

The Global HIV/AIDS Epidemic

Aug 05, 2014

Overview

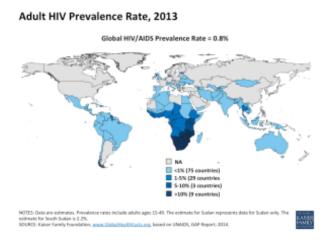
HIV, the virus that causes AIDS, "acquired immunodeficiency syndrome"1 has become one of the world's most serious health and development challenges. The first cases were reported in 1981 and today:

- There are approximately 35 million people currently living with HIV and tens of millions of people have died of AIDS-related causes since the beginning of the epidemic.1
- While new cases have been reported in all regions of the world, approximately 68% are in sub-Saharan Africa.2
- 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.3
- HIV primarily affects those in their most productive years; about 40% of new infections are among those under age 25.2
- HIV 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, new global efforts have been mounted to address the epidemic, particularly in the last decade, and there are signs that the epidemic may be changing course. The number of people newly infected with HIV and the number of AIDS-related deaths have declined, contributing to the stabilization of the epidemic. In addition, the number of people with HIV receiving treatment has increased to 12.9 million in 2013, a 5.6 million increase since 2010.1

Current Global Snapshot

According to the latest estimates from UNAIDS:1, 2

- There were **35.0 million** people living with HIV in 2013, up from 29.8 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



Adult HIV Prevalence Rate, 2013

leveled since 2001 and was 0.8% in 2013.

1.5 million people died of AIDS in 2013, a 35% decrease since 2005. Deaths have declined 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.

- New HIV infections globally have declined by 38% since 2001. In 27 countries with sufficient quality data, new HIV infections have decreased by more than 50% and by more than 75% in 10 countries. Still, there were about **2.1 million** new infections in 2013 or about 6,000 new infections per day.
- 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. When compared to the general population, HIV prevalence rates are estimated to be 19 times higher among men who have sex with men, 28 times higher among injecting drug users, and 12 times higher among sex workers.
- Although HIV testing capacity has increased over time, enabling more people to learn their HIV status, approximately half of all people with HIV are still unaware they are infected.3
- 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.4, 5 In 2012, approximately 13% of new TB cases occurred in people living with HIV. However, between 2004 and 2012 TB deaths in people living with HIV declined by 36%, largely due to the scale up of joint HIV/TB services.
- Women represent half (50%) of all adults living with HIV worldwide. HIV is the leading cause of death among women of reproductive age. Gender inequalities, differential access to service, 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 approximately 33% of new HIV infections (among those 15 and over).2 In sub-Saharan Africa, young women are twice as likely to become infected with HIV than their male counterparts. In some areas, young women are more heavily impacted than young men.

0,	,		
Figure 2: HIV Prevalence & Incidence by Region,			
Region	Total No. (% Living with HIV)	Newly Infected	Adult Prevalence Rate ²⁰ 1, 2
Global Total	35.0 million (100%)	2.1 million	0.8%
Sub-Saharan Africa	24.7 million (71%)	1.5 million	4.7%
Asia and the Pacific	4.8 million (14%)	350,000	0.2%
Western and Central Europe and North America	2.3 million (7%)	88,000	0.3%
Latin America	1.6 million (5%)	94,000	0.4%
Eastern Europe and Central Asia	1.1 million (3%)	110,000	0.6%
Caribbean	250,000 (<1%)	12,000	1.1%
Middle East and North Africa	230.000 (<1%)	25.000	0.1%

• Globally, there were **3.2 million** children living with HIV in 2013, 240,000 new infections among children, and 190,000 AIDS deaths.

• Sub-Saharan Africa. Sub-Saharan Africa, the hardest hit region, is home to 71% of people living with HIV but only about 13% of the world's population.1, 6 Most children with HIV live in this region (91%).2 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, 10% or more of adults are estimated to be HIV-positive. South Africa has the highest number of people living with HIV in the world (6.2 million). Swaziland has the highest prevalence rate in the world (27.4%). Recent data offer promising signs, with

national HIV prevalence and/or incidence stabilizing or even declining in many countries in the region.1

- Latin America & The Caribbean. About 1.9 million people are estimated to be living with HIV in Latin America and the Caribbean combined, including 106,000 newly infected in 2013. 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. Six countries in Latin America and the Caribbean have generalized epidemics, with the Bahamas having the region's highest prevalence rate (3.2%), and Brazil the greatest number of people living with the disease (730,000).1
- Eastern Europe & Central Asia. An estimated 1.1 million people are living with HIV in this region, including 110,000 newly infected in 2013. The epidemic is driven primarily by injecting drug use, although heterosexual transmission also plays an important role. The Russian Federation and Ukraine account for 85% of people living with HIV in the region.1
- Asia and the Pacific. An estimated 4.8 million people are living with HIV in Asia and the Pacific. 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.1

Prevention and Treatment

Numerous **prevention** interventions exist to combat HIV, and new tools, such as vaccines, are currently being researched.**1**, **3**, **7**

- Effective prevention strategies include behavior change programs, condoms, HIV testing, blood supply safety, harm reduction efforts for injecting drug users, and male circumcision. Additionally, recent research has shown that providing HIV treatment to people with HIV significantly reduces the risk of transmission to their negative partners and the use of antiretroviral-based microbicide gel has been found to reduce the risk of HIV infection in women. Pre-exposure antiretroviral prophylaxis (PrEP) has also been shown to be an effective HIV prevention strategy in individuals at high risk for HIV infection.
- 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. Access to prevention, however, remains limited.

