

UNAIDS 2019
GUIDANCE

Global AIDS Monitoring 2020

Indicators for monitoring the
2016 Political Declaration on Ending AIDS

Contents

Foreword	5
Summary of indicators for Global AIDS Monitoring	7
Abbreviations and acronyms	11
Introduction	12
Purpose and background	12
Reporting history	13
Implementing monitoring at the national level	15
Constructing national indicators	15
Measurement tools and data sources	15
Spectrum estimates	16
Importing Spectrum data into Global AIDS Monitoring	17
Numerators and denominators	19
Disaggregate the data, especially by sex and age	19
Subnational data	20
Recent and representative survey data	20
Interpretation and analysis	21
Role of civil society and communities	21
Guidance on submitting data	22
Reporting tool and submitting data	22
The national-level reporting process: action required	24
Data validation process for 2020	26
Additional validation notes by indicator	28
Summary of changes to the indicator set for 2020 reporting	29
Key population-led organizations and responses	32

Please use the Global AIDS Monitoring website (aidsreportingtool.unaids.org) to submit your indicator data by 31 March 2020.

Modelled HIV estimates using the updated Spectrum software are due by 25 March 2020.

Commitment 1: Ensure that 30 million people living with HIV have access to treatment through meeting the 90–90–90 targets by 2020

1.1	People living with HIV who know their HIV status	34
1.2	People living with HIV on antiretroviral therapy	36
1.3	People living with HIV who have suppressed viral loads	38
1.4	Late HIV diagnosis	41
1.5	Antiretroviral medicine stock-outs	42
1.6	AIDS mortality	44
1.7	HIV testing volume and positivity	45

Commitment 2: Eliminate new HIV infections among children by 2020 while ensuring that 1.6 million children have access to HIV treatment by 2018

2.1	Early infant diagnosis	47
2.2	Mother-to-child transmission of HIV	49
2.3	Preventing the mother-to-child transmission of HIV	51
2.4	Syphilis among pregnant women	54
2.5	Congenital syphilis rate (live births and stillbirth)	56
2.6	HIV testing among pregnant women	57

Commitment 3: Ensure access to combination prevention options, including pre-exposure prophylaxis, voluntary medical male circumcision, harm reduction and condoms, to at least 90% of people by 2020, especially young women and adolescent girls in high-prevalence countries and key populations—gay men and other men who have sex with men, transgender people, sex workers and their clients, people who inject drugs and prisoners

3.1	HIV incidence	59
3.2	Estimates of the size of key populations (A–E)	61
3.3	HIV prevalence among key populations (A–E)	62
3.4	HIV testing among key populations (A–D)	64
3.5	Antiretroviral therapy coverage among people living with HIV in key populations (A–E)	66
3.6A	Condom use among sex workers	68
3.6B	Condom use among men who have sex with men	70
3.6C	Condom use among people who inject drugs	72
3.6D	Condom use among transgender people	74
3.7	Coverage of HIV prevention programmes among key populations (A–E)	76
3.8	Safe injecting practices among people who inject drugs	78
3.9	Needles and syringes distributed per person who injects drugs	80
3.10	Coverage of opioid substitution therapy	82
3.11	Active syphilis among sex workers	83

3.12	Active syphilis among men who have sex with men	84
3.13	HIV prevention programmes in prisons	85
3.14	Viral hepatitis among key populations	86
3.15	People receiving pre-exposure prophylaxis (PrEP)	87
3.16	Prevalence of male circumcision	89
3.17	Annual number of males voluntarily circumcised	90
3.18	Condom use at last high-risk sex	92
3.19	Condom distribution	93
Commitment 4: Eliminate gender inequalities and end all forms of violence and discrimination against women and girls, people living with HIV and key populations by 2020		
4.1	Discriminatory attitudes towards people living with HIV	95
4.2	Avoidance of health care among key populations because of stigma and discrimination (A–D)	97
4.3	Prevalence of recent intimate partner violence	99
4.4	Experience of HIV-related discrimination in health-care settings	101
Commitment 5: Ensure that 90% of young people have the skills, knowledge and capacity to protect themselves from HIV and have access to sexual and reproductive health services by 2020, in order to reduce the number of new HIV infections among adolescent girls and young women to below 100 000 per year		
5.1	Young people: Knowledge about HIV prevention	103
5.2	Demand for family planning satisfied by modern methods	104
Commitment 8: Ensure that HIV investments increase to US\$ 26 billion by 2020, including a quarter for HIV prevention and 6% for social enablers		
8.1	Approved and executed public earmarked HIV budgets	106
8.2	Volume and prices of Antiretrovirals per regimen	107
8.3	Total HIV expenditure by source and for key programmes	108
Commitment 10: Commit to taking AIDS out of isolation through people-centred systems to improve universal health coverage, including treatment for tuberculosis, cervical cancer and hepatitis B and C		
10.1	Co-management of tuberculosis and HIV treatment	112
10.2	Proportion of people living with HIV newly enrolled in HIV care with active TB disease	114
10.3	Proportion of people living with HIV newly enrolled in HIV care started on TB preventive therapy	115
10.4	Men with urethral discharge	117
10.5	Gonorrhoea among men	118

10.6 Hepatitis C testing	119
10.7 Proportion of people coinfected with HIV and HCV starting HCV treatment	120
10.8 Cervical cancer screening among women living with HIV	121
Guidelines for completing the NCPI	122
National Commitments and Policy Instrument	128
Annex 1. Selected bibliography	159
Annex 2. Approved and executed HIV earmarked domestic budgets	160
Annex 3. Volumes and unit prices of antiretrovirals procured per regimen	161
Annex 4. Funding matrix of total HIV expenditure and key programmes by financing source	162
Annex 5. Additional guidance on HIV and tuberculosis indicators	169

Foreword

The 2019 AIDS data reported in early 2020 will have special importance for the global AIDS response:

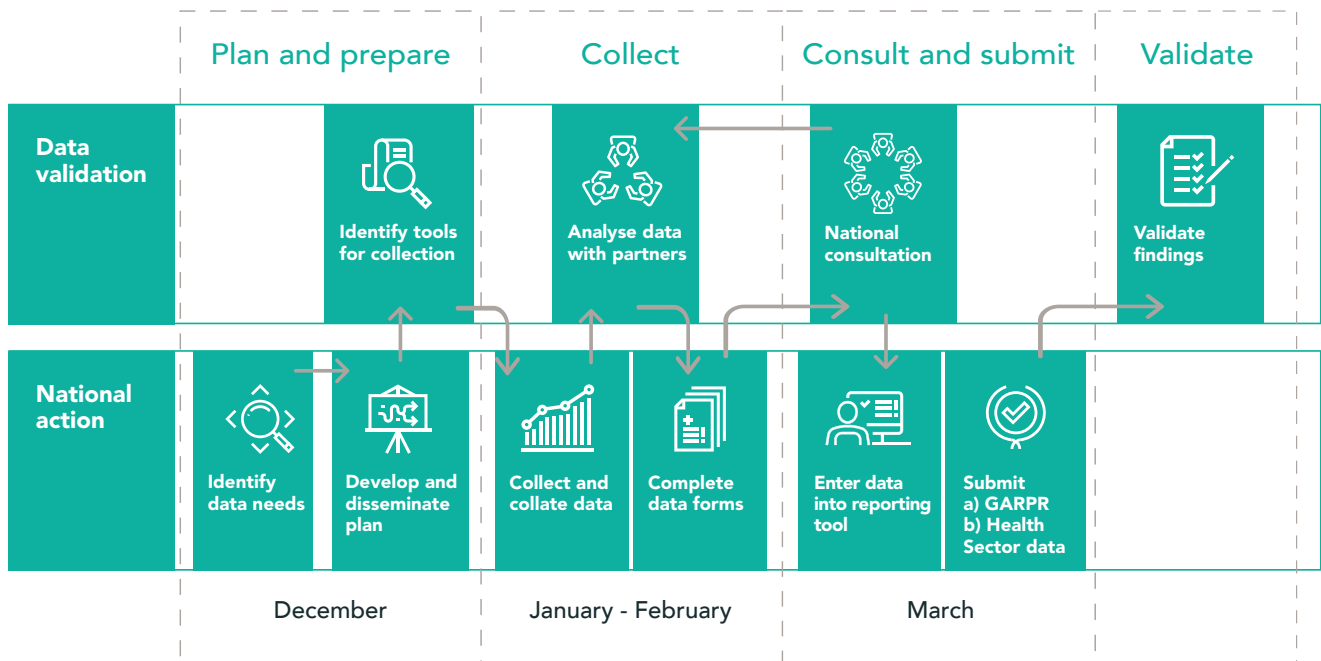
- They will provide the basis of the **12-month countdown** towards countries' progress and accountability for **the 2020 Fast-Track Targets**—a steppingstone to reaching the end of AIDS as a public health threat by 2030.
- They will be used in setting the **Global AIDS Targets for 2025**. The 2025 target setting will inform the national strategic plans on AIDS for the coming years.
- They will inform the 2020 development of the next **Global AIDS Strategy, 2021-2030**.
- The national and sub-national **HIV Estimates preparation** that feeds into **GAM reporting** will simultaneously be available for grant and operational plan preparations and review for countries participating in this year's cycle of **Global Fund** and **PEPFAR** resource mobilization.

We invite your country to submit its monitoring data and narrative report for the year ending in December 2019. **I count on your special efforts to report your country data through the GAM online reporting tool by 31 March 2020.** *Timeliness and quality* of this year's 31 March reporting will be *crucial* to ensure rapid and efficient validation so that each country's data will be fully taken into account during the above critical 2020 activities. **We see this as the window of opportunity to influence the AIDS agenda for the next decade, in order to end AIDS as a public health threat by 2030.** We know that when the world gathers for the AIDS 2020 and HIV 2020 conferences in July, people will be awaiting these critical data and updates on the response.

This guideline document lays out the indicators for monitoring the 2016 Political Declaration on ending AIDS. The Global AIDS Monitoring (GAM) process has been often referenced as a benchmark for successful international accountability mechanisms. **The following lessons from past reporting rounds can be useful for your upcoming reporting—providing an evidence-informed roadmap for timely, high quality, and complete reporting at an accelerated and streamlined pace:**

1. **National consultation process during the 1st quarter of the year** speeds up the consolidation and validation of the data; this reduces the need to exchange on the details, or going back to original sources of the data;
2. **Involvement of civil society** to the consultation is critical, especially in responding to the laws and policies related questions, and ensures that all relevant partners are engaged and play their important role in both implementation and reporting;
3. **Timely engagement of data providers** from the beginning of the year—January—helps to ensure that the data is reported on time and is of the highest quality and accuracy.

These guidelines describe in more detail the steps in collecting, analyzing, sharing and reporting the data, and the below flowchart helps in summarizing the process.



The past years' country reported data is accessible and available through AIDSInfo (<http://aidsinfo.unaids.org/>). The GAM indicator set for 2020 reporting is minimally modified, by including one new indicator, and with the removal of three indicators. Technical guidance on the 2020 reporting process is sent electronically to country rapporteurs and is available on the UNAIDS website. Your office may send any questions to AIDSreporting@unaids.org.

The reported data will inform the Secretary General and General Assembly on the progress in the AIDS response, as well as contribute to improved understanding of the country's response to the epidemic.

I request your continued support in maintaining the outstanding record of national reporting on the global AIDS response. It continues to be one of the leading international accountability mechanisms on any global commitment.

Shannon Hader, MD MPH
Deputy Executive Director, Programme

UNAIDS

Summary of indicators for Global AIDS Monitoring

2020 Fast-Track commitments and expanded targets to end AIDS

* Expanded targets are in blue

Reduce the number of people newly infected with HIV to fewer than 500 000 globally by 2020

➔ HIV incidence (see Commitment 3)

Reduce the number of people dying from AIDS-related causes to fewer than 500 000 globally by 2020

➔ AIDS mortality (see Commitment 1)

Eliminate HIV-related stigma and discrimination by 2020

➔ Discriminatory attitudes towards people living with HIV (see Commitment 4)

COMMITMENT 1: *Ensure that 30 million people living with HIV have access to treatment through meeting the 90–90–90 targets by 2020*

Commit to the 90–90–90 target

- ➔ 1.1 People living with HIV who know their HIV status
- ➔ 1.2 People living with HIV on antiretroviral therapy
- ➔ 1.3 People living with HIV who have suppressed viral loads
- ➔ 1.4 Late HIV diagnosis
- ➔ 1.5 Antiretroviral medicine stock-outs
- ➔ 1.6 AIDS mortality
- ➔ 1.7 HIV testing volume and positivity

Address regulations, policies and practices that prevent access to safe, efficacious and affordable generic medicines, diagnostics and related health technologies, including by ensuring the full use of the Agreement on Trade-related Aspects of Intellectual Property Rights (TRIPS) flexibilities, and strengthen regional and local capacity to develop, manufacture and deliver quality-assured affordable health products

COMMITMENT 2: *Eliminate new HIV infections among children by 2020 while ensuring that 1.6 million children have access to HIV treatment by 2018*

- ➔ 2.1 Early infant diagnosis
- ➔ 2.2 Mother-to-child transmission of HIV
- ➔ 2.3 Preventing the mother-to-child transmission of HIV
- ➔ 2.4 Syphilis among pregnant women
- ➔ 2.5 Congenital syphilis rate (live births and stillbirth)
- ➔ 2.6 HIV testing among pregnant women

Additional indicators related to this target but compiled elsewhere (either in different commitment areas or through the HIV estimates process):

- ➔ Number of children newly infected with HIV (see 3.1 HIV incidence)
- ➔ HIV treatment among children: antiretroviral therapy (see 1.2 People living with HIV on antiretroviral therapy)

COMMITMENT 3: *Ensure access to combination prevention options, including pre-exposure prophylaxis, voluntary medical male circumcision, harm reduction and condoms, to at least 90% of people by 2020, especially young women and adolescent girls in high-prevalence countries and key populations—gay men and other men who have sex with men, transgender people, sex workers and their clients, people who inject drugs and prisoners*

- ➔ 3.1 HIV incidence

Ensure that 90% of the people at risk of HIV infection have access to comprehensive HIV prevention services, including sex workers and their clients, men who have sex with men, transgender people, people who inject drugs and prisoners

- ➔ 3.2 Estimates of the size of key populations
- ➔ 3.3 HIV prevalence among key populations
 - 3.3A HIV prevalence among sex workers
 - 3.3B HIV prevalence among men who have sex with men

- 3.3C HIV prevalence among people who inject drugs
- 3.3D HIV prevalence among transgender people
- 3.3E HIV prevalence among prisoners

- ➔ 3.4 HIV testing among key populations
 - 3.4A HIV testing among sex workers
 - 3.4B HIV testing among men who have sex with men
 - 3.4C HIV testing among people who inject drugs
 - 3.4D HIV testing among transgender people

- ➔ 3.5 Antiretroviral therapy coverage among people living with HIV in key populations
 - 3.5A Antiretroviral therapy coverage among sex workers living with HIV
 - 3.5B Antiretroviral therapy coverage among men who have sex with men living with HIV
 - 3.5C Antiretroviral therapy coverage among people who inject drugs living with HIV
 - 3.5D Antiretroviral therapy coverage among transgender people living with HIV
 - 3.5E Antiretroviral therapy coverage among prisoners living with HIV

- ➔ 3.6 Condom use among key populations
 - 3.6A Condom use among sex workers

- 3.6B Condom use among men who have sex with men
- 3.6C Condom use among people who inject drugs
- 3.6D Condom use among transgender people

- ➔ 3.7 Coverage of HIV prevention programmes among key populations
 - 3.7A Coverage of HIV prevention programmes among sex workers
 - 3.7B Coverage of HIV prevention programmes among men who have sex with men
 - 3.7C Coverage of HIV prevention programmes among people who inject drugs
 - 3.7D Coverage of HIV prevention programmes among transgender people

People who inject drugs

- ➔ 3.8 Safe injecting practices among people who inject drugs
- ➔ 3.9 Needles and syringes distributed per person who injects drugs
- ➔ 3.10 Coverage of opioid substitution therapy

Sex workers

- ➔ 3.11 Active syphilis among sex workers

Men who have sex with men

- ➔ 3.12 Active syphilis among men who have sex with men

Prisoners

- ➔ 3.13 HIV prevention programmes in prisons

Viral hepatitis

- ➔ 3.14 Viral hepatitis among key populations

Reach 3 million people with pre-exposure prophylaxis by 2020

- ➔ 3.15 People receiving pre-exposure prophylaxis

Reach 25 million men with voluntary medical male circumcision in high-incidence countries by 2020

- ➔ 3.16 Prevalence of male circumcision
- ➔ 3.17 Annual number of males voluntarily circumcised

Make 20 billion condoms available annually by 2020 in low- and middle-income countries

- ➔ 3.18 Condom use at last high-risk sex
- ➔ 3.19 Condoms distributed

COMMITMENT 4: Eliminate gender inequalities and end all forms of violence and discrimination against women and girls, people living with HIV and key populations by 2020

.....

- ➔ 4.1 Discriminatory attitudes towards people living with HIV
- ➔ 4.2 Avoidance of health care among key populations because of stigma and discrimination
 - 4.2A Avoidance of health care by sex workers because of stigma and discrimination
 - 4.2B Avoidance of health care by men who have sex with men because of stigma and discrimination

- 4.2C Avoidance of health care by people who inject drugs because of stigma and discrimination
- 4.2D Avoidance of health care by transgender people because of stigma and discrimination

Ensure universal access to quality and affordable sexual and reproductive health-care services, including HIV services, for women

- ➔ 4.3 Prevalence of recent intimate partner violence

Percentage of countries that report disaggregated data by sex (analytical output in the online reporting tool)

Eliminate HIV-related stigma and discrimination in health-care settings by 2020

- ➔ 4.4 Experience of HIV-related discrimination in health-care settings

Review and reform laws that reinforce stigma and discrimination, including on age of consent, HIV non-disclosure, exposure and transmission, travel restrictions and mandatory testing

NCPI

COMMITMENT 5: *Ensure that 90% of young people have the skills, knowledge and capacity to protect themselves from HIV and have access to sexual and reproductive health services by 2020, in order to reduce the number of new HIV infections among adolescent girls and young women to below 100 000 per year*

- ➔ 5.1 Young people: knowledge about HIV prevention
- ➔ 5.2 Demand for family planning satisfied by modern methods

Additional indicators related to this target but compiled elsewhere (either in different commitment areas or through the HIV estimates process):

- ➔ Women 15–24 years old newly infected with HIV (see 3.1 HIV incidence)
- ➔ Condom use at last high-risk sex among young women 15–24 (see 3.18 Condom use at last high-risk sex)

COMMITMENT 6: *Ensure that 75% of people living with, at risk of and affected by HIV benefit from HIV-sensitive social protection by 2020*

Indicators to be included in Global AIDS Monitoring

NCPI

COMMITMENT 7: *Ensure that at least 30% of all service delivery is community-led by 2020*

Indicators to be included in Global AIDS Monitoring

NCPI

COMMITMENT 8: *Ensure that HIV investments increase to US\$ 26 billion by 2020, including a quarter for HIV prevention and 6% for social enablers*

- ➔ 8.1 Approved and executed public earmarked HIV budgets
- ➔ 8.2 Volume and prices of antiretrovirals per regimen
- ➔ 8.3 Total HIV expenditure

Domestic and international HIV expenditure by categories and funding sources

- 8.3A Expenditure on HIV testing and counselling
- 8.3B Expenditure on antiretroviral therapy
- 8.3C Expenditure on HIV-specific laboratory monitoring
- 8.3D Expenditure on TB and HIV
- 8.3E Expenditure on the five pillars of combination prevention
- 8.3F Expenditure on preventing the mother-to-child transmission of HIV

- 8.3G Expenditure on social enablers
- 8.3H Expenditure on cash transfers for young women and girls

COMMITMENT 9: *Empower people living with, at risk of and affected by HIV to know their rights and to access justice and legal services to prevent and challenge violations of human rights*

.....

NCPI

COMMITMENT 10: *Commit to taking AIDS out of isolation through people-centred systems to improve universal health coverage, including treatment for tuberculosis, cervical cancer and hepatitis B and C*

.....

Reduce tuberculosis-related deaths among people living with HIV by 75% by 2020

- ➔ 10.1 Co-managing TB and HIV treatment
- ➔ 10.2 People living with HIV with active TB disease
- ➔ 10.3 People living with HIV who started TB preventive therapy

Additional indicators related to this target but compiled elsewhere (either in different commitment areas or through the HIV estimates process):

- ➔ TB deaths among people living with HIV

Sexually transmitted infections

- ➔ 10.4 Men with urethral discharge
- ➔ 10.5 Gonorrhoea among men

Hepatitis C

- ➔ 10.6 Hepatitis C testing
- ➔ 10.7 People coinfected with HIV and HCV starting HCV treatment

Cervical cancer

- ➔ 10.8 Cervical cancer screening among women living with HIV

Additional indicators related to this target but compiled elsewhere by the World Health Organization:

- ➔ HPV vaccination

Abbreviations and acronyms

3TC	lamivudine
AIDS	acquired immunodeficiency syndrome
AZT	zidovudine
DTG	dolutegravir
EFV	efavirenz
FTC	emtricitabine
GAM	Global AIDS Monitoring
HBV	hepatitis B virus
HCV	hepatitis C virus
HIV	human immunodeficiency virus
HPV	human papillomavirus
HTC	HIV testing and counselling
ILO	International Labour Organization
LMIS	logistics management information system
LPV/r	lopinavir with a ritonavir boost
NASA	National AIDS Spending Assessment
NCPI	National Commitments and Policy Instrument
NGO	nongovernmental organization
NNRTI	non-nucleoside reverse transcriptase inhibitor
NRTI	nucleoside reverse transcriptase inhibitor
NVP	nevirapine
PEP	post-exposure prophylaxis
PEPFAR	United States President's Emergency Plan for AIDS Relief
PrEP	pre-exposure prophylaxis
RPR	rapid plasma reagin
SDG	Sustainable Development Goal
STI	sexually transmitted infection
TB	tuberculosis
TDF	tenofovir disoproxil fumarate
TPHA	treponema pallidum haemagglutination assay
TPPA	treponema pallidum particle agglutination assay
UNDP	United Nations Development Programme
UNFPA	United Nations Population Fund
UNICEF	United Nations Children's Fund
UNODC	United Nations Office on Drugs and Crime
VDRL	Venereal Disease Research Laboratory
WHO	World Health Organization

Introduction

Purpose and background

The purpose of this document is to provide guidance to national AIDS programmes and partners on the use of indicators to measure and report on the country HIV response.

The 2016 Political Declaration on Ending AIDS was adopted at the United Nations (UN) General Assembly High-Level Meeting on AIDS in June 2016. Built on three previous political declarations—the 2001 Declaration of Commitment on HIV/AIDS, the 2006 Political Declaration on HIV/AIDS and the 2011 Political Declaration on HIV and AIDS: Intensifying Our Efforts to Eliminate HIV and AIDS—the 2016 Political Declaration on Ending AIDS mandates UNAIDS to support countries in reporting on the commitments it contains.

The 2016 Political Declaration on Ending AIDS focuses on the five-year period ending in 2021, but it also covers the period of the Sustainable Development Goals (SDGs) (through 2030) and the integration of the global HIV response into the broader development agenda. Besides SDG 3, which focuses on health, there are several goals that are closely linked to HIV and AIDS (read more about the SDGs at https://www.unaids.org/en/AIDS_SDGs).

Figure 1
The SDGs



Source: <https://sustainabledevelopment.un.org/>

Although governments have adopted the 2016 Political Declaration on Ending AIDS, its vision extends far beyond the government sector, reaching private industry and labour groups, faith-based organizations, nongovernmental organizations (NGOs) and other civil society entities, including those representing people living with HIV.

As indicated in the 2016 Political Declaration on Ending AIDS, a successful AIDS response should be measured by the achievement of concrete, time-bound targets. It calls for careful monitoring of the progress of implementing commitments, and it requires the UN Secretary-General to issue annual progress reports. These reports are designed to identify challenges and constraints, and to recommend actions to accelerate the achievement of targets.

The 2020 Global AIDS Monitoring is the fourth year towards the SDGs; it is also the fourth year of reporting on the HIV monitoring framework for 2016–2021.

Countries are encouraged to integrate indicators into their ongoing monitoring efforts. These indicators are designed to help assess the state of the national response and progress made towards achieving national HIV targets. They will contribute to improving understanding of the global response to the HIV epidemic, including progress that has been made towards achieving the global targets set out in both the 2016 Political Declaration on Ending AIDS and the SDGs.¹

These guidelines are designed to improve the quality and consistency of data collected at the country level, enhancing the accuracy of the conclusions drawn at the national, regional and global levels. Countries should also develop national and programme indicators that capture the specific goals of both their national strategic plan for HIV and their particular context. The World Health Organization (WHO), UNAIDS and partners are revising the 2015 *Consolidated strategic information guidelines for HIV in the health sector*, which provide more programmatic indicators.² The revised edition is to be published in 2020.

How to use these guidelines

These guidelines have been developed to help countries collect data and report on their national HIV response as effectively as possible. The section on the indicators for Global AIDS Monitoring devotes space to each indicator, giving reasons for their inclusion and providing methods for collecting, constructing and measuring the indicator. The indicator's strengths and weaknesses are also discussed.

Reporting format

The 2020 reporting requires submission of the indicators, the interim National Commitments and Policy Instrument (NCPI) and the AIDS Medicines and Diagnostics Survey. Countries also are encouraged to submit a narrative report when submitting Global AIDS Monitoring data: the online tool incorporates a template for creating a narrative report that consists of brief narrative summaries for each Fast-Track commitment. Alternatively, countries can submit a recent national epidemiology and response overview report, if available. UNAIDS will then publish the narrative report with the approval of the country.

Indicator data are considered to be an integral part of each country progress report submission. For that reason, both the narrative portion of the country progress report and the indicator data should be considered in the consultation and report preparation process, as outlined in the section on Implementing monitoring at the national level.

The Global AIDS Monitoring report should be submitted through the reporting website (<https://aidsreportingtool.unaids.org>) to enhance the completeness and quality of the data, and to facilitate processing and analysis at the country, regional and global levels. **The deadline for submission using the reporting website is 31 March 2020.**

The changes in this round of reporting (compared with the 2019 reporting round) are summarized on pages 29–31.

These guidelines fully define all indicators used for the Global AIDS Monitoring. The procedures outlined in this manual should be used for collecting and calculating the necessary information for each indicator.

The indicator data will be made available at aidsinfo.unaids.org after a process of data cleaning, validation and reconciliation. Please note that corrections or updates to indicator data following validation are available in AIDSInfo and may not be reflected in narrative reports.

Implementing monitoring at the national level

Constructing national indicators

This manual provides the information needed to construct each indicator, including the following:

- A summary of what the indicator measures.
- A rationale for the indicator.
- A numerator, denominator and calculation **method**.
- Disaggregation of the indicator.
- Recommended measurement tools.
- Measurement frequency.
- Strengths and weaknesses of the indicator (including summary interpretation of the indicator).

Measurement tools and data sources

The primary measurement tools vary by indicator and include the following:

- Nationally representative population-based sample surveys.
- Behavioural surveillance surveys.
- Specially designed surveys and questionnaires, including surveys of specific population groups (such as specific service coverage surveys).
- Patient tracking systems.
- Health information systems.
- Sentinel surveillance.
- HIV case surveillance systems.
- Mathematical models.
- National HIV estimates from Spectrum software.

Existing data sources—including records and programme reviews from health facilities and schools, and specific information from HIV surveillance activities and programmes—should be used to supplement the primary measurement tools.

Civil society organizations are valuable actors in the AIDS response, and they may contribute data for many indicators, especially those that relate to interventions in which NGOs and faith-based and community-based organizations play an active

role. Examples include work with young people, key populations at higher risk and pregnant women.

In many countries, most of the data required for the national-level indicators may not be available from routine sources. Gathering indicator data may require adapting existing monitoring tools or adding specific surveys. Countries that conduct regular, nationally representative population-based surveys—such as Population-based HIV Impact Assessments or the Demographic and Health Surveys—will collect important information, including behavioural data on young people. In countries where other types of population-based surveys are conducted, including those for purposes other than HIV, surveys can be adapted to collect data for selected indicators.

Spectrum estimates

A major tool for generating denominators used in Global AIDS Monitoring reporting is the Spectrum computer package. Spectrum allows countries to create population-level estimates of people living with HIV, pregnant women who need antiretroviral medicine to prevent vertical HIV transmission and HIV-exposed children who need virological testing.³ In addition, Spectrum allows countries to estimate new HIV infections, HIV incidence (the SDG indicator), deaths from AIDS-related illness and the mother-to-child transmission rate—indicators that are difficult to measure directly. Spectrum files are updated every year using the most recent programmatic and surveillance data.

In 2020, Spectrum files will be developed simultaneously with the submission of indicator data through the Global AIDS Monitoring system. Final Spectrum files should be submitted by 25 March 2020. Country teams will receive information on the 2020 estimates process in November 2019.

As in previous years, countries have the option of importing Spectrum data into the Global AIDS Monitoring online tool for certain indicators, thereby simplifying the process of completing data entry in the online tool. This step reduces both the data entry required and the chance for errors, and it improves the consistency of data between the two systems. In 2020, data for Indicators 1.1, 1.2 and 1.3, including the detailed age disaggregation, will be reported in Spectrum and then imported into the Global AIDS Monitoring online reporting tool for countries with final Spectrum files.

The Spectrum files are created by a team of national experts trained in the use of the software. These files are then reviewed by UNAIDS for quality control. It is critical that the team completing the Global AIDS Monitoring tool imports the final set of estimates developed by the national HIV estimates team.

Importing Spectrum data into Global AIDS Monitoring

Spectrum includes a simple tool to export the estimates required for Global AIDS Monitoring. The national estimates teams should export their Spectrum results into a .CSV file that the Global AIDS Monitoring focal point can import into the Global AIDS Monitoring online reporting tool. Importing the Spectrum estimates can be done at any point, and even at multiple times during data entry into the Global AIDS Monitoring online tool.

Once the final Spectrum file has been agreed upon by the country, these final data should be imported into the online reporting tool. UNAIDS will verify that the final Spectrum file matches what was included in Global AIDS Monitoring, reverting to the country if there are any discrepancies.

Importing the estimates into the Global AIDS Monitoring tool requires communication between the national estimates teams and the Global AIDS Monitoring focal point (if they are separate individuals) to ensure the final file is used.

Tips on importing Spectrum results:

- Before the import process, the Global AIDS Monitoring focal point should identify which indicators should be imported by responding **Yes** to the question **Take data from the final Spectrum file**. Any data already entered for these selected indicators will be cleared out and replaced by Spectrum data during the import process.
 - Even if the national figures for Indicators 1.1, 1.2, 1.3, 2.3 and 3.1 would be imported from Spectrum, the Global AIDS Monitoring focal point should review the data entry pages for these indicators to enter additional city-specific data, as available.
-

Steps for the *national estimates team* when exporting data from Spectrum:

1. Open the Spectrum software, but do not open your country file.
 2. Select **Tools** from the tabs at the top of the page, then select **More tools**.
 3. Under **AIM**, select **GAM**. Spectrum will open a dialog box.
 4. Click **Add**, select your national file (or subnational files, if available), then click **Open**.
 5. Select **Set GAM results file name**. Select the directory where you want to save the .CSV file. Give the file a clear name that reflects the Spectrum file name, then click **Save**.
-

Table 1.

Timeline for 2020 Spectrum estimates and GAM reporting

Dates*	Activity	Responsible party
December–March	Develop the Spectrum file and have it reviewed by UNAIDS	National estimates team
15–29 March	Send Spectrum estimates .CSV file to Global AIDS Monitoring focal point	National estimates team
15–29 March	Import Spectrum estimates into Global AIDS Monitoring online reporting tool for final review	Global AIDS Monitoring focal point
15–29 March	Hold stakeholders meeting to approve Global AIDS Monitoring submission	Global AIDS Monitoring focal point
25 March	Send final Spectrum file to UNAIDS	National estimates team
31 March	Submit Global AIDS Monitoring data	Global AIDS Monitoring focal point
1–15 April	Compare final Spectrum file with final Global AIDS Monitoring submission and revert to country if there are discrepancies	Global estimates team
1–30 April	Update Spectrum .CSV file import, if needed	Global AIDS Monitoring focal point or global estimates team
1 May	Summary of estimates results sent to national AIDS coordinator for sign-off	Global estimates team
1–10 May	Review output from Spectrum and send clearance to UNAIDS	National estimates team

* This timeline is slightly different for select countries that require early reporting for planning purposes.

6. Click **Process** to generate the .CSV file.
7. Email the .CSV file to your Global AIDS Monitoring focal point, or follow the next set of instructions if you are the Global AIDS Monitoring focal point.

Steps for the Global AIDS Monitoring focal point/national rapporteur when importing the Spectrum extract into Global AIDS Monitoring:

1. Log into the Global AIDS Monitoring online reporting tool (<https://aidsreportingtool.unaids.org>).
2. Select **Spectrum import** from the top menu.
3. Select **Choose file** and choose the .CSV file to be exported from Spectrum.
4. Click **Preview**.
5. The system will list all of the indicator data from the imported file, side-by-side with any data that have been entered in the system. You may select which set of data to use by ticking **Use entered data** or **Take imported data from Spectrum**.
6. Click **Save** to save the settings and data sets that you have chosen to import, or click **Cancel** to abort the import process.
7. If you have chosen to use the entered data instead of taking data from Spectrum, please be sure to go back to the data entry screens of those indicators to review and enter any missing data.

Indicators that can be imported from Spectrum include the following:

- 1.1 People living with HIV who know their HIV status (for 2010–2019).
 - All, <15, 15+ by sex, detailed age groups (<5, 5–9, 10–14, 15–19, 20–24, 25–49, 50+).
- 1.2 People living with HIV on antiretroviral therapy (for 2010–2019).
 - All, <15, 15+ by sex, detailed age groups (<5, 5–9, 10–14, 15–19, 20–24, 25–49, 50+).
- 1.3 People living with HIV who have suppressed viral loads (for 2010–2019).
 - All, <15, 15+ by sex, detailed age groups (<5, 5–9, 10–14, 15–19, 20–24, 25–49, 50+).
- 1.6 AIDS mortality (for 2010–2019).
 - All, <5, 5–14, 15+ by sex.
- 2.1 Early infant diagnosis (for 2011–2019).
 - Denominator only.
- 2.2 Mother-to-child transmission rate (for 2010–2019).
- 2.3 Preventing mother-to-child transmission of HIV (for 2010–2019).
 - Regimens and coverage.
- 3.1 HIV incidence per 1000 uninfected population (for 2010–2019).
 - 0–99+, 15–49, 15–24, 50+ by sex.
 - All ages, <15.

Numerators and denominators

For each indicator, detailed instructions are provided for measuring the national response. Most national-level indicators use numerators and denominators to calculate the percentages that measure the state of the national response. Countries are strongly encouraged to pay close attention to the dates attached to specific data when calculating an indicator: collecting data used for the numerator and denominator at different times will compromise the accuracy and validity of that information.

The methods described have been designed to facilitate the construction of global estimates from national-level data. Although these methods can be applied at the subnational level, simpler, faster and more flexible approaches tailored to local conditions may be more appropriate to guide decision-making below the national level.

Disaggregate the data, especially by sex and age

One of the key lessons learned from previous rounds of reporting was the importance of obtaining disaggregated data: for example, breaking it down by sex and age, and providing it for specific key populations or geographic locations. It is vital that countries collect data in their component parts and not simply in summary form. Without disaggregated data, monitoring the breadth and depth of the response to the epidemic at the national and global levels is difficult. It is equally difficult to monitor access to services, the equity of that access, the appropriateness of focusing on specific populations and meaningful change over time.

Countries are strongly encouraged to make collecting disaggregated data—especially by sex and age, and for specific key populations—one of the cornerstones of their monitoring and evaluation efforts. If possible, equity analysis should also be conducted.⁴

Sex- and age-disaggregated epidemiological data and behavioural indicators may reveal gender dynamics. Key ministries should review their information systems, surveys and other instruments for collecting data to ensure that they capture disaggregated data at the subnational levels, including facility and project levels. Special effort should be made to follow disaggregated data up to the national level. In addition, the private sector and/or civil society and community organizations involved in the country's AIDS response must be advised of the importance of disaggregated data, and they must make collecting, disseminating and analysing data a priority in their ongoing operations.

The Global AIDS Monitoring online reporting tool clearly identifies the disaggregated data required to report accurately on the numerator and denominator for each indicator. Where appropriate, all data should be disaggregated by sex and age. Detailed age-disaggregated data are requested for indicators 1.1, 1.2 and 1.3. These detailed age groups can improve our understanding of the HIV epidemic. For example, disaggregated detailed age group data allow countries to assess the extent to which programme coverage, including the percentage of people living with HIV on treatment, differs between adolescents aged 10–19 years and young people 15–24 years. If collecting disaggregated data proves difficult, partial data may be entered.

When disaggregated data are not readily available, the information needed for indicators may be extracted from larger data sets, although the location of the data varies from country to country. Countries should seek technical assistance from the UN System (including country offices of UNAIDS, WHO and the United Nations Children's

Fund [UNICEF]) and its partners for help with accessing the disaggregated data needed to properly complete the measurements of indicators.

Governments are encouraged to look beyond their internal information resources to collect and validate data. In many cases, civil society and community organizations may be able to provide valuable primary and secondary data, especially for key populations.

Countries are encouraged to report available complementary data that reflect the gender dimensions of the indicators from other sources, including quantitative and qualitative data collected by civil society. These additional data will permit a more comprehensive situational analysis of the indicators from a gender perspective. These may be entered in the box **Data related to this topic**, found in each indicator page in the online reporting tool.

Subnational data

Many countries are improving the use of data at the subnational level to help all stakeholders better understand the geographical distribution of the epidemic and the response in each community.

Since mid-2014, the online reporting tool has allowed users to submit subnational data or site-specific data for selected indicators. For certain indicators, the tool also prompts users to submit data on high-burden cities or those identified as Fast-Track cities that have committed to ending AIDS by 2030. These data are used to assess progress in the HIV response in these cities. When gathering city-level data for submission, it is highly recommended that relevant city counterparts be consulted.

Recent and representative survey data

Countries are requested to report only newly available data. If the latest available data have already been reported in a previous round of reporting, they should not be reported again.

When calculating indicators based on general population surveys, countries should use the most recently available, nationally representative survey.

When calculating indicators based on key population surveys, ensuring that samples are representative of the broader group is a great technical challenge. Methods are being developed to achieve representative sampling of these populations (such as respondent-driven sampling), but while these are being refined, countries may not be confident that the samples used for surveying key populations at higher risk of HIV exposure are representative. Countries are advised to use the most recent survey of key populations that has been reviewed and endorsed by local technical experts (such as monitoring and evaluation technical working groups or national research councils). Countries are encouraged to report all recent high-quality surveys of key populations, by site, in the Global AIDS Monitoring online reporting tool, along with the numerator, denominator and sample size.

One of the challenges in developing estimates of the burden of disease and planning for programme needs is describing the size of key populations. Countries are asked to report the size estimates for key populations, providing methods and any estimates specific to cities or provinces that have been calculated empirically. Some countries that have empirical national size estimates for key populations can also aggregate prevention programme data. If a country can report against an indicator with

national programme data, this should be noted in the box **Region for which the last estimation was performed**.

Interpretation and analysis

This manual discusses each indicator, including their strengths and weaknesses. Countries should carefully review this section before they begin collecting and analysing data, since it explains how to analyse each indicator and any potential issues related to it. The points raised in this section should be reviewed to confirm the appropriateness of the findings for each indicator before finalizing the reporting and writing the narrative report.

The sections on the strengths and weaknesses of each indicator are designed to improve the accuracy and consistency of the data submitted to UNAIDS. Other points in this section provide additional information on the value of particular indicators while acknowledging that countries vary on diverse issues, such as the relationship of costs to local income, standards for quality and variation in treatment regimens.

After compiling their data, countries are strongly encouraged to continue to analyse their findings. This will enable them to better understand their national response and identify opportunities to improve it. Countries should be looking closely at the links between policy, resource allocation and efficiency, HIV programme implementation, verifiable behaviour change and changes in the epidemic. For example, if a country has a policy for reducing mother-to-child transmission of HIV, does it also have sufficiently funded programmes that make services to prevent mother-to-child transmission available to pregnant women? If these programmes are in place, are women using them in sufficient numbers to reduce the number of infants born with HIV in that country?

These links exist in every facet of a national response, and the national-level indicators included in this manual reflect many of the most important ones. To analyse these linkages effectively, countries must draw on the widest range of data available, including quantitative and qualitative information from the public and private sectors and communities. Excessive reliance on data of a single type or from a single source is less likely to provide the perspective or insights required to understand such links and to identify any existing or emerging trends.

Role of civil society and communities

Civil society plays a key role in the response to the AIDS epidemic in countries around the world, and the wide range of expertise within civil society organizations makes them ideal partners in the process of preparing country progress reports. Specifically, civil society organizations are well positioned to provide quantitative and qualitative information to augment the data collected by governments and to interpret the data collected. National AIDS councils, commissions and committees (or their equivalents) should seek input from the full spectrum of civil society and community—including NGOs, networks of people living with HIV, faith-based organizations, women, young people, trade unions and community-based organizations—for their reports on the national-level indicators underlying reporting on the commitments in the 2016 Political Declaration on Ending AIDS. The importance of securing input from the full spectrum of civil society and community, including people living with HIV, cannot be overstated: civil society and communities speak with many voices and represent many different perspectives, all of which can be valuable when monitoring and evaluating a country's AIDS response.

National AIDS committees or their equivalents should provide civil society and community organizations with easy access to data collection plans, including for denominators. A straightforward mechanism for submitting and evaluating information also should be developed. As part of that effort, civil society and community organizations should be invited to participate in workshops at the national level to determine how they can best support the country's reporting process.

Civil society and community representatives in every country should be given sufficient opportunity to review and comment on the data before they are finalized and submitted. The report submitted to UNAIDS should also be widely disseminated to ensure that civil society has ready access to it.

Country-level UNAIDS staff members are available to assist with input from civil society and community throughout the process. In particular, UNAIDS country-level staff members should:

- Brief civil society and community organizations on the indicators and the reporting process.
- Provide technical assistance on gathering, analysing and reporting data, including focused support for people living with HIV.
- Facilitate the dissemination of reports, including (whenever possible) reports in national languages.

As in previous rounds, UNAIDS will accept shadow reports, but they are not intended to be a parallel reporting process for civil society and communities: whenever possible, UNAIDS encourages integrating civil society and communities into national reporting processes, as described above. Rather, shadow reports are intended to provide an alternative perspective if: (a) it is strongly felt that civil society and communities were not adequately included in the national reporting process; (b) governments do not submit a report; or (c) the data provided by government differ considerably from the data collected by civil society and communities while monitoring government progress in delivering services. Shadow reports can be submitted through aidsreporting@unaids.org.

Guidance on submitting data

Countries needing additional information on collecting data for Global AIDS Monitoring indicators, the reporting tool and/or submission mechanisms should seek technical assistance from their UNAIDS strategic information advisers, UNICEF or WHO offices, or the HIV monitoring and evaluation working groups in their country. The UNAIDS Strategic Information Department is also available to provide support: it can be reached via email at AIDSreporting@unaids.org.

Reporting tool and submitting data

The indicator data, national narrative reports, interim NCPI and AIDS Medicines and Diagnostics Survey should be submitted online by 31 March 2020 using the global reporting tool: <https://aidsreportingtool.unaids.org>.

Each country identifies a national focal point responsible for accessing this tool and entering information: the national rapporteur. Countries may add or assign multiple rapporteurs if data are provided from several sources and reporting structures.

National rapporteurs may access the reporting tool using the same credentials they used in the previous reporting round; they also may extend these rights to others, if

desired. New national rapporteurs are requested to register online as country editors. Registrations are approved based on official communication with the country. Editors can add and change the information to be submitted. Similar to previous years, the national rapporteur can also allow other people to view the data, enabling broader country consultation. Viewers can see the information to be submitted, but they cannot change it. The e-tutorials on how to register for a user account or how to manage user accounts are available at the Global AIDS Monitoring website (<https://www.unaids.org/en/dataanalysis/knowyourresponse/globalaidsprogressreporting>).

Countries are encouraged to submit data for all indicators where data are available. If countries are not submitting data on an indicator, they should indicate whether it is because the indicator is not considered relevant to the epidemic or because recent, appropriate data are not available. Countries may quickly define the relevance or data availability of each indicator through the **Select relevant indicators** screen.

Most of the national indicators apply to all countries. The behaviour indicators for key populations at higher risk are relevant in all countries, regardless of the national HIV prevalence. For example, a country with a higher prevalence epidemic also may have a concentrated subepidemic among people who inject drugs. It would therefore also be valuable to calculate and report on the indicators that relate to the key populations at higher risk.

