



YOUTH RESEARCH WORKING PAPER SERIES

# Iringa Youth Behavior Survey – Findings and Report

Youth Research Working Paper No. 1





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FHI Working Paper Series No. WP05-02

YouthNet is a global program that conducts research, disseminates information, improves services, and strengthens policies and programs related to the reproductive health and HIV prevention needs among youth 10 to 24 years old. The YouthNet team is led by FHI and includes CARE USA and RTI International. YouthNet/Tanzania works in collaboration with U.S. Agency for International Development (USAID)/Tanzania, the Government of Tanzania, and through partnerships with other agencies, with the strategic objective of improved reproductive health and HIV prevention behaviors of Tanzanian youth ages 10 to 19.

Special thanks to the USAID/Tanzania Mission, which funded the survey and this report. The information contained in the publication does not necessarily reflect FHI or USAID policies.

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## **Acknowledgments**

YouthNet/Tanzania appreciates the help of many people in conducting the Iringa youth behavior survey, compiling the results, processing the data, and preparing this report. Students Partnership Worldwide, a nongovernmental organization based in Iringa, coordinated the household interviews. The Ifakara Health Research and Development Centre based in Dar es Salaam managed the data.

The coordinator of the survey was Dr. Jaikishan Desai, Health Services Research (HSR) Division, Family Health International (FHI). He had primary responsibility for designing and overseeing the survey. The report preparation team at FHI was led by Dr. Desai with substantial contributions from Karen Katz and Barbara Janowitz. Others making contributions and editorial review were (in alphabetical order): Cindy Waszak Geary, JoAnn Lewis, Tonya Nyagiro, Jane Schueller, and Matthew Tiedemann. William Finger edited the report and coordinated production, with production assistance from Trina Maxson and Karen Dickerson. Carmen Cuthbertson and Holly Burke conducted the data analysis. Emily Wong contributed to the study design.



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## **Executive Summary**

The Iringa Youth Behavior Survey is a population-based, cross-sectional survey of youth between the ages of 13 and 24, conducted at the request of the U.S. Agency for International Development (USAID) Tanzania Mission. This household survey, conducted in 2004 in all districts in Iringa by YouthNet/Tanzania and local partners, interviewed 4,693 youth. YouthNet/Tanzania was initiated in December 2003, following a two-phase assessment and planning process and a proposal for the YouthNet/Tanzania program.

The survey provides a comprehensive picture of the knowledge, attitudes, and behaviors of youth about sexually transmitted infection (STI)/HIV and reproductive health in Iringa. The effort produced a wealth of data on many aspects of youths' lives as related to their sexual behavior. The findings should point the way for development and implementation of interventions that youth need in the region regarding HIV/AIDS prevention and reproductive health programs and services.

## **Results**

The results section discusses findings in five parts: knowledge, attitudes and social norms, sexual behavior (sexual debut, current sexual relationships, and consequences of sex), use of services, and reaching youth with information.

*Knowledge.* Youth in Iringa displayed a high level of knowledge about STIs, in particular HIV/AIDS, including types of infections, modes of transmission, and ways to avoid infection. About three-quarters of respondents spontaneously said that they can avoid getting HIV by abstaining from sex, and more than half mentioned condoms as a means of protecting against HIV. However, only one-fourth mentioned being faithful. Youth were less knowledgeable about pregnancy and pregnancy prevention. Knowledge of contraceptive methods other than condoms and pills was very low, when unprompted. One of five youth either did not know if the condom is effective or thought it did not protect against pregnancy.

*Attitudes and Social Norms.* Key protection strategies for preventing STI/HIV transmission are abstinence, being faithful, and condom use. Attitudes toward abstinence were generally favorable, and girls were more likely than boys to have early sexual debut. Attitudes toward faithfulness were related primarily to the benefits of avoiding disease, rather than in terms of having a closer/stronger relationship with a partner. Attitudes toward condom use were mixed. Three of five respondents thought it was wise for a woman to carry a condom in her purse, but many negative attitudes were expressed, such as condoms reduce pleasure, are too embarrassing to buy, and suggest a lack of trust. Attitudes toward people living with AIDS were generally sympathetic for family members but negative toward non-relatives, such as teachers and shopkeepers.

*Sexual Behavior/Sexual Debut.* The median age of sexual debut was reported at around age 18 for girls and 19 for boys, substantially higher than what youth perceived to be the

age of debut for their peers. Fear of STIs/HIV was the most prevalent reason for not initiating sex, with religious or moral reasons the second highest reason to remain abstinent. Parental expectations and pressure were also a strong force in promoting abstinence. While about two of five respondents said they were waiting until they got married to have sex, only about 10 percent of those who were sexually active reported having first sex with either a spouse or live-in partner. An important reason that girls first had sex was coercion, trickery, or gifts. Forced sex was reported most often by younger girls in rural areas. Nearly all partners of males having first sex were within two years of the same age as the males. In sharp contrast, six of ten females reported first sex with a man more than two years older.

*Sexual Behavior/Current Sexual Relations.* Overall, 16 percent of youth ages 15 to 24 were married or cohabitating, with minimal differences between urban and rural youth. Frequency of sexual contact was fairly low among unmarried youth who have had sex, with about half having had sex in the last 12 months. In this group, reported rates of secondary abstinence were high, with fear of STIs/HIV a leading reason for choosing to stop having sex. Several notable differences between males and females emerged. About twice as high a percentage of females as males were having sex with spouses, live-in partners, boy/girlfriends, or fiancés. As with sexual debut, the problem of forced sex or sex in exchange for money or goods was especially prevalent among younger rural females.

*Sexual Behavior/Consequences of Sex.* About 15 percent of sexually active females and 9 percent of sexually active males reported ever having at least one STI symptom; since STIs are often asymptomatic for women, the percentage of females could be higher. Among sexually active unmarried youth ages 15 to 19, about two of five have been pregnant, with higher rates among those 20 to 24. A substantial percentage (about two-thirds) of both married and unmarried youth felt they were at no risk of infection, for various reasons. Among married or cohabitating youth, most said they had sex with only one person. Unmarried males said they used condoms much more than did other groups. For those who did feel they were at high risk of HIV infection, the main reasons were because they do not use a condom, have more than one partner, or believe their partner has multiple partners. It was apparent that sexually active youth understand the risk factors of HIV infection.

*Use of Services.* More than 10 percent of all sexually active youth ages 15 to 24 have been tested for HIV, but level of perceived risk for HIV does not appear to be a factor in getting tested. Not surprisingly, urban residents are more likely than those in rural areas to have been tested, regardless of perceived risk status. Physical distance and cost were factors limiting access to testing for rural residents. More than a third of females who have received antenatal care (ANC) were tested for HIV during ANC, but the quality of the counseling was uneven, with better counseling in urban areas. Condoms were the main contraceptive method used, especially among unmarried youth and those with casual partners, suggesting that condoms are used primarily for protection from disease and not for pregnancy prevention. Among females with live-in partners who used contraceptives, about half used condoms and about half used oral contraceptives or

injectables. A high percentage of youth obtained condoms from a pharmacy or other type of shop.

*Reaching Youth with Information.* School provides an easily accessible way to reach large numbers of youth through primary grades, when attendance is nearly universal. However, the drop-out rate increases dramatically at age 15. Among 15- to 19-year-olds in rural areas, only one-third is enrolled in secondary school. Thus, other alternatives to reach out-of-school youth are needed, including youth who work at home, work in a family enterprise, or work for pay. Faith-based organizations provide an important opportunity as 90 percent said they attended religious services at least once a week. Also, about a third of youth are members of youth clubs or organizations that have activities for youth. The mass media, particularly radio, provides another important resource for reaching out-of-school youth. Peer education appears to be an underutilized approach for reaching out-of-school youth, with in-school urban youth being most likely to have had contact with a peer educator. Exposure to campaigns such as Ishi or social marketing messages was much more likely in urban than rural areas, with radio playing an important role in these campaigns.

## **Recommendations**

### *Protective Strategies*

- All three protective strategies – i.e., abstinence, faithfulness, and condom use – need to be reinforced through knowledge and behavior change communication programs in a way that reflects the complexities of young people’s lives. Attention needs to shift from programs focused on knowledge to behavior change communication approaches.
- Programs for younger youth should promote abstinence messages and begin to prepare them for faithfulness, while messages should be adjusted to incorporate all three strategies as youth grow older and face new types of pressures.
- Programs for sexually active youth need to emphasize the importance of faithfulness to one partner (ideally, one who knows his or her HIV status) or partner reduction, even when condoms are used. Faithfulness messages need to address the complexities of this protective strategy. Social, cultural, and gender norms around faithfulness will require more investigation if programs are to be successful in promoting this strategy.
- Programs for sexually active youth should promote the use of condoms for dual protection against STI/HIV transmission and unintended pregnancy.
- Life skills programs must be supported to increase self-esteem, self-confidence, and negotiating abilities, especially among girls. These skills can help youth match their stated desire to remain abstinent with their behaviors.

### *Gender Norms*

- Programs need to pay more attention to gender norms, especially to issues related to power dynamics and control over sexual behavior. Promotion of gender equity and equality messages must start with younger ages and continue to be reinforced for older youth, especially males. Also, girls need to be empowered to take control over their sexual lives and provided with opportunities for improving their decision-making and negotiating abilities.
- More in-depth information is needed about the coercive sexual debut and sexual violence reported by girls, especially younger girls in rural areas. Appropriate interventions need to be developed, both to empower girls to avoid coercive situations, as well as to address social, cultural, and gender norms that condone coercive behaviors in perpetrators.
- More attention is needed on gender roles within marriage for young couples. Interventions are needed to strengthen couple communication about risky behaviors and risk-reduction strategies.

### *Knowledge-Behavior Gap*

- For unmarried, sexually active youth, information about risk perception, methods of protection, and services for STIs, HIV/AIDS, and pregnancy must be an essential component of knowledge campaigns and skills-based interventions. Because sexually active, unmarried girls experience high rates of unintended pregnancy, integrating reproductive health into HIV/AIDS initiatives should be given priority.
- Media, faith-based groups, schools, and other community organizations that influence social and cultural norms should address stigma and discrimination and promote compassion for those who are HIV-positive or living with AIDS.
- School-based programs should be strengthened to reach younger youth with age-appropriate messages. The benefits of avoiding early pregnancy and STI/HIV infection, such as additional schooling and career opportunities, should be more strongly emphasized.
- Older, out-of-school youth need to be reached through strategies that include faith-based initiatives, youth clubs, radio programming, and peer education. Message content for older youth should emphasize both STI/HIV and pregnancy prevention.

### *Services*

- Youth access to quality services and commodities for voluntary counseling and testing (VCT), STI diagnosis and treatment, antenatal care, and family planning needs improvement. Special attention needs to be given to counseling before and after testing and around issues such as partner reduction, condom use, and other ways to reduce high-risk behavior.

These program recommendations will inform YouthNet/Tanzania as it continues its work with the USAID Mission, the Government of Tanzania, and partners in Iringa and elsewhere in the country. The survey results provide a much-needed, expanded base of data to understand how interventions by YouthNet/Tanzania and others can best address the most urgent HIV-prevention and reproductive health needs of youth in Iringa.

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## **Introduction**

Roughly a third of Tanzania's population of 33 million are youth between the ages of 10 and 24, and like youth in other countries, they face multiple and complex challenges to their reproductive health and general well-being. Youth are also at the center of the HIV/AIDS crisis in Tanzania. The first cases of AIDS in Tanzania were reported in 1983 in the northwest region of Kagera. By 1986, all regions on the Tanzanian mainland had reported AIDS cases. By the end of 1999, it was estimated that more than two million people were infected with HIV/AIDS, 15 percent of which were youth 15 to 24 years of age. Among the new infections in women, 69 percent were 15 to 24 years old.

One way to help slow the spread of HIV/AIDS is to focus on prevention among young people. In 2002-2003, at the request of USAID/Tanzania, YouthNet began the process that has led to this report, part of the larger effort in Tanzania to prevent HIV infection among youth and improve their overall reproductive health.

In July/August and November 2002, YouthNet undertook a two-phase situation analysis of HIV/AIDS and reproductive health (RH) for youth in Tanzania that provided information and guidance on existing youth programs and options for innovative and appropriate HIV prevention and RH interventions. The team conducted a participatory, consultative process and issued a report in April 2003 proposing several program options. In June 2003, an implementation planning visit developed a proposal. Based on that proposal, in September USAID funded YouthNet/Tanzania, which was officially launched in December 2003 to work under the auspices of the USAID Mission and the Tanzania President's Office – Planning and Privatization.

During the planning process, YouthNet, in conjunction with the Mission and the Government of Tanzania, decided to focus initially on the Iringa region and Dar es Salaam. The Iringa region, with some 1.5 million people, is mostly rural with one municipal center. Since reproductive health and other services tend to be clustered in urban centers, and an estimated 80 percent of the Iringa population lives in rural areas, a large percentage of the population in this region is left without adequate health coverage.

### **Study Goals**

In April and May of 2004, FHI/YouthNet, in collaboration with the Students Partnership Worldwide, a nongovernmental organization based in Iringa, conducted a household survey among 4,693 youth ages 13 to 24 in all seven districts of the Iringa region. The survey was designed to provide region-specific data that would be useful in the development of programs in Iringa. Specifically, the survey provided a measure of HIV/AIDS and RH knowledge, attitudes, sexual behaviors, and service utilization. The results from the survey will serve as one part of a broader monitoring and evaluation system for the YouthNet/Tanzania program. In September 2004, YouthNet provided a preliminary summary of the survey to the Mission. This is the full report of the survey results and recommendations.

The overall objective of the survey was to assess knowledge, attitudes, behavior, and service use. The survey findings should point the way for development and implementation of interventions to address the needs of youth in the region regarding HIV/AIDS prevention and reproductive health programs and services. The specific objectives of this overall study were:

- to identify and quantify sexual and reproductive health knowledge and attitudes for youth 13 to 24 years of age
- to identify and quantify sexual and reproductive health behaviors for youth 15 to 24 years of age
- to assess utilization of HIV/AIDS and reproductive health services among youth 15 to 24 years of age

### **Iringa Programs**

Given the urgency of developing programs under the guidelines of the President's Emergency Plan for AIDS Relief, in March 2004, YouthNet/Tanzania began working with implementing partners in Iringa prior to having results from the survey. The preliminary results from the survey provided an initial set of indicators for the activities. Indicators will be refined based on this final report.

YouthNet/Tanzania is currently working in five strategic areas: behavior change communication interventions, capacity building for faith-based institutions, youth reproductive health services, technical leadership and coordination, and youth leadership and participation. The behavior change communication interventions and capacity building efforts with faith-based groups have been concentrated in Iringa. The primary activities have been:

- a peer education program through 700 football teams, reaching thousands of youth with HIV prevention messages, working through the Iringa Development of Youth, Disabled, and Children Care (IDYDC)
- providing HIV/AIDS and health information to in- and out-of-school youth and community support groups, primarily in rural areas, through the Students Partnership Worldwide Community Resource Program
- distributing *Si Mchezo!* magazine to an expanded area serving rural youth and incorporating messages on abstinence and faithfulness, working through the Health Information Project
- implementing youth HIV prevention activities through Christian and Muslim groups, based on a participatory learning and action assessment conducted in Iringa, working with the Christian Council of Tanzania.
- a number of smaller efforts focusing on behavior change communication, school interventions, information and education, and community mobilization

These survey results and recommendations provide a much-needed expanded base of information to understand how these interventions and those in the coming years can best address the most urgent HIV-prevention and reproductive health needs of youth in Iringa.

This report uses interchangeably the terms “male” and “boy,” and similarly, “female” and “girl.” When reporting on youth ages 13 to 24, as this report does, finding the right language to delineate various subgroups is difficult. The term “boys” or “girls” is not appropriate for 24-year-old males or females; “young men” and “young women” are more accurate. While “boy” and “girl” are not perfect, these terms make the tables more readable than alternative terms such as “boys and young men” or “girls and young women.” The term “male” and “female” conveys more of a biological view without conveying the personal nature of individuals. The word “sex” is used when referring to data from males and females.

## **Methodology**

The Iringa Youth Behavior Survey (IYBS) is a population-based cross-sectional survey of youth between the ages of 13 and 24. It is intended to obtain data on youth knowledge, attitudes, and behavior regarding sex, contraception, and sexually transmitted infections (STIs), including HIV/AIDS.

### **Target Population**

The target population consisted of all household members ages 13 to 24 years in all seven districts of Iringa region. The target population was divided into males and females for each of three age groups: 13- to 14-year-olds, 15- to 19-year-olds, and 20- to 24-year-olds – a total of six subgroups. The rationale for forming these subgroups is:

- Males and females form separate groups, within each age range, because there are differences by sex in the consequences of unprotected sexual behavior and in knowledge, attitudes, social pressures, behaviors, and use of services.
- The youngest age group, 13- to 14-year-olds, is included to reflect the pre-sexual activity ages when knowledge, attitudes, and information are critical to the timing of sexual debut. International experience has shown that it is more effective to develop and promote health-affirming behaviors before young people begin sexual activity. The focus of the questionnaire for this age group was entirely on knowledge, attitudes, and information. No questions were asked about sexual behavior or use of services or products.
- The 15- to 24-year-olds, the bulk of the sample, provide the basis for calculating a range of indicators on knowledge, attitudes, perceptions, sexual activity (abstinence, partner selection, etc.), STI treatment and HIV testing, and contraceptive use. These data will serve to strengthen the design and targeting of interventions.

### **Sampling Procedures**

A three-stage stratified sample design was used to select eligible youth. Census 2002 information was used to stratify enumeration areas into rural and urban strata. Then, within each enumeration area households were selected with probability proportional to population size. Urban enumeration areas were over-sampled in order to ensure adequate representation and because many of the youth programs have an urban focus. Eligible households, i.e. those with youth 13 to 24 years of age, were allocated to a male and female sample, and all eligible youth in the household were interviewed.

The projected sample size was 6,000 completed interviews – 1,500 completed interviews by sex and by urban-rural residence. These projections were made using the percentage distribution of the Iringa population as of the 2002 census by age groups, sex, and urban-rural residence.

A total of 4,693 interviews were completed. Difficulties in listing households, locating those selected, and contacting eligible youth resulted in the lower sample size. The survey covered 87 percent of the enumeration areas selected for the survey. Also, the final sample had a disproportionately larger percentage of younger youth due to difficulties in locating older youth (20 to 24 years) at the household level. Sampling weights were developed to take into account the (planned) over-sampling of urban areas and the imbalances in coverage.

As Methodology Table A shows, coverage of the survey was not proportionate in all districts; the only exceptions are Iringa Rural and Kilolo.

