



# The Continuum of HIV Care — California, 2016



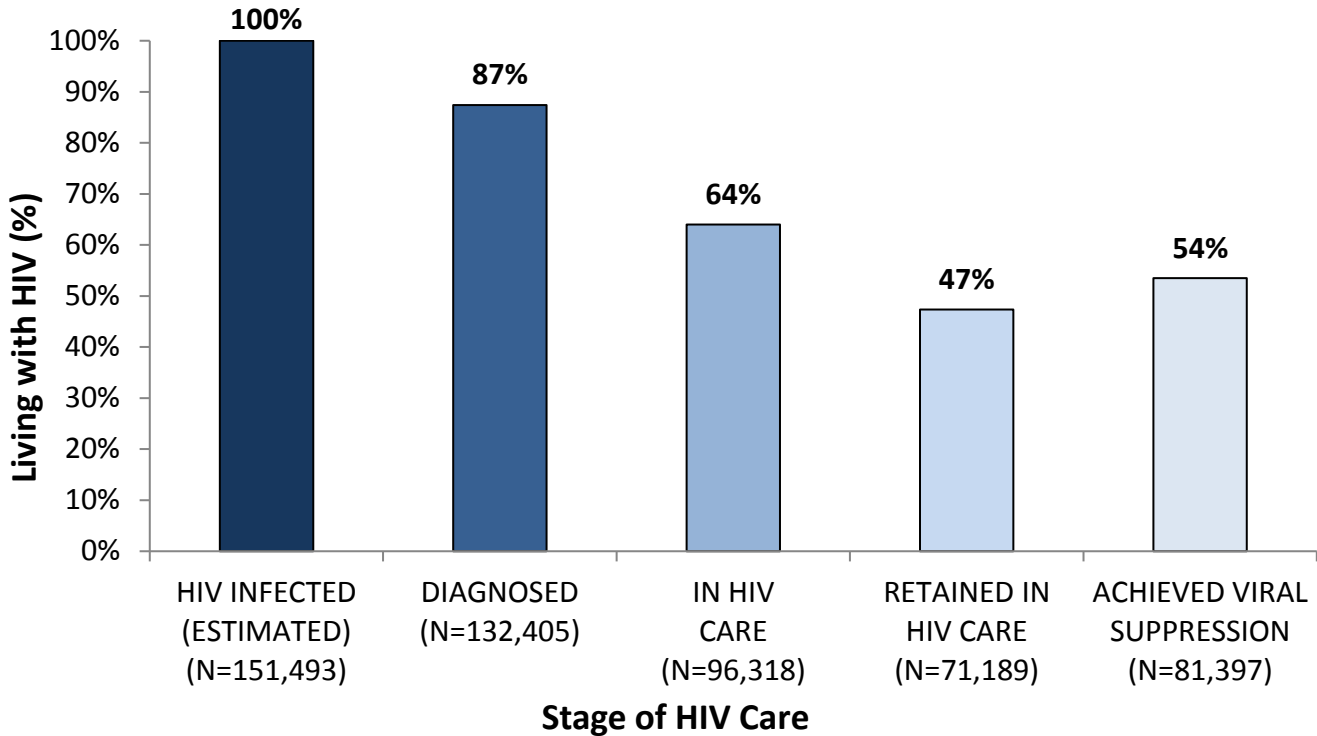
The California Department of Public Health (CDPH), Center for Infectious Diseases, Office of AIDS (OA) has developed Continuums of HIV Care for persons living with HIV in California. The Continuum of HIV Care is a model that outlines the stages of HIV medical care for people living with HIV, from initial diagnosis to viral suppression. The Continuum shows the proportion of people living with HIV who are engaged in each stage of care.

This report includes all persons diagnosed and living with HIV infection who were alive as of December 31, 2016 and living in California, and an estimate of the number of persons who are living, but not yet diagnosed with HIV. The data were extracted from the California HIV Surveillance System 12 months after the end of the calendar year to allow for delays in case and laboratory reporting.