Similarly, countries with a low HIV prevalence are encouraged to collect data on sexual behaviour among young people as a means of tracking trends in behaviour that could influence the national response in the future. However, a few indicators are solely applicable to specific HIV epidemic contexts. This is noted in the corresponding indicator definitions in these guidelines.

UNAIDS strongly recommends that countries use these indicators within their national monitoring and evaluation systems. If a country is using an alternative indicator to monitor the issue in question, the comment box for **Data related to this topic** in the online reporting tool may be used to describe it (including a full definition and method of measurement) and to provide any available data for the indicator.

Countries are requested, when possible, to submit copies of (or links to) primary reports from which data are drawn for the respective indicators. These reports can be submitted through the online reporting tool. This will facilitate interpretation of the data, including trend analysis and comparison between countries.

To facilitate country-level review, users may select **Print all to PDF** to combine all indicators into a single PDF file.

The data entry progress bar showing the percentage of indicators that have been completed can be found in the main indicator list page. Once the data entry progress reaches 100%, the national rapporteur may click the **Submit** button to complete the submission process, locking the country's data in the online reporting tool. UNAIDS will review the data and ask for clarification, if necessary. If UNAIDS has queries about the data, specific indicators will be opened again for countries to respond to queries and edit their responses.

National rapporteurs may import Spectrum data into the Global AIDS Monitoring online tool prior to clicking the **Submit** button. This gives them the opportunity to review the imported data and confirm their inclusion in the Global AIDS Monitoring report. If Spectrum files are finalized after the Global AIDS Monitoring submission, national rapporteurs may request that their Global AIDS Monitoring online tool be opened for the import process between 1 April and 1 May. Alternatively, UNAIDS will

automatically import data from approved Spectrum files provided by the national HIV estimates team. UNAIDS will compare the final data to ensure the same file was used in Global AIDS Monitoring and the final HIV estimates process.

Problems with the online global reporting tool can be reported to AIDSreporting@unaid.org.

The national-level reporting process: action required

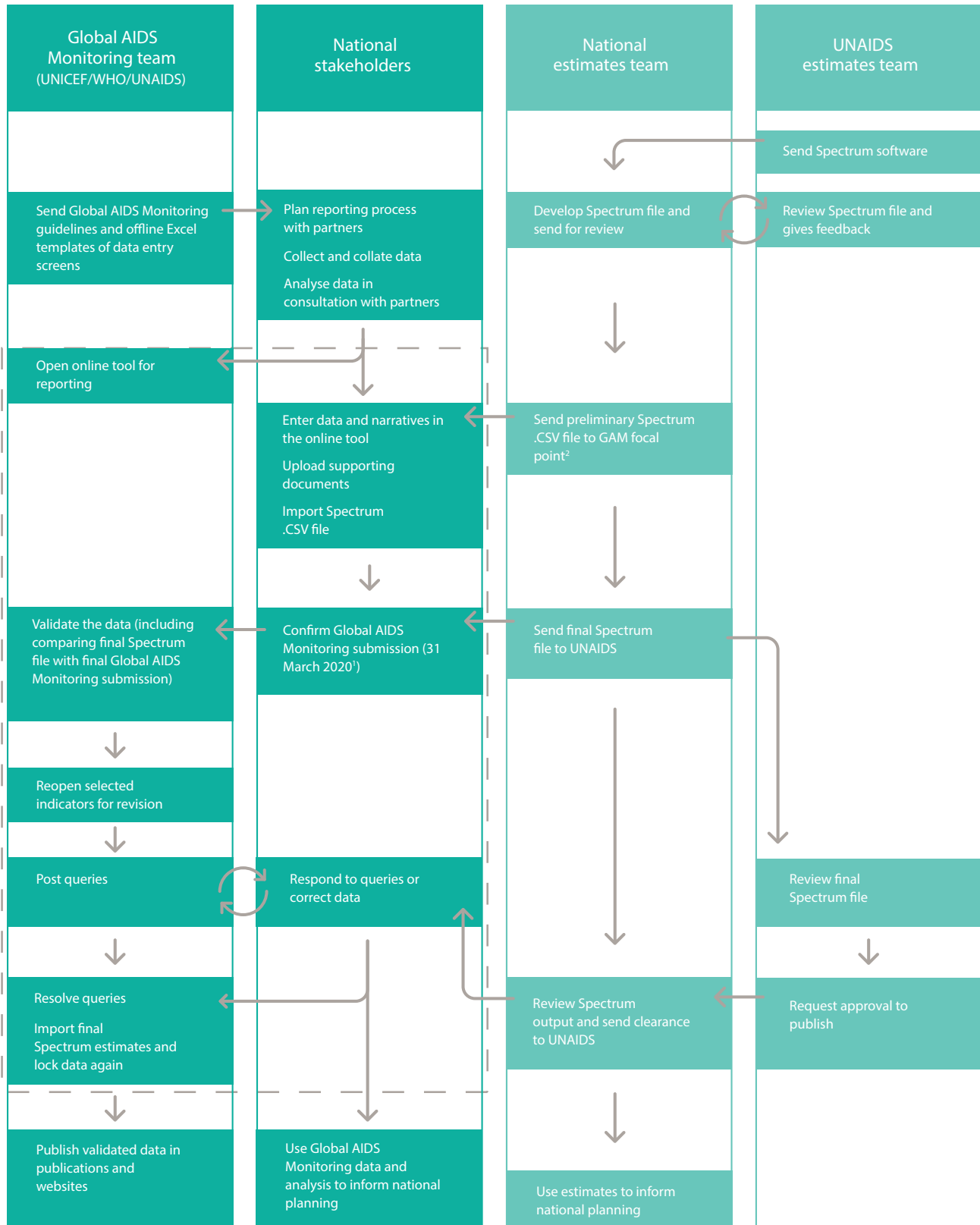
Complete reporting on the indicators is essential to inform national responses and contribute to the global response to the epidemic. Countries are strongly encouraged to establish timetables and milestones for completing the necessary tasks related to reporting. Below is a list of suggested actions to facilitate completion of the report.

Under the direction of the national AIDS committee or its equivalent, countries need to do the following:

1. Identify the focal point for the reporting process and submit the person's name and contact details to UNAIDS (through AIDSreporting@unaid.org) before **1 February 2020**.
2. Identify the data needed in accordance with the national strategic plan and these Global AIDS Monitoring guidelines.
3. Identify a focal point to coordinate the completion of the interim NCPI.
4. Develop and disseminate a plan for collecting data for Global AIDS Monitoring indicators, the interim NCPI and the AIDS Medicines and Diagnostics Survey, including timelines and the roles of the national AIDS committee (or equivalent), other government agencies, civil society and other relevant partners.
5. Identify relevant tools for data collection and sources for each report component, including by:
 - o Meeting with the national HIV estimates team.
 - o Aligning the data collection timeline with the following:
 - That of other data collection efforts, including those through funding agencies such as the Global Fund to Fight AIDS, Tuberculosis and Malaria (Global Fund), the United States President's Emergency Plan for AIDS Relief (PEPFAR) and UN agencies.
 - The timeline for the aggregation of data at the national level for facility-based indicators.
6. Collect and collate data in coordination with partner organizations from government, civil society, communities and international partners, including:
 - o Establishing protocols for data processing and management:
 - Basic data cleaning and validation.
 - One database for analysis and reporting purposes.
 - o Data vetting.
 - o Completing the interim NCPI (see page 122 for further guidance).

Figure 2

Global AIDS Monitoring reporting process



¹ For other important dates, please see page 17.

² For a list of Indicators that can be imported from Spectrum, please see page 18.

7. Ask the national estimates team to provide the final .CSV file with the estimates from Spectrum software.
8. Enter the indicator, interim NCPI and AIDS Medicines and Diagnostics Survey data into the Global AIDS Monitoring online reporting tool (<https://AIDSreportingtool.unaids.org>).
9. Enable stakeholders, including government agencies and civil society, to comment on the draft data.
10. Conduct a validation workshop to analyse indicator data, including on AIDS expenditure and the NCPI, jointly with partner organizations from government, civil society, communities and international partners. This is done in order to: (a) identify progress, gaps, challenges and next steps towards achieving each of the 10 Fast-Track commitments and expanded targets to end AIDS by 2030; and (b) reach consensus on the national Global AIDS Monitoring submission. The results of this analysis should be summarized and entered by commitment in the narrative report section in the online reporting tool.
11. Send the data entered.
12. Upload the final Spectrum file to the designated national estimates folder on or before **25 March 2020**.
13. Submit all indicator data, interim NCPI responses, AIDS Medicines and Diagnostics Survey responses, and narrative summaries by commitment on or before **31 March 2020**.
14. Respond in a timely manner to queries on the submission that are posted in the online reporting tool by UNAIDS, WHO or UNICEF, or those sent by AIDSreporting@unaids.org to the national Global AIDS Monitoring focal point.

The reported data should be validated and reconciled between all partners in the country. The online reporting tool supports this process through the ability to share viewer credentials with national stakeholders. Several countries have reported that this feature enabled civil society and other partners to view and provide input during the reporting process, enabling wider and more rapid stakeholder consultation and validation.

Data validation process for 2020

After countries submit Global AIDS Monitoring reports through the online reporting tool, UNAIDS—with support from UNICEF and WHO—will review the data submitted to do the following:

- Support countries in reviewing any errors in entering data.
- Verify that the data submitted respond to the indicator definitions (as outlined in the Global AIDS Monitoring guidelines).

Data submitted through Global AIDS Monitoring will be published through AIDSInfo and used for global and regional analysis. For this reason, data must be comparable across countries and respond to the globally agreed definitions of the indicators used for monitoring global political commitments.

If countries do not have data that correspond exactly to the indicator definition available, they are encouraged during the reporting process to consider other data that may be relevant to the commitment area in order to assess progress. However, for the reasons mentioned above, these data will not be published in AIDSInfo or included in the global analysis.

During the review, UNAIDS liaises with national Global AIDS Monitoring focal points to request clarification or revise the data submitted in the tool. Data validation is conducted in several steps:

- UNICEF and UNAIDS align the databases of survey data.
- The indicator focal points for UNICEF, WHO and UNAIDS headquarters conduct an initial review and note preliminary queries.
- UNAIDS regional support teams review the submissions and revise the preliminary queries.
- The UNAIDS Secretariat enters queries in the online reporting tool.
- The UNAIDS Secretariat and regional support teams follow up with countries about queries.

The validation process considers the following points across indicators. For indicators sourced from surveys:

- Verify the consistency of reported numbers, including whether the disaggregated data add up to the total.
- Verify for substantial variation from previously reported data.
- Verify that the data were not previously reported through Global AIDS Monitoring. If the data were previously reported, ask the country to remove the data and indicate that no new data are available for the indicator.
- Compare numerators, denominators and disaggregated data with the survey data available.
- Check the survey years and data collection dates entered in the online reporting tool.
- Check the survey methods and sample sizes for representativeness.
- Review the reports.
- If data apply to a composite indicator, verify that the same source was used for all questions, and that the composite values correspond to the sum of individual questions.

For indicators produced from Spectrum or with estimate-based denominators:

- Verify that the estimates match the final Spectrum file submitted to UNAIDS.
- Verify the consistency of reported numbers, including whether the disaggregated data add up to the total.
- Verify the numerators against comparable data.

The comments from countries are reviewed for all indicators.

Additional validation notes by indicator

For the following indicators, the following points will also be considered:

Population size estimates:

- Check for large year-on-year changes.
- Review any reports.

Number of people living with HIV receiving antiretroviral therapy:

- Check whether national procurement and pharmacy data are consistent with the number of people on treatment reported using programme registers or routine health information systems.
- Review results from any recent data quality assessments and adjust numbers as needed.
- Ensure that only people currently on treatment are counted. Specifically, exclude from the count:
 - People who have died.
 - People who have emigrated.
 - People who have disengaged from treatment and are not receiving treatment elsewhere in the country.
 - People who are lost to follow-up.

Note: Starting in 2020, the lost to follow-up definition has changed to include those who have not been seen within 30 days of their last scheduled visit or pill pick-up (as opposed to the previous definition of 90 days).

Summary of the changes to the indicator set for 2020 reporting

The 2020 reporting requires submitting data on indicators, the interim NCPI, and the AIDS Medicines and Diagnostics Survey. The narrative report is optional.

Based on the recommendations of the Global Monitoring Technical Advisory Group following its review of the Global AIDS Monitoring—and taking into account other inputs from stakeholders—some indicators have been modified. One indicator has been added.

The changes for the 2020 reporting round are summarized below:

- An indicator (3.19 Condoms distributed) has been introduced to report on the number of male and female condoms distributed.
- Three indicators have been removed from the Global AIDS Monitoring indicator framework: retention on antiretroviral therapy at 12 months, hepatitis B testing and the proportion of people coinfecting with HIV and hepatitis B receiving combined treatment.
- What was formerly Indicator 8.1 Total HIV Expenditures and Annexes 2–4 is now separated into three indicators that maintain the same content: 8.1 Domestic public budget for HIV, 8.2 Antiretrovirals: unit prices and volume, and 8.3 HIV expenditure by origin of resources to be reported in the AIDS funding matrix.
- Thirteen indicators have been modified for this year's reporting:
 - 1.2 People living with HIV on antiretroviral therapy.
 - Countries with populations >250 000 can now report on this indicator according to detailed age disaggregation for adults 15 years and older (where available within Spectrum).
 - The definition of loss to follow-up of people not on treatment has changed from 90 to 30 days: people who have not been seen within 30 days of their last schedule clinic appointment or pill pick-up should not be counted as currently on treatment.
 - A requested disaggregation for Indicator 1.2—the number of people newly initiating treatment—has been expanded to collect how many people who had previously disengaged from treatment or been lost to follow-up had reinitiated treatment in the reporting period.
 - 1.4 People living with HIV who have suppressed viral loads.
 - For the current and previous years, countries reporting viral load suppression at thresholds of lower than 1000 copies/mL should apply a simple adjustment to produce estimates of the corresponding expected rates of viral suppression at a threshold of 1000 copies/mL. For countries with populations >250 000, this adjustment will be done directly in Spectrum.

- o The previous recommendation that countries with viral load testing coverage above 90% not adjust for suppression among the untested population has been changed. Under the new recommendation, all countries with testing coverage of 50% or greater should calculate total viral load suppression as the proportion of people suppressed among those tested, multiplied by the number of people on treatment.
- 1.8 HIV testing volume and positivity.
 - o Family planning clinic has been added as a disaggregation for facility-level testing.
- 3.6D Condom use among transgender people.
 - o A timeframe of the last six months has been added to the denominator.
- 3.7 Coverage of HIV prevention programmes.
 - o The indicator format has been revised, dividing the indicator into two parts by data source: surveys and programme data.
 - o An option to provide data disaggregated by service provider (public, key population-led organizations, and other entities, such as private for-profit and not-for-profit organizations) has been added.
- 3.9 Needles and syringes distributed per person who injects drugs.
 - o An option to provide data disaggregated by service provider (public, key population-led organizations, and other entities, such as private for-profit and not-for-profit organizations) has been added.
- 3.10 Coverage of opioid substitution therapy.
 - o An option to provide data disaggregated by service provider (public, key population-led organizations, and other entities, such as private for-profit and not-for-profit organizations) has been added.
- 3.15 People who received pre-exposure prophylaxis (PrEP).
 - o Prisoners have been added as a key population for disaggregation.
- 3.16 Prevalence of male circumcision.
 - o The age group 25–29 has been included in the recommended disaggregation by age.
- 3.17 Annual number of males voluntarily circumcised.
 - o The age group 25–29 has been included in the recommended disaggregation by age.
- 10.2 People living with HIV with active tuberculosis disease.
 - o The indicator was modified to refer to people living with HIV who were newly enrolled in HIV treatment rather than HIV care.
- 10.3 People living with HIV who started TB preventive therapy.
 - o The indicator was modified to refer to people living with HIV who were newly enrolled in HIV treatment rather than HIV care.

- 10.8 Cervical cancer screening among women living with HIV.
 - o The indicator has been expanded to include all women living with HIV, instead of only women living with HIV aged 30–49 years.
 - o Disaggregation by age (15–29 and 30–49) and for women having tested in the last year has been added.

UNAIDS is working with key organizations in the framework of the Monitoring Technical Advisory Group to harmonize these new indicators with international standards. These global reporting indicators are intended to provide standardized data for comparison across countries, and to enable aggregation at the global level.

Key population-led organizations and responses

Monitoring the proportion of selected prevention services that are key population-led in the Global AIDS Monitoring 2020

For the 2020 Global AIDS Monitoring reporting round, an additional disaggregation has been included for Indicators 3.7, 3.9 and 3.10. These indicators are sourced from programme data for countries to indicate the proportion of total services delivered by type of provider. The options for type of provider are public, key population-led organizations or other entities (such as private for-profit and nonprofit organizations, including faith-based and international nongovernmental organizations).

The purpose of this disaggregation is to track the proportion of prevention services provided by key population-led organizations, including: (a) individual HIV prevention interventions designed for each key population; (b) distribution of condoms and lubricants; (c) distribution of needles and syringes; and (d) opioid substitution therapy.

Definitions

Key populations share experiences of stigma and discrimination, criminalization and violence, and they shoulder a disproportionate HIV disease burden in all parts of the world. Key population-led organizations and networks are entities whose governance, leadership, staff, spokespeople, members and volunteers reflect and represent the experiences, perspectives and voices of their constituencies.

For reporting on these indicators, the focus is on key population-led organizations and networks that are led by: female, male and transgender sex workers; gay men and other men who have sex with men; people who use drugs; and transgender people. Although the specific focus is on obtaining better information about the proportion of prevention services being delivered by community-based organizations that are led by members of key populations, UNAIDS acknowledges that these groups are overlapping. Furthermore, people living with HIV, prisoners, people with a history of incarceration, migrants, women and young people also may be included within each of the key populations named here.

The reporting on Indicators 3.7, 3.9 and 3.10 focuses on these four key populations—sex workers, gay men and other men who have sex with men, people who use drugs and transgender people—and their involvement in the delivery of the selected HIV prevention services. UNAIDS recognizes that the disaggregated data reported here are a subset of the information about all service delivery led by communities, but they do provide valuable information for monitoring the commitment in the 2016 Political Declaration on Ending AIDS.

How to apply the definition of key population-led organizations

When determining which of the organizations or networks providing the services described in Indicators 3.7, 3.9 and 3.10 are key population-led, countries should consider the following criteria (which are based on the above definition):

- The majority of the organization's governance structure is comprised of individuals who identify as belonging to the key population referred to in the indicator.
- The majority of the leadership, staff, spokespeople and volunteers of the organization or network are themselves members of key populations.
- The majority of the clients, members or constituents of the organization or network are from one or more key population.
- The organization or network has one or more mechanisms for holding itself accountable to the key population communities it serves.

It is strongly recommended that this exercise be conducted in close consultation with communities of male, female and transgender sex workers, gay men and other men who have sex with men, people who use drugs and transgender people at the national, subnational and local levels. Regional and global key population-led networks also may be consulted about best practice approaches for meaningfully engaging with communities at the country level.

Key population-led organizations and networks are often targets of violence and vandalism due to criminalization and/or the stigma and discrimination they face, and every effort should be made to protect their safety and security. This includes protecting information about their leadership and employees, the physical location of their offices and the areas where they conduct peer outreach. Such information should be treated with the same level of confidentiality that is extended to individuals receiving services.

Background

The 2016 Political Declaration on Ending AIDS established global commitment to ensuring that at least 30% of all service delivery is community-led by 2030. Since the first Global AIDS Monitoring round after the adoption of the Political Declaration on Ending AIDS, the existence of laws and policies that facilitate service delivery by community organizations has been tracked through the National Commitments and Policies Instrument (NCPI). Indicator 3.7 (on prevention programmes designed for each of the key populations) included a request for countries to provide information on the number of prevention service provision sites that were operated by the national programme or government or by the community. The Political Declaration on Ending AIDS does not include an explicit definition of "community-led," however, which has presented a challenge for monitoring progress against this commitment and determining which organizations and programmes it covers.

At its 43rd meeting in December 2018, the UNAIDS Programme Coordinating Board called for the development of a shared definition of community-led responses. To advance that work, UNAIDS convened a meeting on 17 and 18 June in Montreux, Switzerland, that brought together representatives of people living with HIV, gay men and other men who have sex with men, transgender people, sex workers, people who use drugs, women's organizations, treatment activists and people living with tuberculosis. Participants developed definitions of community-led organizations and community-led responses, along with the subdefinitions of key population-led organizations (used above) and key population-led responses.

Following this expert consultation, a task team for the operationalization of HIV community-led responses was established. Work is ongoing to determine the further application of these definitions for tracking the coverage of services other than prevention and determining financing for community-led responses.

Indicators for GAM

1.1 People living with HIV who know their HIV status

Percentage of people living with HIV who know their HIV status at the end of the reporting period

What it measures

Progress towards increasing the proportion of people living with HIV who know their HIV status and the efficacy of HIV testing interventions

Rationale

People living with HIV who know their HIV status will be able to access the HIV care and treatment services required to live healthy, productive lives and to reduce the potential of transmitting HIV to other people. The most effective way to ensure that people living with HIV are aware of their HIV status is to offer HIV testing services at locations and among populations with the highest HIV burden.

This measure is the first 90 of the UNAIDS 90–90–90 target: that 90% of the people living with HIV know their HIV status by 2020.

Numerator

Number of people living with HIV who know their HIV status

Denominator

Number of people living with HIV

Calculation

Numerator/denominator

Note: Starting in 2019, countries with a population of more than 250 000 will report on this indicator by broad and detailed age and sex groups within Spectrum. Results will be imported into the Global AIDS Monitoring reporting tool once the national file is finalized. Reporting on cities and other administrative areas of importance will still be done using the Global AIDS Monitoring reporting tool.

Method of measurement

There are two recommended methods for estimating the proportion of people living with HIV who know their status. The method used depends on the availability of data in the country.

1. Direct estimates from HIV case surveillance systems

For the numerator. In countries with well-functioning HIV case surveillance systems, the number of people living with HIV who know their status is the same as the number of people diagnosed with HIV and reported to the surveillance system who are still alive.

For the denominator. Estimation models such as Spectrum are the preferred source for the number of people living with HIV. If models other than Spectrum are used, documentation of the estimation method and uncertainty bounds should be provided.

On case surveillance methods. An HIV case surveillance system is considered to be functioning well if reporting from all facilities providing confirmatory HIV testing, care and treatment services has been in place since at least 2014, and if people who have died, been lost to follow-up or emigrated are removed from the numerator. Only confirmed HIV diagnoses should be counted, although countries should be sure to adjust for reporting delays by including an estimate of the number of people diagnosed but not yet reported during the latest calendar year (if necessary). Mechanisms should be in place to deduplicate individuals reported multiple times or from multiple facilities.

2. Modelled estimates

For the numerator: The approach to modelling the estimate of the number of people who know their HIV status among those living with HIV will depend on the availability of data in the country.

For countries with robust case surveillance and vital registration systems, the number of people who know their HIV status can be derived using the Case Surveillance and Vital Registration (CSAVR) fitting tool in Spectrum. A similar estimation method is available through the European Centres for Disease Control (ECDC) HIV Modelling Tool (<https://ecdc.europa.eu/en/publications-data/hiv-modelling-tool>). Estimates from other country-specific approaches to modelling this count that are based on case surveillance and clinical data may also be reported where these methods have been peer-reviewed and published.

For countries with household population survey data that either directly capture the number of HIV-positive respondents who report that they know their status or the number of HIV-positive people who report ever having been tested, UNAIDS recommends (as of 2018) that the first 90 be modelled using Shiny First 90 (<https://shiny.dide.imperial.ac.uk/shiny90/>). More information about the tool, including the required inputs, can be found at the above link.

Estimates of the first 90 that are based only on self-reported knowledge of status or on historical household population survey data about testing history should not be reported.

For the denominator. Estimation models such as Spectrum are the preferred source for the number of people living with HIV. UNAIDS will work with countries to develop a Spectrum model that matches the estimates of people living with HIV if estimates other than those produced through Spectrum are used.

On estimating the number of children who know their status in countries with modelled estimates based on household survey data. Since household surveys are often restricted to respondents of reproductive age, a separate estimate of knowledge of HIV status among children (0–14 years old) may need to be constructed using programme data in order to produce an overall (i.e., all ages) estimate. In this case, UNAIDS recommends that countries use the number of children on treatment, as reported in Indicator 1.2, as a proxy measure. This approach represents the most conservative measure of knowledge of status in the population.

Measurement frequency

Annually

Disaggregation

- 0–14 years for children and 15 years and older by sex (men and women) for adults.
 - As available: Disaggregation by detailed age and sex: <1 year, 1–4 years, 5–9 years and 10–14 years for children and 15–19 years, 20–24 years, 25–49 years and 50+ years by sex (men and women) for adults; by gender (men, women, other gender) for adults.
 - Cities and other administrative areas of importance.
-

Additional information requested

Please provide subnational or city-specific data for this indicator. Space has been created in the Global AIDS Monitoring reporting tool to provide information for the capital city and one or two other key cities of high epidemiological relevance: such as those with the highest HIV burden or those that have committed to ending AIDS by 2030.

Strengths and weaknesses

Case-based reporting method

Case-based surveillance provides reasonable measures of knowledge of HIV status in the following instances:

- The system has been in place for long enough that all people diagnosed and still alive have been reported.
- There are timely and complete mechanisms for reporting newly diagnosed cases to the system from all facilities that offer HIV diagnostic testing.
- Mechanisms are in place to de-duplicate individuals reported multiple times or from multiple facilities.
- There is sufficient follow-up of individuals to identify that they are still alive, as opposed to having died or moved out of the country.

Countries relying on weak systems may overestimate or underestimate knowledge of HIV status in the following cases:

- De-duplication of case reports has not occurred (overestimation).
- Deaths or out-migration among people diagnosed and reported to the system have not been removed (overestimation).
- Case reporting is not routine from all HIV testing facilities with confirmatory capacity (underestimation).

Modelled estimates

The accuracy of modelled estimates of the first 90 will depend on the quality of the data inputs in each country and the accuracy of the assumptions underpinning each model. Countries should review the quality of the data inputs with UNAIDS and the selected modelling approach to determine the extent to which modelled estimates might overstate or understate knowledge of status among people living with HIV in the country.

Further information

Consolidated strategic information guidelines for HIV in the health sector. Geneva: World Health Organization; 2015 (http://apps.who.int/iris/bitstream/10665/164716/1/9789241508759_eng.pdf?ua=1).

Spectrum. In: Avenir Health [Internet]. Glastonbury (CT): Avenir health; 2016(<http://www.avenirhealth.org/software-spectrum.php>).

The DHS Program: Demographic and Health Surveys [webpage]. Rockville (MD): ICF; c2019 (<http://dhsprogram.com>).

1.2 People living with HIV on antiretroviral therapy

Percentage and number of adults and children on antiretroviral therapy among all adults and children living with HIV at the end of the reporting period

What it measures

Progress towards providing antiretroviral therapy to all people living with HIV

Rationale

Antiretroviral therapy has been shown to reduce HIV-related morbidity and mortality among people living with HIV, and to halt onward transmission of the virus. Studies also show that early initiation, regardless of a person's CD4 cell count, can enhance treatment benefits and save lives. The World Health Organization (WHO) currently recommends treatment for all.

The percentage of people on antiretroviral therapy among all people living with HIV provides a benchmark for monitoring global targets over time and comparing progress across countries. When considered as a proportion of Indicator 1.1, this indicator monitors progress toward the second 90 of the UNAIDS 90-90-90 target: that 90% of people who know their HIV-positive status are accessing treatment by 2020.

Numerator

Number of people on antiretroviral therapy at the end of the reporting period

Denominator

Estimated number of people living with HIV (to determine treatment coverage)

OR

Number of people among all people living with HIV who know their HIV status (to determine the second 90)

Calculation

Numerator/denominator

Note: Starting in 2018, countries with a population of more than 250 000 will report on this indicator by broad and detailed age groups within Spectrum. Results will be imported into the Global AIDS Monitoring reporting tool once the national file is finalized. Reporting on cities and other administrative areas of importance will still be done using the Global AIDS Monitoring reporting tool.

Method of measurement

For the numerator. The numerator is generated by counting the number of adults and children who are on antiretroviral therapy at the end of the reporting period. The numerator should include people on antiretroviral therapy in the private sector (if these data are available). The count should include pregnant women living with HIV who are receiving lifelong antiretroviral therapy. Women taking antiretroviral medicines to prevent mother-to-child transmission and post-exposure prophylaxis (e.g., Option B) should not be counted.

Protocols should be in place to avoid duplicate counting of individuals across facilities or over time, and to ensure that all facility-level data are reported in a timely manner. The count should not include people who have stopped treatment, died or emigrated to another country, or those who were otherwise lost to follow-up at the facility during this period. People are considered lost to follow-up if they have not been seen within 28 days of the last expected clinical contact (for either an appointment or drug pick-up). Some people pick up several months of antiretroviral medicines at one visit; if the duration of the medicine picked up covers the last month of the reporting period, these people should still be counted as receiving antiretroviral therapy (as opposed to having stopped treatment or having been lost to follow-up).

Important: Countries should routinely conduct data quality reviews to determine the accuracy of the count data. This should include triangulation of the programme data with national procurement and drug monitoring systems and other pharmacy or drug distribution data. Estimates of coverage of antiretroviral therapy from surveys can also be used to inform or validate the numerator based on programme data, although survey results should be based on drug testing and not self-reported data since self-reported data has been shown to be of limited quality.

Countries that have undertaken data quality assessments or reviews should adjust current and historical reported data to account for these inconsistencies. UNAIDS will work with countries to agree on a set of best practices for adjusting reported programme data specific to the country.

For the denominator. Models such as Spectrum are the preferred source for estimating the number of people living with HIV. UNAIDS will work with countries to develop a Spectrum model that matches the estimate of people living with HIV if estimates other than those produced through Spectrum are used. For numbers of people living with HIV who know their status, please see Indicator 1.1 for more information about the denominator.

Measurement frequency

Data should be collected continually at the facility level and aggregated periodically, preferably monthly or quarterly. The most recent monthly or quarterly data with the count of the number of people currently on treatment should be used for annual reporting.

Disaggregation

- 0–14 years for children, and 15 years and older by sex (men and women) for adults. Data reported for unknown age or sex should be allocated to the age- and sex-disaggregated data cells using the same distribution of the data with known age and sex.
- Disaggregation by detailed age groups for children : <1 year, 1–4 years, 5–9 years and 10–14 years for children; and by detailed age sex groups for adults: 15–19 years, 20–24 years, 25–49 years and 50+ years.
- Cities and other administrative areas of importance.
- Numbers of people newly initiating antiretroviral therapy during the current reporting year. This disaggregation should only count people who were previously treatment naïve. These data should be available from the same sources as the total number of people receiving antiretroviral therapy.
- Numbers of people reinitiating antiretroviral therapy during the current reporting year after previously having stopped treatment or being classified as lost to follow-up. These data should be available from the same sources as the total number of people receiving antiretroviral therapy.

Additional information requested

For countries with populations less than 250 000 that are reporting through Global AIDS Monitoring, please provide information about the source of the treatment data. Options include the following:

- Programme data, primarily reported in aggregate: choose this option if counts are provided to the Ministry of Health, disaggregated only by age and sex. Data may typically be reported as coming from national or programme reports with the original source being patient registers, pharmacy records or other routine aggregate reporting forms.
- Programme data, primarily reported using health identifiers: choose this option if counts reported to the Ministry of Health can be deduplicated over time and across facilities using health or uniquely identifying person-level information.
- National estimates based on population survey results: choose this option if you have used estimates from a national survey to derive an estimate of the number of people on treatment.
- National estimates based on cohort monitoring data: choose this option if you have derived estimates based on cohort data.
- Other: please use this option only in consultation with UNAIDS.

More detailed age-specific data are requested for: (a) children; and (b) separately, by sex, for adults. The subset of people newly initiating antiretroviral therapy and reinitiating treatment during the last reporting year is requested.

For all countries, please provide subnational data (where available) disaggregated by administrative areas, as well as city-specific data. Provide information for the capital city and one or two other key cities of high epidemiological relevance, such as those with the highest HIV burden or those that have committed to ending AIDS by 2030. The data entry screen has separate space for this. You also may submit the digital version of any related reports using the upload tool.

Strengths and weaknesses

This indicator monitors trends in antiretroviral therapy coverage in a comparable way across countries and over time. It does not, however, measure treatment cost, quality, effectiveness or adherence, which vary within and between countries and are likely to change over time.

The accuracy of the number of people on antiretroviral therapy will depend on the quality of the underlying reporting system. Numbers of people on antiretroviral therapy may be under-reported due to missing or delayed reporting of facility data to the national level. Numbers of people on antiretroviral therapy also may be over-reported as a result of not removing from registries people who stopped treatment, died, transferred facilities or were lost to follow-up. Other errors—such as incorrectly abstracting data from facility-based registries or completing reporting forms—can lead to over- and under-reporting to varying degrees of magnitude.

Further information

Treatment and care. In: who.int [Internet]. Geneva: World Health Organization; c2019 (<http://www.who.int/hiv/topics/treatment/en/index.html>).

1.3 People living with HIV who have suppressed viral loads

Percentage and number of adults and children living with HIV who have suppressed viral loads at the end of the reporting period

What it measures

Individual-level viral load is the recommended measure of antiretroviral therapy efficacy and indicates treatment adherence and the risk of transmitting HIV. A viral load threshold of <1000 copies/mL defines treatment success according to the 2016 World Health Organization (WHO) *Consolidated guidelines on the use of antiretroviral drugs for treating and preventing HIV infection*. People with viral load test results below the threshold should be considered as having suppressed viral loads.

Rationale

Viral suppression among people living with HIV provides a benchmark for monitoring global targets over time and comparing progress across countries towards ending the AIDS epidemic. When considered as a proportion of the number of people on treatment (the numerator of Indicator 1.2), this indicator monitors the third 90 of the UNAIDS 90–90–90 targets: that 90% of the people receiving antiretroviral therapy will have suppressed viral loads by 2020.

Numerator

Number of people living with HIV in the reporting period with suppressed viral loads (<1000 copies/mL)

Denominator

Estimated number of people living with HIV (to estimate viral load suppression coverage);

OR

Estimated number of people living with HIV who are on treatment (to determine progress towards the third 90).

Calculation

Numerator/denominator

Note: Starting in 2018, countries with a population of more than 250 000 will report on this indicator by broad age groups within Spectrum. Results will be imported into the Global AIDS Monitoring reporting tool once the national file is finalized. Reporting on cities and other administrative areas of importance will still be done using the Global AIDS Monitoring reporting tool.

Method of measurement

Viral suppression is defined as <1000 copies/mL. For countries with other thresholds (such as undetectable, <50 copies/mL or <400 copies/mL), preliminary evidence from several studies suggests that the distribution of those with between 50 copies/ml and less than 1000 copies/ml may influence results, so further adjustment is required. Starting in 2019, UNAIDS recommends that countries adjust for lower threshold detection. This is done according to the formula:

$$y \left(\frac{6 - \log(1000)}{6 - \log(t_1)} \right)^{1.5}$$

In this instance, y is the reported viral suppression level and t_1 is the alternative threshold that was used. This adjustment will be done automatically in Spectrum or the reporting tool, if required.

Viral load suppression may be measured using three different data sources: (1) clinical and programme data; (2) nationally representative surveys (such as the Population-based HIV Impact Assessment [PHIA] and HIV drug resistance surveys); or (3) early warning indicators of HIV drug resistance surveys. Countries should report data from whichever source is most recent and nationally representative.

1. Routine viral load suppression tests from people on antiretroviral treatment collected through clinical or laboratory registers or case surveillance.

For the numerator. Countries should report the estimated number of people nationally who have suppressed viral loads during the reporting period if viral load testing coverage (i.e., the number of people routinely tested among all people on treatment) is 50% or greater.

For countries that report viral load testing coverage of less than 50%, only the number of routine viral load tests should be reported. It is not usually possible to estimate the percentage of people living with HIV or those on treatment who are virally suppressed when viral load testing is not routinely accessible. Countries wishing to use data where viral load testing coverage is less than 50% should discuss this with UNAIDS to determine whether the percentage of people suppressed in the tested population is of a similar level to those in the population with no access to testing.

Countries should only include testing data that result from routine rather than targeted testing among those on treatment. For example, a person's results should not be included if testing was done prior to treatment initiation or when treatment failure was suspected. If viral load is tested repeatedly for a person during the year, only the last routine test result should be used.

For countries where viral load testing coverage is 50% or over, an estimated number of people with suppressed viral loads should be reported. This is calculated from the number suppressed among those tested, multiplied by the total number of people on treatment. This assumes that levels of suppression in the untested population are the same as those in the tested population.

Example: A country with an estimate of 100 000 people living with HIV has routine viral load tests for 12 000 of the 24 000 people receiving antiretroviral therapy. The viral load testing coverage is 50%, and the country deems the level of viral load suppression in the untested population to be like that among the tested population of people on treatment. Of the 12 000 people tested, 10 000 people have suppressed viral loads. The estimated national number of people living with HIV who have suppressed viral loads is 20 000 [(10 000/12 000) x 24 000].

Where viral load suppression in the untested population is not like that in the tested population, please contact UNAIDS for further discussion about approaches for estimating this count.

For the denominator. Estimation models such as Spectrum are the preferred source for the number of people living with HIV. UNAIDS will work with countries to develop a Spectrum model that matches the estimate of people living with HIV if estimates other than those produced through Spectrum are used.

For more information on estimating the number of people living with HIV who are on treatment as part of calculating the third 90, please see Indicator 1.2.

2. Recent nationally representative population surveys (including household, acquired HIV drug resistance surveys or early warning indicators (EWI) surveys of HIV drug resistance)

For the numerator. The proportion reported to have suppressed viral loads among people testing positive in the survey should be multiplied by the total number of people estimated to be living with HIV nationally to obtain the total number of people who have a suppressed viral load. This value may slightly overstate the number of people who are virally suppressed among those on treatment, since some people who are not on treatment but naturally suppress the virus will be included. If using data from an acquired HIV drug resistance survey, either the 12- or 48-month cohort data may be used. Data from early warning indicators should only be used to generate national aggregate statistics if: a) All clinics in a country—or a random sampling of clinics—reported early warning indicators data that includes at least 70% of the overall estimated sample size from the sampled clinics.

; or (b) If convenient sampling of clinics was used, a national aggregate statistic can be reported if the data from the sampled clinics includes at least 70% of the eligible population in the country (see page 8 of the EWI annex - sampling guidance)⁽¹⁾.

Note: Countries using survey data should still report on the number of people on treatment with routine viral load tests during the reporting period. Survey data should only be used if conducted in both children and adults.

For the denominator. Estimation models such as Spectrum are the preferred source for the number of people living with HIV. UNAIDS will work with countries to develop a Spectrum model that matches the estimate of people living with HIV if estimates other than those produced through Spectrum are used. For more information on estimating the number of people living with HIV who are on treatment as part of calculating the third 90, please see Indicator 1.2.

For the denominator. Estimation models such as Spectrum are the preferred source for the number of people living with HIV. UNAIDS will work with countries to develop a Spectrum model that matches the estimate of people living with HIV if estimates other than those produced through Spectrum are used. For more information on estimating the number of people living with HIV who are on treatment as part of calculating the third 90, please see Indicator 1.2.

Measurement frequency

Annually

Disaggregation

- 0–14 years for children and 15 years and older by sex (men and women) for adults; data reported for unknown age or sex should be allocated to the age and sex disaggregated data cells using the same distribution of the data with known age and sex. These adjustments should be noted in the box providing additional information.
- As available. Disaggregation by detailed age and sex: <1 year, 1–4 years, 5–9 years and 10–14 years for children and 15–19 years, 20–24 years, 25–49 years and 50+ years by sex (men and women) for adults; by gender (men, women, other gender) for adults.
- Cities and other administrative area of importance.

Additional information requested

Provide city-specific data for this indicator. Space has been created in the Global AIDS Monitoring data entry tool to provide information for the capital city and one or two other key cities of high epidemiological relevance, such as those with the highest HIV burden or those that have committed to ending AIDS by 2030.

Strengths and weaknesses

When viral load suppression testing data are collected from all people receiving antiretroviral therapy or a nationally representative sample, this measurement provides important information on adherence, treatment efficacy and transmission risk at the individual and programme levels. Despite the indicator's importance, several challenges may arise in accurately monitoring it using currently available programme data. First, because viral load monitoring capacity is being scaled up but remains limited in low-income settings, estimates of viral load suppression in the tested population may not be representative of the untested population when measured through programme data. This is especially the case if scale-up of testing is biased to higher or lower performing sites. By assuming that the levels of viral load suppression are the same in the tested and untested population when testing coverage is not complete, progress toward the 90–90–90 targets may be overstated.

A second challenge arising from the currently available programme data is that viral load testing may be performed selectively to identify possible treatment failures. The data reported from the viral load testing of people suspected of treatment failure will underestimate viral load suppression levels. UNAIDS recommends that countries closely review reported data to exclude targeted, non-routine testing.

A third challenge when using routine programme data is that viral load testing data are only reported for the subset of people who are on antiretroviral treatment. This may underestimate overall population-level suppression since people who naturally suppress the virus will not be included in the numerator. UNAIDS is examining available evidence from cohorts and population surveys to better quantify and adjust for this final value when reporting on global and regional progress towards Indicator 1.4.

Further information

UNAIDS, WHO. Guidelines on monitoring the impact of the HIV epidemic using population-based surveys. Geneva: World Health Organization; 2015 (<http://www.who.int/hiv/pub/guidelines/si-guidelines-population-survey/en>).

Consolidated guidelines on the use of antiretroviral drugs for treating and preventing HIV infection. Recommendations for a public health approach. 2nd ed. Geneva: World Health Organization; 2016 (<http://www.who.int/hiv/pub/arv/arv-2016/en>).

Consolidated strategic information guidelines for HIV in the health sector. Geneva: World Health Organization; 2015 (<http://www.who.int/hiv/pub/guidelines/strategic-information-guidelines/en>).

Treatment and Care. In: who.int [Internet]. Geneva: World Health Organization; c2019 (<http://www.who.int/hiv/topics/treatment/en/index.html>).

References

Consolidated guidelines on person-centred HIV patient monitoring and case surveillance. Geneva; World Health Organization; 2017 (https://www.who.int/hiv/pub/guidelines/WHO_Consolidated_Guidelines_Annexes_2.4.6.pdf, accessed 29 October 2019).

1.4 Late HIV diagnosis

Percentage and number of adults and children newly diagnosed with HIV with an the initial CD4 cell count <200 cells/mm³ and <350 cells/ mm³ during the reporting period

What it measures

People who have not received a timely HIV diagnosis.

Rationale

As countries scale up HIV services, it is important to monitor whether people are diagnosed at an earlier stage and what percentage of the people are still diagnosed at a late stage. Late diagnosis is detrimental to people's health, and those with low CD4 counts are more likely to transmit the virus.

Numerator

1. Numbers of people living with HIV with an initial CD4 cell count <200 cells/mm³ at the time of diagnosis
 2. Numbers of people living with HIV with an initial CD4 cell count <350 cells/mm³ at the time of diagnosis
-

Denominator

Total number of people living with HIV with an initial CD4 cell count during the reporting period

Calculation

Numerator/denominator

Method of measurement

Based on data from laboratory information systems and from the records of people in treatment. Data can be compiled from health services registries, case report forms or laboratory information systems. Individuals with CD4 count results should only be included if the test was conducted within one month of the diagnosis date.

Measurement frequency

Annual

Disaggregation

- 0–14 years for children and 15 years and older by sex (men and women) for adults.
-

Explanation of the numerator

People living with HIV whose initial CD4 lymphocyte count was less than 200 cells/mm³ and people living with HIV whose initial CD4 lymphocyte count was less than 350 cells/mm³ in the reporting period. Reporting on the number of people with a CD4 lymphocyte count less than 350 cells/mm³ also should include those with a CD4 lymphocyte count less than 200 cells/mm³.

Explanation of the denominator

Number of people living with HIV who had an initial CD4 lymphocyte count at the time of diagnosis in the reporting period.

Strengths and weaknesses

This indicator may not distinguish between people given a late diagnosis and those who arrived late for care and treatment in a setting where CD4 testing is available. Differentiating them requires knowing the diagnosis date and the date of the initial CD4 lymphocyte count. Dates differing by more than one month may indicate a delay in being linked to care, although it is possible that late diagnosis and late linkage to care may occur in the same person. Previous HIV testing history and clinical records should be reviewed to the extent possible to exclude counting people who were previously diagnosed at some earlier date and are only seeking a second or confirmatory diagnosis later. Finally, this indicator may not include all individuals diagnosed during the reporting period if there are substantial reporting delays in the diagnosis data or CD4 count test result.