*Methodology Table A: Sample design, final sample, coverage, and weighted sample distribution of the Iringa Youth Behavior Survey, 2004*

	<i>Population 13-24 years ( Census 2002)</i>		<i>Sample design</i>		<i>Final sample</i>		<i>Survey coverage</i>	<i>Weighted sample *</i>
	<i>N</i>	<i>Pct.</i>	<i>No. of interviews</i>	<i>Pct.</i>	<i>No. of interviews</i>	<i>Pct.</i>	<i>Pct.</i>	<i>Pct.</i>
<b>Districts</b>								
Iringa Rural	45,188	15.5	642	10.6	696	14.8	108	15.4
Mufindi	54,596	18.7	1,008	16.7	691	14.7	69	19.0
Makete	19,597	6.7	310	5.1	215	4.6	69	6.7
Njombe	83,746	28.7	1,782	29.5	1,242	26.5	70	29.2
Ludewa	24,773	8.5	455	7.5	345	7.4	76	8.4
Iringa Urban	26,434	9.0	1,224	20.3	923	19.7	75	8.4
Kilolo	37,772	12.9	623	10.3	581	12.4	93	12.9
<b>Rural</b>	232,090	79.5	3,006	49.7	2,096	44.7	70	78.8
<b>Urban</b>	60,016	20.5	3,038	50.3	2,597	55.3	85	21.2
<i>All Iringa</i>	292,106	100.0	6,044	100.0	4,693	100.0	78	100.0

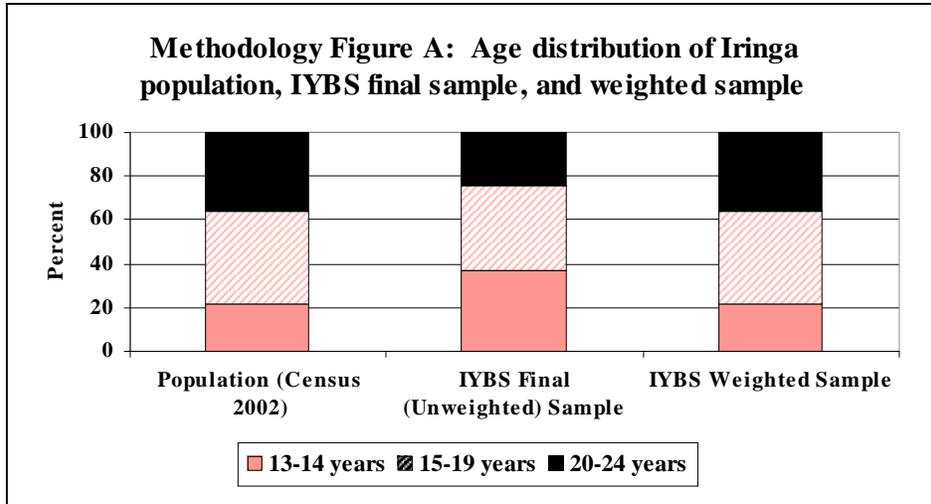
\* Missing data permit calculation of weights for only 4,635 observations. Thus, in all tables, there is a maximum N of 4,635.

## **Data Processing, Analysis, and Reporting**

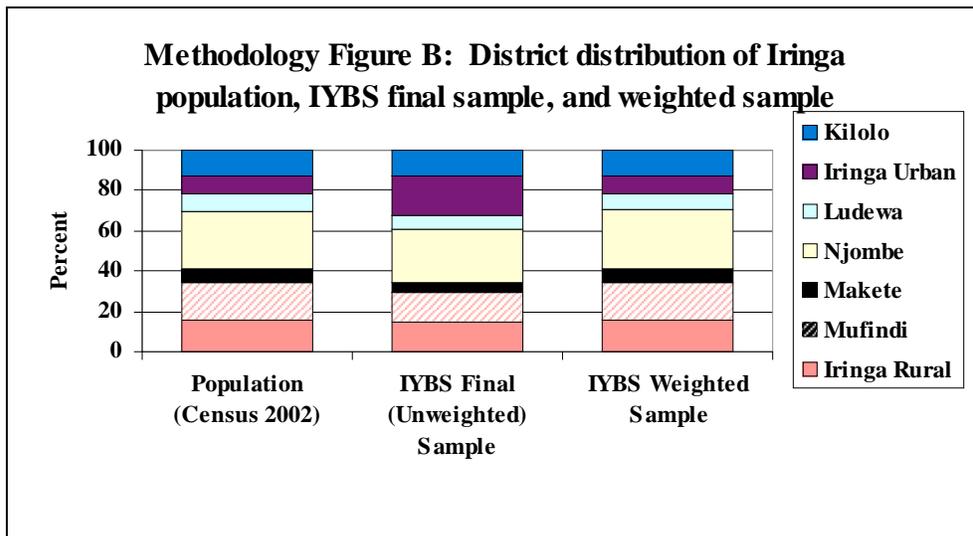
The Ifakara Health Research and Development Centre based in Dar es Salaam had responsibility in Tanzania for data management. Data were entered and edited using FOXPRO software. Descriptive analysis of the survey data was conducted at FHI/NC using SAS System for Windows V8 software. Sampling weights were used to correct for the (planned) over-sampling of urban areas, low response rate, and disproportionate coverage of districts and age groups. The number of responses (Ns) reported in the tables

are unweighted Ns, but the percentages reported in the text and tables are the weighted results.

The results of using weights can be seen in the following two graphs below. Methodology Figure A presents data on the age distribution of the youth population of Iringa (according to Census 2002), the final sample, and the weighted sample. It can be seen that relative to the Census data, the final sample has a smaller proportion of 20- to 24-year-olds, but the use of weights results in a (weighted) sample that mirrors the age distribution in the population.



Similarly Methodology Figure B shows that while the final sample has a disproportionately larger number of youth from Iringa Urban (this is largely due to the planned over-sampling of urban areas, of which Iringa Urban is the main one in the region), the weighted sample's distribution across the districts is similar to that found in Census 2002.



The tables in this final report show data from the survey. Note that the Ns vary for two primary reasons. Some tables show only specific subgroups, as noted in the title, which reduces the N from the overall survey population. Second, some questions had “missing values,” which means that some respondents did not answer the question. Hence, the N varies when the number of responses varies.

### **Survey Instrument**

A questionnaire for the baseline survey was adapted from those used in youth reproductive health surveys conducted by the U.S. Centers for Disease Control and Prevention (CDC) in Zimbabwe and Mozambique. The survey instrument was reviewed by the YouthNet technical team and used in three pilot tests in and around Iringa town. Formative in-depth interviews were also used to identify key issues and test different topic areas. Survey questions were structured around the following themes:

- sociodemographic characteristics
- schooling and daily activities, including church-related
- knowledge of reproductive health, including STIs/HIV
- perceptions of socially accepted sexual behavior
- attitudes toward premarital sex and contraceptive use

Youth ages 15 and over also received questions on the following topics:

- reproductive history
- sexual behaviors and experiences
- use of condoms and other contraceptives
- use of STI/HIV, family planning, and other reproductive health services

### **Survey Implementation, Data Collection, and Field Monitoring**

The household survey was conducted in April and May 2004. Implementation of the survey was coordinated by Students Partnership Worldwide. One notable feature of this survey was the use of youth interviewers. Youth who had completed secondary school underwent an intensive two-week training period; 44 were ultimately selected as interviewers. In addition, 10 supervisors managed the interview teams. These supervisors were not youth, but persons with extensive experience with large-scale surveys of this kind. Male interviewers interviewed males, and female interviewers interviewed females. Using youth interviewers represents one of YouthNet’s guiding principles of youth involvement. The process enhanced the youth interviewers’ skills and knowledge as well.

Interviewers visited sample households and collected information to complete a household roster including sex, age, marital status, and residency status of all living in the household. A listing was made of all youth in the sampled households eligible for the interview. All youth who were part of the household were eligible for the interview. If the sampled individual was at home at the time of the household enumeration, the interview was conducted immediately. Otherwise, an appointment was made for a future date. The team revisited the house up to two times before labeling the youth as unavailable for the interview.

## Results

The results are divided into five sections:

- knowledge of reproductive health, including STI/HIV transmission, pregnancy, and contraception
- attitudes and social norms surrounding sexual relationships and related issues that may influence sexual behavior
- sexual behavior of those ages 15 to 24, including reasons for sexual relations, circumstances surrounding these relationships, and resulting consequences
- use of services for STIs, HIV, and contraception
- reaching youth with information about HIV and reproductive health

### 1. Knowledge of STIs/HIV and Reproductive Health

A central focus of many program initiatives aimed at youth is to provide education on a range of topics, especially on preventing STIs/HIV and unintended pregnancies. Whether or not young people are engaged in sexual relations, accurate information is important to help prepare them to make well-informed, healthy decisions regarding their sexual behavior. The IYBS examined RH knowledge among the entire study population, ages 13 to 24. The percentages cited in this section refer to this full age range unless otherwise noted.

#### A. Sexually Transmitted Infections, including HIV/AIDS

Youth in Iringa display a good level of knowledge on the questions about STIs, in particular HIV/AIDS. Nearly 60 percent spontaneously named gonorrhea and syphilis when asked to name STIs, and about 85 percent named HIV/AIDS. When prompted, most respondents reported that they knew of these diseases (data not shown).

Table 1 shows that Iringa youth are very knowledgeable about the ways by which someone is most likely to become infected with an STI. More than 80 percent of youth agreed with statements that a man or woman can get an STI if he or she has sex with someone who has other lovers, is already infected, does not use a condom, or is involved in commercial sex. While urban residents are more knowledgeable than rural residents, and older youth know more than younger ones, the differences are not great and the overall level of knowledge is quite high.

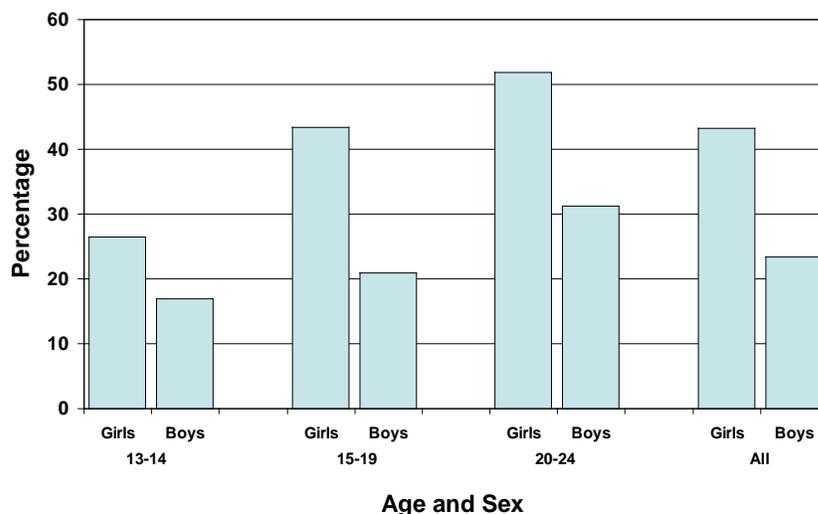
Similarly, knowledge about transmission of HIV is high (Table 2). About 95 percent of respondents know that sexual intercourse is one of the main mechanisms for transmission of HIV. This knowledge is consistent by sex, age groups, and urban/rural residence. Other means of transmission, such as sharing needles or blades or blood transfusions were far less well known. Only a small percentage mentioned some common misconceptions about HIV transmission, such as casual contact, kissing, and mosquito bites.

When asked specifically about other means of transmissions, four out of five youth were aware of the possibility of mother-to-fetus transmission during pregnancy, and two-thirds knew of the possibility of transmission during delivery and through breastfeeding (Table 2). Fewer than 5 percent of all youth mentioned these transmission mechanisms on their own. Only when specific questions were asked about each mother-to-child transmission pathway did such a large proportion of youth recognize the possibilities. Females, older youth, and urban residents are slightly more aware of these three pathways than the other subgroups, but the differences are small.

### B. Pregnancy

Youth in Iringa are less knowledgeable on questions related to pregnancy and pregnancy prevention than on STIs/HIV. Knowledge about the time during a woman’s menstrual cycle when she is at greatest risk of becoming pregnant is relatively low. About one-quarter of males and about 40 percent of females identified correctly the time of ovulation to be two weeks after her period or the middle of the menstrual cycle (Figure 1). Knowledge of the fertile period increases with age and is higher among females than males within each age group. Older females in the urban areas have the highest level of knowledge (62 percent, data not shown). Nevertheless, a substantial proportion of youth in all subgroups did not identify correctly the time of ovulation.

**Figure 1: Percentage of youth who correctly identified when a woman is at greatest risk of pregnancy**



Youth are even less knowledgeable about the potential health risks of a pregnancy to a young girl and her baby. Almost one-third of youth said they were not aware of any health risks of early pregnancy (Table 3). Knowledge is higher in the urban areas and among older age groups. Risks recognized by more than 20 percent of the respondents included risks to the lives of the mother and the child, the likelihood of having a caesarean section, and obstructed labor.

Youth are more knowledgeable about the social and economic consequences of a pregnancy to a young girl (Table 3). Two-thirds cited at least one such consequence, with the main ones being school disruption, having to support a child, and disapproval of the family. Only 10 percent believed there were no consequences for a girl. One-third believed there were no consequences for a young man who gets a girl pregnant (Table 4). The most widely cited consequence for a young man was that he could be sent to prison if the girl is underage. Other consequences for young men who get a girl pregnant were largely similar to those mentioned for girls (dropping out of school and having to support a child).

### C. HIV and Pregnancy Prevention

When asked about ways to avoid HIV infection, being abstinent, being faithful, and using condoms were the three main responses given (Table 5). Figure 2 shows that, without prompting from the interviewer, about three-quarters of youth mentioned that they can avoid getting HIV by abstaining from sex. More than half mentioned condoms as a means of protecting against HIV, but only one-fourth mentioned being faithful. Also, almost one-quarter mentioned avoiding shared razors/blades. When prompted, all three means of protection were mentioned by greater numbers of respondents. Differences among subgroups are not large and for the most part follow the usual pattern of urban residents and older youth displaying higher levels of knowledge than rural and younger youth. A higher percentage of males than females cited condoms as a way of preventing HIV (66 percent and 46 percent respectively, Table 5).

**Figure 2: Percentage of youth ages 13 to 24 who cited various ways to avoid acquiring HIV**

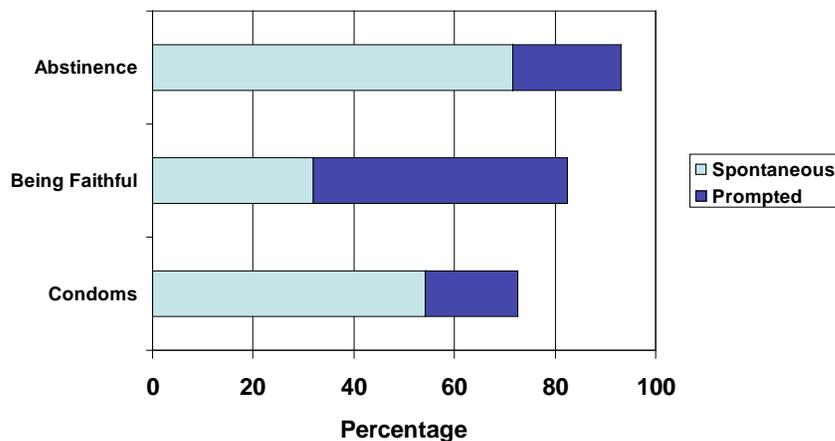
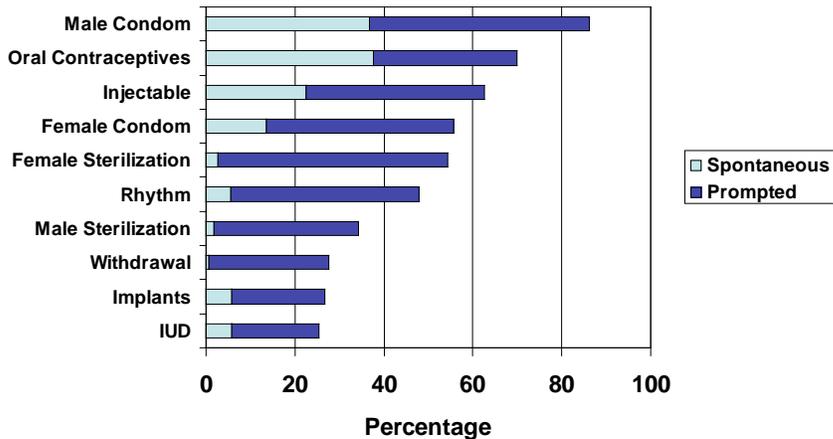


Figure 3 shows that knowledge of the various contraceptive methods is low, especially without prompting. The male condom and oral contraceptives (OCs) are the most widely known contraceptives, but less than 40 percent of the respondents could name even these methods without prompting from the interviewer. The next most familiar methods are injectables and the female condom. With prompting about the various methods,

knowledge is much higher; 86 percent reported having heard of the male condom and about 70 percent knew of oral contraceptives.

**Figure 3: Percentage of youth ages 13 to 24 who were aware of various contraceptive methods**



Youth were not directly asked about the role of abstinence in pregnancy prevention, but about 90 percent of youth knew that there is a likelihood of becoming pregnant if they have sexual intercourse (data not shown).

As shown in Figures 2 and 3, most respondents (when prompted) knew of the male condom as a method of STI/HIV and pregnancy prevention. Three-quarters of youth said that the condom was an effective way to avoid the AIDS virus. Similarly, a large proportion of youth viewed the condom as an effective method to prevent pregnancy (Table 6). Forty-nine percent of all survey respondents thought a condom, if used correctly, protects against pregnancy most of the time, and another 31 percent thought it protects sometimes. Of concern is that 21 percent of all youth did not know if the condom is an effective method or thought that it does not offer protection against pregnancy (Table 6). This knowledge is greater among males and urban youth, as well as older youth.

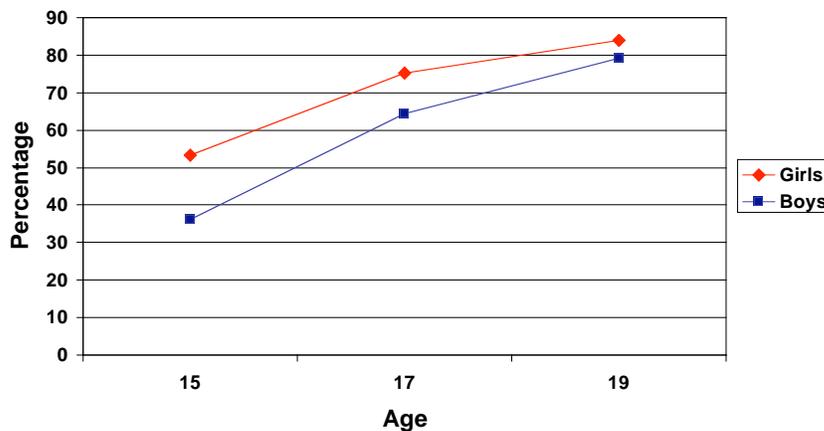
## 2. Attitudes and Social Norms

Personal attitudes and social norms surrounding sexual relations are important to measure because they can guide current and future behaviors. These beliefs can influence a youth's decisions and actions and play a role in determining if a youth practices protective sexual behaviors or engages in risky ones. This section discusses the key protective strategies in the prevention of STIs/HIV: youth attitudes toward abstinence, being faithful, and using condoms. It also summarizes attitudes from youth on people living with AIDS. Unless otherwise noted, most attitude questions were asked of the entire study population, ages 13 to 24.

