Chapter 5: Behavioural Indicators

Overview

Individual forms of behaviour, both directly and indirectly, affect the spread of HIV infection. Sexual behaviour is “directly” causal in contributing to HIV infection; other important forms of behaviour affect sexual behaviour, and therefore indirectly affect biological outcomes. Worldwide, most HIV infections are acquired through sexual transmission. Another common mode of HIV transmission, primarily in Southeast Asia and Eastern Europe, is through sharing needles. The majority of HIV prevention programmes, therefore, aim to reduce the occurrence of unsafe sexual behaviours or unsafe drug injections that can transmit HIV infection in a given population.

The main determinants of the spread of HIV in any population are probably a complex product of the degree and extent of sexual networking. Special high-risk sexual behaviours to consider are sexual partnerships with sex workers, and for young men having anal sex with multiple partners. This chapter presents eight indicators of sexual behaviours.

In addition, some of the main determinants increasing the risk situation take place among young people who may be under the influence of alcohol or drugs. An overlap of risky situations may exist, for example IDUs who have sex with sex workers. Three indicators related to these situations are included in this chapter.

Finally, HIV testing behaviour among young people is an essential behavioural protective factor, which is measured by one indicator.

The success of prevention programmes will increasingly be judged on their success in persuading young people to delay first sex, to restrict the number of partners they choose, and to use condoms when they do have sex. The extent to which these objectives can be achieved will depend on reducing the occurrence of forced sex, so that all young people can choose when they have sex, with whom they have sex, and use condoms and contraception as appropriate. The environment in which risky situations occur (sex work, injecting drug use) needs to be better understood and acted upon as well. Finally, young people have the right to be tested for HIV, and know their results, so that they can be given the opportunity to take the necessary steps to protect themselves and others.

There is considerable experience in the field of public health with collecting behavioural indicators: efforts such as the Demographic and Health Surveys and the Behavioural Surveillance Surveys have been implemented in a number of countries, sometimes more than once. This guide builds on lessons learned, and also goes beyond the standard behavioural measures by introducing a composite indicator which provides a more comprehensive picture of risk behaviour among young people (see indicator 3).

The composite indicator creates a comprehensive picture of the various characteristics of young people’s sexual risk behaviours which were previously analysed independently. This composite indicator is most easily represented in stacked bar charts, which place every survey respondent into one of six categories based on key criteria of HIV risk. Because the indicator combines multiple pieces of data, it illustrates two key points which are not always clear from looking at the separate components. First, the change in the size of one risk category relative to another is apparent. Second, it shows the size of each category relative to the total population. This is crucial in interpretation of data: large changes in behaviour within one part of the population
may be unimportant if that group represents only a tiny fraction of the total population. Conversely, small changes in risk behaviour within a large group could have a large impact on the potential for HIV infection to spread. Although complex, this indicator provides a greater insight into the behavioural trends which drive the HIV epidemic, and which are crucial to a clearer understanding both for better planning of our interventions, and for the evaluation of their effect.

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Most of the indicators are for the age group 15-24. However in many instances a clearer picture of trends will be possible if the indicators are looked at for 15-19 and 20-24 separately. This can only been done when sample sizes are large enough to permit an accurate measurement among that age group.

In order to put the proposed indicators in perspective, it is important to know the proportion of youth involved in high-risk activities. For example it is useful to know the proportion of young men having sex with other men, the proportion of young people engaged in commercial sex work, the proportion of youth that have multiple partners, or the percent of young people using injectable drugs. These background indicators allow programme managers to appropriately prioritize the importance of changes in the indicators described in this chapter.
1. Sex before the age of 15

Priority: Core

Definition
Percentage of young people who have had sex before the age of 15

Target Population
15-24 year olds

Numerator
Number of respondents who report their age at first sex as under 15 years

Denominator
Respondents aged 15-24 years

Measurement tools
Nationally representative general population survey

What it measures
This indicator provides information on the prevalence of early sexual debut among young people.

