

The Global HIV/AIDS Epidemic

June 2008

Since 1981, when the first AIDS cases were identified in the United States followed by Africa the next year, there has been a growing understanding of the HIV/AIDS epidemic's trajectory and the toll it has taken across the globe. Over time, refinements in methodology, increased data availability, and growing knowledge about the natural history of HIV disease necessitate revisions in HIV estimates. This year, there has been another major revision in the data compared to prior published figures. Better data also provide a clearer picture of trends over time. The latest estimates from UNAIDS and the WHO indicate that between 2001 and 2007:¹

- The number of people living with HIV/AIDS globally rose from **29 million** in 2001 to **33.2 million** in 2007 due to continuing new infections, people living longer with HIV, and general population growth;
- The global prevalence rate (the percent of the population with HIV) leveled over this period at **0.8%**;
- Annual deaths increased from **1.7 million** in 2001 to **2.1 million** in 2007 but have declined in the last couple of years due in part to antiretroviral treatment scale up;
- New HIV infections are believed to have peaked in the late 1990s and declined between 2001 and 2007 from **3.2 million** to **2.5 million**. This decline is attributable to natural trends in the epidemic itself and to prevention efforts. Still, in 2007, there were more than 6,800 new HIV infections each day;²
- Women represent half of all people living with HIV/AIDS, as they have since the mid-1990s;
- HIV is among the leading causes of death worldwide and the number one cause of death in sub-Saharan Africa;
- Most people with HIV are unaware that they are infected.

These most recent trends, and the snapshot provided below, represent significant revisions by UNAIDS/WHO based largely on improved methodology and better data availability from countries over time. Importantly, methodological changes have led to revisions in earlier published estimates including significant reductions between 2006 and 2007. For example, the current estimate of the number of people living with HIV/AIDS is a reduction of 6.3 million from last year's published estimate. Most of the reduction (70%) is explained by revisions to prevalence estimates in India and five sub-Saharan African countries. Both incidence and mortality estimates are impacted by these changes and also reflect an increase in the estimated survival time for a person living with HIV (increasing from 9 to 11 years).^{1,3,4}

Current Global Snapshot

HIV/AIDS cases have been reported in all regions of the world, but most people living with the disease (more than 95%) reside in low- and middle-income countries, where most new HIV infections and AIDS-related deaths occur.^{1,2} Sub-Saharan Africa has been hardest hit, followed by the Caribbean; there is also concern about the epidemic in parts of Eastern Europe and Asia (see Figure 1).

Worldwide, HIV is primarily transmitted heterosexually, although risk factors vary within and across populations. In many regions of the world, men who have sex with men, injection drug users, and sex workers account for significant proportions of infections.¹

- **Sub-Saharan Africa.**^{1,5,6} Sub-Saharan Africa, the hardest hit region, is home to two-thirds (68%) of people living with HIV/AIDS, or 22.5 million people, but only about 11% of the world's population.

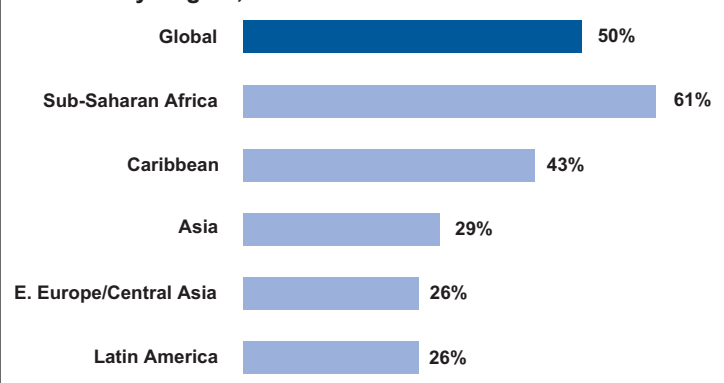
Figure 1: HIV Prevalence & Incidence by Region^{1,2}

