MONITORING AND EVALUATION TOOLKIT

HIV, Tuberculosis and Malaria and Health Systems Strengthening

Part 2: Tools for monitoring programs for HIV, tuberculosis, malaria and health systems strengthening

HIV

Third Edition
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The M&E toolkit is available electronically at http://www.theglobalfund.org.

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Acknowledgements

This M&E toolkit is the outcome of a collaborative process of M&E experts of international organizations, bilateral agencies, nongovernmental and private organizations and major partners: in particular, the United States Centers for Disease Control and Prevention, the Global Fund, the Health Metrics Network, the Roll Back Malaria Partnership, the Stop TB Partnership, UNAIDS, WHO (including the Global Malaria Programme, the HIV/AIDS Department and the Stop TB Department), the World Bank, the United States President’s Emergency Plan for AIDS Relief (Office of the United States Global AIDS Coordinator) and the United States Agency for International Development, the President’s Malaria Initiative and MEASURE Evaluation. Input from several workstreams addressing global health and M&E issues helped to shape relevant sections of the toolkit. The collaborative and consultative process ensured that the recommendations made in this toolkit are in accordance with those used across organizations, promoting a common understanding of M&E within and among the three diseases and health systems strengthening as well as the use of a common set of indicators. In addition to the UNAIDS Monitoring and Evaluation Reference Group and partnership-facilitated process, wide technical consultations were held to better define M&E activities at the community level. In particular, the findings were summarized through a regional workshop with representatives from 22 countries. Consultations were held with gender specialists as well as with experts in the M&E of the quality of services to inform the relevant chapters in this publication.

Last but not least, many colleagues at the Global Fund ensured that this toolkit best serves its targeted audience. Thank you for all your efforts and contributions.
5. HIV

5.1 Introduction

This section presents selected programmatic output, outcome and impact indicators for HIV. Summary tables provide an overview of selected indicators, which are supported by detailed descriptions in the second half of this section.

In addition, new strategies for fighting the epidemic and new strategies in the M&E of HIV programs are briefly presented, along with links to valuable resources.

Most indicators are extracted from the set of 40 core national indicators developed by UNAIDS in collaboration with key international partners. This set provides minimum necessary information for national-level monitoring of the HIV epidemic and response: 25 indicators related to the United Nations General Assembly Special Session on HIV/AIDS required for monitoring the Declaration of Commitment on HIV/AIDS and 15 additional recommended indicators. It helps to focus attention on key prevention, treatment and care components of the national HIV response as well as on key outcomes of national HIV programs.

The core indicators address both national and global data needs, and many are also relevant at the program or project level. Additional indicators are required for routine program-level monitoring. The HIV Monitoring and Evaluation Reference Group has produced an online registry of indicator definitions for HIV monitoring, including output, outcome and impact indicators. This registry can be used to facilitate the selection of indicators for the national M&E plan (that is, the M&E framework), hence to select program indicators that are most appropriate to the program and country context. Links to the HIV Indicator Registry will be provided on both the Global Fund website and the UNAIDS website in early 2009. The Global HIV M&E Reference Group is currently assessing the quality of all the indicators included in the Registry and plans to provide a ranking of the technical merits of each indicator, including the designation of a set of recommended programmatic indicators.

This toolkit provides a table of output indicators that includes several program- or project-level indicators. This is to ensure the selection of indicators that can be routinely reported for areas in which countries have requested substantial funds from the Global Fund. This table also includes indicators for services provided by civil society or community-based organizations. International and national M&E experts and donors have selected, discussed and agreed on these indicators in a workshop in Pretoria (more details on this workshop are provided below). However, these indicators should be viewed as interim indicators, some of which may be replaced when a set of recommended programmatic indicators agreed on by the HIV Monitoring and Evaluation Reference Group becomes available.

The set of indicators in Tables 11 and 12 has been put together for the specific purpose of minimizing information demands on countries. The indicator selection process was guided by six major principles:

- building on existing nationally and globally agreed indicators and linking these indicators to the objectives to be achieved;
- harmonizing with other international frameworks such as the framework of the United Nations General Assembly Special Session on HIV/AIDS and the Millennium Development Goals; the UNAIDS core indicator set; the WHO/UNAIDS framework for universal access to HIV prevention, treatment and care; and the frameworks of other major donors in HIV (notably the United States President's Emergency Plan for AIDS Relief);
- minimizing the number of indicators to be collected;
- selecting indicators for which data can be generated regularly through a (community-based) routine data collection system, a health information system, health facility surveys and behavioral surveillance surveys or acknowledged population-based surveys (Multiple Indicator Cluster Surveys (MICS), Demographic and Health Surveys (DHS) and DHS+), ensuring that these indicators have clear data sources and methods of analysis;
- conciliating the M&E needs of the country and of donors; and
- covering a wide range of program areas and sectors related to HIV.


The indicator descriptions provide information on:

- **rationale for use**;
- **definition, including numerator and denominator**;
- **measurement – details on instrument and process**, comprising:
  - measurement tools: statistics on health services, program reports, health facility surveys, qualitative methods, sentinel site surveillance and population-based surveys;
  - recommended periodicity of data reporting; and
- **resources, including the source document**.

When reading these tables, take into account the following issues.

- **The tables do not aim to provide a comprehensive overview of all indicators. Rather, they aim to provide users with a set of some indicators commonly used for specific activity areas. For a complete listing of all existing indicators, readers are referred to the chapter on resources as well as the forthcoming UNAIDS HIV Indicator Registry mentioned previously.**

- **To facilitate the referencing of indicators from the summary tables to the related descriptions, indicators have been named according to their activity area (prevention, care and support or treatment and outcome, impact indicator) and a number (1, 2, 3, etc.). The first prevention indicator is therefore named P (prevention indicator) 1, and so on. The references do not relate to any categorization of the same indicators in other publications.**

- **Indicators tracking training activities can be selected where relevant. They should specify whether training refers to either new training or retraining of individuals. The indicators should also specify the content of the training and the training audience: public health personnel, midwives, doctors, nurses, staff at the community level, etc. In addition, training should be conducted according to national or international standards, where these exist. It is very important that the recognized standards of training be recorded (including objectives, duration and follow-up) and that follow-up be undertaken to ensure that these individuals become active and practice service delivery.**

- **The indicators for strengthening of health systems are included in Section 8 (Part 2). However, any service delivery area within strengthening health systems can also be built into HIV grants. The details and rules for each round of Global Fund funding should be consulted to assess the best strategy.**

- **With a significant increase in country proposals (grants) focusing on provision of HIV services at the community level, using standard indicators for similar interventions across countries is becoming increasingly important. To facilitate this, the Global Fund, UNAIDS and World Bank (Global HIV/AIDS Monitoring and Evaluation Team) hosted a three-day international workshop on monitoring services and systems at the community level (Pretoria, South Africa, August 2008) with over 40 implementing partners from 22 countries to review and refine community-level indicators. These indicators are already being used in countries to monitor and evaluate interventions for the three diseases and efforts to strengthen health systems at the community level. The indicators recommended from this consultative process for HIV-related interventions have been integrated in this section of the toolkit.**
5.2 Goals and strategies of HIV programs
Several global goals have been defined as part of the Millennium Development Goals, United Nations General Assembly Special Session on HIV/AIDS targets and the commitment of G8 leaders (Box 11).

5.3 New developments in M&E of HIV programs
During the past few years, partners – under the guidance of the global HIV Monitoring and Evaluation Reference Group – have developed tools that aim at a more unified approach to implementing M&E systems. One achievement has been the multi-agency endorsement of the additional recommended indicators for national HIV programs (see above). In addition, WHO proposes a core set of indicators to monitor and report on global progress in the health sector’s response towards universal access in its framework for monitoring and reporting on the health sector's response towards universal access. Besides selected indicators for HIV prevention, treatment, care and support, it provides policy and programmatic questions related to the national response. Parallel with these efforts, a UNAIDS HIV Indicator Registry is being developed. This is a web-based inventory of standardized definitions and other essential indicator specifications for more than 400 existing HIV-related indicators. A public version will be launched soon to allow easy access to these indicator standards. This work will be further refined by reviewing all indicators against defined standards. The Registry will further help countries in selecting quality indicators that may be needed in addition to the core national indicator set.

Another important achievement resulting from recent collaborative work is the partner-endorsed Organizing framework for a functional national HIV monitoring and evaluation system. This framework provides an overview of the main public health questions in M&E and describes the components of a functional national HIV M&E system and some benchmarks against which to assess progress in establishing or reviewing such a system. It can be used in assessing M&E systems, strengthening M&E systems, training on M&E and developing M&E technical guidance and assistance. Based on the organizing framework, agencies endorsed the development of a single tool for assessing the overall HIV M&E system leading to a single action plan for M&E system implementation that different agencies can jointly support.

**Box 11. Global HIV goals and targets**

**Millennium Development Goal 6: Combat HIV/AIDS, malaria and other diseases**

**Target 7: Have halted by 2015 and begun to reverse the spread of HIV/AIDS**

**Indicators:**
- HIV prevalence among population aged 15–24 years
- Condom use at last high-risk sex
- Proportion of population aged 15–24 years with comprehensive correct knowledge of HIV/AIDS
- Ratio of school attendance of orphans to school attendance of non-orphans aged 10–14 years

**United Nations General Assembly High-Level Meeting targets – universal access to prevention, treatment, care and support by 2010**
- By 2010, 95% of young women and men aged 15–24 years both correctly identify ways of preventing the sexual transmission of HIV and reject major misconceptions about HIV transmission
- By 2010, 25% of reduction globally of young women and men aged 15–24 years who are HIV infected
- By 2010, 50% reduction of infants born to HIV-infected mothers who are infected

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Other important new developments include the increasing emphasis on the confidentiality and security of HIV information. This information is important to improve the management and monitoring of people receiving treatment and care and the M&E of programs or services. Information systems need to ensure both patient confidentiality and easy access to the information at both the individual and aggregate levels. The three interrelated concepts that affect the development and implementation of protection of sensitive data are privacy, confidentiality and security. Although they are interrelated, each is distinct and is developed and implemented differently.

The gender sensitivity of HIV programs needs to be considered during planning to ensure that the services reach the right people. For example, in sub-Saharan Africa, women comprise more than half the people living with HIV, and services targeting women therefore need special consideration. At the same time, monitoring how gender has been addressed during implementation is equally important. Part 1 of this toolkit (Section 2) provides generic guidance for measuring whether target groups have been addressed based on gender. More specifically (and in addition to the generic recommendations), monitoring data for gender-sensitive HIV program indicators recommended in Tables 11 and 12 should be disaggregated by sex, where relevant, and by recommended and internationally agreed age groups (as specified in the indicator descriptions in this section). Further, countries are encouraged to use nationally recommended indicators to measure progress in a specific program area not covered in this toolkit (such as gender-based violence).

5.4 Monitoring TB/HIV collaborative activities

M&E of collaborative TB/HIV activities is challenging, as information often has to move from one program to the other. HIV programs need to capture interventions to reduce the burden of TB (such as TB screening among people living with HIV), and TB programs need to capture interventions to reduce the burden of HIV (such as the proportion of people living with TB/HIV who receive antiretroviral therapy). TB and HIV programs have to work together to collect, analyze and report on the data related to TB/HIV activities. Most indicators are captured routinely in either TB or HIV care and treatment registers at the facility or district level and reported quarterly. WHO has issued guidance on the recording and reporting forms, which include the data necessary to report on the recommended indicators for TB/HIV. The indicators presented here have been compiled in a recent global consultation; some of the descriptions may change slightly during the final iterations among the technical experts.

5.5 Selected indicators

Tables 11 and 12 on pages 73-75 present indicators for measuring the output, outcome and impact of HIV programs. They provide measurement tools and the recommended frequency of reporting to facilitate planning and the selection of indicators according to resources. Many country-level implementation programs could use the indicators included in this table. However, they are not applicable to all programs. In these cases, program implementers should identify appropriate performance measures, which directly address program goals, objectives and targets. Users should see the indicator descriptions and individual indicator guidelines (see the subsection on guidelines and essential resources and the indicator descriptions) and, starting soon, the UNAIDS HIV Indicator Registry for a more complete listing of all core and additional indicators in this area.

Table 11 provides guidance on the choice of indicators that are suitable for Global Fund performance-based funding for routine reporting of results against targets. They largely focus on the number of people reached with services. Where relevant to the program, indicators measuring capacity-building – number of people trained and number of service points supported – can be used for service delivery areas where these are not specifically defined. Section 8 on strengthening health systems in Part 2 of the toolkit provides details for the capacity-building indicators.

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Some of the indicators for routine reporting can be collected through monthly health statistics and the annual program review, but others may be best collected through surveys (see text below and Box 12 above). Where relevant, countries are encouraged to collect the necessary information (number of people reached with services, number of people trained or number of service points supported) with routine reporting systems (Box 13). This is to ensure frequent reporting on the results achieved in Global Fund grants. These data can, where necessary, subsequently be used to supplement and validate the periodic surveys that are needed according to the indicator descriptions.

Box 12. Why program counts are good for monitoring programs but not for estimating coverage

Reliably measuring the coverage of certain programs requires cross-sectional surveys for two reasons. First, in some programs, using program data as the numerator results in double-counting. In prevention programs for most-at-risk population groups, for example, it is desirable that an individual be contacted by a prevention program multiple times. Similarly, most-at-risk population groups and other individuals who perceive themselves to be at increased risk of HIV often use voluntary counselling service at frequent intervals. In the absence of unique identifiers, new contacts (or tests) and repeat contacts (or tests) cannot be distinguished. In such programs, avoiding double-counting is therefore extremely difficult. Using such data as a numerator for a coverage indicator will therefore overestimate coverage. Second, using program data as the numerator for a coverage estimate requires a population size estimate to use as the denominator. In the specific case of most-at-risk population groups, very few countries have such estimates and obtaining reliable estimates requires significant investments in data collection, typically far greater than those required for a single cross-sectional survey. In countries where such estimates do exist, the variance around these estimates is large. This is a result of the inherent difficulties in indirect methods of population size estimation, such as capture-recapture and multiplier methods, which typically result in estimates with large confidence intervals. Using such an estimate as the denominator will result in a variance around the coverage estimate that is too great to meaningfully detect any changes in coverage. This can be illustrated through the following example.

Australia has comprehensive services for injecting drug users and high-quality data on injecting drug use from these services and other sources.\(^{50}\) used these data to estimate the number of dependent heroin users in Australia. They determined that there were between 67,000 and 92,000 dependent heroin users. If this was used as a denominator with a hypothetical program count of dependent heroin users enrolled in methadone programs of 30,000, the coverage estimate of the Australian methadone program would be between 43% and 60%, even without considering possible double-counting. By comparison, small cross-sectional surveys can generate estimates with relatively smaller confidence intervals\(^ {51}\) with fewer resources than would be required to estimate population size.

For these two reasons, the UNGASS indicators for measuring the coverage of programs for most-at-risk populations and voluntary counseling and testing require surveys.

Box 13. Using routine data for performance-based funding

Survey-based indicators are impractical for use in routine program management and for performance-based funding. Hence this toolkit encourages the use of data from routine reporting (that is, the numerators of indicators) when reporting the short-term results achieved in Global Fund grants.

However, because of the difficulties related to estimating coverage as described in the text above, Table 11 includes an indicator on the number of contacts with most-at-risk populations as a measure of the output of prevention programs for most-at-risk populations and an indicator of the number of tests conducted in voluntary counseling and testing services as a measure of the output of these services.

Table 11. Selected programmatic output indicators for HIV

<table>
<thead>
<tr>
<th>Service delivery area</th>
<th>Output indicators</th>
<th>UNAIDS core national indicatora</th>
<th>Frequency of reporting</th>
<th>Measurement tools</th>
</tr>
</thead>
<tbody>
<tr>
<td>Behavior change communication – mass media</td>
<td>Young women and men aged 15–24 who both correctly identify ways of preventing the sexual transmission of HIV and who reject the major misconceptions about HIV transmission (percentage) (HIV-P1)</td>
<td>UNGASS #13</td>
<td>Every 2–5 years</td>
<td>Population-based survey</td>
</tr>
<tr>
<td></td>
<td>Most-at-risk populations who both correctly identify ways of preventing the sexual transmission of HIV and who reject major misconceptions about HIV transmission (percentage) (HIV-P2)</td>
<td>UNGASS #14</td>
<td>Every 2 years</td>
<td>Behavioral survey</td>
</tr>
<tr>
<td></td>
<td>Individuals from the targeted audience reached through community outreach with at least one HIV information, education, communication or behavior change communication (number) (HIV-P3)</td>
<td>-</td>
<td>Quarterly</td>
<td>Program reports</td>
</tr>
<tr>
<td></td>
<td>Most-at-risk populations reached with HIV prevention programs (percentage) (HIV-P4ab)</td>
<td>UNGASS #9</td>
<td>Every 2 years</td>
<td>Behavioral survey</td>
</tr>
<tr>
<td></td>
<td>Schools that provided life skills–based HIV education in the last academic year (percentage) (HIV-P5)</td>
<td>UNGASS #11</td>
<td>Every 2 years</td>
<td>School-based survey</td>
</tr>
<tr>
<td></td>
<td>Young women and men aged 15–24 years who both correctly identify ways of preventing the sexual transmission of HIV and who reject the major misconceptions about HIV transmission (percentage) (HIV-P1)</td>
<td>UNGASS #13</td>
<td>Every 2–5 years</td>
<td>Population-based survey</td>
</tr>
<tr>
<td></td>
<td>Most-at-risk populations who both correctly identify ways of preventing the sexual transmission of HIV and who reject major misconceptions about HIV transmission (percentage) (HIV-P2)</td>
<td>UNGASS #14</td>
<td>Every 2 years</td>
<td>Behavioral survey</td>
</tr>
<tr>
<td></td>
<td>Young people aged 10–24 years reached by life skills–based HIV education in schools (number and percentage) (HIV-P6)</td>
<td>-</td>
<td>Quarterly or annually</td>
<td>Program reports</td>
</tr>
<tr>
<td></td>
<td>Condoms available for distribution nationwide during the last 12 months (number) (HIV-P7)c</td>
<td>Additional recommended indicator #10</td>
<td>Quarterly or annually</td>
<td>Program reports, key informant interviews and inventory logs</td>
</tr>
<tr>
<td></td>
<td>Testing and counseling</td>
<td>Women and men aged 15–49 years who received an HIV test in the last 12 months and who know their results (percentage) (HIV-P8a)</td>
<td>UNGASS #7</td>
<td>Every 2–5 years</td>
</tr>
<tr>
<td></td>
<td></td>
<td>People who received testing and counseling services for HIV and received their test results (number) (HIV-P8b)</td>
<td>-</td>
<td>Quarterly or annually</td>
</tr>
<tr>
<td></td>
<td>Condoms</td>
<td>Condoms available for distribution nationwide (disaggregated by (1) male and female condoms and (2) those distributed through the private sector and those distributed free of charge) (HIV-P7)c</td>
<td>-</td>
<td>Every 2 years</td>
</tr>
<tr>
<td></td>
<td>Most-at-risk populations who received an HIV test in the last 12 months and who know their results (percentage) (HIV-P9)</td>
<td>UNGASS #8</td>
<td>Every 2 years</td>
<td>Behavioral survey</td>
</tr>
<tr>
<td></td>
<td>Sexually active young women and men aged 15–24 years who received an HIV test in the last 12 months and know their results (percentage) (HIV-P10)</td>
<td>Additional recommended indicator #5</td>
<td>Every 2–5 years</td>
<td>Population-based survey</td>
</tr>
</tbody>
</table>

a This column indicates whether indicators have been extracted from the core indicators for national AIDS programs: the 15 indicators related to the United Nations General Assembly Special Session on HIV/AIDS (UNGASS) and the 25 additional recommended indicators. The UNAIDS Monitoring and Evaluation Reference Group has agreed a set of indicator standards and has developed a tool to assess the extent to which these standards are applied to different indicators in various settings. Having these explicit standards and tool are planned to be available in mid-2009; additional information may be obtained from the UNAIDS Monitoring and Evaluation Division or UNAIDS M&E advisers based in countries.

