish its results.

We would like to answer all your questions. If you have any questions now, please ask us. If you have any questions in the future, there are other persons that you can contact.

Ministry of Health:

Dr. Alex Opio: 0414-256683

Dr. Joshua Musinguzi: 0414-256683

Dr. Wilford Kirungi: 0414-256683

If you have any concerns about your rights in this survey, please contact Mr. Tom Lutalo Chairman UVRI Science and Ethics Committee 0414-320272.

RESPONDENT AGREES TO BE INTERVIEWED . . . 1      RESPONDENT DOES NOT AGREE TO BE INTERVIEWED . . . 2 → END





NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
101	RECORD THE TIME.	HOUR ..... <input type="text"/> <input type="text"/> MINUTES ..... <input type="text"/> <input type="text"/> MORNING ..... 1 AFTERNOON ..... 2 EVENING/NIGHT ..... 3	
102	In what month and year were you born?	MONTH ..... <input type="text"/> <input type="text"/> DON'T KNOW MONTH ..... 98 YEAR ..... <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> DON'T KNOW YEAR ..... 9998	
103	How old are you? COMPARE AND CORRECT 102 AND/OR 103 IF INCONSISTENT.	AGE IN COMPLETED YEARS <input type="text"/> <input type="text"/>	
104	Have you ever attended school?	YES ..... 1 NO ..... 2	→ 107
105	What is the highest level of school you attended: primary, 'O' level, 'A' level, or university or tertiary?	PRIMARY ..... 1 'O' LEVEL ..... 2 'A' LEVEL ..... 3 UNIVERSITY/TERTIARY ..... 4	
106	What is the highest (class/year) you completed at that level?	CLASS/YEAR ..... <input type="text"/> <input type="text"/>	
107	Do you read a newspaper or magazine almost every day, at least once a week, less than once a week or not at all?	ALMOST EVERY DAY ..... 1 AT LEAST ONCE A WEEK ..... 2 LESS THAN ONCE A WEEK ..... 3 NOT AT ALL ..... 4 CANNOT READ ..... 8	
108	Do you listen to the radio almost every day, at least once a week, less than once a week or not at all?	ALMOST EVERY DAY ..... 1 AT LEAST ONCE A WEEK ..... 2 LESS THAN ONCE A WEEK ..... 3 NOT AT ALL ..... 4	
109	Do you watch television almost every day, at least once a week, less than once a week or not at all?	ALMOST EVERY DAY ..... 1 AT LEAST ONCE A WEEK ..... 2 LESS THAN ONCE A WEEK ..... 3 NOT AT ALL ..... 4	
110	FEMALE <input type="checkbox"/> MALE <input type="checkbox"/>		→ 113
111	Aside from your own housework, have you done any work in the last seven days?	YES ..... 1 NO ..... 2	→ 116
112	As you know, some women take up jobs for which they are paid in cash or kind. Others sell things, have a small business or work on the family farm or in the family business. In the last seven days, have you done any of these things or any other work?	YES ..... 1 NO ..... 2	→ 116 → 114

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
113	Have you done any work in the last seven days?	YES ..... 1 NO ..... 2	→ 116
114	Although you did not work in the last seven days, do you have any job or business from which you were absent for leave, illness, vacation or any other such reason?	YES ..... 1 NO ..... 2	→ 116
115	Have you done any work in the last 12 months?	YES ..... 1 NO ..... 2	→ 117
116	What is your occupation, that is, what kind of work do you mainly do?  INTERVIEWER: PROBE TO OBTAIN DETAILED INFORMATION ON THE KIND OF WORK RESPONDENT DOES.	CATEGORIES - DROP DOWN MENU  _____  _____  <input type="text"/> <input type="text"/> <input type="text"/>	→ 118
117	What have you been doing for most of the time over the last 12 months?	GOING TO SCHOOL/STUDYING ... 01 LOOKING FOR WORK ..... 02 RETIRED ..... 03 TOO ILL TO WORK ..... 04 HANDICAPPED, CANNOT WORK ... 05 HOUSEWORK/CHILD CARE ..... 06  OTHER _____ 96 (SPECIFY)	
118	How long have you been living continuously in (NAME OF CURRENT PLACE OF RESIDENCE)?  IF LESS THAN ONE YEAR, RECORD '00' YEARS.	YEARS ..... <input type="text"/> <input type="text"/> ALWAYS ..... 95 VISITOR ..... 96	
119	In the last 12 months, on how many separate occasions have you traveled away from this community (the community where you usually live) and slept away?	NUMBER OF TRIPS ..... <input type="text"/> <input type="text"/> NONE ..... 00	→ 121
120	In the last 12 months, have you been away from your home community for more than one month at a time?	YES ..... 1 NO ..... 2	
121	What is your religion?	CATHOLIC ..... 01 ANGLICAN/PROTESTANT ..... 02 SDA ..... 03 ORTHODOX ..... 04 PENTECOSTAL ..... 05 OTHER CHRISTIAN ..... 06 MOSLEM ..... 07 BAHAI ..... 08 TRADITIONAL ..... 09 HINDU ..... 10 NONE ..... 11 OTHER ..... 96	
122	What is your ethnic group? _____	ETHNIC GROUP ..... <input type="text"/> <input type="text"/>	

ETHNIC GROUP CODES:

- |                   |                    |                     |
|-------------------|--------------------|---------------------|
| 01 = BAGANDA      | 06 = LANGI         | 11 = ALUR/JOPADHOLA |
| 02 = BANYANKORE   | 07 = BAKIGA        | 12 = BANYORO        |
| 03 = ITESO        | 08 = KARIMOJONG    | 13 = BATORO         |
| 04 = LUGBARA/MADI | 09 = ACHOLI        | 96 = OTHER          |
| 05 = BASOGA       | 10 = BAGISU/SABINY |                     |

**SECTION 2 - REPRODUCTION**

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
201	<p align="center">MALE <input type="checkbox"/></p> <p>Now I would like to ask about all of the children you have had during your lifetime. I am interested only in the children that are biologically yours, even if they are not legally yours or do not have your last name. Have you ever fathered any children with any woman?</p>	<p align="center">FEMALE <input type="checkbox"/></p> <p>Now I would like to ask about all the births you have had during your lifetime. Have you ever given birth?</p>	<p>YES ..... 1</p> <p>NO ..... 2 → 206</p>
202	<p>Do you have any sons or daughters that you have fathered who are now living with you?</p>	<p>Do you have any sons or daughters to whom you have given birth who are now living with you?</p>	<p>YES ..... 1</p> <p>NO ..... 2 → 204</p>
203	<p>How many sons live with you?</p> <p>And how many daughters live with you?</p> <p>IF NONE, RECORD '00'.</p>		<p>SONS AT HOME ..... <input type="text"/></p> <p>DAUGHTERS AT HOME ..... <input type="text"/></p>
204	<p align="center">MALE <input type="checkbox"/></p> <p>Do you have any sons or daughters that you have fathered who are alive but do not live with you?</p>	<p align="center">FEMALE <input type="checkbox"/></p> <p>Do you have any sons or daughters to whom you have given birth who are alive but do not live with you?</p>	<p>YES ..... 1</p> <p>NO ..... 2 → 206</p>
205	<p>How many sons are alive but do not live with you?</p> <p>And how many daughters are alive but do not live with you?</p> <p>IF NONE, RECORD '00'.</p>		<p>SONS ELSEWHERE ..... <input type="text"/></p> <p>DAUGHTERS ELSEWHERE . <input type="text"/></p>
206	<p align="center">MALE <input type="checkbox"/></p> <p>Have you ever fathered a boy or girl who was born alive but later died? Any baby who cried or showed signs of life but did not survive?</p>	<p align="center">FEMALE <input type="checkbox"/></p> <p>Have you ever given birth to a boy or girl who was born alive but later died? Any baby who cried or showed signs of life but did not survive?</p>	<p>YES ..... 1</p> <p>NO ..... 2 → 208</p>
207	<p>How many boys have died?</p> <p>And how many girls have died?</p> <p>IF NONE, RECORD '00'.</p>		<p>BOYS DEAD ..... <input type="text"/></p> <p>GIRLS DEAD ..... <input type="text"/></p>
208	<p>SUM ANSWERS TO 203, 205, AND 207, AND ENTER TOTAL. IF NONE, RECORD '00'.</p>		<p>TOTAL ..... <input type="text"/></p>
209	<p align="center">MALE <input type="checkbox"/></p> <p>Just to make sure that I have this right: you have fathered in TOTAL _____ children during your life. Is that correct?</p> <p align="center">FEMALE <input type="checkbox"/></p> <p>Just to make sure that I have this right: you have had in TOTAL _____ births during your life. Is that correct?</p> <p>YES <input type="checkbox"/> NO <input type="checkbox"/> → PROBE AND CORRECT 201-208 AS NECESSARY.</p>		

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
210	MALE <input type="checkbox"/> FEMALE <input type="checkbox"/>		→ 401
211	CHECK 208: ONE OR MORE BIRTHS <input type="checkbox"/> NO BIRTHS <input type="checkbox"/>		→ 215
212	Now I would like to ask you about your last birth, whether the child is still alive or not. In what month and year did you have your last birth?	MONTH ..... <input type="text"/> <input type="text"/> DON'T KNOW MONTH ..... 98 YEAR ..... <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> DON'T KNOW YEAR ..... 9998	→ 214
213	About how many years ago was your last birth?	YEARS AGO ..... <input type="text"/> <input type="text"/>	
214	Is the child still alive?	YES ..... 1 NO ..... 2	
215	Are you pregnant now?	YES ..... 1 NO ..... 2 UNSURE ..... 8	

SECTION 3. ANTENATAL CARE AND BREASTFEEDING

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
301	CHECK 212 AND 213: MOST RECENT BIRTH IN 2006 OR LATER <input type="checkbox"/> NO BIRTH SINCE JANUARY 2006 <input type="checkbox"/>		→ 401
302	Now I would like to ask you about your most recent birth. Did you see anyone for antenatal care for this pregnancy?  IF YES: Whom did you see? Anyone else?  PROBE TO IDENTIFY EACH TYPE OF PERSON AND CIRCLE ALL MENTIONED.	<b>HEALTH PERSONNEL</b> DOCTOR ..... A NURSE/MIDWIFE ..... B MEDICAL ASSISTANT/ CLINICAL OFFICER ..... C NURSING AIDE ..... D <b>OTHER PERSON</b> TRADITIONAL BIRTH ATTENDANT . E  OTHER _____ X (SPECIFY) NO ONE ..... Y	→ 304
303	Where did you receive antenatal care for this pregnancy?  Anywhere else?  RECORD ALL MENTIONED.  IF UNABLE TO DETERMINE IF A HEALTH FACILITY IS PUBLIC OR PRIVATE MEDICAL, WRITE THE NAME OF THE PLACE.  _____ (NAME OF PLACE)	<b>HOME</b> YOUR HOME ..... A TBA'S HOME ..... B OTHER HOME ..... C  <b>PUBLIC SECTOR</b> GOVT. HOSPITAL ..... D GOVT. HEALTH CENTRE ..... E GOVT. HEALTH POST ..... F OTHER PUBLIC ..... G _____ (SPECIFY)  <b>PRIVATE MED. SECTOR</b> PVT. HOSPITAL/CLINIC ..... H OTHER PRIVATE MEDICAL ..... I _____ (SPECIFY) OTHER _____ X (SPECIFY)	→ 305
304	What was the main reason you did not see anyone for antenatal care?	CLINIC TOO FAR ..... 1 HAD NO MONEY ..... 2 HAD NO TIME ..... 3 NOT AWARE HAD TO ATTEND ..... 4 DID NOT WANT TO ATTEND ..... 5  OTHER _____ 6 (SPECIFY) DON'T KNOW ..... 8	
305	Did you ever breastfeed your last born child?	YES ..... 1 NO ..... 2	
306	CHECK 214: CHILD STILL ALIVE <input type="checkbox"/> CHILD DIED <input type="checkbox"/>		→ 401
307	Are you still breastfeeding your last born?	YES ..... 1 NO ..... 2	→ 401
308	For how many months did you breastfeed your last born?	MONTHS ..... <input type="text"/> <input type="text"/>	

