



The Global HIV/AIDS Epidemic

April 2009

HIV, the virus that causes AIDS, “acquired immunodeficiency syndrome,”<sup>1</sup> has become one of the world’s most serious health and development challenges. Since the first cases were reported in 1981:

- More than 25 million people have died of AIDS worldwide, and another 33 million are currently living with HIV/AIDS.<sup>1</sup>
- While cases have been reported in all regions of the world, almost all those living with HIV (96%) reside in low- and middle-income countries, particularly in sub-Saharan Africa.<sup>2</sup>
- Most people living with HIV or at risk for HIV do not have access to prevention, care, and treatment, and there is still no cure.<sup>3</sup>
- HIV primarily affects those in their most productive years; more than half of new infections are among those under age 25.
- The HIV epidemic not only affects the health of individuals, it impacts households, communities, and the development and economic growth of nations. Many of the countries hardest hit by HIV also suffer from other infectious diseases, food insecurity, and other serious problems.
- Despite these challenges, there have been successes and promising signs. New global efforts have been mounted to address the epidemic, particularly in the last decade. Prevention has helped to reduce HIV prevalence rates in a small but growing number of countries and new HIV infections are believed to be on the decline. In addition, the number of people with HIV receiving treatment in resource poor countries has increased 10-fold since 2002, reaching an estimated 3 million by 2007.<sup>2</sup>

- New HIV infections are believed to have peaked in the late 1990s and declined between 2001 and 2007, from 3 million to **2.7 million**. The decline is attributable to natural trends in the epidemic and to prevention. Still, there were more than 7,000 new HIV infections per day in 2007.
- Most new infections are transmitted heterosexually, although risk factors vary. In some countries, men who have sex with men, injecting drug users, and sex workers are at significant risk.
- An estimated 8 in 10 people infected with HIV do not know it.<sup>4</sup>
- HIV has led to a resurgence of tuberculosis (TB), particularly in Africa, and TB is a leading cause of death for people with HIV worldwide.<sup>5,6</sup>
- Women represent half of all people living with HIV worldwide, and more than half (59%) in sub-Saharan Africa. Gender inequalities, differential access to services, and sexual violence increase women’s vulnerability to HIV, and women, especially younger women, are biologically more susceptible to HIV.
- Young people, ages 15–24, account for 45% of new HIV infections (among those 15 and over). In sub-Saharan Africa, the HIV prevalence rate among young women is nearly 3 times that of their male counterparts.
- Globally, there were 2 million children living with HIV in 2007, 370,000 new infections among children, and 270,000 AIDS deaths. There are approximately 15 million AIDS orphans today (children who have lost one or both parents to HIV), most of whom live in sub-Saharan Africa (77%).

Figure 1: Adult HIV/AIDS Prevalence Rate (Ages 15–49), 2007<sup>1,2</sup>

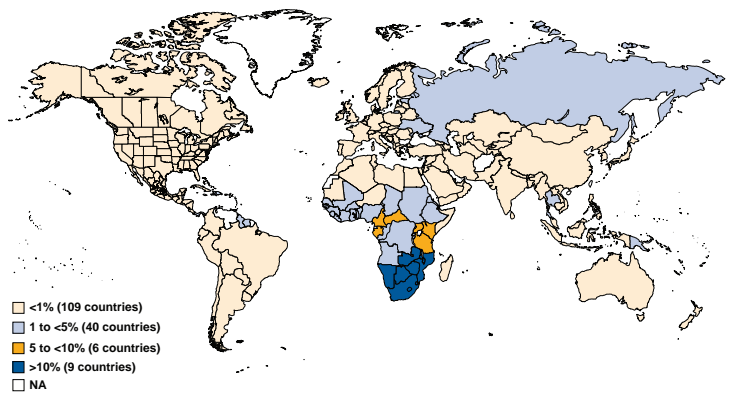


Figure 2: HIV Prevalence & Incidence by Region (Ages 15–49)<sup>1,2</sup>

Region	Total No. (%) Living with HIV end of 2007	Newly Infected in 2007	Adult Prevalence Rate, 2007
<b>Global Total</b>	<b>33 million (100%)</b>	<b>2.7 million</b>	<b>0.8%</b>
Sub-Saharan Africa	22.0 million (67%)	1.9 million	5.0%
South/South-East Asia	4.2 million (13%)	330,000	0.3%
Latin America	1.7 million (5%)	140,000	0.5%
Eastern Europe/Central Asia	1.5 million (5%)	110,000	0.8%
North America	1.2 million (4%)	54,000	0.6%
East Asia	740,000 (2%)	52,000	0.1%
Western/Central Europe	730,000 (2%)	27,000	0.3%
Middle East/North Africa	380,000 (1%)	40,000	0.3%
Caribbean	230,000 (0.7%)	20,000	1.1%
Oceania	74,000 (0.2%)	13,000	0.4%

Current Global Snapshot

According to the latest global estimates from UNAIDS and WHO:<sup>1,2</sup>

- There were **33 million** people living with HIV in 2007, up from 29.5 million in 2001, the result of continuing new infections, people living longer with HIV, and general population growth.
- The global prevalence rate (the percent of people ages 15–49 who are infected) has leveled since 2000 and was 0.8% in 2007.
- **2 million** people died of AIDS in 2007, up from 1.7 million in 2001, but deaths are now declining due in part to antiretroviral treatment (ART) scale-up. HIV is a leading cause of death worldwide and the number one cause of death in Africa.

