HIV AND SEXUAL BEHAVIOUR AMONG YOUNG SOUTH AFRICANS

A NATIONAL SURVEY OF 15 - 24 YEAR OLDS

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HIV and Sexual Behaviour Among Young South Africans: A national survey of 15-24 year olds

A survey conducted by the Reproductive Health Research Unit (RHRU) of the University of the Witwatersrand, Johannesburg, South Africa for the loveLife consortium in partnership with the Medical Research Council of South Africa, and with the independent oversight of a technical advisory board based in the Center for AIDS Prevention Studies (CAPS) at the University of California, San Francisco, chaired by Prof. Tom Coates, Department of Medicine, Division of Infectious Diseases, University of California, Los Angeles.

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Executive Summary

Introduction

South Africa is in the grips of a devastating HIV/AIDS epidemic in which the peak incidence occurs among 15-24 year olds.

loveLife is the largest youth focused intervention aimed at HIV prevention in South Africa. It is a national initiative of unprecedented scale combining a sustained multi-media awareness and education campaign with comprehensive youth-friendly sexual health services in public clinics nationwide, and countrywide outreach and support programmes. This joint initiative between government, non-government organisations (NGOs) and academic institutions aims to reduce HIV, other sexually transmitted infections and unwanted pregnancy among South African youth.

It is difficult to attribute the impact of loveLife as distinct from the effects of other national HIV prevention campaigns. For this reason there are two main objectives of this National Evaluation. The first objective is to identify trends in HIV infection and related determinants of infection among young people. The second objective is to try and gauge the relative impact of loveLife on HIV and related risk behaviours. This National Youth Survey is the first of three such studies to be conducted at approximately two year intervals over the expected duration of the loveLife initiative, to track changes in HIV prevalence and sexual behaviour among South African youth. The aims of this initial study are to:

- establish the prevalence of HIV and related behaviours among young people aged 15-24 years
- assess young people's sexual attitudes
- examine the extent of young people's exposure to loveLife
- undertake this data collection with sufficient accuracy to permit monitoring of trends over time

Methodology

Sample

The sample size was calculated in order to allow for changes in HIV prevalence to be detected over time and to estimate HIV prevalence at a provincial level with reasonable accuracy. A total of 17,450 youth were identified as being eligible for the survey. Among these, 2,036 (11.7%) were from visiting points that could not be enumerated for various reasons. Of eligible and enumerated youth, 77.2% completed an interview, so that of all eligible youth, 11,904 (68.2%) completed the interview. A completed interview was defined as a combination of completed questionnaire and collection of an oral fluid sample for HIV testing.

Sampling Methods

The sample design employed a three-stage, disproportionate, stratified sample of all young people aged 15-24 years in the nine provinces of South Africa. The 2001 census enumeration areas (EAs) were used as the primary sampling unit. Using the census maps, all visiting points in the EAs were verified and the EA was segmented using natural boundaries.

A segment of the EA was randomly selected and all households in the segment were visited and enumerated. One eligible youth in each household was randomly selected.

Questionnaire

The questionnaire was developed based on a review of similar international and South African surveys. It was designed to cover questions addressing:

- demographics
- self reported pregnancy and symptoms of sexually transmitted infections
- self-reported sexual behaviour and key antecedents
- contraceptive use
- sexual coercion and violence
- attitudes, norms and communication around HIV
- perceived risk of HIV and health seeking behaviours
- indicators of awareness, participation and response to loveLife

The questionnaire was available in nine South African languages and was extensively piloted in the field before use. Ethics approval was provided by the Committee for the Protection of Human Subjects, University of the Witwatersrand.

HIV Testing

HIV testing was conducted by collecting an oral fluid sample using the Orasure® Oral Specimen Collection Device. This sample was then tested for HIV-1/2 antibodies using the Vironostika Uniform II plus O ELISA assay adapted for oral fluid samples. HIV testing was anonymous although results were linked to questionnaire information through a unique identification number.

Data Collection and Management

Appointments were made for interviewing the eligible youth selected in each household. Interviewers made three or more repeat visits to each household to ensure that selected youth were interviewed. The questionnaire was administered and an oral fluid sample collected for HIV testing. Data were double entered in EPI INFO and checked for accuracy and internal consistency. The data analysis was conducted in SPSS version 11.0 and STATA 7.0. Tables present weighted percentages and unweighted counts.

Quality Control

Quality control procedures were implemented at all stages and for all components of the study. During data collection a process of quality control was implemented through call backs of 10% of the sample. Participants were contacted telephonically or in person and their participation in an interview verified. In addition, key data were confirmed with the participant.

Results

HIV Prevalence

The survey found that among 15-24 year old South Africans the HIV prevalence was 10.2% [95% CI 9.3-11.3]. Prevalence was significantly higher among women (15.5%) than among men (4.8%) as well as in the 20-24 year old age group (16.5%) compared to the 15-19 year old age group (4.8%).Young women are disproportionately affected by HIV. Among the 10% of South African youth who are HIV positive, 77% are women. Nearly 1 in 4 women aged 20-24 are HIV positive compared to 1 in 14 men of the same age.

The highest HIV prevalence was found in KwaZulu-Natal province (14.1%) and the lowest in Limpopo province (4.8%). In terms of geographic area, youth living in urban informal areas had the highest HIV prevalence (17.4%). This was followed by rural formal areas (13.5%), urban formal areas (9.8%) and rural informal areas (8.7%).

The HIV findings from this study are similar to those found in the 2002 Nelson Mandela/HSRC survey and the 2002 Antenatal Clinic survey. Differences are most likely the result of sampling from different populations. Given the paucity of comparative data, it is not possible to gauge definitive trends from these findings. Nevertheless, the similarity of these survey findings establishes a solid base for the future assessment of trends in HIV infection among young South Africans.

I. Levels of Sexual Experience

Overall, 67% of young people aged 15-24 years reported having had sexual intercourse. Among 15-19 year olds, 48% reported being sexually experienced compared to 89% of 20-24 year olds. There were no differences between genders.

Among those who reported being sexually experienced, 17% indicated that they had not had sex in the past 12 months. Sexually experienced women were more likely than men to report having had sex in the past 12 months, particularly among 15-19 year olds.

Among those youth who were sexually experienced, abstaining from sex in the past 12 months was not associated with an active choice to protect oneself against HIV, but rather due to lack of opportunity to have sex or not having a sexual partner.

Age of First Sex

The median age of first sex among those who reported being sexually experienced was 17 years. Eight percent of sexually experienced youth reported having sex at age 14 or younger. Sexually experienced men were significantly more likely to report sex at 14 years or younger compared to sexually experienced women (12% vs 5%).

Forced Sex and Coercion

Among sexually experienced youth, 6% reported having been forced to have sexual intercourse. This was 10% among females and 2% among males. Three in ten (30%) of sexually experienced females reported really wanting their first sexual experience compared to 83% of sexually experienced young males.

II. Characteristics of Sexual Activity

Sexual Partners

Among sexually experienced young people, 35% indicated that they have had one lifetime sexual partner. Sexually experienced men were significantly less likely than women to report one lifetime sexual partner (24% vs 45%) and the number of lifetime sexual partners increased with age among males and females.

Among those who reported having had sexual intercourse in the past 12 months, 27% indicated that they had had more than one sexual partner in this time. Sexually experienced males were significantly more likely than females to report more than one sexual partner in the past 12 months.

Condom Use

Among sexually experienced youth, 52% reported using a condom at last sex. Condom use was almost identical among sexually experienced men and women aged 15-19 years but, among sexually experienced 20-24 year olds, females were significantly less likely to report condom use at last sex than men (44% vs 57%).

One-third (33%) of youth who reported having sex in the past 12 months reported always using condoms with their most recent partner and 31% indicated that they never used condoms with their most recent partner. Overall, among youth who reported having sex in the past 12 months, females were significantly less likely than males to report always using a condom with their most recent partner (28% vs 39% respectively).

The majority of youth (87%) felt that they were able to access condoms when they needed them.

Alcohol and Drug Use

Just over half of young people reported ever having drunk alcohol. Among these young people, 24% stated that they had had sex while under the influence of alcohol; males were significantly more likely than females to report sex under the influence of alcohol (31% vs 15%).

Just over 1 in 10 youth reported using drugs. Again, drug use was more common among males than females (18% vs 3%).

Transactional Sex

Reported transactional sex was relatively low among those who reported being sexually experienced. Only 3% of sexually experienced youth reported ever having engaged in transactional sex.

III. HIV Knowledge, Communication and Perceived Risk

Among all youth, 94% thought that there were ways to avoid HIV infection. Most (77%) reported that condoms could be used to prevent HIV.

Sixty three percent of youth indicated that they had changed their own behaviour to avoid HIV.

Communication

The majority of young people are talking about HIV/AIDS. Among all youth, 44% indicated that they had spoken to their parents or guardians about HIV/AIDS. This was more common among females than among males (48% vs 39%). Among those who had discussed HIV with their parents (44% of all youth), 75% felt that the conversation had been useful to them.

The most commonly cited source of HIV knowledge was school (32%).

Perceived Risk for HIV

When asked about their risk for HIV infection 36% stated that they were at no risk; 35% of all youth indicated that they were at small risk; 12% indicated moderate risk; and 14% stated that they were at high risk for HIV infection. Females were more likely than males to see themselves at high risk for HIV infection (18% vs 11%).

Among youth there is no increase in perceived risk of HIV as risk behaviours increase. Youth already infected with HIV also remain unaware of their risk: 62% of HIV positive youth stated that they thought they had no chance or a small chance of contracting HIV.

HIV Testing

Significantly more females than males reported having ever been tested for HIV (25% vs 15%). There were also significant differences between the age groups with older youth being more likely to report having been tested for HIV. Among all youth, 60% indicated that they would like to be tested for HIV.

Knowing Someone with HIV

Among all youth, 26% indicated that they knew someone with HIV and 45% reported knowing someone who had died of AIDS.

IV. Attitudes, Norms, Sense of Future and Self-Efficacy

Attitudes

The vast majority of young people agreed that safe sex is a shared responsibility between partners, disagreed that it is okay to force someone to have sex or that having many partners is okay or that it is okay to engage in transactional sex. There were, however, differences by gender and geographical area.

Outlook on Life

Young people in the survey were optimistic about their futures. Ninety-four percent reported knowing what they want out of life, 92% reported having long term goals, 89% reported having many opportunities in life and 69% reported being in control of their lives. Males were significantly more likely to report feeling in control of their lives compared to females.

Fifty five percent of young people believed that the most serious issue facing youth in South Africa is HIV/AIDS.

Self-Efficacy

Young people reported high levels of self-efficacy when it came to believing that they could discuss condoms with their partner and refusing sex when they didn't want it. These reported beliefs were not, however, always matched with actual behaviour.

V. Exposure to loveLife

Eighty five percent of youth reported having heard of or seen loveLife. There were no significant differences by age or gender. loveLife has reported high levels of awareness across all geographic areas in South Africa. More than three quarters of youth living in rural formal areas reported awareness of loveLife compared to 93% of youth living in urban formal areas.

Two thirds (65%) of all South African youth reported awareness of at least four loveLife programmes or products.

Among all youth, more than one-third had participated in loveLife programmes. Most interaction was through reading S'camtoPRINT and the loveFacts booklet. Participation was lowest for the loveTour and loveTrain (2% and 1% respectively).

Eight in ten (82%) of all youth say that loveLife is a good thing for young people in South Africa. Among youth who have heard of loveLife, 97% say it is a good thing for young people in South Africa.

Among all youth, 24% reported doing something as a result of hearing or seeing loveLife. This included talking about loveLife or seeking out information on sex and relationships.

Introduction

South Africa is in the grips of a devastating HIV/AIDS epidemic. Epidemiological studies have shown that the peak incidence of HIV/AIDS occurs in young people aged 15-24 years. South Africa has a real opportunity to reverse the course of the HIV/AIDS epidemic over the next five to ten years, by focusing prevention efforts on young people in this target age-group, so that sustained behaviour change can be achieved.

With the support of government, the private sector and civil society organisations, prevention efforts have been introduced throughout the country with the overarching aim of reducing the number of new HIV infections amongst young people. The largest youth focused intervention is loveLife, which is a national HIV prevention campaign for young people that combines a sustained multi-media awareness and education campaign with a nationwide drive to develop youth-friendly sexual health and outreach services. Its aim is to achieve significant behavioural change among South African teenagers for the purposes of HIV reduction, as well as reductions in other sexually transmitted infections (STI) and teenage pregnancy. As a joint initiative between government, NGOs and an academic institution, loveLife is national in both scale and scope, and complements other prevention efforts in South Africa

In an attempt to evaluate the impact of HIV prevention programmes, it is necessary to undertake studies that monitor sexual behaviour and HIV prevalence amongst youth. While the results of these studies are likely to reflect the combined impact of all national HIV prevention initiatives, it is nonetheless important to try to gauge the relative impact of loveLife, given its comprehensive approach and unprecedented scale. The National Youth Survey described in this report is the first of three such studies to be conducted over the life of the loveLife campaign for the purposes of tracking HIV prevalence among young South Africans, as well as changes in their sexual behaviour.

The primary aim of this study is to establish the prevalence of HIV infection and related behaviours that increase or decrease risk among people aged 15-24 years in South Africa, with sufficient accuracy to permit monitoring of trends over time. In addition, the study assesses young people's sexual attitudes and behaviours, and the extent to which they are exposed to loveLife and other prevention campaigns.

Until recently, South Africa's annual antenatal clinic survey was the only national measure of HIV prevalence within South Africa. While this surveillance tool has been critical in informing understanding of the progression of the HIV epidemic, the data by definition is limited to only sexually active, pregnant women, and does not reflect what is happening amongst youth populations overall. In 2002 the Nelson Mandela Foundation commissioned the Human Sciences Research Council (HSRC) to conduct a nationally representative household HIV survey among people age 2 years and older which assessed HIV prevalence and risk behaviours among the South African population [1]. This was a critical study of HIV infection among the population as a whole, but sample size disaggregated by five year age bands was too small to provide detailed age-specific information. In the same year, the Department of Health and Medical Research Council conducted a national survey of risk behaviours among grade 8-11 learners [2]. Building on all these national data sets, this report outlines the results of the first national survey of HIV prevalence and self-reported sexual behaviour conducted with an exclusive focus on young people, and with large enough numbers in particular sub-groups to have the statistical power to demonstrate differences.

This report is based on data from a nationally representative household survey of close to 12,000 young people age 15-24 years. The survey was conducted from March to August 2003 throughout South Africa to gauge rates of infection among young people from which to track changes in prevalence over time. This report limits itself to a description of the results and does not attempt to examine in any depth, associations that may exist between HIV status and some of the other variables. This analysis will be published in subsequent publications.

The results of the report are divided into 6 key sections:

1. HIV, STIs and Pregnancy (Impact Indicators)
2. Levels of Sexual Activity (Behavioural Outcomes)
3. Characteristics of Sexual Activity (Behavioural Outcomes)
4. HIV Knowledge and Perceived Risk (Behavioural Determinants)
5. Attitudes, Norms, Sense of Future and Self Efficacy (Behavioural Determinants)
6. Exposure to loveLife (Programme Exposure)

Section 1: Impact Indicators: HIV, STIs and Pregnancy

This section describes key biologic outcomes or impact indicators, which measure the ultimate objective of significantly reducing new HIV infections, STIs, and pregnancy among young people. Although HIV prevalence captures both new and existing infections, most young people have commenced sexual activity recently, and therefore incidence rates can be estimated fairly well from prevalence levels [4]. Self reported symptoms of STIs in the last 12 months are also an important indicator to track because infection with an STI is one of the most significant risk factors for infection with HIV. Further, infection with an STI is an indicator of recent unprotected sexual intercourse and has a number of negative health outcomes (e.g. infertility) that are in themselves important. Self reported pregnancy among women is also a key impact indicator, especially unwanted pregnancy. As with STIs, pregnancy is an indicator of recent unprotected sexual intercourse and teenage pregnancy often results in negative outcomes for the mother and child [3].

Section 2 & 3: Behavioural Outcomes: Levels of Sexual Activity and Characteristics of Sexual Activity

Sections 2 and 3 of the report focus on behavioural outcomes. These sections describe key indicators that measure the behaviours of young people that directly impact on HIV, STIs and pregnancy. Section two describes levels of sexual activity among young people (e.g. has the youth ever had sex, sexual activity in the last 12 months, frequency of sexual activity) and section three outlines characteristics of sexual activity, particularly those that directly place young people at risk for infection with HIV (e.g. condom use, number of sexual partners, other attributes that may define the riskiness of sexual activity).

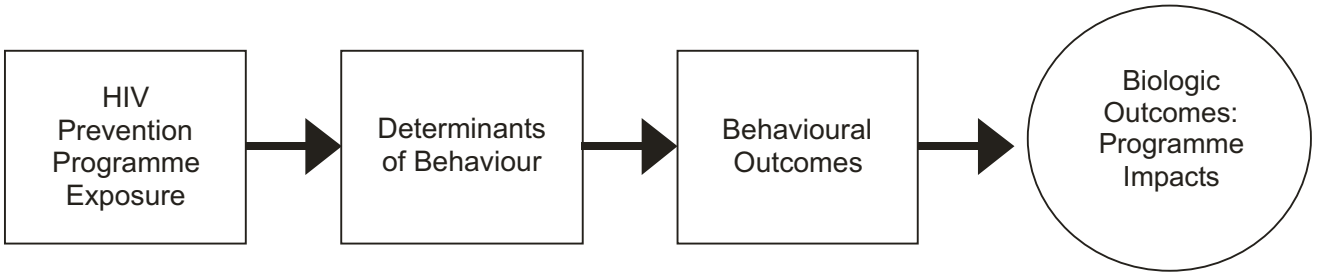
Section 4 & 5: Determinants of Behaviour: HIV Knowledge and Perceived Risk, Attitudes, Norms, Sense of Future and Self Efficacy

Likely antecedents of behaviour change include changes in knowledge, attitudes, perceptions, and beliefs. Sections 4 and 5 of the report describe these antecedents. Section 4 describes young people's knowledge of HIV prevention, whether or not they are communicating with others about the disease, if they believe they are at risk for becoming infected and their personal experiences with being tested for HIV and with being affected by people dying from AIDS. Knowledge of how to protect oneself from HIV infection, personal experiences with HIV/AIDS, and self perceived risk for contracting HIV are all important precursors to behaviour change in response to HIV/AIDS. Section 5 describes youth attitudes, norms, sense of future and self-efficacy. Attitudes and norms surrounding HIV/AIDS create the context in which youth operate. Changes in norms and attitudes are required to create supportive environments in which young people are able to instigate and maintain behaviour change. Without a sense of future, youth may have little motivation to protect themselves from becoming infected with HIV and without the belief that they can protect themselves (self-efficacy) they may not be persuaded to change their behaviour.

Section 6: Programmatic Indicators, Exposure to loveLife

Section 6 of the report describes young people's awareness of loveLife and their interaction with and participation in loveLife programmes. If changes in HIV prevalence are detected in young South Africans over time, it will likely be due to the combined effect of many prevention efforts. Nevertheless, one of the aims of this ongoing research project will be to examine the relationships between changes in HIV prevalence and predictors of infection, and exposure to the loveLife campaign.

Theoretical Construct for Intervention



Language and Definitions

In this report "sexually experienced" youth will refer to youth who reported ever having had sex in their lifetime.

The term "young people" and "youth" will refer to all young people age 15-24 years, unless otherwise stated. Further, note that when "women" or "men" or "females" or "males" are referred to it is always among the survey population of 15-24 year olds, and not all "women" etc.

For the purpose of this study, gender indicates whether the youth is a male or a female. We recognize that this is not technically the correct definition of gender, which incorporates a much broader social construct of gender identity.

According to the South African census there are four geography types, urban formal, urban informal, rural formal (also called farms) and rural informal (often called tribal). Please note that in this report urban will include both urban formal and urban informal areas and rural will include both rural formal and rural informal. Also note that rural formal and farm will be used interchangeably while rural informal will be used to describe what are often called tribal areas.

Geography Type Definition: classification according to the characteristics of a residential population in terms of urban and rural, degree of planned and unplanned (in the case of urban) and jurisdiction (in the case of rural).

Each Enumeration Area (EA) type then falls into four broad geography types (settlement types or geotypes).

Table 1. Census EA Geography Type Definitions

EA Type	Geography Type	Urban/Rural
Small holding Urban settlement	URBAN FORMAL	Urban
Informal settlement	URBAN INFORMAL	
Farm Small holding	RURAL FORMAL (FARMS)	Rural
Tribal settlement	TRIBAL AREA (RURAL INFORMAL)	

The following are descriptions to aid recognition of type of EA, rather than formal definitions.

* Statistics South Africa (2001) *Census 2001: Concepts and Definitions*. Report no. 03-02-26 (2001). Statistics South Africa, Pretoria.

Smallholdings

These are small farms usually on the outskirts of towns. The activity on these smallholdings is usually small-scale intensive farming. Chicken and pig farms, vegetable farms, mushroom and flower farms, small fruit farms and tunnel farming are common, as well as kennels, and some stables/riding schools.

Urban settlements

A formal urban settlement is structured and organised. Land parcels (plots or erven) make up a formal and permanent structure. A local council or district council controls development in these areas. Services such as water, electricity and refuse removal are provided, roads are formally planned and maintained by the council. This category includes suburbs and townships.

Informal settlements

Informal settlements or 'squatter camps' occur on land, which has not been surveyed or proclaimed as residential. And the structures are usually informal. They are usually found on the outskirts of towns or in pockets of 'infill' inside towns, or along railways and roads. Some informal areas are also found in tribal areas (eg. in Mpumalanga) and in townships. Although informal settlements occur within rural areas all EAs of this type were classified as urban informal in 2001.

Farms

Commercial farms cover extensive areas. The land is cultivated and the field size is usually quite large. Farm boundaries are usually easily distinguished on the photo, they are normally clear fence lines or edge of fields or roads or rivers. The fields are cultivated with a variety of crops and the crops differ from season to season and from area to area. Field size will vary and may be affected by the size of the farm, the local climate (rainy or not) and the amount of mechanization on the farm. Most fields on commercial farms are large.