### A. Perceptions on Sexual Initiation and Abstinence

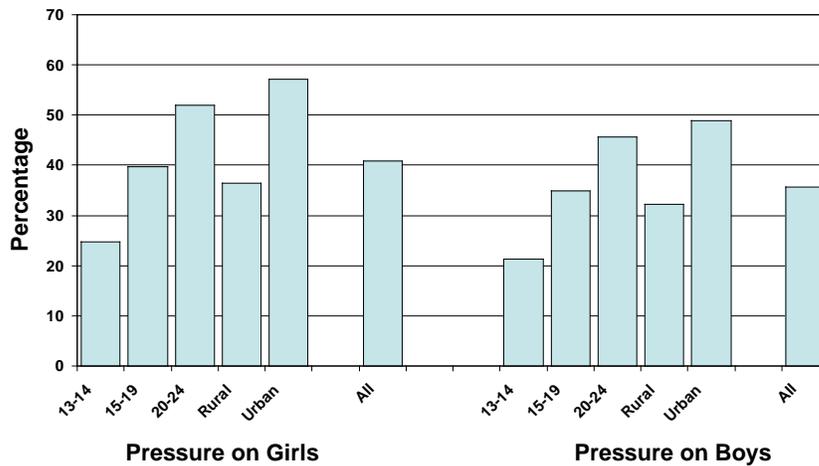
Youth perceive that their peers begin sexual activity at a relatively early age – and hence are no longer abstinent (Figure 4). About half of the study respondents believed that half of all girls who are 15 years old will have already had sex. The perception is that boys begin sexual activity at a slightly older age. Only about one-third believed half of boys have had sex by the age of 15, whereas two-thirds believe half of all boys will have begun sex by age 17. While the perceptions differ among males and females, younger and older youth, and those in rural and urban areas (data not shown), the important point is that a majority think first sex occurs at a relatively young age, with that age being earlier for girls than boys.

**Figure 4: Percentage of youth ages 13 to 24 who thought at least half of youth have had sex by various ages**



Some youth believe that there is pressure to start having sex and stop being abstinent. About one-third overall believed boys feel this pressure, and 40 percent thought that girls feel it (Figure 5). A higher percentage of urban residents than rural ones thought that youth feel pressure to start having sex. One interesting difference is in the source of the pressure. For boys, the primary source is from friends, whereas for girls, there seems to be pressure equally from friends as well as from their boyfriend or partner (data not shown).

**Figure 5: Percentage of youth ages 13 to 24 who thought youth feel pressure to start having sex**



Attitudes toward sexual initiation affect how youth approach abstinence as a protective behavior from STIs/HIV and unintended pregnancy. Reasons why youth practice abstinence are discussed in the section on sexual behavior below.

### *B. Perceptions on Being Faithful*

Partner expectations regarding fidelity in relationships were explored by asking respondents if they agreed or disagreed with a number of statements (Table 7). Responses were fairly consistent across sex, age groups, and urban/rural residence. Between 70 percent and 80 percent of youth agreed that men and women normally expect their partners to be faithful and that it is acceptable to ask a regular partner not to have sex with anyone else. At the same time, 33 percent did not think it is possible for a man to have a sexual relationship with only one woman at a time, and about one-fourth did not think this is so for women. Furthermore, 20 percent of youth believed a man must have more than one partner to be sexually satisfied; a slightly lower percentage thought a woman must have more than one partner. What this suggests is that, even though the majority believes that the social norm is to be faithful to one partner, a sizable minority believes that it is not possible for men and women to be faithful and that men and women need multiple partners to achieve sexual satisfaction.

Youth were asked what they believe is “good” about being faithful. The benefits of being faithful they cited are overwhelmingly related to the avoidance of adverse consequences. Eighty percent stated that if you are faithful, you are less likely to get infected with a disease, and 9 percent said you are less likely to become pregnant (data not shown). These responses were relatively consistent across the various subgroups. A much lower percentage saw the benefit in terms of the quality of their relationship. Overall, 22 percent stated that by being faithful one can have a closer/stronger relationship, and another 17 percent said one can keep respect in the community (data not shown). These

percentages are consistent across subgroups. One concern about faithfulness is that in relationships in which partners perceive themselves to be faithful, it will be difficult for the girl to refuse to have sex.

On a topic related to faithfulness – the degree of control over sexual behavior that youth feel that women and men have – respondents were asked if they agreed or disagreed with a series of statements (Table 8). The first three statements asked young people’s opinion on the ability of a girl who has had sex to refuse sex in situations that reflect increasing familiarity with the boy or man seeking sex. These data show that prevailing social norms greatly limit a girl’s ability to exercise control over her sexual interactions, and this ability is progressively eroded the more (sexually) familiar she is with the person seeking sex.

### *C. Attitudes toward Condoms*

Youth attitudes toward condoms were also explored as a potential barrier to using them. The opinions of those ages 15 to 24 were assessed through a series of statements that were read to respondents. They were then asked to state if they agreed or disagreed with them (Table 9). Sixty-one percent thought it is wise for a woman to carry a condom in her purse; however, an equally large percentage thought that the message it conveys is that the woman plans on having sex. Many other statements on the list are negative about condom use, and a high percentage of respondents agreed with the negative statements, including: condoms reduce sexual pleasure, a woman loses respect for suggesting condom use, condoms are too embarrassing to buy, and condom use suggests a lack of trust.

The degree of control within relationships affects perceptions about the ability to use condoms since condom use requires partner cooperation. Of those women who are married or cohabitating, 45 percent responded that they could not insist on condom use compared to 31 percent of women who are not married or cohabiting (Table 10). But boys were far less likely to say that they could not insist on condom use, indicating that they have greater power to decide on condom use in any relationship.

Under some circumstances, however, condom use is acceptable in marital unions (Table 10). Eighty-seven percent agreed with the statement that a wife is justified in insisting on the use of a condom when she knows her husband has a STI. There is little variation in these percentages across marital status, sex, age group, or residence.

### *D. Attitudes toward Persons Living with AIDS*

While youth were knowledgeable about the main transmission pathways of HIV and how to prevent transmission, attitudes toward people living with AIDS reveal that misconceptions and prejudices still exist.

Attitudes toward family members or relatives with AIDS are largely sympathetic. Table 11 shows that at a personal level nearly half of the respondents either know someone who has the HIV virus or has died of AIDS, with more urban residents knowing an AIDS patient than rural residents. While a smaller percentage had cared for a relative with AIDS at some point, the majority said they would be willing to do so. Most did not believe that they need to keep it a secret if a relative had AIDS. About one-quarter stated that they would want such information to remain secret.

Conversely, attitudes toward non-relatives with AIDS were less compassionate. Half or less believed that a teacher with AIDS should be allowed to continue teaching or that a student with AIDS should be allowed to continue attending school (Table 11). Only about one-third overall would buy food from a shopkeeper who was HIV infected. A smaller percentage of residents held these views in rural areas.

### **3. Sexual Behavior**

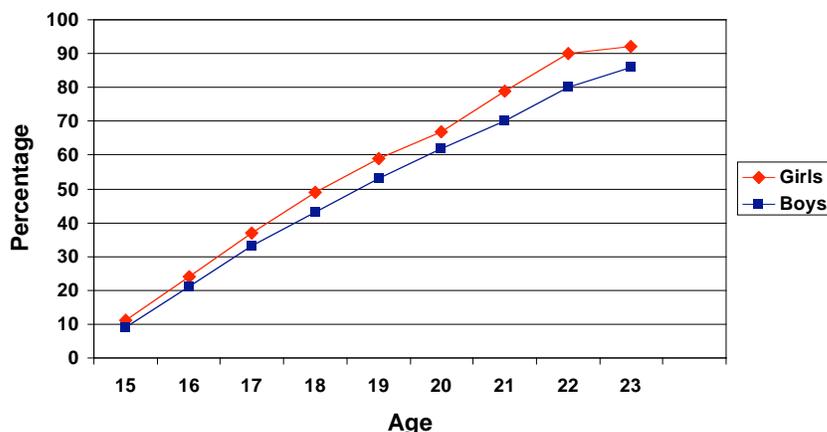
At the heart of most reproductive health programs that focus on youth is the goal of promoting healthy sexual behaviors. In some cases, that might mean promoting abstinence, particularly among younger and unmarried youth. In other instances, it may mean having sex only within committed relationships and using contraceptives to prevent unintended pregnancies and STIs/HIV. This section examines youth ages 15 to 24 only and looks specifically at:

- sexual debut
- current sexual relationships
- consequences of sex

#### **A. Sexual Debut**

The previous section showed that youth perceive that sexual debut occurs at relatively early ages, but according to survey respondents, debut actually is years later. While youth perceived the median age of debut for girls in Iringa region to be around 15, the results show that it is actually 18 (Figure 6). Similarly, youth perceived the median age for boys to be between 15 and 17, but the median age reported by males was 19. Figure 6 shows differences between males and females in terms of their sexual experiences. More females than males have had sex at all ages.

**Figure 6: Percentage of youth ages 15 to 24 who had sex by various ages\***



\*Figure excludes estimate for those 24 years old since too few cases were available for analysis.

Age at first sex is similar in rural and urban areas for boys and only slightly higher for girls in urban areas (Table 12). Girls in rural areas are more likely than rural boys to have had sex at all ages while differences between boys and girls in urban areas are smaller.

### Primary Abstinence

Figure 6 shows that a large proportion of the younger youth are abstaining from sexual relations. Since a central element of most youth programs in Tanzania is to increase the proportion of youth who practice primary abstinence, it is important to know why youth abstain in order to design programs to promote this behavior. Data below examine the reasons youth give for abstaining, their future plans regarding abstinence, and the gains that they perceive from delaying the start of sex.

Across all subgroups, about half of those who had not had sex said they remained abstinent because of a fear of STIs and HIV/AIDS (Table 13). Overall, the second most cited reason, which was also reasonably consistent across subgroups, was religious or moral reasons. The second most cited reason by females, however, was fear of pregnancy. While virtually no males cited this as a reason, more than one-third of females gave this as an influence on their decision. Given that the consequences of pregnancy primarily affect females, this is not surprising. About one in five youth who have abstained cited reasons related to improving their lives, such as completing schooling, having a career, and having control over their lives. Lack of opportunity or partner was mentioned by only five percent of all who abstain.

A substantial proportion (39 percent) of those who have not had sex intended to wait until they get married, and a similarly large percentage intended to wait until they are older (Table 14). A third sizable group (18 percent) intended to wait until they have completed school and fulfilled their plans. These responses suggest that a majority of those who

abstain from sex do so with a fairly clear idea of how long they want to wait and why. Only a small percentage indicated that they are just waiting until they have the opportunity. These patterns were consistent across subgroups with the exception of older (i.e., 20 to 24-year-old) youth. In this group, waiting until marriage was the predominant reason.

Just over two-thirds of those who had abstained said that they felt pressure to abstain from sex, and this percentage was higher for youth in urban areas and among females (Table 15). Youth indicated that the pressure comes from multiple sources, not just one. Not surprisingly, the main source of pressure to abstain was from parents (71 percent). Other major sources of pressure included relatives, friends, religious authorities, and teachers.

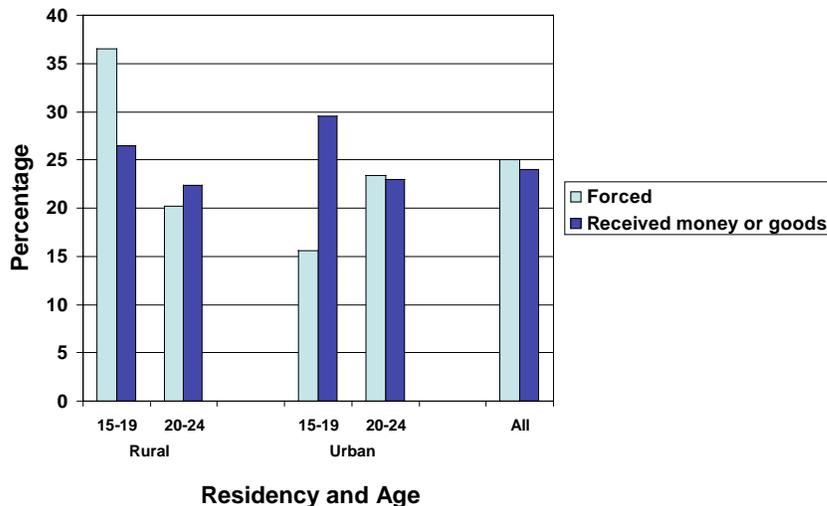
### Circumstances of First Sexual Experience

As noted previously, a relatively large percentage of respondents indicated they are waiting to get married before they have sex, yet only a small percentage of those who have had sex actually gave marriage as the reason for first-time sex (Table 16). Respondents were allowed to provide multiple reasons as to why they initiated sexual activity. The three main reasons cited (each given by about one-fourth of the respondents) were that they just wanted to, they wanted to find out what it was like, and it just happened, with males being far more likely to report the first of these two reasons. A far higher percentage of females than males said they were forced to have sex, were tricked or convinced with money or gifts, were sweet-talked by their partner, or got married.

A second question probed further on certain issues that might have affected first sex, such as coercion or gifts of money or goods in exchange for sex. This second, probing question was used because sometimes it is necessary to be more direct in order to obtain information on certain topics. For example, at first questioning, many females said they just wanted to have sex or wanted to find out what it was like, but when additional questions were asked, they responded that gifts or coercion were given as reasons why they had sex the first time. The percentages in the responses, especially by females, changed substantially and present a troubling picture of circumstances surrounding the first sexual experience.

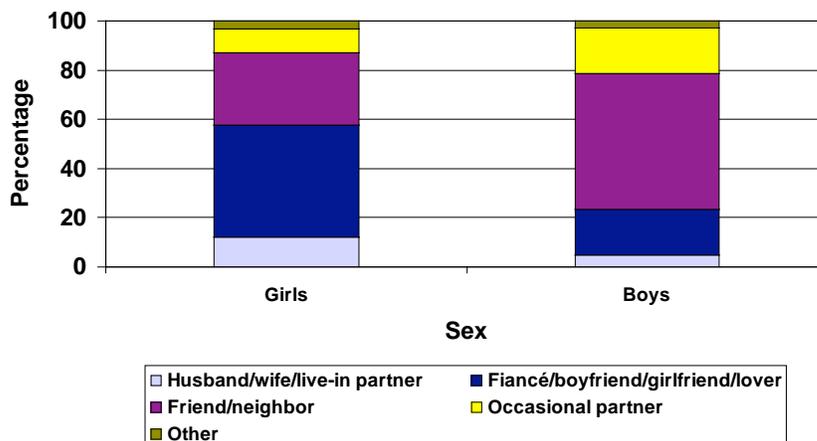
When asked generally about why they had first sex, only 10 percent of females said they were forced (Table 16). However, when specifically questioned whether they agreed or were forced to have their first sexual experience, 25 percent of females said they were forced (Figure 7). Forced sex at first sexual experience is reported most often by younger, rural females but was an issue among all females. Twenty-four percent of girls said that they received money or goods the first time they had sex. This percentage was higher among younger girls in both urban and rural areas. (Figure 7)

**Figure 7: Percentage of girls who were forced or received money/goods for first sex**



Regarding the nature of the relationship in first sexual experiences, Figure 8 shows that a relatively small percentage of youth wait until marriage to have sex for the first time. Overall, just more than 10 percent reported having first sex with either a spouse or a live-in partner. Most first experiences are with a fiancé, girlfriend/boyfriend, or lover. The second most common type of partner for a first experience is a friend or neighbor. Differences by sex are apparent. A higher percentage of females than males have their first experience within a more committed relationship, i.e. with a fiancé or boyfriend. Conversely, a higher percentage of males than females have their first sexual experience within a more casual relationship, i.e., a friend, a neighbor, or an occasional partner.

**Figure 8: Type of relationship girls and boys ages 15 to 24 had with first sexual partner**



A final difference by sex emerges in the ages of the partners at the time of first experience. When male youth had sex the first time nearly all of their partners were within two years (either younger or older) of their own age. A far greater proportion of females (63 percent) said their partner was more than two years older than themselves (data not shown).

### *B. Current Sexual Relationships*

Current sex in this discussion refers to sexual experiences over the 12-month period preceding the survey. In particular, this section examines types of current partners, frequency of sexual relations in nonmarital relationships, and circumstances surrounding sexual activities.

#### Marital Status

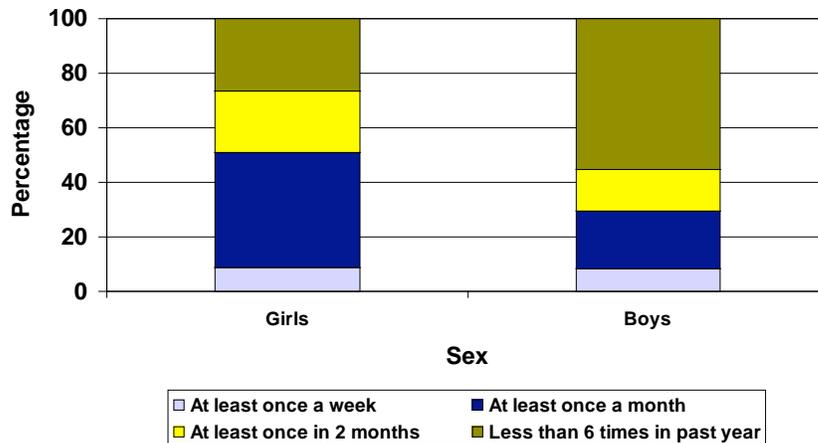
Since sexual relations among youth in marital relationships and youth who are still single are vastly different, it is helpful to know the marital status of the study population. Table 17 shows that overall only 16 percent of youth ages 15 to 24 are married or cohabitating. Not surprisingly, a larger percentage of older youth are married compared to younger youth, and a greater percentage of females in each age group are married compared to males in their age group. The differences between urban and rural sites are minimal.

#### Frequency of Sexual Relations

Even if someone has had a sexual debut, it does not follow that they will continue to have sex on a regular basis. Most married or cohabiting couples are assumed to have sex on a more or less regular basis. However, for many unmarried youth, sexual activity is highly irregular. Table 18 shows that among unmarried youth who have ever had sex, only about half had sex in the past 12 months. A larger percentage of urban youth had sex in the previous 12 months compared to rural youth, regardless of sex or age group.