1.5 Antiretroviral medicine stock-outs

Percentage of treatment sites that had a stock-out of one or more required antiretroviral medicines during a defined period

What it measures

This indicator measures the effectiveness of the procurement and supply management system in making medicines available. The consequences of stock-out—the scale of treatment interruption and risk for drug resistance—depend on the number of people whose treatment product stock-out will disrupt.

Rationale

As countries scale up antiretroviral therapy services, ensuring that antiretroviral medicines are there for the people who need them is important. Antiretroviral therapy is a long-term treatment strategy for people living with HIV, and interruptions may lead to treatment failure and HIV drug resistance. Efficient supply management is needed to ensure an uninterrupted supply of antiretroviral medicines.

Numerator

Number of health facilities dispensing antiretroviral medicines that experienced a stock-out of one or more required antiretroviral medicines during a defined period

Denominator

Total number of health facilities dispensing antiretroviral medicines during the same period

Calculation

Numerator/denominator

Method of measurement

This information is collected centrally at the level at which health facilities submit their inventory control reports or requisition forms for antiretroviral medicines.

This indicator requires:

- Stock inventory control reports from health facilities, also indicating the stock of each item.
- Requisition forms submitted by facilities during a defined period (such as previous order period, previous quarter and past year) for antiretroviral medicines.
- A list of the medicines that each facility is expected to dispense if these are not already included in the inventory control reports or requisition forms.

These work if the national logistics management information system is operational. If not, health facility surveys such as the service provision assessment or the service availability mapping may be used provided they include questions on antiretroviral medicine stock-outs.

If there is one logistics management information system with details on the availability of antiretroviral medicine at the health-facility level, information should be extracted to construct the indicator. Alternatively, the information may be collected through a survey or site visits.

If only a few health facilities dispense antiretroviral medicines, they should all be included in the survey or site visits. If a large number dispense antiretroviral medicines, selecting a representative sample may be necessary. The full list should be available at the national level.

In sampling, it is important to ensure that the sample includes facilities at different levels, such as central, district and peripheral. In countries dispensing antiretroviral medicines at pharmacies or other delivery points that are not health facilities, stock-outs should also be monitored at these venues; feasibility will depend on the coverage of the logistics management information system.

The HIV drug resistance early warning indicator on antiretroviral medicine stock-out monitors the percentage of months in the reporting year without stock-outs. This can be measured at the facility level and aggregated for the national estimate.

Measurement frequency

Annually

Disaggregation

- Type of site: for example, general clinic, maternal and child site or TB site
-

Additional information requested

Comment on whether information is based on national data or survey data from a sample of facilities. Provide comments that would help interpret data: for example, if only public or private sector data are included and whether they may be an overestimate or underestimate.

Strengths and weaknesses

This indicator captures a crucial component of the antiretroviral therapy programme: whether there is an uninterrupted supply of antiretroviral medicines at the health-facility level.

It does not provide information on why stock-out problems occur, which antiretroviral medicines are or were out of stock, how long the stock-out lasted or the quality of antiretroviral medicine storage, delivery and distribution.

If stock-outs exist, assess whether the problem lies in the national distribution system or whether the problem is a financial flow or a global antiretroviral medicine shortage. Find out whether the cause is supply projections, the distribution system or another issue. Use this as an opportunity to see whether the logistics management information system is functioning.

In some situations, simply monitoring stock-outs could be misleading because a facility may keep reserve stock but maintain a policy of not issuing it. Such facilities would not be counted as having experienced a stock-out using this indicator definition, even though people would not receive a required medicine for treatment. In settings in which reserve stock is not issued, collecting information on a functional stock-out is preferable: that is, the inability to access or use a required antiretroviral medicine.

Further information

Harmonized monitoring and evaluation indicators for procurement and supply management systems. Early-warning indicators to prevent stock-outs and overstocking of antiretroviral, antituberculosis and antimalaria medicines. Geneva: World Health Organization; 2011 (http://www.who.int/hiv/pub/amds/monitoring_evaluation/en).

1.6 AIDS mortality

Total number of people who have died from AIDS-related causes per 100 000 population

What it measures

Impact of HIV prevention, care and treatment programmes

Rationale

Recent efforts to scale up access to life-saving antiretroviral therapy, including the 2016 WHO guidelines that recommend treatment for all, should significantly reduce the number of people dying from AIDS-related causes, if these services are accessible and delivered effectively. The impact of the HIV response should be assessed by monitoring changes in AIDS-related mortality over time. This indicator, modified as the total number of people who have died from AIDS-related causes in the reporting period divided by the population (per 100 000), is also included in the WHO consolidated strategic information guidelines for HIV in the health sector.

Numerator

Number of people dying from AIDS-related causes during the calendar year

Denominator

Total population regardless of HIV status

Calculation

Numerator/denominator times 100 000

Method of measurement

The number of people dying from AIDS-related causes can be obtained using a variety of measures, including through a vital registration system adjusted for misreporting, as part of a facility- or population-based survey that may include verbal autopsy and through mathematical modelling using such tools as Spectrum. Modelling tools typically use demographic data, HIV prevalence from survey and surveillance, the number of people receiving antiretroviral therapy, HIV incidence and assumptions around survival patterns to estimate the number of people dying. In some instances, data from vital reporting systems and estimates of underreporting and misclassification also may be incorporated into these models to derive estimates of the number of AIDS-related deaths.

Measurement frequency

Annual

Disaggregation

- Sex.
 - Age (<5, 5–14 and 15+ years).
-

Additional information requested

The source of the estimate is requested. Countries providing the number of people dying from AIDS-related causes derived from a source other than Spectrum should provide any accompanying estimates of uncertainty around this number and upload an electronic copy of the report describing how the number was calculated.

Countries should preferably report a modelled estimate rather than one derived from their vital registration system unless this system has been recently evaluated as one of high quality. Users can now opt to use their Spectrum estimate or enter nationally representative population-level data. If Spectrum estimates are chosen, the values will be pulled directly from the software once the national file is finalized.

Strengths and weaknesses

For countries with strong vital registration systems, changes in AIDS-related mortality estimates provide an accurate measure of the impact of prevention, care and treatment programmes. Even in these systems, periodic evaluation is useful to measure delays or underreporting and misclassification of the cause of death.

For countries that do not have strong systems in place, estimates of AIDS-related deaths are an important programme monitoring tool but subject to more uncertainty. In particular, information about survival patterns for those receiving or not receiving antiretroviral therapy is important. Estimates of AIDS-related deaths should be reported along with the ranges of uncertainty. The estimate will only be as reliable as the data entered into the models and the assumptions made in the model.

Further information

Consolidated strategic information guidelines for HIV in the health sector. Geneva: World Health Organization; 2015 (http://apps.who.int/iris/bitstream/10665/164716/1/9789241508759_eng.pdf?ua=1).

Spectrum software. Glastonbury (CT): Avenir Health; 2019 (<http://www.avenirhealth.org/software-spectrum.php>).

1.7 HIV testing volume and positivity

The number of HIV tests conducted (testing volume) and the percentage of HIV-positive results returned to people (positivity) in the calendar year

What it measures

Trends in the number of HIV tests conducted and the effectiveness of HIV testing services (HTS) in reaching people who are HIV-positive.

Rationale

Testing volume and data on positivity are useful for programme monitoring. Knowing the numbers of people tested annually and the modality of testing or uptake of self-tests is critical to commodity forecasting and staff resource planning. Positivity data among those tested who have received a result also can help to validate the number of people reported as newly diagnosed through routine reporting systems and estimates of HIV prevalence from survey data. Finally, when disaggregated by age, sex, testing modality and HIV status, these data are useful in assessing the effectiveness of delivering HTS and addressing gaps in various settings, contexts and populations.

In addition to programme monitoring activities, annual testing volumes and positivity rates are inputs into the UNAIDS model to monitor progress towards the first 90 (90% of people living with HIV know their HIV status). This model is used primarily in countries with weak case reporting systems that also have national population-based HIV surveys (see Indicator 1.1).

Numerator

Number of tests conducted where an HIV-positive result was returned to a person (positivity)

Denominator

Number of tests performed where results were received by a person (testing volume)

Calculation

Numerator/denominator

Method of measurement

The numerator and denominator should be collected from HTS programme registers, log books and reporting forms on a quarterly or annual basis. Reported data should be a count of the number of tests conducted where results were returned to a person and not the number of unique persons who tested at least once during the calendar year. For example, if a person who is HIV-positive tests once at a mobile testing van and then again at a clinic during the same calendar year, she should be counted twice in the numerator and twice in the denominator. In an alternative scenario, if a person tests negative at a voluntary counselling and testing (VCT) centre and then positive through provider-initiated testing, she should be reported once in the numerator and twice in the denominator.

Please note that only tests conducted where the results are returned to the person should be counted. Also, a person should only be counted as testing once in the numerator and the denominator, even if up to three different assays are performed to confirm an HIV-positive diagnosis according to the national testing algorithm.

Please separately report numbers of self-test kits procured and distributed in the calendar year (where available). Procured self-test kits refers to the total number of self-test kits purchased (not distributed or used) in a year by the national government, including (but not limited to) donors. Test kits procured via other channels, such as the private sector, should not be counted; rather, they should be detailed in the comments. Self-test kits distributed refers to the total number of individual self-test kits that were distributed in a year; it is not the total number of people self-tested, nor is it the total number of people who received a self-test (as individuals may obtain more than one kit). No sex- or age-disaggregation or information on positivity is required for self-test procurement or distribution data.

Measurement frequency

Annually

Disaggregation

- 0–14 years for children and 15 years and older by sex (men and women) for adults.
- Testing modality.
 - Community-level HTS reporting:
 - Mobile testing (e.g., through vans or temporary testing facilities).
 - VCT centres (not within a health-facility setting).
 - Other community-based testing.
 - Facility-level testing:
 - Provider-initiated testing in clinics or emergency facilities.
 - Antenatal care clinics (including labour and delivery).
 - VCT (within a health-facility setting).
 - Family planning clinic.
 - Other facility-level testing.

Note: If testing volume and positivity cannot be disaggregated by modality, please report overall numbers.

Additional information requested

Please provide information in the comments box about any national testing campaigns or shifts in testing strategies that might explain changes to testing volumes when compared to previous years. If data on retesting rates among HIV-positive or HIV-negative individuals are available, please also provide this in the comments box.

Strengths and weaknesses

Not all countries have unique identifiers or underlying systems to deduplicate retesting among individuals. As a result, this indicator is not directly comparable to knowledge of status (as measured in Indicator 1.1). People who test positive may seek additional confirmatory testing and people who are HIV-negative may test repeatedly during the year.

As HIV information systems evolve, it will be important to be able to disaggregate tests by previous testing history (e.g., people who have never been tested, people who were HIV-negative at their last test, and people who already know their HIV-positive status and are seeking or otherwise requiring confirmatory testing). In future years, this indicator could be extended to request this information so as to better understand testing patterns and the efficiency of HTS.

Further information

Consolidated strategic information guidelines for HIV in the health sector. Geneva: World Health Organization; 2015 (http://apps.who.int/iris/bitstream/10665/164716/1/9789241508759_eng.pdf?ua=1).

2.1 Early infant diagnosis

Percentage of infants born to women living with HIV receiving a virological test for HIV within two months of birth

What it measures

Progress in the extent to which infants born to women living with HIV are tested within the first two months of life to determine their HIV status and eligibility for antiretroviral therapy disaggregated by test results

Rationale

Infants acquiring HIV during pregnancy, delivery or early postpartum often die before they are recognized as having HIV infection. The World Health Organization (WHO) recommends that national programmes establish the capacity to provide early virological testing of infants for HIV at six weeks or as soon as possible thereafter to guide clinical decision-making at the earliest possible stage. HIV disease progresses rapidly among children; they need to start treatment as early as possible because, without early treatment, almost 50% of children would be dead by the second year.

Numerator

Number of infants who received an HIV test within two months of birth during the reporting period. Infants tested should only be counted once. The numerator should not include infants tested after two months.

Denominator

Number of pregnant women living with HIV giving birth in the past 12 months

Calculation

Numerator/denominator

Method of measurement

For the numerator. Early infant diagnosis testing laboratories.

For the denominator. Estimation models such as Spectrum or antenatal clinic surveillance surveys in combination with demographic data and appropriate adjustments related to the coverage of antenatal clinic surveys.

Measurement frequency

Annual or more frequently, depending on a country's monitoring needs

Disaggregation

The numerator should be disaggregated by the result: positive, negative, indeterminate or rejected for testing.

Explanation of the numerator

To be collected from the databases held at early infant diagnosis testing laboratories. The numerator should represent the number of infants who received virological testing within two months of birth; it should not represent the number of samples tested at the laboratory. Data should be aggregated from the laboratory databases. Where possible, double counting should be minimized when the data are aggregated to produce national-level data.

The number of infants receiving more than one virological test in the first two months of life is expected to be low. Efforts should be made to include all health facilities operated by public, private and nongovernmental organizations that are providing HIV testing for HIV-exposed infants. Where antenatal care coverage, health facility deliveries and HIV screening in antenatal care and delivery are high and reporting is complete, program data can be used to triangulate with data from either source.

The test results should be reported as positive, negative, indeterminate or rejected for testing by the laboratory. This information should only include the most recent test result for an infant tested in the first two months of life.

Explanation of the denominator

This is a proxy measure for the number of infants born to women living with HIV. Two methods can be used to estimate the denominator:

1. An estimation model, such as Spectrum software, using the output, the number of pregnant women needing services to prevent mother-to-child transmission as a proxy.
2. If Spectrum projections are unavailable, multiplying the total number of women giving birth in the past 12 months (which can be obtained from central statistics office estimates of births or United Nations Population Division estimates) by the most recent national estimate of HIV prevalence for pregnant women (which can be derived from HIV sentinel surveillance in antenatal clinics after appropriate adjustments related to the coverage of antenatal clinic surveys).

To ensure comparability, the Spectrum output will be used for the denominator for global analysis.

Strengths and weaknesses

This indicator allows countries to monitor progress in providing early HIV virological testing to HIV-exposed infants two months or younger, which is critical for appropriate follow-up care and treatment. Limiting the age to two months or younger also eliminates the potential for repeat tests for the same infant, which can lead to double counting. The only three fields needed for this indicator—date of sample collection, age at collection (actual or calculated based on the date of birth) and results—are systematically entered into central early infant diagnosis testing databases at testing laboratories.

Because of the small number of testing laboratories and the electronic format of testing databases, this indicator should not have a heavy collection burden. The data quality of the laboratories is generally high, resulting in a robust indicator. The indicator does not capture the number of children with a definitive diagnosis of HIV infection or measure whether appropriate follow-up services were provided to the child based on interpretation of the test results. It also does not measure the quality of testing or the system in place for testing. A low value of the indicator could, however, signal systemic weaknesses, including poor country-level management of supplies of HIV virological test kits, poor data collection, poor follow-up and mismanagement of testing samples.

Disaggregation by test results cannot be used as a proxy for overall mother-to-child transmission rates. If either the overall national early infant diagnosis coverage or the early infant diagnosis testing coverage in the first two months of life is low, low positivity rates among the infants tested will not necessarily mean programme success, since this sample does not include many other infants who are likely positive.

Although early virological testing is a critical intervention for identifying infants living with HIV, countries should also strengthen the quality of follow-up of HIV-exposed infants and train health providers to recognize the signs and symptoms of early HIV infection among exposed infants, especially if access to virological testing is limited. Inappropriate management of supplies can negatively affect the value of the indicator and significantly reduce access to HIV testing for the infants born to women living with HIV. Countries should ensure that appropriate systems and tools, especially tools for logistics management information systems, are in place to procure, distribute and manage supplies at the facility, district and central levels.

Additional information

The numerator for this indicator is a subset of the United States Government MER indicator on PMTCT Early Infant Diagnosis (PMTCT_EID). The MER indicator is disaggregated to include the number of children with an HIV outcome between 0 and two months and two and 12 months. The Global AIDS Monitoring indicator described here includes only those diagnosed by two months of age, and it uses a denominator of births to women living with HIV, including those women who were not in the prevention of mother-to-child transmission programme.

Further information

Progress reports on HIV. In: who.int [website]. Geneva: World Health Organization; c2019 (<http://www.who.int/hiv/pub/progressreports/en>).

MER indicator reference guide, version 2.4 [Internet]. Washington (DC): United States President's Emergency Plan for AIDS Relief (PEPFAR); 2019 (<https://datim.zendesk.com/hc/en-us/articles/360000084446-MER-Indicator-Reference-Guides>).

Measuring the impact of national PMTCT programmes: towards the elimination of new HIV infections among children by 2015 and keeping their mothers alive. A short guide on methods. Geneva: World Health Organization; 2012 (http://apps.who.int/iris/bitstream/10665/75478/1/9789241504362_eng.pdf).

2.2 Mother-to-child transmission of HIV

Estimated percentage of children newly infected with HIV from mother-to-child transmission among women living with HIV delivering in the past 12 months

What it measures

When compared with values from previous years, this indicator shows the impact of providing women with antiretroviral medicines and retaining them in care to reduce mother-to-child transmission of HIV.

Rationale

Efforts have been made to increase access to interventions that can significantly reduce mother-to-child transmission of HIV, including combining antiretroviral medicine prophylactic and treatment regimens and strengthening counselling on infant feeding. The impact of interventions for preventing mother-to-child transmission in reducing the number of children newly infected with HIV through mother-to-child transmission needs to be assessed.

The percentage of children who are living with HIV should decrease as the coverage of interventions for preventing mother-to-child transmission and the use of more effective regimens increase.

Numerator

Estimated number of children newly infected with HIV in the previous 12 months from mother-to-child transmission

Denominator

Estimated number of births to women living with HIV in the previous 12 months

Calculation

Numerator/denominator

Method of measurement

Ideally, this indicator would be measured through programmes identifying HIV infection in young children. However, these programmes often are not able to identify infections among children of women who seroconvert while they are breastfeeding or those who were not identified as living with HIV during antenatal care. Modelled estimates are used for global reporting in settings where final outcomes at the population level are not available.

The probability of mother-to-child transmission differs with the antiretroviral drug regimen received and infant feeding practices. The transmission can be calculated using Spectrum. The Spectrum computer programme uses information on the following:

- The distribution of pregnant women living with HIV who are receiving antiretroviral medicines by the timing of treatment initiation (before conception, early in the pregnancy or late in the pregnancy).
- The proportion of pregnant women retained on antiretroviral medicines at the time of delivery.
- Estimated HIV incidence among pregnant women and breastfeeding women.
- The distribution of women (and children, if using Option A) receiving antiretroviral medicines after delivery (postpartum).
- Among women receiving antiretroviral medicines, the percentage whose infants have stopped breastfeeding by age of the child in months (from 0–35 months)
- Among women not receiving antiretroviral medicines, the percentage whose infants have stopped breastfeeding by age of the child in months (from 0–35 months)
- Among breastfeeding women receiving antiretroviral medicine, the percentage who drop out each month.
- Estimated incidence among breastfeeding women.
- Probabilities of mother-to-child transmission of HIV based on various categories of antiretroviral medicine regimen and infant feeding practices.
- The estimated number of women living with HIV giving birth by age group.

The summary display for preventing mother-to-child transmission in Spectrum reports the estimated national population-level transmission rate. This variable can also be calculated in Spectrum by dividing the number of children newly infected with HIV through mother-to-child transmission by the number of women who need services for preventing mother-to-child transmission.

Not enough information is available about other HIV transmission routes for children to include such infections in Spectrum. In addition, other modes of transmission are believed to cause a small fraction of the overall number of children acquiring HIV. The Spectrum output variable “new HIV infections for children 0–1 years” is not used because some children older than one year will acquire HIV from breastfeeding.

Global AIDS Monitoring users have the option to use their Spectrum estimate or to enter nationally representative population-level data. If Spectrum estimates are chosen, the values will be pulled directly from the software once the national file is finalized. If programme data are included, report the data based on equal birth cohorts for the numerator and denominator and not by the year of diagnosis.

Measurement frequency

Annually

Disaggregation

None

Additional information requested

This indicator is different from the United States Government MER indicator on PMTCT Final Outcome (PMTCT_FO), as the MER indicator is a cohort measure that does not capture child infections among women who seroconvert during breastfeeding or those who did not participate in (or who dropped out of) prevention of mother-to-child transmission programmes. The denominator is also different: the MER indicator attempts to estimate the number of women who will seroconvert during breastfeeding.

Strengths and weaknesses

Strengths. Over time, this indicator assesses the ability of programmes for preventing mother-to-child transmission by estimating the impact of increases in the provision of antiretroviral medicines and the use of more efficacious regimens and optimal infant feeding practices. This indicator allows countries to assess the impact of antiretroviral medicine programmes on the number of children acquiring HIV by estimating the HIV transmission rate from women living with HIV to their children. The modelled estimate enables this value to be estimated since capturing this indicator through direct measures is almost impossible. The modelled estimate overcomes multiple challenges:

1. Following up mother–child pairs is difficult, especially at the national level, because of the lag in reporting and the multiple health facility sites that mother–child pairs can visit for the wide range of services for preventing mother-to-child transmission and child care interventions delivered over a time span.
2. Children (especially those living with HIV) may die before they are tested to determine whether transmission has occurred.
3. A directly measured indicator will not capture women and their children who do not attend programmes, possibly because of high levels of stigma.
4. Most directly measured values will not include women who seroconvert while breastfeeding.

Weaknesses. This indicator is generated from a model that provides estimates of HIV infection among children. The estimated indicator is only as good as the assumptions and data used in the model. In countries where caesarean section is widely practised, the indicator will overestimate mother-to-child transmission. It also relies on programme data that often capture the antiretroviral medicine regimens provided rather than those consumed and could therefore underestimate mother-to-child transmission.

This indicator does not capture efforts to reduce the risk of mother-to-child transmission by reducing the number of reproductive-age women acquiring HIV or by reducing unintended pregnancies among women living with HIV.

In countries in which data are available, facility attendance is high and confirmatory tests are conducted systematically, efforts should be made to monitor the impact by directly assessing the percentage of children living with HIV among those born to mothers living with HIV. All countries should make efforts to monitor the HIV status and survival of children born to women living with HIV, gathered during follow-up health-care visits.

Further information

Publications on HIV monitoring and evaluation. In: who.int [Internet]. Geneva: World Health Organization; c2019 (<http://www.who.int/hiv/pub/me/en/index.html>).

2.3 Preventing mother-to-child transmission of HIV

Percentage of pregnant women living with HIV who received antiretroviral medicine to reduce the risk of mother-to-child transmission of HIV

What it measures

Progress in preventing mother-to-child transmission of HIV during pregnancy and delivery by providing antiretroviral medicine.

This indicator allows countries to monitor the coverage of initiation of antiretroviral medicines among pregnant women living with HIV to reduce the risk of transmitting HIV to infants during pregnancy and delivery. When disaggregated by regimen, it can show increased access to more effective antiretroviral regimens for pregnant women living with HIV. Since the indicator usually measures the antiretroviral medicines dispensed and not those consumed, adherence to the regimen cannot be determined in most cases.

Rationale

Providing antiretroviral medicines to a woman living with HIV—either before conception or during pregnancy or delivery—can significantly reduce the risk of mother-to-child transmission. This intervention is most effective if antiretroviral medicine is provided during pregnancy, delivery and breastfeeding, and if safe delivery practices and safer infant feeding methods are used. This indicator can be used to: (a) track progress towards global and national goals of eliminating mother-to-child transmission; (b) inform policy and strategic planning; (c) contribute to advocacy efforts; and (d) leverage resources for accelerating scale-up. Since the indicator only counts women initiated on antiretroviral medicines, it is not a true measure of the success of the programme.

Numerator

Number of pregnant women living with HIV who delivered during the past 12 months and received antiretroviral medicines to reduce the risk of mother-to-child transmission of HIV. Global reports summarizing the coverage of antiretroviral medicine for preventing mother-to-child transmission will exclude women who received single-dose nevirapine, since it is considered a suboptimal regimen. However, the country should report the number of women who only received single-dose nevirapine.

This count should include all women who delivered in the past 12 months, regardless of which year they started on antiretroviral medicines.

Denominator

Estimated number of women living with HIV who delivered within the past 12 months

Calculation

Numerator/denominator

Method of measurement

For the numerator. National programme records aggregated from programme monitoring tools, such as patient registries and summary reporting forms.

For the denominator. Estimation models such as Spectrum or antenatal clinic surveillance surveys combined with demographic data and appropriate adjustments related to the coverage of antenatal clinic surveys.

Measurement frequency

Annually or more frequently, depending on a country's monitoring needs

Disaggregation

- Cities and other administrative areas of importance.
 - The numerator should be disaggregated across the regimens described below.
-

Additional information requested

Please provide city-specific data for this indicator. Space has been created in the data entry sheet to provide information for the capital city and one or two other key cities of high epidemiological relevance, such as those with the highest HIV burden or those that have committed to ending AIDS by 2030.

Explanation of the numerator

The numerator should be disaggregated by the categories below. Each woman should only be counted once in one of the cells:

1. Newly initiated on antiretroviral therapy during the current pregnancy.
 2. Already receiving antiretroviral therapy before the current pregnancy.
 3. Other (please specify regimen).
-

Disaggregation of regimen definitions

Categories	Further clarification	Common examples
<p>The first two options include women receiving lifelong antiretroviral therapy (including Option B+):</p> <ol style="list-style-type: none"> Newly initiating treatment during the current pregnancy. Already receiving treatment before the pregnancy. 	<p>A three-drug regimen intended to provide antiretroviral therapy for life:</p> <ol style="list-style-type: none"> Number of pregnant women living with HIV identified in the reporting period newly initiating lifelong antiretroviral therapy. Number of pregnant women living with HIV identified in the reporting period who were already receiving antiretroviral therapy at their first antenatal clinic visit. <p>If a woman initiates lifelong antiretroviral therapy during labour, she would be counted in Category 1.</p> <p>If the number of women receiving antiretroviral therapy is not available by the timing of when they started, the number can be included in the cell entitled "total number of pregnant women receiving lifelong antiretroviral therapy."</p>	<p>Standard national treatment regimen, for example:</p> <ul style="list-style-type: none"> TDF + 3TC + EFV.
<p>3. If another regimen that does not include lifelong therapy was provided, please enter the other regimen (using one of the options below) and the number of women receiving that alternative regimen.</p>		
<p>Maternal triple antiretroviral medicine prophylaxis (prophylaxis component of World Health Organization (WHO) Option B during pregnancy and delivery)</p>	<p>A three-drug regimen provided for prophylaxis of mother-to-child transmission started during pregnancy—or as late as during labour or delivery—with the intention of stopping at the end of the breastfeeding period (or stopping at delivery, if not breastfeeding).</p> <p>If a woman is receiving triple antiretroviral medicines for the first time at labour or delivery, then she should still be counted in this category if the facility is implementing Option B.</p>	<ul style="list-style-type: none"> TDF + 3TC + EFV. AZT + 3TC + EFV. AZT + 3TC + LPV/r.
<p>Maternal AZT (prophylaxis component of WHO Option A during pregnancy and delivery)</p>	<p>A prophylactic regimen that uses AZT (or another nucleoside reverse-transcriptase inhibitor (NRTI)) started as early as 14 weeks—or as late as during labour or delivery—to prevent HIV transmission.</p> <p>If a woman is receiving antiretroviral medicines for the first time at labour or delivery, then she should still be counted in this category if the facility is implementing Option A.</p>	<ul style="list-style-type: none"> AZT at any point before labour + intrapartum NVP. AZT at any point before labour + intrapartum NVP + 7-day postpartum tail of AZT + 3TC.
<p>Single-dose nevirapine to the mother during pregnancy or delivery</p>	<p>Count this if nevirapine is the only regimen provided to a pregnant woman living with HIV during pregnancy, labour or delivery.</p> <p>Do not count as single-dose nevirapine if:</p> <ul style="list-style-type: none"> Nevirapine is provided as part of Option A during pregnancy. A pregnant woman living with HIV initiates Option A, B or B+ at labour and delivery. 	<ul style="list-style-type: none"> Single-dose nevirapine for mother only at onset of labour. Single-dose nevirapine + 7-day AZT + 3TC tail only. Single-dose nevirapine for mother at onset of labour and single-dose nevirapine for baby only.

The numerator must match the values included in Spectrum or an automated query will be sent requesting that the team make the values consistent.

Global AIDS Monitoring

- Newly initiates treatment during the current pregnancy
- Already receiving treatment before the pregnancy

Spectrum

- Option B+: antiretroviral therapy started during current pregnancy (this is split among women who started antiretroviral therapy less than four weeks before delivery and women starting more than four weeks before delivery)
- Option B+: antiretroviral therapy started before current pregnancy

Or, if you have chosen other regimens, they should be incorporated into Spectrum in the following categories:

1. Maternal triple antiretroviral medicine prophylaxis (prophylaxis component of WHO Option B during pregnancy and delivery).	Option B: triple prophylaxis from 14 weeks
2. Maternal AZT (prophylaxis component of WHO Option A during pregnancy and delivery)	Option A: maternal AZT
3. Single-dose nevirapine to the mother during pregnancy or delivery	Single-dose nevirapine
4. Other (usually limited to countries still providing maternal AZT started late in the pregnancy)	Maternal AZT according to the 2006 WHO guidelines. Spectrum requires data on historical regimens. This category is maintained to describe the regimens provided in previous years.

Explanation of the denominator

Two methods can be used to estimate the denominator: an estimation model, such as Spectrum, using the output: the number of pregnant women needing services for preventing mother-to-child transmission; or, if Spectrum estimates are not available, by multiplying the number of women giving birth in the past 12 months (which can be obtained from estimates of the central statistics office, United Nations Population Division or pregnancy registration systems with complete data) by the most recent national estimate of HIV prevalence among pregnant women (which can be derived from HIV sentinel surveillance in antenatal clinic and appropriate adjustments related to coverage of antenatal clinic surveys).

To ensure comparability, the Spectrum output will be used for the denominator for global analysis.

Strengths and weaknesses

Countries are encouraged to track and report the number of women receiving the various treatment regimens so that the impact of antiretroviral medicines on mother-to-child transmission of HIV can be modelled based on their efficacy. If countries do not have a system for collecting and reporting this data, they should establish one. Efforts should be made to remove women captured twice in the reporting systems. A critical determinant of the effectiveness of mother-to-child transmission regimens is whether women have suppressed viral loads when their children are conceived. It is therefore essential for prevention of mother-to-child transmission registers to disaggregate by whether a woman was already on antiretroviral therapy when she arrived for antenatal care.

Further information

The prevention of mother-to-child transmission is a rapidly evolving programme area, and methods for monitoring coverage of this service are likewise evolving. To access information, please consult the following:

Publications on mother-to-child transmission of HIV. In: who.int [Internet]. Geneva: World Health Organization; c2019 (<http://www.who.int/hiv/pub/mtct/en>).

Publications on HIV monitoring and evaluation. In: who.int [Internet]. Geneva: World Health Organization; c2019 (<http://www.who.int/hiv/pub/me/en/index.html>).

2.4 Syphilis among pregnant women

Percentage of women accessing antenatal care services who were tested for syphilis, tested positive and treated

What it measures

- A. Coverage of syphilis testing in women attending antenatal care services
 - B. Percentage of pregnant women attending antenatal clinics with a positive (reactive) syphilis serology
 - C. Percentage of antenatal care attendees during a specified period with a positive syphilis serology who were treated adequately
-

Rationale

- A. Testing pregnant women for syphilis early in pregnancy is important for their health and that of the fetus. This contributes to monitoring the quality of antenatal care services and services to prevent HIV among pregnant women. It is also a process indicator for assessing the validation of eliminating the mother-to-child transmission of syphilis.
 - B. Syphilis infection in antenatal care attendees can be used to guide programmes for preventing sexually transmitted infections and may provide early warning of potential changes in HIV transmission in the general population.
 - C. Treating antenatal care attendees who test positive for syphilis directly measures the programme for eliminating the mother-to-child transmission of syphilis and efforts to strengthen primary HIV prevention. It is also a process indicator for validating the elimination of mother-to-child transmission of syphilis.
-

Numerator

- A. Number of women attending antenatal care services who were tested for syphilis
 - B. Number of women attending antenatal care services who tested positive for syphilis
 - C. Number of antenatal care attendees with a positive syphilis test who received at least one dose of benzathine penicillin 2.4 mU intramuscularly
-

Denominator

- A. Number of women attending antenatal care services
 - B. Number of antenatal care attendees who were tested for syphilis
 - C. Number of antenatal care attendees who tested positive for syphilis
-

Calculation

Numerator/denominator (for A, B and C, respectively)

Method of measurement

- A. All pregnant women should be tested (screened) for syphilis at their first antenatal care visit. Ideally, countries will report on testing at any visit as well as at the first visit. Countries unable to distinguish the first visit from testing at any visit should still report data on this indicator but ensure that it is clearly reported as data for any visit. This indicator should be measured annually.

Screening may include either nontreponemal tests that measure reaginic antibody (such as Venereal Disease Research Laboratory (VDRL) or rapid plasma reagin (RPR)) or treponemal tests that measure treponemal antibody (such as *Treponema pallidum* haemagglutination assay (TPHA), *Treponema pallidum* particle agglutination assay (TPPA), enzyme immunoassay or rapid treponemal tests). For this indicator, having either type of test is sufficient, although being tested with both is preferred. Indicate in the comments section what test type is generally used in your country. The type of test is factored into the analysis of the data.

Ideally, national programme records aggregated from health-facility data should be used. However, if such data are not available, data from sentinel surveillance or special studies can be reported if they are deemed representative of the national situation. Specify the source and coverage of your data (such as national programme data from all 12 provinces) in the comments section.

- B. Syphilis positivity can be measured using either nontreponemal tests (for example, RPR or VDRL) or treponemal tests (TPHA, TPPA, enzyme immunoassay or a variety of available rapid tests) or, ideally, a combination of both. A reactive nontreponemal test, especially if the titre is high, suggests active infection, whereas positivity with a treponemal test indicates any previous infection even if treated successfully. For the purposes of this indicator (intended to measure seropositivity), reporting positivity based on a single test result is acceptable. If both treponemal and nontreponemal test results on an individual person are available, then syphilis positivity should be defined as having positive results in both tests.

The rapid treponemal test has enabled testing in settings without laboratory capacity, greatly increasing the number of women who can be tested and treated for syphilis in pregnancy. Data should be collected annually. It is important to report what test type is generally used in your country. The type of test is factored into data analysis.

The following sources of data may be used: national programme records aggregated from health-facility data, sentinel surveillance or special surveys, using serological tests to detect reaginic and/or treponemal antibody. In the comments section, specify the source and coverage of your data: for example, sentinel surveillance of all antenatal care attendees in two of 10 provinces. Further, specify what test type is generally used in your country to define positivity in pregnant women: for example, nontreponemal (RPR or VDRL), treponemal (rapid tests or TPPA), people positive on both or unknown.

Countries are encouraged to use unique identifiers or registries that separate first and subsequent tests so that the data reflect the true prevalence or incidence of syphilis rather than test positivity.

Since most countries have data from a variety of test types, subanalysis (disaggregation) among women 15–24 years old may increase the likelihood that test positivity reflects recent infection.

-
- C. Data should be collected annually. Seropositivity on either a treponemal or nontreponemal test is sufficient to be considered positive for syphilis for this indicator.

Ideally, national programme records aggregated from health-facility data should be used. However, if national programme data are not available, data from sentinel surveillance or special studies can be reported if they are deemed representative of the national situation. Specify the source and coverage of your data (such as national programme data from all 12 provinces) in the comments section.

Measurement frequency

Data should be recorded daily and reported quarterly to the national or subnational level. They should also be consolidated annually and reported to WHO.

Disaggregation

- A. Tested at any visit, tested at first visit
- B. Age (15–24 and 25+ years)
- C. None
-

Additional information requested

Comment on whether the data you are providing are routine programme data deemed to be representative of the entire country and what test type was used to define positivity among antenatal care attendees: for example, non-treponemal, treponemal, people positive on both or mixed or unknown.

Strengths and weaknesses

- A. Countries may also monitor the week of pregnancy in which each woman is tested. Preventing congenital syphilis requires testing early in pregnancy, since stillbirth may occur in the second trimester. Knowing that women are being tested late in pregnancy will indicate that women are not accessing antenatal care early or that testing is not occurring early in pregnancy.

Programmes that separately test pregnant women for syphilis and for HIV should work together to enhance the effectiveness of their work.

Global. Examine trends over time to assess progress towards target levels of testing coverage required for eliminating mother-to-child transmission of syphilis. Knowledge of testing policies and practices should be used to interpret trends in coverage. Data on testing pregnant women who attend antenatal care services can later be combined with data on antenatal care attendance to estimate the overall coverage of syphilis testing among pregnant women.

Local. Data can be used to identify clinics not fully implementing national policy.

- B. Data on syphilis positivity among pregnant women are available in most countries through routine health-system reporting.

Differences in the test type used or changes in testing practices may affect data. Knowledge of testing practices within the country (such as the proportion of treponemal versus non-treponemal testing used) should be used to interpret disease trends.

Global and regional. Estimate the perinatal mortality and morbidity caused by syphilis that could be averted with effective programmes to eliminate the mother-to-child transmission of syphilis. Identify areas with the greatest need for comprehensive congenital syphilis prevention interventions. Data are used to estimate syphilis incidence and prevalence.

Local. Follow trends over time to assess changes in the burden of disease and the needs of programmes for preventing sexually transmitted infections. Data are used to estimate the incidence and prevalence of syphilis.

All levels. Compare data on trends in syphilis and HIV to look for early warning of increased risk of HIV transmission

- C. Data on treating syphilis among antenatal care attendees are often routinely monitored in health facilities.

Collecting treatment data may require collaboration with maternal and child health programmes to ensure that such data are available at the national level.

For the purposes of this indicator, documentation of a single dose of penicillin is sufficient. Treating a pregnant woman positive for syphilis with a single injection of 2.4 mU of benzathine penicillin before 24 weeks of gestational age is sufficient to prevent syphilis from being transmitted mother to infant. However, three injections at weekly intervals are recommended to treat latent syphilis and prevent tertiary syphilis in the mother.

Global, regional and local. Estimate the effectiveness of the programme in reducing syphilis-associated perinatal morbidity and mortality.

Local. Identify areas that need assistance to implement programmes or additional resources.

All levels. Knowledge of treatment policies and practices should be used to interpret trends in treatment.

Further information

National-level monitoring of the achievement of universal access to reproductive health: conceptual and practical considerations and related indicators. Geneva: World Health Organization; 2008 (<http://www.who.int/reproductivehealth/publications/monitoring/9789241596831/en>).

Methods for surveillance and monitoring of congenital syphilis elimination within existing systems. Geneva: World Health Organization; 2011 (<http://www.who.int/reproductivehealth/publications/rtis/9789241503020/en>).

Global guidance on criteria and processes for validation: elimination of mother-to-child transmission of HIV and syphilis. Geneva: World Health Organization; 2014 (<http://apps.who.int/iris/handle/10665/112858>).

2.5 Congenital syphilis rate (live births and stillbirth)

Percentage of reported congenital syphilis cases (live births and stillbirths)

What it measures

Progress in eliminating the mother-to-child transmission of syphilis

Rationale

Untreated syphilis infection in pregnancy can not only increase the risk of the mother and the infant transmitting and acquiring HIV but also lead to stillbirth, neonatal death and congenital disease (collectively defined as congenital syphilis). Given the high efficacy, simplicity and low cost of syphilis testing and treatment, global and regional initiatives to eliminate the mother-to-child transmission of syphilis have been launched. The rate of congenital syphilis is a measure of the impact of programmatic interventions to eliminate the mother-to-child transmission of syphilis.

Numerator

Number of reported congenital syphilis cases (live births and stillbirths) in the past 12 months

Denominator

Number of live births

Calculation

Numerator/denominator

Method of measurement

Routine health information systems. It is important to indicate in the comment section the case definition of congenital syphilis used in your country.

Measurement frequency

The data should be recorded daily and reported quarterly to the national or subnational level. They should also be consolidated annually and reported to WHO.

Disaggregation

None

Additional information requested

Countries should comment on any major differences between the national case definition and the global surveillance case definition, available on page 15 of: Baseline report on global sexually transmitted infection surveillance 2012. Geneva: World Health Organization; 2013 (<http://www.who.int/reproductivehealth/publications/rtis/9789241505895/en/index.html>).

In particular, countries should note whether or not their national case definition counts stillbirths.

Strengths and weaknesses

Diagnosing congenital syphilis is most reliable when specific diagnostic tests are used that are seldom available even in high-income countries. In most countries, therefore, diagnosis relies on clinical history and examination, making surveillance challenging. Although WHO has a global case definition for surveillance purposes, the actual case definition may vary between and within countries and regions.

It is important that countries, when reporting on syphilis, communicate on the extent to which the data are deemed representative of the national population. If a country is unable to report on the denominator, WHO will use the denominator from the United Nations Population Division.

Given the difficulties in diagnosing congenital syphilis, and depending on the case definition used, underreporting and overreporting can be a problem. The likely magnitude of such reporting errors should always be considered when looking at rates of congenital syphilis. However, using a consistent case definition may make trends over time useful.

Further information

Methods for surveillance and monitoring of congenital syphilis elimination within existing systems. Geneva: World Health Organization; 2011 (<https://extranet.who.int/iris/restricted/handle/10665/44790>).

Global guidance on criteria and processes for validation: elimination of mother-to-child transmission of HIV and syphilis. Geneva: World Health Organization; 2014 (<http://apps.who.int/iris/handle/10665/112858>).

2.6 HIV testing in pregnant women

Percentage of pregnant women with known HIV status

What it measures

Coverage of the first step in the prevention of mother-to-child transmission cascade. High coverage enables early initiation of care and treatment for HIV-positive mothers. The total number of identified HIV-positive women provides the facility-specific number of pregnant women with HIV to start a facility-based prevention of mother-to-child transmission cascade.

Rationale

The risk of mother-to-child transmission can be reduced significantly by: (a) providing antiretroviral medicines—either as lifelong therapy or as prophylaxis—for the mother during pregnancy and delivery; (b) supplying antiretroviral prophylaxis for the infant and antiretroviral medicines for the mother or child during breastfeeding (if applicable); (c) instigating safe delivery practices and safer infant feeding.

Data will be used in the following ways: (a) to track progress towards global and national goals of eliminating mother-to-child transmission; (b) to inform policy and strategic planning; (c) to contribute to advocacy efforts; and (d) to leverage resources for accelerated scale-up. It will help measure trends in coverage of antiretroviral prophylaxis and treatment, and when disaggregated by regimen type, will assess progress in implementing more effective regimens and antiretroviral therapy.

Numerator

Number of pregnant women attending antenatal clinics and/or giving birth at a facility who were tested for HIV during pregnancy, at labour and/or delivery, or those who already knew they were HIV-positive at the first antenatal care visit.

Denominator

Population-based denominator: Number of pregnant women giving birth in the past 12 months.

Programme-based denominator: Number of pregnant women who attended an antenatal clinic or gave birth at a facility in the past 12 months.

Calculation

Numerator/denominator

Method of measurement

Numerator: programme records, such as antenatal care registers or labour and delivery registers. Some people pick up several months of antiretroviral medicine at one visit. If the duration of the medicine picked up covers the last month of the reporting period, these people should still be counted as receiving antiretroviral therapy (as opposed to having stopped treatment).

Population-based denominator: estimates from central statistics office, UN Population Division or vital statistics.

Facility-based denominator: programme records, such as antenatal care registers or labour and delivery registers.

Measurement frequency

Annual or more frequently, depending on a country's monitoring needs

Disaggregation

HIV status/test results:

- Known (positive) HIV infection at antenatal clinic entry.
- Tested HIV-positive at first antenatal care during current pregnancy, labour and/or delivery. This excludes women who already knew their HIV-positive status prior to current pregnancy.
- Tested HIV-negative at first antenatal care during current pregnancy, labour and/or delivery. This should be based on the latest test result in the case of repeat testing.

The sum of the above three counts should equal the number of women tested for HIV. The total identified HIV-positive women should equal the sum of known HIV-positive women at their first antenatal clinic entry plus those who tested HIV-positive at antenatal care during pregnancy, labour and/or delivery.

- Cities (optional).
 - Pregnant women who inject drugs.
-

Additional information requested

Look at trends over time: if disaggregated data is available by region, see whether any lower performing areas can be identified. Review if data are available on the percentage of antenatal care attendees who know their status, including those with previously confirmed HIV status and those tested and the percentage of labour and delivery attendees who know their status.

Provide city-specific data for this indicator. Space has been created in the data entry sheet to provide information for the capital city and one or two other key cities of high epidemiological relevance, such as those with the highest HIV burden or those that have committed to ending AIDS by 2030.

Strengths and weaknesses

This indicator enables a country to monitor trends in HIV testing among pregnant women. The points at which dropouts occur during the testing and counselling process—and the reasons why they occur—are not captured by this indicator. This indicator does not measure the quality of the testing or counselling. It also does not capture the number of women who received pre-test counselling.