Cattle, sheep and other livestock (horses, ostrich and game on a smaller scale) are also reared on commercial farms. These farms have large fenced grazing areas (paddocks) with grass cover for the livestock to graze.

Tribal settlements

Villages that fall within a tribal area. Villages look like pockets of houses/huts clustered throughout the area with large areas of grassland and/or fields in between.

Methodology

A nationally representative household survey of young people age 15-24 years was conducted from March to August 2003.

The sample design employed a three-stage disproportionate, stratified (using provinces as strata) sample of young people age 15-24 years in the nine provinces in South Africa. The number of youth sampled per province (stratum) was calculated to ensure reasonable precision of estimates in the provinces with small youth populations. In order to achieve good representation of the various geographic areas in South Africa, enumeration areas (EAs) were implicitly stratified by geography type [urban formal, urban informal, rural formal (farms), rural informal] within each province.

The 2001 census EAs were used as the primary sampling unit (PSU). A total of 714 EAs were selected with probability proportional to the pre-census estimated number of dwelling units as part of the final sample. Using 2001 census maps, all visiting points within each EA were verified by a fieldwork team. The EA was segmented based on natural boundaries and a segment in the EA was then randomly selected. All households within the segment were visited and enumerated to determine whether an eligible youth was currently living in the household. One eligible youth per household was randomly selected using the Kish grid method [4].

The final sample consisted of 11,904 young people. The sample size was based on two considerations: (1) To be able to detect a 50% decrease in the HIV prevalence by age group (15-19 year or 20-24 years) or gender assuming an initial prevalence of 6%; and (2) To be able to estimate an overall HIV prevalence of 15% with a 95% confidence interval ranging from 10% to 21% in any province. It was assumed throughout that a significance level of 5% (two-sided) and power of 80% would be required.

The final sample was weighted to represent the actual distribution of young people age 15-24 years in South Africa based on the final released 2001 census results. In particular the sample was weighted to be representative of young people aged 15-24 years in South Africa for gender, age, race, province, and geography type.

The questionnaire was developed based on a review of internationally comparable surveys and from questions used in youth surveys in South Africa. It was designed to cover: demographics; self reported symptoms of sexually transmitted infections; self reported pregnancy; sexual behaviours (condom use, partner number, age of sexual debut, transactional sex, partner age); contraceptive use; sexual coercion and violence; alcohol and drug use; key communication practices around HIV, condom use and other sexual and reproductive health (SRH) issues; attitudes and norms around HIV and sexual behaviour; perceived risk of HIV; sense of future and optimism; health seeking behaviours; indicators of awareness and response to loveLife.

The questionnaire was reviewed by experts in the field of HIV and reproductive health surveys in South Africa and internationally. All questions were translated from English into Sotho, Zulu, Tswana, Xhosa, Pedi, Venda, Tsonga, and Afrikaans and then back translated. The questionnaires were extensively piloted.

HIV testing in this study was conducted by collecting an oral fluid sample using the Orasure® Oral Specimen Collection Device. This sample was then tested for the presence of HIV-1/2 antibodies using the Vironostika Unifrom II plus O ELISA assay which has been adapted for testing of oral fluid samples (Biomerieux). This testing combination is approved by the US Food and Drug Administration (US FDA). Using Orasure® tested with an ELISA, sensitivities of 99.9% were reached in a large survey of 3,569 cases [5]. All testing was conducted at Contract Laboratory Services (CLS) of the University of the Witwatersrand. CLS has SANAS (South African National Accreditation System) accreditation covering oral fluid testing which confers an ISO17025 quality standard and has extensive experience with testing oral fluid samples (collected using the Orasure® devices) for the presence of HIV-1/2 antibodies.

HIV testing was anonymous. HIV test results were linked to the behavioural questionnaire through a unique identification number, but could not be linked to an individual by name or other personal identifiers. Those individuals who wished to know their HIV status were referred by the interviewers to the nearest HIV testing centre. This is in accordance with WHO guidelines for HIV testing for surveillance purposes [6] and satisfied the requirements of the Committee for the Protection of Human Subjects, University of the Witwatersrand, Johannesburg, South Africa.

Ethical standards were adhered to in all stages of the research. Informed consent was obtained from all individuals for completing the questionnaire and providing an oral fluid sample. Parental consent was also obtained for all young people age 15-17 years. During recruitment to the study individuals were informed that their HIV results would not be returned to them and were directed to the closest VCT service should they wish to know their status. Confidentiality was maintained through ensuring that interviews were conducted in a private setting and training with interviewers included issues of confidentiality. The study was approved by the Committee for the Protection of Human Subjects, University of the Witwatersrand, Johannesburg, South Africa, protocol number M02-02-28.

The UCSF/UCLA technical advisory board met three times during the course of the survey. Two times prior to the start of the national survey and once while the survey was underway. During these reviews all study documentation, including the protocol, questionnaire, standard operating procedures, quality control documents and other study documents were reviewed. Further, the technical advisory board reviewed the final draft report. The technical advisory board made valuable suggestions throughout the process of the study, helping to enhance the technical accuracy of this report.

Response Rate

Overall 40,731 visiting points were included in the sample. However, not all the visiting points depicted in the selected segment on the EA maps were considered valid because they were vacant, or were business premises, churches, schools, or holiday homes. This reduced the number of valid visiting points by 2,286 (5.6%), so the sample contained 38,445 valid visiting points.

Of the valid visiting points, 13.2% (n= 5,089) were not enumerated to determine whether there were eligible youth in the household. These households were not enumerated for a number of reasons, which included:

- access to a cluster of visiting points was denied (n= 313),
- no one was found at home after at least 3 repeat visits on different days and at different times of the day (n= 2,172),
- there had been a death in the family and the household was preparing for a funeral or was in mourning (n= 22),
- permission to enumerate the household to determine whether there were eligible youth present was refused
- (N= 2,582). The most commonly cited reasons for refusal was "not interested, do not want to" (67.4%, n= 1739) and "do not want family details recorded on the roster" (21.0%, n= 543).

Of the 33,356 households enumerated to determine whether there was a youth living in the household who met the eligibility criteria for the interview, 53.8% (n = 17 942) did not contain an eligible youth.

Among the 15,414 households containing an eligible youth, 12.6% (n= 1,947) refusals were received, 2.3% (n = 362) from the guardians of the youth and 10.3% (n= 1585) from the selected youth. Among the 2.3% of guardians who refused, the most common reason for refusal was a lack of interest in the study (35.6%, n= 129). Eighteen percent (n = 65) of the refusing guardians indicated that the selected youth was sick or mentally disabled. Only 11.6% (n = 42) said that they thought the youth was too young to take part in the study. Among the 10.3% of youth who refused, the most commonly cited reason was a lack of interest (56.2%, n= 890) and fear or unwillingness to be tested for HIV (17.7%, n= 280). Only a small percentage of the youth said that they felt uncomfortable discussing personal issues or HIV/ AIDS (5.9%, n= 93).

One in ten interviews (n= 1,563) were not completed with the selected youth because these youth had not been found at home after at least three repeat visits (n= 1,504), the incorrect youth was interviewed (n= 36) or no Orasure® result was obtained (n= 23).

Within the 15,414 households that were enumerated and contained an eligible youth, 77.2% (n= 11,904) of the interviews were completed. By geography type, 85.7% (n= 4,786) of interviews were completed in urban informal areas and 70.7% (n=5,657) were completed in urban formal areas.

Table 2. Interviews Completed by Geography Type

Geographic types	Total # of eligible youth	# of interviews completed	% of interviews completed
Rural formal	1048	820	78.2
Rural informal	5585	4786	85.7
Urban formal	7996	5657	70.7
Urban informal	785	641	81.7
Total	**15414**	**11904**	**77.2**

The proportion of interviews completed with selected youth in enumerated households varied widely across the race groups. Interviews were completed with 82.7% (n= 9,867) of the African youth selected, 71.2% (1,341) of the coloured youth selected, and 59.9% (445) of the Indian youth selected. However, among the 1,179 White youth selected, interviews were only completed with 37.7% (n=445) of individuals.

Table 3. Interviews Completed by Race

Race	Total # of eligible youth	# of interviews completed	% of interviews completed
African	11933	9867	82.7
Coloured	1883	1341	71.2
White	1179	445	37.7
Indian	419	251	59.9
Total	**15414**	**11904**	**77.2**

Interviews with 80.8% (n= 3,822) of the younger females selected were completed. Among the younger males selected, interviews were completed with 78.6% (n= 2,155) while 76.5% (4,019) of the selected older females were interviewed, and 70.9% (n=1,908) of interviews with older males were completed.

Table 4. Interviews Completed by Gender and Age Group

Age and gender of youth	Total # of eligible youth	# of interviews completed	% of interviews completed
Male 15 – 19	2740	2155	78.6
Male 20 – 24	2690	1908	70.9
Female 15 - 19	4730	3822	80.8
Female 20 - 24	5254	4019	76.5
Total	**15414**	**11904**	**77.2**

The percentage of interviews completed with selected youth cannot be considered the response rate. The response rate needs to take into account the youth in valid visiting points that were potentially missed because the household was not enumerated. Based on the DHS, it was assumed that 40% of households that were not enumerated would contain at least one youth 15 to 24 years old. Thus, the overall response rate was 68.2%, with the highest response rate of 80.5% in Limpopo and the lowest response rate of 42.0% in Gauteng.

Table 5. Response Rates by Province

Province	Total # of VP with an eligible youth	# of interviews completed	% of interviews completed	# of VP not enumerated	# of potentially eligible VP missed	Assumed # of eligible VP if all VP enumerated	Response rate
Eastern Cape	2064	1625	78.7	242	97	2161	75.2
Free State	1428	1097	76.8	272	109	1537	71.4
Gauteng	2073	1274	61.5	2395	958	3031	42.0
KZN	2586	2070	80.0	601	240	2826	73.2
Limpopo	1852	1611	87.0	374	150	2002	80.5
Mpumalanga	1454	1267	87.1	352	141	1595	79.4
North West	1437	1185	82.5	187	75	1512	78.4
Northern Cape	657	496	75.5	167	67	724	68.5
Western Cape	1863	1279	68.7	499	200	2063	62.0
Total	**15414**	**11904**	**77.2**	**5089**	**2036**	**17450**	**68.2**

Training of Fieldworkers

All fieldworkers who administered the questionnaire and collected samples underwent extensive week long training. Training was conducted in each of the DRA offices (Johannesburg, Durban, Port Elizabeth and Cape Town). The training covered the research protocol and design, which included the research process of sampling the EAs, mapping and selection of the segment. Completing the household rosters to enumerate the household for eligible youth was covered in detail and a number of exercises to ensure the Kish grid was correctly used were completed. During training information on the quality control and call back procedures was given. Although most of the field staff had experience in surveys asking about sexual behaviour, time was spent on sensitivity training and interviewing techniques, with an emphasis on personal values clarification around sexual and reproductive health, especially HIV/AIDS. Each question in the questionnaire was covered and the definition of each question was clarified (this included the translation of the question in each language). The questionnaire was role played in the language the fieldworker would be using to interview respondents. The importance of confidentiality was stressed and research ethics were discussed. Training on the informed consent procedure was detailed and fieldworkers practised role-playing exercises. Training was conducted by Central Laboratory Services (CLS) on the collection, storage and transportation of the Orasure® device.

A day was spent in nearby communities (that were not part of the sample) to allow the fieldworkers to conduct interviews with individuals that would be similar to the respondents they would be interviewing. These field test questionnaires were checked by the quality control staff and then feedback on problem areas was given to each fieldworker individually.

A detailed Standard Operations Protocol (SOP) was designed for the survey that covered all the key topics in the training and was given to each fieldworker. This SOP included a detailed guide for the questionnaire that defined what each question meant and how the fieldworker should interpret each question and valid responses.

Fieldworkers

One hundred and thirty-two fieldworkers, ranging in age from 18 to 35 conducted the fieldwork. The average age of the fieldworkers was 25 years. Just over half of the fieldworkers (n=71) were female. Seventy seven of the fieldworkers were Black African, 4 were Indian, 22 were Coloured and 29 were White. Every effort was made to match interviewer and respondent on race, language and gender because of the sensitive nature of most of the questions in the study. Census information for the 1996 EAs with a 50% or more geographic overlay with the 2001 EAs in the sample was obtained from Statistics South Africa. This information was used to ensure that field teams of the appropriate race and language group were sent to the EAs. Given the logistical complexity of this undertaking, it was not always possible to have a male respondent interviewed by a male fieldworker of the same language group so female fieldworkers were permitted to interview male respondents. However, under no circumstances were male field staff permitted to interview female respondents.

Community Preparation

During the mapping of the EAs the mappers distributed leaflets containing information about the study to every household in the selected segment. These leaflets were available in English, Sotho, Zulu, Tswana, Xhosa, Pedi, Venda, Tsonga, and Afrikaans.

In all the EAs, nearby police stations, where they were available, were contacted for information about safety in the area. Principals of any nearby secondary schools were contacted about the study and, where permission was obtained, leaflets containing information about the study were left for the pupils.

In rural formal areas, which are generally commercial farms, permission to work in the area was obtained from the farm owner or manager. In rural tribal areas permission was obtained from the chief or induna within the area. When there were local councillors or municipality officers active in the area [i.e. readily identified by people living in the EA] they were also informed about the study. Similarly in formal urban areas, active local councillors were contacted and informed about the study. In informal settlements identified ward councillors and development committees were informed about the study.

In the gated communities, particularly common to the Gauteng formal urban EAs, the mappers and fieldworkers spoke to security personnel and body corporate members in an effort to gain access to these communities. In other urban formal areas, where field staff found it difficult to gain access to homes, they asked members of the community to inform their neighbours that they were in the area conducting research.

Quality Control

Quality control was implemented not only by DRA, but also by the RHRU. In addition to the extensive training and piloting, after each interview the questionnaire, Orasure® and all other documents were checked in field by the team manager each day. This was done to ensure the correct youth had been interviewed and to give the fieldworker the opportunity to return to the respondent while the team was still in that EA to obtain missing information and verify inconsistencies in the questionnaire. Once checked by the manager, all documents were sent to the regional quality control offices where they were checked again by office-based quality control staff. Call backs were conducted on 10% of all the questionnaires and household rosters submitted by each individual fieldworker. Designated quality control staff verified key information by telephoning the respondent and when no telephone number was recorded physically returning to the household to check information recorded on both the household roster and the questionnaire.

Overall, only a small percentage of call backs had information that did not correspond to the original information recorded by the fieldworkers: 0.64% of call backs on household rosters reported discrepant information and 0.36% of the call backs on questionnaires reported discrepant information. However, at an individual fieldworker level, when the proportion of call backs highlighting discrepancies exceeded 5% of the call backs completed for that fieldworker, the fieldworker was suspended pending a more complete investigation. If after investigation, the fieldworker was found to have falsified information, the person was dismissed. At that time all of the household rosters and questionnaires completed by that fieldworker were removed from the quality control process and a third independent team returned to field to verify all information recorded by that individual. Any further discrepancies at this time were recorded and added to the number of call backs reporting discrepant information.

The RHRU also conducted quality checks of all field teams. This involved observing mapping, sampling, interviewing and quality control. Quality control check-lists were developed and used during the observation process.

Data Entry

All data entry was conducted at DRA main office. Double-data entry was conducted for the questionnaire and household rosters using EPI INFO. The validation procedure in EPI INFO highlights discrepancies between the first and second capture allowing capturing errors to be rectified by returning to the original questionnaire. This procedure was followed until no discrepancies or "zero errors" were found between the two data sets. The data were then transferred into SPSS. Responses to a particular question, which were deemed possibly untrue or incorrect, were verified by returning to the original questionnaire. Further, responses across questions were checked for logical consistency, for example, the number of sexual partners in the 12 months preceding the interview could not have been greater than the number of lifetime sexual partners.

Data Analysis

Data Analysis was conducted in SPSS version 11.0 (Chicago, Illinois) and in STATA 7.0 (College Station, Texas). All frequencies were weighted to be representative of South African youth ages 15-24 years. All tests of statistical significance were conducted in STATA 7.0 using *svy* methods adjusting for sample strata, primary sampling units and population weights. Note that all tables present weighted percentages and unweighted counts. Further, note that percentage may not add to 100% due to rounding and also due to the fact that where missing data was less than 1% it was excluded from the table.

See Appendix 1 for more details on the sampling strategy and design effects.


SOUTH AFRICA - PROVINCES
ZIMBABWE
NORTHERN PROVINCE
Pietersburg
BOTSWANA
MPUMALANGA
Nelspruit
Mafikeng
Pretoria
Johannesburg
NORTH WEST
GAUTENG
NAMIBIA
Klerksdorp
FREE
STATE
Upington
Kimberley
Bloemfontein
NATAL
Pietermaritzburg
Durban
LESOTHO
NORTHERN CAPE
Umtata
ATLANTIC OCEAN
INDIAN OCEAN
EASTERN CAPE
East London
WESTERN CAPE
Cape Town
Port Elizabeth
Mossel Bay

Study Limitations

There were some limitations in the study, some intrinsic to surveys of this type, and others specific to this particular survey.

First, the data reported on here represents information collected on self-reported behaviours. Researchers have questioned the validity of self-report measures in data collection, given that respondents often provide socially acceptable answers rather than reality [7].This is especially true of sensitive information such as that collected on sexual behaviour and beliefs about HIV. Attempts were made to counteract this problem by recruiting interviewers of a similar age, race and gender to survey participants; ensuring that confidentiality was stressed during the informed consent process and throughout the interviews; and, ensuring that interviewer were trained to be non-judgmental and neutral with regard to the various sexual behaviours, attitudes and norms documented in the questionnaire.

Second, as the study is cross-sectional in nature it is not possible to determine causality with respect to risk behaviours, exposure to interventions and outcomes, as all were measured at one point in time. In order to mediate this limitation, repeat cross-sectional surveys have been planned at 2 year intervals. This will allow for a better picture of change over time associated with adolescents, HIV and behaviour change.

Specific to this survey were the following limitations:

Although the Orasure® Oral Specimen Collection Device and testing has been extensively tested in Western populations, there is almost no literature regarding sensitivity and specificity in African populations. Anecdotal evidence suggests that specificity may be lower in these populations and is, therefore, of particular concern in populations where levels of HIV prevalence are low (below 5%), leading to an over-estimation of prevalence generated through false positives. In sub-groups where the HIV prevalence was less than 5% (e.g. HIV prevalence by age and HIV among race groups other than African) the HIV results should be interpreted with caution.

Despite this limitation, Orasure® is approved by the U.S Food and Drug Administration (FDA) and the test has been used extensively in Africa. Further, it is recommended by the World Health Organization (WHO) for HIV testing in surveillance situations. Currently studies are underway to validate Orasure® in African populations.

Caution should be used when interpreting estimates for race groups other than African because these samples are much smaller than those obtained in the African population.

Although the response rate of this survey is good (68.2%), non-response bias is always a possibility for those youth who refused or could not be found to participate in the study. For those youth who could be enumerated and either refused to be interviewed or the youth could not be found after multiple return visits, information on gender, age and location could be recorded. Fewer males age 20-24 years participated than youth of other gender and age groups. Fewer youth of White and Indian race group participated than did youth of other race groups. Fewer youth living in Urban Formal areas participated than youth living in other geography types. Further, response rates were lower in Gauteng and the Western Cape Provinces, which have more Urban Formal areas and youth of White race than other Provinces.

The attitude measurements reflected in Section V are not exhaustive as they are based on a single or few questions for each attitude. It should be recognised that there are entire surveys devoted to gathering information on these variables using multi-question scales. Information about youth attitudes are, therefore, an indication but should be interpreted with caution.

Symptoms of sexually transmitted infections (STIs) have been documented to have relatively poor correlation with actual infection, particularly among women. Therefore, while symptoms of STIs are an important and interesting marker, caution should taken in interpreting these estimates and direct comparisons to actual infections with STIs should not be made.

Study Demographics

The mean age of the sample was 19.1 years. Overall, 22% of young people reported having graduated from high school; thirty-eight percent of those aged 20-24 reported having graduated from high school. Among all youth, 54% reported being full time students while 31% reported being unemployed and 7% reported being employed full-time. Among those aged 15-19, 79% reported being full time students compared to 25% of those age 20-24 and 16% of those age 15-19 reported being unemployed compared to 49% of those age 20-24.

Only 2% of the youth reported being married, 1% of males reported being married and 3% of females.

Seventy-three percent of youth reported that their home had electricity.

Overall, 89% of young people reported having an adult or guardian staying with and taking care of them at home; 91% of the sample reported that their mother was alive and 74% reported that their father was alive. Four percent of young people reported that both of their parents had died; there was no significant difference by age group. When examining this by race, 5% of African youth and 2% of Coloured youth reported that both parents were dead compared to 0% of Indian and White youth.

When young people were asked what religion they considered themselves to be, 86% of youth reported they were Christian, 6% reported Traditional/African religion, 1% Muslim, 1% Hindu and 6% reported that they had no religion. The majority of youth reported that religion was important in their everyday life with 34% reporting it was most important, 45% reporting that it was very important, 14% reported it was somewhat important and 7% reported that religion was not important at all in their everyday life. When asked how often they attend religious services, 17% reported they attend more than once a week, 38% reported attending once a week, 18% reported attending 1-2 times a month, 18% reported attending a few times a year and 9% reported never attending religious services.

