

Human Immunodeficiency Virus (HIV) Disease and Acquired Immunodeficiency Syndrome (AIDS)

Agent: Human Immunodeficiency Virus (retrovirus)

Mode of transmission: Person-to-person via unprotected intercourse, contact of cut or abraded skin with body secretions carrying the virus, use of contaminated needles, blood transfusions and transplants with organs from infected donors, or from mother-to-child before or during birth or through breastfeeding.

Signs/Symptoms: Initial infection with HIV can cause an acute illness or fever, muscle pain, and sore throat, after which the person can be asymptomatic for several years. Eventually the immune system is affected, causing AIDS.

Prevention: Preventive measures include safe sexual practices; screening of blood and plasma; and among infected mothers, antiretroviral prophylaxis, cesarean delivery before labor, and avoidance of breastfeeding.

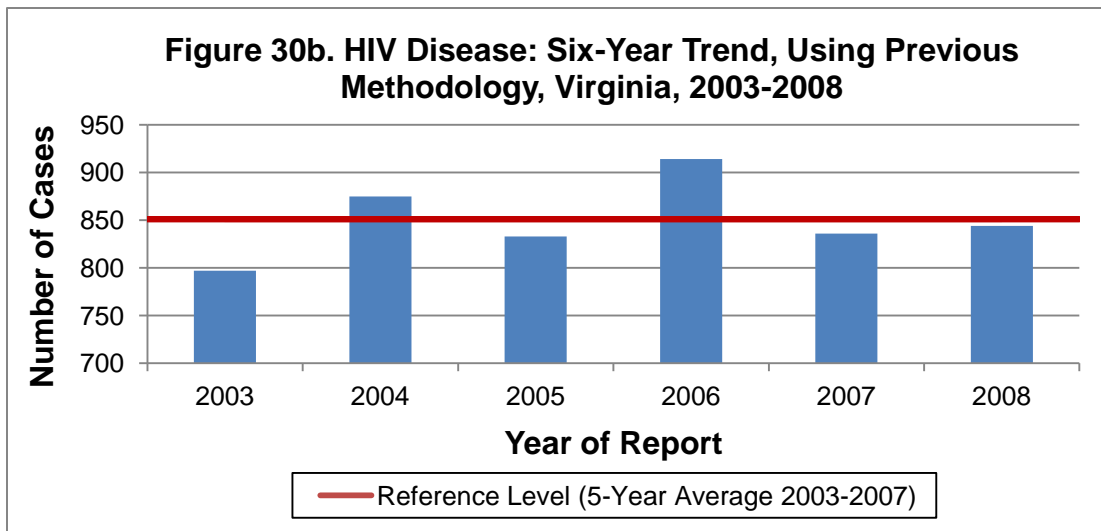
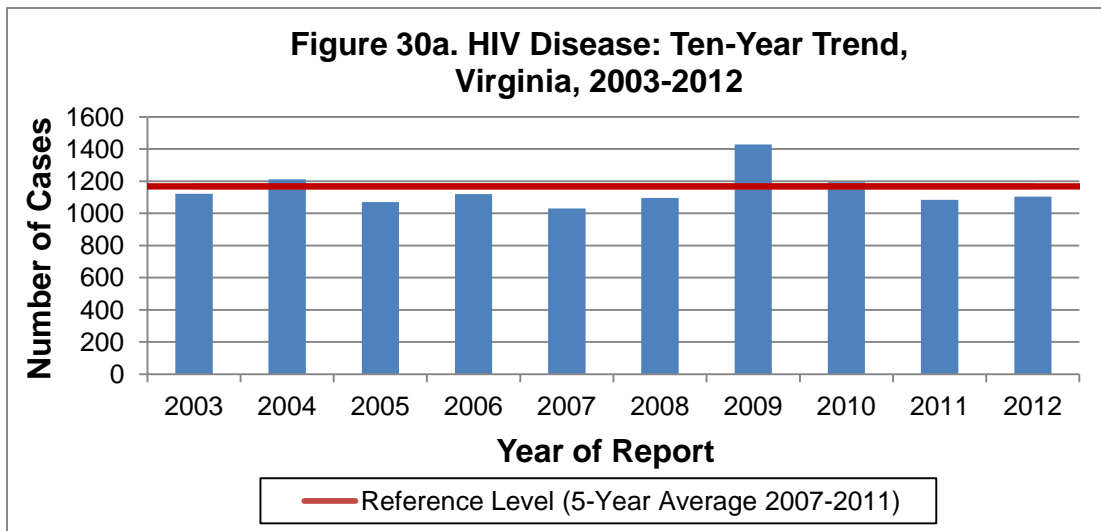
Other Important Information: Data analysis methods for HIV/AIDS were changed in 2009. Statistics are now presented for HIV disease instead of for HIV and AIDS, as explained below. Additional information regarding the changes in analytical methods is available at http://www.vdh.virginia.gov/epidemiology/DiseasePrevention/DAta/documents/Technical%20Notes%20and%20Glossary%20of%20Terms_Revised_04-2010.pdf. More detailed epidemiologic analyses of HIV/AIDS, as well as other STDs, is located at <http://www.vdh.virginia.gov/epidemiology/DiseasePrevention/DAta/>. Rapid tests (which provide results within 30 minutes) are becoming more widely available and are used at various testing sites in Virginia. For more information, call your local health department, or contact the Virginia Department of Health HIV/STD/Viral Hepatitis Hotline at 1-800-533-4148.