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. In 2013, WHO released new treatment guidelines which recommend starting treatment of HIV earlier in the course of illness.**1**, **3**

• Combination ART, first introduced in 1996, has led to dramatic reductions in morbidity and mortality, and access has increased in recent years, rising to 12.9 million people in 2013, a 5.6 million increase in the number of people on treatment since 2010.

Globally, 37% of people living with HIV are receiving treatment, which includes 38% of adults and 24% of children living with HIV.

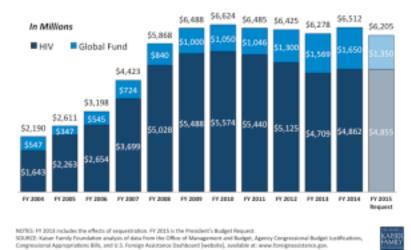
• Approximately 75% of all people receiving antiretroviral therapy live in sub-Saharan Africa.

The number of pregnant women receiving ART for the prevention of mother-to-child transmission of HIV increased to nearly 1 million in 2013. Access to ART among children has also risen significantly, although they have less access than adults.8

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 creation of the President's



Bilateral HIV Funding and U.S. Contributions to the Global Fund, FY 2004-FY 2015

Bilateral HIV Funding and U.S. Contributions to the Global Fund, FY 2004-FY 2015

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.**9** PEPFAR authorized up to \$15 billion over 5 years, primarily for bilateral programs and multilateral contributions to the Global Fund to Fight AIDS, Tuberculosis and Malaria (The Global Fund) as well as UNAIDS. In 2008, PEPFAR was reauthorized for an additional 5 years at up to \$48 billion and, in 2013, the *PEPFAR Stewardship and Oversight Act of 2013* extended a number of existing authorities and strengthened the oversight of the program through updated reporting requirements, among other things.**10** In FY 2014, Congress appropriated a total of \$4.9 billion for bilateral HIV and \$1.65 billion for the Global Fund, totaling \$6.5 billion. The President's FY 2015 budget request for bilateral HIV programs is \$4.9 billion. The Global Fund request is for \$1.35 billion, which would represent a decrease of \$300 million below FY 2014 levels. This \$300 million could be provided to the Global Fund through a new "Opportunity, Growth, and Security Initiative" proposed in the President's budget, which is subject to Congressional approval. Even if approved, U.S. contributions to the Global Fund are also contingent on the amount of support provided by other donors – as mandated by Congress, U.S. Global Fund contributions cannot exceed 33% of funding from all sources.11

• 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.11, 12

The Global Response to HIV/AIDS

International 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. UNAIDS was formed in 1996 to serve as the UN system's coordinating body and to help galvanize worldwide attention to AIDS. The role of affected country governments and civil society also has been critical to the response. Over time, funding by donors and others has increased and several key initiatives have been launched:

- 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, at the June 2011 UNGASS meeting, world leaders adopted a new Declaration that reaffirmed commitments and called for an intensification of efforts to combat the epidemic through new commitments and targets.13
- Most funding has come from international donor governments who disbursed \$8.5 billion in 2013, up from \$1.2 billion in 2002, to address HIV in low- and middle-income countries.12 Hard hit countries have also provided significant resources to address their epidemics. The Global Fund has committed more than \$16 billion for HIV efforts in more than 100 countries to date,14 and the private sector including foundations and corporations, also plays a major role, particularly the Bill & Melinda Gates Foundation which has committed more than \$2.5 billion for HIV, with additional funding provided to the Global Fund.15
- UNAIDS estimates global HIV funding totaled \$19.1 billion in 2013, however, this total is below the UNAIDS estimate of \$22 to \$24 billion needed to address the impacts of HIV.12

Endnotes

- 1. UNAIDS. GAP Report; 2013.
- 2. UNAIDS. 2014 Epidemiological slides GAP report; 2014.
- 3. WHO/UNAIDS/UNICEF. Global update on HIV treatment 2013; June 2013.
- 4. WHO. Tuberculosis.
- 5. WHO. Tuberculosis and HIV.
- 6. Population Reference Bureau. 20123 World Population Data Sheet; 2013.
- 7. Global HIV Prevention Working Group. *Behavior Change for HIV Prevention: (Re) Considerations for the 21st Century*; August 2008.
- 8. UNAIDS. Report on the Global AIDS Epidemic; 2013.

- 9. U.S. Congress. P.L. 108-25; May 27, 2003.
- 10. U.S. Congress. Public Law No: 113-56; December 2, 2013.
- Kaiser Family Foundation analysis of data from the Office of Management and Budget, Agency Congressional Budget Justifications, and Congressional Appropriations Bills. Totals include funding for HIV and the Global Fund. FY 2015 is President's Budget Request to Congress.
- 12. KFF/UNAIDS. Financing the Response to HIV in Low- and Middle-Income Countries: International Assistance from Donor Governments in 2013; July 2014.
- 13. UNAIDS. 2011 Political Declaration on HIV/AIDS; 2011.
- 14. Global Fund. Grants Portfolio; accessed July 2014.
- 15. Bill & Melinda Gates Foundation, *HIV Strategy Overview*; accessed July 2014.