Sex at young ages is thought to be more risky than sex later in life. The female genital tract is more susceptible to infection with HIV before it has fully matured. Typically, young people have partnerships that are more often short-term and perhaps less formal than those of older people. They are certainly less likely to live with their sexual partners. This makes their sexual partners more of a risk to them, on average, than the cohabiting (including marital) partners. People who begin having sex at young ages may spend a longer time having these less stable sexual relationships than those who delay their first sexual intercourse. They may be more likely than older people to be bullied or exploited in sexual relationships.

How to measure it
This indicator is derived from responses to a question about the age of the respondents when they first had penetrative sex (either vaginal or anal). It typically follows a question on whether the respondent has ever had sex.

It should be presented as a percentage separately for men and women disaggregated by age in the following groups: 15–19, 20–24. It will be difficult to monitor change in this indicator over a short period of time since only individuals entering the group (i.e, those less than age 15 at the beginning of the period for which the trends will be assessed) have the possibility of influencing the numerator. If the indicator is assessed every 2-3 years, it may be better to focus on changes
in the levels for the 15-17 age group. If it is assessed every five years, then it will be possible to look at the 15-19 age group.

**Strengths and limitations**

The advantage of using reported age at first sex is that it makes the most use of data that are already collected. Previously, sexual debut has been measured by calculating the median age at first sex. Three different methods of calculating median age at first sex were proposed; each method had unique limitations and each produced different results. The above calculation is simple and is easily compared across time.

The denominator is easily defined because all members of the survey sample contribute to this measure. For most people, first sex is a significant event, which they probably remember with little difficulty. People may, however, be unsure of their exact age.

Young people of both sexes may alter their responses as a result of their society’s views on young people’s sexuality. Analysis of the reporting of age at first sex, however, has shown that the occurrence, extent and direction of reporting or recall bias are not predictable.
2. Condom use among young people who had higher risk sex in the past year

**Priority:** Core

**Definition**
Percentage of young people who had higher risk sex in the last year who used a condom at last higher risk sex

**Target Population**
15-24 year olds

**Numerator**
The number of respondents aged 15-24 years who had sex with a non-cohabiting partner in the last 12 months and used a condom the last time they had sex with such a partner

**Denominator**
Respondents aged 15-24 years who had sex with a non-cohabiting partner in the last 12 months

**Measurement tools**
Nationally representative general population survey

**What it measures**
This indicator is an UNGASS HIV/AIDS indicator, as well as a Millennium Development Goal indicator. It shows the extent to which condoms are used by young people who engage in non-regular sexual relationships.

When interpreting trends in this indicator, it should be noted that changes might reflect variations in the numbers of persons having high-risk sex and not necessarily variation in condom use during high risk sex. Thus, this indicator should be analysed carefully considering the changes in proportion of young people having high risk sex (sex with a non-cohabiting partner) to understand the programmatic implications.

**How to measure it**
Respondents are first asked if they have ever had sex. Among those who have, questions are asked about his/her last three partners. Information on the type of partner (such as spouse, live in partner, boyfriend/girlfriend, acquaintance, commercial sex worker) and whether a condom was used at last sex is asked for each of the last three partners in the last 12 months.

This indicator should be presented as a percentage, separately for males and females, in three age groups: 15–19, 20–24 and 15–24. For reporting progress towards UNGASS goals, the results for the 15–24 age-group should be reported separately for urban and rural residents.
Strengths and Limitations

This indicator is measured among those who have had sex in the past 12 months with a partner with whom they do not live. This group is the most relevant denominator for this indicator because it is in this group that condom use is of paramount importance.

In the population as a whole, there are measures that reduce the risk of HIV infection in uninfected people. If people can delay first sex, abstain from sex, and reduce the number of partners they have, the spread of HIV infection can be reduced. However, among this group already identified as having higher-risk sex, condom use is the most pertinent prevention measure. This indicator simply describes what proportion of those engaging in higher-risk sex over the last year used a condom the last time, and so gives an idea as to how effectively this message has reached this group.

