



# HIV EPIDEMIOLOGICAL PROFILE

Washington State  
2022

# Acknowledgments

## Contributors:

Danika Troupe, MPH, CHES  
Steven Erly, PHD  
Jen Reuer, MPH  
Leticia Campos, MPH  
Kelly Naismith, MPH  
Rachel Amiya, PhD  
Zandt Bryan  
Martha Grimm  
Yehoshua Ventura  
Claire Mocha, MPH  
Kelse Kwaiser, MPH, CHES  
Luke Syphard  
Susan Buskin, PhD  
Courtney Moreno, MPH  
Richard Lechtenberg, MPH  
Anna Berzkalns, MPH  
Chelsey Kaasa  
Laura Garcia  
Columba Fernandez



Washington State Department of  
**HEALTH**

To request this document in another format, call 1-800-525-0127. Deaf or hard of hearing customers, please call 711 (Washington Relay) or email [civil.rights@doh.wa.gov](mailto:civil.rights@doh.wa.gov).

DOH 150-200 February 2023

## Photo Credit:

All images in this report are courtesy of Stephen R. Troupe

# Table of Contents

<b>Preface</b> .....	<b>i</b>
Abbreviations.....	<b>i</b>
Technical Notes.....	<b>ii</b>
Definitions of Important Terms.....	<b>ii</b>
Executive Summary.....	<b>iv</b>
Introduction.....	<b>vi</b>
Background.....	<b>vi</b>
Data Sources.....	<b>vi</b>
<b>Section 1. Characteristics of the General Population</b> .....	<b>1</b>
Summary.....	<b>2</b>
Core Question 1.1. Demographic characteristics and social determinants of health among the general population.....	<b>2</b>
Demographics.....	<b>2</b>
Social Determinants of Health.....	<b>4</b>
<b>Section 2. Epidemiology of HIV</b> .....	<b>5</b>
Summary.....	<b>6</b>
Core Question 2.1. Epidemiology and the distribution of HIV-related disparities or health inequities.....	<b>6</b>
Incidence.....	<b>7</b>
Undiagnosed Fraction.....	<b>10</b>
Late Diagnoses/Care Linkage.....	<b>10</b>
Viral Suppression.....	<b>12</b>
Prevalence.....	<b>15</b>
Impact of COVID-19 on Surveillance Data.....	<b>17</b>
Mortality.....	<b>19</b>
Transmission Clusters.....	<b>22</b>
Co-infection.....	<b>24</b>
Gonorrhea.....	<b>24</b>
Syphilis.....	<b>25</b>
Chlamydia.....	<b>25</b>
Hepatitis C.....	<b>26</b>
Mental Health.....	<b>27</b>
Substance Use.....	<b>28</b>
Disability.....	<b>31</b>
Core Question 2.2. Distribution of the social determinants of health that exacerbate HIV-related disparities.....	<b>32</b>
Socio-economic Status/Social vulnerability index.....	<b>32</b>

Stigma/Discrimination.....	34
Rural/Urban.....	35
<b>Section 3. HIV Care and Treatment.....</b>	<b>37</b>
Summary.....	38
<b>Core Question 3.1. HIV Care and Treatment Services.....</b>	<b>38</b>
Services Provided.....	38
HIV Partner Services.....	38
Ryan White Programs (Part A and B).....	39
ADAP.....	40
Peer Navigation.....	41
Barriers to Care and Wellness of PLWH.....	42
Satisfaction with HIV Care.....	42
Homelessness.....	44
Quality of Life and Overall Health.....	45
Incarceration.....	46
Primary Language and Health Literacy.....	47
Emergency Room and Healthcare Utilization.....	49
COVID-19 Co-infection and Disruption to HIV Care.....	50
Unmet Needs.....	51
<b>Core Question 3.2. HIV care continuum for the overall population and for     priority populations.....</b>	<b>51</b>
Care Continua and Priority Populations.....	52
<b>Section 4. Prevention of HIV.....</b>	<b>54</b>
Summary.....	55
<b>Core Question 4.1. HIV Care and Treatment Services.....</b>	<b>55</b>
Services Provided.....	55
Condoms and Test Kits.....	56
PrEP Uptake.....	58
PrEP DAP.....	60
Syringe Services.....	61
<b>Core Question 4.2. Indicators of risk for acquiring and transmitting HIV     infection.....</b>	<b>61</b>
Births.....	61
Sexual Behaviors.....	61
Sexually Transmitted Infections (STIs).....	63
Substance Use and Syphilis.....	66
Methamphetamine (and other drug) Use.....	69
Additional Populations at Risk.....	70
Houselessness.....	70
Hepatitis C.....	70



# Preface

## Abbreviations:

ADAP: AIDS Drug Assistance Program

AIDS: Acquired Immunodeficiency Syndrome

AI/AN: American Indian / Alaska Native

ART: Anti-retroviral Therapy

BRFSS: Behavioral Risk Factor Surveillance System

CDC: Centers for Disease Control and Prevention

DOH: Washington State Department of Health

eHARS: enhanced HIV/AIDS Reporting System

HIV: Human Immunodeficiency Virus

HRSA: Health Resources and Services Administration

ICD: International Classification of Diseases

IDU: Injection drug use

Lat/Hispanic: Latina/o/e/x, Hispanic

MMP: Medical Monitoring Project

MSM: Gay, bisexual, and other men who have sex with men

n: sample size

N: population size

NHBS: National HIV Behavioral Surveillance System

NHOPI: Native Hawaiian and Other Pacific Islander

NIR: No identified risk

NRR: No risk reported

PHSKC: Public Health – Seattle & King County

PLWH: People living with HIV

PWID: People who inject drugs

STI: Sexually transmitted infection

TB: Tuberculosis

TGA: Transitional grant area

# Technical Notes

## Reporting requirements

HIV and AIDS are notifiable conditions in Washington State. Healthcare providers, healthcare systems, and laboratories are required by law to report diagnoses and laboratory results (I.e., diagnostic tests, CD4 counts, viral loads, and nucleotide sequences) to the Washington State Department of Health. Diagnoses and laboratory results are then used for a variety of public health activities, namely, ensuring linkage to care and other services and identifying and evaluating prevention and care priorities and activities.

## Counting cases

A person is counted as a new HIV case (incident case) in the city/county in which they live at the time of their diagnosis. If that person progresses to AIDS, they will be considered an AIDS case in the city/county of residence at time of diagnosis. For people who already have an HIV diagnosis (prevalent case), assignments are based on the most recently reported city/county of residence.

## HIV Transmission categories

The Centers for Disease Control and Prevention (CDC) has developed a hierarchy of transmission categories based on the likelihood of a person being infected with HIV from different types of exposure. A person is assigned to a transmission category based on the category that is highest on the hierarchy. MSM who have a history of IDU have a separate category that combines these exposures. People are assigned to the category “No Identifiable Risk” (NIR) if they do not report any of the exposures known to transmit HIV during their case investigation.

## Molecular Analysis

Washington State Department of Health (DOH) uses time-space and molecular detection methods to identify HIV clusters. Molecular cluster detection identifies clusters based on HIV genomic sequence data submitted through routine electronic lab records (ELR) for drug resistance testing. HIV genomic sequences are then compared to all other known sequences to identify their similarities. If sequences are similar, it might indicate an HIV cluster that needs additional resources. Molecular analysis can only identify groups of people whose HIV is similar, but it cannot prove transmission between two people. Only the HIV virus genome is sequenced; no genetic information of the person is collected.

## Definitions of Important Terms

**Healthcare Discrimination:** For this report, healthcare discrimination was assessed via questions about a person’s experience getting HIV care in the past 12 months. Discrimination was not limited to HIV status and included experiences involving a person’s race, drug use, or sexuality.

**Incidence:** The number of people (cases) who are newly diagnosed with HIV while living in the state of Washington during a specified time period. The state does not count cases that were diagnosed outside of Washington as an incident case. The Department of Health (DOH) does not receive lab results or case reports for people living with HIV who move into Washington from another country,

which can result in a person being counted as an incident case rather than a prevalent case. To account for this and for other people who may be missing new diagnosis data, cases with a self-reported positive test more than 6 months prior to the diagnosis date recorded by DOH are not considered incident cases.

**Late diagnosis: Defined as when a person (case) is diagnosed with AIDS within 12 months of their initial HIV diagnosis.** This means the infection is likely not new; it has been in the body for many years. Likewise, it means routine screenings for HIV did not occur prior to diagnosis.

**Linked to care:** The number or proportion of people newly diagnosed with HIV who received an HIV medical care visit within 30 days following their HIV diagnosis. This is based on the report of HIV-related diagnostic and care related (e.g., viral load) lab results.

**Prevalence:** All people living with diagnosed HIV in Washington State within a defined time period. Prevalence includes all newly diagnosed individuals in Washington, individuals who were previously diagnosed in Washington and are currently living in Washington, and individuals who were diagnosed outside of Washington and are currently living in Washington. The term is also known as 'Ever Diagnosed' or 'people living with HIV' or 'living HIV case'.

**Stage 3/AIDS:** Acquired Immune Deficiency Syndrome (now known as Stage 3 of HIV). An advanced stage of HIV infection in which the immune system shows very low levels of CD4+ T-cell, a type of white blood cell that fights infection. Opportunistic Illnesses that define AIDS can result from the low levels of CD4+ T-cells and the presence of one diagnosis Stage 3/AIDS.

**Stigma:** For this report, stigma was assessed using a series of questions from the Medical Monitoring Project assessing how a person's HIV status affects their relationship with themselves or others. These questions are combined and developed into a continuous score. High stigma was defined as a score higher than the median stigma score.

**Viral load:** This is the concentration of viral copies circulating within a person's blood plasma. Reducing viral load improves patient health and reduces their ability to transmit HIV to others. Viral load can be reduced by HIV medication and is a good indication of whether a person is receiving optimal care.

**Viral suppression:** The ability to maintain the amount of HIV in the body at suppressed or reduced levels using medicine. A person is considered virally suppressed if they have less than or equal to 200 copies of virus per mL of blood. The proportion of people whose last viral load test in a calendar year is less than or equal to 200 copies of mL are considered virally suppressed.

**Sustained viral suppression:** Sustained viral suppression is when all viral load tests for an individual in a year are under 200 copies per mL of blood.

## Executive Summary

Washington state has a population of approximately 7.5 million people. Each year, roughly 5 out of every 100,000 people are diagnosed with HIV, which equates to roughly 400 new HIV diagnoses annually. There are approximately 14,000 people living with HIV (PLWH), and while this number continues to slowly rise in the State, we remain hopeful as improvements in HIV medication and investments in HIV prevention and treatment have dramatically increased the life expectancy for PLWH. On average, cisgender men make up 81% of the yearly number of cases, and men having sex with men is the identified exposure route in roughly 63% of new cases. Just over half of all the cases live in King County, which is the state's most populous and urban county.

Washington is celebrating many successes in our efforts to end the HIV epidemic, and we are also concerned about systemic injustices that have made the successes unequal among different communities in Washington. Among our successes, we see yearly improvements in viral suppression and sustained viral suppression, reaching the "Ending the Epidemic" goal of 80% of PLWH achieving viral suppression. Viral suppression remains a key target both for the individual health of the person, and for public health, as those who are suppressed cannot sexually transmit HIV. This achievement has been bolstered by improvements in medication, dedicated healthcare workers and public health officials, and programs such as the AIDS Drug Assistance Program (ADAP), case management, peer navigation, and Housing Opportunities for People with AIDS (HOPWA) that support PLWH in their health journey. In fact, our Ryan White programs served 6,725 people in 2021, aiding with medical bills, housing, case management, and more. Our peer navigation programs have served over 700 clients, providing additional peer-supports to PLWH most in need of services. Because of these and other efforts, the average rates of engagement in care and linkage to care within 30 days improved, and in 2019, we saw our lowest proportion of cases diagnosed late. These successes have resulted in meaningful change in the lives of PLWH, as a majority (81%) report having a good, very good, or excellent quality of life, which is similar to the general population in Washington (84%).

However, the work is far from over as inequities persist, and for many residents, optimal health remains out of reach. While the overall rate of new diagnoses in Washington is about 5 per 100,000 people, among the Black community, it is 26 per 100,000. US-born Black and Native Hawaiian and Other Pacific Islanders have the lowest rates of viral suppression (73% and 69%, respectively), as well as the lowest rates of sustained viral suppression (54% and 48%, respectively). We also know that homelessness is a barrier to care and PLWH are at an increased risk of homelessness. An estimated 10% of PLWH have experienced homelessness in the past month. The number is even more alarming for Black PLWH, transgender people, and people who reported injection drug use as a mode of exposure, where 20%, 30%, and 26% of these groups, respectively, reported experiencing homelessness in the last month. In fact, the social determinants of health, which intersect with racism and transphobia, can explain much of the disparities, whereby those of lower socioeconomic status experience worse outcomes, on average. Similarly, stigma and discrimination continue to be barriers to care, especially for people of color, people who inject drugs, and people experiencing homelessness. People who report experiencing stigma in a health care setting have lower rates of viral suppression, pointing to an important opportunity to work with providers to reduce stigma and increase empathy for people who have the greatest needs. Despite drastic improvements in medication that have increased the quality and duration of life for many PLWH, HIV is still the leading cause of death among PLWH.

The data also reveal important opportunities for prevention. People who have STIs are at an increased risk of acquiring HIV. While the HIV diagnosis rate in Washington is 5 per 100,000



people, MSM who have gonorrhea are diagnosed with HIV at a rate of 614 cases per 100,000, and MSM who have syphilis are diagnosed with HIV at a rate of 725 cases per 100,000. Yet, at the Sexual Health Clinic in King County, only 40% of HIV-negative MSM receiving services were on PrEP in 2020. Fortunately, Washington has allocated funding specifically to pay for medication including PrEP, and since 2017, 226 clients have received PrEP coverage through the PrEP Drug Assistance Program (DAP). Further, our cluster detection and response program can identify areas of high need for prevention, and since launching in 2019, 87 individuals were referred for partner services in identified clusters. Another opportunity for prevention is in supporting drug user health. Between 2015 and 2019, 9% of PLWH reported injecting drugs in the past 12 months and 7% of these individuals reported sharing a needle. While the Department of Health is committed to supporting syringe service programs, drug-user health programs remain politically charged, leaving many gaps in supports among those who are the most vulnerable.

While we acknowledge the successes, much work remains as HIV continues to have a significant impact on many Washingtonians. This profile provides data that are intended to be a resource for planning around prevention and intervention services as we continue to work towards ending the HIV epidemic and improving quality of life for PLWH.

# Introduction

## Background

The HIV Epidemiological Profile is conducted once every five years and describes the following:

- HIV among various populations and sub-populations (for example, geographic, behavioral, and clinical subgroups) in Washington
- Characteristics of the general population of Washington, and populations who are living with or at high risk for HIV.
- Data that would be necessary in conducting needs assessments and gap analyses.

This report summarizes the HIV situation in Washington between the years 2015 and 2019. Overall, the profile is intended to be used by state, local, and community groups to identify successes, needs, and gaps in services and for planning HIV prevention and care programs, distributing HIV prevention and care resources, and evaluating programs and policies.

## Data Sources

Core HIV surveillance System: the core HIV Surveillance System is the source of most of the data contained in this report. Because HIV is a notifiable condition, new diagnoses and laboratory results (including viral loads) are reported to the Department of Health. This information is supplemented by case investigations, which are completed to gather more information on the demographics of people living with HIV. These data are collected in eHARS (enhanced HIV/AIDS Reporting System) and exported for analysis. While these data are useful, in particular for understanding incidence, prevalence, and viral suppression, they are limited in that they only include people who have been diagnosed with HIV and reported to surveillance, they have limited information about current gender identity (vs. sex assigned at birth), and it can be difficult to distinguish people who are receiving inadequate HIV care in Washington from those who have moved out of state. The data collected for demographics largely represent a point in time at diagnosis and the engagement in care data is limited to the reporting of laboratory results.

Survey Data: The Medical Monitoring Project (MMP) is an annual survey of PLWH and provides more information on the experience of living with HIV. Although this is a random sample with weights to account for non-response, the numbers can often be too small to be generalizable to all of Washington and for county-level analyses. Moreover, self-reported information can be vulnerable to social desirability bias, whereby a person might not be honest in their interview to be viewed more favorably by the interviewer. Finally, the MMP survey disproportionately reflects the experiences of PLWH who are receiving regular HIV care, as these individuals are easier to locate and recruit for participation.

Administrative Data: The Provide data system collects information on Ryan White Parts A and B, AIDS Drug Assistance Program (ADAP), and Housing Opportunities for People with AIDS (HOPWA), HIV Prevention (PrEP Navigation), and Pre-Exposure Prophylaxis Drug Assistance Program (PrEP DAP). We use these data to assess ADAP, case management, and other supportive services.

Other Secondary Data: This report also uses secondary data, that is, data that we did not collect. For example, data are included from the American Community Survey, which is conducted yearly by the Census Bureau and can inform us about the number of people who live in an area and its demographics. We use state housing data from Department of Commerce to assess homelessness. We also use the Behavioral Risk Factor Surveillance Survey (BRFSS) to assess risks in the general population and the National HIV Behavioral Survey (NHBS) to assess behaviors among people at risk for or living with HIV.

Strengths and Limitations: Overall, this report provides a robust description of the HIV epidemic in Washington. It utilizes multiple different data sources and provides details on all levels of the care continuum, including upstream from the care continuum (i.e., prevention activities), and across multiple co-occurring conditions, supporting a syndemic approach. However, we are still limited by what is collected in the data. For example, we often do not have good information on hard-to-reach populations (e.g., people experiencing homelessness, people who use drugs), and information on gender minorities (e.g., transgender and non-binary individuals) may not be collected, or if it is collected, it might not be consistently reported, limiting our ability to understand the unique challenges of these groups. Finally, the relevance of the data must be contextualized to current planning with the impacts of COVID-19. That is, the majority of the data presented in this report are for 2015-2019, and may have changed due to the far-reaching impacts of the pandemic.

# Section 1

Characteristics of the General Population



## Summary

Washington is a geographically diverse state. Though 69% of the state identifies as White, within differing geographies, there are stark differences in demographics of race, education, income, and healthcare coverage. Understanding the unique make-up of each region and locality is critical to channel the strengths within communities and to address disparities that are continuing to fuel the HIV epidemic.

### Core Question 1.1: What are the demographic characteristics and social determinants of health among the general population in Washington?

## Demographics

Washington State has a population of approximately 7.5 million that is divided into three regions: Western Washington, which is west of the Cascade Mountains and sits along the Salish Sea and Pacific Ocean; Central Washington, which runs down the eastern slope of the Cascade Mountains and into the farm- and desert-landscapes; and Eastern Washington which borders neighboring Idaho. A majority (78%) of the population is concentrated in Western Washington, which contains the largest urban centers and the most racial diversity in the state. Central Washington is the most rural region of the state, where one third of the population identifies as Latina/o/e/x and Hispanic.

Figure 1.1. Map of the Regions and Counties of Washington





**Table 1.1.** Race by Region in Washington State, 2019

Variable	Value	WA State	Western WA	Central WA	Eastern WA
Total	N	7,404,107	5,802,147 (78%)	770,429 (10%)	831,531 (11%)
Birth Sex <sup>2</sup>	Men	50%	50%	50%	50%
	Women	50%	50%	50%	50%
Age	< 15	19%	18%	22%	19%
	15-24	13%	12%	14%	15%
	25-34	15%	16%	13%	14%
	35-44	13%	14%	12%	12%
	45-54	13%	13%	11%	12%
	55-64	13%	13%	12%	13%
	65+	15%	15%	15%	16%
Urbanicity <sup>3</sup>	Urban	64%	69%	34%	59%
	Peri-Urban	21%	20%	30%	20%
	Rural	14%	11%	36%	22%

Data Source: 2019 American Community Survey.

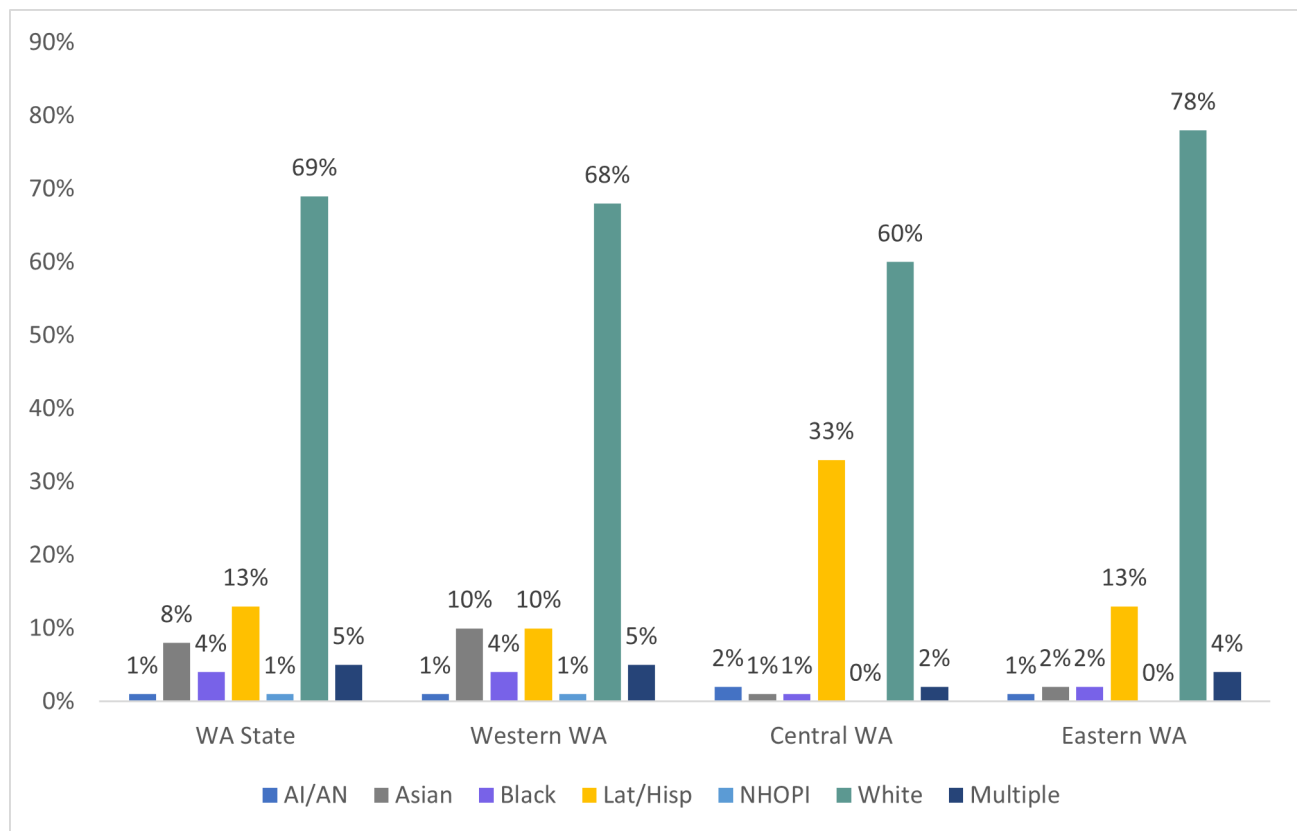
Abbreviations: AI/AN, American Indian or Alaska Native; LAT/HISP, Latina/o/e/x and Hispanic; NHOPI, Native Hawaiian or Other Pacific Islander.

1. Population Denominator: total population of Washington.

2. Gender information is not available in American Community Survey.

3. Urbanicity was determined on the level of census tract based on characteristics describing the population size, economy, and structure of population centers.

**Figure 1.2.** Race by Region in Washington State, 2019



## Social Determinants of Health

There are sharp socio-economic divisions between the regions of Washington State. The highest rates of employment, education, and income are in Western Washington. Central Washington, meanwhile, has the highest concentration of residents with low socio-economic status, with 10% being uninsured (compared to the state average of 6%) and 18% having less than a high school education (compared to the state average of 9%).

**Table 1.2.** Socio-Economic Characteristics of Washington State by Region, 2019

Variable	Value	WA State	Western WA	Central WA	Eastern WA
Total	N	7,404,107	5,802,147 (78%)	770,429 (10%)	831,531 (11%)
Education	<High School	9%	8%	18%	9%
	High School Diploma	22%	21%	27%	24%
	>High School	69%	71%	55%	67%
Household Income	<\$25,000	15%	14%	19%	21%
	\$25,000-49,999	19%	17%	24%	24%
	\$40,000-74,999	17%	17%	20%	19%
	>\$75,000	49%	53%	37%	36%
Employment	Employed	60%	61%	58%	56%
	Unemployed	3%	3%	3%	3%
	Other	27%	26%	29%	31%
Disability Status	Disabled	13%	12%	14%	15%
	Not Disabled	87%	88%	86%	85%
Insurance	Private	70%	73%	58%	63%
	Public	35%	32%	45%	42%
	Uninsured	6%	6%	10%	7%

Data Source: 2019 American Community Survey.

1. Population Denominators: Education-population 25 years and over; Income-total households; Employment-civilian workforce 16 years and over; Disability and Insurance-civilian non-institutionalized population.

# Section 2

Epidemiology of HIV in Washington



## Summary

There are roughly 14,000 people living with HIV in Washington State, with about 400 new cases diagnosed each year. HIV has the largest impact on cisgender men, in particular cisgender men who have sex with men (MSM). On average, cisgender men make up 81% of the annual number of new cases, and male-male sex is the identified exposure in 63% of new cases. Just over half of all cases live in King County, which is the state's most populous and urban county.

There is much progress to celebrate regarding HIV in Washington. Viral suppression and sustained viral suppression continue to increase annually as our programs and partners provide more services for PLWH, including peer navigation, medication, and housing assistance programs. In 2019, we reached our goal of at least 80% of PLWH reaching viral suppression.

Although achieving this goal is a notable accomplishment, there is also cause for concern as progress is not being experienced equally among all communities within Washington. There are large disparities among people of color. Black, Latina/o/e/x, and Native Hawaiian and Other Pacific Islander's (NHOPI) have higher rates of HIV diagnosis, and American Indian/Alaskan Native (AI/AN) communities have lower rates of sustained viral suppression. Furthermore, the median number of days to achieve viral suppression after HIV diagnosis among AI/AN persons is more than double the state average (94 days vs 207 days, respectively). Age is another area where we see differences. Notably, people between the ages of 20 and 40 have about twice the risk of HIV infection compared to the general population. A person's risk of HIV infection peaks between the ages of 26 and 27 years old. Young people, though linked to HIV-related medical care in a similar amount of time as other people living with HIV, are less likely to be virally suppressed. Among PLWH between the ages of 25 and 44, HIV, drug overdoses, and intentional self-harm make up 61% of the causes of death. In comparison, HIV, overdose, and intentional self-harm make up only 41% of the causes of death among all PLWH.

Co-morbidities with HIV also present a significant concern. PLWH are at high risk of infection of other STIs. The rate of gonorrhea infection among PLWH from 2015-2019 was 271 per 10,000 person-years, which is approximately 20 times that of the general Washington population. The rate of syphilis is similarly high (53.6 vs 1.65 per 10,000). This is driven by the high rate of gonorrhea and syphilis among MSM who are living with HIV. Similarly, between 2017 and 2019, PLWH were 4 times more likely to die from opioid overdose than the general Washington population and 11 times more likely to die from overdose of psychostimulants. This points not only to the high prevalence of substance use among PLWH but also the burden of the use on the health of PLWH.

The social determinants of health can explain much of the disparities in Washington State, with those of lower socioeconomic status experiencing worse outcomes, on average. This suggests that meeting the Ending the Epidemic goals will require both targeted supports, and comprehensive programs that seek to eliminate poverty and other determinants of health.