Region	Total No. (%) Living with HIV/AIDS, end of 2007	Newly Infected in 2007	Adult (15-49) Prevalence Rate, 2007
Global Total	33.2 million (100%)	2.5 million	0.8%
Sub-Saharan Africa	22.5 million (67.8%)	1.7 million	5.0%
South/South-East Asia	4.0 million (12.0%)	340,000	0.3%
Eastern Europe/Central Asia	1.6 million (4.8%)	150,000	0.9%
Latin America	1.6 million (4.8%)	100,000	0.5%
North America	1.3 million (3.9%)	46,000	0.6%
East Asia	800,000 (2.4%)	92,000	0.1%
Western/Central Europe	760,000 (2.3%)	31,000	0.3%
Middle East/North Africa	380,000 (1.1%)	35,000	0.3%
Caribbean	230,000 (0.7%)	17,000	1.0%
Oceania	75,000 (0.2%)	14,000	0.4%

Most of the world's children with HIV/AIDS (88%) live in the region. Almost all nations in this region have generalized HIV/AIDS epidemics—that is, their national HIV prevalence rate is greater than 1%. In several countries, more than 10% of adults are already estimated to be HIV positive. South Africa is estimated to have more than 5 million people living with HIV/AIDS, the highest in the world, and almost one in five South African adults is HIV positive. Swaziland has the highest prevalence rate in the world. However, the latest data are promising—in most of the region, national HIV prevalence has either stabilized or is showing signs of decline.

- **Latin America & the Caribbean.**^{1,5,6} Nearly 2 million people are estimated to be living with HIV/AIDS in Latin America and the Caribbean combined, 117,000 of whom were newly infected with HIV in 2007. Ten countries in the region have generalized epidemics. The Caribbean, with an adult prevalence rate of 1.0%, is the second hardest hit region in the world after sub-Saharan Africa. The Dominican Republic and Haiti have the highest prevalence rates in the region and together account for nearly three-quarters of those living with HIV in the Caribbean.
- **Eastern Europe & Central Asia.**^{1,5,6} An estimated 1.6 million people are living with HIV/AIDS in this region, up from 630,000 in 2001 (a 150% increase). The epidemic is driven by injection drug use (accounting for 62% of cases for which transmission data is available); heterosexual sex accounts for 37% of cases. The Russian Federation and Ukraine account for nearly 90% of newly reported HIV diagnoses in the region. Russia has the largest number of people living with HIV/AIDS in the region.
- **Asia.**^{1,5} Nearly 5 million people are living with HIV/AIDS across South/South-East Asia and East Asia. There is wide variation in the epidemic across the region. While epidemics in Cambodia, Myanmar, and Thailand show declines in HIV prevalence, those in Indonesia, and Viet Nam are growing. The region is also home to the two most populous nations in the world—China and India—and even relatively low prevalence rates translate into large numbers of people. Recently, India's HIV/AIDS prevalence estimate was adjusted downward, primarily due to better data availability. It is now estimated to be 2.5 million.⁸

Figure 2: Women as Percent of Adults (15+) Living with HIV/AIDS by Region, 2007¹



Impact on Women & Young People

- Women represent half (50%) of all adults living with HIV/AIDS, as they have since the mid-1990s. The impact on women is more significant in sub-Saharan Africa, where women represent 61% of all adults living with HIV/AIDS (See Figure 2), and their share is growing in Latin America, Asia, and Eastern Europe.¹ Gender inequalities in social and economic status and in access to prevention and care services increase women's vulnerability to HIV. Sexual violence may also increase women's risk, and women, especially young women, are biologically more susceptible to HIV infection than men. The epidemic has multiple effects on women: added responsibilities of caring for sick family members; loss of property if they become widowed and/or infected; and even violence when their HIV status is discovered.
- Teens and young adults, particularly girls and young women, continue to be at the center of the epidemic. Young people aged 15–24 account for about 40% of new HIV infections (among those 15 and over).^{1,2} In sub-Saharan Africa, on average, three young women are infected for every young man; in some countries in the Caribbean, young women are more than twice as likely to be infected with HIV compared to young men.⁶ Still, there are encouraging signs. Recent data indicate that HIV prevalence among young pregnant women attending antenatal clinics has declined since 2000/2001 in 11 of 15 countries with sufficient data for such analysis. In addition, preliminary data from several countries indicate reductions in risk behavior among young people.¹
- Globally, there were 2.1 million children living with HIV/AIDS, 420,000 new infections, and 290,000 deaths due to AIDS among children in 2007.²
- In 2007, there were an estimated 11.4 million AIDS orphans (children who had lost one or both parents to the epidemic) in sub-Saharan Africa, the region that accounts for most of the world's AIDS orphans.¹

