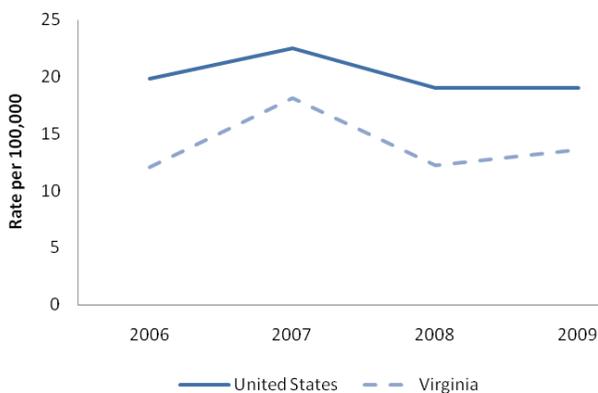




## Estimate of New HIV Infections in Virginia

- Between 2006-2009 the number of annual HIV infections in Virginia remained relatively stable with approximately 900 new infections each year.
- Men who have sex with men (MSM) remain the population most heavily affected by HIV in Virginia.

**Figure 1. Estimated Rate of New HIV Infections in the U.S. and Virginia, 2006-2009**



## 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.

## 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 a more **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 2006-2009 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 (aged 13-29)**.
- The increase in HIV incidence among young MSM was driven by a 48% increase in HIV infections among young Black MSM during the 4-year period.

# ESTIMATING HIV INCIDENCE IN VIRGINIA



Virginia Department of Health

09.11

## National HIV Estimates, 2009

- ✘ Using STARHS technology, CDC estimates that 48,100 new HIV infections occurred in the United States in 2009. 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% (21,200) of all new HIV infections.
- ✘ The rate of new infections among Blacks was almost 8 times the rate among Whites (70 versus 9 new infections per 100,000 people).
- ✘ Men accounted for 77% of new HIV infections (36,900).
- ✘ More new infections occurred among Black MSM aged 13-29 (6,500) than White MSM aged 13-29 and 30-39 combined (6,400).

## Virginia HIV Estimates, 2009

### Likelihood of HIV Infection among Virginians

#### By Gender



#### By Race



Out of every 10 Virginians newly infected with HIV:

- 7 were Male
- 6 were MSM
- 6 were Black
- 4 were 13 to 29 years old

- ✘ Using CDC's methodology, the Virginia Department of Health estimated that approximately 890 Virginians were newly infected with HIV in 2009. Based on this estimate, 14 of every 100,000 people living in Virginia were newly infected with HIV in 2009.
- ✘ Blacks represented approximately 23% of Virginia's population in 2009, but accounted for nearly 59% of new HIV infections. The HIV infection rate among Blacks was almost five times as high as that of all other race categories combined (34 versus 7 new infections per 100,000 people).
- ✘ The majority of newly infected Virginians were males (73%). Males were three times more likely to be newly infected with HIV compared to females (21 versus 7 new infections per 100,000 people).
- ✘ MSM consistently represented the majority of new HIV infections among all transmission categories, and accounted for 63% of new Virginia HIV infections in 2009.

- ✘ 1 in every 4,762 Virginia males were newly infected with HIV, compared to 1 in every 14,286 females.
- ✘ 1 in every 2,941 Black Virginians were newly infected with HIV, compared to 1 in every 14,286 Virginians of all other race categories combined.