Further information

Global guidance on criteria and processes for validation: elimination of mother-to-child transmission of HIV and syphilis. Second edition. Geneva: World Health Organization; 2017 (<https://apps.who.int/iris/bitstream/handle/10665/259517/9789241513272-eng.pdf;jsessionid=015C03A78EC01FA22E13641A3DE9B3E3?sequence=1>).

3.1 HIV incidence

Number of people newly infected with HIV in the reporting period per 1000 uninfected population

What it measures

Progress towards ending the AIDS epidemic

Rationale

The overarching goal of the global AIDS response is to reduce the number of people newly infected to less than 200 000 in 2030. Monitoring the rate of people newly infected over time measures the progress towards achieving this goal. This indicator is one of the 10 global indicators in the WHO consolidated strategic information guidelines.

Numerator

Number of people newly infected during the reporting period

Denominator

Total number of uninfected population (or person-years exposed)

Calculation

Rate: (Numerator x 1000)/denominator

Method of measurement

Methods for monitoring incidence can vary depending on the epidemic setting and are typically categorized either as direct or indirect measures. Direct measurement at a population level is preferred but can often be difficult to obtain. As a result, most if not all countries rely on indirect measures or triangulate direct and indirect methods.

Strategies for directly measuring HIV incidence include longitudinal follow-up and repeat testing among individuals who do not have HIV infection and estimation using a laboratory test for recent HIV infection and clinical data in the population. Longitudinal monitoring is often costly and difficult to perform at a population level. Laboratory testing of individuals to determine the recency of infection also raises cost and complexity challenges since a nationally representative population-based survey is typically required to obtain estimates.

Indirect methods most frequently rely on estimates constructed from mathematical modelling tools, such as Spectrum or the AIDS Epidemic Model. These models may incorporate geographical and population-specific HIV surveys, surveillance, case reporting, mortality, programme and clinical data and, in some instances, assumptions about risk behaviour and HIV transmission. In some instances, countries may wish to triangulate these data with other sources of estimates of the number of people newly infected, including from serial population-based HIV prevalence estimates or estimates of HIV prevalence in young, recently exposed populations.

Note that case-based surveillance systems capturing newly reported people acquiring HIV infection should not be used as a direct source of estimating the number of people newly infected with HIV in the reporting year. Because of reporting delays and underdiagnosis, newly reported cases may not reflect the actual rate of people becoming newly infected. This information may be useful, however, for triangulation or validation purposes, especially when combined with tests for the recency of HIV infection.

Disaggregated data reported for the numerator should be used to monitor progress towards eliminating new child infections and reducing the number of new HIV infections among adolescent girls and young women to below 100 000 per year.

Measurement frequency

Annually

Disaggregation

- Sex (male and female)
 - Age (0–14, 15–24, 15–49 and 50+ years)
 - Cities and other administrative areas of importance
-

Additional information requested

The source of the estimate is requested. For countries providing estimates of incidence derived from a source other than Spectrum, please provide any accompanying estimates of uncertainty around the rate and upload an electronic copy of the report describing the calculation if available.

Countries preferably should report a modelled estimate rather than one calculated only from a population-based survey or the number of newly reported cases of HIV infection reported through case-based surveillance. Users now have the option to use their Spectrum estimate or to enter nationally representative population-level data. If Spectrum estimates are chosen, the values will be pulled directly from the software once the national file is finalized.

Please provide city-specific data for this indicator. Space has been created in the data entry sheet to provide information for the capital city as well as one or two other key cities of high epidemiological relevance: for example, those that have the highest HIV burden or have committed to ending AIDS by 2030.

Strengths and weaknesses

Estimates of the rate of new infections and changes over time in this rate are considered the gold standard for monitoring programme impact. However, even in high-risk populations, people becoming newly infected with HIV is a relatively rare event. The accuracy of estimates of incidence and changes in this rate over time can therefore be uncertain. Such uncertainty should be reported when using HIV incidence rates to monitor programme impact, especially when disaggregated by sex and age and for key populations or in specific geographical areas. Countries should use caution when applying incidence rates from small studies to a population more generally.

Further information

Consolidated strategic information guidelines for HIV in the health sector. Geneva: World Health Organization; 2015 (http://apps.who.int/iris/bitstream/10665/164716/1/9789241508759_eng.pdf?ua=1).

Spectrum software. Glastonbury (CT): Avenir Health; 2019 (<http://www.avenirhealth.org/software-spectrum.php>).

3.2 Estimates of the size of key populations (A–E)

What it measures

Number of people engaging in the specific behaviour that put the given population at risk for HIV transmission or a proxy for those types of behaviour:

- A. Sex workers.
 - B. Men who have sex with men.
 - C. People who inject drugs.
 - D. Transgender people.
 - E. Prisoners.
-

Rationale

Programme planning for key populations can be more efficient if the size of these populations can be accurately estimated. The figures enable national AIDS programmes, health ministries, donors and not-for-profit and multilateral organizations to efficiently allocate resources to adequately meet the prevention needs of specific populations at higher risk. Size estimates are also important for modelling the HIV epidemic.

Numerator

Not applicable

Denominator

Not applicable

Calculation

Not applicable

Method of measurement

Several methods for estimation are available, including capture-recapture, service multipliers and network scale-up. See the Further Information section below for specific details.

Measurement frequency

Population size should be estimated every five years. However, any time an integrated biobehavioural survey is implemented, size estimates should be incorporated, if only to add to the database to confirm or refine estimates.

Disaggregation

- Estimating population sizes by age or sex is generally impractical. However, if a survey measures women who inject drugs or male sex workers, for example, a size estimate should be included.
 - Cities and other administrative areas of importance.
-

Additional information requested

To better understand the size estimates submitted, we request that the following additional information be included in the comment box:

- Definition used for the population, and inclusion criteria used in the study/survey, as applicable.
- Method to derive the size estimate.
- Site-specific estimates for all available estimates.

In keeping with efforts to provide more granular data presentations, the latter will offer the opportunity for mapping denominator data with programme data if they are collected in the same survey areas.

If there are subnational data available, please provide the disaggregation by administrative area, city, or site in the space provided. You may also upload an Excel spreadsheet of these data instead of entering them in the online tool. Submit the digital version of any available size estimation reports using the upload tool.

Strengths and weaknesses

The quality of population size estimates varies according to the methods used and the fidelity with which the methods are implemented. Every effort to assess bias and adjust the estimates accordingly should be attempted and explained. Size estimates for small areas should not be presented as national estimates: either a rational approach to extrapolation should be used and explained or the small area estimates should explicitly be submitted for the relevant areas explicitly. Please indicate in the comment field whether a multi-stakeholder consensus has been reached for the reported size estimates.

Further information

UNAIDS/WHO Working Group on Global HIV/AIDS and STI Surveillance. Guidelines on estimating the size of populations most at risk to HIV. Geneva: World Health Organization, and UNAIDS; 2010 (http://www.who.int/hiv/pub/surveillance/final_estimating_populations_en.pdf).

3.3 HIV prevalence among key populations (A-E)

Percentage of specific key populations living with HIV

This indicator is divided into five subindicators:

- A. HIV prevalence among sex workers.
- B. HIV prevalence among men who have sex with men.
- C. HIV prevalence among people who inject drugs.
- D. HIV prevalence among transgender people.
- E. HIV prevalence among prisoners.

What it measures

Progress on reducing HIV prevalence among key populations

Rationale

- A. Sex workers typically have higher HIV prevalence than the general population in both concentrated and generalized epidemics. In many cases, the prevalence among these populations can be more than twice the prevalence among the general population. Reducing the prevalence among sex workers is a critical measure of a national-level response to HIV.
- B. Men who have sex with men typically have the highest HIV prevalence in countries with either concentrated or generalized epidemics. In many cases, the prevalence among these populations can be more than twice the prevalence among the general population. Reducing the prevalence among men who have sex with men is a critical measure of a national-level response to HIV.
- C. People who inject drugs often have high HIV prevalence in countries with either concentrated or generalized epidemics. In many cases, the prevalence among these populations can be more than twice the prevalence among the general population. Reducing the prevalence among people who inject drugs is a critical measure of a national-level response to HIV.
- D. Transgender communities often have higher HIV prevalence than the general population in many settings. In many cases, the prevalence is more than twice that of the general population. Reducing the prevalence among transgender people is an important measure for monitoring the national HIV response.
- E. In many cases, the HIV prevalence among prisoners is greater than the prevalence among the general population. Addressing HIV among prisoners is an important component of the national response.

Countries with generalized epidemics may also have a concentrated subepidemic among one or more key populations at higher risk. If so, calculating and reporting on this indicator for these populations would be valuable for them.

Numerator

Number of people in a specific key population who test positive for HIV

Denominator

Number of people in a specific key population tested for HIV

Calculation

Numerator/denominator

Method of measurement

A–D. UNAIDS and WHO Working Group on Global HIV/AIDS and STI Surveillance. Guidelines among populations most at risk for HIV. Geneva: World Health Organization, and UNAIDS; 2011.

This indicator is calculated using data from HIV tests conducted among respondents in the sentinel site(s) or participants in biobehavioural surveys. The sentinel surveillance sites used for calculating this indicator should remain constant to allow for tracking changes over time.

E. This indicator is calculated using data from HIV tests conducted by prisons and other closed settings. HIV testing programme data are acceptable. Conducting surveys can be challenging and should therefore not be relied on. Testing should be conducted only with the consent of the prisoners.

Measurement frequency

Annual

Disaggregation

- A, C, D and E: Sex (female, male and transgender).
- A–E: Age (<25 and 25+ years).
- A–E: Cities and other administrative areas of importance.

Additional information requested

A–E: If there are subnational data available, please provide the disaggregation by administrative area, city, or site in the space provided. You may also upload an Excel spreadsheet of these data instead of entering them in the online tool. Submit the digital version of any available survey reports using the upload tool.

Strengths and weaknesses

In theory, progress in reducing the number of people newly infected with HIV is best assessed by monitoring the changes in incidence over time. In practice, however, prevalence data rather than incidence data are available. In analysing the prevalence data from key populations for assessing the impact of prevention programmes, it is desirable not to restrict analysis to young people but to report on the people newly initiating behaviour that puts them at higher risk of infection, such as by restricting the analysis to people participating in sex work for less than one year, to men who first had sex with another man within the past year or to people initiating injecting drug use within the past year. This type of analysis also has the advantage of not being affected by antiretroviral therapy increasing survival and thereby increasing prevalence.

If prevalence estimates are available, disaggregated by greater than and less than one year in sex work, one year of sexual activity with other men or one year of injecting drugs, countries are strongly encouraged to report this disaggregation in their country progress report and to use the comments field in the reporting tool for this indicator to present disaggregated estimates.

Because of the difficulties in accessing key populations, biases in serosurveillance data are likely to be more significant than in data collected from a less stigmatized population, such as women attending antenatal clinics. If there are concerns about the data, the interpretation should reflect these concerns.

Understanding how the sampled populations relate to any larger populations sharing similar high-risk behaviour is critical to interpreting this indicator. The period during which people belong to a key population is more closely associated with the risk of acquiring HIV than their age. It is therefore desirable not to restrict analysis to young people but to report on other age groups as well.

Trends in HIV prevalence among key populations in the capital city provide a useful indication of the performance of HIV prevention programmes in that city. However, they are not representative of the situation in the country as a whole.

The addition of new sentinel sites will increase the sample's representativeness and therefore provide a more robust point estimate of HIV prevalence. However, adding new sentinel sites reduces the comparability of values over time. As such, using consistent sites when undertaking trend analysis is important.

In previous reporting rounds, several countries have reported the HIV prevalence among subpopulations of transgender women through the additional comments field in the Global AIDS Response Progress Reporting online reporting tool. This demonstrates that the data are feasible to obtain in different settings.

Surveys exclusively covering transgender people are rare. Most data for transgender communities are drawn from surveys of men who have sex with men or sex workers. The risk environment reported in most transgender communities is great, placing transgender women at especially high risk of becoming HIV-positive and transmitting the infection. Examples from several Latin American countries demonstrate that successful surveys can be conducted in transgender communities. If transgender women are respondents in surveys of sex workers, include the data with sex workers as a disaggregation. If transgender people are respondents in surveys of men who have sex with men, include the data under the transgender tab.

Prisoners are easily reached with services, while released individuals can be efficiently linked to appropriate care and prevention services. The HIV prevalence can be readily estimated and quickly provide information that can be acted on.

In settings where high-risk behaviours for HIV transmission are criminalized, there is potential for high HIV prevalence and over-interpreting the results. Full understanding of the prison population is helpful during the analysis, especially the reasons for detention.

Further information

UNAIDS epidemiology publications (<http://www.unaids.org/en/dataanalysis/knownyourepidemic/epidemiologypublications>).

WHO/UNAIDS Working Group on Global HIV/AIDS and STI Surveillance. Guidelines on surveillance among populations most at risk for HIV. Geneva: World Health Organization; 2011 (http://www.unaids.org/sites/default/files/sub_landing/files/20110518_Surveillance_among_most_at_risk.pdf).

Operational guidelines for monitoring and evaluation of HIV programmes for sex workers, men who have sex with men, and transgender people. Chapel Hill (NC): MEASURE Evaluation; 2012 (<http://www.cpc.unc.edu/measure/publications/ms-11-49a>).

Consolidated guidelines on HIV prevention, diagnosis, treatment and care for key populations. Geneva: World Health Organization; 2016 (<https://apps.who.int/iris/bitstream/handle/10665/246200/9789241511124-eng.pdf;jsessionid=28C67621504E323967719DE7C880FF01?sequence=1>).

3.4 HIV testing among key populations (A–D)

Percentage of people of a key population who tested for HIV in the past 12 months, or who know their current HIV status

This indicator is divided into four subindicators:

- A. HIV testing among sex workers.
- B. HIV testing among men who have sex with men.
- C. HIV testing among people who inject drugs.
- D. HIV testing among transgender people.

What it measures

Progress providing HIV testing services to members of key populations.

Rationale

Ensuring that people living with HIV receive the care and treatment required to live healthy, productive lives and reducing the chance of transmitting HIV require that they know their HIV status. In many countries, targeting testing and counselling at locations and populations with the highest HIV burden is the most efficient way to reach people living with HIV and ensure that they know their HIV status. This indicator captures the effectiveness of HIV testing interventions targeting populations at higher risk of HIV infection.

Numerator

Respondent knows they are living with HIV (answer to Question 3 is “positive”)

or

Respondent reports having tested for HIV in last 12 months and result was negative (answer to Question 2 is “a” or “b”; answer to Question 3 is “negative”).

		Result of last HIV test		
		Positive	Negative	Indeterminate
When was your last HIV test?	<6 months			
	6–12 months			
	>12 months			

The number of respondents in the yellow boxes are the numerator.

Denominator

Number of people in key populations who answered question 1 below.

Calculation

Numerator/denominator

Method of measurement

Behavioural surveillance or other special surveys

Respondents are asked the following questions:

1. Do you know your HIV status from an HIV test?
 - a. No, I have never been tested
 - b. Yes, I have been tested
2. If yes, when were you last tested?
 - a. In the last 6 months
 - b. In the last 6–12 months
 - c. More than 12 months ago
3. Was the result of your last test:
 - a. Positive
 - b. Negative
 - c. Indeterminate

Measurement frequency

Annual

Disaggregation

A, C and D: Gender (female, male and transgender)

A-D: Age (<25 and 25+ years)

A-D: Cities and other administrative areas of importance

Additional information requested

If there are subnational data available, please provide the disaggregation by administrative area, city, or site in the space provided. Submit the digital version of any available survey reports using the upload tool.

Strengths and weaknesses

HIV testing and counselling is the necessary first step to addressing a person's HIV infection. People living with HIV must be aware of their HIV status and take the subsequent steps towards prevention and treatment services to prevent transmission of the virus. National programmes aim to have 90% of people who are living with HIV know their HIV status. The revision of this indicator strengthens its meaning, providing a more valid measure of progress in assuring that people affected by the HIV epidemic are taking up testing. By using a 12-month reference period, the previous testing indicator failed to capture people known to be living with HIV for a long time. This new formulation corrects that.

The new formulation of this question may not be fully implemented in many surveys yet, leading to reduced reporting in the near term. Respondents may be unwilling to accurately answer questions about their HIV status, leading to under-reporting of testing coverage among people living with HIV.

Further information

United States Centers for Disease Control and Prevention, WHO, UNAIDS, FHI 360. Biobehavioural survey guidelines for populations at risk for HIV. Atlanta: United States Centers for Disease Control and Prevention; forthcoming.

3.5 Antiretroviral therapy coverage among people living with HIV in key populations (A–E)

Percentage of the people living with HIV in a key population receiving antiretroviral therapy in the past 12 months

This indicator is divided into five subindicators:

- A. Antiretroviral therapy coverage among sex workers living with HIV
- B. Antiretroviral therapy coverage among men who have sex with men living with HIV
- C. Antiretroviral therapy coverage among people who inject drugs living with HIV
- D. Antiretroviral therapy coverage among transgender people living with HIV
- E. Antiretroviral therapy coverage among prisoners living with HIV

What it measures

Progress towards providing antiretroviral therapy to people living with HIV in key populations

Rationale

Antiretroviral therapy has been shown to reduce HIV-related morbidity and mortality among people living with HIV and to reduce the transmission of HIV. People living with HIV in key populations should be able to access mainstream services that provide antiretroviral therapy without fear of facing stigma or discrimination and to be able to receive care from health-care workers who have the clinical knowledge to meet their specific needs. Ideally, all of these mainstream services should meet the standards for becoming sensitized to the need of key populations. Accordingly, antiretroviral therapy coverage is a crucial way of assessing access to mainstream services.

In recent years, the guidelines on eligibility for antiretroviral therapy have changed several times. National guidelines do not always match global guidelines. As a result, antiretroviral therapy coverage has been reported using numerous definitions, including those based on global guidelines, or national guidelines, or both. When guidelines are modified to increase eligibility among people who are living with HIV, coverage estimates will decrease. To avoid multiple antiretroviral therapy coverage values, the number of key population members living with HIV receiving antiretroviral therapy will be presented in relation to the total number of key population members living with HIV.

This indicator will be aligned with the indicator on antiretroviral therapy coverage among all people living with HIV.

Numerator

Number of respondents living with HIV who report receiving antiretroviral therapy in the past 12 months

Denominator

Number of respondents living with HIV

Calculation

Numerator/denominator

Method of measurement

Biobehavioural surveys

Most treatment programmes do not collect behavioural risks in medical charts, so programme data are of limited use.

Measurement frequency

Annual

Disaggregation

A, C, D and E: Sex (female, male and transgender)

A-D: Age (<25 and 25+ years)

A-E: Cities and other administrative areas of importance

Additional information requested

If there are subnational data available, please provide the disaggregation by administrative area, city, or site in the space provided. Submit the digital version of any available survey reports using the upload tool.

Strengths and weaknesses

This is a new indicator that recognizes the importance of antiretroviral therapy and the need to achieve equity in access to ART. This has not been a standard question in biobehavioural surveys. It is, however, increasingly asked in surveys, including household surveys. Treatment programmes do not collect data on risk behaviour and therefore do not comprise a routine source for this information. Data on treatment distribution permit measurement of the second 90 of the 90–90–90 target and provide information to advocate for equity for treatment access for all key population communities.

It remains unclear how many people will respond accurately to this question in a survey. Additional analysis and research is required to assess the validity of the responses and to improve the elicitation of valid responses in the future.

Further information

Global HIV Strategic Information Working Group. Biobehavioural survey guidelines for populations at risk for HIV. Geneva, Switzerland; <http://www.who.int/hiv/pub/guidelines/biobehavioral-hiv-survey/en/>

Tool to set and monitor targets for HIV prevention, diagnosis, treatment and care for key populations: supplement to the 2014 consolidated guidelines for HIV prevention, diagnosis, treatment and care for key populations. Geneva: World Health Organization; 2015 (<http://www.who.int/hiv/pub/toolkits/p-monitoring-tools/en>).

3.6A Condom use among sex workers

Percentage of sex workers reporting using a condom with their most recent client

What it measures

Progress in preventing exposure to HIV among sex workers through unprotected sex with clients

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, by consistently and correctly using condoms.

Note: 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.

Numerator

Number of sex workers who reported using a condom with their last client

Denominator

Number of sex workers who reported having commercial sex in the past 12 months

Calculation

Numerator/denominator

Method of measurement

Behavioural surveillance or other special surveys

Respondents are asked the following question:

Did you use a condom with your most recent client with whom you had sexual intercourse?

Whenever possible, data for sex workers should be collected through or with civil society organizations that have worked closely with this population in the field. Access to sex workers and the data collected from them must remain confidential and secure.

Measurement frequency

Every two years

Disaggregation

- Sex (female, male and transgender)
 - Age (<25 and 25+ years)
 - Cities and other administrative areas of importance
-

Additional information requested

If there are subnational data available, please provide the disaggregation by administrative area, city, or site in the space provided. Submit the digital version of any available survey reports using the upload tool.

Strengths and weaknesses

Condoms are most effective when they are used consistently rather than occasionally. The current indicator will overestimate the level of consistent condom use. However, the alternative method of asking whether condoms are always, sometimes or never used in sexual encounters with clients in a specified period is subject to recall bias. Further, the trend in condom use in the most recent sexual act will generally reflect the trend in recent consistent condom use.

This indicator asks about commercial sex in the past 12 months. If data are available on another time period, such as the past three or six months, please include the alternate indicator definition in the metadata in the comments section of the reporting tool.

Surveying sex workers can be challenging. Consequently, the data obtained may not be based on a representative national sample of the key populations at higher risk being surveyed. If there are concerns that the data are not based on a representative sample, the interpretation of the survey data should reflect these concerns. If there are different sources of data, the best available estimate should be used. The report submitted with this indicator should include information on the sample size, the quality and reliability of the data and any related issues.

In previous reporting rounds, several countries have reported the condom use among subpopulations of transgender women through the additional comments field in the Global AIDS Monitoring online reporting tool. This demonstrates that the data are feasible to obtain in different settings.

To maximize the utility of these data, it is recommended that the same sample used for calculating this indicator be used for calculating the other indicators related to these populations.

Further information

World Health Organization, United Nations Population Fund, UNAIDS, Global Network of Sex Work Projects, The World Bank, United Nations Development Programme. Implementing comprehensive HIV/STI programmes with sex workers: practical approaches from collaborative interventions. Geneva: World Health Organization; 2013 (https://www.nswp.org/sites/nswp.org/files/SWIT_en_UNDP%20logo.pdf).

Consolidated strategic information guidelines for HIV in the health sector. Geneva: World Health Organization; 2015 (https://apps.who.int/iris/bitstream/handle/10665/164716/9789241508759_eng.pdf;jsessionid=B897C0E7C775974A6FF941C1C5940AFC?sequence=1).

Global HIV Strategic Information Working Group. Biobehavioral survey guidelines for populations at risk for HIV. Geneva: World Health Organization; 2017 (<https://www.who.int/hiv/pub/guidelines/biobehavioral-hiv-survey/en/>).

3.6B Condom use among men who have sex with men

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

What it measures

Progress in preventing exposure to HIV among men who have unprotected anal sex with a male partner

Rationale

Condoms can substantially reduce the risk of sexually transmitting HIV. Consistently and correctly using condoms is therefore 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 behaviour.

Note: 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.

Numerator

Number of men who have sex with men who reported using a condom the last time they had anal sex

Denominator

Number of men who have sex with men who reported having had anal sex with a male partner in the past six months

Calculation

Numerator/denominator

Method of measurement

Behavioural surveillance or other special surveys

In a behavioural survey of a sample of men who have sex with men, respondents are asked about sexual partnerships in the past six months, about anal sex within these partnerships and about condom use when they last had anal sex. Condom use applies whether the respondent is the receptive and insertive partner.

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

Access to men who have sex with men and the data collected from them must remain confidential and secure.

Measurement frequency

Every two years

Disaggregation

- Age (<25 and 25+ years).
 - Cities and other administrative areas of importance.
-

Additional information requested

If there are subnational data available, please provide the disaggregation by administrative area, city, or site in the space provided. Submit the digital version of any available survey reports using the upload tool.

Strengths and weaknesses

For men who have sex with men, condom use at last anal sex with any partner indicates well the overall levels and trends in protected and unprotected sex in this population. This indicator does not give any idea of risk behaviour in sex with women among men who have sex with both women and men. In countries in which men in the subpopulation surveyed are likely to have partners of both sexes, condom use with female as well as male partners should be investigated. In these cases, data on condom use should always be presented separately for the female and male partners.

This indicator asks about sex between men in the past six months. If data are available for a different time period, such as the past three or 12 months, please include this information in the metadata in the comments section of the reporting tool.

The data obtained may not be based on a representative national sample of the men who have sex with men being surveyed. If there are concerns that the data are not based on a representative sample, the interpretation of the survey data should reflect these concerns. Where different sources of data exist, the best available estimate should be used. The report submitted with this indicator should include information on the sample size, the quality and reliability of the data and any related issues.

To maximize the utility of these data, it is recommended that the same sample used for calculating this indicator be used for calculating the other indicators related to these populations.

Further information

United Nations Population Fund, Global Forum on MSM & HIV, United Nations Development Programme, World Health Organization, United States Agency for International Development, World Bank. Implementing comprehensive HIV and STI programmes with men who have sex with men: practical guidance for collaborative interventions. New York (NY): United Nations Population Fund; 2015 (<https://mpactglobal.org/wp-content/uploads/2015/11/MSMIT-for-Web.pdf>).

Consolidated strategic information guidelines for HIV in the health sector. Geneva: World Health Organization; 2015 (https://apps.who.int/iris/bitstream/handle/10665/164716/9789241508759_eng.pdf;jsessionid=B897C0E7C775974A6FF941C1C5940AFC?sequence=1).

Global HIV Strategic Information Working Group. Biobehavioral survey guidelines for populations at risk for HIV. Geneva: World Health Organization; 2017 (<https://www.who.int/hiv/pub/guidelines/biobehavioral-hiv-survey/en/>).

3.6C Condom use among people who inject drugs

Percentage of people who inject drugs reporting using a condom the last time they had sexual intercourse

What it measures

Progress in preventing sexual transmission of HIV among people who inject drugs

Rationale

Safer injecting and sexual practices among people who inject drugs are essential, even in countries in which other modes of HIV transmission predominate, because the risk of HIV transmission from contaminated injecting equipment is extremely high, and people who inject drugs can spread HIV (such as through sexual transmission) to the wider population.

Note: countries with generalized epidemics may also have a concentrated subepidemic among people who inject drugs. If so, calculating and reporting on this indicator for this population would be valuable.

Numerator

Number of people who inject drugs who reported using a condom the last time they had sex

Denominator

Number of people who inject drugs who report having injected drugs and having had sexual intercourse in the past month

Calculation

Numerator/denominator

Method of measurement

Behavioural surveillance or other special surveys

People who inject drugs are asked the following sequence of questions:

1. Have you injected drugs at any time in the past month?
2. If yes, have you had sexual intercourse in the past month?

If they answer yes to both 1 and 2:

3. Did you use a condom when you last had sexual intercourse?

Whenever possible, data for people who inject drugs should be collected with 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 and secure.

Measurement frequency

Every two years

Disaggregation

- Sex (female, male and transgender).
 - Age (<25 and 25+ years).
 - Cities and other administrative areas of importance.
-

Additional information requested

If there are subnational data available, please provide the disaggregation by administrative area, city, or site in the space provided. Submit the digital version of any available survey reports using the upload tool.

Strengths and weaknesses

Surveying people who inject drugs can be challenging. Consequently, the data obtained may not be based on a representative national sample of the people who inject drugs being surveyed. If there are concerns that the data are not based on a representative sample, the interpretation of the survey data should reflect these concerns. If there are different sources of data, the best available estimate should be used. The report submitted with this indicator should include information on the sample size, the quality and reliability of the data and any related issues.

The extent of HIV transmission associated with injecting drug use within a country depends on four factors: (1) the size, stage and pattern of dissemination of the national AIDS epidemic; (2) the extent of injecting drug use; (3) the degree to which people who inject drugs use contaminated injecting equipment; and (4) the patterns of sexual mixing and condom use among people who inject drugs and between people who inject drugs and the wider population. This indicator provides information on the third factor. To maximize the utility of these data, it is recommended that the same sample used for calculating this indicator be used for the calculating the other indicators related to these populations.

Further information

United Nations Office on Drugs and Crime, International Network of People Who Use Drugs, UNAIDS, United Nations Development Programme, United Nations Population Fund, World Health Organization et al. Implementing comprehensive HIV and HCV programmes with people who inject drugs: practical guidance for collaborative interventions. Vienna: United Nations Office on Drugs and Crime; 2017 (<https://www.inpud.net/en/duit-implementing-comprehensive-hiv-and-hcv-programmes-people-who-inject-drugs>).

Consolidated strategic information guidelines for HIV in the health sector. Geneva: World Health Organization; 2015 (https://apps.who.int/iris/bitstream/handle/10665/164716/9789241508759_eng.pdf;jsessionid=B897C0E7C775974A6FF941C1C5940AFC?sequence=1).

Global HIV Strategic Information Working Group. Biobehavioral survey guidelines for populations at risk for HIV. Geneva: World Health Organization; 2017 (<https://www.who.int/hiv/pub/guidelines/biobehavioral-hiv-survey/en/>).

3.6D Condom use among transgender people

Percentage of transgender people reporting using a condom during their most recent sexual intercourse or anal sex

What it measures

Progress in preventing exposure to HIV among transgender people through unprotected sex with partners

Rationale

Condoms can substantially reduce the risk of sexually transmitting HIV. Consistently and correctly using condoms is therefore important for transgender people, particularly trans-women, because of the high risk of HIV transmission during unprotected anal sex. Condom use with the most recent penetrative sex partner is considered a reliable indicator of longer-term behaviour.

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

Numerator

Number of transgender people who reported using a condom at last sexual intercourse or anal sex

Denominator

Number of transgender people surveyed who reported having sexual intercourse or anal sex in the past six months

Calculation

Numerator/denominator

Method of measurement

Behavioural surveillance or other special surveys

Respondents are asked the following question:

Did you use a condom with your most recent sexual intercourse or anal sex?

Whenever possible, data for transgender people should be collected with civil society organizations that have worked closely with this population in the field. Access to transgender people and the data collected from them must remain confidential and secure.

Measurement frequency

Every two years

Disaggregation

- Gender (transman or transwoman).
 - Age (<25 and 25+ years).
 - Cities.
-

Additional information requested

If there are subnational data available, please provide the disaggregation by administrative area, city, or site in the space provided. Submit the digital version of any available survey reports using the upload tool.

Strengths and weaknesses

For transgender people, condom use at last sexual intercourse or anal sex with any partner indicates well the overall levels of and trends in protected and unprotected sex in this population. In countries in which transgender people in the subpopulation surveyed are likely to have partners of both sexes (including transgender people), condom use with female, male and transgender partners should be investigated. In these cases, data on condom use should always be presented separately for female, male and transgender partners.

This indicator asks about sexual intercourse or anal sex in the past six months. If you have data available on another time period, such as the last three or 12 months, please include this additional data in the comments section of the reporting tool.

Surveying transgender people can be challenging. Consequently, the data obtained may not be based on a representative national sample of the key populations at higher risk being surveyed. If there are concerns that the data are not based on a representative sample, the interpretation of the survey data should reflect these concerns. If there are different sources of data, the best available estimate should be used. The report submitted with this indicator should include information on the sample size, the quality and reliability of the data and any related issues.

In previous reporting rounds, several countries have reported condom use among subpopulations of transgender women through the additional comments field in the Global AIDS Monitoring online reporting tool. This demonstrates that the data are feasible to obtain in different settings.

To maximize the utility of these data, it is recommended that the same sample used for calculating this indicator be used for calculating the other indicators related to these populations.

Further information

United Nations Development Programme, IRGT: A Global Network of Transgender Women and HIV, United Nations Population Fund, UCSF Center of Excellence for Transgender Health, Johns Hopkins Bloomberg School of Public Health, World Health Organization et al. Implementing comprehensive HIV and STI programmes with transgender people: practical guidance for collaborative interventions. New York (NY): United Nations Development Programme; 2016 (<https://www.undp.org/content/dam/undp/library/HIV-AIDS/Key%20populations/TRANSIT.pdf>).

Consolidated strategic information guidelines for HIV in the health sector. Geneva: World Health Organization; 2015 (https://apps.who.int/iris/bitstream/handle/10665/164716/9789241508759_eng.pdf;jsessionid=B897C0E7C775974A6FF941C1C5940AFC?sequence=1).

Global HIV Strategic Information Working Group. Biobehavioral survey guidelines for populations at risk for HIV. Geneva: World Health Organization; 2017 (<https://www.who.int/hiv/pub/guidelines/biobehavioral-hiv-survey/en/>).

3.7 Coverage of HIV prevention programmes among key populations (A–D)

Coverage of HIV prevention programmes: percentage of people in a key population reporting having received a combined set of HIV prevention interventions

This indicator is divided into four sub-indicators:

- A. Coverage of HIV prevention programmes among sex workers.
- B. Coverage of HIV prevention programmes among men who have sex with men.
- C. Coverage of HIV prevention programmes among people who inject drugs.
- D. Coverage of HIV prevention programmes among transgender people.

Each sub-indicator is divided in two parts. *Please report both parts. Surveys and programme data are considered complementary.*

PART I. Behavioral surveillance or other special survey

What it measures

People in key populations who received at least two HIV prevention interventions in the past three months

Rationale

Successfully confronting the HIV epidemic requires combining preventive behaviour and antiretroviral therapy. Coverage with evidence-informed prevention programming is a critical component of the response, the importance of which is reflected in the UNAIDS Strategy.

Numerator

Number of people in a key population who report receiving two or more of the prevention interventions listed

Denominator

Number of people in a key population responding to the survey

Calculation

Numerator/denominator

Method of measurement

Percentage of respondents who report receiving at least two of the following HIV prevention services from a nongovernmental organization, health-care provider or other sources.

- In the past three months, have you been given condoms and lubricant (for example, through an outreach service, drop-in centre or sexual health clinic)?
 - In the past three months, have you received counselling on condom use and safe sex (for example, through an outreach service, drop-in centre or sexual health clinic)?
 - Have you been tested for sexually transmitted infections in the past three months? (sex workers, transgender people and men who have sex with men)
 - Have you received new, clean needles or syringes in the past three months? (people who inject drugs)
-

Measurement frequency

Annual

Disaggregation

- Age (<25 and 25+ years).
 - Gender (male, female and transgender).
-

Strengths and weaknesses

Survey data provide the opportunity to measure the uptake of multiple intervention services by individuals. This indicator shortens the reference period because populations must access services regularly and risky behaviour must be regular. Weaknesses associated with survey data relate to any sampling or response bias and the limited geographical coverage of the information.

Further information

Tool to set and monitor targets for HIV prevention, diagnosis, treatment and care for key populations. Supplement to the 2014 consolidated guidelines for HIV prevention, diagnosis, treatment and care for key populations. Geneva: World Health Organization; 2015 (https://apps.who.int/iris/bitstream/handle/10665/177992/9789241508995_eng.pdf?sequence=1).

Operational Guidelines for Monitoring and Evaluation of HIV Programmes for People who Inject Drugs. In: MEASURE Evaluation [Internet]. Chapel Hill (NC): MEASURE Evaluation; c2019 (<https://www.measureevaluation.org/resources/tools/hiv-aids/operational-guidelines-for-m-e-of-hiv-programmes-for-people-who-inject-drugs>).

PART II. Programme data

What it measures

- People in key populations who are reached with HIV prevention interventions designed for the intended population
-

Rationale

Successfully confronting the HIV epidemic requires combining preventive behaviour and antiretroviral therapy. Coverage with evidence-informed prevention programming is a critical component of the response, the importance of which is reflected in the UNAIDS Strategy.

Numerator

Number of people in a key population reached with HIV prevention interventions designed for the intended population

Denominator

Number of people in a key population

Calculation

Numerator/denominator

Method of measurement

For the numerator: Number of people in a key population reached with individual HIV prevention interventions designed for the intended population and the following:

- For sex workers, gay men and other men who have sex with men and transgender people: number of condoms and lubricants distributed.
- For people who inject drugs: number of needles and syringes distributed.

Plus: [3.7.1] Number of service provision sites dedicated to key populations per administrative area.

For the denominator: Validated population size estimate

Measurement frequency

Annual

Disaggregation

Type of provider (public sector, key populations-led organization or other entities (such as private for-profit and not-for profit organizations, including faith-based, international non-governmental)). Please see page 32 for additional guidance.

Strengths and weaknesses

Programme data provide a national picture to the extent that programmes offer services nationally. While programme data reflect a national commitment to deliver services to specified key population communities, they do not accurately reflect the individuals served and data cannot typically be deduplicated. Furthermore, analysis of two separate programme data sets can only be considered ecologically: that is, we can see the number of people contacted by programmes and we can see the number of condoms provided by programmes, but we cannot know who among the people contacted received condoms.

Additional information requested

Service provision sites designed specifically for one or more key populations demonstrate commitment to deliver context-sensitive services to communities that are often stigmatized. Please provide the total number of such sites and the total number of first-level (e.g., state/province/oblast) or second-level (e.g., county/district) administrative areas that have at least one service and the total number in the country. For example, Country A reports 10 needle-syringe programmes across five provinces, and it has seven total provinces.

If known, please report if the site is operated by the national programme (government) or the community (civil society or nongovernmental organization).

Please provide the number of peer outreach workers active at the time of reporting for each key population.

Further information

Tool to set and monitor targets for HIV prevention, diagnosis, treatment and care for key populations: supplement to the 2014 consolidated guidelines for HIV prevention, diagnosis, treatment and care for key populations. Geneva: World Health Organization; 2015 (https://apps.who.int/iris/bitstream/handle/10665/177992/9789241508995_eng.pdf?sequence=1).

Operational Guidelines for Monitoring and Evaluation of HIV Programmes for People who Inject Drugs. In: MEASURE Evaluation [Internet]. Chapel Hill (NC): MEASURE Evaluation; c2019 (<https://www.measureevaluation.org/resources/tools/hiv-aids/operational-guidelines-for-m-e-of-hiv-programmes-for-people-who-inject-drugs>).

3.8 Safe injecting practices among people who inject drugs

Percentage of people who inject drugs reporting using sterile injecting equipment the last time they injected

What it measures

Progress in preventing HIV transmission associated with injecting drug use

Rationale

Safer injecting and sexual practices among people who inject drugs are essential, even in countries in which other modes of HIV transmission predominate, because the risk of HIV transmission from contaminated injecting equipment is extremely high, and people who inject drugs can spread HIV (such as through sexual transmission) to the wider population.

Note: countries with generalized epidemics may also have a concentrated subepidemic among people who inject drugs. If so, calculating and reporting on this indicator for this population would be valuable.

Numerator

Number of people who inject drugs who report using sterile injecting equipment the last time they injected drugs

Denominator

Number of people who inject drugs who report injecting drugs in the past month

Calculation

Numerator/denominator

Method of measurement

Behavioural surveillance or other special surveys

Respondents are asked the following questions:

1. Have you injected drugs at any time in the past month?

If yes:

2. The last time you injected drugs, did you use a sterile needle and syringe?

Whenever possible, data for people who inject drugs should be collected with civil society organizations that have worked closely with this population in the field.

Access to people who inject drugs and the data collected from them must remain confidential and secure.

Measurement frequency

Every two years

Disaggregation

- Gender (female, male and transgender)
 - Age (<25 and 25+ years)
 - Cities and other administrative areas of importance
-

Additional information requested

If there are subnational data available, please provide the disaggregation by administrative area, city, or site in the space provided. Submit the digital version of any available survey reports using the upload tool.

Strengths and weaknesses

Surveying people who inject drugs can be challenging. The data obtained may therefore not be based on a representative national sample of the people who inject drugs being surveyed. If there are concerns that the data are not based on a representative sample, the interpretation of the survey data should reflect these concerns. If there are different sources of data, the best available estimate should be used. The report submitted with this indicator should include information on the sample size, the quality and reliability of the data and any related issues.

The extent of HIV transmission associated with injecting drug use within a country depends on four factors: (1) the size, stage and pattern of dissemination of the national AIDS epidemic; (2) the extent of injecting drug use; (3) the degree to which people who inject drugs use contaminated injecting equipment; and (4) the patterns of sexual mixing and condom use among people who inject drugs and between people who inject drugs and the wider population. This indicator provides information on the third factor. To maximize the utility of these data, it is recommended that the same sample used for calculating this indicator be used for calculating the other indicators related to these populations.

Further information

WHO, UNODC and UNAIDS. Technical guide for countries to set targets for universal access to HIV prevention, treatment and care for injecting drug users. Geneva: World Health Organization; 2012 (http://www.who.int/hiv/pub/idu/targets_universal_access/en/index.html).

A framework for monitoring and evaluating HIV prevention programmes for most-at-risk populations. Geneva: UNAIDS; 2007 (http://www.unaids.org/sites/default/files/sub_landing/files/17_Framework_ME_Prevention_Prog_MARP_E.pdf).

Practical guidelines for intensifying HIV prevention: towards universal access. Geneva: UNAIDS; 2007 (http://data.unaids.org/pub/Manual/2007/20070306_Prevention_Guidelines_Towards_Universal_Access_en.pdf).

UNAIDS, WHO, Measure Evaluation, CDC, USAID, ICASO, UNODC. Operational Guidelines for Monitoring and Evaluation of HIV Programmes for People who Inject Drugs. <https://www.measureevaluation.org/resources/tools/hiv-aids/operational-guidelines-for-m-e-of-hiv-programmes-for-people-who-inject-drugs>

UNAIDS, WHO, Measure Evaluation, CDC, USAID, ICASO, UNODC. Operational Guidelines for Monitoring and Evaluation of HIV Programmes for Sex Workers, Men who have Sex with Men, and Transgender People. <https://www.measureevaluation.org/resources/tools/hiv-aids/operational-guidelines-for-monitoring-and-evaluation-of-hiv-programmes-for-sex-workers-men-who-have-sex-with-men-and-transgender-people>

3.9 Needles and syringes distributed per person who injects drugs

Number of needles and syringes distributed per person who injects drugs per year by needle–syringe programmes

What it measures

Progress in improving the coverage of needles and syringes provided, an essential HIV prevention service for people who inject drugs

Rationale

Injecting drug use is the main route of transmission for about 12% of people acquiring HIV globally. Preventing HIV transmission caused by injecting drug use is one of the key challenges in reducing the burden of HIV.

Needle–syringe programmes are one of nine interventions in the World Health Organization (WHO), United Nations Office on Drugs and Crime (UNODC) and UNAIDS comprehensive package for the prevention, treatment and care of HIV among people who inject drugs.

Needle–syringe programmes greatly enhance HIV prevention for people who inject drugs, and a wealth of scientific evidence supports their efficacy in preventing the spread of HIV.

Numerator

Number of needles and syringes distributed in the past 12 months by needle–syringe programmes

Denominator

Number of people who inject drugs in the country

Calculation

Numerator/denominator

Method of measurement

For the numerator: Programme data used to count the number of needles and syringes distributed

For the denominator: Estimation of the number of people who inject drugs in the country

Measurement frequency

Every two years

Disaggregation

- Type of provider (e.g., public sector, key populations-led organization or other entities (such as private for-profit and not-for profit organizations, including faith-based, international non-governmental)). Please see page 32 for additional guidance.
 - Cities and other administrative areas of importance.
-

Additional information requested

If there are subnational data available, please provide the disaggregation by administrative area, city or site in the space provided. Submit the digital version of any available survey reports using the upload tool.

Strengths and weaknesses

Some difficulties in counting needles and syringes are reported. Some commonly used syringes are 1 ml or 2 ml needle and syringe units; others are syringes to which needles need to be fitted. In most cases, only data on the number of syringes distributed by needle–syringe programmes but not pharmacy sales are available.

Estimating the number of people who inject drugs at the country level presents challenges. People who inject drugs are defined in many ways, and the estimates have ranges. The UNODC publishes estimates of the number of people who inject drugs in the *World drug report*. These estimates may be used. If there is a reason not to use them, please provide the rationale in the comment field.

Countries that have legalized sales of needles and syringes without a prescription may appear to have artificially low coverage with this indicator. Countries can monitor this indicator against the following coverage levels:

- Low: <100 syringes per person who injects drugs per year.
- Medium: 100–200 syringes per person who injects drugs per year.
- High: >200 syringes per person who injects drugs per year.

These levels are based on studies in low- and middle-income countries investigating the levels of syringe distribution and how these affect HIV transmission. The levels required for preventing hepatitis C are likely to be much higher than those presented here.

Further information

The following fully describes this indicator: World Health Organization, United Nations Office on Drugs and Crime, UNAIDS. Technical guide for countries to set targets for universal access to HIV prevention, treatment and care for injecting drug users. Geneva: World Health Organization; 2012 (https://www.unaids.org/sites/default/files/sub_landing/idu_target_setting_guide_en.pdf).