**SECTION 4 - MARRIAGE AND SEXUAL ACTIVITY**

NO.	QUESTIONS AND FILTERS		CODING CATEGORIES		SKIP															
401	<p align="center">MALE <input type="checkbox"/></p> <p>Are you currently married or living together with a woman as if married?</p>	<p align="center">FEMALE <input type="checkbox"/></p> <p>Are you currently married or living together with a man as if married?</p>	YES, CURRENTLY MARRIED ..... 1 YES, LIVING WITH A MAN / WOMAN . 2 NO, NOT IN UNION ..... 3		→ 404															
402	<p>Have you ever been married or lived together with a woman as if married?</p>	<p>Have you ever been married or lived together with a man as if married?</p>	YES, FORMERLY MARRIED ..... 1 YES, LIVED WITH A MAN / WOMAN . 2 NO ..... 3		→ 420															
403	<p>What is your marital status now: are you widowed, divorced, or separated?</p>	<p>What is your marital status now: are you widowed, divorced, or separated?</p>	WIDOWED ..... 1 DIVORCED ..... 2 SEPARATED ..... 3		→ 410															
404	<p>Is your wife/partner living with you now or is she staying elsewhere?</p>	<p>Is your husband/partner living with you now or is he staying elsewhere?</p>	LIVING TOGETHER ..... 1 STAYING ELSEWHERE ..... 2																	
405	<p>Do you have more than one wife or woman you live with as if married?</p>	<p>Does your husband/partner have other wives or does he live with other women as if married?</p>	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8		→ 407															
406	<p>Altogether, how many wives do you have or other partners do you live with as if married?</p>	<p>Including yourself, in total, how many wives or other partners does your husband live with now as if married?</p>	NUMBER OF WIVES AND LIVE-IN PARTNERS ..... <input type="text"/> <input type="text"/> DON'T KNOW ..... 98																	
407	<p>CHECK 405:</p> <p><u>IF ONE WIFE/PARTNER:</u> Please tell me the name of your wife (the woman you are living with as if married).</p> <p><u>IF MORE THAN ONE WIFE/PARTNER:</u> Please tell me the name of each of your current wives (and/or of each woman you are living with as if married).</p> <p>RECORD THE NAME(S) AND THE LINE NUMBER(S) FROM THE HOUSEHOLD QUESTIONNAIRE FOR EACH SPOUSE AND LIVE-IN PARTNER.</p> <p>IF THE PERSON IS NOT LISTED IN THE HOUSEHOLD, RECORD '00'.</p> <p>ASK 408 FOR EACH WIFE/HUSBAND/PARTNER.</p>	<p>Please tell me the name of your husband (the man you are living together with as if married).</p>	<table border="1"> <thead> <tr> <th>NAME</th> <th>LINE NUMBER</th> <th>AGE</th> </tr> </thead> <tbody> <tr> <td>_____</td> <td><input type="text"/><input type="text"/></td> <td><input type="text"/><input type="text"/></td> </tr> <tr> <td>_____</td> <td><input type="text"/><input type="text"/></td> <td><input type="text"/><input type="text"/></td> </tr> <tr> <td>_____</td> <td><input type="text"/><input type="text"/></td> <td><input type="text"/><input type="text"/></td> </tr> <tr> <td>_____</td> <td><input type="text"/><input type="text"/></td> <td><input type="text"/><input type="text"/></td> </tr> </tbody> </table>	NAME	LINE NUMBER	AGE	_____	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>	_____	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>	_____	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>	_____	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>	<p><b>408</b> How old was your wife/husband/partner on his/her last birthday?</p>	
NAME	LINE NUMBER	AGE																		
_____	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>																		
_____	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>																		
_____	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>																		
_____	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>																		
409	<p>CHECK 407:</p> <p>MALE <input type="checkbox"/></p> <p>ONE WIFE <input type="checkbox"/></p>	<p>FEMALE <input type="checkbox"/></p>	<p>MALE MORE THAN ONE WIFE <input type="checkbox"/></p>		→ 418A															
410	<p>MALE <input type="checkbox"/></p> <p>Have you been married or lived with someone only once or more than once?</p>	<p>FEMALE <input type="checkbox"/></p> <p>Have you been married or lived with someone only once or more than once?</p>	ONLY ONCE ..... 1 MORE THAN ONCE ..... 2		→ 418															

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP	
413	MALE <input type="checkbox"/> → FOR FEMALE RESPONDENTS, CHECK 403: FEMALE CURRENTLY WIDOWED <input type="checkbox"/> → FEMALE AND Q.403 NOT ASKED <input type="checkbox"/> → FEMALE CURRENTLY DIVORCED/SEPARATED <input type="checkbox"/> →		418A 418A 418A	
414	How did your previous marriage or union end?	DEATH/WIDOWHOOD ..... 1 DIVORCE ..... 2 SEPARATION ..... 3	418A	
415	Is your current husband/partner related to your previous husband/partner?  IF YES, What is the relationship between your current husband and your previous husband?	YES, BROTHER ..... 1 YES, UNCLE ..... 2 YES, OTHER ..... 3 (SPECIFY) NO, NOT RELATED ..... 4	418A	
418	MALE <input type="checkbox"/> In what month and year did you start living with your wife/partner?	FEMALE <input type="checkbox"/> In what month and year did you start living with your husband/partner?	MONTH ..... <input type="text"/> <input type="text"/> DON'T KNOW MONTH ..... 98  YEAR ..... <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> DON'T KNOW YEAR ..... 9998	420
418A	Now I would like to ask a question about your first wife/partner.  In what month and year did you start living with your first wife/partner?	Now I would like to ask a question about your first husband/partner.  In what month and year did you start living with your first husband/partner?		420
419	How old were you when you first started living with her?	How old were you when you first started living with him?	AGE ..... <input type="text"/> <input type="text"/>	
420	CHECK FOR THE PRESENCE OF OTHERS. BEFORE CONTINUING, MAKE EVERY EFFORT TO ENSURE PRIVACY.			
421	Now I need to ask you some questions about sexual activity in order to gain a better understanding of some important life issues.  How old were you when you had sexual intercourse for the very first time?	NEVER HAD SEXUAL INTERCOURSE 00  AGE IN YEARS ..... <input type="text"/> <input type="text"/>  FIRST TIME WHEN STARTED LIVING WITH (FIRST) HUSBAND/WIFE/PARTNER. . . . . 95	424 424	
422	CHECK 103: 15-24 YEARS OLD <input type="checkbox"/> →      25-59 YEARS OLD <input type="checkbox"/> →		450	
423	Do you intend to wait until you get married to have sexual intercourse for the first time?	YES ..... 1 NO ..... 2 DON'T KNOW/UNSURE ..... 8	450	
424	CHECK 103: 15-24 YEARS OLD <input type="checkbox"/> →      25-59 YEARS OLD <input type="checkbox"/> →		429	
425	The <u>first</u> time you had sexual intercourse, was a condom used?	YES ..... 1 NO ..... 2 DON'T KNOW/DON'T REMEMBER ... 8		

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
426	How old was the person you first had sexual intercourse with?	AGE OF PARTNER ..... <input type="text"/> <input type="text"/> DON'T KNOW ..... 98	→ 429
427	Was this person older than you, younger than you, or about the same age as you?	OLDER ..... 1 YOUNGER ..... 2 ABOUT THE SAME AGE ..... 3 DON'T KNOW/DON'T REMEMBER ... 8	→ 429
428	Would you say this person was ten or more years older than you or less than ten years older than you?	TEN OR MORE YEARS OLDER ..... 1 LESS THAN TEN YEARS OLDER ... 2 OLDER, UNSURE HOW MUCH ..... 3	
429	<p>Now I would like to ask you some questions about your recent sexual activity. Let me assure you again that your answers are completely confidential and will not be told to anyone. If we should come to any question that you do not want to answer, just let me know and we will go on to the next question.</p> <p>When was the <u>last</u> time you had sexual intercourse?</p> <p>IF LESS THAN 12 MONTHS, ANSWER MUST BE RECORDED IN DAYS, WEEKS OR MONTHS.            IF 12 MONTHS (ONE YEAR) OR MORE, ANSWER MUST BE RECORDED IN YEARS.</p>	DAYS AGO ..... 1 WEEKS AGO ..... 2 MONTHS AGO ..... 3 YEARS AGO ..... 4	→ 431   → 449



		LAST SEXUAL PARTNER	SECOND-TO-LAST SEXUAL PARTNER	THIRD-TO-LAST SEXUAL PARTNER
430	When was the last time you had sexual intercourse with this person?		DAYS . 1 <input type="text"/> <input type="text"/> WEEKS 2 <input type="text"/> <input type="text"/> MONTHS 3 <input type="text"/> <input type="text"/>	DAYS . 1 <input type="text"/> <input type="text"/> WEEKS 2 <input type="text"/> <input type="text"/> MONTHS 3 <input type="text"/> <input type="text"/>
431	The last time you had sexual intercourse (with this second/third person), was a condom used?	YES ..... 1 NO ..... 2 (SKIP TO 433) ←	YES ..... 1 NO ..... 2 (SKIP TO 433) ←	YES ..... 1 NO ..... 2 (SKIP TO 433) ←
432	Was a condom used every time you had sexual intercourse with this person in the last 12 months?	YES ..... 1 NO ..... 2	YES ..... 1 NO ..... 2	YES ..... 1 NO ..... 2
433	What was your relationship to this (second/third) person with whom you had sexual intercourse?  IF BOYFRIEND/GIRLFRIEND: Were you living together as if married? IF YES, CIRCLE '2' IF NO, CIRCLE '3'	HUSBAND/WIFE ..... 1 LIVE-IN PARTNER .... 2 BOYFRIEND/GIRLFRIEND NOT LIVING WITH RESPONDENT .... 3 CASUAL ACQUAINTANCE .... 4 PROSTITUTE ..... 5 OTHER ..... 6 (SPECIFY) (SKIP TO 434) ←	HUSBAND/WIFE ..... 1 LIVE-IN PARTNER .... 2 BOYFRIEND/GIRLFRIEND NOT LIVING WITH RESPONDENT .... 3 CASUAL ACQUAINTANCE .... 4 PROSTITUTE ..... 5 OTHER ..... 6 (SPECIFY) (SKIP TO 434) ←	HUSBAND/WIFE ..... 1 LIVE-IN PARTNER .... 2 BOYFRIEND/GIRLFRIEND NOT LIVING WITH RESPONDENT .... 3 CASUAL ACQUAINTANCE .... 4 PROSTITUTE ..... 5 OTHER ..... 6 (SPECIFY) (SKIP TO 434) ←
433A	CHECK 406, 407 AND 410	MARRIED ONLY ONCE <input type="checkbox"/> MARRIED MORE THAN ONCE <input type="checkbox"/> (SKIP TO 434) ←	MARRIED ONLY ONCE <input type="checkbox"/> MARRIED MORE THAN ONCE <input type="checkbox"/> (SKIP TO 434) ←	MARRIED ONLY ONCE <input type="checkbox"/> MARRIED MORE THAN ONCE <input type="checkbox"/> (SKIP TO 434) ←
433B	CHECK 421	1st TIME WITH 1st HUSBAND/ WIFE <input type="checkbox"/> OTHER <input type="checkbox"/> (SKIP TO 434A) →	1st TIME WITH 1st HUSBAND/ WIFE <input type="checkbox"/> OTHER <input type="checkbox"/> (SKIP TO 434A) →	1st TIME WITH 1st HUSBAND/ WIFE <input type="checkbox"/> OTHER <input type="checkbox"/> (SKIP TO 434A) →
434	How long ago did you first have sexual intercourse with this (second/third) person?	DAYS AGO 1 <input type="text"/> <input type="text"/> WEEKS AGO 2 <input type="text"/> <input type="text"/> MONTHS AGO 3 <input type="text"/> <input type="text"/> YEARS AGO 4 <input type="text"/> <input type="text"/>	DAYS AGO 1 <input type="text"/> <input type="text"/> WEEKS AGO 2 <input type="text"/> <input type="text"/> MONTHS AGO 3 <input type="text"/> <input type="text"/> YEARS AGO 4 <input type="text"/> <input type="text"/>	DAYS AGO 1 <input type="text"/> <input type="text"/> WEEKS AGO 2 <input type="text"/> <input type="text"/> MONTHS AGO 3 <input type="text"/> <input type="text"/> YEARS AGO 4 <input type="text"/> <input type="text"/>
434A	How many times during the last 12 months did you have sexual intercourse with this person?	NUMBER OF TIMES <input type="text"/> <input type="text"/>	NUMBER OF TIMES <input type="text"/> <input type="text"/>	NUMBER OF TIMES <input type="text"/> <input type="text"/>
434B	Are you still having sex with this person?	YES ..... 1 NO ..... 2	YES ..... 1 NO ..... 2	YES ..... 1 NO ..... 2
435	CHECK 103:	WOMAN AGE 15-24 <input type="checkbox"/> MAN 15-59/ WOMAN 25-59 <input type="checkbox"/> (SKIP TO 439) ←	WOMAN AGE 15-24 <input type="checkbox"/> MAN 15-59/ WOMAN 25-59 <input type="checkbox"/> (SKIP TO 439) ←	WOMAN AGE 15-24 <input type="checkbox"/> MAN 15-59/ WOMAN 25-59 <input type="checkbox"/> (SKIP TO 439) ←

