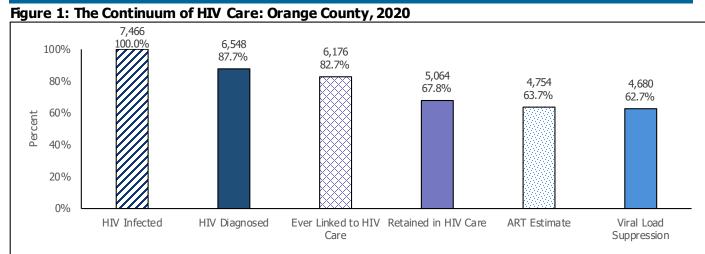




Introduction

The Centers for Disease Control and Prevention (CDC) released an updated analysis¹ showing that only 53% of the estimated 1.2 million Americans living with HIV are virally suppressed. The Continuum of Care provides a visual "cascade" of individuals living with HIV. In Orange County, the stages of the continuum include:

- 1. **Infected with HIV**: This is the CDC estimate that includes those who know their HIV status and those who are HIV-positive but unaware of their HIV status;
- 2. **Diagnosed with HIV**: This is the percent of individuals who are HIV-positive and aware of their status compared to the estimate of all individuals living with HIV in Orange County;
- 3. Ever Linked to HIV care: This is the percent of HIV-positive individuals who have been linked to HIV medical care (as indicated by having at least one viral load and/or CD4 count blood test after the date of diagnosis). Ever Linked to HIV care captures those individuals under the Receipt of Care step of the continuum (as indicated by having at least one CD4 or viral load test in the measurement year in 2020) introduced into the HIV Care Continuum by the CDC in July 2019;
- 4. Retained in HIV care: This is persons diagnosed with HIV and whose most current address was in Orange County as of December 31, 2020 who had at least two CD4 or viral load results with at least three months in-between the first and last result. For persons diagnosed prior to 2020, the two results occurred in 2019 and/or 2020. For persons diagnosed in 2020, the results occurred between January 2020 and February 2021.
- 5. Antiretroviral Therapy (ART) Estimate: This is the estimated percent of HIV-positive individuals who are taking antiretroviral medications. Because this data is not available for Orange County, a proxy measure has been used (persons with an undetectable viral load at their last test in 2020 and persons whose viral load has declined between the last test in 2020 and the previous test); and
- 6. **HIV Viral Load Suppression**: This is the percent of individuals with a HIV viral load of less than 200 copies/mL.



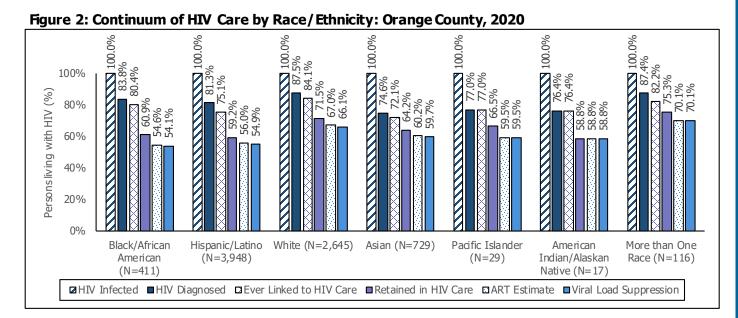
- Of the 7,466² estimated persons living with HIV (PLWH) in Orange County in 2020:
 - 6,176 (82.7%) were ever linked to HIV care.
 - o 5,064 (67.8%) were retained in HIV care.
 - \circ 4,754 (63.7%) were estimated to be receiving ART.
 - 4,680 (62.7%) achieved viral suppression.

¹ Centers for Disease Control and Prevention (2019). *Understanding the HIV Care Continuum*. Retrieved from https://www.cdc.gov/hiv/pdf/library/factsheets/cdc-hiv-care-continuum.pdf.

² The number of persons living with HIV in Orange County changes as individuals move in and out of the County. The 7,466 is estimated from the 6,548 diagnosed who were living in Orange County in 2020 from data extracted as of January 2021 and does not match previously reported numbers.

