

HIV Prevention Progress in the United States

HIV Prevention at a Critical Crossroads

The Centers for Disease Control and Prevention (CDC) works with other federal agencies, state and local health departments, national organizations, community-based organizations, the private sector, and advocates to reduce the spread of HIV in the United States. This work encompasses many components, such as

Behavioral interventions, which have proven to be effective in reducing the risk of acquiring HIV. Ensuring people have the information, motivation, and skills necessary to reduce their risk continues to be important.

HIV testing, which is critical in preventing the spread of HIV. Most people change behaviors to protect their partners if they know they are infected with HIV.

Antiretroviral therapy, which enables persons with HIV to live longer, healthier lives and reduce their risk of transmitting HIV. It is imperative that persons with HIV know their HIV status and are linked to ongoing care and prevention services.

Data about transmission rates, incidence, testing behaviors, and linkages to care all contribute to provide the most accurate picture about progress in our nation's battle against HIV.

- The HIV transmission rate - the estimated annual number of new HIV infections per 100 persons living with HIV- has decreased over the past two decades.
 - Since the mid-1980s, the transmission rate declined approximately 89% (from 44 transmissions per 100 people in 1984 to 5 transmissions per 100 people in 2006).¹
- HIV incidence – the annual number of new HIV infections – has decreased from an estimated high of about 130,000 new infections a year in 1985 to about 56,000 in 2006, despite there being more people every year living with HIV.²
- Perinatal HIV infections – those transmitted from mother to child – have decreased from 1,000-2,000 per year in the early 1990s to an estimated 138 per year in 2004.³

¹ Holtgrave DR, Hall HI, Rhodes PH, et al. Updated annual HIV transmission rates in the United States, 1977-2006. *J Acquir Immune Defic Syndr* 2009;50(2):236-238.

² Hall HI, Song R, Rhodes P, et al. Estimation of HIV incidence in the United States. *JAMA* 2008;300(5):520-529.

³ McKenna M, Hu X. Recent trends in the incidence and morbidity that are associated with perinatal human immunodeficiency virus infection in the United States. *Am J Obstet and Gynecol*, 2007; 197(3), Suppl: S10-S16.

- HIV infections among injection drug users declined by approximately 80% between 1988 and 2006.²
- The proportion of persons who know they are infected with HIV increased from 75% in 2003 to 79% in 2006.⁴ In October 2007, CDC launched the Expanded Testing Initiative. In two years,⁵
 - CDC grantees conducted nearly 1.4 million tests
 - 17,000 persons tested positive for HIV
 - Of these, 10,500 persons had no previous diagnosis of HIV
 - Nearly 6,500 of the 17,000 who tested positive had a previous diagnosis of HIV recorded in surveillance records. Yet many of these persons were unaware of their diagnosis.
 - Of the more than 10,000 persons newly diagnosed with HIV, 86% received their positive HIV test result, 75% were successfully linked to medical care, and 78% were referred to partner services, so that their partners could be advised of their potential exposure to HIV and counseled to receive HIV testing.

HIV prevention saves lives and money. It is estimated that prevention efforts have averted more than 350,000 HIV infections in the United States (a conservative estimate for the period 1991-2006), as well as more than \$125 billion in medical costs.^{6,7} For every HIV infection that is prevented, an estimated \$355,000 (in 2008 dollars) is saved in the cost of providing lifetime HIV treatment – significant cost-savings for the federal government, which spent an estimated \$12.3 billion on HIV care and treatment in 2009 and for the health care system as a whole.^{8,9}

These successes reflect remarkable efforts by people with HIV, communities at risk, health departments, and other CDC partners. However, CDC recognizes there is much work to be done. There are still over 50,000 new HIV infections occurring annually in the United States. Further, certain populations continue to be disproportionately affected by HIV – gay and bisexual men, African Americans, Hispanics/Latinos, and injection drug users – and one HIV infection is estimated to occur every nine and a half minutes in this country. Only by working together, making tough choices, and scaling our efforts to match the scope of the epidemic will we successfully turn the tide of HIV infections in the United States.

“As a nation, it is time to determine the direction we will take in fighting this serious – yet preventable – disease. One direction leads to complacency and the injustice of an HIV epidemic that affects the most vulnerable of Americans. The other turns toward a re-energized, science-driven effort to reduce the spread of HIV. Public health and our national conscience require we make the right choice.”

Dr. Jonathan Mermin
 Director
 CDC’s Division of HIV/AIDS Prevention

⁴ CDC. HIV prevalence estimates – United States, 2006. *MMWR* 2008;57(39):1073-1076.

⁵ CDC internal data.

⁶ Holtgrave DR. Written testimony on HIV/AIDS incidence and prevention for the US House of Representatives Committee on Oversight and Government Reform. September 16, 2008.

⁷ Holtgrave DR, Pinkerton SD. Updates of cost of illness and quality of life estimates for use in economic evaluations of HIV prevention programs. *J Acquir Immune Defic Syndr* 1997;16(1):54-62.

⁸ Schackman BR, Gebo KA, Walensky RP, et al. The lifetime cost of current human immunodeficiency virus care in the United States. *Med Care* 2006 Nov;44(11):990-997.

⁹ Kaiser Family Foundation. U.S. Federal Funding for HIV/AIDS: The FY 2009 Budget Request. Available at www.kff.org/hiv/aids/upload/7029-041.pdf. Accessed April 24, 2010.