

Revised HIV estimates

Overview

As published in the *2007 AIDS epidemic update*, WHO and UNAIDS have revised the estimated number of people living with HIV downwards from 39.5 million [34.1–47.1 million] in 2006 to 33.2 million [30.6–36.1 million], in 2007. The revisions are **due mainly to improved methodology, better surveillance by countries and changes in the key epidemiological assumptions** used to calculate the estimates.

Approximately 70% of the difference is explained by reductions in prevalence in **India** (which alone accounts for approximately half of the revisions) and several sub-Saharan African countries, including **Nigeria, Mozambique, Zimbabwe, Kenya and Angola**.

Most of the estimates in the *2007 AIDS epidemic update* are lower than those published in previous reports, not just for 2007 but also for past years.

Revisions to methodology

In 2007 UNAIDS and WHO undertook the most comprehensive review of HIV and AIDS estimation methodology since 2001. This step was taken as part of the continuing process of refining HIV estimates based on the latest scientific developments. As recommended by the UNAIDS Reference Group on Estimates, Modelling and Projections.¹

In addition, from 14–15 November 2007, UNAIDS and WHO convened **an international consultation on HIV estimates**, bringing together more than 30 global experts to review the processes methodologies and tools used by UNAIDS and WHO to produce HIV estimates.

The consultation recognised that UNAIDS and WHO's 2007 estimates are based on the best available data and methodologies and made a number of recommendations. The recommendations are available on the UNAIDS Web site (see [International consultation on AIDS estimates: Recommendations](#)).

Improvements in surveillance

Over the past few years a number of countries, mostly in **sub-Saharan Africa and Asia**, have expanded and improved their **HIV surveillance systems**, conducting new, more accurate studies. These new data have been used to help produce a better understanding of the global AIDS epidemic.

- In some countries, improvements have been through an **increase of sentinel surveillance** sites both in number and in geographical coverage.
- In addition, 30 countries, mostly in Africa, have conducted national representative **population-based household surveys**.

¹ The UNAIDS Reference Group on HIV/AIDS Estimates, Modelling and Projections is made up of leading researchers in HIV, epidemiology, demography and related areas. The Reference Group assesses the most recent published and unpublished work drawn from research studies in different countries. It also reviews advances in the understanding of HIV epidemics, and suggests methods to improve the quality and accuracy of the estimates.

- The new information has also led **to adjustments for other countries** with similar epidemics that have not yet conducted this research.

Changes in key epidemiological assumptions

In addition, **several new assumptions** have been incorporated into the 2007 version of the estimation software tools² used by UNAIDS and WHO.

- The way in which **data from antenatal clinics** is used to help calculate HIV prevalence in the general population has been adapted.
 - In countries which have not conducted a national population-based survey, HIV data from antenatal clinic attendees has been **adjusted downward on average by a factor of 0.8**. Previously only the HIV prevalence data from antenatal clinics in rural areas were adjusted.
- The **average number of years** that people living with HIV are estimated to survive without treatment has been increased from 9 to 11 years.
 - This **longer average survival period has resulted in lower estimates** of new HIV infections and deaths due to AIDS.

Systematic reviews

All of the above **changes have resulted in improved estimates** of the number of people living with HIV, mortality due to AIDS, the number of new HIV infections and the number of people in need of antiretroviral treatment.

UNAIDS and WHO will continue to work with experts and country counterparts to **systematically review the methods used to derive HIV estimates** and ensure they reflect up-to-date scientific evidence and research.

Contact

Sophie Barton-Knott | UNAIDS Geneva | +41 22 791 1697 | bartonknotts@unaids.org

UNAIDS is an innovative joint venture of the United Nations, bringing together the efforts and resources of the UNAIDS Secretariat and ten UN system organizations in the AIDS response. The Secretariat headquarters is in Geneva, Switzerland—with staff on the ground in more than 80 countries. Coherent action on AIDS by the UN system is coordinated in countries through UN theme groups, and joint programmes on AIDS. UNAIDS' Cosponsors include UNHCR, UNICEF, WFP, UNDP, UNFPA, UNODC, ILO, UNESCO, WHO and the World Bank. Visit the UNAIDS Web site at www.unaids.org

² Estimation and Projection Package (EPP) 2007 and Spectrum 3