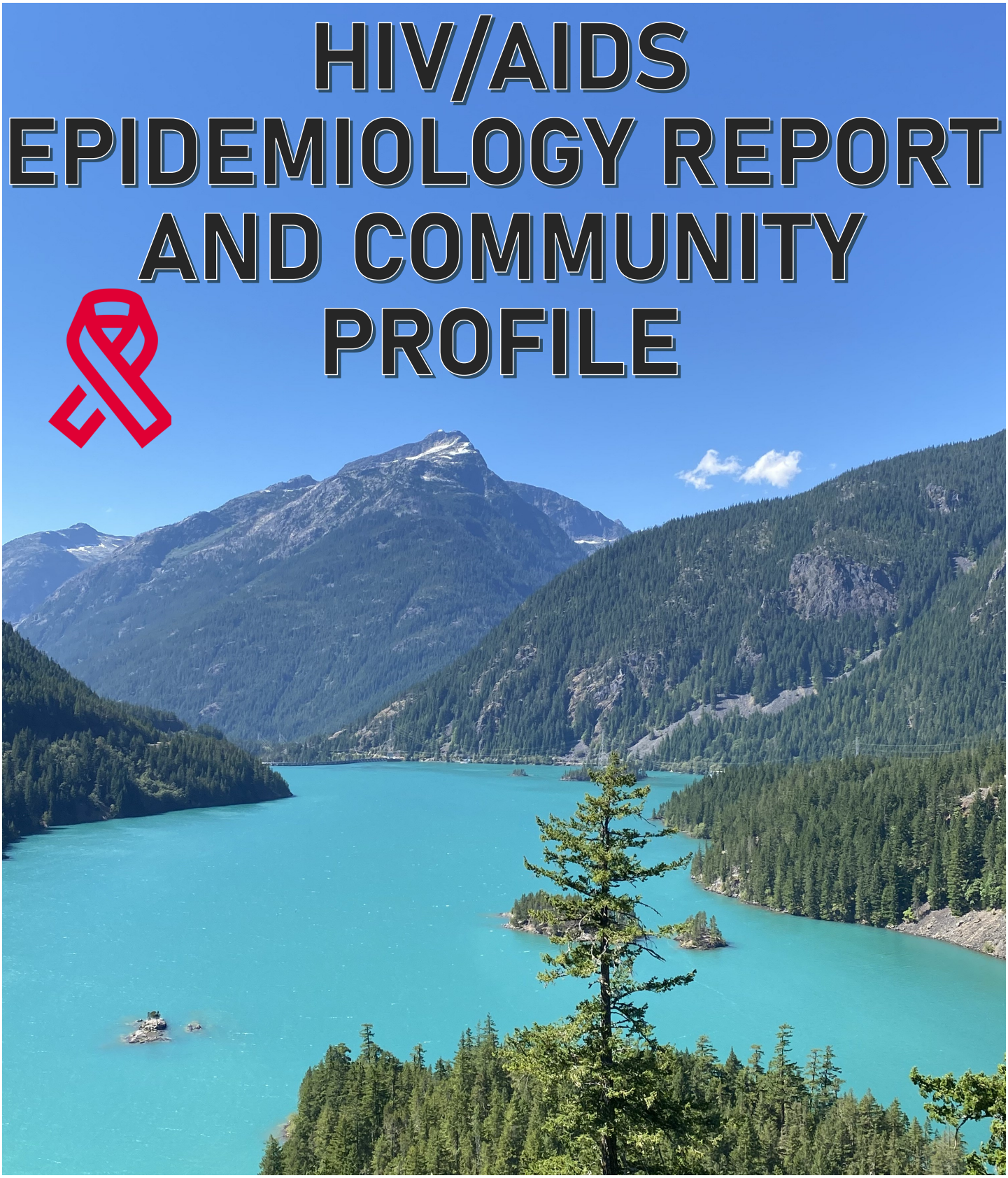
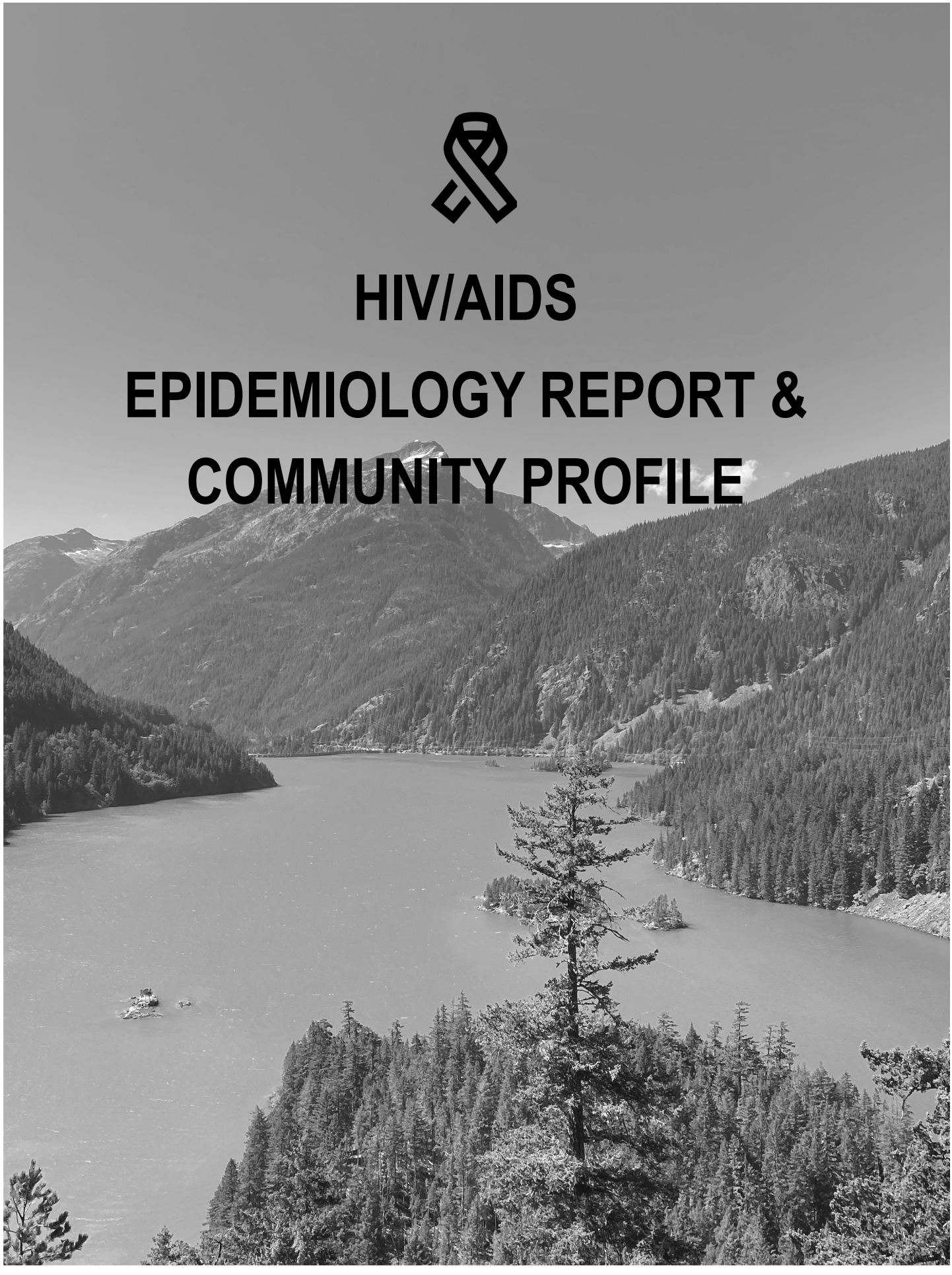
HIV/AIDS EPIDEMIOLOGY REPORT AND COMMUNITY PROFILE



2023

KING COUNTY &
WASHINGTON STATE



HIV/AIDS EPIDEMIOLOGY REPORT & COMMUNITY PROFILE

Contents

Acknowledgements

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Photo Credit

Jen Balkus, Lake Diablo

HIV/AIDS Reporting Requirements

Detailed requirements for reporting of communicable diseases including HIV/AIDS are described in the Washington Administrative Code (WAC), section 246-101 (http://apps.leg.wa.gov/WAC/default.aspx?cite=246-101).

Washington health care providers are required to report all HIV infections, regardless of the date of the patient's initial diagnosis, to the health department. Providers are also required to report new diagnoses of AIDS in a person previously diagnosed with HIV infection. Local health department officials forward case reports to the Department of Health. Names are never sent to the federal government.

Laboratories are required to report evidence of HIV infection (i.e., positive HIV screening tests, p24 antigen detection, viral culture, and nucleic acid detection), all HIV viral load tests (detectable or not), and all CD4 counts in the setting of HIV infection. If the laboratory cannot distinguish tests, such as CD4 counts, done due to HIV versus other diseases (such as cancer), the CD4 counts should be reported and the health department will investigate. However, laboratory reporting does not relieve health care providers of their duty to report, as most of the critical information necessary for surveillance and follow-up is not available to laboratories.

For further information about HIV/AIDS reporting requirements, please call your local health department or the Washington State Department of Health at 888-367-5555. In King County, call 206-263-2000.

Alternate Formats & Questions

- HIV/AIDS Epidemiology publications are online at: www.kingcounty.gov/hivepi
- Alternate formats provided upon request
- To be included on the mailing list or for address corrections, please call 206-263-2000
- For questions or comments about information included in the report, please contact Jen Balkus – jbalkus@kingcounty.gov

Suggested Citation

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Dedication

This report is dedicated to our friend and colleague, Trevor Evans, who passed away in May 2023.

Trevor was a fierce advocate for harm reduction, HIV prevention, and compassion for people who use drugs.

His decade of work with the PHSKC needle exchange program saved lives.

We miss him every day.

Definitions & Commonly Used Abbreviations

Acute HIV Infection: The earliest stage of HIV during which many people experience a flu-like illness occurring 2 to 4 weeks of after infection.
Another Gender Identity: A category on the Washington State HIV case report form that includes people who report gender expressions that are not cisgender women, cisgender men, transgender women, and transgender men.
Acquired immunodeficiency syndrome (AIDS): A result of HIV infection whereby the immune system is damaged and can no longer effectively fight against opportunistic infections and cancers.
Assigned male at birth (AMAB): Refers to the sex that is assigned to an infant (male), most often based on the infant's anatomical and other biological characteristics.
Assigned female at birth (AFAB): Refers to the sex that is assigned to an infant (female), most often based on the infant's anatomical and other biological characteristics.
Antiretroviral therapy (ART): A group of medications used to treat HIV.
American Indian and Alaskan Native (AI/AN): A racial/ethnic group. Individuals may also identify as First Nations or Indigenous.
CD4 Count: A measure of the number of CD4+ T cells in the bloodstream.
Centers for Disease Control and Prevention (CDC): The CDC is a federal disease prevention agency. The CDC both researches and analyzes public health issues, is responsible for working with state and local agencies to monitor health threats and implement measures to prevent outbreaks and for educating the public on health issues and maintaining medical statistics.
Cisgender: Describes a person whose gender identity aligns with their sex assigned at birth.
Epidemiology: The branch of public health science that deals with the incidence, determinants, distribution, and possible control of diseases and other factors relating to health.
Ending the HIV Epidemic (EHE): A federal initiative that aims to capitalize on scientific advances in HIV diagnosis, treatment, and prevention to accelerate national progress in controlling the HIV epidemic.
Gender Identity: One's innermost concept of self as male, female, a blend of both or neither – how individuals perceive themselves and what they call themselves. One's gender identity can be the same or different from their sex assigned at birth.
Human immunodeficiency virus (HIV): The virus that causes AIDS.
HIV Viral Load: The amount of HIV viral RNA that is in the bloodstream.
Latinx: A racial/ethnic group. This is used as the gender inclusive term for people whose ethnicity is from Latin America, South America, and Spanish speaking Caribbean.
Homeless/Unstably Housed: Lacking a stable and safe place to live. This includes those who are both unsheltered and sheltered, as well as those living in temporary settings due to lack of adequate economic resources.
Incidence: The number or rate of new diagnoses over defined period of time.
Linkage to HIV Care: Having the first clinic visit or accessing medical care after an HIV diagnosis.
Men who have sex with men (MSM): A transmission category. Unless otherwise specified, in this report MSM includes cisgender and transgender men who report sex with men.
Native Hawaiian or other Pacific Islander (NHPI): A racial/ethnic group. This group includes people who originate from Hawaii, Guam, Samoa, or other Pacific Islands.
No identifiable Risk (NIR): An HIV transmission category where documentation is insufficient to assign a mode for transmission.
Out of Care (OOC): Someone diagnosed with HIV with no medical visits or laboratory results over the past year or more.
Pediatric: A transmission category used to describe transmission of HIV from a pregnant person to their infant during pregnancy, labor, delivery or breastfeeding; also known as vertical transmission.
People who inject drugs (PWID): An HIV transmission category.
Pre-exposure prophylaxis (PrEP): Antiretroviral medication taken by individuals to prevent HIV infection.
Surveillance: The continuous collection, analysis, and distribution of data regarding a health-related event.
Transgender Man: Person who identifies as a man and was assigned female sex at birth.
Transgender Woman: Person who identifies as a woman and was assigned male sex at birth.
Transmission Category: A system that classifies individuals by possible HIV transmission-related factors or mode(s) of infection, e.g., PWID, MSM/PWID, perinatal transmission, heterosexual sexual contact.
Viral Suppression: When a person living with HIV has less than 200 copies of HIV per milliliter of blood.

Executive Summary

Background

The HIV/AIDS Epidemiology Report & Community Profile is a longstanding joint effort between Public Health – Seattle & King County (PHSKC) and the Washington State Department of Health (WA DOH). Our goal each year is to provide a detailed summary and evaluation of efforts related to HIV/AIDS in King County, in addition to sharing data from across Washington state. The report includes HIV surveillance data, information on populations most affected by HIV, and critical evaluations of various components of our program. We aim to answer these questions: What is the scope of the HIV epidemic in King County and how does that compare to the overall epidemic in Washington State? Who is most impacted by the epidemic? and What are we doing to prevent HIV and ensure the successful treatment of people living with HIV?

In 2019, the U.S. Department of Health and Human Services released its Ending the HIV Epidemic (EHE) plan, which supports jurisdictions most impacted by HIV, including King County. The primary objective of EHE is to reduce the number of new HIV infections by 75% by 2025 and by 90% by 2030. This report, which includes data through the end of 2022, focuses on each of the four EHE pillars: 1) Diagnose, 2) Treat, 3) Prevent, and 4) Respond. Our King County HIV Goals and Metrics Dashboard reflects national and local goals for 2025 that are aligned with the EHE pillars. We set goals that we believe are ambitious, achievable, and aligned with the county's broader goals related to equity. Each pillar-focused chapter includes data documenting progress toward meeting EHE goals and descriptions of pillar-related activities in support of these goals.

Over the past decade, King County and Washington state have met numerous goals related to HIV prevention, care and treatment. To our knowledge, King County was the first urban jurisdiction in the U.S. to meet UNAIDS 90-90-90 goals. More recently, COVID-19 related healthcare service disruptions reduced progress towards some EHE goals, and in some instances, the pandemic impeded our ability to measure key HIV-related indicators. King County has successfully increased PrEP use, and the proportions of people with HIV who know their HIV status and who are virally suppressed continue to be much higher than they are nationally. However, there has been little change in number of new HIV diagnoses, the percentage of people who are virally suppressed and age-adjusted mortality among PLWH. HIV-related disparities have declined only slightly. Overall, in recent years King County's HIV epidemic has remained unchanged. Below we summarize key findings for each EHE pillar.

Lastly, each year the report undergoes revisions and, for readers familiar with past reports, we highlight notable changes for 2023: 1) For the first time, in addition to

reporting cisgender and transgender gender identity, this report includes data for people who report another gender identity; 2) Fact sheets for key populations were not included as the format is being re-evaluated; 3) The order of the chapters has been revised to present King County data and chapters first; and 4) Information on methods, technical definitions and data sources is presented in a combined "Technical Notes" section at the end of the report. We welcome feedback on these changes as we are always striving to ensure this report is accessible to and meets the needs of our community.

EHE Pillar 1: Diagnose

In 2022, there were 183 new HIV diagnoses resulting in an annual rate of 7.9 per 100,000. While this represents a slight increase over the past two years, it is the same as the diagnosis rate in 2019 prior to the COVID-19 epidemic. Individuals with a Seattle residence comprised 40% of new HIV diagnoses, followed by south King County (33%) and individuals who were homeless or unstably housed (15%). The majority of new HIV diagnoses (62%) were among men who have sex men (MSM) including MSM who also inject drugs (people who inject drugs; PWID). Heterosexual sexual contact was indicated for 13% of newly diagnosed residents, followed by PWID (9%, including MSM who inject drugs). The proportion of new HIV diagnoses among Black residents was disproportionately high (25%), given that 7% of residents identify as Black. The proportion of new HIV diagnoses among Latinx people was also disproportionately high (25% of new diagnoses versus 11% of the population in King County). Among both Black and Latinx populations, new HIV diagnoses disproportionately affect people born outside of the U.S. In King County, 97% of residents with HIV are aware of their status, which surpasses the national and local goals of 95%.

EHE Pillar 2: Treat

People living with HIV on sustained antiretroviral therapy improve their own health outcomes and, if virally suppressed, cannot sexually transmit HIV to their partners. King County has made tremendous progress toward meeting and exceeding previous goals related to HIV treatment and viral suppression. EHE aims for ≥95% of people with HIV to be linked to care within 1 month of their diagnosis and ≥95% of people living with diagnosed HIV (PLWH) to be virally suppressed. In King County, 85% of people newly diagnosed with HIV were linked to care within one month and 85% of PLWH were virally suppressed. While we continue to observe racial disparities in viral suppression, some progress is being made towards reducing these disparities. Viral suppression was lowest among PLWH who were homeless/unstably housed or who reported injection drug use (72% and 71%, respectfully). People who are out of care or not virally suppressed often face complex barriers to care. PHSKC has various ongoing efforts to re-engage people in HIV care and treatment, including several low-barrier clinics and a newly formed mobile team to reach people outside of the clinical setting.

EHE Pillar 3: Prevent

The EHE initiative promotes two highly effective HIV prevention strategies: pre-exposure prophylaxis (PrEP) and syringe services programs (SSPs). King County's PrEP implementation guidelines recommend PrEP use among MSM and transgender people who have sex with men based on specific criteria that identify people at elevated risk for HIV acquisition. Approximately 62% of MSM at elevated risk for HIV are currently taking PrEP. PrEP use has steadily increased over the past decade, and we are making excellent progress towards our goal of 70%. Data on PrEP use among transgender populations is limited, but we estimate that 30-70% of transgender people at elevated risk for HIV are currently taking PrEP. Among PWID, PrEP use among is very low (≤1%). King County supports several ongoing efforts to promote PrEP use, including running a large PrEP program at the PHSKC Sexual Health Clinic, offering PrEP to people receiving sexually transmitted infections partner services, partnering with community-based PrEP programs and PrEP navigation services, collaboration with community pharmacies in pharmacy-based PrEP programs, and promoting increased PrEP provision through diverse community healthcare organizations including an EHE-funded low-barrier clinic in north Seattle.

SSPs provide PWID with sterile syringes to reduce the risk of blood-borne infections (HIV and hepatitis C), as well as overdose prevention services, wound care, and linkages to treatment for substance use disorder. The PHSKC SSP's sites distributed over 2.5 million syringes in 2022, nearly a 50% drop from 2021. Across all SSPs in King County, we estimate that nearly 4 million syringes were distributed. The steep decline in the number of syringes distributed is likely due to rapid changes in local drug use patterns, primarily the increase in smoking fentanyl. This has also led to an unprecedented increase in the number of fatal overdoses. To encourage engagement in harm reduction services and overdose prevention among people who are not injecting drugs, the PHSKC SSP introduced the

provision of safer smoking supplies (i.e., pipes).

EHE Pillar 4: Respond

Pillar 4 of EHE promotes novel methods of identifying quickly growing HIV clusters in the community. This identification is followed by a rapid response to provide prevention and treatment resources to individuals linked to the cluster through their sexual and/or drug use networks. King County response efforts blend traditional epidemiologic and partner services investigations with molecular HIV analysis that uses viral genetic sequencing techniques. When clusters are identified, PHSKC can employ focused interventions to expand HIV testing, HIV prevention, and linkage to HIV care for people living with HIV. As of June 2023, King County has identified seven clusters with between three and eight linked cluster members who were diagnosed with HIV in the prior year. PHSKC has connected people identified through cluster investigations to HIV care and referred PLWH to receive housing support, case management, food and meal resources, dental care, legal assistance, and maternal health services. In 2021, we added dashboard indicators specific to the EHE Respond pillar. Due to staffing challenges, including staff redeployment to support the COVID-19 pandemic and mpox outbreak, PHSKC did not meet our goals related to cluster detection and response in 2022. Cluster detection and response efforts improved in 2023 as staff redeployments to support other public health responses efforts ended.

Conclusion

This HIV Epidemiology Report and Community Profile reports data primarily collected during the third year of COVID-19 pandemic. The myriad challenges and barriers posed by this pandemic have deeply affected the communities we serve and the community partners we support. Following some declines in HIV-related outcomes in 2020, some metrics improved in 2022, including increased PrEP use, progress towards reducing racial disparities, and reduced homelessness among PLWH. However, rates of new infections and viral suppression have remained unchanged. To meet the EHE goals, PHSKC aims to fundamentally change how HIV prevention and HIV care services are delivered in King County to better meet the needs of people for whom HIV prevention and care services have not historically been accessible, acceptable, or effective. EHE funding supports an array of expanded services to diagnose, treat, prevent, and respond to the HIV epidemic, including two new low-barrier HIV prevention and care clinics that opened in south King County in 2023. We remain optimistic that the immense progress that our community has collectively made toward reducing HIV incidence and improving the lives and well-being of people living with HIV will continue.

King County HIV Goals and Evaluation Metrics: 2022 Dashboard

King County	2025 Goals[1]		King County Data,		Status (See Key Below)
	National	King County	2019	2022	
DIAGNOSE					
New HIV diagnoses, rate	↓75%	↓75%	8.0/100,000	7.9/100,000	
Disparities in new HIV diagnoses by race/ethnicity[2] (rate per 100,000 pop.)	--	<5% difference between groups and overall rate	AIAN: 10.2 Asian: 2.2 Black: 27.2 Latinx: 17.5 NHPI: 15.8 White: 6.2	AIAN: 16.8 Asian: 3.9 Black: 28.7 Latinx: 17.5 NHPI: 19.3 White: 4.9	
Know HIV status[3]	≥95%	≥95%	94%	97%	
Late HIV diagnosis[4]	--	≤10%	17%	19%	
TREAT					
Linked to HIV care in 1 month[5]	≥95%	≥95%	90%	85%	
In HIV care[6,7]	--	≥95%	89%	91%	
Viral suppression[6,8]	≥95%	≥95%	85%	85%	
Disparities in viral suppression by race/ethnicity[2,6,8]		<5% difference between groups and overall rate	AIAN: 80% Asian: 89% FB Black: 86% US-born Black: 77% Latinx: 85% NHPI: 82% White: 87%	AIAN: 85% Asian: 88% FB Black: 89% US-born Black: 79% Latinx: 86% NHPI: 82% White: 86%	
Viral suppression within 4 months of diagnosis[5]	--	≥90%	69%	70%	
Homelessness among PLWH[6,9]	--	<5%	11%	9%	
Disparities in homelessness by race/ethnicity[2,6,9]		<5% difference between groups and overall rate	--[12]	AIAN: 17% Asian: 4% Black: 12% Latinx: 10% NHPI: 9% White: 9%	—
PREVENT					
PrEP use, MSM at higher risk for HIV[10]	--	≥70%	47%	62%	
Disparities in PrEP use among MSM at higher risk for HIV by race/ethnicity[2,10]		<5% difference between groups and overall rate	--[12]	AIAN: 47% Asian: 63% Black: 55% Latinx: 64% NHPI: 66% White: 62%	—
Syringe coverage[11]	--	≥365/PWID	283/PWID	--[13]	--[13]

Abbreviations: AIAN = American Indian/Alaska Native; FB = foreign-born; MSM = men who have sex with men; NHPI = Native Hawaiian or other Pacific Islander; PrEP = pre-exposure prophylaxis for HIV; PLWH = people living with HIV; PWID = people who inject drugs; US = United States.

Key: Goal met; No change from baseline[14]; Moving toward the goal; Moving away from the goal; Goal not met[15]

Technical Notes to Dashboard

[1] All 2025 goals use 2019 as the baseline.

[2] The goal for disparity-related indicators is for no difference between each racial/ethnic group and the estimate for the entire population for each indicator. This is defined as having all racial/ethnicity-specific estimates within 5% of the overall estimate. For new HIV diagnoses, racial categories are mutually exclusive in order to calculate population-level rates. For all other metrics, racial categories are not mutually exclusive and Individuals reporting multiple racial and ethnic identities are represented in each group.

[3] Percent of people living with HIV who know their HIV status. Based on an estimation method developed by the University of Washington.

[4] Percent of people diagnosed with HIV in 2021 who were diagnosed with AIDS within 1 year of HIV diagnosis. Excludes people who had an HIV-negative test within 2 years of their diagnosis.

[5] Among people with a new HIV diagnosis.

[6] Among people who have been diagnosed with HIV.

[7] Defined as one or more HIV care visits in a calendar year.

[8] See **Technical Note 5** for details on calculating viral suppression.

[9] We define people as living homeless if they report being homeless or unstably housed. People who report being institutionalized (e.g., in jail) are not classified as living homeless. See **Technical Note 4** for more details.

[10] In King County, "MSM at higher risk for HIV" are defined as HIV-negative MSM who report any of the following in the past year: ≥10 sex partners, methamphetamine use, diagnosis of gonorrhea or syphilis, or condomless receptive anal intercourse. The annual estimate of PrEP use among higher risk MSM is an average across multiple contemporaneous surveys.

[11] Defined as the number of syringes provided by SSPs per PWID per year. There is no national goal, but the WHO has a benchmark of 300 syringes per PWID per year by 2030.

[12] These goals were not monitored using data comparable to what is available in 2022, thus baseline estimates are not available for these metrics.

[13] Due to the lack of a current and robust local estimate of the size of the PWID population, syringe coverage was not calculated for this report. Progress toward reaching the 2025 is not included.

[14] "No change from baseline" is defined as a 0% or 1%-point difference between 2019 and 2022.

[15] Prior to 2025, all goals that have not been met will be assessed each year as "no change from baseline", "moving toward the goal", or "moving away from the goal."

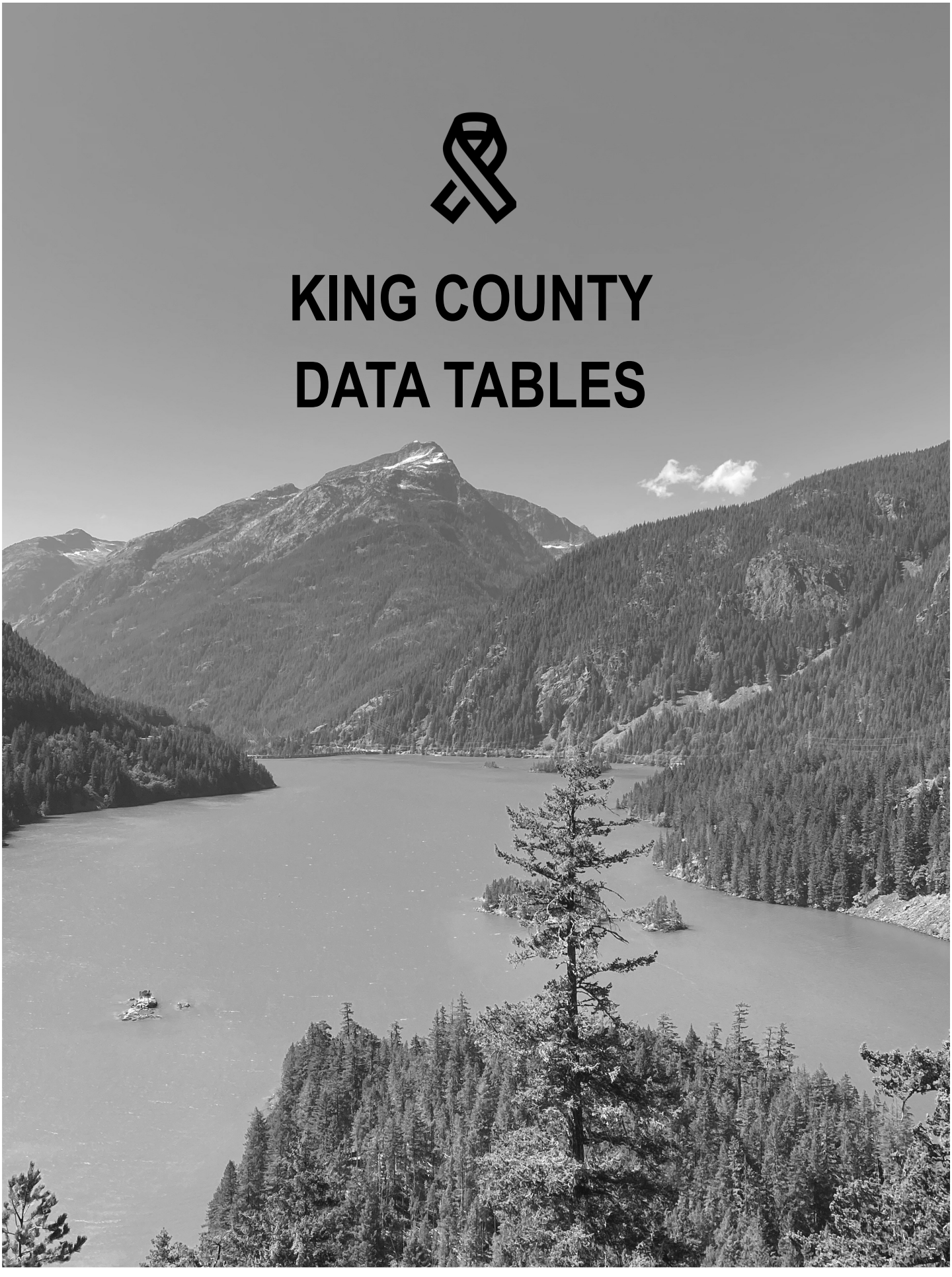
KING COUNTY
DATA TABLES

TABLE 1-1 (PAGE 1 OF 2). PEOPLE LIVING WITH HIV BY RESIDENCE STATUS, KING COUNTY, WA, 2022

	People Living with HIV Currently Residing in King County						Out-migrants: Diagnosed in King County, but now Presumed Living Out of Jurisdiction	
	Total		King County Resident at Time of Diagnosis		Out of Jurisdiction Resident at Time of Diagnosis			
	N	%	N	%	N	%	N	%
Total[A]	7,240		4,020		3,220		3,222	
Gender[B]								
Cisgender Men	6,164	85%	3,442	86%	2,722	85%	2,892	90%
Cisgender Women	969	13%	520	13%	449	14%	299	9%
Transgender Men	6	<1%	4	<1%	2	<1%	3	<1%
Transgender Women	95	1%	50	1%	45	1%	28	1%
Another Gender Identity	6	<1%	4	<1%	2	<1%	0	0%
Current Age (years)								
< 13	4	<1%	0	0%	4	<1%	0%	0%
13-24	117	2%	55	1%	62	2%	19	1%
25-34	978	14%	475	12%	503	16%	198	6%
35-44	1,569	22%	740	18%	829	26%	489	15%
45-54	1,774	25%	945	24%	829	26%	840	26%
55+	2,798	39%	1,805	45%	993	31%	1,676	52%
Race or Ethnicity[C, D]								
American Indian/Alaska Native	260	4%	177	4%	83	3%	123	4%
Asian	615	8%	338	8%	277	9%	178	6%
Black	1,939	27%	914	23%	1,025	32%	596	18%
- U.S.-Born	1,145	16%	540	13%	605	19%	381	12%
- Foreign-Born	794	11%	374	9%	420	13%	215	7%
Latinx or Hispanic (all races)	1,203	17%	590	15%	613	19%	463	14%
- U.S.-Born	553	8%	256	6%	297	9%	234	7%
- Foreign-Born	650	9%	334	8%	316	10%	229	7%
Native Hawaiian or other Pacific Islander	105	1%	63	2%	42	1%	33	1%
White	4,820	67%	2,780	69%	2,040	63%	2,442	76%
Multiracial	503	7%	277	7%	226	7%	230	7%
Transmission Category[E]								
Cisgender Men								
- MSM	4,723	65%	2,647	66%	2,076	64%	2,227	69%
- PWID	160	2%	98	2%	62	2%	79	2%
- MSM and PWID	619	9%	318	8%	301	9%	345	11%
- Heterosexual Sexual Contact	188	3%	114	3%	74	2%	73	2%
- Perinatal	22	<1%	5	<1%	17	1%	8	<1%
- Transfusion/Transplant	12	<1%	10	<1%	2	<1%	4	<1%
- No Identified Risk	440	6%	250	6%	190	6%	156	5%

Abbreviations: MSM = men who have sex with men; PWID = people who inject drugs.

[A] Based on HIV/AIDS surveillance data reported to the Washington State Department of Health as of June 30, 2023.

[B] We assume that people are cisgender in the absence of reporting transgender or another gender identity.

[C] Race/ethnicity categories are not mutually exclusive. Individuals reporting multiple racial and ethnic identities are represented in each group, therefore percentages will sum >100%.

[D] When country of birth is unknown, we assume individuals were born in the United States. Additionally, people born in U.S. Territories were counted as foreign born.

[E] Transmission categories not presented for transgender men and another gender identity due to small numbers.

TABLE 1-1 (PAGE 2 OF 2). PEOPLE LIVING WITH HIV BY RESIDENCE STATUS, KING COUNTY, WA, 2022

	People Living with HIV Currently Residing in King County						Out-migrants: Diagnosed in King County, but now Presumed Living Out of Jurisdiction	
	Total		King County Resident at Time of Diagnosis		Out of Jurisdiction Resident at Time of Diagnosis			
	N	%	N	%	N	%	N	%
Total[A]	7,240		4,020		3,220		3,222	
Cisgender Women								
- PWID	94	1%	68	2%	26	1%	44	1%
- Heterosexual Sexual Contact	608	8%	378	9%	230	7%	211	7%
- Perinatal	42	1%	14	<1%	28	1%	8	<1%
- Transfusion/Transplant	7	<1%	6	<1%	1	0%	5	<1%
- No Identified Risk	218	3%	54	1%	164	5%	31	1%
Transgender Women								
- Male Sex Partner	72	1%	37	1%	35	1%	19	1%
- PWID	1	<1%	1	<1%	0	0%	0	0%
- Male Sex Partner and PWID	21	<1%	11	<1%	10	<1%	9	<1%
- No Identified Risk	1	<1%	1	<1%	0	0%	0	0%

Abbreviations: MSM = men who have sex with men; PWID = people who inject drugs.

[A]Based on HIV/AIDS surveillance data reported to the Washington State Department of Health as of June 30, 2023.

[B]We assume that people are cisgender in the absence of reporting transgender or another gender identity.

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[D]When country of birth is unknown, we assume individuals were born in the United states. Additionally, people born in U.S. Territories were counted as foreign born.

[E]Transmission categories not presented for transgender men and another gender identity due to small numbers.

TABLE 1-2 (PAGE 1 OF 2). NEW HIV DIAGNOSES, KING COUNTY, WA, 2017-2022

	New diagnoses of HIV										Late HIV Diagnoses[A]
Year of HIV Diagnosis:	2017	2018	2019	2020	2021	2022	2021-2022		Annual Rate 2021-2022	Annual Rate 2022	2017-2022
	N	N	N	N	N	N	N	%			%
Total	167	214	178	161	161	183	344		7.5	7.9	20%
Gender[B]											
Cisgender Men	139	168	146	138	133	153	286	83%	12.4	13.2	19%
Cisgender Women	25	46	29	18	21	24	45	13%	2.0	2.1	30%
Transgender Men	1	0	0	0	1	0	1	<1%			0%
Transgender Women	2	0	3	4	6	5	11	3%			5%
Another Gender Identity	0	0	0	1	0	1	1	<1%			0%
Age at HIV Diagnosis (years)											
< 13	1	0	0	0	0	0	0	<1%	0.0	0.0	0%
13 - 24	24	26	25	27	17	28	45	13%	7.2	8.9	6%
25 - 34	66	80	70	57	74	65	139	40%	16.9	15.6	10%
35 - 44	26	50	39	36	37	50	87	25%	11.9	13.5	27%
45 - 54	32	30	28	23	18	26	44	13%	7.5	8.9	35%
55+	18	28	16	18	15	14	29	8%	2.5	2.4	41%
Race or Ethnicity[C, D]											
American Indian/Alaska Native	2	1	1	1	2	2	4	1%	16.8	16.8	22%
Asian	11	10	9	17	9	19	28	8%	2.9	3.9	20%
Black	41	45	35	27	36	45	81	24%	26.3	28.7	32%
- U.S.-Born Black	22	20	20	15	20	25	45	56%	21.4	22.9	20%
- Foreign-Born Black	19	25	15	12	16	20	36	44%	36.8	41.9	45%
Latinx or Hispanic (all races)	34	39	40	20	34	45	79	23%	15.5	17.5	19%
- U.S.-Born Latinx	13	25	15	9	15	20	35	44%	10.9	12.0	7%
- Foreign-Born Latinx	21	14	25	11	19	25	44	56%	23.1	27.4	28%
Native Hawaiian or other Pacific Islander	2	3	3	2	1	4	5	1%	12.3	19.3	27%
White	69	105	79	86	66	60	126	37%	5.1	4.9	16%
Multiracial	8	11	11	8	13	8	21	6%	7.0	5.4	13%
Transmission Category											
Cisgender Men											
- MSM	103	104	109	107	95	103	198	58%			15%
- PWID	4	15	8	3	3	5	8	2%			29%
- MSM and PWID	14	25	13	16	18	11	29	8%			12%
- Heterosexual Sexual Contact	2	6	5	3	2	6	8	2%			50%
- Pediatric	0	0	0	0	0	0	0	0%			0%
- Transfusion/Hemophiliac	0	0	0	0	0	0	0	0%			0%
- No Identified Risk	16	18	11	9	15	28	43	13%			40%

Rate = per 100,000. Abbreviations: MSM = men who have sex with men; PWID = people who inject drugs.

[A]Late HIV diagnoses based on new HIV cases diagnosed between 2016 and 2020. Late diagnoses are defined as those with AIDS (a CD4 count of <200/microliter and/or opportunistic infection diagnosis) within one year of initial HIV diagnosis and no evidence of a negative HIV test in the two years preceding

[B]We assume that people are cisgender in the absence of known transgender identity.

[C]Race/ethnicity includes Latinx/Hispanic persons of any race and non-Latinx/Hispanic individuals with single races or whom are multiracial. These categories differ from categories used elsewhere in this report to match census data for rate calculations.

[D]When country of birth is unknown, we assume individuals were born in the United States. Additionally, people born in U.S. Territories were counted as foreign born.

TABLE 1-2 (PAGE 2 OF 2). NEW HIV DIAGNOSES, KING COUNTY, WA, 2017-2022

	New diagnoses of HIV										Late HIV Diag-noses[A]
Year of HIV Diagnosis:	2017	2018	2019	2020	2021	2022	2021-2022		Annual Rate 2021-2022	Annual Rate 2022	2017-2022
	N	N	N	N	N	N	N	%			%
Total	167	214	178	161	161	183	344		7.5	7.9	20%
Transgender Men (all transmission categories)	1	0	0	0	1	0	1	<1%			0%
Cisgender Women											
- PWID	3	15	9	1	2	1	3	1%			6%
- Heterosexual Sexual Contact	16	24	15	10	12	18	30	9%			28%
- Pediatric	1	1	0	0	0	0	0	<1%			50%
- Transfusion/Hemophiliac	0	0	0	0	0	0	0	0%			
- No Identified Risk	5	6	5	7	7	5	12	3%			54%
Transgender Women (all transmission categories)	2	0	3	4	6	5	11	3%			5%
Another Gender Identity (all transmission categories)	0	0	0	1	0	1	1	<1%			0%

Rate = per 100,000. Abbreviations: MSM = men who have sex with men; PWID = people who inject drugs.

[A]Late HIV diagnoses based on new HIV cases diagnosed between 2016 and 2020; late diagnoses are defined as those with AIDS (a CD4 count of <200/microliter and/or opportunistic infection diagnosis) within one year of initial HIV diagnosis and no evidence of a negative HIV test in the two years preceding

[B]We assume that people are cisgender in the absence of known transgender identity.

[C]Race/ethnicity includes Latinx or Hispanic persons of any race and non-Latinx or Hispanic individuals with single races or whom are multiracial. These categories differ from categories used elsewhere in this report to match census data for rate calculations.