The Multisectoral Impact of AIDS

The global HIV pandemic has had a deeper, multisectoral impact on the structure of many nations, affecting their development and economic growth, communities, households, and individuals:⁹

- AIDS has been identified as a serious challenge to development, with both short and long-term economic effects. Because HIV/AIDS often hits working age populations hardest, the workforce of many nations have been affected, as skilled workers are lost to the epidemic.
- The education sector is also affected, as AIDS claims the lives of teachers and has contributed to serious teacher shortages in several African countries. It also can affect school attendance and enrollment among children affected by HIV/AIDS.
- Increasing demand for health care services is overwhelming the public health infrastructure in many developing countries. At the same time, many countries are losing large numbers of health care workers to AIDS.
- Many of the nations hardest hit by HIV/AIDS also suffer from malnutrition, food insecurity, and famine. These challenges are interrelated with HIV/AIDS, each intensifying and complicating the effects of the other.

- The demographic effects of the epidemic may also be significant in hard hit countries, affecting their population growth, mortality rates, and life expectancy. Individuals die at prematurely young ages during their most productive and reproductive years. One consequence of this occurrence is that there are fewer working age people to support children and the elderly. In addition, in some parts of world, there are disproportionately fewer women compared to men due to HIV mortality.

The Global Response

The past few years have brought greater attention by the international community to HIV/AIDS, leading to several important initiatives: The United Nations General Assembly Special Session on HIV/AIDS and Declaration of Commitment; The Global Fund to Fight AIDS, Tuberculosis and Malaria; The United Nation's Universal Access Campaign; and the U.S. President's Emergency Plan for AIDS Relief (PEPFAR). Affected country governments and civil society also play critical and increasing roles in many national responses to the epidemic. Global funding for HIV/AIDS has increased over time, although resources fall short of projected need and, despite increased efforts, most people living with HIV and those at risk do not have access to prevention, care, and treatment:

- UNAIDS estimated that spending on HIV/AIDS rose from about US\$300 million in 1996 to \$8.9 billion in 2006 and was projected to reach \$10 billion in 2007, but need is estimated to be much higher.¹⁰
- The lack of resources has limited the ability to bring prevention and treatment programs to scale and stem the tide of the epidemic in many hard hit nations. For example only 10–11% of people in low- and middle-income countries have ever been tested for HIV and received their results; only 10% of injection drug users in Eastern Europe and Central Asia, where injection drug use accounts for most HIV infections, have access to prevention programs; and while treatment coverage has certainly increased over time, approximately 7 out of every 10 people with HIV in need of antiretroviral therapy in low- and middle-income countries do not have such access. However, there have also been some important strides made in the global response to HIV/AIDS: for example, 33% of pregnant women received antiretroviral therapy to prevent mother-to-child transmission of HIV in 2007 as compared to only 10% in 2004, and access to prevention and treatment programs for children has risen dramatically.¹¹
- Most funding for HIV/AIDS is expected to come from international donors, although affected country governments also have an important role to play. In 2006, major donor governments committed \$5.6 billion to global HIV/AIDS efforts in developing countries. The U.S. is a key part of the global response, contributing the highest dollar amount to HIV/AIDS. In its fiscal year (FY) 2007, the U.S. federal funding commitment for global HIV/AIDS, as part of PEPFAR, totaled \$4.6 billion, including funding for prevention, care, treatment, research, and the Global Fund.¹³

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