b This indicator should be calculated and reported specifically for each of the population groups most at risk that are most relevant to the country-specific situation (such as injecting drug users, men who have sex with men, sex workers, young people aged 10–24 years in and out of school and others that are not listed). For each of these population groups, the prevention package applied must be clearly defined: outreach and peer education, HIV counseling and testing, distribution of condoms, substitution therapy and safe injection practice for injecting drug users. If other risk groups in the country require different prevention activities, these should be clearly defined. Disaggregation of data for people younger than 25 years of age will enable the collection of data for young people, who are specifically vulnerable to the epidemic.

c For the purpose of performance-based funding, the denominator does not need to be routinely tracked.
### Table 11. Selected programmatic output indicators for HIV (continued)

<table>
<thead>
<tr>
<th>Service delivery area</th>
<th>Output indicators</th>
<th>UNAIDS core national indicatora</th>
<th>Frequency of reporting</th>
<th>Measurement tools</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Prevention</strong></td>
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<tr>
<td></td>
<td><strong>Prevention of mother-to-child transmission</strong></td>
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<tr>
<td></td>
<td>Pregnant women who were tested for HIV and who know their results (percentage) (HIV-P11)</td>
<td>Additional recommended indicator #7</td>
<td>Quarterly or annually</td>
<td>Program reports</td>
</tr>
<tr>
<td></td>
<td>HIV-positive pregnant women who received antiretrovirals to reduce the risk of mother-to-child transmission (percentage) (HIV-P12)</td>
<td>UNGASS #5</td>
<td>Quarterly or annually</td>
<td>Program reports</td>
</tr>
<tr>
<td></td>
<td>Infants born to HIV-infected women who receive an HIV test within 12 months of birth (percentage) (disaggregated into virological testing at &lt;2 months or 2–12 months or antibody testing at 9–12 months) (HIV-P13)</td>
<td>Additional recommended indicator #8</td>
<td>Quarterly or annually</td>
<td>Program reports</td>
</tr>
<tr>
<td></td>
<td>Infants born to HIV-infected women starting on co-trimoxazole prophylaxis within 2 months of birth (percentage) (HIV-P14)</td>
<td>Additional recommended indicator #9</td>
<td>Quarterly or annually</td>
<td>Program reports</td>
</tr>
<tr>
<td></td>
<td><strong>Post-exposure prophylaxis</strong></td>
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<tr>
<td></td>
<td>Health facilities with post-exposure prophylaxis available (percentage) (HIV-P15)</td>
<td>Additional recommended indicator #1</td>
<td>Every 2–3 years</td>
<td>Health facility survey</td>
</tr>
<tr>
<td></td>
<td><strong>Facility-based diagnosis and treatment of sexually transmitted infections</strong></td>
<td></td>
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<td></td>
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<tr>
<td></td>
<td>Cases of sexually transmitted infections treated (number) (HIV-P16)</td>
<td>–</td>
<td>Quarterly or annually</td>
<td>Program reports</td>
</tr>
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<td></td>
<td><strong>Blood safety and universal precautions</strong></td>
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<tr>
<td></td>
<td>Donated blood units screened for HIV in a quality-assured manner (percentage) (HIV-P17)</td>
<td>UNGASS #3</td>
<td>Quarterly or annually</td>
<td>FRAME tool</td>
</tr>
<tr>
<td></td>
<td><strong>Antiretroviral therapy and monitoring</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Adults and children with advanced HIV infection (currently) receiving antiretroviral therapy (percentage) (HIV-T1)</td>
<td>UNGASS #4</td>
<td>Quarterly or annually</td>
<td>Program reports or antiretroviral therapy registers</td>
</tr>
<tr>
<td></td>
<td>Health facilities that offer antiretroviral therapy (prescribe and/or provide clinical follow-up) (percentage) (HIV-T2)</td>
<td>Additional recommended indicator #2</td>
<td>Quarterly or annually</td>
<td>Program reports</td>
</tr>
<tr>
<td></td>
<td>Health facilities dispensing antiretroviral therapy that have experienced a stock-out of at least one required antiretroviral drug in the last 12 months (percentage) (HIV-T3)</td>
<td>Additional recommended indicator #3</td>
<td>Quarterly or annually</td>
<td>Program reports</td>
</tr>
<tr>
<td></td>
<td>Facilities providing antiretroviral therapy using CD4 monitoring in accordance with national guidelines or policies, on site or through referral (percentage) (HIV-T4)</td>
<td>Additional recommended indicator #4</td>
<td>Quarterly or annually</td>
<td>Program reports</td>
</tr>
<tr>
<td></td>
<td>People starting antiretroviral therapy who picked up all prescribed antiretroviral drugs on time (number and percentage) (HIV-T5)</td>
<td>–</td>
<td>Annually</td>
<td>Program reports</td>
</tr>
</tbody>
</table>

---

d For the purpose of performance-based funding, the only women who should be counted are those who received a complete prophylactic regimen according to national guidelines.
e Countries are strongly encouraged to consider the country-specific context; it is important to specify the target group (such as sex workers) and the type of sexually transmitted infections treated.
### Table 11. Selected programmatic output indicators for HIV (continued)

<table>
<thead>
<tr>
<th>Service delivery area</th>
<th>Output indicators</th>
<th>UNAIDS core national indicator</th>
<th>Frequency of reporting</th>
<th>Measurement tools</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prophylaxis for opportunistic infections</td>
<td>Adults and children enrolled in HIV care and eligible for co-trimoxazole prophylaxis (according to national guidelines) currently receiving co-trimoxazole prophylaxis (number and percentage) (HIV-CS1)</td>
<td>–</td>
<td>Quarterly or annually</td>
<td>Program reports</td>
</tr>
<tr>
<td></td>
<td>This indicator will be included in the next generation of indicators developed by the United States President’s Emergency Plan for AIDS Relief.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Care and support for chronically ill people</td>
<td>Adults and children living with HIV who receive care and support services outside facilities (number) (HIV-CS2)</td>
<td>–</td>
<td>Quarterly or annually</td>
<td>Program reports</td>
</tr>
<tr>
<td></td>
<td>A related indicator will be included in the next generation of indicators developed by the United States President’s Emergency Plan for AIDS Relief.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Support for orphaned and vulnerable children</td>
<td>Orphaned and vulnerable children aged 0–17 years whose households received free basic external support in caring for the child (percentage) (HIV-CS3)</td>
<td>UNGASS #10</td>
<td>Every 2–5 years</td>
<td>Population-based survey</td>
</tr>
<tr>
<td></td>
<td>Orphaned and vulnerable children aged 5–17 years who have three basic material needs met (percentage) (HIV-CS4)</td>
<td>–</td>
<td>Every 2–5 years</td>
<td>Population-based survey</td>
</tr>
<tr>
<td></td>
<td>Orphaned and vulnerable children aged 5–17 years who report improvement in their emotional well-being (percentage) (HIV-CS5)</td>
<td>–</td>
<td>Every 2–5 years</td>
<td>Population-based survey</td>
</tr>
<tr>
<td>TB/HIV</td>
<td>Adults and children enrolled in HIV care who had TB status assessed and recorded during their last visit among all adults and children enrolled in HIV care in the reporting period (number and percentage) (TB/HIV-1)</td>
<td>–</td>
<td>Quarterly and annually</td>
<td>Program reports and antiretroviral therapy registers</td>
</tr>
<tr>
<td></td>
<td>Adults and children enrolled in HIV care who started TB treatment, expressed as a proportion of adults and children in HIV care during the reporting period (number and percentage) (TB/HIV-2)</td>
<td>–</td>
<td>Quarterly and annually</td>
<td>Program reports and antiretroviral therapy registers</td>
</tr>
<tr>
<td></td>
<td>Estimated HIV-positive incident TB cases that received treatment for TB and HIV (percentage) (TB/HIV-3)</td>
<td>UNGASS #6</td>
<td>Quarterly and annually</td>
<td>Program reports and antiretroviral therapy registers</td>
</tr>
<tr>
<td>Collaborative activities</td>
<td>Adults and children newly enrolled in HIV care who start treatment for latent TB infection (isoniazid preventive therapy) among the total number of adults and children newly enrolled in HIV care over a given time period (number and percentage) (TB/HIV-4)</td>
<td>–</td>
<td>Quarterly and annually</td>
<td>Program reports and antiretroviral therapy registers</td>
</tr>
<tr>
<td>Policy development including workplace policy</td>
<td>National Composite Policy Index (HIV-SE1)</td>
<td>UNGASS #2</td>
<td>Every 2 years</td>
<td>Desk review and key informant interview</td>
</tr>
<tr>
<td></td>
<td>Enterprises implementing an HIV workplace program (number and percentage) (HIV-SE2)</td>
<td>–</td>
<td>Annually</td>
<td>Special surveys</td>
</tr>
<tr>
<td></td>
<td>This indicator will be included in the next generation of indicators developed by the United States President’s Emergency Plan for AIDS Relief.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Supportive environment</td>
<td>Municipalities with at least one human rights network functioning (number and percentage) (HIV-SE3)</td>
<td>–</td>
<td>Annually</td>
<td>Special survey Desk reviews</td>
</tr>
</tbody>
</table>

---

1. In countries with programs supported by the United States President’s Emergency Plan for AIDS Relief, programs may want to include an indicator on the provision of care (“Number and percentage of adults and children receiving a minimum of one clinical care service during the reporting period”). This captures information on services provided in the facility as well.

2. In countries with programs supported by the United States President’s Emergency Plan for AIDS Relief, this indicator can also be collected on a routine basis from program records.
Table 12 lists the indicators of outcome and impact that are used to measure overall program progress against achieving impact. When selecting these indicators, countries should have baseline data available and invest in data collection and analysis over the program term.

### Table 12. Selected HIV impact and outcome indicators

<table>
<thead>
<tr>
<th>Indicators</th>
<th>Core national indicator</th>
<th>Frequency of data collection</th>
<th>Measurement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Young women and men aged 15–24 years who are HIV infected (percentage) (HIV-11)</td>
<td>UNGASS #22</td>
<td>Annually</td>
<td>HIV sentinel surveillance and population-based survey</td>
</tr>
<tr>
<td>Most-at-risk populations who are HIV-infected (percentage) (HIV-12)</td>
<td>UNGASS #23</td>
<td>Annually</td>
<td>Second-generation surveillance</td>
</tr>
<tr>
<td>Adults and children with HIV known to be on treatment 12 months after initiation of antiretroviral therapy (percentage) (HIV-13)</td>
<td>UNGASS #24</td>
<td>Annually</td>
<td>Program monitoring</td>
</tr>
<tr>
<td>Infants born to HIV-infected mothers who are infected (percentage) (HIV-14)</td>
<td>UNGASS #25</td>
<td>Annually</td>
<td>Modeled at UNAIDS headquarters, based on program coverage</td>
</tr>
<tr>
<td>Children under age 18 years who are orphans (percentage) (HIV-15)</td>
<td>Additional recommended indicator #15</td>
<td>Every 3–5 years</td>
<td>Population-based survey or census</td>
</tr>
<tr>
<td>Newly registered TB patients who are HIV positive (percentage) (HIV-16)</td>
<td>–</td>
<td>Annually</td>
<td>Surveillance</td>
</tr>
<tr>
<td>Never married young men and women aged 15–24 years who have never had sex (percentage) (HIV-O2)</td>
<td>Additional recommended indicator #12</td>
<td>Every 3–5 years</td>
<td>Population-based survey</td>
</tr>
<tr>
<td>Women and men aged 15–49 years who have had sexual intercourse with more than one partner in the past 12 months (percentage) (HIV-O3)</td>
<td>UNGASS #16</td>
<td>Every 3–5 years</td>
<td>Population-based survey</td>
</tr>
<tr>
<td>Women and men aged 15–49 years who have had more than one sexual partner in the past 12 months reporting the use of a condom during their last sexual intercourse (percentage) (HIV-O4)</td>
<td>UNGASS #17</td>
<td>Every 3–5 years</td>
<td>Population-based survey</td>
</tr>
<tr>
<td>Female and male sex workers reporting the use of a condom with their most recent client (percentage) (HIV-O5)</td>
<td>UNGASS #18</td>
<td>Every 2 years</td>
<td>Behavioral survey</td>
</tr>
<tr>
<td>Men reporting the use of a condom the last time they had anal sex with a male partner (percentage) (HIV-O6)</td>
<td>UNGASS #19</td>
<td>Every 2 years</td>
<td>Behavioral survey</td>
</tr>
<tr>
<td>Injecting drug users reporting the use of a condom the last time they had sexual intercourse (percentage) (HIV-O7)</td>
<td>UNGASS #20</td>
<td>Every 2 years</td>
<td>Behavioral survey</td>
</tr>
<tr>
<td>Injecting drug users reporting the use of sterile injecting equipment the last time they injected (percentage) (HIV-O8)</td>
<td>UNGASS #21</td>
<td>Every 2 years</td>
<td>Behavioral survey</td>
</tr>
<tr>
<td>Current school attendance among orphans and among non-orphans (percentage) (HIV-O9)</td>
<td>UNGASS #12</td>
<td>Every 3–5 years</td>
<td>Population-based survey</td>
</tr>
<tr>
<td>Women and men aged 15–49 years expressing accepting attitudes towards people living with HIV (percentage) (HIV-O10)</td>
<td>Additional recommended indicator #14</td>
<td>Every 3–5 years</td>
<td>Population-based survey</td>
</tr>
</tbody>
</table>

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a This column indicates whether indicators have been extracted from the core indicators for national AIDS programs: the 15 indicators related to the United Nations General Assembly Special Session on HIV/AIDS (UNGASS) and the 25 additional recommended indicators.

b HIV sexual behavior indicators should be analyzed together to assess overall behavior change (as important interactions can occur). Outcomes can be collected every 2–5 years, with a population-based survey (such as Demographic and Health Surveys and Multiple Indicator Cluster Surveys) every three to five years and an HIV indicator survey (behavioral surveillance) in between.
Table 13 summarizes some of the measurement tools available to support the reporting of results. It shows the indicator area, methods for collection, limitations to collecting or interpreting data and recommendations to improve on limitations. Wherever possible, such existing sources of data should be leveraged and used in reporting.

**Table 13. Comparison of data measurement tools**

<table>
<thead>
<tr>
<th>Area</th>
<th>Methods for collection</th>
<th>Limitations</th>
<th>Recommendations</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIV prevalence levels</td>
<td>HIV sentinel site surveillance (a)</td>
<td>Difficult to accurately measure or estimate the risk population size Sample biases in (a) and (b)</td>
<td>Prevalence estimates should have ranges</td>
</tr>
<tr>
<td></td>
<td>General population-based surveys that collect specimens for HIV testing (b)</td>
<td></td>
<td>Use WHO/UNAIDS guidelines for conducting HIV sentinel serosurveys and for measuring the national HIV prevalence in population-based surveys</td>
</tr>
<tr>
<td></td>
<td>HIV prevalence modeling using surveys of particular most-at-risk populations (Workbook Method52)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Impact related to survival on antiretroviral therapy</td>
<td>Patient records from facilities aggregated</td>
<td>Tracking clients lost to follow-up requires adequate resources Records do not usually include mobile populations Cohort analyses can be complex</td>
<td>Set up and support a standardized patient monitoring and reporting system according to WHO recommendations</td>
</tr>
<tr>
<td>Knowledge and behavior among the general population</td>
<td>Population-based surveys (behavioral surveillance surveys, knowledge, attitudes and practice survey, Demographic and Health Surveys and Multiple Indicator Cluster Surveys)</td>
<td>Self-reporting biases Household surveys tend to undersample the population groups most at risk Conducted only every several years</td>
<td>Review timing of Demographic and Health Surveys and Multiple Indicator Cluster Surveys scheduled in a country to plan when the survey results will be available</td>
</tr>
<tr>
<td>Knowledge and behavior among the population groups most at risk</td>
<td>Special surveys of the population groups most at risk in country (behavioral surveillance surveys)</td>
<td>The representativeness of the sample is unknown Response biases</td>
<td>Plan for surveys targeting the population groups most at risk, especially in concentrated epidemics See the M&amp;E guide on the population groups most at risk53</td>
</tr>
<tr>
<td>National commitment, policies and strategies</td>
<td>Questionnaire Key informant survey</td>
<td>Quality is not always captured</td>
<td>For composite indicators and indexes, adapt standardized questions</td>
</tr>
<tr>
<td>People trained in various areas related to HIV prevention, treatment, care and support</td>
<td>Training records Certification records</td>
<td>Training is not always standardized Those attending training may not be delivering the services</td>
<td>Countries may want to implement certification processes to ensure that those trained meet the national minimum standards set on the training topic</td>
</tr>
<tr>
<td>Coverage of various services (such as districts with services and the number of facilities with services)</td>
<td>Health ministry reports Program reports Health facility surveys Facility accreditation records Records of nongovernmental organizations</td>
<td>Range in the quality of services provided – some may be below standards Capturing service provision outside the public sector may be difficult</td>
<td>Adapt standardized definitions of indicators that list the criteria for health facilities to be considered suitable to provide a particular service Set up a system to keep track of various providers of services within a district or country</td>
</tr>
</tbody>
</table>

52 See the UNAIDS epidemiological modeling software in the subsection on software products.

Table 13. Comparison of data measurement tools (continued)

<table>
<thead>
<tr>
<th>Area</th>
<th>Methods for collection</th>
<th>Limitations</th>
<th>Recommendations</th>
</tr>
</thead>
</table>
| Number of people reached by services | Routine health services statistics/program reports  
Client records and registers  
Records of nongovernmental organizations | Capturing service provision outside the public sector may be difficult  
Client registers or a system to maintain records must exist  
Aggregation within facilities may not be straightforward for interventions with a time span across months and where multiple data sources may exist (drug dispensing ledger at pharmacy and registers)  
Aggregation across facilities may lead to over- or underreporting when the same patient attends multiple service delivery points and the aggregation mechanism is not clear | Try to standardize data collection for various services so that information can be collated easily  
Give considerable thought to and clear directions on aggregation methods within facilities and across facilities for program monitoring |
| TB/HIV services | Client records and registers | Current TB- and HIV-related registers may not capture this information | Registers may need to be modified to capture this information; if necessary, modify registers according to WHO recommendations |
| Cross-cutting services where data is not easily extracted from existing registers | Client records, registers and special studies | Existing registers and reporting forms may not capture some of this information | Current practices and data collection forms should be reviewed to see how this information could be captured  
Referral links may need to be systematized and strengthened |
| Information on community-level programs and activities | Record-keeping forms  
Special surveys | Capturing service provision outside the public sector may be difficult  
Where multiple organizations are operating, different record-keeping systems may be in place | Set up a system to keep track of various providers of services within a district or country  
Partners working in communities may want to coordinate some basic data elements to be collected so that information can be collated and reported |
| Indicators related to populations most at risk, such as sex workers and injecting drug users | Special surveys (behavioral surveillance surveys) and (sero) surveillance  
Records of nongovernmental organizations | Difficult to accurately measure the size of at-risk populations  
Due to their mobile nature, there is a need to be careful with duplication in counting and whether trends can be captured over time | Refer to recommendation in international guide on M&E of populations most at risk (see reference 53 on the previous page)  
Align reporting requirements among those working with specific populations and Global Fund reporting needs |
5.6 Resources

5.6.1 General Resources

WHO can provide a wide range of assistance, including the latest publications related to M&E in the health sector. WHO can provide a wide range of assistance, including the latest publications related to M&E in the health sector.54 In addition to guidelines and general resources in the area, the WHO website provides the latest information on the universal access initiative.55

Since the creation of the UNAIDS Secretariat, several resource groups have been established to improve coordination among M&E actors. These include:

- **the UNAIDS Monitoring and Evaluation Reference Group (MERG), composed of UNAIDS Cosponsors and Secretariat M&E focal points, bilateral agencies, research institutes and individual experts, which assists in harmonizing M&E approaches and improving methods;**


- **the Global HIV/AIDS Monitoring and Evaluation Team (GAMET), composed of World Bank personnel and staff seconded from technical agencies, which focuses on M&E country support in World Bank-supported countries.**

At the country level, the UNAIDS Secretariat, with support from the country M&E advisers and partners, has been encouraging national authorities to set up a national-level M&E reference or support group to provide advice on national M&E strategies and the development of a national M&E plan and to assist in mobilizing resources for M&E and optimizing the use of data.