[D]When country of birth is unknown, we assume individuals were born in the United States. Additionally, people born in U.S. Territories were counted as foreign born.

TABLE 1-3. AIDS DIAGNOSES AND CUMULATIVE DEATHS, KING COUNTY, WA, 1982-2022

	Recent AIDS Diagnoses 2021-2022			People Living with AIDS 2022			Cumulative AIDS Diagnoses 1982-2022		Cumulative Deaths 1982-2022[B]	
	N	%	Rate[A]	N	% Prevalence[A]		N	%	N	%
Total[A]	190		4.1	3,392		146.4	9,466		5,826	
Gender[C]										
Cisgender Men	151	79%	6.5	2,882	85%	246.7	8,606	91%	5,453	94%
Cisgender Women	35	18%	1.5	466	14%	40.5	809	9%	357	6%
Transgender Men	0	0%		1	<1%		1	<1%	1	<1%
Transgender Women	4	2%		41	1%		50	1%	15	<1%
Another Gender Identity	0	0%		2	<1%		0	0%	0	0%
Age	**Age at Diagnosis**			**Current Age**			**Age at Diagnosis**		**Age at Death**	
< 13	0	0%	0.0	0	0%	0.0	14	<1%	7	<1%
13-24	14	7%	2.2	13	<1%	4.1	321	3%	42	1%
25-34	42	22%	5.1	192	6%	45.9	3,171	33%	1,176	20%
35-44	67	35%	9.2	561	17%	151.0	3,675	39%	2,128	37%
45-54	39	21%	6.7	872	26%	297.9	1,665	18%	1,369	23%
55+	28	15%	2.4	1,754	52%	299.7	620	7%	1,104	19%
Race or Ethincity[D]										
American Indian/Alaska Native	2	1%	8.4	25	1%	209.5	97	1%	74	1%
Asian	13	7%	1.4	165	5%	33.8	225	2%	76	1%
Black	44	23%	14.2	715	21%	451.4	1,347	14%	642	11%
Latinx or Hispanic (all races)	48	25%	9.4	552	16%	213.1	972	10%	367	6%
Native Hawaiian or other Pacific Islander	4	2%	9.8	17	1%	82.1	29	<1%	13	<1%
White	70	37%	2.8	1,660	49%	135.0	6,310	67%	4,469	77%
Multiracial	9	5%	3.0	258	8%	172.2	486	5%	185	3%
Transmission Category										
Cisgender Men										
- MSM	92	48%		2,076	61%		6,444	68%	4,136	71%
- PWID	9	5%		103	3%		388	4%	285	5%
- MSM and PWID	17	9%		328	10%		1,021	11%	685	12%
- Heterosexual Sexual Contact	8	4%		124	4%		209	2%	69	1%
- Perinatal	0	0%		8	<1%		10	0%	5	<1%
- Transfusion/Transplant	0	0%		10	<1%		66	1%	55	1%
- No Identified Risk	25	13%		233	7%		468	5%	218	4%
Transgender Men (all transmission categories)	0	0%		1	<1%		1	<1%	1	<1%
Cisgender Women										
- PWID	4	2%		53	2%		175	2%	141	2%
- Heterosexual Sexual Contact	23	12%		316	9%		511	5%	169	3%
- Perinatal	1	1%		14	<1%		14	<1%	4	<1%
- Transfusion/Transplant	0	0%		5	<1%		23	<1%	18	<1%
- No Identified Risk	7	4%		78	2%		86	1%	25	<1%
Transgender Women (all transmission categories)	4	2%		41	1%		50	1%	15	<1%
Another Gender Identity (all transmission categories)	0	0%		2	<1%		0	0%	0	0%

Abbreviations: MSM = men who have sex with men; PWID = people who inject drugs.

[A]Based on HIV/AIDS surveillance data reported to the WA DOH as of June 30, 2023. Rates and prevalence are per 100,000 residents.

[B]Includes 420 cases with an HIV-only diagnosis and 5,406 AIDS cases. 3,936/5,826 (68%) deaths had HIV listed as an underlying condition.

[C]It is assumed that people are cisgender in the absence of reporting transgender or another gender identity.

[D]Race/ethnicity includes Latinx/Hispanic persons of any race and non-Latinx/Hispanic individuals with single races or whom are multiracial. These categories differ from categories used elsewhere in this report to match census data fore rate calculations.

TABLE 1-4. PEOPLE LIVING WITH HIV BY GENDER IDENTITY, RACE/ETHNICTY, AND TRANSMISSION CATEGORY, KING COUNTY, WA, 2022

	American Indian/ Alaska Native		Asian		Black		Latinx or Hispanic (all races)		White	
	N	%	N	%	N	%	N	%	N	%
Cisgender Men										
- MSM	21	78%	247	76%	548	57%	876	82%	2,683	81%
- PWID	2	7%	3	1%	47	5%	14	1%	80	2%
- MSM and PWID	4	15%	12	4%	52	5%	75	7%	405	12%
- Heterosexual Sexual Contact	0	0%	5	2%	106	11%	29	3%	37	1%
- U.S.-Born	0	0%	0	0%	28	3%	3	<1%	26	1%
- Foreign-Born	0	0%	5	2%	78	8%	26	2%	11	<1%
- Perinatal	0	0%	1	<1%	13	1%	2	<1%	4	<1%
- Transfusion/Transplant	0	0%	0	0%	2	<1%	1	<1%	9	<1%
- No Identified Risk	0	0%	56	17%	189	20%	69	6%	103	3%
Total Cisgender Men	**27**	**100%**	**324**	**100%**	**957**	**100%**	**1,066**	**100%**	**3,321**	**100%**
Total Transgender Men (all transmission categories)	**0**	**0%**	**1**	**100%**	**1**	**100%**	**2**	**100%**	**2**	**100%**
Cisgender Women										
- PWID	4	31%	1	2%	17	3%	4	4%	59	29%
- Heterosexual Sexual Contact	8	62%	31	76%	339	61%	80	80%	118	58%
- U.S.-Born	7	54%	4	10%	256	46%	20	20%	108	53%
- Foreign-Born	1	8%	27	66%	83	15%	60	60%	10	5%
- Perinatal	0	0%	1	2%	32	6%	2	2%	5	2%
- Transfusion/Transplant	0	0%	0	0%	5	1%	0	0%	2	1%
- No Identified Risk	1	8%	8	20%	167	30%	14	14%	20	10%
Total Cisgender Women	**13**	**100%**	**41**	**100%**	**560**	**100%**	**100**	**100%**	**204**	**100%**
Transgender Women (all transmission categories)	**1**	**100%**	**8**	**100%**	**16**	**100%**	**34**	**100%**	**23**	**100%**
Another Gender Identity (all transmission categories)	**0**	**0%**	**0**	**0%**	**0**	**0%**	**1**	**100%**	**4**	**100%**

Abbreviations: MSM = men who have sex with men; PWID = people who inject drugs.

Based on HIV/AIDS surveillance data reported to the Washington State Department of Health as of June 30, 2023.

Table excludes 31 individuals who report Native Hawaiian and Pacific Islander identity due to small numbers.

We assume that people are cisgender in the absence of known transgender identity.

When country of birth is unknown, we assume individuals were born in the United States. Additionally, people born in U.S. Territories were counted as foreign born.

Table 1-5. New HIV Diagnoses among Transgender People, King County, WA, 2017-2022

	New HIV Diagnoses (2017-2022)				Transgender People Living with HIV in King County at the End of 2022	
	Transgender People		All King County Residents			
	N	%	N	%	N	%
Total[A]	22		1,064		101	
Gender Identity[B]						
Transgender Men	2	9%			6	6%
Transgender Women	20	91%			95	94%
Age (years)			At HIV Diagnosis		At the End of 2022	
13 - 24	7	32%	59	6%	5	5%
25 - 34	12	55%	396	37%	32	32%
35 - 44	3	14%	288	27%	28	28%
45 - 54	0	0%	166	16%	21	21%
55+	0	0%	155	15%	15	15%
Race or Ethnicity[C]						
American Indian/Alaska Native	1	5%	34	3%	8	8%
Asian	5	23%	97	9%	15	15%
Black	5	23%	278	26%	27	27%
Latinx or Hispanic (all races)	6	27%	212	20%	36	36%
Native Hawaiian or other Pacific Islander	4	18%	26	2%	7	7%
White	8	36%	657	62%	55	54%
Injection Drug Use						
Yes	4	18%	170	16%	24	24%

[A] Based on HIV/AIDS surveillance data reported to the Washington State Department of Health as of June 30, 2023.

[B] Identification of people that describe themselves as transgender relies on review of information in medical records and/or self-disclosure during partner services interviews. Gender identity has been collected on the HIV/AIDS case report in Washington since late 2004. Data presented here are a potential undercount.

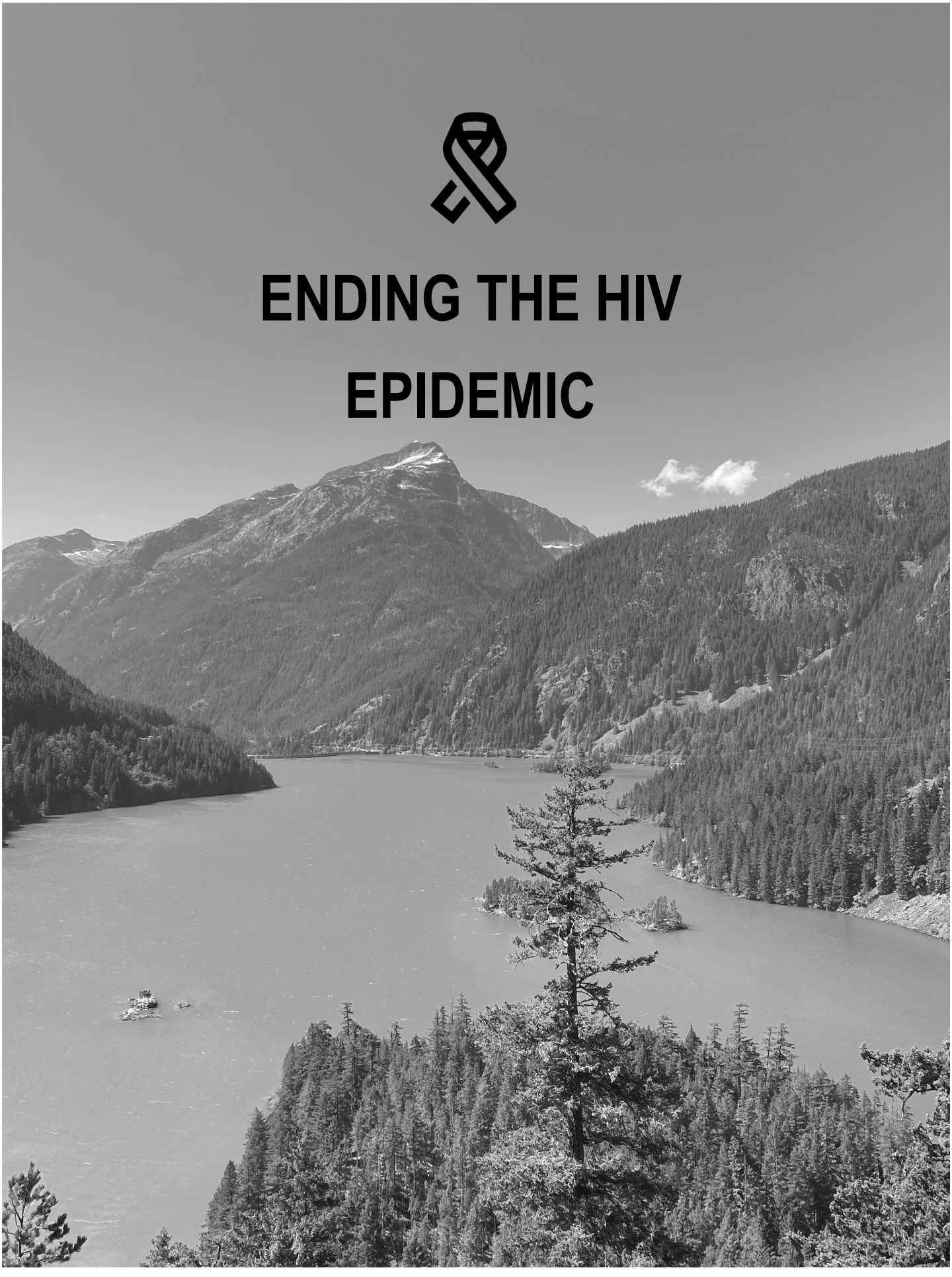
[C] Race/ethnicity categories are not mutually exclusive. Individuals reporting multiple racial and ethnic identities are represented in each group, therefore percentages will sum >100%.

Table 1-6. New HIV Diagnoses among Men Who Have Sex With Men (MSM), King County, WA, 2021-2022

	New HIV Diagnoses (2021-2022)				MSM Living with HIV Presumed Living in King County at the End of 2022	
	MSM		All King County residents			
	N	%	N	%	N	%
Total[A]	228		344		5,347	
Age (years)			At HIV Diagnosis		At the End of 2022	
13 - 24	34	15%	45	13%	62	1%
25 - 34	102	45%	139	40%	776	15%
35 - 44	51	22%	87	25%	1,180	22%
45 - 54	28	12%	44	13%	1,220	23%
55+	13	6%	29	8%	2,109	39%
Race and Ethnicity[B]						
American Indian/Alaska Native	6	3%	10	3%	202	4%
Asian	27	12%	38	11%	452	8%
Black	42	18%	97	28%	909	17%
Latinx or Hispanic (all races)	56	25%	79	23%	953	18%
Native Hawaiian or other Pacific Islander	5	2%	8	2%	81	2%
White	149	65%	189	55%	4,122	77%
Injection Drug Use						
Yes	29	13%	43	13%	621	12%
Country of Birth						
United States	165	72%	220	64%	4,233	79%
Outside of the United States	56	25%	112	33%	896	17%
Unknown	7	3%	12	3%	218	4%

[A] Based on HIV/AIDS surveillance data reported to the Washington State Department of Health as of June 30, 2023. Men who have sex with men includes cisgender and transgender men who have sex with men.

[B] Race/ethnicity categories are not mutually exclusive. Individuals reporting multiple racial and ethnic identities are represented in each group, therefore percentages will sum >100%.


ENDING THE HIV
EPIDEMIC

King County HIV Prevalence, Incidence, Mortality, Key Populations & Community Profile

KEY POINTS

In 2022, an estimated 7,240 people were living with HIV and 183 people were newly diagnosed with HIV in King County (rate = 7.9 per 100,000).

Following a small decline in new HIV diagnoses in 2020-2021 associated with the COVID-19 pandemic, the rate of new HIV diagnoses increased by 13% between 2021 and 2022. However, the rate of new HIV diagnoses in 2022 was lower than the pre-COVID average from 2013-2019 (9.0 per 100,000), suggesting that the overall epidemic may be stabilizing.

Men who have sex with men (MSM) continue to comprise the majority of new HIV diagnoses. The proportion of new HIV diagnoses among residents of south King County increased since 2021.

HIV incidence in King County is characterized by profound racial and ethnic disparities, with the highest rates of new infections observed among Black, Latinx and American Indian/Alaska Native people, respectively.

Approximately 15% of people newly diagnosed with HIV in King County were homeless or unstably housed.

The age-adjusted mortality rate among people living with HIV in King County, which had been declining since 2010, increased in 2022. The proportion of deaths attributable to HIV continued to decrease.

Overview of the Population Residing in King County

King County is located on the traditional land of the Coast Salish people, whose communities have lived here for generations. The county currently has a population of about 2.3 million and is the most populated county in Washington State. Based on 2020 census data, it is estimated that 1% of King County residents identify as American Indian or Alaska Native, 21% as Asian, 7% as Black or African American (Black is used going forward), 11% as Hispanic or Latino/Latina/Latinx (Latinx is used going forward), 6% as Multiracial, 1% as Native Hawaiian or other Pacific Islander, and 53% as White. These estimates are based on U.S. census data, which uses mutually exclusive classifications for racial identity. Approximately 25% of King County residents are foreign-born, including 31% of Black, 35% of Latinx, and 67% of Asian residents. In 2022, 14% of the King County population was under 13 years of age, and 25% was 55 years of age or older. The population sizes for relevant demographics characteristics among King County residents and additional details regarding population estimates and rate calculations are provided in the Technical Notes.

HIV Prevalence

Across Washington State, ~49% of people living with HIV (PLWH) reside in King County (Table 10-7). As of December 31, 2022, PHSKC estimated there were 7,240 PLWH with a

King County address. This estimate has been stable for many years and includes 3,220 (44%) PLWH who were originally diagnosed outside of King County. Details on the approach to calculating HIV prevalence in King County are presented in **Technical Note 1**. The numbers of PLWH in King County by gender, age, race and ethnicity, and HIV transmission category are presented in **Table 1-1**. Overall, 74% of all PLWH are classified in the MSM transmission category (including MSM who inject drugs), 11% as presumed heterosexual sexual contact, and 3% as non-MSM PWID.

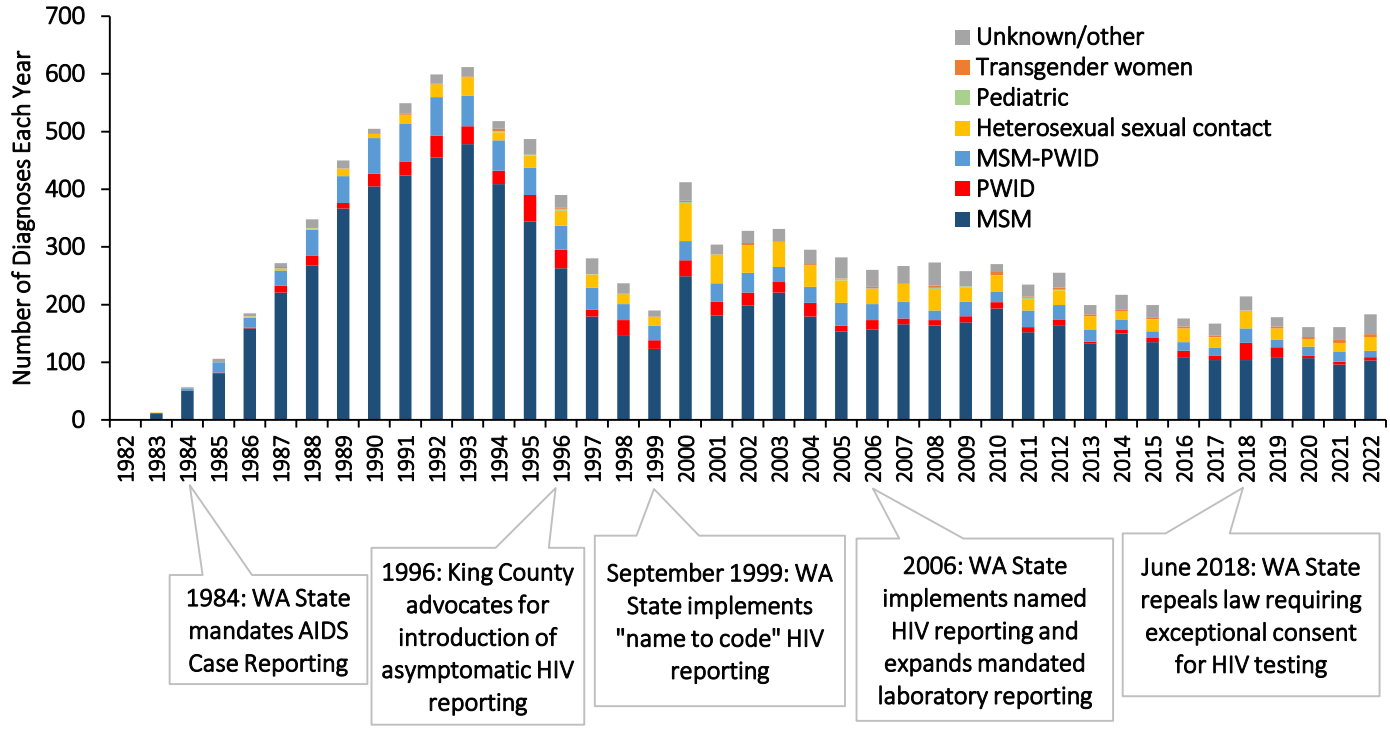
HIV prevalence in King County is characterized by profound racial and ethnic disparities, with a disproportionate number of American Indian/Alaska Native, Black and Latinx residents living with HIV. For example, 27% of PLWH in King County are Black which is higher than the 7% of the overall King County population that is Black. These disparities reflect both the impact of social and structural determinants of health, such as poverty and systemic racism. The impact of these intersecting determinants of health is exemplified by disparities in homelessness or housing instability by race/ethnicity among PLWH, with 16.5% of American Indian/Alaska Native PLWH reporting homelessness, 11.7% of Black PLWH and 10.1% of Latinx PLWH compared to 9% overall for PLWH in King County. In addition, the population of PLWH in King County includes residents who have immigrated from other regions of the world with a higher prevalence of HIV. Furthermore, the number of PLWH varies across regions within King County, with the majority of PLWH (64%) living in Seattle (**Table 2-1**).

New HIV Diagnoses

There were 183 new HIV diagnoses in 2022 resulting in an annual rate of 7.9 per 100,000. Following a small decline in new HIV diagnoses in 2020-2021 associated with the COVID-19 pandemic, the overall rate of new diagnoses increased by 13% between 2021 and 2022. While this represents a slight increase over the past two years (**Figure 2-2**), it is slightly lower than the rate of diagnosis in 2019 prior to the COVID-19 epidemic.

The majority of new HIV diagnoses were among cisgender men (84%), followed by cisgender women (13%) and transgender women (3%) (**Table 1-2**).

FIGURE 2-1. HIV DIAGNOSES BY YEAR AND HIV TRANSMISSION CATEGORY OR KEY POPULATION, KING COUNTY, WA, 1982-2022



MSM = men who have sex with men; includes cisgender and transgender men who reported sex with men; **PWID** = people who inject drugs; **Heterosexual sexual contact** = people who report sexual activity with a partner of the opposite sex partner and do not report injecting drugs; **Pediatric** = perinatal transmission to an infant during pregnancy, delivery or through breastfeeding; **Transgender women** = transgender women included here as a key population (all transmission categories); **Unknown/other** = other risk, such as blood products or transfusions or no reported risk.

Individuals with a Seattle residence comprised 40% of new HIV diagnoses, followed by south King County (33%) and individuals who were homeless or unstably housed (15%) (**Figure 2-3**). Trends in HIV diagnosis rates among people who were homeless or unstably housed are described in more detail below. Accounting for population size, the rate of new HIV diagnoses varied across King County and was highest in urban areas, like Seattle, and other areas with a higher proportion of individuals experiencing poverty (**Table 2-1**). Details on the approach to calculating new HIV diagnoses and population rates in King County are presented in **Technical Note 2**.

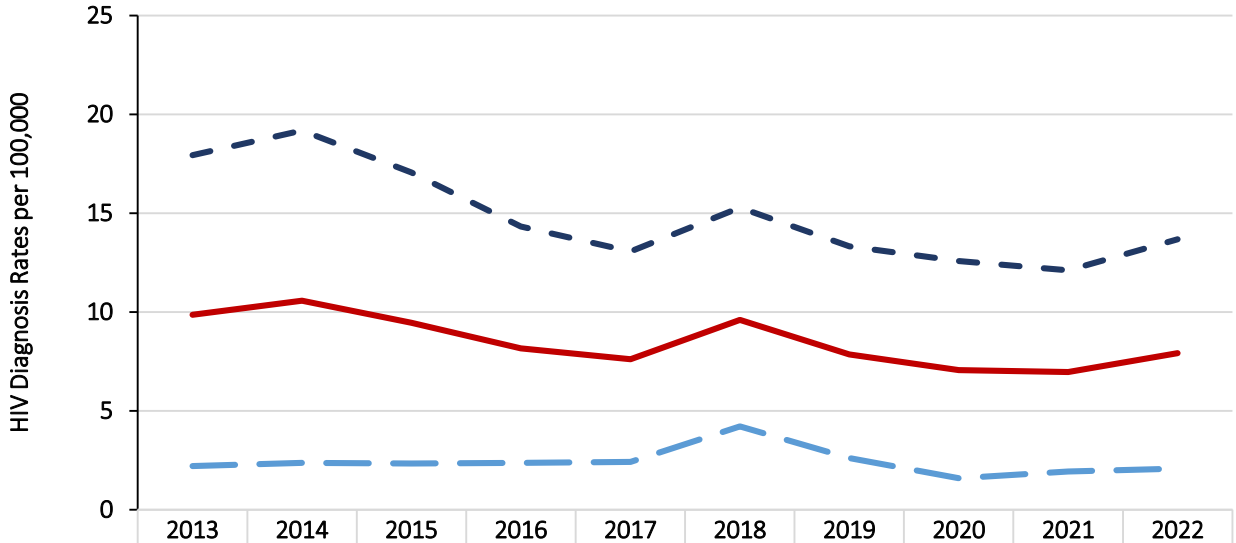
TRENDS BY TRANSMISSION CATEGORY: The number of new HIV diagnoses in 2022 by transmission category among King County residents is presented in **Table 1-2**. MSM who did not report injection drug use accounted for 56% of new HIV diagnoses, a percentage that has been generally consistent over the past decade (**Figure 2-1**). Heterosexual sexual contact was indicated among 13% of newly diagnosed residents (**Table 1-2**), followed by PWID (9%, including MSM). Among 242 pregnant people living with HIV who had a live birth over the past decade, there were no cases of perinatal transmission.

TRENDS IN HIV DIAGNOSIS RATES BY SEX ASSIGNED AT BIRTH AND NATIVITY: The HIV diagnosis rate among people assigned male sex at birth (males) declined over the past 10 years; however, there was a slight (13%) increase in the HIV diagnosis rate between 2021 and 2022 (**Figure 2-2**). Among US-born males, the HIV diagnosis rate was similar between 2021 and 2022. While the HIV diagnosis rate was 62% higher among foreign-born males in 2022 compared to 2021, the 2022 rate is nearly identical to the new diagnosis rate in 2019 (**Figure 2-4**). Given COVID-19 healthcare disruptions, including reduced HIV testing, the recent increase likely reflects a return to more typical patterns of HIV testing.

Among people assigned female sex at birth (females), the HIV diagnosis rate remained stable over the past 10 years, with the exception of an increase in 2018 due to an outbreak among females who reported injection drug use.[1] The HIV diagnosis rate among foreign-born females continued to be higher than the rate for US-born females but has also remained stable over the past 10 years (**Figure 2-4**).

TRENDS IN HIV DIAGNOSES BY RACE, ETHNICITY AND NATIVITY: Similar to trends observed with HIV prevalence, HIV incidence in King County is also characterized by profound racial and ethnic disparities, with the highest rates of new diagnoses observed among Black, Latinx and American Indian/Alaska Native people, respectively (**Table 1-2**). Since 2020, the rate of new HIV diagnoses increased among Black US-born, Latinx, and American Indian/Alaska Native people (**Figure 2-5**). These increases

FIGURE 2-2. HIV DIAGNOSES RATES BY YEAR AND SEX ASSIGNED AT BIRTH, KING COUNTY, WA, 2013-2022



	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Female*	2.2	2.4	2.3	2.4	2.4	4.2	2.6	1.6	1.9	2.1
Male*	17.9	19.2	17.1	14.3	13.1	15.3	13.3	12.6	12.1	13.7
Total	9.9	10.6	9.5	8.2	7.6	9.6	7.9	7.1	7.0	7.9

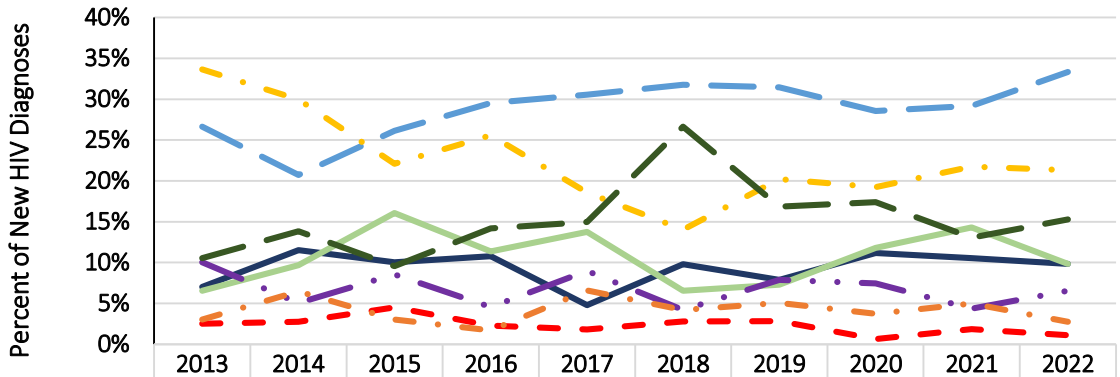
* According to sex assigned at birth.

TABLE 2-1. KEY METRICS OF INCIDENT HIV DIAGNOSES (2018-2022) AND PREVALENCE (2022) BY KING COUNTY CITIES

City	New Diagnoses (2018-2022), N	Estimates for 2022: New Diagnoses, N	Diagnosis Rate per 100K	PLWH, N	Population Size[A], N	Population Living in Poverty[A], %
Seattle	503	91	11.9	4,564	766,084	10.0%
Kent	60	9	6.6	364	137,410	11.3%
Federal Way	53	14	14	322	100,061	11.3%
Renton	44	8	7.5	297	106,384	7.9%
Auburn	27	9	11.8	223	76,803	9.6%
Bellevue	29	8	5.1	188	156,968	6.9%
Burien	27	6	11.6	166	51,947	11.7%
Tukwilla	20	7	32.2	150	21,857	12.4%
Seatac	20	5	16.1	125	31,211	10.7%
Shoreline	21	5	8.2	125	61,031	8.4%
Kirkland	20	3	3.2	111	94,221	6.8%
Des Moines	9	5	15.1	103	33,136	11.3%
Redmond	13	4	5.1	92	78,455	6.0%
Sammamish	7	2	3	23	67,324	3.1%
Other Cities or Unincorporated	44	7	1.3	387	534,809	--

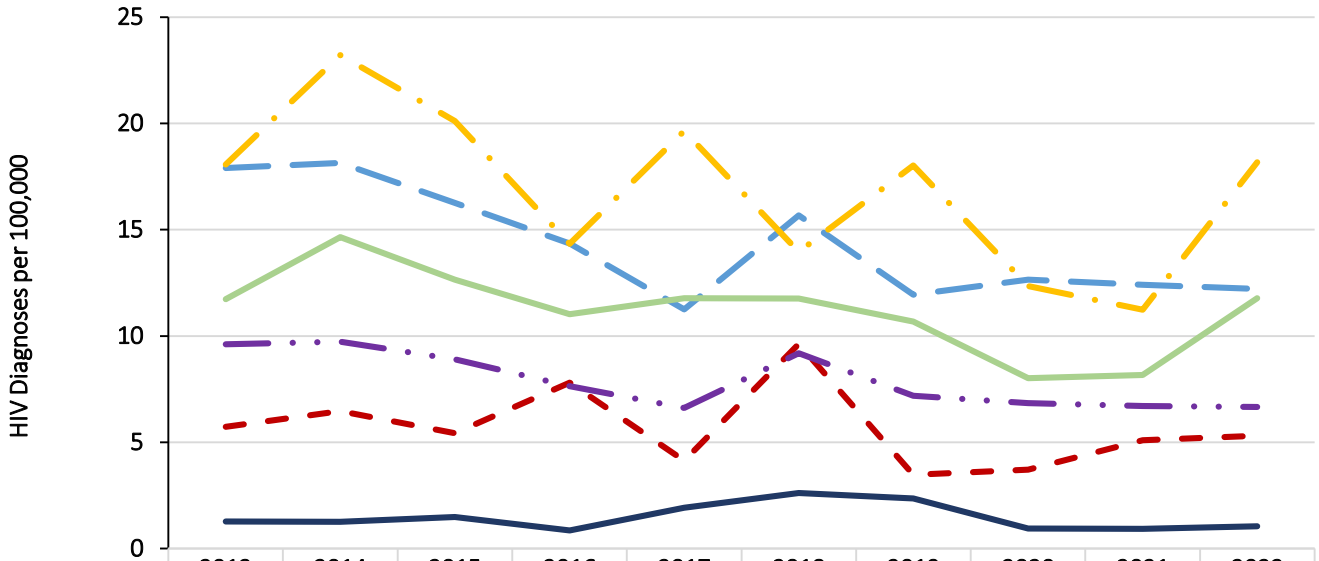
Data for PLWH by city in King County that had a population size above 50,000 or more than 100 PLWH in 2022.
[A] Population estimates and percent of population living in poverty from U.S. Census data.

FIGURE 2-3. TRENDS IN RESIDENCE AMONG PEOPLE NEWLY DIAGNOSED WITH HIV, KING COUNTY, WA, 2013-2022



	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
KC East	7.0%	11.5%	10.1%	10.8%	4.8%	9.8%	7.9%	11.2%	10.6%	9.8%
KC North	2.5%	2.8%	4.5%	2.3%	1.8%	2.8%	2.8%	0.6%	1.9%	1.1%
KC South	26.6%	20.7%	26.1%	29.5%	30.5%	31.8%	31.5%	28.6%	29.2%	33.3%
Seattle Central	33.7%	30.0%	22.1%	25.6%	18.6%	14.0%	20.2%	19.3%	21.7%	21.3%
Seattle North	6.5%	9.7%	16.1%	11.4%	13.8%	6.5%	7.3%	11.8%	14.3%	9.8%
Seattle South	10.1%	5.1%	8.5%	4.5%	9.0%	4.2%	7.9%	7.5%	4.3%	6.6%
Seattle West	3.0%	6.5%	3.0%	1.7%	6.6%	4.2%	5.1%	3.7%	5.0%	2.7%
Homeless or Unstably housed	10.6%	13.8%	9.5%	14.2%	15.0%	26.6%	16.9%	17.4%	13.0%	15.3%

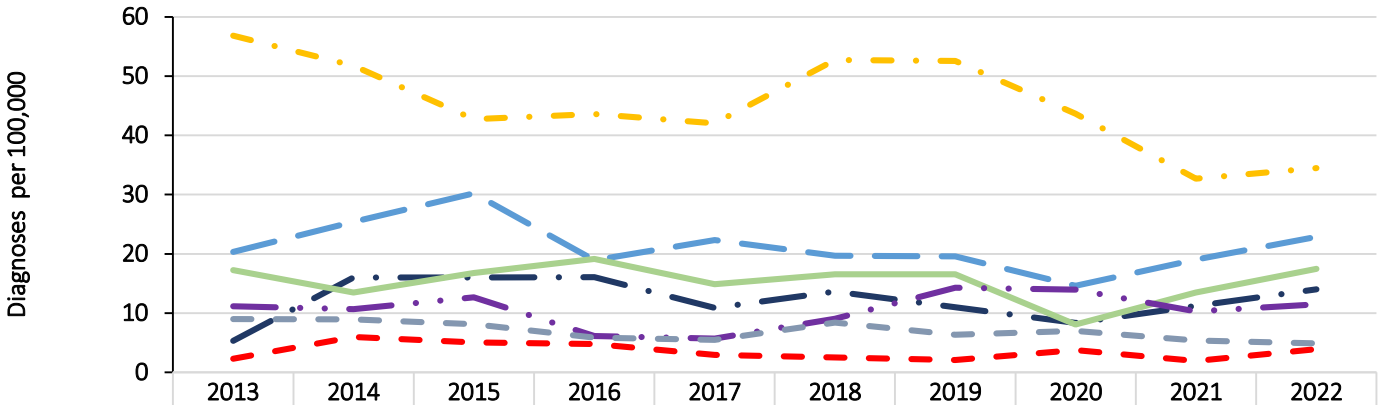
FIGURE 2-4. HIV DIAGNOSIS RATES BY YEAR, SEX ASSIGNED AT BIRTH, AND NATIVITY, KING COUNTY, WA, 2013-2022*



	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
USB Female	1.3	1.3	1.5	0.9	1.9	2.6	2.4	0.9	0.9	1.0
FB Female	5.7	6.5	5.4	7.8	4.1	9.6	3.5	3.7	5.1	5.3
USB Male	17.9	18.1	16.3	14.3	11.2	15.7	11.9	12.6	12.4	12.2
FB Male	18.1	23.2	20.1	14.3	19.6	14.0	18.0	12.4	11.2	18.2
Total FB	11.7	14.6	12.6	11.0	11.8	11.8	10.7	8.0	8.2	11.8
Total USB	9.6	9.7	8.9	7.6	6.6	9.2	7.2	6.8	6.7	6.7

* According to sex assigned at birth. **FB**=Foreign born; **USB**=U.S.-born. U.S.-born includes people born in U.S. territories.

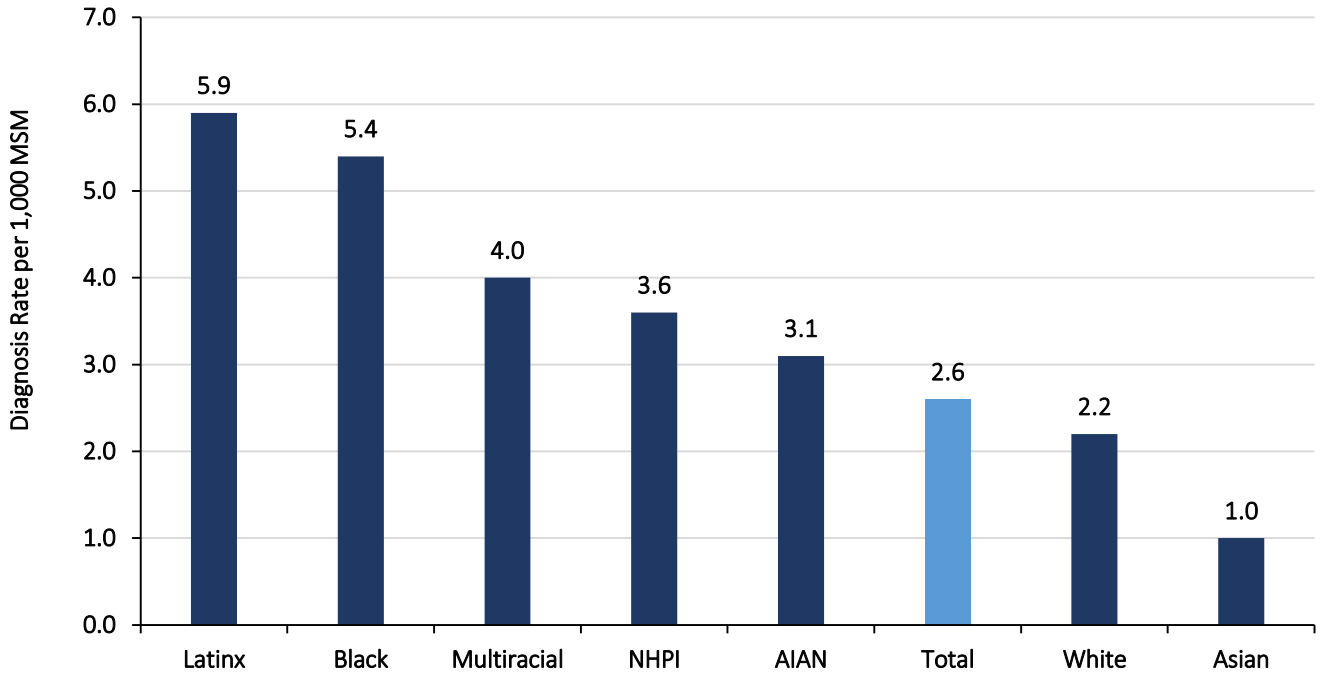
FIGURE 2-5. RATE OF HIV DIAGNOSES PER 100,000 BY YEAR AND RACE/ETHNICITY, KING COUNTY, WA, 2013-2022



	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
AIAN*	5.3	16.0	16.0	16.1	10.9	13.6	11.0	8.3	11.2	14.0
Asian	2.3	5.9	5.1	4.8	2.9	2.5	2.1	3.8	1.9	3.9
USBB*	20.3	25.4	30.2	18.9	22.3	19.7	19.6	14.6	19.0	22.9
FBB*	56.8	51.7	42.7	43.6	42.0	52.7	52.5	43.7	32.7	34.5
Latinx	17.2	13.5	16.8	19.1	14.9	16.5	16.5	8.1	13.5	17.5
NHPI	11.1	10.7	12.7	6.1	5.7	9.1	14.3	14.0	10.3	11.5
White	9.0	9.0	8.1	5.8	5.5	8.4	6.4	7.0	5.4	4.9

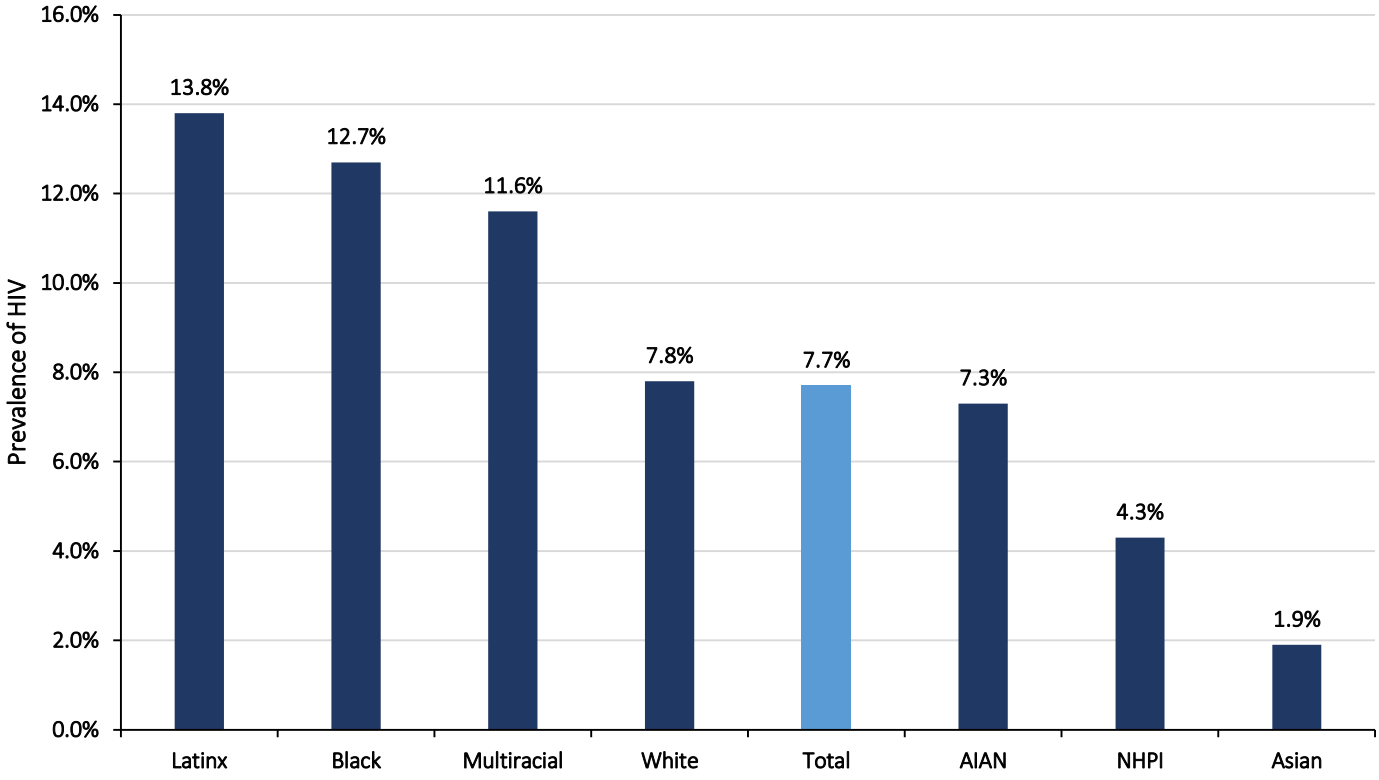
* Designates 3-year averages due to small numbers. **AIAN** = American Indian or Alaska Native; **NHPI=**Native Hawaiian or other Pacific Islander; **FBB**=Foreign-born Black; **USBB**=U.S.-born Black

FIGURE 2-6. HIV DIAGNOSIS RATES (10-YEAR AVERAGES) AMONG MEN WHO HAVE SEX WITH MEN (MSM) BY RACE/ETHNICITY, KING COUNTY, WA, 2012-2022



AIAN: American Indian/Alaska Native; **NHPI:** Native Hawaiian or other Pacific Islander.