One limitation is the way in which condom use is measured. Use at last sex is a good measure because last sex is a definite occasion and the most recent sex should be recalled most accurately. Thus the data should be subject to less reporting and recall bias than other types of data on condom use. The limitation is that condom use at last sex provides no measure of the consistency of condom use. To some extent, more consistent condom use in the population as a whole will be reflected by an increase in use at last sex. This, however, can be affected by the type of partner and the rate at which new partners are acquired, especially if condoms are used more often with new partners than within more established relationships. If new partners are acquired at a high rate, and condoms are used on the first, but not subsequent, occasions with each new partner, the cross-sectional prevalence of reported condom use at last sex could rise while the consistency of use remained the same. Increases in the prevalence of condom use at last sex, therefore, while a positive sign, do not mean that the people reporting condom use have not placed themselves at risk of acquiring HIV infection at any time in the last 12 months.
**Composite Indicator: An explanatory note**

The following indicator is a composite. It represents a departure from the usual focus on discrete behaviours. Sexual behaviours are inter-dependent and so it is difficult to interpret any single aspect in isolation. The advantages of this new approach are that:

- Instead of focusing on one specific aspect it summarises a range of interrelated behaviours.
- Information presented in this way reveals the fractions of the total population that are in the different categories of risk.

### 3. Abstinence, Being faithful and using Condoms (ABC) among young people

**Priority:** Core

**Definition**  
Composite of safe sexual behaviour among young people

**Target Population**  
15-24 year olds

**Numerator and Denominator**

<table>
<thead>
<tr>
<th>Denominator:</th>
<th>Numerator:</th>
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<tbody>
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<td>Part 1</td>
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<td></td>
<td>Number of respondents who have never had sex</td>
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<td>Part 2</td>
<td>Number of respondents aged 15-24</td>
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<td></td>
<td>Number of respondents who have had sex but not in the last 12 months</td>
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<td>Part 3</td>
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<td>Number of respondents who had sex with only one partner in the last 12 months and who used a condom the last time</td>
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<td></td>
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<td>Number of respondents who had sex with more than one partner in the last 12 months and who used a condom the last time</td>
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<td>Number of respondents aged 15-24</td>
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<tr>
<td></td>
<td>Number of respondents who had sex with more than one partner in the last 12 months and who did not use a condom the last time</td>
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**Measurement tools**  
Nationally representative general-population survey

**What it measures**

This indicator describes the proportions of people having no partner, one partner and multiple partners over 12 months, and the prevalence of condom use at the last sex, among those who have had only one partner and those who have had more than one.
This indicator provides information on four important aspects of sexual behaviour: the prevalence of virginity among young people, the prevalence of abstinence from sex (over the last 12 months) among those who have begun sexual activity, the prevalence of sex with only one partner and with multiple partners, and the frequency with which these last two groups used condoms at last sex.

These aspects of behaviour are considered together here because each component affects the other and each component is of progressively riskier behaviour. Programme managers are thus encouraged to consider all aspects of sexual behaviour to understand what portion of the population is vulnerable to HIV. In addition changes in this composite over time will be much more informative than a single indicator.

In the example below there are changes over time that result in a smaller fraction of the population being in the highest category of risk. There is an initial increase in sex with only one partner between 1996 and 2000. This is followed by an increase in the number of respondents reporting abstinence or no sex in last year between 2000 and 2003.

**How to measure it**

Respondents are first asked if they have ever had sex. Among those who have, questions are asked about his/her last three partners. Information on the type of partner (such as spouse, live in partner, boyfriend/girlfriend, acquaintance, commercial sex worker) and whether a condom was used at last sex is asked for each of the last three partners in the last 12 months. (The information on partner type is used for calculating the previous indicator.)

This indicator should be presented as a stacked bar graph, separately for men and women, in three age groups: 15–19, 20–24 and 15–24.

