HIV care continuum in Oregon

What is the HIV care continuum?

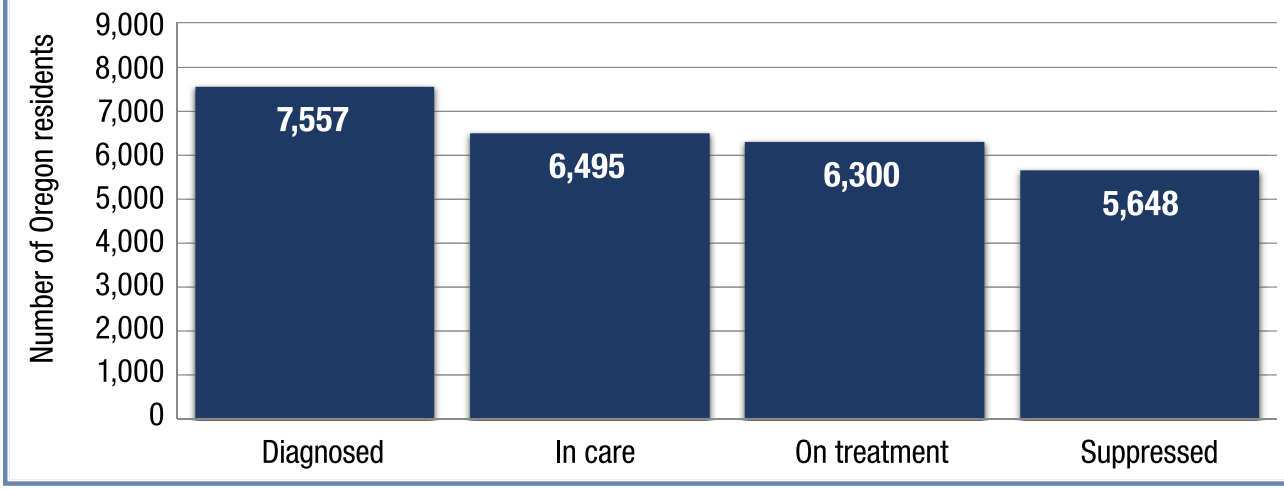
Reducing the amount of HIV in the body helps people infected with HIV stay healthier and reduces the chances of infecting others. People who do not know they have HIV could spread the virus, so it is important that people at risk for HIV get tested regularly and into care as soon as possible. Preventing HIV requires early diagnosis, getting linked with and staying in medical care, and taking antiretroviral therapy (ART) continuously to suppress viral load. One achieves viral suppression when the HIV viral load test result is 200 copies/mL or less. This level of HIV in the blood minimizes the risk of transmission. The HIV care continuum describes a region's success in achieving key prevention milestones from infection to viral suppression. The Centers for Disease Control and Prevention (CDC) and the National HIV/AIDS Strategy extensively use the HIV care continuum to assess treatment outcomes.(1, 2) The Oregon HIV Program uses information collected about people with HIV infection to create an HIV care continuum specifically for Oregon.

HIV care continuum definitions

- Infected*: people with HIV infection including people with diagnosed infection and people with unrecognized or undiagnosed HIV infection (estimated).
- Diagnosed*: people diagnosed with HIV whose case has been reported to the Oregon HIV Program.
- Linked to care: an HIV-specific laboratory test (CD4 or viral load) collected within 30 days of first diagnosis. (Indicates that a person has received medical attention for HIV.)
- In care: people with an HIV-related laboratory test in 2017.
- On treatment: people who have been prescribed an antiretroviral medicine (HIV treatment).
- Suppressed: people whose last reported HIV viral load (measure of amount of HIV circulating in bloodstream) during 2017 was < 200 copies/mL.

* The difference between "infected" and "diagnosed" is an estimate from the CDC (14% of people infected are not diagnosed). The "on treatment" estimate is based on Medical Monitoring Project data from Oregon, which observed 97% of people "in care" were prescribed ART.(4)

Figure 1 Oregon HIV care continuum, 2017



The Oregon HIV care continuum gives us a picture of the HIV epidemic in Oregon at the end of 2017 (Figure 1).