Needle and syringe programmes, In: who.int [website]. Geneva: World Health Organization; c2019 (<http://www.who.int/hiv/topics/idu/needles/en/index.html>).

Effectiveness of sterile needle and syringe programming in reducing HIV/AIDS among IDUs. Geneva: World Health Organization; 2004 (<http://www.who.int/hiv/pub/idu/e4a-needle/en/index.html>).

WHO/UNAIDS Working Group on Global HIV/AIDS and STI Surveillance. Guidelines on estimating the size of populations most at risk to HIV. Geneva: World Health Organization and UNAIDS; 2010 (http://www.unaids.org/en/media/unaids/contentassets/documents/epidemiology/2011/2011_Estimating_Populations_en.pdf).

Consolidated strategic information guidelines for HIV in the health sector. Geneva: World Health Organization; 2015 (https://apps.who.int/iris/bitstream/handle/10665/164716/9789241508759_eng.pdf;jsessionid=B897C0E7C775974A6FF941C1C5940AFC?sequence=1).

Global HIV Strategic Information Working Group. Biobehavioral survey guidelines for populations at risk for HIV. Geneva: World Health Organization; 2017 (<https://www.who.int/hiv/pub/guidelines/biobehavioral-hiv-survey/en/>).

3.10 Coverage of opioid substitution therapy

Percentage of people who inject drugs receiving opioid substitution therapy

What it measures

A programme's ability to deliver opioid substitution therapy among people who inject drugs as a method of directly reducing injecting frequency. The target coverage is 40%.

Rationale

Opioid substitution therapy represents a commitment to treat opioid dependence and reduce the frequency of injecting, preferably to zero. It is the most effective, evidence-based public health tool for reducing use among the people who inject opioids. Opioid substitution therapy provides crucial support for treating other health conditions, including HIV, tuberculosis and viral hepatitis.

Numerator

Number of people who inject drugs and are receiving opioid substitution therapy at a specified date

Denominator

Number of opioid-dependent people who inject drugs in the country

Calculation

Numerator/denominator

Method of measurement

For the numerator: Programme records: for example, opioid substitution therapy registries.

For the denominator: Size estimations of opioid users or injectors.

Biobehavioral surveys can collect this information but are often biased by an inclusion criterion of being a current injector, whereas people receiving opioid substitution therapy should not be injecting anymore.

Measurement frequency

Annual

Disaggregation

- Gender (male, female and transgender).
 - Age (<25 and 25+ years).
 - Type of provider (e.g., public sector, key populations-led organization or other entities (such as private for-profit and not-for profit organizations, including faith-based, international non-governmental)). Please see page 32 for additional guidance.
 - Cities and other administrative areas of importance.
-

Additional information requested

If there are subnational data available, please provide the disaggregation by administrative area, city or site using the space provided. You may also upload an Excel spreadsheet of these data instead of entering them in the online tool. Submit the digital version of any available survey reports using the upload tool.

Strengths and weaknesses

The population size estimate used as the denominator should be appropriate for the numerator: not all opioid substitution therapy recipients have a history of injecting and not all people who inject drugs use or are dependent on opioids.

Further information

World Health Organization, United Nations Office on Drugs and Crime, UNAIDS. Technical guide for countries to set targets for universal access to HIV prevention, treatment and care for injecting drug users. Geneva: World Health Organization; 2012 (http://www.who.int/hiv/pub/idu/targets_universal_access/en/index.html).

For a proposed complete set of globally agreed indicators for people who inject drugs, please see:

People who inject drugs. In: who.int [Internet]. Geneva: World Health Organization; 2016 (<http://www.who.int/hiv/topics/idu/en/index.html>).

3.11 Active syphilis among sex workers

Percentage of sex workers with active syphilis

What it measures

Progress in decreasing high-risk sexual behaviour and intervention efforts to control syphilis among sex workers

Rationale

Testing sex workers for syphilis is important for their health and for second-generation surveillance purposes.

Numerator

Number of sex workers who tested positive for active syphilis

Denominator

Number of sex workers who were tested for active syphilis

Calculation

Numerator/denominator

Method of measurement

Measurement tools. Data from routine health information systems, sentinel surveillance or special surveys may be used.

How to measure. The traditional approach to determining seroprevalence has been to screen with a non-treponemal test that measures reaginic antibody (such as VDRL or RPR) and confirm positive results with a treponemal test that measures treponemal antibody (such as TPHA, TPPA, enzyme immunoassay or rapid treponemal test). Newer, rapid treponemal tests are comparatively easy to use, which encourages the use of these tests for screening, ideally paired with a non-treponemal test that detects reaginic antibody. Whichever approach is used, the proposed indicator requires both a positive non-treponemal test and a positive treponemal test to give a proxy for active infection.

Just a non-treponemal test, or just a treponemal test, although useful in some situations for therapeutic purposes, is not sufficiently specific for surveillance of sex workers. The requirement for both a positive non-treponemal test and a positive treponemal test among sex workers differs from the indicator on syphilis testing in antenatal care attendees because sex workers are more likely to have a history of previous infection. A positive treponemal test measures lifetime exposure, whereas the non-treponemal test better indicates active infection.

Disaggregation

Gender (male, female and transgender)

Strengths and weaknesses

Strengths. Requiring testing using both non-treponemal and treponemal tests enhances the specificity of the reported numbers of positive tests. In addition, requiring testing using both tests increases the likelihood of identifying active disease.

Weaknesses. Requiring testing using both tests increases the difficulty of acquiring data for this indicator.

Further information

Quality assurance. Quality assurance and quality control should be an integral part of syphilis testing to ensure reliable results.

Use of the data. Look at trends in comparable groups over time. Compare with data on the trends in syphilis and HIV if these are available.

Quality control of data and notes for the reporting tool. Please describe what type of sex workers the data represent and the setting in which the data were collected in the comments field. Do not count multiple tests run on the same person: if a person has been tested more than once in the past 12 months, they should not be counted more than once.

3.12 Active syphilis among men who have sex with men

Percentage of men who have sex with men with active syphilis

What it measures

Progress in decreasing high-risk sexual behaviour and intervention efforts to control syphilis among men who have sex with men

Rationale

Testing of syphilis among men who have sex with men is important for their health and for second-generation surveillance purposes.

Numerator

Number of men who have sex with men testing positive for active syphilis

Denominator

Number of men who have sex with men tested for active syphilis

Calculation

Numerator/denominator

Method of measurement

Measurement tools. Routine health information systems, sentinel surveillance or special surveys.

How to measure. The traditional approach to determining seroprevalence has been to screen with a non-treponemal test that measures reaginic antibody (such as VDRL or RPR) and confirm positive results with a treponemal test that measures treponemal antibody (such as TPHA, TPPA, enzyme immunoassay or rapid treponemal test). Newer, rapid treponemal tests are comparatively easy to use, which encourages the use of these tests for screening, ideally paired with a non-treponemal test that detects reaginic antibody. Whichever approach is used, the proposed indicator requires both a positive non-treponemal test and a positive treponemal test to give a proxy for active infection.

Just a non-treponemal test, or just a treponemal test, although useful in some situations for therapeutic purposes, is not sufficiently specific for surveillance of men who have sex with men. The requirement for both a positive non-treponemal test and a positive treponemal test among men who have sex with men differs from the indicator on syphilis testing among antenatal care attendees because men who have sex with men are more likely to have a history of previous infection. A positive treponemal test measures lifetime exposure, whereas the non-treponemal test better indicates active infection.

Disaggregation

None

Strengths and weaknesses

Strengths. Requiring testing using both tests enhances the specificity of the reported numbers of positive tests. In addition, requiring testing using both tests increases the likelihood of identifying active disease.

Weaknesses. Requiring testing using both tests increases the difficulty of acquiring data for this indicator.

Further information

Quality assurance. Quality assurance and quality control should be an integral part of syphilis testing to ensure reliable results.

Use of the data. Look at trends in comparable groups over time. Compare with data on trends in syphilis and HIV if these are available.

Quality control of data and notes for the reporting tool. Do not count multiple tests run on the same person: if a person has been tested more than once in the past 12 months, they should not be counted more than once. Please describe the setting in which the data were collected in the comments field.

3.13 HIV prevention programmes in prisons

HIV prevention and treatment programmes offered to prisoners while detained

What it measures

The number of prisoners who receive HIV preventive or treatment services while incarcerated

Rationale

Prisoners are often at risk for acquiring HIV when they are released and living in the community. This is especially true for people involved with illicit drug use or where selling sex is illegal. Offering HIV prevention and treatment services in prisons can reduce HIV transmission risk both within the prison and in the community on release. A strong national HIV response will include such services to prisoners.

Numerator

Number of clean needles distributed to prisoners

Number of prisoners receiving opioid substitution therapy

Number of condoms distributed to prisoners

Number of prisoners receiving antiretroviral therapy

Number of prisoners tested for HIV

Number or percentage of people living with HIV among prisoners

Number or percentage of prisoners with hepatitis C or co-infected with HIV and hepatitis C virus

Number or percentage of prisoners with TB or co-infected with HIV and TB

Denominator

Not applicable

Calculation

Not applicable

Method of measurement

Routine programme data

Measurement frequency

Annual

Disaggregation

None

Additional information requested

Number of prisons offering any HIV prevention or treatment services

Strengths and weaknesses

Programme data provide a strong picture of services and the burden of HIV among inmates. The indicator informs whether a national programme is taking advantage of serving a readily accessible population at higher risk.

Given the turnover in most prison systems, any programme data provide a snapshot of a given time period. Concerns for confidentiality and the welfare of inmates mitigates against surveys, although they can be useful if they can be conducted safely.

Further information

UNODC, ILO, UNDP, WHO, UNAIDS. HIV prevention, treatment and care in prisons and other closed settings: a comprehensive package of interventions. Vienna: UNODC; 2013.

3.14 Viral hepatitis among key populations

Prevalence of hepatitis and coinfection with HIV among key populations

What it measures

Comorbidity with HIV and potential need for appropriate treatment

Rationale

Appreciation of hepatitis and HIV coinfection has improved recently. Many people living with HIV receiving antiretroviral therapy are dying from liver disease resulting from untreated viral hepatitis. HIV treatment regimens can be adjusted to treat chronic hepatitis B infection as well. New, highly effective hepatitis C treatment is available and has a high rate of virus clearance regardless of hepatitis C virus subtype. Measuring the hepatitis burden among key populations living with HIV can help national planners determine the resources needed to address the syndemic.

Numerator

Number of people in a key population who test positive for antibody to hepatitis C virus

or

Number of people in a key population who test positive for hepatitis B surface antigen

and

Number of people in a key population who also test positive for HIV together with one of the above

Denominator

Number of respondents tested for both HIV and one or both of hepatitis B and C

Calculation

Numerator/denominator

Method of measurement

Integrated Biological and Behavioural Surveillance Survey

Measurement frequency

Every two years

Disaggregation

- Age (<25 and 25+ years).
 - Gender (male, female and transgender).
 - Key population.
-

Additional information requested

If the testing algorithm is available for hepatitis C screening, please include this information, especially if complementary or PCR testing is conducted.

Strengths and weaknesses

Probability-based estimates of coinfection with HIV and hepatitis C virus or HIV and hepatitis B virus among key populations are generally unavailable, although several biobehavioural surveys have conducted hepatitis antibody testing. Improving knowledge about coinfection will help to improve treatment programmes and help to maximize the survival of the affected populations. The numbers of people coinfecting are likely to be small, with the possible exception of people who inject drugs, so the confidence intervals will be large.

Further information

Global HIV Strategic Information Working Group. 2017. Biobehavioural survey guidelines for populations at risk for HIV. Geneva: World Health Organization; 2017 (<http://www.who.int/hiv/pub/guidelines/biobehavioral-hiv-survey/en/>).

3.15 People who received PrEP

Number of people who received oral pre-exposure prophylaxis (PrEP) at least once during the reporting period

What it measures

Progress towards scaling up PrEP and the expanded Fast-Track Target of reaching 3 million people with PrEP by 2020.

Rationale

This indicator is key to assessing the availability and uptake of PrEP, especially among people at higher risk of HIV infection. Through data disaggregation, this indicator will also attempt to monitor the availability and use by population (age, gender and key population).

The use of antiretroviral medicine by people who are HIV-negative before they are exposed to HIV can prevent HIV infection. Clinical trials have shown that oral PrEP can reduce the number of people acquiring HIV among serodiscordant couples, heterosexual men, women, men who have sex with men, people who inject drugs and transgender women.

WHO recommends that oral PrEP containing tenofovir be offered as an additional prevention choice for people at substantial risk of HIV infection as part of combination HIV prevention approaches. WHO provisionally defines substantial risk of HIV infection as HIV incidence of about 3 per 100 person-years or higher in the absence of PrEP. Implementation should be informed by local information, including the epidemiological context or trends, feasibility and demand, as well as individual assessment and consideration of the local environment related to people living with HIV and key populations in order to protect their safety. The implementation criteria may vary by country.

Numerator

Number of people who received oral PrEP at least once during the reporting period

Denominator

Not applicable

Calculation

Not applicable

Method of measurement

The numerator is generated by counting the number of people who received oral PrEP at least once during the reporting period (the previous calendar year), in accordance with national guidelines or WHO/UNAIDS standards. The numerator should only count individuals once: the first time they received oral PrEP during the reporting period. People who received oral PrEP through national programmes, demonstration projects, research, or through private means—but are taking it according to WHO/UNAIDS standards—should be included.

Age is defined as the age at the time the person received PrEP for the first time during the reporting period.

If a person identifies as belonging to more than one key population, all that are relevant should be recorded. The sum of the data disaggregated by key populations can therefore be greater than the total.

Measurement frequency

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

Disaggregation

- People who received PrEP for the first time in their lives.
 - Gender (male, female or transgender).
 - Age (<15, 15+ 15–19, 20–24, 25–49 and 50+ years).
 - Key population (men who have sex with men, sex workers, people who inject drugs, transgender people and prisoners).
 - Cities and other administrative areas of importance.
-

Additional information requested

If there are subnational data available, please provide the disaggregation by administrative area, city, or site in the space provided. Submit the digital version of any available survey reports using the upload tool.

Strengths and weaknesses

This indicator will not capture the number of person-years at risk, since it will not account for how long PrEP is used. It will also not measure the treatment cost, quality, effectiveness or adherence, which vary within and among countries and are likely to change over time.

The availability and use of PrEP will depend on such factors as cost, service delivery infrastructure and quality, legal and policy environment, perceptions of effectiveness and possible side-effects.

Countries with strong monitoring systems and using unique identifiers will likely more accurately estimate the number of people receiving PrEP for the first time during the calendar year than those with aggregate data systems. In countries with weaker monitoring systems, avoiding double-counting of the people receiving PrEP may be difficult, including those who may transfer to another facility to receive medication during the reporting period. In these cases, the number of people receiving PrEP for the first time during the calendar year may be overstated.

Further information

Consolidated guidelines on the use of antiretroviral drugs for treating and preventing HIV infection: recommendations for a public health approach. Second edition. Geneva: World Health Organization; 2016 (http://apps.who.int/iris/bitstream/10665/208825/1/9789241549684_eng.pdf?ua=1, accessed 15 November 2016).

WHO implementation tool for pre-exposure prophylaxis (PrEP) of HIV infection. Geneva: World Health Organization; 2017 (<http://www.who.int/hiv/pub/prep/prep-implementation-tool/en/>).

Male circumcision indicators

Indicators 3.16 and 3.17 are required only from 16 countries with high HIV prevalence, low levels of male circumcision and generalized heterosexual epidemics: Botswana, Ethiopia, Eswatini, Central African Republic, Kenya, Lesotho, Malawi, Mozambique, Namibia, Rwanda, South Africa, South Sudan, Uganda, United Republic of Tanzania, Zambia and Zimbabwe.

3.16 Prevalence of male circumcision

Percentage of men 15–49 that are circumcised

What it measures

Progress towards increased coverage of male circumcision

Rationale

Compelling evidence indicates that male circumcision reduces the risk of men heterosexually acquiring HIV infection by approximately 60%. Three randomized controlled trials have shown that male circumcision provided by well-trained health professionals in properly equipped settings is safe and can reduce the risk of acquiring HIV. WHO/UNAIDS recommendations emphasize that male circumcision should be considered an efficacious intervention for HIV prevention in countries and regions with heterosexual epidemics, high HIV prevalence and low male circumcision prevalence.

Numerator

Number of male respondents aged 15–49 who report that they are circumcised

Denominator

Number of all male respondents aged 15–49 years

Calculation

Numerator/denominator

Method of measurement

Population-based surveys (Demographic and Health Survey, AIDS Indicator Survey, Multiple Indicator Cluster Surveys or other representative survey)

Measurement frequency

Every 3–5 years

Disaggregation

- Age (15–19, 20–24, 25–29 and 25–49 years)
- Source or practitioner of circumcision procedure: formal health-care system or traditional
- Cities and other administrative areas of importance

Additional information requested

Please provide city-specific data for this indicator. Space has been created in the data entry sheet to provide information for the capital city as well as one or two other key cities of high epidemiological relevance: for example, those that have the highest HIV burden or have committed to ending AIDS by 2030.

Strengths and weaknesses

A programme may or may not change the rate of male circumcision. For example, changing societal norms not caused by a programme may lead to changing rates of male circumcision. This indicator measures the total change in the population, regardless of the reasons.

Existing population-based surveys (such as Demographic and Health Surveys) may not accurately measure true male circumcision status because people may lack knowledge of what male circumcision is, be confused about their circumcision status or perceive the social desirability of circumcision status. Other approaches to determining circumcision status might be used: for example, using photographs or drawings (drawings may be more culturally appropriate), prompts or even direct examination. Modelling how changing rates of male circumcision can potential affect HIV incidence requires accurate knowledge of male circumcision status over time.

Further information

A guide to indicators for male circumcision programmes in the formal health-care system. Geneva: World Health Organization and UNAIDS; 2009 (http://whqlibdoc.who.int/publications/2009/9789241598262_eng.pdf).

3.17 Annual number of males voluntarily circumcised

Number of male circumcisions performed according to national standards during the past 12 months

What it measures

Progress in scaling up male circumcision services

Rationale

Compelling evidence indicates that male circumcision reduces the risk of men heterosexually acquiring HIV infection by about 60%. Three randomized controlled trials—plus post-trial studies—have shown that male circumcision provided by well-trained health professionals in properly equipped settings is safe and can reduce the risk of acquiring HIV. The World Health Organization (WHO) and UNAIDS recommendations emphasize that male circumcision should be considered an efficacious intervention for HIV prevention in countries and regions with heterosexual epidemics and high HIV prevalence.

Numerator

Number of males circumcised during the past 12 months according to national standards

Denominator

Not applicable

Calculation

Not applicable

Method of measurement

Health facility recording and reporting forms, programme data, health information system

Measurement frequency

Annual

Disaggregation

- Age (<1, 1–9, 10–14, 15–19, 20–24, 25–29, 25–49 and 50+ years).
 - Cities and other administrative areas of importance.
-

Additional information requested

Please provide city-specific data for this indicator. Space has been created in the data entry sheet to provide information for the capital city and one or two other key cities of high epidemiological relevance: for example, those that have the highest HIV burden or those that have committed to ending AIDS by 2030.

Optional to estimate coverage: Estimated number of uncircumcised, HIV-negative males.

Strengths and weaknesses

The total number of men and boys circumcised indicates either change in the supply of services or change in demand. Comparing the results against previous values shows where male circumcision services have been newly instituted or where male circumcision volume has changed.

As countries successfully scale up voluntary medical male circumcision (VMMC), the number of uncircumcised adolescent boys and men eligible for the procedure will decrease and the number of procedures performed becomes more difficult to interpret. It can be helpful to estimate the coverage of circumcisions performed relative to need; in this instance, need can be understood as the number of uncircumcised, HIV-negative adolescent boys and men who would be eligible for the procedure. These estimates can be derived from models such as those used for the purposes of monitoring progress against HIV Fast-Track Targets and the VMMC Decision Makers' Program Planning Toolkit (DMPPT) 2.

Further disaggregation is recommended at the country level:

- HIV-positive by test(s) on site, HIV-negative by test(s) on site, HIV-indeterminate results by test(s) on site, or unknown/refused HIV test(s).
- Groups identified as being at increased risk of HIV infection (for example, men seeking services for STI management, male clients of sex workers or occupational groups).
- Type and location of health facility.
- Cadre of the provider.
- Surgical versus device-based procedure.

Disaggregating the number of male circumcisions by HIV status and age will enable the impact of male circumcision programmes on HIV incidence to be determined using models. If a country has given priority to specific age groups, this disaggregation will help to determine whether age-specific communication strategies are creating demand. If the data are available by the type and location of health-care facility where the circumcision was performed, resource allocation needs can be assessed. Disaggregating these data by the cadre of health-care provider will determine whether task-shifting efforts are succeeding and help to determine resource allocation.

Some programmes will work closely with voluntary HIV testing services to provide HIV testing. A man desiring circumcision may have been recently tested, and an on-site HIV test may be unnecessary. In these cases, the facility may request a written verified result to verify HIV status. There is no specific length of time before male circumcision that the test should have been done, but within three months is suggested. The purpose of testing is not to identify every man who might be HIV-positive, but to provide HIV testing to men seeking health care and to identify men living with HIV who, if they choose to be circumcised, are likely to be at higher risk of surgical complications (men with chronic infections and low CD4 counts).

Further information

A guide to indicators for male circumcision programmes in the formal health care system. Geneva: World Health Organization and UNAIDS; 2009 (http://whqlibdoc.who.int/publications/2009/9789241598262_eng.pdf).

3.18 Condom use at last high-risk sex

The percent of respondents who say they used a condom the last time they had sex with a non-marital, non-cohabiting partner, of those who have had sex with such a partner in the last 12 months

What it measures

Progress towards preventing exposure to HIV through unprotected sexual intercourse among people with non-marital non-cohabiting partners.

Rationale

Condom use is an important way of protecting against HIV, especially among people with non-regular sexual partners.

Numerator

The number of respondents who report using a condom the last time they had sex with a non-marital, non-cohabiting partner.

Denominator

Total number of respondents who report that they had sex with a non-marital, non-cohabiting partner in the last 12 months.

Calculation

Numerator/denominator

Method of measurement

Population-based surveys (Demographic Health Survey, AIDS Indicator Survey, Multiple Indicator Cluster Survey or other representative survey)

Respondents' sexual histories are obtained. Analysis of sexual history is used to determine whether the respondent had sex with a non-marital, non-cohabiting partner in the past 12 months and, if so, whether the respondent used a condom the last time the respondent had sexual intercourse with such a partner.

Measurement frequency

3–5 years

Disaggregation

- Sex
 - Age (15–19, 20–24 and 25–49 years)
-

Strengths and weaknesses

A rise in this indicator is an extremely powerful indication that condom promotion campaigns are having the desired effect among their principle target market.

Since condom promotion campaigns aim for consistent use of condoms with non-regular partners rather than simply occasional use, some surveys have tried to ask directly about consistent use, often using an always/sometimes/never question. While this may be useful in sub-population surveys, it is subject to recall bias and other biases and is not sufficiently robust for use in a general population survey. Asking about the most recent act of non-cohabiting sex minimises recall bias and gives a good cross-sectional picture of levels of condom use. It is recognised that consistent use of condoms is an important goal. But inevitably, if consistent use rises, this indicator will also rise.

Further information

Demographic and Health Survey or AIDS Indicator Survey methods and survey instruments (<http://dhsprogram.com/What-We-Do/Survey-Types/AIS.cfm>); http://hivdata.dhsprogram.com/ind_tbl.cfm

3.19 Annual number of condoms distributed

Number of condoms distributed during the past 12 months

This indicator is divided into two sub-indicators:

- A. Number of male condoms distributed in the past 12 months.
- B. Number of female condoms distributed in the past 12 months.

What it measures

Progress in scaling up distribution of male and female condoms.

Rationale

Condoms have been shown to be one of the most effective methods in preventing the sexual transmission of HIV, other sexually transmitted infections (STIs) and unintended pregnancy, with effectiveness that increases with consistent and correct use. The World Health Organization (WHO) and UNAIDS recommendations emphasize that condom distribution and promotion is an efficacious intervention and a critical component of combination HIV prevention.

Numerator

- A. Number of male condoms distributed in the past 12 months.
- B. Number of female condoms distributed in the past 12 months.

Denominator

Not applicable.

Not applicable.

Calculation

Not applicable.

Not applicable.

Method of measurement

Count of the number of male and female condoms that left the central or regional warehouses for onward distribution in the previous calendar year. Data should include condoms distributed for free (public providers), condoms sold at subsidized rates through social marketing (nongovernmental organizations as providers) and condoms sold through the commercial sector (private sector providers). There should be no double-counting of condoms in case of overlap. If condoms from public sector warehouses are given to nongovernmental organizations or community workers for distribution, condoms should be accounted for in the public sector.

Measurement frequency

Annual

Disaggregation

- Provider (public, private and nongovernmental organizations).
- Cities and other administrative areas of importance.

Additional information requested

Please provide city-specific data for this indicator. Space has been created in the data entry sheet to provide information for the capital city and one or two other key cities of high epidemiological relevance (for example, those that have the highest HIV burden or those that have committed to ending AIDS by 2030).

Strengths and weaknesses

A count of the number of condoms that have left the central or regional warehouses can provide useful information on the supply of condoms. Since condom use is only tracked through surveys every three to five years, it is important to monitor distribution closely to be able to track uptake of condoms in real time. Analyzing these data jointly with condom needs estimates can provide information on supply gaps. Countries can also use this indicator for comparing subnational distribution per male aged 15–64 years in order to understand inequities in supply and uptake. The indicator requires countries to aggregate and analyze data from different distribution channels, including the public or private sectors and social marketing, making this indicator critical for building a total market approach and exploring complementarity between different market segments.

Distribution from central or regional warehouses will not capture whether condoms are reaching facilities, are being distributed before expiry and are being used. To obtain more accurate information on uptake of condoms, countries should ideally track condom consumption, which is the number of condoms that left distribution points like health facilities, shops or community outreach teams. This is usually done through stock counts at each distribution point at the time of replacing supply. However, since such consumption data is not available in aggregated form in most countries, distribution from central and regional warehouses is recommended as a proxy indicator.

Further information

United Nations Population Fund, World Health Organization, UNAIDS. Position statement on condoms and the prevention of HIV, other sexually transmitted infections and unintended pregnancy. 2015 (<https://hivpreventioncoalition.unaids.org/wp-content/uploads/2018/01/Condom-position-statement-WHO-UNFPA-UNAIDS-final-logo-clearance-26-June-2015-1.pdf>).

Condoms: the prevention of HIV, other sexually transmitted infections and unintended pregnancies. Geneva: UNAIDS; 2016 (<https://hivpreventioncoalition.unaids.org/wp-content/uploads/2018/01/JC2825-7-1.pdf>).

4.1 Discriminatory attitudes towards people living with HIV

Percentage of women and men 15–49 years old who report discriminatory attitudes towards people living with HIV

What it measures

Progress towards reducing discriminatory attitudes and support for discriminatory policies

Rationale

Discrimination is a human rights violation prohibited by international human rights law and most national constitutions. Discrimination in the context of HIV refers to unfair or unjust treatment (an act or an omission) of an individual based on his or her real or perceived HIV status. Discrimination exacerbates risks and deprives people of their rights and entitlements, fueling the HIV epidemic. This indicator does not directly measure discrimination but rather measures discriminatory attitudes that may result in discriminatory acts (or omissions). One item in the indicator measures the potential support by respondents for discrimination that takes place at an institution and the other measures social distancing or behavioural expressions of prejudice. The composite indicator can be monitored as a measure of a key manifestation of HIV-related stigma and the potential for HIV-related discrimination within the general population. This indicator could provide further understanding and improve interventions in HIV discrimination by: showing change over time in the percentage of people with discriminatory attitudes; allowing comparisons between national, provincial, state and more local administrations; and indicating priority areas for action.

Numerator

Number of respondents (15–49 years old) who respond no to either of the two questions

Denominator

Number of all respondents (15–49 years old) who have heard of HIV

Calculation

Numerator/denominator

Method of measurement

Population-based surveys (Demographic and Health Survey, AIDS Indicator Survey, Multiple Indicator Cluster Survey or other representative survey). This indicator is constructed from responses to the following questions in a general population survey from respondents who have heard of HIV.

- Would you buy fresh vegetables from a shopkeeper or vendor if you knew that this person had HIV? (yes, no, don't know/not sure/it depends)
 - Do you think that children living with HIV should be able to attend school with children who are HIV negative? (yes, no, don't know/not sure/it depends)
-

Measurement frequency

Every 3–5 years

Disaggregation

- Age (15–19, 20–24 and 25–49 years)
 - Sex
 - Responses for each question (based on the same denominator) are required as well as the consolidated response for the composite indicator
-

Explanation of the numerator

The respondents who have never heard of HIV and AIDS should be excluded from the numerator and denominator. Participants who respond don't know/not sure/it depends and those who refuse to answer should also be excluded.

Yes and no responses to each question may not add up to 100% if any participants respond "don't know" or values are missing. Calculating the percentage of people responding no to this question by subtracting the percentage of yes responses from 100% would therefore be inaccurate.

Strengths and weaknesses

This indicator directly measures discriminatory attitudes and support for discriminatory policies.

The question about buying vegetables is virtually identical to one used in a Demographic and Health Survey for monitoring "accepting attitudes" towards people living with HIV, enabling continued monitoring of trends. This question, however, focuses on "no" (discriminatory attitudes) rather than "yes" (accepting attitudes) responses, improving the previous measures for the "accepting attitudes" indicator, since it is applicable in settings with both high and low HIV prevalence and in high-, middle- and low-income countries and is relevant across a wide cultural range. Individual measures and the composite indicator do not rely on the respondent having observed overt acts of discrimination against people living with HIV, which are rare and difficult to characterize and quantify in many contexts. Rather, the individual measures and the composite indicator assess an individual's attitudes, which may more directly influence behaviour.

The recommended questions assess agreement with hypothetical situations rather than measuring events of discrimination witnessed. Social desirability bias may therefore occur, leading to underreporting of discriminatory attitudes. There is no mechanism for examining the frequency with which discrimination occurs or its severity.

Ideally, in addition to conducting surveys that measure the prevalence of discriminatory attitudes in a community, qualitative data should be collected to inform about the origins of discrimination. It would also be advisable to routinely collect data from people living with HIV on their experiences of stigma and discrimination via the People Living with HIV Stigma Index process (www.stigmaindex.org) and to compare the findings with the data derived from the discriminatory attitudes indicator.

Further information

Thematic segment: non-discrimination. Background note. In: Thirty-first meeting of the UNAIDS Programme Coordinating Board, Geneva, 11–13 December 2012. Geneva: UNAIDS; 2012 (http://www.unaids.org/en/media/unaids/contentassets/documents/pcb/2012/20121111_PCB%2031_Non%20Discrimination_final_newcoverpage_en.pdf).

Stangl A, Brady L, Fritz K. Technical brief: measuring HIV stigma and discrimination. STRIVE. Washington DC and London: International Center for Research on Women and London School of Hygiene and Tropical Medicine; 2012 (http://strive.lshtm.ac.uk/system/files/attachments/STRIVE_stigma%20brief-A4.pdf).

Stangl A, Lloyd JK, Brady LM, Holland CE, Baral S. A systematic review of interventions to reduce HIV-related stigma and discrimination from 2002 to 2013: how far have we come? *J Int AIDS Soc.* 2013;16(3 Suppl. 2) (<http://www.jiasociety.org/index.php/jias/issue/view/1464>).

For more on the methods and survey instruments for the Demographic and Health Survey and AIDS Indicator Survey: <http://dhsprogram.com>.

This indicator provides an important measure of prevalence of discriminatory attitudes towards people living with HIV. More completely assessing progress towards eliminating HIV-related stigma and discrimination and the success or failure of efforts to reduce stigma requires measuring other domains of stigma and discrimination.

4.2 Avoidance of health care among key populations because of stigma and discrimination (A–D)

Avoidance of health care among key populations because of stigma and discrimination

This indicator is divided into four subindicators:

- A. Avoidance of health care by sex workers because of stigma and discrimination.
- B. Avoidance of health care by men who have sex with men because of stigma and discrimination.
- C. Avoidance of health care by people who inject drugs because of stigma and discrimination.
- D. Avoidance of health care by transgender people because of stigma and discrimination.

What it measures

Progress towards reducing discriminatory attitudes and support for discriminatory policies in health-care settings.

Rationale

Discrimination is a human rights violation and is prohibited by international human rights law and most national constitutions. In the context of HIV, discrimination refers to unfair or unjust treatment of an individual (either through actions or by failure to act) based on his or her real or perceived HIV status. Discrimination exacerbates risks and deprives people of their rights and entitlements, thus fueling the HIV epidemic. HIV-related stigma refers to negative beliefs, feelings and attitudes towards people living with HIV, groups associated with people living with HIV (e.g., the families of people living with HIV) and other key populations at higher risk of HIV infection, such as people who inject drugs, sex workers, men who have sex with men and transgender people.

This indicator is important for providing a measure of the proportion of members of key populations who have avoided accessing general health-care services, HIV testing, HIV medical care and HIV treatment due to fear of stigma and discrimination. Related reasons for avoiding such services may include (but are not limited to) the following: a lack (or perceived lack of) confidentiality within health-care settings; negative attitudes and behaviours among health-care providers; and fears of disclosing or hinting at individual behaviours and sexual preference/orientation.

Data related to the avoidance of health-care services are important in measuring the proportion of key populations who are not fulfilling their basic health-care needs (such as routine medical check-ups) and thus may be less likely to attend health-care settings for more specialized services and care (such as HIV testing, treatment and medical care).

Data related to the avoidance of HIV testing services are important for addressing barriers to health-seeking behaviours, especially when health-care facilities are available and accessible.

This indicator is important for understanding and addressing the barriers to achieving the 90–90–90 targets among members of key populations. Data from this indicator directly measure fear of stigma or discrimination. This indicator could provide further understanding and improve interventions in reducing HIV stigma and discrimination by (1) showing change over time in the percentage of people who fear experiencing stigma, (2) enabling comparisons between national, provincial, state and more local administrations, and (3) indicating priority areas for action.

This indicator aims to capture avoidance of four characterisations of health-care services:

1. Avoidance of health-care services in general among all respondents.
2. Avoidance of HIV testing among all respondents who report not having had an HIV test in the past 12 months.
3. Avoidance of HIV-specific health-care among respondents who have indicated they are living with HIV and have not received or have stopped receiving HIV care.
4. Avoidance of HIV treatment among respondents who have indicated they are living with HIV and have never taken or have stopped taking HIV treatment.

Numerator

Number of respondents who answer yes to one of the following:

Have you ever avoided seeking (i) health-care, / (ii) HIV testing, / (iii) HIV medical care* or (iv) HIV treatment* in the last 12 months due to any of the following:

1. Fear of or concern about stigma?
2. Fear or concern someone may learn you [insert behaviour]?
3. Fear of or concern about or experienced violence?
4. Fear of or concern about or experienced police harassment or arrest?

Avoidance of services due to fear of stigma and discrimination may be asked in different ways across countries/surveys. Those provided here are examples of how these questions may be worded.

* Among respondents who have indicated they are living with HIV, in surveys that ask the HIV status of respondents

Denominator

Number of respondents

Calculation

Numerator/denominator

Method of measurement

Behavioural surveillance or other special surveys

Measurement frequency

Every 2–3 years

Disaggregation

- A–D: Age (<25 and 25+ years).
 - A and C: Gender (female, male and transgender).
 - A–D: Cities.
-

Additional information requested

Please provide the questions included in the survey instruments.

Please provide city-specific data for this indicator. Space has been created in the data entry sheet to provide information for the capital city as well as one or two other key cities of high epidemiological relevance: for example, those that have the highest HIV burden or have committed to ending AIDS by 2030.

Strengths and weaknesses

As a measure of stigma and discrimination, this indicator focuses on the outcomes of such behaviour. If perceived or experienced stigma and discrimination is sufficiently severe enough to dissuade people from seeking necessary health services, not only can it readily be identified as a problem, but it also affects critical service uptake. Some respondents, however, may experience and perceive important stigmatizing and discriminatory behaviour in their communities but, because of their own resilience or discrete or specialized services, may still seek out services. The indicator is not going to measure achieving zero discrimination but can inform on whether discrimination is reducing service uptake.

Further information

For further information on stigma and discrimination, and efforts to measure their prevalence, please see: Thematic segment on non-discrimination, 31st meeting of the UNAIDS Programme Coordinating Board. Background note. Geneva UNAIDS; 2012 (http://www.unaids.org/en/media/unaids/contentassets/documents/pcb/2012/20121111_PCB%2031_Non%20Discrimination_final_newcoverpage_en.pdf, accessed 21 November 2017).

Stangl A, Brady L, Fritz K. Technical brief: measuring HIV stigma and discrimination. Washington (DC) and London: International Center for Research on Women and London School of Tropical Medicine, STRIVE; 2012 (http://strive.lshtm.ac.uk/system/files/attachments/STRIVE_stigma%20brief-A4.pdf).

Stangl A, Lloyd JK, Brady LM, Holland CE, Baral S. A systematic review of interventions to reduce HIV-related stigma and discrimination from 2002 to 2013: how far have we come? *J Int AIDS Soc.* 2013;16(3 Suppl. 2).www.jiasociety.org/index.php/jias/issue/view/1464

Confronting discrimination: Overcoming HIV-related stigma and discrimination in health-care settings and beyond. Geneva: UNAIDS; 2017 (http://www.unaids.org/sites/default/files/media_asset/confronting-discrimination_en.pdf, accessed 21 November 2017).

4.3 Prevalence of recent intimate partner violence

Proportion of ever-married or partnered women 15–49 years old who experienced physical or sexual violence from a male intimate partner in the past 12 months

What it measures

Progress in reducing the prevalence of intimate partner violence against women, as an outcome itself and as a proxy for gender inequality.

An intimate partner is defined as a cohabiting partner, whether or not they were married at the time. The violence could have occurred after they separated.

Rationale

Globally, high rates of HIV infection among women have brought into sharp focus the problem of violence against women. There is growing recognition that deep-rooted, pervasive gender inequalities, especially violence against women and girls, shape their risk of and vulnerability to HIV infection. Violence and HIV have been linked through direct and indirect pathways. Studies in many countries indicate that many women have experienced violence in some form or another at some point in their life. WHO estimates that one in three women globally has experienced intimate partner violence and/or non-partner sexual violence.

Numerator

Women 15–49 years old who have or have ever had an intimate partner and report experiencing physical or sexual violence from at least one of these partners in the past 12 months. See the numerator explanation below for the specific acts of physical or sexual violence to include.

Denominator

Total number of women 15–49 years old surveyed who currently have or have had an intimate partner

Calculation

Numerator/denominator

Method of measurement

Population-based surveys already being used within countries, such as WHO multicountry surveys, Demographic and Health Surveys or AIDS Indicator Surveys (domestic violence module) and the International Violence against Women Surveys.

Collecting data on violence against women requires special methods ensuring that information is gathered in a manner adhering to ethical and safety standards, that does not pose a risk to study participants and maximizes data validity and reliability.

Measurement frequency

3–5 years

Disaggregation

- Age (15–19, 20–24 and 25–49 years)
 - HIV status (if available)
-

Explanation of the numerator

Ever-married or -partnered women 15–49 years old include those who have ever been married or have had an intimate partner. They are asked whether they have experienced physical or sexual violence from a male intimate partner in the past 12 months. Physical or sexual violence is determined by asking whether their partner did any of the following:

- Slapped her or threw something that could hurt her.
- Pushed or shoved her.
- Hit her with a fist or something else that could hurt her.
- Kicked, dragged or beat her up.
- Choked or burned her.
- Threatened or used a gun, knife or other weapon against her.
- Physically forced her to have sexual intercourse against her will.
- Forced her to do something sexual she found degrading or humiliating.
- Made her afraid of what would happen if she did not have sexual intercourse.

The numerator includes those reporting at least one incident corresponding to any item in the past 12 months.

Explanation of the denominator

Total number of women 15–49 years old surveyed who currently have or had an intimate partner.

Strengths and weaknesses

This indicator assesses progress in reducing the proportion of women experiencing recent intimate partner violence as an outcome in and of itself. It should also be interpreted as a proxy for gender equality. A change over time in the prevalence of recent violence will indicate a change in the level of gender equality, one of the structural factors driving the HIV epidemic.

The indicator focuses on recent intimate partner violence rather than any experience of it, to enable progress to be monitored. Any experience of intimate partner violence would show little change over time, no matter what the level of programming, since the numerator would include the same women as long as they fell into the target age group. Sustained reductions in intimate partner violence are not possible without fundamental changes in unequal gender norms, relations at the household and community levels, women's legal and customary rights, gender inequalities in access to health care, education and economic and social resources and male involvement in reproductive and children's health. Nor is this possible without promoting men's responsibility for HIV prevention. Changes in this intimate partner violence indicator will measure changes in the status and treatment of women in all societal domains, which directly and indirectly contribute to reduced risk of HIV transmission.

Even when WHO ethical and safety guidelines are adhered to and interviews are conducted in privacy, some women will not disclose information. This means that the estimates will probably be more conservative than the actual level of violence in the surveyed population.

The complex relationship between violence against women and HIV has been conceptually illustrated in a review of the state of evidence and practice in developing and implementing strategies addressing the intersection of violence and HIV. For more than a decade, research worldwide has documented the link between violence against women and HIV. Studies have demonstrated an association between violence against women and HIV as both a contributing factor for infection and a consequence of infection. This relationship operates through a variety of direct and indirect mechanisms.

- Fear of violence may keep women from insisting that a male partner whom they suspect is living with HIV use a condom.
- Fear of intimate partner violence may keep women from disclosing their HIV status or seeking treatment.
- Forced vaginal penetration increases the likelihood of HIV transmission.
- Rape is one manifestation of gender inequality and can result in HIV infection, although it represents a minority of cases.
- Rape and other sexual and physical abuse can result in mental distress that is manifested in high-risk sexual behaviour, increasing the chances of HIV transmission.

Further information

Investing in gender equality: ending violence against women and girls. New York: UN Women; 2010 (<http://www.unwomen.org/en/digital-library/publications/2010/1/ending-violence-against-women-and-girls-unifem-strategy-and-information-kit>).

WHO, UNAIDS. Addressing violence against women and HIV/AIDS: what works? Geneva: World Health Organization; 2010 (<http://www.who.int/reproductivehealth/publications/violence/9789241599863/en>).

Programme on International Health and Human Rights, Harvard School of Public Health. Gender-based violence and HIV. Cambridge (MA): Harvard School of Public Health; 2009.

Maman S, Campbell J, Sweat MD, Gielen AC. The intersections of HIV and violence: directions for future research and interventions. *Soc Sci Med*. 2000;50:459–478.

WHO, Department of Reproductive Health and Research, London School of Hygiene and Tropical Medicine, South African Medical Research Council. Global and regional estimates of violence against women. Prevalence and health effects of intimate partner violence and non-partner sexual violence. Geneva: World Health Organization; 2013 (<http://www.who.int/reproductivehealth/publications/violence/9789241564625/en>).

WHO, UNAIDS. 16 ideas for addressing violence against women in the context of the HIV epidemic: a programming tool. Geneva: World Health Organization; 2013 (http://www.who.int/reproductivehealth/publications/violence/vaw_hiv_epidemic/en).

Unite with women—unite against violence and HIV. Geneva: UNAIDS; 2014 (http://www.unaids.org/en/resources/documents/2014/20140312_JC2602_UniteWithWomen).

World Health Organization and London School of Hygiene and Tropical Medicine. Preventing intimate partner and sexual violence against women: taking action and generating evidence. Geneva: World Health Organization; 2010 (<http://www.who.int/reproductivehealth/publications/violence/9789241564007/en>).

Dunkle KL, Decker MR. Gender-based violence and HIV: reviewing the evidence for links and causal pathways in the general population and high-risk groups. *Am J Reprod Immunol*. 2013;69(Suppl. 1):20–26.

Adolescents and young women. In: The gap report. Geneva: UNAIDS; 2014 :132–145 (http://www.unaids.org/en/media/unaids/contentassets/documents/unaidspublication/2014/unaids_gap_report_en.pdf).

4.4 Experience of HIV-related discrimination in health-care settings

Percentage of people living with HIV who report experiences of HIV-related discrimination in health-care settings

What it measures

Progress in reducing HIV-related discrimination experienced by people living with HIV when seeking health-care services.

Rationale

Discrimination is a human rights violation and is prohibited by international human rights law and most national constitutions. In the context of HIV, discrimination refers to unfair or unjust treatment of an individual (either through actions or by failure to act) based on his or her real or perceived HIV status. Discrimination exacerbates risks and deprives people of their rights and entitlements, thus fueling the HIV epidemic.