- **Sub-Saharan Africa.** Sub-Saharan Africa, the hardest hit region, is home to two-thirds (67%) of people living with HIV but only 11–12% of the world’s population. Most children with HIV live in this region (90%). Almost all of the region’s nations have generalized HIV epidemics—that is, their national HIV prevalence rate is greater than 1%. In 9 countries, more than 10% of adults are estimated to be HIV-positive. South Africa has the highest number of people living with HIV in the world (5.7 million), and almost one in five South African adults is HIV-positive. Swaziland has the highest prevalence rate in the world (26.1%). Recent data offer promising signs, with national HIV prevalence stabilizing or even declining in several countries in the region.

- **Latin America & The Caribbean.** Nearly 2 million people are estimated to be living with HIV in Latin America and the Caribbean combined, including 160,000 newly infected in 2007. The Caribbean itself, with an adult HIV prevalence rate of 1.1%, is the second hardest hit region in the world after sub-Saharan Africa. Ten countries in Latin America and the Caribbean have generalized epidemics, with the Bahamas having the region's highest prevalence rate (3.0%), and Brazil the greatest number of people living with the disease (730,000).
- **Eastern Europe & Central Asia.** An estimated 1.5 million people are living with HIV in this region, up from 650,000 in 2001 (a 130% increase). The epidemic is driven primarily by injecting drug use, although heterosexual transmission also plays an important role. Estonia, the Russian Federation, and Ukraine have the highest prevalence rates in the region, and Russia has the region's highest number of people living with HIV (940,000).
- **Asia.** Nearly 5 million people are living with HIV across South/South-East Asia and East Asia. While HIV prevalence appears to be declining in Cambodia, Myanmar, and Thailand, it is on the rise in Indonesia, Pakistan, and Viet Nam. 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.

### Prevention and Treatment

Numerous **prevention** interventions exist to combat HIV, and new tools, such as microbicides and vaccines, are currently being researched.<sup>8</sup>

- Effective prevention strategies include behavior change programs, condoms, HIV testing, blood supply safety, harm reduction efforts for injecting drug users, and male circumcision.<sup>8</sup>
- Experts recommend that prevention be based on “knowing your epidemic,” that is, tailoring prevention to the local context and epidemiology, and using a combination of prevention strategies, bringing programs to scale, and sustaining efforts over time.<sup>1,8</sup>
- Access to prevention, however, remains limited; only one in five of those at risk have access to needed services.<sup>9</sup>

**HIV treatment** includes the use of combination antiretroviral therapy to attack the virus itself, and medications to prevent and treat the many opportunistic infections that can occur when the immune system is compromised by HIV.<sup>3</sup>

- Combination ART, first introduced in 1996, has led to dramatic reductions in morbidity and mortality, and access has increased in recent years, rising from about a quarter million in 2002 to nearly 3 million in 2007 (31% of those in need).<sup>3</sup>
- The greatest increase was in Sub-Saharan Africa, where the number of people receiving ART surpassed 2 million in 2007.<sup>3</sup>
- The share of pregnant women receiving ART for the prevention of mother-to-child transmission of HIV increased from 10% in 2004 to 33% in 2007. Access to ART among children has also risen significantly, although they have less access than adults.<sup>3</sup>
- Despite these successes, more than two-thirds of those in need of ART still have not received it.<sup>2</sup>

### The U.S. Government Response

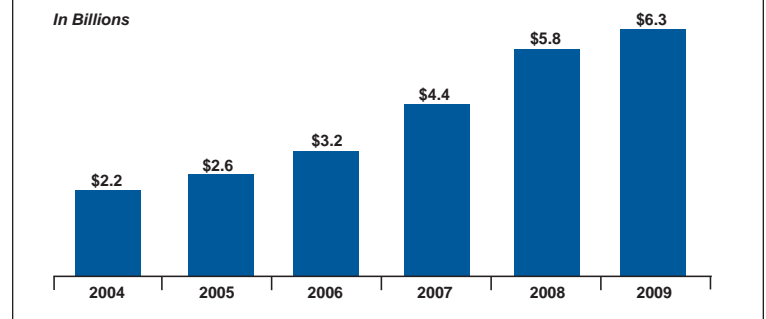
The U.S. first provided funding to address the global HIV epidemic in 1986. U.S. efforts and funding increased slowly over time, intensifying relatively recently. Key initiatives include:

- In 1999, President Clinton announced the Leadership and Investment in Fighting an Epidemic (LIFE) Initiative to address HIV in 14 African countries and in India.
- In 2002, President Bush announced the International Mother and Child HIV Prevention Initiative focused on 12 African and 2 Caribbean countries.
- The passage of the President's Emergency Plan for AIDS Relief (PEPFAR) in 2003 brought significant new attention and funding to address the global epidemic, as well as TB and malaria.<sup>10</sup> PEPFAR authorized up to \$15 billion over 5-years, primarily for 15 hard hit “focus countries”, and multilateral support to the Global Fund to Fight AIDS, Tuberculosis and Malaria (Global Fund), an independent, international financing institution which in turn provides grants to countries to address HIV/AIDS.
- In 2008, PEPFAR was reauthorized for an additional 5-year period and up to \$48 billion to combat HIV, TB, and malaria.<sup>11</sup> Funding

for HIV/AIDS under PEPFAR, including Global Fund contributions, was \$5.8 billion in FY 2008, and is estimated to be \$6.3 billion in FY 2009.<sup>12</sup>

- Today, there are multiple federal departments, agencies, and programs that address the global epidemic, and the U.S. government is the single largest donor to international HIV efforts in the world, including the largest donor to the Global Fund.<sup>13</sup>

**Figure 3: U.S. Government Funding for Global HIV/AIDS Through PEPFAR, Bilateral and Global Fund Contributions, FY 2004–2009<sup>12</sup>**



### The Global Response to HIV/AIDS

Global efforts to combat HIV began in the first decade of the epidemic, with the creation of the WHO's Global Programme on AIDS in 1987, but did not increase until recently. UNAIDS formed in 1996 to help galvanize worldwide attention to and funding for AIDS. More recent initiatives include:

- In 2000, all nations agreed to global HIV targets to halt and begin to reverse the spread of HIV by 2015, as part of the UN Millennium Development Goals (MDGs), and the World Bank launched its Multi-Country AIDS Program (MAP).
- In 2001, a United Nations General Assembly Special Session on HIV/AIDS (UNGASS) was convened and the Global Fund was created. More recently, in 2006, UNAIDS launched a Universal Access Campaign to reach universal treatment access by 2010.
- The role of affected country governments and civil society has also been critical to the response.
- As a result of increased efforts, total global spending on HIV rose from \$300 million in 1996 to \$13.7 billion in 2008. Most funding has come from international donors who, in 2007, committed \$6.6 billion to address HIV in developing countries.<sup>14</sup> Hard hit countries have also provided significant resources to address their epidemics. The Global Fund has disbursed over \$4 billion to more than 110 countries for HIV efforts to date,<sup>15</sup> and the private sector, including foundations and corporations, also plays a major role, particularly the Bill & Melinda Gates Foundation which has committed \$2.3 billion for HIV to date, with additional funding provided to the Global Fund.<sup>16</sup>
- Despite these increases, resource needs are still estimated to be much higher (\$19.8 billion in 2009, rising to \$25.1 billion in 2010), leaving a significant gap.<sup>17</sup>

<sup>1</sup> UNAIDS/WHO. *2008 Report on the Global AIDS Epidemic*; 2008.

<sup>2</sup> UNAIDS/WHO. *Core Slides: Global Summary of the HIV and AIDS Epidemic*; 2008.

<sup>3</sup> WHO. *Towards universal access: Scaling up priority HIV/AIDS interventions in the health sector*; June 2008.

<sup>4</sup> WHO. HIV Testing and Counseling: [www.who.int/hiv/topics/vct/en/](http://www.who.int/hiv/topics/vct/en/).

<sup>5</sup> WHO. Tuberculosis: [www.who.int/mediacentre/factsheets/fs104/en/index.html](http://www.who.int/mediacentre/factsheets/fs104/en/index.html).

<sup>6</sup> UNAIDS. *Tuberculosis and HIV* [website]; 2008.

<sup>7</sup> Population Reference Bureau. *2007 World Population Data Sheet*; 2007.

<sup>8</sup> Global HIV Prevention Working Group. *Behavior Change for HIV Prevention: (Re) Considerations for the 21st Century*, August 2008.

<sup>9</sup> UNAIDS. HIV prevention [website]; 2008.

<sup>10</sup> U.S. Congress. P.L. 108-25; May 27, 2003.

<sup>11</sup> PEPFAR. About PEPFAR [website]; 2009.

<sup>12</sup> KFF analysis of data from OMB and OGAC.

<sup>13</sup> KFF. *U.S. Federal Funding for HIV/AIDS: The FY 2009 Budget Request*; April 2008.

<sup>14</sup> KFF/UNAIDS. *Financing the Response to AIDS in Low- and Middle-Income Countries: International Assistance from the G8, European Commission and Other Donor Governments, 2007*, Chartpack; July 2008.

<sup>15</sup> The Global Fund to Fight AIDS, Tuberculosis and Malaria: [www.theglobalfund.org/programs/search/?search=3&lang=en](http://www.theglobalfund.org/programs/search/?search=3&lang=en).

<sup>16</sup> Personal communication, Bill & Melinda Gates Foundation; February 2009.

<sup>17</sup> UNAIDS. *What Countries Need: Investments needed for 2010 Targets*; February 2009.