Change in Epidemiologic Analyses of HIV Disease

Beginning in 2009, VDH reassessed the way HIV and AIDS surveillance data were reported in order to better illustrate the epidemic in Virginia. Instead of approaching HIV and AIDS as two separate conditions of the same disease, it was found to be more helpful for epidemiologic and community planning purposes to evaluate all HIV and AIDS cases as one encompassing group: persons diagnosed or living with **HIV disease**. Before 2009, cases that were reported as having an AIDS-defining condition were excluded from the count of newly diagnosed HIV infections. Due to this change in methodology from previous years, those calculations pre-2009 are not comparable to calculations post-2009, where HIV and AIDS are treated as one disease, without considering disease progression. Currently, any case that presents as having HIV or an AIDS-defining condition at the time of diagnosis is considered a newly diagnosed HIV disease case.

Figure 30a displays the trend in HIV disease for the previous 10 years when the current methodology is applied to the entire 2003-2012 period. For comparison, Figure 30b uses the previous methodology to depict the trend for HIV infections from 2003 through 2008, and is comparable to what was presented in earlier reports. Use of the older methodology

will be phased out of this report as time progresses. For a more thorough discussion of the changes in the analysis of HIV and AIDS surveillance data, please refer to the web site address listed above in the Other Important Information section above.



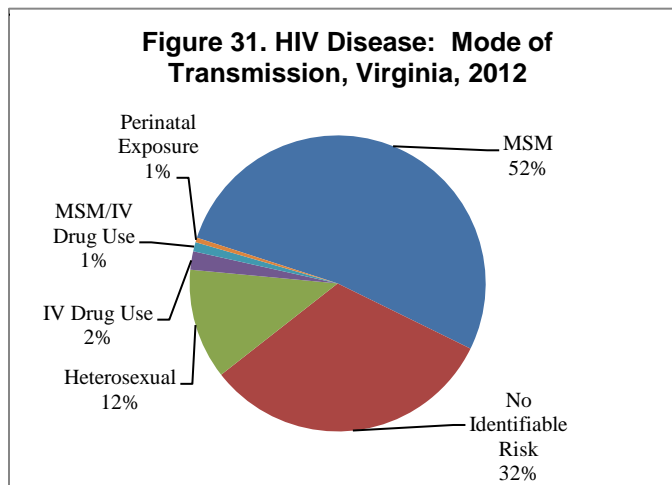
HIV Disease

In 2012, 1,105 cases of HIV disease were reported in Virginia, as illustrated in Figure 30a. This is a slight increase (2%) from the 1,085 cases reported in 2011, but reflects the stability of new HIV disease diagnoses over the last several years. The statewide incidence rate of HIV disease was 13.6 per 100,000 in 2012.