Stigma is the attribution of undesirable characteristics to an individual or group that reduces their status in the eyes of society. It frequently drives experiences of discrimination.

The health sector is one of the main settings where people living with HIV—and those perceived to be living with HIV—experience discrimination. This indicator directly measures discrimination experienced by people living with HIV when seeking services in health-care settings.

The composite indicator can be monitored as a measure of the prevalence of HIV-related discrimination experienced in the health sector by people living with HIV. This indicator could provide further understanding of HIV-related health outcomes and improve interventions to reduce and mitigate HIV-related stigma and discrimination experienced along the treatment and care cascade by (a) showing change over time in the percentage of people living with HIV who experience discrimination in health-care settings and (b) indicating priority areas for action.

Numerator

Number of respondents who respond in the affirmative (“Yes”) to at least one of the seven items per question.⁵

Denominator

Number of all respondents

Calculation

Numerator/denominator

Method of measurement

People Living with HIV Stigma Index⁶

Respondents of the survey are asked if they experienced any of the following forms of HIV-related discrimination when seeking HIV and non-HIV-specific health services in the last 12 months:

- Denial of care due to HIV status.
 - Advised not to have sex because of HIV status.
 - Being the subject of gossip or negative talk because of HIV status.
 - Verbal abuse because of HIV status.
 - Physical abuse because of HIV status.
 - Avoidance of physical contact because of HIV status.
 - Sharing of HIV status without consent.
-

Measurement frequency

Every 2–3 years

Disaggregation

Responses for each question are required, as is the consolidated response for the composite indicator. The composite indicator can be disaggregated by the following:

- Type of health service (HIV, non-HIV).
 - Gender (male, female or transgender).
 - Key population (identification with at least one of the key population groups).
 - Age group (15–19 years, 20–24 years or 25–49 years).
 - Length of time living with HIV (0–<1 years, 1–4 years, 5–9 years, 10–14 years, or 15+ years).
-

⁵ The minimum age range currently captured by most DHS surveys is 15–49 years old, but this range is not prescriptive.

⁶ For further information on the People Living with HIV Stigma Index, please visit <http://www.stigmaindex.org/>.

Explanation of the individual items

The proposed indicator combines 14 items that capture discrimination experienced by people living with HIV when seeking HIV care (seven items) and non-HIV care (seven items). During the 2016 consultation process to update the People Living with HIV Stigma Index survey, people living with HIV highlighted the importance of separately measuring discrimination experienced when seeking HIV and non-HIV care. In response, the new version of the survey asks about experiences of discrimination when seeking both HIV care and non-HIV care (whereas the original survey only asked about stigma experienced when seeking health services in general). When reporting on this indicator with data from People Living with HIV Stigma Index surveys conducted prior to 2017, it will not be possible to disaggregate by the type of health service sought.

Strengths and weaknesses

This indicator directly measures experiences of discrimination among people living with HIV who sought health services.

The recommended questions assess whether specific forms of discrimination have been experienced in a health-care setting. The experience of discrimination may be dependent on whether the health-care provider is aware of the person's HIV status. Given this, disclosure of HIV status to the health-care provider should be collected whenever possible in order to help interpret the indicator.

In addition, people seeking HIV services at specialty HIV clinics may report fewer experiences of discrimination than people seeking HIV services that are integrated within general health-care services. Thus, capturing the type of clinic is recommended where possible. It also would be advisable to compare the findings from this indicator with Indicators 4.1 (Discriminatory attitudes towards people living with HIV) and 4.2 (Avoidance of health care among key populations) for a broader understanding of the stigma environment and the discrimination that can result in a given context.

Findings from this indicator should also be analysed in conjunction with the NCPI responses on programmes to address stigma and discrimination in health care and their scale, as well as programs to train health-care providers on human rights and medical ethics.

Further information

The indicator measures HIV-related discrimination experienced in health-care settings. HIV is often associated with a range of behaviours that are viewed as socially deviant or immoral, such as injecting drug use and sexual promiscuity. Because of these underlying societal beliefs, people living with HIV often are viewed as shameful and are thought to be responsible for having contracted HIV. This shaming process has repercussions beyond the individual because it greatly reduces incentives to be tested for HIV or, in the event the test result is positive, to disclose HIV status to sexual partners or family members.

Mahajan AP, Sayles JN, Patel VA, Remien RH, Sawires SR, Ortiz DJ et al. Stigma in the HIV/AIDS epidemic: a review of the literature and recommendations for the way forward. *AIDS*. 2008;22(Suppl 2):S67–79.

Nyblade L, Stangl A, Weiss E, Ashburn K. Combating HIV stigma in health care settings: what works? *J Int AIDS Soc*. 2009;12(1):15.

Confronting discrimination: overcoming HIV-related stigma and discrimination in health-care settings and beyond. Geneva: UNAIDS; 2017 (http://www.unaids.org/sites/default/files/media_asset/confronting-discrimination_en.pdf, accessed 21 November 2017).

5.1 Young people: Knowledge about HIV prevention

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

What it measures

Progress towards universal knowledge of the essential facts about HIV transmission

Rationale

HIV epidemics are perpetuated primarily through the sexual transmission of infection to successive generations of young people. Sound knowledge about HIV and AIDS is necessary (although often insufficient) for adopting behaviour that reduces the risk of HIV transmission.

Numerator

Number of respondents 15–24 years old who correctly answered all five questions

Denominator

Number of all respondents 15–24 years old

Calculation

Numerator/denominator

Method of measurement

Population-based surveys (Demographic and Health Survey, AIDS Indicator Survey, Multiple Indicator Cluster Survey or other representative survey)

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 they have 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?
-

Measurement frequency

Preferred: every two years; minimum: every 3–5 years

Disaggregation

- Age (15–19 and 20–24 years)
 - Sex (male and female)
-

Explanation of the numerator

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 "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.

Strengths and weaknesses

The belief that a person who looks healthy cannot be living with HIV is a common misconception that can result in unprotected sexual intercourse with infected partners. Rejecting major misconceptions about the modes of HIV transmission is as important as correct knowledge of the actual modes of transmission. For example, belief that HIV is transmitted through mosquito bites can weaken motivation to adopt safer sexual behaviour, and belief that HIV can be transmitted through sharing food reinforces the stigma faced by people living with HIV.

This indicator is especially useful in countries in which knowledge about HIV and AIDS is poor because it enables easy measurement of incremental improvements over time. However, it is also important in other countries, since it can be used to ensure that pre-existing high levels of knowledge are maintained.

Further information

Demographic and Health Survey and AIDS Indicator Survey methods and survey instruments (<http://dhsprogram.com>).

5.2 Demand for family planning satisfied by modern methods

Percentage of women of reproductive age (15–49 years old) who have their demand for family planning satisfied with modern methods

What it measures

Progress towards increasing the capacity of women and adolescent girls to access sexual and reproductive health services using the most effective methods

Rationale

This indicator assesses progress towards increasing the capacity of women and adolescent girls to access sexual and reproductive health services and being able to exercise their right to control and freely decide on matters related to their sexuality and sexual and reproductive health. It reflects the right of women and adolescent girls to decide whether and when to have children and having the methods to implement this decision.

This indicator is also used to measure progress towards Sustainable Development Goals target 3.7, which aims to ensure universal access to sexual and reproductive health-care services, including for family planning, information and education, and integrating reproductive health into national strategies and programmes by 2030.

Sexual and reproductive health services are also an entry point for HIV prevention, treatment, care and support services, and their integration will be key to ensuring the sustainability of HIV-related services.

Numerator

Number of women 15–49 years old who are using modern contraceptive methods

Denominator

Total number of women 15–49 years old with a demand for family planning

Calculation

Numerator/denominator

Method of measurement

Population-based surveys (Demographic and Health Survey or other representative survey)

Measurement frequency

Every 3–5 years

Disaggregation

- Age (15–19, 20–24, 25–49 and 15–49 years)
-

Explanation of the numerator

The numerator includes all women 15–49 years old who were using modern contraceptive methods at the time of the survey. The following are considered modern contraceptive methods:

- The pill (oral contraceptives)
 - Intrauterine device (IUD)
 - Injectables
 - Female sterilization
 - Male sterilization
 - Female condoms
 - Male condoms
 - Implants
 - Emergency contraception
 - Standard days method
 - Lactational amenorrhoea method (LAM)
 - The diaphragm
 - Foam or jelly.
-

Explanation of the denominator

The denominator includes all women of reproductive age (15–49 years old) who have a demand for family planning. Women are considered to have a demand for family planning if they want to delay, space or limit childbearing. A woman is considered to have a demand for family planning if:

- She or her partner is currently using a contraceptive method; or,
- She has an unmet need for family planning:
- Women who are currently pregnant or postpartum amenorrhoeic whose current pregnancy or last birth was unwanted or mistimed, or,
- Women who are currently married or sexually active and able to become pregnant who say that they want to delay pregnancy by two or more years or do not know when or whether they want any more children and who are not currently using any contraceptive method.

A detailed explanation of the calculation of unmet need can be found in the following document: *Revising unmet need for family planning: DHS Analytical Studies 25* (<https://dhsprogram.com/pubs/pdf/AS25/AS25%5B12June2012%5D.pdf>).

The denominator includes women who are not using any contraceptive method as well as those who are using a modern or a traditional contraceptive method.

Strengths and weaknesses

By referring to modern methods, this indicator measures access to more effective methods of contraception, which will lead to fewer unwanted pregnancies and improved maternal and child health.

Construction of this indicator requires complex calculations. The consistent application of a standard definition can provide measures of demand for family planning satisfied by modern methods that are comparable over time and across countries.

Further information

Demand satisfied by modern methods indicator snapshot [video]. Rockville (MD): DHS Programme; 2016 (<https://www.youtube.com/watch?v=RceOuljwKY&feature=youtu.be>).

Bradley, Sarah E.K., Trevor N. Croft, Joy D. Fishel, and Charles F. Westoff. 2012. Revising Unmet Need for Family Planning. DHS Analytical Studies No. 25. Calverton, Maryland, USA: ICF International (<https://dhsprogram.com/pubs/pdf/AS25/AS25%5B12June2012%5D.pdf>).

8.1 Domestic public budget for HIV

Budget for HIV and AIDS programmes from domestic public sources

What it measures

Monitors allocated and executed government budget earmarked for HIV programmes, along with perceived near-term trends in budget (i.e., next year's budget).

The total domestic public resources allocated and executed for HIV from central and subnational levels are to be reported.

Rationale

Domestic resources have contributed significantly to the HIV funding landscape over the last decade. In recent years, domestic resources have accounted for more than half of the total financial resources for HIV in low- and middle-income countries.

The monitoring of domestic public budgets and their short-term forecasts aims to foster global efforts to mobilize resources to achieve the targets to end AIDS by 2030.

Numerator

Not applicable

Denominator

Not applicable

Data type

Currency and monetary values, and categorical variables indicating the magnitude of change to represent short-term forecasts of the domestic funding landscape.

Calculation

Planned and executed budgets by each fiscal year.

The relevant department of government financial statistics maintains the budgets allocated to various sectors. Many countries may have earmarked budgets for HIV and AIDS programmes, while some may have budgets for those activities under different sectors.

The indicator aims to capture the budget for HIV and AIDS activities allocated through the government's own sources of funding. Budgeted activities funded through external aid transfers from foreign entities must be excluded.

Virtually all countries have an earmarked public budget for HIV, even while not all HIV expenditures are derived from budgets. The scope of budgets may differ occasionally across countries, but trends are useful for in-country analysis.

Method of measurement

Budget analysis

Note: The short-term forecast for the approaching fiscal year must be reported based on the information obtained through the government finance statistics, the Ministry of Health or the National AIDS Commission.

Measurement frequency

Annually for fiscal year

Disaggregation

- Budgets by level of government (i.e., national/federal, provincial/state/district or municipal/city/local) as appropriate in each country.
 - If segmented budgetary units exist (e.g., social security institutions or national AIDS bodies), they should be reported separately.
-

Strengths and weaknesses

The data quality may be robust in countries that have earmarked budgets for HIV. When there are no earmarked budgets for HIV, it may need coordination between government departments concerned with health and social welfare. When service provision is integrated within facilities, such expenditures will not be identified easily in earmarked budgets.

Further information

Annex 1

8.2 Antiretrovirals: unit prices and volume

What it measures

The average unit prices of antiretroviral regimens for a country's HIV programme and the associated procurement volume

Rationale

The average unit prices and procurement volume of antiretroviral commodities help monitor the antiretroviral medicine market dynamics and support the process of triangulating people reported to be on antiretroviral therapy.

Numerator

Not applicable

Denominator

Not applicable

Data type

The average unit price per pack of regimen in US\$, and the absolute number of packs procured within a given period.

Calculation

Not applicable

Method of measurement

Procurement and supply chain management systems

Data collection tools

Logistics Management Information Systems (LMIS)

Measurement frequency

Annually

Disaggregation

- By procurement batches. The number of packs procured needs to be provided for each batch of procurement of a regimen/formulation. When batch level data do not exist, then average annual unit price and the total number of packs procured annually need to be reported for this indicator.
-

Strengths and weaknesses

The procurement supply chain management systems (PSM) in countries maintain information on health commodity procurement at the central level. In some countries, there are LMIS that monitor commodities data at the level of the health facility. These information systems may be able to provide the data for reporting on this indicator.

Further information

Annex 2

8.3 HIV expenditure by origin of resources

Domestic and international HIV expenditure by programme category and financing source

What it measures

In-country expenditures of HIV programmes and services by source in a standardized and comparable manner according to mutually exclusive categories. The HIV expenditures by programme or service reported here would need to be consistent with the number of people who have received the services (as reported elsewhere in Global AIDS Monitoring).

Rationale

The indicator to be reported is total and subtotal HIV expenditures by services or programme categories and by financing sources. There are eight core sub-indicators that map to Commitment 8. These are outlined under Annex 3.

By the end of 2018, the international and domestic resource availability for the HIV response reached an estimated US\$ 19 billion (in 2016 dollars) in low- and middle-income countries. Achieving country and global targets requires increased focus, resources, programme effectiveness and efficiency to provide the HIV care, treatment and prevention to reduce HIV incidence and extend life.

It is critical to identify long-term, sustainable financing sources, including domestic resource mobilization, to maintain and build upon the success achieved. However, filling the financing gap and pursuing efficient resource allocation can only be achieved by assessing and managing the resources available and their use.

The quantification of financing flows and expenditures helps to examine the questions of who benefits from HIV programmes and to determine the current state of allocations for HIV programmes and services that focus on key or other specific populations.

The vast majority of the AIDS Spending Categories (or ASCs, per National AIDS Spending Assessment [NASA] classifications) or the sub-indicators are drawn from existing frameworks and are now structured around the 10 commitments derived from the 2016 Political Declaration on Ending AIDS. The resource needs for low- and middle-income countries resulted in a target to mobilize at least US\$ 26.2 billion (in 2016 US dollars) by 2020.

Numerator

Not applicable

Denominator

Not applicable

Data type

Currency and monetary values

Calculation

Social accounting and costing principles need to be applied for producing expenditure data. Rules, frameworks and principles are described in the specific manuals and guidelines (links provided below).

The calculation of each service/programme or sub-indicator may have individual characteristics to ensure proper accounting of all components (e.g., direct and shared costs of service provision) and to avoid double-counting; these calculations may be different by each financing source and service delivery modality (or even by service provider). Further guidance is available in the respective guidelines and manuals listed at the end of this section.

The quantification is limited to in-country expenditures, using international development assistance funds and the expenditures incurred using public or private funds.

There are certain requirements for data collection and quality to ensure the reliability and validity of the indicators to assure credibility.

The conciliation of top-down estimates (from the financing sources) and bottom-up (from the costing of service delivery) provides the best assessment of the total HIV in-country spending.

Financial and programme records from providers or service delivery organizations are the basis for data collection.

There are significant documented discrepancies between budgetary allocations and actual expenditures. Budget analysis is not recommended as the sole basis for reporting total in-country HIV expenditure.

It is good practice to validate expenditures funded by international sources, national financing sources and financing agents, as well as with all relevant stakeholders.

Method of measurement

Primary:

- NASA.

Alternative:

- Budget analysis.
- System of Health Accounts 2011 (SHA-2011) with HIV module.

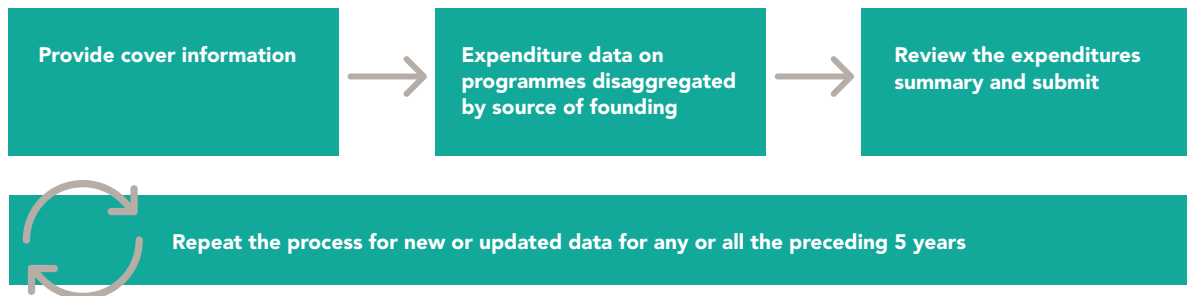
Note:

- When a NASA is not available, countries may use centrally produced results from the PEPFAR expenditure reporting system.
 - Health accounts using the SHA-2011 framework with full disease distribution attempt to capture top-level elements of the NASA ASCs. However, depending on the objectives of a given resource-tracking exercise, SHA-2011 may or may not inform on the totality of HIV granular expenditure (disaggregated by programme) as required. The SHA-2011 accounting framework may have to be supplemented by robust costing principles to disaggregate the HIV portion of the joint costs incurred by the system.
-

Data collection tools

Countries develop their reports on HIV expenditures by core programme/service categories and financing sources using the national funding matrix template. A full range of HIV programme categories is provided in Annex 2. If countries have developed a full and proper NASA, the filling of the funding matrix constitutes only an output template from the exercise. If countries have developed a health account using the SHA-2011 framework, the cells of the funding matrix can be filled, particularly for the international sources, and in some cases, for the domestic private and public sources of financing.

Process flow for reporting on this indicator



The amended data for previous years can be submitted if the data submitted in previous years were preliminary.

Measurement frequency

Annually for calendar or fiscal year. Since the results of any accounting exercise may take time longer than the deadline for annual reporting, countries may submit preliminary results, which will be substituted when final results are available. In this reporting cycle, we suggest that countries submit any number of annual final reports available from the last five years, indicating their status as preliminary or final and whether they substitute for previous reports. It is not required to resubmit the data that have previously been reported and that remained unchanged. The UNAIDS team can be contacted for assistance if countries would like to submit recently amended or final reports on expenditures prior to 2015.

Disaggregation

- Financing source.
 - HIV and AIDS programme categories.
 - For selected sub-indicators, countries are encouraged to report expenditures on the most salient commodities under each of the relevant programmes representing sub-indicators, as data allow. Reporting of total expenditures by programme is acceptable if the disaggregation is not known but there is certainty that both commodities and service delivery costs are included.
-

Strengths and weaknesses

Countries that have appropriately implemented a full NASA are able to fill the template with an output table from the NASA exercise. Final country estimates need to be validated with all stakeholders and triangulated to increase reliability and validity.

Countries that have implemented an SHA-2011 annual exercise may need to ensure that the allocation keys used to estimate HIV expenditures from the utilization of the health system are updated and allow the granular data for domestic sources. This process may not use certified data as some accounting principles might require. Countries that have just started the process of full distributional health accounts need to validate the results with other existing sources and all stakeholders to increase reliability and validity of the estimates, particularly the overall level, potential duplication and significant unaccounted expenditures. Countries using health accounts should add non-health-related expenditures and ensure that consistent HIV expenditure is reported, particularly for shared costs in the health system. The implementation of health accounts needs medium- to long-term planning, and it is resource-intensive and depends on coordination between health accountants and programme managers.

Countries using budget analysis need to ensure that allocated budgets were spent as planned; the estimates for the expenditures that are not incurred using an earmarked budget should be added to each subtotal, as appropriate.

Countries have the choice of reporting on: (a) separate costs (commodities and service delivery) if they have the data; (b) on only one cost (if that is what is available); or (c) a disaggregated total that includes both commodities and service delivery.

List of core sub-indicators and associated statistical metadata

Total HIV expenditure	Funding source or service/programme category	Not applicable	Total expenditure from all sources spent on HIV and AIDS at the national level, including health and non-health
Sub-indicators	Disaggregation	Target population	What it measures
A. Expenditure on HIV testing and counselling (non-targeted; specific commodities separately)	Funding source	General population under specific indications	<p>HIV testing and counselling is used to refer to all services involving HIV testing provided alongside counselling, including:</p> <ul style="list-style-type: none"> ▪ Client-initiated HIV testing and counselling. ▪ Provider-initiated testing and counselling. ▪ HIV testing and counselling (HTC) as part of a campaign, through outreach services or through home-based testing. <p>Direct expenditures in the purchase of reagents for laboratory and rapid tests to be reported separately from other costs (as available).</p>
B. Expenditure on antiretroviral therapy (adults and paediatric; specific commodities separately)	Funding source, adults and children (younger than 15 years old)	Persons living with HIV	<p>Antiretroviral therapy.</p> <p>Direct expenditures in the purchase of antiretrovirals separately from other from other costs (as available).</p> <p>Unit prices and volume of commodities procured/ distributed.</p>
C. Expenditure on HIV-specific laboratory monitoring (specific commodities separately)	Funding source	Persons living with HIV on antiretroviral therapy	<p>Diagnostic services related to HIV clinical monitoring.</p> <p>Direct expenditures in the purchase of laboratory reagents for use in determining CD4+ cell counts and viral load quantification, separately from costs associated with other commodities and service delivery (as available).</p>
D. Expenditure on tuberculosis (TB) and HIV (specific commodities separately)	Funding source	People living with HIV and people living with TB	<p>Examinations, clinical monitoring, related laboratory services, treatment and prevention of TB (including isoniazid and drugs for treating active TB), and screening and referring clients of TB clinics for HIV testing and clinical care.</p> <p>Direct expenditures in the purchase of drugs for the treatment and prevention of TB (including isoniazid and drugs for treating active TB) separately from other commodities and service delivery costs (as available).</p>
E. Expenditure on the five pillars of combination prevention (specific commodities separately)	<p>Funding source, five pillars of combination prevention:</p> <ul style="list-style-type: none"> ▪ Prevention for young women and adolescent girls (age 10–24 years, exclusively high-prevalence countries). ▪ Voluntary medical male circumcision (exclusively high-prevalence countries). ▪ Pre-exposure prophylaxis (PrEP) stratified by key population (gay men and other men who have sex with men [MSM], sex workers [SW], people who inject drugs [PWIDs], transgender people [TG], prisoners, young women and adolescent girls, and serodiscordant couples). ▪ Condoms (non-targeted). ▪ Prevention among key populations (gay men and other men who have sex with men [MSM], sex workers [SW], people who inject drugs [PWID], transgender people [TG] and prisoners). 	General population, key populations	<p>This subset of prevention services is labelled and defined as combination prevention. The rest of the HIV prevention services are to be specified within the categories of the national funding matrix as part of broader prevention services.</p> <p>This subset includes prevention services specifically designed and delivered for each of the key populations, including prevention services for:</p> <ul style="list-style-type: none"> ▪ Young women and adolescent girls (age 10–24 years) in high-prevalence countries. ▪ Gay men and other men who have sex with men. ▪ Sex workers and their clients. ▪ People who inject drugs. ▪ Voluntary medical male circumcision. ▪ Pre-exposure prophylaxis (PrEP), stratified by key populations. ▪ Condom promotion and provision for the general population. <p>Direct expenditures in the purchase of condoms, needles and syringes, and drugs for substitution therapy separately from other costs (as available).</p>

F. Expenditure on prevention of vertical transmission of HIV (specific commodities separately)	Funding source	Pregnant women and newborns	<p>Activities aimed at elimination of new HIV infections in children, including:</p> <ul style="list-style-type: none"> ▪ HIV testing for pregnant women. ▪ Antiretroviral therapy for pregnant women living with HIV. ▪ Antiretroviral medicine for newborns. ▪ Safe childbirth practices. ▪ Counselling and support for maternal nutrition and for exclusive breastfeeding. <p>Note: When a woman living with HIV receives antiretroviral therapy as a part of her treatment before she knows she is pregnant, the treatment should be included under antiretroviral therapy for adults rather than for the prevention of mother-to-child transmission.</p>
G. Expenditure on social enablers	Funding source	Not Applicable	<p>Activities to support the implementation of basic programmes as defined in the UNAIDS Investment Framework, including:</p> <ul style="list-style-type: none"> ▪ Political commitment and advocacy. ▪ Mass media. ▪ Laws, legal policies and practices. ▪ Community mobilization. ▪ Stigma reduction. ▪ Human rights programmes
H. Expenditure on cash transfers for young women and girls (age 10–24 years, high-prevalence countries)	Funding source	Young women and girls (age 10–24 years)	<p>Total expenditure on cash transfers for young women and girls (age 10–24 years). This is defined as a development synergy with implications for HIV prevention.</p>

Further information

To access guidelines, framework tools and classifications for NASAs, please contact AIDSspending@unaids.org

Health Accounts reports are available at the World Health Organization (WHO) Global Health Expenditure Database: <http://apps.who.int/nha/database/DocumentationCentre/Index/en>

Eurostat. HEDIC – Health expenditures by diseases and conditions. 2016 edition [Internet]. Luxembourg: Publications Office of the European Union; 2016 (<http://ec.europa.eu/eurostat/web/products-statistical-working-papers/-/KS-TC-16-008>).

10.1 Co-management of tuberculosis and HIV treatment

Percentage of estimated HIV-positive incident tuberculosis (TB) cases that received treatment for both TB and HIV

What it measures

Progress in detecting and treating TB among people living with HIV

Rationale

TB is a leading cause of morbidity and mortality among people living with HIV, including those receiving antiretroviral therapy. Prompt TB treatment and early antiretroviral therapy are critical for reducing the mortality due to HIV-associated TB and must be the highest-priority activity for both the AIDS Programme and National TB Programme. A measure of the percentage of HIV-positive TB patients that access appropriate treatment for their TB and HIV is therefore very important.

Numerator

Number of HIV-positive new and relapse TB patients started on TB treatment during the reporting period who were already on antiretroviral therapy or started on antiretroviral therapy during TB treatment within the reporting year

Denominator

Estimated number of incident TB cases in people living with HIV

Calculation

Numerator/denominator

Method of measurement

For the numerator: Facility antiretroviral therapy registers and reports; programme monitoring tools. Count the total number of HIV-positive new and relapse TB patients who were started on TB treatment (as recorded in the TB register) and antiretroviral therapy, or those already on antiretroviral therapy (as recorded in the antiretroviral therapy register). The information should be reconciled quarterly and annually with the TB registers in the relevant basic management units before consolidation and reporting.

For the denominator: Programme data and estimates of incident TB cases among people living with HIV. WHO calculates annual estimates of the number of incident TB cases in people living with HIV. The denominator estimates, provided by countries on notification and antiretroviral therapy coverage, become available only in August of the reporting year and do not need to be provided at the time of reporting. The estimates for 2017 are available at <http://www.who.int/tb/country/data/download/en>.

See Annex 5 for further understanding of the indicator.

Measurement frequency

Data should be collected continuously at the facility level, reconciled with the TB registers and aggregated periodically, preferably monthly or quarterly, and reported annually. The most recent year for which data and estimates are available should be reported here.

Disaggregation

- Sex.
 - Age (<15 and 15+ years).
 - Cities.
-

Additional information requested

Please provide city-specific data for this indicator. Space has been created in the data entry sheet to provide information for the capital city and one or two other key cities of high epidemiological relevance, such as those with the highest HIV burden or those that have committed to ending AIDS by 2030.

Strengths and weaknesses

Adequate detection and treatment of TB will prolong the lives of people living with HIV and reduce the community burden of TB. WHO provides annual estimates of the burden of TB among people living with HIV, based on the best available country estimates of HIV prevalence and TB incidence. All people living with HIV newly infected with TB should start TB treatment and antiretroviral therapy within eight weeks of starting TB treatment, regardless of CD4 count. The people with both HIV and TB with profound immunosuppression (such as CD4 counts less than 50 cells/mm³) should receive antiretroviral therapy within the first two weeks of initiating TB treatment. TB treatment should be started in accordance with national TB programme guidelines.

This indicator measures the extent to which collaboration between national TB and HIV programmes ensures that people living with HIV and TB are able to access appropriate treatment for both diseases. However, this indicator will be affected by low uptake of HIV testing, poor access to HIV care services and antiretroviral therapy and poor access to TB diagnosis and treatment. Separate indicators for each of these factors should be referred to when interpreting the results of this indicator.

It is important that those providing HIV care and antiretroviral therapy record TB diagnosis and treatment, since this information has implications for antiretroviral therapy eligibility and choice of antiretroviral regimen. It is therefore recommended that the date TB treatment starts be recorded in the antiretroviral register.

Further information

WHO policy on collaborative TB/HIV activities. Geneva: World Health Organization; 2012 (http://apps.who.int/iris/bitstream/10665/44789/1/9789241503006_eng.pdf?ua=1&ua=1).

Global tuberculosis report 2018. Geneva: World Health Organization; 2018 (http://www.who.int/tb/publications/global_report/en).ganization; 20178 (http://www.who.int/tb/publications/global_report/en).

A guide to monitoring and evaluation for collaborative TB/HIV activities: 2015 revision. Geneva: World Health Organization; 2015 (<http://www.who.int/tb/publications/monitoring-evaluation-collaborative-tb-hiv/en>).

10.2 People living with HIV with active tuberculosis disease

Total number of people living with HIV with active tuberculosis (TB) expressed as a percentage of those who are newly enrolled in HIV treatment during the reporting period

What it measures

The burden of active TB among people living with HIV who are newly enrolled in HIV treatment. It also indirectly measures efforts to detect HIV-associated TB early.

Rationale

The primary aims of intensified TB case-finding in HIV care settings and provider-initiated HIV testing and counselling for TB patients are early detection of HIV-associated TB and prompt provision of antiretroviral therapy and TB treatment. Although intensified TB case-finding should be implemented among all people living with HIV at each visit to HIV care and treatment facilities, it is particularly important at the time of enrolment, since the risk of undetected TB is higher among newly enrolled patients than among those already receiving antiretroviral therapy. Furthermore, newly enrolled people living with HIV may be less aware of TB symptoms and the importance of early detection and treatment, and they may not seek care for general or specific TB symptoms. Intensified TB case-finding offers an opportunity to educate people living with HIV and to detect TB early. All people living with HIV detected with TB disease should start anti-TB treatment immediately and antiretroviral therapy within eight weeks (if they are not already receiving antiretroviral medicine).

Numerator

Total number of people living with HIV newly enrolled in HIV treatment who have active TB disease during the reporting period

Denominator

Total number of people newly enrolled in HIV treatment (i.e., those who registered for antiretroviral therapy during the reporting period)

Calculation

Numerator/denominator

Method of measurement

The outcome of TB investigations among people living with HIV presumed to have TB should be recorded on the HIV antiretroviral therapy card (in the "Investigations" column in the Encounters section) and in the antiretroviral therapy registers (the monthly and quarterly follow-up sections, respectively). Similarly, TB patients who are found to be HIV-positive should be enrolled into HIV treatment promptly and their TB status recorded on the antiretroviral therapy card and registers.

For the numerator. At the end of the reporting period, count the total number of people living with HIV newly enrolled in HIV treatment who have active TB disease.

For the denominator. Count the total number of people living with HIV who are newly enrolled in HIV treatment (i.e., those who started antiretroviral therapy during the reporting period).

The information on TB status in the antiretroviral therapy registers should be updated and reconciled with the TB registers in relevant basic management units before consolidation and reporting to higher levels.

See Annex 5 for further understanding of the indicator.

Measurement frequency

Data should be recorded daily and reported to the national or subnational level as part of routine quarterly reporting. Data should also be submitted annually to UNAIDS.

Disaggregation

- Cities
-

Additional information requested

Please provide city-specific data for this indicator. Space has been created in the data entry sheet to provide information for the capital city and one or two other key cities of high epidemiological relevance, such as those with the highest HIV burden or those that have committed to ending AIDS by 2030.

Strengths and weaknesses

Reviewing the trends in TB among people living with HIV who are newly enrolled in treatment over a period of time may provide useful information on: (a) the TB burden among them; and (b) the effectiveness of efforts to detect and treat HIV-associated TB early.

This indicator may underestimate the actual burden of HIV-associated TB, since it may exclude: (a) patients who were detected through provider-initiated HIV testing and counselling, but who were not enrolled in HIV treatment; or (b) those who have disseminated forms of TB, remain asymptomatic and were missed during routine TB screening. A high indicator value may mean high TB rates or effective TB screening and HIV testing programmes, whereas a low value may reflect poor TB screening and HIV testing or successful TB control efforts. The indicator value, therefore, needs to be interpreted carefully.

Further information

A guide to monitoring and evaluation for collaborative TB/HIV activities. 2015 revision. Geneva: World Health Organization; 2015 (https://apps.who.int/iris/bitstream/handle/10665/150627/9789241508278_eng.pdf?sequence=1).

10.3 People living with HIV who started tuberculosis preventive therapy

Number of people who started treatment for latent tuberculosis (TB) infection, expressed as a percentage of the total number of people newly enrolled in HIV treatment during the reporting period

What it measures

The extent to which people living with HIV newly registered in HIV treatment start treatment for latent TB infection.

Rationale

All people on HIV treatment should be screened for TB at every visit, using a clinical algorithm recommended by the World Health Organization (WHO). Adults and adolescents living with HIV who do not report any of the symptoms—current cough, fever, weight loss or night sweats—are unlikely to have active TB and should be offered TB preventive therapy (i.e., treatment for latent TB infection). Similarly, children who do not have poor weight gain, fever or current cough should be offered TB preventive therapy to reduce the risk of developing active TB, regardless of whether or not they are receiving antiretroviral therapy.

Numerator

Total number of people living with HIV newly enrolled in HIV treatment who start treatment for latent TB infection during the reporting period.

If available, also enter data for the total number of people living with HIV currently enrolled in HIV treatment who start treatment for latent TB infection during the reporting period.

Denominator

Total number of people newly enrolled in HIV treatment (i.e., those registered for antiretroviral therapy during the reporting period). This denominator should be the same as the denominator of Indicator 10.2.

If available, also enter data for the total number of people currently enrolled in HIV treatment.

Calculation

Numerator/denominator

Method of measurement

TB preventive therapy should be started for all eligible people and the start date recorded on the HIV care/antiretroviral therapy card (Encounter section). Those who accept treatment and receive at least the first dose should then be recorded in the antiretroviral therapy registers (isoniazid start month and year column).

Numerator. Count the total number of people living with HIV newly enrolled in HIV treatment during the reporting period who start treatment for latent TB infection (i.e., those who receive at least one dose of anti-TB drugs, such as isoniazid).

Denominator. Count the total number of people living with HIV newly registered for antiretroviral therapy during the reporting period.

For accurate planning and drug management, more detailed information needs to be collected in addition to the above. A pharmacy-based register may be used to record client attendance and drug collection. Alternatively, the antiretroviral therapy facility may maintain a latent TB infection treatment register in parallel with the antiretroviral therapy register. Such a record may provide valuable information on the number of new and continuing patients on latent TB infection treatment, as well as treatment completion rates and adverse events.

See Annex 5 for further understanding of the indicator.

In addition, please report the percentage of people living with HIV currently enrolled in HIV treatment who started TB preventive therapy during the reporting period:

Numerator. Count the number of people living with HIV who are currently enrolled in HIV treatment who started TB preventive therapy during the reporting period.

Denominator. Count the number of people living with HIV who are currently enrolled in HIV treatment during the reporting period.

Measurement frequency

Data should be recorded daily and reported quarterly to the national or subnational level. They should be consolidated annually and reported to UNAIDS.

Disaggregation

- Cities
-

Additional information requested

Please provide city-specific data for this indicator. Space has been created in the data entry sheet to provide information for the capital city as well as one or two other key cities of high epidemiological relevance (e.g., those that have the highest HIV burden or those that have committed to ending AIDS by 2030).

Strengths and weaknesses

This indicator measures the coverage of TB preventive therapy among people newly enrolled in HIV treatment. However, it lacks the benchmark for acceptable performance. Scaling up this intervention will assist in developing such a benchmark at the national level. Unless further data are collected, this indicator provides no information on the number of individuals who adhere to or complete the course of treatment.

Further information

A guide to monitoring and evaluation for collaborative TB/HIV activities. 2015 revision. Geneva: World Health Organization; 2015 (https://apps.who.int/iris/bitstream/handle/10665/150627/9789241508278_eng.pdf?sequence=1).

10.4 Men with urethral discharge

Number of men reporting urethral discharge in the past 12 months

What it measures

Progress in reducing unprotected sex among men.

Rationale

Urethral discharge among men is a sexually transmitted infection syndrome generally most commonly caused by *Neisseria gonorrhoeae* or *Chlamydia trachomatis*. Presentation with an acute sexually transmitted infection syndrome, such as urethral discharge, is a marker of unprotected sexual intercourse, and urethral discharge facilitates HIV transmission and acquisition. Surveillance for urethral discharge therefore contributes to second-generation HIV surveillance by providing early warning of the epidemic potential of HIV from sexual transmission and ongoing high-risk sexual activity that may require more aggressive programme interventions to reduce the risk. Untreated urethral discharge can result in infertility, blindness and disseminated disease. Increasing resistance to the recommended treatment options for *Neisseria gonorrhoeae* may render this infection untreatable.

Numerator

Number of men reported with urethral discharge during the reporting period

Denominator

Number of men 15 years and older

Calculation

Numerator/denominator

Method of measurement

Routine health information systems

Measurement frequency

Data should be recorded daily and reported quarterly to the national or subnational level. They should also be consolidated annually and reported to WHO.

Disaggregation

None

Strengths and weaknesses

Although WHO has provided a global case definition, the actual case definition may vary between and within countries, as may clinical diagnostic capacity. Although this indicator may be underreported, in the absence of changes in case definition or major changes in screening practices, these data can generally be used for following trends over time within a country.

Countries reporting on urethral discharge should communicate the extent to which the data are deemed representative of the national population.

Following trends in urethral discharge is a feasible means to monitor incident sexually transmitted infection in a population. Data on vaginal discharge among women, although useful for monitoring purposes at the local and national levels, are not requested at the global level because, in many settings, sexually transmitted infections do not cause most vaginal discharge cases.

Countries should periodically assess the causes of urethral discharge syndrome to understand the predominant causes of urethral discharge and, therefore, the appropriate therapy.

If a country is unable to report on the denominator, WHO will use the denominator from the United Nations Population Division. Examine trends in comparable groups over time.

Further information

Strategies and laboratory methods for strengthening surveillance of sexually transmitted infection 2012. Geneva: World Health Organization; 2012 (<http://www.who.int/reproductivehealth/publications/rtis/9789241504478/en>).

10.5 Gonorrhoea among men

Rate of laboratory-diagnosed gonorrhoea among men in countries with laboratory capacity for diagnosis

What it measures

Progress in reducing the number of men engaging in unprotected sex.

Rationale

Infection with an acute bacterial sexually transmitted infection such as gonorrhoea is a marker of unprotected sexual intercourse and facilitates HIV transmission and acquisition. Surveillance for gonorrhoea therefore contributes to second-generation HIV surveillance by providing early warning of the epidemic potential of HIV from sexual transmission and ongoing high-risk sexual activity that may require more aggressive programme interventions to reduce risk. Further, untreated gonorrhoea can result in pelvic inflammatory disease, ectopic pregnancy, infertility, blindness and disseminated disease. Increasing resistance to currently recommended treatment options may render this infection untreatable.

Numerator

Number of men reported with laboratory-diagnosed gonorrhoea in the past 12 months

Denominator

Number of men 15 years and older

Calculation

Numerator/denominator

Method of measurement

Routine health information systems

Disaggregation

None

Strengths and weaknesses

Although WHO has provided a global case definition, the actual case definition may vary between and within countries. Further, diagnostic capacity may vary between and within countries. Although this indicator may be underreported, in the absence of changes in case definition or major changes in screening practices, these data can generally be used for following trends over time within a country.

Further information

Countries reporting on gonorrhoea should communicate the extent to which the data are representative of the national population. Data on gonorrhoea among women, although useful for monitoring purposes at the local and national levels, are not requested at the global level because most women infected with *Neisseria gonorrhoeae* are asymptomatic, and sensitive diagnostic tests for gonorrhoea among women are not widely available in low- and middle-income countries. Data on gonorrhoea among women are therefore too dependent on diagnostic resources and screening practices to be monitored appropriately at the global level. If a country cannot report on the denominator, WHO will use the denominator from the United Nations Population Division.

Strategies and laboratory methods for strengthening surveillance of sexually transmitted infection 2012. Geneva: World Health Organization; 2012 (<http://www.who.int/reproductivehealth/publications/rtis/9789241504478/en>).

10.6 Hepatitis C testing

Proportion of people starting antiretroviral therapy who were tested for hepatitis C virus (HCV)

What it measures

It monitors trends in hepatitis C testing, a critical intervention for assessing needs related to managing hepatitis C.

Hepatitis C testing provides information on the prevalence of HIV and HCV coinfection, informing clinicians on the need for further clinical and laboratory evaluation and treatment.

Rationale

Testing for hepatitis C identifies HIV and HCV coinfection to adapt treatment

Numerator

Number of adults and children starting antiretroviral therapy who were tested for hepatitis C during the reporting period using the sequence of anti-HCV antibody tests followed by HCV polymerase chain reaction (PCR) for those who are anti-HCV positive.

Denominator

Number of adults and children starting antiretroviral therapy during the reporting period

Calculation

Numerator/denominator

Method of measurement

Clinical and/or laboratory records

Measurement frequency

Annual

Disaggregation

- Sex
 - Age (<15 and 15+ years)
 - People who inject drugs
-

Strengths and weaknesses

Patients who are anti-HCV positive have serological evidence of past or present infection. People who are anti-HCV positive must be tested for HCV RNA (detects HCV circulating in the blood) to differentiate resolved infections from current infections that require treatment.

This indicator monitors progress in hepatitis C testing activities on a regular basis but does not reflect the overall proportion of people coinfecting HIV and HCV receiving HIV care who are aware of their hepatitis C coinfection. Indicator C.6 of the viral hepatitis monitoring and evaluation framework, disaggregated by HIV status, would reflect this.

This indicator corresponds to indicator LINK.28 (Rev.1) of the 2015 WHO consolidated strategic information guidelines for HIV in the health sector. The revision comprised considering people starting antiretroviral therapy, since this is the best moment to test people living with HIV for coinfection to initiate treatment.

10.7 People coinfectd with HIV and HCV starting HCV treatment

Proportion of people coinfectd with HIV and HCV starting HCV treatment

What it measures

Initiation of HCV treatment for people coinfectd with HIV and HCV among people enrolled in HIV care

Rationale

The prevalence of HCV coinfection is especially high among people living with HIV in the WHO European Region because of injecting drug use. Treating people living with HIV for hepatitis C influences quality of life, life expectancy and mortality.

Numerator

Number of people diagnosed with HIV and HCV coinfection starting treatment for HCV during a specified time frame (such as 12 months)

Denominator

Number of people diagnosed with HIV and HCV coinfection enrolled in HIV care during a specified time period (such as 12 months)

Calculation

Numerator/denominator

Method of measurement

The numerator and denominator are calculated from clinical records of health-care facilities providing HIV treatment and care.

Measurement frequency

Annual

Disaggregation

- People who inject drugs
-

Strengths and weaknesses

This indicator monitors access to hepatitis C treatment for people living with HIV coinfectd with HCV. The weakness is that it reflects only one year of activity. Describing the cumulated effect of people coinfectd with HIV and HCV starting treatment, requires compiling cumulative data on the people starting treatment and accounting for people newly infected with HCV and reinfected with HCV in the denominator.

Further information

This indicator corresponds to indicator C.7b of the 2016 WHO viral hepatitis monitoring and evaluation framework, disaggregated by HIV status.

10.8 Cervical cancer screening among women living with HIV

Proportion of women living with HIV who report being screened for cervical cancer using any of the following methods: visual inspection with acetic acid (VIA), Pap smear or human papillomavirus (HPV) test

What it measures

Proportion of women living with HIV screened for cervical cancer

Rationale

With an estimated 570 000 cases and 311 000 deaths worldwide in 2018, cervical cancer ranks as the fourth most frequently diagnosed cancer and the fourth leading cause of cancer deaths among women. It is the second most common type of cancer among women living in low- and middle-income countries.