For HIV/TB, the Stop TB Partnership (http://www.stoptb.org) working groups provide a focus for coordinated action and support to the M&E of country-level activities related to:

- **DOTS expansion, including subgroups on laboratories and the public–private mix;**

- **TB/HIV; and**

- **multidrug-resistant TB.**

5.6.2 Technical support

Several mechanisms have been established to respond to the increasing need for technical support to implement HIV programs. The information below provides an overview of the major technical support mechanisms.

**UNAIDS M&E advisers**

The UNAIDS M&E advisers in about 60 countries are essential partners to both governments and civil society. The primary responsibility of these advisers is to provide technical support for developing and strengthening national M&E systems, with a focus on building national capacity to design M&E strategies, collect and analyze data and use data for decision-making. UNAIDS M&E advisers also play a role in monitoring and evaluating the performance of its grantees by strengthening the capacity of principal recipients and subrecipients to report on grant implementation.

**Global Implementation Support Team**56

The Global Implementation Support Team was established in 2005 as a forum for United Nations agencies and major funding entities such as the Global Fund and the World Bank to mobilize a rapid response to addressing implementation bottlenecks at the country level. In 2006, membership was expanded to include the United States Government (Office of the United States Global AIDS Coordinator), GTZ (Gesellschaft für Technische Zusammenarbeit) owned by the Government of Germany, the International Council of AIDS Service Organizations, the International HIV/AIDS Alliance, the International Coalition on AIDS and Development and the International Center for Technical Cooperation on HIV/AIDS. The mandate of the Global Implementation Support Team is to harmonize and coordinate technical support to address implementation bottlenecks, disseminate lessons learned and identify good practices. The Global Implementation Support Team is developing a time-sensitive global-level database, known as CoATS (Coordinating AIDS Technical Support) for technical support provision to enable improved planning and coordination of technical support. The Global Implementation Support Team is also taking forward research and analysis of global-level systemic issues that affect the provision of technical support.

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The UNAIDS Technical Support Facilities

UNAIDS has established Technical Support Facilities across the world that together cover five global regions. The Facilities provide experienced, quality-assured consultants to design programs and solve problems in strategic planning, communication, resource mobilization and tracking, M&E, management and selected thematic areas.

The World Bank Global HIV/AIDS Monitoring and Evaluation Team

The Global HIV/AIDS Program of the World Bank hosts the Global HIV/AIDS Monitoring and Evaluation Team (GAMET). The central mission of GAMET is to help governments around the world to improve the quality of HIV information for policy and program decision-making. GAMET works closely with UNAIDS, the Global Fund, the United States Government and other global partners to achieve this objective. GAMET helps strengthen national M&E capacity through deployment of an international team of M&E specialists, based primarily in countries in need. GAMET has the following areas of focus:

- support for the development of national M&E frameworks, operational plans and budgets;
- improvement of data use for programming and decision-making; and
- improvement of evidence-based results information (evaluation, operations research and others).

The United States Government

The United States Government supports the implementation of Global Fund grants through a wide variety of mechanisms, including those responding to demand-driven requests for short-term technical assistance and those providing short and longer-term support through the bilateral United States President's Emergency Plan for AIDS Relief and President's Malaria Initiative. To provide country coordination mechanisms and principal recipients with urgent short-term technical assistance, including that in M&E, the United States Government funds technical assistance efforts through Roll Back Malaria, the Stop TB Partnership, the Green Light Committee, UNAIDS Technical Support Facilities and the Grant Management Solutions project.

Country coordination mechanisms and principal recipients can submit requests to the United States Government for support through Grant Management Solutions in a number of technical areas; M&E support from Grant Management Solutions includes facilitating the M&E Systems Strengthening Tool, developing M&E action plans and supporting monitoring and reporting systems.

TB/HIV

In general, the same support mechanisms as for the TB program are in place. More specifically, the reader can seek information on the following websites:

- the International Union against Tuberculosis and Lung Disease: http://www.iuatld.org;
- the KNCV Tuberculosis Foundation: http://www.kncvtbc.nl; and
- the TB team of the Stop TB partnership: http://stoptb.org/wg/tbteam.

5.6.3 Software products

The UNAIDS Country Response Information System (CRIS) is an indicator data management tool that is suitable for use at the national level and at the subnational or program level. CRIS is prepopulated with several recommended indicators. Users of CRIS have the option of adding their own indicators or of downloading indicators into their CRIS system from the HIV Indicator Registry. CRIS was recently enhanced to support data on programs and projects, routine monitoring at the subnational and facility levels, local system integration, customization and data exchange. This latest version of CRIS (CRIS V3) was released in late 2008.

Other important software products include the following:

- the Estimation and Projection Package (UNAIDS), which is used to estimate and project adult HIV prevalence from surveillance data;
- the Workbook Method (UNAIDS) to estimate and project adult HIV prevalence from surveillance data in countries with low-level or concentrated epidemics; and

5.6.4 Financial tracking

Understanding the flow of financial resources from funding source to beneficiary populations is an essential part of M&E of the response to the HIV pandemic. UNAIDS collects both global and national data, quantifying financing in HIV programs in low- and middle-income countries to develop and maintain the best possible estimates of actual spending and tracking the progress of global commitments.60

5.6.5 Guidelines and essential Resources

In addition to the resources listed earlier in this section, several publications and links to guidance materials are useful for monitoring and evaluating HIV programs.


HIV/TB


**Publications and websites on gender-sensitive HIV programs**


5.7
Description of HIV indicators
### Prevention indicator (HIV-P1)

**Behavior change communication – mass media; community outreach and schools**

Percentage of young women and men aged 15–24 years who both correctly identify ways of preventing the sexual transmission of HIV and who reject the major misconceptions about HIV transmission

#### Rationale

HIV epidemics are perpetuated through primarily sexual transmission of infection to successive generations of young people. Sound knowledge about HIV is an essential prerequisite - albeit, often an insufficient condition - for adoption of behavior that reduces the risk of HIV transmission.

**Applicability:** All countries

#### Definition of the indicator

**Numerator:** Number of respondents aged 15–24 years who answered all five questions correctly

**Denominator:** Number of all respondents aged 15–24 years

**Disaggregation:** Age groups: 15–19 years; 20–24 years

- Sex: female, male

#### Measurement

This indicator is constructed from responses to the following set of prompted questions.

1. *Can the risk of HIV transmission be reduced by having sex with only one uninfected partner who has no other partners?*
2. *Can a person reduce the risk of getting HIV by using a condom every time he or she has sex?*
3. *Can a healthy-looking person have HIV?*
4. *Can a person get HIV from mosquito bites?*
5. *Can a person get HIV by sharing food with someone who is infected?*

The first three questions should not be altered. Questions 4 and 5 ask about local misconceptions and may be replaced by the most common misconceptions in your country. Examples include: “Can a person get HIV by hugging or shaking hands with a person who is infected?” and “Can a person get HIV through supernatural means?”.

Those who have never heard of HIV and AIDS should be excluded from the numerator but included in the denominator. An answer of “I don’t know” should be recorded as an incorrect answer.

Scores for each of the individual questions (based on the same denominator) are required as well as the score for the composite indicator.

**Tool:** population-based surveys (Demographic Health Survey, AIDS Indicator Survey, Multiple Indicator Cluster Survey or other representative survey)

**Frequency:** preferred: every two years; minimum: every 4–5 years

For more details on *interpretation* of the indicator, see Monitoring the Declaration of Commitment on HIV/AIDS: guidelines on the construction of core indicators. 2008 reporting.

#### Source

Prevention indicator (HIV-P2)

Behavior change communication – mass media; community outreach and schools

Percentage of most-at-risk populations who both correctly identify ways of preventing the sexual transmission of HIV and who reject the major misconceptions about HIV transmission

Rationale

Concentrated epidemics are generally driven by sexual transmission or use of contaminated injecting equipment. Sound knowledge about HIV is an essential prerequisite if people are going to adopt behavior that reduces the risk of infection. This indicator should be calculated separately for each population group that is considered most at risk in a given country: sex workers, injecting drug users and men who have sex with men. Countries with generalized epidemics may also have a concentrated subepidemic among one or more most-at-risk populations. If so, calculating and reporting on this indicator for these populations would be valuable. Applicability: countries with concentrated or low-level epidemics, including countries with concentrated subepidemics within a generalized epidemic.

Definition of the indicator

Numerator: Number of most-at-risk population respondents who correctly answered all five questions

Denominator: Number of most-at-risk population respondents who gave answers, including “I don't know”, to all five questions

Disaggregation: Age groups: <25 years; 25+ years

Sex: female, male

Measurement

Respondents are asked the following five questions:

1. Can having sex with only one faithful, uninfected partner reduce the risk of HIV transmission?
2. Can using condoms reduce the risk of HIV transmission?
3. Can a healthy-looking person have HIV?
4. Can a person get HIV from mosquito bites?
5. Can a person get HIV by sharing a meal with someone who is infected?

The first three questions should not be altered. Questions 4 and 5 may be replaced by the most common misconceptions in the country.

Respondents who have never heard of HIV and AIDS should be excluded from the numerator but included in the denominator.

Scores for each of the individual questions – based on the same denominator – are required in addition to the score for the composite indicator.

Whenever possible, data for most-at-risk populations should be collected through civil society organizations that have worked closely with this population in the field.

Access to survey respondents as well as the data collected from them must remain confidential.

Tool: special behavioral surveys such as the Family Health International Behavioral Surveillance Survey for most-at-risk populations

Frequency: every two years

For more details on interpretation of the indicator, see Monitoring the Declaration of Commitment on HIV/AIDS: guidelines on the construction of core indicators. 2008 reporting.

Source


Resources


Prevention indicator (HIV-P3)

Behavior change communication – community outreach and schools

Number of individuals from the targeted audience reached through community outreach with at least one HIV information, education, communication or behavior change communication

Rationale

This indicator measures the number of individuals who attended community outreach activities focused on creating awareness on how to prevent HIV. Community outreach is defined as any effort to affect change that might include peer education, classroom, small group and/or one-on-one information, education, communication or behavior change communication. Some programs have clear messages designed to reach a specific audience. For the purposes of this indicator count, community outreach does not include large-scale public gatherings.

Applicability: all countries.

Definition of the indicator

Numerator: Number of individuals reached with HIV information, education, communication or behavior change communication

Denominator: Not applicable

Disaggregation: By target group

Measurement

The data on this indicator can be collected through program monitoring reports of implementing partners. These records are compiled and aggregated to obtain an overall measure of the reach of prevention programs. Implementers at the community level need to devise reliable tracking mechanisms that capture accurate data to avoid double counting. The designated national body for data aggregation is responsible, to the extent possible, for adjusting for overlap between multiple programs serving the same individuals in a target area.

An individual may be counted in separate program areas, such as youth out of school, who may be served (and therefore counted) separately by a youth program, program targeting married men, antiretroviral therapy program, etc.

Tool: routine program monitoring reports

Frequency: quarterly

Resources


Prevention indicator (HIV-P4a)
Behavior change communication – community outreach and schools

Percentage of most-at-risk-populations reached with HIV prevention programs

Rationale
Most-at-risk population groups are often difficult to reach with HIV prevention programs. However, preventing the spread of HIV among these population groups and among the general population requires that they access these services. This indicator should be calculated separately for each population group that is considered most at risk in a given country: sex workers, injecting drug users, men who have sex with men and youth out of school.

Countries with generalized epidemics may also have a concentrated subepidemic among one or more most-at-risk population groups. If so, they should calculate and report this indicator for these population groups.

Applicability: countries with concentrated or low-level epidemics, including countries with concentrated subepidemics within a generalized epidemic.

Definition of the indicator
Numerator: Number of most-at-risk population respondents who replied “yes” to both (all three for injecting drug users) questions
Denominator: Total number of respondents surveyed
Disaggregation: Age groups: <25 years versus 25+ years
Sex: female, male
Most-at-risk population groups: injecting drug users, men who have sex with men, sex workers

Measurement
Respondents are asked the following questions.

1. Do you know where you can go if you wish to receive an HIV test?
2. In the past 12 months, have you been given condoms (such as through an outreach service, drop-in center or sexual health clinic)?
   Injecting drug users should be asked the following additional question.
3. In the past 12 months, have you been given sterile needles and syringes (such as by an outreach worker, a peer educator or from a needle exchange program)?

Scores for each of the individual questions – based on the same denominator – are required in addition to the score for the composite indicator.

Whenever possible, data for most-at-risk population groups should be collected through civil society organizations that have worked closely with this population in the field.

Access to survey respondents as well as the data collected from them must remain confidential.

Tool: behavioral surveillance or other special surveys

Frequency: every two years

For more details on interpretation of the indicator, see Monitoring the Declaration of Commitment on HIV/AIDS: guidelines on the construction of core indicators. 2008 reporting.

Source
Resources


**Prevention indicator (HIV-P4b)**

**Behavior change communication – community outreach and schools**

**Number of most-at-risk populations reached with HIV prevention programs**

**Rationale**

Most-at-risk population groups are often difficult to reach with HIV prevention programmes. However, preventing the spread of HIV among these populations and among the general population requires that they access these services. This indicator should be calculated separately for each population group that is considered most at risk in a given country: sex workers, injecting drug users, men who have sex with men and youth out of school.

Countries with generalized epidemics may also have a concentrated subepidemic among one or more most-at-risk population groups. If so, they should calculate and report this indicator for those population groups.

**Applicability:** countries with concentrated or low-level epidemics, including countries with concentrated subepidemics within a generalized epidemic.

**Definition of the indicator**

**Numerator:** Number of most-at-risk populations who have received a basic package of services

**Disaggregation:** Age groups: <25 years versus 25+ years

- Sex: female, male
- Most-at-risk population groups: injecting drug users, men who have sex with men, sex workers, young people out of school

**Measurement**

The data should be collected through program monitoring reports of implementing partners on a more routine basis. These records are compiled and aggregated to obtain an overall measure of the number of people reached by a prevention program, including young people out of school. Implementers at the community level need to devise reliable tracking mechanisms that capture accurate data to avoid double counting. Whenever possible, data for most-at-risk population groups should be collected at the community level through organizations that have worked closely with these people. There is a need to ensure that clients served (as opposed to client visits) for the same service or across services are counted. Data for this indicator can also be tracked through behavioral surveillance surveys (see UNGASS #9 indicator).

There is a need for clear information flow mechanisms and tools (devised by national-level partners and bodies) that capture this kind of community data into national-level databases. Different types of services will all count the same in estimating overall service coverage.

It is suggested that the essential minimum package of services for most-at-risk population groups should include:

- material on behavior change communication (promoting safer behavior);
- consumables (condoms; syringes if client is also an injecting drug user);
- counseling from a social worker or other relevant specialist; and
- referral to another specialist or service, as appropriate and based on individual client needs.

This list defines the minimum number of services that an individual should receive to be counted as “reached” and by no means diminishes the importance of other relevant services provided at service delivery points.

**Tool:** program reports

**Frequency:** continuous, with monthly or quarterly aggregation

**Resource**


---

\(a\) This indicator was suggested by the participants of the international workshop on monitoring services and systems at the community level (Pretoria, South Africa, August 2008).
### Prevention indicator (HIV-P5)

**Behavior change communication – community outreach and schools**

<table>
<thead>
<tr>
<th>Percentage of schools that provided life skills–based HIV education in the last academic year</th>
</tr>
</thead>
</table>

**Rationale**

Life skills–based education is an effective method that uses participatory exercises to teach behavior to young people that helps them deal with the challenges and demands of everyday life. It can include decision-making and problem-solving skills, creative and critical thinking, self-awareness, communication and interpersonal relations. It can also teach young people how to cope with their emotions and causes of stress. When adapted specifically for HIV education in schools, a life skills–based approach helps young people understand and assess the individual, social and environmental factors that raise and lower the risk of HIV transmission. When properly implemented, it can positively affect behavior, including delaying sexual debut and reducing the number of sexual partners.

**Applicability:** all countries

**Definition of the indicator**

**Numerator:** Number of schools that provided life skills–based HIV education in the last academic year

**Denominator:** Number of schools surveyed

Indicator scores are required for all schools combined and for primary and secondary schools separately. If the school provides both primary and secondary education, information should be collected and reported separately for both levels of education.

**Measurement**

Principals or heads of a nationally representative sample of schools (to include both private and public schools) are briefed on the meaning of life skills–based HIV education and are then asked the following question: Within the last academic year, did your school provide at least 30 hours of life skills training to each grade?

**Tool:** school survey or education program review

**Frequency:** every two years


**Source**


**Resources**


**Notes from the international workshop on monitoring services and systems at the community level (Pretoria, South Africa, August 2008)**

This indicator measures both formal and non-formal schools and rural and urban school settings, and the data need to be disaggregated accordingly.
**Prevention indicator (HIV-P6)**

Behavior change communication – community outreach and schools

| Number and percentage of young people aged 10–24 years reached by life skills–based HIV education in schools |

**Rationale**

This indicator is intended to measure the level of coverage of life skills–based HIV education and communication in a school setting, as an important and effective method of teaching behavior to young people that helps them deal with the challenges and demands of everyday life. When adapted specifically for HIV education in schools, a life skills–based approach helps young people to understand and assess the individual, social and environmental factors that raise and lower the risk of HIV transmission. When properly implemented, it can positively affect behavior, including delaying sexual debut and reducing the number of sexual partners. Life skills include decision-making and problem-solving skills, creative and critical thinking, self-awareness, communication, negotiation and interpersonal relations.

**Definition of the indicator**

**Numerator:** Number of young people reached through any effort to affect change, including peer education, class room, small group, and/or one-on-one information, education and communication or behavior change communication to promote change in behavior in a school setting

**Denominator:** Number of young people attending targeted schools

**Measurement**

The data can be collected through program monitoring reports of implementing partners. These records are compiled and aggregated to obtain an overall measure of the number of young people reached by HIV education based on a life skills–based approach in schools. When an indicator is based on program data, an attempt to address the issue of double counting during the reference period should be made.