## Highlights from the Continuum of HIV Care — California, 2016

- Of the estimated 151,493 persons living with HIV in California during 2016, about 87 percent (132,405 persons) had been diagnosed, and 54 percent (81,397 persons) achieved viral suppression. A primary objective of California's integrated plan for getting to zero (GTZ) is to increase the percentage of Californians living with HIV who know their serostatus to a least 95 percent by 2021.
- Among the 132,405 persons living with diagnosed HIV in California during 2016, 73 percent (96,318 persons) were in HIV care and 61 percent (81,397 persons) achieved viral suppression. The related GTZ objectives are to increase the percentage of Californians with diagnosed HIV infection who are in HIV medical care to at least 90 percent and increase viral suppression to at least 80 percent by 2021.
- For persons over 12, viral suppression increased with age. Persons 13–24 years old had the lowest viral suppression (52 percent) with viral suppression increasing to 68 percent for persons 65 and older. The highest viral suppression (77 percent) was achieved by persons 0-12 years old.
- Men were more likely to be virally suppressed than women (62 percent versus 59 percent), and transgender men were more likely to be virally suppressed than transgender women (60 percent versus 57 percent, respectively).
- Black/African Americans and Hispanic/Latinos(as) were less likely to be virally suppressed (55 percent and 58 percent, respectively) compared to Whites and Asians (67 percent, in both). Native Hawaiian/Pacific Islanders achieved 65 percent viral suppression. American Indian/Alaska Natives had the lowest viral suppression (53 percent) compared to all other groups.
- Men who have sex with men (MSM) had the highest levels of viral suppression (65 percent) and were the largest category of HIV infected persons (88,251). Persons who inject drugs had the lowest level of viral suppression (51 percent) followed by non-high-risk heterosexual contact (56 percent), perinatal (59 percent), high-risk heterosexual contact (60 percent), and MSM who inject drugs (60 percent).

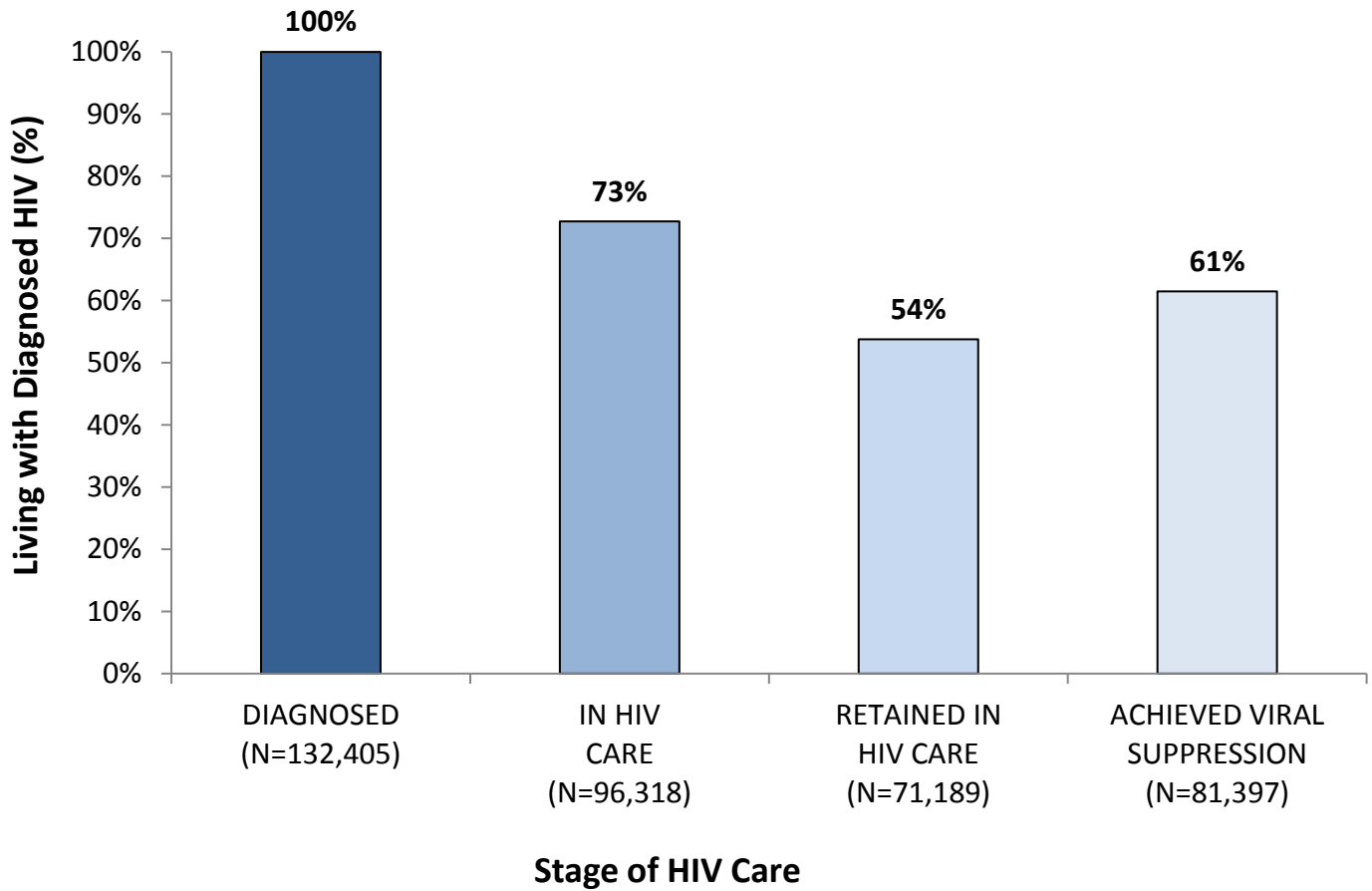
**Figure 1. The Overall Continuum of HIV Care: All Persons Living with HIV Infection — California, 2016**