**Strengths and limitations**

Abstinence from sex, Being faithful to one partner and using Condoms are the ways of preventing HIV infection which form the central message of many AIDS control programmes. This indicator describes the extent to which these are practised.
This indicator highlights the size of the group of people who have sex with more than one partner and who do not consistently use condoms. It also illustrates the prevalence of (one-sided) monogamy and of condom use within sexual relationships. This aspect is important because the classification for this indicator is based only on the behaviour of the survey respondent. The respondent's partner may not be similar in this respect: i.e., the only partner of a survey respondent may have other partners besides the respondent. Condom use among people who report only one partner is therefore important because the partner may still present a risk.

Having more than one partner in a year might be common, and may not indicate multiple or concurrent partnerships, but merely that the end of one partnership and the beginning of the next occurred within 12 months of each other. This indicator assigns into the same category people who regularly have several concurrent sexual partners and people who have ended one relationship and begun another in the same year.

The limitation on measuring condom use that was discussed in the strengths and limitations of the previous indicator also apply to this indicator.
4. Forced sex among young people

Priority: Core

Definition
Proportion of young people who were forced to have sex in the last 12 months

Target Population
15-24 year olds

Numerator
Number of respondents aged 15-24 years who report being forced to have sex in the last 12 months

Denominator
Number of respondents aged 15-24 years

Measurement tools
Nationally representative general population survey

What it measures
Sex should take place only between entirely willing partners. Forcing a person to have sex may have a number of negative consequences, ranging from physical and psychological trauma to unwanted pregnancy and HIV infection. This indicator attempts to measure the proportion of respondents that have experienced forced sex. This data is important for programme managers to know who is being forced to have sex so that programmes and interventions may be appropriately targeted and monitored.

How to measure it
Questions on sexual violence are difficult to capture in a household survey. However if interviewers are well trained, questions are well thought out, and interviews are conducted in a private setting, information on sexual violence can provide valuable information for understanding the spread of HIV in a country. A useful review of the issues around measuring violence is presented in the WHO document “Putting Women’s Safety First: Ethical and Safety Recommendations for Research on Domestic Violence Against Women.” Available at http://www.who.int/gender/violence/womenfirtseng.pdf.

One example of how it can be collected is by asking all respondents “In the last 12 months has any sexual partner forced you to have sexual relations against your will?” The question should be posed to all young persons 15-24 to ensure that the respondent has not erroneously reported never having sex because they were not including forced sex in their response.

This indicator should be presented as a percentage separately for men and women and for age in three groups: 15–19, 20–24 and 15–24.
Strengths and limitations

This indicator may be especially prone to reporting bias, and the extent to which people are willing to admit to having been forced to have sex is likely to vary greatly both within and between countries.

It is difficult to define what people consider as “forced” and this is likely to vary between settings. There has only been limited experience asking such questions in household surveys, so pilot testing these questions within countries will be critical. For example, one survey in South Africa found that a high proportion of boys reported they had been forced to have sex. Upon examination of the findings it seemed the respondent may have interpreted the question as peer pressure from male friends to have sex (A. Pettifor, personal correspondence).

It might be useful to also add a question and tabulate the proportion of respondents who have ever been forced to have sex. This will be useful for looking at changes in trends and will provide information on forced sex that occurred to respondents as younger children.

Additional information on defining and understanding forced sex in developing countries can be found at http://www.popcouncil.org/pdfs/wp/seasia/seawp16.pdf.
5. Age-mixing in sexual partnerships among young women

Priority: Core in generalized epidemics

Definition
The proportion of young women who have had sex in the last 12 months with a partner who is 10 or more years older than themselves

Target Population
Sexually active females aged 15-24 years

Numerator
Number of female respondents aged 15-24 years who have had sex in the last 12 months with a partner who is 10 years or more older than themselves

Denominator
Female respondents aged 15-24 years who have had sex in the last 12 months

Measurement tools
Nationally representative general population survey

What it measures
This indicator measures the progress made towards reducing the proportion of young women having sex with older men.