FIGURE 2-7. HIV PREVALENCE AMONG MEN WHO HAVE SEX WITH MEN BY RACE/ETHNICITY, KING COUNTY, WA, 2022



AIAN: American Indian/Alaska Native; **NHPI:** Native Hawaiian or other Pacific Islander.

could reflect a return to routine testing following COVID-19-related service disruptions in 2020. Over the past decade, the new HIV diagnosis rate has been highest among Black foreign-born populations; however, this rate has also declined from 2013-2020 and remained steady between 2021 to 2022.

Key Populations

HIV DIAGNOSES AMONG MSM BY RACE/ETHNICITY: Data on demographic characteristics of MSM with recent HIV diagnoses are presented in Table 1-6. Because MSM are the population with the largest proportion of HIV diagnoses in King County, we compared diagnosis rates over the past decade among MSM by race/ethnicity. (See Technical Note 3 for details on our approach for calculating the size of the MSM population in King County). Compared to the 10 year-average from 2012-2021, the rate of new HIV infections among MSM decreased in 2022 (2.9 per 1,000 versus 2.6 per 1,000). MSM who identified as Latinx, Black, Multiracial, Native Hawaiian or other Pacific Islander or American Indian/ Alaska Native had the highest rates of new HIV diagnoses over the past decade compared to the overall population of MSM (Figure 2-6). The trend differs somewhat when examining HIV prevalence by race/ethnicity, where HIV prevalence is highest among Latinx, Black, Multiracial, and White MSM, respectively (Figure 2-7).

HIV DIAGNOSES AMONG TRANSGENDER PEOPLE AND PEOPLE WHO REPORT ANOTHER GENDER: PHSKC and Washington State updated HIV surveillance data collection to allow individuals to report another gender identity if they do not identify as a cisgender or transgender man or woman. This is the first PHSKC HIV report to include data for people who report another gender identity.

Among transgender people and people who reported another gender identity, there were five transgender women diagnosed with HIV in 2022, one person who reported another gender identity, and no transgender men (Table 1-2). Because transgender people represent a smaller proportion of the overall population, data on select factors among newly diagnosed transgender people and PLWH are presented in aggregate for the last five years (Table 1-5). A higher proportion of newly diagnosed transgender people identified as Asian, Latinx, or Native Hawaiian or other Pacific Islander compared to all newly diagnosed people in King County during the same period. In addition, newly diagnosed transgender people were younger than the overall population of people diagnosed with HIV in King County with 86%

FIGURE 2-8. PREVALENCE OF HIV AMONG PWID, SEATTLE AREA NATIONAL HIV BEHAVIORAL SURVEILLANCE, 2022

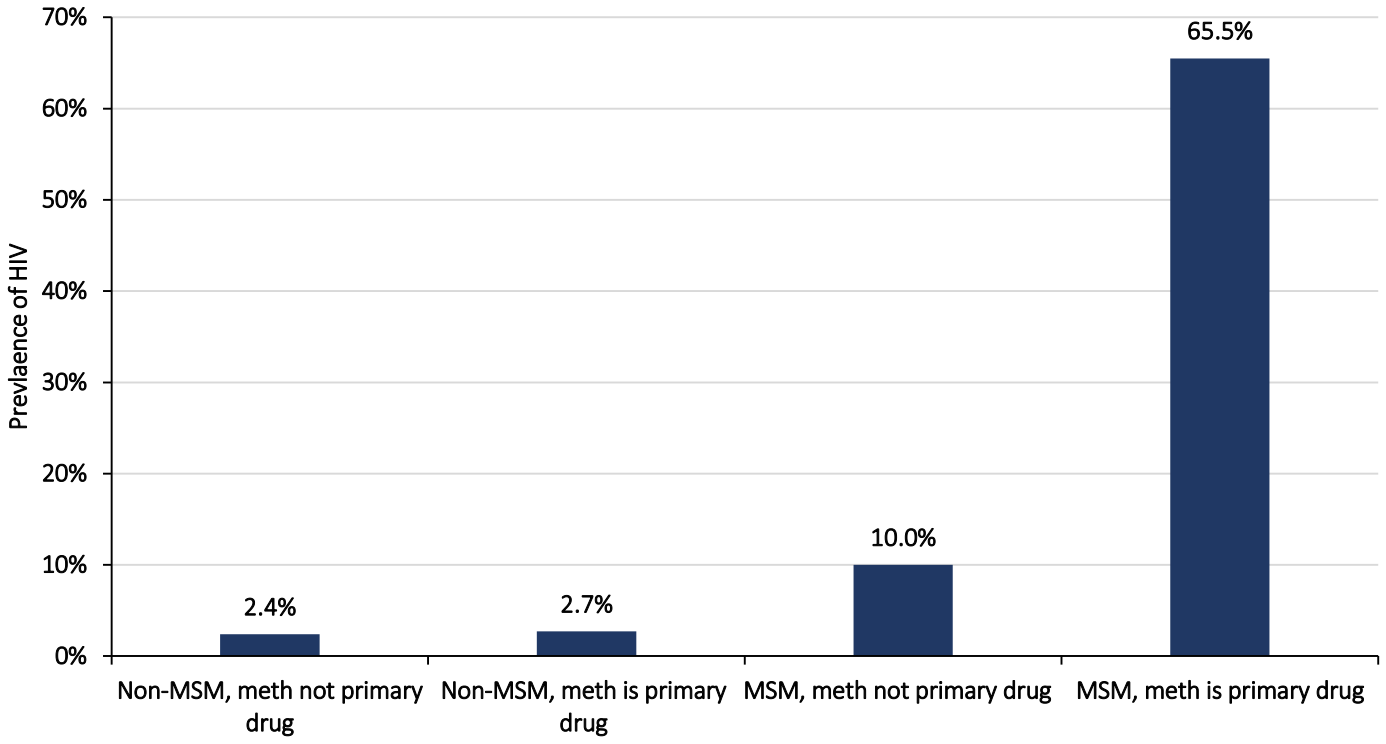


FIGURE 2-9. PREVALENCE OF HOMELESSNESS OR UNSTABLE HOUSING AMONG PEOPLE NEWLY DIAGNOSED WITH HIV, KING COUNTY, WA, 2013-2022

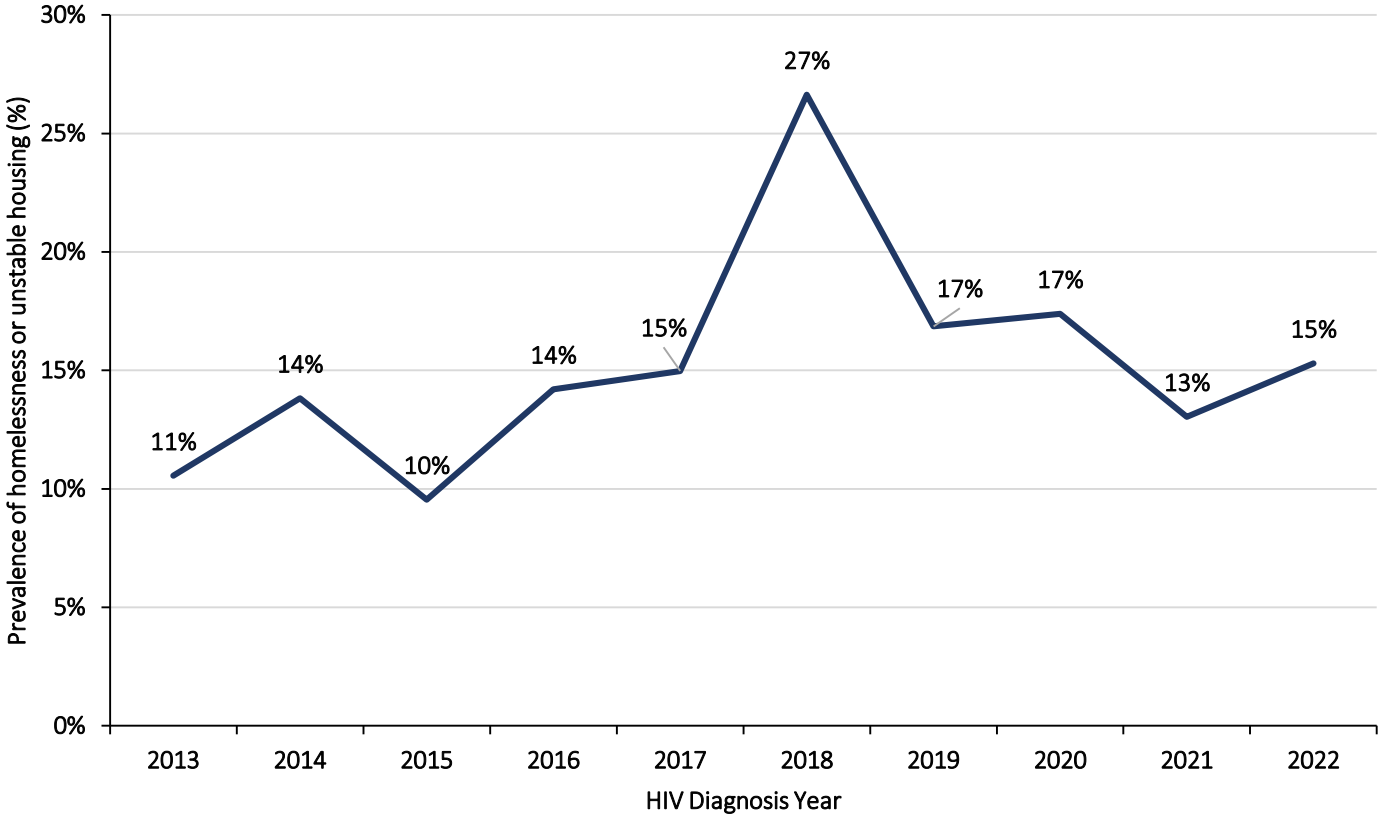
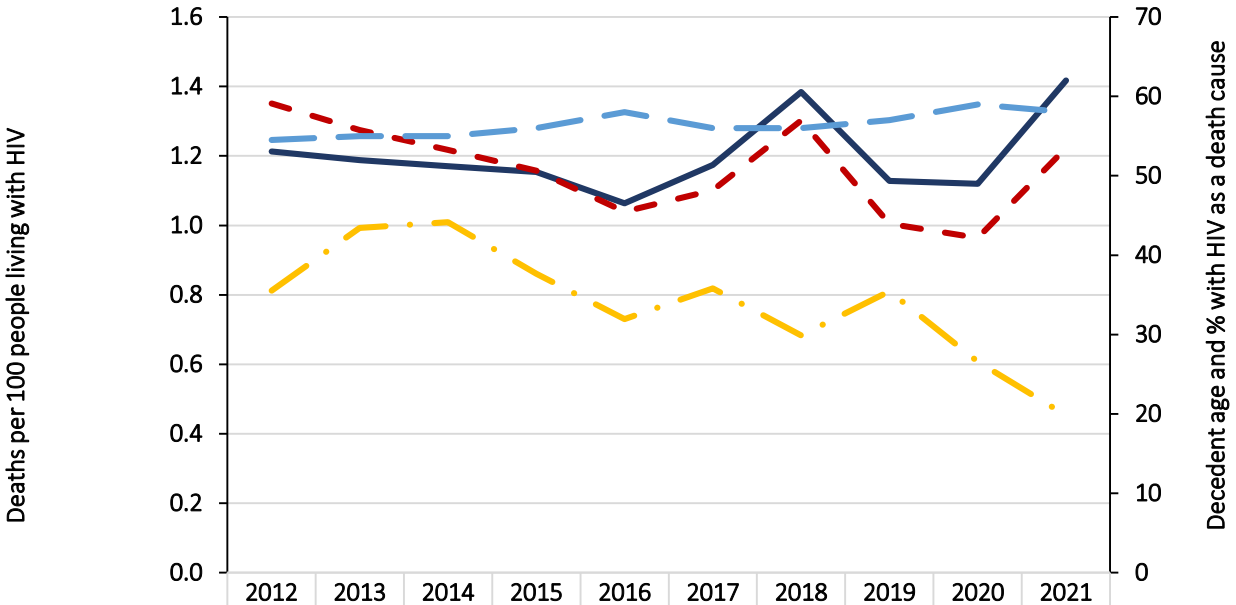


FIGURE 2-10. MORALITY RATES AMONG PEOPLE DIAGNOSED WITH HIV IN KING COUNTY, WA, 2012-2021



	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Crude mortality rate	1.2	1.2	1.2	1.2	1.1	1.2	1.4	1.1	1.1	1.4
Age-adjusted mortality rate	1.4	1.3	1.2	1.2	1.0	1.1	1.3	1.0	1.0	1.2
Median age (years)	55	55	55	56	58	56	56	57	59	58
% with HIV as a death cause	35.5	43.4	44.2	37.7	31.9	35.8	29.9	35.4	26.6	19.8

being under 35 years of age. The U.S. Census does not provide a population size estimate for the number of King County residents who are transgender, and reliable alternative estimates are currently not available, therefore, rates of new diagnoses among transgender people or people who report another gender were not calculated.

Drug use, MSM status, and Disparities in HIV prevalence among PWID: Based on data from routine HIV surveillance, including the 2022 National HIV Behavioral Surveillance (NHBS) PWID survey, we estimate that MSM -PWID who primarily inject methamphetamine have an HIV prevalence of approximately 60%. In the 2022 NHBS-PWID survey, MSM who primarily inject methamphetamine were approximately 25 times as likely to have HIV relative to non-MSM PWID, and seven times as likely to have HIV relative to MSM-PWID who primarily inject drugs other than methamphetamine (Figure 2-8).

HIV diagnoses among people who report homelessness and unstable housing: The percent of individuals newly diagnosed with HIV reporting homelessness and unstable housing has fluctuated over the past decade (Figure 2-9), ranging from 11% to 17%. (This range excludes an increase in 2018 attributable to the HIV outbreak among PWID, a large proportion of whom were also homeless). In 2022, 15% of newly diagnosed individuals were homeless or unstably housed. Consistent with other HIV-related racial and ethnic disparities, a higher proportion of newly diagnosed Black PLWH reported being homeless compared to newly diagnosed Latinx and White PLWH (15% versus 11% and 11%, respectively). Homelessness and housing instability threaten the ability of PLWH to engage in consistent HIV care, which is often needed to achieve viral suppression. The chapter documenting progress towards EHE pillar 2 of this report provides detailed information related to engagement in HIV care and viral suppression among PLWH who experience homelessness or housing instability.

Mortality

Due to lags in mortality data reporting, this report includes all-cause mortality rates among PLWH between through 2021. Data through 2020 show that age-adjusted mortality has been consistently declining among PLWH in King County, except for a transient increase in 2018 (Figure 2-10). However, between 2020 and 2021, there was a 20% increase in age-adjusted mortality. Despite the recent increase in age-adjusted mortality, the proportion of deaths caused by HIV was at an all-time low, indicating that deaths due to non-HIV-related causes are on the rise. PHSKC continues to monitor mortality among PLWH to determine if/how trends in mortality among PLWH have changed and identify public health opportunities for action.

Overview of the Ending the HIV Epidemic Initiative in King County

Background

In February 2019, the U.S. federal government announced Ending the HIV Epidemic: A Plan for America (EHE) to decrease new HIV infections in the U.S. by 75% by 2025, and 90% by 2030.[2] The EHE initiative aims to capitalize on scientific advances in HIV diagnosis, treatment, and prevention in order to accelerate national progress in controlling the now 42-year-old HIV epidemic. King County is one of 57 geographic areas funded through the first phase of EHE. This section reviews the King County EHE Plan and implementation status of the EHE initiative in King County and references data presented in detail in subsequent chapters that focus on progress within each EHE pillar.

EHE Strategies and Local Funding

EHE supports implementation of activities that link to four "pillars" prioritized by federal funders: 1) Diagnose, 2) Treat, 3) Prevent, and 4) Respond (**Table 3-1**). In 2019, PHSKC developed a comprehensive EHE Plan guiding the use of EHE funding between 2020-2025. PHSKC was subsequently awarded two cooperative agreements, one from the Centers for Disease Control and Prevention (CDC) in the amount of $2.1 million annually, and another from the Health Resources Services Administration (HRSA) Ryan White HIV/AIDS Program that gradually increased from $800,000 in year 1 to a current award amount of $2 million in year 4. The infrastructure supported by these EHE funds allowed partners to secure additional funding and resources for EHE populations through Substance Abuse and Mental Health Services Administration (SAMHSA) and Housing and Urban Development (HUD)/Housing Opportunities for Persons with AIDS (HOPWA) funding opportunities. Additionally, six healthcare organizations in King County (Country Doctor Community Health Centers, PHSKC Healthcare for the Homeless, HealthPoint Health Center, International Community Health Services, Sea Mar Community Health Center, and Seattle Indian Health Board) received between $250,000-400,000 through the

Table 3-1. EHE Strategies and Pillars

Strategy	
Diagnose	Ensure that people with HIV are diagnosed as soon as possible following infection
Treat	Treat people with HIV right away after they are diagnosed, and ensure that all people with HIV are effectively treated, achieving sustained viral suppression
Prevent	Prevent new HIV infections using proven interventions, including pre-exposure prophylaxis (PrEP) and syringe service programs (SSP)
Respond	Respond quickly to potential HIV outbreaks to get needed prevention and treatment services to people who need them

HRSA Bureau of Primary Health Care to increase HIV testing, pre-exposure prophylaxis (PrEP) prescribing, and linkage to HIV care for their patient populations. The Mountain West AIDS Education and Training Center (MWAETC) received funding to provide technical assistance to support implementation of EHE strategies in King County and National Institutes of Health (NIH) EHE funding supported local studies related to EHE.

The King County EHE Plan

In 2019, PHSKC convened a diverse group of stakeholders including representatives from government, community, healthcare, and social service organizations to develop the King County EHE plan. Through this plan, PHSKC and its collaborators sought to identify populations whose needs were not met through prior HIV prevention and care efforts with the goal of developing strategies that more effectively met the needs of the entire population.

Four Primary Principles of King County's EHE Plan

King County's EHE plan aims to fundamentally change how HIV prevention and HIV care services are delivered in King County to better meet the needs of persons for whom HIV prevention and care services have not historically been accessible, acceptable, or effective. The following four primary principles guide implementation of EHE in King County:

1) HIV care and prevention services need to be more geographically dispersed. Prior to EHE, HIV prevention and care services were concentrated in the Seattle city center, with inadequate prevention and treatment capacity in north Seattle and south King County. Historically, this aligned with where many MSM resided in the county, with nearly half of all new HIV diagnoses in 2012 occurring among persons living in central Seattle (**Figure 2-2**). However, since 2018, the largest proportion of new diagnoses - approximately one-third of the total - have occurred among persons living in south King County. A large outbreak of HIV among persons living in north Seattle in 2018 further highlighted the need to expand the availability of prevention and care services outside of central Seattle.[1] As such, EHE is working to meet the needs of a more dispersed population by expanding clinical HIV and prevention infrastructure to north Seattle and south King County.

2) HIV care and prevention services need to better address the needs of the most marginalized persons with HIV, particularly persons who are unhoused and/or who use drugs. As HIV transmission in King County has declined, the epidemic has become increasingly concentrated among persons who are unhoused and who use substances. Among King County residents living with HIV in 2022, we estimate that 9% are unhoused or unstably housed and 15% were neither in care nor virally suppressed (**Tables 3-2** and **3-3**). King County's inter-related epidemics of homelessness and substance use coupled with the area's success in preventing and treating HIV in more advantaged populations necessitates a shift in the public health and clinical approach to HIV towards a more syndemics response. Thus, EHE is creating the infrastructure needed to better serve the most disadvantaged populations with HIV and at risk for HIV in our community.

3) Prevention and treatment efforts need to focus on eliminating racial/ethnic disparities in HIV care and prevention. As noted in chapters for King County epidemiology and Pillar 2, the HIV epidemic in King County disproportionately affects racial and ethnic minorities. Black foreign-born individuals have the highest rate of new HIV diagnoses in King County (**Figure 2-5**), while the rate of new HIV diagnosis among Black, Latinx, and Multiracial MSM continues to higher than the rate observed in MSM overall (**Figure 2-6**). Among people diagnosed with HIV, Black MSM had the lowest rate of viral suppression compared to all other MSM racial and ethnic groups (**Table 3-2**). The mpox outbreak of 2022 provided another example of an infection that disproportionately affected racial and ethnic minority MSM; 27% of mpox diagnoses in King County occurred among Latinx MSM, while only 11% of the county's population is Latinx. Thus, a key focus of the EHE Plan in King County is reducing and ultimately eliminating racial and ethnic disparities in HIV care and prevention. This effort includes new funding to support community-based organizations to reach and serve their respective populations outside traditional healthcare settings, such as culturally specific stigma reduction events and providing outreach testing in settings already trusted by their communities.

4) HIV testing and prevention needs to be better integrated into the wider healthcare system. Success in preventing and treating HIV using biomedical interventions (e.g., testing, PrEP, antiretroviral

treatment) depends on the existence and success of the HIV clinical infrastructure. King County has a significant specialized clinical infrastructure related to HIV and other sexually transmitted infections that plays a central role in HIV prevention, including the PHSKC Sexual Health Clinic, Seattle's LGBTQ+ Center (formerly Gay City), Madison Clinic, Max Clinic, and numerous private medical practices. EHE is supporting the creation of three low-barrier clinics (Engage Health Federal Way & Kent, and Aurora Clinic) and promoting new or expanded walk-in sexual health services through community health centers and public health clinics throughout the county. King County's EHE effort also seeks to promote HIV testing and PrEP throughout the healthcare system through a county-wide EHE Health Care Collaborative; organizations that participate in the collaborative provide medical care to over 1.2 million adults in King County.

Current Status of King County EHE Activities

PHSKC is in the fourth year of implementing EHE and has launched all activities prioritized in the EHE Plan. For detailed information on all King County EHE activities, see **Table 3-2** or the EHE website: www.kingcounty/EHE.

Updates on Key Components of King County's EHE Plan

Differentiated models of care. Differentiated care is a client-centered approach to the provision of healthcare that seeks to meet patients' needs by altering the frequency and content of care, who provides care, and where it is provided.[3] It acknowledges that the same system of care cannot work for everyone and that the healthcare system needs to adapt to meet patients' needs. Expanding King County's system of differentiated prevention and care is a centerpiece of the local EHE initiative. Prior to EHE, the county had three low-barrier clinics: Max Clinic, Mod Clinic, and SHE Clinic, all of which provided walk-in care and sought to serve persons living unhoused or unstably housed with complex social or behavioral barriers to successful HIV treatment.

EHE has allowed King County to expand its system of low-barrier care through the following activities: 1) increased capacity at the Max and Mod Clinics, both of which are located on the Harborview Medical Center campus in central Seattle; 2) establishment of the Aurora Clinic and expansion of the SHE Clinic, both of which are low-barrier clinics co-located with Aurora Commons, a community-based organization trusted by people living unhoused in north Seattle, many of whom engage in sex work; and 3) establishment of two new low-barrier clinics in south King County, Engage Health-Federal Way (opened December 2022), and Engage Health-Kent (opened August 2023), both of which are co-located in Catholic Community Services of Western Washington engagement centers.

In 2022, King County's north Seattle and south King County low-barrier clinics (Aurora Clinic, SHE Clinic, and Engage-Federal Way) provided 964 visits with 395 people living with or at risk for HIV. In central Seattle, Max Clinic provided care for 228 people living with HIV, about 38% of whom received services during EHE funded expanded hours, and MOD Clinic provided 691 visits for 264 unduplicated clients. Finally, EHE is supporting a new HIV Mobile Outreach Team to engage the hardest to reach persons with HIV who have fallen out of care wherever they live (services began March 2023).

Community-based services to support EHE priority populations. King County's EHE program is supporting community-based organizations to provide pre-housing case management, behavioral health services, stigma reduction resources, HIV prevention services (including condom distribution), HIV testing, linkage/re-linkage to PrEP and/or HIV care and expanded access to SSPs. In 2022, EHE funds were allocated to three community-based organizations, and a community-based services request for proposal was released in the end of 2022 to fund additional community-based organizations in 2023. These organizations and services provided are specifically designed to expand access to care in south King County. Additionally, the PHSKC EHE team continues to collaborate with state, county, and city officials to expand resources for priority populations, including allocating new HOPWA housing vouchers for low-barrier clinic patients in Seattle and south King County.

Promotion of healthcare system change. Widespread expansion and improvement in services and available care for diverse populations, particularly LGBTQ+ people, is needed to end the HIV epidemic. Guided by Bree Collaborative recommendations,[4] in 2020 PHSKC initiated a EHE Health Care Collaborative to work across health systems to define and implement systemic changes to increase HIV testing, PrEP use, and culturally affirming and responsive HIV care services among LGBTQ+ populations. Collaborative members provide

TABLE 3-2 (PAGE 1 OF 2). CORE ELEMENTS OF THE KING COUNTY EHE PLAN AND PROGRESS TO DATE

Strategy	Objective	EHE Activities
Diagnose	Increase routine testing in clinical settings	• Foster systemic changes at health care organizations to improve risk identification, testing, and care • Promote universal or risk-based HIV testing through the EHE Emergency Department Collaborative • Promote and provide HIV Testing through new low-barrier clinic sites
	Increase HIV testing in non-clinical settings (e.g., street outreach, jails)	• Provide HIV testing through the South King County Correctional Entity (SCORE) • Support community-based organizations' outreach and provision of HIV testing for populations at higher risk for HIV
	Increase partner notification services	• Expand capacity for partner services at PHSKC
	Conduct public awareness and mobilization campaigns focusing on Black and Latinx populations	• 12-week digital media social marketing campaign to raise awareness of the four central EHE strategies • Campaigns to promote low-barrier services, PrEP, and HIV testing • Promotional postcards for new low-barrier clinics • Contracted with community-based organizations to develop promotional campaigns focusing on PrEP awareness and uptake • Campaign to promote HIV testing across King County emergency departments
Treat	Expand access to low-barrier HIV care by reducing structural barriers to care and collocating mental health, substance use, and psychosocial support services – with a focus on north Seattle and south King County	• Expanded services initiated in MAX Clinic and MOD Clinic on the HMC campus • Opened Aurora Clinic in north Seattle in late 2021, expanded SHE Clinic in 2022 • Opened Engage Health – Federal Way in late 2022, and Engage Health – Kent in mid-2023 • Initiated Hygiene Center services for north low-barrier clinic patients • Walk-in Sexual Health Services started in PHSKC Sexual and Reproductive Health Clinics and Community Health Centers
	Enhance linkage to care for persons with newly diagnosed HIV infection	• Expanded PHSKC staffing for engaging with persons with early indication of falling out of care • Targeted outreach and linkage to individuals identified through HIV testing in emergency department settings
	Expand real-time data to care to re-engage persons who are not virally suppressed –focus on emergency rooms, inpatient hospitals, jails, pharmacies	• Identification of out of care persons using Collective Medical
	Enhanced retention in care efforts	• Pre-housing case management services for people with HIV and housing case management for people at risk for and living with HIV • Expanded cross-systems collaboration engaging partners in housing, mental health, and substance use systems to improve access and service delivery to people at risk for or living with HIV

TABLE 3-2 (PAGE 2 OF 2). CORE ELEMENTS OF THE KING COUNTY EHE PLAN AND PROGRESS TO DATE

Strategy	Objective	EHE Activities
Prevent	Expand PrEP access – with a focus on north and south King County and healthcare system-level interventions	• PrEP promotion through the EHE Health Care Collaborative • PrEP provision through new and expanded low-barrier clinic sites, Madison Clinic, and Community Health Centers throughout King County • Expanded PrEP services in the PHSKC Sexual Health Clinic • Expanded PrEP and HIV services in PHSKC Sexual and Reproductive Health Clinics in south Seattle and south King County-PrEP promotional campaigns • Expended PrEP services at low-barrier clinics in north Seattle and south King County • Expanded PrEP services through community health centers • Linkage to PrEP through Emergency Department Collaborative
	Develop new PrEP navigation and retention models	• CBO partners link communities at high risk for HIV to PrEP and provide PrEP navigation • Community Health Centers provide more robust PrEP navigation across the county
	Expand condom access – focus north and south King County	• Condom distribution project – 941,648 condoms distributed in King County in 2022 • Continued expansion to additional zip codes with high incidence of HIV
	Expand SSP – focus north Seattle and south King County	• South County Outreach and Referral Exchange (SCORE) SSP expansion • Expanded morning hours at downtown SSP
	Expand availability and accessibility of medications for opiate use disorder	• Increased availability of medication for opioid use through low-barrier clinics in north Seattle & south King County • Education through both collaboratives on overdose response and available OUD treatment services
	Improve delivery of comprehensive health services to LGBTQ persons by medical providers	• EHE Health Care collaborative providing support and guidance to create widespread improvements in care to LGBTQ+ populations • Support improvement projects among participants
Respond	Identify and investigate HIV outbreaks using molecular laboratory and other data	• Implemented a Cluster Detection and Response (CDR) system • Expanded staff capacity to conduct outreach to cluster members, test them for HIV, and link them to PrEP or HIV care
	Provide outreach to persons identified through outbreak investigations – focus on virally unsuppressed persons	
	Community engagement	• CDR focus groups and one on one interviews completed to inform implementation of CDR • Educational video developed

TABLE 3-3. EHE COLLABORATIVE MEMBERS

A. Health Care Collaborative Organizations (HCOs)	B. Emergency Department (ED) Collaborative
CHI Franciscan	CHI Franciscan St Anne Hospital
Country Doctor & Carolyn Downs Community Clinics	Kaiser Permanente Urgent Care
HealthPoint	Multicare – Auburn
International Community Health Services	Overlake Hospital
Kaiser Permanente Washington	Swedish Ballard
NeighborCare Health	Swedish Cherry Hill
PHSKC Sexual and Reproductive Health Program	Swedish First Hill
UW Harborview Medical Center	Swedish Issaquah
UW Northwest Hospital	Swedish Redmond
UW Montlake	UW Harborview Medical Center
Seattle Indian Health Board	UW Northwest Hospital
Sea Mar Community Health Center	UW Medical Center Montlake
Swedish Medical Center	Virginia Mason Franciscan Health
VA Puget Sound Health Care System	
Mountain West AIDS Education and Training Center	

medical care to approximately 1.1 million adults in King County (see Table 3-3.A) and work together to make changes to their electronic health record systems that allow patients to voluntarily identify their gender, sexual orientation, and behaviors related to HIV vulnerability; develop staff training; implement low-barrier access to PrEP; and promote HIV/STI/hepatitis C testing according to local and national guidelines. The EHE Health Care Collaborative is a dynamic group, and has adapted over time to address diverse public health concerns, such as mpox, syphilis, and hepatitis C. See Table 3-2 for more detail.

In 2021 PHSKC convened the EHE Emergency Department (ED) Collaborative to increase HIV testing in King County EDs. EHE ED Collaborative participants (see Table 3-3.B) are working with their leadership and staff to develop and pilot processes to increase HIV testing among ED patients and implement a promotional patient awareness campaign. Much like the EHE Health Care Collaborative, the EHE ED Collaborative has adopted a syndemics lens, focusing on increasing testing and care for hepatitis C and syphilis as well as HIV, and improving overdose response and culturally specific care for LGBTQ+ populations that receive care in ED settings.

Expanded public health outreach. Increasing and assuring engagement with HIV testing, PrEP, and HIV care – particularly for our most vulnerable populations – will require a more robust system of outreach. Through EHE, PHSKC is implementing an intensified system of linkage and relinkage to care utilizing a data information exchange and collaborations with diverse partners to identify and re-link people living with HIV who are out of care when they are seen in emergency rooms, hospitals, jails, and pharmacies. This outreach links and integrates the work conducted by PHSKC outreach staff with the services available at the new low-barrier clinics and community-based organizations, ultimately helping more people access the low-barrier HIV testing, PrEP, and HIV treatment.

EHE OUTCOMES

King County's progress towards achieving population level goals for EHE are available throughout this report. These goals are intended to be ambitious but achievable, with both long term and interim measures of success.

Ending the HIV Epidemic Pillar 1: Diagnose

KEY POINTS

An estimated 97% of all people living with HIV in King County have been diagnosed with HIV.

The number of publicly-funded HIV tests performed is approaching pre-COVID levels, with 17,547 publicly -funded HIV tests in 2022, and 19% of all newly identified cases in King County diagnosed through publicly-funded HIV testing.

Among people newly diagnosed with HIV, 21% reported no prior HIV test before testing positive, with a third of both PWID and people with presumed heterosexual sexual contact reporting no prior testing.

Nearly one-fifth (19%) of people with newly diagnosed HIV infection who did not have a negative HIV test within the past two years were diagnosed with AIDS concurrently or within 12 months of HIV diagnosis, suggesting that they likely had longstanding infections.

Background

HIV testing is a cornerstone of HIV care and prevention. It plays a critical role in advancing both of PHSKC's primary objectives related to HIV: averting the morbidity and mortality associated with HIV and preventing HIV transmission. PHSKC and WA DOH promote widespread HIV testing as part of routine medical care and directly fund testing for people at higher risk for acquiring HIV. PHSKC monitors the success of HIV diagnosis and case-finding at the population level. Key indicators of the success of HIV testing efforts are presented in Table 4-1. PHSKC/WA State HIV Testing Guidelines are shown in Table 4-2.

HIV Testing among Select King County Populations

Estimating the Proportion of People Living with HIV who are Undiagnosed

PHSKC uses a tool developed by University of Washington (UW) researchers that uses HIV testing history to estimate the proportion of all people who have HIV who are unaware of their status (i.e., the undiagnosed fraction).[5] In 2022, the overall estimated undiagnosed fraction in King County was 3%. Among men who have sex with men (MSM), the estimated undiagnosed fraction was 2%.

FIGURE 4-1. KING COUNTY PROGRESS TOWARDS HIV DIAGNOSIS GOALS

Goals and Evaluation Metrics	2019	2022	2025 Goal
New HIV diagnoses, rate	8.0/100,000	7.9/100,000	↓75%
Disparities in new HIV diagnoses by race/ ethnicity (per 100,000)	AIAN: 10.2 Asian: 2.2 Black: 27.2 Latinx: 17.5 NHPI: 15.8 White: 6.2	AIAN: 16.8 Asian: 3.9 Black: 28.7 Latinx: 17.5 NHPI: 19.3 White: 4.9	<5% difference between groups and overall rate
Know HIV status	94%	97%	≥95%
Late HIV diagnosis	17%	19%	≤10%

2019 is the first year for the EHE initiative. AIAN = American Indian or Alaska Native; NHPI = Native Hawaiian or other Pacific Islander.
Note: The goal for disparity-related indicators is for no difference between each racial/ethnic group and the estimate for the entire population for each indicator. This is defined as having all racial/ethnicity-specific estimates within 5% of the overall estimate. Detailed definitions for metrics can be found in the Technical Notes to Dashboard on page 5.

HIV TESTING HISTORY IN POPULATIONS AT HIGHER RISK FOR HIV

HIV testing histories were collected during the seven most recent NHBS surveys between 2016-2022, which sampled MSM (twice), PWID (twice), heterosexually-active people at higher risk for HIV, transgender women, and women who exchange sex (WES) (Figure 4-1). Of these five populations, MSM and transgender women were the most likely to have had an HIV test in the past 6 months (64%-65% and 47%, respectively). Heterosexually -active people at higher risk for HIV were mostly likely to report never having had an HIV test (19%).

HIV TESTING HISTORY IN PEOPLE WITH NEWLY DIAGNOSED HIV

In King County, because new HIV diagnoses are most prevalent among MSM, we report in detail on HIV testing history in that population. Between 2013 and 2020, 10% (range: 5% to 12%) of MSM reported never testing for HIV prior to their initial HIV diagnosis (Figure 4-3). However, this proportion increased in both 2021 and 2022, with 15% of newly diagnosed MSM reporting never having tested for HIV prior to their HIV diagnosis in 2022 (Table 4-3). Among MSM diagnosed with HIV in 2022, 48% had tested in the past two years and one-third had tested HIV-negative in the past year. Of note, a lower proportion of Black MSM newly diagnosed with HIV reported testing in the prior year compared to all MSM (20% vs. 31%, respectively, Table 4-3).