The estimated number of persons living with HIV infection are California-specific estimates calculated using the Centers for Disease Control and Prevention’s (CDC) CD4-based method for generating an estimate of living cases and new HIV infections, including those that have not yet been diagnosed. The CD4-based model is a new method that replaces the back calculation method used previously to generate estimates for 2015. For more information about the CD4-based methodology, please see [Hall HI, Song R, Tang T, An Q, Prejean J, Dietz P, Hernandez AL, Green T, Harris N, McCray E, Mermin J HIV Trends in the United States: Diagnoses and Estimated Incidence, JMIR Public Health Surveill 2017;3\(1\):e8 \(http://publichealth.jmir.org/2017/1/e8/\)](http://publichealth.jmir.org/2017/1/e8/).

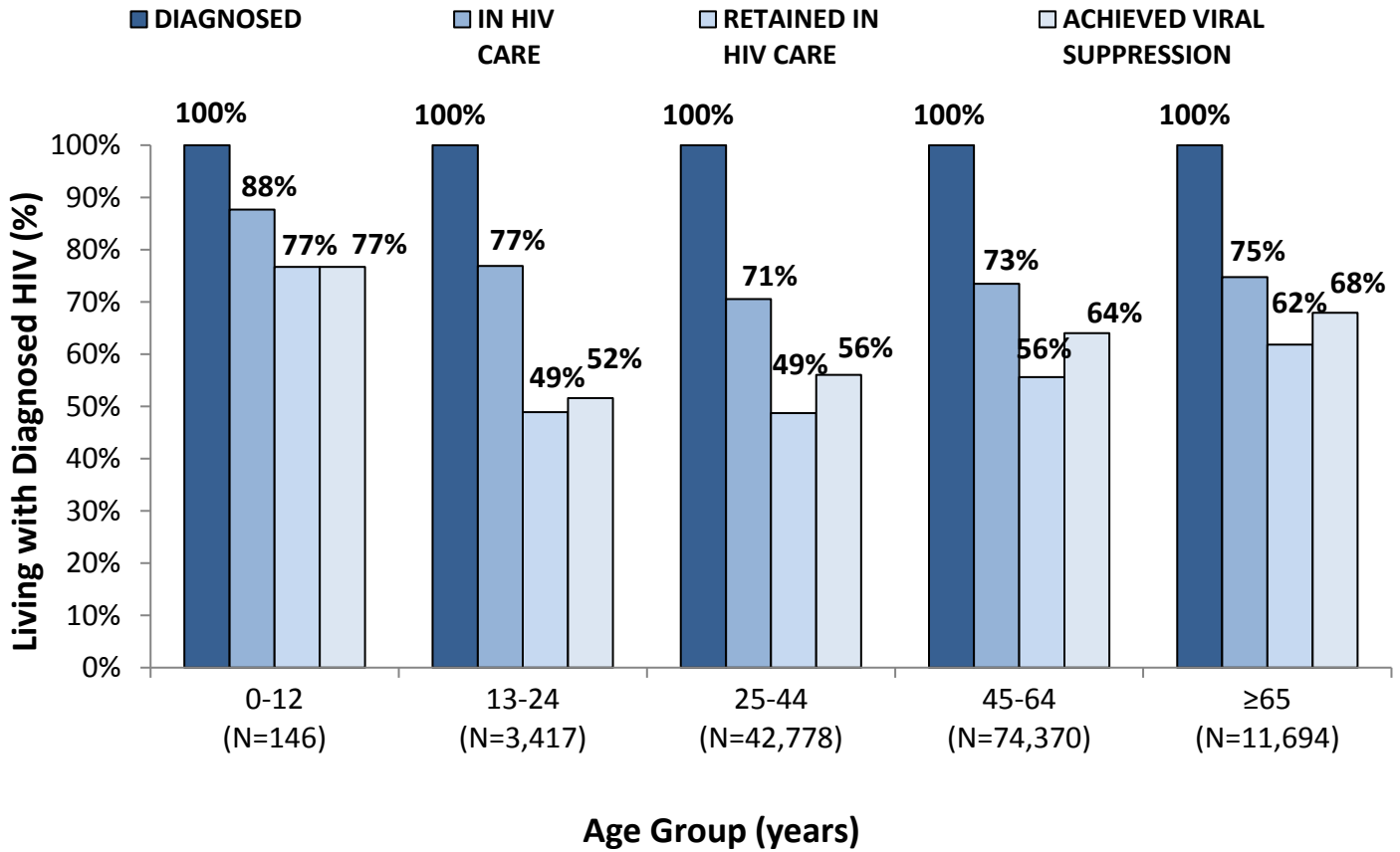
Diagnosed persons met the CDC surveillance case definition for HIV infection, and were presumed to be alive and living in California if no death document was received and they were residing in California as of the last known address. Persons who had at least one CD4, viral load, or HIV-1 genotype test during the calendar year were considered to be engaged in HIV care. Persons who had two or more CD4, viral load, or HIV-1 genotype tests that were performed at least 3 months apart during the calendar year were considered retained in care. Persons whose most recent HIV viral load test result during the calendar year was  $\leq 200$  copies/ml were considered to be virally suppressed.