		LAST SEXUAL PARTNER	SECOND-TO-LAST SEXUAL PARTNER	THIRD-TO-LAST SEXUAL PARTNER
436	How old is this person?	AGE OF PARTNER <input type="text"/> <input type="text"/> (SKIP TO 439) ← DON'T KNOW . . . . . 98	AGE OF PARTNER <input type="text"/> <input type="text"/> (SKIP TO 439) ← DON'T KNOW . . . . . 98	AGE OF PARTNER <input type="text"/> <input type="text"/> (SKIP TO 439) ← DON'T KNOW . . . . . 98
437	Is this person older than you, younger than you, or about the same age?	OLDER . . . . . 1 YOUNGER . . . . . 2 SAME AGE . . . . . 3 DON'T KNOW . . . 8 (SKIP TO 439) ←	OLDER . . . . . 1 YOUNGER . . . . . 2 SAME AGE . . . . . 3 DON'T KNOW . . . 8 (SKIP TO 439) ←	OLDER . . . . . 1 YOUNGER . . . . . 2 SAME AGE . . . . . 3 DON'T KNOW . . . 8 (SKIP TO 439) ←
438	Would you say this person is ten or more years older than you or less than ten years older than you?	TEN OR MORE YEARS OLDER . . 1 LESS THAN TEN YEARS OLDER . . 2 OLDER, UNSURE HOW MUCH . . . 3	TEN OR MORE YEARS OLDER . . 1 LESS THAN TEN YEARS OLDER . . 2 OLDER, UNSURE HOW MUCH . . . 3	TEN OR MORE YEARS OLDER . . 1 LESS THAN TEN YEARS OLDER . . 2 OLDER, UNSURE HOW MUCH . . . 3
439	The last time you had sexual intercourse with this (second/third) person, did you or this person drink alcohol?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 440A) ←	YES . . . . . 1 NO . . . . . 2 (SKIP TO 440A) ←	YES . . . . . 1 NO . . . . . 2 (SKIP TO 440A) ←
440	Were you or your partner drunk at that time?  IF YES: Who was drunk?	RESPONDENT ONLY 1 PARTNER ONLY . . . 2 RESPONDENT AND PARTNER BOTH . 3 NEITHER . . . . . 4	RESPONDENT ONLY 1 PARTNER ONLY . . . 2 RESPONDENT AND PARTNER BOTH . 3 NEITHER . . . . . 4	RESPONDENT ONLY 1 PARTNER ONLY . . . 2 RESPONDENT AND PARTNER BOTH . 3 NEITHER . . . . . 4
440A	What is this partner's HIV status?	NEGATIVE . . . . . 1 POSITIVE . . . . . 2 REFUSED TO ANSWER . . . . . 3 (SKIP TO 440C) ← DON'T KNOW . . . . . 8	NEGATIVE . . . . . 1 POSITIVE . . . . . 2 REFUSED TO ANSWER . . . . . 3 (SKIP TO 440C) ← DON'T KNOW . . . . . 8	NEGATIVE . . . . . 1 POSITIVE . . . . . 2 REFUSED TO ANSWER . . . . . 3 (SKIP TO 440C) ← DON'T KNOW . . . . . 8
440B	What do you think your partner's HIV status is?	NEGATIVE . . . . . 1 POSITIVE . . . . . 2 REFUSED TO ANSWER . . . . . 3 DON'T KNOW . . . . . 8	NEGATIVE . . . . . 1 POSITIVE . . . . . 2 REFUSED TO ANSWER . . . . . 3 DON'T KNOW . . . . . 8	NEGATIVE . . . . . 1 POSITIVE . . . . . 2 REFUSED TO ANSWER . . . . . 3 DON'T KNOW . . . . . 8
440C	The last time you had sex with this partner, did your partner know your HIV status?	YES . . . . . 1 NO . . . . . 2 REFUSED TO ANSWER . . . . . 3 DON'T KNOW . . . . . 8	YES . . . . . 1 NO . . . . . 2 REFUSED TO ANSWER . . . . . 3 DON'T KNOW . . . . . 8	YES . . . . . 1 NO . . . . . 2 REFUSED TO ANSWER . . . . . 3 DON'T KNOW . . . . . 8 (SKIP TO 441A) ←
441	Apart from [this person/these two people], have you had sexual intercourse with any other person in the last 12 months?	YES . . . . . 1 (GO BACK TO 430 IN NEXT COLUMN) NO . . . . . 2 (SKIP TO 443) ←	YES . . . . . 1 (GO BACK TO 430 IN NEXT COLUMN) NO . . . . . 2 (SKIP TO 443) ←	
441A	CHECK 430			LESS THAN 3 MONTHS <input type="text"/> MORE THAN 3 MONTHS <input type="text"/> ↓ (SKIP TO 442) ←

		LAST SEXUAL PARTNER	SECOND-TO-LAST SEXUAL PARTNER	THIRD-TO-LAST SEXUAL PARTNER
441B	In total, with how many different people have you had sexual intercourse in the last 3 months?  IF NON-NUMERIC ANSWER, PROBE TO GET AN ESTIMATE. IF GREATER THAN 95, WRITE ' 95'.			NUMBER OF PARTNERS LAST 3 MONTHS <input type="text"/> <input type="text"/> DON'T KNOW ..... 98
442	In total, with how many different people have you had sexual intercourse in the last 12 months?  IF NON-NUMERIC ANSWER, PROBE TO GET AN ESTIMATE. IF GREATER THAN 95, WRITE ' 95'.			NUMBER OF PARTNERS LAST 12 MONTHS <input type="text"/> <input type="text"/> DON'T KNOW ..... 98
442A	With how many of these people are you still having sex?			NUMBER OF CURRENT SEXUAL PARTNERS <input type="text"/> <input type="text"/> DON'T KNOW ..... 98

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
443	MALE <input type="checkbox"/> FEMALE <input type="checkbox"/>		→ 448B
444	CHECK 433 (ALL COLUMNS): AT LEAST ONE PARTNER IS PROSTITUTE <input type="checkbox"/> NO PARTNERS ARE PROSTITUTES <input type="checkbox"/>		→ 446
445	CHECK 432 AND 433 (ALL COLUMNS): CONDOM USED WITH EVERY PROSTITUTE <input type="checkbox"/> NO CONDOM USED/ CONDOM NOT USED WITH EVERY PROSTITUTE <input type="checkbox"/>		→ 449 → 448
446	In the last 12 months, did you pay anyone in exchange for having sexual intercourse?	YES ..... 1 NO ..... 2	→ 449
447	The last time you paid someone in exchange for sexual intercourse, was a condom used?	YES ..... 1 NO ..... 2	→ 449
448	Was a condom used during sexual intercourse every time you paid someone in exchange for having sexual intercourse in the last 12 months?	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8	→ 449
448B	Did you ever give sex in exchange for goods or services?	YES ..... 1 NO ..... 2 REFUSED TO ANSWER ..... 3 DON'T KNOW ..... 8	→ 448E
448C	Did this happen in the last 12 months?	YES ..... 1 NO ..... 2 REFUSED TO ANSWER ..... 3 DON'T KNOW ..... 8	
448D	The last time this happened, was a condom used?	YES ..... 1 NO ..... 2 REFUSED TO ANSWER ..... 3 DON'T KNOW ..... 8	
448E	Did you ever give sex in exchange for money?	YES ..... 1 NO ..... 2 REFUSED TO ANSWER ..... 3 DON'T KNOW ..... 8	→ 449
448F	Did this happen in the last 12 months?	YES ..... 1 NO ..... 2 REFUSED TO ANSWER ..... 3 DON'T KNOW ..... 8	
448G	The last time this happened, was a condom used?	YES ..... 1 NO ..... 2 REFUSED TO ANSWER ..... 3 DON'T KNOW ..... 8	
449	In total, with how many different people have you had sexual intercourse in your lifetime? IF NON-NUMERIC ANSWER, PROBE TO GET AN ESTIMATE. IF GREATER THAN 95, WRITE ' 95'.	NUMBER OF PARTNERS IN LIFETIME ..... <input type="text"/> <input type="text"/> DON'T KNOW ..... 98	
450	Do you know of a place where a person can get condoms?	YES ..... 1 NO ..... 2	→ 453A