Among people who tested for HIV prior to their initial diagnosis, the HIV inter-test interval (ITI) is the time between a person's last HIV-negative test and first HIV-positive test. A lower ITI among people with newly diagnosed HIV suggests a shorter period between initial infection and diagnosis. PHSKC's goal is to promote widespread and frequent testing in populations at elevated risk for HIV, thereby shortening the ITI. Between 2013 and 2020, the median ITI in MSM was relatively

TABLE 4-2. PHSKC & WA DOH HIV TESTING GUIDELINES

ALL WA STATE RESIDENTS

- Test at least once between the ages of 13 and 64
- Test concurrent with any diagnosis of gonorrhea or syphilis
- During pregnancy, test in the first trimester and test again the 3rd trimester in the setting of methamphetamine use, opioid use, exchange sex, or housing instability/ homelessness

MEN WHO HAVE SEX WITH MEN AND TRANSGENDER PEOPLE WHO HAVE SEX WITH MEN

- Indications for testing every 3 months (any of below reported in the last 12 months):
- Diagnosis of a bacterial STI (e.g., syphilis, gonorrhea, chlamydia)
- Use of methamphetamine or poppers (amyl nitrate)
- >10 sex partners (anal or oral)
- Condomless anal intercourse with an HIV+ partner or partner of unknown HIV status
- Ongoing use of HIV pre-exposure prophylaxis (PrEP)
- MSM and transgender people who have sex with men who do not report any of the above should test annually[A]

PEOPLE WHO INJECT DRUGS

- Annual testing
- Every 3 months for PWID who exchange sex for money or drugs or who are pregnant

Note: People should also be tested for syphilis and for gonorrhea and chlamydia at all exposed anatomical sites.
[A] People who have not had sex in the prior year or who are in long-term mutually monogamous relationships do not require annual HIV/ STI testing.

stable and ranged from 6 to 11 months (**Figure 4-2**). However, the median ITI increased to 19 months in 2022, with 37% of people newly diagnosed with HIV reporting more than two years since their last HIV test (**Figure 4-3**). Several factors may have contributed to this trend. First, HIV testing decreased with the COVID-19 pandemic and it is possible that some new diagnoses in 2022 reflect people that might have been diagnosed earlier had the pandemic not disrupted the healthcare system's HIV testing efforts. Recent increases in the ITI and percentage of MSM testing HIV positive at their first HIV test may also reflect the impact of PrEP, a widely used, highly effective prevention intervention that is closely integrated into HIV testing.

HIV testing histories for people in other transmission categories differ from MSM. Overall, people in the PWID and heterosexual sexual contact transmission risk categories were more likely to report no prior HIV testing. People in these transmission risk categories also had lower proportions of testing in the prior year compared to MSM, with foreign-born people having the lowest proportion of testing in the prior year (**Table 4-3**).

FIGURE 4-1. HIV TESTING HISTORY AMONG MEN WHO HAVE SEX WITH MEN (MSM), PEOPLE WHO INJECT DRUGS (PWID), HETEROSEXUALLY-ACTIVE PEOPLE AT HIGHER RISK FOR HIV (HET), TRANSGENDER WOMEN (TRANS), AND WOMEN WHO EXCHANGE SEX FOR DRUGS OR MONEY (WES), SEATTLE AREA NATIONAL HIV BEHAVIORAL SURVEILLANCE SYSTEM, 2016-2022

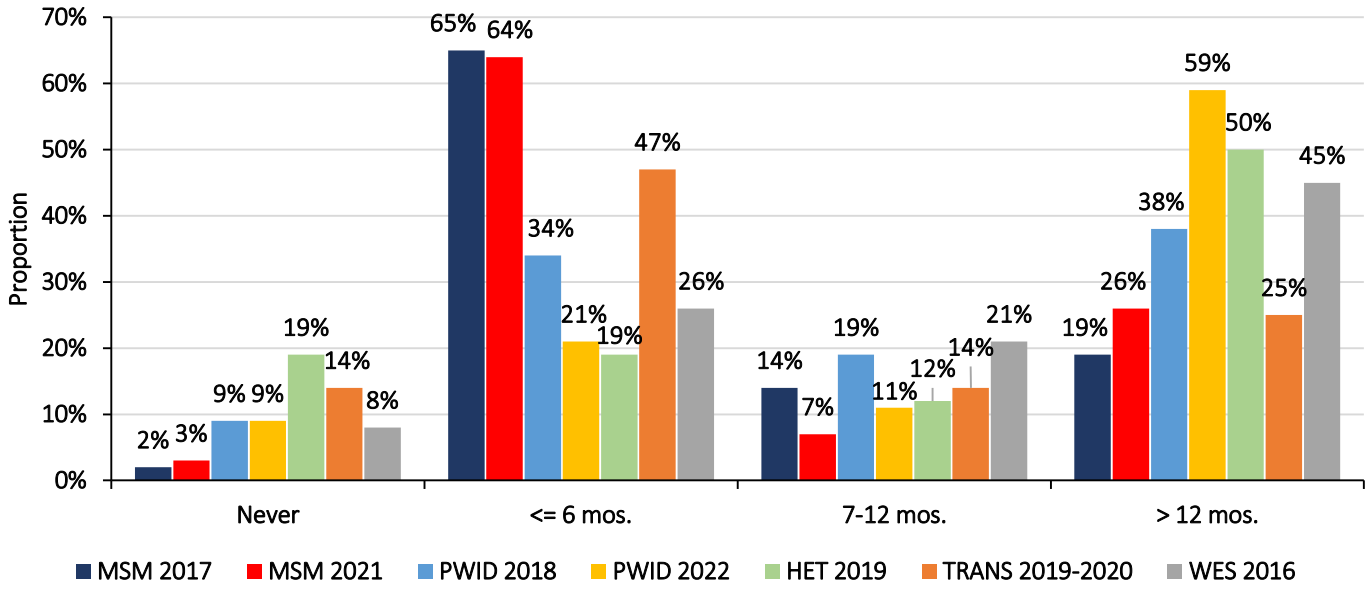


FIGURE 4-2. MEDIAN AND INTER-QUARTILE RANGE (IQR) OF INTEREST INTERVALS (MONTHS BETWEEN LAST NEGATIVE AND FIRST POSITIVE TEST) OF NEWLY HIV DIAGNOSED MSM, KING COUNTY, WA, 2013-2022

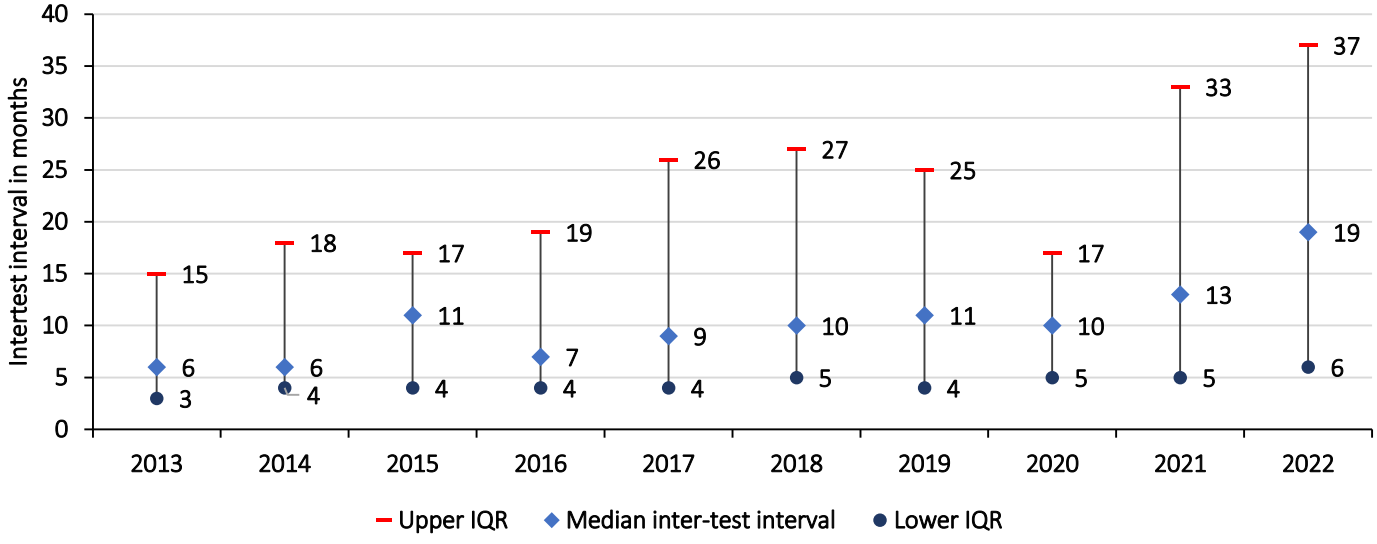


TABLE 4-3. KEY HIV TESTING METRICS AMONG INDIVIDUALS NEWLY DIAGNOSED WITH HIV, KING COUNTY, WA, 2021-2022

	N	Percent Never Previously HIV Tested[A]	Median Intertest Interval (IQR)[A]	Percent HIV Tested in the Prior Year[A]	Percent HIV Tested in the Prior 2 Years[A]	Percent with Concurrent HIV & AIDS Diagnoses[B]
All	183	21%	21 (8, 50)	27%	41%	26%
Age at Diagnosis (years)						
13-24	28	13%	19 (7, 37)	25%	42%	14%
25-34	65	26%	37 (12, 94)	14%	24%	38%
35-44	50	29%	33 (15, 73)	12%	15%	38%
45-54	26	22%	35 (4, 193)	14%	21%	43%
55+	14	24%	6 (3, 25)	36%	43%	14%
Gender[C]						
Cisgender Men	153	19%	21 (7, 50)	21%	33%	24%
Cisgender Women	24	35%	29 (15, 69)	8%	17%	42%
Transgender People	38	19%	7 (4, 17)	55%	61%	16%
Transmission Category						
MSM	103	15%	19 (6, 37)	31%	48%	22%
Black MSM[D]	19	7%	23 (12, 50)	20%	47%	16%
Latinx MSM[D]	34	25%	16 (4, 30)	34%	50%	24%
White MSM[D]	57	12%	17 (6, 37)	35%	53%	25%
Another race MSM[D]	16	13%	19 (9, 37)	33%	47%	6%
PWID[E]						
Non-MSM	8	33%	55 (13, 149)	17%	33%	38%
MSM	11	17%	4 (1, 39)	50%	50%	36%
Heterosexual Sexual Contact[F]	24	39%	35 (16,79)	11%	17%	42%
U.S.-born	7	33%	19 (8, 32)	33%	67%	14%
Foreign-born	17	42%	65 (25, 86)	8%	28%	53%
Unknown Transmission Risk[G]	33	33%	44 (18, 107)	6%	22%	24%

Abbreviations: MSM = men who have sex with men; PWID = people who inject drugs.

*Transgender people and nativity (US-born versus foreign-born) represent key populations not transmission categories.

[A] Among those with a known HIV test history.

[B] Proportion of people diagnosed with AIDS within 30 days following HIV diagnosis

[C] Due to small numbers in 2022, the time interval was expanded to 2013–2022 for transgender people; most of the 38 transgender people diagnosed in the 10-year period were transgender women (82%). Since data on "Another Gender Identity" was only recently collected, number are too small to summarize.

[D] Race and Latinx ethnicity categories are not mutually exclusive. Due to small numbers, people who identify as American Indian/Alaska Native, Asian, or Native Hawaiian or other Pacific Islander are included in the "Another race" category.

[E] Given the differences in non-MSM and MSM PWID, no aggregate estimate is presented.

[F] Heterosexual sexual contact includes all people recently diagnosed with HIV without known MSM or PWID HIV risks.

[G] Unknown/other transmission risk includes those with no identified risk.

HIV TESTING HISTORY AND AIDS AT TIME OF HIV DIAGNOSIS

As shown in **Figure 4-4,** the percentages of people with newly diagnosed HIV who were diagnosed with AIDS at the same time or within 12 months of their HIV diagnosis remained relatively stable over the past decade, ranging from 17% to 21%. In 2022, the proportion of people with AIDS diagnosed at the same time or within 6 months of their HIV diagnosis increased to 23% and 25%, respectively.

Among people in the heterosexual sexual contact category, relatively few U.S.-born people had a concurrent HIV and AIDS diagnosis (14%), compared to 53% of foreign-born people (**Table 4-3**). Among the nine foreign-born people in the heterosexual transmission category diagnosed with concurrent HIV and AIDS in 2022, six had a known immigration date. Among those, the median time between immigration to the U.S. and HIV diagnosis was 3.5 years. This suggests that a small but important population of foreign-born people progress to AIDS after being in the U.S. for several years. There is a need for public health and the health system to provide more effective HIV testing services in this community to identify HIV earlier in the course of

FIGURE 4-3. HIV TESTING HISTORY AMONG MEN WHO HAVE SEX WITH MEN WITH NEWLY DIAGNOSED HIV, KING COUNTY, WA 2013-2022

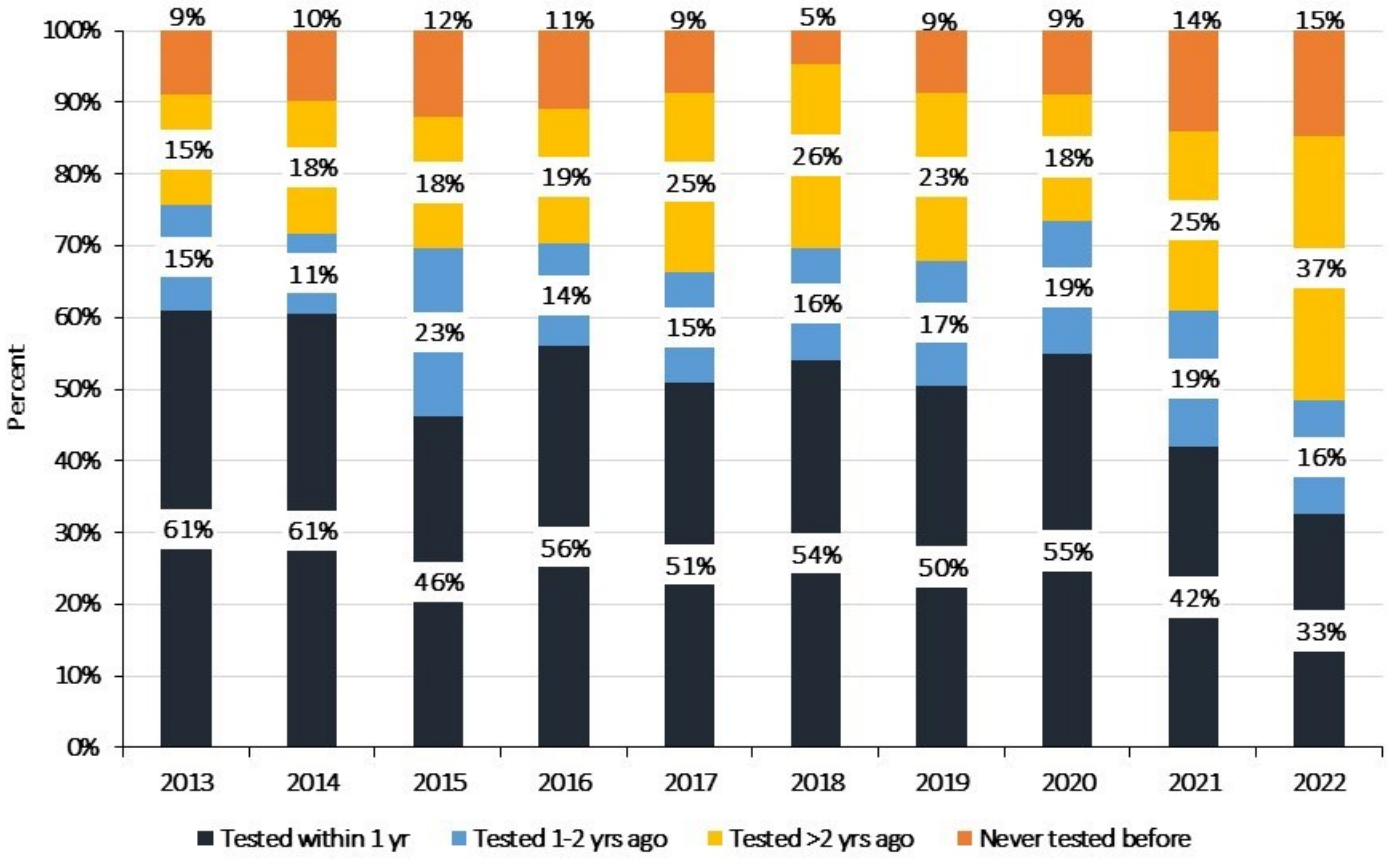
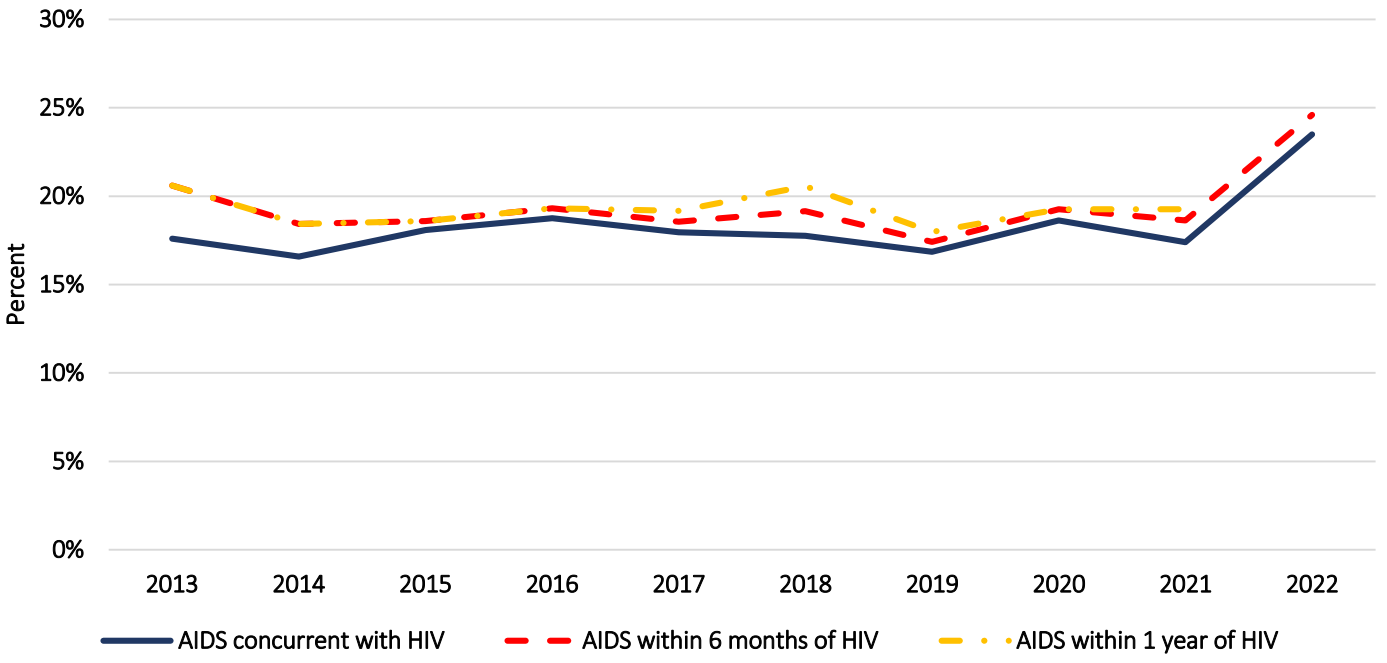


FIGURE 4-4. LATE HIV DIAGNOSES DEFINED BY AIDS DIAGNOSIS CONCURRENT, WITHIN SIX MONTHS, OR WITHIN ONE YEAR OF HIV DIAGNOSIS, KING COUNTY, WA, 2013-2022 [A,B]



[A] Excludes people who reported having a negative HIV test within 24 months of HIV diagnosis.
[B] "AIDS within 1 year of HIV" excludes 2022 as there has not yet been a full year for AIDS to develop.

infection (i.e., before progression to AIDS), particularly for immigrants from countries with high levels of endemic HIV infection.

Place of HIV Diagnosis and Reason for HIV Testing

Figure 4-5 presents information on the facilities where people were initially diagnosed with HIV in King County in 2021 and 2022. The highest proportion of new diagnoses in 2022 occurred at outpatient clinics (36%), representing 52 different facilities (not including health department clinics, community clinics, and known HIV or LGBTQ+ specialty medical practices). This proportion is less than in 2021 when outpatient clinics diagnosed 45% of all new cases, but similar to that observed in 2019 (35%), prior to the COVID-19 pandemic. The PHSKC Sexual Health Clinic, which includes outreach testing by clinic staff, was the largest diagnosing site with 7% of new HIV diagnoses. However, proportion of people diagnosed in the Sexual Health Clinic as well as the proportion diagnosed through specialty providers and CBOs has declined in recent years, possibly reflecting high levels of PrEP use among persons receiving care in such venues. During that same time, the percentage of people diagnosed in emergency department/urgent care facilities has increased from 8% in 2019 to 13% and 12% of the diagnoses in 2021 and 2022, respectively.

Table 4-4 presents data on reasons for HIV testing at the time of HIV diagnosis in 2022. Among 101 people diagnosed with HIV for whom PHSKC had data on reason for testing, most were tested because of testing they initiated themselves or as part of PrEP related care (30%) and 17% tested because of symptoms of an STI. Of note, 20% were diagnosed after presenting with symptoms related to HIV or AIDS (excluding symptoms of acute HIV). This is higher than 2021, when 12% were diagnosed for this reason, and consistent with other data indicating that more people in 2022 were diagnosed late in infection compared to 2021 (Figure 4-2). People diagnosed because of symptoms of more advanced HIV/AIDS represent a failure of the public health and medical systems to diagnose people with HIV before they become ill.

Public Health Interventions that Support this Pillar

The WA DOH and PHSKC fund HIV testing, primarily for people at higher risk for HIV infection. This testing occurs at the PHSKC Sexual Health Clinic and other public health clinics, through several community-based organizations, and in the King County Jail. Figure 4-6 shows trends in the number of HIV tests performed using public health funds between 2013 and 2022, overall and for MSM. The COVID-19 pandemic limited testing in 2020, and although the volume of testing has increased greatly since then, it was still slightly lower in 2022 than it had been prior to the pandemic.

HIV test positivity is the percentage of tests that are positive among all tests performed. The proportion of people who tested positive for HIV among those tested at publicly funded sites is presented in Figure 4-7. Between 2013 and 2019, HIV test positivity among tests performed among MSM through publicly funded testing declined from 1.1% to 0.4%, a 62% reduction. In 2020, test positivity among MSM increased, likely because

Table 4-4. Reason for HIV Testing among People Diagnosed with HIV, King County Partner Services Data, 2022*

	N	%
Individual initiated regular or risk-based testing, including plasma and blood donations	32	32%
Symptoms of HIV/AIDS	20	20%
Symptoms of sexually transmitted infection (STI) or STI partner notification[B]	17	17%
Medical provider-initiated testing[A]	8	8%
PrEP screening	8	8%
HIV partner notification[B]	7	7%
Symptoms of acute HIV infection	6	6%
Prenatal testing	3	3%
Total	101	100%

* Based on interviews with 101 (55%) of 183 persons with newly diagnosed HIV infection.
[A]Routine testing or testing occurring in the absence of symptoms attributable to HIV.
[B]Partner notification includes both partners notified by Public Health – Seattle & King County staff and people who tested after a partner notified them that they had tested positive for HIV or an STI.

FIGURE 4-5. HIV DIAGNOSIS FACILITIES, KING COUNTY, WA, 2021-2022

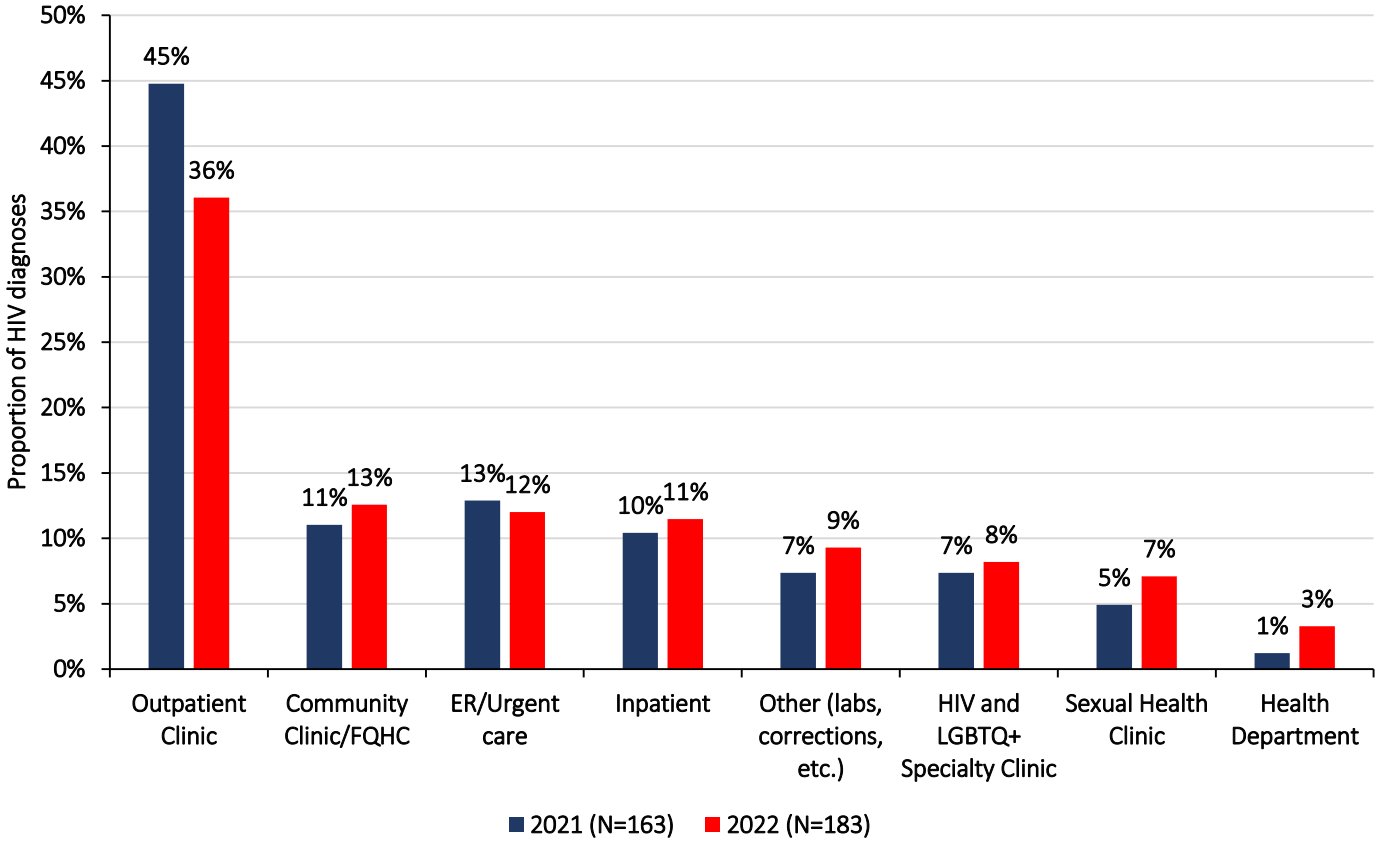


FIGURE 4-6. PUBLICLY-FUNDED HIV TESTS OVERALL AND AMONG MEN WHO HAVE SEX WITH MEN (MSM), KING COUNTY, WA, 2013-2022

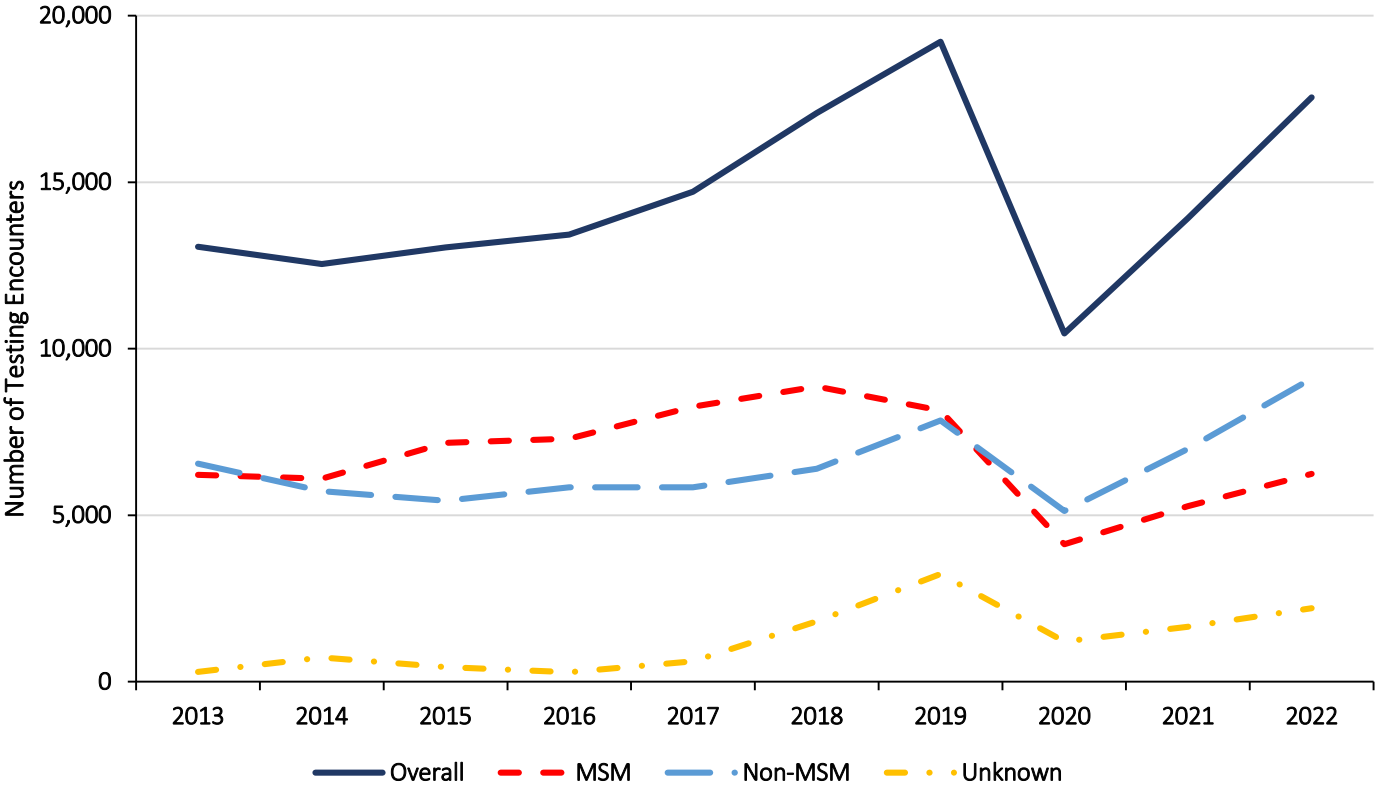
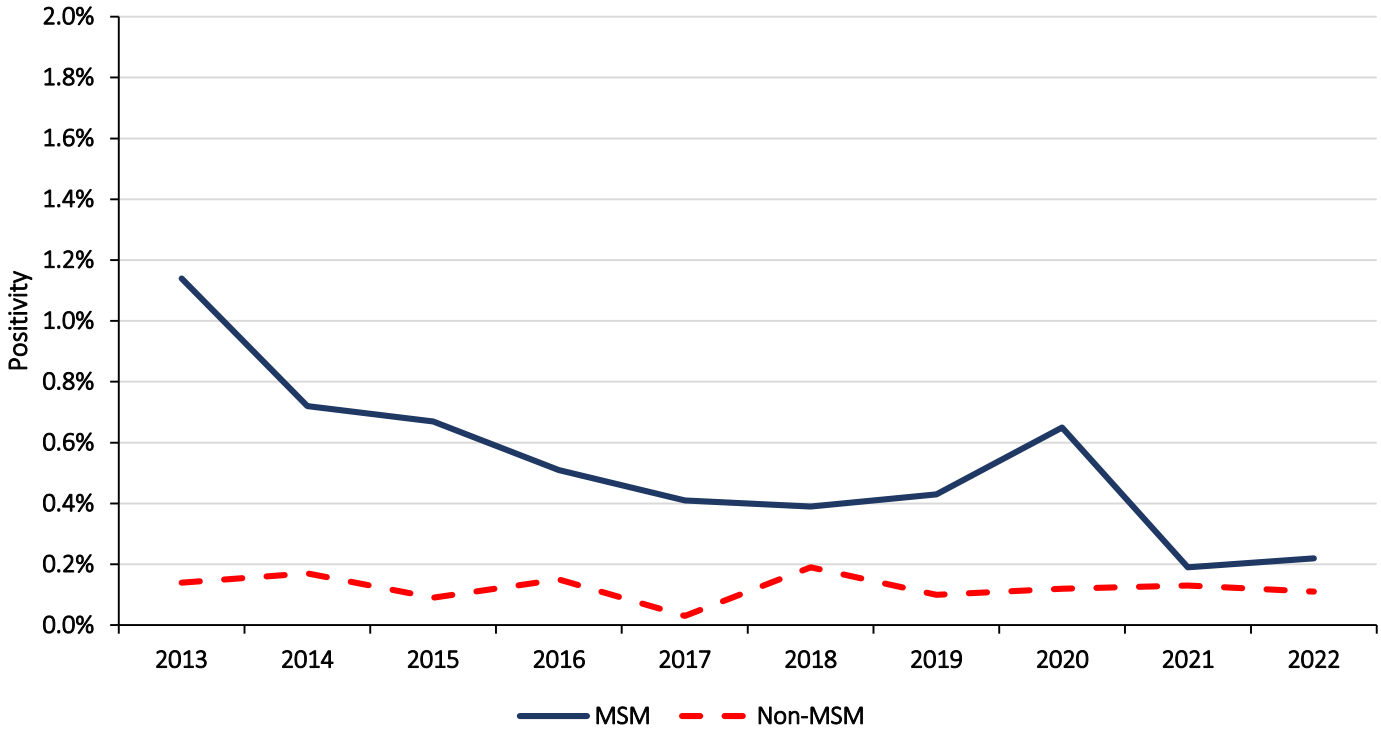


FIGURE 4-7. HIV POSITIVITY RATE FOR MEN WHO HAVE SEX WITH MEN (MSM) AND NON-MSM AT PUBLICLY-FUNDED TESTING SITES, KING COUNTY, WA, 2013-2022



routine HIV testing – including testing among persons on PrEP - declined with the COVID-19 pandemic and more tests were performed in persons at higher risk for HIV. HIV test positivity declined again in 2021. HIV test positivity among non-MSM increased in 2018 concurrent with the outbreak of HIV among PWID, declined in 2019, and has since remained low.

Summary

HIV testing in King County has been extremely successful, reflecting the combined efforts of medical providers, community-based organizations, communities affected by HIV, WA DOH, and PHSKC. As of 2022, an estimated 97% of all people living with HIV had been diagnosed with HIV. Among MSM diagnosed with HIV in 2022, about half had tested HIV-negative in the prior two years and only 15% reported never having tested for HIV previously. Despite these successes, the ITI increased and nearly 19% of people diagnosed with HIV had an AIDS diagnosis at the same time or within 12 months of their HIV diagnosis, with the greatest risk of late diagnosis seen among foreign-born people with presumed heterosexual sexual contact. These data highlight the need for expanded testing in these populations. The COVID-19 pandemic resulted in decreased HIV testing in 2020 and 2021. The extent to which that decrease may have led to an increase in HIV diagnoses in 2022 as the population resumed its prior pattern of testing is uncertain.

Ending the HIV Epidemic Pillar 2: Treat

KEY POINTS

Among people newly diagnosed with HIV in 2022, 85% linked to care within 1 month and 70% were virally suppressed within 4 months of diagnosis.

Among all people with diagnosed HIV in King County 85% were virally suppressed at the end of 2022.

Racial disparities in viral suppression persist, as the percent of individuals who were virally suppressed was lowest among Black people living with HIV who were born in the US (79%). However, viral suppression in this population has increased over the past three years, demonstrating progress towards this goal.

The lowest levels of viral suppression occur among persons who use injection drugs (71%) and those who are homeless (72%). Among PLWH who were out-of-care or virally unsuppressed in 2022, an estimated 17% were living homeless or unstably housed, and 21% were identified as people who inject drugs at the time of HIV diagnosis.

TABLE 5-1. KING COUNTY PROGRESS TOWARDS HIV TREATMENT GOALS

GOALS AND EVALUATION METRICS	2019	2022	2025 Goal
Linked to care in 1 month	90%	85%	≥95%
In HIV Care	89%	91%	≥95%
Viral Suppression	85%	85%	≥95%
Disparities in Viral Suppression by Race/Ethnicity	AIAN: 80% Asian: 89% FB Black: 86% USB Black: 77% Latinx: 85% NHPI: 82% White: 87%	AIAN: 85% Asian: 88% FB Black: 89% USB Black: 79% Latinx: 86% NHPI: 82% White: 86%	<5% Difference Between Groups and Overall Rate
Viral suppression within 4 months of diagnosis	69%	70%	≥90%

2019 is the first year for the EHE initiative. AIAN = American Indian/Alaska Native; FB = Foreign-born; USB = US-born; NHPI = Native Hawaiian or other Pacific Islander. Note: The goal for disparity-related indicators is for no difference between each racial/ethnic group and the estimate for the entire population for each indicator. This is defined as having all racial/ethnicity-specific estimates within 5% of the overall estimate. Detailed definitions for metrics can be found in the Technical Notes to the Dashboard on page 5.

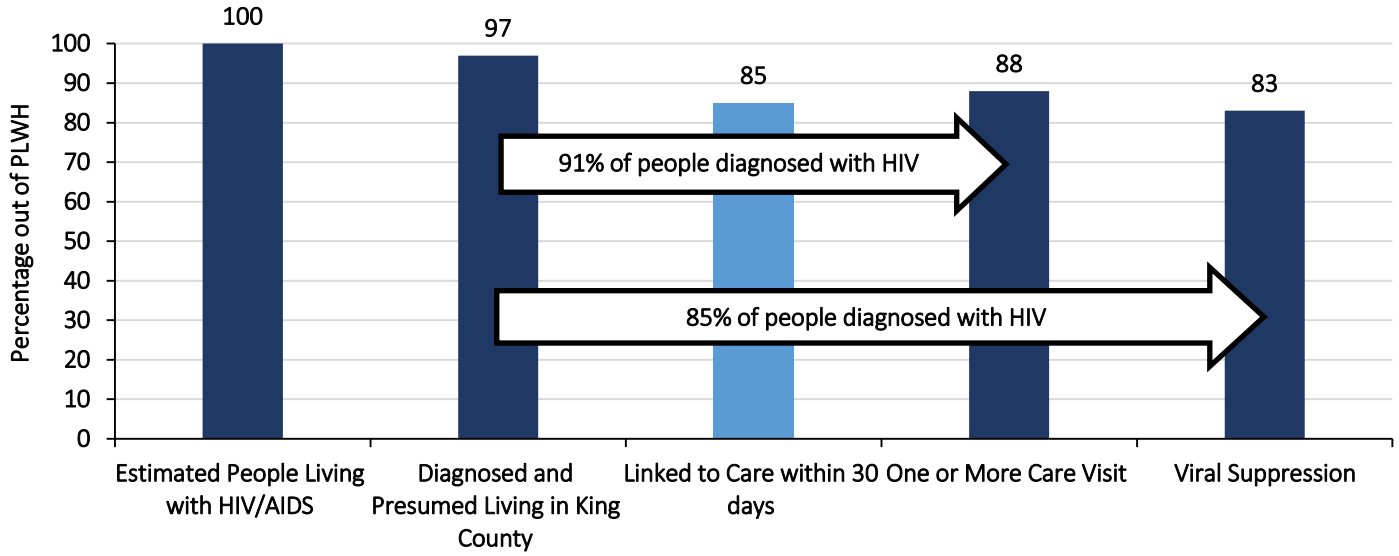
Background

The primary goal of the EHE initiative is to reduce new HIV diagnoses by 75% by 2025 and by 90% by 2030. A key aspect of achieving the EHE goals is ensuring that all PLWH in King County have access to medical care, achieve viral suppression as soon as possible after diagnosis, and remain virally suppressed over time. Achieving and sustaining viral suppression benefits an individual's health and prevents HIV transmission. King County has four specific goals related to HIV care and treatment (e.g., the HIV care continuum) which are presented in **Table 5-1** and discussed in detail below.

HIV Care Continuum & Linkage to Care

The HIV care continuum for King County in 2022 is presented in **Figure 5-1**. Of an estimated 7,446 PLWH, an estimated 97% have been diagnosed and know their HIV status. Among those diagnosed with HIV, 91% had one or more care visits in 2022, and 85% were virally suppressed. After a person is newly diagnosed with HIV, public health, medical providers, other clinical staff, and community partners work to ensure that each person has access to HIV medical care as soon as possible. **Figure 5-2** shows data on linkage to care within 1 month from 2017 to 2022. In 2022, 85% of newly diagnosed individuals were linked to care within one month of diagnosis. This is lower than both the 2025 goal (95%) and the 2019 measure (90%) and may reflect the fact that new HIV diagnoses in King County are increasingly concentrated in populations facing complex barriers to care (e.g., homelessness, substance use, poverty).

FIGURE 5-1. HIV CARE CONTINUUM, KING COUNTY, WA, 2022



	Estimated People Living with HIV/AIDS[A]	Diagnosed and Presumed Living in King County[B]	Linked to Care in 2022[C]	One or More Care Visit[D]	Viral Suppression[E]
Number of People	7,446	7,240	156/183	6,571	6,187

[A] Percent undiagnosed was calculated as 3% for King County, based on a publicly available R back calculation package (https://github.com/hivbackcalc/package1.0/wiki). Our estimate based on this program is 2.7%, which we round to 3%. Estimated people living with HIV/AIDS is calculated by dividing "diagnosed and presumed living in King County" residents by 0.9723.