Even among those who reported that they did have sex in the previous 12 months, very few had sex on a regular basis. Figure 9 shows that for both males and females who are unmarried or not cohabitating, only about 10 percent have sex at least once a week.

**Figure 9: Coital frequency of non-cohabiting, sexually active youth ages 15 to 24 in last year**



The reasons why youth who have initiated sexual relations are no longer having sex or are having infrequent relations are varied. For some, it may be a lack of partner or opportunity. But others may have made a decision to be abstinent – i.e., sometimes called “secondary abstinence,” which refers to abstinence after sexual activity has begun. One definition of secondary abstinence is a conscious decision not to have sex over some time period.

Fifty-five percent of males and 31 percent of females who had sex and were not married or cohabiting said they decided not to have sex in the 12 months preceding the interview (Table 19). Of these males, 37 percent made this decision because they were scared of getting infected. The next most common responses were that they did not have a reason, they just did not want to have it, and to a much lesser degree, they had religious or moral reasons or did not want to get someone pregnant. The main reason among females was that they just did not want to. A much smaller percentage said they did not want to get pregnant and were scared of getting infected.

Types of Partners

In examining the type of relationship the respondent had with his or her last sexual partner, large differences exist among subgroups of study respondents (Table 20). About twice as high a percentage of females as males had sex with partners who were either their spouses or live-in partners, or with those they characterized as boy/girlfriends or fiancés. While this pattern was evident in the data on sexual debut, the pattern is more pronounced here with 82 percent of females saying the last time they had sex was with their husband, live-in partner, fiancé, boyfriend, or lover. In contrast, only 40 percent of males reported this type of relationship (Table 20).

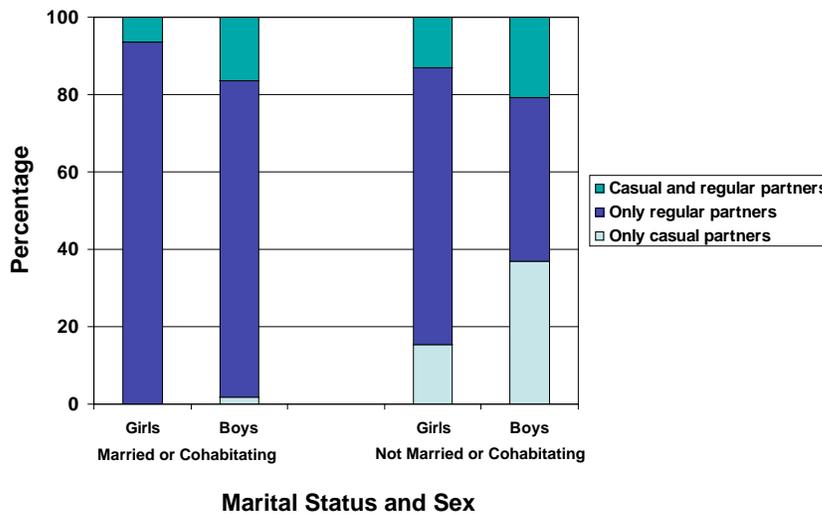
A second difference is associated with age. A higher percentage of older youth compared to younger youth described their most recent sexual partner as their spouse, live-in

partner, or girlfriend or boyfriend. Both rural and urban areas display this life-cycle shift in types of sexual relationships.

Types of relationships are further illustrated by data on casual and regular relationships in the 12 months preceding the survey. Figure 10 not surprisingly shows a large difference by marital status. A higher percentage of married youth compared to unmarried report having sex only with a regular partner. Some married youth, nonetheless, report having relationships also with casual partners and a higher percentage of males than females report this (16 percent and 7 percent, respectively).

Differences by sex are again illustrated by the types of relationships among nonmarried youth. A higher percentage of females than males reported relationships only with regular partners (71 percent vs. 42 percent, respectively) and a lower percentage of females than males reported relationships only with casual partners (15 percent vs. 37 percent, respectively).

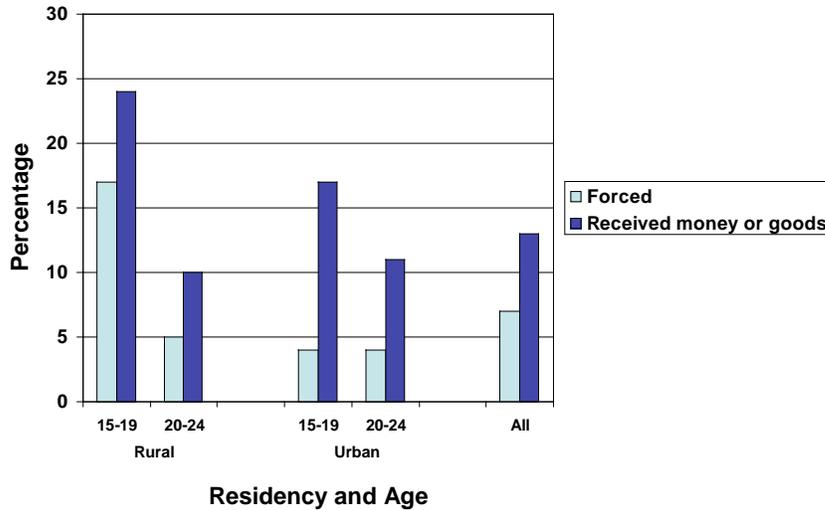
**Figure 10: Types of sexual partners girls and boys ages 15 to 24 had in the last year**



### Circumstances of Sexual Relations

When specifically questioned whether they agreed or were forced to have sex, one of five females reported that at last sex, they were forced or received money in exchange for sex (Figure 11), a high rate but lower than reported at sexual debut. The problem of forced sex remains especially prevalent among younger rural females, as does the problem of exchanging sex for money or goods.

**Figure 11: Percentage of girls who were forced or received money/goods for last sex**



### *C. Consequences of Sex*

The two main negative outcomes of sexual activity are STIs/HIV and unintended pregnancy. This section discusses respondents' experiences with these consequences. STIs and HIV are negative consequences of sex. Pregnancy, on the other hand, is a negative consequence only if it is unintended.

Overall, about 15 percent of the sexually active females and 9 percent of sexually active males reported having ever had at least one STI symptom. Figure 12 shows that a higher percentage of older females reported having had an STI symptom, compared to the older male group. Since STIs are often asymptomatic in females, this may mean that the STI rate in females is even higher than reported, resulting in larger differences between sexes.

**Figure 12: Percentage of sexually active youth who reported at least one STI symptom**

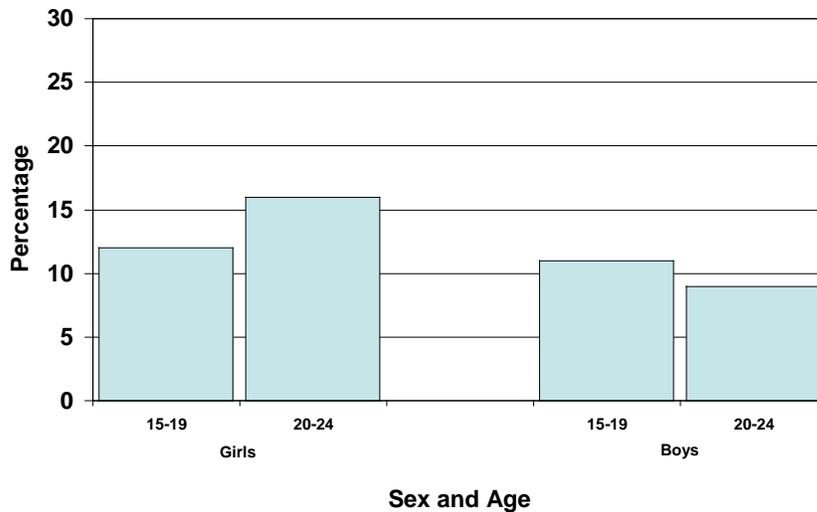
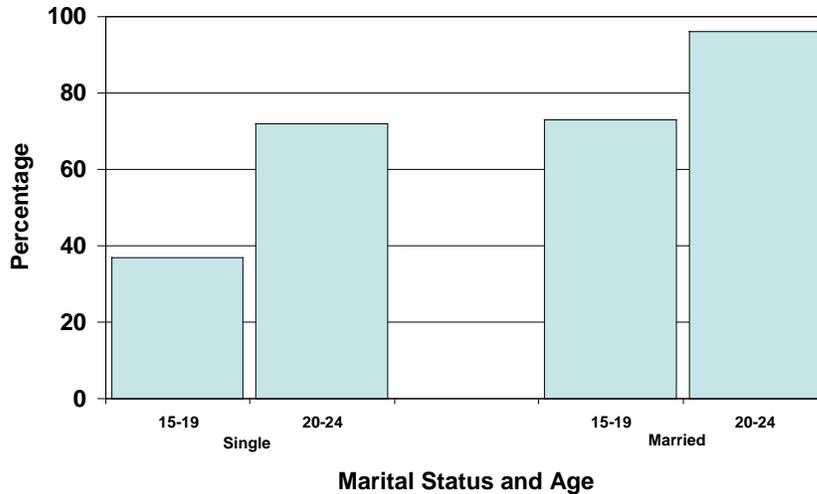


Figure 13 shows the percentage of sexually active females who reported ever being pregnant. While one can assume that most pregnancies among married females are intended, many pregnancies among the nonmarried females may be unintended, particularly among the younger age group. While overall the proportion of 15- to 19-year-olds who have had sex is quite small, of those who have had sex, nearly 40 percent of the single females in this age group have been pregnant. An even higher proportion of single, sexually active females who are 20 to 24 have been pregnant. The difference between urban and rural subgroups is minimal among the younger females but far more pronounced among the older ones (87 percent of rural and 70 percent of urban older females have been pregnant, data not shown).

For married women, nearly all of the older females have been pregnant, as have approximately three-fourths of the younger females. The high percentage of ever sexually active females who reported a pregnancy may reflect the fact that females who have never been pregnant are reluctant to report they have had sex, while those who have been pregnant cannot hide their sexual activity and thus will report it.

**Figure 13: Percentage of sexually active girls ever pregnant**



### Assessment of Risk

Data show how youth assess the likelihood of experiencing the physical consequences of sexual intercourse. Sexually active youth were asked to assess their risk of HIV infection. The majority felt that they are not at risk. Just under two-thirds of both married and non-married youth felt they were at no risk of infection, with an additional 14 percent who felt their risk was low (Table 21). These percentages were relatively consistent by sex and marital status.

Youth who believed they were at a low or no risk of HIV infection generally believed they were practicing safe sexual behaviors, though the reasons differed to some extent by marital status (Table 22). For married or cohabiting youth, the main reason cited by both males and females was that they only had sex with one person. Other reasons cited by a far lower percentage of respondents included having confidence in their partner and always using a condom. In addition, 13 percent of males stated that their partner had no other partner. In contrast, unmarried male and female youth cited not having sexual relations as their main reason for believing they are not at risk. Compared to the married respondents, a much higher percentage (especially males) said that they use a condom. A much lower percentage of unmarried than married youth said that they only had sex with one person or had confidence in their partner.

For both married and unmarried males and females, the main reasons why they felt they were at high risk were because they did not use a condom and because they either had more than one partner (males) or believed their partner had other partners (females) (Table 23). Unmarried males also indicated that they had sex often. Surprisingly, 15 percent of unmarried males said they used injectable drugs.

Turning to pregnancy risk, sexually active females were asked what they thought was the chance that they would get pregnant in the three months after the interview, and why they made that assessment. A majority (60 percent) of those who were interviewed thought it was not at all likely that they would get pregnant in the near future, 18 percent thought it was somewhat likely and 14 percent thought it was very likely or certain (data not shown).

However, the reasons respondents gave for their risk assessments are strongly related to their current situation (Table 24). A high percentage of young women were already pregnant or breastfeeding (indicating that they have a young child). Other reasons related to using contraception to reduce risk or thinking that risk is minimal (having sex during safe times). Not surprisingly, a higher percentage of those who are married or cohabitating, compared to those who are not, reported being pregnant or breastfeeding, but a quarter of those not married or cohabiting gave this as a reason for thinking that they are not likely or somewhat likely to get pregnant. A higher percentage of rural women than urban women gave reasons relating to pregnancy/breastfeeding for assessing their risk as low while a higher percentage of urban women said that they were using contraception or condoms. Most of the 14 percent who assessed pregnancy risk as very likely based it on high coital frequency and non-use of contraception (Table 24). Those who were married were most likely to say that they were not using a contraceptive.

It is apparent that sexually active youth understand the risk factors of HIV infection and those who believe they are at high risk are fully aware why they are at risk. The following section explores more fully protective behaviors youth practice to reduce the likelihood of STIs/HIV and unintended pregnancy.

#### **4. Use of Services for STIs, HIV, and Contraception**

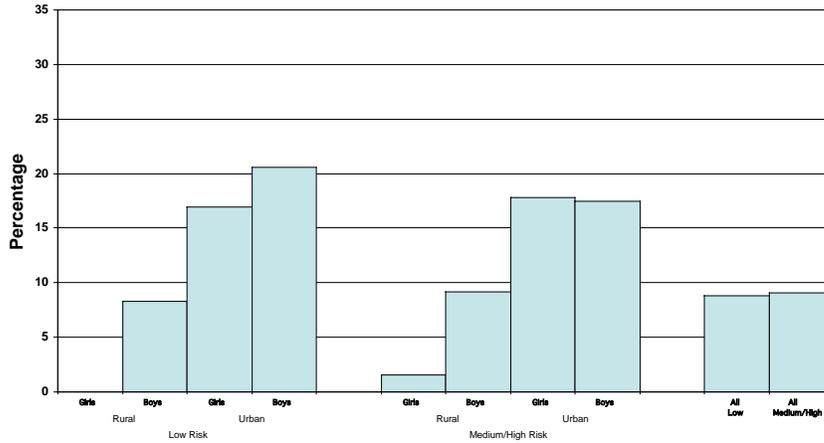
STIs, including HIV, and unintended pregnancy are the undesirable physical consequences of sexual intercourse. Those who perceive that they may have an STI or HIV need testing and treatment facilities where they can also receive counseling and condoms. To prevent these consequences altogether, those who are sexually active need condoms to protect themselves from STIs/HIV, and they need contraception to protect themselves from unintended pregnancy.

##### *A. STI and HIV/AIDS Counseling and Testing Services*

More than 10 percent of all sexually active youth ages 15 to 24 had been tested for HIV. Figure 14 shows testing by perceived risk status. Perceived risk status does not make a difference in terms of getting an HIV test; those who perceived themselves to be at low risk were tested at about the same rate as those who perceived themselves to be at medium or high risk. There are, however, large differences in terms of urban and rural residency. A higher percentage of urban residents than rural ones were tested, regardless of perceived status. Furthermore, in rural areas, more males than females were tested (in

the low-risk rural subgroup, no females got tested). In urban areas, the male/female difference was minimal.

**Figure 14: Percentage youth ages 15 to 24 tested for HIV, by perceived risk status**

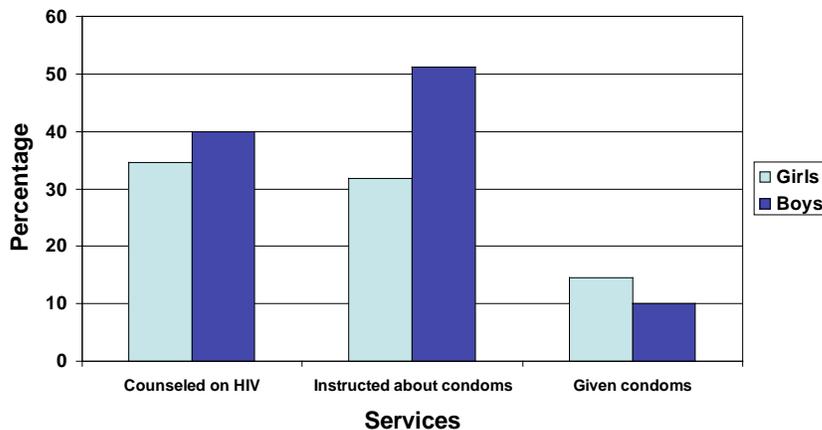


Of those at medium or high risk who did not get tested, most did not provide a reason for why not (32 percent of rural high risk respondents and 58 percent of urban ones) (data not shown). A higher percentage of rural residents than urban ones cited a reason related to access to services. Nearly 50 percent said that they did not get tested because services were either too far away, they could not afford them, or they did not know where to go. Only 15 percent of urban residents cited these reasons.

STI treatment presents an opportunity to counsel youth on HIV/AIDS and ways to prevent its transmission. About 13 percent of respondents reported ever having had an STI symptom. Fifty-eight percent of those who reported ever having symptoms got treatment the last time they had one (data not shown). A higher percentage of older youth sought treatment (65 percent) than younger youth (40 percent), and younger females were the least likely to seek treatment (32 percent). The two main reasons respondents reported not seeking treatment was because they did not think they had an STI or the symptoms disappeared.

Figure 15 shows that of those who received STI treatment, 40 percent or less were counseled on HIV, only about half of males but one-third of females said they were instructed about condoms, and less than 15 percent received condoms.

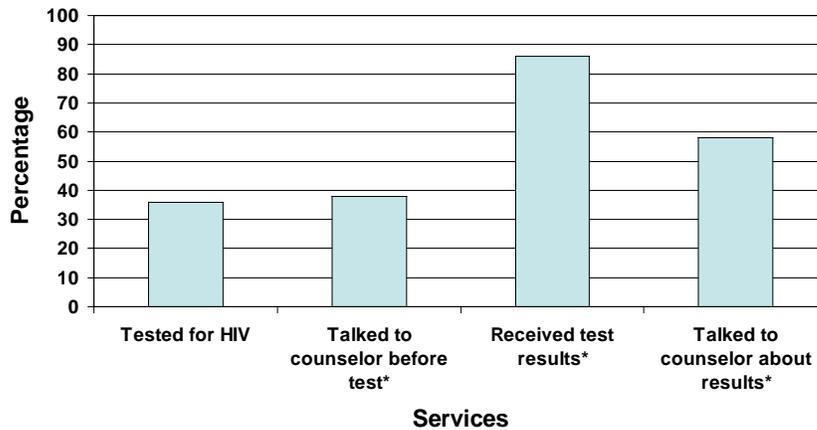
**Figure 15: Percentage of youth ages 15 to 24 who received various services at last STI treatment**



Antenatal care (ANC) visits present an opportunity to counsel pregnant women on mother-to-child transmission of the HIV virus, provide testing for HIV, and present information about family planning methods. More than 95 percent of ever pregnant women ages 20 to 24 have had ANC (data not shown). The percentage was lower among younger pregnant women, as this latter group includes a greater percentage pregnant for the first time, and many of these women had not yet have had ANC. Of those who have received ANC, 36 percent received HIV testing during their ANC 35 percent in rural areas and 42 percent in urban areas.

