

## **A Sentinel Event: CDC Releases New HIV Incidence Estimates for the United States**

*[Announcer] This podcast is presented by the Centers for Disease Control and Prevention. CDC – safer, healthier people*

[Kevin Fenton, MD, PhD] Hello. My name is Dr. Kevin Fenton and I am the Director of the National Center for HIV/AIDS, Viral Hepatitis, STD and TB Prevention at the Centers for Disease Control and Prevention. I'd like to welcome you to this video on CDC's 2006 estimates of HIV incidence in the United States.

Today, the Journal of the American Medical Association published the first data from a new and innovative CDC-developed system designed to estimate the number of new HIV infections (or incidence) for the United States in a given year. CDC considers the publication of these estimates to be a sentinel event in the course of the HIV epidemic for two reasons: first, this is the first national surveillance system of its kind in the world that is based on direct measurement of new HIV infections and, second, we now have much more direct information about the leading edge of the epidemic. In the coming years, this new system will provide trend information that will allow us to better monitor the course of the epidemic and assess the impact of our nation's HIV prevention efforts.

Now, all of this is possible because of CDC-developed technology called STARHS, which stands for Serological Testing Algorithm for Recent HIV Seroconversion. This can distinguish recent from longstanding HIV infections. CDC has also been working for a number of years to plan, establish, and evaluate this critical new national surveillance system. Once the system was mature enough to produce robust and reliable incidence estimates, it was imperative that the new methods underlying these estimates undergo rigorous scientific reviews. The review process took longer than we anticipated, but, in the end, it has produced estimates that are more reliable and scientifically sound than would have been possible without the rigorous review.

With a newfound ability to more accurately identify the leading edge of the epidemic, this new and innovative system will allow CDC to better direct our prevention programs and ensure that the HIV prevention needs of populations most devastated by the spread of HIV are met with resources that are commensurate with the scale of the epidemic. I hope this video will help you to understand the utility and the significance of this new and innovative surveillance system, as well as the resulting prevention implications for at-risk populations. Dr. Rich Wolitski of the Division of HIV/AIDS Prevention at the CDC will now share with you the 2006 HIV incidence estimates for the United States and CDC's perspectives on their prevention implications.

[Rich Wolitski, PhD] Hello. I am Rich Wolitski and I am Acting Director of the Division of HIV/AIDS Prevention in the National Center for HIV, Viral Hepatitis, STD, and TB Prevention at CDC. I'd like to add my own welcome to Dr. Fenton's and thank you for viewing this Web video on CDC's new 2006 estimates of HIV incidence in the United States.

Before I get into the specifics of the estimates, I'd like to spend a moment providing you with some background and context. CDC has always taken very seriously its responsibility to monitor the HIV/AIDS epidemic and to constantly improve our nation's ability to identify and understand the leading edge of the epidemic. These are not simple tasks. In fact, these new incidence estimates are the

end result of a decade's worth of work that involved scientific breakthroughs in the lab, statistical breakthroughs in methodology, consultations with external experts on methods, theoretical modeling, feasibility studies, working within government regulations, and a lot of dedication from CDC staff, state and local health departments, and other public health professionals.

The outcome of this work is a scientific achievement that shows us the most accurate profile of the HIV/AIDS epidemic possible. We all understand why having the most accurate HIV incidence information possible is critical to HIV prevention efforts in the United States and around the world. Without clear and precise information, it is extremely difficult to know where to invest available resources in order to fight an infectious disease.

Our new incidence estimates give us that information. They show us a profile of HIV/AIDS that is primarily young, male, and African American. They also show us an epidemic that has continued to take a disproportionate toll on the lives of gay and bisexual men---a toll that these data show has been steadily increasing since the early 1990s. It's a profile of an epidemic that must be met with an even greater sense of urgency -- by all of us. We at CDC feel strongly about the importance of these new estimates and, we believe, all of you watching this video will share our sentiment. There is no doubt that this is a sentinel event -- an event so significant that it signals the need for all of us to do more to fight the further spread of HIV.

CDC's 2006 incidence estimate reveals that the epidemic is, and has been, worse than previously estimated. Approximately 56,300 new HIV infections occurred in the United States in 2006, which is 40 percent higher than the previous estimate of 40,000 infections annually. It is important for everyone to understand that the 2006 estimate does not represent an increase in the annual number of new infections. Rather, a separate CDC historical trend analysis published along with the incidence estimate suggests that the number of new HIV infections was never as low as 40,000, and that it has been roughly stable at the current level since the early 2000s.