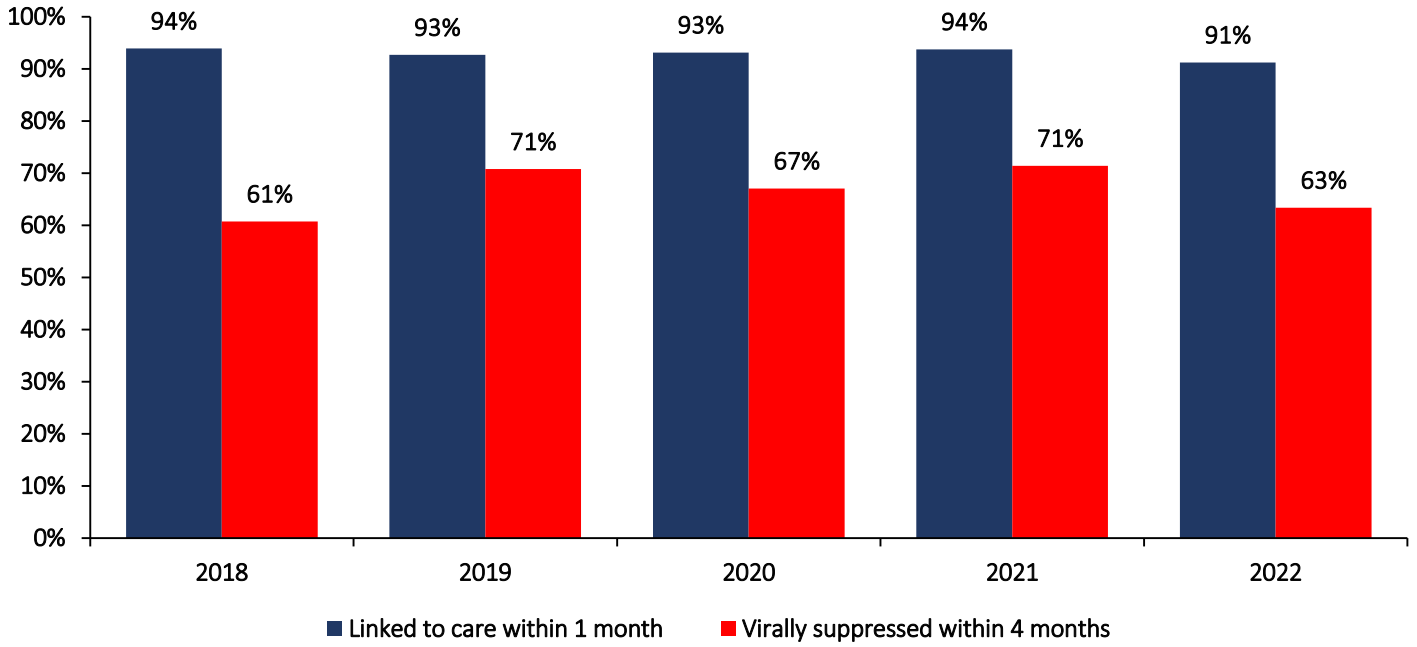
[B] People diagnosed with HIV and presumed living in King County at the end of 2022. Individuals with no contact for ten or more years were presumed to have relocated or died and were excluded. Others with unconfirmed relocations (e.g., identified by online Internet database searches, but not confirmed by the new jurisdiction or another secondary source) and no laboratory results reported in 18 months were also excluded (N = 62 probable relocations excluded).

[C] Linked to care in 2022 is not a subset of earlier data (hence different color in the graph) and is based on the percent diagnosed in 2022 with a CD4 or viral load test within 30 days of diagnosis. The percent linked in the figure, 85%, is the percent of diagnosed cases in 2022 who linked within 30 days of diagnosis: (156/183).

[D] One or more care visit was based on one or more reported laboratory result (CD4, viral load, genotypic resistance assay).

[E] Viral suppression is defined as the most recent viral load test result <200 copies.

FIGURE 5-2. PERCENTAGES OF PEOPLE DIAGNOSED WITH HIV LINKED TO CARE WITHIN 1 MONTH AND VIRALLY SUPPRESSED WITHIN 4 MONTHS, KING COUNTY, WA, 2018-2022



Viral Suppression

VIRAL SUPPRESSION AFTER A NEW HIV DIAGNOSIS

A key step in successful linkage to HIV treatment is the initiation of antiretroviral medication, ideally as soon as possible. The rapidity with which people newly diagnosed with HIV achieve viral suppression reflects the combined functioning of public health and clinical infrastructure in King County as well as the efficacy of modern HIV treatment regimens. In 2022, 70% of people with newly diagnosed HIV had documented viral suppression within 4 months after diagnosis. This is substantially lower than the King County 2025 goal (≥95%) and has remained essentially stable since 2019 (**Figure 5-2**). However, other metrics point to ongoing improvement in viral suppression after diagnosis. In 2022, the median time to viral suppression after diagnosis was 57 days [interquartile range (IQR): 38 to 98 days]. The median time to viral suppression after an HIV diagnosis decreased substantially from 2013 to 2022, and the interquartile range narrowed, meaning that more people were achieving viral suppression in a shorter period of time (**Figure 5-3**).

VIRAL SUPPRESSION AND RETENTION IN CARE

Of all PLWH in King County, 85% had a suppressed viral load (<200 copies/mL) at their last viral load test. **Table 5-2** summarizes viral suppression and care among PLWH in King County by gender, age, race/ethnicity, nativity, HIV transmission risk category, and other factors. Among the following key populations, <80% had a suppressed viral load: U.S.-born Black people, PWID, MSM-PWID, people who use methamphetamine, and people who were homeless or unstably housed. The vast majority (91%) of people with diagnosed HIV received any care in 2022, defined by having at least one HIV-associated laboratory test result (CD4 count or viral load) reported to the health department. Approximately one-half (52%) of people were retained in care as it is defined by the Health Resources and Services Administration (i.e., at least two visits [defined by laboratory testing for HIV] at least three months apart in the calendar year). The wide disparities between the relative high proportion of PLWH who are virally suppressed and the much lower estimate of the number retained in care suggests that the current definition of retention in care is not a useful measure for evaluating the success of HIV treatment at the population level.

RACIAL/ETHNIC DISPARITIES IN VIRAL SUPPRESSION AND RECEIPT OF CARE

The proportion of PLWH who were virally suppressed was lowest among Black PLWH who were born in the US (79%) and highest among Black foreign-born individuals (89%) (**Table 5-2**). There was a similar pattern in the proportion of PLWH who received any care in 2022 (range: 89%-100%). While viral suppression has increased somewhat among U.S.-born Black PLWH and

TABLE 5-2. HIV CARE METRICS, INCLUDING LINKAGE TO CARE, BEING IN MEDICAL CARE, AND VIRAL SUPPRESSION FOR SELECTED GROUPS LIVING WITH DIAGNOSED HIV, KING COUNTY, WA, 2022

		Percent of People with New HIV Diagnoses in King County in 2022 who:			Percent of People with Diagnosed HIV in King County in 2022 who:
	People with Diagnosed HIV, N	New HIV Diagnoses,[A] N	Linked to Care within One Month of Diagnosis	Had One or More Care Visits	Had a Recent Suppressed Viral Load (<200 copies)
Total	7,240	183	85%	91%	85%
Gender[B]					
Cisgender Men	6,164	153	85%	91%	86%
Cisgender Women	969	24	83%	90%	83%
Transgender People	107	6	100%	91%	80%
Age (years)					
13-24	121	28	93%	93%	83%
25-34	978	65	85%	88%	80%
35-44	1,569	50	90%	89%	81%
45-54	1,774	26	73%	90%	85%
55+	2,798	14	79%	93%	90%
Race or Ethnicity[C, D]					
American Indian/Alaskan Native	260	27	85%	92%	85%
Asian	615	25	80%	91%	88%
Black	1,939	52	88%	90%	83%
U.S.-born	1,145	32	78%	88%	79%
Foreign-born	794	21	100%	92%	89%
Latinx (all races)	1,203	45	89%	91%	86%
U.S.-born	553	20	85%	91%	84%
Foreign-born	650	25	92%	92%	88%
Native Hawaiian or other Pacific Islander	105	23	83%	90%	82%
White	4,820	89	82%	91%	86%
Transmission Risk[E]					
MSM	4,726	103	90%	92%	88%
PWID	254	6	67%	84%	71%
MSM-PWID	621	11	82%	88%	76%
Heterosexual Sexual Contact	796	24	88%	91%	85%
Other Transmission Risks	742	33	70%	88%	83%
Other Factors					
Methamphetamine Use[F]	435	26	85%	89%	72%
Homeless or Unstably Housed	631	28	75%	90%	72%
Race or Ethnicity among MSM (excluding PWID-MSM)[C]					
American Indian/Alaskan Native	165	11	100%	93%	90%
Asian	415	13	92%	92%	93%
Black	804	19	89%	89%	82%
Latinx	877	34	88%	92%	88%
Native Hawaiian or other Pacific Islander	70	9	100%	90%	90%
White	3590	57	88%	93%	89%

Abbreviations: VL = viral load; MSM = men who have sex with men; PWID = people who inject drugs;

[A] Due to small numbers (i.e., fewer than 6 new diagnoses in 2022), data for newly diagnosed Native Hawaiian and other Pacific Islander people, and PWID (excluding MSM-PWID) were combined over a 5-year period. Therefore, for these specified groups, the number of new diagnoses is the total number of diagnoses between 2018-2022.

[B] Transgender people are those for whom we have data reflecting transgender gender identity, and includes transgender women, transgender men, and people who report another gender identity. All other people are categorized by their sex assigned at birth, and presumptively labeled as cisgender women and cisgender men. For people diagnosed with HIV, the transgender group includes 90% transgender women, 6% transgender men and 5% people who report another gender identity. For new HIV diagnoses, the transgender group includes 83% transgender women and 17% people who report another gender identity.

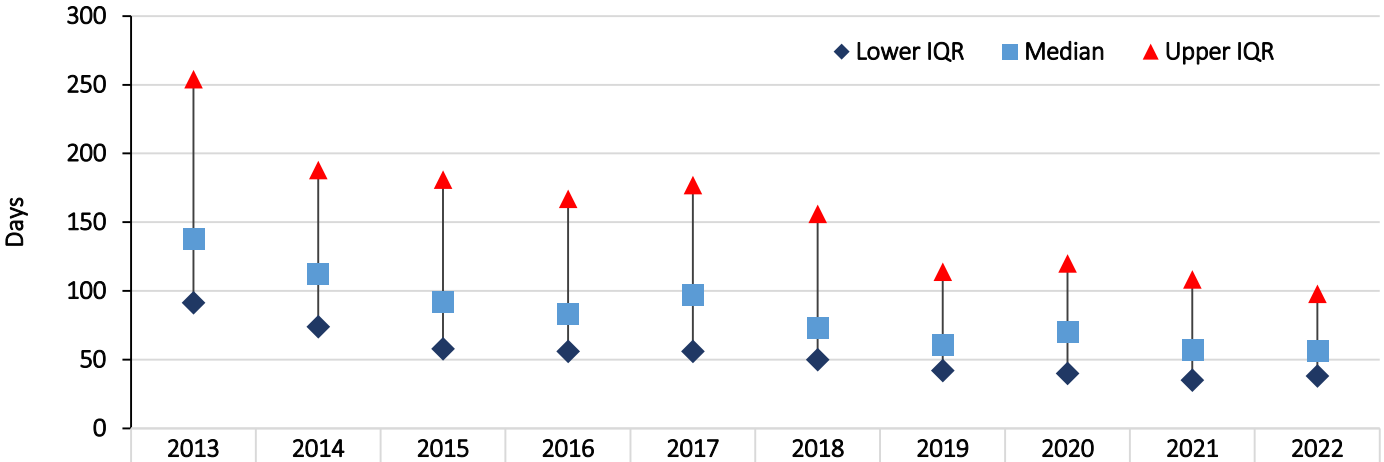
[C] Race/ethnicity categories are not mutually exclusive and people reporting multiple racial and ethnic identities are represented in each group.

[D] U.S.-born includes individuals where the country of birth is unknown.

[E] All transmission risk categories are mutually exclusive. MSM includes cisgender and transgender men who report sex with men. Other transmission risks include pediatric, transfusion, and no identifiable risk.

[F] Information on methamphetamine use has been collected since 2009 and reflects reported use at or since diagnosis to present.

FIGURE 5-3. MEDIAN TIME TO VIRAL SUPPRESSION IN DAYS (INTERQUARTILE RANGE, IQR) FOLLOWING AN HIV DIAGNOSIS, KING COUNTY, WA, 2013-2022



	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Lower IQR	91.5	74	58	56	56	50	42	40	35	38
Median	138	112.5	92	83	97	73	61	70.5	57	56.5
Upper IQR	254	188	181	167	177	156	114	120	108.5	98

disparities have decreased, the persistent disparity shows that we need ongoing concerted efforts to ensure that systems of HIV care counteract and mitigate the impact of social and structural factors that drive the observed disparities.

Out-of-Care and Unsuppressed PLWH

Table 5-3 summarizes the characteristics of PLWH in King County who were either out of care or unsuppressed. PLWH who are out of care or virally unsuppressed often face complex barriers to care, including poverty, homelessness or unstable housing, substance use disorders, and mental health disorders. PHSKC collects some data on these factors; however, information is often limited to what was available at the time of HIV diagnosis through case reporting, partner services interviews, and medical records review. Among PLWH who are out of care or virally unsuppressed, an estimated 17% are homeless or unstably housed, 21% have a history of injecting drugs, and 11% have a history of methamphetamine use.

UPDATED INFORMATION ON PEOPLE WHO WERE NOT VIRALLY SUPPRESSED IN LAST YEAR'S REPORT

Each year, we report HIV care continuum outcomes among PLWH in King County based on data accumulated through the end of the calendar year of focus. In each subsequent year after the surveillance report, PHSKC gains additional information about the status of people who appeared to be out of care (and presumed virally unsuppressed) during the previous focus year. Many people who appeared to be out of care are later found to have moved out of the area.

For that reason, we provide a revised estimate of the prior year's care continuum in each surveillance report to update the community and aid our interpretation of the current year's data. Table 5-4 shows the status of people defined as being out of care or virally unsuppressed at the end of 2021 updated to reflect data through mid-2023. In summary, of the 945 people presumed to be out of care or virally unsuppressed at the end of 2021 (i.e., reported in last year's surveillance report), 14% were confirmed to have moved away, 30% were virally suppressed at the end of 2022, 3% died in 2021 or 2022, and 53% were still out of care or virally unsuppressed at the end of 2022. Revised estimates of viral suppression are typically ~2% higher than initial estimates. In 2021, approximately 89% of PLWH were virally suppressed.

What PHSKC is Doing to Improve HIV Viral Suppression

PHSKC has several ongoing efforts to identify PLWH who are out of care or not virally suppressed in order to re-engage them in HIV care and treatment. These include

TABLE 5-3. CHARACTERISTICS OF PEOPLE LIVING WITH DIAGNOSED HIV WHO ARE OUT OF CARE (OOC) OR NOT VIRALLY SUPPRESSED, KING COUNTY, WA, 2022

	Living with Diagnosed HIV in King County	Virally Unsuppressed	Unsuppressed due to Being Out of Care	Unsuppressed due to Viral Load ≥200	Total Virally Unsuppressed
Group	Col %	Col %	Row %	Row %	Row %
Total			9%	6%	15%
Gender					
Cisgender Men	85%	83%	8%	6%	14%
Cisgender Women	13%	15%	9%	8%	17%
Transgender People	1%	2%	8%	11%	20%
Race or Ethnicity[A, B]					
American Indian/Alaska Native	4%	4%	8%	7%	15%
Asian	8%	7%	8%	4%	12%
Black	27%	32%	10%	7%	17%
U.S.-born	16%	23%	12%	10%	21%
Foreign-born	11%	9%	7%	4%	11%
Latinx	17%	16%	7%	6%	14%
U.S.-born	8%	7%	8%	6%	14%
Foreign-born	9%	9%	7%	7%	14%
Native Hawaiian or other Pacific Islander	1%	2%	10%	9%	18%
White	67%	63%	8%	6%	14%
Age (years)					
13-24	2%	2%	6%	12%	17%
25-34	14%	18%	12%	8%	20%
35-44	22%	28%	10%	8%	19%
45-54	25%	25%	9%	6%	15%
55+	39%	27%	7%	4%	10%
Transmission Risk[C]					
MSM	65%	53%	7%	4%	12%
PWID	4%	7%	16%	13%	29%
MSM-PWID	9%	14%	10%	14%	24%
Heterosexual Sexual Contact	11%	11%	8%	7%	15%
Other Transmission Risks	10%	12%	12%	6%	18%
Other Factors					
Methamphetamine Use[D]	6%	11%	12%	16%	27%
Current Region of Residence					
Seattle	52%	44%	8%	5%	12%
South King County	28%	31%	10%	6%	16%
East King County	8%	7%	8%	5%	13%
North King County	2%	1%	4%	1%	5%
Homeless or Unstably Housed[E]	9%	17%	10%	18%	28%

Abbreviations: VL = viral load; MSM = men who have sex with men; PWID = people who inject drugs.

[A] Race/ethnicity categories are not mutually exclusive and people reporting multiple racial and ethnic identities are represented in each group.

[B] U.S.-born includes individuals where the country of birth is unknown.

[C.] All transmission risk categories are mutually exclusive. MSM includes cisgender and transgender men who report sex with men. Other transmission risks include pediatric, transfusion, and no identifiable risk.

[D] Information on methamphetamine used has been collected since 2009. Methamphetamine use is calculated use of methamphetamine anytime from diagnosis to the present.

[E] Housing status was determined using an individual's most current address. Homelessness or unstable housing status was based on matches with predetermined list of shelters and services that serve the homeless (see **Technical Note 4**).

TABLE 5-4. INITIAL AND UPDATED ESTIMATES OF THE PERCENTAGE OF PEOPLE DIAGNOSED WITH HIV WHO WERE OUT OF CARE (OOC) OR VIRALLY UNSUPPRESSED, AND OUTCOMES IN THE SUBSEQUENT YEAR, KING COUNTY, WA, 2017-2021

Year	Initial Estimate OOC/ Virally Unsuppressed (% of all People with Diagnosed HIV)	Found to Have Moved Away (% of OOC/Virally Unsuppressed)	Updated Estimate of OOC/Virally Unsuppressed (% of all People with Diagnosed HIV)	Status at the End of Subsequent Year		
				Deceased	Virally Suppressed	Not Virally Suppressed
					(% of Revised Estimate)	
2017	1,046 (15%)	142 (14%)	909 (14%)	33 (4%)	427 (47%)	449 (49%)
2018	1,122 (16%)	241 (21%)	879 (13%)	20 (2%)	397 (45%)	462 (53%)
2019	1,052 (15%)	207 (20%)	843 (12%)	32 (4%)	367 (45%)	444 (55%)
2020	958 (14%)	151 (16%)	805 (12%)	19 (2%)	313 (39%)	473 (59%)
2021	945 (13%)	128 (14%)	813 (11%)	24 (3%)	287 (35%)	502 (62%)

data to care efforts, which use public health data to identify people who appear to be out of care or virally unsuppressed based on laboratory reporting and/or at the time of an emergency room visit, jail booking, or syphilis diagnosis. Public health outreach staff work with individual PLWH and other support agencies to support re-engagement in HIV care. For people who are not well-engaged in conventional HIV medical care, public health staff work with low-barrier clinic staff to engage people with an alternative model of care and with a newly formed mobile team to reach people outside of the clinic. These activities are described in more detail on the King County EHE website under "Low Barrier Services."

Summary

Most PLWH in King County rapidly link to care following HIV diagnosis and 85% are virally suppressed. This level of suppression is higher than recent estimates from other urban areas in the western US (61-80%; Los Angeles County, San Francisco and Portland) and vastly higher than the 2021 national estimates of viral suppression (58%).[6] Despite this success, King County has made relatively little progress increasing this number over the last three years. Intersecting social and structural factors continue drive disparities in HIV-related care, with U.S.-born Black people, people who were homeless or unstably housed, PWID, and people who use methamphetamine having the lowest rate of viral suppression. Through EHE, PHSKC is continuing to adapt and innovate approaches to HIV care to better serve people facing complex barriers to care.

TABLE 5-5. KEY METRICS OF HIV CARE BY KING COUNTY CITIES. 2022

City	People Living with Diagnosed HIV, N	Out of Care or Virally Unsuppressed, N	Virally Unsuppressed, %	Out of Care, %	Population Living in Poverty*, %
Seattle	4,564	653	8%	6%	10.0%
Kent	364	65	7%	10%	11.3%
Federal Way	322	48	7%	8%	11.3%
Renton	297	52	10%	8%	7.9%
Auburn	223	47	10%	11%	9.6%
Bellevue	188	19	4%	6%	6.9%
Burien	166	26	4%	11%	11.7%
Tukwilla	150	19	7%	6%	12.4%
Seatac	125	19	4%	11%	10.7%
Shoreline	125	8	5%	2%	8.4%
Kirkland	111	22	14%	6%	6.8%
Des Moines	103	19	9%	10%	11.3%
Redmond	92	11	4%	8%	6.0%
Sammamish	23	4	4%	13%	3.1%
Other Cities or Unincorpo-rated	387	41	5%	6%	--

Data for PLWH by city in King Co. that had a population size above 50,000 or more than 100 PLWH in 2022

*Population estimate and percent of population living in poverty from U.S. Census data.

Ending the HIV Epidemic Pillar 3: Prevent

KEY POINTS

Approximately one-half (51%) of MSM are currently on PrEP for HIV prevention.

Nearly two-thirds (62%) of MSM at higher risk of HIV are currently using PrEP.

In 2022, the PHSKC syringe services program sites distributed over 2.5 million syringes and started a pipe distribution program.

In 2022, PHSKC distributed 941,648 external condoms, 2,700 internal condoms, and 56,500 lubricant packs in King County.

Introduction

The prevention pillar of the EHE initiative focuses on two highly effective, evidence-based HIV prevention approaches: PrEP and syringe services programs (SSP). The first approach, PrEP, consists of taking a medication to prevent HIV acquisition, and the EHE initiative aims to increase the use of PrEP among populations at elevated risk for HIV. In King County, efforts to expand PrEP use have focused on men who have sex with men, transgender people who have sex with men, and people who inject drugs with additional indications for PrEP (e.g., women who exchange sex). The second approach, SSPs, seeks to provide harm reduction services to

TABLE 6-1. KING COUNTY PROGRESS TOWARDS HIV PREVENTION GOALS

Goals and Evaluation Metrics	2019	2022	2025 GOAL
PrEP use, higher-risk	47%	62%	≥70%
Disparities in PrEP use among higher-risk MSM by race/ethnicity	--	AIAN: 47% Asian: 63% Black: 55% Latinx: 64% NHPI: 66% White: 62%	<5% difference between groups and overall rate
Syringe coverage	283/PWID	—	≥365/PWID

2019 is the first year for the EHE initiative. AIAN = American Indian/ Alaska Native; NHPI = Native Hawaiian or other Pacific Islander; MSM = men who have sex with men; PWID = people who inject drugs.
Note: The goal for disparity-related indicators is for no difference between each racial/ethnic group and the estimate for the entire population for each indicator. This is defined as having all racial/ethnicity-specific estimates within 5% of the overall estimate. Detailed definitions for metrics can be found in the Technical Notes to the Dashboard on page 5.

reduce the risk of infectious diseases and other outcomes, including overdose, among people who use drugs. Services offered at SSPs typically include syringe access, naloxone (overdose reversal medication) distribution and training, treatment for substance use disorders, HIV and hepatitis C testing and linkage to care, and wound care. The goal of EHE is to increase access to, and the quality of, SSPs among people who use drugs. A third HIV prevention approach, condom distribution, is not included in EHE but remains an important component of prevention efforts for both HIV and other STIs. Here we highlight progress that King County has made toward increasing access to, and use of, each of these interventions to reduce the risk of HIV.

Pre-Exposure Prophylaxis

Background

People who are at risk for HIV can take a medication to reduce their risk of acquiring HIV. This prevention strategy, PrEP, usually involves taking a single pill daily. In addition, in 2021, an injectable version of PrEP received approval by the U.S. Food and Drug Administration (FDA). Multiple clinical trials showed that PrEP medications are safe and effective at reducing the risk of acquiring HIV through sexual behavior or injection drug use. When people take PrEP consistently, their risk of HIV is decreased by at least 90%.

PHSKC and WA DOH PrEP implementation guidelines recommend PrEP initiation for:

- MSM or transgender people who have sex with men if the person has any of the following:
    - Diagnosis of gonorrhea or early syphilis in the past 12 months
    - Methamphetamine use in the past 12 months
    - ≥10 sex partners in the past 12 months
    - History of providing sex in exchange for money or drugs in the past 12 months
- People in ongoing sexual partnerships with a person who is living with HIV and who is not on antiretroviral therapy (ART), is on ART but is not virologically suppressed, or who is within 6 months of initiating ART.

PHSKC also recommends that medical providers discuss PrEP with all MSM, PWID, and women who exchange sex for money or drugs, and that providers prescribe PrEP to patients seeking such a prescription.

Monitoring PrEP Use

PHSKC uses multiple methods to monitor PrEP use among MSM, transgender, and non-binary people who report another gender have sex with men in King County. Two surveys assess current PrEP use in these key populations: the annual Pride Survey and the National HIV Behavioral Surveillance (NHBS) surveys. Additional data on PrEP use among MSM, transgender, and non-binary people at higher risk for HIV come from data collected from STI case reports, public health interviews following an STI diagnosis (referred to as partner services interviews) and patient data from the Harborview Sexual Health Clinic. These surveys and data sources are described in more detail in the **Technical Notes**.

When possible, PrEP outcomes are presented separately for MSM who do and do not meet criteria for being at "higher risk" for HIV (**Figure 6-1**). We acknowledge that vulnerability to HIV exposure or "risk" is driven by a multitude of systemic-, community-, interpersonal- and individual-level factors. No individual is inherently "high risk" for HIV; however, local analyses of data from MSM clients at the PHSKC Sexual Health Clinic indicate certain factors associated with HIV seroconversion. These findings have been used by PHSKC to inform the PrEP implementation guidelines presented above and those who might benefit most from PrEP.

PrEP Awareness

The annual Pride Survey has collected data on PrEP awareness among MSM since PrEP was licensed for use in the US in 2012. **Figure 6-2** illustrates how awareness of PrEP grew rapidly from 2013 to 2015 and is now nearly universal among MSM at both higher and lower risk of HIV.

PrEP Use

PrEP Use among MSM. PHSKC has a goal of having 70% of MSM at higher risk for HIV on PrEP by 2025. Over the past decade, PrEP use has rapidly expanded among King County MSM (**Figure 6-2**). In **Table 6-2** we summarize reported PrEP use among MSM across several data sources: NHBS participants, PHSKC Sexual Health Clinic patients, and Pride Survey participants. We estimate that 62% of MSM at higher risk for HIV are currently using PrEP, and 51% of all MSM are on PrEP. We observed moderate differences in current PrEP use by race/ethnicity among MSM at higher risk for HIV: 55% of Black MSM at higher risk, 64% of Latinx MSM at higher risk, and 62% of White MSM at higher risk.

PrEP use among the MSM who are potentially at the highest risk for HIV can also be estimated using data collected when people are diagnosed with an STI (partner services interview data). By definition, MSM who do not have HIV who are diagnosed with gonorrhea or syphilis meet the PHSKC criteria for being at higher risk for HIV (**Figure 6-1**). Among MSM with a recent diagnosis of gonorrhea or syphilis, 78% reported currently being on PrEP (**Figure 6-3**). This PrEP use estimate was higher than estimates in **Table 6-2** due to the overrepresentation of MSM who receive quarterly STI screening as part of being on PrEP and consequently are more like to be diagnosed with asymptomatic STIs. Because urethral gonorrhea is usually symptomatic (i.e., people seek testing and treatment), it provides an estimate of PrEP use that is less likely to be influenced by frequent STI screening routinely done in people on PrEP. Seventy-two percent of MSM diagnosed with urethral gonorrhea in 2022 were on PrEP.

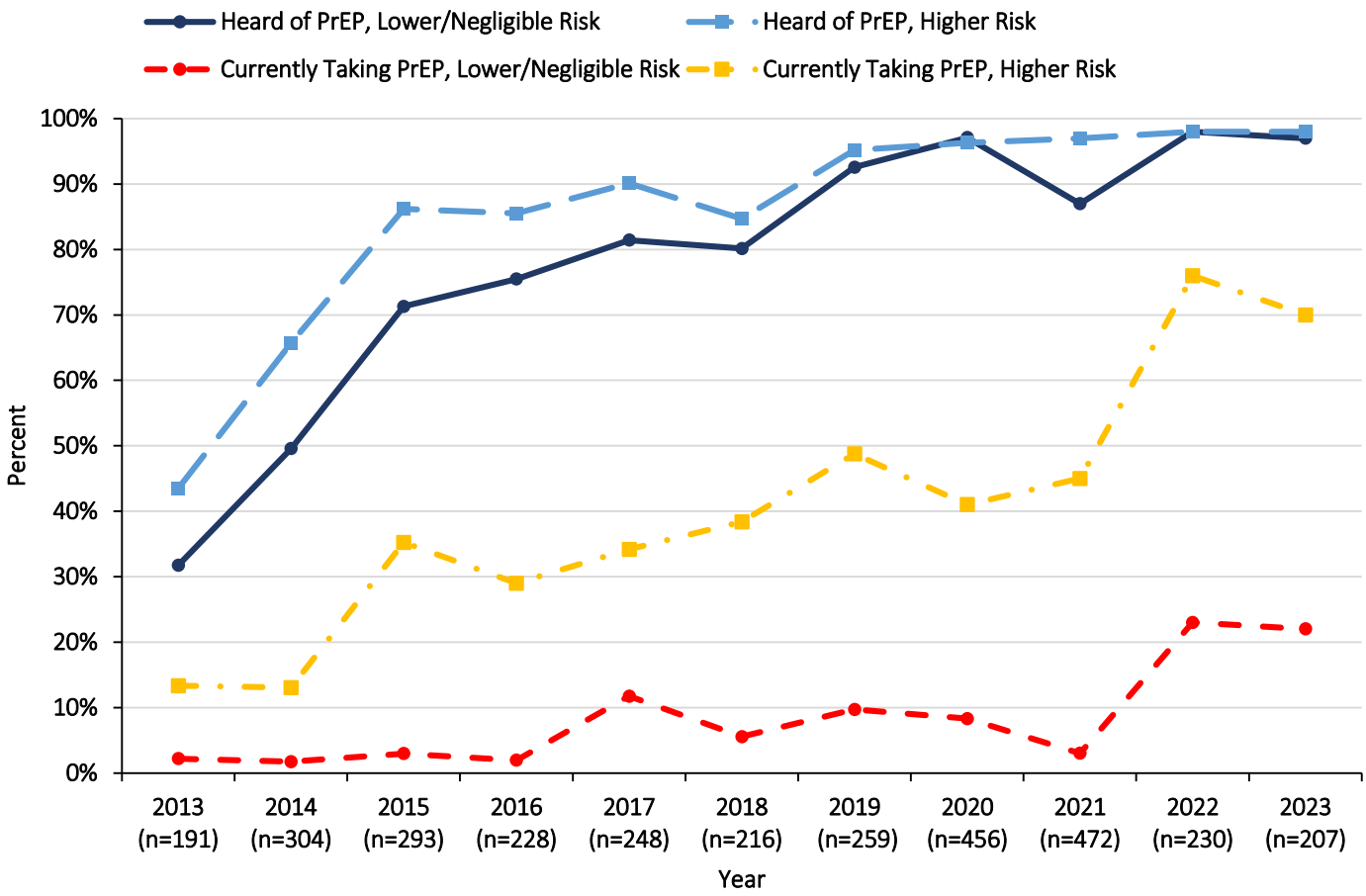
FIGURE 6-1. CRITERIA FOR DEFINING MSM AT HIGHER RISK FOR HIV

- ≥10 sex partners
- Methamphetamine use
- Gonorrhea or syphilis diagnosis
- Condomless receptive anal intercourse

Note: All criteria refer to the past 12 months

Impact of PrEP on Condom Use and Sexual Behaviors among MSM. Among 207 HIV-negative, sexually active MSM who participated in the 2023 Pride Survey, 49% were currently using PrEP. Of these, 67% reported they were more likely to have condomless sex since starting PrEP. Additionally, 54% reported having more sex partners since starting PrEP, 49% reported being more likely to have sex partners that they did not know; 22% reported that their sexual behavior had not changed since starting PrEP.

FIGURE 6-2. PREP AWARENESS AND USE AMONG MSM IN KING COUNTY, SEATTLE AREA PRIDE SURVEY, 2013-2023[A]



[A] Prior to 2015, respondents were asked if they had ever used PrEP.

TABLE 6-2. ESTIMATED PREP USE AMONG MSM, KING COUNTY, WA, 2021-2023

Group*	NHBS-MSM Survey 2021[A]	PHSKC Sexual Health Clinic 2022	Pride Survey 2023[A]	Combined Estimate of MSM Currently on PrEP[B]
American Indian/Alaska Native MSM at higher risk for HIV	0%	59%	50%	47%
Asian MSM at higher risk for HIV	43%	67%	44%	63%
Black MSM, at higher risk for HIV	40%	56%	75%	55%
Latinx MSM, higher risk for HIV	43%	66%	74%	64%
Native Hawaiian or other Pacific Islander MSM at higher risk for HIV	0%	74%	50%	66%
White MSM, at higher risk for HIV	40%	62%	74%	62%
All MSM at higher risk for HIV	40%	63%	70%	62%
All other MSM (i.e., not at higher risk for HIV)	19%	33%	22%	32%
All MSM, any HIV risk level	38%	52%	49%	51%

*Race/ethnicity categories are not mutually exclusive and individuals reporting multiple racial and ethnic identities are represented in each group.
[A]The number of NHBS and Pride respondents who identified as American Indian/Alaska Native, Black, or Native Hawaiian or other Pacific Islander and who were higher risk for HIV was ≤10 in each respective category. Given the small number of respondents, the estimates for these populations may not be representative and should be interpreted with caution.
[B] The percentage for all MSM was calculated based on a weighted average of the NHBS-MSM survey and Pride Survey, which are the data sources most representative of the entire population of MSM. The estimates for MSM at higher risk for HIV also included PHSKC SHC data.

PrEP Use among Transgender and Non-binary/ Genderqueer People Who Have Sex with Men. Data on PrEP use among transgender and non-binary/ genderqueer populations is available in multiple data sources (Table 6-3). Current PrEP use among HIV-negative transgender or non-binary/genderqueer people who reported sex with male partners was 35%. Among those who met criteria for being at higher risk of HIV, over half (51%) were currently using PrEP.

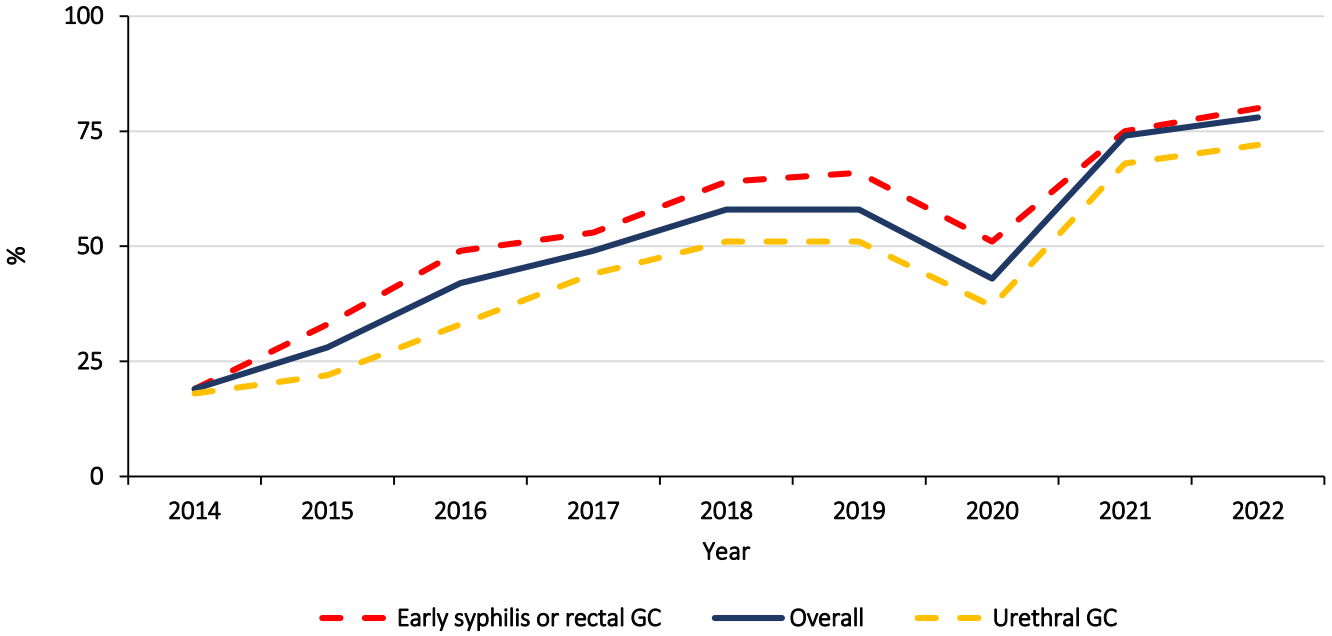
People Who Inject Drugs and Women who Exchange Sex for Money or Drugs. PrEP awareness and use remained very low among local populations of PWID (non-MSM) and women who exchange sex, including women who both exchange sex and inject drugs. Data from the 2021 NHBS survey of PWID showed that only 34% of HIV-negative PWID were aware of PrEP and 1% had used PrEP in the past year. Among the subset of women who reported exchanging sex for money or drugs, 34% had heard of PrEP and none had used PrEP in the last year. Importantly, new HIV diagnoses were uncommon in these populations in 2022. While PrEP may be a useful HIV prevention tool for some PWID and women who exchange sex, these data suggest that for most people in these populations, HIV risk is low and/or other existing HIV prevention strategies are adequate.

PUBLIC HEALTH ACTIVITIES TO PROMOTE ACCESS TO AND USE OF PREP

PHSKC and the WA DOH engage in a spectrum of activities to increase PrEP use among people at higher risk for HIV, including directly providing of PrEP, outreach efforts and PrEP navigation designed to increase the use of PrEP, dissemination of information, and financial assistance to make PrEP more accessible.

PrEP Program in the PHSKC Sexual Health Clinic. The PHSKC Sexual Health Clinic started prescribing PrEP in October 2014. Providers at the Sexual Health Clinic routinely discuss PrEP with all MSM and transgender patients who have sex with men and recommend that individuals initiate PrEP if they meet criteria defined in the 2021 PrEP Implementation Guidelines. The racial and ethnic composition of the population of receiving PrEP in the Sexual Health Clinic in 2022 is shown in Table 6-4. Overall, these estimates are similar to the racial/ethnic composition of the population of MSM diagnosed with HIV in King County in 2022 (Table 3-2).

FIGURE 6-3. CURRENT PREP USE AMONG MSM DIAGNOSED WITH GONORRHEA OR SYPHILIS, KING COUNTY, WA, 2014-2022*



*Data from 2014-2020 is limited to MSM completing a partner services interview. Starting in 2021, data includes all MSM.

Promoting PrEP via STI Partner Services Interviews. Partner services interviews are conducted by PHSKC following a positive test for syphilis or gonorrhea and present an opportunity to provide population-based HIV prevention, including PrEP referrals, to people at higher risk for HIV and STIs. In 2022, 38% of HIV-negative MSM who were contacted for a partner services interview for syphilis or gonorrhea reported not using PrEP at the time of their interview. Of those that were offered a PrEP referral, 63% accepted the referral (Table 6-4).