**Tools:** school survey or education program review

**Frequency:** quarterly survey and review every two years

**Resource**


**Notes from the international workshop on monitoring services and systems at the community level (Pretoria, South Africa, August 2008)**

This indicator measures both formal and non-formal schools and rural and urban school settings, and the data need to be disaggregated accordingly. Implementers at the community level need to devise reliable tracking mechanisms that capture accurate data to avoid double counting. Clear information flow mechanisms and tools (devised by national-level partners or bodies) are needed that capture this kind of community data into national-level databases. Different types of services will all count the same in estimating overall service coverage.
Prevention indicator (HIV-P7)

### Condoms

Number of male and female condoms available for distribution nationwide during the last 12 months per person aged 15-49 years

#### Rationale

This indicator measures the number of condoms available for use by those in the most sexually active age group. Where active efforts are made to promote the availability of female condoms, this indicator should include both female and male condoms, although the indicator should be disaggregated by condom type. The first challenge for national programs promoting condom use is to ensure that there are enough condoms in the country to satisfy demand. This indicator can be used together with indicators of sexual behavior to give a powerful picture of the adequacy of condom provision.

#### Definition of the indicator

**Numerator:** Number of male and female condoms available for distribution nationwide in the last 12 months

**Denominator:** Total population aged 15–49 years

**Disaggregation:** By condom type: female condoms, male condoms
- Total number of male and female condoms distributed through the private sector
- Total number of male and female condoms distributed free of charge

#### Measurement

The numerator is calculated using information derived from key informant interviews, program records and/or inventory logs. For key informant interviews, individuals with special knowledge of the national condom supply situation are interviewed to identify all possible sources of condom manufacture, import, distribution and storage in the country. Next, data on the number of condoms in stock, the number of condoms imported, the number of condoms manufactured in-country and the number of condoms exported are collected from all groups involved in acquiring and distributing condoms: manufacturers and major commercial condom importers and distributors; condom storage facilities; government; parastatals; nongovernmental organizations; and major donors.

The number of organizations involved may complicate the calculation of the number of condoms imported. Many countries have deregulated condom imports to maximize the availability of condoms. This means that condoms may be imported by a wide variety of companies, nongovernmental organizations, donors and government departments. Information about the number of condoms imported may not be collected in a centralized or systematic fashion.

Where possible, data should be presented by program. Traditionally, there has been a distinction between condoms distributed through family planning programs and those distributed to reduce sexually transmitted infections. Generally, condoms distributed by family planning programs are primarily intended for use during sex within stable monogamous unions, carrying a low risk of HIV transmission, whereas condoms distributed through HIV programs are primarily intended for use during sex in situations that confer a relatively higher risk of HIV transmission.

**Tools:** key informant interviews, program records or inventory logs

**Frequency:** at least annually

For additional information on calculation and interpretation of this indicator see Core indicators for national AIDS programs: guidance and specifications for additional recommended indicators.

#### Source

Prevention indicator (HIV-P8a)

Testing and counseling

Percentage of women and men aged 15–49 years who received an HIV test in the last 12 months and who know their results

Rationale

To protect themselves and to prevent infecting others, it is important for individuals to know their HIV status. Knowledge of one's status is also a critical factor in the decision to seek treatment.

Applicability: all countries

Definition of the indicator

Numerator: Number of respondents aged 15–49 years who have been tested for HIV during the last 12 months and who know their results

Denominator: Number of all respondents aged 15–49 years

Disaggregation: Age groups: 15–19 years, 20–24 years, 25–49 years

Sex: female, male

The denominator includes respondents who have never heard of HIV or AIDS.

Measurement

Respondents are asked:

1. I don't want to know the results, but have you been tested for HIV in the last 12 months?
2. If yes: I don't want to know the results, but did you get the results of that test?

Tool: population-based surveys (Demographic Health Survey, AIDS Indicator Survey, Multiple Indicator Cluster Survey or other representative survey) or program records

Frequency: preferred: every two years; minimum: every 4–5 years

For more details on interpretation of the indicator, see Monitoring the Declaration of Commitment on HIV/AIDS: guidelines on the construction of core indicators. 2008 reporting.

Source


Resource

Prevention indicator (HIV-P8b)

Testing and counseling

Number of people who received testing and counseling services for HIV and received their test results

Rationale

This indicator is intended to monitor trends in the uptake of HIV testing and counseling services over time within a country, regardless of how testing and counseling services are delivered.

The recommended levels of disaggregation are intended to monitor the access to and uptake of HIV testing and counseling by specific population groups that are most affected by the epidemic. Data could also be useful for projecting programmatic needs such as HIV test kits and other staffing resources.

Applicability: all countries

Definition of the indicator

Numerator: Number of people who have been tested for HIV and who received their results

Disaggregation: Age groups: <15 years versus >15 years
Sex: female, male
Target population groups: pregnant women, TB patients, general population or others; or type of site (such as services for preventing mother-to-child transmission, antiretroviral therapy, TB or others)

Measurement

Data for the numerator should be generated by counting the number of individuals who received HIV testing and counseling from any service delivery point. Adequately collecting data for this indicator requires a minimum provision of the following services: counseling, testing, return and receipt of test results.

Tool: existing testing and counselling registers; reporting forms and program data from various facilities that capture HIV testing and counselling encounters

Frequency: continuous collection (at the facility level or community level); with quarterly aggregation

Interpretation: This indicator is intended to monitor trends in the uptake of testing and counseling over time. However, in some cases, data for this indicator might include repeat testers. Repeat testing is common practice among most HIV testing and counselling programs, and it is important to recognize this and interpret the aggregated data with caution. While repeat testing is expected to be somewhat limited to any one year's data, the same cannot be said for aggregation of data across years. When testing and counselling data are aggregated across years, the term “testing encounters” should be used to describe the data.

Over time, the number of people who are expected to be tested and counseled within a country will vary depending on numerous factors such as the numbers of people with previously confirmed positive status or the number of people who may be at perceived risk of HIV infection, and hence this indicator should be interpreted accordingly.

In addition, the type and focus of a testing and counseling program for each respective country affects its interpretation. For example, a program that targets high-risk groups or areas of highest prevalence may have smaller numbers tested and yet higher yield in identifying HIV infection than a program providing general testing and counselling services. These higher-risk population groups may also experience a higher rate of repeat testing given programmatic recommendations for this target population group.

Finally, this indicator does not provide information on whether those who were tested were adequately referred to and are receiving follow-up services to benefit from knowing their HIV status.

Resource

The United States President's Emergency Plan for AIDS Relief is preparing a guidance document on next-generation indicators that is expected to be released in 2009.
**Prevention indicator (HIV-P9)**

**Testing and counseling**

<table>
<thead>
<tr>
<th>Percentage of most-at-risk-populations who received an HIV test in the last 12 months and who know their results</th>
</tr>
</thead>
</table>

**Rationale**

To protect themselves and to prevent infecting others, it is important for most-at-risk populations to know their HIV status. Knowledge of one's status is also a critical factor in the decision to seek treatment. This indicator should be calculated separately for each population that is considered most at risk in a given country: sex workers, injecting drug users and men who have sex with men.

Countries with generalized epidemics may also have a concentrated subepidemic among one or more most-at-risk population groups. If so, they should calculate and report this indicator for these population groups.

**Applicability:** countries with concentrated or low-level epidemics, including countries with concentrated subepidemics within a generalized epidemic.

**Definition of the indicator**

**Numerator:** Number of most-at-risk population group respondents who have been tested for HIV during the last 12 months and who know the results

**Denominator:** Number of most-at-risk population group included in the sample

**Disaggregation:** Age groups: <25 years, 25+ years  
Sex: female, male

Whenever possible, data for most-at-risk populations should be collected through civil society organizations that have worked closely with this population in the field.

Access to survey respondents and the data collected from them must remain confidential.

**Measurement**

Respondents are asked the following questions.

1. Have you been tested for HIV in the last 12 months?  
2. If yes: I don't want to know the results, but did you receive the results of that test?

**Tool:** behavioral surveillance or other special surveys

**Frequency:** every two years

For more details on interpretation of the indicator, see Monitoring the Declaration of Commitment on HIV/AIDS: guidelines on the construction of core indicators. 2008 reporting.

**Source**


**Resources**


Prevention indicator (HIV-P10)
Testing and counseling

Percentage of sexually active young women and men aged 15–24 years who received an HIV test in the last 12 months and know their results

Rationale
To protect themselves against HIV and to avoid infecting others, sexually active young people should know their HIV status. This indicator provides a measure of the effectiveness of interventions that promote HIV counseling and testing among young people. This is important to know, because young people may feel that there are barriers to accessing services related to sensitive issues, such as sexual health.

Applicability: All countries

Definition of the indicator
Numerator: The number of respondents aged 15–24 years who had an HIV test in the last 12 months and who know their results
Denominator: The number of respondents aged 15–24 years who have had sexual intercourse in the last 12 months

Disaggregation: Age groups: 15–19 years, 20–24 years
Sex: female, male

Measurement
In a population-based survey, respondents are first asked whether they have had sexual intercourse in the last 12 months. Those replying affirmatively are then asked whether they were tested in the last 12 months and, if yes, whether they know the results of their HIV test. Those replying affirmatively to these three questions are counted in the numerator.

The validity of the data may be affected by reporting bias because some respondents may not want to admit to knowing their HIV status for fear of being pressed to disclose it. Conditions under which respondents are interviewed are likely to affect reporting bias. For example, respondents are more likely to be reticent if data are collected in the presence of other people than if they are collected in strict privacy.

Tool: population-based survey, such as the AIDS Indicator Survey (AIS) or Demographic and Health Survey (DHS)

Frequency: preferred: every 2 years; minimum: every 4–5 years.

For more details on calculation and interpretation of the indicator, see Core indicators for national AIDS programs: guidance and specifications for additional recommended indicators.

Source
Prevention indicator (HIV-P11)

Prevention of mother-to-child transmission

Percentage of pregnant women who were tested for HIV and who know their results

Rationale

Mother-to-child transmission of HIV infection can occur during pregnancy, labor and delivery or during breastfeeding. The risk of mother-to-child transmission can be reduced by a range of interventions, including providing antiretroviral prophylaxis to women during pregnancy and labor and to the infant in the first weeks of life; obstetrical interventions, including elective caesarean delivery; and completely avoiding breastfeeding.

Receiving HIV testing and counseling services as early as possible during pregnancy enables pregnant women living with HIV to benefit from HIV services and to access interventions for reducing HIV transmission to their infants.

Applicability: all countries

Definition of the indicator

Numerador: The number of women attending antenatal care, labor and delivery, and postpartum services who were tested for HIV and received their result, plus women with known HIV infection attending antenatal care for a new pregnancy in the last 12 months

Denominator: Estimated number of pregnant women in the last 12 months

Disaggregation: Service type: antenatal care, labor and delivery, postpartum

Measurement

The numerator is the sum of categories a–d:

a) pregnant women who received an HIV test and result during antenatal care;

b) pregnant women attending labor and delivery with unknown HIV status who were tested for HIV in the labor and delivery facility and received their result;

c) women with unknown HIV status attending postpartum services within 72 hours of delivery who were tested for HIV and received their result; and

d) pregnant women with known HIV infection attending antenatal care for a new pregnancy.

Pregnant (and postpartum) women with unknown status are women who were not tested during antenatal care or labor and delivery for this pregnancy or did not have documented proof of having been tested during antenatal care or labor and delivery for this pregnancy.

Pregnant women with known HIV infection are women who were tested and confirmed HIV-positive at any point before the current pregnancy and are attending antenatal care for a new pregnancy. Pregnant women with known HIV infection attending antenatal care for a new pregnancy do not need to be retested but do need subsequent services for preventing mother-to-child transmission and are counted in the numerator.

Data to construct the numerator should come from national program records aggregated from facility registers in antenatal care, labor and delivery and postpartum services. Health facility registers should include data on known HIV infection among pregnant women living with HIV accessing antenatal care services for a new pregnancy in order for them to receive subsequent services for preventing mother-to-child transmission. All service providers should be included: public, private, faith-based and nongovernmental organizations.

Not all categories are applicable or significant to all settings (such as women of unknown status tested within 72 hours postpartum). Countries may want to set priorities for investing resources for measuring the categories that are appropriate to their country context.
The denominator is generated through a population estimate of the number of pregnant women giving birth in the last 12 months, which can be obtained from the estimates of births from central statistics offices or the estimates of the United Nations Population Division.

In countries with low-level and concentrated epidemics where policies to identify the HIV status of all pregnant women do not exist, the denominator should be adapted to the target population of pregnant women whose HIV status should be assessed.

**Tool:** numerator: program or facility records; denominator: population estimate

**Frequency:** numerator: ongoing; denominator: annually

For more details on calculation and interpretation of the indicator, see Core indicators for national AIDS programs: guidance and specifications for additional recommended indicators.

**Source**

### Prevention indicator (HIV-P12)

#### Prevention of mother-to-child transmission

<table>
<thead>
<tr>
<th>Prevention indicator (HIV-P12)</th>
<th>Percentage of HIV-positive pregnant women who received antiretrovirals to reduce the risk of mother-to-child transmission</th>
</tr>
</thead>
</table>

#### Rationale

In the absence of any preventive interventions, infants born to and breastfed by women living with HIV have roughly a one in three chance of acquiring infection themselves. This can happen during pregnancy, during labor and delivery or after delivery through breastfeeding. The risk of mother-to-child transmission can be significantly reduced through the complementary approaches of providing antiretroviral prophylactic regimens for the mother with or without prophylaxis to the infant, implementing safe delivery practices and using safe alternatives to breastfeeding. Antiretroviral prophylaxis followed by exclusive breastfeeding may also reduce the risk of vertical transmission when breastfeeding is limited to the first six months.

**Applicability:** all countries

#### Definition of the indicator

**Numerator:** Number of HIV-infected pregnant women who received antiretroviral drugs to reduce the risk of mother-to-child transmission

**Denominator:** Estimated number of HIV-infected pregnant women in the last 12 months

#### Measurement

The number of HIV-infected pregnant women who received antiretroviral drugs to reduce the risk of mother-to-child transmission during the last 12 months is obtained from program monitoring records compiled from patient records and registers.

There are four general antiretroviral treatment options that HIV-infected women can receive for the prevention of mother-to-child transmission:

1) *single-dose nevirapine*;

2) *prophylactic regimens using a combination of two antiretroviral drugs*;

3) *prophylactic regimens using a combination of three antiretroviral drugs*; and

4) *antiretroviral therapy for HIV-positive pregnant women eligible for treatment*.

HIV-infected women receiving any of the four options meet the definition for the numerator. Countries should report as the numerator the total number of HIV-infected pregnant women who were provided with any of the antiretroviral regimens in options 1 to 4.

In option 4, HIV-infected pregnant women who are eligible for antiretroviral therapy and receive a treatment regimen will also benefit from the prophylactic effect for preventing mother-to-child transmission and thus are included in the numerator.

Antiretroviral drugs can be provided to HIV-infected women during pregnancy, at labor and shortly after delivery, and provision can take place at a number of sites. Countries should focus on compiling data for the numerator from patient registers at antenatal clinics, delivery and care sites and postpartum care service sites.

Women receiving antiretroviral drugs in both the private sector and the public sector should be included in the denominator where data for both are available.

The denominator is generated by estimating the number of HIV-infected women who were pregnant in the last 12 months. This is based on surveillance data from antenatal clinics.
Two methods are possible for generating the estimate for the denominator:

1. *Estimates generated by a projection model such as Spectrum; or*

2. *Multiplying:*

   (a) the total number of women who gave birth in the last 12 months, which can be obtained from the estimates of births by central statistics offices; and

   (b) the most recent national estimate of HIV prevalence in pregnant women, which can be derived from HIV sentinel surveillance antenatal clinic estimates.

**Tool:** for the numerator: program monitoring tools; for the denominator: antenatal clinic surveillance or estimation model.

**Frequency:** data should be collected continuously at the facility level. Data should be aggregated periodically, preferably monthly or quarterly.

For more details on *interpretation* of the indicator, see Monitoring the Declaration of Commitment on HIV/AIDS: guidelines on the construction of core indicators. 2008 reporting.

**Source**


**Resource**

**Prevention indicator (HIV-P13)**

**Prevention of mother-to-child transmission**

Percentage of infants born to HIV-infected women who receive an HIV test within 12 months of birth

**Rationale**

Determining the HIV status of children exposed to HIV during pregnancy, labor or breastfeeding is an important part of follow-up services in programs for preventing mother-to-child HIV transmission. Infants infected with HIV during pregnancy, delivery or early postpartum often die before they are recognized as having HIV infection. HIV testing and counseling should therefore be recommended for all HIV-exposed infants or infants born to women living with HIV as a routine component of follow-up care. WHO recommends that national programs establish the capacity to provide early HIV virological testing of infants at six weeks or as soon as possible thereafter, to guide clinical decision-making at the earliest possible stage. Where virological testing is unavailable, antibody testing at 9–12 months of age is recommended.

**Applicability:** all countries

**Definition of the indicator**

*Numerator:* Number of infants in the last 12 months who received an HIV test within 12 months of birth, disaggregated by:

1) Infants who received virological testing in the first 2 months; and

2) Infants who were tested either virologically between 2 and 12 months or by antibody testing between 9 and 12 months.

*Denominator:* Estimated number of HIV-infected pregnant women giving birth in the last 12 months. This is a proxy measure for the number of infants born to HIV-infected women.

**Disaggregation:** Type and timing of testing: virological testing within 2 months, virological testing between 2 and 12 months or antibody testing between 9 and 12 months.

**Measurement**

Data for the numerator should be aggregated from the appropriate facility registers, which could include integrated maternal and child health registers, registers on the follow-up of HIV-exposed infants or pre–antiretroviral therapy registers. The register used may vary depending on the country context. For example, where HIV-exposed infants are followed up in the HIV care and treatment setting, countries may aggregate information either from a pre–antiretroviral therapy register adapted for follow-up of HIV-exposed infants or from a separate register for HIV-exposed infants.

Where feasible, infants born to mothers known to be HIV-infected (identified as being HIV-infected through a program for preventing mother-to-child transmission) should be included in the numerator. The number of infants who were tested, and not the number of HIV tests performed, should be counted, since many infants may be tested multiple times.

All service providers should be included: public, private, faith-based and nongovernmental organizations.

The denominator is generated by estimating the number of HIV-infected women who were pregnant in the last 12 months. This is based on HIV surveillance data from antenatal clinics, and estimates can be generated by:

1) *using a projection model, such as SPECTRUM; or*

2) *multiplying:*

   - The total number of women who gave birth in the last 12 months
   - The most recent national estimate of HIV prevalence among pregnant women
The total number of women who gave birth in the last 12 months can be obtained from estimates of births from central statistics offices or the estimates of the United Nations Population Division. The most recent national estimate of HIV prevalence among pregnant women can be derived from HIV sentinel surveillance data collected in antenatal clinics.

**Tools:** numerator: program or facility records; denominator: antenatal care surveillance, projection model, population estimates

**Frequency:** numerator: ongoing; denominator: annually

For more details on *calculation and interpretation* of the indicator, see Core indicators for national AIDS programs: guidance and specifications for additional recommended indicators.

**Source**

**Resource**
**Prevention indicator (HIV-P14)**

**Prevention of mother-to-child transmission**

<table>
<thead>
<tr>
<th>Prevention indicator (HIV-P14)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Percentage of infants born to HIV-infected women starting on co-trimoxazole prophylaxis within two months of birth</strong></td>
</tr>
</tbody>
</table>

**Rationale**

Co-trimoxazole prophylaxis is a simple and cost-effective intervention to prevent Pneumocystis jiroveci pneumonia (PCP) among HIV-exposed and -infected infants. PCP is the leading cause of serious respiratory disease among young HIV-infected infants in resource-limited countries and often occurs before HIV infection can be diagnosed. Because diagnosing HIV infection among young infants is difficult, all infants born to women living with HIV should receive co-trimoxazole prophylaxis starting at 4–6 weeks after birth and continuing until HIV infection has been excluded and the infant is no longer at risk of acquiring HIV through breastfeeding.