Table 6. Unweighted Counts, Weighted Proportions and Standard Errors for Key Demographic Variables

	Count (unweighted)	Weighted Proportions	Standard Error	2001 Census Proportions**
Total	11904	100.0%		100.0%
PROVINCE				
EC	1625	14.5%	5.0%	14.5%
FS	1097	6.1%	0.5%	6.1%
GT	1273	19.4%	2.0%	19.6%
KZN	2070	21.7%	2.0%	21.7%
LP	1612	13.0%	1.0%	12.6%
MP	1267	6.9%	0.6%	7.2%
NW	1185	8.0%	0.8%	7.9%
NC	496	1.6%	0.2%	1.7%
WC	1279	8.8%	0.8%	8.8%
GEOTYPE				
Farm	820	6.0%	1.0%	6.0%
Rural Informal	4786	38.7%	4.0%	38.7%
Urban Formal	5657	47.0%	4.0%	47.1%
Urban Informal	641	8.2%	2.0%	8.2%
GENDER				
Male	5687	49.4%	0.7%	49.4%
Female	6217	50.6%	0.7%	50.6%
AGEGROUP				
15-19 years	7238	53.6%	1.0%	53.6%
20-24 years	4666	46.4%	1.0%	46.4%
RACE				
African	9867	82.5%	2.0%	82.5%
Coloured	1341	8.2%	1.0%	8.2%
White	445	7.0%	1.0%	7.0%
Indian	251	2.3%	1.0%	2.3%

** The census percent values were derived from the 10% sample of the 2001 census in which special institutions have been excluded (which resembles the sampling population from which the sample has been drawn.)

Results

I. HIV, STIs and Pregnancy

All young people age 15-24 years were tested for HIV infection. Further, other key biological indicators of unprotected sexual behaviour, namely self-reported symptoms of STIs and pregnancy among women were also recorded.

HIV Prevalence

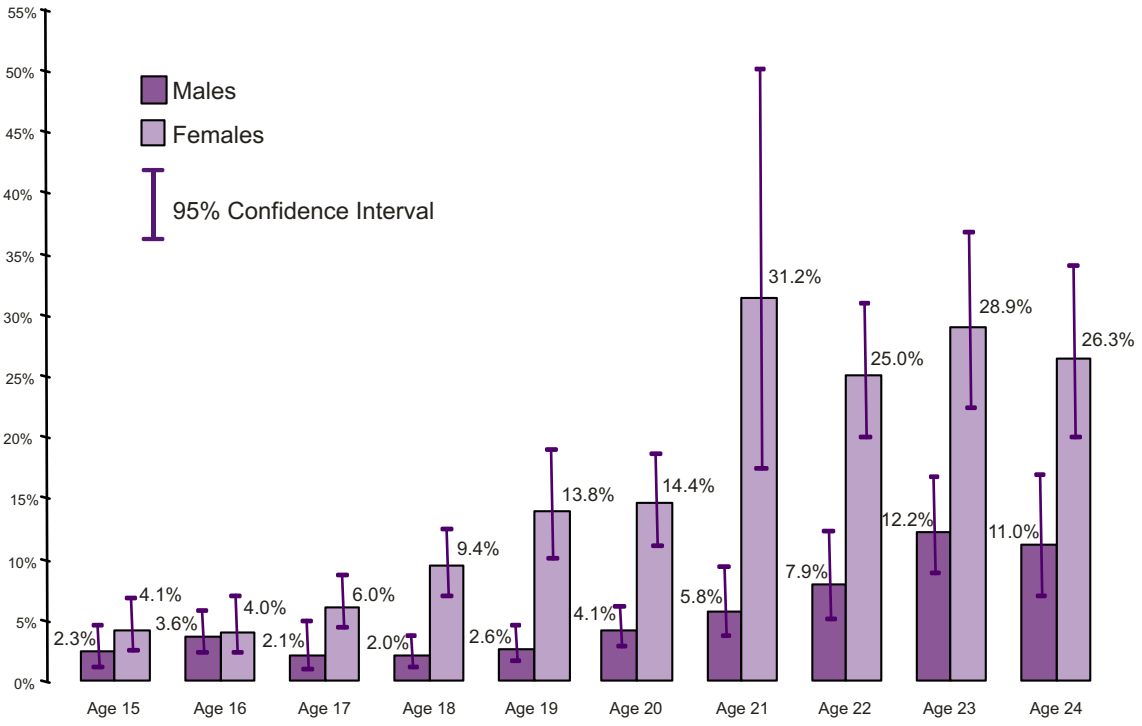
Overall the HIV prevalence among 15-24 year olds was 10.2% (95% CI 9.3-11.3). Among those age 15-24 years the prevalence among males was 4.8% (95% CI 3.9-5.9) and among females it was 15.5% (95% CI 13.7-17.6). For those age 15-19 years the prevalence among males was 2.5% (1.8-3.4) and for females it was 7.3% (5.9-9.0) and among those age 20-24 years the prevalence among males was 7.6% (6.3-9.3) while among females it was 24.5% (20.3-29.3).

Table 7. HIV Prevalence by Gender and Age Group

			Gender		Age group		Gender by age group			
							Male Age group		Female Age group	
		Total	Male	Female	15-19	20-24	15-19	20-24	15-19	20-24
HIV status	HIV positive	10.2%	4.8%	15.5%	4.8%	16.5%	2.5%	7.6%	7.3%	24.5%
	HIV negative	89.8%	95.2%	84.5%	95.2%	83.5%	97.5%	92.4%	92.7%	75.5%
	Total	**11904**	**5687**	**6217**	**7238**	**4666**	**3556**	**2131**	**3682**	**2535**

Figure 1

HIV Prevalence among Men and Women by Age



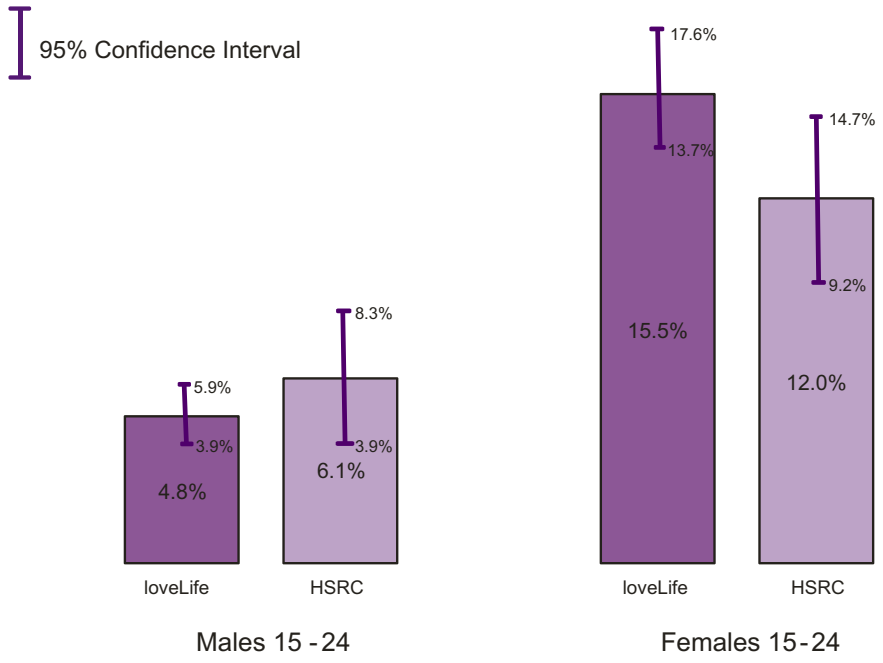
Source: National HIV and Sexual Behaviour Survey of 15-24 year olds, 2003

For comparison, data from the 2002 Nelson Mandela/HSRC survey found the HIV prevalence among 15-24 year olds to be 9.3% (95% CI 7.3-11.2); for males it was 6.1% (05% CI 3.9-8.3) and for females it was 12.0% (95% CI 9.2-14.7) [1]. In 2002 the National HIV and Syphilis Antenatal Sero-Prevalence (ANC) Survey in South Africa, conducted among pregnant women attending public sector clinics/hospitals, found the prevalence among women age 15-19 to be 14.8% (95% CI 13.4-16.1) and among women age 20-24 it was 29.1% (95% CI 27.5-30.6) [8].

Coefficients of variation and design effects for HIV prevalence by key demographic variables are described in Appendix 2.

Figure 2

HIV Prevalence among Men and Women Ages 15 - 24



Source: National HIV and Sexual Behaviour Survey of 15-24 year olds, 2003

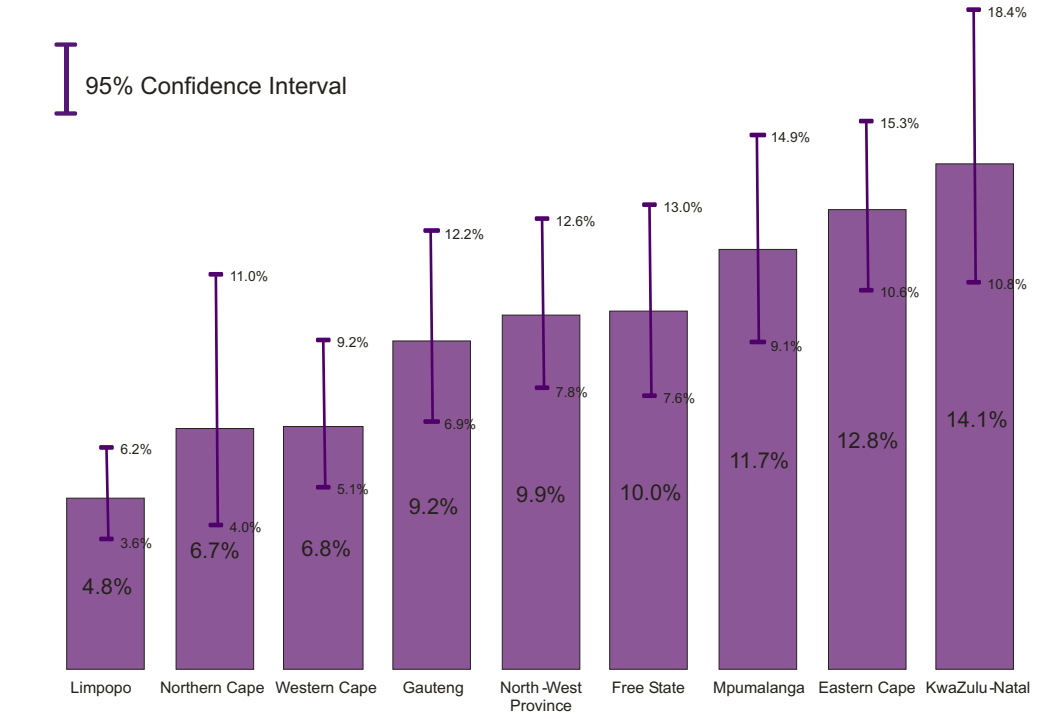
In this study, overall the prevalence was 11.8% (95% CI 10.7-13.1) among Africans, 3.8% (95%CI 2.7-5.5) among Coloureds, 2.0% (95% CI 0.09-4.3) among Whites and 0.9% (95% CI 0.2-3.6) among Indians. The HSRC survey found that among this age group 10.2% of Africans tested positive for HIV, 6.4% of Coloureds, 3.2% of Whites and 0.3% of Indians.

Provincially, KZN had the highest prevalence of HIV infection at 14.1% (95% CI 10.8-18.4), followed by the Eastern Cape at 12.8% (95% CI 10.6-15.3) while the provinces with the lowest prevalence were Limpopo at 4.8% (95% CI 3.6-6.2), the Northern Cape at 6.7% (95% CI 4.0-11.0), and the Western Cape at 6.8% (95% CI 5.1-9.2).

Reporting by race remains significant in South Africa given the country's history of racial segregation. Despite democracy, many of the social effects of apartheid continue to affect African youth disproportionately. The impact of the socio-cultural environment on HIV acquisition and differential prevalence rates among different race groups justify a continued consideration of race in this analysis. In this report African refers to African youth while Coloured refers to those of mixed ancestry.

Figure 3

HIV Prevalence by Province

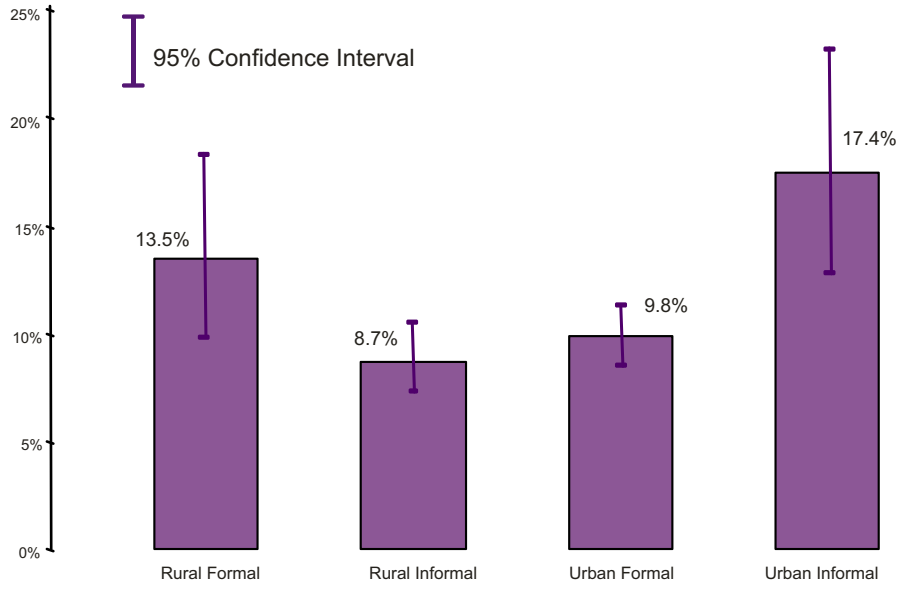


Source: National HIV and Sexual Behaviour Survey of 15-24 year olds, 2003

Youth living in urban informal areas had the highest HIV prevalence at 17.4% (95% CI 12.8-23.2) followed by those living in rural formal areas (farms) at 13.5% (95% CI 9.8-18.3), then urban formal areas at 9.8% (95% CI 8.5-11.3) and lastly those in rural informal areas at 8.7% (95% CI 7.3-10.5).

Figure 4

HIV Prevalence by Geography Type



Source: National HIV and Sexual Behaviour Survey of 15-24 year olds, 2003

Profile of HIV Positive Youth

Given the high prevalence of HIV among young people, understanding who these young people are is important to better tailor programmes and interventions. Among HIV positive 15-24 year olds (roughly 10% of all young South Africans in this age group), 77% were female. Seventy-five percent of HIV positive individuals were age 20-24 years and 95% were African. By location, 59% of HIV positive youth live in urban areas (urban formal and informal) and 41% live in rural areas (rural informal and farms). Among those age 20-24, HIV positive youth were significantly less likely to have completed high school compared to HIV negative youth (23% vs. 41%, $p<.01$). HIV positive youth were also significantly more likely to report being unemployed compared to their HIV negative counterparts (56% vs. 29%, $p<.01$).

HIV Infection among Youth Who Report Never Having Had Sex

Overall, 10.2% (n=142) of HIV positive youth reported that they had never had vaginal or anal sex. When examining this by age and gender, 44% of HIV positive males age 15-19 reported that they had never had sex, 6.9% of HIV positive 20-24 year olds males, 28.2% of HIV positive females age 15-19 years and 1.4% of HIV positive females age 20-24 years reported that they had never had sex.

Symptoms of Sexually Transmitted Infections (STIs)

Sexually transmitted infections (STIs) have been shown to significantly increase the risk of HIV transmission and acquisition [9]. Given their importance as risk factors for HIV infection, young people were asked about symptoms of STIs in the past 12 months. Among the 68% of women who reported ever having had sex, 19% reported that they had experienced an unusual vaginal discharge in the past 12 months while 9% of sexually experienced young men reported that they had experienced an unusual discharge from their penis in the past 12 months. For both genders there was no significant difference by age group. Young people were also asked if they had experienced genital sores or ulcers in the past 12 months, 6% of young people who reported ever having had sex reported that they had experienced genital sores or ulcers in the past 12 months; there were no significant differences by gender or age.

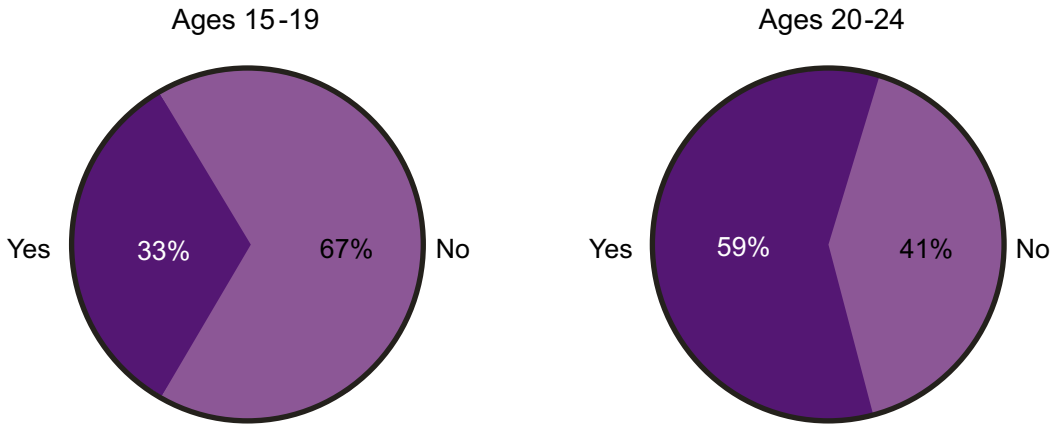
Pregnancy

While HIV is one of the unintended consequences of unprotected sexual intercourse, pregnancy is another indicator that young people are having unprotected sex. Pregnancy history is only reported here for women, and not for men, as women are more likely to accurately recall lifetime pregnancies whereas men may not always know if they made a female partner pregnant. Pregnancy is also presented by marital status but should be viewed in the light of the fact that only 3% of women report being married. Among the 68% of women who reported ever having had sex, 49% (95% CI 46%-53%) reported ever having been pregnant (this includes youth who were currently pregnant). Almost twice as many sexually experienced 20-24 year olds had ever been pregnant compared to sexually experienced young women age 15-19 years (see Figure 5). Women are more likely to be sexually experienced as they get older, to have been sexually experienced for longer, and thus more likely to become pregnant.

Figure 5

Ever Pregnant by Age Group

Among those who report ever having had sexual intercourse…

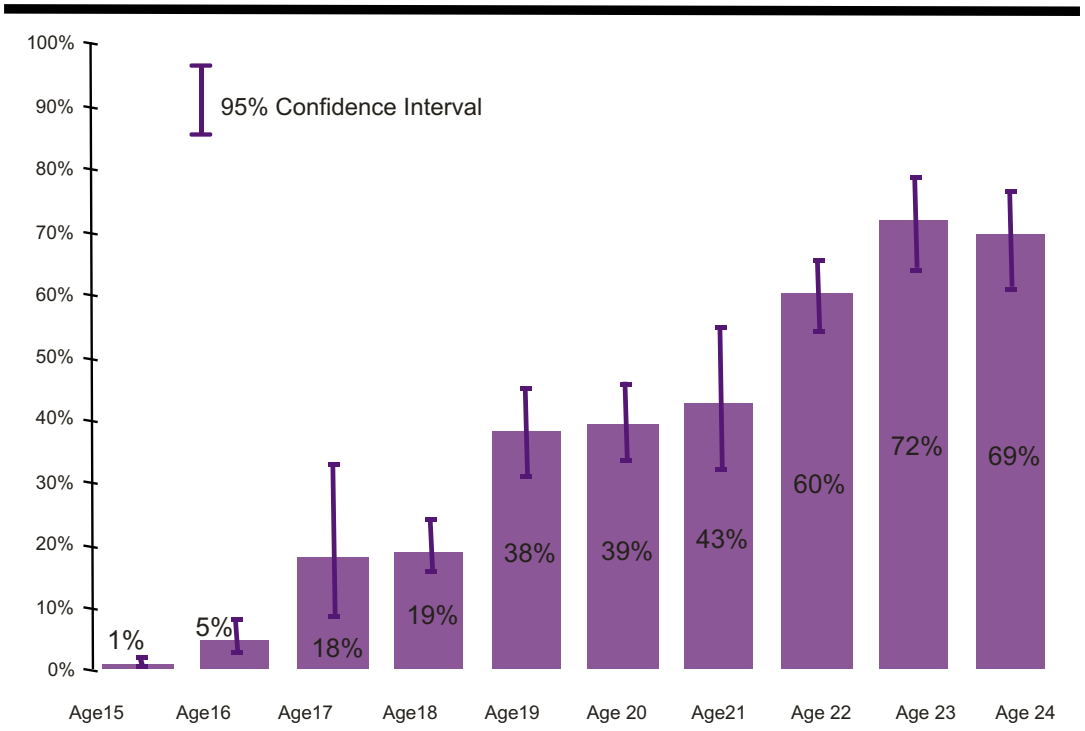


Source: National HIV and Sexual Behaviour Survey of 15-24 year olds, 2003

When examining all young women, not just those sexually experienced, 34% (95% CI 32%-36%) of all young women in South Africa report having ever been pregnant; 15% of 15-19 year olds and 53% of 20-24 year olds.

Figure 6

Ever Pregnant among All Women



Source: National HIV and Sexual Behaviour Survey of 15-24 year olds, 2003

In total, 2.9% of all females reported being married, 1% of 15-19 year old women and 5% of 20-24 year old women. When examining pregnancy by marriage, 48% of sexually experienced single women reported that they had ever been pregnant compared to 83% of sexually experienced married women (p<.01). Among sexually experienced 15-19 year old women, 33% of single women reported ever having been pregnant compared to 58% of married women (p<.01). Among sexually experienced 20-24 year old women, 57% of single women reported ever having been pregnant compared to 87% of married women.

The mean age of first pregnancy among the 49% of women who have been pregnant was 18.5 years and 77% of ever pregnant women reported only having been pregnant once.

Of young women who have ever been pregnant, 66% reported having been pregnant when they did not want to be. Examining wanting a pregnancy by marital status, among women who reported ever having been pregnant, 68% of single women reported that they had ever been pregnant when they did not want to be compared to 42% of married women (p<.01).

While tracking the proportion of young women who have ever been pregnant allows for an examination of the number of women who have experienced pregnancy in their lifetime, it does not necessarily reflect current sexual behaviour. Asking women if they are currently pregnant is a much better measure of current behaviour (current pregnancy indicates that the woman has had unprotected sex in recent months) and is perhaps more likely to detect behaviour change. Of those young women who reported ever having been pregnant, 11% reported being pregnant at the time of the interview. There was no significant difference in current pregnancy by marital status.