2020 Highlights

- Of the 7,466 Orange County residents estimated to be living with HIV, 62.7% had achieved viral suppression (Figure 1).
- Asians have the lowest percentage of ever being linked to care (72.1%), American Indian/Alaskan Natives have the lowest percentage of retention in care (58.8%), while Blacks have the lowest percentage of ART estimate (54.6%) and viral suppression (54.1%) (Figure 2). Percentages for Pacific Islanders and American Indian/Alaskan Natives are based on a small number of PLWH and should be compared with caution.
- Younger persons (13-24 years) estimated to be living with HIV are least likely to ever be linked to care (38.9%), retained in care (32.8%), estimated to be on ART (30.7%), and least likely to be virally suppressed (29.3%) (Figure 3).
- Women estimated to be living with HIV in Orange County are more likely to ever be linked to care (81.6%) and retained in care (65.9%), while males are more likely to be on ART (61.3%) and be virally suppressed (60.3%) (Figure 4).

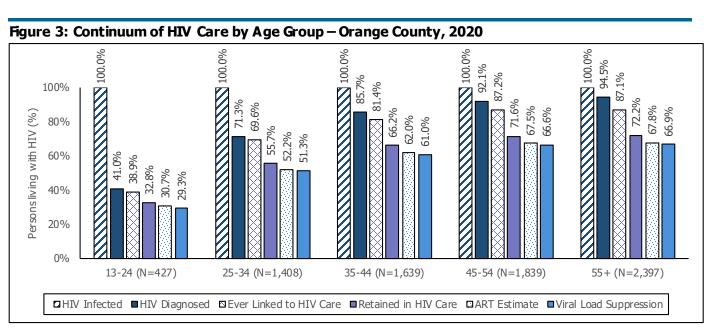


The figures below provide an overview of Orange County data.

Race/Ethnicity

- Asians have the lowest percentage of ever being linked to care (72.1%), American Indian/Alaskan Natives have the lowest percentage of retention in care (58.8%), while Blacks have the lowest percentage of ART estimate (54.6%) and viral suppression (54.1%).
- Whites have the highest percentage of linkage to care (84.1%), while persons of more than one race have the highest percentages of retention in care (75.3%), ART estimate, and viral suppression (70.1% for both measures).
- Percentages for Pacific Islanders and American Indian/Alaskan Natives are based on a small number of PLWH and should be compared with caution.

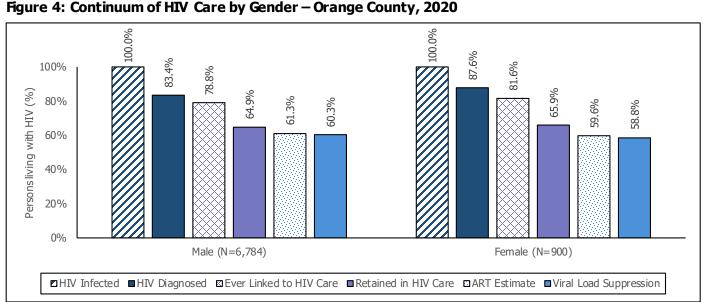
(Continued on the next page)



Does not include persons under the age of 13.

Age Group

- Persons age 13-24 years estimated to be living with HIV in Orange County are least likely to be diagnosed (41.0%), ever linked to care (38.9%), be retained in care (32.8%), be on ART (30.7%), or be virally suppressed (29.3%).
- Viral load suppression increases with age, with persons age 55 years and over having the highest rate of viral load suppression (66.9%).



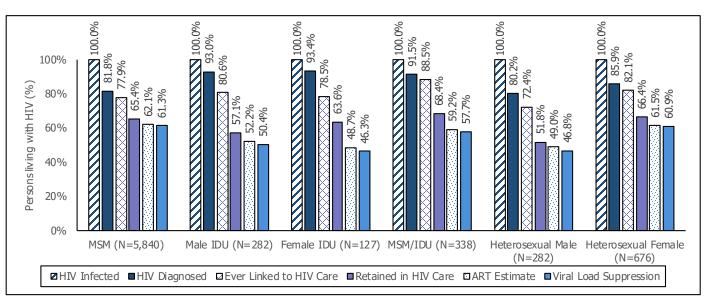
Does not include persons who identify as transgender.