**Applicability:** all countries

**Definition of the indicator**

**Numerator:** Number of infants born to HIV-infected women in the last 12 months started on co-trimoxazole prophylaxis within two months of birth

**Denominator:** Estimated number of HIV-infected pregnant women giving birth in the last 12 months

**Disaggregation:** Not applicable

**Measurement**

Data for the numerator should be aggregated from the appropriate facility registers, which could include integrated maternal and child health registers, registers on the follow-up of HIV-exposed infants or pre–antiretroviral therapy registers. The register used may vary depending on the country context. For example, where HIV-exposed infants are followed up in the HIV care and treatment setting, countries may aggregate information either from a pre–antiretroviral therapy register adapted for follow-up of HIV-exposed infants or from a separate register for HIV-exposed infants.

The denominator is generated by estimating the number of HIV-infected women who were pregnant in the last 12 months. This is based on HIV surveillance data from antenatal clinics, and estimates can be generated by:

1) **using a projection model, such as Spectrum; or**
2) **multiplying:**
   
   \[ \text{The total number of women who gave birth in the last 12 months} \times \text{The most recent national estimate of HIV prevalence among pregnant women} \]

The total number of women who gave birth in the last 12 months can be obtained from estimates of births from central statistics offices or the estimates of the United Nations Population Division. The most recent national estimate of HIV prevalence among pregnant women can be derived from HIV sentinel surveillance data collected in antenatal clinics.

**Tool:** numerator: program or facility records; denominator: antenatal care surveillance, projection model, population estimates

**Frequency:** numerator: ongoing; denominator: annually

For more details on **calculation and interpretation** of the indicator, see Core indicators for national AIDS programs: guidance and specifications for additional recommended indicators.

**Source**

**Prevention indicator (HIV-P15)**

**Post-exposure prophylaxis**

| Percentage of health facilities with post-exposure prophylaxis available |

**Rationale**

Post-exposure prophylaxis (PEP) reduces the probability of HIV infection after exposure to potentially HIV-infected blood or body fluids. For maximum effectiveness, PEP should be provided within hours after exposure. PEP may be provided following occupational exposure (for example, in health care facilities) or non-occupational exposure (such as after sexual assault).

Within the health sector, PEP should be provided as part of a comprehensive standard precautions package that reduces staff and patient exposure to infectious hazards in health care settings. PEP for non-occupational exposure should be considered for people who have been sexually assaulted, particularly in countries with high HIV prevalence.

**Applicability:** all countries

**Definition of the indicator**

**Numerator:** Number of health facilities with PEP available for those who are at risk of HIV infection through occupational and/or non-occupational exposure to HIV

**Denominator:** Total number of health facilities

**Disaggregation:** Exposure: occupational, non-occupational

   Sector: public, private

**Measurement**

The numerator is calculated by summing the number of facilities reporting the availability of PEP services. Information on the availability of specific services is usually kept at the national or subnational level. National AIDS programs should have a record of all health facilities that provide PEP services. A health facility census or survey can also provide this information, along with more in-depth information on available services, if the information is collected from a representative sample of health facilities in the country. One potential limitation to facility surveys or censuses is that they are usually only conducted once every few years. Countries should regularly update their program records on the availability of PEP services in health facilities and supplement these data with those obtained through a health facility survey or census every few years.

The denominator is calculated by summing the total number of health facilities included in the sample. Information for constructing the denominator may come from program records, facility listings and/or national strategy or planning documents.

**Tool:** program records and health facility survey or census

**Frequency:** annually for program records; every 2–3 years for facility survey or census

For more details on calculation and interpretation of the indicator, see Core indicators for national AIDS programs: guidance and specifications for additional recommended indicators.

**Source**

### Prevention indicator (HIV-P16)

**Treatment of sexually transmitted infections**

| Number of cases of sexually transmitted infections treated |

#### Rationale

Similar types of behavior put people at risk for both sexually transmitted infections and HIV. People with sexually transmitted infections may be at higher risk of acquiring or transmitting HIV infection due to the co-factor effect of an existing sexually transmitted infection. Services for sexually transmitted infections provide opportunities for comprehensive care that includes early treatment; counseling and communication about behavior change and information for sexual partners; access to testing for HIV infection; and an entry point into care programs for people living with HIV. Treating sexually transmitted infections quickly and effectively reduces the possibility of further transmission of infection.

#### Definition of the indicator

**Numerator:** Number of cases of sexually transmitted infections (determined syndromically or etiologically) identified at selected facilities that were treated

The following sexually transmitted infections have been shown to be important co-factors for HIV transmission or acquisition and should therefore be considered for the assessment: curable genital ulcers, notably chancroid and syphilis; other curable sexually transmitted infections including Neisseria gonorrhoeae and Chlamydia trachomatis, which may present as urethral discharge. Where treatment of herpes viral infection is included as a part of national guidelines, assessment for appropriate genital ulcer disease therapy should include anti-herpes treatment.

#### Measurement

**Tools:** program records

**Frequency:** quarterly

**Disaggregation:** By sex (male, female) and age

To assess whether sexually transmitted infections have been treated according to national guidelines, a health facility survey should be performed. In this case, the indicator would be defined as follows.

**Numerator:** Number of cases of sexually transmitted infections treated according to national guidelines

**Denominator:** Total number of cases of sexually transmitted infections at selected facilities

**Tools:** health facility surveys in a selection of facilities

**Frequency:** every two to three years

#### Resources


**Prevention indicator (HIV-P17)**

**Blood safety and universal precautions**

Percentage of donated blood units screened for HIV in a quality-assured manner

**Rationale**

Blood safety programs aim to ensure that all blood units are screened for transfusion-transmissible infections, including HIV, and that only the units that do not react on screening tests are released for clinical use. In many countries, blood units are not screened for all the major transfusion-transmissible infections. Even when screening does occur, inaccurate test results often compromise the safety of blood due to the poor quality or incorrect storage of test kits. Further, inadequate staff training or a lack of standard operating procedures may result in laboratory errors. This could lead to blood units being classified as safe even when they are infectious, posing a serious risk of transmission of HIV through unsafe blood.

Universal (100 percent) screening of donated blood for HIV and other transfusion-transmissible infections cannot be achieved without mechanisms to ensure quality and continuity in screening. In some countries, interruptions to supplies of test kits and reagents, or emergency situations, can result in the use of blood for transfusion without screening for transfusion-transmissible infections. The development of systems that provide reliable and regular supplies of low-cost, high-quality test kits and reagents and effective stock management is therefore essential to ensure universal quality screening of blood units.

Thus, screening all donated blood units for HIV in a quality-assured manner is crucial. Two key components of quality assurance in screening are:

- the use of documented and standardized procedures (standard operating procedures) for the screening of every blood unit; and
- participation of the laboratories in an external quality assessment scheme for HIV screening in which external assessment of the laboratory’s performance is conducted using samples of known, but undisclosed, content to assess its quality system and assist in improving standards of performance.

**Applicability:** all countries

**Definition of the indicator**

**Numerator:** Number of donated blood units screened for HIV in blood centers or blood screening laboratories that have both: (1) followed documented standard operating procedures and (2) participated in an external quality assurance scheme

**Denominator:** Total number of blood units donated

In this context, donation refers to any blood collected for the purposes of medical use. This includes all possible types of providers of blood, regardless of whether they receive remuneration or not. Examples of different categories of blood donors include:

- voluntary non-remunerated blood donor: an altruistic donor who gives blood freely and voluntarily without receiving money or any other form of payment;
- family or replacement blood donor: a donor who gives blood when it is required by a member of the patient’s family or community, which may involve a hidden paid donation system in which the patient’s family pays the donor;
- paid donor: a donor who gives blood for money or other form of payment; and
- autologous donor: a patient who donates his or her blood to be stored and reinfused, if needed, during surgery.
Measurement
The information relates to data from the previous 12 months (January–December). This information should be available from the national blood transfusion service or the national blood program manager in the health ministry. The following information is required to measure this indicator.

1. **How many total blood units were donated in the country?**

   For each blood center and blood screening laboratory that screens donated blood for HIV:

2. **How many units of blood were donated in each blood center or blood-screening laboratory?**

3. **How many donated units were screened in the blood center or blood-screening laboratory?**

4. **Does the blood center or blood-screening laboratory follow documented standard operating procedures for HIV screening?**

5. **Does the blood center or blood-screening laboratory participate in an external quality assessment scheme for HIV screening?**

From this information, the indicator can be calculated.

**Tools:** FRAME Tool (Framework for Assessment, Monitoring and Evaluation of blood transfusion services): a rapid assessment tool used by the WHO Global Database on Blood Safety

**Frequency:** annually

For examples of calculation and more details on interpretation of the indicator, see Monitoring the Declaration of Commitment on HIV/AIDS: guidelines on the construction of core indicators. 2008 reporting.

**Source**

**Resources**


**Treatment indicator (HIV-T1)**

**Antiretroviral therapy and monitoring**

**Percentage of adults and children with advanced HIV infection receiving antiretroviral therapy**

**Rationale**

As the HIV pandemic matures, increasing numbers of people are reaching advanced stages of HIV infection. Antiretroviral therapy has been shown to reduce mortality among those infected, and efforts are being made to make it more affordable within low- and middle-income countries. Antiretroviral combination therapy should always be provided in conjunction with broader care and support services, including counseling for family caregivers.

**Applicability:** all countries

**Definition of the indicator**

**Numerator:** Number of adults and children with advanced HIV infection who are currently receiving antiretroviral therapy in accordance with the nationally approved treatment protocol (or WHO/UNAIDS standards) at the end of the reporting period

**Denominator:** Estimated number of adults and children with advanced HIV infection

**Disaggregation:** Age groups: <15 years, 15+ years

Sex: female, male

Percentages should be given for 2006 and 2007 to track annual trends in coverage.

**Measurement**

The numerator can be generated by counting the number of adults and children who received antiretroviral therapy at the end of the reporting period.

The numerator should equal the number of adults and children with advanced HIV infection who ever started antiretroviral therapy minus the people who are not currently receiving treatment before the end of the reporting period. People not currently receiving treatment at the end of the reporting period (those excluded from the numerator) are people who died, stopped treatment or are lost to follow-up.

Some people pick up several months of antiretroviral drugs at one visit, which could include antiretroviral therapy received for the last months of the reporting period but that is not recorded as visits for the last months in the patient register. Efforts should be made to account for these patients, as they need to be included in the numerator. Antiretroviral drugs taken only for the purpose of preventing mother-to-child transmission and post-exposure prophylaxis are not included in this indicator. Pregnant women living with HIV who are eligible for and receiving antiretroviral therapy for their own treatment are included in this indicator.

The number of adults and children with advanced HIV infection who are currently receiving antiretroviral combination therapy can be obtained through data collected from drug supply management systems or facility-based antiretroviral therapy registers. These are then tallied and transferred to cross-sectional monthly or quarterly reports, which can then be aggregated for national totals.

People receiving antiretroviral therapy in the private sector and public sector should be included in the numerator where data are available.

The denominator is generated by estimating the number of people with advanced HIV infection requiring (in need of or eligible for) antiretroviral therapy.

The denominator estimates are usually based on the latest data available from sentinel surveillance, which can then follow the methods of the UNAIDS Reference Group on Estimates, Modelling and Projections.

Need or eligibility for antiretroviral therapy should follow the WHO definitions for the diagnosis of advanced HIV (including AIDS) for adults and children.
Tools: antiretroviral therapy registers and HIV surveillance systems

Frequency: data should be collected continuously at the facility level. Data should be aggregated periodically, preferably monthly or quarterly. The most recent monthly or quarterly data should be used for annual reporting.

For more details on interpretation of the indicator, see Monitoring the Declaration of Commitment on HIV/AIDS: guidelines on the construction of core indicators. 2008 reporting.

Source

Resources


Treatment indicator (HIV-T2)
Antiretroviral therapy and monitoring

Percentage of health facilities that offer antiretroviral therapy (prescribe and/or provide clinical follow-up)

Rationale
This indicator measures the capacity of health facilities to provide antiretroviral therapy. Antiretroviral therapy is a cornerstone of effective HIV treatment, and measuring the percentage of health facilities that offer antiretroviral therapy provides valuable information about availability. One strategy for scaling up antiretroviral therapy services is to make antiretroviral therapy available in more health facilities. This may be achieved by decentralizing antiretroviral therapy services from tertiary facilities (such as hospitals) to primary or secondary health care facilities.

Applicability: all countries

Definition of the indicator
Numerator: Number of health facilities that offer antiretroviral therapy (that is, prescribe and/or provide clinical follow-up)
Denominator: Total number of health facilities, excluding specialized facilities where antiretroviral therapy services are or will never be relevant
Disaggregation: Sector: public, private

Measurement
The numerator is calculated by summing the number of facilities reporting the availability of antiretroviral therapy services. Information on the availability of specific services is usually kept at the national or subnational level. National AIDS programs should have a record of all health facilities offering antiretroviral therapy services. A health facility census or survey can also provide this information, along with more in-depth information on available services, provided the information is collected from a representative sample of health facilities in the country. In a facility survey (such as Service Provision Assessment or Service Availability Mapping), the most knowledgeable person responsible for client services is interviewed using the AIDS Outpatient Department (OPD) module of the survey. Responses to a series of questions establish whether providers in that facility provide antiretroviral therapy services directly (that is, prescribe antiretroviral therapy and/or provide clinical follow-up for people receiving antiretroviral therapy) or refer people to other health facilities for these services. In addition, facility records documenting the current status of service provision should be consulted. One potential limitation to facility surveys or censuses is that they are usually only conducted once every few years. Countries should regularly update their program records on health facilities offering antiretroviral therapy services and supplement these data with those obtained through a health facility survey or census every few years.

The denominator is calculated by summing the total number of health facilities included in the sample. Information for construction of the denominator may come from program records, facility listings and/or national strategy or planning documents.

Tool: program records; health facility survey or census

Frequency: annual for program records; every 2–3 years for facility survey or census

For more details on interpretation of the indicator, see Core indicators for national AIDS programs: guidance and specifications for additional recommended indicators.

Source
**Treatment indicator (HIV-T3)**

**Antiretroviral therapy and monitoring**

Percentage of health facilities dispensing antiretroviral therapy that have experienced a stock-out of at least one required antiretroviral drug in the last 12 months

**Rationale**

This indicator measures a key aspect of antiretroviral drug supply management: whether health facilities dispensing antiretroviral drugs have run out of stock of at least one required antiretroviral drug in the last 12 months.

As countries scale up antiretroviral therapy services, ensuring that antiretroviral drugs are available to those who need them is important. Antiretroviral therapy is a long-term treatment strategy for people living with advanced HIV infection, and treatment interruptions may lead to HIV drug resistance. Efficient supply management is needed to ensure that required antiretroviral drugs do not run out of stock.

**Applicability**: all countries

**Definition of the indicator**

**Numerator**: Number of health facilities dispensing antiretroviral drugs that experienced one or more stock-outs of at least one required antiretroviral drug in the last 12 months

**Denominator**: Total number of health facilities dispensing antiretroviral drugs

**Disaggregation**: Sector: public, private

**Measurement**

If there is one national logistics management information system with details on the availability of antiretroviral drugs at the health facility level, information should be extracted from this system to construct this indicator. Alternatively, the information may need to be collected through a special survey or site visits. If a limited number of health facilities dispense antiretroviral drugs in the country, all health facilities dispensing antiretroviral drugs should be included in the survey or site visits. If the number of health facilities dispensing antiretroviral drugs is large, selecting a representative sample of the health facilities dispensing antiretroviral drugs may be necessary (the full list should be available at the national level). In sampling, the sample should include facilities at different levels (such as the central, district and peripheral levels). In countries where antiretroviral drugs are dispensed at pharmacies or other delivery points other than health facilities, stock-outs should also be monitored in these venues; feasibility depends on the coverage of the logistics management information system.

**Tools**: program records; logistics management information system; health facility survey

**Frequency**: annual for program records; every 2–3 years for facility survey or census

For more details on calculation and interpretation of the indicator, see Core indicators for national AIDS programs: guidance and specifications for additional recommended indicators.

**Source**

**Treatment indicator (HIV-T4)**

**Antiretroviral therapy and monitoring**

Percentage of facilities providing antiretroviral therapy using CD4 monitoring in accordance with national guidelines or policies, on site or through referral

**Rationale**

This indicator measures the percentage of health facilities providing antiretroviral therapy using CD4 monitoring. Although the unavailability of CD4 monitoring should not be a barrier to providing antiretroviral therapy, WHO recommends CD4 monitoring for better and more accurate clinical decision-making. This indicator may also be used as a proxy measure of the quality of antiretroviral therapy services provided in a country.

Current WHO guidelines recommend that people with advanced or severe symptomatic HIV disease start antiretroviral therapy irrespective of CD4 cell count. Although the optimum time to start antiretroviral therapy has not been firmly established, it is known to be before people become unwell or present with HIV-associated opportunistic diseases. Immunological monitoring (that is, CD4 testing), where possible, is the best approach to guide the decision on when to initiate antiretroviral therapy in asymptomatic individuals and to monitor the responses of people receiving antiretroviral therapy.

In many resource-limited settings where antiretroviral therapy services are being scaled up, decisions to initiate antiretroviral therapy are based on clinical assessment. As antiretroviral therapy services expand, health system infrastructure should be strengthened where possible to make CD4 testing more readily available. Making CD4 testing available allows asymptomatic but immunologically compromised individuals to start antiretroviral therapy earlier and improves the quality of care of people living with HIV through better treatment monitoring. Further, CD4 testing is also useful to expand access to co-trimoxazole prophylaxis among people living with HIV as part of the pre–antiretroviral therapy care package.

**Applicability:** all countries

**Definition of the indicator**

**Numerator:** Number of health facilities providing antiretroviral therapy using CD4 monitoring in accordance with national guidelines or policies, either on site or through referral

**Denominator:** Total number of health facilities providing antiretroviral therapy

**Disaggregation:** Sector: public, private

**Measurement**

National antiretroviral therapy programs should have a record of all facilities that provide CD4 testing services, whether on site or through referral. This is a national list or inventory of sites with CD4 testing available or of reference laboratory networks with a list of facilities that link with these laboratories to provide CD4 testing. A health facility census or survey can also provide this information as well as more in-depth information on services available, provided the information is collected from a representative sample of health facilities in the country. In a facility survey (such as Service Provision Assessment or Service Availability Mapping), the most knowledgeable person responsible for client services is interviewed using the AIDS Outpatient Department (OPD) module of the survey. Responses to a series of questions establish whether the facility uses CD4 monitoring on site or through referral. In addition, facility records documenting the current status of service provision should be consulted. One potential limitation to facility surveys or censuses is that they are usually only conducted once every few years. Countries should regularly update their program records on health facilities offering antiretroviral therapy services and supplement these data with those obtained through a health facility survey or census every few years.

**Tools:** program records; laboratory network records; health facility survey

**Frequency:** annual for program records; every 2–3 years for facility survey or census

For more details on calculation and interpretation of the indicator, see Core indicators for national AIDS programs: guidance and specifications for additional recommended indicators.

