Estimate of New HIV Infections in Virginia

- For 2008-2010, annual HIV infections in Virginia remained relatively stable with approximately 829, 880, and 1,116 new infections each year, respectively.
- Youth (ages 13-24), men who have sex with men (MSM), and Blacks remain the populations most affected by HIV in Virginia.

Figure 1. Estimated Rate of New HIV Infections in the U.S. and Virginia, 2008-2010

HIV Incidence Estimate Facts

**Incidence** is defined as the number of new cases of a disease that occur in a population over a certain period of time.

Unlike incidence, **prevalence** includes all people living with the disease regardless of when they acquired their infection.

The goal of HIV Incidence Surveillance is to provide national and area-specific population based estimates of the number of new HIV infections that occur each year including those not diagnosed.

The HIV incidence estimate provides an **accurate picture** of the spread of new HIV infections and helps to more clearly identify groups who are contracting HIV and where to focus prevention efforts.

National Estimate of New HIV Infections

- Between 2008-2010 the number of annual HIV infections in the United States remained relatively stable with approximately 50,000 new infections each year.
- Overall, HIV infections were relatively stable among all populations except **young MSM (ages 13-24)**.
- Interestingly, there was a **21% decrease** in new HIV infections reported among Black women; yet the rate of new infections for Black women is **20 and 5 times** that of White and Hispanic women, respectively.

HOW DOES HIV INCIDENCE ESTIMATION WORK?

The Serologic Testing Algorithm for Recent HIV Seroconversion (STARHS) method uses a laboratory test (the BED HIV-1 Capture Enzyme) to classify newly diagnosed infections as either long-standing or recent (occurring within approximately the past 5 months).

The STARHS result of the first positive blood sample along with demographic data, HIV testing history and antiretroviral use are used to estimate HIV incidence.
ESTIMATING HIV INCIDENCE IN VIRGINIA

Virginia Department of Health

12.2013

National HIV Estimates, 2010

- Using STARHS technology, CDC estimates that 47,500 new HIV infections occurred in the United States in 2010. Based on this estimate, 19 out of every 100,000 people living in the US were newly infected with HIV.
- Blacks in the United States represent 14% of the total population but accounted for 44% (20,900) of all new HIV infections; and The rate of new infections among Blacks was almost 8 times the rate among Whites (69 versus 9 new infections per 100,000 people); and approximately 2.5 times the rate of Hispanics (69 v 28).
- Men accounted for 80% of new HIV infections (38,000).
- More new infections occurred among Black MSM aged 13-24 (4,800) than all other races for MSM aged 13-24 (4,000).

Virginia HIV Estimates, 2010

Likelihood of HIV Infection among Virginians

By Gender
- Males
- Females

By Race
- Blacks
- White
- Other

Out of every 10 Virginians newly infected with HIV:
- 8 were Male
- 8 were MSM
- 6 were Black
- 4 were 13 to 24 years old

- 1 in every 3,565 Virginia males was newly infected with HIV, compared to 1 in every 16,704 females.
- 1 in every 2,244 Black Virginians was newly infected with HIV, compared to 1 in every 15,706 White Virginians and 1 in 6,218 of all other race categories combined.

Using CDC’s methodology, the Virginia Department of Health estimated that approximately 1,116 Virginians were newly infected with HIV in 2010. Based on this estimate, 14 of every 100,000 people living in Virginia were newly infected with HIV in 2010.

Blacks represented approximately 19% of Virginia’s population in 2010, but accounted for 61% of new HIV infections. The HIV infection rate among Blacks was almost seven-fold higher as that of Whites, and almost three times as high as that of Hispanics (45 versus 6 and 16 new infections per 100,000 people, respectively).

The majority of newly infected Virginians were males (82%). Males were almost five times more likely to be newly infected with HIV compared to females (28 versus 6 new infections per 100,000 people).

MSM consistently represented the majority of new HIV infections among all transmission categories, and accounted for 75% of new Virginia HIV infections in 2010.

References


Incidence data are processed by the CDC and the finalized datasets are returned to states. This process causes delays in reporting of data. 2010 incidence data were released to Virginia in December 2012.