Community-Based PrEP Programs and PrEP Navigation. The WA DOH supports several community-based programs to promote PrEP use and make PrEP more accessible in King County. The primary intervention is PrEP navigation, which connects current and prospective PrEP clients with PrEP navigators in their community. PrEP navigators counsel clients about PrEP, help clients obtain health insurance and funding for PrEP and associated medical services, and increase continued PrEP use through reminders and ongoing support. PrEP

TABLE 6-3. PREP USE AMONG TRANSGENDER, NON-BINARY, AND GENDERQUEER PEOPLE WHO HAVE SEX WITH MEN, KING COUNTY, WA, 2019-2023

Data Source	Population	Proportion Currently on PrEP
Pride Survey, 2023	Transgender or non-binary/genderqueer; reported sex with cis-gender man, transgender women, and/or nonbinary assigned male at birth (AMAB) sex partners (N=46)	33%
PHSKC Sexual Health Clinic, 2022	Transgender or non-binary/genderqueer; reported sex with men (N=197)	35%
	Transgender or non-binary/genderqueer; reported sex with men; and met clinic criteria for being at higher risk for HIV (N=83)	51%
STI Partner Services Data, 2022	Transgender or non-binary/genderqueer; reported sex with men; diagnosed with gonorrhea or syphilis (N=103)	69% 75% of transgender women 46% of transgender men 68% of non-binary/ genderqueer
NHBS Survey of Transgender Women, 2019-2020	Transgender women (N=100)	16% (past year)
	Transgender women; met criteria for being at higher risk for HIV (N=69)	17% (past year)

TABLE 6-4. PREP SERVICES RECEIVED IN KING COUNTY, WA, 2022

PrEP Services	N or %
Data from PHSKC Sexual Health Clinic	
Patients completing initial intake	
Ever (October 2014 – December 2022)	2,381
2022 only	421
Patients currently receiving PrEP[A,B]	811
MSM	92%
American Indian/Alaska Native	2%
Asian	14%
Black	8%
Latinx	25%
Native Hawaiian or Other Pacific Islander	1%
White	56%
Data from STI Case Reports and Partner Services Interviews in 2022[C]	
HIV-negative MSM diagnosed with syphilis or gonorrhea	2,033
Already using PrEP	1,594 (78%)
HIV-negative MSM with a STI partner services interview	241
Already using PrEP	149 (62%)
Not using PrEP	92 (38%)
Offered a referral to a PrEP provider	46 (50%)
Accepted a PrEP referral	29 (63%)
Community-Based PrEP Programs and PrEP Navigation	
Clients seen for PrEP navigation services	1,199
Clients who filled a PrEP prescription	634 (53%)
Clients who had a medical/lab service	468 (39%)

[A]MSM defined as cisgender men reporting sex with men, including cisgender or transgender men.
[B]Race and ethnicity categories were not mutually exclusive (i.e., a person who reported more than one race is represented in each reported racial category).
[C]Public health interview with an individual following an STI diagnosis.

navigators currently operate at multiple agencies in King County: Entre Hermanos, POCAAN, Lifelong, LGBTQ+ Center (formerly Gay City), Madison Clinic at Harborview Medical Center, Country Doctor, and CMCH. In 2022, 1,199 unique clients received PrEP navigation services and 53% filled a PrEP prescription (Table 6-4).

PrEP Information and Resources supported by PHSKC .

PHSKC maintains a web page with PrEP information and resources, available here: www.kingcounty.gov/prep. The website includes facts about PrEP, a link to the "We are 1" quiz to help people decide if PrEP is right for them, information about paying for PrEP, and clinical guidelines for providers. The web page also includes a list of medical providers who are willing to prescribe and manage patients on PrEP, and a searchable map of these medical providers. A 2022 campaign highlighted "Easier Access" to HIV testing, treatment, and PrEP and can be found here: Easy access to HIV testing, treatment and PrEP - King County, Washington.

PREP DISCONTINUATION

Increases in PrEP awareness and PrEP use are signs of successful public health efforts; however, PrEP discontinuation among people who continue to be at risk for HIV remains a challenge. Of the 2,381 patients enrolled in the Sexual Health Clinic PrEP program from October 2014 to December 2022, 23% were still receiving PrEP services at the clinic as of June 30, 2023. Of those who were no longer receiving services, 11% did not fill their first prescription (i.e., never started PrEP), 19% moved or transferred care and 46% discontinued PrEP at least once. Table 6-5 shows median time to PrEP discontinuation among Sexual Health Clinic PrEP patients by race/ethnicity. Black patients had a shorter time to discontinuation compared to other groups. Understanding individual, social, and structural reasons for PrEP discontinuation is necessary to address and better support people interested in using PrEP.

SUCCESSES AND CHALLENGES

King County is close to meeting its goal of having 70% of MSM at higher risk for HIV on PrEP, with approximately 62% of MSM at higher risk for HIV, and 51% of all MSM in King County, on PrEP in 2022. Notably, 78% of MSM

TABLE 6-5. PREP DISCONTINUATION AMONG PHSKC SEXUAL HEALTH CLINIC PREP PATIENTS, 2014-2022

	Median time (months)	Interquartile range (months)
All Patients	7	(3, 15)
Age (years)		
15-19	6	(2, 11)
20-24	7	(3, 16)
25-34	7	(3, 15)
35-44	7	(3, 14)
45-54	5	(2, 14)
55+	12	(3, 21)
Race/ethnicity[A]		
American Indian/Alaska Native	6	(1.5, 14.5)
Asian	7	(3, 14.5)
Black	4	(1, 13)
Latinx	7	(3, 17)
Native Hawaiian or other Pacific Islander	6	(3, 11)
White	7	(3, 16)
Other factors		
Methamphetamine use	4	(1, 9)

[A]Race/ethnicity categories are not mutually exclusive and individuals reporting multiple racial and ethnic identities are represented in each group.

diagnosed with a bacterial STI – perhaps the population at highest risk for HIV – reported being on PrEP. Data also showed higher levels of PrEP use among Latinx MSM, a population in King County that has experienced high rates of HIV and STIs. King County and Washington State provide robust services and options for people to access PrEP, including offering PrEP at the PHSKC Sexual Health Clinic, promotion of PrEP prescribing though large healthcare organizations, and community-based PrEP navigation services.

Despite high levels of PrEP use among MSM in King County, there remain challenges in PrEP uptake and continuation. Published research has suggested that PrEP use is lower among some subpopulations of MSM, particularly Black MSM, younger MSM, and MSM who use methamphetamine, populations at particularly higher risk for HIV infection.[7] Some of our local data show lower PrEP use among Black MSM as well as American Indian/Alaska Native MSM compared to White MSM, as well as higher rates of PrEP discontinuation among Black MSM.

Syringe Service Programs

BACKGROUND

SSPs are public health programs for people who use drugs, including PWID. One component of SSPs is the distribution of new, sterile syringes and other injection equipment, which reduces the spread of HIV and other blood-borne infections among PWID. To reduce the frequency of injection and its associated risks, SSPs can also provide safer smoking equipment (e.g., pipes, foil). As shown in Figure 6-4, SSPs can provide many other harm reduction services to people who use drugs. In 2022, there were four major SSPs in King County, including the PHSKC SSP, People's Harm Reduction Alliance (PHRA), Hepatitis Education Project (HEP), and Project NEON.

PHSKC SSP PROGRAM OPERATIONS

PHSKC's SSP began operating in 1989. Currently, PHSKC operates at four sites: fixed sites in downtown Seattle and Capitol Hill, a mobile program in south Seattle/south King County, and a mobile program in north Seattle. The fixed sites are open weekdays and Saturday (Capitol Hill only) and include morning, afternoon, and evening hours. SCORE (South County Outreach Referral and Exchange) operates four days a week in south Seattle and south King County using a mobile unit. The North Seattle Outreach Referral and Exchange (NORE) mobile unit is open two days a week and visits homeless encampments and other locations frequented by PWID in north Seattle. Clients can call the PHSKC SSP to arrange exchange services, including same-day appointments. Currently, all PHSKC SSP sites use a negotiated syringe distribution model which allows clients to receive as many syringes as they request to ensure a new syringe for each injection. Clients are also permitted to engage in secondary exchange, which includes requesting and returning

FIGURE 6-4. HARM REDUCTION SERVICES PROVIDED BY PHSKC SSP

- Syringes
- Other injection equipment
- Safe disposal of injection equipment
- Safer smoking supplies (pipes, foil)
- Naloxone and overdose prevention
- HIV/HCV testing
- Linkage to drug treatment
- Wound care
- Hygiene supplies
- Vaccinations
- Case management services
- Drug testing

TABLE 6-6. ANNUAL NUMBER OF SYRINGES DISTRIBUTED AT KING COUNTY SSPS, 2021-2022

SSP	2021	2022	Percent Change
PHSKC SSP Overall	5,158,262	2,642,206	↓49%
Downtown	1,873,482	1,096,093	↓41%
Capitol Hill	926,180	504,377	↓46%
South King County (SCORE) mobile	1,514,200	731,749	↓52%
North Seattle (NORE) mobile	844,400	309,987	↓63%
People's Harm Reduction Alliance (PHRA)	1,767,424	881,708	↓50%
Hepatitis Education Project (HEP)	410,743	289,506	↓30%
Project NEON	24,310*	18,031*	--
TOTAL	**7,336,429**	**3,813,420**	**↓48%**

*Incomplete data for both years due to program movement. Excluded from annual totals and percent change calculations.

syringes for acquaintances. Both of these syringe distribution models are considered best practices by the CDC for reducing HIV/HCV risk. In 2022, there were three additional major SSPs in King County, including PHRA, Hepatitis Education Project (HEP), and Project NEON.

NUMBER OF SYRINGES DISTRIBUTED AND CLIENT ENCOUNTERS

Table 6-6 includes the number of syringes distributed by each King County SSP in 2022 and the percent change from 2021. In 2022, the PHSKC SSP distributed 2,642,206 syringes at its four sites, an unprecedented 49% decrease from 2021. (See Figure 6-5 for annual syringe distribution estimates since 1989.) This large decrease in syringe distribution was seen across all PHSKC SSP sites and other King County SSPs.

The World Health Organization (WHO) recommends that SSPs provide 300 sterile syringes per PWID per year by 2030 to control HIV infection in the population. The PHSKC HIV/STI/HCV Program has a goal to distribute 365 syringes per PWID by 2025. In 2021, we estimated that syringe coverage in King County was 316 syringes per PWID. The syringe coverage calculation requires an estimate of the total population size of PWID in King County, which we have previously estimated using findings from both national and local surveys. However, the estimates are largely out-of-date and do not account for the recent and significant changes in patterns of drug use (e.g., introduction of fentanyl, shift from injection to smoking). Therefore, we are no longer confident in the local estimate of the size of the PWID population and are not calculating syringe coverage for this report. As new estimates are published, we will reassess our local estimates of PWID population size and syringe coverage.

Table 6-7 includes the number of client encounters at the PHSKC SSP in 2022 and the percent change from 2021. There were 14,424 total encounters in 2022, which was a 20% decline from 2021. The smallest decline (8%) was at the downtown location, while the largest decline (54%) was with SCORE. The decline in client encounters was substantially smaller than the decline in syringe distribution and demonstrates that the SSP continues to engage in harm reduction services with clients, but the nature and services provided during these encounters is changing.

SAFER SMOKING SUPPLIES

Fentanyl was introduced into the Seattle-area drug market in the mid/late-2010s, but its use increased substantially around 2020. During this time, there was a substantial shift in the prevalence of injection drug use, with many people switching to smoking fentanyl. At the same time, there was a large increase in the fatal overdose rate in King County, largely attributed to fentanyl use. In October 2022, the PHSKC SSP began a pilot program to distribute pipes to clients at the downtown site. During this pilot, the SSP distributed a maximum of 10 pipes a day (maximum of one per person). The initial goals of this pilot program were to assess the feasibility of pipe distribution, attract new SSP participants, and provide additional harm reduction services (e.g., naloxone, linkage to treatment for opioid use disorder) to clients receiving pipes. Key findings from an initial evaluation conducted in April 2023 included:

- by April 30, 2023, SSP staff distributed 1,126 pipes, an average of 161 pipes per month;

TABLE 6-7. ANNUAL NUMBER OF CLIENT ENCOUNTERS AT THE PHSKC SSP, 2021-2022

SSP	2021	2022	Percent Change
PHSKC SSP Overall	18,018	14,424	↓20%
Downtown	9,996	9,232	↓8%
Capitol Hill	2,623	1,724	↓34%
South King County (SCORE) mobile	2,295	1,052	↓54%
North Seattle (NORE) mobile	3,104	2,416	↓22%

- 71% of participants who received a pipe received at least one additional service;
- 20% received naloxone and 1% received a referral to substance use treatment at the same visit as receiving a pipe;
- 15% of participants who received a pipe also received syringes;
- 33% of new participants received naloxone and 4% received a referral to substance use treatment, both of which were significantly higher than the proportion of returning participants who received a pipe.

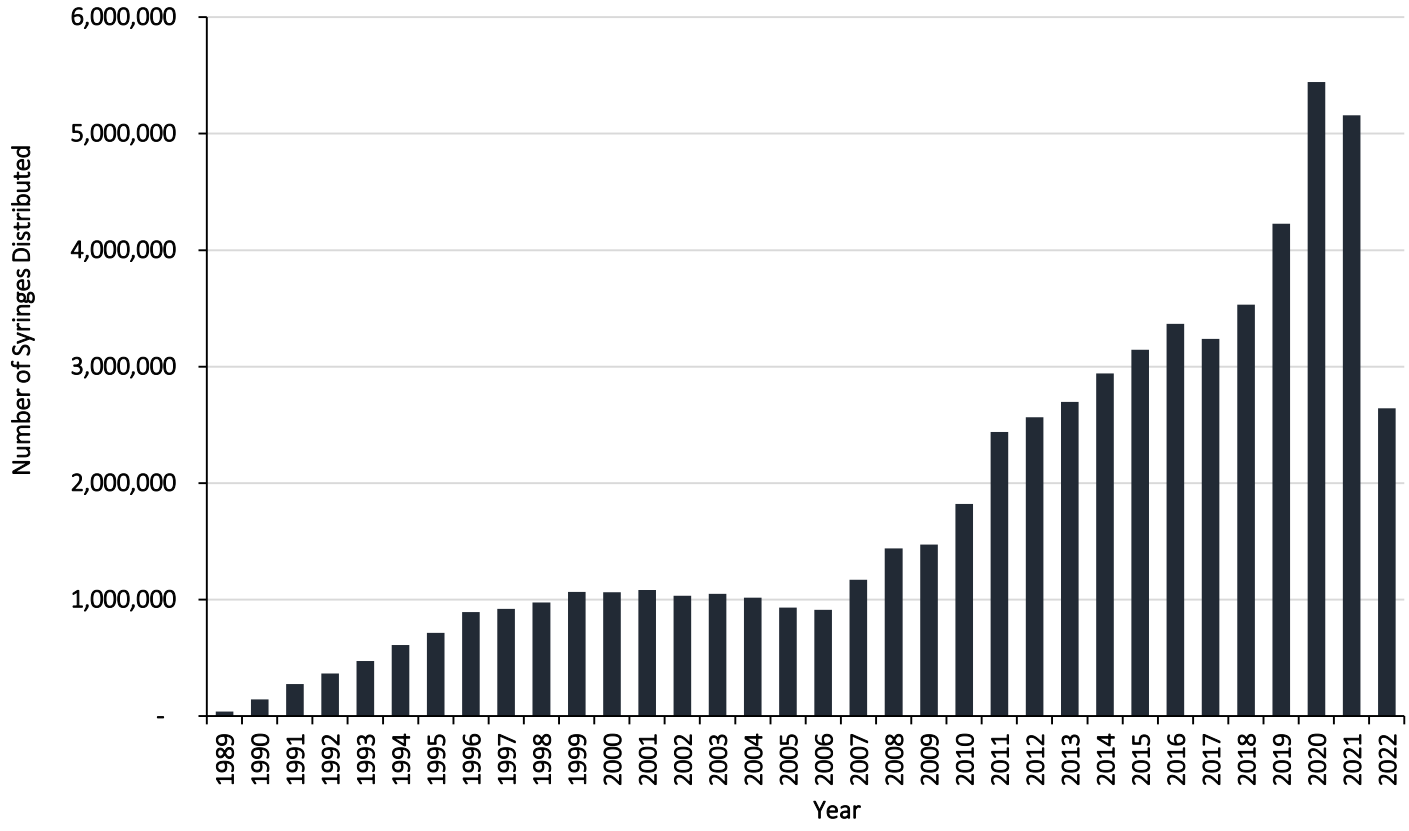
NALOXONE

Naloxone is an opioid-antagonist medication used to reverse the effects of an opioid overdose. PHSKC SSP sites have been offering naloxone kits and training to clients since 2012. Figure 6-6 shows the number of naloxone kits distributed at PHSKC SSP sites since 2015. In 2022, the PHSKC SSP distributed 3,884 naloxone kits, which was a 74% increase from 2021. In 2022, 795 clients self-reported using a kit to reverse an opioid overdose, a 152% increase from 2021.

OTHER HARM REDUCTION SERVICES

Table 6-8 summarizes the volume of other harm reduction services provided at the PHSKC SSP in 2022.

FIGURE 6-5. ANNUAL SYRINGE DISTRIBUTION AT PHSKC SSP SITES, 1989-2022



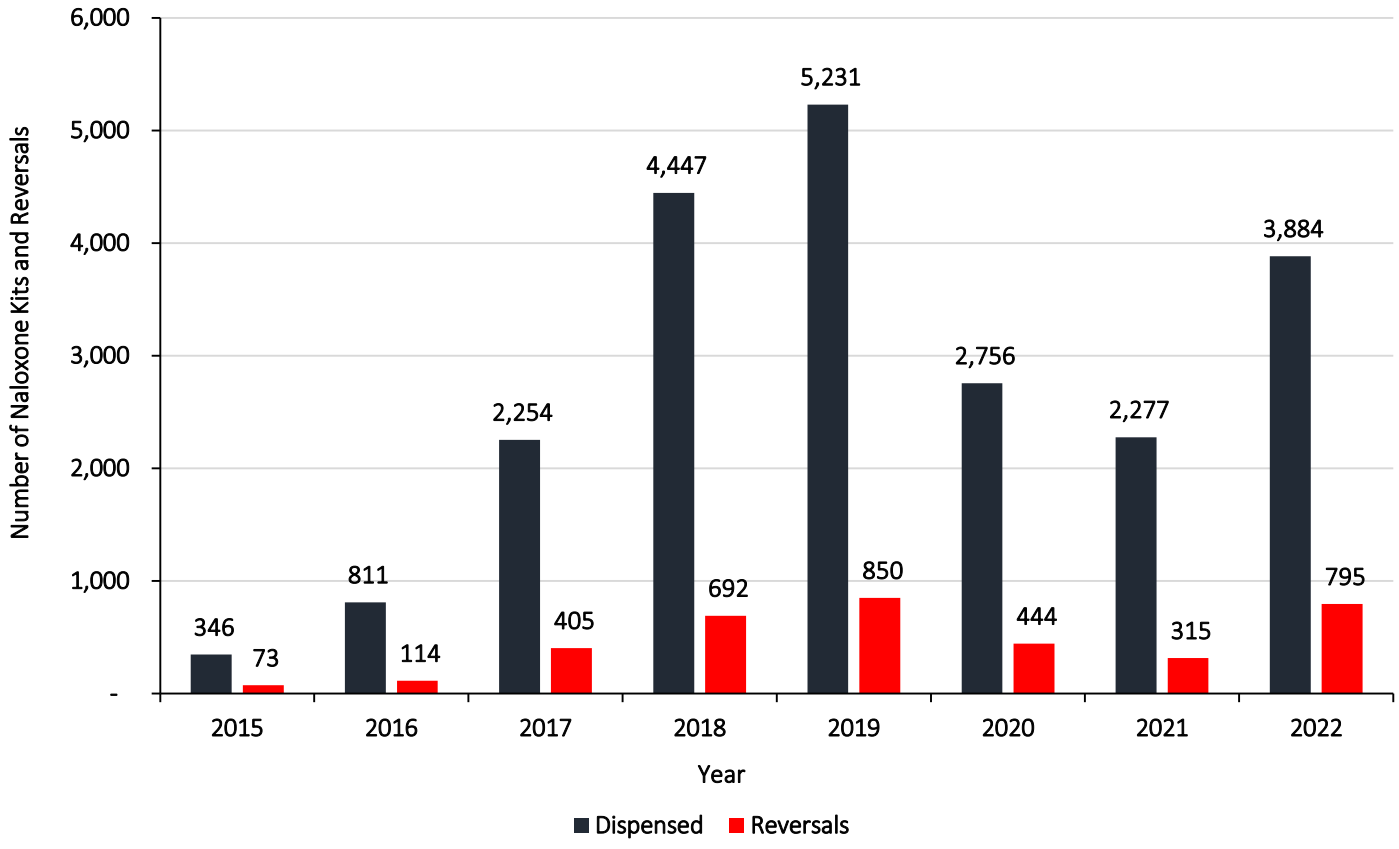
- Social workers provide referrals to treatment for substance use disorder (medication for opioid use disorder, intensive outpatient, and detox), as well as primary and mental health care. They also help people sign up for health insurance, provide resource information, and talk with people who are in crisis and offer support and encouragement.
- Pathways (formerly known as Bupe Pathways) provides low-barrier access to buprenorphine, a medication for opioid use disorder. Pathways is in the same building as the Downtown PHSKC SSP and is staffed by an interdisciplinary team. Buprenorphine prescriptions can be dispensed at the on-site pharmacy. The program moved into a new, larger clinical space in 2021, which has resulted in an increase in the number of clients and client visits.
- The downtown SSP partners with the Pioneer Square Downtown medical clinic to provide medical services to clients, including injection-related wound care.
- Other PHSKC staff provide HIV and HCV testing services at the PHSKC SSP and assist clients with linkage to follow-up care and treatment.

Successes and Challenges

Over the past year, the PHSKC SSP has taken a significant step forward to meet the needs of the growing number of people who smoke drugs by providing safer smoking supplies, including pipes and foils. The pilot program showed the popularity of these supplies, as well as their ability to attract new clients to the SSP and engage them in additional services like naloxone. The volume of naloxone distribution continues to rebound after a dramatic decline during the COVID-19 pandemic, a critical response to the increasing number of fatal opioid overdoses in King County.

Indeed, fatal overdoses are at a historic high in King County, largely due to the recent influx of fentanyl into the local drug supply. The magnitude of the overdose crisis – and its connection with the co-occurring housing crisis – make this the most significant current public health challenge in King County. As noted above, the

Figure 6-6. Annual Number of Dispensed Naloxone Kits and Reported Overdose Reversals by Participants at PHSKC SSP Sites, 1989-2022



PHSKC SSP increased its naloxone output in 2022, and staff continue to provide support to people seeking substance use treatment. The changes in the local drug supply have also had a profound impact on syringe services at the PHSKC SSP and across all SSPs in King County. Between 2021 and 2022, the number of syringes distributed at the PHSKC SSP dropped by nearly 50%, reflecting local changes in drug availability and how drugs are being consumed (i.e., fewer people injecting and more people smoking). The SSP responded by offering safer smoking supplies to reduce risks and engage with participants who may not have traditionally sought services at a program that largely served people who inject drugs. We anticipate that the SSP will need to continue to significantly evolve and change in the coming years to better confront the overdose crisis.

Condom Use and Distribution

Background

When used correctly and consistently, condoms are highly effective in preventing HIV, other sexually transmitted infections (STI, e.g., syphilis, gonorrhea, chlamydia, genital herpes, and human papillomavirus), and unwanted pregnancies. Although many people do not use condoms every time they have sex, condom use remains widespread and are a low-cost intervention well-suited for use in a diverse population that includes persons of all ages, genders, and sexual orientations. Condoms are a central component of PHSKC and WA DOH's HIV/STI prevention strategy.

Condom Use among MSM

Among 211 MSM participants in the 2023 Pride Survey who reported anal and/or vaginal/front hole sex partner in the last 12 months, 48% reported at least some condom use in the last 12 months. Pride Survey participants identified the context in which they used condoms including: 4% reported always using condoms, 18% used condoms with partners outside of their primary relationship, and 11% with partners whose HIV status they did not know.

Condoms Distributed by Washington State Department of Health to King County Partners

In 2022, 661,248 condoms were procured through the WA-DOH to the following King County partners: People's PHRA (272,160 condoms), PHSKC HIV/STI/HCV Program (132,048 condoms), PHSKC's Sexual Health Clinic (64,512 condoms), PHSKC (42,336 condoms), Harborview Medical Center – Madison Clinic (15,120 condoms), and Harborview Medical Center – SHE Clinic (14,112 condoms). Additionally, HIV Community Services contractors in King County including the Center for MultiCultural Health, Entre Hermanos, Seattle's LGBTQ+ Center, Lifelong, and POCAAN documented distributing 101,662 condoms.

King County Condom Distribution Projects

Overall, in 2022, the PHSKC HIV/STI Condom Distribution Program dispensed a total of 941,648 external condoms, 2,700 internal condoms, and 56,500 packs of lubricants (lube) across King County. The Condom Distribution Program supplied King County non-profit and community -based organizations with free bulk condoms and lube for their clients and community outreach, including 248,020 external condoms, 2,700 internals condoms, and 56,500 lubricants . In addition, the Condom Distribution Program distributed 30,328 external condoms to attendees of Seattle Pride Fest 2022. Condoms distributed by the Condom Distribution Program increased by 78% from 2021 to 2022. This increase is attributed to the expansion of several condom distribution projects.

- In 2019, the PHSKC HIV/STI Condom Distribution Program launched the Condom Cube Project (www.condomcubes.com.) This project aims to promote the availability, accessibility, and acceptability of free condoms to increase condom use and decrease HIV/STI transmission. One priority of the Condom Cube Project was to expand availability of free condoms specifically to King County zip codes with high rates of bacterial STIs and HIV, and areas where free condoms were not previously available. The project places Condom Cubes, custom acrylic open-top boxes that hold 500 free condoms of 20 different types, in a variety of public venues that are easily accessible, particularly for youth. In 2022, the project distributed 649,500 external condoms. This is a 98% increase in condom distribution from 2021. In 2022, Condom Cubes expanded from 17 zip codes to 20 zip codes. As of December 2022, 198 Condom Cubes were available in King County.
- The Condom Distribution Program developed condom "Fit Kits" to encourages people to find the condom that fits them the best and maximizes their pleasure with the goal of increasing condom use and decreasing the transmission of HIV and STIs. The kits

TABLE 6-8: NUMBER OF HARM REDUCTION SERVICES PROVIDED BY THE PHSKC SSP, 2021-2022

Harm Reduction Services	2021	2022	Percent Change
Social work services			
Number of unique clients	93	77	-17%
Number of contacts per client	1-8	1-4	--
Referrals to medication for opioid use disorder	49	42	-14%
On-site buprenorphine treatment (Pathways)			
Number of unique clients (end of 2022)	455	490	+8%
Client visits	2,582	3,844	+49%
Medical care encounters at downtown SSP[A]	--	887	--
HIV testing			
Number of tests	59	104	+76%
Number of positive tests (% of all tests)	1 (2%)	0 (0%)	--
HCV testing			
Number of tests	41	159	+288%
Number of positive antibody tests (% of all tests)	27 (66%)	136 (86%)	+30%
Number of positive confirmatory tests (% of all tests)	21/41 (51%)	12/19[B] (63%)	--
Number linked to HCV care (% of + confirmatory tests)	18 (86%)	77[C]	--

[A] Starting in 2022, we began tracking medical care visits of SSP clients at the Pioneer Square Downtown medical clinic.
[B] In 2022, HCV confirmatory testing was conducted among 19 people, and is not comparable to the 2021 data which included people who received both HCV antibody and confirmatory testing.
[C] In 2022, the number of people linked to HCV care is based on all people linked to care through the SSP, and is not comparable to the 2021 data which included only people who had been tested for HCV at the SSP.

provide 20 varieties of condoms, two types of lube, a syphilis testing and treatment resource card, an information card on how to use the kit, instructions on how to correctly use a condom, PrEP information, and additional sexual health resources. In 2022, Fit Kits were distributed to PHSKC Sexual Health Clinic patients and HIV/STI community partner testing sites for their clients. A total of 690 Fit Kits (13,800 condoms and 1,380 packets of lube) were distributed.

- The Washington State Free Condom Map is a mobile-friendly and interactive map that allows residents to identify free condom locations in King County and throughout the state (https://www.freecondomswa.com/). In 2022, the condom map had 8,562 total page views. This is a 473% increase in total page views from 2021. Google Analytics data showed that 27% of viewers used a personal computer and 72% of viewers used a mobile device to view the map.

SUCCESSES AND CHALLENGES

PHSKC and the WA DOH remain committed to condoms as part of a broad-based prevention program for HIV and other STIs. Although some evidence suggests that condom use among MSM is declining, approximately half of sexually active MSM report condom use at least some of the time. Inadequate access to free condoms can be a barrier to condom use for some populations. PHSKC has launched new initiatives to promote condom use by expanding access to free condoms with methods that are acceptable to the populations affected by HIV/STI.

Ending the HIV Epidemic Pillar 4: Respond

KEY POINTS

PHSKC has a long history of successful cluster detection and response (CDR) using established approaches.

In recent years, PHSKC has incorporated molecular HIV analysis into CDR activities to better identify and respond to HIV clusters with recent and rapid growth.

CDR has identified several recent clusters, most of which were comprised predominantly of men who have sex with men.

Initial experiences with molecular HIV analysis as part of CDR suggest that this multi-faceted approach further helps to connect people with HIV-related services.

Among people who completed a cluster interview, most agreed that it was important for the health department to follow up with people who may be part of HIV clusters.

Background

Pillar 4 of the EHE Initiative promotes novel methods of identifying quickly growing HIV clusters followed by a rapid response to provide prevention and treatment resources to individuals linked to the cluster through their sexual and/or drug use networks. This strategy is often referred to as "Cluster Detection and Response" (CDR) and combines established and newer methods for cluster identification and response. In 2021, PHSKC introduced metrics to evaluate our CDR program (Table 7-1). Here we describe PHSKC's efforts to identify HIV clusters among King County residents and respond through the provision of appropriate HIV-related services.

Approach to HIV Cluster Identification

PHSKC uses multiple methods for cluster identification, including:

- Medical provider reports. Providers and public health staff may notice an increase in HIV diagnoses in a specific population.
- Time-space cluster analyses. Public health analyses look for geographic areas with counts of recent diagnoses that are higher than expected. These analyses are conducted by the Washington State Department of Health (WA DOH) and can identify new patterns of HIV transmission, especially when occurring in non-urban areas or crossing jurisdictional boundaries.

TABLE 7-1. KING COUNTY PROGRESS TOWARDS HIV RESPONSE GOALS

Goals and Evaluation Metrics	2019	2022	2025 Goal
HIV+ cluster members meeting eligibility criteria evaluated within 30 days of identification	78%	28%	≥ 90%
Cluster members eligible for cluster interview contacted by DRIS by June 30th of the following year	68%	25%	≥70%

2019 is the first year for the EHE initiative.
Note: 2022 performance was adversely impacted by staffing challenges, including but not limited to redeployments for mpox vaccination and COVID response.

- **Public health analysis of HIV surveillance data.** Information shared as part of partner services interviews with people newly diagnosed with HIV may help to identify clusters.
- **Molecular HIV analysis.** Linkages of HIV viral genetic sequences.

Additional details on the use of partner services interviews/case reports and the use of HIV genetic sequences for cluster detection are provided below. Regardless of the method of identification, once a potential cluster is identified, PHSKC responds to ensure that impacted individuals receive appropriate HIV testing, prevention and/or treatment services.

PARTNER SERVICES CLUSTER IDENTIFICATION

When people are newly diagnosed with HIV or selected other sexually transmitted infections, health department staff contact them to offer assistance in ensuring their sex and needle-sharing partners get tested and link to medical care. This activity also allows PHSKC staff to collect information about people with newly diagnosed HIV and their partners (e.g., geography, HIV risk, substance use, reason for HIV testing), which in some instances allows the health department to identify clusters of related cases.

MOLECULAR ANALYSIS, CLUSTER IDENTIFICATION AND PRIORITIZATION

Genetic sequencing of HIV to identify possible drug resistance is a standard part of clinical HIV care. Laboratories report HIV genetic sequences to the health department. Over time, as the virus replicates within a person's body, changes (i.e., mutations) accumulate in the virus' genetic sequence. These changes mean that infections with very similar viral sequences are likely to be closely related or linked. The viruses in two people can be very similar even in the absence of a direct link (e.g., sex or syringe sharing) between the people with the infections. Therefore, these data cannot be used to determine if one person transmitted HIV to another person or if two people had any direct contact through sex or drug use. However, they can still be useful for guiding public health action. When PHSKC observes a cluster of new HIV diagnoses with related viruses, it suggests that HIV may be rapidly spreading in a network. This ideally prompts a public health and community response to address the needs of affected communities. Details on the methods and tools used by PHSKC to identify potential clusters using molecular analysis and time/space analyses are provided in **Technical Note 6**.

Cluster Identification and Response

CURRENT AND RECENT PRIORITY CLUSTERS

For molecular HIV analyses, PHSKC defines a priority cluster as one with recent and rapid growth, which is further defined as three or more linked diagnoses within the preceding 12 months. Additional details on PHSKC's approach to molecular HIV analysis are provided in **Technical Note 6**. In recent years, molecular and time/space analyses occurred at different frequencies depending on the reporting of new HIV sequences and competing public health response efforts (i.e., COVID-19 and mpox).

Since 2019, PHSKC has identified 31 clusters with recent and rapid growth with at least one member residing in King County at diagnosis (**Figure 7-1**). As of June 2023, King County had seven clusters with between three and eight linked cluster members diagnosed with HIV in the prior year. Including all linked cases regardless of when they were diagnosed, these clusters include 13 to 175 people. Transmission risk categories for the seven clusters are illustrated in **Figure 7-2**.

Cluster Interviews and HIV-related services

Cluster interviews are an integral part of CDR. These interviews involve identifying members of recent and rapid clusters who live in King County, contacting them for an enhanced partner services interview, and providing them with appropriate HIV-related services. This includes HIV testing, and for people diagnosed with HIV, linkage to HIV care, antiretroviral therapy initiation, and efforts to promote retention in care to ensure sustained viral suppression. For people who are HIV-negative, services include promotion of frequent HIV testing, condom use, syringe services (for PWID), and PrEP. Currently, individuals eligible for cluster interviews include cluster members diagnosed with HIV in the past 12 months as well as those who are virally unsuppressed or out of HIV care at some point in the year prior to being identified as cluster member.

PHSKC seeks to evaluate at least 90% of people referred for cluster interview within 30 days of being identified as a new cluster member, and to successfully contact 70% or more of those eligible for interview by June 30th of the year following their referral (**Table 7-1**). Due to staffing challenges, including staff redeployment to support the COVID-19 pandemic and mpox outbreak, our performance on these metrics for 2022 were 28% and 25%, respectively. Cluster detection and response efforts improved in 2023 as staff redeployments to support other public health responses efforts ended.

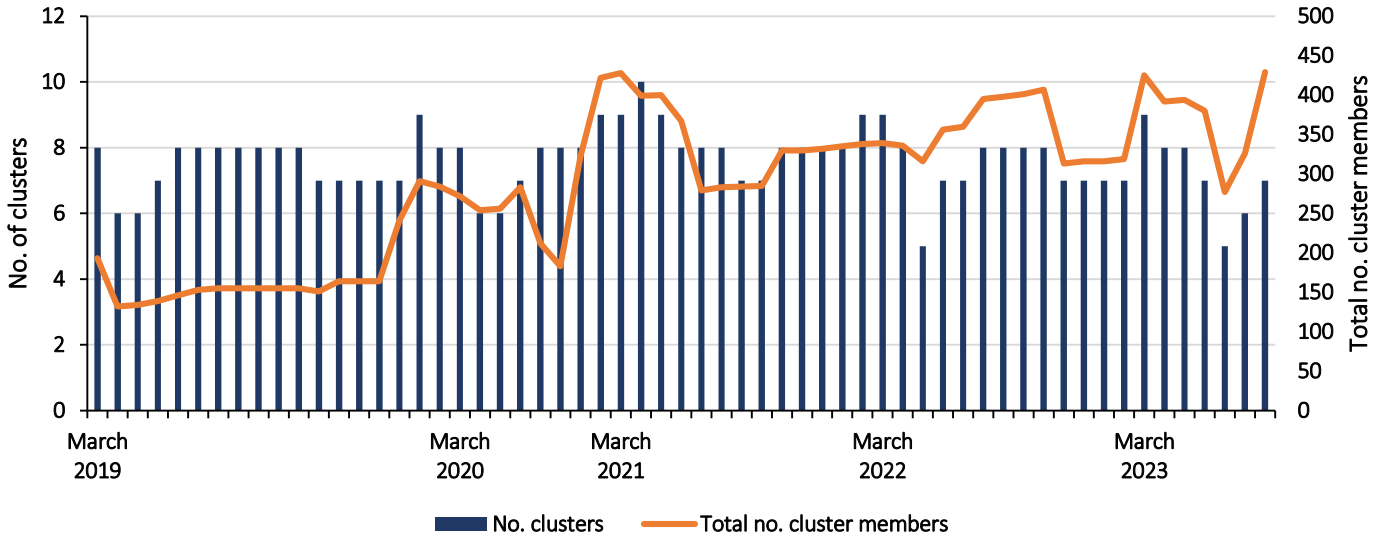
Between February 2021 and June 2023, PHSKC referred 221 individuals for a cluster interview of whom 177 were confirmed to be eligible upon initial evaluation. The most common reasons for being ineligible were moving out of King County or achieving viral suppression or re-engaging in care prior to being reached for a cluster interview. Of those eligible for a cluster interview, 75 (42%) were successfully contacted and completed at least part of the interview. Twenty-five (33%) interviewed persons provided contact information for at least one sex or syringe sharing partner. PHSKC staff provided these partners with referrals for HIV care and other services. Of these, 14 partners were linked to HIV care, nine of whom achieved viral suppression within a year of interview. In addition, 31 received one or more referrals to other resources including housing support (n=8), case management (n=8), PLWH support groups (n=8), mental health (n=7), food and meal resources (n=3), dental care (n=2), legal assistance (n=2), and maternal health services (n=1).

Successes and Challenges

Completeness and Timing of Viral Sequencing

While molecular HIV cluster analysis have the potential to provide needed resources to affected communities, these analyses are limited by the incomplete reporting of viral sequences. PHSKC only receives sequences for roughly three-quarters of King County residents newly

Figure 7-1. Numbers of Clusters and Members of These Clusters, King County, WA, March 2019-August 2022



Each vertical line represented a cluster analysis, with the number of analyses performed varying by year. In January 2020 cluster membership expanded to search all of a persons' sequences not just an initial sequence, and in January 2021 cluster membership expanded to include earlier-diagnosed PLWH only *indirectly* linked to the most recent diagnoses.

diagnosed with HIV. The timeliness of cluster detection is also limited by delays in the reporting of these sequences. In 2020-2022, initial genotypic sequences for King County residents newly diagnosed with HIV were reported to PHSKC a median of 35 days after being collected (97% were received within about three months of diagnosis).

Community Feedback

Both locally and nationally, some community members and researchers have expressed concern about the use of molecular data for cluster detection and response.[8,9] These concerns have often centered on the potential use of molecular data to identify individuals who have transmitted HIV and initiate criminal proceedings against them. PHSKC does not share any of our data with any law enforcement agency and Washington State law was updated in 2020 to reflect current science on HIV and reduce HIV-related stigma. To better understand the experience of individuals contacted for cluster interviews, we asked interviewees to rate their level of agreement (strongly agree, agree neutral, disagree, strongly disagree) with two statements:

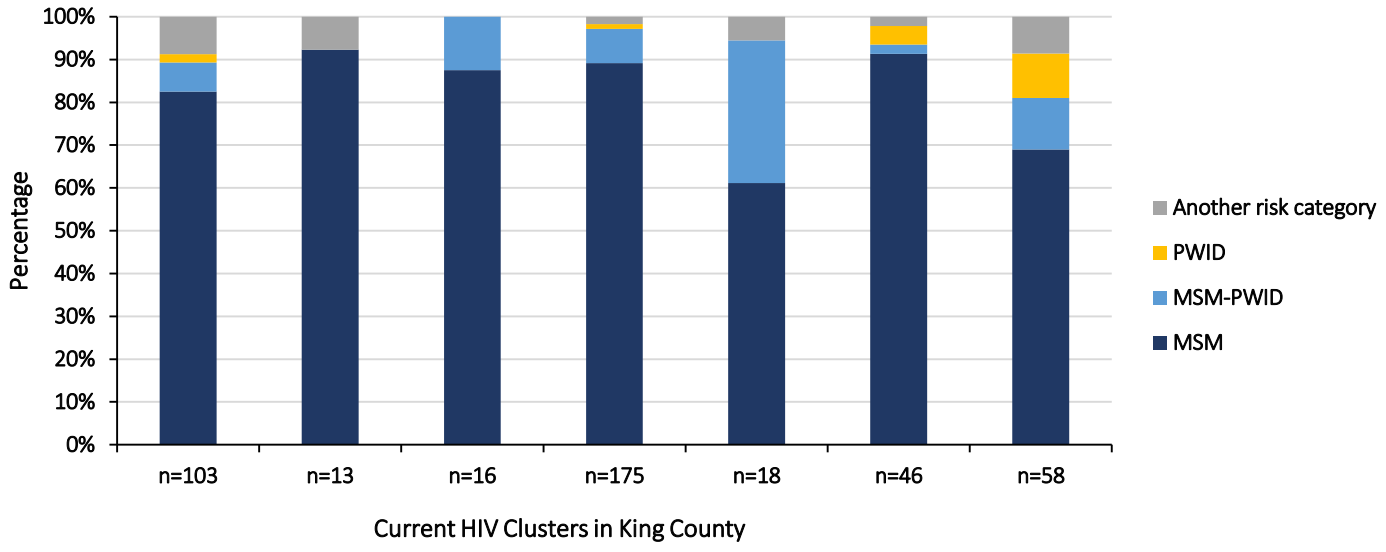
1. It is important for the health department to follow up with people who may be part of HIV clusters.
2. It is important to me to know that I may be part of a cluster.