**Core Question 2.1: What is the epidemiology of HIV and the distribution of HIV-related disparities or health inequities in Washington?**

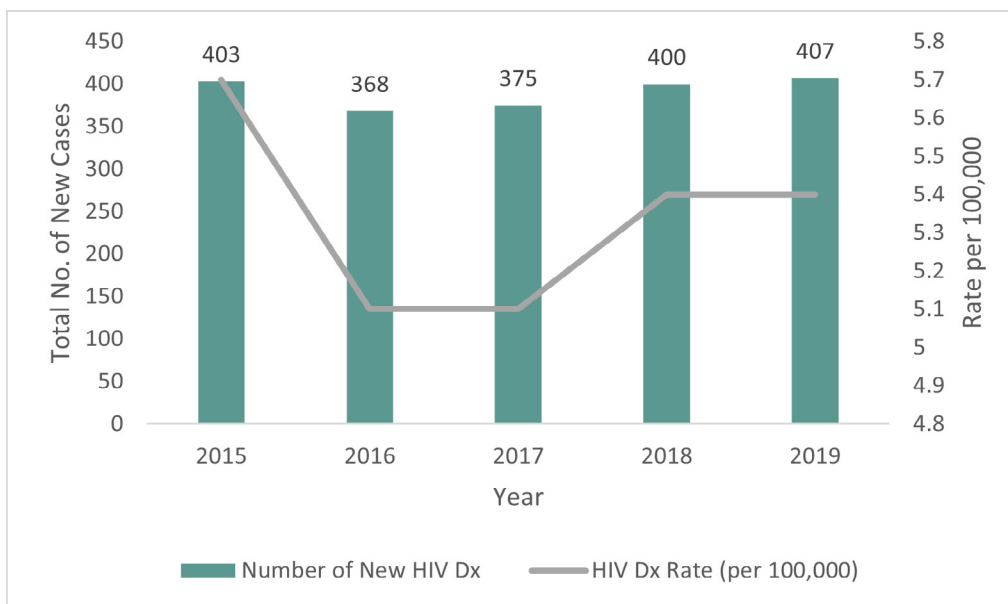
## Incidence

Incidence describes the number of new HIV infections and is useful for understanding how the epidemic is progressing. In Washington State, we measure incidence using new diagnoses of HIV. These are defined as persons whose first HIV-indicated laboratory result or first diagnosis by a healthcare provider occurred while living in Washington. Cases with a self-reported positive test more than 6 months prior to the diagnosis date recorded by the Department of Health are not considered incident cases.

We use both rates and counts of new diagnoses to understand incidence. The counts give us an understanding of the number of people impacted, and the rates, which account for the population size, are useful for comparing different years and populations. The rate of new HIV diagnosis in Washington has dropped since 2015. Between 2018 and 2019, the rate stayed the same at 5.4 diagnoses per 100,000 people. Within this same time frame, the number of new cases has remained steady, ranging from 368 to 407 between 2015 and 2019.

We can also look at the 5-year average, which stabilizes the numbers and can provide more information on the 'big picture' of HIV in Washington. Five-year averages are especially useful when numbers are small (e.g., when looking at sub-groups of people), as it reduces the probability of seeing large changes that are simply due to random chance. Overall, the 5-year average was 5.3 new infections per 100,000 people from 2015-2019. However, we see that people aged 25-34 had a much higher rate (14.0 per 100,000). Looking at race, we see higher rates among Black (26.3 per 100,000) and Latina/o/e/x and Hispanic (8.3 per 100,000) identifying populations. The high rates among Black and Latina/o/e/x populations are partially caused by the large number of reported diagnoses among foreign-born individuals. These rates should be interpreted with caution, as it can be difficult to know if foreign-born individuals represent new infections or people who moved to the United States while HIV positive. That is, it may be that a foreign-born individual was diagnosed in a different country, but we do not have records of their diagnosis, and therefore they appear to be a new diagnosis. Although we do account for self-reporting of a previous diagnosis, individuals may not always disclose a previous HIV diagnosis. Despite this, we know that the rate of HIV diagnosis among foreign-born Black and Latina/o/e/x populations is still higher than that of the general population in Washington.

**Figure 2.1.** New HIV Case Counts over Time, WA State, 2015-2019





**Table 2.1. Rate of New Cases, by Demographic and Risk Characteristics, WA State, 2015-2019**

Variable	Value	HIV Diagnoses 2015-2019	Yearly Average N (%)	Annual Rate (per 100,000 Individuals)
Total	N	1953	391 (100%)	5.3
Gender	Cisgender men	1574	315 (81%)	8.6
	Cisgender women	352	70 (18%)	1.9
	Transgender men	2	0 (0%)	NA
	Transgender women	25	5 (1%)	NA
Age at HIV Diagnosis	< 13	9	2 (0%)	0.2 <sup>NR</sup>
	13-24	301	60 (15%)	5.3
	25-34	713	143 (37%)	14
	35-44	390	78 (20%)	8.3
	45-54	323	65 (17%)	6.8
	55-64	171	34 (9%)	3.6
	65+	46	9 (2%)	0.8 <sup>NR</sup>
Race/Ethnicity	AI/AN	24	5 (1%)	5.2 <sup>NR</sup>
	<i>Including Multiracial</i>	67	13 (3%)	NA
	Asian	111	22 (6%)	3.7
	<i>Including Multiracial</i>	146	29 (7%)	NA
	Black	355	71 (18%)	26.3
	<i>Including Multiracial</i>	423	85 (22%)	NA
	Foreign-born <sup>a</sup>	161	32 (8%)	50.1
	U.S.-born <sup>a</sup>	169	34 (9%)	16.4
	LAT/HISP	390	78 (20%)	8.3
	<i>Including Multiracial</i>	390	78 (20%)	NA
	Foreign-born <sup>a</sup>	195	39 (10%)	12.9
	U.S.-born <sup>a</sup>	143	29 (7%)	4.5
	NHOPI	18	4 (1%)	7.2 <sup>NR</sup>
	<i>Including Multiracial</i>	34	7 (2%)	NA
	White	966	193 (49%)	3.8
	<i>Including Multiracial</i>	1323	265 (68%)	NA
Multiple	89	18 (5%)	5.8	
Mode of Exposure	MSM	1095	219 (56%)	NA
	PWID	162	32 (8%)	NA
	MSM/PWID	144	29 (7%)	NA
	Heterosexual	218	44 (11%)	NA
	Blood/pediatric	12	2 (1%)	NA
	NIR	322	64 (16%)	NA

Abbreviations: AI/AN, American Indian or Alaska Native; LAT/HISP, Latina/o/e/x and Hispanic; MSM, men having sex with men; NHOPI, Native Hawaiian or Other Pacific Islander; NIR, no identified risk; PWID, people who inject drugs.

<sup>NR</sup>Not reliable, RSE ≥25

<sup>a</sup> Country of origin data are missing for approximately 19% and 34% of newly diagnosed cases among Black and LAT/HISP, respectively.

**Table 2.2.** New HIV Case Counts over Time, by County of Residence at HIV Diagnosis, WA State, 2015-2019

County	HIV Diagnoses 2015-2019	Yearly Average N (%)	Annual Rate (per 100,000 Individuals)
Total	1953	391 (100%)	5.3
Adams Co.	2	0 (0%)	2.0 <sup>NR</sup>
Asotin Co.	1	0 (0%)	0.9 <sup>NR</sup>
Benton Co.	22	4 (1%)	2.3
Chelan Co.	17	3 (1%)	4.4
Clallam Co.	15	3 (1%)	4.0 <sup>NR</sup>
Clark Co.	108	22 (6%)	4.6
Columbia Co.	1	0 (0%)	4.9 <sup>NR</sup>
Cowlitz Co.	12	2 (1%)	2.3 <sup>NR</sup>
Douglas Co.	7	1 (0%)	3.4 <sup>NR</sup>
Ferry Co.	0	0 (0%)	0.0
Franklin Co.	20	4 (1%)	4.4
Garfield Co.	0	0 (0%)	0.0
Grant Co.	6	1 (0%)	1.2 <sup>NR</sup>
Grays Harbor Co.	11	2 (1%)	3.0 <sup>NR</sup>
Island Co.	13	3 (1%)	3.1 <sup>NR</sup>
Jefferson Co.	4	1 (0%)	2.6 <sup>NR</sup>
King Co.	978	196 (50%)	9.1
Kitsap Co.	43	9 (2%)	3.3
Kittitas Co.	5	1 (0%)	2.2 <sup>NR</sup>
Klickitat Co.	1	0 (0%)	0.9 <sup>NR</sup>
Lewis Co.	4	1 (0%)	1.0 <sup>NR</sup>
Lincoln Co.	2	0 (0%)	3.7 <sup>NR</sup>
Mason Co.	22	4 (1%)	6.9
Okanogan Co.	2	0 (0%)	0.9 <sup>NR</sup>
Pacific Co.	1	0 (0%)	0.9 <sup>NR</sup>
Pend Oreille Co.	2	0 (0%)	3.0 <sup>NR</sup>
Pierce Co.	249	50 (13%)	5.8
San Juan Co.	0	0 (0%)	0.0
Skagit Co.	18	4 (1%)	2.9
Skamania Co.	1	0 (0%)	1.7 <sup>NR</sup>
Snohomish Co.	145	29 (7%)	3.7
Spokane Co.	108	22 (6%)	4.3
Stevens Co.	1	0 (0%)	0.4 <sup>NR</sup>
Thurston Co.	39	8 (2%)	2.8
Wahkiakum Co.	0	0 (0%)	0.0
Walla Walla Co.	4	1 (0%)	1.3 <sup>NR</sup>
Whatcom Co.	24	5 (1%)	2.2
Whitman Co.	4	1 (0%)	1.6 <sup>NR</sup>
Yakima Co.	61	12 (3%)	4.8

<sup>NR</sup>Not reliable, RSE ≥25

## Undiagnosed Fraction

Unfortunately, our incidence rates do not tell us about people who have contracted HIV but have not been diagnosed. The Washington State Department of Health partners with the University of Washington to estimate the number of people in living with HIV who have not been diagnosed. This number is estimated with a model that uses information about people newly diagnosed with HIV (CD4 count and testing history) to infer how long it takes for someone to be diagnosed after infection. In 2019, an estimated 1109 people were living with undiagnosed with HIV in Washington state. This represents 7.5% of the total population of PLWH: a fraction that has decreased over the decade (10.1% in 2010).

**Table 2.3.** Estimate of People Living with Undiagnosed HIV in Washington State, 2019<sup>1</sup>

Variable	Value	Undiagnosed Cases	% of PLWH
Total	N	1109	7.5%
Geography	King County	499	6.6%
	Non-King County	610	8.4%
Risk	MSM	498	4.6%
	Non-MSM	612	15.1%

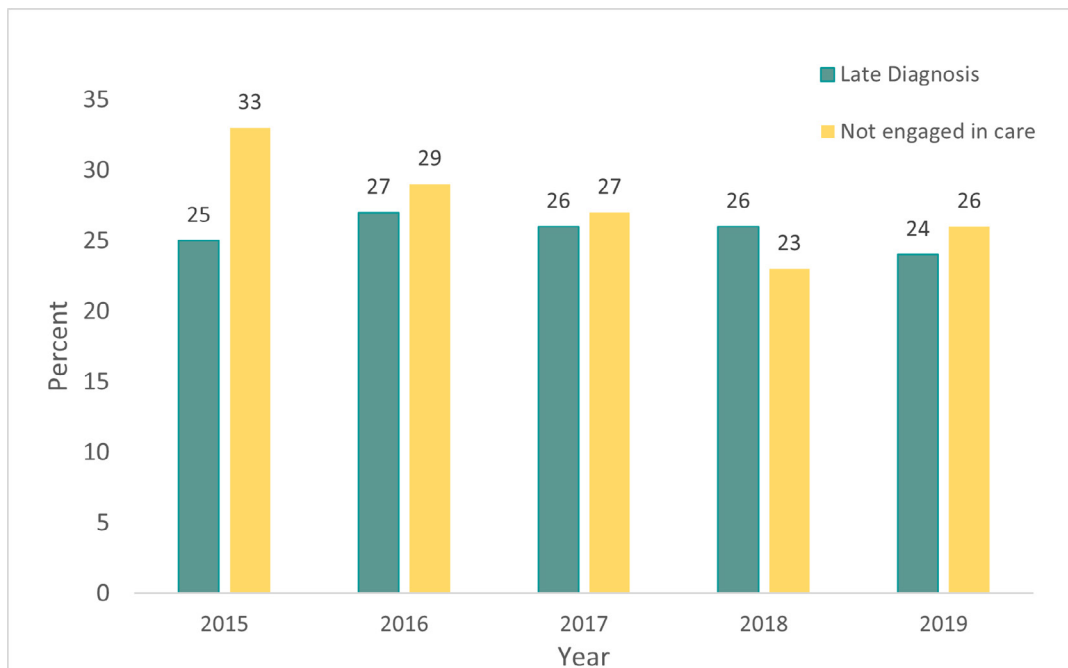
Abbreviations: MSM, MSM, men having sex with men

1. Estimates from model of time to HIV diagnosis incorporating testing history and first CD4 count.

## Late Diagnoses/Care Linkage

Two key metrics of success in the response to the HIV epidemic are: the proportion of people linked to care within 30-days of diagnosis, and the proportion of people who progress to Stage 3 (AIDS) within 1-year of diagnosis – also known as ‘late diagnoses’. Between 2015 and 2019 there were 1,953 people diagnosed with HIV in Washington state. Of those, 82% (1,606) were linked to medical care within 30-days, and 26% (499) were considered late diagnoses. American Indian/Alaskan Natives had the lowest proportion of people getting linked to care within 30-days (69%).

**Figure 2.2.** Percent of HIV cases diagnosed late and not engaged in care by year, WA 2015-2019.



**Table 2.4.** Late Diagnosis and Initial Linkage to HIV Care, WA 2015-2019

Variable	Value	HIV Diagnoses N	Late Diagnoses <sup>1</sup> N (%)	Linked to Care in 30 Days <sup>2</sup> N (%)
Total	N	1953	499 (26%)	1606 (82%)
Gender	Cisgender men	1574	391 (25%)	1291 (82%)
	Cisgender women	352	105 (30%)	295 (84%)
	Transgender men	2	1 (50%)	1 (50%)
	Transgender women	25	2 (8%)	19 (76%)
Age at HIV Diagnosis	< 13	9	0 (0%)	8 (89%)
	13-24	305	36 (12%)	234 (77%)
	25-34	708	132 (19%)	578 (82%)
	35-44	390	112 (29%)	328 (84%)
	45-54	321	125 (39%)	268 (83%)
	55-64	169	75 (44%)	146 (86%)
	65+	45	17 (38%)	43 (96%)
Race/Ethnicity	AI/AN	24	5 (21%)	15 (63%)
	<i>Including Multiracial</i>	67	15 (22%)	51 (76%)
	Asian	111	40 (36%)	98 (88%)
	<i>Including Multiracial</i>	148	47 (32%)	130 (88%)
	Black	355	110 (31%)	293 (83%)
	<i>Including Multiracial</i>	423	124 (29%)	356 (84%)
	Foreign-born <sup>a</sup>	161	67 (42%)	143 (89%)
	U.S.-born <sup>a</sup>	169	36 (21%)	132 (78%)
	LAT/HISP	390	102 (26%)	325 (83%)
	<i>Including Multiracial</i>	390	102 (26%)	325 (83%)
	Foreign-born <sup>a</sup>	195	69 (35%)	169 (87%)
	U.S.-born <sup>a</sup>	143	21 (15%)	117 (82%)
	NHOPI	18	6 (33%)	14 (78%)
	<i>Including Multiracial</i>	34	10 (29%)	28 (82%)
	White	966	219 (23%)	783 (81%)
	<i>Including Multiracial</i>	1325	305 (23%)	1079 (81%)
Multiple	89	78 (88%)	78 (88%)	
Mode of Exposure	MSM	1095	230 (21%)	915 (84%)
	PWID	162	36 (22%)	122 (75%)
	MSM/PWID	144	27 (19%)	109 (76%)
	Heterosexual	218	70 (32%)	187 (86%)
	Blood/pediatric	12	3 (25%)	11 (92%)
	NIR	322	133 (41%)	262 (81%)

Abbreviations: AI/AN, American Indian or Alaska Native; LAT/HISP, Latina/o/e/x and Hispanic; MSM, men having sex with men; NHOPI, Native Hawaiian or Other Pacific Islander; NIR, no identified risk; PWID, people who inject drugs.

a Late HIV diagnoses = AIDS diagnoses within 12 months of HIV diagnoses.

b Initial linkage to care = at least one CD4 or viral load result within 30 days of HIV diagnoses.

c Country of origin data are missing for approximately 19% and 34% of newly diagnosed cases among Black and LAT/HISP, respectively.

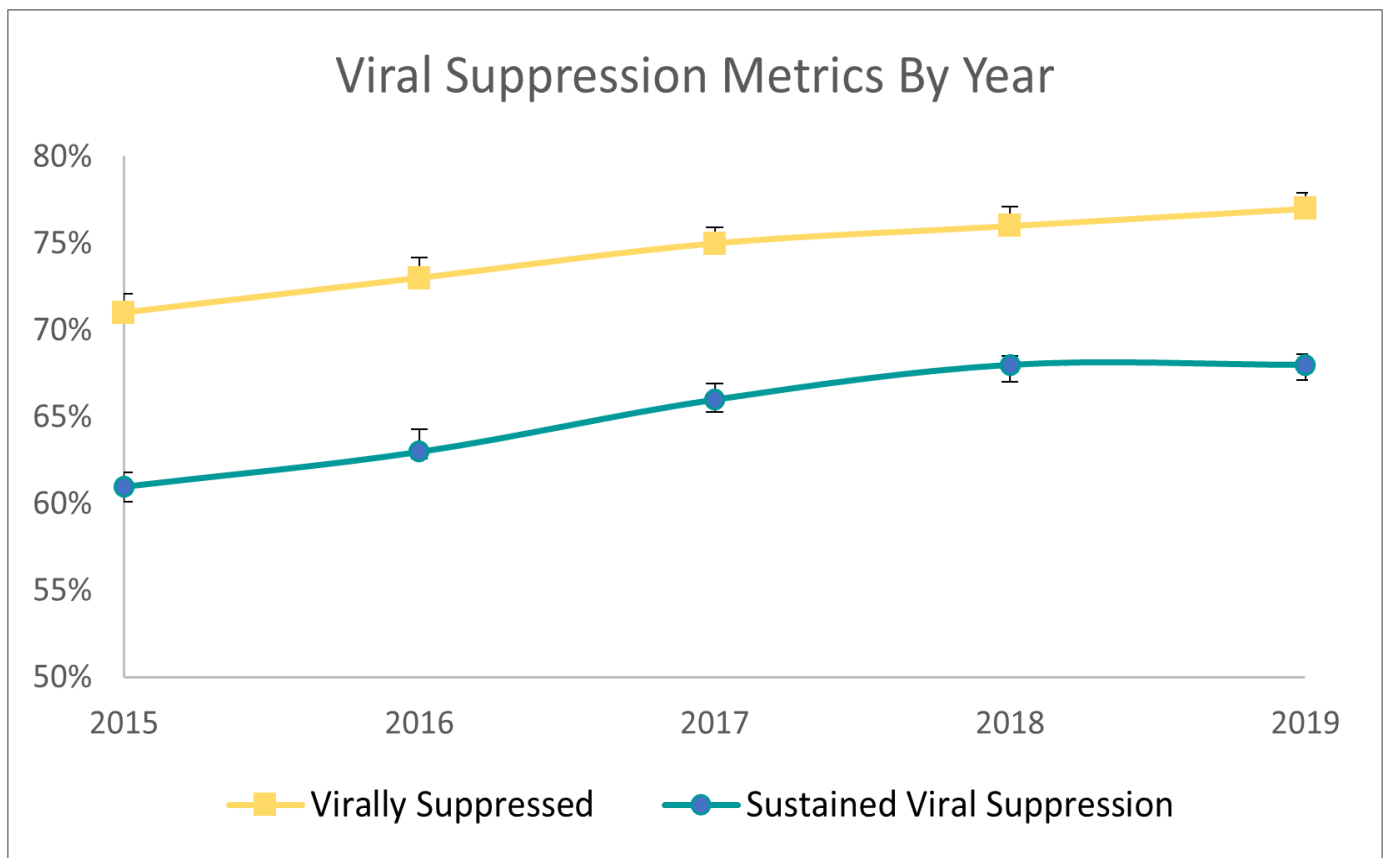
## Viral Suppression

Viral suppression is an important indicator as it is significant for both individual health and public health as it reduces the risk of transmission. In 2019, the median time from HIV diagnosis to viral suppression was 94 days. In general, it takes young people longer to achieve viral suppression after diagnosis, with the time to viral suppression decreasing as people age. People who identify solely as AI/AN and PWID had the longest time to viral suppression of the populations we characterized (207 and 173 days, respectively).

Eighty-one percent of PLWH in Washington were virally suppressed at the end of 2019 and 68% were virally suppressed throughout 2019 (durable suppression). These proportions have been increasing over the last 5 years. The populations with the lowest rate of durable viral suppression were people who identify as U.S.-born black (54%), people who identify as NHOPI (48%), transgender men (35%) and PWID (53%). The highest rates of viral suppression were found among people who identify as Asian (75%) and MSM (72%).

Although the overall proportion of PLWH who are virally suppressed has increased over the past decade, the progress has not been equal for all communities. The figures below demonstrate that people of color generally have lower rates of viral suppression than white PLWH. These differences vary in their magnitude across the state, with southwest Washington experiencing the widest disparities.

**Figure 2.3. Percent Virally Suppressed and with Sustained Viral Suppression over time, 2015-2019**





**Table 2.5. Viral Suppression by Demographic Characteristics, Washington State**

Variable	Value	New Diagnoses, 2015-2019	Days to Viral Suppression Median (95% CI) <sup>a</sup>	PLWH, 2019	Viral Suppression N (%) <sup>a</sup>	Sustained Viral Suppression N (%) <sup>b</sup>	
Total	N	1953	94 (91-100)	13906	11262 (81%)	10363 (68%)	
Gender	Cisgender men	1574	95 (91-101)	11622	9453 (81%)	8737 (69%)	
	Cisgender women	352	92 (84-106)	2150	1703 (79%)	1533 (63%)	
	Transgender men	2	NE	13	8 (62%)	6 (35%)	
	Transgender women	25	103 (60-133)	121	98 (81%)	86 (63%)	
Age at HIV Diagnosis	< 13	9	49 (17-284)	170	137 (81%)	123 (62%)	
	13-24	305	106 (92-117)	2259	1679 (74%)	1481 (57%)	
	25-34	708	92 (85-103)	5261	4190 (80%)	3838 (66%)	
	35-44	390	91 (84-103)	3890	3270 (84%)	3073 (73%)	
	45-54	321	98 (89-110)	1709	1459 (85%)	1365 (75%)	
	55-64	169	90 (79-107)	515	444 (86%)	408 (75%)	
Race/Ethnicity	65+	45	85 (71-121)	102	83 (81%)	74 (67%)	
	AI/AN	24	207 (83-421)	134	6478 (83%)	86 (58%)	
	<i>Including Multiracial</i>	67	110 (81-183)	577	460 (80%)	421 (62%)	
	Asian	111	82 (66-104)	484	414 (86%)	390 (75%)	
	<i>Including Multiracial</i>	147	79 (69-93)	879	749 (85%)	699 (73%)	
	Black	355	104 (93-118)	2375	1828 (77%)	1639 (61%)	
	<i>Including Multiracial</i>	423	100 (90-112)	3003	2327 (77%)	2081 (61%)	
	<i>Foreign-born<sup>c</sup></i>	161	98 (80-112)	1012	840 (83%)	766 (70%)	
	<i>U.S.-born<sup>c</sup></i>	169	122 (99-140)	1270	923 (73%)	814 (54%)	
	LAT/HISP	390	92 (88-105)	2108	1650 (78%)	1486 (64%)	
	<i>Including Multiracial</i>	390	92 (88-105)	2108	1650 (78%)	1486 (64%)	
	<i>Foreign-born<sup>c</sup></i>	195	90 (80-100)	1049	829 (79%)	739 (65%)	
	<i>U.S.-born<sup>c</sup></i>	143	94 (77-118)	896	709 (79%)	648 (65%)	
	NHOPI	18	108 (52-148)	62	43 (69%)	35 (48%)	
	<i>Including Multiracial</i>	34	94 (68-132)	187	143 (76%)	121 (55%)	
	White	966	94 (88-103)	7827	6478 (83%)	6047 (71%)	
	<i>Including Multiracial</i>	1325	92 (88-99)	10029	8227 (82%)	7623 (70%)	
	Multiple	89	82 (76-93)	911	743 (82%)	674 (64%)	
	Mode of Exposure	MSM	1095	90 (85-95)	8542	7097 (83%)	6628 (72%)
		PWID	162	173 (139-255)	815	597 (73%)	511 (53%)
MSM/PWID		144	94 (85-126)	1263	987 (78%)	874 (59%)	
Heterosexual		218	81 (72-90)	1739	1392 (80%)	1279 (66%)	
Blood/pediatric		12	104 (27-264)	192	169 (88%)	140 (73%)	
NIR		322	110 (96-125)	1355	1030 (76%)	930 (63%)	

Data source: EHARS 2015-2019

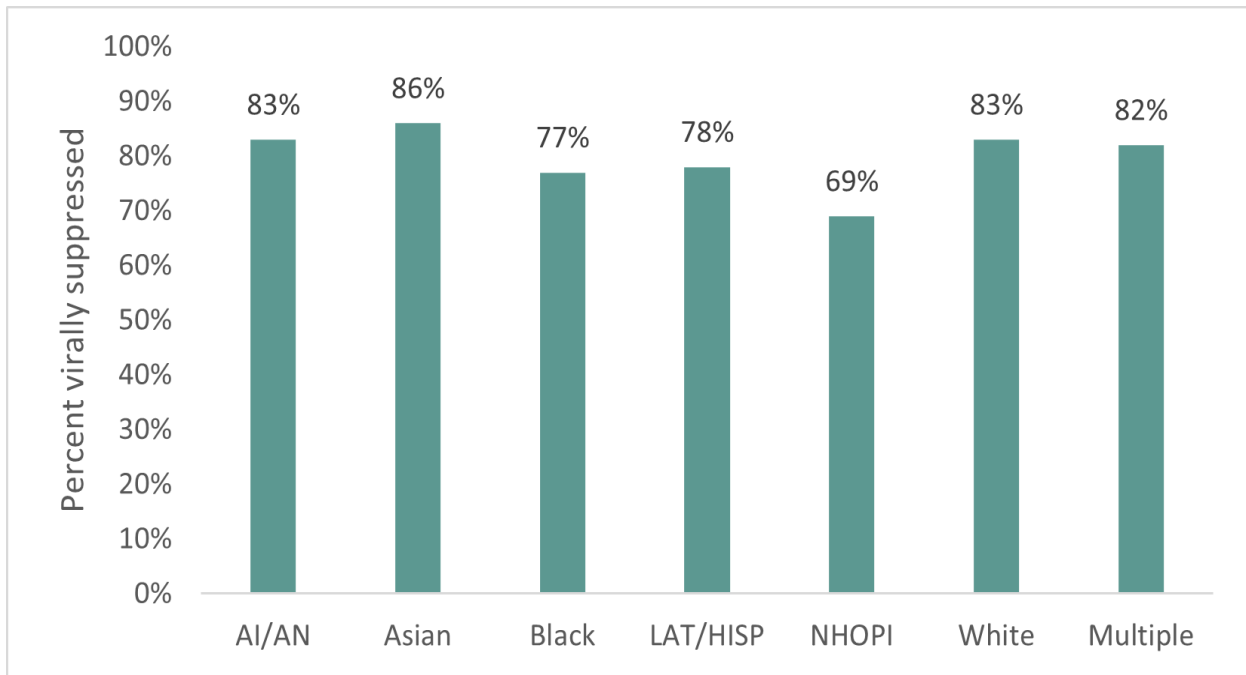
Abbreviations: NE: Not Estimatable, AI/AN: American Indian or Alaska Native, LAT/HISP: Latina/o/e/x and Hispanic, NHOPI: Native Hawaiian or Other Pacific Islander, MSM: men having sex with men, NIR: no identified risk, PWID: people who inject drugs.

a. Viral Suppression = 1 or more viral load test in calendar year and final viral load under 200 copies/mL.