**Figure 2. The Continuum of HIV Care: All Persons Living with Diagnosed HIV Infection—California, 2016**



Diagnosed persons met the Centers for Disease Control and Prevention surveillance case definition for HIV infection, and were presumed to be alive and living in California if no death document was received and they were residing in California as of the last known address. Persons who had at least one CD4, viral load, or HIV-1 genotype test during the calendar year were considered to be engaged in HIV care. Persons who had two or more CD4, viral load, or HIV-1 genotype tests that were performed at least 3 months apart during the calendar year were considered retained in care. Persons whose most recent HIV viral load test result during the calendar year was  $\leq 200$  copies/ml were considered to be virally suppressed.

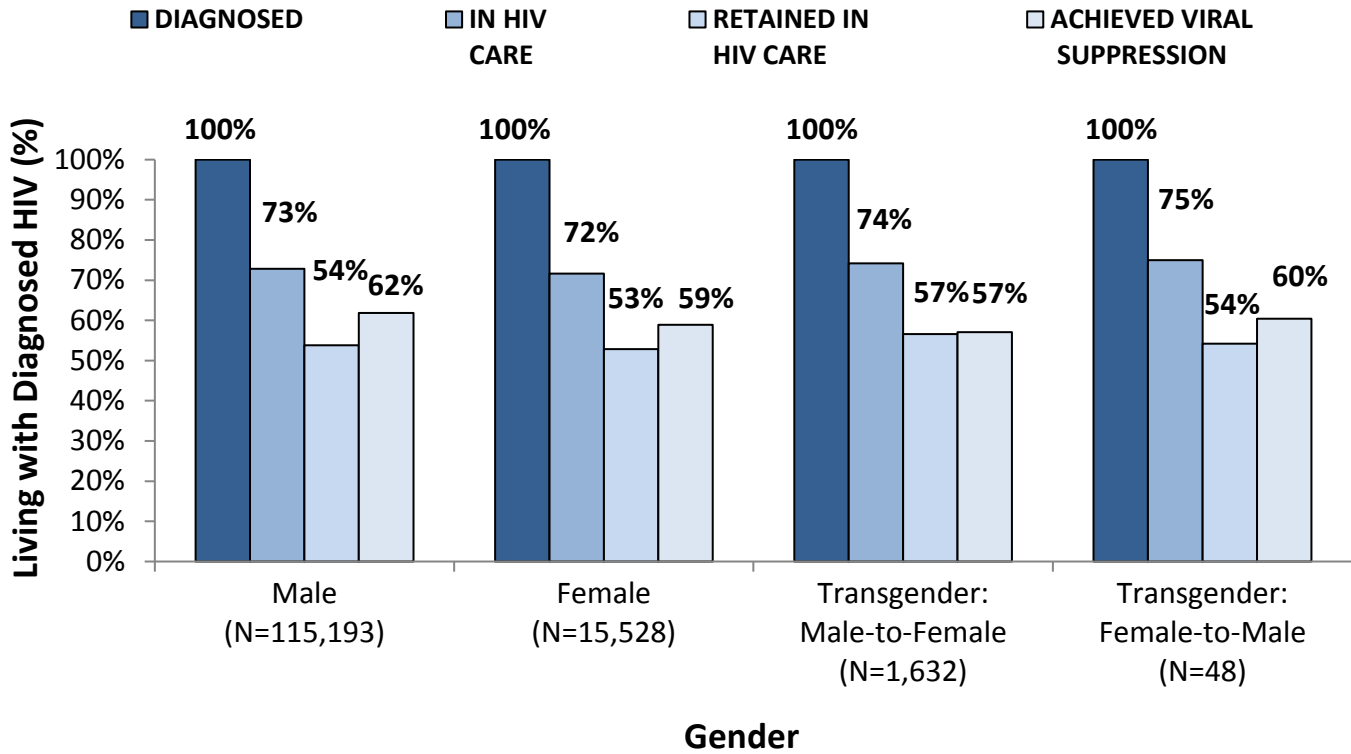
**Figure 3. The Continuum of HIV Care by Age Group: All Persons Living with Diagnosed HIV Infection— California, 2016**