In high-income countries, programmes are in place that enable women to get screened, making most precancerous lesions identifiable at stages when they can easily be treated and cured. Achieving high coverage of screening of women—and treatment of precancerous lesions detected by screening—can ensure a low incidence of invasive cervical cancer in high-income countries.

Women living with HIV are more vulnerable than HIV-negative women to being affected by cervical cancer and to developing invasive cancer. Invasive cervical cancer is an AIDS-defining condition and the most common cancer among women living with HIV. Compared to women not living with HIV, women living with HIV are up to five times more likely to develop invasive cervical cancer. For these reasons, screening women living with HIV is important. This can prevent up to 80% of the cases of cervical cancer in these countries.

Numerator

Number of women living with HIV who report ever having had a screening test for cervical cancer using any of these methods: VIA, Pap smear or HPV test

Denominator

All women respondents living with HIV

Calculation

Numerator/denominator

Method of measurement

- Nationally representative population-based surveys.
 - Programmatic data: If you do not have the number of women living with HIV (aged 30–49 years) who have ever been screened for cervical cancer, you also can provide the number of women who tested positive for HIV among all women who were screened for cervical cancer.
-

Measurement frequency

Data should be collected at least every five years

Disaggregation

- Age (15–29, 30–49).
 - Tested in the last year.
-

Strengths and weaknesses

Potential limitations include bias through self-report, including mistakenly assuming that any pelvic exam was a test for cervical cancer, and the limited validity of survey instruments.

Further information

Follow-up to the Political Declaration of the High-level Meeting of the General Assembly on the Prevention and Control of Non-communicable Diseases, WHO Sixty-Sixth World Health Assembly, WHA66.10, World Health Organization (http://apps.who.int/gb/ebwha/pdf_files/WHA66/A66_R10-en.pdf).

Global action plan for the prevention and control of noncommunicable diseases 2013–2020. Geneva: World Health Organization; 2013 (https://apps.who.int/iris/bitstream/handle/10665/94384/9789241506236_eng.pdf?sequence=1).

Noncommunicable diseases global monitoring framework: indicator definitions and specifications. Geneva: World Health Organization; 2014 (http://www.who.int/nmh/ncd-tools/indicators/GMF_Indicator_Definitions_Version_NOV2014.pdf).

Bray F, Ferlay J, Soerjomataram I, Siegel RL, Torre L, Jemal A. Global cancer statistics 2018: GLOBOCAN estimates of incidence and mortality worldwide for 36 cancers in 185 countries. *CA Cancer J Clin.* 2018;0:1–31.

Guidelines for screening and treatment of precancerous lesions for cervical cancer prevention. Geneva: World Health Organization; 2013 (http://www.who.int/reproductivehealth/publications/cancers/screening_and_treatment_of_precancerous_lesions/en).

Comprehensive cervical cancer control: a guide to essential practice. 2nd ed. Geneva: World Health Organization; 2014 (https://apps.who.int/iris/bitstream/handle/10665/144785/9789241548953_eng.pdf).

Guidelines for completing the 2020 interim National Commitments and Policy Instrument

Introduction

Policy monitoring has been a component of global AIDS reporting since 2003, and it has been implemented every two years, most recently in 2018 through the interim National Commitments and Policy Instrument (NCPI) and then in 2019 through the full NCPI. The NCPI is an integral component of Global AIDS Monitoring that aims to measure progress in developing and implementing policies, strategies and laws related to the HIV response. It achieves this by doing the following:

- Promoting consultation and dialogue between key stakeholders at the national level, especially government and civil society and communities, in order to capture their perspectives on the AIDS response.
- Supporting countries in assessing the status of their HIV epidemic and response, and in identifying barriers, gaps and facilitators to strengthen the response.
- Collecting data on the policy and legal environment related to the AIDS response.

The responses directly monitor or provide context on progress towards achieving the 10 Fast-Track commitments and expanded targets to end AIDS by 2030.

The NCPI is to be completed and submitted as part of Global AIDS Monitoring reports every two years. This time frame reflects the consideration that changes to laws, policies and regulations are expected to occur slowly, and the need for more frequent monitoring may be limited.

During interim years, an interim NCPI is to be completed and submitted as part of Global AIDS Monitoring reports. The Interim NCPI includes a subset of questions from the NCPI Part A that relate to policy elements that may change more frequently.

After an extensive consultative review, a new NCPI questionnaire and proposed process for its completion were integrated into Global AIDS Monitoring reporting for the first time in 2017. The wording of some of the questions has been further refined for interim reporting in 2020 based on the experiences of 2017, 2018 and 2019 reporting.

NCPI structure

The NCPI has two parts. Part A is to be completed by national authorities, and Part B is to be completed by civil society, communities and other nongovernmental partners involved in the national AIDS response. For interim reporting years, only a subset of questions from Part A are included in the interim NCPI.

The questions in the interim NCPI are structured around the 10 Fast-Track commitments and expanded targets to end AIDS by 2030.⁷

Proposed steps for gathering and validating data

The process described below for completing the NCPI should be integrated within each country's plan and time frame for the overall Global AIDS Monitoring process.

While questions from the NCPI Part B—which are to be completed by civil society, communities and other nongovernmental partners engaged in the response—are not included in the interim NCPI, countries are encouraged to engage civil society and communities in the overall Global AIDS Monitoring process.

1. Establish a working group to accompany NCPI reporting. This could be an existing multisectoral monitoring and evaluation technical working group.
2. Identify a focal point to coordinate the completion of the questionnaire.
3. An NCPI working group conducts a stakeholder mapping exercise to select contributors systematically.

Such mapping can ensure that the most updated and accurate data can be collected through the NCPI by involving relevant experts and avoid the influence of potential biases in the reporting process. This can also ensure that the reporting reflects a broad range of perspectives. Involving a broad range of stakeholders can help in interpreting qualitative or potentially ambiguous data.

The list of all people or entities who could provide information or insight on the questions included in the NCPI can be drawn from the knowledge of working group members and through contacts with other people knowledgeable of the national HIV response and by reviewing relevant documentation.

Stakeholders can be identified from the following sectors and groups, among others:

- o Health ministry or the equivalent.
- o Education ministry or the equivalent.
- o Gender ministry or the equivalent.
- o Justice ministry or the equivalent.
- o Trade ministry or the equivalent.
- o Representatives of people living with HIV, including women and young people living with HIV.
- o Representatives of the various key population groups.
- o Bilateral and multilateral organizations engaged in the HIV response.
- o Other nongovernmental organizations or foundations engaged in the HIV response.
- o Private sector.

Geographical diversity should be considered in identifying stakeholders to ensure representativeness.

The following information should be recorded for all stakeholders contacted throughout the NCPI reporting process:

- Name.
- Contact details.

- Organization affiliation.
- Role in the organization.
- Stakeholder type: health ministry, other ministry, private sector, civil society, community, international nongovernmental organization, bilateral organization, UNAIDS or other United Nations organization.

This information could be helpful to document the multisectoral nature of the process and to support preparations for future rounds of NCPI reporting.

4. Collect responses to NCPI questions: to ensure accuracy and avoid respondent fatigue, it is suggested to direct specific questions to specific respondents knowledgeable in that area, as relevant. Focal points for the questionnaire, or consultant(s) recruited to support the process, coordinate contact with identified stakeholders, such as through in-person interviews, by phone or email, to share the NCPI questions in their area of expertise with them and gather their responses.

If possible, it is recommended to send the same question to more than one stakeholder knowledgeable in the area. If there are discrepant answers, the coordinator for the NCPI could share a summary of the information received for that question with the various stakeholders that have provided it to clarify the source of the different responses and reach consensus, if possible. To avoid potential sources of bias, the anonymity of respondents should be maintained as much as possible during this process of data verification and follow-up.

The PDF version of the questionnaire is available on the UNAIDS website and can also be downloaded through the NCPI header in the indicator list in the Global AIDS Monitoring online reporting tool (<https://AIDSreportingtool.unaids.org>).

5. The national Global AIDS Monitoring focal point enters responses in the online reporting tool.
6. Stakeholders view and provide comments on the draft responses. The draft of the completed NCPI can be shared with stakeholders by giving them viewing rights to the Global AIDS Monitoring online reporting tool or by sharing the NCPI questionnaire with draft responses in PDF. The PDF can be extracted from the online reporting tool by clicking "Print all NCPI to PDF" in the indicator list page.
7. Conduct a validation consultation:
 - o To review NCPI responses for selected questions.
 - o To analyse NCPI data jointly with indicator data, identifying progress, gaps, barriers and facilitators to the AIDS response.
 - o To identify key points for narrative summaries for each commitment area.

Because of the length of the questionnaire, it is suggested that responses to all questions not be reviewed during the national validation workshop but that the workshop focus on specific questions identified as key for discussion during the data collection and review process before the workshop and on discussing progress and gaps for each commitment area more broadly.

8. Update the NCPI responses entered in the Global AIDS Monitoring online reporting tool based on comments received in preparation for and during the consultation and complete the narrative summaries for each commitment area.
9. Submit the NCPI responses with other Global AIDS Monitoring components on or before 31 March 2020.

10. Respond to queries posted through the online reporting tool during the data validation process.

This suggested process aims to integrate consistency checks for NCPI data collected throughout the process and to promote as objective analysis of the information as possible.

Operationalizing and using the NCPI data

Data collected through the NCPI will complement indicator and expenditure data also collected and reported through the Global AIDS Monitoring process. Countries are encouraged to use the NCPI data in analysing the status of the national epidemic and response, and in national strategic planning efforts.

Globally, NCPI data will also be used to monitor the 10 Fast-Track commitments and expanded targets directly, or to provide context to quantitative data collected through Global AIDS Monitoring indicators and to inform global strategies and reports. The responses from each country to NCPI questions will be aggregated to generate regional and global values. The NCPI data by country will also be available through AIDSInfo (<http://aidsinfo.unaids.org/>) and Laws and Policies Analytics (<http://lawsandpolicies.unaids.org/>).

Loading policy data previously reported through Global AIDS Monitoring

Countries that submitted responses to questions through a previous NCPI can choose to load those responses into the 2020 Global AIDS Monitoring online reporting tool. Responses can then be updated or resubmitted where there has been no change.

Definitions

The following definitions of key terms included in the NCPI questionnaire should be used to complete the questionnaire. Consistent use of definitions over time and across countries will strengthen comparability and trend analyses. The terms defined in the list below are marked with an asterisk (*) in the questionnaire.

Cash transfers. Programmes that give money to poor and vulnerable people. Cash transfers may be conditional, giving money in return for fulfilling specific behavioural conditions (such as school attendance among children) or unconditional (not attached to specific behavioural requirements).

Community accountability mechanisms in the context of programmes for preventing the mother-to-child transmission of HIV. These may include any of the following mechanisms.

- **Citizen report cards.** Large-scale surveys of user feedback used for advocacy to increase public accountability.
- **Community scorecards.** Facilitated meetings for communities and health workers to score service quality and then to develop remedial action plans in consensus.
- **Community client-oriented provider efficient (COPE).** A complement to a facility-based quality improvement programme that involves the health workers gathering information from surrounding communities.
- **Partnership-defined quality.** With outside facilitation, health workers and community define and examine quality, set priorities among issues and develop and implement an action plan.

- **Patient-focused quality assurance.** A process that involves conducting 50–100 client exit interviews every 3–6 months, collating data, setting priorities among issues, drawing up action plans and displaying results.
- **Peer and participatory rapid health appraisal for action.** Rapidly diagnosing quality using checklists, setting priorities among issues identified, disseminating results and developing a remedial action plan. Community input comes through client interviews and female and male focus group discussions in which quality is ranked on specific indicators.
- **Integrated supportive supervision.** Quarterly facility visits by a team that includes community representatives. Methods include client interviews and checklists.
- **Health committees.** Local committees that include community members and monitor service quality. Some make ad hoc visits; others have a more formal monitoring schedule.

Grave or systematic human rights abuses. The qualification of grave indicates a serious, flagrant, egregious human rights violation. A violation of the right to life or physical integrity would constitute a grave violation of human rights. Systematic refers to the number of people affected and the frequency. It implies a pattern of violations and not an isolated case.

HIV case surveillance: HIV case surveillance refers to the reporting of an initial diagnosis of HIV infection and defined sentinel events from every person diagnosed with HIV to a public health agency responsible for monitoring and controlling the epidemic. Case surveillance entails individual-level, longitudinal data obtained from multiple sources that are linked by unique identifiers and maintained in a dedicated data repository at the national level.⁸

Gender-based violence. Violence that establishes, maintains or attempts to reassert unequal power relations based on gender. It encompasses acts that inflict physical, mental or sexual harm or suffering, the threat of such acts, and coercion and other deprivations of liberty.⁹

Gender-sensitive indicators. Indicators that help understand gender-based inequities and gender inequality as a social determinant of health. Gender-sensitive indicators are used to measure the current situation of women or men in relation to a specific norm or in comparison with another reference group, such as the proportion of girls enrolled in primary school compared with boys. They are also used to measure and monitor inequalities in access to health services (for example, the difference in the proportion of women and men with access to antiretroviral therapy) and the success of efforts to reduce gender inequality over time.¹⁰

Gender-transformative. Gender-transformative approaches encourage critical awareness of gender roles and norms and include ways to change harmful to more equitable gender norms to foster more equitable power relationships between women and men and between women and others in the community. They promote women's right and dignity; challenge the unfair and unequal distribution of resources and allocation of duties between men and women; and consider the specific needs of women and men. Such approaches can be implemented separately with women and girls and with men and boys. However, they are also being increasingly implemented with both women and girls and men and boys together and across generations—either simultaneously or in a coordinated way to challenge harmful masculine and

feminine norms and unequal power relations that may be upheld by everyone in the community.¹¹

Non-nucleoside/nucleotide transcriptase inhibitors (NNRTI): Antiviral drug class non-analogue to nucleosides that block/interfere HIV reverse transcriptase and prevent HIV replication.

Nucleoside/nucleotide reverse transcriptase inhibitors (NRTI): Antiviral drug class analogue to nucleosides that block/interfere HIV reverse transcriptase and prevent HIV replication.

Participation. Active and informed participation in formulating, implementing, monitoring and evaluating all decisions, policies and interventions that affect one's health to ensure respect for human rights. It also means ensuring that health systems and interventions are responsive, effective, appropriate and sustainable. Participation is informed when people can access the information required to participate in a meaningful and effective way. If necessary, capacity-building activities should be carried out to ensure this.¹²

Social protection: Defined as "all public and private initiatives that provide income or consumption transfers to the poor, protect the vulnerable against livelihood risks, and enhance the social status and rights of the marginalised; with the overall objective of reducing the economic and social vulnerability of poor, vulnerable and marginalized groups."^{13, 14} Social protection is HIV-sensitive when it is inclusive of people who are either at risk of HIV infection or susceptible to the consequences of HIV.¹⁵

Stable on antiretroviral therapy: The World Health Organization (WHO) defines people stable on antiretroviral therapy according to the following criteria: on treatment for at least one year, no current illnesses or pregnancy, good understanding of lifelong adherence and evidence of treatment success (two consecutive viral load measurements below 1000 copies/mL). For service delivery recommendations, an additional criterion is that there are no adverse drug reactions requiring regular monitoring.¹⁶

Stock-out. Unplanned interruption in the stock of a health product.

Routine viral load testing: Routine viral load monitoring can be carried out at six months, at 12 months and then every 12 months thereafter if the patient is stable on antiretroviral therapy.¹⁷

Interim NCPI

Abbreviations and acronyms

3TC	lamivudine
ABC	abacavir
AZT	zidovudine
DTG	dolutegravir
EFV	efavirenz
FTC	emtricitabine
LPV/r	lopinavir with a ritonavir boost
NNRTI	non-nucleoside reverse transcriptase inhibitor
NRTI	nucleoside reverse transcriptase inhibitor
PrEP	pre-exposure prophylaxis
RPR	rapid plasma reagin
TDF	tenofovir disoproxil fumarate
TPHA	Treponema pallidum hemagglutination assay
TPPA	Treponema pallidum particle agglutination assay
VDRL	Venereal Disease Research Laboratory
WHO	World Health Organization

* The guidelines for the NCPI define the terms marked with an asterisk (*).

1. Ensure that 30 million people living with HIV have access to treatment through meeting the 90–90–90 targets by 2020.

- Commit to the 90–90–90 targets.
- Address regulations, policies and practices that prevent access to safe, efficacious and affordable generic medicines, diagnostics and related health technologies, including by ensuring the full use of the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) flexibilities, and strengthen regional and local capacity to develop, manufacture and deliver quality-assured affordable health products.

HIV testing

1. Which of the following HIV testing approaches are used in your country (please select all that apply):

- Client-initiated testing and counselling
- Provider-initiated testing and counselling
- Routine antenatal testing
- Community-based testing and counselling
- Home testing
- Lay provider testing
- Self-testing
- Assisted partner notification/index testing
- Social network-based testing
- Other (please specify): _____

2. Has your country adapted the recommendations from the 2019 WHO Consolidated guidelines on HIV testing services in a national process on testing guidelines?

- Yes, fully
- Yes, partially
- No
- Don't know

3. Has your country adopted or included HIV self-testing as a national policy or plan?

- Yes
- No

3.1 If yes, is HIV self-testing implemented?

- Yes, fully implemented
- No, it is being piloted
- No pilots or implementation

3.2 If no, is a national policy on HIV self-testing in development?

- Yes
- No

3.2a If yes to Question 3.2, please indicate the year in which self-testing is planned to be included:

- No planned year
 - 2020
 - 2021
 - 2022
 - 2023
-

-
- 4. Has your country included assisted HIV partner notification in its national policy?**
- Yes
- No
- 4.1 If no, does it have plans to include assisted HIV partner notification in its national policy in the future?**
- Yes
- No
- 4.1a If yes, please indicate the year in which assisted HIV partner notification is planned to be included:**
- No planned year
- 2020
- 2021
- 2022
- 2023
-

- 5. Does your country have national policies and/or strategies on linking HIV testing and counselling and enrolment with care?**
- Yes
- No
- 5.1 If yes, what do they include (please select all that apply)?**
- Streamlined interventions (enhanced linkage, disclosure, tracing)
- Peer support and patient navigation approaches
- Quality improvement approaches
- CD4 testing at the point-of-care
- Others (please specify): _____
-

Antiretroviral therapy

- 6. Has your country adopted the recommendations from the 2018 update to the WHO Consolidated guidelines on the use of antiretroviral drugs for treating and preventing HIV infection in a national process:**
- Yes, completed
- Ongoing
- No
- Other (please specify): _____
- Please upload a copy of any available updated national guideline documents.
-
- 7. What is the recommended CD4 threshold for initiating antiretroviral therapy in adults and adolescents who are asymptomatic, as per Ministry of Health (MOH) guidelines or directive?**
- No threshold; treat all regardless of CD4 count
- ≤ 500 cells/mm³
- ≤ 350 cells/mm³
- Other (please specify): _____
- 7.1 If implementing treat all regardless of CD4 count, what is the status of implementation?**
- Implemented in few (<50%) treatment sites
- Implemented in many (50–95%) treatment sites
- Implemented countrywide (>95% of treatment sites)
- Not implemented in practice
- Other (please specify): _____
- 7.2 If your country has not yet adopted a treat all policy in accordance with the 2016 WHO Consolidated guidelines on the use of antiretroviral drugs for treating and preventing HIV infection, is there a plan to move towards adopting and implementing a treat all policy in the future?**
- Yes
- No
- 7.2a If yes, please indicate the year in which it is planned for treat all to be implemented:**
- No planned year
- 2020
- 2021
- 2022
- 2023
-

8. Has your country adopted the WHO 2017 Recommendation on rapid initiation of ART?

- Yes, rapid initiation within 7 days of HIV diagnosis
 No
 Other (please specify): _____

9. Does your country have a policy to offer the start of antiretroviral therapy on the same day as an HIV diagnosis?

- Yes
 No

9.1 If your country has a policy on rapid initiation and/or same day start, what is the status of implementation?

- Implemented in few (<50%) treatment sites
 Implemented in many (50–95%) treatment sites
 Implemented countrywide (>95% of treatment sites)
 Not implemented in practice
 Other (please specify): _____

10. Is CD4 testing for immunological staging available?

- Yes
 No

10.1 If yes, where is it available?

- Point-of-care
 Facility laboratory
 Centralized laboratory
 Other (please specify): _____

10.2 If yes, in what percentage of sites (estimated) do clients have access to testing and return of results?

- In few (<50%) sites
 In many (50–95%) sites
 Countrywide (>95% of sites)
 Not implemented in practice
 Other (please specify): _____

11. Is nurse-initiated antiretroviral therapy allowed in your country for any of the following populations (please select all that apply)?

- Non-pregnant adults (men, women and transgender)
 Pregnant women
 Adolescents (10–19 years old)
 Children younger than 10 years old
 None of the above

12. Does your country have a national policy promoting community delivery (such as outside health facilities) of antiretroviral therapy?

- Yes
 No

12.1 If yes, please specify what approaches are used to support community delivery of antiretroviral therapy: _____

13. Is antiretroviral therapy provided in community settings (such as outside health-facilities) for people who are stable on antiretroviral therapy* in your country?

- Yes
 No

13.1 If yes, is it implemented:

- Nationally
 Regionally
 At pilot sites
 Other (please specify): _____
-

14. Does your country have a national policy on the frequency of clinic visits for people who are stable on antiretroviral therapy*?

- Yes
 No

14.1 If yes, please specify the frequency of clinic visits in the national policy:

- Once a month
 Every 3 months
 Every 6 months
 Every 12 months

15. Does your country have a national policy on how frequently people who are stable on antiretroviral therapy should pick-up antiretroviral medicine?

- Yes
 No

15.1 If yes, please specify the frequency of antiretroviral medicine pick-up included in the national policy:

- Once a month
 Every 3 months
 Every 6 months
 Every 12 months

16. Please provide the country's national criteria for (or definition of) "lost to follow-up." For example, you might define lost to follow-up as a patient who has not received antiretroviral medicines within four weeks of their last missed drug collection appointment.

17. Has your country adopted the WHO 2017 recommendation to offer a package of interventions to all patients presenting with advanced HIV disease (defined by WHO as CD4<200)?

- Yes, fully adopted
 Yes, partially adopted
 No

17.1 If yes, how widely is it implemented?

- Implemented in few (<50%) treatment sites
 Implemented in many (50–95%) treatment sites
 Implemented countrywide (>95%) of treatment sites
 Not implemented in practice
 Other (please specify): _____

18. Which of the following service provision modalities are included in the national policy on antiretroviral therapy for adults, adolescents and children (please select all that apply):

- Tuberculosis (TB) service providers provide antiretroviral therapy in TB clinics
 Antiretroviral therapy providers provide TB treatment in antiretroviral therapy settings
 Maternal, newborn and child health service providers provide antiretroviral therapy in maternal, newborn and child health (MNCH) clinics
 Nutrition assessment, counselling and support provided to malnourished people living with HIV
 Antiretroviral therapy provided in settings providing opioid substitution therapy
 Primary health care providers provide antiretroviral therapy in primary health care settings
 Patient support
 Antiretroviral therapy delivered in the community as part of a differentiated care model
 Antiretroviral therapy providers carry out cardiovascular disease screening and management
 Antiretroviral therapy providers carry out mental health screening and treatment
 Other (please specify): _____

19. Do patients pay any routine user fees or charges for services when visiting a public sector health facility?

- Yes
 No

19.1 If yes, is there a specific formal fee or an informal one?

- a) HIV testing**
 Formal
 Informal

-
- b) Dispensing of PrEP**
- Formal
- Informal
- c) Primary care appointment**
- Formal
- Informal
- d) Patient cards**
- Formal
- Informal
- e) Diagnostic services (including viral load test)**
- Formal
- Informal
- f) Dispensing of HIV treatment (i.e., antiretroviral medicines)**
- Formal
- Informal
-

Antiretroviral therapy regimens

Adults and adolescents

- 20. Based on the recommendations in the 2019 WHO treatment guidelines, is TDF + 3TC or (FTC) + DTG the preferred first-line antiretroviral medicine combination for treatment initiation in your national guidelines for the following:**
- a) Adults and adolescents**
- Yes
- No
- ai. If no, what is (are) the preferred option(s):**
- TDF + 3TC (or FTC) + EFV 600 mg
- TDF+ 3TC + EFV 400mg
- ABC + 3TC + DTG
- TAF + 3TC (or FTC) + DTG
- Other regimens (specify): _____
- a.ii. If no, is there a plan to adopt TDF + 3TC or (FTC) + DTG as the preferred first-line antiretroviral medicine combination for treatment initiation in 2020?**
- Yes
- No
- b) Women of childbearing age?**
- Yes
- No
- bi. If no, what is (are) the preferred option(s):**
- TDF + 3TC (or FTC) + EFV 600mg
- TDF + 3TC + EFV 400mg
- TAF + 3TC (or FTC) + DTG
- Other regimen (specify): _____
- b.ii. If no, is there a plan to adopt TDF + 3TC or (FTC) + DTG as the preferred first-line antiretroviral medicine combination for treatment initiation in 2020?**
- Yes
- No
-

c) Pregnant and/or breastfeeding women

- Yes
 No

ci. If no, what is (are) the preferred option(s):

- TDF + 3TC (or FTC) + EFV 600mg
 TDF + 3TC + EFV 400mg
 TAF + 3TC (or FTC) + DTG
 Other regimens (specify): _____

cii. If no, is there a plan to adopt TDF + 3TC or (FTC) + DTG as the preferred first-line antiretroviral medicine combination for treatment initiation in 2020?

- Yes
 No
-

21. Is DTG being introduced as the first-line antiretroviral regimen in your country?

- Yes, DTG has been introduced in national guidelines, but procurement has not yet been initiated
 Yes, DTG has been introduced in national guidelines and procurement has been initiated
 No
-

22. Does your country use fixed-dose (FDC) antiretroviral therapy combinations as the preferred first-line therapy (please select all that apply):

- Yes, 3 drugs fixed-dose combination taken once a day
 Yes, 2-drug, fixed-dose combination + 1 other drug
 No
 Other (please specify): _____
-

23. Is a DTG-based regimen the preferred second-line antiretroviral combination for adults and adolescents with HIV in the national guidelines?

- Yes
 No
 Other (please specify): _____
-

Children

24. Are LPV/r regimens the preferred treatment option for all infants and children weighing less than 20 kg with HIV in the national guidelines?

- Yes, for all
 No, but recommended for non-nucleoside reverse transcriptase inhibitor-exposed (NNRTI) infants only
 Not recommended
-

25. Is DTG recommended as the preferred option for treatment initiation in children weighing more than 20 kg?

- Yes
 No
 Other (please specify): _____
-

26. What is the recommended NRTI backbone for treatment initiation in children in the national guidelines?

- TDF + 3TC (or FTC)
 AZT + 3TC (or FTC)
 ABC + 3TC (or FTC)
 Other (please specify): _____
-

27. Is DTG recommended as the preferred second-line option for children weighing at least 20 kg?

- Yes
 No
 Other (please specify) _____
-

28. Is LPV/r (or ATVr) recommended as the preferred second-line option for children failing NNRTI-based regimens and weighing less than 20 kg?

- Yes
 No
 Other (please specify)
-

29. Is RAL recommended as the preferred second-line option for children failing protease inhibiting-based regimens and weighing less than 20 kg?

- Yes
- No
- Other (please specify): _____

Viral load

30. Please identify from national treatment guidelines the measured threshold at which viral load suppression in an individual is defined as a success:

- <1000 copies/ml
- <400 copies/ml
- <200 copies/ml
- <50 copies/ml
- Other (please specify): _____

31. Does your country have a current national policy on routine viral load testing* for monitoring antiretroviral therapy, and to what extent is it implemented?

a) For adults and adolescents

- Yes
- No

ai) If yes, what is the status of implementation:

- Implemented in few (<50%) treatment sites
- Implemented in many (50–95%) treatment sites
- Implemented countrywide (>95%) of treatment sites
- Not implemented in practice
- Other (please specify): _____

a ii) If no, is targeted viral load testing available?

- Yes
- No

b) For children

- Yes
- No

bi) If yes, what is the status of implementation:

- Implemented in few (<50%) treatment sites
- Implemented in many (50–95%) treatment sites
- Implemented countrywide (>95%) of treatment sites
- Not implemented in practice
- Other (please specify): _____

b ii) If no, is targeted viral load testing available?

- Yes
- No

32. Is point-of-care viral load testing available at any health facility in your country?

- Yes
- No

33. Are dried blood spot specimens recommended in the national policy for viral load testing?

- Yes
- No
- Other (please specify): _____

33.1 If yes, what is the level of implementation?

- Fully
 - Partially
 - Not implemented
-

-
- 34. Does the country have a policy to prioritize viral load testing in select populations (e.g., pregnant women, infants and adolescents)?**
- Yes
- No

34.1 If yes, for which populations is viral load testing prioritized (please select all that apply):

- Pregnant and breastfeeding women
- Patients with advanced HIV disease
- Patients suspected of failing treatment
- Infants and children (0–<10 years)
- Adolescents (10–19 years)
- Other (please specify): _____
-

HIV drug resistance and toxicity monitoring¹⁸

35. Does your country have a national plan to monitor HIV drug resistance?

- Yes
- No

35a. If yes, please specify the years covered by the plan: _____

36. In the past three years, has your country carried out HIV drug resistance (HIVDR) surveillance according to any of the following WHO protocols?

a) Pre-treatment drug resistance (PDR) surveys¹⁹

- Yes
- No, but there is a plan to implement the PDR survey this year
- No, and there is no plan to implement the PDR survey this year

a.i. If yes, please specify:

Year the last PDR survey started: _____

b) Acquired drug resistance surveys among adults²⁰

- Yes
- No, but there is a plan to implement the survey this year
- No, and there is no plan to implement the survey this year

b.i. If yes, please specify:

Year the last survey started: _____

c) Acquired drug resistance surveys among children

- Yes
- No, but there is a plan to implement the survey this year
- No, and there is no plan to implement the survey this year

c.i. If yes, please specify:

Year the last survey started: _____

d) HIV drug resistance among infants (<18 months) using early infant diagnosis²¹

- Yes
- No, but there is a plan to implement the infant survey this year
- No, and there is no plan to implement the infant survey this year

d.i. If yes, please specify:

Year the last infant survey started: _____

¹⁸ Data from HIV drug resistance surveys should be routinely uploaded to the WHO HIVDR database. Designated users from ministries of health or antiretroviral therapy programmes can request access by contacting hiv-aids@who.int. For details, please see: <http://www.who.int/hiv/topics/drugresistance/hiv-drug-resistance-database/en>.

¹⁹ For details, please see: Surveillance of HIV drug resistance in adults initiating antiretroviral therapy. Geneva: WHO; 2014 (http://www.who.int/hiv/pub/drugresistance/pretreatment_drugresistance/en/, accessed 22 October 2019).

²⁰ For details, please see: Survey of HIV drug resistance in adults receiving ART. Geneva: WHO; 2014 (http://www.who.int/hiv/pub/drugresistance/acquired_drugresistance/en/, accessed 22 October 2019).

²¹ For details please see: HIV drug resistance. In: World Health Organization: Health Topics [website]. Geneva; WHO; c2018 (<http://www.who.int/hiv/topics/drugresistance/en/>, accessed 22 October 2019).

e) Survey or routine monitoring of clinic performance using early warning indicators for HIV drug resistance

- Yes
 No

e.i. If yes, please specify:

- Year it was last monitored: _____
 Number of clinics monitored: _____

e.ii. The early warning indicators for HIV drug resistance were collected through:

- EWI survey in a sample of clinics
 Routine patient monitoring systems
-

37. Does your country have a national policy for HIV drug resistance testing for individual patients who fail second-line antiretroviral therapy?

- Yes
 No
-

38. Excluding passive pharmacovigilance approaches, does your country make an ongoing systematic effort to monitor the toxicity of antiretroviral medicines in the country?

- Yes
 No

38.1 If yes, what approaches are used (please select all that apply):

- Routine toxicity monitoring as part of the national M&E system
 Active toxicity monitoring/surveillance within cohorts in adults
 Active toxicity monitoring/surveillance within cohorts in adolescents and children
 Pregnancy registry and surveillance of birth defects
-

39. Have toxicity monitoring approaches been introduced to monitor adverse drug reactions to DTG use?

- Yes
 No

39.1 If yes, what approaches are used (please select all that apply)?

- Routine toxicity monitoring as part of the national M&E system
 Active toxicity monitoring/surveillance within cohorts in adults
 Active toxicity monitoring/surveillance within cohorts in adolescents and children
 Pregnancy registry and surveillance of birth defects

39.2 If yes to Question 41.1, has training of health-care workers on the management, capture and reporting of adverse drug reactions related to DTG been implemented?

- Yes
 No
-

Adherence and retention

40. Does your country have national policies and/or strategies on adherence support?

- Yes
 No

40.1 If yes, do they include (please select all that apply):

- Peer counsellors
 Text messages
 Use of reminder devices
 Cognitive-behavioural therapy
 Behavioural skills training/medication adherence training
 Fixed-dose combinations and once-daily regimens
 Case management
 Peer navigation
 Other (please specify): _____
-

41. Are any of the following adherence support services being implemented in your country (please select all that apply):

- Peer counsellors
- Text messages
- Use of reminder devices
- Cognitive-behavioural therapy
- Behavioural skills training/medication adherence training
- Fixed-dose combinations and once-daily regimens
- Case management
- Peer navigation
- Other (please specify): _____

42. Does your country have national policies and/or strategies on retention in antiretroviral therapy:

- Yes
- No

42.1 If yes, do they include (please select all that apply):

- Community-based interventions
- Adherence clubs and peer support
- Other (please specify): _____

43. Are any of the following retention support services being implemented in your country (please select all that apply):

- Community-based interventions
- Adherence clubs and peer support
- Other (please specify): _____

44. Are treatment literacy programmes available in your country to people living with HIV, including information on side effects, drug resistance, etc.?

- Yes
 - No
-

2. Eliminate new HIV infections among children by 2020 while ensuring that 1.6 million children have access to HIV treatment by 2018.

Prevention of mother-to-child transmission of HIV

45. Does your country have a policy on retesting HIV-negative women during pregnancy, delivery and/or the post-partum/breastfeeding period?

- Yes
 No

45.1 If yes, please select the period(s) when retesting is done (please select all that apply):

- During pregnancy
 At delivery
 Post-partum/breastfeeding
-

46. Does your country have a national plan for the elimination of mother-to-child transmission (MTCT) of HIV:

- Yes
 No

46.1 If yes, please specify:

- Target(s) for the mother-to-child transmission rate: _____
 Year: _____
- Elimination target(s) (such as the number of cases/population): _____
 Year: _____
-

47. What is the current nationally recommended regimen for preventing the mother-to-child-transmission of HIV, in accordance with Ministry of Health guidelines or directives²²:

- Treat all pregnant women and/or breastfeeding women for life
 Antiretroviral therapy during pregnancy and/or breastfeeding only
 Other (please specify regimen): _____

47.1 If your country is applying a treat all policy for pregnant and breastfeeding women living with HIV, how is it being implemented?

- Implemented in a small number (<50%) of maternal and child health sites
 Implemented in a large number (>50–95%) of maternal and child health sites
 Implemented countrywide (>95%) of maternal and child health sites
 Not implemented in practice
 Other (please specify): _____
-

48. What is the current nationally recommended first-line antiretroviral therapy regimen for pregnant and breastfeeding women living with HIV:

- TDF/3TC(FTC)/EFV
 TDF/3TC/DTG
 Other (please specify): _____
-

49. What is the current nationally recommended regimen for preventing the mother-to-child transmission of HIV for HIV-exposed infants?

- a) Please specify the infant prophylaxis regimen: _____
b) Recommended duration of the regimen: _____

49.1 Are different regimens recommended for high-risk infants?

- Yes
 No

a) If yes, please specify the regimens: _____

²² In countries where breastfeeding is not recommended for women living with HIV, please click this response if it only applies to pregnant women.

50. Does your country have a national recommendation on infant and young child feeding for HIV-exposed infants?

- Yes, breastfeeding
- Yes, replacement feeding
- Yes, both are recommended, left to individual choice or different settings
- No

50.1 If breastfeeding is recommended for HIV-positive women and HIV-exposed infants, is the recommended duration specified?

- Yes (please specify the duration in months): _____
- No

51. Is food and nutrition support in your country integrated within prevention of mother-to-child transmission programmes?

- Implemented in few (<50%) maternal and child health sites
- Implemented in many (>50–95%) maternal and child health sites
- Implemented countrywide (>95%) of maternal and child health sites
- Not implemented in practice
- Other (please specify): _____

52. Does your country have a national strategy on interventions at delivery for women living with HIV who have not previously been tested for HIV?

- Yes, fully implemented
- Yes, partially implemented
- Yes, but not implemented
- No

53. Is vertical transmission of HIV criminalized in your country?

- Yes
- No

Elimination of mother-to-child transmission of syphilis

54. Does your country have a national plan for the elimination of mother-to-child transmission of syphilis?

- Yes, integrated with HIV or other elimination initiative(s)
- Yes, standalone (not integrated with HIV or other elimination initiatives)
- No national plan

55. Does your country have a national policy for routinely screening pregnant women for syphilis?

- Yes
- No

55.1 If yes, what tests are used:

- Laboratory-based non-treponemal (such as RPR/VDRL)
- Laboratory-based treponemal (such as TPPA, TPHA)
- Rapid syphilis treponemal tests (such as those from Bioline, Determine, Chembio)
- Dual HIV/syphilis rapid tests

Early infant diagnosis

56. At what age do your national guidelines recommend that HIV-exposed children be tested for HIV with nucleic acid testing (please select all that apply)?

- At birth
 - 4–6 weeks
 - 2 months
 - 6 months
 - 9 months
 - 12 months
 - 18 months
 - 24 months
-

57. At what age do your national guidelines recommend that HIV-exposed children be tested with an antibody test (please select all that apply)?

- 9 months
- 12 months
- 18 months
- 24 months

58. In addition to prevention of mother-to-child transmission settings, do any of the following sites in your country carry out HIV testing of children (please select all that apply)?

- Paediatric inpatient wards
- Nutrition centres
- Immunization clinics
- Outpatient clinics
- TB clinics
- Other (please specify): _____

59. Does the country have a policy to provide nucleic acid testing for HIV-exposed infants (early infant diagnosis, nucleic acid test [NAT]) at birth?

- Yes
- No

60. Are HIV-exposed infants routinely tested for HIV at nine months in your country?

- Yes
- No

61. Are HIV-exposed children routinely tested for HIV at 18 months of age or after three months from cessation of breastfeeding, whichever is later?

- Yes
- No

62. Does your country have a policy or recommendation for point-of-care early infant diagnosis testing?

- Yes
- No

62.1 If yes, is it implemented:

- Implemented in few (<50%) sites
- Implemented in many (>50–95%) sites
- Implemented in sites countrywide (>95%)
- Not implemented in practice
- Other (please specify): _____

Community engagement in the prevention of mother-to-child transmission of HIV

63. How many health facilities in your country are providing services for preventing mother-to-child transmission in the country? _____

63.1 How many of the health facilities providing prevention of mother-to-child transmission services have community accountability mechanisms* in place? _____

64. Are there targeted interventions that address any of the following human rights considerations as part of prevention of mother-to-child transmission programmes (please select all that apply):

- Voluntary and informed consent as sole basis for testing and/or treatment for HIV
 - Voluntary and informed consent as sole basis for abortion, contraception and/or sterilization of women living with HIV
 - Confidentiality and privacy
 - Prevention of grave or systematic human rights abuses* as part of prevention of mother-to-child transmission programmes
 - Due diligence to address any human rights abuses as part of prevention of mother-to-child transmission programmes
-

-
- 65. Has a meeting been held at the national level to review prevention of mother-to-child transmission progress in the past 12 months?**
- Yes
- No

65.1 If yes:

- a) Were community and civil society represented at the national review meeting?**

- Yes
- No

- b) Were women living with HIV represented at the national review meeting?**

- Yes
- No

- c) Was the opportunity provided for community and civil society to provide comments?**

- Yes
- No

- d) Was analysis by community and civil society provided in a systematic manner?**

- Yes
- No

- e) Was analysis provided by community and civil society documented and disseminated following the meeting?**

- Yes
- No

- f) Do women living with HIV in your country participate* in developing national policies, guidelines and strategies relating to prevention of mother-to-child transmission?**

- Yes
- No
-

Child antiretroviral therapy

- 66. Do the national guidelines recommend treating all infants and children living with HIV irrespective of symptoms?**

- Treat all, regardless of age
- Yes, treat all, aged <10 years
- Yes, treat all, aged <5 years
- Yes, treat all, aged <2 years
- Yes, treat all, aged <1 years
- Other (please specify): _____

- 66.1 What is the status of implementing the treat all policy regardless of age in your country?**

- Implemented in a few (<50%) treatment sites
- Implemented in many (>50–95%) treatment sites
- Implemented countrywide (>95% of treatment sites)
- Not implemented in practice
- Other (please specify): _____
-

- 67. When is a child who initiated antiretroviral therapy considered lost to follow-up in your country?**

- Has not been seen for HIV care or pharmacy pick up in 1 month
- Has not been seen for HIV care or pharmacy pick up in 2 months
- Has not been seen for HIV care or pharmacy pick up in 3 months
-

- 68. Does your country have a strategy or plan to ensure that adolescents born with HIV are not lost to follow-up as they transition into adult HIV care?**

- Yes
- No
-

69. Are cohorts of children receiving antiretroviral therapy monitored (i.e., ensuring that these children are alive and receiving antiretroviral therapy) in national registers at 6-month and 12-month intervals?

- Yes
- No

70. Are growth monitoring and nutrition programmes for children integrated with HIV testing and treatment in your country?

- Implemented in few (<50%) treatment sites
 - Implemented in many (>50–95%) treatment sites
 - Implemented countrywide (>95% of treatment sites)
 - Not implemented in practice
 - Other (please specify): _____
-

3. Ensure access to combination prevention options, including pre-exposure prophylaxis (PrEP), voluntary medical male circumcision (VMMC), harm reduction and condoms, to at least 90% of people, especially young women and adolescent girls in high-prevalence countries and key populations (gay men and other men who have sex with men, transgender people, sex workers and their clients, people who inject drugs and prisoners).

- Ensure that 90% of people at risk of HIV infection have access to comprehensive HIV prevention services, including sex workers and their clients, men who have sex with men, transgender people, people who inject drugs and prisoners.
- Reach 3 million people with PrEP by 2020.
- Reach 25 million men with VMMC in high-incidence countries by 2020.
- Make 20 billion condoms available annually by 2020 in low- and middle-income countries.

Participation of key populations in the national response

71. Do men who have sex with men participate* in developing national policies, guidelines and strategies relating to their health in your country?

- Yes
 No

72. Do sex workers participate* in developing national policies, guidelines and strategies relating to their health in your country?

- Yes
 No

73. Do people who inject drugs participate* in developing national policies, guidelines and strategies relating to their health in your country?

- Yes
 No

74. Do transgender people participate* in developing national policies, guidelines and strategies relating to their health in your country?

- Yes
 No

75. Do former and/or current prisoners participate* in developing national policies, guidelines and strategies relating to their health in your country?

- Yes
 No

Pre-exposure prophylaxis

76. Has the WHO recommendation on oral PrEP been adopted in your country's national guidelines?

- Yes, PrEP guidelines have been developed and are being implemented
 Yes, PrEP guidelines have been developed but are not yet being implemented
 No, guidelines have not been developed

76.1 If the WHO recommendation on oral PrEP has not yet been adopted in the national guidelines, is there a plan to adopt a PrEP recommendation in the future?

- Yes
 No

76.1a If yes, please indicate the year when adoption of the PrEP recommendations is planned:

- No planned year
 2020
 2021
 2022
 2023
 Other (please specify): _____
-

76.2 If national PrEP guidelines have been developed, please specify for which populations PrEP is provided as per the guidelines:

- Gay men and other men who have sex with men
- Sex workers
- People who inject drugs
- Transgender people
- Serodiscordant couples
- Young women (aged 15–24 years)
- Prisoners
- Other (please specify): _____

76.3 If national PrEP guidelines have been developed, who has the authority to prescribe PrEP in your country (please select all that apply)?