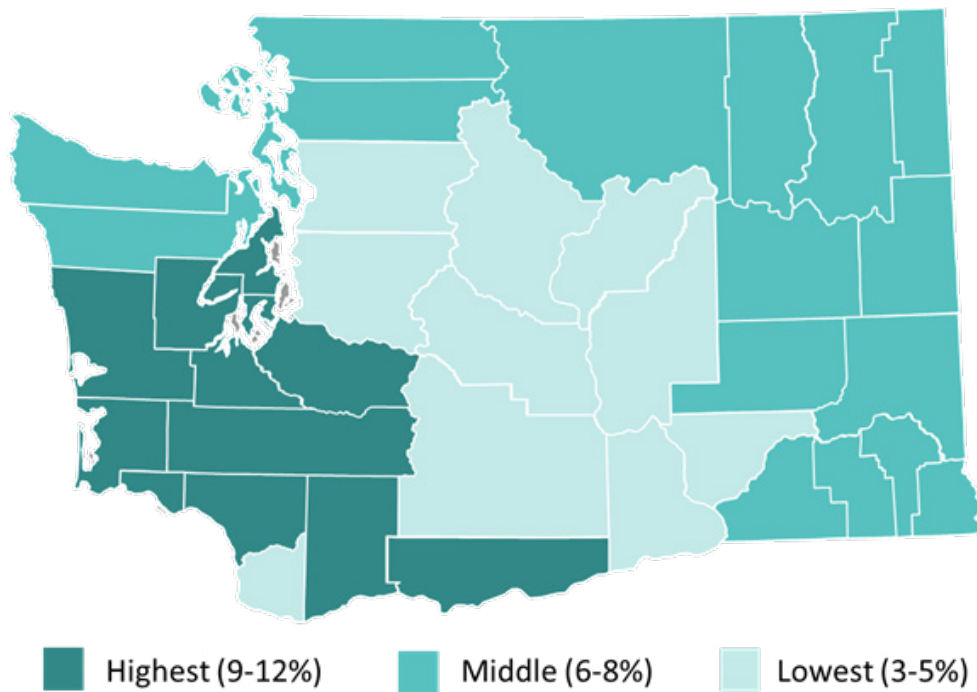
b. Sustained Viral Suppression = 1 or more viral load test in calendar year and all viral load values under 200 copies/mL.

c. Country of origin data are missing for approximately 19% and 34% of newly diagnosed cases among Black and LAT/HISP, respectively.

**Figure 2.4.** Viral Suppression by Race, Washington State 2019.



**Figure 2.5.** Racial Disparities in Viral Suppression (Black, Hispanic Latino/a/e/x, and AI&AN vs. Other Races), Washington State 2019

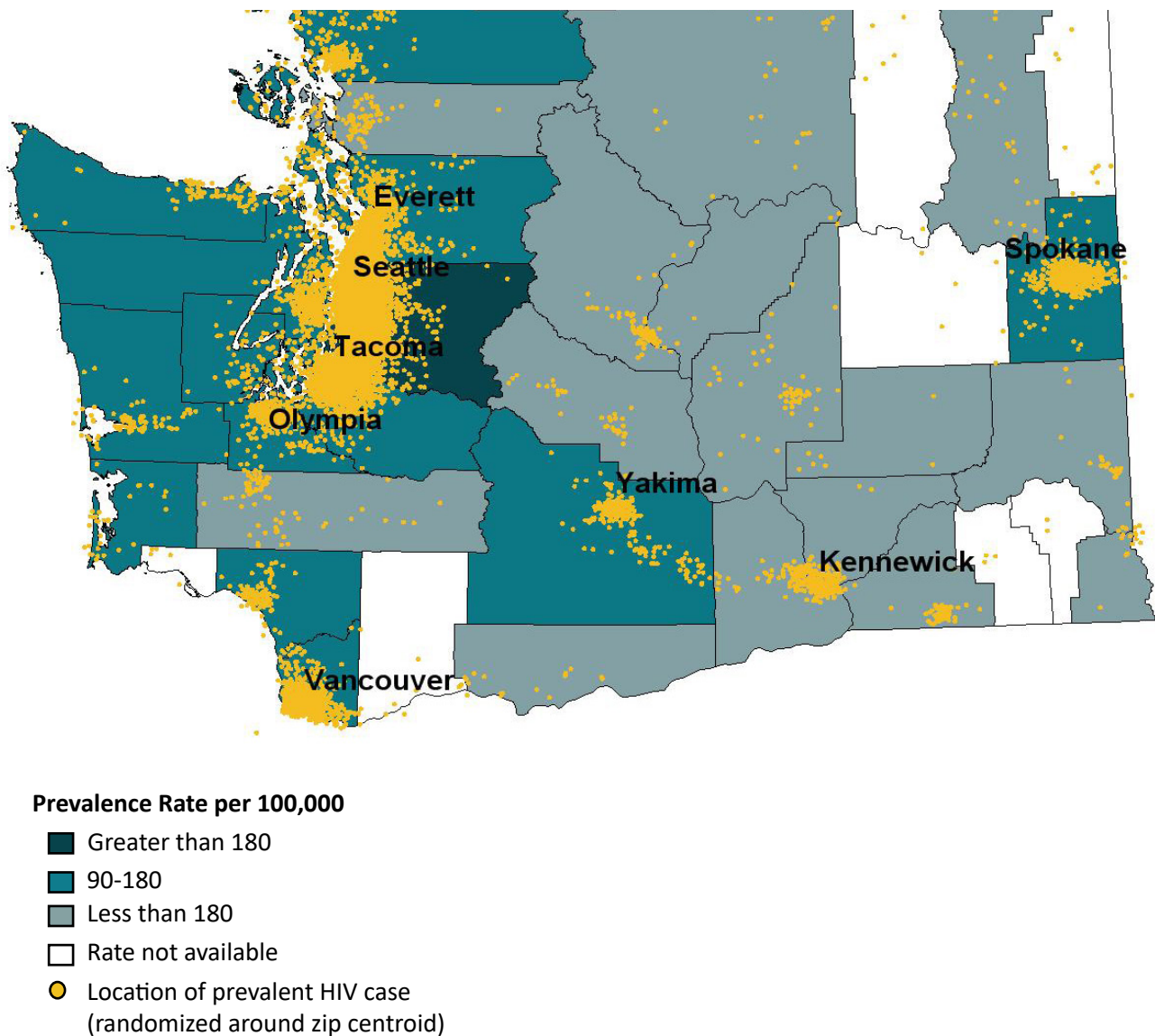


## Prevalence

Prevalence describes the number of people living with HIV and it has been steadily increasing since 2015. By 2019, there were almost 14,000 people living with HIV (PLWH) in Washington, with about half living in King County. Sixty-one percent of PLWH in 2018 and 2019 were categorized as men who have sex with men, which is a small decrease from 2015, 2016, and 2017 (62%). From 2015 to 2019, the proportion of PLWH aged 45-54 has consistently decreased while the proportion of PLWH aged 55-64 and 65+ has consistently increased. The increasing proportion of older adults living with HIV is primarily explained by the longer life expectancy that is provided by consistent use of anti-retroviral therapy (ART).

The proportion of PLWH among all non-white populations (AI/AN, Asian, Black, LAT/HISP, NHOPI, and multi-racial) has stayed the same or consistently increased since 2015, while the proportion of people who identify as white living with HIV has been consistently decreasing. Worth noting is the increase in people who identify as Asian (including those who are multi-racial), with the proportion of PLWH increasing from 6% to 10% from 2018-2019.

**Figure 2.6.** Living HIV Cases and Prevalence Rates by County, 2019



**Table 2.6.** Prevalent Cases of HIV, by County of Residence when Diagnosed, WA State, 2015-2019

County	No. PLWH 2015	No. PLWH 2016	No. PLWH 2017	No. PLWH 2018	No. PLWH 2019
Total	12426 (100%)	12810 (100%)	13311 (100%)	13706 (100%)	13905 (100%)
Adams Co.	12 (0%)	13 (0%)	11 (0%)	13 (0%)	14 (0%)
Asotin Co.	22 (0%)	25 (0%)	23 (0%)	23 (0%)	19 (0%)
Benton Co.	123 (1%)	133 (1%)	158 (1%)	178 (1%)	192 (1%)
Chelan Co.	52 (0%)	56 (0%)	56 (0%)	57 (0%)	60 (0%)
Clallam Co.	71 (1%)	77 (1%)	78 (1%)	80 (1%)	85 (1%)
Clark Co.	636 (5%)	663 (5%)	710 (5%)	747 (5%)	779 (6%)
Columbia Co.	8 (0%)	7 (0%)	6 (0%)	4 (0%)	3 (0%)
Cowlitz Co.	120 (1%)	124 (1%)	144 (1%)	151 (1%)	149 (1%)
Douglas Co.	17 (0%)	16 (0%)	15 (0%)	16 (0%)	20 (0%)
Ferry Co.	2 (0%)	4 (0%)	4 (0%)	5 (0%)	6 (0%)
Franklin Co.	58 (0%)	68 (1%)	78 (1%)	84 (1%)	81 (1%)
Garfield Co.	2 (0%)	3 (0%)	3 (0%)	3 (0%)	2 (0%)
Grant Co.	43 (0%)	41 (0%)	40 (0%)	43 (0%)	50 (0%)
Grays Harbor Co.	82 (1%)	84 (1%)	98 (1%)	98 (1%)	95 (1%)
Island Co.	77 (1%)	84 (1%)	91 (1%)	101 (1%)	104 (1%)
Jefferson Co.	37 (0%)	38 (0%)	46 (0%)	53 (0%)	48 (0%)
King Co.	6714 (54%)	6803 (53%)	6926 (52%)	7018 (51%)	7049 (51%)
Kitsap Co.	292 (2%)	310 (2%)	330 (2%)	326 (2%)	345 (2%)
Kittitas Co.	32 (0%)	29 (0%)	29 (0%)	28 (0%)	32 (0%)
Klickitat Co.	16 (0%)	15 (0%)	17 (0%)	17 (0%)	19 (0%)
Lewis Co.	51 (0%)	57 (0%)	64 (0%)	68 (0%)	67 (0%)
Lincoln Co.	7 (0%)	8 (0%)	9 (0%)	5 (0%)	7 (0%)
Mason Co.	62 (0%)	68 (1%)	67 (1%)	69 (1%)	69 (0%)
Okanogan Co.	29(0%)	30 (0%)	29 (0%)	28 (0%)	28 (0%)
Pacific Co.	32 (0%)	29 (0%)	25 (0%)	29 (0%)	33 (0%)
Pend Oreille Co.	14 (0%)	12 (0%)	12 (0%)	10 (0%)	12 (0%)
Pierce Co.	1355 (11%)	1419 (11%)	1452 (11%)	1542 (11%)	1562 (11%)
San Juan Co.	24 (0%)	23 (0%)	21 (0%)	23 (0%)	23 (0%)
Skagit Co.	84 (1%)	97 (1%)	98 (1%)	97 (1%)	96 (1%)
Skamania Co.	7 (0%)	5 (0%)	7 (0%)	6 (0%)	5 (0%)
Snohomish Co.	976 (8%)	1041 (8%)	1080 (8%)	1155 (8%)	1206 (9%)
Spokane Co.	576 (5%)	608 (5%)	634 (5%)	677 (5%)	688 (5%)
Stevens Co.	23 (0%)	23 (0%)	25 (0%)	28 (0%)	26 (0%)
Thurston Co.	281 (2%)	292 (2%)	331 (2%)	338 (2%)	339 (2%)
Wahkiakum Co.	5 (0%)	4 (0%)	4 (0%)	6 (0%)	4 (0%)
Walla Walla Co.	53 (0%)	57 (0%)	62 (0%)	59 (0%)	55 (0%)
Whatcom Co.	184 (1%)	186 (1%)	250 (2%)	248 (2%)	253 (2%)
Whitman Co.	20 (0%)	23 (0%)	25 (0%)	25 (0%)	28 (0%)
Yakima Co.	227 (2%)	235 (2%)	253 (2%)	248 (2%)	252 (2%)

**Table 2.7.** Prevalent Cases of HIV, by Demographic and Risk Characteristics, WA State, 2015-2019

Variable	Value	No PLWH 2015	No PLWH 2016	No PLWH 2017	No PLWH 2018	No PLWH 2019	
Total	N	12426 (100%)	12810 (100%)	13311 (100%)	13706 (100%)	13906 (100%)	
Gender	Cisgender men	10549 (85%)	10828 (85%)	11211 (84%)	11486 (84%)	11622 (84%)	
	Cisgender women	1762 (14%)	1861 (15%)	1967 (15%)	2084 (15%)	2150 (15%)	
	Transgender men	11 (0%)	11 (0%)	12 (0%)	13 (0%)	13 (0%)	
	Transgender women	104 (1%)	110 (1%)	121 (1%)	123 (1%)	121 (1%)	
Age at HIV Diagnosis	< 13	40 (0%)	43 (0%)	43 (0%)	37 (0%)	30 (0%)	
	13-24	312 (3%)	313 (2%)	306 (2%)	301 (2%)	311 (2%)	
	25-34	1666 (13%)	1708 (13%)	1792 (13%)	1824 (13%)	1845 (13%)	
	35-44	2648 (21%)	2635 (21%)	2695 (20%)	2768 (20%)	2755 (20%)	
	45-54	4371 (35%)	4343 (34%)	4252 (32%)	4100 (30%)	3911 (28%)	
	55-64	2598 (21%)	2856 (22%)	3161 (24%)	3449 (25%)	3688 (27%)	
	65+	791 (6%)	912 (7%)	1062 (8%)	1227 (9%)	1366 (10%)	
Race/Ethnicity	AI/AN	121 (1%)	126 (1%)	128 (1%)	131 (1%)	134 (1%)	
	<i>Including Multiracial</i>	558 (4%)	575 (4%)	580 (4%)	587 (4%)	576 (4%)	
	Asian	379 (3%)	412 (3%)	436 (3%)	452 (3%)	484 (3%)	
	<i>Including Multiracial</i>	750 (6%)	797 (6%)	825 (6%)	845 (6%)	1454 (10%)	
	Black	1880 (15%)	1977 (15%)	2131 (16%)	2284 (17%)	2375 (17%)	
	<i>Including Multiracial</i>	2440 (20%)	2554 (20%)	2733 (21%)	2906 (21%)	3003 (22%)	
	Foreign-born <sup>a</sup>	712 (6%)	754 (6%)	848 (6%)	954 (7%)	1012 (7%)	
	U.S.-born <sup>a</sup>	1101 (9%)	1145 (9%)	1204 (9%)	1247 (9%)	1270 (9%)	
	LAT/HISP	1700 (14%)	1806 (14%)	1939 (15%)	2026 (15%)	2108 (15%)	
	<i>Including Multiracial</i>	1700 (14%)	1806 (14%)	1939 (15%)	2026 (15%)	2108 (15%)	
	Foreign-born <sup>a</sup>	838 (7%)	876 (7%)	948 (7%)	979 (7%)	1049 (8%)	
	U.S.-born <sup>a</sup>	734 (6%)	800 (6%)	856 (6%)	899 (7%)	896 (6%)	
	NHOPI	49 (0%)	51 (0%)	56 (0%)	62 (0%)	62 (0%)	
	<i>Including Multiracial</i>	149 (1%)	156 (1%)	168 (1%)	181 (1%)	187 (1%)	
	White	7433 (60%)	7559 (59%)	7720 (58%)	7834 (57%)	7827 (56%)	
	<i>Including Multiracial</i>	9268 (75%)	9492 (74%)	9778 (73%)	9966 (73%)	10027 (72%)	
	Multiple	859 (7%)	874 (7%)	896 (7%)	912 (7%)	911 (7%)	
	Mode of Exposure	MSM	7726 (62%)	7911 (62%)	8195 (62%)	8396 (61%)	8542 (61%)
		PWID	779 (6%)	791 (6%)	783 (6%)	803 (6%)	815 (6%)
MSM/PWID		1193 (10%)	1241 (10%)	1291 (10%)	1310 (10%)	1263 (9%)	
Heterosexual		1535 (12%)	1603 (13%)	1670 (13%)	1715 (13%)	1739 (13%)	
Blood/pediatric		165 (1%)	169 (1%)	185 (1%)	185 (1%)	192 (1%)	
NIR		1028 (8%)	1095 (9%)	1187 (9%)	1297 (9%)	1355 (10%)	

Abbreviations: AI/AN, American Indian or Alaska Native; LAT/HISP, Latina/o/e/x and Hispanic; MSM, men having sex with men; NHOPI, Native Hawaiian or Other Pacific Islander; NIR, no identified risk; PWID, people who inject drugs.

<sup>a</sup> Country of origin data are missing for approximately 19% and 34% of newly diagnosed cases among Black and LAT/HISP, respectively.

## Impact of COVID-19 on Surveillance Data

HIV surveillance data are the cornerstone of monitoring HIV prevention and care and allow public health professionals to plan, implement, and evaluate programs. However, with the onset of the COVID-19 pandemic, it is difficult to interpret changes in the data as behaviors may have shifted and impacted both risk-behaviors and accessing testing and care. The four primary HIV metrics are the number of new diagnoses, the proportion of people newly diagnosed with HIV linked to care within 30 days of diagnosis, the proportion of people living with HIV (PLWH) engaged in care, and the proportion of PLWH virally suppressed. Three of these metrics - linkage to care, engagement in care, and viral suppression – increased between 2015 and 2019 but declined markedly during the

first year of the COVID-19 pandemic. Conversely, the number of new diagnoses in Washington state gradually increased from 2015 to 2019 but dropped sharply in 2020.

To understand the impact of COVID-19 on the surveillance data, we estimated what the 2020 data would be, had trends from previous years continued. The actual 2020 data showed statistically significant deviations from historical trends in the metrics of engagement in HIV care and viral suppression but not linkage to care or viral suppression among those engaged in care. The overall number of new HIV diagnoses in 2020 was significantly lower than predicted, as were the number of diagnoses among people who inject drugs but not men who have sex with men. In addition, there was a large decrease in the number of HIV labs performed in Washington at the beginning of 2020. Taken together, the HIV care data point to a disconnect between the surveillance metrics and the ability of PLWH to access care. The consistency in the proportion of ADAP clients who filled an ART prescription and viral suppression among those engaged in care suggest that the ability to access care within these populations was not disrupted by the pandemic. The decrease in the number of labs reported at the beginning of the pandemic suggests that many people forewent routine laboratory testing, but this does not preclude access to ART. The decrease in HIV testing during the pandemic suggests that the decrease in HIV diagnoses seen during 2020 may, at least in part, represent a lack of detection rather than a decrease in transmission. Although it is possible that some of this decline represents a change in risk behaviors during the pandemic. Because of this, we suggest that the data be interpreted with caution and that other sources of information be integrated in program decision-making.

**Table 2.8.** HIV Diagnoses, Care Metrics, and ADAP Utilization for Washington State, Projected and Actual, 2016-2020

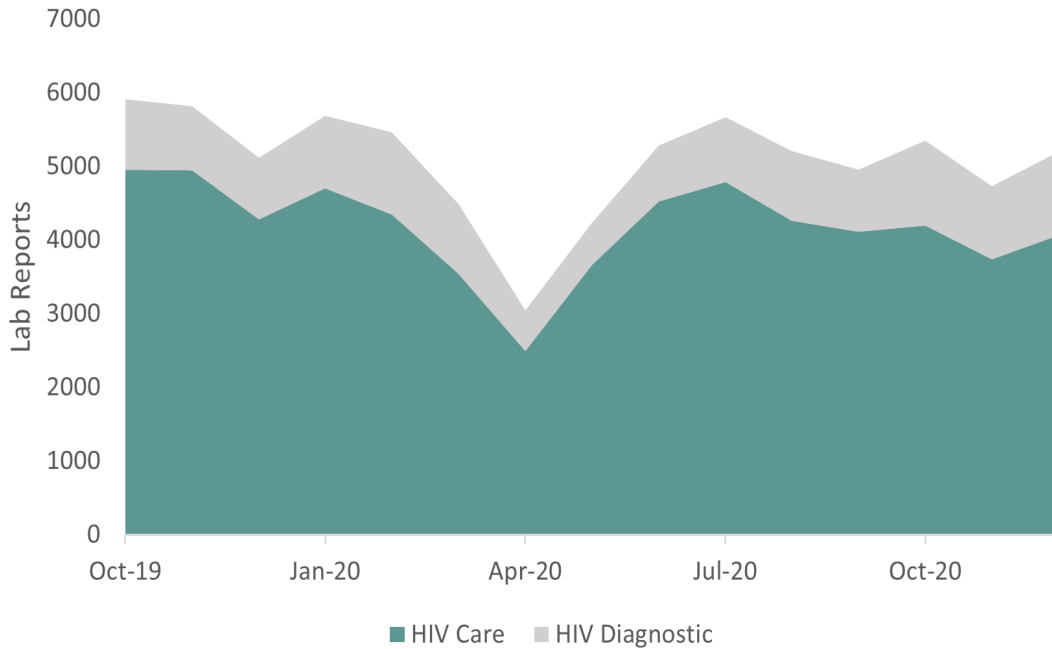
Metric <sup>a</sup>	2016	2017	2018	2019	2020 Actual	2020 Projected <sup>b</sup>	P-value
<b>Prevalence</b>	12776	13274	13652	13862	14061	-	-
-Linkage to Care (30 Days)	302 (82%)	313 (83%)	334 (83%)	337 (83%)	290 (81%)	83% (73-90%)	0.73
-Engagement in Care	11068 (87%)	11526 (87%)	11858 (87%)	12198 (88%)	12004 (85%)	88% (86-90%)	0.03
-Viral Suppression	9783 (77%)	10427 (79%)	10863 (80%)	11260 (81%)	11064 (79%)	83% (81-85%)	<0.01
-Viral Suppression Among Those Engaged in Care	9783 (88%)	10427 (90%)	10863 (92%)	11260 (92%)	11064 (92%)	93% (92-96%)	0.21
<b>New HIV Diagnoses</b>	370	375	401	408	359	424 (376-478)	0.03
-MSM Diagnoses	193	211	199	240	223	245	0.37
-IDU Diagnoses	28	19	43	41	11	52	<0.01
<b>ADAP Enrollment</b>	4079	4265	4514	4783	4682	-	
-% of Clients with ART Fills	3268 (80%)	3416 (80%)	3612 (80%)	3806 (80%)	3822 (82%)	80 (76-83%)	0.31

a. Engaged in care defined as receiving 1 or more CD4 or viral load test in a calendar year. Virally suppressed defined as receiving 1 or more viral load in a calendar year and the final viral load result being less than or equal to 200 copies per mL. Linked to care defined as receiving a CD4 or viral load test within 30 days of HIV diagnosis.

b. Projected value and p-value from Poisson model with linear term for year and an indicator variable for the year 2020.



**Figure 2.7.** HIV Labs Reported Through Washington State Automated Electronic Laboratory System by Month and Type, 10/2019-12/2020

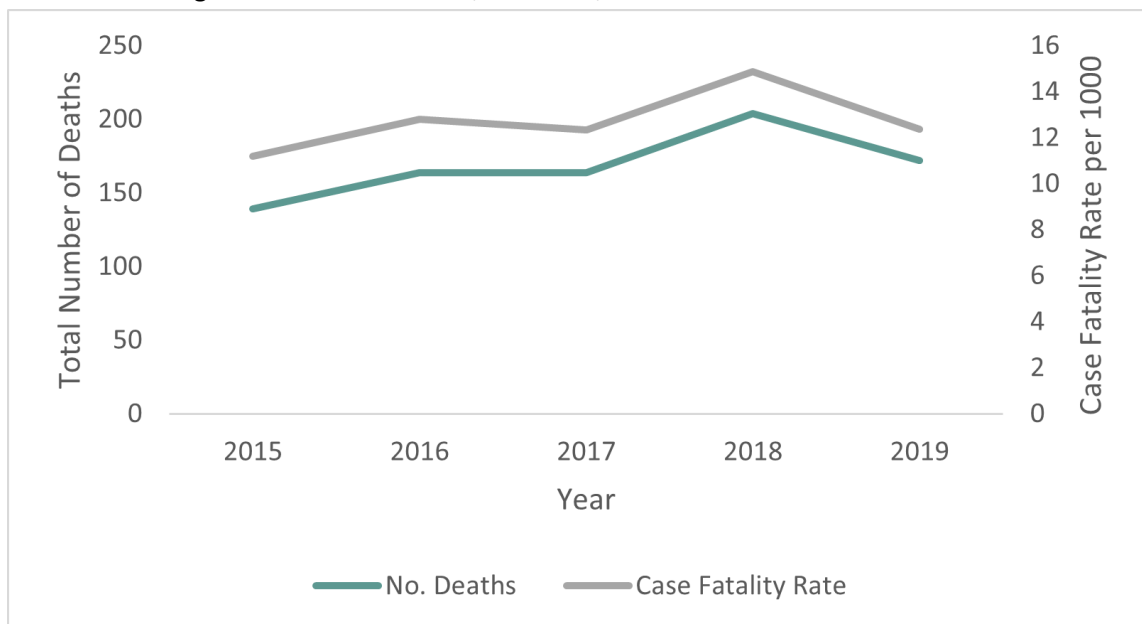


## Mortality

From 2018 to 2019, the number of deaths among cases of HIV decreased from 204 to 172. From 2015 to 2019, while people who identified as AI/AN (24.3) and NHOPI (16) experienced a higher mortality rate compared to other groups rates, the number of PLWH who are AI/AN and NHOPI is small, making the yearly estimates subject to variability.

Between 2010 and 2019, the top causes of death among PLWH were HIV, cancer, and drug overdose. The top causes for those aged 25-44, however, were HIV, drug overdose, and intentional self-harm (excluding drug overdose). Together, these data speak to the high health-burden of HIV for all PLWH in Washington, despite improvements in medication. Further, the top causes of mortality for PLWH who are between the ages of 25-44 are all preventable.