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Age was calculated as of the last day of the calendar year.

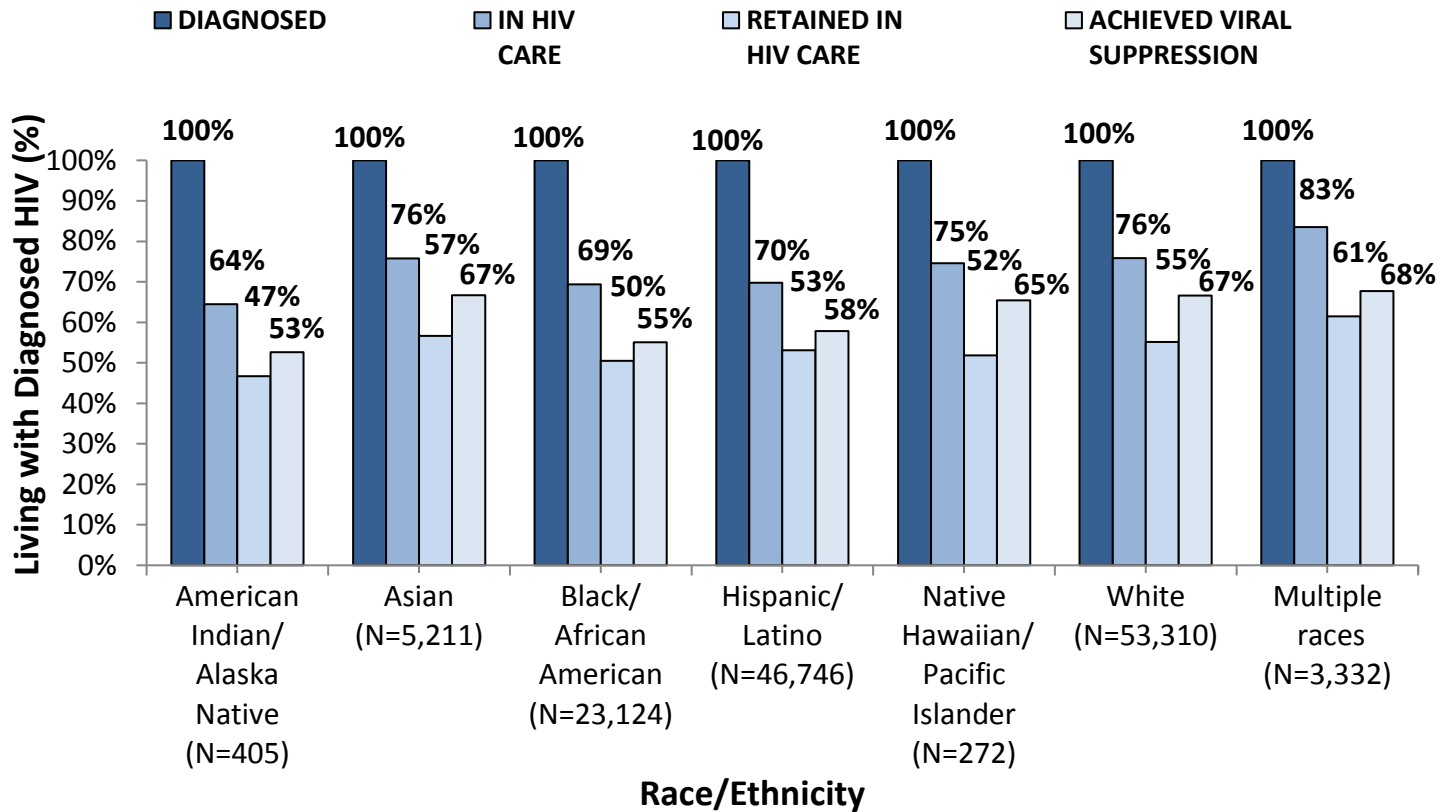
**Figure 4. The Continuum HIV Care by Gender: All Persons Living with Diagnosed HIV Infection — California, 2016**