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
451	<p>Where is that?</p> <p>Any other place?</p> <p>PROBE TO IDENTIFY EACH TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE(S).</p> <p>IF UNABLE TO DETERMINE IF HOSPITAL, HEALTH CENTER OR CLINIC IS PUBLIC OR PRIVATE MEDICAL, WRITE THE NAME OF THE PLACE.</p> <hr/> <p>(NAME OF PLACE(S))</p>	<p><b>PUBLIC SECTOR</b></p> <p>GOVT. HOSPITAL ..... A</p> <p>GOVT. HEALTH CENTER ..... B</p> <p>FAMILY PLANNING CLINIC ..... C</p> <p>OUTREACH ..... D</p> <p>GOVT COMMUNITY BASED DISTRIBUTOR ..... E</p> <p>OTHER PUBLIC ..... F</p> <p>(SPECIFY)</p> <p><b>PRIVATE MEDICAL SECTOR</b></p> <p>PRIVATE HOSPITAL/CLINIC ..... G</p> <p>PHARMACY/DRUG SHOP ..... H</p> <p>PRIVATE DOCTOR/NURSE/MIDWIFE ..... I</p> <p>OUTREACH ..... J</p> <p>NGO COMMUNITY BASED DISTRIBUTOR ..... K</p> <p>OTHER PRIVATE MEDICAL ..... L</p> <p>(SPECIFY)</p> <p><b>OTHER SOURCE</b></p> <p>SHOP ..... M</p> <p>RELIGIOUS INSTITUTION ..... N</p> <p>FRIEND/RELATIVE ..... O</p> <p>OTHER ..... X</p>	
452	If you wanted to, could you yourself get a condom?	<p>YES ..... 1</p> <p>NO ..... 2</p> <p>DON'T KNOW/UNSURE ..... 8</p>	
453	In the last 12 months, have you ever run short of condoms because they were not available at the place you normally get them?	<p>YES ..... 1</p> <p>NO ..... 2</p> <p>NEVER USED CONDOM ..... 3</p> <p>DON'T KNOW/UNSURE ..... 8</p>	
453A	<p>CHECK COVER:</p> <p>RESPONDENT SELECTED FOR SV QUESTIONS <input type="checkbox"/></p> <p>RESPONDENT NOT SELECTED <input type="checkbox"/></p>		501
453B	<p>CHECK FOR PRESENCE OF OTHERS:</p> <p>DO NOT CONTINUE UNTIL EFFECTIVE PRIVACY IS ENSURED.</p> <p>PRIVACY OBTAINED <input type="checkbox"/></p> <p>PRIVACY NOT POSSIBLE <input type="checkbox"/></p>		501
453C	<p>READ TO THE RESPONDENT</p> <p>Now I would like to ask you questions about some other important aspects of women's and men's lives. I know that some of these questions are very personal. However, your answers are crucial for helping to understand the condition of women and men in Uganda. Let me assure you that your answers are completely confidential and will not be told to anyone else. You are the only person in this household who will be asked these questions and no one else in the household will know that you have been asked the questions.</p>		
454	Were you ever physically forced to have sex against your will?	<p>YES ..... 1</p> <p>NO ..... 2</p> <p>REFUSED TO ANSWER ..... 3</p> <p>DON'T KNOW ..... 8</p>	456
455	Did this happen in the last 12 months?	<p>YES ..... 1</p> <p>NO ..... 2</p> <p>REFUSED TO ANSWER ..... 3</p> <p>DON'T KNOW ..... 8</p>	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
456	Were you ever coerced to have sex, that is, against your will but without the use of physical force?	YES ..... 1 NO ..... 2 REFUSED TO ANSWER ..... 3 DON'T KNOW ..... 8	→ 457A
457	Did this happen in the last 12 months?	YES ..... 1 NO ..... 2 REFUSED TO ANSWER ..... 3 DON'T KNOW ..... 8	
457A	CHECK 454 AND 456:  RESPONDENT REPORTED BEING COERCED TO HAVE SEX AGAINST THEIR WILL WITH OR WITHOUT PHYSICAL FORCE <input type="checkbox"/>	RESPONDENT DID NOT REPORT BEING COERCED TO HAVE SEX AGAINST THEIR WILL <input type="checkbox"/>	→ 501
458	What was your relationship with the last person who forced you to have sex against your will?	SPOUSE ..... 11 OTHER SEX PARTNER ..... 12 FATHER ..... 13 BROTHER ..... 14 UNCLE ..... 15 GRANDPARENT ..... 16 COUSIN ..... 17 NEPHEW ..... 18 OTHER FAMILY MEMBER ..... 19 TEACHER ..... 21 EMPLOYER ..... 31 ACQUAINTANCE ..... 32 STRANGER ..... 33 REFUSED TO ANSWER ..... 95 DON'T KNOW ..... 98	
459	Did you report this to the police?	YES ..... 1 NO ..... 2 REFUSED TO ANSWER ..... 3 DON'T KNOW ..... 8	→ 501 → 501
460	What is the main reason why you did not report this to the police?	DID NOT KNOW WHO TO GO TO ... 01 IT WILL BE OF NO USE ..... 02 IT IS PART OF LIFE ..... 03 AFRAID OF DIVORCE/DISERTION ... 04 AFRAID OF FURTHER VIOLENCE .... 05 AFRAID OF GETTING PERSON INTO TROUBLE ..... 06 EMBARRASSED TO REPORT ..... 07 DID NOT WANT TO DISGRACE FAMILY ..... 08 NOT IMPORTANT ..... 09 OTHER ..... 96	



NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
517	<p>During any of the antenatal visits for your last birth, did anyone talk to you about:</p> <p>Babies getting the AIDS virus from their mother?  Things that you can do to prevent getting the AIDS virus?  Getting tested for the AIDS virus?</p>	<p style="text-align: center;"><u>YES</u>   <u>NO</u>   <u>DK</u></p> <p>AIDS FROM MOTHER   1   2   8  THINGS TO DO ...   1   2   8  TESTED FOR AIDS .   1   2   8</p>	
518	Were you tested for the AIDS virus as part of your antenatal care?	YES ..... 1 NO ..... 2	→ 520
519	Were you offered a test for the AIDS virus as part of your antenatal care?	YES ..... 1 NO ..... 2	→ 521L
520	<p>Where was the test done?</p> <p>PROBE TO IDENTIFY THE TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE.</p> <p>IF UNABLE TO DETERMINE IF HOSPITAL, HEALTH CENTER, VCT CENTER, OR CLINIC IS PUBLIC OR PRIVATE MEDICAL, WRITE THE NAME OF THE PLACE.</p> <p style="text-align: center;">_____</p> <p style="text-align: center;">(NAME OF PLACE)</p>	<p><b>PUBLIC SECTOR</b></p> GOVERNMENT HOSPITAL ..... 11 GOVT. HEALTH CENTER ..... 12 STAND-ALONE VCT CENTER ..... 13 FAMILY PLANNING CLINIC ..... 14 OUTREACH ..... 15 GOVT COMMUNITY BASED WORKER ..... 16  OTHER PUBLIC _____ 17 (SPECIFY) <p><b>PRIVATE/NGO MEDICAL SECTOR</b></p> PRIVATE HOSPITAL/CLINIC ..... 21 STAND-ALONE VCT CENTER ..... 22 PHARMACY/DRUG SHOP ..... 23 PRIVATE DOCTOR/NURSE/MIDWIFE 24 OUTREACH ..... 25 TASO ..... 26 AIDS INFORMATION CENTER ... 27 OTHER PRIVATE/NGO MEDICAL _____ 28 (SPECIFY) OTHER _____ 96 (SPECIFY)	
521A	Did you get the result of the test?	YES ..... 1 NO ..... 2	→ 521L
521B	What was the result of the test?	POSITIVE ..... 1 NEGATIVE ..... 2 REFUSED TO ANSWER ..... 3 DON'T KNOW ..... 8	→ 521L
521C	During the pregnancy or during labor and delivery, were you offered anti-retroviral drugs to reduce the risk of passing on the AIDS virus to your unborn baby?	YES ..... 1 NO ..... 2 ALREADY ON ART ..... 3 DON'T KNOW ..... 8	→ 521F → 521E → 521F
521D	Did you take the drugs?	YES, BOTH MOTHER AND BABY ... 1 ONLY MOTHER ..... 2 ONLY BABY ..... 3 NEITHER ..... 4 DON'T KNOW ..... 8	
521E	Was your baby also given treatment? IF YES, CIRCLE CODE 1 FOR YES, MOTHER AND BABY. IF NO, CIRCLE CODE 2 , ONLY MOTHER.		
521F	<p>CHECK 214:</p> <p style="text-align: center;">CHILD STILL ALIVE   <input type="checkbox"/>   CHILD DIED   <input type="checkbox"/></p> <p style="text-align: center;">↓</p>		→ 521L



NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
521H	Has the child ever been tested for HIV?  IF YES: What is the child's HIV status?	YES-POSITIVE ..... 1 YES-NEGATIVE ..... 2 NO, NEVER TESTED ..... 3 REFUSED TO ANSWER ..... 4 DON'T KNOW ..... 8	→ 521L
521I	You said your child has HIV. Is your child taking any medicine for HIV?	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8	→ 521L
521J	Is your child taking Septrin or Co-trimoxazole daily?	YES, DAILY ..... 1 YES, NOT DAILY ..... 2 NO ..... 3 DON'T KNOW ..... 8	
521K	Is your child taking anti-retrovirals or ARVs daily?	YES, DAILY ..... 1 YES, NOT DAILY ..... 2 NO ..... 2 DON'T KNOW ..... 8	
521L	During your last pregnancy, were you tested for syphilis?	YES ..... 1 NO ..... 2 REFUSED TO ANSWER ..... 3 DON'T KNOW ..... 8	→ 521O
521M	What was the result of that syphilis test?	POSITIVE ..... 1 NEGATIVE ..... 2 REFUSED TO ANSWER ..... 3 DON'T KNOW ..... 8	→ 521O
521N	Did you receive treatment for syphilis?	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8	
521O	CHECK 518:  HAD HIV TEST DURING ANC <input type="checkbox"/> NO HIV TEST DURING ANC <input type="checkbox"/>		→ 524
521P	CHECK 521B:  RESPONSE OTHER THAN POSITIVE TEST RESULT/NO RESPONSE <input type="checkbox"/> POSITIVE TEST RESULT <input type="checkbox"/>		→ 530
522	Have you been tested for the AIDS virus since that time you were tested during your pregnancy?	YES ..... 1 NO ..... 2	→ 530
523	When was the last time you were tested for the AIDS virus?	LESS THAN 12 MONTHS AGO ..... 1 12 - 23 MONTHS AGO ..... 2 2 OR MORE YEARS AGO ..... 3	→ 526
524	Have you ever been tested to see if you have the AIDS virus?	YES ..... 1 NO ..... 2	→ 541
525	When was the last time you were tested?	LESS THAN 12 MONTHS AGO ..... 1 12 - 23 MONTHS AGO ..... 2 2 OR MORE YEARS AGO ..... 3	
526	The last time you had the test, did you yourself ask for the test, was it offered to you and you accepted, or was it required?	ASKED FOR THE TEST ..... 1 OFFERED AND ACCEPTED ..... 2 REQUIRED ..... 3	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
527	<p>Where was the test done?</p> <p>PROBE TO IDENTIFY THE TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE.</p> <p>IF UNABLE TO DETERMINE IF HOSPITAL, HEALTH CENTER, VCT CENTER, OR CLINIC IS PUBLIC OR PRIVATE MEDICAL, WRITE THE NAME OF THE PLACE.</p> <p>_____</p> <p>(NAME OF PLACE)</p>	<p><b>PUBLIC SECTOR</b></p> <p>GOVERNMENT HOSPITAL ..... 11</p> <p>GOVT. HEALTH CENTER ..... 12</p> <p>STAND-ALONE VCT CENTER ..... 13</p> <p>FAMILY PLANNING CLINIC ..... 14</p> <p>OUTREACH ..... 15</p> <p>GOVT COMMUNITY BASED WORKER ..... 16</p> <p>OTHER PUBLIC _____ 17 (SPECIFY)</p> <p><b>PRIVATE/NGO MEDICAL SECTOR</b></p> <p>PRIVATE HOSPITAL/CLINIC ..... 21</p> <p>STAND-ALONE VCT CENTER ..... 22</p> <p>PHARMACY/DRUG SHOP ..... 23</p> <p>PRIVATE DOCTOR/NURSE/MIDWIFE 24</p> <p>OUTREACH ..... 25</p> <p>TASO ..... 26</p> <p>AIDS INFORMATION CENTER ..... 27</p> <p>OTHER PRIVATE/NGO MEDICAL _____ 28 (SPECIFY)</p> <p>OTHER _____ 96 (SPECIFY)</p>	
528	Did you get the results of the last test?	<p>YES ..... 1</p> <p>NO ..... 2</p>	→ 530
529	What was the result of the test?	<p>POSITIVE ..... 1</p> <p>NEGATIVE ..... 2</p> <p>REFUSED TO ANSWER ..... 3</p> <p>DON'T KNOW ..... 8</p>	
530	How many times in total have you been tested for HIV (including the test(s) you have told me about)?	<p>NUMBER <input type="text"/> <input type="text"/></p> <p>DON'T KNOW ..... 98</p>	
531	Have you ever been tested for HIV together as a couple?	<p>YES ..... 1</p> <p>NO ..... 2</p>	
532	<p>CHECK 521B AND 529:</p> <p>EITHER IS "POSITIVE" TEST RESULT <input type="checkbox"/></p> <p>RESPONSE OTHER THAN POSITIVE TEST RESULT/NO RESPONSE IN BOTH QUESTIONS <input type="checkbox"/></p>		→ 541
533	Are you taking Septrin or Co-trimoxazole daily?	<p>YES ..... 1</p> <p>NO ..... 2</p> <p>DON'T KNOW ..... 8</p>	→ 535
534	<p>From where did you get the supply of Septrin (Co-trimoxazole) you are taking now?</p> <p>PROBE TO IDENTIFY THE TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE.</p> <p>IF UNABLE TO DETERMINE IF HOSPITAL, HEALTH CENTER, VCT CENTER, OR CLINIC IS PUBLIC OR PRIVATE MEDICAL, WRITE THE NAME OF THE PLACE.</p> <p>_____</p> <p>(NAME OF PLACE)</p>	<p><b>PUBLIC SECTOR</b></p> <p>GOVERNMENT HOSPITAL ..... 11</p> <p>GOVT. HEALTH CENTRE/CLINIC 12</p> <p>GOVERNMENT DISPENSARY .. 13</p> <p>OTHER PUBLIC _____ 16 (SPECIFY)</p> <p><b>PRIVATE MEDICAL SECTOR</b></p> <p>MISSION/CHURCH HOSP./CLNC 21</p> <p>PRIVATE HOSPITAL/CLINIC ..... 23</p> <p>OTHER PRIVATE MEDICAL _____ 26 (SPECIFY)</p> <p>OTHER _____ 96 (SPECIFY)</p>	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
535	Are you taking ARVs, that is, antiretroviral medications daily?	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8	→ 539
536	From where did you get the ARVs you are taking the last time?  PROBE TO IDENTIFY THE TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE.  IF UNABLE TO DETERMINE IF HOSPITAL, HEALTH CENTER, VCT CENTER, OR CLINIC IS PUBLIC OR PRIVATE MEDICAL, WRITE THE NAME OF THE PLACE.  _____ (NAME OF PLACE)	<b>PUBLIC SECTOR</b> GOVERNMENT HOSPITAL ..... 11 GOVT. HEALTH CENTRE/CLINIC ..... 12 GOVERNMENT DISPENSARY .. 13 OTHER PUBLIC ..... 16 (SPECIFY) <b>PRIVATE MEDICAL SECTOR</b> MISSION/CHURCH HOSP./CLNC ..... 21 PRIVATE HOSPITAL/CLINIC ..... 23 OTHER PRIVATE MEDICAL ..... 26 (SPECIFY) OTHER ..... 96 (SPECIFY)	
537	The place where you get your ARVs, how many kilometers is it away from your home?  PROBE DISTANCE IN KM AND WRITE RESPONDENT'S BEST GUESS.	NUMBER OF KILOMETERS ..... <input type="text"/> <input type="text"/> <input type="text"/>  250 KILOMETERS OR MORE ... 995 DON'T KNOW ..... 998	
538	How long have you been on the ARVs?  RECORD THE ANSWER IN MONTHS IF LESS THAN ONE YEAR. RECORD '00' IF LESS THAN ONE MONTH.	MONTHS ..... 1 <input type="text"/> <input type="text"/> YEARS ..... 2 <input type="text"/> <input type="text"/>	
539	Have you ever been offered a test of your immunity level, i.e., a test that shows the CD4 count?	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8	→ 543
540	Did you ever have the CD4 test done?	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8	→ 543
541	Do you know of a place where people can go to get tested for the AIDS virus?	YES ..... 1 NO ..... 2	→ 543
542	Where is that?  PROBE TO IDENTIFY THE TYPE OF SOURCE(S) AND THE APPROPRIATE CODE.  IF UNABLE TO DETERMINE TYPE OF SOURCE, WRITE THE NAME OF THE PLACE.  _____ (NAME OF PLACE)  Any other place?	<b>PUBLIC SECTOR</b> GOVERNMENT HOSPITAL ..... A GOVT. HEALTH CENTER ..... B STAND-ALONE VCT CENTER ..... C FAMILY PLANNING CLINIC ..... D OUTREACH ..... E GOVT COMMUNITY BASED WORKER ..... F OTHER PUBLIC ..... G (SPECIFY) <b>PRIVATE/NGO MEDICAL SECTOR</b> PRIVATE HOSPITAL/CLINIC ..... H STAND-ALONE VCT CENTER ..... I PHARMACY/DRUG SHOP ..... J PRIVATE DOCTOR/NURSE/MIDWIFE K OUTREACH ..... L TASO ..... M AIDS INFORMATION CENTER ..... N OTHER PRIVATE/NGO MEDICAL ..... O (SPECIFY) OTHER ..... X (SPECIFY)	
543	Would you buy fresh vegetables from a shopkeeper or vendor if you knew that this person had the AIDS virus?	YES ..... 1 NO ..... 2 DK/NOT SURE/DEPENDS ..... 8	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
544	If a member of your family got infected with the AIDS virus, would you want it to remain a secret or not?	YES, REMAIN A SECRET ..... 1 NO ..... 2 DK/NOT SURE/DEPENDS ..... 8	
545	If a member of your family became sick with the virus that causes AIDS, would you be willing to care for her or him in your own household?	YES ..... 1 NO ..... 2 DK/NOT SURE/DEPENDS ..... 8	
546	In your opinion, if a female teacher has the AIDS virus but is not sick, should she be allowed to continue teaching in the school?	SHOULD BE ALLOWED ..... 1 SHOULD NOT BE ALLOWED ..... 2 DK/NOT SURE/DEPENDS ..... 8	
547	Do you personally know someone who has been denied health services in the last 12 months because he or she is suspected to have the AIDS virus or has the AIDS virus?	YES ..... 1 NO ..... 2 DK ANYONE WITH AIDS ..... 3	→ 552
548	Do you personally know someone who has been denied involvement in social events, religious services, or community events in the last 12 months because he or she is suspected to have the AIDS virus or has the AIDS virus?	YES ..... 1 NO ..... 2	
549	Do you personally know someone who has been verbally abused or teased in the last 12 months because he or she is suspected to have the AIDS virus or has the AIDS virus?	YES ..... 1 NO ..... 2	
550	CHECK 547, 548, 549:  NOT A SINGLE <input type="checkbox"/> "YES" ↓	AT LEAST ONE "YES" <input type="checkbox"/>	→ 552
551	Do you personally know someone who is suspected to have the AIDS virus or who has the AIDS virus?	YES ..... 1 NO ..... 2	
552	Do you agree or disagree with the following statement: People with the AIDS virus should be ashamed of themselves.	AGREE ..... 1 DISAGREE ..... 2 DON'T KNOW/NO OPINION ..... 8	
553	Do you agree or disagree with the following statement: People with the AIDS virus should be blamed for bringing the disease into the community.	AGREE ..... 1 DISAGREE ..... 2 DON'T KNOW/NO OPINION ..... 8	
554	Should children age 12-14 be taught about using a condom to avoid getting AIDS?	YES ..... 1 NO ..... 2 DK/NOT SURE/DEPENDS ..... 8	
555	Should children age 12-14 be taught to wait until they get married to have sexual intercourse in order to avoid getting AIDS?	YES ..... 1 NO ..... 2 DK/NOT SURE/DEPENDS ..... 8	
555A	CHECK 521B AND 529:  RESPONSE OTHER THAN POSITIVE TEST RESULT/NO RESPONSE IN BOTH QUESTIONS <input type="checkbox"/> ↓	EITHER IS "POSITIVE" TEST RESULT <input type="checkbox"/>	→ 605
556	Please tell me, now that there is treatment for AIDS, are you more, less or equally careful about avoiding HIV/AIDS?	MORE CAREFUL ..... 1 LESS CAREFUL ..... 2 EQUALLY CAREFUL ..... 3 DON'T KNOW ..... 8	
557	In your opinion, are the chances that you can get HIV high or low?	HIGH ..... 1 LOW ..... 2 DON'T KNOW ..... 8	
558	If you were to get HIV, from whom would you most likely get it?	SPOUSE ..... 1 BOY/GIRLFRIEND ..... 2 STRANGER ..... 3 COMMERCIAL SEX PARTNER ..... 4 DON'T KNOW ..... 8	

SECTION 6 - OTHER HEALTH ISSUES

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
601	<p>Now I would like to ask you some questions about any injections you have had in the last twelve months. Have you had an injection for any reason in the last twelve months?</p> <p>IF YES: How many injections did you have?</p> <p>IF NUMBER OF INJECTIONS IS GREATER THAN 90, OR DAILY FOR 3 MONTHS OR MORE, RECORD '90'.</p> <p>IF NON-NUMERIC ANSWER, PROBE TO GET AN ESTIMATE.</p>	<p>NUMBER OF INJECTIONS ... <input type="text"/> <input type="text"/></p> <p>NONE ..... 00</p>	→ 607
602	<p>Among these injections, how many were administered by a doctor, a nurse, a pharmacist, a dentist, or other health worker?</p> <p>IF NUMBER OF INJECTIONS IS GREATER THAN 90, OR DAILY FOR 3 MONTHS OR MORE, RECORD '90'.</p> <p>IF NON-NUMERIC ANSWER, PROBE TO GET AN ESTIMATE.</p>	<p>NUMBER OF INJECTIONS ... <input type="text"/> <input type="text"/></p> <p>NONE ..... 00</p>	→ 605
603	<p>The last time you had an injection given to you by a trained health worker, where did you go to get the injection?</p> <p>PROBE TO IDENTIFY THE TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE.</p> <p>IF UNABLE TO DETERMINE IF HOSPITAL, HEALTH CENTER OR CLINIC IS PUBLIC OR PRIVATE MEDICAL, WRITE THE NAME OF THE PLACE.</p> <p>_____</p> <p>(NAME OF PLACE)</p>	<p><b>PUBLIC SECTOR</b></p> <p>GOVERNMENT HOSPITAL ..... 11</p> <p>GOVT. HEALTH CENTER ..... 12</p> <p>OTHER PUBLIC _____ 16</p> <p>(SPECIFY)</p> <p><b>PRIVATE MEDICAL SECTOR</b></p> <p>PRIVATE HOSPITAL/CLINIC/</p> <p>PRIVATE DOCTOR ..... 21</p> <p>DENTAL CLINIC/OFFICE ..... 22</p> <p>PHARMACY/DRUG SHOP ..... 23</p> <p>OFFICE OR HOME OF NURSE/</p> <p>HEALTH WORKER ..... 24</p> <p>OTHER PRIVATE</p> <p>MEDICAL _____ 26</p> <p>(SPECIFY)</p> <p><b>OTHER PLACE</b></p> <p>AT HOME ..... 31</p> <p>OTHER _____ 96</p> <p>(SPECIFY)</p>	
604	<p>Did the person who gave you that injection take the syringe and needle from a new, unopened package?</p>	<p>YES ..... 1</p> <p>NO ..... 2</p> <p>DK ..... 8</p>	
605	<p>In addition to trained health workers, sometimes other people also give injections. Did you ever get an injection from an untrained person?</p>	<p>YES ..... 1</p> <p>NO ..... 2</p> <p>DK ..... 8</p>	→ 607
606	<p>Where did you last get such an injection?</p>	<p>DRUG SHOP ..... 1</p> <p>SHRINE/TRADITIONAL HEALERS ... 2</p> <p>HOME ..... 3</p> <p>OTHER ..... 4</p> <p>DON'T KNOW ..... 8</p>	
607	<p>MALE <input type="checkbox"/></p> <p style="text-align: center;">↓</p> <p>FEMALE <input type="checkbox"/></p>		→ 612
608	<p>Now I would like to ask you a few questions about male circumcision, that is, the procedure where the foreskin is removed from the penis in males. Some men are circumcised. Are you circumcised?</p>	<p>YES ..... 1</p> <p>NO ..... 2</p>	→ 611
609	<p>How old were you when you were circumcised?</p> <p>RECORD '00' IF AGE AT CIRCUMCISION LESS THAN 1 YEAR</p>	<p>AGE IN YEARS ..... <input type="text"/> <input type="text"/></p> <p>DON'T KNOW ..... 98</p>	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
610	Where were you circumcised?	HEALTH CARE FACILITY ..... 1 AT HOME ..... 2 ELSEWHERE ..... 6 (SPECIFY) DON'T KNOW ..... 8	→ 613
611	Would you like to be circumcised?	YES ..... 1 NO ..... 2 NOT SURE/DON'T KNOW ..... 8	→ 613
612	Male circumcision is the procedure where the foreskin is removed from the penis in males. Would you recommend your male relatives/friends who are not circumcised to go for male circumcision?	YES ..... 1 NO ..... 2 NOT SURE/DON'T KNOW ..... 8	
613	Would you recommend your male relatives/friends who are not circumcised to go for male circumcision?		
614	CHECK 501: <input type="checkbox"/> HEARD ABOUT AIDS Apart from AIDS, have you heard about other infections that can be transmitted through sexual contact? <input type="checkbox"/> NOT HEARD ABOUT AIDS Have you heard about infections that can be transmitted through sexual contact?	YES ..... 1 NO ..... 2	
615	CHECK 421: HAS HAD SEXUAL INTERCOURSE <input type="checkbox"/> HAS NOT HAD SEXUAL INTERCOURSE <input type="checkbox"/>		→ 623
616	CHECK 614: HEARD ABOUT OTHER SEXUALLY TRANSMITTED INFECTIONS? YES <input type="checkbox"/> NO <input type="checkbox"/>		→ 618
617	Now I would like to ask you some questions about your health in the last 12 months. During the last 12 months, have you had a disease which you got through sexual contact?	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8	
618	<b>MALE</b> Sometimes men experience an abnormal discharge from their penis. During the last 12 months, have you had an abnormal discharge from your penis? <b>FEMALE</b> Sometimes women experience a bad smelling abnormal genital discharge. During the last 12 months, have you had a bad smelling abnormal genital discharge?	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8	
619	Sometimes men have a sore or ulcer on or near their penis. During the last 12 months, have you had an ulcer or sore on or near your penis? Sometimes women have a genital sore or ulcer. During the last 12 months, have you had a genital sore or ulcer?	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8	
620	CHECK 617, 618, AND 619: HAS HAD AN INFECTION (ANY 'YES') <input type="checkbox"/> HAS NOT HAD AN INFECTION OR DOES NOT KNOW <input type="checkbox"/>		→ 623
621	The last time you had (PROBLEM FROM 614/615/616), did you seek any kind of advice or treatment?	YES ..... 1 NO ..... 2	→ 623



NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
622	<p>Where did you go?</p> <p>Any other place?</p> <p>PROBE TO IDENTIFY EACH TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE(S).</p> <p>IF UNABLE TO DETERMINE IF HOSPITAL, HEALTH CENTER VCT CENTER, OR CLINIC IS PUBLIC OR PRIVATE MEDICAL, WRITE THE NAME OF THE PLACE.</p> <p>_____</p> <p>(NAME OF PLACE(S))</p>	<p><b>PUBLIC SECTOR</b></p> <p>GOVERNMENT HOSPITAL ..... A</p> <p>GOVT. HEALTH CENTER ..... B</p> <p>STAND-ALONE VCT CENTER ..... C</p> <p>FAMILY PLANNING CLINIC ..... D</p> <p>OUTREACH ..... E</p> <p>GOVT. COMMUNITY BASED WORKER ..... F</p> <p>OTHER PUBLIC _____ G</p> <p>(SPECIFY)</p> <p>PRIVATE HOSPITAL/CLINIC ..... H</p> <p>STAND-ALONE VCT CENTER ..... I</p> <p>PHARMACY/DRUG SHOP ..... J</p> <p>PRIVATE DOCTOR/NURSE/MIDWIFE ..... K</p> <p>OUTREACH ..... L</p> <p>TASO ..... M</p> <p>AIDS INFORMATION CENTER ..... N</p> <p>OTHER PRIVATE/NGO MEDICAL _____ O</p> <p>(SPECIFY)</p> <p>SHOP ..... P</p> <p>OTHER _____ X</p> <p>(SPECIFY)</p>	
623	<p>Husbands and wives do not always agree on everything. If a wife knows her husband has a disease that she can get during sexual intercourse, is she justified in refusing to have sex with him?</p>	<p>YES ..... 1</p> <p>NO ..... 2</p> <p>DON'T KNOW ..... 8</p>	
624	<p>If a wife knows her husband has a disease that she can get during sexual intercourse, is she justified in asking that they use a condom when they have sex?</p>	<p>YES ..... 1</p> <p>NO ..... 2</p> <p>DON'T KNOW ..... 8</p>	
625	<p>Is a wife justified in refusing to have sex with her husband when she is tired or not in the mood?</p>	<p>YES ..... 1</p> <p>NO ..... 2</p> <p>DON'T KNOW ..... 8</p>	
626	<p>Is a wife justified in refusing to have sex with her husband when she knows her husband has sex with women other than his wife or wives?</p>	<p>YES ..... 1</p> <p>NO ..... 2</p> <p>DON'T KNOW ..... 8</p>	
627	<p>CHECK 401:</p> <p>FEMALE, CURRENTLY MARRIED/ LIVING WITH A PARTNER <input type="checkbox"/></p> <p>FEMALE, NOT IN UNION <input type="checkbox"/></p> <p>MALE <input type="checkbox"/></p>	<p>→ 630</p> <p>→ 630</p>	
628	<p>Can you say no to your husband/partner if you do not want to have sexual intercourse?</p>	<p>YES ..... 1</p> <p>NO ..... 2</p> <p>DEPENDS/UNSURE ..... 8</p>	
629	<p>Could you ask your husband/partner to use a condom if you wanted him to?</p>	<p>YES ..... 1</p> <p>NO ..... 2</p> <p>DEPENDS/UNSURE ..... 8</p>	
630	<p>RECORD THE TIME.</p>	<p>HOUR ..... <input type="text"/> <input type="text"/></p> <p>MINUTES ..... <input type="text"/> <input type="text"/></p> <p>MORNING ..... 1</p> <p>AFTERNOON ..... 2</p> <p>EVENING/NIGHT ..... 3</p>	









104	REQUEST CONSENT TO TAKE A BLOOD SAMPLE. NONEMANCIPATED YOUTH SHOULD BE ASKED FOR CONSENT ONLY IF THE PARENT OR ADULT RESPONSIBLE FOR YOUTH HAS GIVEN PERMISSION OR CONSENTED.			
	<b>FOR NONEMANCIPATED YOUTH</b>		<b>SURVEY RESPONDENTS</b>	
	ASK AND RECORD CONSENT OF <u>PARENT OR OTHER ADULT</u> RESPONSIBLE FOR YOUTH.		ASK AND RECORD CONSENT FROM ALL SURVEY RESPONDENTS EXCEPT NONEMANCIPATED YOUTH FOR WHOM THE PARENT OR OTHER ADULT RESPONSIBLE FOR THE YOUTH REFUSED CONSENT.	
105	Do you agree to have a sample of (NAME'S) blood taken for these tests?	AGREED ..... 1 REFUSED ..... 2 (RECORD ON  ) COVER AND <b>END</b> ) _____ (SIGN)	Do you agree to have a sample of blood taken for these tests?	AGREE ..... 1 REFUSE ..... 2 (RECORD ON  ) COVER AND <b>END</b> ) _____ (SIGN)
106	IF CONSENT GRANTED, GO ON TO ASK CONSENT SEPARATELY FOR THE SYPHILIS AND HIV TESTS. IF REFUSED, GO TO NEXT ELIGIBLE PERSON IN HOUSEHOLD. IF NO MORE ELIGIBLE PERSONS, GO TO NEXT HOUSEHOLD.			
	<b>NONEMANCIPATED YOUTH</b>		<b>SURVEY RESPONDENTS</b>	
	ASK AND RECORD CONSENT OF <u>PARENT OR OTHER ADULT</u> RESPONSIBLE FOR YOUTH.		ASK AND RECORD CONSENT FROM ALL SURVEY RESPONDENTS EXCEPT NONEMANCIPATED YOUTH FOR WHOM THE PARENT OR OTHER ADULT RESPONSIBLE FOR THE YOUTH REFUSED CONSENT.	
107	<b>SYPHILIS</b>			
	Do you agree for (NAME'S) blood to be tested for <b>sypphilis</b> ?	AGREED ..... 1 → REFUSED ..... 2 _____ (SIGN) ↓	Do you agree to have your blood tested for <b>sypphilis</b> and the results given to you?	AGREED, WANTS RESULT. ... 1 AGREED, DOES NOT WANT RESULT ..... 2 REFUSED ..... 3 _____ (SIGN)
108	<b>HIV</b>			
	Do you agree for (NAME'S) blood to be tested for <b>HIV</b> ?	AGREED ..... 1 → REFUSED ..... 2 _____ (SIGN) ↓	Do you agree to have your blood tested for <b>HIV</b> and the results given to you?	AGREED, WANTS RESULT. ... 1 AGREED, DOES NOT WANT RESULT ..... 2 REFUSED ..... 3 _____ (SIGN)
109	<b>STORED BLOOD</b>			
	May we store and use any blood from (NAME) that remains for future testing at the central laboratory?	AGREED ..... 1 → REFUSED ..... 2 _____ (SIGN) ↓	May we store and use any blood that remains for future testing at the central laboratory?	AGREED ..... 1 REFUSED ..... 2 _____ (SIGN)
110	CHECK 107, 108 AND 109. INDICATE IF RESPONDENT AGREED TO SYPHILIS TEST OR HIV TEST OR TO STORAGE OF BLOOD.			
	AGREED TO SYPHILIS OR HIV TEST OR TO STORAGE OF BLOOD <input type="checkbox"/>		REFUSED SYPHILIS AND HIV TEST AND STORAGE OF BLOOD <input type="checkbox"/>	
	(THANK THE RESPONDENT AND GO TO NEXT PERSON ELIGIBLE FOR TESTING. IF NO MORE ELIGIBLE PERSON, <b>END</b> AND GO TO NEXT HOUSEHOLD)			
111	CHECK 108 AND INDICATE IF RESPONDENT AGREED TO HIV TEST AND AGREED TO RECEIVING RESULTS OF HIV TEST			
	AGREED TO HIV TEST AND WANTS HIV TEST RESULTS <input type="checkbox"/>		DOES NOT WANT HIV RESULTS OR REFUSED HIV TEST (SKIP TO 201) <input type="checkbox"/>	
112	COUNSELOR SHOULD PERFORM PRE-RESULTS COUNSELING. COUNSELOR SHOULD VERIFY AT THE END OF THE SESSION THAT THE PARTICIPANT WANTS THE HIV TESTS DONE AND WANTS TO BE GIVEN THE RESULTS.			AGREED, WANTS RESULT. ... 1 AGREED, DOES NOT WANT RESULT ..... 2 REFUSED ..... 3 _____ (SIGN)