**Figure 2.8.** Deaths among Cases of HIV Infection, WA State, 2015-2019



**Table 2.9.** Deaths among Cases of HIV Infection, by Demographic and Risk Characteristics, WA State, 2015-2019

Variable	Value	2019				2015-2019	
		No.	Column %	Mortality rate (per 100000)	Case Fatality Rate (per 1000)	No.	Column %
Total	N	172	100%	2.3	12.4	843	100%
Gender	Cisgender men	144	84%	3.8	12.4	722	86%
	Cisgender women	26	15%	0.7	12.1	115	14%
	Transgender men	0	0%	n/a	0.0	0	0%
	Transgender women	2	1%	n/a	16.5 <sup>NR</sup>	6	1%
Age at HIV Diagnosis	< 13	0	0%	0.0	0.0	1	0%
	13-24	1	1%	0.1	3.2	4	0%
	25-34	9	5%	0.8 <sup>NR</sup>	4.9 <sup>NR</sup>	44	5%
	35-44	17	10%	1.7	6.2	82	10%
	45-54	38	22%	4.1	9.7	242	29%
	55-64	61	35%	6.3	16.6	269	32%
Race/Ethnicity	65+	46	27%	3.8	33.7	201	24%
	AI/AN	2	1%	2.1 <sup>NR</sup>	14.9 <sup>NR</sup>	13	2%
	<i>Including Multiracial</i>	14	8%	n/a	24.3	51	6%
	Asian	1	1%	0.1 <sup>NR</sup>	2.1 <sup>NR</sup>	7	1%
	<i>Including Multiracial</i>	4	2%	n/a	2.8	26	3%
	Black	22	13%	7.6	9.3	110	13%
	<i>Including Multiracial</i>	30	17%	n/a	10.0	161	19%
	Foreign-born <sup>a</sup>	5	3%	6.2 <sup>NR</sup>	4.9 <sup>NR</sup>	26	3%
	U.S.-born <sup>a</sup>	17	10%	7.8	13.4	80	9%
	LAT/HISP	21	12%	2.1	10.0	92	11%
	<i>Including Multiracial</i>	21	12%	n/a	10.0	92	11%
	Foreign-born <sup>a</sup>	6	3%	1.9 <sup>NR</sup>	5.7 <sup>NR</sup>	30	4%
	U.S.-born <sup>a</sup>	14	8%	2.0 <sup>NR</sup>	15.6 <sup>NR</sup>	57	7%
	NHOPI	2	1%	3.7 <sup>NR</sup>	32.3 <sup>NR</sup>	4	0%
	<i>Including Multiracial</i>	3	2%	n/a <sup>NR</sup>	16.0 <sup>NR</sup>	9	1%
	White	110	64%	2.2	14.1	548	65%
<i>Including Multiracial</i>	141	82%	n/a	14.1	685	81%	
Multiple	14	8%	4.3 <sup>NR</sup>	15.4 <sup>NR</sup>	69	8%	
Mode of Exposure	MSM	76	44%	n/a	8.9	427	51%
	PWID	29	17%	n/a	35.6	126	15%
	MSM/PWID	27	16%	n/a	21.4	107	13%
	Heterosexual	17	10%	n/a	9.8	83	10%
	Blood/pediatric	1	1%	n/a	5.2 <sup>NR</sup>	4	0%
	NIR	22	13%	n/a	16.2	96	11%

n/a Rate cannot be calculated due to no available population estimate

<sup>NR</sup>Not reliable, RSE ≥25

<sup>a</sup> Country of origin data are missing for approximately 19% and 34% of newly diagnosed cases among Black and LAT/HISP, respectively.

**Table 2.10.** Top Causes of Death for PLWH, 2010-2019

Rank	Underlying Cause of Death	Count	Percent of Deaths
#1	HIV <sup>1</sup>	461	28%
#2	Cancer	191	12%
#3	Drug overdose	160	10%
#4	Cardiovascular diseases (non-cerebrovascular)	148	9%
#5	Chronic lower respiratory diseases and lung cancer	102	6%
#6	Viral Hepatitis, chronic liver disease, liver cancer, and cirrhosis	68	4%
#7	Intentional self-harm (excluding overdose)	53	3%
#8	Neurological conditions	35	2%
#9	Diabetes	25	2%
#10	Cerebrovascular diseases	21	1%
#11	Influenza and pneumonia	18	1%
#12	Assault (homicide)	12	1%
#13	Kidney Disease	8	1%
#14T	Congenital malformations	2	0%
#14T	Pregnancy, childbirth and perinatal disease	2	0%
#16	Pericarditis, endocarditis and myocarditis	1	0%
-	Other Internal and External Causes of Morbidity	294	18%
-	Unreported	53	3%

Data Source: EHARS 2010-2019

1. A person was considered to have died of HIV if they had a HIV-related ICD Code as the underlying cause of death on their death certificate and they had a both a viral load over 5000 and a CD4 count below 200 or were out of care for 2 years before death. Otherwise, HIV-related ICD codes were assigned to other categories.
2. T: Tie

**Table 2.11.** Top Causes of Death for PLWH ages 25 to 44, 2010-2019

Rank	Underlying Cause of Death	Count	Percent of Deaths
#1	HIV <sup>1</sup>	125	41%
#2	Drug overdose	38	13%
#3	Intentional self-harm (excluding overdose)	30	7%
#4	Cancer	19	7%
#5	Cardiovascular diseases (non-cerebrovascular)	18	6%
#6	Viral Hepatitis, chronic liver disease, liver cancer, and cirrhosis	6	2%
#7	Chronic lower respiratory diseases and lung cancer	3	1%
#8T	Assault	2	1%
#8T	Cerebrovascular diseases	2	1%
#8T	Congenital malformations	2	1%
#8T	Neurological Conditions	2	1%
#12T	Diabetes	1	1%
#12T	Influenza and pneumonia	1	1%
#12T	Nephritis, nephrotic syndrome and nephrosis	1	0%
#12T	Pericarditis, endocarditis and myocarditis	1	0%
-	Other Internal and External Causes of Morbidity	49	16%
-	Unreported	12	4%

Data Source: EHARS 2010-2019

1. A person was considered to have died of HIV if they had a HIV-related ICD Code as the underlying cause of death on their death certificate and they had a both a viral load over 5000 and a CD4 count below 200 or were out of care for 2 years before death. Otherwise, HIV-related ICD codes were assigned to other categories.

## Transmission Clusters

Washington State Department of Health (DOH) uses time-space and molecular detection methods to identify clusters. The time-space cluster detection method uses a CDC-provided SAS program, and a time-space permutation statistic using SaTScan software that allows us to identify clusters that may cross county boundaries. Observed new cases within geographic areas are compared to expected numbers if all the cases were independent of each other and assessed for statistical significance based on time and area. Areas with a new rate of diagnoses that exceeds the expected amount are identified as clusters. Molecular cluster detection identifies clusters based on HIV sequence data submitted through routine electronic lab records (ELR). Molecular clusters are defined as 3 cases over 12 months at .015% relatedness, with no historical time bound. Although all clusters are not followed up on, all clusters are reviewed by the epidemiology team. Finally, clusters are sometimes also identified by local health jurisdictions, field services staff, or service providers and are investigated by DOH in conjunction with partners.

Between November 2021 and January 2022, our HIV Outbreak Plan Coordinator conducted seven HIV Cluster and Outbreak Response planning sessions with local health jurisdiction (LHJ) staff and DOH staff across the state. In these sessions, we provided an overview of HIV cluster detection methods and explained the process for our CDR plan development. We discussed the need for LHJs to develop their own plans for responding to outbreaks locally. LHJs continue to face staffing challenges due to COVID-19, and we anticipate any work on LHJ plans to be slow. We sent a post-session survey to attendees to gauge staff capacity and time for the development of local HIV outbreak response plans in their jurisdiction. This survey also provides an opportunity for LHJ staff to inform what kinds of support, guidance, and resources DOH can provide to help them accomplish this work. Based on survey responses, we've been working regionally and one-on-one with LHJs to provide tools, examples, and other support on outbreak response planning. We have finalized a contract with an external partner who will be engaging communities impacted by HIV and CDR topics. This contractor has begun working on the initial engagement plan, with engagement activities projected to take place during Q3-Q4 of 2022.

Most of the cluster response activities that occurred in Washington State between 2019 and 2020 were in King County. Within the county, there were 87 individuals referred for partner service investigations, of who 69 (79%) were successfully interviewed. Across the state, individuals who were linked to transmission clusters were more likely to be white (74%) and use injection drugs (24%) than is proportional to the total population of PLWH (57% white and 6% PWID).

**Table 2.12.** Cluster Detection and Response Activities, King County 2019-2020<sup>1</sup>

Year	Molecular Clusters Identified <sup>1</sup>	N Cluster Members <sup>2</sup>	N Individuals Referred for Partner Services Investigation <sup>3</sup>	N Successfully Contacted	N Interviewed <sup>4</sup>
2019	12	292	57	45 (79%)	44 (77%)
2020	14	125	30	26 (87%)	25 (83%)

1. Includes clusters that met local criteria for recent and rapid (R&R) transmission (3+ diagnoses in the prior 12 months, linked at 1.5% genetic distance). Clusters identified as R&R in multiple years appear in multiple rows.

2. Though clusters may be counted multiple times, cluster members are only counted once, in the first year (since 2019) the person was identified as a member of the cluster *and* the cluster met R&R criteria.

3. All King County residents newly diagnosed with HIV are contacted for partner services, and cluster members are flagged for HIV partner services staff if they diagnosed within twelve months prior to being identified as a member of an R&R cluster.

4. Includes partial interviews (6/87 cluster members flagged for partner services).

**Table 2.13.** Demographics of Priority Clusters, Washington State 2015-2020<sup>1</sup>

Variable	Value	Cases Comprising R&R Transmission	All Cases in Clusters	All PLWH with Sequence <sup>2</sup>	All PLWH
Total	N	58	273	8162	16558
Gender	Cisgender men	46 (79%)	249 (91%)	6865 (84%)	13968 (84%)
	Cisgender women	12 (21%)	22 (8%)	1190 (15%)	2427 (15%)
	Transgender men	0 (0%)	0 (0%)	8 (<1%)	14 (1%)
	Transgender women	0 (0%)	2 (1%)	99 (1%)	149 (1%)
Age	< 13	0 (0%)	0 (0%)	88 (1%)	188 (1%)
	13-24	9 (16%)	74 (27%)	1480 (18%)	2763 (17%)
	25-34	27 (47%)	121 (44%)	3164 (39%)	6255 (38%)
	35-44	11 (19%)	44 (16%)	2150 (26%)	4614 (28%)
	45-54	8 (14%)	19 (7%)	932 (11%)	2009 (12%)
	55-64	2 (4%)	12 (4%)	281 (3%)	597 (4%)
	65+	1 (2%)	3 (1%)	67 (1%)	132 (1%)
Race/Ethnicity	AI/AN	2 (3%)	3 (1%)	81 (1%)	155 (1%)
	<i>Including Multiracial</i>	4 (7%)	16 (6%)	433 (5%)	693 (4%)
	Asian	2 (3%)	16 (6%)	267 (3%)	549 (3%)
	<i>Including Multiracial</i>	3 (5%)	23 (8%)	549 (7%)	1014 (6%)
	Black	2 (3%)	13 (5%)	1384 (17%)	2765 (17%)
	<i>Including Multiracial</i>	4 (7%)	21 (8%)	1860 (23%)	3571 (22%)
	<i>Foreign-born<sup>c</sup></i>	0 (0%)	0 (0%)	505 (6%)	1103 (7%)
	<i>U.S.-born<sup>c</sup></i>	1 (2%)	12 (4%)	841 (10%)	1554 (9%)
	LAT/HISP	4 (7%)	42 (15%)	1331 (16%)	2517 (15%)
	<i>Including Multiracial</i>	4 (7%)	42 (15%)	1335 (16%)	2524 (15%)
	<i>Foreign-born<sup>c</sup></i>	3 (5%)	18 (7%)	647 (8%)	1196 (7%)
	<i>U.S.-born<sup>c</sup></i>	0 (0%)	20 (7%)	581 (7%)	1130 (7%)
	NHOPI	1 (2%)	2 (1%)	46 (1%)	73 (<1%)
	<i>Including Multiracial</i>	1 (2%)	5 (2%)	128 (2%)	216 (1%)
	White	43 (74%)	181 (66%)	4383 (54%)	9374 (57%)
	<i>Including Multiracial</i>	50 (86%)	223 (68%)	5856 (72%)	12073 (73%)
Multiple	4 (7%)	16 (82%)	670 (8%)	1120 (7%)	
Mode of Exposure	MSM	36 (62%)	220 (81%)	4883 (60%)	10212 (72%)
	PWID	14 (24%)	23 (8%)	567 (7%)	1020 (6%)
	MSM/PWID	4 (7%)	17 (6%)	938 (11%)	1616 (10%)
	Heterosexual	3 (5%)	8 (3%)	967 (12%)	1955 (12%)
	Blood/pediatric	0 (0%)	0 (0%)	99 (1%)	212 (1%)
	NIR/NRR	1 (2%)	5 (2%)	708 (9%)	1543 (9%)

Data Source: EHARS and HIV TRACE 2015-2019

Abbreviations: R&R, Recent and Rapid Transmission; AI/AN, American Indian or Alaska Native; LAT/HISP, Latina/o/e/x and Hispanic; MSM, men having sex with men; NHOPI, Native Hawaiian or Other Pacific Islander; NIR, no identified risk; PWID, people who inject drugs.

1. Priority clusters are clusters containing 5 or more new diagnoses linked at 0.5% genetic distance.

2. Cases with a PR or RT sequence reported to the Washington State Department of Health.

## Co-infection

The shared risk-behaviors and overlapping populations of those living with HIV and other sexually transmitted infections (STIs), and the often co-occurring mental health and substance use disorders points to the value of a syndemic approach to disease prevention in our field.

## Gonorrhea

The rate of gonorrhea infection among PLWH from 2015-2019 was 271 per 10,000 person-years, which is approximately 20 times that of the general Washington population. This is driven in large by the higher rate of STIs among men living with HIV who have sex with men; the rate of STIs among PLWH with other risk categories is more similar to the general population.

**Table 2.14.** New Diagnoses and Rate of Gonorrhea Among PLWH, Washington State 2015-2019

Variable	Value	Cases	Person-Years <sup>1</sup>	Rate per 10,000 PY
Total	N	4059	149594	271.3
Cisgender	Cisgender men	3942	135729	290.4
	Cisgender women	63	12347	51.0
	Transgender men	0	167	NE
	Transgender women	54	1351	399.7
Age	< 13	0	125	NE
	13-24	121	2298	526.5
	25-34	1256	23926	525
	35-44	1268	37337	339.6
	45-54	918	43874	209.2
	55-64	413	32139	128.5
	65+	83	9895	83.9
Race/Ethnicity	AI/AN	34	1344	253.0
	Asian	116	4492	258.2
	Black	452	19531	231.4
	LAT/HISP	889	25706	345.8
	NHOPI	31	772	401.6
	White	2242	86915	258.0
	Multiple	295	10809	272.9
Mode of Exposure	MSM	3308	106697	310
	PWID	65	5461	119
	MSM/PWID	616	19169	321.4
	Heterosexual	31	10009	31
	Blood/pediatric	4	998	40.1
	NIR	35	7260	48.2

Data Source: EHARS and PHIMS STD 2015-2019

Abbreviations: AI/AN, American Indian or Alaska Native; LAT/HISP, Latina/o/e/x and Hispanic; MSM, men having sex with men; NHOPI, Native Hawaiian or Other Pacific Islander; NIR, no identified risk; PWID, people who inject drugs.

1. Person-Years derived from the number of PLWH in Washington state on December 31<sup>st</sup> of each year.



## Syphilis

The rate of syphilis infection among PLWH from 2015-2019 was 53.6 per 10,000 person-years, which is 32 times higher than the rate of 1.65 per 10,000 in the general population.

**Table 2.15.** New Diagnoses and Rate of Syphilis (Primary & Secondary) Among PLWH, Washington State 2015-2019

Variable	Value	Cases	Person-Years	Rate per 10,000 PY
Total	N	802	149594	53.6
Gender	Cisgender men	793	135729	58.4
	Cisgender women	3	12347	2.4
	Transgender men	0	167	NE
	Transgender women	6	1351	44.4
Age	< 13	0	125	NE
	13-24	22	2298	95.7
	25-34	193	23926	80.7
	35-44	242	37337	64.8
	45-54	207	43874	47.2
	55-64	113	32139	35.2
	65+	25	9895	25.3
Race/Ethnicity	AI/AN	6	1344	44.6
	Asian	28	4492	62.3
	Black	82	19531	42.0
	LAT/HISP	145	25706	56.4
	NHOPI	3	772	38.9
	White	481	86915	55.3
	Multiple	57	10809	52.7
Mode of Exposure	MSM	653	106697	61.2
	PWID	10	5461	18.3
	MSM/PWID	126	19169	65.7
	Heterosexual	1	10009	1.0
	Blood/pediatric	0	998	0.0
	NIR	12	7260	16.5

Data Source: EHARS and PHIMS STD 2015-2019

NE: Not Estimatable

Abbreviations: AI/AN, American Indian or Alaska Native; LAT/HISP, Latina/o/e/x and Hispanic; MSM, men having sex with men; NHOPI, Native Hawaiian or Other Pacific Islander; NIR, no identified risk; PWID, people who inject drugs.

1. Person-Years derived from the number of PLWH in Washington state on December 31<sup>st</sup> of each year.

## Chlamydia

Chlamydia rates are also high among PLWH, as they are across the general population in Washington, especially among young people aged 13-24.

**Table 2.16.** New Diagnoses and Rate of Chlamydia Among PLWH, Washington State 2015-2019

Variable	Value	Cases	Person-Years	Rate per 10,000 PY
Total	N	3912	149594	261.5
Gender	Cisgender men	3766	135729	277.5
	Cisgender women	106	12347	85.9
	Transgender men	2	167	119.8
	Transgender women	38	1351	281.3
Age	< 13	0	125	NE
	13-24	133	2298	578.8
	25-34	1141	23926	476.9
	35-44	1237	37337	331.3
	45-54	907	43874	206.7
	55-64	423	32139	131.6
	65+	71	9895	71.8
Race/Ethnicity	AI/AN	28	1344	208.3
	Asian	135	4492	300.5
	Black	421	19531	215.6
	LAT/HISP	919	25706	357.5
	NHOPI	38	772	492.2
	White	2112	86915	243
	Multiple	259	10809	239.6
Mode of Exposure	MSM	3265	106697	306
	PWID	47	5461	86.1
	MSM/PWID	470	19169	245.2
	Heterosexual	66	10009	65.9
	Blood/pediatric	15	998	150.0
	NIR	49	7260	67.5

Data Source: EHARS and PHIMS STD 2015-2019

Abbreviations: NE: Not Estimatable, AI/AN: American Indian or Alaska Native, LAT/HISP: Latina/o/e/x and Hispanic, NHOPI: Native Hawaiian or Other Pacific Islander, MSM: men having sex with men, NIR: no identified risk, PWID: people who inject drugs.

1. Person-Years derived from the number of PLWH in Washington state on December 31<sup>st</sup> of each year.

## Hepatitis C

Between 2015 and 2016, 16% of PLWH either were infected or had been previously infected with hepatitis C. This number was much higher among PWID (66%) and PWID who are also MSM (37%).

**Table 2.17.** New Diagnoses and Rate of Acute Hepatitis C Among PLWH, Washington State 2015-2019

Variable	Value	Count	% (95% CI)
Total	N	135	16% (13-19%)
Cisgender	Cisgender men	111	16% (13-18%)
	Cisgender women	18	18% (10-26%)
	Transgender men	0	NE
	Transgender women	2	20% (0-44%)
Age	< 13	0	NE
	13-24	0	NE
	25-34	6	10% (1-18%)
	35-44	19	13% (7-18%)
	45-54	35	15% (10-20%)
	55-64	52	20% (15-25%)
	65+	19	18% (10-25%)
Race/Ethnicity	AI/AN	2	25% (0-55%)
	Asian	1	7% (0-20%)
	Black	14	11% (5-17%)
	LAT/HISP	15	14% (7-20%)
	NHOPI	0	NE
	White	90	18% (15-22%)
	Multiple	9	13% (5-21%)
Mode of Exposure	MSM	59	10% (8-13%)
	PWID	25	66% (51-82%)
	MSM/PWID	38	37% (27-46%)
	Heterosexual	5	6% (1-12%)
	Blood/pediatric	1	36% (0-92%)
	NIR	3	10% (0-22%)

Data Source: 2015-2019 Medical Monitoring Project

Abbreviations: NE: Not Estimatable, AI/AN: American Indian or Alaska Native, LAT/HISP: Latina/o/e/x and Hispanic, NHOPI: Native Hawaiian or Other Pacific Islander, MSM: men having sex with men, NIR: no identified risk, PWID: people who inject drugs.

## Mental Health

Mental Health also plays a large role in a person's quality of life. Between 2015 and 2019, 26% of PLWH reported having poor mental health on 14 or more of the past 30 days. These individuals were more likely to be female and to report injection drug use.

**Table 2.18.** Mental Health Among PLWH in Washington State, Medical Monitoring Project 2015-2019

Poor Mental Health in Past 30 Days <sup>1</sup>	N	Weighted % (95% CI)	N Suppressed	% Virally Suppressed (95% CI) <sup>2</sup>
Yes	174	26% (22-29%)	148	83% (78-90%)
No	494	73% (70-77%)	448	88% (84-91%)

Data Source: 2015-2019 MMP

1. Poor mental health defined as having self-reported poor mental health in 14 or more of the past 30 days
2. A person was categorized as virally suppressed if they received a viral load in the past 12 months and their most recent viral load was <200 copies/mL.

**Table 2.19.** Mental Health Among PLWH in Washington State by Race, Medical Monitoring Project 2015-2019

Variable	Value	N Total	% Poor Mental Health (95% CI) <sup>1</sup>
Gender <sup>2</sup>	Male	582	24% (20-28%)
	Female	88	36% (25-47%)
	Transgender	5	50% (5-96%)
Age	13-24	8	.% (.-%)
	25-34	73	31% (20-42%)
	35-44	132	30% (22-38%)
	45-54	222	28% (22-34%)
	55-64	175	23% (17-30%)
	65+	65	14% (6-22%)
Transmission Risk	Heterosexual C.	64	31% (19-44%)
	IDU	32	55% (37-73%)
	MSM	436	23% (19-27%)
	MSM+IDU	73	31% (21-42%)
	Other	70	21% (11-31%)
Race	Black	88	23% (14-31%)
	Hispanic	99	27% (18-36%)
	White	375	28% (23-33%)
	Other	113	20% (13-28%)

Data Source: 2015-2019 MMP

1. Poor Mental Health Defined as having self-reported poor mental health in 14 or more of the past 30 days.

2. Transgender and non-binary individuals were combined into a single category due to identifiability concerns.

## Substance Use

BRFSS also asks participants to report their use of illicit substances. One point four percent of Washingtonians reported using heroin, cocaine, crack, or meth in the past 12 months. Notably, when we look at the total drug use by individuals, 76% of individuals who used one substance in the past 12 months also used another. In comparison, between 2015 and 2019, 9% of PLWH reported injecting drugs in the past 12 months. Of the 9%, 7% reported sharing a needle with another person in the past 12 months. A larger proportion of PLWH reported using non-injection drugs in the past 12 months (21%). PLWH are far more likely to use methamphetamine than heroin or cocaine.

The use of injection and non-injection drugs has harmful effects on the health of PLWH. PLWH who use injection or non-injection illicit drugs (e.g., heroin, cocaine, crack and methamphetamine), are approximately 3 times less likely to achieve virally suppression compared to those who do not use drugs. PLWH also die from overdose at a higher rate compared to the general population; PLWH are 4.4 times as likely to die from opioid overdose, 2.3 times more likely to die of cocaine overdose, and 10.8 times as likely to die from psychostimulant overdose.

**Table 2.20.** Past 12 Month use of Heroin, Cocaine, Crack or Meth by Gender, Age and Race, 2019

Variable	Value	Heroin, Cocaine, Crack, or Meth Use in Past 12 Months (95% CI) <sup>1</sup>
Total	N	1.4% (1-1.6%)
Gender	Male	1.9% (1.4-2.4%)
	Female	0.8% (0.5-1.2%)
	Transgender Male <sup>2</sup>	-
	Transgender Female <sup>2</sup>	-
Age	<25	3% (1-4%)
	25-34	3% (2-3%)
	35-44	1% (0-2%)
	45-54	1% (1-2%)
	55+	1% (0-1%)
Race	Black	1% (1-2%)
	White	2% (0-4%)
	Hispanic	2% (1-3%)
	Other	1% (0-2%)

Data Source: BRFSS 2019

1. Drug use defined as reporting use of heroin, cocaine, crack, or meth in the past 12 months.

2. No transgender individuals reported drug use in past 12 months.

Another way to learn about people who inject drugs is through surveys of clients of syringe service programs (SSP). The Addiction, Drug, and Alcohol Institute performs a yearly 2019 State Syringe Exchange Health Survey, which collects information from 30 SSP's in Washington State with the following key findings:

- The most frequently injected drug in Washington state was methamphetamine (84% of SSP customers in the past 3 months) followed by heroin (78%). However, 57% of clients identified heroin as their main drug, as compared to only 26% who identified methamphetamine. Crack and powder cocaine were each used by 10% of clients, but were only identified as the main drug 1% or less.
- Polysubstance use was reported by the vast majority of SSP customers, although people who identify heroin as their main drug were nearly twice as likely to use other drugs (91%) than people whose main drug was methamphetamine (48%).
- The majority (82%) of people who reported using heroin as their main drug were interested in reducing or stopping their opioid use. Only 42% of methamphetamine users were interested.
- On the day respondents were surveyed, two-thirds reported they were exchanging syringes for other people (i.e., "secondary exchange") as well as themselves and for an average of two additional people (Table below). The majority also reported using an SSP more than once in the past month, with an average of three times per month.
- Seventy-eight percent of people injected 5-7 days in the last week with most injecting every day. The average number of injections per day was 3.5, and 65% of respondents reported that they typically use a syringe only once before disposing of it.
- Eighty-five percent (85%) reported that they had not shared a syringe with another person in the last three months, and 60% reported that they had not shared other drug injection materials (e.g., cottons, cookers, water) in the last three months.

**Table 2.21.** Non-Injection Drug Use Among PLWH in Washington State, Medical Monitoring Project 2015-2019

Drug Use in Past 12 Months (95% CI) <sup>1</sup>	N	Weighted % (95% CI)	N Suppressed	% Virally Suppressed (95% CI) <sup>1</sup>
Non-Injection	172	21% (18-23%)	127	71% (64-79%)
No Non-Injection	685	79% (77-82%)	629	90% (88-93%)
Injection	70	9% (7-11%)	70	67% (54-79%)
No Injection	787	91 (89-93%)	706	88% (86-91%)

Data Source: 2015-2019 MMP

1. Non-injection drug use defined as the use of cocaine, amphetamines, or opiates/tranquilizers used in a manner that is inconsistent with a prescription.