Diagnosed persons met the Centers for Disease Control and Prevention surveillance case definition for HIV infection, and were presumed to be alive and living in California if no death document was received and they were residing in California as of the last known address. Persons who had at least one CD4, viral load, or HIV-1 genotype test during the calendar year were considered to be engaged in HIV care. Persons who had two or more CD4, viral load, or HIV-1 genotype tests that were performed at least 3 months apart during the calendar year were considered retained in care. Persons whose most recent HIV viral load test result during the calendar year was  $\leq 200$  copies/ml were considered to be virally suppressed.

Persons were classified as being transgender if a case report form affirming their transgender status was present in HIV surveillance data. Among the persons living with HIV in California in calendar year 2016, there were four persons categorized as alternative gender identity who are not shown in the figure above.

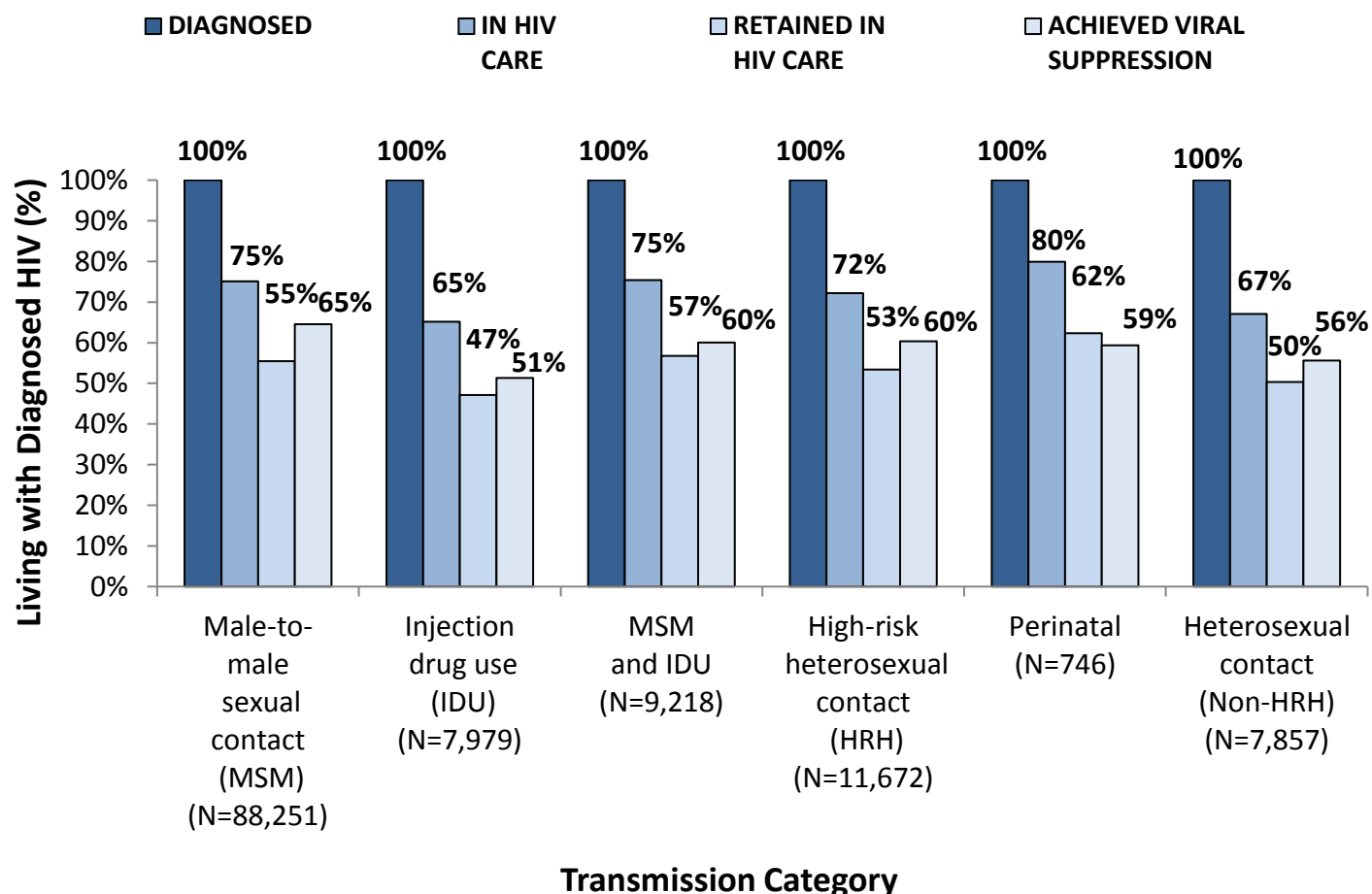
**Figure 5. The Continuum of HIV Care by Race/Ethnicity: All Persons Living with Diagnosed HIV Infection — California, 2016**