**Source**

Treatment indicator (HIV-T5)
Antiretroviral therapy and monitoring

Number and percentage of people starting antiretroviral therapy who picked up all prescribed antiretroviral drugs on time

Rationale
Developing simple, affordable ways of monitoring people after they initiate antiretroviral therapy has become a major public health priority. Since the central paradigm of antiretroviral therapy is suppression of viral replication and since the costs of second-line regimens are higher than those of first-line regimens, monitoring efforts should largely focus on preserving the antiretroviral effectiveness of first-line combinations. Failure to identify people who are at high risk of future antiretroviral failure or who are currently on partly suppressive regimens may result in resistance to antiretroviral drugs, which has been associated with more rapid disease progression and death. Evaluating whether people have periods during which they have no antiretroviral drugs available through the extent to which they pick up antiretroviral drugs on time has been shown to be highly associated with antiretroviral failure and is one potentially useful and low-cost method of identifying people at high risk for failure in resource-limited settings. In addition, if more than 10 percent of people are picking up their antiretroviral drugs after their previously dispensed antiretroviral drugs run out, this may indicate that an underlying programmatic problem that affects the quality of services provided (such as the cost of drugs or clinic appointments, transport, clinic hours or a combination of issues) should be addressed.

Applicability: all countries

Definition of the indicator
Numerator: Number of people who have picked up all their prescribed antiretroviral drugs on time for two consecutive drug pick-ups after a selected month

Denominator: Number of people who picked up antiretroviral drugs during a selected month

Suggested target: ≥90 percent

On-time drug pick-up is defined as picking up antiretroviral drugs at each of the monitored pick-ups before the antiretroviral drugs previously dispensed would have been finished if taken according to schedule. Expected or scheduled pick-up dates should not be used to calculate this indicator.

People who die or transfer out before the first drug pick-up after the selected month should be excluded from the numerator and the denominator. People who die or transfer out between the first and second drug pick-ups after the selected month should be classified according to whether their first drug pick-up was on time.

Measurement
Identifying the people who picked up antiretroviral drugs during the selected month is easy at sites with electronic or manual antiretroviral drug pick-up, pharmacy registers or dispensing records that include personal identifiers arranged sequentially by date. Data abstractors should record the following information for each patient who picked up antiretroviral drugs in the selected month:

- a patient identifier;
- the last antiretroviral drug pick-up date during the selected month (baseline pick-up);
- the two consecutive antiretroviral drug pick-up dates after the selected month (pick-up 1 and pick-up 2);
- the list of antiretroviral drugs, including number of days, or pill number, number of pills in a dose and frequency of doses to be taken that were dispensed (or in hand on leaving the pharmacy) at the baseline pick-up and pick-up 1;
- the date of transfer out after baseline pick-up if two antiretroviral drug pick-ups were not recorded after the baseline pick-up;
- the date of death after baseline pick-up if two antiretroviral drug pick-ups were not recorded after the baseline pick-up; and
- the date antiretroviral therapy stopped after the baseline pick-up (that is, a recorded decision by the person receiving antiretroviral therapy or physician that no more antiretroviral drugs should be dispensed) if two antiretroviral drug pick-ups were not recorded after the baseline pick-up.
Tool: pharmacy records; program or medical records

Frequency: annually (using the same baseline month every year)

For more details on data collection and data analysis of the indicator, see HIV drug resistance early warning indicators.

Countries can also collect the following indicator: percentage of people initiating antiretroviral therapy at the site during a selected time period who picked up all prescribed antiretroviral drugs on time during their first 12 months of antiretroviral therapy (cohort). For more details, see HIV drug resistance early warning indicators.

Source

Care and support indicator (HIV-CS1)
Prophylaxis for opportunistic infections

Number and percentage of adults and children enrolled in HIV care\textsuperscript{a} and eligible for co-trimoxazole prophylaxis (according to national guidelines) currently receiving co-trimoxazole prophylaxis

**Rationale**
Co-trimoxazole prophylaxis is a simple and cost-effective intervention that reduces the risk of opportunistic infections and mortality among children and adults living with HIV. WHO recommends administration of co-trimoxazole for the following groups: adults living with HIV, including pregnant women, children living with HIV and infants exposed to HIV\textsuperscript{b}. The WHO guidelines offer countries a choice of whether to provide co-trimoxazole broadly or according to disease stage.

**Applicability:** all countries

**Definition of the indicator**

**Numerator:** Number of adults and children living with HIV enrolled in HIV care\textsuperscript{a} and receiving co-trimoxazole prophylaxis

**Denominator:**
A. Number of adults and children\textsuperscript{b} living with HIV enrolled in HIV care who are eligible for co-trimoxazole prophylaxis based on national guidelines.
B. Estimated number of people living with HIV in the country

**Disaggregation:** By sex and age

Age represents an individual's age at the end of the reporting period or when last seen at the facility.

**Measurement**

**Numerator:** Individuals should be considered to be “receiving” co-trimoxazole prophylaxis if co-trimoxazole has been prescribed and obtained by the patient (provided by a program or procured by the patient). Include “active” patients: ones seen at the clinic at least once in the past year. Do not include HIV-exposed infants who have not yet been confirmed as HIV positive and are therefore not enrolled in HIV care. The indicator is not meant to account for short-term lapses in adherence or short-term stock-outs. If individuals are served by more than one program that might provide co-trimoxazole prophylaxis, the figure should be adjusted as needed so that the numerator represents only unique individuals receiving co-trimoxazole within the reporting period.

Countries should focus on compiling data for the numerator from patient registers at facilities. Where patient level data are not available, countries may develop program or facility-level estimates of coverage with co-trimoxazole and apply these estimates to the total number of individuals receiving care and support services through those programs or facilities. People living with HIV receiving co-trimoxazole in both the private sector and the public sector should be included in the numerator where data for both are available.

**Denominator:**
(A) Number of people living with HIV eligible for co-trimoxazole according to national guidelines. This denominator will be derived through estimations based on country guidelines for co-trimoxazole (where guidelines exist). The proportion derived from using this denominator will provide data on the coverage of co-trimoxazole among people living with HIV eligible to receive co-trimoxazole.

(B) Estimated number of people living with HIV in the country. The denominator is an estimation of the number of people living with HIV produced through the SPECTRUM model, which is based on surveillance data from facilities and calibrated as new population-based survey data become available. The proportion derived from using this denominator will provide country coverage data of co-trimoxazole among people living with HIV.

\textsuperscript{a} HIV care includes enrollment in pre-antiretroviral therapy and antiretroviral therapy.
\textsuperscript{b} Infants exposed to HIV but not yet confirmed HIV positive are not counted under this indicator. Infants receiving co-trimoxazole are counted under indicator HIV-P14.
Tools: numerator: program monitoring tools; denominator(s): population estimates based on UNAIDS “country-approved” files in the SPECTRUM model (for the total number of people living with HIV)

Frequency: continuously, ideally quarterly

Source

Resource
The United States President’s Emergency Plan for AIDS Relief is preparing a guidance document on next-generation indicators that is expected to be released in 2009.
### Care and support (HIV-CS2)

#### Care and support for chronically ill people

| Number of adults and children living with HIV who receive care and support services outside facilities during the reporting period\(^{a,b}\) |

#### Rationale

Adults and children living with HIV should receive a comprehensive package of services (see below) to improve the quality of life, extend life and delay the need for antiretroviral therapy. Care and support programs can cover external support, including counseling, health care, help with household work, companionship, financial support, legal services and access to shelter or other social services. The goal should be to provide services in different domains and to provide these services using a holistic approach, from the time of HIV diagnosis. Many of these services are provided outside the formal health care system and take place at the household level and some at the community level. This indicator tracks information on the level of coverage and care and support provided outside facilities (at the household and community levels) to people living with HIV.

#### Applicability

All countries

#### Definition of the indicator

**Numerator:** Number of adults and children living with HIV who received at least one service from the essential package (regardless of the number of service provision episodes) outside a health facility during the reporting period

#### Measurement

To ensure quality care, all people living with HIV should receive health care support for their illness regardless of whether that support takes place within a facility or outside of a facility. There may be country-specific approaches to grouping services into the major care and support categories. However, to be counted in this numerator, a person living with HIV must receive at least one service from the essential package of services, and that service must take place outside a health facility. For the purposes of reporting on this indicator, “outside a facility” may refer to community gatherings, mobile units or home-based care settings. Services provided in primary, secondary or tertiary health facilities or hospitals should not be counted here.\(^c\)

An essential package of services for people living with HIV is recommended to include:

- **health care** and home-based care, such as counseling on and monitoring of adherence to antiretroviral therapy; pain management; and referral of people suspected of having TB;
- **spiritual and psychosocial support**, such as participation in self-help groups and peer counseling related to hopes, fears, meaning, guilt etc.; mental health; succession planning; and preparing for and coping with the process of dying;
- **socioeconomic support**, such as nutritional support; social and health insurance; social patronage; and financial support;
- **legal and human rights**, such as legal aid; protection against violence and discrimination; stigma; and child protection services; and
- **integrated disease prevention services with care**, such as HIV risk reduction messaging and counseling.

#### Disaggregation

Sex, age, service provider and location depending on the country-specific needs

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\(^a\) In countries in which the United States President’s Emergency Plan for AIDS Relief has programs, the information collected for this indicator can be used to inform reporting on the relevant indicator used by the Emergency Plan (see resource below).

\(^b\) This indicator was suggested by the participants of the international workshop on monitoring services and systems at the community level (Pretoria, South Africa, August 2008).

\(^c\) Health care excludes provision of antiretroviral drugs to avoid double counting when measuring antiretroviral therapy coverage.
Data can be obtained from all HIV care and support service providers in the country or region. These might include:

- *individual nongovernmental organizations*;
- *individual private organizations*; and
- *individual public (government) organizations, such as social services within the relevant ministries*.

Data are aggregated at the central level on a regular basis. A single body (usually the national M&E unit) should be responsible for data aggregation, analysis and dissemination. Double counting (such as people receiving services from different providers) needs to be avoided.

**Tool:** program monitoring reports

**Frequency:** quarterly

**Resources**


The United States President's Emergency Plan for AIDS Relief is preparing a guidance document on next-generation indicators that is expected to be released in 2009.
Rationale
As the number of orphaned and vulnerable children continues to grow, adequate support to families and communities needs to be assured. In practice, care and support for orphaned children comes from families and communities. As a foundation for this support, it is important that households be connected to additional support from external sources.

Applicability: countries with high prevalence of HIV infection

Definition of the indicator

**Numerator:** Number of orphaned and vulnerable children aged 0–17 years who live in households that received at least one of the four types of support for each child (answered “yes” to at least one of questions 1, 2, 3 and 4)

**Denominator:** Total number of orphaned and vulnerable children aged 0–17

For the purposes of this indicator, an orphan is defined as a child younger than 18 years who has lost both parents. A child made vulnerable by HIV is younger than 18 years and fulfills any of the following:

- has lost one or both parents;
- has a chronically ill parent (regardless of whether the parent lives in the same household as the child);
- lives in a household where, in the last 12 months, at least one adult died and was sick for three of the four months before he or she died;
- lives in a household where at least one adult was seriously ill for at least three of the past 12 months.

Measurement
For the survey method, after all orphaned and vulnerable children aged 0–17 years in the household have been identified, the household heads are asked the following four questions about the types and frequency of support received and the primary source of the help for each orphan and vulnerable child. Each question is to be asked for each child.

1. Has this household received medical support, including medical care and/or medical care supplies, within the last 12 months?
2. Has this household received school-related assistance, including school fees, within the last 12 months? (This question is to be asked only for children aged 5–17 years.)
3. Has this household received emotional or psychological support, including counseling from a trained counselor and/or emotional or spiritual support or companionship within the last three months?
4. Has this household received other social support, including socioeconomic support (such as clothing, extra food, financial support or shelter) and/or instrumental support (such as help with household work, training for caregivers, child care or legal services) within the last three months?

External support is defined as help free of charge coming from a source other than friends, family or neighbours unless they are working for a community-based group or organization.

**Tools:** program monitoring reports; population-based surveys (Demographic Health Survey, AIDS Indicator Survey, Multiple Indicator Cluster Survey or other representative surveys)

**Frequency:** quarterly (for routine reporting); every 2–5 years (for survey-based indicators)

For more details on interpretation of the indicator, see Monitoring the Declaration of Commitment on HIV/AIDS: guidelines on the construction of core indicators. 2008 reporting.
Notes from the international workshop on monitoring services and systems at the community level (Pretoria, South Africa, August 2008)

The data should also be collected through program monitoring reports of implementing partners on a more routine basis. These records are compiled and aggregated to obtain an overall measure of the reach of the care and support for orphans and vulnerable children. Implementers at the community level need to devise reliable tracking mechanisms that capture accurate data to avoid double counting. There is a need to ensure that clients served (as opposed to client visits) for the same service or across services are counted. Population-based surveys (Demographic and Health Survey, AIDS Indicator Survey, Multiple Indicator Cluster Survey or other representative surveys) are complementary validation methods for this indicator.

Clear information flow mechanisms and tools (devised by national-level partners or bodies) are needed that capture this kind of community data into national-level databases. Different types of services will all be taken into account in estimating overall service coverage.

In addition to the UNGASS criteria for a child made vulnerable by HIV, the international workshop on monitoring services and systems at the community level (Pretoria, South Africa, August 2008) identified the following criteria:

In addition to the UNGASS criteria for a child made vulnerable by HIV, the workshop identified the following criteria:

- *lives with a guardian who is 65 years or older; or*
- *lives with guardian(s) who are physically impaired.*
Care and support (HIV-CS4)
Support for orphaned and vulnerable children

Percentage of orphaned and vulnerable children aged 5–17 years who have three basic material needs met

Rationale
The indicator is intended to measure progress towards meeting the material needs of orphans and vulnerable children and improved the quality of their care as a result of various interventions targeted at improving the livelihood conditions of orphans and vulnerable children and their households.

Applicability: countries with high prevalence of HIV infection

Definition of the indicator
Numerateur: Number of orphaned and other most vulnerable children aged 5–17 years reporting having at least three basic needs met

Denominator: Total number of orphaned and vulnerable children aged 5–17 years

For the purposes of this indicator, an orphan is defined as a child younger than 18 years who has lost both parents. A child made vulnerable by HIV is younger than 18 years and fulfills any of the following:

- has lost one or both parents;
- has a chronically ill parent (regardless of whether the parent lives in the same household as the child);
- lives in a household where, in the last 12 months, at least one adult died and was sick for three of the four months before he or she died;
- lives in a household where at least one adult was seriously ill for at least three of the past 12 months;
- lives with a guardian who is 65 years or older; or
- lives with guardian(s) who are physically impaired.

Measurement
After all orphans and vulnerable children aged 0–17 years in the household have been identified, those aged 5–17 years are asked questions related to provision of their basic needs such as food, shelter, clothing, education and health services.

Specific questions will be formulated according to country setting.

External support is defined as help free of charge coming from a source other than friends, family or neighbors unless they are working for a community-based group or organization.

Tools: population-based surveys (Demographic Health Survey, AIDS Indicator Survey, Multiple Indicator Cluster Survey or other representative surveys)

Frequency: every 2–5 years

For children, more ethical protocols are needed and some countries do not allow children to be interviewed. These issues have to be considered while designing the studies to measure this indicator.

Resources


This indicator was suggested by the participants of the international workshop on monitoring services and systems at the community level (Pretoria, South Africa, August 2008).
Rationale
This indicator is intended to measure psychosocial well-being among orphaned and most vulnerable children, beyond material satisfaction.

Applicability: countries with high prevalence of HIV infection

Definition of the indicator

Numerator: Number of orphaned and vulnerable children aged 5–17 years reporting at least five elements of the psychosocial well-being matrix\(^b\) at the time of the survey

Denominator: Total number of orphans and vulnerable children aged 5–17 years

For the purposes of this indicator, an orphan is defined as a child younger than 18 years who has lost both parents. A child made vulnerable by HIV is younger than 18 years and fulfills any of the following:

- has lost one or both parents;
- has a chronically ill parent (regardless of whether the parent lives in the same household as the child);
- lives in a household where, in the last 12 months, at least one adult died and was sick for three of the four months before he or she died;
- lives in a household where at least one adult was seriously ill for at least three of the past 12 months;
- lives with a guardian who is 65 years or older; or
- lives with guardian(s) who are physically impaired.

Measurement
After all orphans and vulnerable children aged 0–17 years in the household have been identified, those aged 5–17 years are asked questions related to their psychosocial well-being such as discrimination and freedom of expression in the household or community. Countries need to design these questions according to their local context.

Tools: population-based surveys (Demographic Health Survey, AIDS Indicator Survey, Multiple Indicator Cluster Survey or other representative surveys)

Frequency: every 2–5 years

For children, protocols that are more ethical are needed and some countries do not allow children to be interviewed. These issues have to be considered while designing the studies to measure this indicator.

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\(^a\) This indicator was suggested by the participants of the international workshop on monitoring services and systems at the community level (Pretoria, South Africa, August 2008).

\(^b\) Questions from the psychological well-being matrix could include the following:

1. Feelings of belonging
2. Feeling of discrimination
3. Value in family/community
4. Feeling of trust
5. Freedom to talk freely to people in community/household
6. Feeling of acceptance and trust
7. Feeling of security
8. Feeling of love
9. Feeling of hope for the future
10. Feeling of self-esteem, confidence
11. Feeling of happiness
12. Feeling of sadness
13. Feeling of stress and worry
14. Feeling of isolation
15. Freedom to free play with friends, family members without feeling discriminated against
Collaborative activities (TB/HIV-1)
TB/HIV: intensified TB case-finding among people living with HIV

Number and percentage of adults and children enrolled in HIV carea who had TB status assessed and recorded during their last visit among all adults and children enrolled in HIV care in the reporting period

Rationale
This indicator assesses activity intended to reduce the impact of TB among people living with HIV. It demonstrates the level of implementation of the recommendation that people living with HIV be screened for TB at diagnosis and at all follow-up visits.

Applicability: all countries

Definition of the indicator
Numerator: Number of adults and children enrolled in HIV carea who had their TB status assessed and recorded during their last visit
Denominator: Total number of adults and children enrolled in HIV carea in the reporting period

Measurement
Data should be recorded routinely at every visit on the person's HIV care or antiretroviral therapy card and transferred onto the pre-antiretroviral therapy and antiretroviral therapy registers at all facilities providing routine HIV care. These data should be analyzed quarterly and reported on the quarterly cross-sectional reports to the national level.

TB and HIV programs should collaborate to ensure that agreed criteria for identifying a person suspected of having TB and that the methods of TB screening used are consistent with TB control program protocols.

A suggested method of conducting the screening would be to ask clients living with HIV whether they are currently receiving TB treatment. If not, they are then asked about the key symptoms of TB disease (such as cough lasting more than two weeks, persistent fever, night sweats, unexplained weight loss and lymphadenopathy). A simple checklist could be used, and any positive response would indicate that the individual may be suspected of having TB. If, on questioning, they are defined as suspected of having TB (in accordance with national protocols), treatment for latent TB infection should not be given and they should be investigated for TB (or referred to a TB service for investigation) and treated appropriately. Those found not to have TB should be offered six months of isoniazid preventive therapy.