Figure 16 provides information on the voluntary counseling and testing (VCT)-related services that women received during these visits. Of the 36 percent who were tested, less than 40 percent reported that they talked to a counselor about the test. About 15 percent of the women did not get their results, and of those who did, less than 60 percent talked to a counselor about the results. During the pre- or post-test sessions for those who did get counseling, counselors were very likely to have asked why women wanted to learn their HIV status and were likely to have discussed how HIV is transmitted, how to deal with positive results, the meaning of the results, and how to lower their HIV risk (Table 25). However, women in urban areas were more likely to receive counseling messages than were women in rural areas.

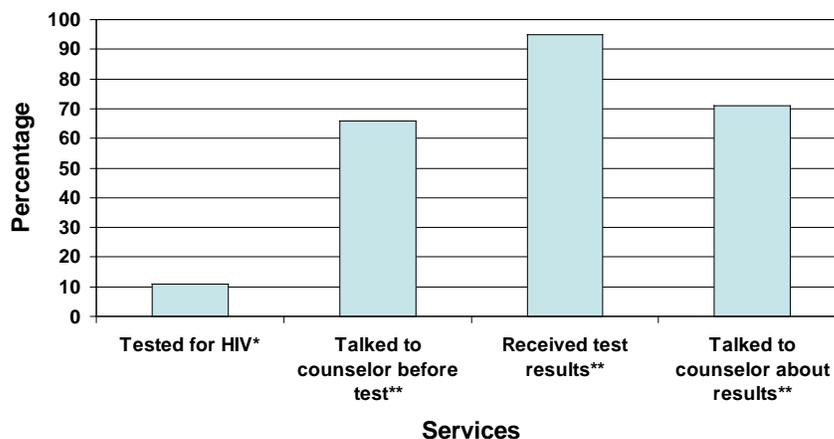
**Figure 16: Percentage of girls ages 15 to 24 that received various VCT services during antenatal care visit**



\* Of those tested for HIV

A much lower percentage (Figure 17) was tested by seeking out services on their own. Overall, of those youth ages 15 to 24 who had *not* been tested for HIV during an ANC visit, 11 percent got tested for HIV, with a higher percentage in urban areas (18 percent) than in rural areas (9 percent). The percentage who got various services during the visit was much higher compared to the percentage getting VCT services during antenatal care visits. A higher percent got both pre- and post-test counseling. Well over 90 percent received their results (Figure 17). Of those who received pre-test counseling, more than 90 percent received key messages (Table 26). Of those who talked to a counselor about their HIV test results, about 90 percent received key messages.

**Figure 17: Percentage of youth ages 15 to 24 who were tested for HIV and received various services during a VCT visit\***



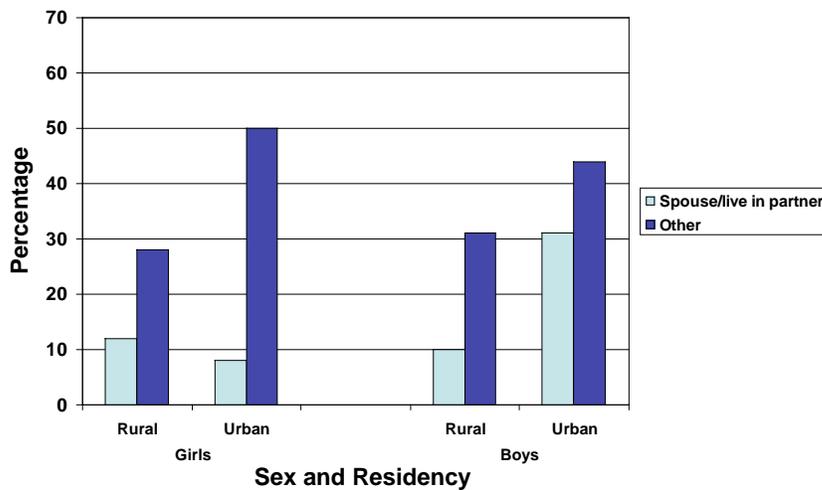
\* Excludes girls tested during antenatal visits

\*\* Of those tested for HIV

### B. Contraception and Condom Use

Thirty-two percent of youth ages 15 to 24 years of age reported they used contraception when they first had sex (data not shown). The percentage that used contraception (Figure 18) is strongly related to the relationship status of the partner at time of first intercourse. A lower percentage of those with a live-in partner reported using contraception at the time of first sex compared to those without a live-in partner. Among those who did not have a live-in partner, contraceptive use was higher in urban areas.

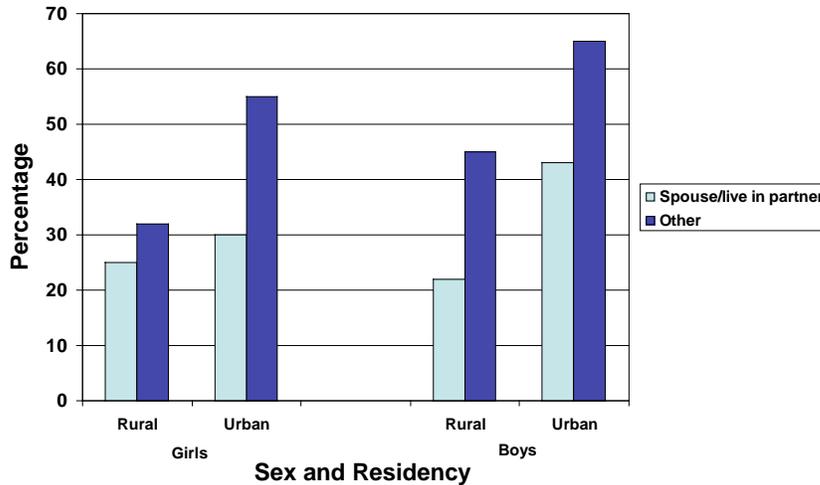
**Figure 18: Percentage of youth ages 15 to 24 who used contraception at first sex, by relationship with partner**



Note: Other includes boyfriend, girlfriend, friend, neighbor, occasional partner, sugar daddy, teacher, just met, family member, sex worker.

The overall percentage who used a contraceptive at last sex was slightly higher than at first sex, with 39 percent reporting use (data not shown). However, the patterns are generally the same with higher contraceptive use among those without live-in partners and in urban areas (Figure 19). Generally boys reported higher contraceptive use than did females.

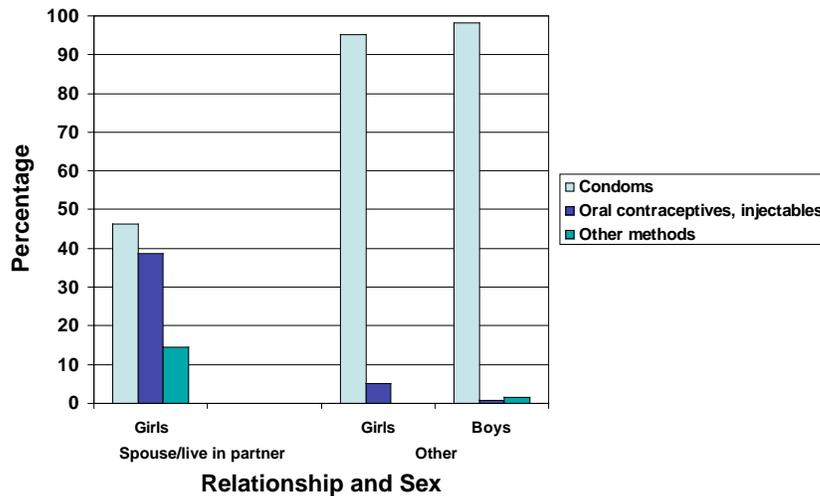
**Figure 19: Percent of youth ages 15 to 24 who used contraception at last sex, by relationship with partner**



Note: Other includes boyfriend, girlfriend, friend, neighbor, occasional partner, sugar daddy, teacher, just met, family member, sex worker.

The main method of choice is the male condom (Figure 20), but the method mix differs according to the relationship to the partner. Among those who did not have a live-in partner, almost all used condoms. For females with live-in partners, only about half used condoms. The other two methods mainly used by this group were injectables and oral contraceptives. There were too few married men using contraception to include in the analysis.

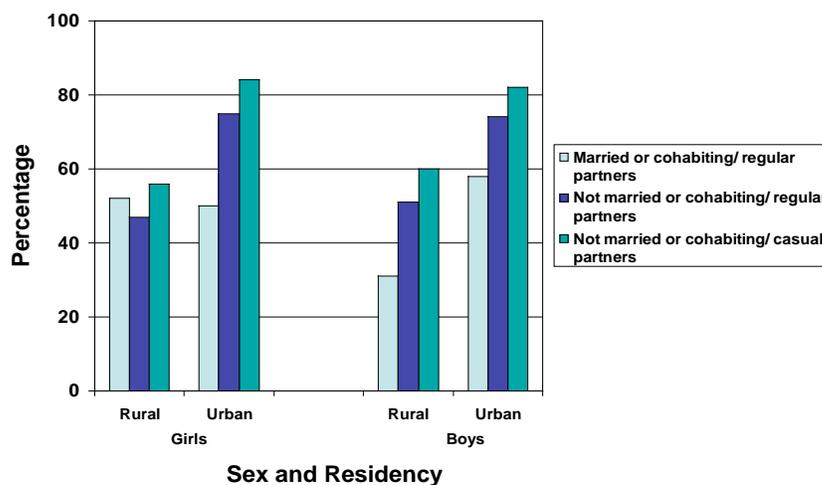
**Figure 20: Contraceptive method used by youth ages 15 to 24 during last sex, by relationship with partner**



Those who did not use a contraceptive method reported reasons that were related to their sex and whether they had a live-in partner (Table 27). Among males with a live-in partner, perhaps surprisingly, the main reason that they gave for not using contraception was that they wanted to have a baby. Fewer females with a live-in partner gave this reason, and more reported that they perceived no risk of getting a disease. Among those without a live-in partner, no more than 20 percent gave any one reason, though the main one was that they perceived no risk of getting a disease. More than 10 percent of males and females said that they wanted to have a child. The results show that, for many, the use of contraception is associated more with disease prevention than with pregnancy prevention, which was not surprising, given the dominance of condoms in the method mix.

Youth were also asked about contraceptive use in the previous twelve months. Figure 21 shows how use varied according to whether the respondent had a live-in partner and also according to whether the respondent had regular or casual partners. It should first be noted that the percentage using a contraceptive is higher in Figure 21 than in Figure 19. This is because Figure 21 refers to a longer time period, and use could have been sporadic, while Figure 19 refers to a particular act, and either the person used a method or did not. Very few respondents with a live-in partner said that they also had casual relationships; thus, this category is not included in the figure. With the exception of females in rural areas, contraceptive use is strongly related to relationship status. Contraceptive use was lowest among those with live-in partners and highest among those who did not have a live-in partner and had casual partners. In addition, contraceptive use is generally higher among those living in urban areas.

**Figure 21: Percentage of youth ages 15 to 24 who used contraception in past 12 months, by relationship with partner**



The method mix during the previous year also varies by the relationship status as it did with respect to the last sex. As noted earlier, those who are married or living together are the least likely to be using condoms. Those in other relationships almost exclusively use condoms.

For those using condoms – the most prevalent method among youth – the frequency of condom use is higher with casual partners (82 percent said that they always or mostly use condoms) as compared with regular partners (65 percent) (data not shown).

Most youth who obtained condoms got them from a pharmacy or another type of shop (Table 28). There are differences by sex, age, and location. A higher percentage of females than males say that they obtained condoms from a friend, relative, or partner. In urban areas, youth use both pharmacies and shops, but in rural areas where there is less access to pharmacies, youth generally purchased condoms at shops but not at pharmacies.

## **5. Reaching Youth with Information about Reproductive Health and HIV**

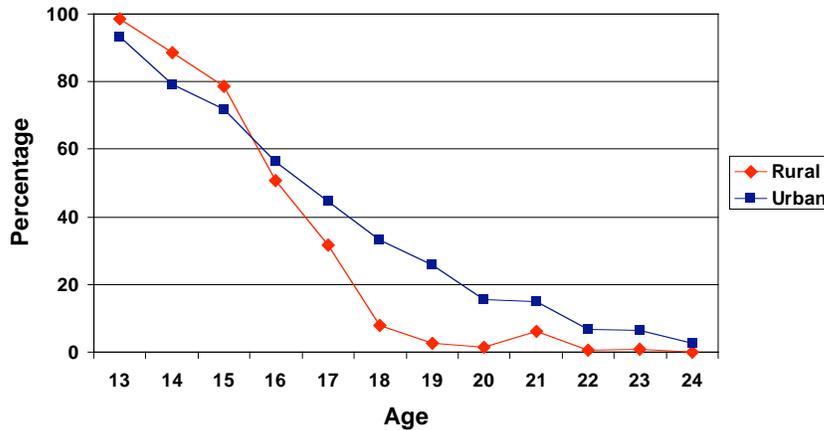
Programs targeting youth need to know where to reach large numbers of this group. While it is expected that a certain proportion of youth will be in school, as age increases, more and more will be outside the school setting. This section explores which youth are in school and for those already out of school, what types of settings may would be worthwhile avenues for programmatic initiatives. Differences by age, sex, and urban/rural residence for the entire study population (ages 13 to 24) are all examined.

The second half of this section explores the reach of programs currently providing reproductive health information. It links to the first half of the section by exploring the avenues used to reach youth (school-based programs, out-of-school programs, media, etc.). Finally this section addresses messages of these programs.

### *A. Potential Sources to Reach Youth*

In both urban and rural areas, school attendance is nearly universal. A small percentage of youth have dropped out of school by age 13. At age 14, nine of every ten youth in rural areas and eight of ten in urban areas are enrolled (Figure 22). At age 15, however, many youth have finished primary school. Few go to secondary school, so the dropout rate at age 15 increases dramatically. Among 15- to 19-year-olds, only one-third in rural areas were enrolled; in the urban areas, 43 percent were still enrolled, higher for this age group than rural areas (Table 29). About 10 percent of all urban youth ages 20 to 24 were still in school, compared to only 2 percent in rural areas.

**Figure 22: Percentage of youth ages 13 to 24 enrolled in school**



Being male or female also plays a role in the pattern of decline in school enrollment (Table 29). Urban enrollment was lower than in rural areas for the younger age group because higher rates of urban females have stopped attending (16 percent of urban females compared to 6 percent of rural females). However, by age 19, the pattern was reversed with a higher percentage of rural females no longer attending.

In Tanzania, primary school goes from Standard 1 to 7. As Table 30 shows, the survey found that about three of every four youth (77 percent) completed Standard 7 but went no further. Less than 10 percent region-wide went on to secondary school. The percentage completing at least primary school was relatively consistent between the urban and rural areas. However, there was a pronounced difference regarding secondary school, with only five percent of rural youth completing more than Standard 7 compared to 24 percent of urban youth.

There are also variations in the age of beginning and completing school. If a child begins Standard 1 at age six and passes one grade per year, by Standard 7, he or she would be 13 years old. Table 31 shows that only 2 percent of 13-year-olds in rural areas had reached Standard 7 compared to 11 percent in urban areas.

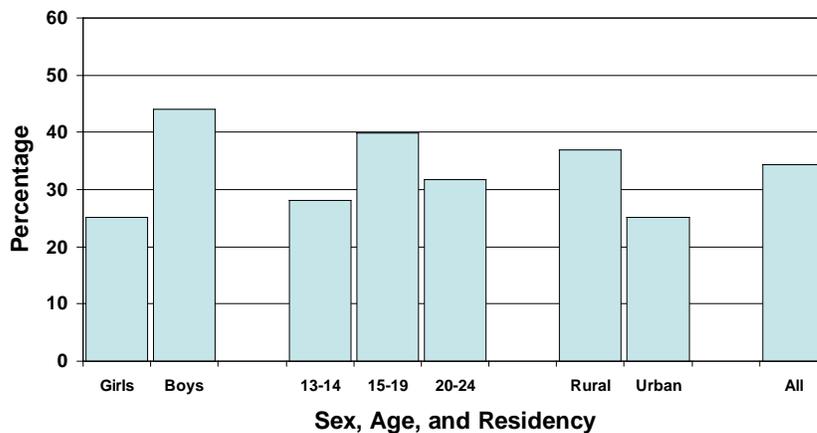
Young people not in school are primarily engaged in work at home, work in a family enterprise, or work for pay (Table 32). More youth in rural areas than in urban areas worked in a family enterprise (mainly agriculture and livestock maintenance), while more of the urban youth worked for pay. Paid work was largely for older youth, and as expected, more females contributed to household chores by working at home. Even though very few youth said they were unemployed or looking for work, it is reasonable to conclude that most males who say they “worked at home” were not engaged in any income-generating activity. These data confirm that reaching out-of-school youth is a

bigger challenge than reaching in-school youth because programs have to pay attention to differences in places of work by where youth live and their sex.

There appears to be more of an opportunity for reaching youth through faith-based programs because almost all youth stated some religious affiliation, and 90 percent attended religious services at least once a week (data not shown). About one-half of all youth said they are Catholics, 45 percent that they are Protestants, and 4 percent that they are Muslims. In urban areas, a higher percentage (13 percent) said that they are Muslims.

Youth clubs and organizations offer another way to reach youth. Figure 23 shows that about a third of all youth said they were members of a youth club or some type of organization with activities for young people. Eighty-seven percent of those youth members attended activities at least once a week (data not shown). Membership is higher among males, the 15 to 19 age group, and in rural areas.

**Figure 23: Percentage of youth ages 13 to 24 who were members of a youth club**

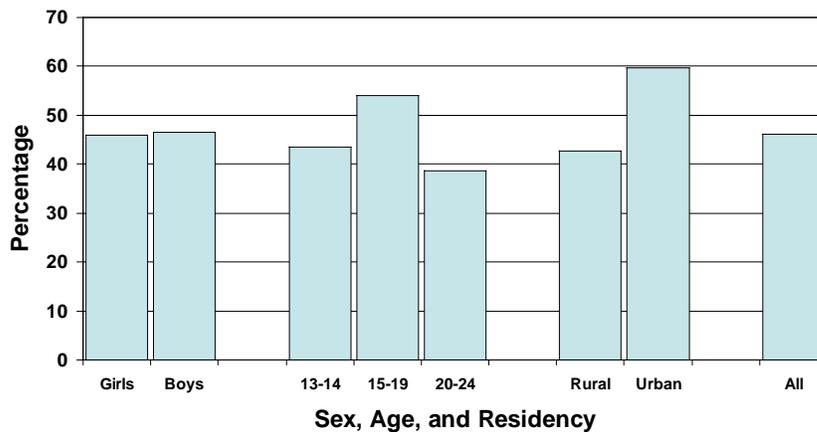


Finally youth can be reached through the mass media. As shown in Table 33, the medium that youth are most likely to take advantage of is radio; almost half of all youth listened to radio at least once a day. This percentage was much higher among males than females and in urban as compared with rural areas. In contrast, a far lower percentage watched television every day. Fully two-thirds of youth did not watch television at all, and this percentage was 80 percent in rural areas. In urban areas, up to 25 percent watched television every day. In addition, a very low percentage of youth read a newspaper or a magazine every day and more than a third of youth said that they never read newspapers and magazines. As with television, the percentage of youth who did not read newspapers or magazines was much higher in rural than in urban areas.