Among all young women in South Africa, 4% reported being pregnant at the time of interview; 3% of 15-19 year olds and 5% of 20-24 year olds. Examining current pregnancy, even among women who have not had sex or been pregnant, allows for a measure of pregnancy among the whole population of women age 15-24. If more young women delay having sex for the first time, this measure will better capture those changes.

Table 8. Pregnancy Status at the Time of Interview among Women by Age Group

			Age group	
		Total	15-19	20-24
AMONG ALL WOMEN: Are you currently pregnant?	Yes	4%	3%	5%
	No	64%	44%	85%
	Not had sexual intercourse	32%	53%	9%
	Total	**6217**	**3682**	**2535**

Termination of Pregnancy

Among women who reported ever having been pregnant (49% of sexually experienced women), 3% reported that they had ever terminated a pregnancy (TOP). When examining TOP by women reporting that they had ever had an unwanted pregnancy, 3% of women who reported having had an unwanted pregnancy reported having had a TOP compared to 1% of women reporting that they had never had an unwanted pregnancy (p=0.03).

II. Levels of Sexual Activity

We turn now to the key indicators of young people's behaviour that directly impact on HIV, STIs and pregnancy, focusing first on reported levels of sexual activity.

Sexual Experience

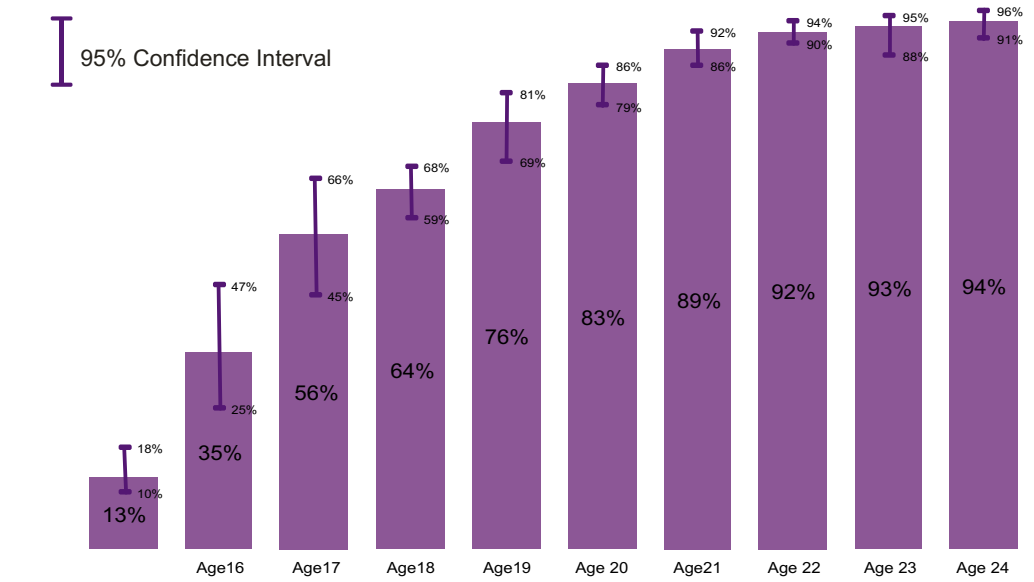
Overall 67% (95% CI 65%-69%) of young people age 15-24 years reported ever having had sexual intercourse (this includes either vaginal or anal sex); 48% (95% CI 45%-52%) of those age 15-19 years reported that they had ever had sex compared to 89% (95% CI 88%-91%) of those age 20-24 years. There was no major difference in sexual experience by gender (67% of males vs. 68% of females).

Table 9. Sexual Experience by Gender and Age

					Age group		Gender by age group			
							Male Age group		Female Age group	
		Total	Male	Female	15-19	20-24	15-19	20-24	15-19	20-24
Ever had sexual intercourse (vaginal or anal)	Yes	67%	67%	68%	48%	89%	50%	88%	47%	91%
	No	33%	33%	32%	52%	11%	50%	12%	53%	9%
	Total	**11904**	**5687**	**6217**	**7238**	**4666**	**3556**	**2131**	**3682**	**2535**

Figure 7

Youth who Report Ever Having Had Sex by Age Group



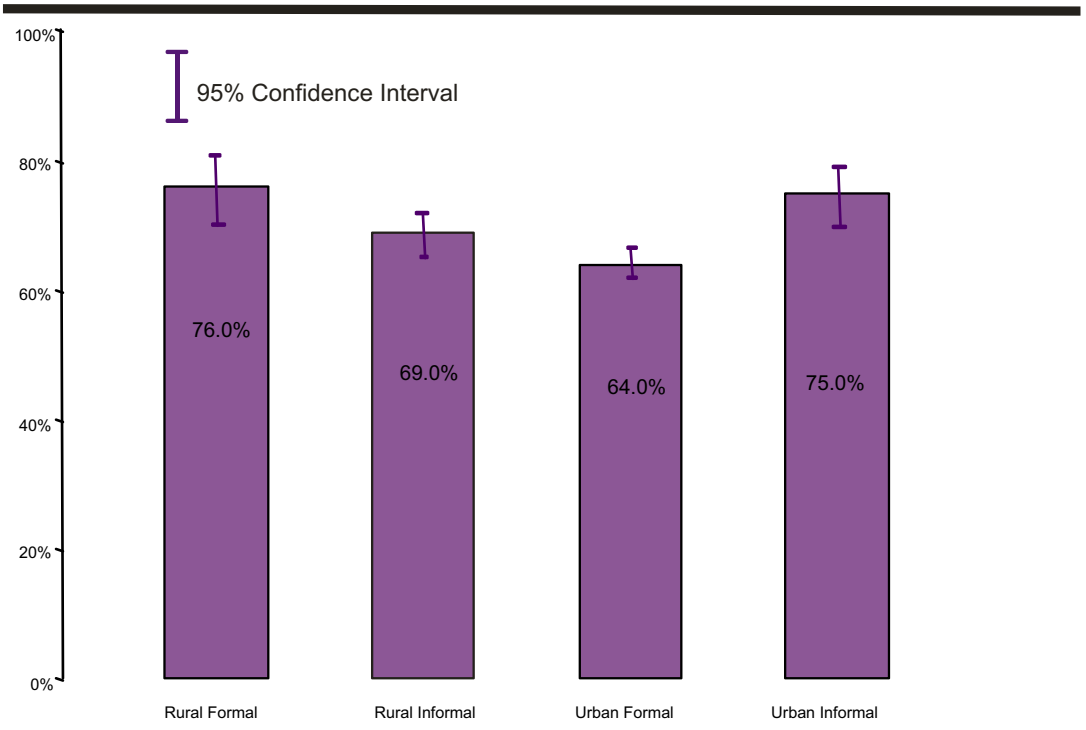
Source: National HIV and Sexual Behaviour Survey of 15-24 year olds, 2003

Seventy-one percent of African youth age 15-24 reported ever having sex, 58% of Coloured youth, 43% of White youth and 43% of Indian youth.

Young people living in urban informal and rural formal (farms) areas reported similar levels of sexual experience (75% vs. 76% respectively). Sixty-four percent of youth living in urban formal areas and 69% of youth living in rural informal areas reported ever having had sex.

Figure 8

Ever had Sex by Geography Type



Source: National HIV and Sexual Behaviour Survey of 15-24 year olds, 2003

Sexual Activity in Past 12 Months

A key indicator to track behaviour change is the number of youth who have ever had sex but have not had sex in the past 12 months, also known as secondary abstinence. This measure of sexual activity is more sensitive to behaviour change as it is a better measure of recent sexual activity, and therefore exposure to HIV infection, and it captures people who may have chosen to change their behaviour by refraining from sex. Overall, of the 67% of young people who reported ever having had sex, 17% reported that they had not had sex in the past 12 months. Females who have ever had sex were significantly less likely than their male counterparts to report not having had sex in the past 12 months (13% vs. 21% respectively, $p<.01$). Further, among sexually experienced youth age 15-19 years, 10% of females reported not having had sex in the past 12 months compared to 27% of males the same age.

Table 10. Sexual Experience in the Past 12 Months by Gender and Age

			Gender		Age group		Gender by age group			
							Male Age group		Female Age group	
		Total	Male	Female	15-19	20-24	15-19	20-24	15-19	20-24
ASKED OF THOSE WHO REPORT HAVING HAD SEXUAL INTERCOURSE: Have you had sexual intercourse in the past 12 MONTHS?	Yes	83%	79%	87%	81%	84%	73%	83%	90%	85%
	No	17%	21%	13%	19%	16%	27%	17%	10%	15%
	Total	**7692**	**3626**	**4066**	**3501**	**4191**	**1760**	**1866**	**1741**	**2325**

Youth who reported ever having had sex but who had not had sex in the past 12 months were asked the reason for this; the majority of youth reported it was because they did not have a partner (36%) or had not had the opportunity (31%). It is assumed that youth not having sex in the past 12 months did so as an active choice to protect themselves against HIV, however this evidence suggests this is not the case. Only 8% reported it was because they were worried about getting HIV/AIDS, and 6% said they were waiting until they get married. Therefore, while this marker of behaviour change is an important one, it is significant to note that most previously sexually experienced youth were abstaining from sexual activity due to the lack of opportunity and not due to a conscious choice not to have sex.

Frequency of Sexual Activity in Last Month

The frequency with which young people are engaging in sexual intercourse is an important indicator of the number of potential exposures to HIV infection; more sex means greater possible exposure to HIV infection. Although many young people may have experienced sexual intercourse and be practising high risk behaviours, the majority of sexually active youth are not having a lot of sex. Among the young people who reported having had sex in the past 12 months (56% of all youth), 40% of males and 39% of females reported that they had not had sex in the past month, 51% of males and 50% of females reported having had sex 1-5 times in the past month and 8% of males and 10% of females reported that they had sex more than 5 times in the past month. Older sexually active youth were significantly more likely than sexually active younger youth to report having had sex in the past 12 months (6% of 15-19 year olds reported having had sex more than 5 times compared to 10% of 20-24 year olds, $p<.01$).

Table 11. Frequency of Sexual Intercourse in the Past Month by Gender and Age

		Total	Gender		Age group		Gender by age group			
							Male		Female	
							Age group		Age group	
		Total	Male	Female	15-19	20-24	15-19	20-24	15-19	20-24
ASKED OF THOSE WHO REPORTED HAVING HAD SEXUAL INTERCOURSE IN THE PAST 12 MONTHS : How often have you had sex with your MOST RECENT partner in the PAST MONTH?	0 times	39%	40%	39%	47%	34%	49%	34%	45%	35%
	1-5 times	50%	51%	50%	46%	53%	45%	54%	46%	52%
	5+ times	9%	8%	10%	6%	10%	5%	10%	8%	11%
	Missing/Refused	1%	1%	1%	1%	2%	1%	2%	1%	2%
	Total	**6649**	**3025**	**3624**	**3016**	**3633**	**1446**	**1579**	**1570**	**2054**

Age of First Sex

A delay in the age at first sex is one of the many factors attributed to the decline in HIV, therefore the proportion of youth who report having sex at an early age is another important indicator [10, 11]. Among youth who reported ever having had sex, the mean age of first sex was 16.7 years and the median was 17 years. For males the mean age was 16.4 years and the median was 16 years and for females the mean and median were 17 years. Eight percent of all young people reported having had sex at less than 15 years of age. This cut off has been chosen by WHO and other organisations as an indicator of early age at first sex. Males were significantly more likely to report having sex at an early age (less than or equal to 14 years) compared to females (12% vs. 5% respectively, $p < 0.01$).

Table 12. Age of Coital Debut by Gender and Age

		Total	Gender		Age group		Gender by age group			
							Male Age group		Female Age group	
		Total	Male	Female	15-19	20-24	15-19	20-24	15-19	20-24
How old were you when you first had sexual intercourse with someone?	Less than or equal to 14	8%	12%	5%	10%	7%	13%	10%	7%	4%
	>14	59%	55%	63%	38%	83%	37%	78%	40%	87%
	Not had sexual intercourse	33%	33%	32%	52%	11%	50%	12%	53%	9%
	Total	**11904**	**9867**	**1341**	**445**	**251**	**820**	**4786**	**5657**	**641**

Young African people were slightly more likely to report having had sex at an early age compared to youth of other races (9% vs. 4% respectively, $p<.01$). Youth living in rural informal areas were also significantly more likely to report having sex at an early age compared to youth living in urban formal areas (11% vs. 7% respectively, $p<.05$)

Table 13. Age of Coital Debut by Race and Geographic Area

		Total	African	Coloured	White	Indian	Farm	Rural Informal	Urban Formal	Urban Informal
How old were you when you first had sexual intercourse with someone?	Less than or equal to 14	8%	9%	5%	4%	5%	6%	11%	7%	8%
	>14	59%	62%	53%	39%	38%	69%	57%	58%	66%
	Not had sexual intercourse	33%	29%	42%	57%	57%	24%	31%	36%	25%
	Total	**11904**	**9867**	**1341**	**445**	**251**	**820**	**4786**	**5657**	**641**

Ever Physically Forced to Have Sex

In South Africa, it is commonly held that young women experience coercion and rape at alarmingly high rates [12-14]. In relationships characterized by violence and coercion there are few opportunities for open discussion about sexual histories or potential for condom negotiation. When asked "Have you ever had sexual intercourse because someone used physical force to make you have sex with him or her" 6% of all sexually experienced youth said yes. When examining this by gender, 2% of sexually experienced males and 10% of sexually experienced females reported that they had ever had sex because someone physically forced them.

Table 14. Forced Sex by Gender and Age

			Gender		Age group		Gender by age group			
							Male Age group		Female Age group	
		Total	Male	Female	15-19	20-24	15-19	20-24	15-19	20-24
ASKED OF THOSE WHO REPORT HAVING HAD SEXUAL INTERCOURSE: Have you ever had sex because someone used physical force to make you have sex with him or her?	Yes	6%	2%	10%	6%	6%	1%	2%	11%	9%
	No	94%	98%	90%	94%	94%	99%	98%	89%	91%
	Total	**7692**	**3626**	**4066**	**3501**	**4191**	**1760**	**1866**	**1741**	**2325**

Degree to Which First Intercourse was Wanted

Both partners do not always want to have sex to the same degree. The degree to which young people reported wanting first sex gives some indication of coercion, lack of decision making ability and possible rape among the sample population. Among young people who reported ever having had sex, 83% of males reported that they really wanted to have sex the first time whereas only 30% of females reported the same. Further, 28% of sexually experienced young women reported that they either did not or really did not want to have sex the first time they had sex compared to only about 1% of males.

Table 15. Degree to Which of First Sex was Wanted by Gender and Age

			Gender		Age group		Gender by age group			
							Male Age group		Female Age group	
		Total	Male	Female	15-19	20-24	15-19	20-24	15-19	20-24
ASKED OF THOSE WHO REPORT HAVING HAD SEXUAL INTERCOURSE: How much would you say you wanted to have sex the VERY FIRST TIME YOU EVER HAD SEX?	Really wanted	56%	83%	30%	56%	56%	83%	83%	27%	31%
	Wanted	28%	15%	41%	27%	29%	15%	14%	40%	41%
	Did not want	13%	1%	23%	13%	12%	1%	2%	26%	22%
	Really did not want	3%	0%	5%	3%	3%	0%	0%	6%	5%
	Missing/Refused	1%	0%	1%	1%	1%	0%	0%	1%	1%
	Total	**7692**	**3626**	**4066**	**3501**	**4191**	**1760**	**1866**	**1741**	**2325**

Similar patterns emerge when asking young people to characterize their first sexual experience. While 96% of sexually experienced males reported that they were willing to have sex the first time, only 59% of sexually experienced females reported that they were willing. Further, 31% percent of sexually experienced young women reported that they felt they were persuaded to have sex the first time, 6% reported that they felt they were tricked into having sex and 3% reported that they were physically forced; less than 1% of males reported being tricked or forced and only 3% reported being persuaded.

III. Characteristics of Sexual Activity

Here we focus on the characteristics of sexual activity, particularly those that directly place young people at risk for infection with HIV (e.g. condom use, number of partners, other attributes that may define the riskiness of sexual activity).

Sexual Partners

The greater the number of sexual partners young people have, the greater their potential exposure to HIV will be. Partner reduction is, therefore, one of the key factors of most HIV prevention programmes. Among sexually experienced young people, 35% reported only having had one lifetime sexual partner. Sexually experienced males were significantly less likely to report having had only one lifetime partner compared to females (25% vs. 45%, p<.01). Fifteen percent of sexually experienced young people reported that they had more than five lifetime sexual partners; 24% of males and 6% of females. As would be expected, the number of lifetime sexual partners increases as youth get older with 15% of sexually experienced 15-19 year old males reporting having more than 5 partners compared to 31% of sexually experienced males age 20-24 and only 1% of sexually experienced females age 15-19 reported having more than 5 partners compared to 7% of sexually experienced females age 20-24.

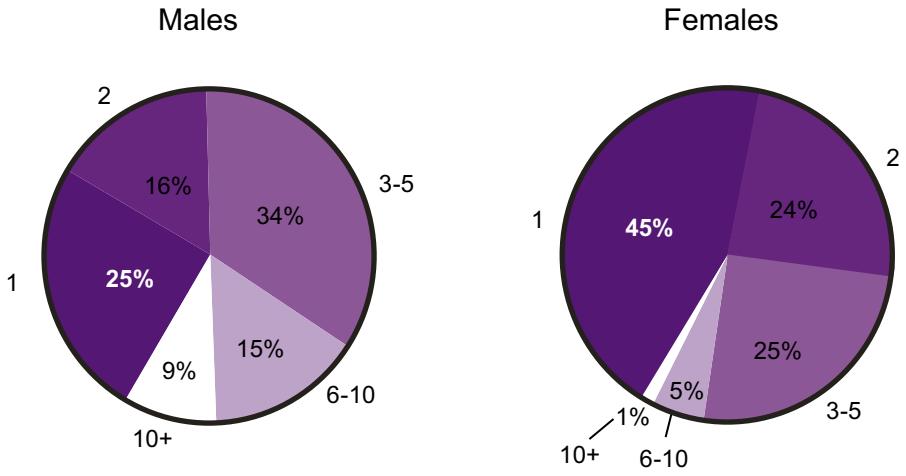
Table 16. Number of Sexual Partners in Lifetime by Gender and Age

			Gender		Age group		Gender by age group			
							Male Age group		Female Age group	
		Total	Male	Female	15-19	20-24	15-19	20-24	15-19	20-24
ASKED OF THOSE WHO REPORT HAVING HAD SEXUAL INTERCOURSE: How many different people have you had sexual intercourse with in your whole lifetime?	1	35%	25%	45%	47%	28%	37%	16%	58%	38%
	2	20%	16%	24%	20%	20%	18%	15%	22%	25%
	3-5	30%	34%	25%	24%	33%	29%	38%	18%	30%
	6-10	10%	15%	5%	6%	12%	10%	18%	1%	6%
	>10	5%	9%	1%	3%	6%	5%	13%	0%	1%
	Total	**7692**	**3626**	**4066**	**3501**	**4191**	**1760**	**1866**	**1741**	**2325**

Figure 9

Number of Sexual Partners in Lifetime

Among those who reported ever having had sexual intercourse…



Source: National HIV and Sexual Behaviour Survey of 15-24 year olds, 2003

While lifetime number of sexual partners provides insight into the lifetime risk a young person has been exposed to, the number of partners they have had in the past 12 months better reflects their recent sexual behaviour; as with other measures of sexual behaviour, the number of sexual partners in the past 12 months should better capture changes in sexual behaviour. Among young people who have had sexual intercourse in the past 12 months, 27% reported that they had more than one sexual partner in the past 12 months. Males who had sex in the past 12 months were significantly more likely to report having had more than one sexual partner in the past year compared to females (44% vs. 12%, $p < 0.01$). Thus among youth who reported having had sex in the past 12 months, 56% (95% CI 52%-59%) of males and 88% (86%-90%) of females reported only having one sexual partner in the past 12 months.

There were no significant differences in partner number in the past 12 months by age group, race or geographic type.

Table 17. Number of Sexual Partners in the Past 12 Months by Gender and Age

			Gender		Age group		Gender by age group			
							Male Age group		Female Age group	
		Total	Male	Female	15-19	20-24	15-19	20-24	15-19	20-24
ASKED OF THOSE WHO REPORTED HAVING HAD SEXUAL INTERCOURSE IN THE PAST 12 MONTHS: How many different people have you had sex with in the past 12 months?	1 partner	73%	56%	88%	72%	74%	57%	55%	85%	90%
	>1 partner	27%	44%	12%	28%	26%	43%	45%	15%	10%
	Total	**6649**	**3025**	**3624**	**3016**	**3633**	**1446**	**1579**	**1570**	**2054**

Age Difference with Sexual Partners

Age differences between young people and their sexual partners have been hypothesized to increase the risk of HIV for young people. Older partners are more likely to have been exposed to HIV than partners of the same age group and among South African youth, older male partners may be members of age cohorts with the highest levels of HIV infection[15]. Young women tend to have older male partners while men tend to have younger partners. Among youth who had sex in the past year, 0.5% of males reported having had a partner 10 or more years their senior compared to 6% of females ($p<.01$). The mean age difference with their most recent sexual partner was 1 year younger for men and 4 years older for females. The interquartile range (25^{th}-75^{th} percentile) for the age difference between partners for males ranged from 2 years younger to the same age (no age difference) and for females it ranged from 2 to 6 years older.

Condom Use

Condom use is one of the few interventions known to be effective in reducing the risk of HIV infection. Therefore, promotion of condom use is a central tenet of many HIV prevention efforts and a key indicator. Of youth who reported ever having had sex, 52% (95%CI 49%-56%) reported that they used a condom the last time they had sex; 57% of males reported using condoms at last sex compared to 48% of females.

Although reported condom use at last sex was almost identical among males and females in the 15-19 year old age group, among those age 20-24 years, sexually experienced females were significantly less likely to report using condoms at last sex compared to males of the same age (44% vs. 57%, $p < 0.01$).