- An estimated 7,557 residents of Oregon had diagnosed HIV infection.
- Approximately 1,230 Oregonians were infected with HIV but remained undiagnosed.(3)
- Sixty-six percent (748/1,122) of people with newly diagnosed HIV infection in Oregon (2013–2017) were linked to care in 30 days, and 85% were linked in 90 days (952/1,122) (not shown in Figure 1).
- Approximately 14% or 1,062 Oregon residents with diagnosed HIV were not in medical care in 2017.
- Ninety-seven percent (6,300/6,495) of those in medical care with HIV were on ART.(4)
- Viral load suppression was achieved among more than 75% (5,648/7,557) of those living with diagnosed HIV, and was 91% (5,648/6,180) among those with a viral load reported in 2017.

Viral suppression

In 2013, the CDC estimated that 30% of all people infected with HIV in the United States were virally suppressed.(1) This estimate included people with undiagnosed HIV. If Oregon calculated suppression the same way, the estimate of suppression would be 64% (5,648/8,787). The difference between the national and Oregon estimates may be due to Oregon having more complete viral load reporting, more up-to-date residence information, better access to care, or better quality of care than the U.S. norm.

Some Oregon groups were less likely to be virally suppressed:

- Females were less likely to be virally suppressed than men (88% vs. 92% suppressed).
- American Indians/Alaska Natives and Blacks/African Americans were less likely to be virally suppressed than Whites (74% and 85% vs. 92% suppressed).
- Males who have had sex with men who have injected drugs (MSM/IDU) and IDU-only were less likely to be virally suppressed than MSM-only (85% and 84% vs. 93% not suppressed).
- Females who reported injection drug use were less likely to be virally suppressed than females whose transmission category was heterosexual with partner's risk unknown (77% vs. 89% suppressed).
- Younger persons were generally less likely to be virally suppressed than people in older age groups: Viral suppression was lowest among persons 13–24 years old (83%) and generally increased to 97% suppression among those 60 years of age and older.
- People living in rural Oregon counties were less likely to be suppressed than those living in mixed urban/rural areas (89% vs. 92%).

Summary

The continuum is one tool for assessing the state of HIV care and treatment. Oregon's continuum suggests that most people with diagnosed HIV in Oregon achieve viral suppression and appear to stay there. This coincides with gradual declines in new HIV infections from 291 cases in 2008 to 200 cases in 2017 and with an estimated increase in the percentage of people with HIV on treatment from 93% in 2009 to 97% in 2013.(4)

Oregon's viral suppression estimates substantially exceed comparable CDC estimates. This suggests a robust and largely successful network of HIV treatment in Oregon. It also suggests efforts to increase access to and use of medical care for HIV in Oregon might yield relatively smaller increases in the number of people virally suppressed than these efforts elsewhere in the United States where access and use of care might be lower. Conversely, more than 1,000 Oregonians already infected with HIV do not yet know it. Because they have not been diagnosed, this population cannot possibly be moved to the viral suppression category by treatment. This suggests further reductions in the number of new cases might rest on expanded screening.

References:

1. HIV care continuum at AIDS.gov [cited 2017 Feb 9].
   Available from: https://www.aids.gov/federal-resources/policies/care-continuum/.

2. National HIV/AIDS strategy overview at AIDS.gov [cited 2017 Feb 9].
   Available from: www.aids.gov/federal-resources/national-hiv-aids-strategy/overview/;
   National HIV/AIDS strategy for the United States: Updated to 2030, July 2015.
   Available from: www.aids.gov/federal-resources/national-hiv-aids-strategy/nhas-update.pdf.

3. Hall HI et al. Prevalence of diagnosed and undiagnosed HIV infection – United States, 2008–2012.
   Morbidity and Mortality Weekly Report. 2015 June 26; 64(24) [cited 2017 Feb 9].
   Available from: www.cdc.gov/mmwr/preview/mmwrhtml/mm6424a2.htm.

4. Medical Monitoring Project, 2017 unpublished chart abstraction data.

Epidemiologic resources:

Oregon Health Authority, HIV/AIDS epidemiology: https://public.health.oregon.gov/DiseasesConditions/CommunicableDisease/DiseaseSurveillanceData/HIVData/Pages/index.aspx

Centers for Disease Control and Prevention: www.cdc.gov/hiv.