**2. SPECIMEN COLLECTION AND FIELD TEST RESULT RECORD**

201	<p>CHECK THE CONSENT RECORD AND DETERMINE WHETHER OR NOT THE RESPONDENT HAS AGREED TO A SPECIFIC TEST. IF YOU WILL NOT BE CONDUCTING THE TEST AND/OR COLLECTING THE SAMPLE, RECORD REASON IN COLUMN (1)</p> <p>CHECK IF RESPONDENT PREFERS A VENOUS BLOOD DRAW OR FINGER PRICK AND PREPARE ALL OF THE MATERIALS THAT YOU WILL NEED TO COLLECT THE SAMPLES AND TO CONDUCT THE TESTS .</p> <p>ASSIGN A UNIQUE BAR CODE NUMBER TO THE PARTICIPANT. PASTE A LABEL WITH THAT NUMBER ON COVER PAGE.</p> <p>PLACE LABELS WITH THE RESPONDENT'S BAR CODE ON BLOOD TUBES, FILTER PAPER CARD, AND FIELD FORMS.</p> <p>COLLECT SAMPLES AND PERFORM HOME-BASED TESTS FOR WHICH THE RESPONDENT HAS AGREED.</p> <p>RECORD OUTCOME OF THE HOME-BASED TESTS IN COLUMN (2). IF YOU CANNOT CONDUCT OR COLLECT A SAMPLE, RECORD CODE 6 (OTHER) IN COLUMN (1) AND NOTE THE REASON.</p>		
		(1)	(2)
203	<p><b>TYPE OF BLOOD COLLECTED</b></p> <p>RECORD TYPE OF BLOOD COLLECTED. IF VENOUS, RECORD TUBES OBTAINED. IF NOT OBTAINED, SPECIFY REASON.</p>	<p>VENOUS ..... 1</p> <p>CAPILLARY ..... 2</p> <p>↓</p> <p>OTHER _____ 6</p> <p align="center">(SPECIFY)</p>	<p><b>EDTA:</b> YES ... 1 NO ... 2</p> <p><b>SST:</b> YES ... 1 NO ... 2</p> <p><b>CD4:</b> YES ... 1 NO ... 2</p> <p>_____</p> <p align="center">(SPECIFY)</p>
204	<p>CHECK 107 AND INDICATE IF RESPONDENT AGREED TO SYPHILIS TEST</p> <p>AGREED TO SYPHILIS TEST <input type="checkbox"/></p> <p>REFUSED SYPHILIS TEST <input type="checkbox"/></p> <p align="right">(SKIP TO 207) ←</p>		
205	<p><b>SYPHILIS BIOLINE TEST</b></p>	<p>TESTED, WANTS RESULT ... 1</p> <p>TESTED, DID NOT WANT RESULT ..... 2</p> <p>OTHER _____ 6</p> <p align="center">(SPECIFY)</p>	<p align="center"><b>BIOLINE</b></p> <p>POSITIVE ..... 1</p> <p>NEGATIVE ..... 2</p> <p align="right">(SKIP TO 207) ←</p>
206	<p><b>SYPHILIS RPR TEST</b></p> <p>THIS TEST IS CONDUCTED LATER ONLY FOR PARTICIPANTS WITH A POSITIVE BIOLINE RESULT WHO AGREED TO A VENOUS BLOOD DRAW.</p>	<p>TESTED, WANTS RESULT ... 1</p> <p>TESTED, DID NOT WANT RESULT ..... 2</p> <p>REFUSED ..... 3</p> <p>DID NOT PROVIDE VENOUS BLOOD SAMPLE ..... 4</p> <p>OTHER _____ 6</p> <p align="center">(SPECIFY)</p>	<p align="center"><b>RPR</b></p> <p>REACTIVE ..... 1</p> <p>NONREACTIVE ..... 2</p>
207	<p>CHECK 108 AND INDICATE IF RESPONDENT AGREED TO HIV TEST</p> <p>AGREED TO HIV TEST <input type="checkbox"/></p> <p>REFUSED HIV TEST <input type="checkbox"/></p> <p align="right">(SKIP TO 213) ←</p>		
208	<p><b>HIV DETERMINE TEST</b></p>	<p>TESTED, WANTS RESULT ... 1</p> <p>TESTED, DID NOT WANT RESULT ..... 2</p> <p>OTHER _____ 6</p> <p align="center">(SPECIFY)</p>	<p align="center"><b>DETERMINE</b></p> <p>POSITIVE ..... 1</p> <p>NEGATIVE ..... 2</p>
209	<p>POSITIVE DETERMINE TEST RESULT <input type="checkbox"/></p> <p>NEGATIVE DETERMINE TEST <input type="checkbox"/></p> <p align="right">(SKIP TO 213) ←</p>		
210	<p><b>HIV STATPAK TEST</b></p>	<p>TESTED ..... 1</p> <p>OTHER _____ 6</p> <p align="center">(SPECIFY)</p>	<p align="center"><b>STATPAK</b></p> <p>POSITIVE ..... 1</p> <p>NEGATIVE ..... 2</p>
211	<p>CHECK 210 AND INDICATE STATPAK TEST RESULT</p> <p>NEGATIVE STATPAK RESULT <input type="checkbox"/></p> <p>POSITIVE STATPAK TEST RESULT <input type="checkbox"/></p> <p align="right">(SKIP TO 213) ←</p>		
212	<p><b>HIV UNIGOLD TEST</b></p>	<p>TESTED ..... 1</p> <p>OTHER _____ 6</p> <p align="center">(SPECIFY)</p>	<p align="center"><b>UNIGOLD</b></p> <p>POSITIVE ..... 1</p> <p>NEGATIVE ..... 2</p>
213	<p><b>DBS ON FILTER PAPER</b></p>	<p>COLLECTED ..... 1</p> <p>REFUSED ..... 2</p> <p>OTHER _____ 6</p> <p align="center">(SPECIFY)</p>	
214	<p><b>CD4 TEST</b></p> <p>ONLY FOR RESPONDENTS WHO TEST HIV POSITIVE. RECORD AGREEMENT AFTER POST-TEST COUNSELING.</p>	<p>AGREED ..... 1</p> <p>REFUSED ..... 2</p> <p>OTHER _____ 6</p> <p align="center">(SPECIFY)</p>	

**3. SYPHILIS TREATMENT AND REFERRAL RECORD**

301	CHECK 205	POSITIVE <input type="checkbox"/>	NEGATIVE OR OTHER <input type="checkbox"/> SKIP TO 401 (INFORM THE RESPONDENT OF NEGATIVE RESULT, OFFER STI BROCHURE, AND ANSWER ANY QUESTIONS).
302	CHECK 203 AND INDICATE TYPE OF BLOOD COLLECTED.	CAPILLARY <input type="checkbox"/>	VENOUS <input type="checkbox"/> (SKIP TO 304)
303	Your syphilis test result was positive. As I said, the test can only show that you have ever had syphilis. To know if you may have an active case, you must have another test. It is important that you consult a health facility as soon as possible to have that test done. PROVIDE REFERRAL TO HEALTH FACILITY. THEN GO ON TO 401.		
304	Your syphilis test result was positive. As I said, the test can only show that you have ever had syphilis. To know if you may have an active case, we must do another test later today elsewhere using special equipment. For this test, we will use blood from one of the blood tubes you already gave.  I [One of my colleagues, who is a nurse] will return tomorrow to give you the result of the test.  If the test shows that you may have an active syphilis, we will offer you treatment, either a penicillin injection or antibiotic tablets.  RECORD APPOINTMENT TIME _____		
305	RETURN TO THE HOUSEHOLD AFTER THE RPR TEST IS COMPLETE. BEFORE RECORDING THE RESULTS HERE AND IN 206 CHECK THAT THE BAR CODE ON THE COVER MATCHES THE BAR CODE IN THE LABORATORY FORM.		REACTIVE <input type="checkbox"/>
		NON-REACTIVE <input type="checkbox"/> (INFORM THE RESPONDENT OF THE NEGATIVE RESULT, OFFER STI BROCHURE, ANSWER ANY QUESTIONS, AND GO TO <b>322</b> TO OFFER PARTNER REFERRAL)	
306	We have completed the second syphilis test. Your result from this test shows that you may have active syphilis, which can cause serious health problems if it is not treated. The treatment is either a penicillin injection or antibiotic tablets.  We can provide you with treatment immediately here. However, if you would prefer, we can provide you a referral to receive treatment at another location in the community today or at a health facility. The decision to be treated or to receive a referral is up to you. Do you want to receive treatment now in the house?  <b>IF NO:</b> Would you like to meet me (my colleague) at another site to get treatment or would you prefer to go to a health facility for treatment?  IF AGREES TO IMMEDIATE TREATMENT, GO TO 307 AND ASK ALL APPROPRIATE SCREENING QUESTIONS BEFORE ADMINISTERING INJECTION OR PROVIDING ANTIBIOTICS. IF PARTICIPANT WANTS TREATMENT IN A LOCATION OTHER THAN THE HOME, DISCUSS THE SITE AND TIME WHERE YOU (A COLLEAGUE) WILL BE AVAILABLE TO PROVIDE TREATMENT. IF TREATMENT IS PROVIDED AT ANOTHER LOCATION, THE TREATMENT SCREENING QUESTIONS MUST BE COMPLETED BEFORE TREATMENT IS PROVIDED. IF WANTS REFERRAL, COMPLETE REFERRAL CARD.	YES, NOW IN HOME ..... 1 YES, ANOTHER LOCATION ... 2  NO, WANTS REFERRAL TO HEALTH FACILITY ..... 3 (PROVIDE REFERRAL TO FACILITY FOR RESPONDENT, GO TO 322 TO OFFER PARTNER REFERRAL)  DOES NOT WANT TREATMENT/REFERRAL ... 4  _____ (SIGN) (GO TO 401)	
307	<b>ADVISE RESPONDENT OF POSSIBILITY OF ALLERGIC REACTION TO PENICILLIN INJECTION AND SCREEN FOR PRIOR REACTIONS.</b>  For most people, the treatment is an injection of penicillin. However, in very rare instances, an individual may experience an allergic reaction to a penicillin injection, e.g., an itchy skin rash and/or swelling of the lips, mouth or face. Sometimes, in very rare instances, the person may have shortness of breath or may collapse.  If you have not had this type of reaction before, it is unlikely that you will experience it today. However, just to be sure, I need to ask you some questions about your experience with penicillin before I give you the treatment.  If you receive an injection, our team will stay in the area about two hours after the injection and you can contact me immediately or any member of my team working in your village/locality for any problem following your injection with penicillin.		
308	To your knowledge, have you ever been given a penicillin injection before?	YES ..... 1 NO ..... 2 → 310	
309	Have you ever had any reaction to penicillin?	YES ..... 1 → 315 NO ..... 2	
310	Have you had any other type of injection before?	YES ..... 1 NO ..... 2 → 312	
311	Did you have any reaction at any time when you had an injection?	YES ..... 1 → 315 NO ..... 2	



**4. HIV TEST RESULT NOTIFICATION**

401	CHECK 208, 209, 210, 211 AND 212 AND RECORD RESULT OF HIV TEST.  <div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <p align="center">POSITIVE (POSITIVE DETERMINE HIV TEST (208) AND EITHER STATPAK (210) OR UNIGOLD (212) IS POSITIVE)</p> <p align="center">↓ <input style="width: 20px; height: 15px;" type="checkbox"/></p> </div> <div style="width: 45%;"> <p align="center">NEGATIVE (NEGATIVE DETERMINE, OR POSITIVE DETERMINE AND NEGATIVE STATPAK OR UNIGOLD)</p> <p align="center">↓ <input style="width: 20px; height: 15px;" type="checkbox"/></p> </div> </div> <p align="center">(INFORM THE RESPONDENT OF NEGATIVE RESULT, AND CONDUCT POST-TEST COUNSELING. <b>END</b>)</p>
402	INFORM SURVEY PARTICIPANT ABOUT POSITIVE HIV STATUS AND PROVIDE POST-TEST COUNSELING. AS PART OF POST-TEST COUNSELING, PROVIDE A REFERRAL TO THE NEAREST HEALTH FACILITY WHERE HIV CARE AND SUPPORT SERVICES ARE AVAILABLE.
403	CHECK 203 AND INDICATE TYPE OF BLOOD COLLECTED.  <div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <p align="center">VENOUS</p> <p align="center">↓ <input style="width: 20px; height: 15px;" type="checkbox"/></p> </div> <div style="width: 45%;"> <p align="center">CAPILLARY</p> <p align="center">↓ <input style="width: 20px; height: 15px;" type="checkbox"/></p> <p align="center">END ←</p> </div> </div>
404	<p align="center"><b>CD4 TEST</b></p> <div style="display: flex;"> <div style="width: 60%; padding-right: 10px;"> <p>As my colleague discussed earlier, we would like to use one of the other blood tubes we collected from you to do another test. This test cannot be done in the home. We need to do it at a laboratory. The testing is to see how many CD4 cells you have. These cells help a person to stay healthy. We will send the blood for this test to a Central Laboratory at UVRI in Entebbe. We will give you a unique code with which they can get the result of your CD4 test in a health facility nearby [MENTION NAMES]. The clinic staff there will advise you on the need for treatment. The result will be ready in about 6 weeks. The results will remain available in the health facility for a period of 6 months. If the result is not picked in that period, you will have to have the tests again in a health facility providing CD4 testing services.</p> </div> <div style="width: 35%; border-left: 1px solid black; padding-left: 10px;"> <p>AGREED, WANTS RESULT . . . 1</p> <p>AGREED, DOES NOT WANT RESULT . . . . . 2</p> <p>REFUSED . . . . . 3</p> <p align="center">_____</p> <p align="center">(SIGN)</p> <p>(RECORD OUTCOME OF REQUEST FOR CONSENT FOR CD4 TEST IN 214).</p> </div> </div>

**501 FIELD TESTING OBSERVATIONS**

TO BE FILLED IN AFTER COMPLETING TESTING AND TREATMENT

COMMENTS ABOUT RESPONDENT:

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COMMENTS ON TESTING PROCESS:

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ANY OTHER COMMENTS:

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**SUPERVISOR'S OBSERVATIONS**

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NAME OF THE SUPERVISOR: \_\_\_\_\_ DATE: \_\_\_\_\_







**1. REQUEST FOR CONSENT TO TESTING**

101 LABORATORY TECHNICIAN: IDENTIFY AND REQUEST CONSENT FROM PARENT OR OTHER ADULT RESPONSIBLE FOR CHILD.

102 HIV is one of the leading causes of death in this country. HIV can be found in blood. We want to see how many children in Uganda have HIV. We would also like to store some of the blood that remains and test for other diseases in the future. Your household has been selected purely by chance from your community. As part of this survey we ask parents to consent for us to take a little blood from their children under five years. We will be testing more than 10,000 children from all over the country. You can choose to let your child give blood or not. It is your choice. If you choose not to let your child give blood, there is no problem. If you agree, we would like to take a few drops of blood from your child's finger (heel).