Table 18. Condom Use at Last Sex by Gender and Age

			Gender		Age group		Gender by age group			
							Male Age group		Female Age group	
		Total	Male	Female	15-19	20-24	15-19	20-24	15-19	20-24
ASKED OF THOSE WHO REPORT HAVING HAD SEXUAL INTERCOURSE: The LAST time you had sexual intercourse, did you use a condom?	Yes	52%	57%	48%	56%	50%	57%	57%	55%	44%
	No	48%	43%	52%	44%	50%	43%	43%	45%	56%
	Total	**7692**	**3626**	**4066**	**3501**	**4191**	**1760**	**1866**	**1741**	**2325**

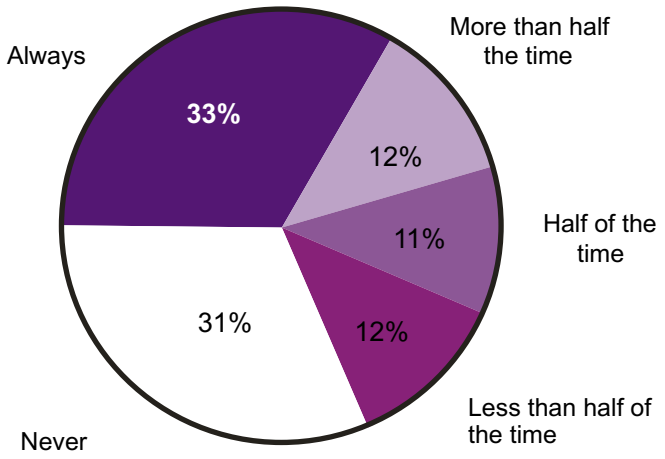
Fewer sexually experienced youth living in rural areas reported condom use at last sex; 36% of sexually experienced youth living in farming areas and 43% living in rural informal areas reported using a condom at last sex compared to 63% of their counterparts living in urban formal areas and 52% living in urban informal areas. There were no significant differences in condom use at last sex by race.

While condom use at last sex may be a more valid measure of condom use in terms of recall of use, it does not capture the consistency of use, an essential element of condom effectiveness. Of those youth who reported having had sex in the past 12 months (56% of all young people), 33% reported that they always used a condom with their most recent sexual partner while 31% reported that they never used a condom with their most recent partner. Among this group who reported having had sex in the past 12 months, females were significantly less likely than males to report always using condoms with their most recent sexual partner (28% vs. 39% respectively, p<.01). Among these youth, females age 20-24 years were significantly less likely to report always using condoms compared to males the same age (24% vs. 35% respectively, p<.01).

Figure 10

Condom Use Consistency with Most Recent Sexual Partner

Among those who reported having had sex in the past 12 months...



Source: National HIV and Sexual Behaviour Survey of 15 - 24 year olds, 2003

Studies have found that condoms are often less likely to be used in consistent partnerships [16, 17]. Among the 56% of youth who reported having had sex in the past 12 months, 32% of those who reported that their most recent partner was a main partner reported always using a condom, 53% of those whose most recent partner was a regular casual partner (that is someone other than a main partner with whom they had sex on a regular basis) said they always used a condom, and 56% of those who reported that their most recent partner was a non-regular casual partner (that is someone other than a main partner with whom they had sex one or two times) said they always used a condom.

Among youth who reported having sex in the past 12 months, Indian youth (52%) were more likely to report always using a condom with their most recent partner than were their White (43%), African (33%), or Coloured (28%) counterparts ($p<.01$).

Youth living in urban formal areas who reported having sex in the past 12 months were most likely to report always using condoms (43%) compared to only 15% of those in farming areas. Further, among youth who reported having sex in the past 12 months, thirty percent of youth living in urban informal areas and 27% living in rural informal areas reported always using condoms.

Condoms are offered free to youth at South Africa's public sector clinics and through many other non-clinical venues around the country. In order to assess if access to condoms was a factor influencing their use, youth were asked whether it was easy or difficult for them to get condoms if they wanted them. The vast majority of youth said it was very easy to get condoms if they needed or wanted them (87%), another 6% of youth said it was somewhat easy, while 3% said it was somewhat difficult and 3% said it was very difficult.

When examining condom access by race, 94% of African youth, 94% of Coloured youth, 91% of White youth and 90% of Indian youth reported that it was very easy or somewhat easy to get a condom. By geographic type 96% of youth living in urban informal areas, 94% of youth living in urban formal areas, 93% of youth living in rural informal areas and 88% of youth living in farming areas reported that it was very easy or somewhat easy to get a condom if they needed or wanted one.

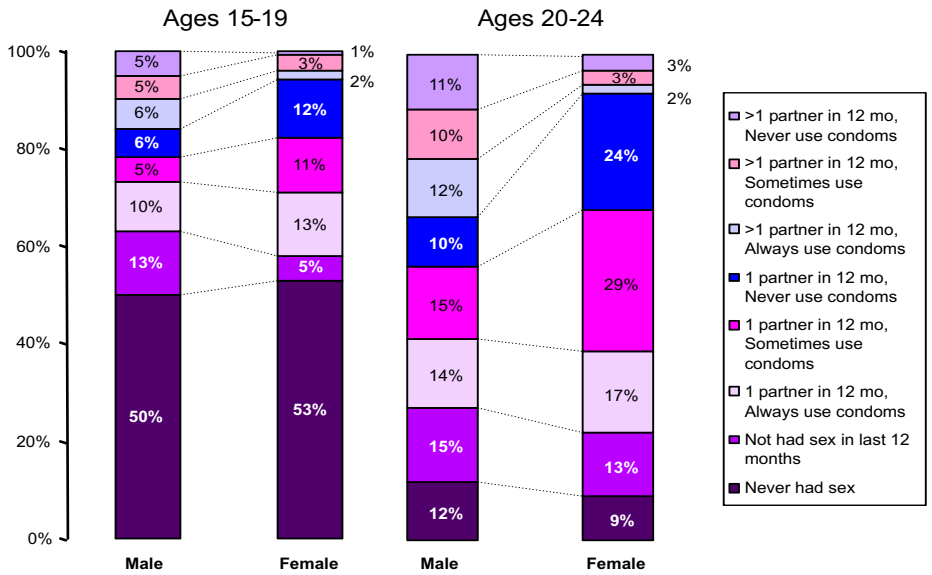
Partner Numbers in Past 12 Months and Condom Use Consistency

Grouping risk behaviours together gives a better picture of how they intersect and describes what proportion of youth are in the highest risk group (i.e. multiple partners and no condom use). In Figure 11, ten percent of males age 15-19 years and 13% of females 15-19 reported having one partner in the past 12 months and always using a condom with that partner and 14% of males age 20-24 and 17% of females age 20-24 reported having one partner and always using a condom with the partner. Among 15-19 year olds, five percent of males and 1% of females reported having more than one partner in the past 12 months and never using a condom. Among those age 20-24 years, 11% of males and 3% of females reported having more than one partner in the past 12 months and never using a condom.

In Figure 11 to Figure 13, among 15-19 year olds 50% of males and 53% of females reported that they had never had sex and 13% of males and 5% of males reported they had not had sex in the past 12 months. Among those age 20-24, 12% of males and 9% of females reported that they had never had sex and 15% of males and 13% of females reported that they had not had sex in the past 12 months.

Figure 11

Partner Number and Condom Use Consistency by Gender



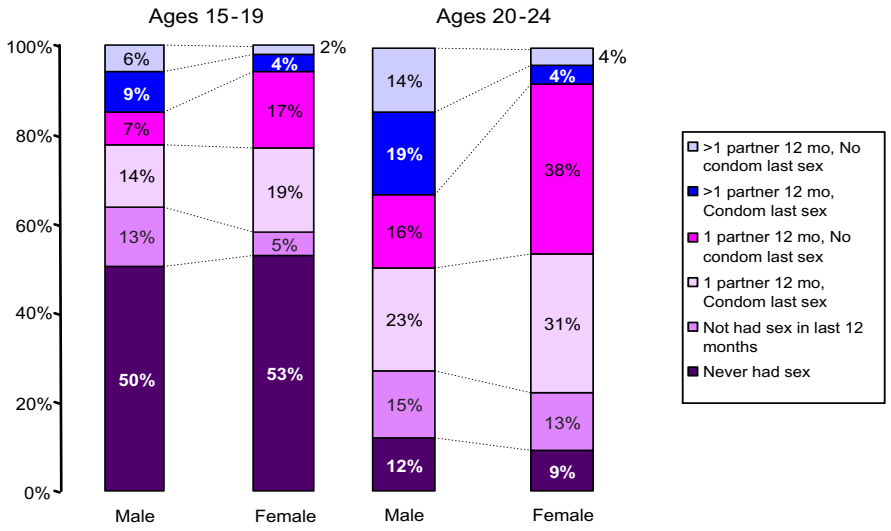
Source: National HIV and Sexual Behaviour Survey of 15 -24 year olds, 2003

Partner Numbers in Past 12 Months and Condom Use at Last Sex

Among those age 15-19 years, fourteen percent of males and 19% of females reported having one partner in the past 12 months and using a condom at last sex. Among those age 20-24 years, twenty-three percent of males and 31% of females reported having one partner in the past 12 months and using a condom at last sex. Six percent of males age 15-19 and 2% of females the same age reported that they had more than one partner in the past 12 months and did not use a condom at last sex and 14% of males age 20-24 and 4% of females the same age reported having more than one partner in the past 12 months and not using a condom the last time they had sex (see Figure 12).

Figure 12

Partner Number and Condom Use at Last Sex by Gender



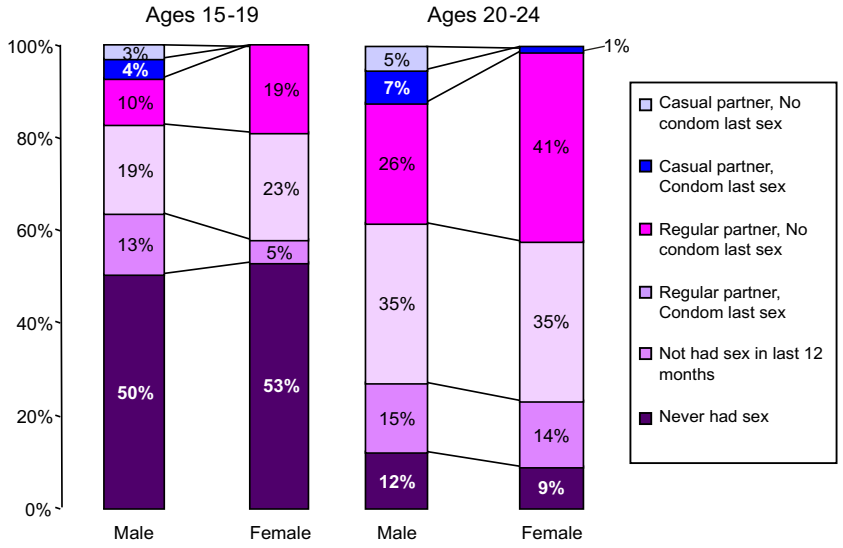
Source: National HIV and Sexual Behaviour Survey of 15-24 year olds, 2003

Partner Type in Past 12 Months and Condom Use at Last sex

When examining the type of partner a youth has had and condom use, among those age 15-19 years, ten percent of males reported that their last partner was a regular partner and they did not use a condom the last time they had sex compared to 19% of females the same age. Among those age 15-19 years, four percent of males reported their last partner was a casual partner and that they did use a condom at last sex and 3% who reported that their last partner was casual reported they did not use a condom at last sex; less than 1% of women age 15-19 reported having a casual partner. Among those age 20-24 years, twenty-six percent of males and 41% of females reported that their last partner was a regular partner and that they did not use a condom the last time they had sex.

Figure 13

Partner Type and Condom Use at Last Sex by Gender



Source: National HIV and Sexual Behaviour Survey of 15-24 year olds, 2003

Contraceptive Use

While the primary aim of loveLife is to reduce HIV infections, the programme also aims to reduce unwanted pregnancies. Many of loveLife's outreach and service programmes aim to improve access to reproductive health services for young people including improved access to contraception.

Of the 59% of women who reported having had sex in the past 12 months, 57% reported that they were currently using a method of pregnancy prevention. Of these women, 58% reported that they were using injectable contraceptives, 34% reported using the male condom and 13% reported that they were using oral contraceptive pills.

Alcohol and Drug Use

When young people were asked what the biggest problems facing youth were, alcohol and drug abuse were the second greatest concern after HIV/AIDS. Previous research has shown young people are more likely to engage in high risk behaviour when under the influence of alcohol and drugs [18, 19]. While just over half (56%) of young people reported ever having drunk alcohol (not just to taste or for religious reasons), 24% of these youth reported that they had ever had sex when under the influence of alcohol. Among youth who had ever drunk alcohol, males were twice as likely as females to report having had sex under the influence of alcohol (31% vs. 15% respectively, $p < .01$).

Experience with drug use was less common with just over 1 in 10 youth reporting that they had ever used any drug to make them feel 'high'. Males were much more likely than females to report ever having used drugs (18% vs. 3% respectively, $p<.01$). Further, and of greater concern in terms of the spread of HIV, of the 11% of youth who reported ever having used drugs, 4% reported that they had ever injected drugs (5% males vs. 1% females).

Transactional Sex

Transactional sex, or sex in exchange for money, gifts, favours, good grades or other material and non-material items, has been reported to be one of the high risk sexual behaviours putting young people, especially young women, at risk for HIV [20-22]. In such relationships young women have limited opportunities for setting boundaries on sexual behaviour and are unlikely to engage in negotiation over safer sex. Self reporting of ever having engaged in transactional sex was relatively low (3%) among youth who reported ever having had sex. Given that this phenomenon is more widely recognized among young women, interestingly, there was no difference in reported prevalence by gender.

IV. HIV Knowledge, Communication and Perceived Risk

Both theory and research suggest that prior to youth changing their sexual behaviour to protect themselves from HIV/AIDS, key antecedents of behaviour change such as knowledge, attitudes, and beliefs must change first. Here we examine antecedents that could lead to behaviour change including young people's knowledge of HIV prevention, whether or not they are communicating with others about the disease, if they believe they are at risk for becoming infected and their personal experiences with being tested for HIV and with being affected by people dying from AIDS.

HIV Knowledge

Among all youth, 94% reported that they believed that were ways to avoid getting HIV infection. There were no significant differences by age or gender.

Table 19. Knowledge of HIV Prevention by Gender and Age

			Gender by age group			
			Male Age group		Female Age group	
		Total	15-19	20-24	15-19	20-24
To the best of your knowledge, is there anything a person can do to avoid HIV, the virus that causes AIDS?	Yes	94%	90%	95%	94%	95%
	No	6%	9%	5%	5%	4%
	Not heard of HIV/ AIDS	0%	1%	0%	0%	0%
	Total	**11904**	**3556**	**2131**	**3682**	**2535**

When youth were asked to describe in their own words what could be done to prevent HIV/AIDS, 77% reported that you can use condoms during sex, 41% reported you can not have sex, 10% said you can have one faithful partner, 7% said you cannot have many sex partners, and 6% reported that there is nothing you can do to avoid HIV/AIDS (youth were asked to report all ways they knew, thus percentages add up to greater than 100%).

* Note that all questions pertaining to HIV/AIDS were asked of youth who reported knowing what HIV/AIDS was, 1% of 15-19 year old males reported not knowing what HIV/AIDS was.

Table 20. Knowledge of Different HIV Prevention Methods by Gender and Age

			Gender by age group			
			Male Age group		Female Age group	
		Total	15-19	20-24	15-19	20-24
What can a person do to avoid getting HIV, the virus that causes AIDS? (unprompted)	Use condoms during sex	77%	74%	82%	74%	78%
	Do not have sex at all	41%	41%	35%	46%	40%
	Have one faithful partner	10%	7%	12%	9%	13%
	No multiple partners	7%	4%	8%	7%	9%
	Avoid blood transfusions	6%	6%	6%	7%	4%
	Do not share needles	4%	5%	3%	4%	3%
	Other	5%	6%	5%	6%	4%
	Nothing you can do	6%	10%	5%	6%	5%
	Total	**11904**	**3556**	**2131**	**3682**	**2535**

When asked if they had changed their personal behaviour in any way to prevent getting HIV, 63% percent of youth said yes. Among 15-19 year olds 56% of males and 61% of females reported having changed their behaviour and among those age 20-24 years 70% of males and 68% of females reported having changed their behaviour.

Table 21. Self Reported Behaviour Change by Gender and Age

			Gender by age group			
			Male Age group		Female Age group	
		Total	15-19	20-24	15-19	20-24
How did you change your behaviour to prevent getting HIV/AIDS? (unprompted)	Use condoms	20%	17%	32%	12%	23%
	Reduce number of partners	14%	12%	24%	8%	13%
	Abstain from sex	13%	14%	9%	17%	12%
	Being faithful to one partner	11%	5%	9%	11%	21%
	Delay having first sex	7%	10%	3%	13%	2%
	Talked to friends about sex, relationships & risk of HIV	2%	1%	1%	3%	1%
	Talked to partner about sex, relationships & risk of HIV	2%	1%	1%	1%	3%
	Do not share needles	1%	1%	1%	2%	1%
	Got an HIV test	1%	0%	1%	1%	2%
	Talked to parents about sex, relationships & risk of HIV	1%	0%	2%	2%	1%
	Choose only healthy looking partners	1%	1%	2%	0%	1%
	Other	3%	4%	3%	4%	3%
	Not changed behaviour	37%	44%	30%	39%	32%
	Total	**11904**	**3556**	**2131**	**3682**	**2535**

When youth were asked to report, unprompted, what they had done to change their behaviour, among all youth, 20% reported that they used a condom, 14% reported that they had reduced their number of sexual partners, 13% reported having abstained or stopped having sex, 11% reported that they were faithful to one partner and 7% said they were delaying having sex for the first time; 37% reported not having changed their behaviour.

Communication

One of the central messages of the loveLife campaign is to talk more openly about sexuality and HIV/AIDS. This is based on the premise that more open communication about these issues will challenge social norms and lead to positive behaviour change such as delaying age at first sex and increasing safer behaviour. When young people were asked if they had ever talked to their parents or guardians about HIV/AIDS, 44% said yes. Females were slightly more likely than males to report talking to their parents (48% vs. 39% respectively, p<.01). Research on HIV and sexual communication has shown that young people who have spoken to their parents about HIV are more likely to engage in safer sexual behaviours [23, 24]. The research also shows that it is not just whether a youth talked to their parent or not, but the content of the conversation that impacts on behaviour. Of youth who reported having talked to their parents about HIV/AIDS, 75% reported that the conversation was very helpful while only 7% reported that the conversation was not too helpful or not helpful at all.

Table 22. Communication with Parents around HIV/AIDS by Gender and Age

			Gender		Age group		Gender by age group			
							Male Age group		Female Age group	
		Total	Male	Female	15-19	20-24	15-19	20-24	15-19	20-24
Have you ever talked to your parents or guardians about HIV/AIDS?	Yes	44%	39%	48%	42%	46%	37%	42%	47%	50%
	No	56%	60%	52%	58%	54%	62%	58%	53%	50%
	Not heard of HIV/AIDS	0%	1%	0%	0%	0%	1%	0%	0%	0%
	Total	**11904**	**5687**	**6217**	**7238**	**4666**	**3556**	**2131**	**3682**	**2535**

Youth were asked about their perceived ability to go to their parents/guardians with questions about sex. Fifty-four percent of youth reported that they felt they could go to their parents with questions about sex; 47% of 15-19 year old boys felt they could go to their parents compared to 59% of 15-19 year old girls.

Youth were also asked if they had talked to anyone else, other than their parent/guardians, about HIV/AIDS. Eighty percent of youth reported that they had talked to someone other than their parents about HIV/AIDS. Of the 80% of youth reporting having talked to someone other than their parents about HIV/AIDS, the majority (72%) reported having talked to their friends. Eighteen percent of this group reported having talked about HIV/AIDS at school (with teachers, classmates or in the classroom), 17% reported having talked to boyfriends/girlfriends/husbands or wives and 10% reported having talked to siblings.

Table 23. People Youth has Communicated with about HIV/AIDS by Gender and Age

			Gender by age group			
			Male Age group		Female Age group	
		Total	15-19	20-24	15-19	20-24
ASKED OF THOSE WHO REPORT HAVING TALKED TO ANYONE ELSE, OTHER THAN THEIR PARENTS OR GUARDIANS, ABOUT HIV/AIDS: Who have you talked to about HIV/AIDS? (unprompted)	Friends	72%	77%	81%	67%	62%
	Teacher/Classmates/Classroom/ School	18%	25%	8%	31%	9%
	Boyfriend/Girlfriend/Husband/ Wife/Partner	17%	7%	19%	11%	30%
	Brothers/Sisters	10%	7%	7%	11%	13%
	Other relatives	5%	4%	4%	5%	7%
	Health worker/Nurse/Doctor/ Clinic	4%	2%	4%	5%	6%
	Community members/Neighbours/ Community meeting	3%	2%	3%	3%	4%
	Other	3%	3%	4%	3%	4%
	Total	**9760**	**2816**	**1812**	**2995**	**2137**

Fifty-five percent of youth reported that they had actually started a conversation about HIV/AIDS. While there were no major differences by gender, older youth were more likely to have started a conversation compared to younger youth; 61% of 20-24 year olds reported having started a conversation compared to 50% of 15-19 year olds. Of the 55% of youth who reported having started conversations about HIV/AIDS, the majority (69%) reported having started conversations about HIV/AIDS with their friends, 16% with their partners and 11% at school (with teachers, classmates, or in the classroom). Of youth who reported having started a conversation about HIV/AIDS, males were more likely to say they start conversations with their friends compared to females (77% vs. 62% respectively, $p<.01$) and females were more likely than males to report starting conversations with their partners (20% vs. 13% respectively, $p<.01$).

Young people were asked from which one source (people, place or media) they had learned the most about HIV/AIDS. Thirty-two percent of youth reported having learned the most about HIV/AIDS from school (teachers, classmates or in the classroom). This was followed by 19% of youth reporting to have learned the most about HIV/AIDS from TV, 17% from radio, and 12% from health care workers/nurses/doctors/clinic. Only 4% reported having learned the most about HIV/AIDS from their parents/guardian and 2% reported having learned the most from friends.

