

2012 Profile of HIV in Michigan (Statewide)

Monitored Viral Load

Data from enhanced HIV/AIDS Reporting System (eHARS)

The National HIV/AIDS Strategy (NHAS) and the Centers for Disease Control and Prevention (CDC) have recently developed a “High Impact HIV Prevention” approach (<http://www.cdc.gov/hiv/topics/funding/PS12-1201/resources/factsheet/pdf/foa-partner.pdf>), which emphasizes the need to target resources to maximize the impact of HIV prevention activities. Measuring viral load has been highlighted as a useful tool in this effort. A viral load test is a measure of the amount of HIV in a person’s body, and it is a proxy measure for disease progression and infectiousness. Persons with lower viral loads are less likely to transmit HIV to uninfected partners.

Monitored viral load is the viral load of persons with HIV in care who have had viral load tests. It is impossible to know the viral load values of persons in care but without a viral load test (in-care viral load), persons diagnosed but not in care (community viral load), and undiagnosed persons (population viral load); therefore, monitored viral load is used to identify and target persons or groups with high viral loads. The following categorical measures are used to assess the quality of HIV care or the possible transmission potential for particular groups in care:

- **Suppressed:** Viral load is ≤ 200 copies/mL (> 200 copies/mL is considered not suppressed);
- **Undetectable:** Viral load is ≤ 50 copies/mL (> 50 copies/mL is considered detectable);
- **High VL:** Viral load is $> 100,000$ copies/mL.

Table 16 on page 110 shows the proportion of persons living with HIV infection in Michigan as of December 31, 2009 with suppressed viral loads by select characteristics. Among those with at least one viral load test between January 1, 2009 and December 31, 2009 (roughly half of all persons living with HIV), 69 percent of males and 63 percent of females had at least one suppressed viral load value. When broken down by age, persons who were 13-24 years old on December 31, 2008 had the lowest proportion of suppressed viral loads (37 percent). Viral load suppression increases with age, with 80 percent of persons 65 years and older having suppressed viral loads. This has implications for prevention, as the majority of new infections are among persons 30-39 years of age at diagnosis, and persons with unsuppressed viral loads are more infectious. There are also racial/ethnic disparities in viral load suppression. A smaller proportion of black persons who had a viral load test in 2009 had suppressed viral load values (61 percent) compared to 77 percent of white persons with at least one test. Seventy-four percent of HIV-positive Hispanics/Latinos had viral load suppression. The proportion of persons with suppressed viral loads is relatively constant across risk groups (62-69 percent), except that female injection drug users (IDU) have the lowest proportion of viral load suppression at 57 percent. Men who have sex with men (MSM), including MSM/IDU, have the highest proportion of viral load suppression at 69 percent.

It is important to note that these percentages are among persons with at least one viral load test in 2009, which only represents about half of persons living with HIV. In order to have a more accurate picture of monitored viral load, more persons living with HIV and in care need to have viral load testing at least annually.

The NHAS has three goals specifically related to viral load to reduce health disparities: 1) Increase the proportion of HIV diagnosed gay and bisexual men with undetectable viral load by 20 percent; 2) Increase the proportion of HIV diagnosed blacks with undetectable viral load by 20 percent; and 3) Increase the proportion of HIV diagnosed Latinos with undetectable viral load by 20 percent. Analyses of monitored viral load will continue and help Michigan to track the progress of these goals.