Gender

• Women estimated to be living with HIV in Orange County have higher percentages than males with regard to ever linked to care (81.6%) and retained in care (65.9%), while males have higher percentages of ART estimate (61.3%) and viral suppression (60.3%). Transgender percentages are not shown due to the lack of an estimate regarding how many are diagnosed.

(Continued on the next page)

Figure 5: Continuum of HIV Care by Risk Group – Orange County, 2020



Note: MSM=men who have sex with men. IDU=injection drug users.

Does not include people infected as children, infected through a blood transfusion, are hemophiliacs, or are of unknown transmission source.

Risk Group

- Heterosexual males estimated to be living with HIV in Orange County have the lowest percentages of ever being linked to care (72.4%) and being retained in care (51.8%). Female IDUs have the lowest percentages of using ART (48.7%) and virally suppression (46.3%).
- MSM/IDU have the highest percentages of linkage to care (88.5%) and retention in care (68.4%), while MSM have the highest percentages of ART usage (62.1%) and viral suppression (61.3%).

Closing the Gaps

HIV testing is a critical step in HIV prevention and is the only way to identify Orange County residents with HIV who do not know they are infected (12.3% of the number of persons living with HIV do not know they are infected).

In addition, ensuring that people have access to care, stay in care, and remain on antiretroviral treatment will increase the percentage of HIV-infected individuals who achieve and maintain viral suppression, which is important for improving their health and for preventing HIV transmission.

To reduce the impact of HIV in Orange County, improvements are needed at each stage of the Continuum of HIV Care, with particular efforts aimed to reduce disparities by race, age, and risk group.

(Continued on the next page)

Data Sources, Methods, and Additional Resources

Data Sources

- The data were extracted from the Orange County HIV Case Registry, as reported January 2021.
- The estimated percentage of persons living with undiagnosed HIV are based on State of California figures obtained from California's Office of AIDS.³
- The estimated percentages of persons living with undiagnosed HIV by subpopulation are based on national figures obtained from the CDC.⁴

Definitions

 Persons living and diagnosed with HIV were defined as current Orange County residents diagnosed with HIV by December 31, 2020 who had their case reported to the Orange County HIV/AIDS Surveillance and Monitoring Program by January 31, 2021.

Additional Resources

- Diagnosis of HIV Infection in the United States and Dependent Areas, 2018 (Updated): https://www.cdc.gov/hiv/pdf/library/reports/surveillance/cdc-hiv-surveillance-report-2018-updatedvol-31.pdf
- National HIV/AIDS Strategy: <u>https://hab.hrsa.gov/about-ryan-white-hivaids-program/national-hivaids-strategy-updated-</u> <u>2020#:~:text=The%20National%20HIV%2FAIDS%20Strategy%20is%20a%20five-</u> <u>year%20plan,nation%20forward%20in%20addressing%20the%20domestic%20HIV%20epidemic</u>
- Centers for Disease Control and Prevention. Estimated HIV incidence and prevalence in the United States, 2014–2018. HIV Surveillance Supplemental Report 2020; 25(No. 1). Published May 2020. Accessed March 3, 2021:

http://www.cdc.gov/hiv/library/reports/hiv-surveillance.html.

 California's Office of AIDS Integrated HIV Surveillance, Prevention, and Care Plan, Laying a Foundation for Getting to Zero: California's Integrated HIV Surveillance, Prevention, and Care Plan, California Department of Public Health, Center for Infectious Diseases, Office of AIDS, September 2016: <u>https://www.cdph.ca.gov/Programs/CID/DOA/CDPH%20Document%20Library/GTZ%20Baseline%</u> 20Report%20FINAL.pdf

Acknowledgements

Orange County Health Care Agency would like to thank all Orange County providers and laboratories whose work made this report possible.

³ Laying a Foundation for Getting to Zero: California's Integrated HIV Surveillance, Prevention, and Care Plan, California Department of Public Health, Center for Infectious Diseases, Office of AIDS, September 2016.

https://www.cdph.ca.gov/Programs/CID/DOA/CDPH%20Document%20Library/GTZ%20Baseline%20Report%20FINAL.pdf

⁴ Centers for Disease Control and Prevention. Estimated HIV incidence and prevalence in the United States, 2014–2018. HIV Surveillance Supplemental Report 2020; 25(No. 1). Published May 2020. Accessed March 3, 2021.