**Table 2.22.** Injection Drug Use in Past 12 Months, PLWH in Washington State by Demographic Characteristics, Medical Monitoring Project 2015-2019<sup>1</sup>

Variable	Value	N Total	Injection Drug Use in Past 12 Months (95% CI) <sup>1</sup>	Shared Needle in Past 12 Months <sup>1</sup>
Total	N	70	9% (7-11%)	7% (0-15%)
Gender <sup>2</sup>	Male	738	9% (7-11%)	3% (0-8%)
	Female	112	7% (1-12%)	38% (0-81%)
	Transgender	7	14% (0-39%)	0%
Age	13-24	10	0%	0%
	25-34	95	16% (7-24%)	11% (0-31%)
	35-44	174	9% (5-13%)	6% (0-18%)
	45-54	285	10% (6-13%)	5% (0-14%)
	55-64	218	7% (3-10%)	12% (0-35%)
	65+	75	4% (0-8%)	0%
Race	Black	114	4% (0-8%)	0%
	Hispanic	120	8% (2-13%)	0%
	White	486	10% (7-13%)	9% (0-19%)
	Other	137	10% (4-15%)	10% (0-28%)
		Heterosexual C.	87	2% (0-5%)
	IDU	38	20% (5-35%)	37% (0-79%)
	MSM	552	6% (4-8%)	0%
	MSM+IDU	101	31% (22-40%)	8% (0-18%)
	Other	79	6% (0-13%)	0%

Data Source: 2015-2019 MMP

1. Percentage among those who reported injection drug use.

2. Transgender and non-binary individuals were combined into a single category due to identifiability concerns.



**Table 2.23.** Non-Injection Drug Use in Past 12 Months, PLWH in Washington State by Demographic Characteristics, Medical Monitoring Project 2015-2019<sup>1</sup>

Variable	Value	N Total	% Non-Injection Drug Use in Past 12 Months (95% CI) <sup>1</sup>
Gender <sup>2</sup>	Male	738	22% (19-25%)
	Female	112	14% (6-21%)
	Transgender	7	27% (0-59%)
Age	13-24	10	0
	25-34	95	33% (23-43%)
	35-44	174	22% (16-29%)
	45-54	285	23% (18-28%)
	55-64	218	16% (11-21%)
	65+	75	7% (1-13%)
Transmission Risk	Heterosexual C.	87	11% (3-18%)
	IDU	38	22% (8-37%)
	MSM	552	20% (17-24%)
	MSM+IDU	101	43% (33-53%)
	Other	79	7% (1-12%)
Race	Black	114	19% (11-26%)
	Hispanic	120	18% (10-25%)
	White	486	22% (18-26%)
	Other	137	19% (12-26%)

Data Source: 2015-2019 MMP

1. Non-injection drug use defined as the use of cocaine, amphetamines, or opiates/tranquilizers used in a manner that is inconsistent with a prescription.
2. Transgender and non-binary individuals were combined into a single category due to identifiability concerns.

## Disability

MMP defines disability as having deafness or difficulty hearing; blindness or difficulty seeing with glasses; a mental or emotional condition that causes difficulty concentrating, remembering, or making decisions; difficulty walking or climbing stairs; difficulty dressing or bathing; or a physical, mental or emotional condition that causes difficulty doing errands alone. Between 2015 and 2019, 44% of PLWH reported having one or more disability.

**Table 2.24.** Disability Among PLWH in Washington State, Medical Monitoring Project 2015-2019

Physical or Mental Disability	N	Weighted % (95% CI)	N Suppressed	% Virally Suppressed (95% CI) <sup>2</sup>
Yes	376	44% (41-48%)	329	86% (82-90%)
No	479	56% (52-59%)	426	87% (84-91%)

Data Source: 2015-2019 MMP

1. A person was categorized as virally suppressed if they received a viral load in the past 12 months and their most recent viral load was <200 copies/mL.

**Table 2.25.** Disability Among PLWH in Washington State by Race, Medical Monitoring Project 2015-2019

Variable	Value	N Total	% with Physical or Mental Disability (95% CI) <sup>1</sup>
Gender <sup>2</sup>	Male	738	42% (38-46%)
	Female	112	59% (49-69%)
	Transgender	7	24% (0-54%)
Age	13-24	10	45% (13-78%)
	25-34	95	35% (25-45%)
	35-44	174	35% (27-42%)
	45-54	285	46% (40-52%)
	55-64	218	55% (48-61%)
	65+	75	43% (32-55%)
Transmission Risk	Heterosexual C.	87	48% (37-59%)
	IDU	38	77% (63-91%)
	MSM	552	39% (35-43%)
	MSM+IDU	101	60% (51-70%)
	Other	79	41% (29-52%)
Race	Black	114	49% (40-59%)
	Hispanic	120	39% (30-48%)
	White	486	44% (39-49%)
	Other	137	46% (38-55%)

Data Source: 2015-2019 MMP

2. Transgender and non-binary individuals were combined into a single category due to identifiability concerns.

## Core Question 2.2: What is the distribution of the social determinants of health that exacerbate HIV-related disparities among people living with HIV in Washington?

### Socio-economic Status/Social vulnerability index

Socio-economic status (SES) influences many domains of a person's life and HIV care is no exception. When we stratify PLWH by different aspects of SES, we find that people with lower SES tend to have lower rates of viral suppression. Attaining less than a high school education and being unable to work are associated with the lowest rates of viral suppression. Further, looking at the social vulnerability index - a measure developed by the CDC that accounts for 16 different variables from the US census (e.g., poverty, vehicle access) that can be used to identify census-tract level communities that might need additional support during hazardous events - we see a steady increase in HIV prevalence as social vulnerabilities increase.

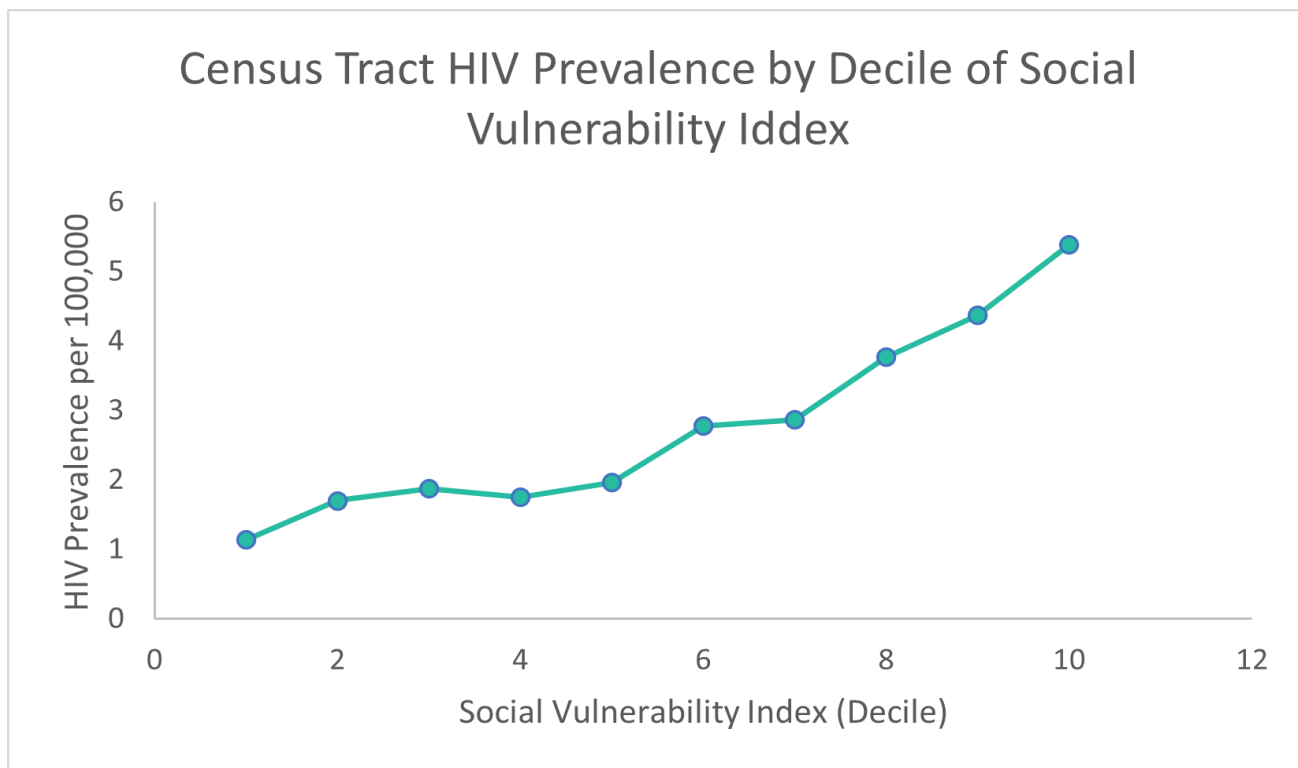
**Table 2.26.** PLWH by Socioeconomic Characteristics and Viral Suppression Status, Washington State 2019

Variable	Value	N	% Virally Suppressed (95% CI) <sup>1</sup>
Education	<High School	67 (8%)	77% (66-88%)
	High School Diploma	186 (22%)	84% (78-90%)
	>High School	628 (70%)	89% (86-92%)
Household Income	<\$20,000	379 (46%)	82% (78-86%)
	\$20,000-39,999	158 (19%)	85% (79-91%)
	\$40,000-74,999	150 (16%)	96% (93-99%)
	>\$75,000	168 (19%)	94% (89-98%)
Employment	Employed	448 (50%)	88% (85-92%)
	Unemployed	117 (13%)	83% (76-91%)
	Retired	87 (10%)	92% (78-100%)
	Unable to Work	198 (23%)	78% (55-100%)
	Student	18 (2%)	90% (83-97%)
	Homemaker	17 (2%)	84% (79-90%)
Insurance	Public	479 (56%)	92% (89-95%)
	Private	386 (43%)	84% (80-88%)
	Uninsured	1 (<1%)	NE

Data Source: 2015-2019 Medical Monitoring Project

1. A person was categorized as virally suppressed if they received a viral load in the past 12 months and their most recent viral load was <200 copies/mL.

**Figure 2.9.** HIV Diagnosis Rate by Community Social Vulnerability Index



## Stigma/Discrimination

The Medical Monitoring Project asks multiple questions about discrimination and stigma while receiving HIV care, which are rolled up into summary variables. People who experience healthcare discrimination have much lower rates of viral suppression (79% vs 93%). PWID and people of color were the most likely to experience healthcare discrimination.

**Table 2.27.** HIV Stigma and Healthcare Discrimination Among PLWH in Washington State, Medical Monitoring Project 2015-2019

Experiencing High HIV Stigma <sup>1</sup>	N	Weighted % (95% CI)	N Suppressed	% Virally Suppressed (95% CI) <sup>2</sup>
Yes	150	38% (33-43%)	137	89% (84-95%)
No	196	57 (52-62%)	174	87% (82-92%)
<b>Experiencing Healthcare Discrimination</b>				
Yes	87	25% (21-30%)	72	79% (70-89%)
No	246	74% (69-79%)	231	93% (90-97%)

Data Source: 2015-2019 MMP

**Table 2.28.** HIV Stigma and Healthcare Discrimination Among PLWH in Washington State by Race, Medical Monitoring Project 2015-2019

Variable	Value	N Total	% Experiencing High HIV Stigma <sup>1</sup>	% Experienced Healthcare Discrimination in Past 12 Months <sup>2</sup>
Gender <sup>2</sup>	Male	293	43% (37-48%)	26% (21-32%)
	Female	51	46% (31-61%)	23% (10-35%)
	Transgender	2	0%	0%
Age	13-24	4	75% (32-100%)	25% (0-68%)
	25-34	32	49% (31-66%)	24% (7-40%)
	35-44	75	47% (35-59%)	26% (16-36%)
	45-54	111	45% (35-54%)	25% (17-33%)
	55-64	88	42% (32-53%)	29% (19-39%)
	65+	36	23% (9-36%)	21% (8-34%)
Transmission Risk	Heterosexual C.	37	52% (34-70%)	19% (5-33%)
	IDU	17	75% (54-95%)	29% (8-50%)
	MSM	212	39% (32-46%)	25% (19-31%)
	MSM+IDU		44% (29-59%)	40% (24-56%)
	Other	41	39% (24-55%)	19% (6-33%)
Race	Black	39	37% (22-52%)	26% (12-40%)
	Hispanic	48	34% (21-47%)	27% (14-40%)
	White	67	47% (40-55%)	22% (16-28%)
	Other	53	44% (31-56%)	35% (23-47%)

Data Source: 2015-2019 MMP

1. Healthcare discrimination was assessed via a question about a person's experience in the past 12 months. Discrimination was not limited to HIV status and included experiences involving a person's race, drug use, or sexuality.

2. Transgender and non-binary individuals were combined into a single category due to identifiability concerns.

## Rural/Urban

PLWH disproportionately live in urban areas in Washington state (82% of PLWH vs 64% of the general population). PLWH who live in urban areas tend to have a higher rate of viral suppression and a lower rate of injection drug use. Urban areas also tend to have a slightly higher proportion of exposure through MSM, and rural areas have a slightly higher proportion of exposure through IDU.

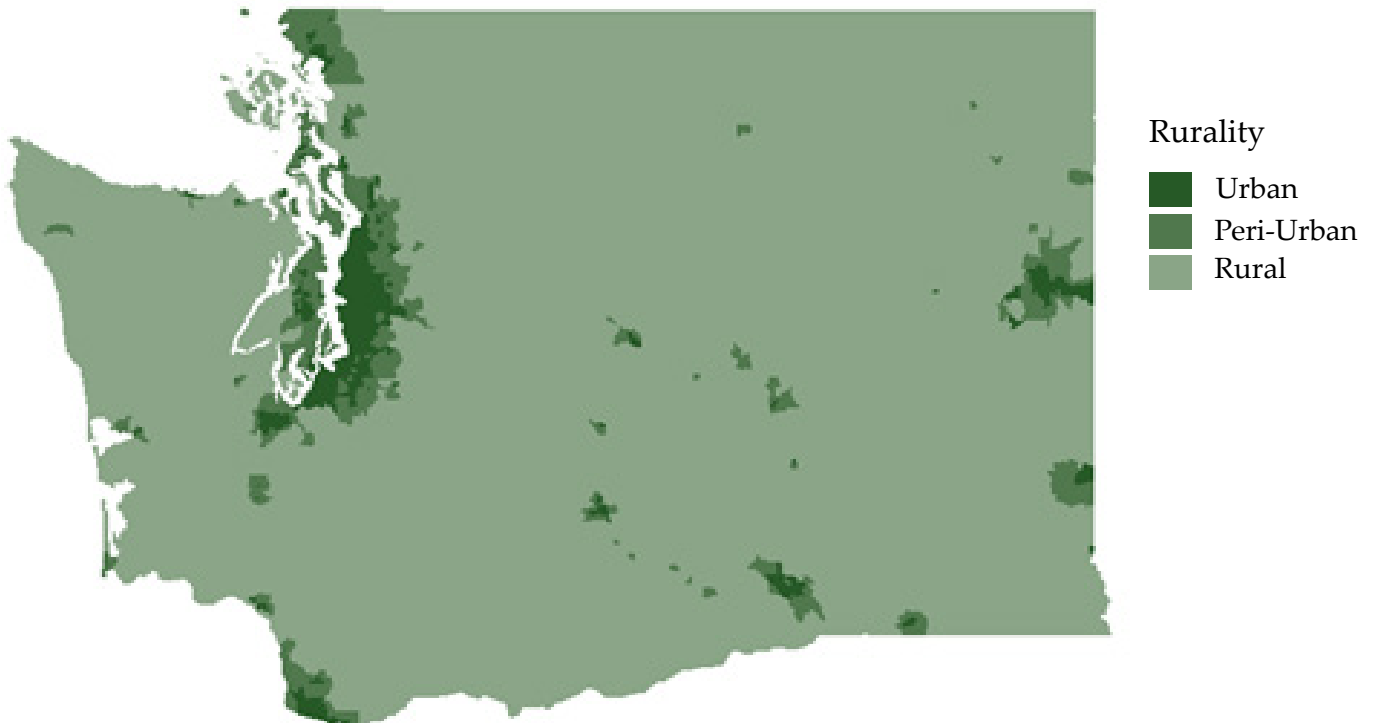
**Table 2.29.** Population Demographics by Urbanicity and HIV Status, Washington State 2019<sup>1</sup>

Variable	Urban	Peri-Urban	Rural
<b>WA Population</b>			
Total	4756205 (64%)	1579150 (21%)	1068752 (14%)
Black	243770 (5%)	19837 (1%)	7097 (1%)
White	3028645 (64%)	1205863 (76%)	839437 (79%)
Hispanic	590605 (12%)	199557 (13%)	147417 (14%)
Other	893185 (19%)	153893 (10%)	74801 (7%)
<b>PLWH</b>			
Total	11398 (82%)	1600 (12%)	821 (6%)
Black	2169 (20%)	158 (10%)	37 (5%)
White	6122 (54%)	1054 (66%)	599 (73%)
Hispanic	1772 (16%)	218 (14%)	108 (13%)
Other	1335 (12%)	170 (11%)	77 (9%)

Data Sources: EHARS 2019, American Community Survey 2019

1. Urbanicity was determined on the level of census tract based on characteristics describing the population size, economy, and structure of population centers.

**Figure 2.10.** Map of Urban/Rural Areas in Washington



**Table 2.30.** Demographics of PLWH by Urbanicity, Washington State 2019<sup>1</sup>

Variable	Value	Urban	Peri-Urban	Rural
New Diagnoses (2015-2019)	N	1601 (82%)	231 (12%)	115 (6%)
HIV Acquisition Risk	MSM	934 (58%)	111 (48%)	48 (42%)
	IDU	124 (8%)	26 (11%)	12 (10%)
	MSM+IDU	118 (7%)	19 (8%)	7 (6%)
	Heterosexual Contact	179 (11%)	25 (11%)	13 (11%)
	Other	246 (15%)	50 (22%)	35 (30%)
Care Metrics <sup>2</sup>	Late Diagnosis	394 (20%)	72 (31%)	30 (26%)
	Linked to Care in 30 Days	260 (16%)	58 (25%)	25 (22%)
PLWH (2019)	N	11398 (82%)	1600 (12%)	821 (6%)
HIV Acquisition Risk	MSM	7090 (62%)	940 (59%)	445 (54%)
	IDU	612 (5%)	121 (8%)	72 (9%)
	MSM+IDU	1069 (9%)	113 (7%)	72 (9%)
	Heterosexual Contact	1375 (12%)	224 (14%)	113 (16%)
	Other	1252 (11%)	202 (13%)	98 (12%)
Care Metrics <sup>3</sup>	Engaged in Care	10065 (88%)	1396 (87%)	702 (86%)
	Virally Suppressed	9281 (81%)	1292 (81%)	652 (79%)

Data Sources: EHARS 2019, American Community Survey 2019

Abbreviations: MSM, men having sex with men; IDU, injection drug use.

1. Urbanicity was determined on the level of census tract based on characteristics describing the population size, economy, and structure of population centers. More information can be found in the accompanying text.

2. A person was categorized as a late diagnosis if they were diagnosed with AIDS within 12 months of their HIV diagnosis. A person was categorized as linked to care in 30 days if they received a viral load or CD4 test within 30 days of HIV diagnosis.

3. A person was categorized as engaged in care if they received a viral load or CD4 test in 2019. Individuals were categorized as virally suppressed if they received a viral load test in the past 12 months and their most recent viral load result was <200 copies/mL.

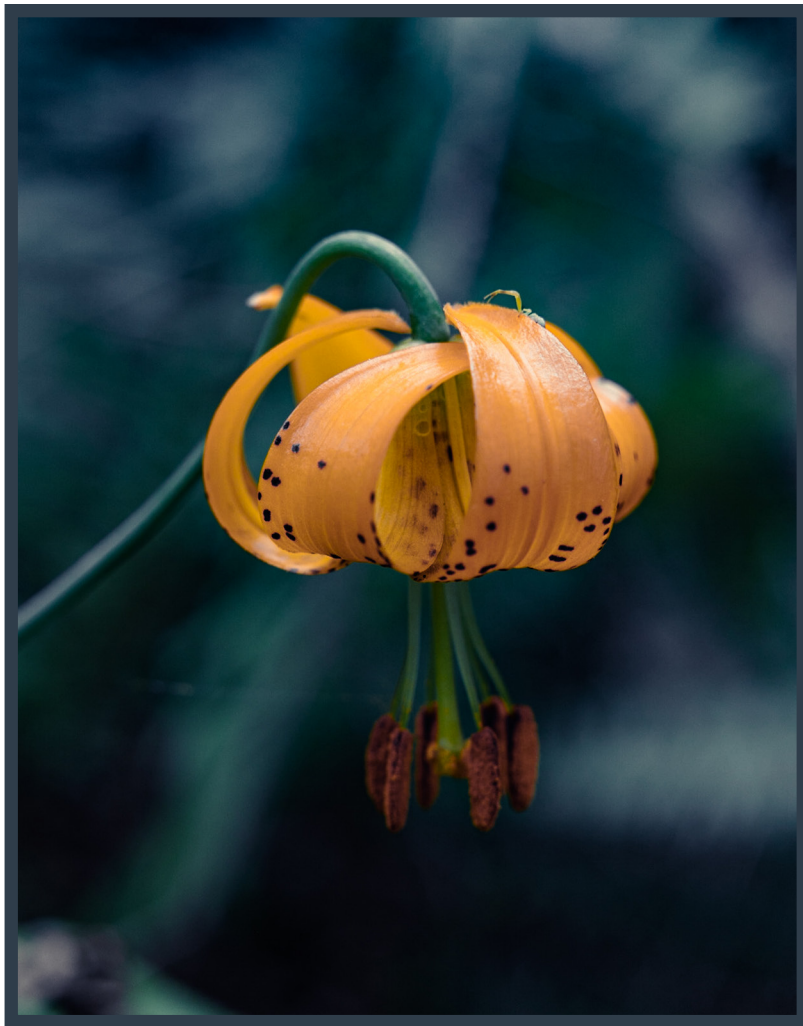
**Table 2.31.** Transmission Category by Ruralilty<sup>1</sup> Washington State, 2021

Transmission category	Urban	Periurban	Rural
N	11,547 (85%)	1246 (9%)	743 (5%)
MSM	7174 (62%)	724 (58%)	415 (56%)
IDU	608 (5%)	83 (7%)	59 (8%)
MSM+IDU	1041 (9%)	106 (9%)	58 (8%)
Heterosexual Contact	1387 (12%)	180 (15%)	112 (15%)
Other	1337 (12%)	153 (12%)	99 (13%)



# Section 3

HIV Care and Treatment among People living with HIV in Washington



## Summary

Washington State Department of Health provides a number of services for people living with HIV. Our Ryan White programs served 6,725 people in 2021 alone, providing them assistance with medical bills, housing, case management, and more. Our peer navigation programs connect PLWH who may be struggling accessing services to a peer who supports them in their engagement in care and other needs. We also conduct partner services, ensuring that partners who are exposed to HIV have access to testing and treatment.

Yet, some people living with HIV continue to experience barriers to care. People living with HIV who are also experiencing homelessness or who have been incarcerated have markedly lower rates of viral suppression. Although a majority of PLWH live in urban areas, PLWH in rural areas also tend to have lower rates of viral suppression. HIV remains the number one cause of death for PLWH, suggesting that treatment barriers remain for many. The third leading cause of death for PLWH is overdose and points to the importance of mental health and substance use treatment for PLWH.

Overall, great strides have been made in viral suppression among PLWH in Washington. Namely, we see yearly increases in the proportion of PLWH who are virally suppressed. However, these gains are not equally experienced among all populations. People who inject drugs, Black women, and Black and Latina/o/e/x men who have sex with men, all experience lower rates of engagement in care and viral suppression and should therefore be prioritized for services and interventions.

### **Core Question 3.1: What HIV Care and Treatment Services are available in Washington?**

#### **Services Provided**

##### **HIV Partner Services**

HIV partner services and linkage to care is a patient-centered public health activity performed by public health workers in partnership with people living with HIV (PLWH), their partners, contacts and communities, case managers, peer navigators, and medical providers. People diagnosed with HIV who might be candidates for partner services are identified by new surveillance case reports or through identification of gaps in medical care in surveillance data. The person is contacted by a public health worker to ensure that they are aware of their status and are offered a partner services interview and assistance to link them to medical care, case management, peer navigation and other supportive services. The partner services interview includes:

- an assessment of the PLWH's understanding of the infection
- risk reduction and health education
- social and medical history (e.g., connection to medical care, needs for support in linking to medical care for HIV, referrals to assistance to support linkage to and engagement in medical care), and
- elicitation of sex and/or needle-sharing partners and other contacts who may be at risk for acquiring HIV and may benefit from testing, prevention services, and/or related medical care or support services.

Following the partner services interview, the public health worker contacts people identified as at risk of potentially acquiring HIV to offer testing and referral for prevention services or medical care depending on identified HIV status. From 2015 to 2019, 6,090 HIV cases (which includes newly diagnosed and previously reported HIV cases in Washington State) were referred for partner services. Of these, 2,687 (44.1%) were interviewed and 58.2% (N=1,564) shared partners for follow-up. Of the 3,053 named partners, 2,022 (66.2%) were successfully contacted and 570 (28.2%) were tested for HIV.

### **Ryan White Programs (Part A and B)**

The Ryan White HIV/AIDS Program Part A funds grants to Eligible Metropolitan Areas (EMAs) and Transitional Grant Areas (TGAs) that are most affected by the HIV epidemic. In Washington State, Ryan White Part A serves residents in and around King County and the Portland Transitional Grant Areas. Ryan White Part B serves the entire state with Medical Case Management services in addition to other medical and support services.

In 2021, the WA State Ryan White programs served 6,725 clients; 6,027 (90%) of these clients were virally suppressed in 2021. Between 2013-2019 WA State Ryan White Programs (Part A and/or Part B) provided:

- 354,095 ambulatory outpatient medical services to 9,837 clients
- 832,248 medical case management services to 9,834 clients
- 483,638 non-medical case management services to 5,659 clients
- 9,623 outreach services to 1,120 clients
- 158,081 medical transportation services to 3,655 clients
- 242,235 food bank home delivered meals services to 4,498 clients

**Table 3.1.** Clients Served by Ryan White, 2021

<b>Variable</b>	<b>Value</b>	<b>Clients Served</b>
Total	N	<b>6,725</b>
Insurance Type	Uninsured	217 (3%)
	Private Insurance	2,268 (34%)
	Public Insurance*	4,143 (63%)
	Missing	97 (1%)
Gender	Female	1,331 (20%)
	Male	5,291 (79%)
	Transgender	96 (1%)
	Unknown	7 (0%)
Age	<25	123 (2%)
	25-34	899 (13%)
	35-44	1,383 (21%)
	45-54	1,698 (25%)
	55+	2,622 (39%)
Race	Black	1,547 (23%)
	Hispanic or Latina/o/e/x	1,252 (19%)
	White	3,287 (49%)
	Other	639 (10%)
Year	2017	7,353
	2018	7,080
	2019	7,040
	2020	6,879
	2021	6,725

\* Medicare, Medicaid or Dual (Medicaid and Medicare)

## ADAP

The AIDS Drug Assistance Program (ADAP) is a component of the Part B Ryan White Program and ensures that PLWH have access to HIV care, regardless of their financial situation. For those who meet the income requirements, Washington State's ADAP provides financial assistance for medical care, medication, and supportive services (e.g., mental health care, dental care). Washington's ADAP also pays healthcare premiums for health insurance for eligible program participants.

Between 2015 and 2021, Washington state ADAP served 4,747 PLWH and paid for ART prescriptions for 3,844 clients. From 2015-2019 DOH spent \$158,039,846 on ADAP, consisting of \$85,777,328 on prescriptions and \$72,262,518 on insurance premiums.

**Table 3.2.** ADAP Enrollment and Services Provided, Washington State 2015-2021

Variable	Value	Clients Enrolled	Clients Served	Clients Receiving ART
Total	N	<b>6,294</b>	<b>4,757</b>	<b>3,844</b>
Insurance Type	Uninsured	311 (5%)	328 (7%)	141 (4%)
	Private Insurance	2,281 (36%)	2,314 (49%)	2,038 (53%)
	Public Insurance*	3,702 (59%)	2,082 (44%)	1,665 (43%)
Gender	Female	1,210 (19%)	843 (18%)	672 (17%)
	Male	4,993 (79%)	3,862 (81%)	3,130 (81%)
	Transgender	88 (1%)	49 (1%)	41 (1%)
	Unknown	3 (0%)	3 (0%)	1 (0%)
Age	<25	112 (2%)	60 (1%)	43 (1%)
	25-34	797 (13%)	523 (11%)	424 (11%)
	35-44	1244 (20%)	797 (17%)	681 (18%)
	45-54	1537 (24%)	1,114 (23%)	908 (24%)
	55+	2604 (41%)	2,263 (48%)	1,708 (44%)
Race	Black	1360 (22%)	977 (21%)	766 (20%)
	Hispanic or Latina/o/e/x	1177 (19%)	995 (21%)	894 (23%)
	White	3188 (51%)	2,408 (51%)	1,883 (49%)
	Other	569 (9%)	377 (8%)	301 (8%)
Year	2015	3,728	3,681	3,225
	2016	4,029	3,997	3,400
	2017	4,065	4,084	3,528
	2018	4,385	4,338	3,692
	2019	4,742	4,583	3,920
	2020	4,632	4,461	3,935
	2021	6,294	4,757	3,844

\* Medicare, Medicaid or Dual (Medicaid and Medicare)

## Peer Navigation

Beginning in 2018, WA DOH, on the recommendation of the HIV Planning Steering Group, implemented a state-wide peer navigation program to promote a trauma-informed and healing-centered approach to HIV care access. Currently, twelve Peer Navigators support eight community-based programs statewide and work collaboratively with case managers, housing case managers, and other members of a client's care team to improve the quality of life and access to medical care for persons living with HIV.

