Goal 3: Ensure healthy lives and promote well-being for all at all ages

Target 3.3: By 2030, end the epidemics of AIDS, tuberculosis, malaria and neglected tropical diseases and combat hepatitis, water-borne diseases and other communicable diseases

Indicator 3.3.1: Number of new HIV infections per 1,000 uninfected population, by sex, age and key populations

Institutional information

Organization(s):

The Joint United Nations Programme on HIV/AIDS (UNAIDS)

Concepts and definitions

Definition:

The number of new HIV infections per 1,000 uninfected population, by sex, age and key populations as defined as the number of new HIV infections per 1000 person-years among the uninfected population.

Rationale:

The incidence rate provides a measure of progress toward preventing onward transmission of HIV.

Methodology

Computation method:

Longitudinal data on individuals are the best source of data but are rarely available for large populations. Special diagnostic tests in surveys or from health facilities can be used to obtain data on HIV incidence. HIV incidence is thus modelled using the Spectrum software.

Treatment of missing values:

- ***At country level:***

Estimates are not collected from countries with populations < 250,000. In addition no estimates are available for 10 countries with very small HIV epidemics who do not produce estimates. For some countries the estimates were not finalized at the time of publication. The country specific values are not presented for these countries.

- ***At regional and global levels:***

The countries with populations < 250,000 and the 10 countries that do not produce estimates are not included in regional or global level estimates. For countries in which the estimates were not finalized at the time of publication, the unofficial best estimates are included in the regional and global values.

Regional aggregates:

Available for the World, the SDG regional groupings, LDCs, LLDCs and SIDS.

Sources of discrepancies:

These variations will differ by country.

Methods and guidance available to countries for the compilation of the data at the national level:

A description of the methodology is available at:

http://www.unaids.org/sites/default/files/media_asset/Estimates_methods_2018.pdf

Countries are providing with capacity building workshops every two years on the methods. In addition, they are supported by in country specialists in roughly 45 countries. Where no in country specialists are available remote assistance is provided. Guidelines are also available at: http://www.unaids.org/en/dataanalysis/datatools/spectrum-epp and at www.avenirhealth.org

Quality assurance:

http://www.unaids.org/sites/default/files/media_asset/Estimates_methods_2018.pdf

Countries are fully involved in the development of the estimates. The final values are reviewed for quality by UNAIDS and approved by senior managers at national Ministries of Health.

Data sources

Description:

Spectrum modelling, household or key population surveys with HIV incidence-testing,

Other possible data sources: Regular surveillance system among key populations.

Collection process:

Country teams use UNAIDS-supported software to develop estimates annually. The country teams are comprised of primarily epidemiologists, demographers, monitoring and evaluation specialists and technical partners.

The software used to produce the estimates is Spectrum—developed by Avenir Health (www.avenirhealth.org)—and the Estimates and Projections Package, which is developed by the East-West Center (www.eastwestcenter.org). The UNAIDS Reference Group on Estimates, Modelling and Projections provides technical guidance on the development of the HIV component of the software (www.epidem.org).

Data availability

Description:

170 countries in 2019

Time series:

2000-2018

Disaggregation:

General population, Age groups (0-14, 15-24, 15-49, 50+ years), sex (male, female, both)

Calendar

Data collection:

Data sources are compiled all year long. The spectrum models are created in the first three months of every year and finalized by June. The next report will be in July 2020.

Data release:

June 2018, June 2019, etc.

Data providers

The estimates are produced by a team consisting of ministry of health, national AIDS advisory groups and development partners. The results are signed off on by senior managers at the ministries of health.

Data compilers

UNAIDS

References

URL:

http://unaids.org

References:

http://www.unaids.org/en/dataanalysis/datatools/spectrum-epp

UNAIDS Global AIDS Monitoring: Indicators for monitoring the 2016 United Nations Political Declaration on Ending AIDS

Political Declaration on HIV and AIDS: On the Fast Track to Accelerating the Fight against HIV and to Ending the AIDS Epidemic by 2030 http://www.unaids.org/sites/default/files/media_asset/2017-Global-AIDS-Monitoring_en.pdf

UNAIDS website for relevant data and national Spectrum files http://aidsinfo.unaids.org/

Consolidated Strategic Information Guidelines for HIV in the Health Sector. Geneva: World Health Organization https://www.who.int/hiv/pub/guidelines/en/ accessed on 7 February 2019