The highest HIV disease rates in 2012 occurred in the 20-29 year age group (30.7 per 100,000), followed by the 30-39 and 40-49 year age groups (25.7 and 19.5 per 100,000, respectively). Since 2007, the 20-29 year age group has consistently been reported with

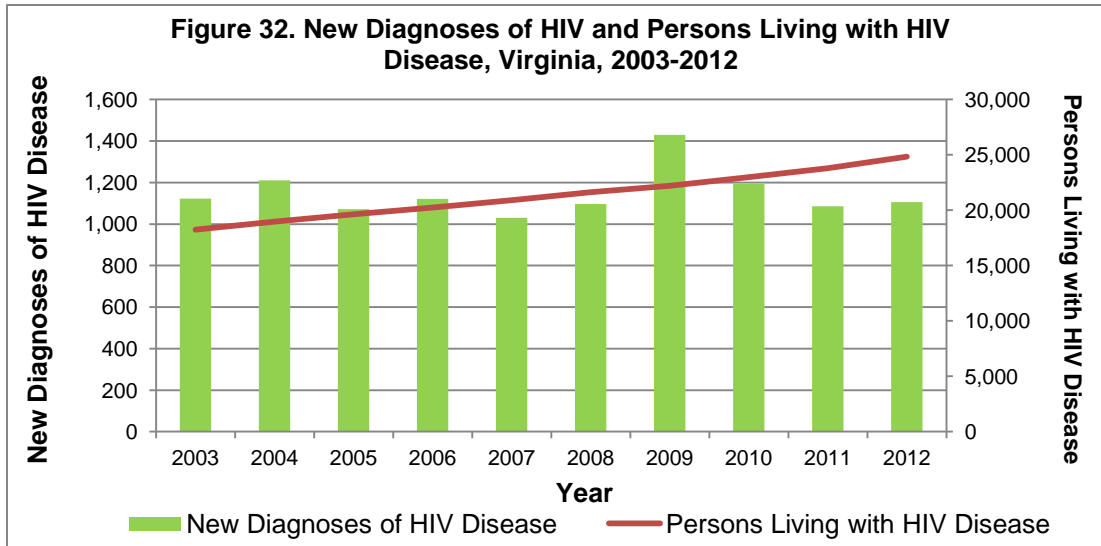
the highest incidence rate. The incidence rate for the black population was 37.9 per 100,000, approximately five times the rate of the white population (5.5 per 100,000) and above the rate of those in the “other” race category (24.7 per 100,000). The “other” race category includes Hispanics, Asian/Hawaiian/Pacific Islanders, American Indian/Alaska Natives, and those cases categorized as multi-racial. The rate for those in the “other” category has increased from the rate of 15.7 per 100,000 in 2011; however, all rates have stayed relatively stable over time. Males have consistently shown higher rates of HIV disease than females across time, and were over four times more likely than females to be diagnosed with HIV disease in 2012 (22.2 and 5.4 per 100,000, respectively). With respect to HIV incidence in Virginia’s health regions, the highest rates were observed in the eastern and central regions (17.7 and 17.6 per 100,000, respectfully) and the lowest rate, 6.4 per 100,000, was observed in the northwest region.

In 2012, the most frequently reported transmission category for HIV disease was among men who have sex with men (MSM), which represented 52% of the cases in Virginia. Among identified MSM cases, 44% were 20-29 years of age and 52% were black. Twelve percent of the cases for 2012 were attributed to heterosexual contact, and 2% to intravenous (IV) drug use; whereas, 32% of new diagnoses did not report or identify a specific risk factor for transmission (Figure 31).



Persons Living with HIV Disease

Due to advances in medical therapies and care strategies, the number of persons living with HIV disease has continued to increase. As of December 31, 2012, 24,848 persons were known to be living with HIV disease in Virginia (Figure 32).



Approximately three-quarters of the prevalent cases are male (Figure 33), 32% are in the 40-49 year age group, 60% are black, 43% are attributed to male-to-male sexual contact, and approximately 59% are living with HIV disease in the eastern and northern regions of the state. Half of those living with HIV disease have also been diagnosed with an AIDS-defining condition.