In 2021, the Washington State Peer Navigation program served 689 clients, most of whom were white, male, and over the age of 45. In 2022, WA DOH launched a new model prioritizing Black American/African-born and Hispanic or Latina/o/e/x communities who are the most affected by health disparities and experience slower linkage to care and viral suppression.

**Table 3.3.** Peer Navigation Services, 2018-2021

Variable	Value	Clients Served
Total	N	689
Gender	Female	136
	Male	543
	Transgender	10
Age	<25	10
	25-34	79
	35-44	136
	45-54	168
	55+	296
Race	Black	94
	Hispanic or Latina/o/e/x	178
	White	361
	Other	56
Year	2018	35
	2019	45
	2020	328
	2021	689

## Barriers to Care and Wellness of PLWH

### Satisfaction with HIV Care

As part of the Medical Monitoring Project, PLWH were asked to rate their satisfaction with their outpatient HIV care. Ninety-Five Percent of PLWH reported that they were “Somewhat Satisfied” or “Very Satisfied” with the care they were receiving. Due to the small number of people who expressed dissatisfaction with their care, it is difficult to discern demographic trends, but it is notable that people who were dissatisfied with their care were less likely to be virally suppressed.

**Table 3.4.** Satisfaction with HIV Care Among PLWH in Washington State, Medical Monitoring Project 2015-2019

Satisfaction with Outpatient HIV Care <sup>1</sup>	N	Weighted % (95% CI)	N Suppressed	% Virally Suppressed (95% CI) <sup>2</sup>
Very or Somewhat Satisfied	471	96% (94-98%)	414	86% (82-89%)
Very or Somewhat Dissatisfied	22	4% (2-6%)	16	68% (46-91%)

Data Source: 2015-2019 MMP

1. Satisfaction was ascertained using the question, “In general, how satisfied are you with the outpatient HIV medical care you received in the past 12 months?”

2. A person was categorized as virally suppressed if they received a viral load in the past 12 months and their most recent viral load was <200 copies/mL.

**Table 3.5.** Satisfaction with HIV Care Among PLWH in Washington State by Race, Medical Monitoring Project 2015-2019

Variable	Value	N Total	% Satisfied (95% CI) <sup>1</sup>
Gender	Male	432	95% (93-97%)
	Female	56	99% (96-100%)
	Transgender	5	100% (100-100%)
Age	13-24	4	100% (100-100%)
	25-34	61	92% (83-100%)
	35-44	96	96% (92-100%)
	45-54	168	96% (93-99%)
	55-64	126	97% (94-100%)
	65+	38	93% (84-100%)
Transmission Risk	Heterosexual C.	47	100% (100-100%)
	IDU	20	100% (100-100%)
	MSM	331	96% (93-98%)
	MSM+IDU	58	93% (86-100%)
	Other	37	91% (78-100%)
Race	Black	63	95% (89-100%)
	Hispanic	64	95% (87-100%)
	Other	67	99% (97-100%)
	White	299	95% (93-97%)

Data Source: 2015-2019 MMP

1. Provider Satisfaction defined as a response of ‘Somewhat Satisfied’ or ‘Very Satisfied’ to the question “In general, how satisfied are you with the outpatient HIV medical care you received in the past 12 months?”

## Homelessness

Homelessness is prevalent among PLWH (10%) and is a large barrier to successful HIV care. Viral suppression among homeless PLWH was 68% between 2015 and 2019 as compared to 89% among housed PLWH. PWID and Black PLWH had the highest rates of homelessness.



**Table 3.6.** Homelessness Among PLWH in Washington State, Medical Monitoring Project 2015-2019

Homeless in Past 12 Months <sup>1</sup>	N	Weighted % (95% CI)	N Suppressed	% Virally Suppressed (95% CI) <sup>2</sup>
Yes	85	10% (8-12%)	59	68% (58-79%)
No	771	90% (8-12%)	698	89% (86-91%)

Data Source: 2015-2019 MMP

1. Homeless is defined as living on the street, in a shelter, in a Single Room Occupancy (SRO) hotel, or in a car in the past 12 months.

2. A person was categorized as virally suppressed if they received a viral load in the past 12 months and their most recent viral load was <200 copies/mL.

**Table 3.7.** Homelessness Among PLWH in Washington State by Race, Medical Monitoring Project 2015-2019

Variable	Value	N Total	% Homeless in Past 12 Months (95% CI) <sup>1</sup>
Gender <sup>2</sup>	Male	738	9% (7-11%)
	Female	112	16% (9-24%)
	Transgender	7	30% (0-64%)
Age	13-24	10	11% (0-32%)
	25-34	95	16% (8-24%)
	35-44	174	15% (10-21%)
	45-54	285	8% (5-12%)
	55-64	218	10% (5-14%)
Transmission Risk	65+	75	3% (0-6%)
	Heterosexual C.	87	18% (9-27%)
	IDU	38	26% (12-41%)
	MSM	552	8% (6-10%)
	MSM+IDU	101	14% (7-21%)
Race	Other	79	6% (1-11%)
	Black	114	20% (12-28%)
	Hispanic	120	16% (9-23%)
	White	486	7% (5-9%)
	Other	137	10% (4-15%)

Data Source: 2015-2019 MMP

1. Homelessness is defined as living on the street, in a shelter, in a Single Room Occupancy (SRO) hotel, or in a car in the past 12 months.

2. Transgender and non-binary individuals were combined into a single category due to identifiability concerns.

## Quality of Life and Overall Health

A majority (81%) of PLWH responded that their quality of life was “Good”, “Very Good”, or “Excellent”, which is similar to that of the general population (84% “Good”, “Very Good”, or “Excellent”, BRFSS 2019). Those who self-reported a quality of life that was “Good” or better had a high rate of viral suppression (90%). In contrast, only 77% of people with “Fair” or “Poor” quality of life were virally suppressed between 2015 and 2019. While these data cannot describe whether viral suppression preceded a good quality of life or a good quality of life preceded viral suppression, still, the association between them suggests the importance of anti-retroviral therapy (ART) in achieving a high quality of life for PLWH, as well as the importance of addressing the needs of the whole person so they can prioritize their health and wellbeing and achieve viral suppression.

**Table 3.8.** Quality of Life Among PLWH in Washington State, Medical Monitoring Project 2015-2019

Quality of Life in Past 30 Days <sup>1</sup>	N	Weighted % (95% CI)	N Suppressed	% Virally Suppressed (95% CI) <sup>2</sup>
Good, Very Good, or Excellent	550	81% (77-84%)	505	90% (86-93%)
Fair or Poor	122	19% (16-22%)	96	77% (69-85%)

Data Source: 2015-2019 MMP

1. Quality of life assessed with the question " In general, would your say your quality of life is...?"

2. A person was categorized as virally suppressed if they received a viral load in the past 12 months and their most recent viral load was <200 copies/mL.

**Table 3.9.** Quality of Life Among PLWH in Washington State by Race, Medical Monitoring Project 2015-2019

Variable	Value	N Total	% Good to Excellent Quality of Life (95% CI) <sup>1</sup>
Gender <sup>2</sup>	Male	582	82% (78-85%)
	Female	88	74% (64-84%)
	Transgender	5	100% (100-100%)
Age	13-24	8	100% (100-100%)
	25-34	73	82% (73-91%)
	35-44	132	80% (73-88%)
	45-54	222	77% (71-83%)
	55-64	175	83% (77-88%)
	65+	65	85% (75-94%)
Transmission Risk	Heterosexual C.	64	76% (65-88%)
	IDU	32	49% (31-68%)
	MSM	436	85% (81-88%)
	MSM+IDU	73	69% (58-79%)
	Other	70	87% (78-95%)
Race	Black	88	71% (61-81%)
	Hispanic	99	82% (74-90%)
	White	375	84% (80-88%)
	Other	113	77% (69-86%)

Data Source: 2015-2019 MMP

1. Quality of life assessed with the question " In general, would your say your quality of life is...?"

2. Transgender and non-binary individuals were combined into a single category due to identifiability concerns.

## Incarceration

In 2013, 37,000 people in Washington state were incarcerated which is a rate of 455 per 100,000 people. The incarceration rate has grown steadily for the past 40 years. Since 1980, the rate has nearly doubled. Since 2005, the growth in prison population is attributable to people being held in pre-trial detention. In addition to the 37,000 who are incarcerated, an additional 99,000 Washingtonians are under criminal justice supervision including probation and parole.

The demographics of the imprisoned population does not match that of Washington state. People of color are overrepresented among those who are incarcerated: 2,372 out of every 100,000 people who identifies as Black are incarcerated as compared to 392 of every 100,000 people who identify as White. The rates for people who identify as Latina/o/e/x or Hispanic is 601/100,000 and the rate for people who identify as American Indian, or Alaska Native is 1,427/100,000. Men are incarcerated at a far higher rate than women (467 versus 40 per 100,000 people).

Incarceration can cause tremendous disruption to a person’s ability to care for themselves and attend to their medical needs. Between 2015 and 2019, an estimated 4% of PLWH were incarcerated each 12 months. Those that were incarcerated were far less likely to be virally suppressed than those who were not (66% vs 87%). Younger PLWH, Black PLWH, and PLWH who inject drugs were the most likely to be incarcerated.

**Table 3.10.** Recent Incarceration Among PLWH in Washington State, Medical Monitoring Project 2015-2019

<b>Incarcerated in Past 12 Months</b>	<b>N</b>	<b>Weighted % (95% CI)</b>	<b>N Suppressed</b>	<b>% Virally Suppressed (95% CI)</b>
Yes	33	4% (3-5%)	23	66% (49-83%)
No	823	96% (95-97%)	733	87% (85-90%)

Data Source: 2015-2019 MMP

1. A person was categorized as incarcerated if they were in jail, detention, or prison for longer than 24 hours in the past 12 months.
2. A person was categorized as virally suppressed if they received a viral load in the past 12 months and their most recent viral load was <200 copies/mL.

**Table 3.11.** Recent Incarceration Among PLWH in Washington State by Race, Medical Monitoring Project 2015-2019

Variable	Value	N Total	% Incarcerated in Past 12 Months (95% CI) <sup>1</sup>
Gender <sup>2</sup>	Male	738	4% (3-6%)
	Female	112	1% (0-2%)
	Transgender	7	13% (0-37%)
Age	13-24	10	0
	25-34	95	12% (5-19%)
	35-44	174	6% (2-9%)
	45-54	285	1% (0-3%)
	55-64	218	3% (1-6%)
	65+	75	1% (0-4%)
Transmission Risk	Heterosexual C.	87	1% (0-3%)
	IDU	38	8% (0-18%)
	MSM	552	3% (2-5%)
	MSM+IDU	101	9% (3-15%)
	Other	79	2% (0-6%)
Race	Black	114	9% (3-14%)
	Hispanic	120	4% (0-7%)
	White	486	4% (2-5%)
	Other	137	1% (0-2%)

Data Source: 2015-2019 MMP

1. A person was categorized as incarcerated if they were in jail, detention, or prison for longer than 24 hours in the past 12 months.
2. Transgender and non-binary individuals were combined into a single category due to identifiability concerns.

## Primary Language and Health Literacy

A sizable proportion of PLWH may encounter barriers to medical care because of low health literacy (24%) or limited English proficiency (15%). Despite this, PLWH with limited literacy had similar rates of viral suppression as PLWH who had high health literacy and English proficiency.

**Table 3.12.** Health Literacy Among PLWH in Washington State, Medical Monitoring Project 2015-2019

Confidence in Filling Out Medical Forms	N	Weighted % (95% CI)	N Suppressed	% Virally Suppressed (95% CI)
High	650	76% (73-79%)	577	87% (84-90%)
Low	203	24% (21-27%)	178	86% (81-91%)

Data Source: 2015-2019 MMP

1. A person was categorized as confident if they answered “Extremely” or “Quite a Bit” to the question “How confident are you in filling out medical forms by yourself?”
2. A person was categorized as virally suppressed if they received a viral load in the past 12 months and their most recent viral load was <200 copies/mL.

**Table 3.13.** English Language Skills Among PLWH in Washington State, Medical Monitoring Project 2015-2019

English Proficiency	N	Weighted % (95% CI)	N Suppressed	% Virally Suppressed (95% CI)
High	732	85% (82-88%)	650	87% (84-90%)
Low	125	15% (12-18%)	107	85% (78-92%)

Data Source: 2015-2019 MMP

1. A person was categorized as having high English proficiency if they answered “Very well” to the question “How well do you speak English?”
2. A person was categorized as virally suppressed if they received a viral load in the past 12 months and their most recent viral load was <200 copies/mL.

**Table 3.14.** Linguistic Barriers to Healthcare Access in Washington State by Race, Medical Monitoring Project 2015-2019

Variable	Value	N Total	% with Linguistic Barriers (95% CI) <sup>1</sup>
Gender <sup>2</sup>	Male	738	6% (4-7%)
	Female	112	13% (6-20%)
	Transgender	7	0%
Age	13-24	10	20% (0-46%)T
	25-34	95	2% (0-6%)
	35-44	174	12% (7-18%)
	45-54	285	7% (4-10%)
	55-64	218	4% (1-6%)
	65+	75	5% (0-11%)
Transmission Risk	Heterosexual C.	87	14% (6-22%)
	IDU	38	2% (0-6%)
	MSM	552	5% (3-7%)
	MSM+IDU	101	5% (1-10%)
	Other	79	12% (4-20%)
Race	Black	114	6% (1-11%)
	Hispanic	120	16% (9-23%)
	Other	137	9% (4-15%)
	White	486	4% (2-6%)

Data Source: 2015-2019 MMP

1. A person was categorized as having a linguistic barrier to healthcare access if they reported low confidence in filling out medical forms or low English proficiency.
2. Transgender and non-binary individuals were combined into a single category due to identifiability concerns.

**Table 3.15.** Foreign Languages Spoken by PLWH in Washington, Medical Monitoring Project 2015-2019

Language	PLWH Who Speak a Language other than English at Home n (%)	PLWH Who Do Not Speak English Well n (%)
Spanish	1520 (53%)	237 (68%)
French	256 (9%)	0 (0%)
Swahili	154 (5%)	0 (0%)
Tagalog	147 (5%)	14 (4%)
Thai	109 (4%)	25 (7%)
Vietnamese	99 (3%)	13 (4%)
Chinese Languages	99 (3%)	20 (6%)
Russian	54 (2%)	0 (0%)
Other	412 (14%)	42 (12%)

Data Source: 2015-2019 MMP

## Emergency Room and Healthcare Utilization

The emergency room (ER) is an important part of the medical system within the United States. However, frequent use of the emergency room may indicate that a person’s medical needs are not being met via primary medical providers. Between 2015 and 2019, 38% of PLWH used the emergency room in the past 12 months. Of these, 81% were virally suppressed as compared to 90% among the MMP participants who didn’t report going to the ER; this may indicate that they face barriers in accessing regular HIV care.

**Table 3.16.** Emergency Room Utilization Among PLWH in Washington State, Medical Monitoring Project 2015-2019

Used Emergency Room in Past 12 Months	N	Weighted % (95% CI)	N Suppressed	% Virally Suppressed (95% CI) <sup>1</sup>
Yes	320	38% (34-41%)	265	81% (87-93%)
No	535	62% (59-66%)	491	90% (87-93%)

Data Source: 2015-2019 MMP

1. A person was categorized as virally suppressed if they received a viral load in the past 12 months and their most recent viral load was <200 copies/mL.

**Table 3.17.** Emergency Room Utilization Among PLWH in Washington State by Race, Medical Monitoring Project 2015-2019

Variable	Value	N Total	Used Emergency Room in Past 12 Months (95% CI) <sup>1</sup>
Gender <sup>2</sup>	Male	736	37% (33-41%)
	Female	112	37% (27-47%)
	Transgender	7	86% (61-100%)
Age	13-24	10	29% (1-57%)
	25-34	94	39% (28-49%)
	35-44	173	37% (29-44%)
	45-54	285	38% (32-44%)
	55-64	218	38% (31-45%)
	65+	75	37% (26-48%)
Transmission Risk	Heterosexual C.	87	35% (24-46%)
	IDU	38	51% (34-68%)
	MSM	551	37% (33-41%)
	MSM+IDU	100	49% (39-59%)
	Other	79	22% (12-31%)
Race	Black	112	35% (26-45%)
	Hispanic	120	32% (23-41%)
	Other	137	40% (31-48%)
	White	486	39% (34-43%)

Data Source: 2015-2019 MMP

1. Transgender and non-binary individuals were combined into a single category due to identifiability concerns.

## COVID-19 Co-infection and Disruption to HIV Care

The 2020 COVID-19 pandemic caused significant disruption to the medical system in the United States and worldwide. The table below describes the experience of PLWH with COVID-19 and HIV care in Washington State.

**Table 3.18.** Impact of COVID-19 Pandemic on PLWH and Healthcare Access, Washington State, 2020

Since February 1, 2020, have you...	Respondents	No (%)	Yes (%)
Lost wages from your work for one week or more because of COVID-19?	140	103 (74%)	37 (26%)
Lost your health insurance because of COVID-19?	149	147 (99%)	2 (1%)
Missed any doses of your medication due to COVID-19?	147	139 (95%)	8 (5%)
Had a problem getting a prescription or a refill for your HIV medications due to COVID-19?	149	137 (92%)	12 (8%)
Been unable to receive services (e.g., counseling, support group, housing assistance, food pantry) because of COVID-19?	150	126 (84%)	24 (16%)
Skipped or delayed routine HIV-related laboratory tests (such as CD4 and viral load tests) due to COVID-19?	150	116 (77%)	34 (23%)

Source: 2020-2021 Medical Monitoring Project



## Unmet Needs

The most used services for PLWH in Washington state are dental services (66%), HIV case management (62%), ADAP (49%), food stamps (36%), and mental health services (33%). Between 2015 and 2019, 39% of PLWH reported 1 or more unmet service need. The most common unmet needs were dental services (18%), mental health services (12%), peer group support (8%), transportation assistance (8%), and social security insurance or social security disability insurance (8%).

**Table 3.19.** PLWH with Unmet Service Needs in Washington State by Race, Medical Monitoring Project 2015-2019

Variable	Value	N Total	1 or More Unmet Service Need (95% CI) <sup>1</sup>
Total	n	132	39% (34-44%)
Gender <sup>2</sup>	Male	292	36% (30-42%)
	Female	51	54% (39-69%)
	Transgender	2	50% (0-100%)
Age	13-24	3	67% (13-100%)
	25-34	32	45% (27-62%)
	35-44	75	48% (36-60%)
	45-54	111	40% (31-49%)
	55-64	88	34% (24-45%)
	65+	36	21% (8-34%)
Transmission Risk	Heterosexual C.	37	44% (26-62%)
	IDU	17	42% (16-68%)
	MSM	211	34% (27-40%)
	MSM+IDU	41	44% (29-59%)
	Other	39	54% (37-70%)
Race	Black	48	59% (44-74%)
	Hispanic	52	34% (21-48%)
	Other	67	45% (32-57%)
	White	178	32% (25-39%)

Data Source: 2015-2019 MMP

1. Transgender and non-binary individuals were combined into a single category due to identifiability concerns. See note on page XXX for more information.

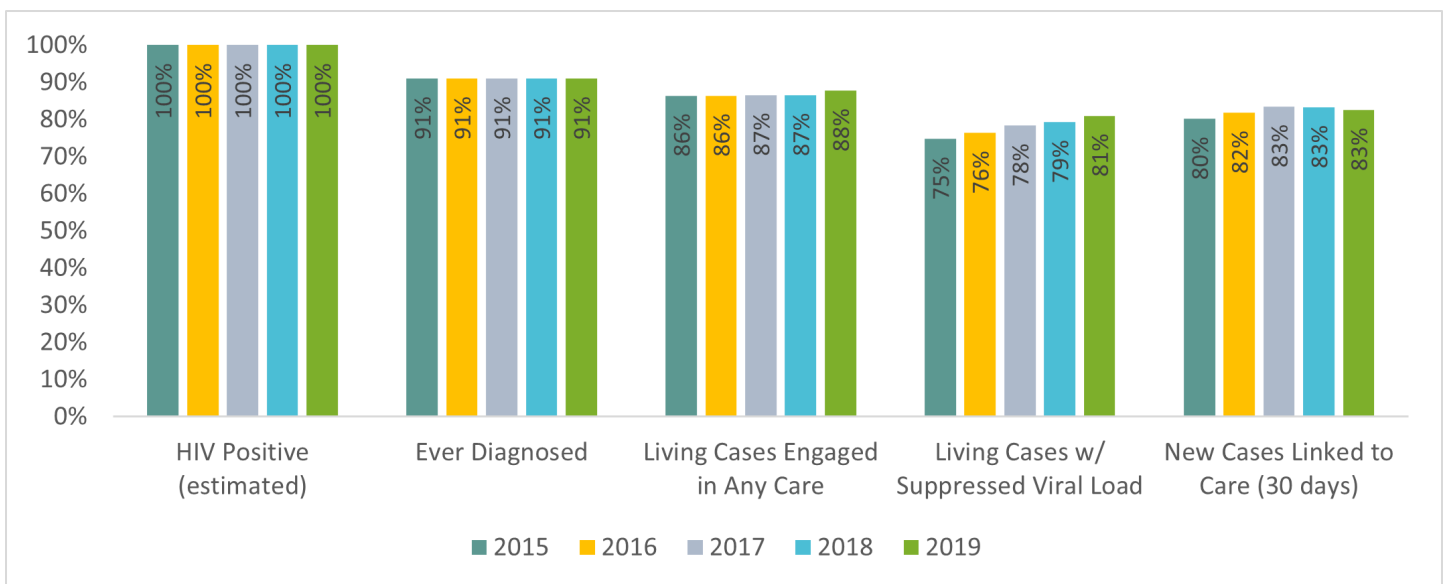
**Core Question 3.2: What is the HIV care continuum for the overall population and for priority populations in Washington?**

## Care Continua and Priority Populations

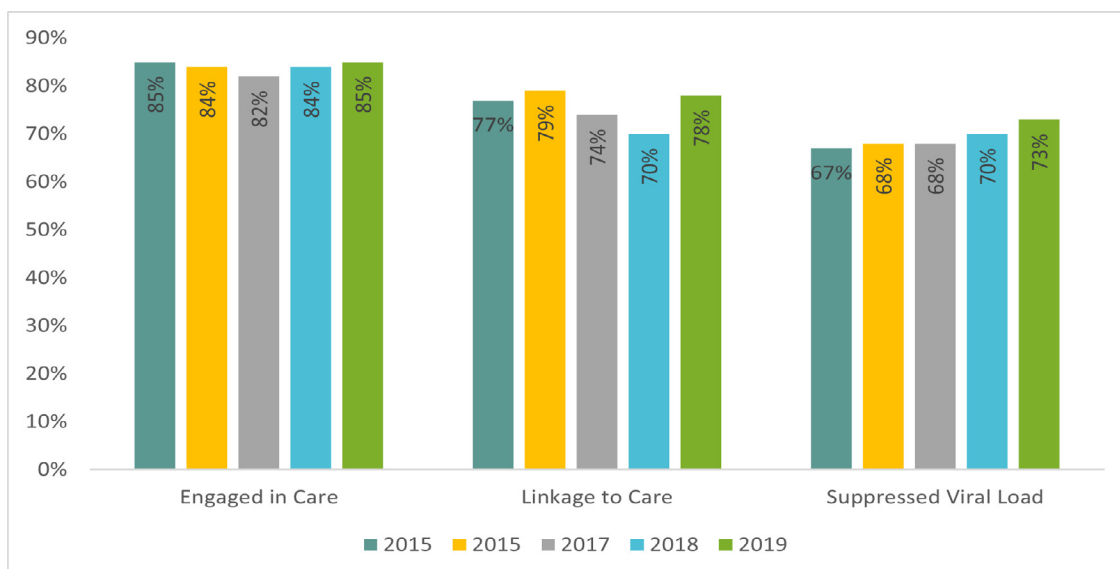
From 2015 to 2019, the total number of PLWH who were virally suppressed has consistently increased, with 81% of people reaching viral suppression in 2019. However, there are subpopulations who are less likely to be virally suppressed; people who inject drugs, black women, and Black/AI/AN/LAT/HISP men who have sex with men all have viral suppression proportions of 80% or less. In 2019, 83% of new HIV cases were linked to care within 30 days. Like viral suppression, the proportion of new cases who were linked to care among people who inject drugs and Black/AI/AN/LAT/HISP men who have sex with men was slightly lower. However, the percentage of Black women linked to care was higher, with 92% being linked to care.

From 2015-2019, engagement in care has increased from 86% to 88%. Increases in engagement in care have been seen among people who inject drugs and Black/AI/AN/LAT/HISP men who have sex with men. For Black women (defined by sex at birth) engagement in care dropped from 88% in 2017 to 87% in 2018 and stayed consistent in 2019.