I want to emphasize that even though the analysis shows overall stability in new HIV infections in recent years, the epidemic has stabilized at an unacceptably high level. Taking a closer look at the 2006 HIV incidence estimates, we see that: 73 percent of new HIV infections were among men. Even though many heterosexual men are affected by HIV, most of the infections in men occur among gay and bisexual men. These men are represented in the transmission category of men who have sex with men or MSM. In 2006, MSM represented 53 percent of all new HIV infections. Back calculations indicate that HIV incidence has been steadily increasing among gay and bisexual men since the early 1990's, which confirms a trend suggested by prior data showing increases in risk behavior, sexually transmitted diseases and HIV diagnoses in this population throughout the past decade.

The analysis showed that another group is strongly affected by HIV and, that is, African Americans. Although blacks comprise only 13 percent of the U.S. population, 45 percent of new HIV infections were among blacks. While this number is unacceptably high, evidence shows that it's not rising. Back calculations show that the number of infections has been roughly stable, with some fluctuations, since the early 1990s. However, blacks are more affected by HIV and AIDS than any other racial or ethnic group in the United States, with an HIV incidence rate that is 7 times higher than whites at 83.7 per

100,000 for blacks -- compared to 11.5 per 100,000 for whites; and it's almost 3 times higher than Latinos at a rate of 29.3 per 100,000. Latinos are also disproportionately impacted by the epidemic. Latinos had rates of HIV infections that were 3 times higher than the rates among whites.

The new estimates also showed that young people are also becoming increasingly affected by HIV. These new numbers pointed out in stark detail that young people, those under 30 years of age, are where the most HIV infections are occurring. Thirty four percent (34 percent) of new infections occurred in young people between the ages of 13 and 29.

Besides pointing out challenges, the new estimates did reveal some encouraging signs of success. For example, sustained reductions in new infections among injecting drug users and heterosexuals are important signs of progress. In addition, the much-welcomed success of HIV treatments means that an increasing number of people are living with HIV than ever before. And although this means that there are more opportunities for HIV transmission to occur, the number of new HIV infections has remained relatively stable in this decade. This is evidence that prevention programs can, and do, work. The new estimates underscore the need to expand access to HIV prevention to gay and bisexual men, especially younger men, and to expand access to African American men and women as well.

An overwhelming number of published studies and multiple independent reviews have documented that prevention works. But the fact remains that the scale of our prevention efforts does not match the scale of today's epidemic. Many populations at risk are not being reached by HIV prevention efforts, and much more must be done. For example, recent data indicate that in the past year, 80 percent of MSM have not been reached by individual and small group interventions that we know to be effective. This illustrates one of the many challenges to preventing the spread of this disease -- the challenge of reaching new generations and adapting to the evolving epidemic while sustaining efforts to others as they age.

Perceptions of HIV risk and treatment options have changed over time, and we must work together to ensure that prevention barriers such as complacency, stigma, and homophobia, and substance abuse do not allow this disease to continue to spread. Additionally, far too many undiagnosed individuals remain - - 25 percent of persons living with HIV are unaware of their status and they account for more than half of all new HIV infections. Not only are these persons at risk for unknowingly transmitting the virus; they are also at increased risk for developing HIV-related symptoms and progressing to AIDS. There's an urgent need to expand access to HIV testing so that persons living with HIV can take steps to protect themselves and to their partners.

The new incidence estimates underscore the need for expanded access to prevention services and a greater national commitment to HIV prevention. They serve as an urgent reminder that we all -- as individuals, as communities, and as a nation -- need to do more to prevent the further spread of HIV and its devastating effects on our communities.

In conclusion, today's announcement highlights a truly significant advance in our nation's ability to monitor and evaluate HIV prevention. We need to do more, though, to fully realize the promise of this advancement. As a nation, we must continue to work together to prevent the spread of this insidious disease by renewing our collective commitment to combating the stigma and complacency that allow HIV to flourish in our communities. Our silence will not protect us. As a nation, we must continue to

have an open and honest dialogue to ensure that our HIV prevention needs are met with matching resources - - resources that are critical to sustaining effective HIV prevention efforts in the U.S. and around the world.

For additional information on the methods used to develop the estimates, please view Dr. Irene Hall's podcast on methods. Thank you for joining us today and for your continued efforts to end this epidemic.

*[Announcer] For the most accurate health information, visit [www.cdc.gov](http://www.cdc.gov) or call 1-800-CDC-INFO, 24/7.*