Table 24. Source of HIV/AIDS Knowledge for Youth by Gender and Age

			Gender by age group			
			Male		Female	
			Age group		Age group	
		Total	15-19	20-24	15-19	20-24
From which ONE source (people, places, or media) have you learned the MOST about HIV/AIDS? (unprompted)	Teacher/Classmates/ Classroom/School	32%	37%	23%	44%	22%
	TV	19%	19%	24%	15%	19%
	Radio	17%	18%	22%	10%	18%
	Health worker/Nurse/Doctor/ Clinic	12%	8%	12%	10%	18%
	Community members/Neighbours/ Community meetings	6%	6%	6%	7%	5%
	Newspapers/Magazines/ Books/Library	4%	4%	3%	4%	4%
	Parents/Guardians/Mother/ Father	4%	3%	3%	4%	6%
	Friends	2%	2%	2%	2%	2%
	Other	5%	2%	4%	4%	5%
	Not heard of HIV/AIDS	0%	1%	0%	0%	0%
	Total	**11904**	**3556**	**2131**	**3682**	**2535**

In contrast to learning about HIV/AIDS, when youth were asked where they had learned the most about dealing with pressures to have sex, 24% reported from their friends, 13% from school, 9% from TV and 7% from parents/guardians.

When asked about where they had learned the most about contraception or family planning (pregnancy prevention), 22% reported from health care workers/nurses/ doctors/clinic, 17% reported at school, 15% reported from parents/guardians and 9% from friends.

When it comes to getting information from parents, more youth report learning about pregnancy prevention from parents (15%) than HIV/AIDS (4%) or pressures to have sex (7%).

Perceived Risk of HIV

In order for young people to take precautions to protect themselves from HIV, they first have to think that they are potentially at risk for becoming infected with HIV. Among all youth, when asked what they thought their chances of getting HIV/AIDS were, 36% reported they believed they were at no risk at all of contracting HIV, 35% reported being at small risk while 12% reported to be at moderate risk and 14% said at high risk. More females than males perceived themselves to be at great risk for HIV (18% vs. 11% respectively, $p<.01$).

Table 25. Self Perceived HIV Risk by Gender and Age

			Gender		Age group		Gender by age group			
							Male Age group		Female Age group	
		Total	Male	Female	15-19	20-24	15-19	20-24	15-19	20-24
What do you think your chances of getting HIV/AIDS are?	No risk at all	36%	40%	33%	44%	28%	47%	31%	40%	25%
	Small	35%	36%	34%	33%	38%	33%	41%	33%	35%
	Moderate	12%	11%	12%	10%	15%	10%	13%	9%	16%
	Great	14%	11%	18%	12%	17%	8%	14%	17%	20%
	Already know HIV status	1%	1%	2%	1%	2%	1%	1%	1%	3%
	Do not know	0%	0%	0%	0%	1%	0%	0%	0%	1%
	Youth has never heard of HIV	0%	1%	0%	0%	0%	1%	0%	0%	0%
	Total	**11904**	**5687**	**6217**	**7238**	**4666**	**3556**	**2131**	**3682**	**2535**

When a comparison of perceived HIV risk and various risk behaviours was conducted two issues emerged. Among those young people who really are at low risk when considering their reported sexual behaviours, there is a justified lack of perceived HIV risk. There is, however, no increase in perceived risk among young people who engage in sexual behaviours that are considered to place them at greater risk of HIV infection.

Among sexually active young people 67% continue to think of themselves as being at low risk for HIV infection. Fifty four percent of young people who indicated never using a condom with their last sexual partner feel that they are at low risk of infection and 67% of those reporting three or more lifetime sexual partners also indicated that they are at low risk of HIV. This relationship continued into the amalgamated risk profiles with 49% of young people with more than one partner and a history of no condom use indicating that they felt at low risk of HIV. These relationships were all significant.

HIV Testing

Voluntary Counselling and Testing (VCT) for HIV infection is one strategy that has been shown to reduce high risk behaviour and increase health seeking behaviours among adults [25-27]. Young people were asked if they had ever been tested for HIV. Twenty percent of young people reported that they had ever been tested for HIV. Females were significantly more likely to report having been tested for HIV compared to males (25% vs. 15% respectively, p<.01). Similarly, older youth were more likely to have been tested compared to younger youth (29% vs. 12% respectively, p<.01). Fifteen percent of 15-19 year olds females reported ever having been tested compared to 9% of males the same age (p<.01) and 35% of 20-24 year old females reported ever having been tested compared to 22% of males the same age (p<.01).

Table 26. HIV Testing by Gender and Age

			Gender		Age group		Gender by age group			
							Male Age group		Female Age group	
		Total	Male	Female	15-19	20-24	15-19	20-24	15-19	20-24
Have you ever been tested for HIV?	Yes	20%	15%	25%	12%	29%	9%	22%	15%	35%
	No	80%	85%	75%	88%	71%	90%	78%	85%	64%
	Youth has never heard of HIV	0%	1%	0%	0%	0%	1%	0%	0%	0%
	Total	**11904**	**5687**	**6217**	**7238**	**4666**	**3556**	**2131**	**3682**	**2535**

Although many youth had never been tested for HIV, the majority (60%) reported that they were interested in knowing whether or not they have HIV, while 28% reported not being interested and 11% reported already knowing their status. We note that this percentage differs from that in Table 19 where only 1% of young people reported that they knew their HIV status.[††]

Table 27. Interest in Knowing HIV Status by Gender and Age

			Gender by age group			
			Male Age group		Female Age group	
		Total	15-19	20-24	15-19	20-24
I cannot provide you with your HIV test results today, but in general, do you want to know whether or not you have HIV?	Yes	60%	62%	59%	64%	55%
	No	28%	33%	30%	25%	25%
	Already know status	11%	5%	11%	10%	20%
	Youth has never heard of HIV	0%	1%	0%	0%	0%
	Total	**11904**	**3556**	**2131**	**3682**	**2535**

[††] We acknowledge the discrepancy in youth reporting that they 'already know status' for HIV between Table 25 and 27. Question wording, prompting, and order in the questionnaire may explain the differences.

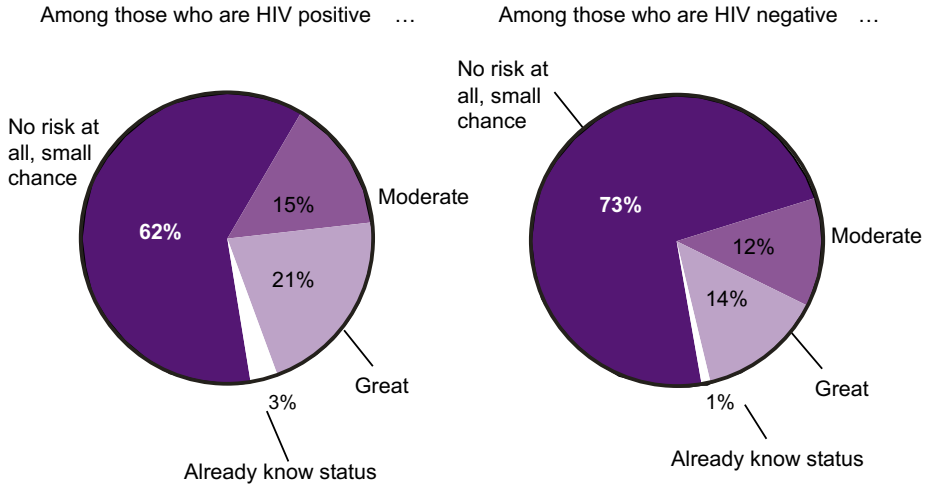
HIV Testing and Perceived Risk of HIV among HIV Positive Youth

Despite the high prevalence of HIV in this young age group, the vast majority of HIV positive youth do not know they are infected as 67% reported that they had never been tested. Encouragingly though, many of the HIV infected young people did report wanting to know their HIV status (56%) and 17% reported already knowing their status. Of concern, was that 27% of HIV infected youth said they did not want to know their status.

Despite many HIV positive youth wanting to know their status, the majority do not see themselves at risk for contracting HIV, even though they are already infected. When asked "What do you think your chances of getting HIV/AIDS are?" 62% of HIV infected young people reported that they thought their chances were small or that they were at no risk of contracting HIV.

Figure 14

Perceived Risk of Contracting HIV by HIV Status



Source: National HIV and Sexual Behaviour Survey of 15-24 year olds, 2003

Health Seeking Behaviours

HIV prevention services need to be readily accessible to young people if they are to be effective. In South Africa, such services are generally associated with the public health care sector. It is, therefore, important to establish the levels of use young people make of these facilities. Forty-seven percent of young people reported that they had been to a government clinic in the past 12 months. Females were significantly more likely than males to report having been to a clinic (56% vs. 37% respectively, $p<.01$). Of the 47% of youth who reported having been to a clinic, 65% reported having been for minor ailments or for a medical check-up, 20% had been to get contraceptives, 12% had taken their baby or been for antenatal or postnatal check-ups, and 5% had been to get condoms.

One of the reported barriers to service utilization often mentioned by youth is the negative attitudes of health care staff [28, 29]. Nevertheless, among youth who had attended services, the majority felt they were treated well by clinic staff. When asked how they were treated the last time they were at the clinic, of the 47% of youth who had been to a clinic, 85% said they were treated well or very well.

Of youth who had been to a clinic in the past 12 months, 49% reported that they were informed about the risks of HIV/AIDS when they were at the clinic and 54% reported that they were counselled to use condoms.

Know Someone with HIV

With such a high prevalence of HIV infection in South Africa, many youth have been personally affected by AIDS. Knowing someone with HIV or AIDS can be an important first step in recognizing one's own vulnerability to the disease. Twenty-six percent of youth reported personally knowing someone with HIV/AIDS, and 45% of youth reported that they personally knew someone who had died of AIDS.

HIV Stigma

Reducing the stigma around HIV/AIDS so that more people will be comfortable learning their HIV status and so that people living with AIDS can live more fulfilling lives is important throughout South Africa. Youth were asked whether they would remain friends with a friend they discovered was HIV positive and 86% of youth said, yes, they would. An even higher percentage of youth (96%) reported being willing to care for their family members if they became sick with HIV/AIDS.

Funerals

Given the high prevalence of HIV infection in South Africa and the limited availability of antiretroviral therapy, there is increasing mortality from AIDS. Youth were asked to report how many funerals they had attended in the past 12 months; 67% of young people reported having been to at least one funeral in the past 12 months. When reporting how many funerals they had attended 33% had attended no funerals, 19% had attended one, 13% had attended two, 20% had attended three to five, 8% attended six to nine and 7% had attended ten or more funerals. Of those youth that attended funerals in the past 12 months, they were asked how many they thought were related to HIV/AIDS; 71% reported none, 10% reported that a quarter were, 13% reported that more than a quarter but less than a half, and 6% reported that more than half were related to HIV/AIDS.

V. Attitudes, Norms, Sense of Future and Self-Efficacy

Theory and research also suggest that attitudes and norms surrounding HIV/AIDS create the context in which youth operate and can lead to changes in behaviour. Without a sense of future, youth may have little motivation to protect themselves from becoming infected with HIV and without the belief that they can protect themselves (self-efficacy) they may not be persuaded to change their behaviour. Here we examine these attitudes in more depth.

Attitudes

An important precursor to behaviour change is a shift in youth attitudes and norms. The vast majority of youth (96%) agreed with the statement that safer sex is the shared responsibility of both partners, the majority (97%) disagreed that it is okay to have many sexual partners, 98% disagreed that it is okay to pressure someone into having sex and 95% disagreed that it was okay to have a sugar mommy, sugar daddy or someone you have sex with so that they will buy you things.

Females age 15-19 were significantly less likely than males the same age to agree that safer sex is the shared responsibility of both partners (94% vs. 97% respectively, p<.01). Females were significantly more likely than males to disagree that it is okay to have many sexual partners (99% vs. 94%, respectively p<.01). Females were more likely than males to disagree that it is okay to have a sugar mommy, sugar daddy or someone you have sex with so that they will buy you things (98% vs. 93% respectively, p<.01). There were significant differences by geotype for this question with 94% of youth living in rural formal areas, 97% of youth living in rural informal areas, 93% of youth living in urban formal areas and 97% of youth living in urban formal areas disagreeing that it is okay to have a sugar mommy or daddy (p<.01).

While 54% of youth agreed that it was against their values for them to have sex while they were a young person, 53% of youth agreed that it is okay for people their age to have sex. Within this question there were both gender and age differences, with 43% of males age 15-19 years agreeing it is okay for youth their age to have sex compared to 25% of females the same age (p<.01). For youth age 20-24 years 81% of males agreed that it was okay for youth their age to have sex while 69% of females the same age agreed (p<.01).

A concerning 31% of youth still believe that using condoms is a sign of not trusting your partner. There were no differences by gender or age. Youth living in rural areas were more likely to agree that using a condom is a sign of not trusting your partner than youth living in urban formal areas (p<.01); 43% of youth living in rural formal areas, 43% of youth living in rural informal areas, 19% of youth living in urban formal areas and 36% of youth living in urban informal areas agreed that using a condom was a sign of not trusting your partner. Among sexually experienced youth, those who agreed that using a condom was a sign of not trusting your partner were significantly less likely to report using a condom the last time they had sex compared to youth who disagreed with the statement (43% vs. 57% respectively, p<.01).

Among youth who reported ever having had sex, females were significantly more likely to agree with the statement "there are times when I do not want to have sex but I do because my partner insists on having sex" (29% vs. 16% respectively, p<.01). Nine percent of sexually experienced youth agreed with the statement that they sometimes have sex with their partner even though their partner does not want to; there were no age or gender differences for this question.

Table 28. Attitudes around Having Unwanted Sex by Gender and Age

			Gender		Age group		Gender by age group			
							Male Age group		Female Age group	
		Total	Male	Female	15-19	20-24	15-19	20-24	15-19	20-24
How much pressure do you get from your friends to have sexual intercourse, would you say...?.	No pressure at all	68%	61%	74%	64%	71%	57%	66%	72%	76%
	Not much pressure	11%	13%	10%	13%	10%	15%	11%	11%	9%
	Some pressure	11%	14%	8%	11%	10%	16%	12%	7%	9%
	A lot of pressure	10%	12%	8%	11%	9%	12%	12%	10%	6%
	Total	**11904**	**5687**	**6217**	**7238**	**4666**	**3556**	**2131**	**3682**	**2535**

Older partners have been hypothesized to increase the risk for HIV infection both by being more likely to be HIV infected and through gender power differences, which increase the chances of unwanted and unsafe sexual practices. Twenty percent of young people agreed that it was cool to have a sexual partner that was older; females were significantly more likely to agree with this statement compared to males (26% vs. 14% respectively, p<.01). Women age 20-24 years were more likely than women age 15-19 years to agree that it was 'cool' to have an older partner (35% vs. 18% respectively, p<.01). There were significant differences for this question by geotype with 13% of youth living in urban informal areas, 17% of youth living in rural informal areas, 23% of youth living in urban formal areas and 24% of youth living in rural formal areas agreeing that it is cool to have an older partner (p<.01).

When youth were asked whether it is more difficult to refuse sex with a partner who is older than you compared to a partner who is the same age as you, 42% of youth agreed with this statement; there were no significant differences by age or gender. There were, however, significant differences for this question by geography type where 37% of youth living in urban formal areas agreed with this statement compared to 47% of youth living in rural formal areas, 48% of youth living in rural informal areas and 48% of youth living in urban informal areas (p<.01).

Peer Pressure & Norms

Peer pressure has been identified as one of the major factors influencing youth to participate in high risk behaviours[30]. When youth were asked "How much pressure do you get from friends to have sexual intercourse?" 68% reported that they received no pressure at all while 10% reported that they get a lot of pressure from friends to have sex. Females were more likely than males to report not being pressured by friends to have sex (74% vs. 61% respectively, p<.01). Among those age 15-19, 72% of females reported that they have no pressure at all from friends to have sex compared to 57% of males. Among those age 20-24 years 76% of females report no pressure from friends compared to 66% of males.

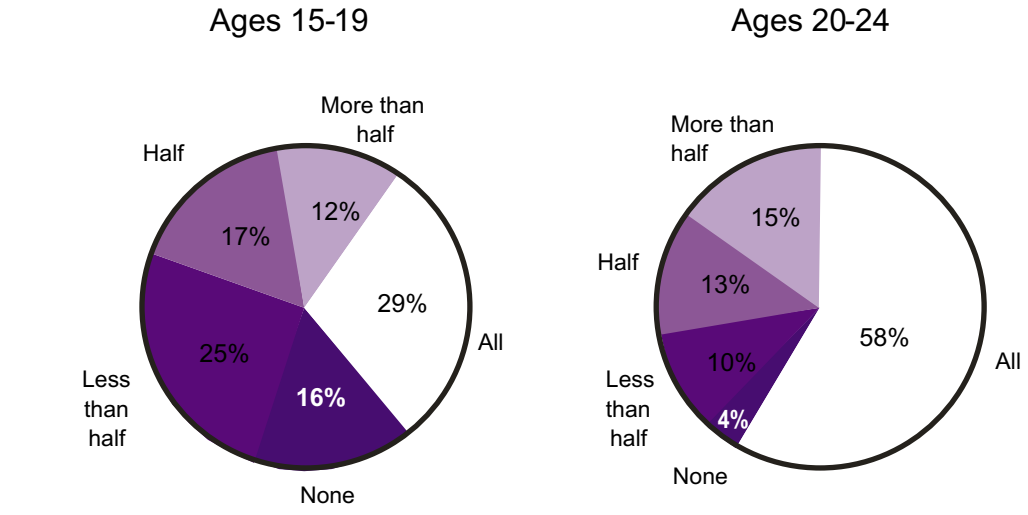
Table 29. Perceived Peer Pressure to have Sex by Gender and Age

			Gender		Age group		Gender by age group			
							Male Age group		Female Age group	
		Total	Male	Female	15-19	20-24	15-19	20-24	15-19	20-24
How much pressure do you get from your friends to have sexual intercourse, would you say...?.	No pressure at all	68%	61%	74%	64%	71%	57%	66%	72%	76%
	Not much pressure	11%	13%	10%	13%	10%	15%	11%	11%	9%
	Some pressure	11%	14%	8%	11%	10%	16%	12%	7%	9%
	A lot of pressure	10%	12%	8%	11%	9%	12%	12%	10%	6%
	Total	**11904**	**5687**	**6217**	**7238**	**4666**	**3556**	**2131**	**3682**	**2535**

Youth were also asked how many of their friends they think have had sexual intercourse. Twenty-nine percent of 15-19 year olds thought all of their friends had had sex compared to 58% of 20-24 year olds. Twenty-nine percent of 15-19 year olds reported that they thought half or more than half (but not all) of their friends were sexually experienced as did 28% of 20-24 year olds.

Figure 15

Sexually Active Friends by Age Group



Source: National HIV and Sexual Behaviour Survey of 15-24 year olds, 2003

In order to obtain some measure of social norms as created by a young person's peer group, youth were asked whether or not they thought their friends agreed or disagreed with a number of statements. Similar to their own opinions, 90% reported their friends would disagree that it is okay to have many sexual partners; 97% of youth did not think that their friends would think it is okay to pressure someone into having sex; 88% thought their friends would disagree that it is okay to have a sugar mommy or daddy, or a person with whom you have sex so that they will buy you things; and 85% of youth agreed that their friends think you should use a condom every time you have sex.

Outlook on Life

One theory as to why youth engage in high risk behaviours is that they do not have a sense of purpose in life and no future plans, and therefore, have nothing to lose in the future by engaging in high risk behaviour in the present [31, 32]. When asked how they feel about their future opportunities to be successful and prosper, 72% of youth reported that their opportunities were limitless or that they had many opportunities.

The majority of youth (69%) reported that they usually feel that they control what happens to them in life; males were slightly more likely to report perceived control than females (73% vs. 65%, $p<.01$).

A series of questions were asked about future goals and aspirations and the majority of youth were very optimistic about the future. Eighty-nine percent of youth agreed with the statement “I have many opportunities in life”. Similarly large majorities agreed that they have long range goals for themselves (92%), that they know what they want out of life (94%), and that they have a good idea of where they are headed in the future (82%). Furthermore, about two-thirds agree you should plan for the future. What is troubling, however, are the one third who agree “that it doesn't do any good to plan for the future because you don't have control over it”.

When youth were asked what they thought the most important issue or problem facing young South Africans was, the majority (55%) said HIV/AIDS followed by drug and alcohol abuse (12%), unwanted pregnancy (9%), and crime (7%). Youth were then asked what the most important issue or problem was for youth in their community, 23% reported HIV/AIDS, 21% reported drug and alcohol abuse, followed by crime (15%) and unwanted pregnancy (14%).

Self Efficacy

A number of psychological models of behaviour change have been consolidated into the AIDS risk reduction model [33], in which self efficacy plays an important role. Through the three stages of the model, once a young person has knowledge about a particular safer sex behaviour (for example using condoms), they then have to think the behaviour is socially acceptable (norms/attitudes) and to believe that they would be able to practise the behaviour (self-efficacy) before they actually engage in the behaviour.

Young people were asked to agree or disagree with various statements about their perceived self efficacy to control particular events around safe sexual practices. While young people were confident that they could talk with their partner about using condoms (90%), fewer youth were confident that they could use a condom after drinking or taking drugs (43%).

When asked if they could refuse sex anytime they did not want it, 85% of youth said yes; there were no significant differences by gender or age. It is interesting that women report such high perceived self efficacy in this regard given that 28% of sexually experienced women reported that their first sexual experience was unwanted and 29% of sexually experienced women reported that there are times when they have sex with their partner even when they do not want to.

Seventy percent of youth felt they could refuse sex with their partner if he/she refused to use a condom and 74% were confident that they could use a condom every time they have sex. Given these high percentages, young people apparently know that they should use condoms every time they have sex and feel confident that they can use condoms every time they have sex. Nevertheless, only 33% of sexually experienced youth who have had more than one lifetime partner and sex in the past 12 months reported always using condoms with their most recent sexual partner.