Sex between young women and older men is often risky because young women lack the power in the relationship to negotiate safe sex. It is also an efficient means of spreading HIV infection, since, for physiological reasons, younger women are more likely to get infected. Each sexual act with an infected man carries a higher risk of infection for a young girl, and older men are more likely than younger men to be infected. AIDS programmes sometimes try to address this issue through IEC campaigns aimed at making sex with younger women socially unacceptable among older men, and through initiatives to increase girls’ negotiating power.

How to measure it
In a general population survey, respondents are first asked whether they have had sex in the past 12 months. Of those who said they had, respondents are then asked whether any of the last three partners were at least 10 years older than the respondent. The numerator includes all those respondents who had sex with a man who is at least 10 years older than themselves of the last three partners in the last 12 months.
This indicator should be reported as a percentage presented separately for age into three groups: 15–19, 20–24 and 15–24. It should be further disaggregated by current marital status, where possible.

**Strengths and limitations**

This measure has two major limitations. The first is that people often do not know the exact age of their sex partners. This is more likely to be true of casual partners than of spouses. The second is that it is not clear exactly what age difference constitutes an elevated risk of exposure to HIV.

When uncertain about a partner’s age, respondents frequently give numbers that “heap” around numbers such as 20 or 30. This may well distort the indicator. It should be noted, however, that the biases introduced through age heaping or age misreporting are unlikely to change greatly over time, so this may be of little consequence when looking at trends.

This measure will not give an exact picture of patterns of age mixing, and it will not capture small shifts in the age gap between partners. But it should capture the substantial changes in age mixing that HIV prevention and life-skills programmes promote, since women are unlikely to mistake a peer for a man much older than themselves. If women increasingly choose to have sex with their peers rather than with older men, or if older men become less likely to seek out substantially younger partners, these changes will be reflected in the indicator, regardless of errors in age reporting.
6. Sex with a commercial sex worker among young people

**Priority:** Additional

**Definition**
Proportion of young people who have had sex with a commercial sex worker in the last 12 months

**Target Population**
Young people aged 15-24 years

**Numerator**
Number of respondents aged 15 – 24 years who have had sex with a commercial sex worker in the last 12 months

**Denominator**
Respondents aged 15-24 years

**Measurement tools**
Nationally representative general population survey

**What it measures**
In places where commercial sex workers (CSW) are important sources of new HIV infections it is a priority to reduce the number of people having sex with them. Ever having had sex with a CSW will elevate the risk of having contracted HIV infection in places where CSW are very commonly infected. This indicator measures the prevalence of commercial sex in the last year which, although not a good estimate of the lifetime prevalence of this behaviour, is more able to detect changes in this behaviour over time.

Attempts to collect and analyse data on the basis of a wider definition of commercial sex (based on questions such as “Have you given or received money or gifts in exchange for sex?”) have not yielded useful information. In epidemic terms, sex workers are of interest because they have a high turnover of partners and are therefore at high risk of being exposed to infection, becoming infected and passing on infection. In many cultures, this is true of only a fraction of those who have “received money or gifts in exchange for sex”. If there is no locally specific term for prostitution, this indicator is unlikely to be relevant to the programme. It should not be used in these circumstances.

The inclusion in the denominator of all young people, and of those who had sex with a sex worker makes it simple to describe and monitor the size of a group of young people who may be especially vulnerable to HIV infection. If the denominator had been the number of sexually active young people, a shift in the number sexually active could affect the proportion visiting commercial sex workers, complicating the analysis of this indicator.

**How to measure it**
Respondents are first asked if they have ever had sex. Among those who have, questions are asked about his/her last three partners in the last 12 months. Information on the type of partner (such as spouse, live-in partner, boyfriend/girlfriend, acquaintance, or commercial sex worker) is asked for each of the last three partners.

This indicator should be given as the percentage of all men who report this behaviour, presented separately for three age groups: 15–19, 20–24 and 15–24. Where appropriate this indicator should be presented for women as well.