Diagnosed persons met the Centers for Disease Control and Prevention surveillance case definition for HIV infection, and were presumed to be alive and living in California if no death document was received and they were residing in California as of the last known address. Persons who had at least one CD4, viral load, or HIV-1 genotype test during the calendar year were considered to be engaged in HIV care. Persons who had two or more CD4, viral load, or HIV-1 genotype tests that were performed at least 3 months apart during the calendar year were considered retained in care. Persons whose most recent HIV viral load test result during the calendar year was  $\leq 200$  copies/ml were considered to be virally suppressed.

Hispanic/Latino(a) persons can be of any race. Race/ethnicity was collected using Asian/Native Hawaiian/Pacific Islander as a single category until 2003; therefore cases reported prior to 2003 are classified as Asian above because they cannot be disaggregated. Although California Government Code Section 8310.5 requires the Department to tabulate information by expanded ethnicities for each major Asian and Pacific Islander group, the data shown here are not disaggregated in those groups in order to maintain the confidentiality of these persons. There were five persons diagnosed and living with HIV in California with an unknown race/ethnicity who are not shown in the figure above.

**Figure 6. The Continuum of HIV Care by Transmission Category: All Persons Living with Diagnosed HIV Infection — California, 2016**



Diagnosed persons met the Centers for Disease Control and Prevention surveillance case definition for HIV infection, and were presumed to be alive and living in California if no death document was received and they were residing in California as of the last known address. Persons who had at least one CD4, viral load, or HIV-1 genotype test during the calendar year were considered to be engaged in HIV care. Persons who had two or more CD4, viral load, or HIV-1 genotype tests that were performed at least 3 months apart during the calendar year were considered retained in care. Persons whose most recent HIV viral load test result during the calendar year was  $\leq 200$  copies/ml were considered to be virally suppressed.

High-risk heterosexual contact (HRH) includes persons who reported engaging in heterosexual intercourse with a person of the opposite sex of their sex-at-birth, and that partner was known to be HIV positive or engage in an activity that put them at high risk for HIV (e.g., MSM, IDU). Heterosexual contact non-high risk (Non-HRH) includes persons with no other identified risk who reported engaging in heterosexual intercourse with a person of the opposite sex of their sex-at-birth. Perinatal includes persons who were exposed immediately before or during birth, or after birth due to breastfeeding. Among the persons living with HIV in California in calendar year 2016, there were 388 who were categorized as having “other” risks such as having hemophilia, receiving a blood transfusion, or experiencing an occupational exposure. An additional 6,294 persons had no known risks reported and were categorized as “Unknown risk”; they are not shown in the above figure.