VI. Exposure to loveLife

Finally, we turn to young people's awareness of loveLife and their interaction with and participation in loveLife programmes. If changes in HIV prevalence are detected in young South Africans over time, it will likely be due to the combined effect of many prevention efforts. Nevertheless, one of the aims of this ongoing research project will be to examine the relationships among changes in HIV and predictors of infection, and exposure to the loveLife campaign.

Over the past decade, there have been a number of national campaigns and media programmes that have been designed to raise HIV awareness and promote prevention. Overall 62% of all youth age 15-24 reported knowing of any national HIV/AIDS programmes or campaigns. Males were significantly more likely to report knowing of any campaign compared to females (68% vs. 57%, respectively p<.01), but there was no significant difference in awareness by age group.

Table 30. Awareness of National HIV/AIDS Programmes/Campaigns by Gender and Age

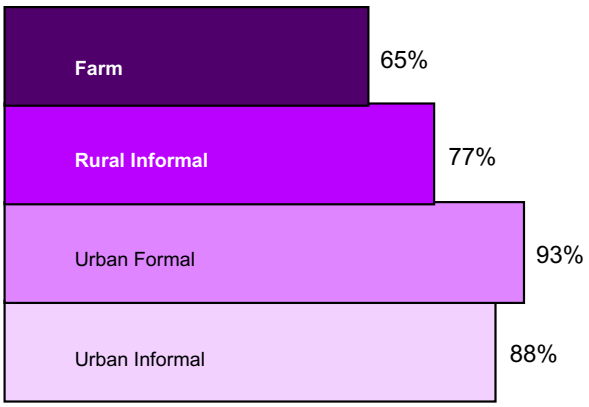
			Gender		Age group		Gender by age group			
							Male Age group		Female Age group	
		Total	Male	Female	15-19	20-24	15-19	20-24	15-19	20-24
Do you know of any National HIV/AIDS Programmes or Campaigns?	Yes	62%	68%	57%	63%	62%	66%	70%	59%	55%
	No	38%	32%	43%	37%	38%	34%	30%	41%	45%
	Total	**11904**	**5687**	**6217**	**7238**	**4666**	**3556**	**2131**	**3682**	**2535**

Although just under two-thirds of youth reported knowing of any national HIV programmes/campaigns, when they were specifically asked if they had heard or seen the loveLife youth prevention campaign and simultaneously shown the logo, 85% of youth reported having heard or seen loveLife. There were no significant differences in awareness of loveLife by age or gender.

loveLife has reported high levels of awareness across all geographic areas in South Africa. Seventy-seven percent of youth living in rural informal areas report being aware of loveLife and 93%, of youth living in urban formal areas report awareness of loveLife.

Figure 16

Awareness of loveLife by Geographic Area



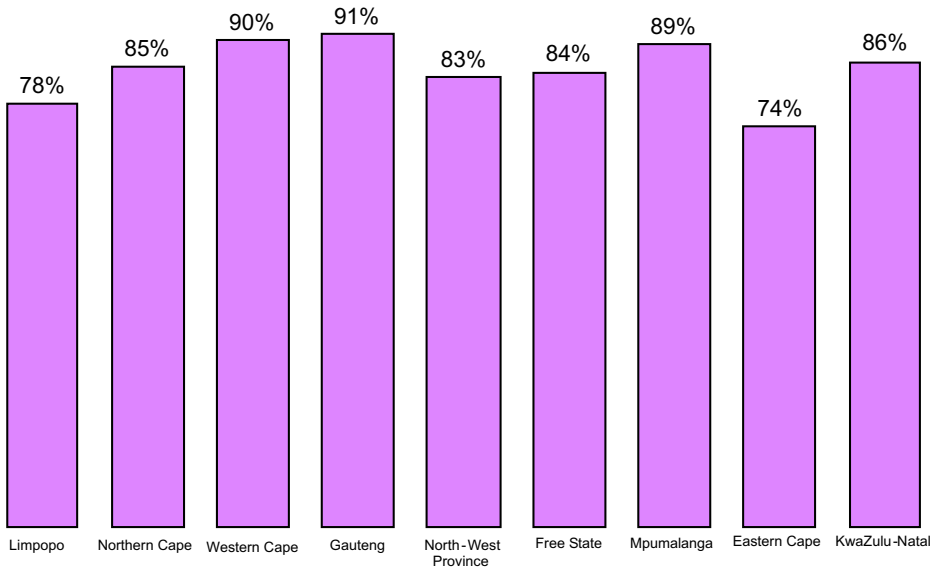
Source: National HIV and Sexual Behaviour Survey of 15-24 year olds, 2003

Indians reported having heard or seen loveLife (95%) more than any other race group; 84% of African youth, 89% of Coloured youth and 87% of White youth report awareness of loveLife.

More young people living in Gauteng reported awareness of loveLife (91%) while fewer, but still almost three-quarters, of youth living in the Eastern Cape reported awareness of loveLife (75%).

Figure 17

Awareness of loveLife by Province



Source: National HIV and Sexual Behaviour Survey of 15-24 year olds, 2003

Among all young people, when asked, unprompted, where they had heard or seen loveLife, almost half of youth overall reported having heard of loveLife from TV (48%). About two in ten (22%) named Billboards/Posters/Pamphlets/Watertanks, 17% the radio, 13% Newspapers or Magazines, 11% schools (classroom/teachers/classmates), 10% loveLife t-shirts or accessories, and 10% taxis.

For information describing these loveLife programmes please see Appendix 3.

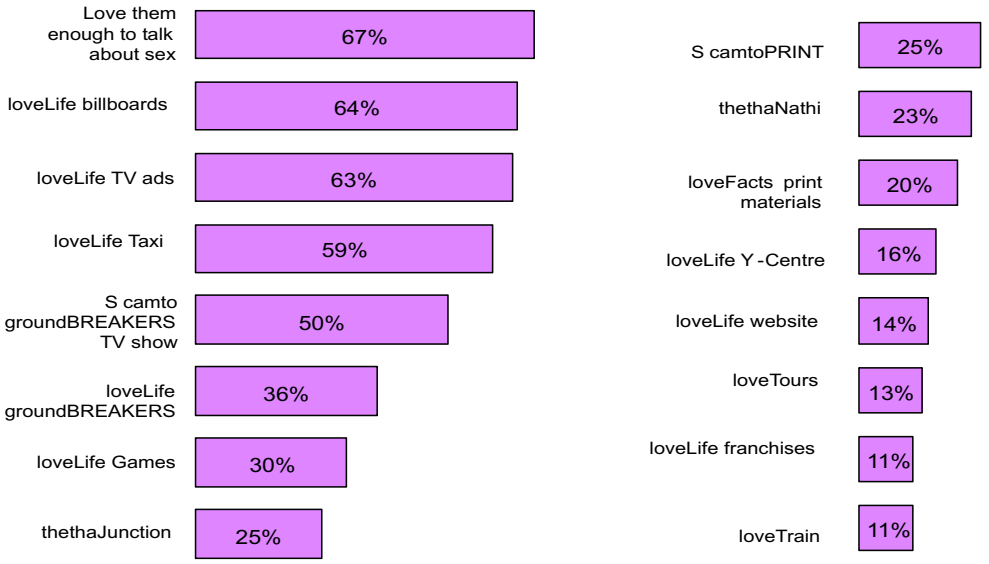
Table 31. Source of Awareness of loveLife by Gender and Age

			Gender by age group			
			Male Age group		Female Age group	
		Total	15-19	20-24	15-19	20-24
Where did you hear about or see loveLife? (unprompted)	Television	48%	45%	51%	46%	48%
	Outdoor media or pamphlets	22%	23%	25%	20%	19%
	Radio	17%	16%	19%	15%	17%
	School	11%	14%	6%	18%	5%
	Printed media	13%	12%	15%	13%	12%
	loveLife accessories	10%	10%	9%	11%	12%
	Taxis	10%	11%	13%	9%	6%
	groundBREAKERS/ Y-Centres	5%	4%	4%	8%	3%
	Health service	4%	3%	4%	3%	8%
	Community	4%	6%	4%	4%	3%
	loveLife Games/Sports	2%	4%	2%	1%	1%
	Friends	2%	1%	2%	3%	2%
	Other	1%	1%	2%	1%	2%
	Not seen or heard of loveLife	15%	18%	14%	13%	16%
	Total	**11904**	**3556**	**2131**	**3682**	**2535**

When asked if they knew of 16 specific loveLife programmes/products (see Figure 18 for each of these programmes/products), 67% of youth overall reported having seen or heard of the loveLife parent campaign, followed by 64% who reported having seen or heard of the loveLife billboards and 63% who reported having seen or heard of loveLife T.V. advertisements. On the other extreme, 11% reported having seen or heard of the loveLife Train and Franchises followed by 13% who reported having heard of or seen the loveTours. Among the majority of programmes there were no major differences reported by gender with the following exceptions: males were more likely than females to report having heard of or seen the loveLife Taxis (64% vs. 55%) and the loveLife Games (33% vs. 26%). By age the only programme with a notable difference was the loveLife Games where 33% of 15-19 year olds reported being aware of it compared to 26% of 20-24 year olds. As the Games operate primarily through the school system it is likely that older youth have had less exposure as they are no longer in school.

Figure 18

loveLife Programmes Youth Have Seen or Heard

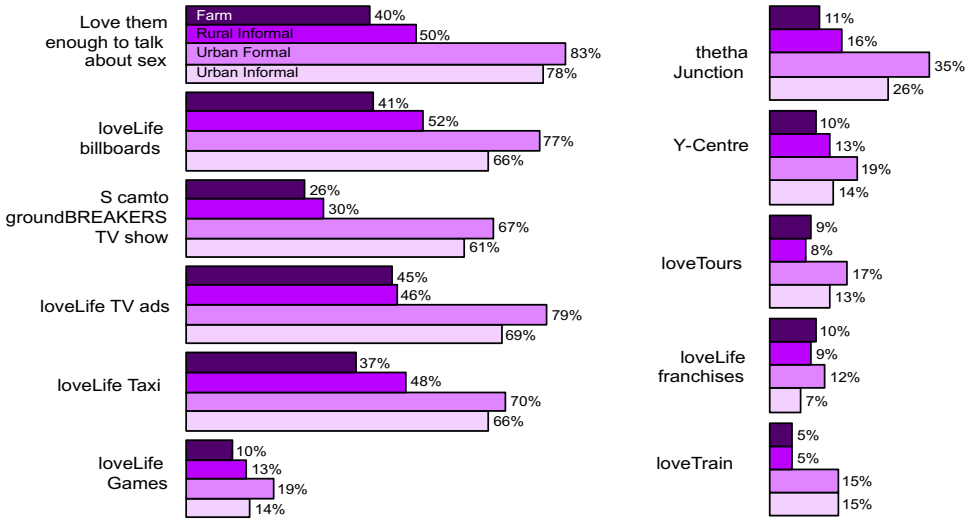


Source: National HIV and Sexual Behaviour Survey of 15-24 year olds, 2003

For the majority of the loveLife programmes, youth living in urban areas were more aware of loveLife compared to youth living in rural areas. However, youth living in urban areas were much more likely to report awareness of loveLife media programmes compared to outreach/service programmes.

Figure 19

Awareness of loveLife Programmes by Geographic Area



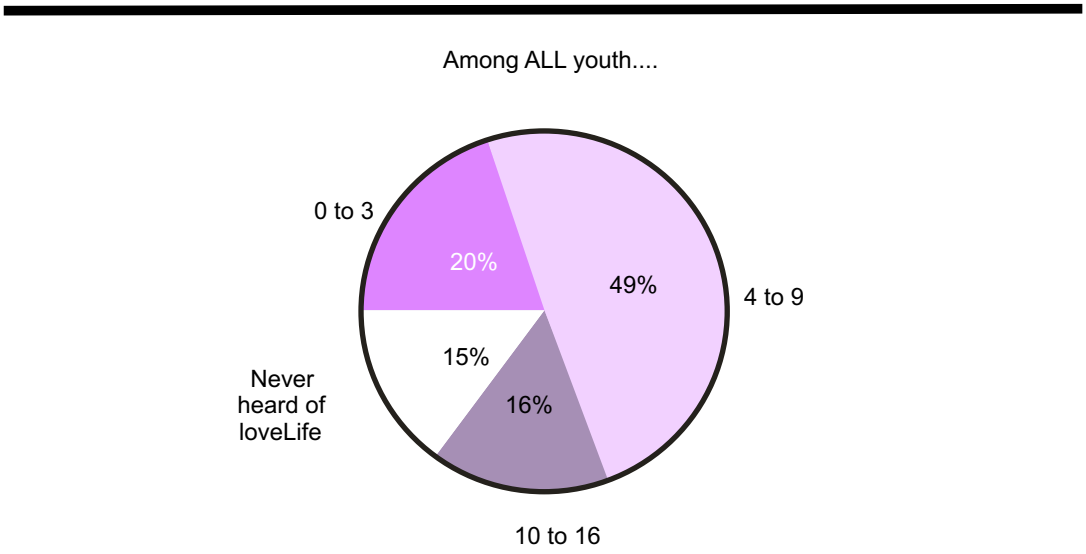
Source: National HIV and Sexual Behaviour Survey of 15-24 year olds, 2003

More youth living in Gauteng reported awareness of most loveLife programmes compared to youth living the Eastern Cape. For example, 76% of youth living in Gauteng reported having seen the loveLife billboards compared to 49% of youth in the Eastern Cape. Youth living in Gauteng reported more awareness of loveLife's help line, thethaJunction, (40%), and both of loveLife's youth magazines, S'camto PRINT and thethaNathi, (42% and 38%, respectively) compared to youth living in the Eastern Cape (18%, 15%, 14% respectively).

Nearly two-thirds of youth in South Africa reported being aware of multiple loveLife products/programmes. Among all youth, 15% reported that they have not heard of loveLife, 20% percent reported having heard or seen zero to three specific loveLife programmes, 49% reported having heard or seen four to nine products/programmes and 16% reported having heard or seen 10 or more products/programmes. There were no significant differences by age or gender.

Figure 20

Number of loveLife Programmes/ Products Youth Report They Have Seen or Heard

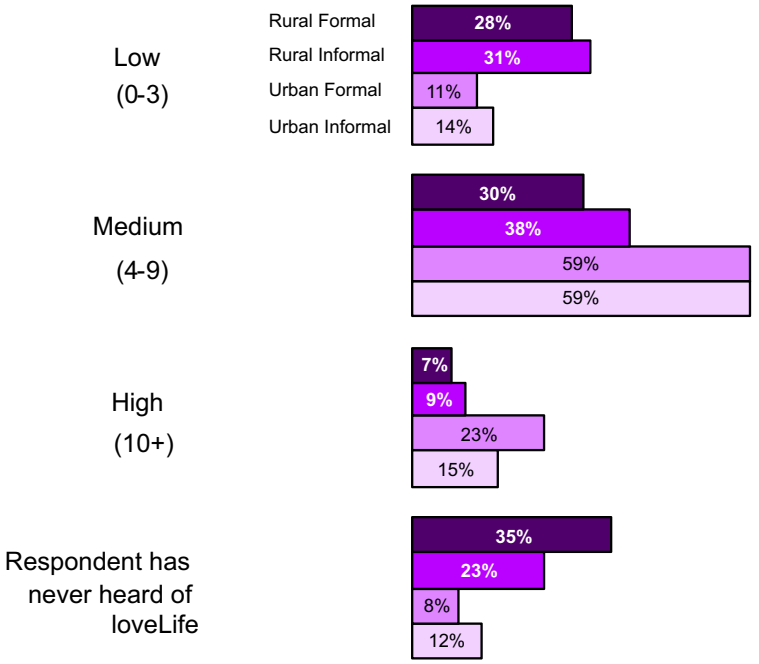


Source: National HIV and Sexual Behaviour Survey of 15-24 year olds, 2003

Fifty-nine percent of young people living in urban informal areas reported being aware of 4 to 9 loveLife programmes compared to 30% of young people living in farm areas. More youth living in urban formal areas fell into the highest awareness (10+ products) group (23%) than did youth living in farming and rural informal areas (7% and 9%, respectively).

Figure 21

Levels of Awareness of loveLife Programmes/Products by Geographic Area



Source: National HIV and Sexual Behaviour Survey of 15-24 year olds, 2003

By province, more youth living in Gauteng (27%) and Free State (21%) fell into the highest awareness category compared to youth living in the Eastern Cape (10%) and Limpopo (9%) provinces.

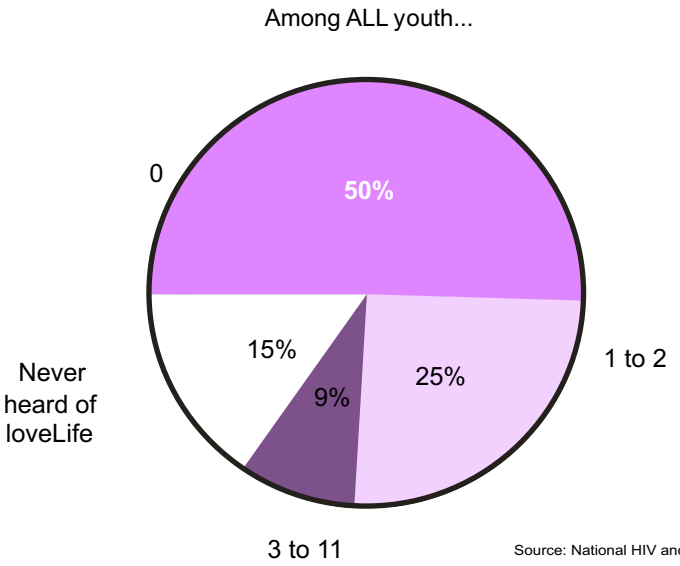
Table 32. Numbers of Different loveLife Programmes/Products Youth have Heard or Seen by Province

		Total	Province								
			KwaZulu Natal	Eastern Cape	Limpopo	Western Cape	Gauteng	Mpum-alanga	Northwest Province	Free State	Northern Cape
Number of loveLife programmes/ products youth reports having heard of or seen (prompted)	Not heard of loveLife	15%	13%	25%	22%	11%	9%	11%	18%	17%	17%
	Low (0-3 products)	20%	22%	35%	27%	18%	10%	12%	14%	17%	16%
	Medium (4-9 products)	49%	53%	30%	41%	58%	55%	59%	53%	45%	50%
	High (10+ products)	16%	12%	10%	9%	13%	27%	17%	16%	21%	17%
	Total	**11904**	**2070**	**1625**	**1612**	**1279**	**1273**	**1267**	**1185**	**1097**	**496**

While awareness of loveLife and its programmes/products is an important first step before youth can interact with loveLife, the ultimate aim is to get as many youth as possible to have a more substantive experience with loveLife by actually interacting and participating in its programmes. Among all youth, 25% reported ever having participated in or interacted with 1-2 loveLife programmes and 9% reported having participated in 3 to 11 programmes. Among all youth, 34% have used or participated in loveLife's service programmes or products.

Figure 22

Number of loveLife Programmes/Products Youth Report They Have Participated in



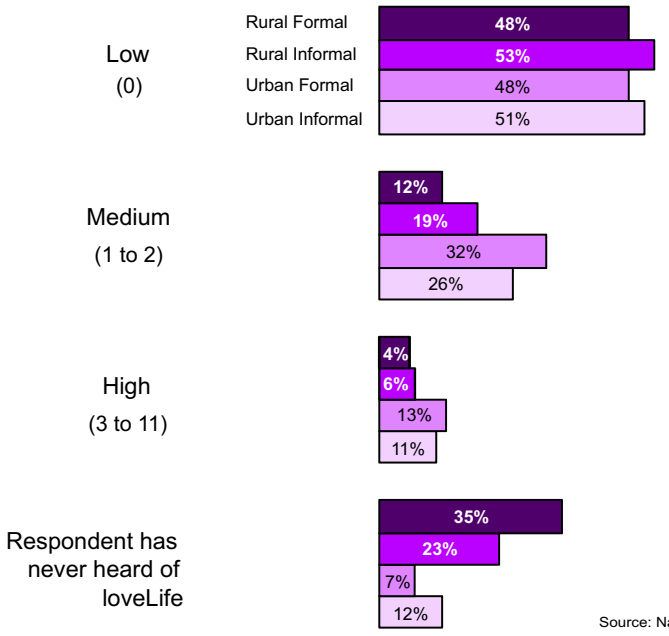
Source: National HIV and Sexual Behaviour Survey of 15-24 year olds, 2003

When looking at use or participation in loveLife's programmes by race, 47% of Indian youth report having participated in or used loveLife programmes or products, 35% of African youth, 26% of Coloured youth and 20% of White youth.

As with all other aspects of loveLife, youth living in urban areas were more likely to report participation in loveLife programmes/products than youth living in rural areas.

Figure 23

Levels of Participation In or Use Of loveLife Programmes/Products by Geographic Area

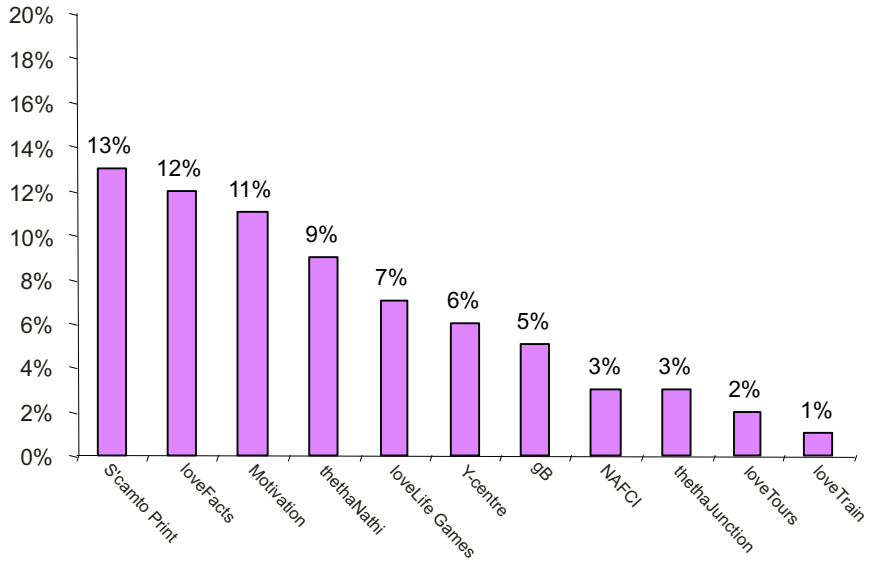


Source: National HIV and Sexual Behaviour Survey of 15-24 year olds, 2003

Youth were asked about their interaction with specific loveLife programmes/ products. Among all youth in South Africa, 13% reported having ever read S'camtoPRINT, followed by 12% who reported having read the loveFacts booklet. Eleven percent reported having participated in loveLife's school motivation programme, while 9% reported having read thethaNathi, and 7% reported having participated in the loveLife Games. Only 3% of youth reported having ever called thethaJunction, the free loveLife help line, while 2% reported having participated in the loveTour and 1% in the loveTrain.