**Strengths and limitations**

This indicator assumes that condom use is not consistent among sex workers. The uneven power between a sex worker and a client would suggest that this is often the case. Thus, it assumes that any sex with sex workers is unsafe. However in countries where condom promotion has been successful among sex workers, an alternative indicator on the use of condom at last commercial sex might be more appropriate.

In concentrated and low-level epidemics, sex work can play a major part in spreading HIV infection, but it is very difficult to define commercial sex in a way that translates from one place to another and this is the major limitation of this indicator. Once commercial sex has been described for a country, however, this is unlikely to change much over time. Once a question has been satisfactorily phrased, this indicator can be used to track trends in the prevalence of this behaviour over time.

This indicator is of limited use in very high-level epidemics, since differences in risk associated with sex with a sex worker compared with any other casual partner may not be very substantial.
7. Sex while intoxicated among young people

Priority: Additional

Definition
Proportion of young people who have had sex while intoxicated during the last 12 months

Target Population
15-24 year olds

Numerator
Number of respondents aged 15-24 years who had sex while intoxicated during the last 12 months

*NOTE: Intoxicating substances should be defined and reported at a country level, such as alcohol, cannabis, injectable drugs, etc. The substances most relevant in each country can therefore be used in this indicator.

Denominator
Number of respondents aged 15-24 years

Measurement tools
Nationally representative general population survey

What it measures
Sex, while one or both partners are intoxicated, is more likely to be unplanned, and couples are less likely to use a condom. This indicator describes the prevalence of this sex in such situations. The indicator only measures whether the respondent was intoxicated, and not whether his or her partner was intoxicated, to avoid double counting when both partners are included in a survey.

How to measure it
In a general population survey, respondents are first asked whether they have ever had sex during the last 12 months. Of those who said they did, the respondents are asked about the last three occurrences and whether they were intoxicated while having sex (as defined by the country).

This indicator should be presented as a percentage and disaggregated down by sex and by age into three groups: 15–19, 20–24 and 15–24.

Strengths and limitations
The point at which people will describe themselves as intoxicated is subjective. In addition, the effects of intoxication will depend on the substance used. This indicator will therefore be difficult to interpret across cultures where different substances are used.

The context of the substance use must be carefully considered: this indicator could include sex after social drinking, or sex after taking a sedative, or drug rape.

This indicator is best used for comparison within a defined population over time. The proportion of all young people who have used the substance of interest in the year before the survey might be useful information to aid the interpretation of this indicator.
8. HIV testing behaviour among young people

Priority: Core in generalised epidemics, additional in others

Definition
Proportion of sexually active young people who had an HIV test in the last 12 months and know the results

Target Population
15-24 year olds

Numerator
Number of respondents aged 15-24 years who had an HIV test in the last 12 months and who know the results

Denominator
Respondents aged 15-24 years who have had sex in the last 12 months

Measurement tools
Nationally representative general population survey

What it measures
This indicator aims to give an idea of the reach of HIV testing services in the general population and of the percentage of sexually active young people who are aware of their HIV status. This topic has special significance for young people because they may feel there are barriers to accessing and using many services and facilities. This is likely to be most acute for those who are concerned about sensitive and potentially distressing issues such as sexual health.

This indicator can provide a measure of the effectiveness of interventions that promote VCT, and if these interventions are targeted at a particular sub-group it may be appropriate to restrict this indicator to that group.

How to measure it
In a general population survey, respondents are first asked if they have ever been tested for HIV. Of those who reported they did, another question is asked if they were tested in the last 12 months and finally whether they know the results of that test.

This indicator should be presented separately for men and women and by age in three groups (15–19, 20–24, 15–24).

This indicator may be affected by reporting bias because people may not want to admit to knowing their status in case they are pressed to disclose it. The privacy of the interview may affect this. Where data are collected in the presence of others during the interview it might be possible to assess this.
Strengths and limitations

This indicator has several components: in order to have had a test and then have returned for the results, young people must consider themselves or their partners to be at risk of having contracted HIV, they must know where to get a test and feel able to have the test and, after the test, they must want to know the results and be able to return to the testing centre to get them.