Tool: HIV care and antiretroviral therapy patient cards with data transferred to the pre-antiretroviral therapy and antiretroviral therapy registers and then quarterly reporting formats

Frequency: data should be collected continuously and reported as part of the quarterly cross-sectional reports and analyzed quarterly or at least annually; these data could be cross-checked using card sorts during annual patient monitoring reviews

Resources

a HIV care includes HIV treatment: that is, enrollment in both pre-antiretroviral therapy and antiretroviral therapy registers.
Collaborative activities (TB/HIV-2)

TB/HIV: TB treatment among people living with HIV

Number and percentage of adults and children enrolled in HIV care\(^a\) who started TB treatment, expressed as a proportion of adults and children in HIV care during the reporting period

**Rationale**

TB is the major coinfection of people living with HIV. This indicator assesses trends in the detection and treatment of TB among people living with HIV who are registered in HIV care. It may also be used in drug supply planning, as the treatment of people with HIV for TB may require temporary antiretroviral drug substitution.

**Applicability:** all countries

**Definition of the indicator**

**Numerator:** Number of adults and children enrolled in HIV care\(^a\) who started TB treatment during the reporting period

**Denominator:** Number of adults and children enrolled in HIV care\(^a\) during the reporting period

**Measurement**

The data for the numerator come from the “TB treatment” column of the pre–antiretroviral therapy and antiretroviral therapy registers. Among those newly enrolled in HIV care during the reporting period, those receiving TB treatment at time of enrollment and those starting TB treatment during the reporting period should both be included in the numerator. The data needed for this indicator are more difficult to collect if TB diagnosis and treatment are not carried out on the same site as HIV testing or treatment and care. This situation will require establishing reliable two-way communication between the TB service and the HIV treatment and care services. The denominator data are obtained by adding those retained on treatment at the beginning of the reporting period to those newly enrolled in the program during the reporting period.

The data for this indicator should be reported disaggregated by antiretroviral therapy and pre–antiretroviral therapy registers.

The numerator data from the antiretroviral therapy register are used as the basis of the UNGASS core indicator 6 (the co-management of TB and HIV treatment): the number of adults and children on the antiretroviral therapy registers starting TB treatment during the last year as a proportion of the estimated HIV-positive TB cases at the country level.

WHO provides this estimate for this UNGASS indicator on an annual basis in the global TB control report.

**Tool:** pre–antiretroviral therapy and antiretroviral therapy registers; the data are collated on the cross-sectional quarterly reporting formats

**Frequency:** data would be collected continuously and reported quarterly to the national level and annually to WHO

**Resources**


\(^a\) HIV care includes HIV treatment: that is, enrollment in both pre–antiretroviral therapy and antiretroviral therapy registers.
Collaborative activities (TB/HIV-3)

TB/HIV: TB treatment among people living with HIV

Percentage of estimated HIV-positive incident TB cases that received treatment for TB and HIV

Rationale

TB is one of the most common causes of morbidity and mortality among people living with HIV, even those receiving antiretroviral therapy. Intensified TB case-finding and access to quality diagnosis and treatment of TB in accordance with international and national guidelines is essential for improving the quality and quantity of life for people living with HIV. A measure of the percentage of HIV-positive TB cases that access appropriate treatment for their TB and HIV is important.

Applicability: all countries

Definition of the indicator

Numerator: Number of adults with advanced HIV infection who are currently receiving antiretroviral therapy in accordance with the nationally approved treatment protocol (or WHO/UNAIDS standards) and who started TB treatment (in accordance with national TB program guidelines) within the reporting year

Denominator: Estimated number of incident TB cases among people living with HIV

WHO calculates country-specific annual estimates of the number of incident TB cases in people living with HIV: http://www.who.int/tb/country/en

Disaggregation: By sex (male, female)

Measurement

Tool: facility antiretroviral therapy registers and reports; program monitoring tools and estimates

Method: program data and estimates of incident TB cases among people living with HIV

Frequency: the data should be collected continuously and reported and analyzed quarterly or at least annually; data will be reported to the national level as part of the annual patient monitoring review

For more details on interpretation of the indicator, see Monitoring the Declaration of Commitment on HIV/AIDS: guidelines on the construction of core indicators. 2008 reporting.

Source


Resource

### TB/HIV Indicator (TB/HIV-4)

**Preventing TB disease among people living with HIV**

Number and percentage of adults and children newly enrolled in HIV care who start on treatment for latent TB infection (isoniazid preventive therapy) among the total number of adults and children newly enrolled in HIV care over a given time period

#### Rationale
To ensure that eligible people living with HIV are given treatment for latent TB infection and thus to reduce the incidence of TB among people living with HIV.

**Applicability:** all countries

#### Definition of the indicator
**Numerator:** Total number of adults and children newly enrolled in HIV care who start (given at least one dose) treatment of latent TB infection over a given time period

**Denominator:** Total number of adults and children newly enrolled in HIV care over a given time period

#### Measurement
The data needed for this indicator are collected from pre–antiretroviral therapy and antiretroviral therapy registers at the HIV care service sites, depending on where TB preventive therapy is to be administered. People living with HIV should have their TB status assessed. Those found not to have evidence of active TB will be offered TB preventive therapy according to nationally determined guidelines. All those accepting TB preventive therapy and receiving at least the first dose of treatment should be recorded. This information is being recorded through an extra column in the HIV care register and on the patient treatment card. Accurately predicting drug requirements for supply management requires collecting more detailed information: a pharmacy-based TB preventive therapy (isoniazid) register should record client attendance to collect further drug supplies (usually monthly). From this register, facilities would be able to report the number of new cases, continuing cases and completed cases on a quarterly basis. If such information is collected routinely, the indicator of choice would be the number of HIV-positive clients completing treatment of latent TB infection as a proportion of the total number of HIV-positive clients started on such treatment. Pilot testing sites show that 10–50 percent of clients who test HIV-positive can be expected to start TB preventive therapy; some will not meet the eligibility criteria, some will decline to participate and some will drop out during the screening process. The proportion likely to start TB preventive therapy depends on the screening algorithm used (for example, using tuberculin skin test as a screening tool reduces the number that are eligible) and on the type of facility at which HIV diagnosis is made. Among hospital or clinical referrals, a greater proportion would be expected to be sick and thus ineligible for treatment of latent TB infection. Higher proportions would be expected from sites linked to preventing mother-to-child transmission of HIV or stand-alone voluntary counseling and testing centers. Most programs would aim to exceed 60 percent starting isoniazid preventive therapy depending on the types of HIV testing and counseling facilities available.

**Tool:** pre–antiretroviral therapy registers. The data are collated on the cross-sectional quarterly reporting formats and reported to the national level. Ideally, all new clients should be registered by HIV care (pre–antiretroviral therapy) registers. In the situations in which new clients are enrolled directly onto antiretroviral therapy registers, these need to be included.

**Frequency:** collected continuously and reported and analyzed quarterly

#### Resources
Supportive environment (HIV-SE1)
Policy development including workplace policy

National Composite Policy Index

Rationale
This indicator assesses progress in developing and implementing national-level HIV and AIDS policies and strategies.

Applicability: all countries

Measurement
The composite index covers the following broad areas of policy, strategy and program implementation.

Part A
1. Strategic plan
2. Political support
3. Prevention
4. Treatment, care and support
5. Monitoring and evaluation

Part B
1. Human rights
2. Civil society involvement
3. Prevention
4. Treatment, care and support

Tool: National Composite Policy Index (NCPI) questionnaire

Frequency: every two years

Source
Supportive environment (HIV-SE2)
Policy development including workplace policy

Number and percentage of enterprises implementing an HIV workplace program

Rationale
The workplace is a strategic venue for promoting HIV prevention within a country's population. It is in employers' best interest to maintain a healthy workforce, and encouraging their participation helps bring about normative practices within the world of work. This indicator permits monitoring the number of enterprises that are implementing some aspect of a workplace HIV program that addresses the prevention of HIV within the workforce.

Applicability: all countries

Definition of the indicator
Numerator: Number of enterprises that are implementing an HIV workplace program
Denominator: Total number of enterprises surveyed

Measurement
Tools: special survey
Frequency: annual

Countries with partners funded by the United States President's Emergency Plan for AIDS Relief that are working in workplace prevention should collect data continuously at the facility or community level (program monitoring tools). In this case, the denominator would be the sum of all enterprises that have received support from the United States President's Emergency Plan for AIDS Relief for workplace programs.

Enterprises are defined as public or private, formal or informal, workplace entities made up of management and workers.

Access is defined as making the service available to employees for free or at low cost either on site or outside the enterprise through a formal referral system. When the service is made available outside the enterprise through a referral system, the enterprise must have an agreement with a local provider to provide the service via a workplace referral. Comprehensive HIV workplace programs have many components. This indicator focuses on the following four critical areas:

- HIV workplace policy;
- HIV peer education program;
- voluntary HIV counseling and testing (either on site or via referral); and
- formal activities to prevent HIV transmission.

Although countries may not have a system in place yet to collect and report on enterprises providing HIV services, the goal should be to set up such a system.

Resources
The United States President's Emergency Plan for AIDS Relief is preparing a guidance document on next-generation indicators that is expected to be released in 2009.

For more information on comprehensive HIV workplace programs, see the ILO (International Labour Organization) Code of Practice (http://www.ilo.org/aids) or http://www.smartwork.org.
Supportive environment (HIV-SE3)
Reducing stigma in all settings

Number and percentage of municipalities with at least one human rights network functioning

Rationale
Stigma and related human rights violations fuel the HIV epidemic. Stigma is literally a “mark” or “blemish” on someone or something. HIV is often viewed negatively, and social attitudes may be damaging to those infected or suspected of living with HIV. Discrimination is defined more in terms of legal and human rights: when a person loses a job because of the negative connotation or impression of HIV, overt discrimination has taken place. HIV is heavily stigmatized in most societies. A strengthened human rights-based response to the epidemic will help to increase social cohesion and the community’s ability to respond to the epidemic. Programs aim to combat active discrimination by changing laws to support people living with HIV and by ensuring that these laws are enforced. Mechanisms need to be in place to record, document and address cases of discrimination experienced by people living with HIV and populations most at risk. An important step is to develop networks in which violations or complaints of human rights can be reported and handled.

Applicability: all countries

Definition of the indicator
Numerators: Total number of municipalities with at least one human rights network functioning
Denominator: Total number of municipalities surveyed

Disaggregation: By geographical region

A human rights network will at least include: a human rights ombudsperson office, human rights desk or accredited legal offices that permit people living with HIV and/or population groups most at risk who believe that their human rights or fundamental freedoms have been violated to lodge a confidential petition and to start the necessary proceedings. Depending on the current policy and legal environment of the country, the numerator is expected to increase or decrease. An increase in networks may be observed where laws have recently been established and programs have begun to focus on combating stigma and discrimination. However, with progressing program implementation and the expected resulting decrease in violations and complaints to be reported, the number of networks may stagnate. This indicator does not measure whether the complaints were handled successfully. Additional data need to be collected to track the outcome of a complaint made. The confidentiality of a complaint should be maintained at all times.

Measurement
Tools: special survey; desk reviews
Frequency: annual

Resources

**HIV impact indicator (HIV-I1)**

Prevalence of HIV infection

| Percentage of young women and men aged 15–24 years who are HIV infected |

**Rationale**

The goal in the response to HIV is to reduce HIV infection. As the highest rates of new HIV infections typically occur in young adults, more than 180 countries have committed themselves to achieving major reductions in HIV prevalence among young people: a 25 percent reduction in the most affected countries by 2005 and a 25 percent reduction globally by 2010.

*Applicability:* all countries

**Definition of the indicator**

*Numerator:* Number of antenatal clinic attendees (aged 15–24 years) tested whose HIV test results are positive.

*Denominator:* Number of antenatal clinic attendees (aged 15–24 years) tested for their HIV infection status.

*Disaggregation:* Age groups: whole age range (aged 15–24 years) and five-year age groups (aged 15–19 years and 20–24 years)

**Measurement**

This indicator is calculated using data from pregnant women attending antenatal clinics in HIV sentinel surveillance sites in the capital city, other urban areas and rural areas.

The proportion of the total female population aged 15–24 years living in the capital city, in other urban areas and in rural areas should be provided so that national estimates can be calculated, where possible.

*Tools:* WHO guidelines for HIV sentinel surveillance

*Frequency:* annually

For more details on interpretation of the indicator, see Monitoring the Declaration of Commitment on HIV/AIDS: guidelines on the construction of core indicators. 2008 reporting.

**Source**


**Resources**

**HIV impact indicator (HIV-i2)**

**Prevalence of HIV infection**

Percentage of most-at-risk populations who are HIV infected

**Rationale**

Most-at-risk population groups typically have the highest HIV prevalence in countries with either concentrated or generalized epidemics. In many cases, the prevalence among these population groups can be more than twice the prevalence among the general population. Reducing prevalence among most-at-risk population groups is a critical measure of a national-level response to HIV. This indicator should be calculated separately for each population group that is considered most at risk in a given country: sex workers, injecting drug users and men who have sex with men.

Countries with generalized epidemics may also have a concentrated subepidemic among one or more most-at-risk population groups. If so, calculating and reporting on this indicator for these population groups would be valuable.

**Applicability:** countries with concentrated or low-prevalence epidemics, where routine surveillance among pregnant women is not recommended; also includes countries with concentrated subepidemics within a generalized epidemic.

**Definition of the indicator**

**Numerator:** Number of members of the most-at-risk population group who test positive for HIV

**Denominator:** Number of members of the most-at-risk population group tested for HIV

**Disaggregation:** Age groups: <25 years, 25+ years

Sex: female, male

**Measurement**

This indicator is calculated using data from HIV tests conducted among members of most-at-risk population groups in the capital city.

To avoid biases in trends over time, this indicator should be reported for the capital city only. In recent years, many countries have expanded the number of sentinel sites to include more rural ones, leading to biased trends resulting from the aggregation of data from these sites.

**Tools:** Second generation surveillance for HIV: the next decade; Behavioral surveillance surveys (BSS): guidelines for repeated behavioral surveys in populations at risk for HIV

**Frequency:** annually

For more details on interpretation of the indicator, see Monitoring the Declaration of Commitment on HIV/AIDS: guidelines on the construction of core indicators. 2008 reporting.

**Source**


**Resources**


HIV impact indicator (HIV-I3)

Survival

Percentage of adults and children with HIV known to be on treatment 12 months after initiation of antiretroviral therapy

Rationale

One of the goals of any antiretroviral therapy program is to increase survival among people living with HIV. As antiretroviral therapy is scaled up in countries around the world, understanding why and how many people drop out of treatment programs is also important. These data can be used to demonstrate the effectiveness of the programs and highlight obstacles to expanding and improving them.

Applicability: all countries

Definition of the indicator

Numerator: Number of adults and children who are still alive and on antiretroviral therapy at 12 months after initiating treatment

Denominator: Total number of adults and children who initiated antiretroviral therapy who were expected to achieve 12-month outcomes within the reporting period, including those who have died since starting antiretroviral therapy, those who have stopped antiretroviral therapy and those recorded as lost to follow-up at month 12

Disaggregation: Age groups: <15 years, 15+ years
Sex: female, male

Measurement

The reporting period is defined as any continuous 12-month period that has ended within a predefined number of months from the submission of the report. The predefined number of months can be determined by national reporting requirements. If the reporting period is 1 January to 31 December 2007, countries will calculate this indicator by using all patients who started antiretroviral therapy any time during the 12-month period from 1 January to 31 December 2006. If the reporting period is 1 July 2006 to 30 June 2007, countries will include patients who started antiretroviral therapy from 1 July 2005 to 30 June 2006.

A 12-month outcome is defined as the outcome (whether the patient is still alive and on antiretroviral therapy, dead or lost to follow-up) 12 months after starting. For example, patients who started antiretroviral therapy during the 12-month period from 1 January to 31 December 2006 will have reached their 12-month outcomes for the reporting period of 1 January to 31 December 2007.

Numerator: the numerator requires that adults and children must be alive and receiving antiretroviral therapy 12 months after they initiate treatment. For comprehensive understanding of survival, the following data must be collected:

- the number of adults and children in the antiretroviral therapy start-up groups initiating antiretroviral therapy at least 12 months before the end of the reporting period; and

- the number of adults and children still alive and receiving antiretroviral therapy 12 months after initiating treatment.

The numerator does not require people to have been receiving antiretroviral therapy continuously for the 12-month period. People who missed one or two appointments or drug pick-ups and temporarily stopped treatment during the 12 months since initiating treatment but are recorded as still receiving treatment at month 12 are included in the numerator. In contrast, people who have died, stopped treatment or been lost to follow-up 12 months after starting treatment are not included in the numerator.
For example, for people who started antiretroviral therapy in May 2005, if at any point from May 2005 to May 2006 they die, are lost to follow-up (and do not return) or stop treatment (and do not restart), then at month 12 (May 2006) they are not receiving antiretroviral therapy and are not included in the numerator. Conversely, people who started antiretroviral therapy in May 2005 and who missed an appointment in June 2005 but are recorded as receiving antiretroviral therapy in May 2006 (at month 12) are receiving antiretroviral therapy and will be included in the numerator. What is important is that the person who started antiretroviral therapy in May 2005 is recorded as being alive and receiving antiretroviral therapy after 12 months, regardless of what happened from May 2005 to May 2006.

**Denominator**: the denominator is the total number of adults and children in the antiretroviral therapy start-up groups who initiated antiretroviral therapy at any point during the 12 months prior to the beginning of the reporting period, regardless of their 12-month outcome. For example, for the reporting period 1 January to 31 December 2007, this includes everyone who started antiretroviral therapy during the 12-month period from 1 January to 31 December 2006. This includes everyone, both those receiving antiretroviral therapy and those who are dead, have stopped treatment or are lost to follow-up at month 12.

**Tools**: program monitoring tools; cohort or group analysis forms; antiretroviral therapy registers

**Frequency**: as people start antiretroviral therapy, monthly cohort data should be collected continuously for them; data for monthly cohorts that have completed at least 12 months of treatment should then be aggregated.

For more details on interpretation of the indicator, see Monitoring the Declaration of Commitment on HIV/AIDS: guidelines on the construction of core indicators. 2008 reporting.

**Source**

**Resources**

HIV impact indicator (HIV-I4)
Reducing mother-to-child transmission

Percentage of infants born to HIV-infected mothers who are infected

Rationale
In high-income countries, strategies such as antiretroviral therapy during pregnancy and following birth and the use of breastfeeding substitutes have greatly reduced the rate of mother-to-child HIV transmission. In low-income countries, significant difficulties exist in implementing these strategies due to constraints in accessing, affording and using voluntary counseling and testing services, reproductive health, and maternal and child health services, which have integrated interventions for preventing mother-to-child transmission, including breast-milk substitute (where this is part of the country’s policy on preventing mother-to-child transmission). Nevertheless, mother-to-child transmission can be reduced substantially through approaches such as short-course antiretroviral prophylaxis.

Applicability: all countries

Definition of the indicator
Countries are not required to submit any data for this indicator. The indicator will be modeled at UNAIDS Headquarters, using data submitted in country progress reports for the indicator coverage of services to prevent mother-to-child transmission.

Measurement
The indicator will be calculated by taking the weighted average of the probabilities of mother-to-child transmission for pregnant women receiving and not receiving HIV prophylaxis, the weights being the proportions of women receiving and not receiving various prophylactic regimens.

Tools: statistical modelling based on program coverage and efficacy studies

Frequency: annually

For more details on interpretation of the indicator, see Monitoring the Declaration of Commitment on HIV/AIDS: guidelines on the construction of core indicators. 2008 reporting.

Source
**HIV impact indicator (HIV-i5)**

**Orphanhood**

Percentage of children under age 18 years who are orphans

**Rationale**

Definitions of orphanhood differ between countries. In some countries, the legal definition includes all children younger than 18 years who have lost either or both parents. In other countries, it includes all children younger than 15 years who have lost their mother. This indicator provides an inclusive and standardized measure to allow for comparison across countries.