### B. Sources Used to Get Information

School-based programs are potentially an important way of reaching youth with information about reproductive health, as well as STI/HIV. As shown in Figure 24, less than half of youth reported ever attending a lecture or lesson about an issue related to reproductive health. This percentage was above 50 percent only in urban areas and among those who are in the 15- to 19-year-old age group. Exposure to programs may be higher in this age group compared to 20- to 24-year-olds because of recent efforts to promote school-based reproductive health programs. Furthermore, it may be higher compared to 13- to 14-year-olds because not all schools offer these programs in grades attended by youth who are as young as 13 to 14.

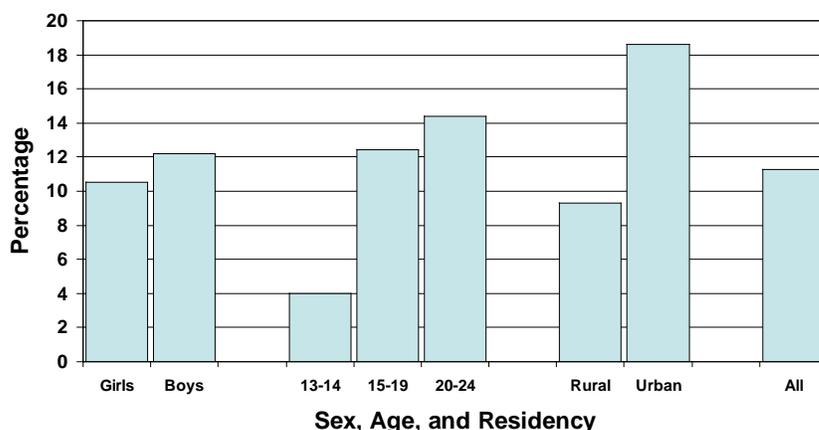
**Figure 24: Percentage of youth ages 13 to 24 who ever received instruction on reproductive health**



The percentage of youth who said various topics were covered in these lectures and lessons is shown in Table 34 according to urban-rural residence. The most common topics were STIs and HIV. Less attention was given to other reproductive health issues, and family planning received very little emphasis. Information on sources for HIV testing or where to get family planning was rarely discussed.

Peer education programs provide another opportunity for reaching young people with information about reproductive health. Overall, only 11 percent of youth reported that they had had some contact with a peer educator (Figure 25). The percentage was twice as high in urban areas as in rural areas. In addition, this percentage increased with age. Nearly half of youth who had contact with a peer educator had this contact in school (data not shown). The most common topics that were covered by peer educators were similar to those reported for in-school education programs, namely STIs/HIV, methods to prevent STIs/HIV, and condoms (data not shown).

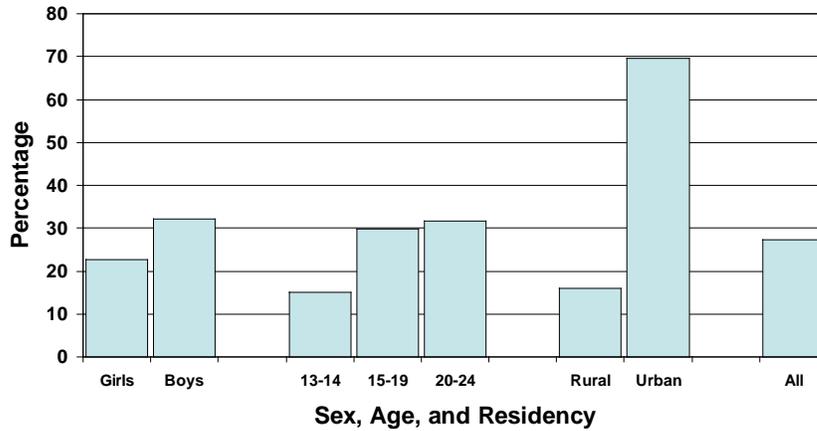
**Figure 25: Percentage of youth who talked to a peer educator**



Other ways to reach youth are through media campaigns or social marketing programs. These present an opportunity to provide information and education to a broad spectrum of the population. The IYBS specifically asked youth in Iringa about three such initiatives that have operated in Tanzania: the Ishi campaign, the social marketing program that promotes the Salama condom, and the Truth about Condoms program.

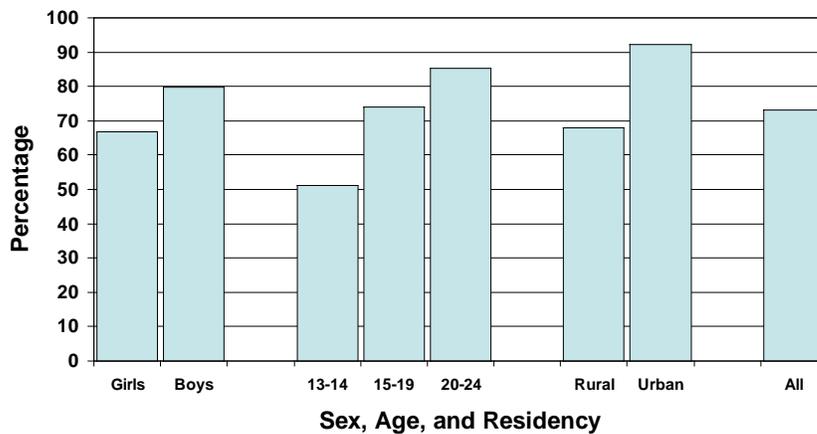
Ishi is a behavior change communication program whose aim is to raise awareness about and reduce the spread of HIV/AIDS. Youth were asked if they had ever heard Ishi slogans. As shown in Figure 26, just over one-quarter reported that they had heard the slogans, but this percentage was more than four times as high in urban as in rural areas, and was higher among males and older youth. The main source from which respondents heard about Ishi was radio (50 percent), followed closely by TV/video (48 percent). Somewhat fewer respondents cited newspapers or magazines (24 percent) or tee shirts or caps (23 percent) as a source. The source of information (Table 35) differed between rural and urban areas, with those in urban areas most likely to find out about Ishi from television/videos while those in rural areas were most likely to cite radio. When asked what messages they think about when they hear the word “Ishi,” more than a third of respondents who had heard of Ishi said “talk to partner about being faithful and using a condom.” Also mentioned were “abstain from sex” (24 percent) and “use condom” (20 percent) (data not shown).

**Figure 26: Percentage who ever heard Ishi slogans**



Iringa youth were far more likely to have heard of the social marketing program that sells the condom Salama. Almost 75 percent of respondents (Figure 27) said that they had ever heard or seen an ad for Salama condoms. (This includes both prompted and unprompted responses.) This percentage is higher in urban than in rural areas, among males than females, and among older youth. The highest percentage of youth said that they had heard the Salama ads on radio (67 percent). Other sources were used less, as shown in Table 36. There are important differences associated with residence. The percentage of youth who got information from television/videos, from newspapers/magazines, and from billboards is higher in urban than in rural areas. However, the percent who got information from the radio is about the same in rural and urban areas.

**Figure 27: Percentage who ever encountered ads for Salama condoms**



The Truth about Condoms program was designed to combat negative myths about condoms. Awareness of this program is very low. Only 9 percent of youth reported that they had heard about this program, with the percentage who reported hearing these messages being more than twice as high in urban as in rural areas (data not shown). Among those who had heard of the Truth about Condoms, the main message remembered was that HIV cannot pass through condoms (48 percent). Youth were most likely to hear this message on the radio (62 percent).

## Discussion and Recommendations

The Iringa Youth Behavior Survey provides a comprehensive picture of the knowledge, attitudes, and behaviors regarding HIV/AIDS and reproductive health of young men and women in Iringa. The discussion focuses on what the results show about protective strategies, the role of gender norms, the knowledge-behavior gap, and service utilization.

### Protective Strategies

A useful way to view the protective strategies used by youth to avoid STIs/HIV and unintended pregnancy is to look specifically at abstinence, faithfulness, and condom use, the most widely promoted strategies.

*Abstinence.* The relatively high median age of sexual debut shows that many young women and men chose to remain abstinent until their late teens. The level of sexual activity at young ages was very low, and less than a fourth of youth reported having had sexual relations by the age of 16. On average, girls started having sex before boys. Sexual debut is one of the key indicators of the U.S. President's Emergency Plan for AIDS Relief to be monitored over the coming years. Since the median age is already relatively high, demonstrating a change toward increased age of sexual debut will be difficult during the program period.

Despite the high level of abstinence, programs should not be complacent about the need to continue promoting messages related to abstaining and delaying sexual debut. First, messages need to be reinforced continuously, especially among younger youth. Second, youth need support to handle conflicting pressures to abstain or to have sex. Pressure from parents and relatives appears to be a strong factor in why youth continue to abstain. To a lesser extent, friends, religious groups, and teachers also play a role in promoting abstinence. The findings suggest that social and cultural norms concerning abstinence are being communicated to young people by families and faith-based groups. They also suggest that interventions targeting parents, relatives, and religious leaders need to focus on building the skills of these groups to continue to promote and teach abstinence to youth.

The content of abstinence messages are important to consider. The main motivation for both primary and secondary abstinence is a fear of getting STIs/HIV and for girls, to a lesser extent, to prevent pregnancy. Only a minority cited reasons that viewed waiting to have sex as a means to improve their lives, such as allowing them to finish school or establish a career. Exploring whether messages other than fear can be effective in preventing STIs/HIV and unintended pregnancy may be worthwhile. Promoting the positive value of abstinence (e.g., able to finish school, able to begin a career, etc.) along with messages about the serious consequences of too-early sex may ultimately be more sustaining than fear messages alone. In addition, such messages could help youth better understand why abstinence is an appropriate and healthy option for them.

The findings show that, for most young people, abstinence is being used to avoid disease, rather than unintended pregnancy or both. There appears to be a missed opportunity for promoting abstinence as a strategy for dual protection. If programs could expand the rationale and incentive for remaining abstinent (i.e., to avoid both STIs/HIV *and* unintended pregnancy), youth might be more willing to select abstinence as their protective strategy of choice.

*Being Faithful.* Once Iringa youth begin to have sexual relations, their use of protective strategies, such as remaining faithful to a single partner (one who ideally knows his or her HIV status) or using condoms, is more mixed. Of the three protective strategies, the data indicate that faithfulness messages are the least well known and understood. There also appear to be conflicting social and cultural norms that may make messages about faithfulness particularly difficult to convey effectively.

Most married or cohabiting youth reported that they are faithful to their partners. Few reported extramarital relationships, though more married men report them than married women. The extent to which sexually active unmarried or cohabiting youth are having multiple partners is more difficult to assess from the data. The percentage who reported having only casual or a mix of casual and regular partners in the past year was fairly high, particularly for boys. This could suggest many are having multiple partners.

While the majority of youth expected their partners to be faithful, a large minority indicated that being faithful is not possible for men or women and that it is necessary to have multiple partners in order to be sexually satisfied. Most youth viewed being faithful as a means to avoid STI/HIV infection, with only a minority seeing it as an important component of a relationship. Youth may not believe that being faithful or having fewer partners is necessary if they are using condoms. Conversely, if youth perceive that their partner is faithful, they may not use condoms.

Norms surrounding faithfulness can vary from culture to culture; establishing what faithfulness messages mean to a given population and how best to convey them is important. Recognizing the complexities of promoting faithfulness and partner reduction, YouthNet is conducting focus group discussions with youth in Iringa and Dar es Salaam to examine how these messages are understood and what they mean to the recipients. This modified cognitive testing approach will help programs to design and promote faithfulness messages by ensuring that the intended message is the same as the understood message.

*Condom Use.* Data on condom use show the inherent complexities of this dual protection strategy. Knowledge of condoms was high among the study population, and most viewed condoms as both an effective means of HIV and pregnancy prevention. Nonetheless, of concern is that a sizeable minority did not believe they are effective at preventing either HIV or pregnancy, which would likely discourage their use. Similarly, while attitudes toward using condoms were largely positive, contradictions exist. For example, many respondents thought a woman is smart for carrying a condom with her, but they also believed that a woman who carries one is planning to have sex or may lose respect if she

asks a man to use a condom. Other youth believed that using a condom means you do not trust your partner. Such contradictions and attitudes may discourage women and men from using condoms, and ultimately, could result in unprotected sex that could lead to HIV, an STI, or unintended pregnancy.

Not surprisingly, given social and cultural norms that encourage having children soon after marriage, condoms are used more often by unmarried than married youth. Among the unmarried, contraceptive use is almost entirely condom use. Although condom use rates at last sex were reasonably high, contraceptive use at first sex was relatively low. While the survey did not ask about consistent condom use, the fact that use during the last 12 months was higher than use at last sex shows that those respondents using condoms are not using them at every sex act. Messages reinforcing the need for consistent condom use by those who are sexually active are needed.

Data on reasons why contraception was not used at last sex illustrate the inconsistencies in the way condoms are perceived. Many unmarried youth said they did not use contraception because they perceived no risk of getting a disease. Since contraceptive use among this population is almost entirely condoms, it suggests that condoms are viewed as something to use for disease prevention – not necessarily to prevent pregnancy. Condom use was more prevalent within casual relationships than in regular ones. More attention is needed to promote condoms for dual protection and to make other methods of contraception more accessible.

Messages and program initiatives promoting these three protective strategies are dealing with complex topics that can overlap as well as conflict with each other. When promoting messages that encompass all three strategies, the underlying theme must encourage youth to make appropriate and healthy choices. Messages that promote only one of the three choices – i.e., abstain, be faithful, or use a condom – should be targeted appropriately. They should also clearly outline the benefits of the individual strategy being endorsed. For example, messages about abstinence and condom use should promote each strategy as a means to prevent both disease and unintended pregnancy. Messages about faithfulness should explain that a family planning method must be used if pregnancy prevention is desired. Messages that have been concentrating on STI/HIV prevention have downplayed pregnancy prevention and family planning messages.

### *Recommendations*

- All three protective strategies – i.e., abstinence, faithfulness, and condom use – need to be reinforced through knowledge and behavior change communication programs in a way that reflects the complexities of young people’s lives. Attention needs to shift from programs focused on knowledge to behavior change communication approaches.
- Programs for younger youth should promote abstinence messages and begin to prepare them for faithfulness, while messages should be adjusted to incorporate all three strategies as youth grow older and face new types of pressures.

- Programs for sexually active youth need to emphasize the importance of faithfulness to one partner (ideally, one who knows his or her HIV status) or partner reduction, even when condoms are used. Faithfulness messages need to address the complexities of this protective strategy. Social, cultural, and gender norms around faithfulness will require more investigation if programs are to be successful in promoting this strategy.
- Programs for sexually active youth should promote the use of condoms for dual protection against STI/HIV transmission and unintended pregnancy.
- Life skills programs must be supported to increase self-esteem, self-confidence, and negotiating abilities, especially among girls. These skills can help youth match their stated desire to remain abstinent with their behaviors.

### **Role of Gender Norms**

Gender differences are evident throughout the results and come through in nearly all areas examined in this survey.

For most questions, girls almost consistently knew less than boys, though the difference was often not too great. Furthermore, an examination of attitudes shows the influence of gender in terms of power dynamics within relationships and control over sexual behavior. Social and cultural norms dictate that the more stable the relationship, the less likely a girl feels she can negotiate condom use or refuse having sex. A married woman is the least likely to feel she can insist on condom use. The only exception for married women is that it is considered acceptable for a wife to ask a husband to use a condom if she knows he has an STI. Older youth and boys tend to support gender norms that give males more control over sexual behavior. The data show an evolution of these norms as youth grow older. HIV/AIDS and reproductive health interventions need to incorporate information and build skills that promote gender equity and equality relating to communication and sexual negotiation.

Gender differences are further apparent in terms of sexual debut and in the types of relationships boys and girls have. Girls had sexual debut at an earlier age than boys. Their first experience was more likely to be with a regular partner. On the other hand, sexual debut for boys was more likely to be within a casual relationship. This pattern of types of relationships continued beyond sexual debut with girls having sex primarily with regular partners and unmarried boys having relationships more with casual partners.

Of special concern is the high percentage of girls, particularly younger, rural girls reporting forced sex, trickery, or receipt of money or goods in exchange for sex. This was noted both at first sex and at last sex and presents a troubling picture of the situation under which many girls are initiating sexual relations and remaining sexually active. The full circumstances surrounding nonconsensual sex is not clear from this survey and more in-depth research is needed to fully understand this situation and to develop programs and interventions to counter it.

## *Recommendations*

- Programs need to pay more attention to gender norms, especially to issues related to power dynamics and control over sexual behavior. Promotion of gender equity and equality messages must start with younger ages and continue to be reinforced for older youth, especially males. Also, girls need to be empowered to take control over their sexual lives and provided with opportunities for improving their decision-making and negotiating abilities.
- More in-depth information is needed about the coercive sexual debut and sexual violence reported by girls, especially younger girls in rural areas. Appropriate interventions need to be developed, both to empower girls to avoid coercive situations, as well as to address social, cultural, and gender norms that condone coercive behaviors in perpetrators.
- More attention is needed on gender roles within marriage for young couples. Interventions are needed to strengthen couple communication about risky behaviors and risk-reduction strategies.

## **Knowledge-Behavior Gap**

The need to expand behavior change communication efforts is evident throughout the results. The data suggest a need to build on information-based initiatives to include greater emphasis on skills-building related to protecting oneself from both disease and unintended pregnancy. In addition to the need to scale up educational efforts that promote the three protective strategies, the data highlight weaknesses in specific areas of knowledge. The most serious gap in knowledge concerns pregnancy prevention and contraceptive methods. Given the high pregnancy rates among single women who have had sex, it is apparent that additional, youth-specific programs are needed to respond effectively and appropriately to this critical problem.

Another issue to be addressed among young people is stigma mitigation. While most youth displayed compassion for family members who have HIV/AIDS and did not feel the disease must remain a family secret, compassion did not extend to community members who are not related to the respondent. Complementary efforts addressing social norms, promoting compassion, and destigmatizing HIV/AIDS – targeted at youth specifically as well as the community – could help alleviate discrimination against those living with HIV/AIDS and prevent further infections. Countering stigma may include, for example: campaigns dispelling myths and misconceptions, coping skills for persons living with or affected by HIV/AIDS, counseling for persons infected or those providing care, and expanding faith-based efforts to reduce stigma and discrimination.