Factors that could influence a young person’s access to testing facilities are their location, the availability of transport to these places, the cost involved, the young person’s perception of the confidentiality of the process and especially the result, and the perceived attitude of the staff towards young people. Changes in this indicator could be a result of some, or all of these reasons.

Used alone, this indicator cannot show whether the number of people having an HIV test is limited by the availability of testing resources, or if testing facilities are underutilised. This is important to know because if fewer people are being tested than could be, and if a substantial proportion of people are thought not to know their status, then awareness-raising campaigns may be necessary. If the opposite is true, and testing behaviour is limited by resources, such campaigns like this would not be appropriate. The services that accompany testing are important for a successful intervention and behaviour change. In further research on testing behaviour, the services being offered should be considered in concert with this indicator.

In areas where HIV is highly stigmatised, respondents may be unwilling even to admit to having taken an HIV test, since it may be regarded as an admission that they fear they may be infected. This is all the more true when the question is posed as an item in a questionnaire on risk behaviour. On the other hand, in countries where testing has been heavily promoted as a “responsible” thing to do, some people may say they have been tested when in fact they have not. Despite these possible biases, the indicator approximates the proportion of young people likely to know their HIV status at all.

In low-level and concentrated epidemics, the indicator may yield extremely low percentages if measured in the general population. If this is the case it can be used effectively in surveys of behaviour in sub-populations at higher risk of infection. However, it should be noted, that IDUs who are not yet sexually active, are not reflected in the indicator.

The indicator is restricted to tests in the last 12 months so that programme managers can see changes over time. It might be useful to also tabulate the proportion that has ever been tested. The proportion ever tested might be a more useful indicator among populations with low prevalence.
9. Condom use during anal sex among young men who have sex with men (MSM)

**Priority:** Core in concentrated epidemics, additional in others

**Definition**
Proportion of young men who report using a condom at last anal sex with a male partner in the past 12 months

**Target Population**
Men who have sex with men (MSM), aged 15-24 years

**Numerator**
Number of young MSM young men who report using a condom at last anal sex with a male partner in the past 6 months

**Denominator**
All young MSM who have had anal sex with a man in the last 6 months

**Measurement tools**
Special surveys among MSM. Unless MSM behaviour is widely prevalent in the general population, the proportion of the general population reporting this behaviour will be very small. Consequently a very large sample would be needed in a general population survey to provide a reliable estimate of this behaviour.

**What it measures**
Both unprotected anal sex and multiple partners put MSM at higher risk of being infected with HIV. Monitoring both the proportion of MSM that have protected anal sex and the proportion who avoid multiple partners is important, however, in the age range 15-24, young men are less likely to stick with one partner and thus protected anal sex is the more critical indicator to monitor.

**How to measure it**
In a behavioural survey in a sample of men who have sex with men, respondents are asked about their sexual partnerships with other men in the past 6 months. For both anal and oral sex the respondent is asked about the last time they had such sex and whether the respondent or his partner used a condom.

This indicator should be reported as a percentage and broken down by age into three groups: 15–19, 20–24 and 15–24.

**Strengths and limitations**
The time reference of 6 months is used because most surveys of MSM use a sampling strategy that interviews respondents in areas where men congregate to meet other male partners. Thus
the men are at the high end of the spectrum of risk behaviours and are also likely to have a high turnover of partners. The smaller time frame reduces any recall bias of the number of partners.

A limitation of surveys among high-risk groups is that it is not usually possible to find a representative probability sample. This means that it is difficult to estimate to what extent an indicator based on these data will describe all members of the high-risk group.

This indicator gives no idea of risk behaviour in sex with women, on the part of men who have sex with both men and women. In countries where men in the sub-population surveyed are likely to have partners of both sexes the prevalence of sex between men and women must be considered, as well as the frequency of condom use with partners of each sex.