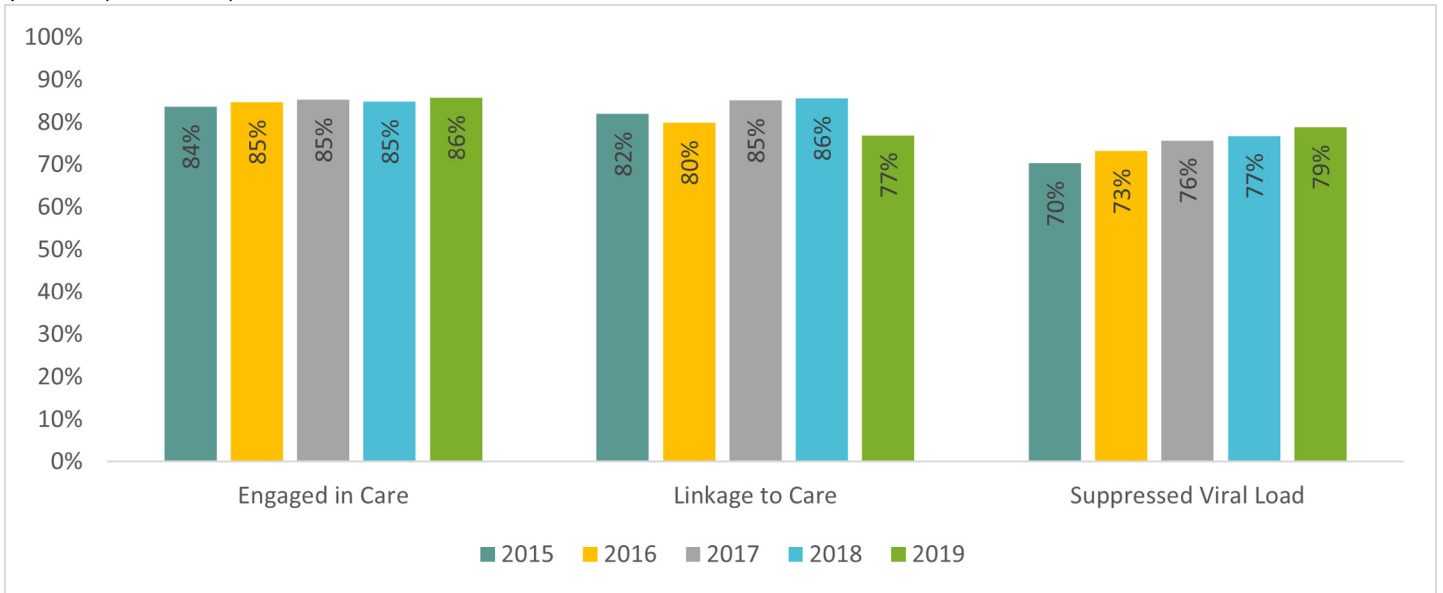
**Figure 3.1.** HIV Care Continuum, WA State, 2015-2019



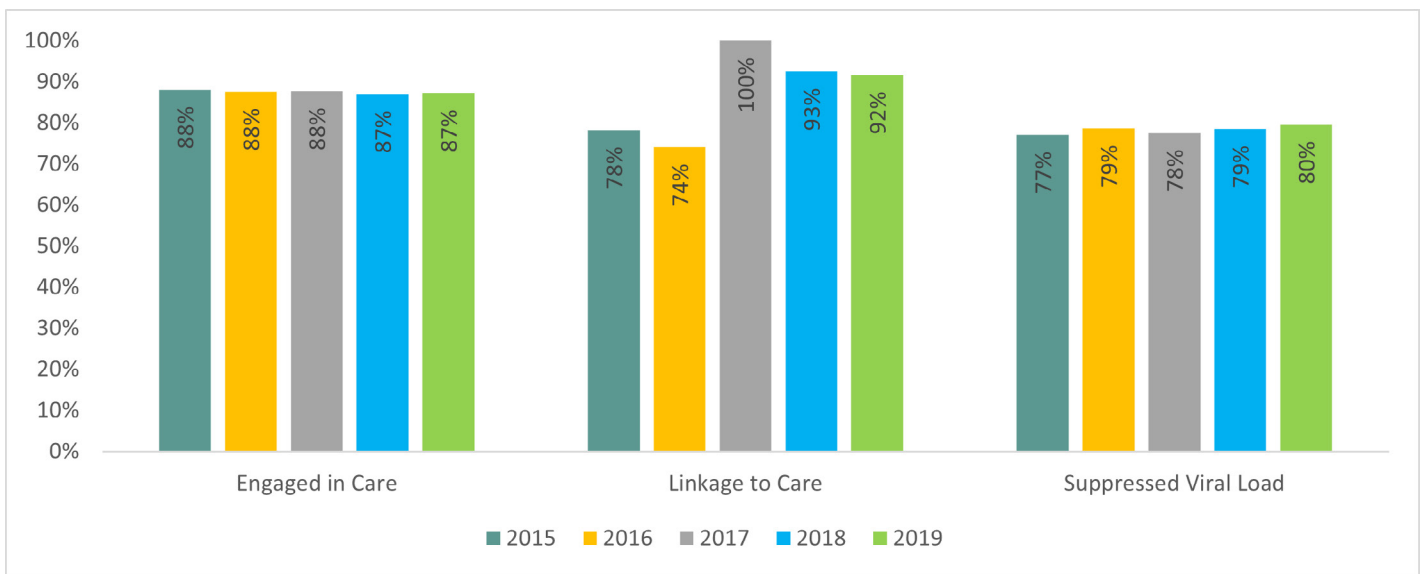
**Figure 3.2.** HIV Care Continuum among People Who Inject Drugs, WA State, 2015-2019



**Figure 3.3.** HIV Care Continuum among Black, American Indian/Alaskan Native, Hispanic or Latina/o/ e/x MSM, WA State, 2015-2019



**Figure 3.4.** HIV Care Continuum among Black People assigned Female at Birth, WA State, 2015-2019



# Section 4

Prevention of HIV in Washington



## Summary

Washington State Department of Health funds a variety of prevention programs, though lack of a centralized data system makes it difficult to evaluate the statewide landscape. From telephone surveys of Washingtonians, we estimate about 57% of people in Washington have been tested for HIV at least once in their life. We also distributed HIV test and condom kits, reaching thousands of residents, and fund programs that pay for PrEP for people at risk of acquiring HIV.

Although HIV is considered a sexually transmitted infection, HIV can be transmitted through other pathways. It can be transmitted during pregnancy to the fetus, during childbirth, and during breastfeeding. It can also be transmitted through sharing needles, making injection drug use with shared needles a concern. Further, substance use and high-risk sexual behaviors often co-occur, and stigma may compound the ability to receive HIV care. Thus, monitoring substance use and HIV together can provide important insight in strategic planning.

Still, sexual behaviors remain a concern, in particular condomless/barrierless sex with partners who have multiple sex partners, and among those who exchange sex. Because other STIs such as gonorrhea and chlamydia have similar risk profiles, they can be indicators of potential risk for HIV.

### **Core Question 4.1: What HIV Care and Treatment Services are available in Washington?**

#### **Services Provided**

Fifty-seven percent of Washingtonians have been tested for HIV one or more times in their lives. The rate is higher among women than men, which may be a product of HIV screening during prenatal care. The rate of lifetime HIV testing is higher among people who identify as Black or Hispanic; the rate of HIV diagnosis is also higher in these populations. This information is useful to view HIV testing across the population, but the public health relevance is diluted by the large number of people who are at low risk of HIV acquisition.

We have limited information about HIV testing in populations at higher risk of HIV acquisition from NHBS surveys in King County and from participants of BRFSS who identify as MSM. Among these populations, we do not see a higher rate of testing among individuals who identify as Black and Hispanic. Due to the high prevalence and incidence of HIV in Black and Hispanic communities, this likely represents an unmet need for testing.

**Table 4.1.** Self-Reported Lifetime HIV Testing in Washington State by Demographic Characteristics, Behavioral Risk Factor Surveillance System 2015-2019

Variable	Value	Ever Tested for HIV (95% CI)
Total	N	57% (56-58%)
Gender	Male	38% (36-39%)
	Female	42% (40-44%)
	Transgender Male <sup>2</sup>	48% (18-78%)
	Transgender Female <sup>2</sup>	56% (29-83%)
Age	<25	25% (21-29%)
	25-34	51% (47-54%)
	35-44	58% (55-61%)
	45-54	50% (47-53%)
	55+	27% (26-29%)
Race	Black	66% (58-73%)
	White	39% (37-40%)
	Hispanic	44% (40-48%)
	Other	38% (34-41%)

Data Source: BRFSS 2019

### Condoms and Test Kits

The DOH funded 12-15 thousand HIV tests a year between 2015 and 2019. The most successful testing was among MSM who inject drugs, of whom 2.4% were newly diagnosed with HIV. In addition to publicly funded tests, DOH distributed 1,395,072 condom and lube packages and 4,000 HIV test kits to community partners in 2018. In 2019, DOH distributed 1,379,952 condom and lube packages and 4200 test kits.

**Table 4.2.** HIV Tests Performed by Funded Sites, Washington State, 2015 – 2019<sup>1</sup>

Variable	Value	N Total	% Newly Diagnosed HIV <sup>2</sup> (95% CI)
Year	2015	12,651	0.7 (0.5 - 0.8)
	2016	12,007	0.7 (0.6 - 0.9)
	2017	13,289	0.6 (0.4 - 0.7)
	2018	15,073	0.5 (0.4 - 0.6)
	2019	13,849	0.4 (0.3 - 0.5)
Type of Test Site	Clinical	33,321	0.6 (0.5 - 0.7)
	Non-clinical	33,548	0.5 (0.4 - 0.6)
Age Group	<25	12,254	0.5 (0.3 - 0.6)
	25-34	28,213	0.6 (0.5 - 0.7)
	35-44	12,913	0.5 (0.4 - 0.7)
	45-54	8,071	0.7 (0.5 - 0.8)
	55+	5,186	0.5 (0.3 - 0.7)
	Unknown	232	0.0 (0.0 - 0.0)
Sex at Birth	Male	58,067	0.6 (0.5 - 0.7)
	Female	8,750	0.3 (0.2 - 0.4)
	Unknown	52	0.0 (0.0 - 0.0)
Race/Ethnicity	Hispanic or Latina/o/e/x	11,037	0.8 (0.6 - 0.9)
	NH Asian	6,519	0.4 (0.2 - 0.5)
	NH Black	7,555	0.8 (0.6 - 0.9)
	NH White	35,023	0.5 (0.4 - 0.6)
	NH Other Race	1,219	0.7 (0.3 - 1.2)
	NH Multirace	2,367	0.7 (0.3 - 1.0)
	Unknown	3,149	0.3 (0.1 - 0.6)
Risk Population <sup>3</sup>	MSM	37,291	0.6 (0.5 - 0.7)
	PWID	1,778	0.5 (0.2 - 0.8)
	MSM/PWID	787	2.4 (1.3 - 3.5)
	Transgender	615	0.0 (0.0 - 0.0)
	Transgender/PWID	26	0.0 (0.0 - 0.0)
	Other <sup>3</sup>	14,640	0.3 (0.2 - 0.3)
	Unknown Risk	11,732	0.8 (0.6 - 0.9)

1. Data Source: EvaluationWeb<sup>(R)</sup> 2015-2019

2. Men who have sex with men (MSM) defined as clients born male or transgender males, reporting sex with male.

3. “Other” risk category includes presumed heterosexual males, heterosexual females, and clients reporting transgender sex partners. Multiple risk categories were combined into a single category due to identifiability concerns.



## PrEP Uptake

PrEP uptake is a difficult topic to study in Washington State, as there is no centralized data system that gathers information. The most detailed information comes from King County, where data is collected from 2 data sources: The Public Health Sexual Health and PrEP Clinic (SHC) at Harborview, and participants in the Seattle arm of the National HIV Behavioral Surveillance (NHBS) system. Given that infection with one STI increases a person’s chance of contracting another STI, we can assume that many of the folks at the SHC would be good candidates for PrEP. However, we see that only 40% of MSM, 6% of PWID, and 5% of women who exchange sex at the SHC are receiving PrEP. The NHBS is a survey that focuses on three populations at highest risk: MSM, PWID, and heterosexuals at high risk of contracting HIV. NHBS in Seattle found that 1% of HIV-negative women who exchange sex and 1% of PWID were receiving PrEP, compared to 33% of HIV-negative MSM, suggesting that messaging and services for people at risk of HIV who are not MSM is needed.

**Table 4.3.** Characteristics of SHC PrEP Clinic patients enrolled or receiving services in 2020

Variable	Value	PrEP Users n (%)	Total HIV neg patients at SHC*
Total	N	768 (19)	4,009
Gender	Cisgender men	716 (23)	3,105
	Cisgender women	10 (1)	781
	Transgender men	3 (23)	13
	Transgender women	13 (42)	31
	Non-binary or genderqueer	26 (33)	79
Age	< 13	0 (0)	0
	13-24	105 (16)	641
	25-34	402 (23)	1,785
	35-44	173 (20)	855
	45-54	61 (14)	428
	55-64	24 (10)	232
	65+	3 (4)	68
Race/Ethnicity	AI/AN	7 (29)	24
	Asian	91 (24)	378
	Black	64 (8)	754
	LAT/HISP	184 (32)	579
	NHOPI	6 (21)	21
	White	386 (20)	1,969
	Multiple	19 (23)	82
	Unknown	11 (5)	202
Risk Characteristics	MSM	697 (40)	1,745
	PWID	6 (7)	87
	MSM/PWID	22 (39)	57
	Heterosexual	5 (<1)	1,811
	Transgender ppl who have sex with men	37 (34)	110
	Women who exchange sex	1 (5)	21

**Table 4.4.** National HIV Behavioral Surveillance Survey PrEP Results (2017-2019)

Variable	Value	Women who Exchange Sex	Men who Have Sex with Men	People who Inject Drugs	Heterosexually active people	Transgender Women
Total	n	2 (1%)	137 (33%)	5 (1%)	0 (0%)	16 (17%)
Gender category						
	Cisgender men	*	137 (33%)	2 (1%)	0 (0%)	*
	Cisgender women	2 (1%)	*	2 (1%)	0 (0%)	*
	Transgender men	*	*	0 (0%)	*	*
	Transgender women	0 (0%)	*	1 (25%)	*	16 (17%)
	Transgender <sup>1</sup>	(0%)	(0%)	(0%)	(0%)	(0%)
Age <sup>2</sup>						
	18-24	0 (0%)	11 (33%)	0 (0%)	0 (0%)	5 (33%)
	25-34	1 (2%)	67 (35%)	3 (2%)	0 (0%)	7 (14%)
	35-44	1 (1%)	32 (34%)	1 (1%)	0 (0%)	2 (13%)
	45-54	0 (0%)	22 (32%)	1 (1%)	0 (0%)	1 (17%)
	55-64	0 (0%)	4 (17%)	0 (0%)	0 (0%)	1 (20%)
	65+	*	1 (13%)	0 (0%)	*	0 (0%)
Race/ Ethnicity <sup>3</sup>						
	AI/AN	1 (2%)	9 (26%)	3 (3%)	0 (0%)	4 (57%)
	Asian	0 (0%)	1 (29%)	0 (0%)	0 (0%)	3 (18%)
	Black	0 (0%)	12 (24%)	0 (0%)	0 (0%)	3 (25%)
	LAT/HISP	1 (3%)	30 (41%)	3 (5%)	0 (0%)	5 (26%)
	NHOPI	0 (0%)	5 (46%)	1 (4%)	0 (0%)	3 (8%)
	White	1 (1%)	113 (35%)	3 (1%)	0 (0%)	4 (14%)
Risk						
	MSM <sup>4</sup>	*	130 (33%)	*	*	*
	PWID	2 (1%)	*	3 (1%)	*	0 (0%)
	MSM/PWID	*	7 (33%)	2 (5%)	*	*
	Trans people who have sex with men <sup>5</sup>	0 (0%)	*	0 (0%)	*	14 (20%)
	Receive money or drugs in exchange for sex	2 (1%)	8 (35%)	2 (2%)	0 (0%)	4 (17%)
	10+ sex partners past 12 months	1 (1%)	94 (59%)	3 (8%)	0 (0%)	5 (25%)
	Meth - last 12 months	1 (1%)	13 (29%)	4 (1%)	0 (0%)	3 (27%)
	Gonorrhea or syphilis dx - last 12 months	0 (0%)	42 (61%)	1 (5%)	0 (0%)	1 (20%)
	PHSKC PrEP guidelines for initiation <sup>6</sup>	0 (0%)	103 (49%)	2 (5%)	*	6 (18%)
Insurance						
	Yes	2 (1%)	126 (35%)	5 (1%)	0 (0%)	13 (19%)
	No	0 (0%)	11 (20%)	0 (0%)	0 (0%)	3 (12%)
Income <sup>7</sup>						
	<\$15,000	1 (1%)	7 (14%)	2 (1%)	0 (0%)	5 (24%)
	\$15,000-\$29,999	1 (3%)	21 (31%)	2 (3%)	0 (0%)	4 (19%)
	\$30,000-\$49,999	0 (0%)	21 (26%)	1 (2%)	0 (0%)	4 (21%)
	\$50,000-\$74,999	0 (0%)	28 (34%)	0 (0%)	0 (0%)	1 (6%)
	≥\$75,000	0 (0%)	60 (45%)	0 (0%)	*	2 (13%)

<sup>1</sup>Cycle Years: women who exchange sex 2016; men who have sex with men 2017; people who inject drugs. 2018; heterosexually active people 2019; transgender women 2019-2020.

<sup>2</sup>NHBS only includes participants 18+

<sup>3</sup>Check all, participants may appear in multiple racial/ethnic categories.

<sup>4</sup>MSM, PWID, and MSM/PWID are mutually exclusive with each other. For all other risk categories participants may fall under more than one. MSM includes trans men when possible.

<sup>5</sup>NHBS-Trans didn't ask gender of all sex partners last 12 months, so this is gender of last sex partner.

## PrEP DAP

In order to address financial barriers to PrEP, the WA State Department of Health PrEP DAP (Pre-Exposure Prophylaxis Drug Assistance Program) assists enrollees with costs of certain medications and medical/lab services for enrollees who visit contracted pharmacies or providers. The WA State PrEP DAP began in April 2014 as the first PrEP payment assistance program in the US. The program was developed on the infrastructure the Early Intervention Program (EIP), using similar application/eligibility renewal methods, utilization of the existing contracted Pharmacy Benefits Manager and contracted providers and labs actively working within the EIP network. PrEP DAP applicants must meet eligibility requirements which include being HIV-negative, residence in Washington State, and have one or more HIV risk factors. In addition, applicants must be prescribed PrEP, complete an application and provide the required documentation.

The WA State Legislature authorized the use of 2 million dollars in General Funding Source annually to support the PrEP DAP Program. From 2017-2021, DOH PrEP DAP enrolled 2,841 clients, served 1,768 clients, and provided PrEP to 226 clients. This came at a cost of \$6,629,691, consisting of \$4,373,801 on prescriptions and \$2,255,889 on Medical/Lab Services.

**Table 4.5.** PrEP Enrollment and Services Provided, Washington State 2017-2021

Variable	Value	Clients Enrolled	Clients Served	Clients Receiving Truvada/Descovy
Total	N	<b>2,841</b>	<b>1,768</b>	<b>226</b>
Insurance Type	Uninsured	774	568 (32%)	27 (12%)
	Private Insurance	1948	1,121 (63%)	131 (58%)
	Public Insurance*	119	79 (5%)	68 (30%)
Gender	Female	55	32 (1.8%)	4 (1.8%)
	Male	2,677	1,665 (94%)	218 (96%)
	Other	109	71 (4%)	4 (1.8%)
Age	<25	224	142 (8%)	14 (6%)
	25-34	1,250	789 (45%)	70 (31%)
	35-44	746	463 (26%)	36 (16%)
	45-54	357	225 (13%)	34 (15%)
	55+	264	149 (8.4%)	72 (32%)
Race	Black	146	98 (5.5%)	10 (4%)
	Hispanic or Latina/o/e/x	742	520 (29%)	25 (11%)
	White	1,497	857 (48%)	160 (71%)
	Other	474	293 (17%)	31 (14%)
Year	2017	695	44	6
	2018**	1,703	760	114
	2019	2,418	1,296	87
	2020***	2,630	1,429	155
	2021	2,841	1,768	226

\* Medicare, Medicaid or Dual (Medicaid and Medicare)

\*\* In 2018, DOH starts covering costs associated with medical/lab services in addition to cost associated with medication services

\*\*\* In September of 2020, DOH stopped requiring Gilead PAP Assistance because generic Truvada is available. Generic Truvada introduces fluctuation in co-pay amounts

## Syringe Services

Recent HIV outbreaks and low viral suppression rates among people who inject drugs (PWID) highlight the need for prevention and treatment services tailored to this priority population. Syringe service programs (SSPs) are effective and culturally appropriate interventions for decreasing the risk of HIV transmission among PWID. DOH supports 31 SSPs across Washington State. These programs provide a range of services, including condom distribution, syringe access, enhanced outreach, overdose prevention and naloxone distribution, PrEP navigation, and HIV testing and linkage to care. As overdose is the third leading cause of death for people living with HIV, partnerships between HIV providers and syringe service programs have the potential to improve health and decrease mortality for PWID living with HIV in Washington State.

### Core Question 4.2: What are the indicators of risk for acquiring and transmitting HIV infection in Washington?

## Births

From 2015-2019 there were 191 children born to PLWH in Washington state. Of these, 148 (77%) had their HIV status determined by 18 months of age. As of 1/1/2022, 159 were confirmed HIV negative, 2 are HIV positive, and 30 have an unknown HIV status.

**Table 4.6.** Births Among People Living with HIV in Washington State (2015-2019)

Year	2015	2016	2017	2018	2019	Total
All Births	41	40	32	43	35	191
HIV Positive	1	0	0	0	1	2
Unknown	10	2	5	6	7	30

Data Source: EHARS 2015-2019

## Sexual Behaviors

The Washington Behavioral Risk Factor Surveillance System (BRFSS) asks Washingtonians about behaviors that may put them at risk of HIV acquisition. Instead of asking individual questions, which may involve disclosing sensitive or damaging personal details, risk is ascertained via a combined question:

*"I am going to read you a list. When I am done, please tell me if any of the situations apply to you. You do not need to tell me which one. You have injected any drug other than those prescribed for you in the past year. You have been treated for a sexually transmitted disease or STD in the past year. You have given or received money or drugs in exchange for sex in the past year."*

In Washington state, 6% of the population answered "Yes", indicating participation in a behavior that carries a high risk of HIV acquisition. People who were male and younger were more likely to answer "Yes". There were differences across racial categories, but after adjustment for age, gender, and socioeconomic status, these differences disappeared.

**Table 4.7.** Prevalence of Risk Behaviors for HIV Acquisition in Washington State by Demographic Characteristics, Behavioral Risk Factor Surveillance System 2015-2019<sup>1</sup>

<b>Variable</b>	<b>Value</b>	<b>Reported Risk Behavior in Past 12 Months (95% CI)<sup>1</sup></b>
Total	N	6% (5-6%)
Gender	Male	7% (6-8%)
	Female	4% (4-5%)
	Transgender Male <sup>2</sup>	27% (8-48%)
	Transgender Female <sup>2</sup>	6% (0-20%)
Age	<25	11% (9-14%)
	25-34	13% (11-15%)
	35-44	7% (5-8%)
	45-54	4% (3-5%)
	55+	2% (1-2%)
Race	Black	10% (5-14%)
	White	5% (5-6%)
	Hispanic	8% (6-10%)
	Other	5% (4-7%)

Data Source: BRFSS 2019

1. Risk behaviors are ascertained by via the following question: "I am going to read you a list. When I am done, please tell me if any of the situations apply to you. You do not need to tell me which one. You have injected any drug other than those prescribed for you in the past year. You have been treated for a sexually transmitted disease or STD in the past year. You have given or received money or drugs in exchange for sex in the past year."

2. Estimates are based on small numbers and care should be taken in interpretation (Transgender Male: N=17, Transgender Female: N=20)

As part of the MMP survey, PLWH are asked to describe the precautions they take to reduce the risk of HIV transmission during sexual activity. During this time period, 61% of PLWH either did not participate in sexual activities or took precautionary measures to prevent the transmission of HIV. Those who were more likely to engage in activities with a high risk of HIV transmission were younger and identified as white.

**Table 4.8.** Participation in Sexual Activities with a High Risk of Transmission, PLWH in Washington State by Demographic Characteristics, Medical Monitoring Project 2015-2019<sup>1</sup>

Variable	Value	N Total	Participation in Sexual Activities with a High Risk of Transmission (95% CI) <sup>1</sup>
Total	N	247	29% (96-33%)
Gender <sup>2</sup>	Male	738	31% (27-34%)
	Female	112	21% (13-29%)
	Transgender	7	30% (0-65%)
Age	13-24	10	35% (3-67%)
	25-34	95	58% (47-69%)
	35-44	174	36% (28-43%)
	45-54	285	28% (23-34%)
	55-64	218	18% (13-23%)
	65+	75	15% (7-23%)
Race	Black	114	23% (14-31%)
	Hispanic	120	24% (16-31%)
	Other	137	27% (19-35%)
	White	486	33% (28-37%)
	Heterosexual C.	87	15% (7-23%)
	IDU	38	20% (7-33%)
	MSM	552	32% (28-36%)
	MSM+IDU	101	32% (22-41%)
	Other	79	27% (17-38%)

Data Source: 2015-2019 MMP

1. Sexual activities with a high risk of transmission is defined as condomless anal or vaginal sex with a partner of negative or unknown HIV status while not virally suppressed or protected by PrEP.

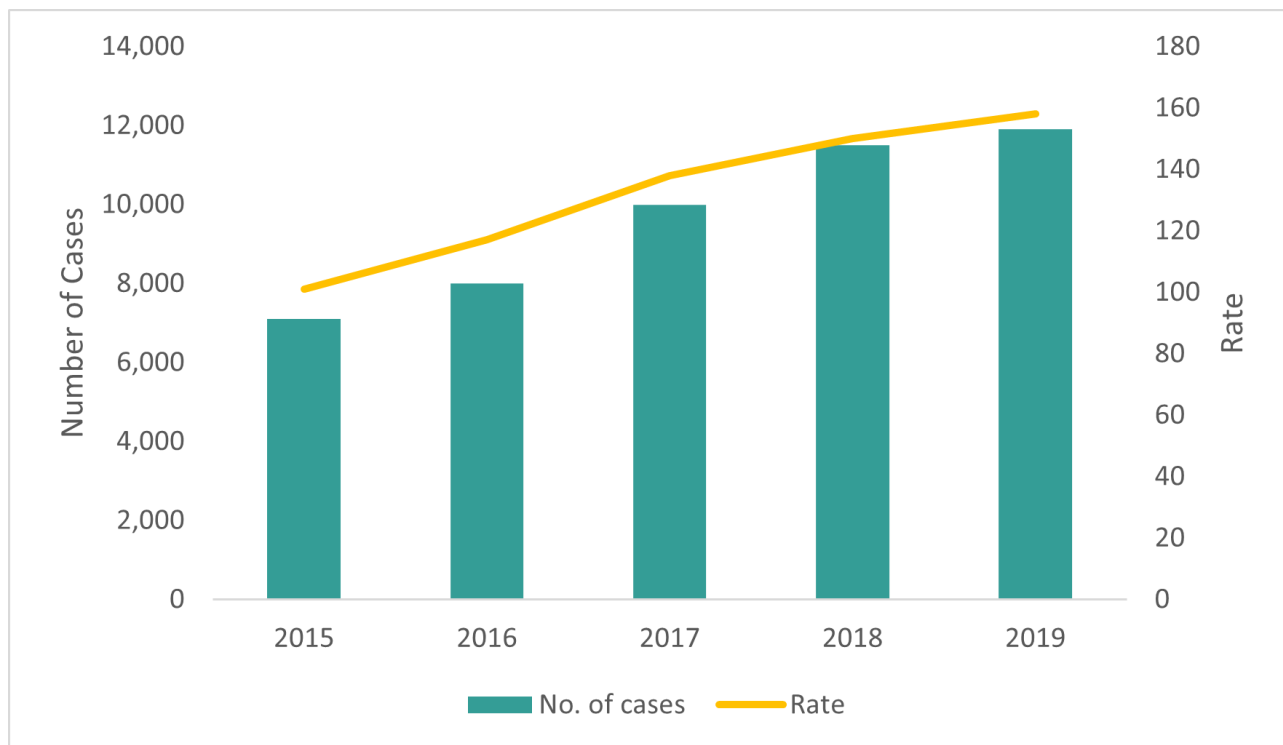
2. Transgender and non-binary individuals were combined into a single category due to identifiability concerns. See note on page XXX for more information.

## Sexually Transmitted Infections (STIs)

Statewide gonorrhea and early syphilis cases and rates increased consistently between the years of 2015 and 2019. During this time, the highest rates for both gonorrhea and early syphilis were among cisgender men, individuals within the 25-34 years age group, and Black non-Hispanic persons. The higher rate in males is partly due to high rates of these STIs among MSM. Rates are unavailable for mode of exposure due to unavailability of appropriate population estimates, and the category of “Other” includes all cases that did not otherwise fall within one of the designated risk groups in the below table. Rates are calculated per 100,000 population. Case counts less than 10 are suppressed due to data confidentiality concerns.