Of 177 individuals who were eligible for cluster interviews to date, 75 were interviewed and 42 answered these two questions. Nearly all (95%) agreed with statement #1 (strongly agree or agree) and 74% agree (strongly agree or agree) with statement #2. The high level of agreement with both statements suggests that interviewees believe there is value in reaching out to HIV cluster members to help ensure that people in their network are connected with HIV-related services. However, it is important to note that only a subset of individuals interviewed (56%) answered the questions. The responses for those who declined to answer these questions may differ from those who completed the interview.

Summary

PHSKC has successfully incorporated molecular HIV analysis into its broader HIV cluster detection approach. Cluster detection efforts have successfully connected a small number of King County residents to needed HIV-related and other support services (housing, dental care, etc.). While PHSKC was close to meeting its goals in 2021 related to conducting timely interviews of cluster members, several staffing challenges adversely impacted our performance on these metrics in 2022. CDR efforts improved in 2023 as staff redeployments to support other public health activities have ended. In summary, molecular HIV cluster detection complements PHSKC's established approaches to cluster detection and response efforts to reduce HIV incidence and link PLWH and at risk for HIV to prevention and treatment.

Figure 7-2. Relative Sizes and Transmission Risk Categories of Current Clusters with Recent and Rapid Growth, King County, WA, June 2023



Ryan White HIV/AIDS Program

KEY POINTS

Public Health — Seattle & King County is the recipient of a $7 million Ryan White Part A grant that funds services in the Seattle Transitional Grant Area, which includes King, Island, and Snohomish Counties

The Part A grant supports services for close to 3,000 people living with HIV, with the majority of funding used to support case management, housing, food, oral health, and treatment adherence support.

These funds, plus additional services funded through Ryan White grants Parts B through F, Medicare, and Medicaid provide medical care and a robust wrap-around panel of services for low-income people living with HIV.

Background

The Ryan White HIV/AIDS Program (RWHAP) is a federal program that provides direct health care and support services for more than half a million people with HIV. It is administered by the U.S. Department of Health and Human Services (HHS), Health Resources and Services Administration (HRSA), and the HIV/AIDS Bureau (HAB). In fiscal year (FY) 2022, HRSA awarded approximately $2.3 billion dollars in RWHAP funding to cities, counties, states, and community-based organizations.

There are five parts of the RWHAP and each part has a different purpose (Table 8-1). This report focuses on Part A. Among cities and counties most severely affected by HIV, Part A funds are used to develop and enhance access to a comprehensive system of care that provides primary health care and support services throughout the service area. Part A also supports administrative activities, including a community planning process; managing, monitoring, and evaluating programs; and clinical quality management activities.

Ryan White Part A and Minority AIDS Initiative Funding

PHSKC receives funding from a variety of sources to support HIV related public health activities. PHSKC is part of

TABLE 8-1. RYAN WHITE HIV/AIDS PROGRAM COMPONENTS

RWHAP Program Parts	Grant Recipients	Purpose
Part A	PHSKC is the recipient of Ryan White Part A funds in the Seattle Transitional Grant Area (TGA), which includes King, Island, and Snohomish Counties.	• Provides medical and support services to cities and counties most severely affected by HIV • Funds used to develop and enhance access to primary health care and support services • Also supports a community planning process; managing, monitoring, and evaluating programs; and clinical quality management activities
Part B	WA DOH is the recipient of Part B funding, and most Part B program funds pay for health insurance coverage, copays, and deductibles.	• Improve the quality of and access to HIV health care and support in the U.S. • Provide medications to low-income people with HIV through AIDS Drug Assistance Program
Part C	In the Seattle area, Harborview Medical Center, Country Doctor Community Clinic, and Community Health Center of Tacoma receive Part C funding.	• Provide outpatient ambulatory health services and support for people with HIV • Help for community-based groups to strengthen their capacity to deliver high-quality HIV care
Part D	Local community-based groups.	• Provide medical care for low-income women, infants, children, and youth with HIV • Offer support services for people with HIV and their family members • Coordinate with HIV education and prevention programs designed to reduce the risk of HIV acquisition among youth
Part F	AIDS Education and Training Centers (*AETCs) and* Special Projects of National Significance (*SPNS)* Domestic public or private, non-profit organizations, schools, academic health science centers, faith-based organizations, tribes, and tribal organizations *Dental Programs* Dental schools Hospitals with postdoctoral dental residency programs Community colleges with dental hygiene programs *Minority AIDS Initiative (MAI)* RWHAP recipients The Seattle TGA receives MAI funding which is included with the Ryan White Part A award.	• AETC Programs: provide training and technical assistance to providers treating patients with or at risk for HIV • SPNS: develop innovative models of HIV care and treatment to respond to RWHAP client needs • Dental Programs: provide oral health care for people with HIV and education about HIV for dental care providers • Minority AIDS Initiative (MAI): help RWHAP recipients improve access to HIV care and health outcomes for minorities

TABLE 8-2. RYAN WHITE PART A PROGRAM SERVICES PROVIDED IN FISCAL YEAR 2022[A]

Service Category	Amount Spent	Clients Served (duplicated)	Services Provided
Housing	$961,140	103	14,832 transitional and emergency bed nights
Food bank/home-delivered meals	$1,477,594	543	84,427 prepared meals, 18,199 grocery bags, 1,443 essential household item kits, and 173 nutrition consults/ skills-building
Emergency Financial Assistance	$168,661	85	85 rental and 20 utility assistance payments
Psychosocial Support	$85,867	110	1,033 one-on-one peer counseling sessions (measured in 15-minute increments) and 197 support groups
Non-medical case management (Part A) for engagement & retention in care, housing, oral health, and substance use support.	$1,392,806	3,456	75,811 collateral, face-to-face, telephone and written communications (measured in 15-minute increments)
Non-medical case management (MAI)	$264,030	503	19,319 collateral, face-to-face, telephone and written communications (measured in 15-minute increments)
Oral Health Care	$1,256,375	1,749	2,717 dental appointments
Medical transportation	$9,094	71	909 one-way rides
Early Intervention Services (MAI)	$176,508	335	56 targeted test encounters (measured in 15-minute increments), 53 tests completed, 616 health education & literacy encounters (measured in 15-minute increments), & 931 general support encounters (measured in 15-minute increments)
Outpatient/Ambulatory Health Services – Treatment Adherence	$707,481	344	16,504 medication adherence assessments/encounters

[A]Service categories presented in order of highest to lowest priority as determined by the Planning Council

the Seattle Transitional Grant Area (TGA), which includes King, Island, and Snohomish Counties, and receives Ryan White Part A funding annually.

The Seattle TGA HIV Planning Council determines how Ryan White Part A funding is allocated in our grant area. The Planning Council is comprised of HIV service providers; PLWH who access Part A services; representatives from state, federal, and local health jurisdictions; and representatives from other Ryan White Program Parts. Through a series of priority-setting and allocation meetings that include public comment from members of the community -- including review of local surveillance data, needs assessments and, service utilization data -- Planning Council members identify the highest priority needs in the TGA and allocate resources to HRSA-approved service categories. It is then the responsibility of Ryan White Part A program staff at PHSKC, through a competitive bi-annual Request for Application (RFA) process, to award funding to

TABLE 8-3. SELECT DEMOGRAPHIC CHARACTERISTICS OF SEATTLE TGA CLIENTS RECEIVING RYAN WHITE PART A SERVICES IN FISCAL YEAR 2022 COMPARED TO ALL PLWH IN KING COUNTY, WA[A]

	Ryan White Part A Clients	PLWH in King County
Age (years)		
13-24	1%	2%
25-34	10%	14%
35-44	22%	22%
45-54	25%	25%
55+	43%	39%
Gender[B]		
Cisgender Men	78%	85%
Cisgender Women	20%	13%
Transgender Women	2%	1%
Transgender Men	<1%	<1%
Race or Ethnicity[B]		
American Indian/Alaska Native	3%	4%
Asian	4%	8%
Black	29%	27%
Latinx	21%	17%
Native Hawaiian or other Pacific Islander	1%	1%
White	65%	67%

[A] Seattle TGA clients include those residing in King, Island and Snohomish counties.
[B] Race/ethnicity categories are not mutually exclusive. Individuals reporting multiple racial and ethnic identities are represented in each group, therefore percentages will sum >100%. Four clients were missing data on race/ethnicity and gender identity.

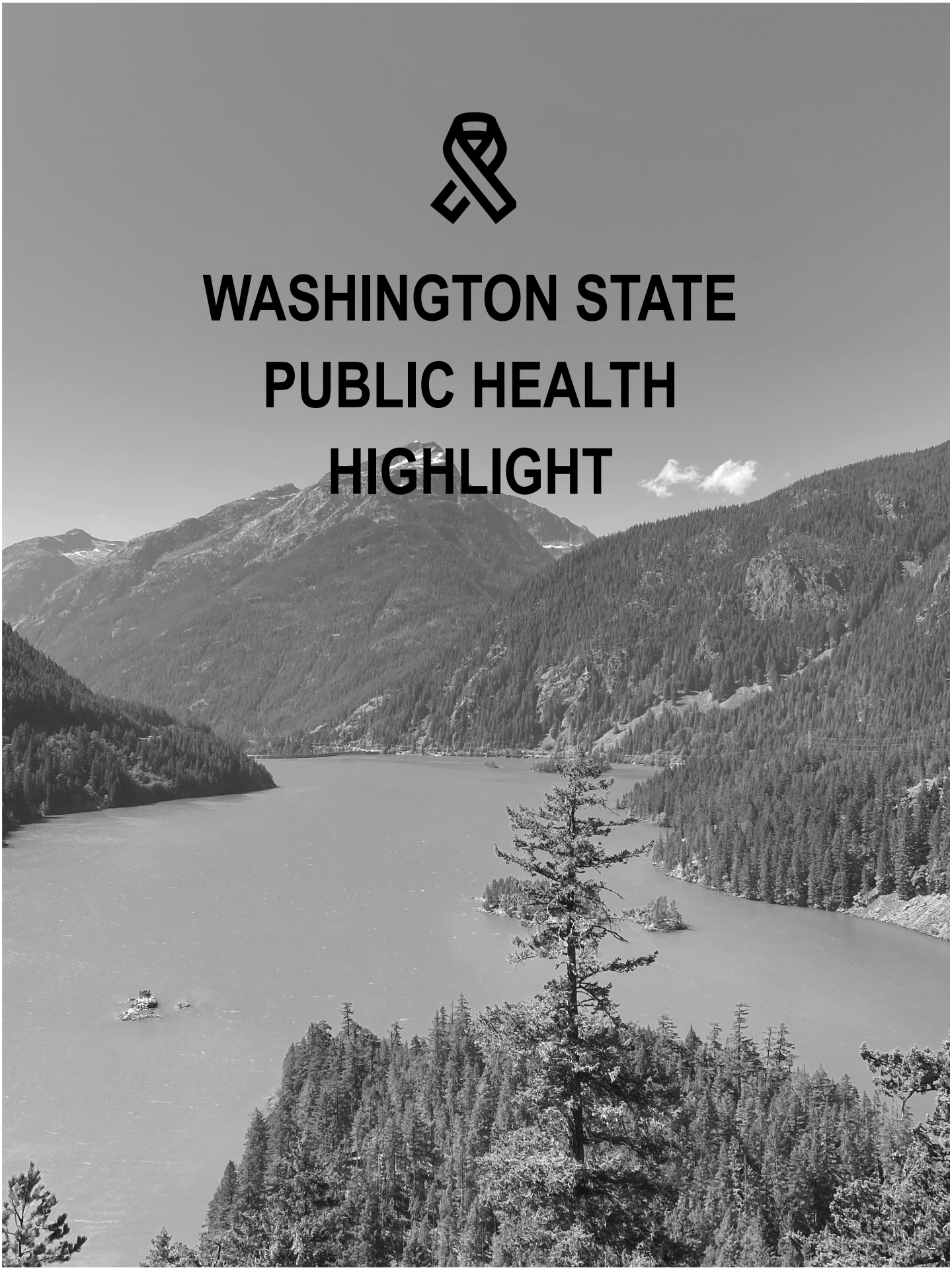
community providers (sub-recipient agencies) to deliver services to eligible PLWH in the community.

RWHAP is required to be payer of last resort. Washington State has expanded Medicaid as part of the Affordable Care Act, and nearly all RW Part A-eligible PLWH in the Seattle TGA have health insurance coverage which pays for much of their medical care. Consequently, most funding is used to support non-medical service categories. In-person assisters and case managers help PLWH obtain health insurance, including PLWH whose immigration status makes them ineligible for Medicaid or insurance subsidies funded through the Affordable Care Act. All WA State residents are eligible to receive HIV care regardless of their immigration status.

In grant year 2022 (March 1, 2022 – February 28, 2023), the Seattle TGA received a total of $7,281,709 in Ryan White funding, of which $388,666 was targeted for Minority AIDS Initiative (MAI) services. Part A funding to the Seattle TGA has remained relatively stable over the past 10 years. Table 8-2 shows the Seattle TGA Planning Council's prioritized service categories (in priority order), amount spent, number of clients served, and services provided. The Part A program served nearly three-thousand (2,931) unduplicated clients, 87% of whom were virally suppressed. Ryan White part A clients are generally similar to the larger population of PLWH in King County with respect to age, gender identity and race/ethnicity (Table 8-3).

Summary

Ryan White Part A funds support services for a diverse clientele. Funded services play a critical role in ensuring that low-income PLWH are able to receive life-saving HIV care in King, Snohomish, and Island Counties.


WASHINGTON STATE
PUBLIC HEALTH
HIGHLIGHT

Estimating the Number of People Living with HIV Who are Incarcerated in Jails, Washington State 2022-2023

Background

Jail bookings represent an important opportunity for diagnosis and care linkage for PLWH.[10] However, there is scant data on how the criminal legal system and PLWH interact on the state level. Jails are under county jurisdiction in Washington state and there is no central data source describing the incarcerated population. The purpose of this project was to use publicly available jail inmate data to describe the size and characteristics of the population of PLWH who have regular interactions with jails in Washington state.

Approach

Public health staff from the WA DOH developed scripts to collect public-facing online jail rosters from local and tribal facilities in Washington state using R software. Jails in Washington state are required by law to maintain timely registers of the names of all people confined within them and to make these registers available to the public.[11] Although only name is required, the information released by jails varies from jurisdiction to jurisdiction and may include age, date of birth, gender, and race. We collected this information daily from 11/14/2022 to 8/13/2023 to develop a database of the incarcerated population of Washington state over time.

A deterministic matching algorithm was used to link this database to the WA DOH registry of PWLH in Washington state as of 12/31/2022. This algorithm was developed for a related care linkage project using these two databases and validated using manual review. This report summarizes demographic characteristics (sex assigned at birth, age, HIV transmission category, geographic region) and CDC-defined care status (viral suppression, engagement in care) for PLWH that spent time in Washington state jail during the data collection period. As the population observed being jailed between 11/14/2022 and 8/13/2023 represents only a subset of the population who are incarcerated in jails, we used a zero-truncated Poisson model to estimate the total population of PLWH who are in and out of jail. This type of model uses information about the number of repeat incarcerations to estimate the size of the population that has not been observed yet.[12]

Findings

Data were successfully obtained from 57 of the 59 jails identified by WA DOH public health staff for Washington state. The remaining two jails were small county facilities which were not in compliance with state reporting requirements. In the 9-month period, data were collected for 79,088 individuals who experienced a total of 2,270,716 person-days of incarceration. There were 398 PLWH in this population who were jailed 546 times.

TABLE 9-1: ESTIMATED NUMBER OF PEOPLE LIVING WITH HIV WHO WERE INCARCERATED IN JAILS, WASHINGTON STATE 11/14/2022 -8/13/2023

	Value	PLWH Observed in Jail N	Estimated Population of PLWH in Jail[A] N (95% CI)	% of WA PLWH[B]
Total		398	815 (727, 904)	5.4%
Sex Assigned at Birth	Male	364	740 (657, 823)	5.9%
	Female	34	76 (45, 108)	3.2%
Transmission Category	MSM	189	412 (341, 481)	4.5%
	PWID	56	114 (82, 148)	13.9%
	MSM and PWID	77	163 (122, 206)	12.9%
	Heterosexual Sexual Contact	25	44 (29, 59)	2.4%
	Other Risk Category	51	91 (69, 113)	5.0%
Race or Ethnicity[C]	American Indian/Alaska Native	10	20 (10, 32)	3.3%
	Another Racial Identity	10	24 (4, 43)	11.9%
	Black	89	160 (130, 190)	6.1%
	Latinx	86	164 (129, 198)	6.6%
	Multiracial	33	65 (42, 88)	6.7%
	White	170	402 (322, 481)	5.0%
Age (as of 12/31/2022)	<30	64	112 (88, 135)	9.2%
	31-45	175	373 (310, 438)	8.5%
	46-65	147	304 (249, 358)	4.0%
	>65	12	44 (12, 95)	2.6%
Geography	King County	206	435 (367, 504)	6.0%
	Other WA County	192	381 (325, 438)	5.0%
Care Engagement	Virally Suppressed	276	587 (507, 666)	5.0%
	Not Virally Suppressed	79	163 (123, 203)	14.9%
	Out of care	43	73 (55, 91)	3.5%

[A]Estimated using a truncated Poisson model applied to the number of individuals jailed single and multiple times.
[B]Percentages calculated based on reported HIV prevalence on 12/31/2022.
[C]Categories are mutually exclusive.

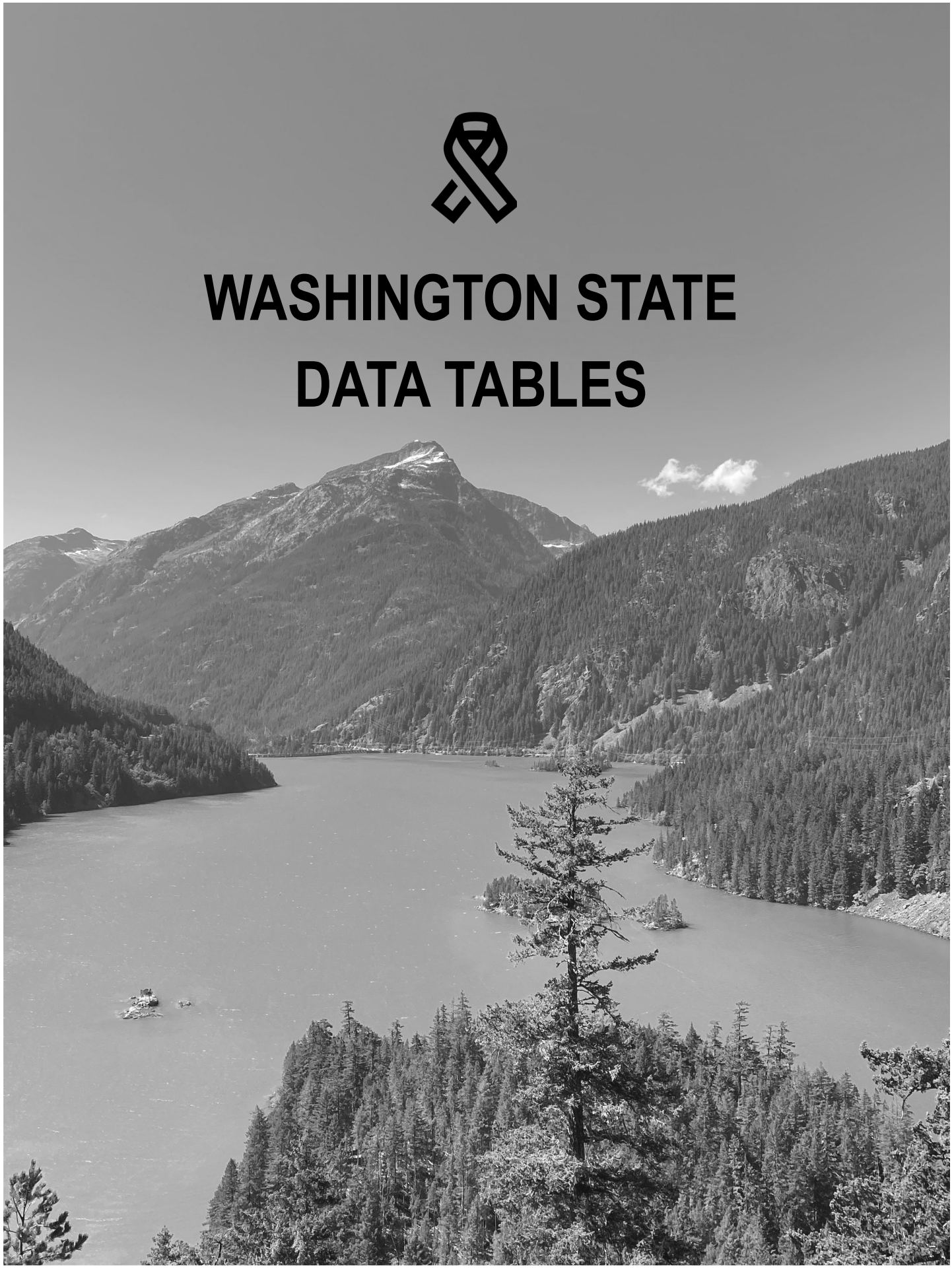
We estimate that this is a subset of a population of 815 PLWH (95% CI 727-904) who are jailed, representing 5.4% of the 14,872 PLWH living in Washington state (**Table 9-1**). Among PLWH who were incarcerated in Washington state jails during the project period, 26.8% had PWID as their transmission category (PWID alone or PWID and MSM), 14.9% were engaged in care but not virally suppressed and 3.5% were out of care.

Summary

This project identified 398 PLWH were who incarcerated in jails in Washington state in the 9-month project period. We estimate that this represents only 49% of the PLWH who are in and out of jail and that 5.4% of PLWH have encounters with jail or prisons. Notably, this includes 14.9% of people who are engaged in care but not virally suppressed. The low proportion of jail encounters among those who are not engaged in care (3.5%) is surprising. There are significant overlaps in the risk factors for incarceration and lapses in HIV care (substance use, poverty, mental health challenges)[13] and one might expect this population to look similar to those who are in care but not virally suppressed. The low proportion may be an indication that many of these individuals are no longer residing in Washington State and thus not at risk of incarceration in Washington jails. Another surprise is the small differences between racial categories. This may reflect the high degree of marginalization and risk factors for incarceration among PLWH generally. If these comprise a large part of the mechanism leading to racial disparities in the general population, one would not see large racial differences in a population where there is less variability in these risk factors across racial identities.

There are several limitations to our analysis. The zero-truncated Poisson model assumes a constant rate of incarceration among those that churn in and out of jail. If this is not true (e.g. perhaps those we observe in jail are members of this population with a particularly high risk for arrest), then our estimates of the size of the population at risk may be low. In practice, we are assuming that we are observing a population that is churning through jail regularly, and not individuals who may be going to jail for their first and only time. Another limitation is the small number of identifiers we receive from jails for matching between registries; in many cases we received only names. This may limit the quality of our record linkage although the size and direction of the bias is unclear. The large differences in population characteristics observed in our matched population relative to all PLWH gives us some confidence in our matching; one would not expect to see such strong demographic differences from a match that was linking people at random. A further evaluation relating the match success with the number of identifiers offered by each facility could be useful.

Although this project focused on describing the population of PLWH, the data used in this project could be used for real-time HIV care-linkage treatment programs in Washington state. Such programs have been effective in King County, and the results of this project suggest that they would interact with a large proportion of PLWH who are not adequately engaged in HIV care.[10] Successful service delivery to these individuals could have a significant positive impact on the HIV epidemic.



WASHINGTON STATE DATA TABLES

TABLE 10-1: NEW HIV AND AIDS DIAGNOSES, LATE HIV DIAGNOSES AND LINKAGE TO CARE, BY SELECT CHARACTERISTICS, WA STATE, 2022

	New AIDS Diagnoses			New HIV Diagnoses			Late HIV Diagnoses[A]		Initial Linkage to HIV Care[B]	
	N	Col %	Rate	N	Col %	Rate	N	Row %	N	Row %
Total	215	100%	2.7	421	100%	5.4	119	28%	336	80%
Gender										
Cisgender Men	170	79%	4.3	332	79%	8.4	89	27%	264	80%
Cisgender Women	41	19%	1.0	76	18%	1.9	28	37%	60	79%
Transgender Men	0	0%	n/a	2	<1%	n/a	0	0%	2	100%
Transgender Women	4	2%	n/a	11	3%	n/a	2	18%	10	91%
Age at HIV Diagnosis (years)										
<14	0	0%	0	1	<1%	0.1 NR	0	0%	1	100%
15-24	14	7%	1.4 NR	60	14%	6.2	8	13%	51	85%
25-34	46	21%	4.0	149	35%	13.1	26	17%	120	81%
35-44	76	35%	7.0	112	27%	10.3	41	37%	87	78%
45-54	45	21%	4.8	60	14%	6.4	25	42%	46	77%
55-64	24	11%	2.5	32	8%	3.3	15	47%	25	78%
65+	10	5%	0.7 NR	7	2%	0.5 NR	4	57%	6	86%
Race or Ethincity										
American Indian/Alaska Native	1	<1%	1.1 NR	3	1%	3.2 NR	1	33%	3	100%
Asian	12	6%	1.5 NR	33	8%	4.2	7	21%	26	79%
Black	42	20%	13.1	93	22%	29.0	28	30%	78	84%
Foreign-born[C]	28	13%	34.5	42	10%	51.7	19	45%	39	93%
U.S.-born[C]	13	6%	5.8 NR	41	10%	18.3	7	17%	32	78%
Latinx or Hispanic (all races)	57	27%	5.0	111	26%	9.7	32	29%	92	83%
Foreign-born[C]	32	15%	10.2	52	12%	16.6	24	46%	44	85%
U.S.-born[C]	18	8%	2.4	31	7%	4.1	4	13%	27	87%
Native Hawaiian or other Pacific Islander	7	3%	10.3 NR	9	2%	13.3 NR	5	56%	7	78%
White	86	40%	1.7	155	37%	3.1	46	30%	120	77%
Multiracial	10	5%	2.0 NR	17	4%	3.4	0	0%	10	59%
Transmission Category										
MSM	96	45%	n/a	217	52%	n/a	46	21%	178	82%
PWID	20	9%	n/a	20	5%	n/a	9	45%	15	75%
MSM and PWID	20	9%	n/a	22	5%	n/a	6	27%	18	82%
Heterosexual Sexual Contact	27	13%	n/a	44	10%	n/a	16	36%	38	86%
Transfusion/Transplant/ Perinatal	0	0%	n/a	1	<1%	n/a	0	0%	1	100%
No Identified Risk	52	24%	n/a	117	28%	n/a	42	36%	86	74%

Abbreviations: MSM = people assigned male at birth who have sex with men; PWID = people who inject drugs

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

-- Due to the small number of HIV cases, the count and percentage based on the count is not shown

NR Not reliable, RSE ≥25

[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 11% and 25% of newly diagnosed cases among Black and Latinx or Hispanic, respectively.

TABLE 10-2. NEW HIV DIAGNOSES, INCLUDING LATE HIV DIAGNOSES AND LINKAGE TO CARE, BY COUNTY AND HEALTH DISTRICT (HD) OF RESIDENCE AT HIV DIAGNOSIS, WA STATE, 2022

County or Health District or Residence	New HIV Diagnoses			Late HIV Diagnoses[A]		Initial Linkage to HIV Care[B]	
	N	Col %	Rate	N	Row %	N	Row %
Adams Co.	2	<1%	9.5 NR	1	50%	1	50%
Asotin Co.	0	0%	0.0	0	0%	0	0%
Benton Co.	5	1%	2.4 NR	3	60%	2	40%
Benton-Franklin HD	0	0%	0.0	0	0%	0	0%
Chelan Co.	4	1%	5.0 NR	2	50%	4	100%
Chelan-Douglas HD	0	0%	0.0	0	0%	0	0%
Clallam Co.	0	0%	0.0	0	0%	0	0%
Clark Co.	26	6%	5.0	9	35%	21	81%
Columbia Co.	0	0%	0.0	0	0%	0	0%
Cowlitz Co.	3	1%	2.7 NR	0	0%	1	33%
Douglas Co.	1	<1%	2.3 NR	0	0%	0	0%
Ferry Co.	1	0%	13.7 NR	0	0%	0	0%
Franklin Co.	5	1%	5.0 NR	1	20%	2	40%
Garfield Co.	0	0%	0.0	0	0%	0	0%
Grant Co.	6	1%	5.9 NR	2	33%	4	67%
Grays Harbor Co.	5	1%	6.5 NR	3	60%	3	60%
Island Co.	3	1%	3.4 NR	0	0%	3	100%
Jefferson Co.	1	<1%	3.0 NR	0	0%	1	100%
King Co.	194	46%	8.4	54	28%	159	82%
Kitsap Co.	10	2%	3.6 NR	2	20%	9	90%
Kittitas Co.	1	1<%	2.1 NR	0	0%	0	0%
Klickitat Co.	0	0%	0.0	0	0%	0	0%
Lewis Co.	3	1%	3.6 NR	1	33%	2	67%
Lincoln Co.	0	0%	0.0	0	0%	0	0%
Mason Co.	3	1%	4.5 NR	1	33%	3	100%
Ne Tri-County HD	0	0%	0.0	0	0%	0	0%
Okanogan Co.	0	0%	0.0	0	0%	0	0%
Pacific Co.	0	0%	0.0	0	0%	0	0%
Pend Oreille Co.	0	0%	0.0	0	0%	0	0%
Pierce Co.	60	14%	6.4	18	30%	43	72%
San Juan Co.	0	0%	0.0	0	0%	0	0%
Skagit Co.	3	1%	2.3 NR	0	0%	3	100%
Skamania Co.	0	0%	0.0	0	0%	0	0%
Snohomish Co.	28	7%	3.3	6	21%	22	79%
Spokane Co.	29	7%	5.3	9	31%	28	97%
Stevens Co.	0	0%	0.0	0	0%	0	0%
Thurston Co.	9	2%	3.0 NR	1	11%	7	78%
Wahkiakum Co.	0	0%	0.0	0	0%	0	0%
Walla Walla Co.	1	<1%	1.6 NR	0	0%	1	100%
Whatcom Co.	10	2%	4.3 NR	4	40%	10	100%
Whitman Co.	0	0%	0.0	0	0%	0	0%
Yakima Co.	8	2%	3.1 NR	2	25%	7	88%
Total	421	100%	5.4	119	28%	336	80%

-- Due to the small number of HIV cases, the count and percentage based on the count is not shown

NR Not reliable, RSE ≥25

[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 diagnosis

TABLE 10-3. NEW HIV DIAGNOSES OVER TIME, BY DEMOGRAPHIC AND RISK CHARACTERISTICS, WA STATE, 2018-2022

	2018	2019	2020	2021	2022	2018-2022			
	N	N	N	N	N	Total	Avg. N	%	Rate
Total	398	404	358	408	421	1,989	397.8	100%	5.2
Gender									
Cisgender Men	308	332	302	326	332	1,600	320.0	80%	8.3
Cisgender Women	88	65	50	69	76	348	69.6	17%	1.8
Transgender Men	0	0	0	3	2	5	1.0	<1%	n/a
Transgender Women	2	7	6	10	11	36	7.2	2%	n/a
Age at HIV Diagnosis (years)									
<14	0	1	0	2	1	4	0.8	<1%	0.1
15-24	54	60	54	51	60	279	55.8	14%	5.8
25-34	137	162	124	145	149	717	143.4	36%	12.8
35-44	92	75	85	96	112	460	92.0	23%	8.9
45-54	66	64	47	72	60	309	61.8	16%	6.6
55-64	41	31	36	32	32	172	34.4	9%	3.5
65+	8	11	12	10	7	48	9.6	2%	0.8
Race or Ethincity									
American Indian/Alaska Native	2	2	4	5	3	16	3.2	1%	3.5
Asian	15	18	29	17	33	112	22.4	6%	3.1
Black	82	64	58	79	93	376	75.2	19%	25.2
Foreign-born[A]	44	30	22	31	42	169	33.8	8%	44.1
U.S.-born[A]	33	31	24	40	41	169	33.8	8%	15.4
Latinx or Hispanic (all races)	71	95	56	100	111	433	86.6	22%	8.0
Foreign-born[A]	30	52	20	43	52	197	39.4	10%	12.8
U.S.-born[A]	29	30	20	35	31	145	29.0	7%	4.0
Native Hawaiian or other Pacific Islander	4	3	4	7	9	27	5.4	1%	8.6
White	198	197	189	177	155	916	183.2	46%	3.7
Multiracial	26	25	18	23	17	109	21.8	5%	4.5
Transmission Category									
MSM	198	240	224	219	217	1,098	219.6	55%	n/a
PWID	44	41	14	24	20	143	28.6	7%	n/a
MSM and PWID	39	23	22	35	22	141	28.2	7%	n/a
Heterosexual Sexual Contact	51	38	31	46	44	210	42.0	11%	n/a
Transfusion/Transplant/Perinatal	2	2	0	1	1	6	1.2	<1%	n/a
No Identified Risk	64	60	67	83	117	391	78.2	20%	n/a

Abbreviations: MSM = people assigned male at birth who have sex with men; PWID = people who inject drugs

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

NR: Not reliable, RSE ≥25

[A] Country of origin data are missing for approximately 11% and 25% of newly diagnosed cases among Black and Latinx or Hispanic (all races), respectively

TABLE 10-4. NEW HIV DIAGNOSES OVER TIME, BY COUNTY AND HEALTH DISTRICT (HD) OF RESIDENCE AT HIV DIAGNOSIS, WA STATE, 2018-2022

County and Health District of Residence	2018	2019	2020	2021	2022	2018-2022			
	N	N	N	N	N	Total.	Avg. N	%	Rate
Adams Co.	0	1	1	0	2	4	0.8	<1%	A3.9 NR
Asotin Co.	0	0	0	0	0	0	0	0%	0.0
Benton Co.	0	13	6	10	5	34	6.8	2%	3.3
Benton-Franklin HD	5	19	10	17	10	61	12.2	3%	4.0
Chelan Co.	3	2	1	5	4	15	3	1%	3.8 NR
Chelan-Douglas HD	4	4	3	5	5	21	4.2	1%	3.4
Clallam Co.	5	2	1	5	0	13	2.6	1%	3.4 NR
Clark Co.	21	28	22	26	26	123	24.6	6%	4.9
Columbia Co.	0	0	0	0	0	0	0	0%	0.0 NR
Cowlitz Co.	1	3	2	5	3	14	2.8	1%	2.5 NR
Douglas Co.	1	2	2	0	1	6	1.2	<1%	2.8 NR
Ferry Co.	0	0	0	0	1	1	0.2	<1%	2.8 NR
Franklin Co.	5	6	4	7	5	27	5.4	1%	5.6
Garfield Co.	0	0	0	0	0	0	0	0%	0.0
Grant Co.	4	2	3	1	6	16	3.2	1%	3.2 NR
Grays Harbor Co.	0	2	1	4	5	12	2.4	1%	3.2 NR
Island Co.	2	5	3	0	3	13	2.6	1%	3.0 NR
Jefferson Co.	1	0	0	0	1	2	0.4	<1%	1.2 NR
King Co.	225	189	169	180	194	957	191.4	48%	8.5
Kitsap Co.	9	9	4	6	10	38	7.6	2%	2.8
Kittitas Co.	1	2	1	0	1	5	1.0	<1%	2.2 NR
Klickitat Co.	0	0	1	0	0	1	0.2	<1%	0.9 NR
Lewis Co.	1	2	1	4	3	11	2.2	1%	2.7 NR
Lincoln Co.	0	0	0	1	0	1	0.2	<1%	1.8 NR
Mason Co.	5	5	4	2	3	19	3.8	1%	5.8
Ne Tri-County HD	0	1	2	1	1	5	1.0	<1%	1.5 NR
Okanogan Co.	0	1	0	0	0	1	0.2	<1%	0.5 NR
Pacific Co.	1	0	0	0	0	1	0.2	<1%	0.9 NR
Pend Oreille Co.	0	1	0	0	0	1	0.2	<1%	1.5 NR
Pierce Co.	49	52	51	59	60	271	54.2	14%	5.9
San Juan Co.	0	0	0	0	0	0	0	0%	0.0
Skagit Co.	3	3	5	2	3	16	3.2	1%	2.5 NR
Skamania Co.	0	0	0	0	0	0	0	0%	0.0
Snohomish Co.	20	29	23	32	28	132	26.4	7%	3.2
Spokane Co.	16	26	32	23	29	126	25.2	6%	4.7
Stevens Co.	0	0	2	1	0	3	0.6	<1%	1.3 NR
Thurston Co.	8	6	8	17	9	48	9.6	2%	3.3
Wahkiakum Co.	0	0	0	0	0	0	0	0%	0.0
Walla Walla Co.	1	0	1	1	1	4	0.8	<1%	1.3 NR
Whatcom Co.	3	5	3	3	10	24	4.8	1%	2.1
Whitman Co.	3	0	1	4	0	8	1.6	<1%	3.4 NR
Yakima Co.	10	8	6	10	8	42	8.4	2%	3.3
Total	398	404	358	408	421	1,989	397.8	100%	5.2

NR Not reliable, RSE ≥25

TABLE 10-5. NEW HIV DIAGNOSES, BY CURRENT GENDER[A], RACE OR ETHNICITY, AND/OR HIV TRANSMISSION CATEGORY, WA STATE, 2018-2022

	Asian		Black		Latinx or Hispanic (all races)		Another Racial Identity		White	
Cisgender Men	**N**	**%**	**N**	**%**	**N**	**%**	**N**	**%**	**N**	**%**
- MSM	67	75%	129	58%	298	77%	83	70%	492	63%
- PWID	1	1%	7	3%	7	2%	4	3%	66	8%
- MSM and PWID	0	0%	8	4%	12	3%	14	12%	103	13%
- Heterosexual Sexual Contact	0	0%	12	5%	10	3%	1	1%	15	2%
- Transfusion/Transplant/Perinatal	0	0%	1	<1%	0	0%	0	0%	0	0%
- No Identified Risk	21	24%	64	29%	59	15%	17	14%	109	14%
Total	89	100%	221	100%	386	100%	119	100%	785	100%

	Asian		Black		Latinx or Hispanic (all races)		Another Racial Identity[B]		White	
Cisgender Women	**N**	**%**	**N**	**%**	**N**	**%**	**N**	**%**	**N**	**%**
- PWID	0	0%	4	3%	3	9%	7	27%	43	35%
- Heterosexual Sexual Contact	12	67%	78	53%	20	63%	11	42%	47	38%
- Transfusion/Transplant/Perinatal	0	0%	4	3%	0	0%	0	0%	1	1%
- No Identified Risk	6	33%	62	42%	9	28%	8	31%	33	27%
- Total	18	100%	148	100%	32	100%	26	100%	124	100%

	Total	
Transgender Women	**N**	**%**
- Male Sex Partner	29	81%
- PWID	1	3%
- Male Sex Partner and PWID	4	11%
- Heterosexual Sexual Contact	1	3%
- No Identified Risk	1	3%
Total	36	100%

Abbreviations: MSM, people assigned male at birth who have sex with men; PWID, people who inject drugs

[A] Due to the small number of new HIV diagnoses among transgender men, they were not included in this table. Data on race/ethnicity are not presented for transgender women due to small numbers.

[B] Individuals who identified as American Indian or Alaska Native, Native Hawaiian or other Pacific Islander, and Multiracial were combined due to small numbers.