Reporting may be biased as a result of the stigma associated with homosexual behaviour in many communities, resulting in under-reporting of frequency or non-admission.
10. Safe practices among young IDU

**Priority:** Core in concentrated epidemics, additional in others

**Definition**
Percentage of young injecting drug users 1) who report having never shared injecting equipment during the last month and 2) who also reported that a condom was used the last time they had sex.

**Target Population**
Young sexually active injecting drug users (IDUs), ages 15-24 years

**Numerator**
Number of respondents who report having never shared injecting equipment during the last month and who also reported that a condom was used the last time they had sex in the last month.

**Denominator**
Number of respondents who report injecting drugs in the last month and having had sexual intercourse in the last month.

**Measurement tools**
Special surveys among IDUs. It is essential to make sure that locally appropriate terminology is used to collect the correct information.

**What it measures**
Injecting drug use does not, in itself, expose a drug user to HIV infection; the additional risk for drug users arises from the practice of sharing needles. Intravenous injections with needles that someone else has used can be an efficient mode of transmission of HIV infection.

The extent to which IDUs share needles varies. The prevalence of IDUs alone, therefore, does not accurately describe the size of the group at risk of HIV. This indicator shows what proportion of IDUs has adopted behaviour to avoid HIV transmission. The separate components can be used to track trends in unsafe needle use among IDUs and unsafe sex among IDUs. This indicator should be carefully considered by the different break-downs because changes in the indicator could reflect real change in behaviour, changes in reporting, or changes in the overall composition of the group.

This indicator should be reported as a percentage, separately for men and women and presented separately for age in three groups (15–19, 20–24 and 15–24) and compared with other high-risk age-groups.

This indicator is an UNGASS indicator.
How to measure it
In a behavioural survey among injecting drug users, respondents are asked about their injecting habits. Specifically, respondents are asked whether they shared a needle at any time in the past month. And then whether they had sex in the last month, and if so whether a condom was used.

Strengths and limitations
The time limit of one month is used because it minimizes recall bias, which may be a particular problem for IDU. By also using the one month time limit the indicator gives some perspective on the consistency of the behaviours.

A limitation of surveys among high-risk groups is that it is not usually possible to find a representative probability sample. This means that it is difficult to estimate the extent to which an indicator based on these data will describe all members of the high-risk group.
11. Condom use among commercial sex workers

Priority: Core in concentrated epidemics, additional in generalized epidemics

Definition
Percentage of young commercial sex workers who used a condom at last sex with a client

Target Population
Young commercial sex workers, ages 15-24 years

Numerator
Number of commercial sex workers aged 15-24 years who used a condom at last sex with a client

Denominator
Commercial sex workers aged 15-24 years interviewed

Measurement tools
Special surveys among commercial sex workers

*NOTE: In many countries this indicator will be relevant only for young women.

What it measures
This indicator is a measure of the success of campaigns to promote condom use in commercial sex. One of the goals of programmes that work with sex workers is an increase in the number of sex workers who always use a condom and thus are protected from HIV infection. This indicator refers to men and women actually working, as providers of sex and the data are collected together with self-report client data; the indicator will validate levels of condom use for commercial sex as reported by clients.

How to measure it
In a special survey of commercial sex workers, respondents are asked whether they used a condom with their most recent client.

This indicator should be disaggregated by sex and by age group (15–19, 20–24 and 15–24)

Strengths and limitations
In areas where patronage of commercial sex is highly stigmatised, clients may hesitate to report visits to commercial sex workers. As well, clients may desire to give the ‘good’ answer that they used a condom at last sex, especially in areas where programmes have stressed condom use at commercial and other sex. The indicator seeks responses from sex workers, who may not
have the same motivation to give socially desirable answers and who offer a different perspective.

A limitation of surveys among high-risk groups is that it is not usually possible to find a representative probability sample. This means that it is difficult to estimate the extent to which an indicator based on these data will describe all members of the high-risk group. In addition it will be difficult to duplicate the survey at a later date to look at trends.