Figure 24

loveLife Programmes Youth Have Participated In



Source: National HIV and Sexual Behaviour Survey of 15-24 year olds, 2003

Among all youth, when asked if they thought loveLife is a good or a bad thing for the youth of South Africa, 82% reported that they thought that loveLife was a good thing, 15% had not heard of loveLife and only 2% said they thought it was a bad thing. Among youth who have heard of loveLife, 97% say it is a good thing for young people in South Africa.

Table 33. Perception of loveLife's Value for South African Youth by Gender and Age

			Gender by age group			
			Male Age group		Female Age group	
		Total	15-19	20-24	15-19	20-24
Do you think loveLife is a good thing for the youth of South Africa, or do you think it is a bad thing for the youth of South Africa?	A good thing	82%	81%	84%	84%	80%
	A bad thing	2%	1%	2%	2%	2%
	Do not know	0%	0%	0%	0%	1%
	Not heard of loveLife	15%	18%	14%	13%	16%
	Missing/Refused	0%	0%	1%	0%	1%
	Total	**11904**	**3556**	**2131**	**3682**	**2535**

While being aware of loveLife and participating in its programmes is an essential element, it is hoped that through this interaction youth will change their behaviour or act in some positive way as a result. Among all youth, 24% reported that they had done something as a result of what they saw or heard about loveLife. Fifteen percent of all youth report having talked to someone about loveLife as a result of what they saw or heard. Fewer reported looking for more information on sex, sexuality and relationships (4%), looking for more information on loveLife (3%), or calling thethaJunction (1%). Sixty-one percent did nothing as a result, and 16% had not heard of loveLife.

When all youth were specifically asked whether they had communicated with others about loveLife, 33% reported having talked to someone about it. Of the 33% of youth who reported talking to someone about loveLife, the majority (74%) reported talking to friends. Fewer indicated they had talked to a teacher or classmate (11%), a partner (8%), a sibling (7%), or their parents (5%).

Table 34. Communication about loveLife by Gender and Age

			Gender by age group			
			Male Age group		Female Age group	
		Total	15-19	20-24	15-19	20-24
Have you talked to anyone about loveLife?	Yes	33%	31%	33%	40%	28%
	No	51%	51%	53%	47%	56%
	Not heard of loveLife	15%	18%	14%	13%	16%
	Total	**11904**	**3556**	**2131**	**3682**	**2535**

Summary of Findings

Young South Africans are at risk for HIV infection with one in ten 15 - 24 year olds currently infected with HIV

About ten percent (10.2%) of all young people age 15-24 years are infected with HIV in South Africa. By the age of sixteen, 2% of boys and 4% of girls are already infected with HIV, emphasizing the need to target youth before they become sexually active.

Among women, the percent that are sexually experienced does not seem to have changed much in the past 5 years; 47% of 15-19 year olds and 91% of 20-24 year olds reported ever having had sex in this survey, which is almost identical to the percentages reported by women in the 1998 Demographic and Health Survey.

While this study shows significant use of condoms amongst young people, the lack of consistency still exposes youth to risk of HIV infection. Although 33% of youth who had sex in the past 12 months reported always using a condom with their most recent partner, 67% of these youth are still not using condoms consistently. While young people report high self confidence that they could use a condom every time they have sex, it is concerning that 31% of sexually active youth said they never used a condom with their most recent sexual partner. Almost one-third of youth still hold the misconception that using a condom means that you do not trust your sexual partner. Access to condoms does not seem to be the barrier to inconsistent condom use as over 90% of youth reported that it is easy or very easy to get a condom if they needed or wanted one.

The majority of youth who have ever had sex reported that they were sexually active in the past year. Many youth HIV prevention programmes are eager to track measures of secondary abstinence as a measure of youth choosing to abstain from sex. While 8% of youth who had not had sex in the past 12 months reported they were doing so as a primary means of preventing HIV infection, the majority reported that it was because they did not have a partner or had not had the opportunity and not because they had chosen to abstain. Noting this, when evaluating HIV prevention efforts in the future, it will be important not just to measure whether or not youth are having sex, but also to ascertain their reasons for abstaining as a measure of whether prevention messages have been effective.

High risk young South Africans underestimate their possibility of contracting HIV

Although young people reported HIV/AIDS to be the biggest problem facing young people in South Africa and in their communities and although 45% of young people say they personally know someone who has died of AIDS, the vast majority of youth do not think they personally are at risk for contracting HIV. In fact, 61% of HIV positive and 73% of HIV negative youth reported that they thought they were at no risk at all or had a small chance of getting HIV. It is possible because youth do not think they are at risk for HIV infection, they do not feel the need to protect themselves. A perceived low risk of HIV infection is justified among young people not engaging in risky sexual behaviours, however, among those who are engaged in risk behaviours there is no increase in perceived vulnerability.

Young women are disproportionately affected by HIV

Women have roughly 3 times the prevalence of HIV compared to their male counterparts; nearly 1 in 4 women age 20-24 years in South Africa is infected with HIV compared to roughly 1 in 14 males of the same age.

Among the 10% of South African youth who are HIV positive, 77% are women.

In this study, there appears to be an increase in HIV levels amongst young women at around the age of 21 years. It is worth considering whether any significant lifestyle changes occur at this time. Two possible events that precede this age and may explain this increase include, firstly, the median age of first pregnancy which is 18 years and secondly, the age where the social situation of the woman changes including school leaving and leaving the home.

Young women are at risk for HIV infection

Sexually experienced young women were significantly less likely to report having used a condom at last sex and to report always using a condom compared to their male counterparts. In particular, sexually experienced women age 20-24 years were less likely to report using condoms at last sex compared to males the same age (44% vs. 57%, respectively $p<.01$), and 20-24 year old females who reported having had sex in the past 12 months were significantly less likely to report always using condoms with their most recent partner compared to males (24% vs. 35%, respectively $p<.01$).

Not only are sexually experienced young women less likely to use condoms when they have sex, but they report having more sex than their male counterparts, putting them at greater risk for exposure to HIV infection. Sexually experienced females are more likely to report having sex in the past 12 months compared to males, especially among those age 15-19 years where 73% of sexually experienced males vs. 90% of sexually experienced females reported having had sex in the past 12 months.

Gender power imbalances exist in sexual relationships

Noting the higher rates of HIV amongst young women than men, it is important to try to ascertain whether coercion plays any role in their sexual decision-making. Women's sexual partners were on average 5 years older, increasing gender power differentials, which make it more difficult for women to refuse unwanted sex or negotiate condom use. Forty-three percent of all women agreed that is harder to refuse sex with a sexual partner who is older compared to someone the same age. Further, twenty-nine percent of sexually experienced women reported that there were times when they had sex with their partner even though they did not want to because he insisted. Sexually experienced males and females also characterize their first sexual experiences very differently with close to 30% of females reporting that they did not want to have sex their first time compared to only 1% of males.

While the question of transactional sex has been documented in a number of other quantitative and qualitative studies in South Africa, only a small number of respondents in this study reported that they had sex in exchange for money, luxuries or necessities (3%). The low prevalence of reported transactional sex in this survey is likely due to under-reporting in population based, quantitative surveys such as this.

Pregnancy is common and contraceptive use is inconsistent among young women

Pregnancy is not uncommon among sexually experienced young women with 33% of 15-19 year old and 59% of 20-24 year old sexually experienced women reporting ever having been pregnant. Of these women reporting a pregnancy, sixty-six percent said that they did not want the pregnancy. Therefore, while more than half of women who reported having had sex in the past year reported currently using contraceptives, the other 44% of sexually experienced women are not protected from pregnancy and therefore most likely not from HIV or STIs either.

Given the high prevalence of HIV among women age 20-24 years and the fact that close to six in ten sexually experienced women in this age group have ever been pregnant, the importance of promoting contraception among this age group to prevent unwanted pregnancy and mother to child transmission of HIV is significant.

Further, women must be able to access pregnancy counseling services to make informed decisions about continuation of the pregnancy. In addition, with such high rates of HIV and pregnancy among young women, access to antiretroviral medication for prevention of mother to child transmission and for treatment becomes essential.

Young men are at risk for HIV infection

Although among this age group young men had about one-third the HIV infection prevalence of their female counterparts, epidemiological evidence from South Africa and other sub-Saharan African countries shows that HIV prevalence in males starts to approach that of females as men and women get older and by the age of 30-35 years men generally have the same HIV prevalence as females. Young men report starting sex at an earlier age than females and international research demonstrates that the earlier the age at first sex the more likely it is that sex is unprotected. Further, young men were more likely to report feeling peer pressure to have sex than young women, which may influence early age at first sex.

Sexually experienced young men also consistently report having more lifetime sexual partners and more partners in the past 12 months than females. As the mean age of men's most recent sex partners was 1.5 years younger, the partners of these men are for the most part the women in the age group interviewed in this survey. The discrepancy in number of partners between men and women is a common, though somewhat puzzling, finding. One explanation for the difference could be that men tend to over report the number of sexual partners while women tend to underreport. Another answer could lie in sexual network patterns; for example it could be that there is a small pool of women who have multiple partners and with whom all of these men have sexual intercourse from time-to-time.

Young men are also at risk for HIV infection as 20% of all males reported ever having had sex under the influence of alcohol, which reduces the chances that they will use condoms or use good judgment when deciding whether or not to have sex.

Young African youth are disproportionately affected by HIV

African youth have the highest HIV prevalence of all races. Ninety-five percent of all young people affected by HIV are of African race. African youth were more likely to report ever having sex than the other race groups and are more likely to report having sex at age 14 or younger than other races, but they were as likely to report using condoms at last sex as other races and did not report having more sexual partners than other race groups. Although HIV among other race groups was significantly lower than among African youth, the poor response rate among White and Indian youth raises the question of whether youth who refused to participate in the survey were at higher or lower risk for HIV infection.

Youth living in urban informal and rural formal (farm) areas are at most risk for HIV

While the HIV prevalence among youth is high in all types of areas in South Africa, youth living in urban informal and rural formal areas are particularly at risk. Although youth in these areas only make up about 14% of the population, they are still at higher risk than youth living in other parts of South Africa. Not only do youth living in urban informal and rural formal areas have the first and second highest HIV infection prevalence (17.4% and 13.5% respectively), a greater percentage of youth in these areas report having had sex than youth in urban formal and rural informal areas. Further, sexually experienced youth living in rural formal areas reported the lowest condom usage of all four geographic types, 36% reported using a condom at last sex and among those who had sex in the past year only 15% among reported using condoms consistently. Contributing to the HIV risk of youth living in these areas is the fact that they also report the lowest awareness of and exposure to HIV prevention campaigns.

Alcohol and drug use is a problem among young people

When young people were asked what the biggest problems facing youth were, alcohol and drug abuse was the second largest concern after HIV/AIDS. Given that alcohol and drug use impair good judgment and increase risk behaviour, the use of substances before or during sex is not a good combination. Among youth who had tried alcohol, 24% reported that they had had sex under the influence. Further, and of great concern in terms of the spread of HIV, of the 11% of youth who reported ever having used drugs, 4% reported that they had ever injected drugs (5% males vs. 1% females). Many youth were not very confident that they would be able to use a condom if they had been drinking or taking drugs.

Awareness of condoms among sexually active young people is high

Young people in South Africa report high levels of awareness about using condoms to protect themselves from HIV. Not only are they aware that they should use condoms all of the time, but they are also very confident that they can use condoms all the time even if their behaviour does not always reflect this. When youth who had heard of HIV/AIDS were asked if there was anything that could be done to prevent HIV infection, 94% of youth said yes but when asked what can be done, the vast majority only identified using condoms when having sex.

Far fewer young people reported being faithful to one partner or having fewer partners. Likewise, of the 63% of youth who reported that they have changed their behaviour because of HIV/AIDS, close to one third reported that they used condoms and fewer reported that they reduced partner numbers.

Youth are learning about HIV/AIDS at school

When young people were asked where they felt they had learned the most about HIV/AIDS, more named school, including teachers, classmates and in the classroom, (32%) than other sources.

Young people are talking about HIV/AIDS

Forty-four percent of youth reported having talked to their parents about HIV/AIDS and of those youth that had spoken to their parents, the vast majority reported that they found the conversation helpful. Even more youth, 80%, say they have spoken to someone other than their parents about HIV/AIDS. While youth are talking, most youth are talking to their friends about HIV/AIDS and far fewer report talking to their sexual partners, the group of people with whom it is perhaps most important that they do discuss HIV/AIDS.

When youth were asked, unprompted, where they had learned the most about various HIV and reproductive health issues, more youth report learning about pregnancy prevention from parents (15%) than HIV/AIDS (4%) or pressures to have sex (7%). Given that many youth who reported having talked to their parents about HIV/AIDS reported finding the conversation very helpful, prevention programmes may need to be more direct about providing accurate information on HIV/AIDS to parents so that youth feel that their parents are a reliable source of HIV/AIDS information.

Of youth who had been to a clinic in the past 12 months, 49% reported that they were informed about the risks of HIV/AIDS when they were at the clinic and 54% reported that they were counselled to use condoms. This represents a missed opportunity for information dissemination from clinic staff.

Young South Africans continue to be very optimistic about their futures

Despite the high prevalence of HIV infection, unemployment and crime in the country, South African youth are very optimistic about their futures. The majority of youth (69%) report feeling in control of their lives and 94% say they know what they want out of life. Youth report having goals for the future (92%) and knowing where they are headed in the future (82%). Youth also believe it is worth planning for the future and feel they have many opportunities.

Over eight in ten South African youth are aware of loveLife

Eighty-five percent of young people reported ever having heard or seen loveLife. Although this high awareness is encouraging, differences in awareness by where young people live and by race exist. While 88% of youth living in urban formal areas reported being aware of loveLife, about two-thirds (65%) of youth living in rural formal areas reported the same. This discrepancy corresponds with reported awareness by province where more youth living in Gauteng, one of the most urban provinces, were aware of loveLife than youth living in the Eastern Cape, one of the most rural. By race, 84% of African youth reported being aware of loveLife compared to 95% of Indian youth.

The majority of South African youth are aware of multiple loveLife programmes and over one third have participated in or interacted with loveLife's programmes

Awareness of multiple loveLife products is high with 65% of all South African youth reporting awareness of more than 4 programmes/products; 49% reporting awareness of 4-9 programmes/products and 16% reporting awareness of 10-16 programmes/products African youth report higher awareness of outreach programmes than youth of other races which is encouraging since these programmes target previously disadvantaged areas.

Over one-third of all youth in South Africa have participated in or interacted with one of loveLife's programmes, 25% with 1-2 and 9% with 3-11 programmes. If loveLife is to achieve its goals, greater numbers of young people need to be facilitated the opportunity for substantive engagement with loveLife products and programmes.

National HIV prevalence surveys establish a solid baseline from which to assess future trends

The findings from this current study are similar to those found in the 2002 Nelson Mandela/HSRC survey, despite the prevalence in men being slightly lower and in women being a bit higher, the 95% confidence intervals from both surveys overlap.

Among women age 15-19 years the prevalence in this survey was 6.9%, half that found in the 2002 ANC survey while the prevalence among women 20-24 years it this survey was 24.1%, fairly close to the ANC estimate. Discrepancies between the HIV prevalence among women in this survey and the ANC survey are most likely due to differences in populations as this survey included young women of all races in the age group 15-24 years, including those not sexually active; the ANC survey is only among pregnant women who are sexually active and who attend public sector clinics and are thus primarily African women.

Given the paucity of comparative data, it is not possible to gauge definitive trends from these findings. Nevertheless, the similarity of these survey findings establishes a solid baseline for future assessment of trends in HIV infection.

Appendix 1

Sampling

Provinces were used as explicit stratification variables with the following allocation of EA's to the 9 provinces (in total 714 EA's):

Western Cape	75
Eastern Cape	98
Northern Cape	35
Free State	63
KwaZulu-Natal	115
North West	72
Gauteng	101
Mpumalanga	66
Limpopo	89

This allocation was obtained by using the square root allocation rule based on the estimated number of youth (age 15-24) per province as measure of its size (MOS). This rule allocates proportionally more EAs to the provinces with a smaller MOS and proportionally less to the provinces with a larger MOS. This deviation of proportional allocation was done to enable reporting of the results by province.

The sampling within each province used implicit stratification to get a representative spread of EAs over the province. The EAs were ordered in a serpentine way prior to their drawing using, in order of importance, the following variables: geography type (i.e. urban formal, urban informal, rural informal and rural formal including farms), region code, EA-type and EA-number. Then the required number of EAs (see above) was drawn per province using systematic sampling with probability proportional to its Measure of Size (MOS), i.e. the square root of the estimated number of youth (age 15-24) per province. Large EAs were first split into approximately equal segments whereupon one of these segments was selected at random for the purpose of drawing the youth. Finally, in each selected EA 15 youth were randomly selected, one per household using the Kish grid method [26]. It was estimated that 54 households would need to be visited to realize 15 interviews per EA (this was based on an estimated refusal rate of 30% and 40% of households containing one eligible young person).

For weighting of the final sample, the first step was to compare the list of the realized set EA-numbers with the list of original drawn set of EA-numbers per province. If EAs were substituted (which was limited to an absolute minimum and based on specific criteria defined a priori), the next step was to recalculate the sampling weights of the realized EAs assuming that they were originally drawn. This implies that the sampling weights of those EAs, which were originally drawn and not substituted remained the same apart from the fact that only 708 instead of 714 EAs were realized. This necessitated an adjustment of the sampling weights of the realized EAs in the affected areas.

In cases where an EA was split into segments, the EA sampling weight was multiplied by the number of segments.

The sampling weight of a selected youth was calculated as follows:
record weight = (adjusted EA sampling weight) (number segments) (number eligible DUs or HHs) (number eligible youths in HH or DU)/(number interviews completed)

Note that the record weight was proportionally adjusted for invalid dwelling units (DUs) found within the selected segments of realized EAs.

Finally, the record weights of the youths interviewed were marginally benchmarked or calibrated using as benchmark variables province, gender, age group, race and geography type with marginal population (youth) figures as obtained from the released 2001 population census results. Two age groups were considered: 15 to 19 and the 20 to 24 years. The marginal frequencies of the other variables were the population counts specifically for the age group 15 to 24.

In theory, substitution of a “non-responding” EA (or dwelling unit/youth) due to non-response destroys the probabilistic nature of a probability sample and should be avoided in any scientific study as far as possible. However, in the South African situation today it is impossible to avoid totally “non-responding” EAs. For this reason a small number of EAs were drawn as possible substitutes. The possible substitutes for a drawn EA were always of the same geography type, in the same region (village, suburb or community) and of the same EA type (i.e. small holding or hostel, etc.).

Appendix 2

Table 35. Coefficients of Variation and Design Effects for HIV Prevalence by Key Demographic Variables

Characteristic	C.V. (%)	Deff
Total	5.11	3.54
PROVINCE		
EC	9.26	2.17
FS	13.36	1.44
GT	14.83	5.04
KZN	13.58	7.87
LP	13.60	1.43
MP	12.69	1.75
NW	12.54	1.64
NC	26.17	0.93
WC	15.31	1.81
GEOTYPE		
Farm	15.94	2.82
Rural Informal	9.31	3.83
Urban Formal	7.16	3.11
Urban Informal	15.10	4.71
GENDER		
Male	10.75	3.44
Female	6.33	4.42
AGEGROUP		
15-19 years	11.07	3.99
20-24 years	7.51	6.13
RACE		
African	5.16	3.50
Coloured	18.31	1.30
White	39.09	2.60
Indian	68.78	1.24

Appendix 3

Table 36. Brief Description of loveLife Programmes

The table of programmes does not represent the full range of loveLife programmes but only those depicted in Figure 18.

loveLife product	Scope
Love them enough to talk about sex	National media campaign to encourage parents to talk more openly with their children about sex, sexuality, gender and HIV/AIDS
Billboards	An element of loveLife's sustained national media HIV awareness and education campaign
TV advertisements	An element of loveLife's sustained national media HIV awareness and education campaign
Taxi advertisements	An element of loveLife's sustained national media HIV awareness and education campaign
S'camto groundBREAKERS TV show	Reality genre 13 part annual television series broadcast on SABC 1 dealing with issues of healthy living and responsible sexuality
loveLife groundBREAKERS	18-25 year old volunteers contracted to work for loveLife for one year to implement loveLife programmes
loveLife Games	Annual, year-long regional, provincial and national school sporting events promoting healthy lifestyle
thethaJunction	National toll-free sexual health counseling and help line
S'camtoPRINT	Free youth supplement in national newspapers; distributed once a month
thethaNathi	Free youth supplement in national newspapers; distributed twice a month
loveFacts print material	Education pamphlets distributed by loveLife
loveLife Y-Centre	16 youth centres in all provinces of South Africa where youth can engage with loveLife programmes and access clinical services in a non-clinical setting
NAFCI clinic	National Adolescent Friendly Clinic Initiative to improve quality and accessibility of comprehensive reproductive health and HIV/AIDS services in government clinics
loveLife website	Website with access to sexual health and HIV/AIDS information, as well as information on loveLife programmes and products
loveTours	Mobile loveLife outreach and support programmes to access regions where there are not permanent loveLife programmes
loveLife franchises	National network of 110 community-based youth-serving NGOs and CBOs affiliated to loveLife for the promotion of healthy lifestyles
loveTrain	Mobile loveLife out reach and support programme to access regions where there are not permanent loveLife programmes

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