- Doctors
- Clinical officers
- Nursing cadre (e.g., midwives, nurse practitioners and registered nurses)
- Pharmacists
- Other (please specify): _____

76.4 If national PrEP guidelines have not been developed, indicate the applicable reasons (please select all that apply):

- There is no identified population group with sufficiently high incidence in accordance with the WHO guidelines
- It is not a funding priority
- The medicines are not available in the country
- The technical capacity to consider PrEP is limited
- Other (please specify): _____

76.5 Is PrEP available through any of the following in your country (please select all that apply):

- Research (including pilot studies and demonstration projects)
- Public facilities
- Private providers
- The Internet
- Educational institutions
- Other (please specify): _____

Condoms

77. Have the national needs for condoms been estimated?

- Yes
- No

77.1 If yes, what is the estimated number of condoms needed? _____

77.2 If yes, for what year is the condom needs estimate? _____

77.3 If yes, what method was used to estimate the number of condoms needed?

- General population (condoms per sexually active man/year)
- Historical (same as last year + population growth)
- Budget-driven (based on what can be bought)
- Demand-based (based on past condom usage rates, such as using the GOALS model)
- Capacity-based (how many can be supplied and distributed with current capacity)
- Part of family planning commodity needs estimates
- "Total universe of need" approach
- UNFPA/UNAIDS Condom Needs and Resource Requirement Estimation Tool
- Other (please specify): _____

78. Have there been condom stock-outs* in the past 12 months?

a) National stock-outs

- Yes
- No

b) Local stock-outs

- Yes
 - No
-

4. Eliminate gender inequalities and end all forms of violence and discrimination against women and girls, people living with HIV and key populations by 2020.

- Ensure universal access to quality and affordable sexual and reproductive health-care services, including HIV services, for women.
- Eliminate HIV-related stigma and discrimination in health-care settings by 2020.
- Review and reform laws that reinforce stigma and discrimination, including those on age of consent, HIV non-disclosure, exposure and transmission, travel restrictions and mandatory testing.

5. Ensure that 90% of young people have the skills, knowledge and capacity to protect themselves from HIV and have access to sexual and reproductive health services by 2020, in order to reduce the number of new HIV infections among adolescent girls and young women to below 100 000 per year.

79. Do young people in your country (age 15–24 years old) participate* in developing national policies, guidelines and strategies relating to their health in your country?

- Yes
 No

79.1 If yes, do young people participate* in any of the following decision-making spaces in the national HIV response, where these exist?

Decision-making space	Does it exist?	Do young people participate in this space?
Technical teams for the development, review and update of national AIDS strategies and plans	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
Technical teams for the development or review of programmes that relate to young people's access to HIV testing, treatment, care and support services	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
National AIDS Coordinating Authority or equivalent, with a broad-based multi-sector mandate	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
Global Fund Country Coordinating Mechanism	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
Civil society coordination spaces of populations most affected by HIV	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
Community advisory body for hospitals, clinics and/or research projects	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
Other (please specify): _____	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No

6. Ensure that 75% of people living with, at risk of and affected by HIV benefit from HIV-sensitive social protection by 2020.

80. Does the country have an approved social protection* strategy, policy or framework?

- Yes, and it is being implemented
- Yes, but it is not being implemented
- No

80.1 If yes:

a) Does it refer to HIV?

- Yes
- No

b) Does it recognize people living with HIV as key beneficiaries?

- Yes
- No

c) Does it recognize any key populations (sex workers, gay men and other men who have sex with men, people who inject drugs, transgender people or prisoners) as key beneficiaries?

- Yes
- No

c.i. If yes, which key populations are recognized as key beneficiaries (select all that apply):

- Sex workers
- Gay men and other men who have sex with men
- Transgender persons
- People who inject drugs
- Prisoners

d) Does it recognize adolescent girls and young women as key beneficiaries?

- Yes
- No

e) Does it recognize children affected by HIV as key beneficiaries?

- Yes
- No

f) Does it recognize families affected by HIV as key beneficiaries?

- Yes
- No

g) Does it address the issue of unpaid care work in the context of HIV?

- Yes
 - No
-

81. Are representatives of the National AIDS Programme or equivalent included in any social protection* coordination mechanism or platform?

- There is no social protection coordination mechanism or platform
 - There is a social protection coordination mechanism or platform, but it does not include any representatives of the National AIDS Programme or equivalent
 - There is a social protection coordination mechanism or platform and it includes representatives of the National AIDS Programme or equivalent
-

82. Are any cash transfer programmes* for young women aged 15–24 years being implemented in the country?

- Yes
 - No
-

7. Ensure that at least 30% of all service delivery is community-led by 2020.

83. Are there any of the following safeguards in laws, regulations and policies that provide for the operation of civil society organizations (CSOs) or community-based organizations (CBOs) in your country (please select all that apply)?

- Registration of HIV CSOs is possible
 - Registration of CSOs/CBOs working with key populations is possible
 - HIV services can be provided by CSOs/CBOs
 - Services to key populations can be provided by CSOs/CBOs
 - Reporting requirements for CSOs/CBOs delivering HIV services are streamlined
 - There are no safeguards in laws, regulations or policies that provide for the operation of CSOs/CBOs in the country
 - Other (please specify): _____
-

84. Are there laws, policies or regulations that enable access to funding for CSOs/CBOs?

- Social contracting or other mechanisms allowing for funding of service delivery by communities from domestic funding
 - From international donors
 - Both from domestic funding and international donors
 - Require a certain percentage of government funding for CSOs/CBOs
 - There are no laws, policies or regulations enabling access to funding for CSOs/CBOs
 - Other (please specify): _____
-

8. Ensure that HIV investments increase to US\$ 26 billion by 2020, including a quarter for HIV prevention and 6% for social enablers.

9. Empower people living with, at risk of and affected by HIV to know their rights and to access justice and legal services to prevent and challenge violations of human rights.

85. Does your country have training programmes for the following groups on human rights and non-discrimination legal frameworks as applicable to HIV?

a) For police and other law enforcement personnel

- Yes, at scale at the national level
- Yes, at scale at the sub-national level
- Yes, one-off activities
- Yes, small scale
- No

b) For members of the judiciary

- Yes, at scale at the national level
- Yes, at scale at the sub-national level
- Yes, one-off activities
- Yes, small scale
- No

c) For elected officials (lawmakers/parliamentarians)

- Yes, at scale at the national level
- Yes, at scale at the sub-national level
- Yes, one-off activities
- Yes, small scale
- No

d) For health-care workers

- Yes, at scale at the national level
 - Yes, at scale at the sub-national level
 - Yes, one-off activities
 - Yes, small scale
 - No
-

86. Does your country have training programmes on the prevention of violence against women and gender-based violence for the following groups?

a) For police and other law enforcement personnel

- Yes, at scale at the national level
 - Yes, at scale at the sub-national level
 - Yes, one-off activities
 - Yes, small scale
 - No
-

b) For members of the judiciary

- Yes, at scale at the national level
- Yes, at scale at the sub-national level
- Yes, one-off activities
- Yes, small scale
- No

c) For elected officials (lawmakers/parliamentarians)

- Yes, at scale at the national level
 - Yes, at scale at the sub-national level
 - Yes, one-off activities
 - Yes, small scale
 - No
-

d) For health-care workers

- Yes, at scale at the national level
- Yes, at scale at the sub-national level
- Yes, one-off activities
- Yes, small scale
- No

87. Are there any of the following barriers to providing these trainings and/or capacity-building activities (please select all that apply)?

- Lack of political will
 - Lack of funding
 - Lack of capacity for delivery of trainings
 - Barriers that hinder the target audience in accessing such trainings or capacity-building
-

10. Commit to taking AIDS out of isolation through people-centered systems to improve universal health coverage, including treatment for tuberculosis, cervical cancer and hepatitis B and C.

- Reduce TB-related deaths among people living with HIV by 75% by 2020.

88. Is cervical cancer screening and treatment for women living with HIV recommended in the following?

a. The national strategy, policy, plan or guidelines for cancer, cervical cancer or the broader response to non-communicable diseases (NCDs)

- Yes
 No

b. The national strategic plan governing the AIDS response

- Yes
 No

c. National HIV-treatment guidelines

- Yes
 No

89. What coinfection policies are in place in the country for adults, adolescents and children (please select all that apply)?

- Isoniazid preventive therapy (IPT) or latent TB infection (LTBI) prophylaxis for people living with HIV
 Intensified TB case finding among people living with HIV
 TB infection control in HIV health-care settings
 Co-trimoxazole prophylaxis
 Hepatitis B screening and management in antiretroviral therapy clinics
 Hepatitis C screening and management in antiretroviral therapy clinics
 Hepatitis B vaccination provided at antiretroviral therapy clinics
 Hepatitis C treatment (direct-acting antiviral agents) provided in antiretroviral therapy clinics
 Other (please specify): _____

Sexually transmitted infections

90. Does your country have national treatment guidelines or recommendations for sexually transmitted infections (STIs)?

- Yes
 No

90.1 If yes, in what year were they last updated? _____

91. Does your country have a national strategy or action plan for the prevention and control of STIs?

- Yes
 No

92. Is gonococcal antimicrobial-resistance monitoring conducted in the country?

- Yes, annually
 Yes, less than annually
 No

93. Does the national definition for congenital syphilis include stillbirths?

- Yes
 No
-

Strategy

94. Does your country have a national strategy or policy that guides the AIDS response?

- Yes, a stand-alone AIDS strategy or policy
- Yes, a health strategy or policy that integrates the AIDS response
- No
- Other (please specify): _____

94.1 If yes, has the national HIV strategy or policy been reviewed in the past two years?

- Yes
- No

94.2 If yes, does the national strategy or policy guiding the AIDS response explicitly address the following key populations or vulnerable groups (please select all that apply)?

- Adolescent key populations
- Men who have sex with men
- People in prisons and other closed settings
- People who inject drugs
- Sex workers (male and female)
- Transgender people
- Non-displaced people affected by emergencies
- Refugees
- Internally displaced people
- Migrants and asylum-seekers

94.3 If yes, does the national strategy or policy guiding the AIDS response (please select all that apply):

- Specifically include explicit plans or activities that address the needs of key populations
- Specifically include explicit plans or activities that address the needs of young women and girls
- Draw on the most recent evidence about the national HIV epidemic and the status of the response
- Integrate inputs from a multisectoral process, including various government sectors as well as nongovernmental partners

94.4 If yes, does the national strategy or policy guiding the AIDS response include gender-transformative* interventions, including interventions to address the intersections of gender-based violence and HIV?

- Yes
- No

94.4.a If yes, does the national strategy or policy guiding the AIDS response include a dedicated budget for implementing gender-transformative interventions*?

- Yes
 - No
-

Monitoring and evaluation

95. Does your country have a national monitoring and evaluation plan or strategy for HIV?

- Yes, a stand-alone HIV monitoring and evaluation strategy or plan
- Yes, HIV monitoring and evaluation is integrated in a broader health monitoring and evaluation strategy or plan
- No
- Other (please specify): _____

95.1 If yes, has it been updated in the past two years?

- Yes
- No

95.2 If yes, does it integrate gender-sensitive indicators*?

- Yes
 - No
-

Information system

96. Does your country have a functioning health information system that is electronic, paper-based or both?

- Yes, electronic
- Yes, paper-based
- Yes, both
- No functioning health information system

96.2 If a health information system exists, are patient-level viral load testing results routinely available within the health information system?

- Yes, fully
- Yes, partially
- No

96.3 Are treatment cascade data included in the health information system at the district level?

- Yes, fully
 - Yes, partially
 - No
-

Surveillance

97. Does the country carry out sentinel surveillance in the following special populations?

Population	Sentinel surveillance conducted	How often is it conducted (in years)?	In what year was the most recent survey conducted?	In what number of sites was surveillance conducted?
Sex workers	<input type="checkbox"/> Yes <input type="checkbox"/> No			
Men who have sex with men	<input type="checkbox"/> Yes <input type="checkbox"/> No			
People who inject drugs	<input type="checkbox"/> Yes <input type="checkbox"/> No			
Transgender people	<input type="checkbox"/> Yes <input type="checkbox"/> No			
In prisons and other closed settings	<input type="checkbox"/> Yes <input type="checkbox"/> No			

Other (please specify):

98. Is the country using data from antenatal clinic attendees on the number of women who tested positive for HIV and the number of women already known to be HIV-positive to monitor trends in HIV prevalence?

- Yes
 - No
-

Patient monitoring systems

99. Has the country updated the patient monitoring system indicators and tools using the 2017 WHO Consolidated guidelines on person-centered HIV patient monitoring and case surveillance?

- Yes, fully
- Yes, partially
- No
- Don't know

What percentage of health facilities have electronic systems for patient-level longitudinal data capture (e.g., electronic medical records)?

Unique identification codes for patients

100. Does the country have a method to identify and remove duplicate health information for patients within and between clinics (such as linking records using unique identifiers and/or personal identifiable information (including biometrics) for the following services?

	Method to identify and remove duplicate health information	If yes, please specify how data are linked
Treatment services	<input type="checkbox"/> Yes, nationally harmonized <input type="checkbox"/> Yes, but varies across regions <input type="checkbox"/> Yes, but varies across programmes <input type="checkbox"/> No <input type="checkbox"/> Don't know	<input type="checkbox"/> National unique personal identifier <input type="checkbox"/> HIV-specific unique identifier <input type="checkbox"/> Combination of routinely collected personal identifying information <input type="checkbox"/> Biometric <input type="checkbox"/> Other (please specify) _____
Testing services	<input type="checkbox"/> Yes, nationally harmonized <input type="checkbox"/> Yes, but varies across regions <input type="checkbox"/> Yes, but varies across programmes <input type="checkbox"/> No <input type="checkbox"/> Don't know	<input type="checkbox"/> National unique personal identifier <input type="checkbox"/> HIV-specific unique identifier <input type="checkbox"/> Combination of routinely collected personal identifying information <input type="checkbox"/> Biometric <input type="checkbox"/> Other (please specify) _____
Laboratory services	<input type="checkbox"/> Yes, nationally harmonized <input type="checkbox"/> Yes, but varies across regions <input type="checkbox"/> Yes, but varies across programmes <input type="checkbox"/> No <input type="checkbox"/> Don't know	<input type="checkbox"/> National unique personal identifier <input type="checkbox"/> HIV-specific unique identifier <input type="checkbox"/> Combination of routinely collected personal identifying information <input type="checkbox"/> Biometric <input type="checkbox"/> Other (please specify) _____
HIV prevention services designed for any key population group to track combination prevention uptake		
Gay men and other men who have sex with men	<input type="checkbox"/> Yes, nationally harmonized <input type="checkbox"/> Yes, but varies across regions <input type="checkbox"/> Yes, but varies across programmes <input type="checkbox"/> No <input type="checkbox"/> Don't know	<input type="checkbox"/> National unique personal identifier <input type="checkbox"/> HIV-specific unique identifier <input type="checkbox"/> Combination of routinely collected personal identifying information <input type="checkbox"/> Biometric <input type="checkbox"/> Other (please specify) _____
Sex workers	<input type="checkbox"/> Yes, nationally harmonized <input type="checkbox"/> Yes, but varies across regions <input type="checkbox"/> Yes, but varies across programmes <input type="checkbox"/> No <input type="checkbox"/> Don't know	<input type="checkbox"/> National unique personal identifier <input type="checkbox"/> HIV-specific unique identifier <input type="checkbox"/> Combination of routinely collected personal identifying information <input type="checkbox"/> Biometric <input type="checkbox"/> Other (please specify) _____

Transgender people	<input type="checkbox"/> Yes, nationally harmonized <input type="checkbox"/> Yes, but varies across regions <input type="checkbox"/> Yes, but varies across programmes <input type="checkbox"/> No <input type="checkbox"/> Don't know	<input type="checkbox"/> National unique personal identifier <input type="checkbox"/> HIV-specific identifier <input type="checkbox"/> Combination of routinely collected personal identifying information <input type="checkbox"/> Biometric <input type="checkbox"/> Other (please specify)
---------------------------	--	---

People who inject drugs	<input type="checkbox"/> Yes, nationally harmonized <input type="checkbox"/> Yes, but varies across regions <input type="checkbox"/> Yes, but varies across programmes <input type="checkbox"/> No <input type="checkbox"/> Don't know	<input type="checkbox"/> National unique personal identifier <input type="checkbox"/> HIV-specific unique identifier <input type="checkbox"/> Combination of routinely collected personal identifying information <input type="checkbox"/> Biometric <input type="checkbox"/> Other (please specify) _____
--------------------------------	--	--

Other (please specify) _____	<input type="checkbox"/> Yes, nationally harmonized <input type="checkbox"/> Yes, but varies across regions <input type="checkbox"/> Yes, but varies across programmes <input type="checkbox"/> No <input type="checkbox"/> Don't know	<input type="checkbox"/> National unique personal identifier <input type="checkbox"/> HIV-specific unique identifier <input type="checkbox"/> Combination of routinely collected personal identifying information <input type="checkbox"/> Biometric <input type="checkbox"/> Other (please specify) _____
-------------------------------------	--	--

Case surveillance

101. Is HIV a nationally notifiable condition by law?

- Yes
 No
-

102. Does the country have an HIV case surveillance* system?

- Yes
 No

102.1 If yes, are the following sentinel events reported:

a) Diagnosis

- Yes
 No

b) Result of first CD4 cell count at diagnosis

- Yes
 No

c) Antiretroviral therapy initiation

- Yes
 No

d) Results of first and follow-up viral load test

- Yes
 No

e) Deaths

- Yes
 No
-

90-90-90

103. What is the source of data on the number of people who know their HIV status that is available for Indicator 1.1 for 2018?

- HIV case surveillance
- Modelling
- No data available
- Other (please specify): _____

104. What is the source of the number of people living with HIV who are on antiretroviral therapy for Indicator 1.2 for 2018?

- Programme data, primarily reported in aggregate
- Programme data, primarily reported using identifiers
- National estimates based on population survey results
- National estimates based on nationally representative cohort monitoring
- No data available
- Other (please specify): _____

105. When was the most recent data quality review conducted to determine the accuracy of national-level numbers of people reported to be on treatment?

- Currently being conducted (results expected next year)
- Completed in the last year and results available
- Completed 2 to 5 years ago
- Never conducted or conducted more than 5 years ago

105.1 If a data quality review has been conducted in the last year, have the results been used to adjust the numbers of people on treatment reported in Indicator 1.2?

- Yes
- No

106. What is the source of the number of people living with HIV who are virally suppressed for Indicator 1.4 for 2018?

- Aggregate routine programme data from laboratory systems
- Data from case surveillance systems
- Survey
- No data available
- Other (please specify): _____

TB/HIV

107. Are the following recommended for people living with HIV in national strategies, policies, plans or guidelines related to TB and/or HIV?

a) TB screening

- Yes
- No

b) TB preventive treatment

- Yes
- No

108. Has your country adopted the 2015 WHO policy update on The use of lateral flow urine lipoarabinomannan assay (LF-LAM) for the diagnosis and screening of active tuberculosis in people living with HIV?

- Yes
 - No
-

109. Which of the following regimen are recommended for TB preventive treatment in national guidelines (please select all that apply)?

a) Adults living with HIV

- 6 months of daily isoniazid monotherapy (6H)
- 9 months of daily isoniazid monotherapy (9H)
- 36 months of daily isoniazid monotherapy (36H)
- 4 months of daily rifampicin (4R)
- 3 months of rifapentine plus isoniazid weekly (3HP)
- 3 months of daily rifampicin plus isoniazid (3RH)
- 1 month of rifapentine plus isoniazid daily (1HP)
- Other: (please specify)

ai. If more than one regimen is recommended, which is the preferred regimen?

- 6 months of daily isoniazid monotherapy (6H)
- 9 months of daily isoniazid monotherapy (9H)
- 36 months of daily isoniazid monotherapy (36H)
- 4 months of daily rifampicin (4R)
- 3 months of rifapentine plus isoniazid weekly (3HP)
- 3 months of daily rifampicin plus isoniazid (3RH)
- 1 month of rifapentine plus isoniazid daily (1HP)
- Other: (please specify)

b) Children living with HIV

- 6 months of daily isoniazid monotherapy (6H)
- 9 months of daily isoniazid monotherapy (9H)
- 4 months of daily rifampicin (4R)
- 3 months of rifapentine plus isoniazid weekly (3HP)
- 3 months of daily rifampicin plus isoniazid (3RH)
- Other: (please specify) _____

bi. If more than one regimen is recommended, which is the preferred regimen?

- 6 months of daily isoniazid monotherapy (6H)
- 9 months of daily isoniazid monotherapy (9H)
- 4 months of daily rifampicin (4R)
- 3 months of rifapentine plus isoniazid weekly (3HP)
- 3 months of daily rifampicin plus isoniazid (3RH)
- Other: (please specify) _____

110. Are the following required in national guidelines prior to initiating TB preventive treatment?

a) Tuberculin skin test or interferon-gamma release assay (IGRA) test

- Yes for all
- No
- Only if available

b) X-ray

- Yes for all
- No
- Only if available

111. In the last reporting period, has there been a stock-out of:

a) Isoniazid

- Yes, at the national level
- Yes, at the local level
- No

b) Vitamin B6

- Yes, at the national level
 - Yes, at the local level
 - No
-

c) Other nationally recommended TB preventive therapy drugs

- Yes, at the national level
 Yes, at the local level
 No

ci. If yes, please specify which drugs: _____

112. What is the status of integration of the following HIV/TB services?

a) WHO-recommended rapid molecular diagnostics (e.g., Xpert MTB/RIF) are collocated

- In few (<50%) health facilities providing HIV testing and care
 In many (50–95%) health facilities providing HIV testing and care
 Countrywide (>95% of health facilities providing HIV testing and care)
 Not integrated in practice
 Other (please specify): _____

b) People living with HIV who have TB received antiretroviral medicines at the same place as they receive their TB treatment

- In few (<50%) health facilities
 In many (50–95%) health facilities
 Countrywide (>95% of health facilities)
 Not integrated in practice
 Other (please specify): _____

c) Antiretroviral therapy is initiated by the same health-care worker providing TB treatment for people living with HIV who have TB

- In few (<50%) health facilities
 In many (50–95%) health facilities
 Countrywide (>95% of health facilities)
 Not integrated in practice
 Other (please specify): _____

d) Antiretroviral therapy and TB treatment for people living with HIV who have TB are monitored by one health-care worker

- In few (<50%) health facilities
 In many (50–95%) health facilities
 Countrywide (>95%) of health facilities
 Not integrated in practice
 Other (please specify): _____
-

Universal health insurance

113. Does your country have a universal health insurance scheme?

- Yes
 No

113.1 If no, is your country moving to a universal health insurance scheme?

- Yes
 No

113.2 If yes to 113 or 113.1, does the benefits package include:

a) Antiretroviral medicines

- Yes
 No

b) Pre-exposure prophylaxis

- Yes
 No
-

Annex 1.

Selected bibliography

1. 12 components monitoring and evaluation system assessment: guidelines to support preparation, implementation and follow-up activities. Geneva: UNAIDS; 2010 (<http://www.unaids.org/en/dataanalysis/monitoringandevaluationguidance>).
2. 12 components monitoring and evaluation system strengthening tool. Geneva: UNAIDS; 2010 (<http://www.unaids.org/en/dataanalysis/monitoringandevaluationguidance>).
3. Glossary: monitoring and evaluation terms. Geneva: UNAIDS; 2011 (<http://www.unaids.org/en/dataanalysis/monitoringandevaluationguidance>).
4. Guidance on capacity building for HIV monitoring and evaluation. Geneva: UNAIDS; 2010 (<http://www.unaids.org/en/dataanalysis/monitoringandevaluationguidance>).
5. Indicator standards: operational guidelines for selecting indicators for the HIV response. Geneva: UNAIDS; 2010 (<http://www.unaids.org/en/dataanalysis/monitoringandevaluationguidance>).
6. A national evaluation agenda for HIV. Geneva: UNAIDS; 2010 (<http://www.unaids.org/en/dataanalysis/monitoringandevaluationguidance>).
7. An introduction to triangulation. Geneva: UNAIDS; 2010 (<http://www.unaids.org/en/dataanalysis/monitoringandevaluationguidance>).
8. An introduction to indicators. Geneva: UNAIDS; 2010 (<http://www.unaids.org/en/dataanalysis/monitoringandevaluationguidance>).
9. Basic terminology and frameworks for monitoring and evaluation. Geneva: UNAIDS; 2010 (<http://www.unaids.org/en/dataanalysis/monitoringandevaluationguidance>).
10. Organizing framework for a functional national HIV monitoring and evaluation system. Geneva: UNAIDS; 2008 (<http://www.unaids.org/en/dataanalysis/monitoringandevaluationguidance>).
11. Communities at the centre. Geneva: UNAIDS; 2019 (https://www.unaids.org/sites/default/files/media_asset/2019-global-AIDS-update_en.pdf).
12. Strategic guidance for evaluating HIV prevention programmes. Geneva: UNAIDS; 2010 (http://www.unaids.org/sites/default/files/sub_landing/files/12_7_MERG_Guidance_Evaluating%20HIV_PreventionProgrammes.pdf).
13. Consolidated strategic information guidelines for HIV in the health sector. Geneva: World Health Organization; 2015 (<http://www.who.int/hiv/pub/guidelines/strategic-information-guidelines/en>).
14. Consolidated guidelines on the use of antiretroviral drugs for treating and preventing HIV infection: recommendations for a public health approach. 2nd ed. Geneva: World Health Organization; 2016 (<http://www.who.int/hiv/pub/arv/arv-2016/en>).
15. Consolidated guidelines on sexual and reproductive health and rights of women living with HIV. Geneva: World Health Organization; 2017 (http://www.who.int/reproductivehealth/publications/gender_rights/Ex-Summ-srhr-women-hiv/en/).
16. The state of the world's children 2019. New York: UNICEF; 2016 (<https://www.unicef.org/media/61356/file/SOWC-2019.pdf>).
17. Segone M, ed. Country-led monitoring and evaluation systems: better evidence, better policies, better development results. New York: UNICEF; 2009 (<http://mics.unicef.org/files?job=W1siZiIsIjIwMTUvMDEvMzAvMDMvMjUvNTUvNTAwLONvdW50cnlfGvKX01FX3N5c3RlbXMucGRmlld&sha=cdcc92ec34d8448b>).

Annex 2.

Expected levels of earmarked domestic public budget for HIV

To fill in the form, please consider the following:

1. Indication of a fiscal year is required. A fiscal year may or may not align with the calendar year (use the fiscal year that starts on the calendar year specified in the field).
2. Choose the reporting currency. This could be filled in local currency or converted into US dollars when an official exchange rate is specified.
3. It is required to express the amounts in currency units in thousands or millions.
4. Fill the approved and executed budget in the corresponding fiscal year. The approved budget includes the domestic budget that is approved by the government. Budget allocations using government loans (non-official development assistance loans) are also considered to be part of the domestic budget. The executed budget is the spending of the approved budget; it should not be more than the approved budget unless there were additional funds provided (if so, please specify). The totality of the expenditures can exceed the approved budget because some incurred expenditures were not funded by HIV-specific earmarked budgets.
5. Indicate the perception of a budget increase, maintenance at the same level or a budget decrease for the next fiscal year.
6. It is necessary to provide the aggregate subtotals for budgets at each level of government, and for under-segmented and independent budget structures. For the levels of government, report the subtotals for the national/central/federal, provincial/state/district and municipal/city/local levels in each country (as appropriate). Separately report the public budgets for institutions that pertain to different systems—such as security institutions or other national bodies (e.g., the national AIDS commission)—if those systems are independent from the government levels mentioned above.

Annex 3. Volume and unit prices of antiretrovirals medicines procured and distributed

As part of Indicator 8.2, it is mandatory to complete the information on the volume and unit prices of antiretroviral medicines procured and distributed.

Regimen/formulation	Posology	Pills or smallest dose per pack	Total number of packs procured in the fiscal year	Procurement month and year (MM/YYYY)	Average unit price per pack	Total number of packs picked up by beneficiaries in the fiscal year
Tenofovir + Emtricitabine + Efavirenz [TDF + FTC + EFV]	300 mg + 200 mg + 600 mg					
Tenofovir + Lamivudine + Efavirenz [TDF + 3TC + EFV]	300 mg + 300 mg + 600 mg					
Tenofovir + Lamivudine + Nevirapine [TDF + 3TC] + NVP	300 mg + 300 mg + 200 mg					
Zidovudine + Lamivudine + Efavirenz [ZVD + 3TC] + EFV	300 mg + 150 mg + 200 mg					
Abacavir + Lamivudine + Zidovudine [ABC + 3TC + ZDV]	300 mg + 150 mg + 300 mg					
Zidovudine + Lamivudine + Nevirapine [ZVD + 3TC + NVP]	300 mg + 150 mg + 200 mg					
Zidovudine + Lamivudine + Nevirapine [ZVD + 3TC + NVP]	60 mg + 30 mg + 50 mg					
Tenofovir + Emtricitabine [TDF + FTC]	300 mg + 200 mg					
Zidovudine + Lamivudine [ZDV + 3TC]	300 mg + 150 mg					
Lopinavir + Ritonavir [LPV + RTV]	200 mg + 50 mg					
Lopinavir + Ritonavir [LPV + RTV]	80 mg + 20 mg/ml					
Abacavir + Lamivudine [ABC + 3TC]	60 mg + 30 mg					
Tenofovir + Lamivudine [TDF + 3TC]	300 mg + 300 mg					
Darunavir [DRV]	300 mg					
Dolutegravir [DTG]	50 mg					
Others (please specify):						

1 Please express volume in the number of packs procured and unit prices in local currency units.

2 The number of packs procured needs to be provided for each batch of procurement of a regimen/formulation.

3 The data on the number of packages picked up by beneficiaries correspond to the regimen/formulations without need to disaggregate by procurement process.

4 By choosing the "Other" option, the rapporteur will be able to provide custom data on the regimen and posology combination in case the regimen information is not found in the standard list shown above.

5 Information on patients per regimen will be captured as part of the WHO/AIDS Medicines and Diagnostics Service Survey on the Use of ARV Medicines and Laboratory Technologies and in the implementation of the WHO Related guidelines, hosted on the Global AIDS Monitoring online tool.

Annex 4.

The national funding matrix for Indicator 8.3: HIV expenditure by origin of the resources

As in previous reporting cycles, the national funding matrix suggested for the Global AIDS Monitoring 2020 cycle contains a set of key core programmes and services by financing source. The only change is in the format of the reporting and how the commitments of the 2016 Political Declaration on Ending AIDS are mapped against the contents of the matrix (see Table 1).

Each of the programme categories are divided into sets of sub-indicators. The set of the core sub-indicators comprise the following key programmes or services:

- Combination prevention, including condoms, pre-exposure prophylaxis (PrEP), voluntary medical male circumcision, harm reduction services, empowering young women and girls, and providing essential service packages for key populations.
- Prevention of mother-to-child transmission of HIV.
- HIV testing and counselling.
- HIV-specific laboratory monitoring.
- Antiretroviral therapy.
- HIV and tuberculosis (TB).
- Social enablers, including reducing stigma and discrimination.
- Instituting human rights programmes.

Table 1.

Mapping of the 2016 High-Level Meeting commitments to the programme categories for the AIDS funding matrix in the Global AIDS Monitoring 2020 reporting cycle

Fast-Track commitments to end AIDS by 2030	Codes in the Global AIDS Monitoring national funding matrix	Global AIDS Monitoring 2020 programme categories: complete set of interventions
Commitment 1. Ensure that 30 million people living with HIV have access to treatment through meeting the 90–90–90 targets by 2020	1	Treatment, care and support (subtotal)
Commitment 2. Eliminate new HIV infections among children by 2020 while ensuring that 1.6 million children have access to HIV treatment by 2018	2	Prevention of vertical transmission of HIV (subtotal)
Commitment 3. Ensure access to combination prevention options, including pre-exposure prophylaxis, voluntary medical male circumcision, harm reduction and condoms, to at least 90% of people by 2020, especially young women and adolescent girls in high-prevalence countries and key populations—gay men and other men who have sex with men, transgender persons, sex workers and their clients, persons who inject drugs and prisoners	3	Prevention (subtotal)
Commitment 8. Ensure that HIV investments increase to US\$ 26 billion by 2020, including a quarter for HIV prevention and 6% for social enablers		
Commitment 4. Eliminate gender inequalities and end all forms of violence and discrimination against women and girls, people living with HIV and key populations by 2020	4	Gender programmes
Commitment 5. Ensure that 90% of young people have the skills, knowledge and capacity to protect themselves from HIV and have access to sexual and reproductive health services by 2020, in order to reduce the number of new HIV infections among adolescent girls and young women to below 100 000 per year	5	Programmes for children and adolescents
Commitment 6. Ensure that 75% of people living with, at risk of and affected by HIV benefit from HIV-sensitive social protection by 2020	6	Social protection
Commitment 7. Ensure that at least 30% of all service delivery is community-led by 2020	7	Community mobilization
Commitment 8. Ensure that HIV investments increase to US\$ 26 billion by 2020, including a quarter for HIV prevention and 6% for social enablers	8	Governance and sustainability (subtotal)
Commitment 9. Empower people living with, at risk of and affected by HIV to know their rights and to access justice and legal services to prevent and challenge violations of human rights	9	Critical enablers (subtotal)
Commitment 10. Commit to taking AIDS out of isolation through people-centred systems to improve universal health coverage, including treatment for tuberculosis, cervical cancer and hepatitis B and C	10	TB–HIV co-infection, diagnosis and treatment (subtotal)

The reporting framework of Indicator 8.3—“Total HIV expenditure by origin of the resources”—is organized around a two-dimensional system for recording HIV expenditure by programme and financing source. The form of reporting therefore has the format of a matrix.

The table below (Table 2) provides a complete set of programmes or services and a residual category that account for the totality of possible use of resources in countries, including financing sources. Countries are requested to report on the applicable programmes or services as appropriate (i.e., countries should only report on the relevant rows of the matrix, not on each one). The same is true for the financing sources: they need to be completed as they exist in each country. It is important to differentiate when the expenditure is non-existent (i.e., it has a value of “0”), unavailable or not applicable.

The total HIV expenditure is the sum of the core programmes and services from reported figures from Commitments 1 to 10, plus the residual category of “Other essential programmes outside of the suggested framework” to account for total HIV expenditure and not just for the expenditures derived from earmarked budgets.

Further guidance will be provided in the Global AIDS Monitoring online reporting tool on how to complete the reporting forms and submit expenditure indicators to UNAIDS. The total amount of resources should include the totality of financing flows and expenditures by all programmes or services and by all sources. The sub-indicators would represent only a subset of the total that corresponds to parts of the specific commitments. The amounts reported will be compared to the number of people receiving the same services reported in Global AIDS Monitoring or elsewhere.

The National AIDS Spending Assessment (NASA) guidelines are being updated. A crosswalk on the new AIDS Spending Categories (ASCs) and the Global AIDS Monitoring funding matrix requested for Indicator 8.3 will be made available in time for Global AIDS Monitoring reporting. When a NASA—an in-depth HIV resource tracking exercise—is performed in countries, one can extract a Excel report from the resource tracking tool (RTT) and upload it into the Global AIDS Monitoring AIDS spending module.

Table 2

List of HIV programmes or services in the national funding matrix

Codes in the Global AIDS Monitoring national funding matrix	Global AIDS Monitoring 2020 programme categories: complete set of interventions	Global AIDS Monitoring 2020 programme categories: core sub-indicators
1 Treatment, care and support (subtotal)		
1.1	HIV testing and counselling (HTC)	Expenditure on HTC (non-targeted), disaggregated by commodities and other direct/indirect costs.
1.2	Antiretroviral treatment (subtotal)	Expenditure on antiretroviral therapy (adults and paediatric).
1.2.1.	Adult antiretroviral treatment	Expenditure on antiretroviral therapy for adults disaggregated by commodities and other direct/indirect costs.
1.2.2.	Paediatric antiretroviral treatment	Expenditure on antiretroviral therapy for paediatric use, disaggregated by commodities and other direct/indirect costs.
1.2.3.	Antiretroviral therapy not broken down by either age or line of treatment	
1.3	Specific HIV-related laboratory monitoring (CD4, viral load)	Expenditure on HIV-specific laboratory monitoring (CD4 cell count, viral load) disaggregated by commodities and other direct/indirect costs.
1.4	Opportunistic infections (OI) prophylaxis and treatment, excluding treatment and prevention of TB for people living with HIV	
1.5	Palliative care	
1.6	Support and retention	
1.98	Programmatic activities for treatment, care and support not disaggregated by type	
2 Prevention of vertical transmission of HIV (subtotal)		
2.1	HIV testing and counselling (HTC) for pregnant women	Expenditure on prevention of vertical transmission of HIV disaggregated by commodities and other direct/indirect costs.
2.2	Early infant diagnosis	Expenditure on prevention of vertical transmission of HIV disaggregated by commodities and other direct/indirect costs.
2.3	Antiretroviral treatment to reduce vertical transmission of HIV	Expenditure on prevention of vertical transmission of HIV disaggregated by commodities and other direct/indirect costs.

2.4	Non-ARV antiretroviral medicine-related component of prevention of mother-to-child transmission	Expenditure on prevention of vertical transmission of HIV other than the expenditures on the antiretroviral treatment provided to the pregnant women if a regimen as an adult living with HIV is provided.
2.98	Prevention of vertical transmission of HIV not disaggregated	
3 Prevention: Five pillars of prevention only (subtotal)		
3.1	Social and behaviour change (SBC) programmes	Non-targeted.
3.2	Condoms	Condoms (non-targeted) disaggregated by commodities and other direct/indirect costs.
3.3	Pre-exposure prophylaxis (PrEP) disaggregated by key populations (subtotal)	Pre-exposure prophylaxis (PrEP) stratified by key population.
3.3.1.	PrEP for gay men and other men who have sex with men (MSM)	Pre-exposure prophylaxis (PrEP) stratified by key population.
3.3.2.	PrEP for sex workers	Pre-exposure prophylaxis (PrEP) stratified by key population.
3.3.3.	PrEP for persons who inject drugs (PWID)	Pre-exposure prophylaxis (PrEP) stratified by key population.
3.3.4.	PrEP for transgender persons	Pre-exposure prophylaxis (PrEP) stratified by key population.
3.3.5.	PrEP for key populations	Pre-exposure prophylaxis (PrEP) stratified by key population.
3.3.6.	PrEP for young women and adolescent girls in high-prevalence countries	Pre-exposure prophylaxis (PrEP) stratified by key population.
3.3.7.	Pre-exposure prophylaxis (PrEP) for serodiscordant couples	Pre-exposure prophylaxis (PrEP) stratified by key population.
3.4	Voluntary medical male circumcision (VMMC) in high-prevalence countries	Voluntary medical male circumcision (VMMC).
3.5	Prevention, promotion of testing and linkage to care programmes for gay men and other men who have sex with men (MSM)	Prevention among key populations disaggregated by commodities and other direct/indirect costs.
3.6	Prevention, promotion of testing and linkage to care programmes for sex workers and their clients	Prevention among key populations disaggregated by commodities and other direct/indirect costs.
3.7	Prevention, promotion of testing and linkage to care programmes for persons who inject drugs (subtotal)	Prevention among key populations.
3.7.1.	Needle-syringe exchange, and prevention and promotion of testing, and linkage to care programmes for people who inject drugs	Prevention among key populations disaggregated by commodities and other direct/indirect costs.
3.7.2.	Substitution therapy	Prevention among key populations disaggregated by commodities and other direct/indirect costs.

3.8	Prevention and promotion of testing and linkage to care programmes for transgender persons	Prevention among key populations.
3.9	Prevention and promotion of testing and linkage to care programmes for prisoners	Prevention among key populations.
3.10	Prevention and promotion of testing and linkage to care programmes for young women and adolescent girls (high-prevalence countries)	Prevention among key populations.
3.11	Cash transfers to girls (high-prevalence countries)	Expenditures on cash transfers for young women and girls (age 10–24 years in high-prevalence countries) from HIV earmarked budgets.
3.12	Prevention programmes for vulnerable and accessible populations	
3.13	Post-exposure prophylaxis (PEP)	
3.14	Workplace	
3.15	Synergies with health sector	
3.16	Prevention of HIV transmission aimed at people living with HIV (PLHIV) not broken down by type	
3.98	Prevention (five pillars) not disaggregated	Do not include other activities in this code if not explicitly listed. If there are additional activities, list them individually in mutually exclusive categories (ensuring no double-counting); avoid using a category already included above.

4 Gender programmes

5 Programmes for children and adolescents

6 Social protection

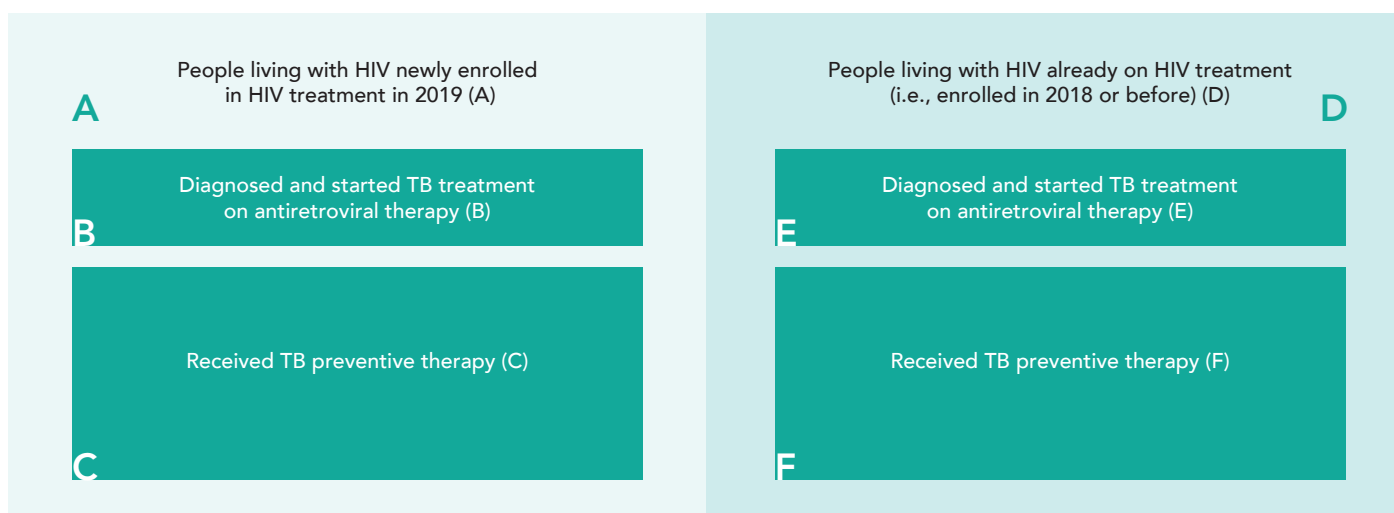
7 Community mobilization

8 Governance and sustainability (subtotal)

8.1	Strategic information	
8.2	Planning and coordination	
8.3	Procurement and logistics	
8.4	Health systems strengthening	

8.5	Education	
8.6	HIV- and AIDS-related research	
8.98	Governance and sustainability not disaggregated	
9 Critical social enablers (subtotal)		
9.1	Policy dialogue	
9.2	Key human rights programmes	
9.3	HIV- and AIDS-specific institutional development	
9.98	Critical social enablers not disaggregated	
10 TB–HIV coinfection, diagnosis and treatment (subtotal)		
10.1	TB screening and diagnosis among people living with HIV (PLHIV)	Expenditure on TB and HIV.
10.2	TB prevention and treatment for people living with HIV (PLHIV)	Expenditure on TB and HIV.
10.98	TB–HIV coinfection, diagnosis and treatment not disaggregated	
11.99	Other essential programmes outside the suggested framework of core HIV and AIDS programmes (please list below and specify)	<p>All other HIV expenditure not elsewhere classified in any of the above categories (codes 1 through 10).</p> <p>Please ensure that none of the programmes or activities listed here are duplicated with any of the previous categories.</p> <p>Any programme or service listed below should be mutually exclusive with any of the codes listed above (codes 1 through 10).</p>

Annex 5: Additional guidance on constructing Global AIDS Monitoring indicators on HIV and tuberculosis (GAM indicators 10.1–10.3)



Indicator 10.1: Percentage of estimated *HIV-positive incident tuberculosis (TB)* cases that received treatment for both TB and HIV = $(B + E)/\text{estimated number}$

Note: Numerator for Indicator 10.1 should be equal to the number of HIV-positive new and relapse TB patients who started or continued on antiretroviral therapy as reported by the national TB programme to WHO (TB indicator 2.29). Please reconcile data with the national TB programme.

Indicator 10.2: Percentage of people living with HIV with active TB disease among people living with HIV newly enrolled in HIV treatment = B/A

Note: Numerator for Indicator 10.1 will be greater than for 10.2.

Indicator 10.3: Percentage of people living with HIV newly enrolled in HIV treatment started on TB preventive therapy = C/A

Percentage of people living with HIV currently enrolled in HIV treatment started on TB preventive therapy = $(C + F)/(A + D)$

Copyright © 2019
Joint United Nations Programme on HIV/AIDS (UNAIDS)
All rights reserved.

The designations employed and the presentation of the material in this publication do not imply the expression of any opinion whatsoever on the part of UNAIDS concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. UNAIDS does not warrant that the information published in this publication is complete and correct and shall not be liable for any damages incurred as a result of its use.

UNAIDS/JC2976



UNAIDS
Joint United Nations
Programme on HIV/AIDS

20 Avenue Appia
1211 Geneva 27
Switzerland

+41 22 791 3666

unaids.org