Table 10-6. Engagement in Care and Viral Load Suppression for People Living with HIV, by Select Characteristics, WA State, 2022

	Prevalent Cases of HIV			Engaged in Care[A]		Suppressed Viral Load[B]	
	N	Col %	Rate	N	Row %	N	Row %
Total	14,873	100%	189.1	12,803	86%	11,711	79%
Gender							
Cisgender Men	12,336	83%	313.0	10,615	86%	9,720	79%
Cisgender Women	2,341	16%	59.7	2,015	86%	1,837	78%
Transgender Men	20	<1%	n/a	17	85%	17	85%
Transgender Women	176	1%	n/a	156	89%	137	78%
Current Age (years)							
<14	31	<1%	2.2	28	90%	28	90%
15-24	278	2%	28.6	239	86%	193	69%
25-34	1,955	13%	171.4	1,604	82%	1,399	72%
35-44	3,063	21%	282.3	2,540	83%	2,247	73%
45-54	3,530	24%	375.5	3,043	86%	2,784	79%
55-64	4,064	27%	418.5	3,583	88%	3,379	83%
65+	1,952	13%	144.9	1,766	90%	1,681	86%
Race or Ethincity							
American Indian/Alaska Native	123	1%	132.7	107	87%	97	79%
Asian	598	4%	75.9	524	88%	501	84%
Black	2,627	18%	820.5	2,222	85%	2,006	76%
Foreign-born[C]	1,210	8%	1490.1	1,067	88%	1,010	83%
U.S.-born[C]	1,299	9%	580.0	1,063	82%	913	70%
Latinx or Hispanic (all races)	2,503	17%	219.6	2,147	86%	1,954	78%
Foreign-born[C]	1,256	8%	401.7	1,079	86%	1,012	81%
U.S.-born[C]	1,030	7%	134.9	892	87%	784	76%
Native Hawaiian or other Pacific Islander	76	1%	112.3	62	82%	51	67%
White	7,979	54%	161.2	6,905	87%	6,344	80%
Multiracial	964	6%	190.6	833	86%	755	78%
Transmission Category							
MSM	9149	62%	n/a	7,981	87%	7,404	81%
PWID	819	6%	n/a	664	81%	560	68%
MSM and PWID	1,265	9%	n/a	1,081	85%	933	74%
Heterosexual Sexual Contact	1,820	12%	n/a	1562	86%	1,450	80%
Transfusion/Transplant/Perinatal	215	1%	n/a	186	87%	167	78%
No Identified Risk	1,605	11%	n/a	1,329	83%	1,197	75%

Abbreviations: MSM = people assigned male at birth who have sex with men; PWID = people who inject drugs

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

[A] Engaged in care = at least one reported CD4 or VL result within calendar year

[B] Suppressed viral load = last reported viral load result in calendar year was < 200 copies/mL

[C] Country of origin data are missing for approximately 4% and 9% of newly living cases among Black and Latinx or Hispanic (all races), respectively.

TABLE 10-7. ENGAGEMENT IN CARE AND VIRAL LOAD SUPPRESSION FOR PEOPLE LIVING WITH HIV, BY COUNTY AND HEALTH DISTRICT (HD) OF CURRENT RESIDENCE, WA STATE, 2022

County or Health District of Residence	People Living with HIV			Engaged in Care[A]		Suppressed Viral Load[B]	
	N	Col %	Rate	N	Row %	N	Row %
Adams Co.	17	<1%	80.6	12	71%	11	65%
Asotin Co.	20	<1%	88.5	15	75%	15	75%
Benton Co.	202	1%	95.1	171	85%	152	75%
Benton-Franklin HD	305	2%	97.7	255	84%	222	73%
Chelan Co.	80	1%	99.2	56	70%	52	65%
Chelan-Douglas HD	105	1%	84.2	76	72%	71	68%
Clallam Co.	87	1%	112.1	77	89%	74	85%
Clark Co.	895	6%	171.8	687	77%	635	71%
Columbia Co.	2	<1%	50.6 NR	2	100%	2	100%
Cowlitz Co.	158	1%	140.6	128	81%	110	70%
Douglas Co.	25	<1%	56.8	20	80%	19	76%
Ferry Co.	5	<1%	68.5 NR	4	80%	3	60%
Franklin Co.	103	1%	103.3	84	82%	70	68%
Garfield Co.	0	0%	0.0	0	0%	0	0%
Grant Co.	68	<1%	66.8	57	84%	51	75%
Grays Harbor Co.	103	1%	134.8	85	83%	76	74%
Island Co.	110	1%	125.4	85	77%	77	70%
Jefferson Co.	57	<1%	170.9	51	89%	48	84%
King Co.	7,302	49%	315.1	6,484	89%	5,939	81%
Kitsap Co.	384	3%	136.7	331	86%	307	80%
Kittitas Co.	38	<1%	80.5	30	79%	28	74%
Klickitat Co.	22	<1%	95.0	19	86%	17	77%
Lewis Co.	72	<1%	86.3	57	79%	52	72%
Lincoln Co.	10	<1%	90.5 NR	9	90%	8	80%
Mason Co.	80	1%	120.8	64	80%	58	73%
Ne Tri-County HD	42	<1%	61.8	31	74%	30	71%
Okanogan Co.	27	<1%	63.2	22	81%	21	78%
Pacific Co.	41	<1%	173.7	34	83%	33	80%
Pend Oreille Co.	14	<1%	102.8 NR	10	71%	10	71%
Pierce Co.	1,694	11%	180.7	1,385	82%	1,239	73%
San Juan Co.	21	<1%	115.7	19	90%	19	90%
Skagit Co.	97	1%	73.9	83	86%	79	81%
Skamania Co.	7	<1%	58.8 NR	5	71%	5	71%
Snohomish Co.	1,280	9%	151.1	1,104	86%	1,046	82%
Spokane Co.	828	6%	150.4	714	86%	624	75%
Stevens Co.	23	<1%	48.9	17	74%	17	74%
Thurston Co.	365	2%	121.5	313	86%	287	79%
Wahkiakum Co.	5	<1%	110.5 NR	4	80%	4	80%
Walla Walla Co.	54	<1%	86.2	47	87%	43	80%
Whatcom Co.	269	2%	116.1	236	88%	216	80%
Whitman Co.	35	<1%	73.2	30	86%	29	83%
Yakima Co.	273	2%	105.0	252	92%	235	86%
Total	14,873	100%	189.1	12,803	86%	11,711	79%

-- Due to the small number of HIV cases the count and percentage based on the count is not shown

NR Not reliable, RSE ≥25

A Engaged in care = at least one reported CD4 or VL result within calendar year

B Suppressed viral load = last reported viral load result in calendar year was < 200 copies/mL

TABLE 10-8. PEOPLE LIVING WITH HIV, BY CURRENT GENDER[A], RACE OR ETHNICITY, AND HIV TRANSMISSION CATEGORY, WA STATE, 2022

	Asian		Black		Latinx or Hispanic (all races)		Another Racial Identity		White	
Gender	N	%	N	%	N	%	N	%	N	%
Cisgender Men										
- MSM	358	74%	872	55%	1,669	77%	673	70%	5,440	76%
- PWID	7	1%	70	4%	51	2%	42	4%	317	4%
- MSM and PWID	15	3%	89	6%	156	7%	131	14%	839	12%
- Heterosexual Sexual Contact	11	2%	172	11%	76	4%	34	4%	122	2%
- Transfusion/Transplant/Perinatal	4	1%	44	3%	12	1%	6	1%	41	1%
- No Identified Risk	92	19%	346	22%	197	9%	70	7%	377	5%
Total	487	100%	1,593	100%	2,161	100%	956	100%	7,136	100%
Cisgender Women										
- PWID	2	2%	35	3%	28	10%	43	24%	218	28%
- Heterosexual Sexual Contact	70	71%	586	58%	192	70%	104	58%	445	57%
- Transfusion/Transplant/Perinatal	3	3%	64	6%	10	4%	5	3%	25	3%
- No Identified Risk	24	24%	320	32%	46	17%	26	15%	95	12%
Total	99	100%	1,005	100%	276	100%	178	100%	783	100%
Transgender Women										
- Male Sex Partner	10	91%	24	89%	46	74%	20	77%	33	66%
- PWID	0	0%	0	0%	1	2%	0	0%	1	2%
- Male Sex Partner and PWID	0	0%	3	11%	12	19%	6	23%	14	28%
- Heterosexual Sexual Contact	1	9%	0	0%	1	2%	0	0%	0	0%
- No Identified Risk	0	0%	0	0%	2	3%	0	0%	2	4%
Total	11	100%	27	100%	62	100%	26	100%	50	100%

Abbreviations: MSM, people assigned male at birth who have sex with men; PWID, people who inject drugs

[A] Due to the small number of HIV cases reported as transgender men, they were not included in this table.

[B] Individuals who identified as American Indian or Alaska Native, Native Hawaiian or other Pacific Islander, and Multiracial were combined due to small numbers.

TABLE 10-9. PEOPLE LIVING WITH HIV, BY SELECT CHARACTERISTICS, WA STATE, 2018-2022

	2018		2019		2020		2021		2022	
Total	N	Col %	N	Col %	N	Col %	N	Col %	N	Col %
	13,866	100%	14,075	100%	14,294	100%	14,457	100%	14,873	100%
Gender										
Cisgender Men	11,625	84%	11,766	84%	11,946	84%	12,033	83%	2,341	16%
Cisgender Women	2,102	15%	21,71	15%	2,200	15%	2,249	16%	12,336	83%
Transgender Men	13	0%	12	0%	15	0%	18	0%	176	1%
Transgender Women	126	1%	126	1%	133	1%	157	1%	20	0%
Age at HIV Diagnosis (years)										
<14	54	0%	48	0%	40	0%	35	0%	31	0%
15-24	295	2%	304	2%	289	2%	269	2%	278	2%
25-34	1,866	13%	1,891	13%	1,949	14%	1,932	13%	1,955	13%
35-44	2,805	20%	2,787	20%	2,845	20%	2,878	20%	3,063	21%
45-54	4,123	30%	3,937	28%	3,740	26%	3,625	25%	3,530	24%
55-64	3,488	25%	3,730	27%	3,896	27%	3,988	28%	4,064	27%
65+	1,235	9%	1,378	10%	1,535	11%	1,730	12%	1,952	13%
Race or Ethincity										
American Indian/Alaska Native	121	1%	125	1%	117	1%	122	1%	123	1%
Asian	453	3%	483	3%	523	4%	546	4%	598	4%
Black	2,286	16%	2371	17%	2439	17%	2,501	17%	2,627	18%
Foreign-born	988	7%	1,046	7%	1,083	8%	1,134	8%	1,210	8%
U.S.-born[a]	1,214	9%	1,229	9%	1,245	9%	1,254	9%	1,299	9%
Latinx or Hispanic (all races)	2,102	15%	2,188	16%	2,253	16%	2,325	16%	2,503	17%
Foreign-born	1,001	7%	1,069	8%	1,100	8%	1,147	8%	1,256	8%
U.S.-born[a]	953	7%	956	7%	975	7%	984	7%	1,030	7%
Native Hawaiian or other Pacific Islander	58	0%	58	0%	60	0%	66	0%	76	1%
White	7,856	57%	7850	56%	7918	55%	7,918	55%	7,979	54%
Multiracial	987	7%	997	7%	981	7%	976	7%	964	6%
Transmission Category										
MSM	8,506	61%	8,663	62%	8,811	62%	8,915	62%	9,149	62%
PWID	816	6%	828	6%	814	6%	807	6%	819	6%
MSM and PWID	1,352	10%	1,301	9%	1,301	9%	1,285	9%	1,265	9%
Heterosexual Sexual Contact	1,717	12%	1,745	12%	1,771	12%	1,784	12%	1820	12%
Transfusion/Transplant/Perinatal	195	1%	202	1%	198	1%	199	1%	215	1%
No Identified Risk	1,280	9%	1,336	9%	1,399	10%	1,467	10%	1,605	11%

Abbreviations: MSM, people assigned male at birth who have sex with men; PWID, people who inject drugs

TABLE 10-10. PEOPLE LIVING WITH HIV, BY COUNTY AND HEALTH DISTRICT (HD) OF RESIDENCE AT HIV DIAGNOSIS, WA STATE, 2018-2022

County and Health District of Residence	2018		2019		2020		2021		2022	
	N	Col %	N	Col %	N	Col %	N	Col %	N	Col %
Adams Co.	13	<1%	14	<1%	13	<1%	13	<1%	17	<1%
Asotin Co.	23	<1%	19	<1%	18	<1%	20	<1%	20	<1%
Benton Co.	185	1%	200	1%	206	1%	205	1%	202	1%
Benton-Franklin HD	271	2%	282	2%	295	2%	300	2%	305	2%
Chelan Co.	57	<1%	62	<1%	64	0%	77	1%	80	1%
Chelan-Douglas HD	73	1%	81	1%	92	1%	99	1%	105	1%
Clallam Co.	81	1%	86	1%	84	1%	83	1%	87	1%
Clark Co.	777	6%	813	6%	875	6%	861	6%	895	6%
Columbia Co.	4	<1%	3	<1%	3	<1%	3	<1%	2	<1%
Cowlitz Co.	155	1%	152	1%	156	1%	160	1%	158	1%
Douglas Co.	16	<1%	19	<1%	28	<1%	22	<1%	25	<1%
Ferry Co.	6	<1%	6	<1%	4	<1%	3	<1%	5	<1%
Franklin Co.	86	1%	82	1%	89	1%	95	1%	103	1%
Garfield Co.	3	<1%	2	<1%	2	<1%	0	0%	0	0%
Grant Co.	45	<1%	52	<1%	59	<1%	59	<1%	68	0%
Grays Harbor Co.	99	1%	96	1%	104	1%	108	1%	103	1%
Island Co.	104	1%	108	1%	113	1%	107	1%	110	1%
Jefferson Co.	53	<1%	48	<1%	49	<1%	48	<1%	57	<1%
King Co.	7,044	51%	7,072	50%	7,102	50%	7,161	50%	7,302	49%
Kitsap Co.	332	2%	354	3%	359	3%	363	3%	384	3%
Kittitas Co.	29	<1%	33	<1%	33	<1%	36	<1%	38	<1%
Klickitat Co.	17	<1%	19	<1%	21	<1%	24	<1%	22	<1%
Lewis Co.	71	1%	70	<1%	68	<1%	75	1%	72	<1%
Lincoln Co.	5	<1%	7	<1%	6	<1%	12	<1%	10	<1%
Mason Co.	71	1%	71	1%	77	1%	79	1%	80	1%
Ne Tri-County HD	47	<1%	47	<1%	42	<1%	42	<1%	42	<1%
Okanogan Co.	28	<1%	28	<1%	27	<1%	28	<1%	27	<1%
Pacific Co.	29	<1%	33	<1%	35	<1%	38	<1%	41	<1%
Pend Oreille Co.	12	<1%	14	<1%	13	<1%	12	<1%	14	<1%
Pierce Co.	1,566	11%	1,588	11%	1,617	11%	1625	11%	1,694	11%
San Juan Co.	24	<1%	24	<1%	23	<1%	21	<1%	21	0%
Skagit Co.	97	1%	96	1%	97	1%	100	1%	97	1%
Skamania Co.	6	<1%	5	<1%	5	<1%	6	<1%	7	<1%
Snohomish Co.	1,165	8%	1,219	9%	1,242	9%	1,235	9%	1,280	9%
Spokane Co.	688	5%	698	5%	737	5%	788	5%	828	6%
Stevens Co.	29	<1%	27	<1%	25	<1%	27	<1%	23	<1%
Thurston Co.	345	2%	346	2%	340	2%	350	2%	365	2%
Wahkiakum Co.	6	<1%	4	<1%	4	<1%	5	<1%	5	<1%
Walla Walla Co.	60	<1%	56	<1%	56	<1%	55	<1%	54	<1%
Whatcom Co.	251	2%	257	2%	257	2%	257	2%	269	2%
Whitman Co.	28	<1%	31	<1%	28	<1%	30	<1%	35	<1%
Yakima Co.	256	2%	260	2%	255	2%	266	2%	273	2%
Total	13,866	100%	14,075	100%	14,294	100%	14,457	100%	14,873	100%

TABLE 10-11. CHARACTERISTICS AND CARE OUTCOMES OF PEOPLE LIVING WITH HIV REPORTING ANY AMERICAN INDIAN OR ALASKA NATIVE RACE, 2018-2022

	New HIV Diagnoses (2018-2022)		People Living with HIV (2022)	
	N	Col %	N	Col %
Total	55	3%[A]	555	4%[A]
Gender				
Cisgender Men	34	62%	439	79%
Cisgender Women	19	35%	100	18%
Transgender Men	0	0%	2	<1%
Transgender Women	2	4%	14	3%
Transmission Category				
MSM	23	42%	313	56%
PWID	9	16%	59	11%
MSM and PWID	7	13%	74	13%
Heterosexual Sexual Contact	7	13%	65	12%
No Identified Risk/Other	9	16%	44	8%
Geography				
King County	27	49%	260	47%
Other Western Washington	19	35%	219	39%
Eastern Washington	9	16%	76	14%
Care Metrics				
Initial Linkage to HIV Care[B]	44	80%	N/A	N/A
Engaged in Care[C]	N/A	N/A	489	88%
Viral Suppression[D]	N/A	N/A	443	80%

Abbreviations: MSM, people assigned male at birth who have sex with men; PWID, people who inject drugs

[A] Percentage of total Washington cases

[B] Initial linkage to care = at least one CD4 or viral load result within 30 days of HIV diagnoses

[C] Engaged in care = at least one reported CD4 or VL result within calendar year

[D] Suppressed viral load = last reported viral load result in calendar year was < 200 copies/mL

TABLE 10-12. DEATHS AMONG PEOPLE LIVING WITH HIV, BY SELECT CHARACTERISTICS, WA STATE, 1983-2021

	2021					1983-2021	
Total	N	Col %	Mortality Rate (per 100,000)	Case Fatality Rate (per 1,000)[A]	Standard Mortality Ratio[B]	N	Col %
	224	100%	2.9	15.5	1.7	8,989	100%
Gender							
Cisgender Men	197	88%	5.1	16.4	1.7	0	0%
Cisgender Women	27	12%	0.7	12.0	1.4	821	9%
Transgender Men	0	0%	n/a	0	n/a	0	0%
Transgender Women	0	0%	n/a	0	n/a	22	0%
Current Age (years)							
<14	0	0%	0.0	0	0	26	<1%
15-24	1	<1%	0.1 NR	3.7 NR	4.4	97	1%
25-34	12	5%	1.1 NR	6.2 NR	4.3	1,766	20%
35-44	24	11%	2.3	8.3	3.7	3,099	34%
45-54	51	23%	5.4	14.1	3.3	2,180	24%
55-64	80	36%	8.2	20.1	2.1	1,210	13%
65+	56	25%	4.3	32.4	0.8	611	7%
Race or Ethnicity							
American Indian/Alaska Native	1	<1%	1.1 NR	8.2 NR	n/a	142	2%
Asian	5	2%	0.7 NR	9.2 NR	n/a	103	1%
Black	35	16%	11.4	14.0	n/a	886	10%
Foreign-born[C]	5	2%	7.2 NR	4.4 NR	n/a	92	1%
U.S.-born[C]	29	13%	12.7	23.1	n/a	777	9%
Latinx or Hispanic (all races)	25	11%	2.3	10.8	n/a	622	7%
Foreign-born[C]	11	5%	3.7 NR	9.6 NR	n/a	214	2%
U.S.-born[C]	12	5%	1.6 NR	12.2 NR	n/a	373	4%
Native Hawaiian or other Pacific Islander	2	1%	3.1 NR	30.3 NR	n/a	23	<1%
White	134	60%	2.7	16.9	n/a	6,864	76%
Multiracial	22	10%	4.4	22.5	n/a	348	4%
Transmission Category							
MSM	108	48%	n/a	12.1	n/a	5,652	63%
PWID	34	15%	n/a	42.1	n/a	1,028	11%
MSM and PWID	36	16%	n/a	28.0	n/a	1,024	11%
Heterosexual Sexual Contact	21	9%	n/a	11.8	n/a	550	6%
Transfusion/Transplant/Perinatal	1	<1%	n/a	5.0	n/a	189	2%
No Identified Risk	24	11%	n/a	16.4	n/a	546	6%

Abbreviations: MSM, people assigned male at birth who have sex with men; NIR, no identified risk; PWID, people who inject drugs

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

NR Not reliable, RSE ≥25

[A] Case fatality rate = the number of deaths among people living with HIV divided by the total number of people living with HIV and then multiplied by 1000

[B] Standard mortality ratio = the death rate among people living with HIV divided by the death rate of the general population adjusted for age and gender

[C] Country of origin data are missing for approximately 4% and 9% of living cases among Black and Latinx or Hispanic (all races), respectively.

FIGURE 10-1. HIV CARE CONTINUUM, WASHINGTON STATE 2021 (BASED ON DATA REPORTED THROUGH JUNE 2022)

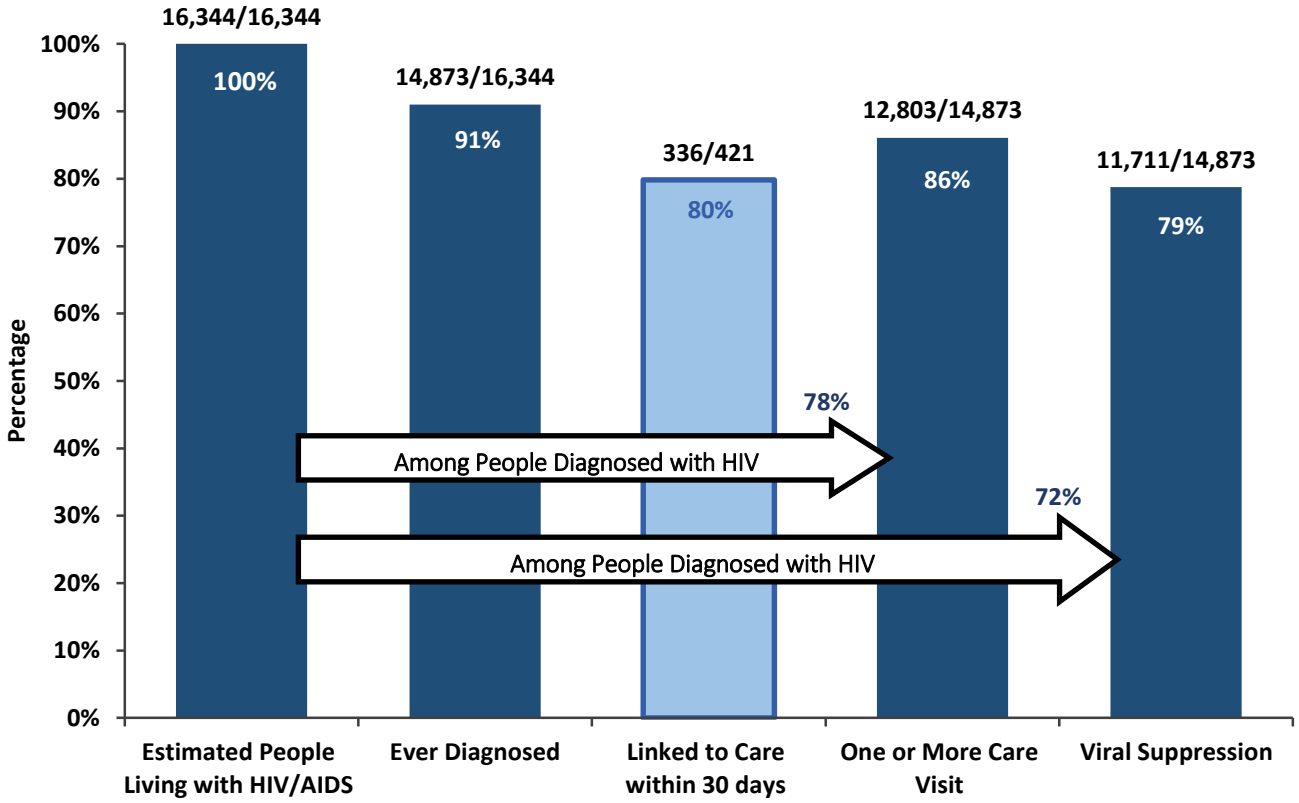


FIGURE 10-2. NEW HIV DIAGNOSES, DEATHS, AND CUMULATIVE NUMBER OF HIV DIAGNOSES, WASHINGTON STATE, 2022 (BASED ON DATA REPORTED THROUGH JUNE 2023)

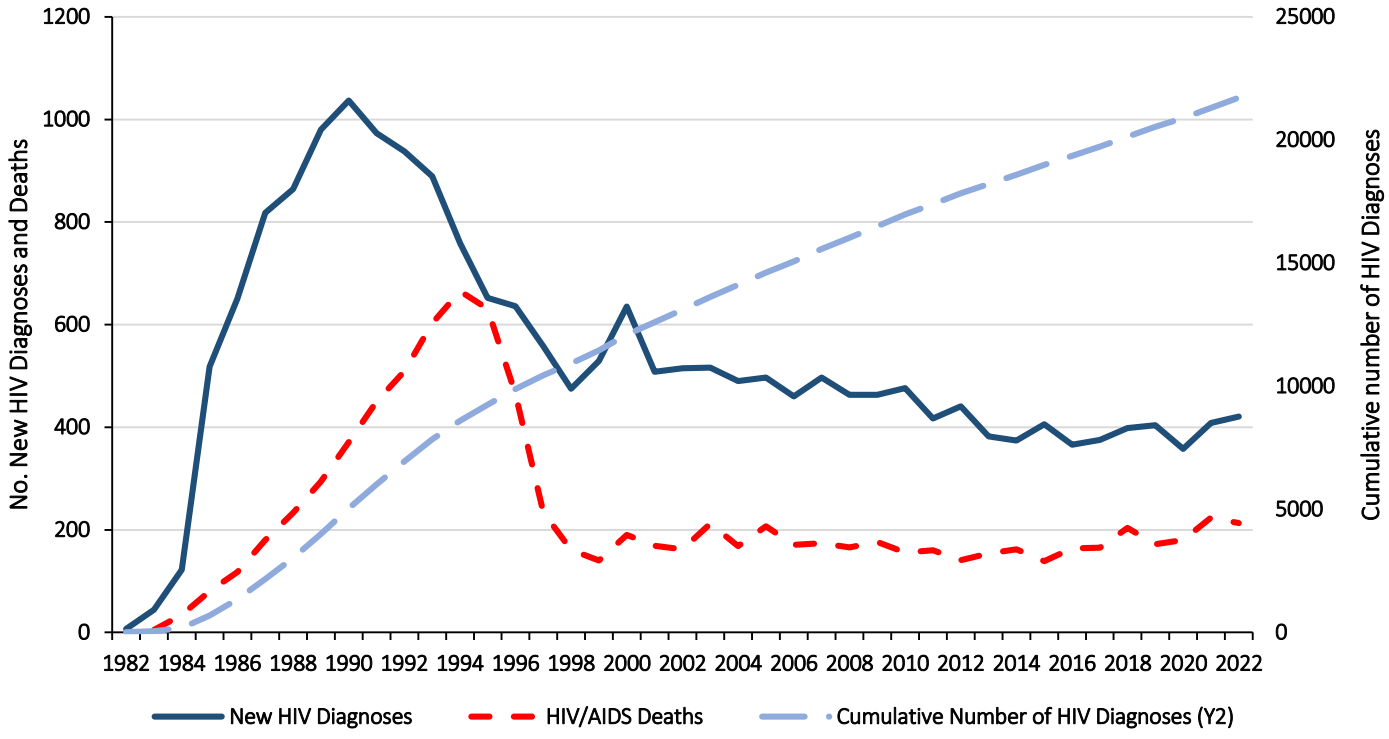
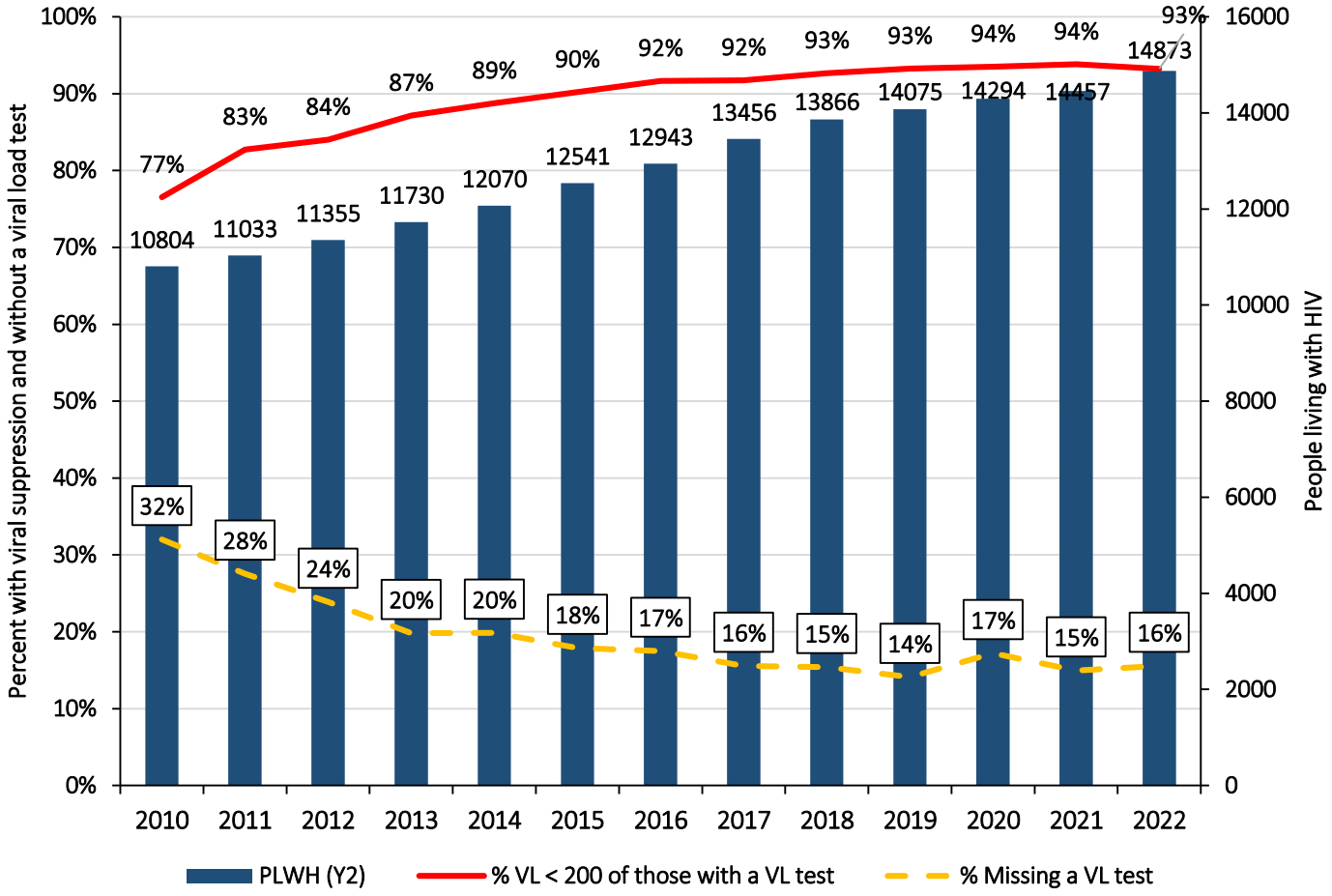


FIGURE 10-3. PEOPLE LIVING WITH HIV, % WITH VIRAL SUPPRESSION (OF THOSE WITH A VIRAL LOAD [VL] TEST), AND % WITH NO VL, WASHINGTON STATE, 2022 (BASED ON DATA REPORTED THROUGH JUNE 2023)



Technical Notes

This section provides more details on methodology related to the estimates provided and select data sources referenced in this report.

A general note about comparing data presented in this report with past reports. HIV surveillance data are dynamic with databases often being updated with new data, including data on characteristics of people living with HIV laboratory results, and causes of death. Health departments may also change their definitions for defining outcomes, including new HIV diagnoses. These changes can affect current calculations of estimates from prior years. Thus, differences between report for estimates for a given year are expected.

Methodology

1. **Calculating HIV Prevalence in King County:** Federal, Washington State and King County estimates of the number of people living with HIV (PLWH) residing in King County differ due to differences in data cleaning, record access, and/or date of analysis. PHSKC removes people from the total number of PLWH in King County based on case investigations for individuals who have had no HIV care for at least 1.5 years and were found likely to be no longer living in King County based on a search of publicly available records. However, in accordance with national HIV surveillance protocols, PHSKC does not change the official residence of the individual unless a health department in another jurisdiction confirms that the individual has relocated. Thus, federal count and state counts of PLWH in King County will be slightly higher than the estimates reported by PHSKC in this report.
2. **Calculating new HIV Diagnoses in King County:** The first HIV diagnoses among King County residents were in 1982. Licensed HIV tests were not available until 1985, so diagnoses between 1982-1984 were made either due to presentation with AIDS-defining illness or due to a diagnosis in a clinical trial. People who test positive for HIV in King County are investigated to determine if they have tested positive previously in another state or country. People who previously tested positive for HIV in another state or country are excluded from PHSKC's count of new HIV diagnoses that year. As described in **Technical Note 1**, Washington State and King County numbers of new HIV diagnoses in King County differ due to differences in data cleaning, record access, and/or date of analysis. HIV diagnosis rates are calculated by dividing the number of new HIV diagnoses in a population by the estimated population size of people at risk for HIV in that population. Data from the U.S. Census and American Community Survey, which provides reliable estimates of the size of each population, is used for estimates by demographic characteristics (i.e., age, race/ethnicity). Due to a lack of data on transgender gender identity in U.S. Census data, rates are only presented using sex assigned at birth. Calculating HIV diagnosis rates by transmission risk categories (e.g., men who have sex with men [MSM], people who inject drugs [PWID], heterosexual sexual contact)

TABLE 11-1. POPULATION SIZE FOR SELECT DEMOGRAPHICS IN KING COUNTY, WA

Population	Estimated Population Size, King County, 2022	Data Source
Men who have sex with men	971,796	PHSKC estimate of the percentage of all men who are MSM based on BRFSS (Behavioral Risk Factor Surveillance System) sexual orientation metrics applied to U.S. Census data of males aged 15 years and over
Male (sex assigned at birth)	1,168,424	King County's Population Interim Estimates (PIE), a combination of Census 2020 population estimates and Census 2010-based population estimates from OFM. Race and ethnicity categories are mutually exclusive and include people who identify as a single racial identity. [A] American Community Survey data was used to estimate nativity.
Female (sex assigned at birth)	1,149,276	
American Indian/Alaska Native	11,936	
Asian	487,762	
Black or African American	158,385	
U.S.-Born	110,064	
Foreign-Born	48,321	
Latinx or Hispanic	259,077	
U.S.-Born	167,147	
Foreign-Born	91,930	
Multiracial	149,831	
Native Hawaiian or other Pacific Islander	20,712	
White	1,229,997	
Total Population	**2,317,700**	

[A]We recognize this approach can result in under estimates of population size, particularly for people who identify as American Indian/Alaska Native and other racial identities.

involves more uncertainty since the size of these populations are not precisely known. Details on the approach used to estimate the number of people who are MSM are described in **Technical Note 3**. Previous reports calculated new HIV diagnosis rates for PWID; however, current estimates of the size of the population of people who inject drugs in King County are no longer reliable due to changes in the population. Therefore, this report does not provide rates for this transmission category. Historically, the population at risk for HIV acquired through heterosexual sexual contact was defined as residents aged 15 years and over minus MSM and PWID. Given the lack of reliable estimated for PWID this year, a rate for heterosexual sexual contact was not calculated. Future reports will include these estimates as data becomes available.

3. **ESTIMATING THE NUMBER OF PEOPLE WHO ARE MSM:** The rate of new HIV diagnoses among MSM, calculated as diagnoses per 1,000 per year, was based on U.S. Census estimates of the number of men living in King County and Behavioral Risk Factor Surveillance Survey (BRFSS) estimates of the proportion of the adult male population that are MSM. Between 2013 and 2021, the proportion of MSM ranged from 5.7 - 6.7%. We assume that the percentage of men who are MSM does not vary by race/ethnicity.

4. **ESTIMATING HOMELESSNESS AND HOUSING INSTABILITY:** To estimate the burden of homelessness and housing instability among PLWH in King County, several data sources were used. These include (1) addresses reported with laboratory results in HIV surveillance data, (2) self-reported housing information from partner services interviews of newly diagnosed persons, and (3) data on housing status from Ryan White clients. To assess homelessness among all PLWH, PHSKC compared address data on lab reports with a list of homeless service centers, food banks, day centers, transitional housing facilities, shelters, medical facilities, and other addresses associated with housing instability.

5. **DEFINING VIRAL SUPPRESSION AMONG PEOPLE LIVING WITH HIV:** Estimates of viral suppression in 2022 also incorporate data from 2021 and 2023. In addition to people with documented viral loads <200 in 2022, people who (1) have no viral load reported in 2022 but were suppressed as of a last viral load in 2021 and a first viral load in 2023 or (2) were diagnosed in the last quarter of 2022 and achieved suppression in the first quarter of 2023 were classified as achieving viral suppression.

6. **METHODS AND TOOLS FOR MOLECULAR HIV CLUSTER IDENTIFICATION:** In alignment with CDC methodology,

clusters with recent and rapid growth were identified using the first available HIV sequence for those people diagnosed in the prior three years. Starting in 2019, response efforts have focused on these more recently diagnosed cluster members as well as people diagnosed in prior years (i.e., people diagnosed more than three years earlier) whose first HIV sequence linked directly to that of a more recently diagnosed person. In 2020, earlier-diagnosed people were included in response efforts on the basis of linkages via *any* of their HIV sequences (i.e., not just their first). Additionally, in 2021, we started linking earlier-diagnosed people living with HIV (PLWH) even if only *indirectly* linked to the most recent diagnoses in the cluster. This broadening of criteria was motivated by a desire to ensure that analyses included all people who may be connected to a cluster and reflects our increasing capacity for cluster response. The tools used to identify molecular HIV clusters are the CDC-sponsored Secure HIV TRACE (HIV TRAnsmission Cluster Engine, created by University of California - San Diego and Temple University) and DIVEIN, a University of Washington-created tool. HIV TRACE is used by HIV surveillance groups for cluster identification across the nation. HIV TRACE can identify and visualize clusters. HIV TRACE was built to function best for the entire state, thus its utility at the county level is limited. The CDC periodically identifies molecular clusters which are of national priority and expects all HIV surveillance jurisdictions to also identify local clusters monthly. The CDC can identify inter-jurisdictional clusters which may not be visible to individual jurisdictions. National priority clusters are limited to those that are "recent and rapid", those that include five linked new diagnoses in the past year. For the level of HIV morbidity King County experiences, PHSKC has elected to use a lower threshold of three members (i.e., casting a wider net) for King County to become aware more quickly of new populations with HIV transmission and quickly initiate interventions. King County also generally casts a broader net with the genetic cluster distance of 1.5% (relative to 0.5%), which may result in more distal and indirect linkages being included in King County clusters. Genetic distance refers to how similar the genetic sequences are for two or more PLWH. A genetic difference of 0.5% or less indicates HIV strains that are 99.5% or more alike; the genetic difference of 1.5% indicates 98.5% similarity.

Data Sources

HIV Core Surveillance: Data are collected as part of investigations of people with newly diagnosed HIV or AIDS. These investigations are informed and augmented by HIV-related test results reported to PHSKC by laboratories, including HIV diagnostic tests and CD4 counts.

PHSKC Medical and Laboratory Records: Data from HIV testing conducted at jails and at clinics operated by PHSKC are extracted from the PHSKC medical record system, and HIV testing data from teen health centers and the juvenile detention center are provided by the PHSKC public health laboratory.

Evaluation Web: Data from HIV testing funded by the WA DOH and conducted at agencies within King County are captured in WA DOH's Evaluation Web data system and shared with PHSKC.

Partner Services Data: Partner services seek to ensure that people with bacterial STIs and HIV receive appropriate treatment and that their sex and needle sharing partners are notified, tested, and treated. Partner services interviews also allow PHSKC staff to collect information about people with newly diagnosed HIV infection, including their reason for HIV testing and their testing history. For people who are HIV-negative, partner services interviews also present an opportunity to monitor PrEP use among a population at higher risk for HIV acquisition. PHSKC staff who conduct partner services interviews among HIV-negative MSM diagnoses with STIs routinely ask if they are currently taking PrEP. Partner services interview data are used to monitor PrEP use among MSM with bacterial STIs. In March 2020, current PrEP use was added to the STI case report form which allows for monitoring PrEP use among MSM diagnosed with STIs who were not interviewed for as part pf partner services outreach.

Pride Survey: Local data from the King County Pride surveys provide insight into PrEP use and sexual behavior among MSM, transgender, and non-binary individuals. The 2023 Pride survey is an online survey that is advertised online and at select in-person pride events in Seattle. In 2023, 735 King County residents participated, among whom 222 (30%) identified as a cisgender or transgender man who was sexually active with a man in the past 12 months. Overall, 69 (9%) participants identified as transgender and/or non-binary.

National HIV Behavioral Surveillance (NHBS): NHBS is a national, CDC funded surveillance project that includes King County, WA. Survey participants include diverse samples of people at increased risk for HIV and rotate each year between MSM, PWID, and heterosexually-active people at higher risk for HIV. Recent surveys have included MSM (2017, 2021), PWID (2018, 2022), heterosexually-active people (2019), and ad hoc surveys of transgender women (2019-2020) and women who exchange sex for money or drugs (2016).

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