Risk perceptions about HIV and pregnancy are interrelated. In general, young people tended to know about HIV/AIDS and how it is transmitted, but many youth did not perceive themselves to be at risk. Moreover, young peoples' behaviors did not always

match their perceptions of HIV risk, and risk perception did not appear to influence who got an HIV test. Many stated their risk of pregnancy was low because they were not having sex often or because they were already pregnant. In addition, girls did not appear to have the information, and by extension the appropriate skills, needed to assess their risk of getting pregnant.

One troubling finding about risk perception is that some reported they were at medium or high risk of HIV because of injectable drug use. Further investigation is needed to determine if this question was, in fact, understood by survey respondents. If injectable drug use is a problem among Iringa youth, knowledge and services on drug use and abuse will also be needed.

Overall, knowledge on most topics increases as youth get older. Males often know more than females, and urban residents know more than rural residents. One reason for urban-rural differences is that programs have focused more on urban areas. This evidence points to the need for targeted interventions to ensure that all subgroups are getting the information that they need to protect themselves against both STIs/HIV and unintended pregnancy. It also points to the value of reaching youth at younger ages. Educating youth when they are young, and teaching them appropriate refusal and negotiation skills, will increase the chance of influencing their future behavior. Also, because children begin internalizing social, cultural, and gender norms at a young age, interventions that reach youth before attitudes are fully formed may have the greatest chance of having an impact on their reproductive health and sexual behaviors.

The data on education show that the best chance of reaching a substantial proportion of younger youth is in primary school. Most youth in Iringa complete primary school, but few go on to secondary school, particularly in the rural areas. School-based HIV/AIDS and family life education efforts also need to increase their provision of age- and developmental-appropriate information and skills related to pregnancy and family planning. While many youth reported receiving information on STIs and HIV/AIDS in schools, a far lower percentage reported lessons on pregnancy, childbirth, and family planning. More attention should also be paid to communication, decision-making, and refusal skills, as well as relationships, sexual coercion, and demand for and use of youth-friendly services.

Targeting out-of-school youth is far more difficult than reaching those in school. A popular means of doing this is through peer-education programs. However, the results show that such programs are reaching only a minority of youth, although this percentage is higher in urban than in rural areas. Furthermore, peer education programs are reaching more youth who are in-school than out-of-school. Thus, these programs are often reaching the same youth who are receiving school-based HIV/AIDS or family life education. More in-depth information about whether peer education and school-based programs complement or substitute for each other is needed in order to determine whether and how the two approaches should be revised or expanded. Like in-school programs, peer education programs also appear to concentrate on providing STI and HIV/AIDS information and do not include enough information on pregnancy and

childbirth, as well as skills-based training, modeling, and reinforcement of messages. Referral for services could be also enhanced within peer education programs, especially for family planning and VCT.

Other ways to reach youth are through faith-based groups and youth groups. Given that the majority of respondents indicated that they attend religious services at least once a week, faith-based initiatives have the potential to reach large numbers of youth and to influence norms and behaviors of young people, their parents, and other community members. Youth groups also have potential, although girls and younger youth need to be better integrated into such programs, and efforts in rural areas must be expanded.

Programs that rely on the media mainly reach their target groups through radio. This is a common source of communication in both rural and urban areas, and it is the only one routinely used by youth. As such, more creative ways of using radio could be explored. Radio stations in Dar es Salaam have shown great interest in youth programming around reproductive health and HIV/AIDS issues and their support could possibly be solicited in developing behavior change communication interventions, especially those that can reach youth in more rural areas. Because television use is only cited widely in urban areas, it should only be relied on by programs that want to reach urban youth.

The results showed little daily use of magazines and newspapers. However, the survey was done before a recent initiative expanding the availability of written materials for youth in Iringa, especially in rural areas. The impact of this initiative should be followed to assess the value of scaling up related interventions where possible. In addition, it would be worth exploring lessons learned from the Ishi and Salama condom campaigns to try to develop innovative and effective behavior change communication campaigns and interventions.

### *Recommendations*

- For unmarried, sexually active youth, information about risk perception, methods of protection, and services for STIs, HIV/AIDS, and pregnancy must be an essential component of knowledge campaigns and skills-based interventions. Because sexually active, unmarried girls experience high rates of unintended pregnancy, integrating reproductive health into HIV/AIDS initiatives should be given priority.
- Media, faith-based groups, schools, and other community organizations that influence social and cultural norms should address stigma and discrimination and promote compassion for those who are HIV-positive or living with AIDS.
- School-based programs should be strengthened to reach younger youth with age-appropriate messages. The benefits of avoiding early pregnancy and STI/HIV infection, such as additional schooling and career opportunities, should be more strongly emphasized.

- Older, out-of-school youth need to be reached through strategies that include faith-based initiatives, youth clubs, radio programming, and peer education. Message content for older youth should emphasize both STI/HIV and pregnancy prevention.

## **Services**

The data show areas where services for youth could be improved. The quality of VCT services needs improvement, specifically with regard to counseling before testing and after receiving the results. These weaknesses are especially evident in testing provided during antenatal care. Provider training is needed to address these weaknesses.

STI services could use the opportunity of youth coming for treatment to provide further counseling on HIV/AIDS, including condom use. It could also be an opportunity to integrate pregnancy prevention counseling.

Finally, more investigation is needed about distribution of commodities through non-health sources. Many youth are getting their condoms from pharmacies and shops (rather than from health care providers). Investigating how to better utilize these distribution points would be helpful, for example, by promoting youth-friendly pharmacies through a targeted behavior change communication campaign.

## *Recommendations*

- Youth access to quality services and commodities for VCT, STI diagnosis and treatment, antenatal care, and family planning needs improvement. Special attention needs to be given to counseling before and after testing and around issues such as partner reduction, condom use, and other ways to reduce high-risk behavior.

## Tables

**Table 1: Percentage of youth who identified ways of becoming infected with STIs**

	Boys	Girls	13-14	15-19	20-24	Rural	Urban	All
<i>When is a man most likely to become infected because of having sexual intercourse?</i>								
<i>Percentage who agreed with following statement:</i>								
If he also has sex with other women	88	87	76	89	93	87	90	88
When his partner is already infected	95	93	85	94	99	93	97	94
If his partner also has other	89	88	75	90	95	88	92	89
partners								
When he has sex with a prostitute	86	87	72	88	93	85	90	86
When he doesn't use a condom	88	79	67	84	93	81	93	84
N	2311	2297	1682	1808	1118	2040	2568	4608
<i>When is a woman most likely to become infected because of having sexual intercourse?</i>								
<i>Percentage who agreed with following statement:</i>								
If she also has sex with other men	89	89	78	90	95	88	92	89
When her partner is already infected	94	94	86	94	98	93	97	94
If her partner also has other lovers	89	89	77	90	95	88	92	89
If she has sex for money	89	87	75	88	95	87	92	88
When her partner does not use a condom	88	80	67	85	93	81	94	84
N	2309	2293	1679	1806	1117	2037	2565	4602

**Table 2: Percentage of youth who identified various HIV transmission pathways**

	Boys	Girls	13-14	15-19	20-24	Rural	Urban	All
<i>Spontaneously identified</i>								
Sexual intercourse	95	93	90	94	97	94	96	94
Sharing needles/blades	51	40	30	47	52	42	59	45
Blood transfusions	18	16	11	17	22	15	28	17
Kissing	3	2	1	1	4	1	6	2
Oral sex	1	0	0	1	1	0	2	1
Casual contact (handshake, sharing food, etc.)	6	6	5	7	6	6	6	6
Don't know	4	5	8	5	1	5	3	5
<i>Specifically asked about*</i>								
Mother-to-child during pregnancy	79	80	69	82	82	79	81	79
Mother-to-child during delivery	65	69	52	66	78	65	76	67
Mother-to-child through breastmilk	62	71	53	66	75	65	73	66
N	2296	2282	1659	1804	1115	2018	2560	4578

\* Unlike the other transmission mechanisms, the three mother-to-child transmission mechanisms were individually read aloud to the respondent.

**Table 3: Percentage of youth who have various perceptions of the potential risks and consequences of pregnancy**

	Boys	Girls	13-14	15-19	20-24	Rural	Urban	All
<i>Potential health risks to young mother and her child</i>								
Risk to life of	41	32	26	39	40	34	47	36
Risk to life of	31	19	16	27	28	23	32	25
Birth by operation (caesarean section)	37	42	20	36	57	39	44	40
Obstructed labor	24	23	13	23	30	22	29	23
Damage to reproductive organs	12	10	7	13	12	10	16	11
Other pregnancy and delivery complications	14	11	10	13	14	11	19	13
Not aware of health risks	29	31	49	30	17	33	17	30
Don't know	2	2	3	2	1	2	2	2
<i>Social and economic consequences to young mother</i>								
Have to drop out of school	29	27	33	28	26	25	41	28
Have to support a child	27	24	11	24	36	24	30	25
Disapproval of family	22	28	18	25	29	21	38	25
Early marriage	10	9	6	10	11	8	16	9
Early marriage	17	8	7	13	14	12	12	12
Other	2	4	1	3	4	3	3	3
No consequences at all	11	9	11	12	8	11	6	10
Don't know	24	27	40	26	17	28	16	26
N	2315	2295	1682	1810	1118	2039	2571	4610

**Table 4: Percentage of youth who have various perceptions of the consequences for young men who get a girl pregnant**

	Boys	Girls	13-14	15-19	20-24	Rural	Urban	All
No consequences at all	27	41	36	32	35	35	31	34
Have to drop out of school	17	9	13	13	13	11	22	13
Have to run away from home	15	9	8	12	14	11	14	12
Early marriage	21	12	9	17	21	17	17	17
Have to support a child	21	14	9	17	23	16	21	17
Disapproval of family	9	8	5	9	9	7	12	8
Disapproval of community	5	4	3	5	5	4	6	4
Can be sent to prison if girl is underage	37	28	34	32	31	31	36	32
Other	9	10	13	11	6	11	4	9
N	2307	2295	1678	1808	1116	2036	2566	4602

**Table 5: Percentage of youth who identified various ways to avoid getting HIV**

	Boys	Girls	13-14	15-19	20-24	Rural	Urban	All
Abstain from sex	77	68	76	74	69	73	72	73
Use condoms	66	46	35	55	69	52	67	55
Limit sex to one partner/stay faithful to one partner	35	29	18	29	44	29	43	32
Avoid sex with persons who have many partners	3	2	3	2	2	2	2	2
Avoid injections	7	9	6	8	9	7	11	8
Avoid sharing razors/blades	27	20	16	27	25	23	28	24
N	2281	2269	1649	1799	1102	2005	2545	4550

**Table 6: Percentage of youth who perceived effectiveness of condoms in preventing pregnancy**

<i>If a condom is used correctly for preventing pregnancy it...</i>	<i>13-14</i>			<i>15-19</i>			<i>20-24</i>			<i>All</i>
	<i>Boys</i>	<i>Girls</i>	<i>All</i>	<i>Boys</i>	<i>Girls</i>	<i>All</i>	<i>Boys</i>	<i>Girls</i>	<i>All</i>	
<i>Rural</i>										
Protects most of the time	40	22	32	53	34	45	71	40	54	46
Protects sometimes	30	26	28	33	41	37	20	31	26	31
Does not protect	13	15	14	8	8	8	5	6	5	8
Don't know	17	37	25	6	17	11	5	23	15	15
N	345	285	630	338	240	578	222	157	379	1587
<i>Urban</i>										
Protects most of the time	46	31	38	63	49	55	76	59	66	57
Protects sometimes	34	35	35	29	33	31	20	31	26	30
Does not protect	9	8	8	4	6	5	2	4	3	5
Don't know	11	26	19	3	13	8	2	7	5	8
N	304	305	609	501	570	1071	363	355	718	2398
<i>All Iringa</i>										
Protects most of the time	41	24	33	55	39	47	72	45	57	49
Protects sometimes	31	28	30	32	39	35	20	31	26	31
Does not protect	13	13	13	7	7	7	4	5	5	7
Don't know	16	35	24	5	15	10	4	19	13	14
N	649	590	1239	839	810	1649	585	512	1097	3985

**Table 7: Percentage of youth who agreed with the following statements concerning sexual relationships**

	<i>Boys</i>	<i>Girls</i>	<i>13-14</i>	<i>15-19</i>	<i>20-24</i>	<i>Rural</i>	<i>Urban</i>	<i>All</i>
Normally a woman expects her regular partner to not have sex with anyone else	70	74	63	72	77	72	74	72
It is ok for a woman to ask her regular partner to not have sex with anyone else	77	83	68	80	88	79	86	80
It is not possible for a man to have a sexual relationship with only one woman at a time	32	34	31	33	34	33	32	33
Normally a man expects his regular partner to not have sex with anyone else	73	76	66	73	82	75	76	75
It is ok for a man to ask his regular partner to not have sex with anyone else	77	83	70	80	87	79	87	80
It is not possible for a woman to have a sexual relationship with only one man at a time	29	23	27	27	23	26	24	26
N (13-24 year olds)	2316	2297	1680	1813	1120	2039	2574	4613
A man must have more than one partner to be sexually satisfied	21	19	NA	24	16	20	19	20
A woman must have more than one partner to be sexually satisfied	17	15	NA	20	11	16	16	16
N (ages 15 to 24)	1493	1431	0	1804	1120	1080	1844	2924

**Table 8: Percentage of youth who agreed with various statements about control over sexual behavior**

	Boys	Girls	13-14	15-19	20-24	Rural	Urban	All
<i>Once a girl has had sex, she cannot or has no reason to say "no" when:</i>								
Someone (anyone) asks her to have sex	50	39	40	46	45	45	40	44
Someone she has had sex with before asks her to have sex	61	59	51	60	65	61	55	60
Someone she has sex with regularly asks her to have sex	68	67	58	68	72	68	65	67
<i>A wife cannot or has no reason to say "no" when her husband asks her to have sex</i>								
	67	79	64	73	78	73	73	73
N	2318	2300	1682	1816	1120	2044	2574	4618

**Table 9: Percentage of youth who agreed with various statements regarding condoms**

	Boys	Girls	15-19	20-24	Rural	Urban	All
Many people in your community use male condoms	71	48	60	58	55	68	58
A woman who carries male condoms in her purse is wise	72	53	61	61	58	70	61
Using male condoms reduces sexual pleasure	56	37	41	47	44	50	45
A woman would lose a man's respect if she asked him to use a male condom	45	45	41	47	46	43	45
You would not be able to buy a male condom because it is too embarrassing	39	57	46	50	52	42	49
Using a male condom means that you don't trust your partner	67	66	64	67	69	58	66
Carrying a male condom with you is difficult because it makes you look as if you planned to have sex	59	62	60	61	61	59	61
N (ages 15 to 24)	711	723	557	876	454	980	1434

**Table 10: Percentage of youth who had various perceptions of their ability to have a partner use condoms**

	<i>Married or cohabiting</i>			<i>Not married or cohabiting</i>		
	Boys	Girls	Total	Boys	Girls	Total
Definitely or probably could not insist on condom use even if partner does not want to	9	45	35	7	31	19
Agrees that a wife is justified in asking her husband to use condom when she knows that her husband has an STI	89	85	86	91	84	87
N (sexually active, ages 15 to 24)	99	252	351	610	470	1080

**Table 11: Percentage of youth who agreed with various statements concerning attitudes toward AIDS and persons living with AIDS**

	<i>Boys</i>	<i>Girls</i>	<i>13-14</i>	<i>15-19</i>	<i>20-24</i>	<i>Rural</i>	<i>Urban</i>	<i>All</i>
Knows someone who has HIV or died from AIDS	44	42	32	42	50	40	53	43
Would want AIDS to remain a secret if family member had it	21	26	30	23	20	23	25	23
Would be willing to care for a relative if he/she became sick with AIDS	78	82	69	80	86	77	90	79
Currently or ever has taken care of a relative with AIDS	7	7	3	6	10	6	9	7
Teacher with AIDS should be allowed to continue teaching	49	44	35	48	52	42	63	47
Knows of a teacher who was forced to leave school because he/she had AIDS	4	3	3	3	4	3	5	3
Students with AIDS should be allowed to continue studying at school	54	46	38	50	57	45	66	50
Knows of a student who was forced to leave school because he/she had AIDS	4	4	3	3	4	3	5	4
Would buy food from shopkeeper who had HIV	38	29	20	34	40	29	48	33
N	2295	2279	1658	1801	1115	2017	2557	4574

**Table 12: Percentage of youth who had sexual intercourse by various ages and median age at first intercourse**

	<i>Rural</i>		<i>Urban</i>		<i>All</i>	
	<i>Boys</i>	<i>Girls</i>	<i>Boys</i>	<i>Girls</i>	<i>Boys</i>	<i>Girls</i>
<i>Percentage who had sex by age:</i>						
15	9	14	8	10	9	11
17	34	41	32	34	33	37
19	54	65	52	55	53	60
21	68	86	72	74	70	79
23	84	98	89	87	86	92
<i>Median age at 1st sex</i>	19	18	19	18.5	19	18
N (ages 15 to 24)	597	460	858	943	1455	1403

**Table 13: Percentage of youth who gave various reasons why they had not had sex**

	<i>Boys</i>	<i>Girls</i>	<i>15-19</i>	<i>20-24</i>	<i>Rural</i>	<i>Urban</i>	<i>All</i>
Fear of STIs/HIV	55	51	52	55	53	51	53
Fear of pregnancy	2	35	18	16	17	22	18
Want to finish school/have career	15	11	16	6	13	16	14
Want to have control over own life	9	8	8	12	7	14	8
No opportunity/partner	5	5	5	5	5	7	5
Religious/moral reasons	27	23	23	33	24	29	25
Other	8	11	10	4	9	10	9
Don't know	5	7	6	5	6	4	6
N (ages 15 to 24)	777	705	1244	238	625	857	1482

**Table 14: Percentage of youth who plan to begin having sex, by circumstance**

	<i>Boys</i>	<i>Girls</i>	<i>15-19</i>	<i>20-24</i>	<i>Rural</i>	<i>Urban</i>	<i>All</i>
No plan, will have sex when have opportunity	2	2	2	3	2	1	2
Until I am married	39	39	33	63	38	40	39
Until I meet the right person	2	2	1	5	2	2	2
Until I am emotionally ready	0	1	1	0	1	1	1
Until I finish school/fulfill plans	17	18	20	9	17	20	18
Until I am a certain age	37	36	39	24	37	34	36
Other	1	0	1	1	0	1	1
Don't know	11	14	13	10	13	9	13
N (youth who had not had sex)	750	682	1201	231	603	829	1432

**Table 15: Percentage of youth who had not had sex who said they feel pressure to delay sex, and source of pressure**

	<i>Boys</i>	<i>Girls</i>	<i>15-19</i>	<i>20-24</i>	<i>Rural</i>	<i>Urban</i>	<i>All</i>
Percent who felt pressure to delay sex	61	74	68	65	66	74	67
N (youth who had not had sex)	778	701	1241	238	624	855	1479
<i>Source of pressure (to delay sex)</i>							
Friends	33	25	29	29	28	31	29
Parents	64	77	71	69	70	71	71
Relatives	32	47	42	31	39	43	40
Media	4	3	4	3	4	5	4
Teachers	15	16	19	1	15	17	15
Religious authority	29	17	18	44	24	21	23
Govt/organizations/NGOs	9	4	7	8	7	6	7
N (youth had not had sex and said they feel pressure to delay sex)	500	529	875	154	401	628	1029

**Table 16: Percentage of youth who cited various reasons why they had sex the first time**

	<i>Boys</i>	<i>Girls</i>	<i>15-19</i>	<i>20-24</i>	<i>Rural</i>	<i>Urban</i>	<i>All</i>
Wanted to	34	15	26	23	24	24	24
Find out what it was like/experimenting	35	15	20	25	23	25	24
Pressure from peers	4	1	3	2	2	4	2
To have a baby	1	2	1	2	2	1	2
It just happened	21	27	26	23	24	25	24
Sweet-talked by my partner	4	10	4	9	8	5	7
Partner threatened to end relationship	1	10	5	7	6	8	6
Partner threatened to end relationship	0	1	0	0	0	0	0
Tricked/convinced with money, gifts	4	10	8	7	7	9	8
Forced to have sex	1	10	9	4	5	6	6
Other	1	2	1	2	2	1	2
N (youth who had ever had sex)	711	722	559	874	451	982	1433

Note: Totals do not add to 100 because each respondent could give multiple responses.