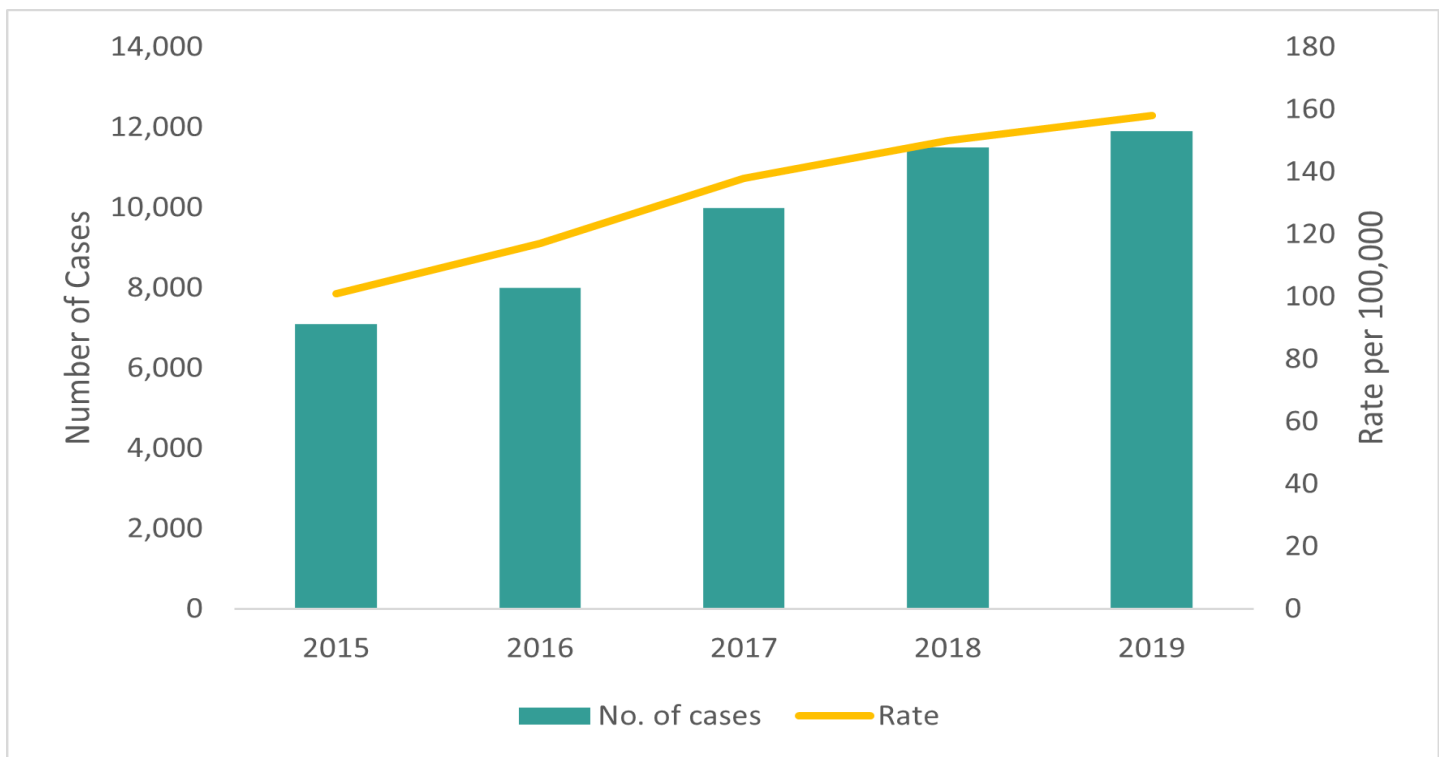
**Table 4.9. New Diagnoses and Rate of Gonorrhea, Washington State 2015-2019**

Variable	Value	Cases	Rate per 100,000
Total	N	48,498	132.8
Gender	Cisgender men	30,929	169.7
	Cisgender women	17,343	94.8
	Transgender men	87	
	Transgender women	124	
Age	< 25	15,481	133.7
	25-34	18,907	370.9
	35-44	8,599	182.0
	45-54	3,917	83.0
	55-64	1,377	28.8
	65+	208	3.7
Race/Ethnicity	AI/AN	1,129	244.0
	Asian	1,414	46.3
	Black	7,404	544.2
	LAT/HISP	7,300	155.9
	NHOPI	495	200.0
	White	21,939	87.1
	Multiple	3,846	250.1
Mode of Exposure	MSM	14,577	--
	PWID	509	--
	MSM/PWID	227	--
	Heterosexual	25,473	--
	Blood/pediatric	N/A	--
	NIR	N/A	--
	Other	9,374	--

**Figure 4.1. Cases and Rates of Gonorrhea Infection by Year, 2015-2019**

**Table 4.10.** New Diagnoses and Rate of Early Syphilis, Washington State 2015-2019

Variable	Value	Cases	Rate per 100,000
Total	N	6,015	16.5
Gender	Cisgender men	5,336	29.3
	Cisgender women	641	3.5
	Transgender men	1	--
	Transgender women	31	--
Age	< 25	933	8.1
	25-34	2,265	44.4
	35-44	1,418	30.0
	45-54	966	20.5
	55-64	361	7.6
	65+	72	1.3
Race/Ethnicity	AI/AN	71	15.4
	Asian	214	7.0
	Black	484	35.6
	LAT/HISP	1,111	23.7
	NHOPI	54	21.8
	White	3,432	13.6
	Multiple	382	24.8
Mode of Exposure	MSM	4,383	--
	PWID	306	--
	MSM/PWID	144	--
	Heterosexual	1,658	--
	Blood/pediatric	N/A	--
	NIR	N/A	--
	Other	311	--

**Figure 4.2.** Cases and Rates of Early Syphilis Infection by Year, 2015-2019



## Substance Use and Syphilis

People diagnosed with early syphilis and report IDU are more likely to be female (28.7% versus 10.1%), to be non-MSM (47% versus 24.2%), and to be white (81.8% versus 61.1%) when compared to people who do not report IDU. These trends match those seen among people who report any drug use, as shown in Table 4.1.14. The largest proportion of early syphilis cases are aged 25 to 34 years, and this age group also has the largest proportion of people who report IDU.

**Table 4.11.** Demographics of early syphilis cases by self-reported use of injection drugs Washington State, 2015-2019

	No IDU		IDU		All	
	n	%	n	%	n	%
<b>Sex at birth</b>						
Male/MTF transgender	3763	89.9%	214	71.3%	3977	88.6%
Female/FTM transgender	424	10.1%	86	28.7%	510	11.4%
<b>MSM</b>						
Yes	3172	75.8%	159	53.0%	3313	73.8%
No	1015	24.2%	141	47.0%	1174	26.2%
<b>Race</b>						
White	2596	61.1%	234	81.8%	2830	62.4%
Black	389	9.2%	13	4.5%	402	8.9%
Asian	183	4.3%	1	<1%	184	4.1%
NH/OP	48	1.1%	2	<1%	50	1.1%
AI/AN	183	4.3%	1	<1%	184	4.1%
Multiracial	159	3.7%	12	4.2%	171	3.8%
Other	132	3.1%	1	<1%	133	2.9%
Unknown	556	13.1%	22	7.7%	578	12.8%
<b>Age group (years)</b>						
0 to 12	0	0.0%	0	0.0%	0	0.0%
13 to 24	737	17.6%	45	15%	782	17.4%
25 to 34	1608	38.4%	134	44.7%	1742	38.8%
35 to 44	911	21.8%	73	24.3%	984	21.9%
45 to 54	629	15.0%	39	13%	668	14.9%
55 to 64	251	6.0%	5	1.7%	256	5.7%
65+	51	1.2%	4	1.3%	55	1.2%
<b>Reason for visit</b>						
Symptomatic	2035	49.5%	146	49.2%	2181	49.5%
Routine Exam	1384	33.7%	94	31.6%	1478	33.5%
Exposed	690	16.8%	57	19.2%	747	17.0%

The following table includes reporting of one or more of the following: crack, cocaine, methamphetamine, heroin, injection drug, or any other reported drug. Among people who have been diagnosed with early syphilis, we see differences in demographics between those who reported drug use and those who did not report using drugs. The proportion of females, non-MSM, and White people with early syphilis was higher among those who report using drugs compared to those who did not. People who report use of drugs are more likely to be female (18.4% versus 9.4%), non-MSM (38.6% versus 22.6%), and white (71.6% versus 61.9%) when compared to people who do not report use of drugs. The largest proportion of early syphilis cases are aged 25 to 34 years, and this age group also has the largest proportion of people who report any drug use.

**Table 4.12.** Demographics of early syphilis cases by self-reported use of any drugs, Washington State 2015-2019.

	No drug use		Any drug use		All	
	n	%	n	%	n	%
<b>Sex at birth</b>						
Male/MTF transgender	3160	90.6%	817	81.6%	3977	88.6%
Female/FTM transgender	326	9.4%	184	18.4%	510	11.4%
<b>MSM</b>						
Yes	2698	77.4%	615	61.4%	3313	73.8%
No	788	22.6%	386	38.6%	1174	26.2%
<b>Race</b>						
White	2122	61.9%	708	71.6%	2830	64.1%
Black	329	9.6%	73	7.4%	402	9.1%
Asian	170	5.0%	14	1.4%	184	4.2%
NH/OP	44	1.3%	6	0.6%	50	1.1%
AI/AN	37	1.1%	30	3.0%	67	1.5%
Multiracial	122	3.6%	49	5.0%	171	3.9%
Other	119	3.5%	14	1.4%	133	3.0%
Unknown	483	14.1%	95	9.6%	578	13.1%
<b>Age group (years)</b>						
0 to 12	0	0.0%	0	0.0%	0	0.0%
13 to 24	619	17.8%	163	16.3%	782	17.4%
25 to 34	1283	36.8%	459	45.9%	1742	38.8%
35 to 44	764	21.9%	220	22.0%	984	21.9%
45 to 54	541	15.5%	127	12.7%	668	14.9%
55 to 64	229	6.6%	27	2.7%	256	5.7%
65+	50	1.4%	5	0.5%	55	1.2%
<b>Reason for visit</b>						
Symptomatic	1699	49.6%	482	48.9%	2181	49.5%
Routine Exam	1167	34.1%	311	31.6%	1478	33.5%
Exposed	555	16.2%	192	19.5%	747	17.0%

**Table 4.13.** Number and percent of interviewed early syphilis cases reporting drug use by year, MSM status and drug reported, Washington State 2015-2020

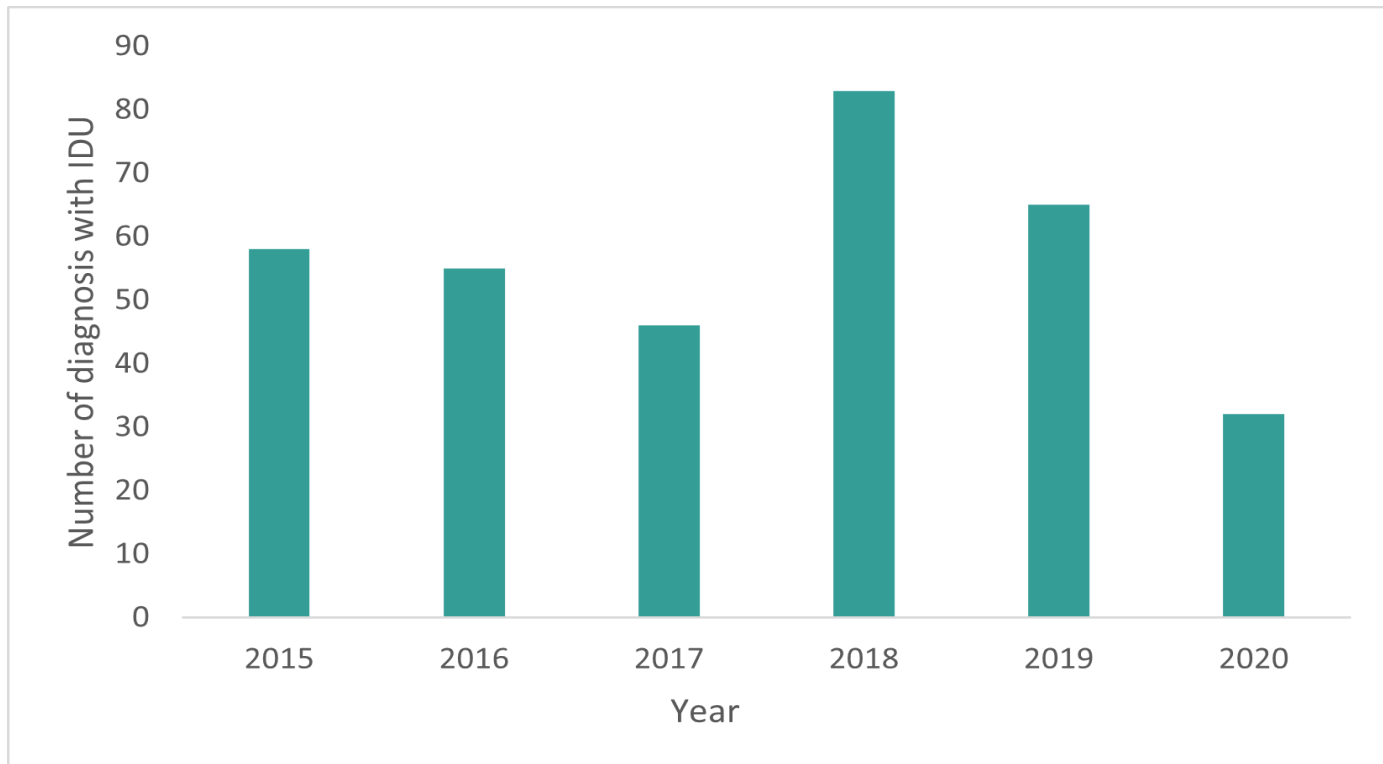
Drug	MSM	n, 2015	%, 2015	n, 2016	%, 2016	n, 2017	%, 2017	n, 2018	%, 2018,	n, 2019	%, 2019	n, 2020	%, 2020,
Any Drug	No	27	29%	69	39%	102	40%	104	33%	84	25%	121	23%
Methamphetamine	No	18	19%	56	32%	84	33%	83	27%	62	18%	100	19%
IDU	No	11	12%	34	19%	41	16%	46	15%	27	8%	35	7%
Heroin	No	8	9%	21	12%	22	9%	38	12%	28	8%	46	9%
Cocaine	No	4	4%	1	1%	6	2%	7	2%	7	2%	2	0%
Crack	No	4	4%	1	1%	2	1%	3	1%	6	2%	1	0%
Other	No	4	4%	12	7%	9	4%	6	2%	14	4%	19	4%
Cocaine or Crack <sup>i</sup>	No	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	12	2%
Any Drug	Yes	100	20%	101	16%	157	21%	131	18%	126	18%	47	17%
Methamphetamine	Yes	60	12%	77	12%	101	13%	82	11%	81	11%	33	12%
IDU	Yes	27	6%	35	6%	34	4%	21	3%	24	3%	6	2%
Heroin	Yes	6	1%	10	2%	7	1%	5	1%	12	2%	6	2%
Cocaine	Yes	24	5%	17	3%	46	6%	35	5%	26	4%	4	1%
Crack	Yes	8	2%	7	1%	4	1%	1	0%	2	0%	0	0%
Other	Yes	38	8%	25	4%	47	6%	44	6%	36	5%	17	6%
Cocaine or Crack <sup>i</sup>	Yes	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8	3%

<sup>i</sup>In 2020, reporting was changed to create one question for cocaine or crack use, shown in the updated “cocainecrack” variable. Note: For all data in this section, cases are included if they are early syphilis (primary, secondary, or early latent non-primary non-secondary stages) and have a complete or partial patient interview on record, as drug use data is not reported through case report alone and an interview is necessary to obtain such information.

## Methamphetamine (and other drug) Use

Between 2015 and 2019, roughly 16% of new diagnoses of HIV involved injection drug use (PWID or PWID who are also MSM). This points to the large role that injection drug use plays in the perpetuation of the HIV epidemic.

**Figure 4.3.** Injection Drug use at HIV diagnosis by year



A large proportion of PLWH use methamphetamine and it is a significant barrier to their ability to access HIV care. Ten percent of PLWH self-report using meth at least weekly or have methamphetamine use documented in their medical records. Of these, 33% are not virally suppressed.

Although heroin and off-label opiate use are also large barriers to HIV care (30% not virally suppressed in this population), it is much less common among PLWH. An estimated 4% of PLWH used heroin at least weekly or had heroin use or opiate use disorder documented in their medical records. Similar to the general population, PLWH who use heroin are likely to also use meth (43%), but people who use meth are not likely to use heroin (16%).

**Table 4.14.** Substance use and viral suppression among PLWH

Substance	PLWH who use at least weekly	% Virally Suppressed	Co-Use
Methamphetamine	10%	67%	16% also use heroin
Heroin / Opiate Use Disorder	4%	70%	43% also use meth

Data source: 2015-2019 MMP

In addition to the information from MMP, we see similar trends from state death records. Between 2017 and 2019, PLWH were 4 times more likely to die from opioid overdose than the general Washington population and 11 times more likely to die from overdose of psychostimulants. This points not only to the high prevalence of substance use among PLWH but also the burden on the health of PLWH.

## **Additional Populations at Risk**

### **Houselessness**

Every year at the end of January, Washington state performs a “Point in Time” Count (PIT), which is a study conducted to enumerate the number of people living in emergency shelters, transitional housing, and unsheltered on one day of the year. In the 2020 PIT, 22,933 people were identified as homeless, of whom, 10,814 (47%) were unsheltered, meaning they were living in an area that was not meant for human habitation. These numbers have been relatively stable over the last 10 years, although the distribution of people has varied by region.

In 2020, 15,755 (69%) of the homeless population lived in the Puget sound region (King, Pierce, Thurston, and Snohomish Counties). The majority of people who are homeless are in a state of transition; only 6756 (29%) are chronically homeless (unsheltered or in an emergency shelter for more than 12 months or more than 4 times in 3 years).

Data Source: WA PIT Count

### **Hepatitis C**

Between 2019 and 2020, there were 11,205 new diagnoses of Hepatitis C, of which 217 were acute. The majority (79%) of acute cases indicated injection drug use as a risk factor. In 2019-2020, 30% of chronic cases and 59% of acute cases were less than 35 years of age at the time of diagnosis/report.

When interpreting Hepatitis C data from 2020, there are some considerations that should be taken due to the COVID-19 pandemic’s impact on access to testing, linkage to care, and public health investigative resources. Namely,

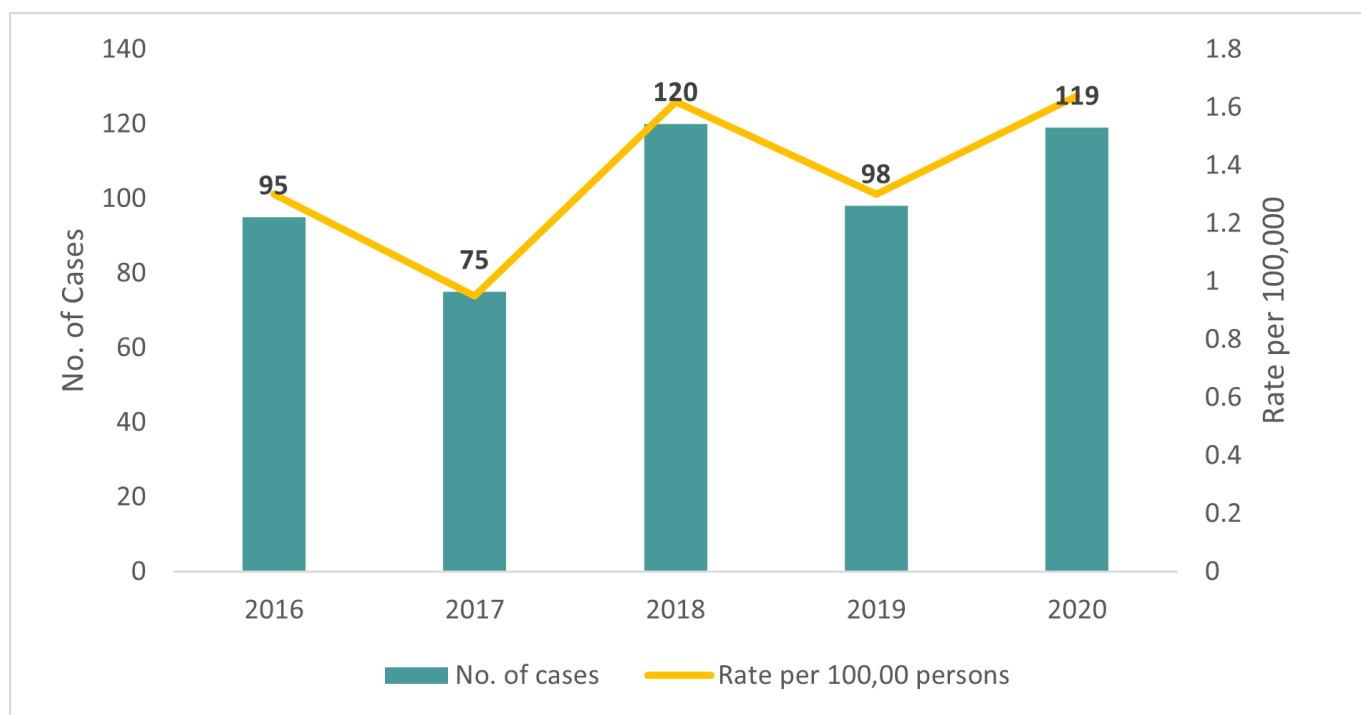
- The number of new chronic cases reported to DOH dropped 34% in 2020 when compared to 2019, but this is likely due to the impacts of the COVID-19 pandemic on access to testing and linkage to care and public health investigative resources, rather than a true decrease in incidence.
- The number of new acute cases reported to DOH did not decrease significantly in 2020 when compared to 2019, despite the impacts of the pandemic.

**Table 4.15. New Reports (Diagnoses) of Acute Hepatitis C, Washington State 2019-2020**

Variable	Value	Cases (%)
Total	N	217 (100%)
Sex at birth	Male	126 (58.1%)
	Female	89 (41.0%)
	Unknown	2 (0.9%)
Age	< 25	34 (15.7%)
	25-34	94 (43.3%)
	35-44	48 (22.1%)
	45-54	27 (12.4%)
	55-64	13 (6.0%)
	65+	1 (0.5%)
Race/Ethnicity	AI/AN	10 (4.6%)
	Asian	3 (1.4%)
	Black	10 (4.6%)
	LAT/HISP	14 (6.5%)
	NHOPI	3 (1.4%)
	White	137 (63.1%)
	Multiple	8 (3.7%)
	Other/Unknown	32 (14.7%)
	Injection drug use (during exposure period)	Yes
No		9 (4.1%)
Unknown		49 (22.6%)

+Cases of hepatitis C are included in this table if they are a resident of Washington at the time of initial diagnosis/report, are a reportable case in the relevant calendar year (January 1, XXXX – December 31, XXXX), and are given a valid DOH case classification of Probable or Confirmed as determined by the CDC case definition.

+Data source: WDRS 1/2022

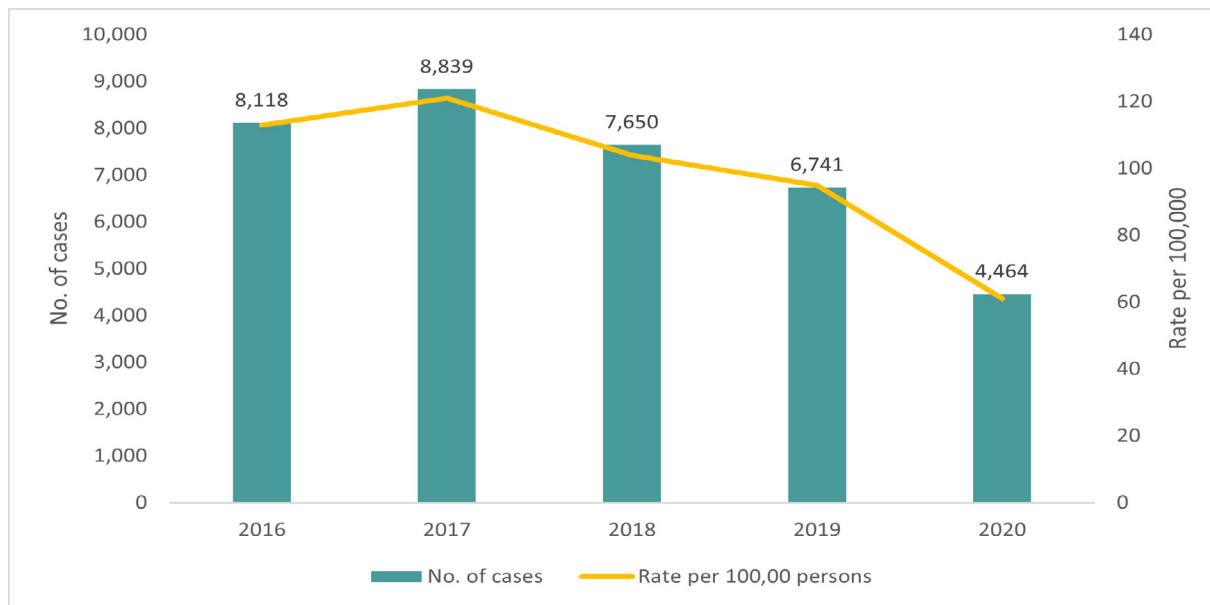
**Figure 4.4. Number and Rate of Acute Hepatitis C Infection by Year, 2016-2020**

**Table 4.16. New Reports (Diagnoses) of Chronic Hepatitis C, Washington State 2019-2020**

Variable	Value	Cases (%)
Total	N	11,205 (100%)
Sex at birth	Male	6,857 (61.2%)
	Female	4,233 (37.8%)
	Unknown	115 (1.0%)
Age	< 25	645 (5.8%)
	25-34	2,779 (24.8%)
	35-44	1,943 (17.3%)
	45-54	1,734 (15.5%)
	55-64	2,468 (22.0%)
	65+	1,574 (14.0%)
	Unknown	62 (0.6%)
Race/Ethnicity	AI/AN	160 (1.4%)
	Asian	59 (0.5%)
	Black	174 (1.6%)
	LAT/HISP	188 (1.7%)
	NHOPI	21 (0.2%)
	White	2,403 (21.4%)
	Multiple	38 (0.3%)
	Other/Unknown	8,162 (72.8%)
Injection drug use	Yes	1,270 (11.3%)
	No	55 (0.5%)
	Unknown	9,880 (88.2%)

+Cases of hepatitis C are included in this table if they are a resident of Washington at the time of initial diagnosis/report, are a reportable case in the relevant calendar year (January 1, XXXX – December 31, XXXX), and are given a valid DOH case classification of Probable or Confirmed as determined by the CDC case definition.

+Data source: WDRS 1/2022

**Figure 4.5. Number and Rate of Chronic Hepatitis C Infection by Year, 2016-2020**

+Data from 2020 should be interpreted with caution due to the COVID-19 pandemic's impact on access to testing, etc. In addition, the decreasing trend in chronic case counts from 2016-2020 could partly be attributed to the transition to a new surveillance system (Washington Disease Reporting System – WDRS) in 2018 that allowed for better case deduplication and case ascertainment.



To request this document in another format, call 1-800-525-0127. Deaf or hard of hearing customers, please call 711 (Washington Relay) or email [civil.rights@doh.wa.gov](mailto:civil.rights@doh.wa.gov).  
DOH 150-200 February 2023