HIV is changing the face of adult mortality in many communities, killing men and women at exactly the ages when they are usually establishing families and bringing up children. Their deaths leave behind orphans who must be cared for, generally by other members of the community. The social and economic impact of rising orphanhood can be considerable, and countries need to track levels of orphanhood to plan for the services needed.

*Applicability:* countries with generalized epidemics

**Definition of the indicator**

*Numerator:* Number of children younger than 18 years whose mother or father or both parents have died, as listed by survey respondents

*Denominator:* All children younger than 18 years, as listed by survey respondents

*Disaggregation:* Age group: <5 years; 5–9 years; 10–14 years; 15–17 years

Sex: female, male

Type of orphan: maternal, paternal, double

**Measurement**

In a population-based survey or a national census, respondents are asked the ages of all children in the household and whether the mothers and fathers of these children are alive. The children who are currently younger than 18 years and whose mother or father or both parents have died are counted in the numerator.

The denominator consists of all children currently younger than 18 years, as listed by respondents in the survey or census.

If the number of children living outside households is substantial (more than 5 percent of children younger than 18 years), two supplemental surveys should be considered to estimate: (1) the number of orphans living on the streets and (2) the number of orphans living in institutions.

*Tools:* population-based survey or national census

*Frequency:* preferred: every 2 years; minimum: every 4–5 years

For more details on *calculation and interpretation* of the indicator, see *Core indicators for national AIDS programs: guidance and specifications for additional recommended indicators.*

**Source**

HIV/TB impact indicator (HIV-16)
HIV seroprevalence among TB patients

Percentage of newly registered TB patients who are HIV positive

Rationale
Surveillance of HIV prevalence among TB patients will give information about the epidemics of both TB and HIV. In particular, it indicates the degree of overlap in the epidemics in any given setting and, when compared with the HIV prevalence in the general population, indicates the contribution of HIV to the TB epidemic in any given setting.

Definition of the indicator
Numerator: Total number of newly registered TB patients who are HIV positive over a given time period
Denominator: Total number of newly registered TB patients (registered over the same given time period) who were tested for HIV and included in the surveillance system

Measurement
Selecting the appropriate strategy for HIV surveillance among TB patients depends mainly on the existing surveillance system and the underlying HIV epidemic state in a country. There are three main methods for surveillance of HIV among TB patients.

Routine HIV testing data can form the basis of a reliable surveillance system at all levels of HIV epidemic (low-level, concentrated and generalized\(^a\)), provided that high coverage is achieved (more than 80 percent of all TB patients giving consent and being tested). These routine data can be calibrated by periodic (special) or sentinel surveys. Sentinel surveillance collects information regularly and consistently from a predetermined number of people from specific sites and population groups that are of particular interest or are representative of a larger population. The difficulty with sentinel surveillance is in determining how representative the people are of the population from which they are taken and how representative they are of the general population of TB patients. Sentinel surveillance systems are usually based on unlinked anonymous testing methods, often using blood specimens that have been collected for other purposes and stripped of all identifying markers. Periodic special surveys have a specific role in which the prevalence of HIV among TB patients has not been previously estimated and are an essential part of the initial assessment of the situation. Surveys using representative sampling methods and appropriate sample sizes can provide accurate estimates of the burden of HIV among TB patients. This information may alert TB programs to a potential HIV problem and enable action to be taken that may include the implementation of more systematic surveillance.

Surveillance of HIV prevalence should ideally include all newly registered TB patients, diagnosed according to international standards. However, if periodic special surveys or sentinel methods are used and resources are limited, countries may choose to include only adults with smear-positive pulmonary TB: those with a definitive diagnosis of TB. Countries with scarce resources in which the HIV epidemic state is either low or concentrated may also choose to only include a smaller subgroup of TB patients, such as adults aged 15–59 years.

Relapse cases should be excluded from surveillance systems because of the risk of surveying the same patient twice, unless they are identified as such and the results are analyzed separately. However, relapse cases may be included and need not be identified as such if surveillance is based on survey methods and these surveys are undertaken over a short period of time, ideally less than 2–3 months.

Resources


\(^a\) Classified according to the WHO definitions. Low-level HIV epidemic: the HIV prevalence has not consistently exceeded 5 percent in any defined subpopulation at risk of HIV. Concentrated: the HIV prevalence consistently exceeds 5 percent in at least one defined subpopulation but the HIV prevalence is less than 1 percent among pregnant women in urban areas. Generalized: the HIV prevalence consistently exceeds 1 percent in pregnant women in urban areas.
**HIV outcome indicator (HIV-01)**

**Abstinence**

Percentage of young women and men aged 15–24 years who have had sexual intercourse before the age of 15 years

**Rationale**

A major goal in many countries is to delay the age at which young people first have sex and to discourage premarital sexual activity because it reduces young people's potential exposure to HIV. There is also evidence to suggest that first having sex at a later age reduces susceptibility to infection per act of sex, at least for women.

**Applicability:** all countries

**Definition of the indicator**

*Numerator:* Number of respondents (aged 15–24 years) who report the age at which they first had sexual intercourse as under 15 years

*Denominator:* Number of all respondents aged 15–24 years

*Disaggregation:* Age groups: 15–19 years, 20–24 years

Sex: female, male

**Measurement**

Respondents are asked whether or not they have ever had sexual intercourse and, if yes, they are asked: how old were you when you first had sexual intercourse for the first time?

*Tool:* population-based surveys (Demographic and Health Survey, AIDS Indicator Survey, Multiple Indicator Cluster Survey or other representative surveys)

*Frequency:* 2–5 years

For more details on interpretation of the indicator, see Monitoring the Declaration of Commitment on HIV/AIDS: guidelines on the construction of core indicators. 2008 reporting.

**Source**

HIV outcome indicator (HIV-02)

Abstinence

Percentage of never married young women and men aged 15–24 years who have never had sex

Rationale

This indicator measures the percentage of never married young people surveyed who report they have never had sex (that is, the self-reported prevalence of virginity among young people). Abstinence and delayed sexual initiation can help young people protect themselves against sexually transmitted infections, including HIV. Looking at this prevalence within narrow age ranges (15–16, 17–18, 19–20, 21–22 and 23–24 years or by age in years) over time allows program managers to assess whether the age at sexual debut is changing.

Applicability: all countries

Definition of the indicator

Numerator: Number of never married young women and men who have never had sexual intercourse

Denominator: Number of never married young women and men aged 15–24 years surveyed

Disaggregation: Age group: 15–19 years; 20–24 years (see above for narrow age ranges)

Sex: female, male

Measurement

The numerator is measured by asking never married male and female survey respondents aged 15–24 years whether they have ever had sexual intercourse. If they answer no to this question, then they are counted in the numerator.

The denominator includes all male and female survey respondents aged 15–24 years who were never married, including those that are cohabiting.

Tool: population-based survey

Frequency: preferred: every 2 years; minimum: every 4–5 years

For more details on calculation and interpretation of the indicator, see Core indicators for national AIDS programs: guidance and specifications for additional recommended indicators.

Source

**HIV outcome indicator (HIV-03)**

**Multiple partners**

| Percentage of women and men aged 15–49 years who have had sexual intercourse with more than one partner in the last 12 months |

**Rationale**

The spread of HIV largely depends on unprotected sex among people with a high number of partnerships. Individuals who have multiple partners (concurrently or sequentially) have a higher risk of HIV transmission than individuals that do not link into a wider sexual network.

**Applicability:** all countries

**Definition of the indicator**

**Numerator:** Number of respondents aged 15–49 years who have had sexual intercourse with more than one partner in the last 12 months

**Denominator:** Number of all respondents aged 15–49 years

**Disaggregation:** Age groups: 15–19, 20–24 and 25–49 years

- Sex: female, male

**Measurement**

Respondents are asked whether or not they have ever had sexual intercourse and, if yes, they are asked: in the last 12 months, with how many different people have you had sexual intercourse?

**Tool:** population-based surveys (Demographic and Health Survey, AIDS Indicator Survey, Multiple Indicator Cluster Survey or other representative surveys)

**Frequency:** 2–5 years

For more details on *interpretation* of the indicator, see Monitoring the Declaration of Commitment on HIV/AIDS: guidelines on the construction of core indicators. 2008 reporting.

**Source**

HIV outcome indicator (HIV-04)

Condom use

Percentage of women and men aged 15–49 years who have had more than one sexual partner in the past 12 months reporting the use of a condom during their last sexual intercourse

Rationale

Condom use is an important measure of protection against HIV, especially among people with multiple sexual partners.

Applicability: all countries

Definition of the indicator

Numerator: Number of respondents aged 15–49 years who reported having had more than one sexual partner in the last 12 months who also reported that a condom was used the last time they had sex

Denominator: Number of respondents aged 15–49 years who reported having had more than one sexual partner in the last 12 months

Disaggregation: Age groups: 15–19, 20–24 and 25–49 years

Sex: female, male

Measurement

Respondents are asked whether or not they have ever had sexual intercourse and, if yes, they are asked:

1. In the last 12 months, with how many different people have you had sexual intercourse?

   If more than one, the respondent is asked:

2. Did you or your partner use a condom the last time you had sexual intercourse?

Tool: population-based surveys (Demographic and Health Survey, AIDS Indicator Survey, Multiple Indicator Cluster Survey or other representative surveys)

Frequency: preferred: every two years; minimum: every 4–5 years

For more details on interpretation of the indicator, see Monitoring the Declaration of Commitment on HIV/AIDS: guidelines on the construction of core indicators. 2008 reporting.

Source

HIV outcome indicator (HIV-05)
Condom use

Percentage of female and male sex workers reporting the use of a condom with their most recent client

Rationale
Various factors increase the risk of exposure to HIV among sex workers, including multiple, non-regular partners and more frequent sexual intercourse. However, sex workers can substantially reduce the risk of HIV transmission, both from clients and to clients, through consistent and correct condom use.

Countries with generalized epidemics may also have a concentrated subepidemic among sex workers. If so, calculating and reporting on this indicator for this population would be valuable.

Applicability: countries with concentrated or low-prevalence epidemics, including countries with concentrated subepidemics within a generalized epidemic

Definition of the indicator
Numerator: Number of respondents who reported that a condom was used with their last client in the last 12 months
Denominator: Number of respondents who reported having commercial sex in the last 12 months

Disaggregation: Age groups: <25 years; 25+ years
Sex: female, male

Measurement
Respondents are asked the following question: Did you use a condom with your most recent client in the last 12 months?

Whenever possible, data for sex workers should be collected through civil society organizations that have worked closely with this population in the field.

Access to survey respondents as well as the data collected from them must remain confidential.

Tools: special surveys, including the Family Health International Behavioral Surveillance Survey questionnaire for female sex workers

Frequency: every two years

For more details on interpretation of the indicator, see Monitoring the Declaration of Commitment on HIV/AIDS: guidelines on the construction of core indicators. 2008 reporting.

Source

Resources


HIV outcome indicator (HIV-O6)
Condom use

Percentage of men reporting the use of a condom the last time they had anal sex with a male partner

Rationale
Using condoms can substantially reduce the risk of the sexual transmission of HIV. Consequently, consistent and correct condom use is important for men who have sex with men because of the high risk of HIV transmission during unprotected anal sex. In addition, men who have anal sex with other men may also have female partners, who could become infected as well. Condom use with the most recent male partner is considered a reliable indicator of longer-term behavior.

Countries with generalized epidemics may also have a concentrated subepidemic among men who have sex with men. If so, calculating and reporting on this indicator for this population would be valuable.

Applicability: countries with concentrated or low-prevalence epidemics, including countries with concentrated subepidemics within a generalized epidemic

Definition of the indicator

Numerator: Number of respondents who reported that a condom was used the last time they had anal sex

Denominator: Number of respondents who reported having had anal sex with a male partner in the last six months

Disaggregation: Age groups: <25 years; 25+ years

Measurement
In a behavioral survey of a sample of men who have sex with men, respondents are asked about sexual partnerships in the preceding six months, about anal sex within those partnerships and about condom use when they last had anal sex.

Whenever possible, data for men who have sex with men should be collected through civil society organizations that have worked closely with this population in the field.

Access to survey respondents as well as the data collected from them must remain confidential.

Tools: special surveys, including the Family Health International Behavioral Surveillance Survey questionnaire for men who have sex with men

Frequency: every two years

For more details on interpretation of the indicator, see Monitoring the Declaration of Commitment on HIV/AIDS: guidelines on the construction of core indicators. 2008 reporting.

Source

Resources


HIV outcome indicator (HIV-O7)

Condom use

Percentage of injecting drug users reporting the use of a condom the last time they had sexual intercourse

Rationale
Safer injecting and sexual practices among injecting drug users are essential, even in countries where other modes of HIV transmission predominate, because: (1) the risk of HIV transmission from contaminated injecting equipment is extremely high; and (2) injecting drug users can spread HIV (such as through sexual transmission) to the wider population.

Countries with generalized epidemics may also have a concentrated subepidemic among injecting drug users. If so, calculating and reporting on this indicator for this population would be valuable.

Applicability: countries where injecting drug use is an established mode of HIV transmission

Definition of the indicator

Numerator: Number of respondents who reported that a condom was used the last time they had sex

Denominator: Number of respondents who report having had sexual intercourse in the last month

Disaggregation:
Age groups: <25 years; 25+ years
Sex: female, male

Measurement
Respondents are asked the following sequence of questions:

1. Have you injected drugs at any time in the last month?
2. If yes: have you had sexual intercourse in the last month?
3. If answering yes to both 1 and 2: did you use a condom when you last had sexual intercourse?

Whenever possible, data for injecting drug users should be collected through civil society organizations that have worked closely with this population in the field.

Access to survey respondents as well as the data collected from them must remain confidential.

Tool: special surveys, including the Family Health International Behavioral Surveillance Survey questionnaire for injecting drug users

Frequency: every two years

For more details on interpretation of the indicator, see Monitoring the Declaration of Commitment on HIV/AIDS: guidelines on the construction of core indicators. 2008 reporting.

Source

Resources


**HIV outcome indicator (HIV-08)**

**Safe behavioral practices**

Percentage of injecting drug users reporting the use of sterile injecting equipment the last time they injected

**Rationale**

Safer injecting and sexual practices among injecting drug users are essential, even in countries where other modes of HIV transmission predominate, because: (1) the risk of HIV transmission from contaminated injecting equipment is extremely high; and (2) injecting drug users can spread HIV (such as through sexual transmission) to the wider population.

Countries with generalized epidemics may also have a concentrated subepidemic among injecting drug users. If so, calculating and reporting on this indicator for this population would be valuable.

**Applicability:** countries where injecting drug use is an established mode of HIV transmission

**Definition of the indicator**

**Numerator:** Number of respondents who report using sterile injecting equipment the last time they injected drugs

**Denominator:** Number of respondents who report injecting drugs in the last month

**Disaggregation:** Age groups: <25 years; 25+ years

  Sex: female, male

**Measurement**

Respondents are asked the following sequence of questions:

1. Have you injected drugs at any time in the last month?
2. If yes: the last time you injected drugs, did you use a sterile needle and syringe?

Whenever possible, data for injecting drug users should be collected through civil society organizations that have worked closely with this population in the field.

Access to survey respondents as well as the data collected from them must remain confidential.

**Tool:** special surveys, including the Family Health International Behavioral Surveillance Survey questionnaire for injecting drug users

**Frequency:** every two years

For more details on interpretation of the indicator, see Monitoring the Declaration of Commitment on HIV/AIDS: guidelines on the construction of core indicators. 2008 reporting.

**Source**


**Resources**


HIV outcome indicator (HIV-O9)

Support for orphans

Current school attendance among orphans and among non-orphans (percentage)

Rationale

HIV is claiming ever-growing numbers of adults just at the time in their lives when they are forming families and bringing up children. As a result, the prevalence of orphanhood is rising steadily in many countries, while fewer relatives within the prime adult ages means that orphaned children face an increasingly uncertain future. Orphanhood is frequently accompanied by prejudice and increased poverty, factors that can further jeopardize children's chances of completing school education and may lead to the adoption of survival strategies that increase vulnerability to HIV. Monitoring the extent to which HIV support programs succeed in securing the educational opportunities of orphaned children is therefore important.

Applicability: all countries

Definition of the indicator

A. Current school attendance rate of orphans aged 10–14 years

Numerator: Number of children who have lost both parents and who attend school

Denominator: Number of children who have lost both parents

B. Current school attendance rate of children aged 10–14 years both of whose parents are alive and who live with at least one parent

Numerator: Number of children both of whose parents are alive who are living with at least one parent and who attend school

Denominator: Number of children both of whose parents are alive who are living with at least one parent

Disaggregation: Sex: female, male

Measurement

For every child aged 10–14 years living in a household, a household member is asked:

1. Is this child's natural mother still alive? If yes, does she live in the household?
2. Is this child's natural father still alive? If yes, does he live in the household?
3. Did this child attend school at any time during the school year?

Tools: population-based surveys (Demographic and Health Survey, AIDS Indicator Survey, Multiple Indicator Cluster Survey or other representative surveys)

Frequency: preferred: every 2 years; minimum: every 4–5 years

For more details on interpretation of the indicator, see Monitoring the Declaration of Commitment on HIV/AIDS: guidelines on the construction of core indicators. 2008 reporting.

Source


Resource

HIV outcome indicator (HIV-O10)

Reducing stigma

Percentage of women and men aged 15–49 years expressing accepting attitudes towards people living with HIV

Rationale

This indicator measures accepting attitudes toward people living with HIV among women and men aged 15–49 years.

HIV-related stigma refers to unfavorable attitudes, beliefs and policies directed toward people living with HIV and their family members, close associates and communities. HIV-related stigma can reduce the effectiveness of programs and services designed for those living with HIV and those who are affected by the disease. For example, studies have shown that some families with orphans have chosen not to receive relief services in order to avoid the stigma attached to these benefits. Other studies found that some families cut themselves off from social support networks long before an HIV-related death occurs in the family to avoid HIV-related stigma.

HIV awareness programs are designed to increase accepting attitudes toward people living with HIV or those perceived to be living with HIV. This indicator provides a measure of the effectiveness of HIV awareness programs and can highlight whether more needs to be done to counter HIV-related stigma.

Applicability: all countries

Definition of the indicator

Numerator: Number of women and men aged 15–49 years who report accepting attitudes towards people living with HIV

Denominator: All respondents aged 15–49 years who have heard of HIV

Disaggregation:
- Sex: female, male
- Age group: 15–19 years; 20–24 years; 25–49 years
- Education: none; primary; secondary or higher

Measurement

The numerator is calculated by first asking survey respondents if they have ever heard of HIV. If they answer yes, then they are asked a series of questions about people with HIV, including:

1. If a member of your family became sick with the HIV virus, would you be willing to care for him or her in your household?
2. If you knew that a shopkeeper or food seller had the HIV virus, would you buy fresh vegetables from him or her?
3. If a female teacher has the HIV virus but is not sick, should she be allowed to continue teaching in school?
4. If a member of your family became infected with the HIV virus, would you want it to remain a secret?

Only respondents who report an accepting or supportive attitude on all four of these questions are counted in the numerator. An accepting attitude for all four questions is considered to be (1) yes; (2) yes; (3) yes; and (4) no.

The denominator consists of all respondents in the survey who have heard of HIV.

Tools: population-based survey

Frequency: preferred: every 2 years; minimum: every 4–5 years

For more details on calculation and interpretation of the indicator, see Core indicators for national AIDS programs: guidance and specifications for additional recommended indicators.

Source