**Table 17: Percentage of youth by marital/cohabiting status**

	<i>15 to 19</i>			<i>20 to 24</i>			<i>All</i>
	<i>Boys</i>	<i>Girls</i>	<i>Total</i>	<i>Boys</i>	<i>Girls</i>	<i>Total</i>	
<i>Rural</i>							
Currently married/currently cohabiting with partner	2	8	5	22	36	30	16
Not currently/never married or living with partner	98	92	95	78	64	70	84
Total	100	100	100	100	100	100	100
N	378	309	687	228	164	392	1079
<i>Urban</i>							
Currently married/currently cohabiting with partner	2	9	6	11	36	25	15
Not currently/never married or living with partner	98	91	94	89	64	75	85
Total	100	100	100	100	100	100	100
N	517	598	1115	367	357	724	1839
<i>All</i>							
Currently married/currently cohabiting with partner	2	8	5	19	36	29	16
Not currently/never married or living with partner	98	92	95	81	64	71	84
Total	100	100	100	100	100	100	100
N	895	907	1802	595	521	1116	2918

**Table 18: Percentage of youth who had sex in the past 12 months among those never married/not currently cohabiting**

	<i>Boys</i>	<i>Girls</i>	<i>15-19</i>	<i>20-24</i>	<i>All</i>
<i>Rural</i>					
Percentage who had sex in the past year	52	46	57	45	49
N (ever had sex)	185	132	133	184	317
<i>Urban</i>					
Percentage who had sex in the past year	61	66	64	63	63
N (ever had sex)	424	338	339	423	762
<i>All</i>					
Percentage who had sex in the past year	55	52	59	50	53
N (ever had sex)	609	470	472	607	1079

**Table 19: Percentage of unmarried and non-cohabiting respondents who decided not to have sex at some time in the past 12 months and reasons given**

	<i>Boys</i>	<i>Girls</i>	<i>15-19</i>	<i>20-24</i>	<i>Rural</i>	<i>Urban</i>	<i>All</i>
<i>Percentage decided not to have sex in the past 12 months:</i>							
	55	31	43	43	42	46	43
N (sexually active unmarried and non-cohabiting youth)	614	485	490	609	324	775	1099
<i>Leading reasons why decision made:</i>							
No reason, just did not want to	28	31	31	29	30	29	30
Scared of getting infected	37	7	28	20	22	25	23
Religious/moral reasons	9	1	4	5	5	6	5
Did not want to get pregnant/get someone pregnant	3	10	6	6	5	7	6
N (those who decided not to have sex in the past 12 months)	354	172	237	289	147	379	526

**Table 20: Percentage distribution of type of relationship at last sex**

	15-19		20-24		All	
	Boys	Girls	Boys	Girls	Boys	Girls
<i>Rural</i>						
husband/wife/live-in partner	7	31	28	46	21	42
fiancé/boyfriend/girlfriend/lover	20	39	22	39	21	39
friend/neighbor	56	16	35	11	42	12
occasional partner	16	7	12	3	13	4
other*	1	8	3	1	2	3
Total	100	100	100	100	100	100
N (youth who have ever had sex)	77	79	153	127	230	206
<i>Urban</i>						
husband/wife/live-in partner	6	27	11	43	9	38
fiancé/boyfriend/girlfriend/lover	17	48	30	43	25	45
friend/neighbor	59	21	35	8	44	12
occasional partner	17	2	20	2	19	2
other*	1	2	4	3	3	3
Total	100	100	100	100	100	100
N (youth who have ever had sex)	186	206	282	299	468	505
<i>All</i>						
husband/wife/live-in partner	7	29	24	45	18	41
fiancé/boyfriend/girlfriend/lover	19	42	24	40	22	41
friend/neighbor	57	17	35	11	42	12
occasional partner	16	5	14	3	15	3
other*	1	6	3	1	2	3
Total	100	100	100	100	100	100
N (youth who have ever had sex)	263	285	435	426	698	711

\* Other includes sugar daddy/sugar mommy, just met/stranger, family member/relative, sex workers, and others.

**Table 21: Percentage distribution of risk perceptions about HIV/AIDS among sexually active youth ages 15 to 24**

	Married or cohabiting			Not married or cohabiting		
	Boys	Girls	All	Boys	Girls	All
No risk	66	59	61	64	65	64
Low risk	18	12	14	16	13	14
Medium risk	4	8	7	6	4	5
High risk	10	14	13	12	11	11
Don't know	3	6	5	2	7	5
All	100	100	100	100	100	100
N	99	251	350	603	481	1084

**Table 22: Percentage of sexually active youth ages 15 to 24 who gave various reasons why they perceived no risk or a low risk of HIV infection**

	<i>Married or cohabiting</i>			<i>Not married or cohabiting</i>		
	<i>Boys</i>	<i>Girls</i>	<i>All</i>	<i>Boys</i>	<i>Girls</i>	<i>All</i>
I don't have sexual relations	0	9	6	40	52	46
I always use a condom	11	11	11	30	16	23
I only have sex with one person	68	58	61	24	20	22
My partner has no other partner	13	5	7	6	2	4
I have confidence in my partner	27	33	31	7	15	11
N	75	168	243	461	376	837

**Table 23: Percentage of sexually active youth ages 15 to 24 who gave various reasons why they perceived a medium risk or high risk of HIV infection**

	<i>Married or cohabiting</i>			<i>Not married or cohabiting</i>		
	<i>Boys</i>	<i>Girls</i>	<i>All</i>	<i>Boys</i>	<i>Girls</i>	<i>All</i>
I use injectable	6	1	2	15	0	9
I have sex often	3	2	2	17	10	14
I don't use a condom	38	25	28	42	26	35
I have more than one partner	22	8	11	13	3	9
My partner has other partners	22	67	57	18	48	31
N	21	61	82	132	86	218

**Table 24: Percentage of girls who cited various reason for why they think it is likely or unlikely they will become pregnant in the 3 months following the interview**

	<i>Not married or cohabiting</i>	<i>Married or cohabiting</i>	<i>Rural</i>	<i>Urban</i>	<i>All</i>
<i>Reasons why respondent thinks it not likely or somewhat likely she will get pregnant in the next 3 month:</i>					
I am already pregnant or breastfeeding	25	62	42	27	38
I do not have/plan not to have sex that often	45	5	32	30	32
I don't have a partner/just broke up relationship/marriage	20	0	14	12	13
I only have sex during safe times	3	2	3	3	3
I am using a contraceptive	12	29	15	25	18
We always use a condom	9	2	4	15	7
I have not gotten pregnant so far	3	1	2	2	2
Other	6	3	6	2	5
N (say they are not likely or somewhat likely to get pregnant)	413	176	166	423	589
<i>Reasons why respondent thinks it is very likely or certain that she will get pregnant in the next 3 months:</i>					
I have/plan to have sex often	37	36	39	25	36
I just started relationship/marriage	37	2	15	8	14
I am not using a contraceptive	11	65	43	62	46
I have been pregnant before	2	1	0	8	2
I have not gotten pregnant so far	0	6	2	12	4
Other	13	1	5	8	5
N (say they are very likely or certain to get pregnant)	35	52	32	55	87

**Table 25: Percentage of girls ages 15 to 24 who got tested and received counseling messages during an ANC visit**

	<i>Rural</i>	<i>Urban</i>	<i>All</i>
Tested for HIV virus during one of your ANC visits	35	42	36
N (girls who had ANC visit)	142	275	417
Counselor asked you why you wanted to learn your HIV status?	*	85	93
Counselor discussed how HIV is transmitted?	*	92	88
Counselor discussed how you would deal with a positive result?	*	94	77
N (girls received pre-test counseling)	15	52	67
Counselor discussed the meaning of your test results?	*	90	89
Counselor discussed how to lower your risk of getting HIV/AIDS?	*	77	85
N (girls received HIV test results during antenatal visits)	22	58	80

\* Percentage not calculated if N<25.

**Table 26: Percentage of girls ages 15 to 24 who got tested and received counseling messages during a VCT visit**

	<i>Rural</i>	<i>Urban</i>	<i>All</i>
Tested for HIV	9	18	11
N (all 15-24)*	415	874	1289
Counselor asked you why you wanted to learn your HIV status?	96	96	96
Counselor discussed how HIV is transmitted?	92	92	92
Counselor discussed how you would deal with a positive result?	92	95	93
N (received pre-test counseling)	25	124	149
Counselor discussed the meaning of your test results?	89	93	91
Counselor discussed how to lower your risk of getting HIV/AIDS?	88	90	89
N (received HIV test results)	27	119	146

\* Excludes girls tested during antenatal visits.

**Table 27: Percentage of youth ages 15 to 24 who gave various reasons for not using any prevention against disease or pregnancy at last sex, by relationship with partner**

	<i>Spouse/live-in partner</i>		<i>Other</i>		<i>All</i>
	<i>Boys</i>	<i>Girls</i>	<i>Boys</i>	<i>Girls</i>	
Didn't want to	21	13	12	7	12
Partner did not want to	0	7	1	13	7
Wasn't expecting to have sex	0	2	1	6	3
Wasn't thinking about it	0	1	8	17	8
Thought I couldn't get pregnant/get her pregnant	1	9	10	12	9
Perceived no risk of getting disease	19	30	20	20	23
Thought it was bad for my health	2	7	11	5	7
Did not know about methods	4	6	7	10	7
Wanted to have a child	50	20	10	15	19
Other	12	12	7	2	7
N	67	189	250	228	734

**Table 28: Percentage of youth who obtained condoms, by source**

	<i>Boys</i>	<i>Girls</i>	<i>15-19</i>	<i>20-24</i>	<i>Rural</i>	<i>Urban</i>	<i>All</i>
Hospital/maternity ward	9	6	6	9	8	7	8
Health center/health post	15	8	4	15	14	6	12
Private clinic	1	3	1	3	2	2	2
Pharmacy	25	23	26	23	15	42	24
Other shop	62	50	62	53	57	52	56
Bar/guest house	1	2	3	1	2	1	1
Family member/partner/friend	2	21	15	11	12	12	12
Festivals/organizations/NGOs	2	1	1	2	1	3	2
Other	1	1	2	1	2	1	1
N	465	439	345	559	230	674	904

**Table 29: Percentage of youth who are currently attending, have dropped out, or never attended school**

	<i>13-14</i>			<i>15-19</i>			<i>20-24</i>		
	<i>Boys</i>	<i>Girls</i>	<i>All</i>	<i>Boys</i>	<i>Girls</i>	<i>All</i>	<i>Boys</i>	<i>Girls</i>	<i>All</i>
<i>Rural</i>									
attending school	90	91	90	37	31	34	1	3	2
not attending	7	6	7	59	62	60	93	89	91
never attended	3	3	3	5	7	6	6	8	8
N	465	493	958	377	313	690	226	161	387
<i>Urban</i>									
attending school	88	78	83	50	38	43	14	7	10
not attending	10	16	13	46	57	52	84	88	86
never attended	2	6	4	4	5	5	3	5	4
N	351	367	718	520	598	1118	367	354	721
<i>All</i>									
attending school	90	88	89	39	33	36	4	4	4
not attending	7	8	8	56	61	58	91	89	90
never attended	3	4	3	4	7	6	6	8	7
N	816	860	1676	897	911	1808	593	515	1108

**Table 30: Percentage of youth who indicated highest schooling level completed, by those who no longer attend school**

	<i>15-19</i>			<i>20-24</i>			<i>All</i>
	<i>Boys</i>	<i>Girls</i>	<i>All</i>	<i>Boys</i>	<i>Girls</i>	<i>All</i>	
<i>Rural</i>							
Less than Standard 7	18	12	15	14	16	15	15
Standard 7	82	84	83	81	76	78	80
More than Standard 7	0	4	2	5	8	7	5
Total	100	100	100	100	100	100	100
N	207	177	384	206	142	348	732
<i>Urban</i>							
Less than Standard 7	15	10	12	10	11	11	11
Standard 7	71	69	70	56	65	61	65
More than Standard 7	13	21	18	34	24	28	24
Total	100	100	100	100	100	100	100
N	217	333	550	305	309	614	1164
<i>All</i>							
Less than Standard 7	17	11	14	13	15	14	14
Standard 7	81	80	80	76	73	74	77
More than Standard 7	2	8	5	11	12	12	9
Total	100	100	100	100	100	100	100
N	424	510	934	511	451	962	1896

**Table 31: Percentage distribution of 13 year-olds currently attending school, by grade**

	<i>Boys</i>	<i>Girls</i>	<i>Rural</i>	<i>Urban</i>	<i>All</i>
<i>Age in years = 13</i>					
Standard 2 or lower	5	3	4	3	5
Standard 3	19	12	16	12	15
Standard 4	30	29	32	18	30
Standard 5	32	30	31	30	31
Standard 6	12	19	14	25	16
Standard 7 or higher	2	5	2	11	4
Total	100	100	100	100	100
N	354	401	439	316	755

**Table 32: Percentage distribution of youth by main activity in the past 12 months**

	<i>Boys</i>	<i>Girls</i>	<i>13-14</i>	<i>15-19</i>	<i>20-24</i>	<i>Rural</i>	<i>Urban</i>	<i>All</i>
Student	40	34	88	38	5	37	37	37
Worked in family enterprise	24	22	2	21	37	25	12	23
Worked for pay	14	11	2	11	20	10	20	12
Worked at home	18	27	5	25	30	23	19	22
Other	6	7	3	6	8	5	11	6
Total	100	100	100	100	100	100	100	100
N	2316	2307	1690	1816	1117	2050	2573	4623

**Table 33: Percentage of youth who used various media and frequency of use**

	<i>Boys</i>	<i>Girls</i>	<i>13-14</i>	<i>15-19</i>	<i>20-24</i>	<i>Rural</i>	<i>Urban</i>	<i>All</i>
<i>Read a newspaper or magazine</i>								
Almost every day	7	4	5	5	6	3	13	5
Occasionally	61	55	53	60	57	55	68	58
Not at all	33	42	42	35	37	42	19	37
Total	100	100	100	100	100	100	100	100
N	2310	2292	1678	1806	1118	2039	2563	4602
<i>Listen to the radio</i>								
Almost every day	56	38	34	48	53	43	58	46
Occasionally	33	41	46	38	32	39	32	38
Not at all	11	21	21	14	16	18	10	16
Total	100	100	100	100	100	100	100	100
N	2300	2286	1674	1796	1116	2031	2555	4586
<i>Watch television</i>								
Almost every day	6	5	3	6	7	1	25	6
Occasionally	31	21	19	29	26	19	50	26
Not at all	63	74	77	65	67	80	25	69
Total	100	100	100	100	100	100	100	100
N	2308	2292	1679	1803	1118	2038	2562	4600

**Table 34: Percentage of youth ages 13 to 24 who reported various topics covered by school instruction**

	<i>Rural</i>	<i>Urban</i>	<i>All</i>
Puberty, menstruation, reproduction	24	26	24
Sexual relationships, harassment, coercion	8	10	8
Abstinence, frequency of sex, sexual pleasure	19	20	19
Pregnancy and childbirth	20	36	25
STIs	49	59	51
HIV/AIDS	61	63	61
Family planning methods	7	8	7
Methods to prevent STIs, HIV/AIDS	29	26	28
Effectiveness of condoms in preventing HIV/AIDS	4	9	5
Sources of family planning methods, condoms	1	3	1
Places for testing for HIV/AIDS, treating STIs	1	4	2
<b>N</b>	<b>823</b>	<b>1495</b>	<b>2318</b>

**Table 35: Percentage of youth who reported that they heard about Ishi from various sources**

	<i>Boys</i>	<i>Girls</i>	<i>13-14</i>	<i>15-19</i>	<i>20-24</i>	<i>Rural</i>	<i>Urban</i>	<i>All</i>
Television/video	45	52	49	49	47	30	63	48
Radio	59	39	42	52	51	56	46	50
Newspaper/magazine	30	17	15	27	24	23	26	24
Billboards	12	9	8	12	10	10	12	11
Concert	14	8	11	12	11	9	14	12
Community rally/road show	11	9	12	8	13	10	11	10
Tee shirts/caps	22	24	23	27	18	18	27	23
Calendar/poster/sticker	16	16	16	18	14	16	16	16
Other	5	7	5	5	7	5	7	6
Don't remember	0	1	1	1	0	1	0	1
<b>N</b>	<b>1089</b>	<b>872</b>	<b>455</b>	<b>910</b>	<b>596</b>	<b>277</b>	<b>1684</b>	<b>1961</b>

**Table 36: Percentage of youth ages 13 to 24 who reported that they got information about Salama condoms from various sources**

	<i>Rural</i>	<i>Urban</i>	<i>All</i>
Television/video	13	55	24
Radio	68	66	67
Newspaper/magazine	23	38	27
Billboards	17	30	20
Concert	4	6	5
Community rally/road show	15	7	13
Tee shirts/caps	1	5	2
Mobile video	2	1	2
Calendar/poster/sticker	23	28	24
Other	6	3	5
Don't remember	1	0	1
N	1218	2240	3458



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