We use only new sterile lancets to collect blood. The tests are simple, fast and accurate. We can do them here in the home. They take about 30 minutes. We can tell you your child's results right away. We will offer to counsel you before and after the test. That way you know what the test and the result means. If your child is less than 18 months' old and if the test is positive, then we will send the blood for further testing to a laboratory in Entebbe. We will give you a card with a unique code which you can take to a health facility nearby [MENTION NAMES] to find out if your child has HIV. The health providers there will advise you on the need for treatment. The result will be ready in about 6 weeks. The results will remain available in the health facility for 6 months. If the result is not picked in that period, your child who tests HIV positive will have to have the tests again in a health facility providing these services. If you agree, we will keep the leftover blood. We may use it for later testing related to health or diseases in a central laboratory. Because we do not keep your child's name, we cannot tell you about any results from future testing. Such testing will help the Government to improve health in Uganda. You can join this study even if you don't want us to keep your child's blood.

You can decide to let your child give blood for the tests or not to give blood. You can decide if you want all, only some or none of the tests done in the home. You can also decide for each test if you want the results given to you. The pinprick may hurt your child a little. If there is bleeding or swelling at the site, please contact our study staff or your health worker. All information you share will be kept secret. We will put a study number, not your child's name, on the blood samples. That way we can make sure nobody can tell to whom the blood belongs. We do not expect major risks from participating in this survey.

1. Your child's name or identifiable information will NOT be used in any survey materials.
2. Only research team members will have access to your child's data and specimens.
3. Skilled interviewers will be trained to protect your privacy.

You may not benefit directly from being part of this survey. As mentioned earlier, we will offer free treatment or advise you what to do. We will provide counseling and results for HIV to all who request for them in the household. We shall refer children who are HIV positive to health facilities for medical care services. We do not offer money for participating in this study.

Everything we talk about will be kept secret to the extent allowed by the law. Your child's test results will be kept secret to the extent allowed by the law. To protect your privacy, we will use a code number to identify your child and all specimens. We will keep these records and specimens locked. Only special staff will be able to look at the records or use the specimens. Your child's name or any other facts that might point to your household will not appear when we present this survey or publish its results.

We would like to answer all your questions. If you have any questions now, please ask us. If you have any questions in the future, there are other persons that you can contact. Ministry of Health:  
 Dr. Alex Opio: 0414-256683  
 Dr. Joshua Musinguzi: 0414-256683  
 Dr. Wilford Kirungi: 0414-256683  
 If you have any concerns about this survey, contact Mr. Tom Lutalo Chairman UVRI Science and Ethics Committee 0414-320272.

**HIV TEST**

103	Would you like to have your child take part in this survey where a sample of (NAME'S) blood is taken for the HIV tests?	AGREED ..... 1 REFUSED ..... 2 (THANK THE PARENT/GUARDIAN AND GO TO NEXT CHILD ELIGIBLE FOR TESTING. IF NO MORE ELIGIBLE CHILDREN, GO TO NEXT HOUSEHOLD). _____ (SIGN)
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**STORED BLOOD**

104	May we store and use any blood that remains for future testing at the central laboratory?	AGREES ..... 1 REFUSES ..... 2 _____ (SIGN)
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105	CHECK 103 AND 104. INDICATE IF RESPONDENT AGREED TO HIV TEST OR TO STORAGE OF BLOOD. <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;">                     AGREED TO HIV TEST OR TO STORAGE OF BLOOD <input type="checkbox"/> </div> <div style="text-align: center;">                     REFUSED HIV TEST AND STORAGE OF BLOOD (THANK THE PARENT/GUARDIAN AND GO TO NEXT CHILD ELIGIBLE FOR TESTING. IF NO MORE ELIGIBLE CHILDREN, GO TO NEXT HOUSEHOLD). <input type="checkbox"/> </div> </div> _____ (SIGN)
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106	CHECK 103 AND INDICATE IF PARENT/GUARDIAN AGREED TO HIV TEST FOR THIS CHILD. <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;">                     AGREED TO HIV TEST <input type="checkbox"/> </div> <div style="text-align: center;">                     REFUSED HIV TEST (SKIP TO 201) <input type="checkbox"/> </div> </div>
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107	COUNSELOR SHOULD PERFORM PRE-RESULTS COUNSELING. COUNSELOR SHOULD VERIFY AT THE END OF THE SESSION THAT THE PARENT/CAREGIVER WANTS THE CHILD TO BE TESTED FOR HIV.	AGREES ..... 1 REFUSES ..... 2 _____ (SIGN)
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**2. SPECIMEN COLLECTION AND FIELD TEST RESULT RECORD**

201	CHECK THE CONSENT RECORD AND DETERMINE WHETHER OR NOT THE PARENT/GUARDIAN HAS AGREED TO THE HIV TEST. IF YOU CANNOT COLLECT A SAMPLE OR CONDUCT A TEST, CIRCLE CODE 6 (OTHER) IN COLUMN (1) IN Q.204 AND NOTE REASON. PREPARE ALL OF THE MATERIALS THAT YOU WILL NEED TO CONDUCT THE TESTS AND TO COLLECT THE DBS SAMPLE. ASSIGN A UNIQUE BAR CODE NUMBER TO THE CHILD. PASTE A LABEL WITH THAT NUMBER ON THE COVER PAGE. PLACE LABELS WITH THE CHILD'S BAR CODE ON FILTER PAPER CARD, AND OTHER TEST DEVICES AS APPROPRIATE. COLLECT SAMPLES AND PERFORM HOME-BASED HIV TESTS. RECORD OUTCOME OF THE HIV TESTS IN COLUMN (2).		(1)	(2)						
202	What is [NAME]'s month and year of birth?  PASTE BAR CODE LABEL ON COVER PAGE.	MONTH <table border="1" style="display:inline-table; vertical-align:middle;"><tr><td style="width:20px; height:20px;"></td><td style="width:20px; height:20px;"></td></tr></table> YEAR <table border="1" style="display:inline-table; vertical-align:middle;"><tr><td style="width:20px; height:20px;"></td><td style="width:20px; height:20px;"></td><td style="width:20px; height:20px;"></td><td style="width:20px; height:20px;"></td></tr></table>								
203	CHECK 106 AND INDICATE WHETHER PARENT/GUARDIAN AGREED TO HIV RAPID TEST AGREED TO HIV RAPID TEST <input type="checkbox"/> REFUSED HIV RAPID TEST <input type="checkbox"/> → 208									
204	<b>HIV DETERMINE TEST</b>	TESTED, WANTS RESULT ..... 1 TESTED, DID NOT WANT ..... 2 RESULTS ..... 3 REFUSED ..... 4 (SKIP TO 208) ← OTHER _____ 6 (SPECIFY)	<b>DETERMINE</b> POSITIVE ..... 1 NEGATIVE ..... 2							
205	POSITIVE DETERMINE TEST AND CHILD IS ≥18 MONTHS <input type="checkbox"/> NEGATIVE DETERMINE TEST REGARDLESS OF AGE <input type="checkbox"/> → 208 POSITIVE DETERMINE TEST AND CHILD <18 MONTHS <input type="checkbox"/> → 208									
206	<b>HIV STATPAK TEST</b>	TESTED ..... 1 OTHER _____ 6 (SPECIFY)	<b>STATPAK</b> POSITIVE ..... 1 NEGATIVE ..... 2 (SKIP TO 208) ←							
207	<b>HIV UNIGOLD TEST</b>	TESTED ..... 1 OTHER _____ 6 (SPECIFY)	<b>UNIGOLD</b> POSITIVE ..... 1 NEGATIVE ..... 2							
208	CHECK 104 AND INDICATE WHETHER PARENT/GUARDIAN AGREED TO STORAGE OF BLOOD AGREED TO STORAGE OF BLOOD <input type="checkbox"/> REFUSED STORAGE OF BLOOD <input type="checkbox"/> → 301									
209	<b>DBS ON FILTER PAPER</b>	COLLECTED ..... 1 REFUSED ..... 3 (SKIP TO 301) ← OTHER _____ 6 (SPECIFY)								
210	<b>HIV PCR [ONLY FOR CHILDREN &lt;18 MONTHS WITH POSITIVE DETERMINE TEST]</b> RECORD AGREEMENT AFTER POST-TEST COUNSELING SESSION.	AGREED ..... 1 REFUSED ..... 3 OTHER _____ 6 (SPECIFY)								

**3. HIV TEST RESULT NOTIFICATION**

301	CHECK 204, 205, 206 AND 207 AND RECORD RESULT OF HIV TEST.  POSITIVE DETERMINE HIV TEST (204) AND EITHER STATPAK (206) OR UNIGOLD (207) IS POSITIVE (POSITIVE HIV TEST AND CHILD IS ≥18 MONTHS) <input type="checkbox"/>		POSITIVE DETERMINE TEST CHILD <18 MONTHS <input type="checkbox"/> → 303  NEGATIVE DETERMINE TEST <input type="checkbox"/> → (INFORM RESPONDENT OF THE NEGATIVE RESULT, CONDUCT POST-TEST COUNSELING AND END).
302	FOR CHILDREN ≥18 MONTHS WITH POSITIVE HIV TEST INFORM PARENT/GUARDIAN ABOUT POSITIVE HIV STATUS AND PROVIDE POST-TEST COUNSELING. AS PART OF POST-TEST COUNSELING, PROVIDE A REFERRAL TO THE NEAREST HEALTH FACILITY WHERE HIV CARE AND SUPPORT SERVICES ARE AVAILABLE. <b>END</b>		
303	FOR CHILDREN <18 MONTHS WITH POSITIVE DETERMINE TEST, INFORM PARENT/GUARDIAN ABOUT THE NEED FOR ADDITIONAL (PCR) TEST TO CONFIRM HIV TEST RESULT AND PROVIDE POST-TEST COUNSELING.  The test indicates that [NAME] may be having the HIV virus. However, we need to do an additional test to determine whether [NAME] really has the virus or not. We will send the blood for this test to a Central Laboratory at UVRI in Entebbe. We will give you a unique code with which you can get the final HIV result for [NAME] in a health facility nearby [MENTION NAMES]. The clinic staff there will advise you on the test result and need for treatment. The result will be ready in about 6 weeks. The results will remain available in the health facility for a period of 6 months. If the result is not picked in that period, [NAME] will have to have the test again in a health facility providing HIV testing services.	AGREES ..... 1 REFUSES ..... 2  _____ (SIGN) (RECORD OUTCOME OF REQUEST FOR CONSENT FOR PCR TEST IN 210).	

OBSERVATIONS

COMMENTS ABOUT RESPONDENT:

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COMMENTS ON TESTING PROCESS:

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ANY OTHER COMMENTS, SUCH AS REACTION TO COARTEM OR OTHER TREATMENT:

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SUPERVISOR'S OBSERVATIONS

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NAME OF THE SUPERVISOR: \_\_\_\_\_ DATE: \_\_\_\_\_