HIV EPIDEMIOLOGY

Annual Report 2023
San Francisco

Department of Public Health
Population Health Division

HIV Epidemiology

Annual Report 2023

San Francisco Department of Public Health
Population Health Division

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A Abbreviations

API	Asian/Pacific Islander
ART	Antiretroviral therapy
CDC	Centers for Disease Control and Prevention
HCV	Hepatitis C virus
LA-CAB	Long-acting cabotegravir
LINCS	Linkage Integration Navigation Comprehensive Service
MSM	Men who have sex with men
MSM-PWID	Men who have sex with men and who also inject drugs
NDI	National Death Index
OOJ	Out-of-jurisdiction
PEH	People experiencing homelessness
PLWH	People living with HIV
PrEP	Pre-exposure prophylaxis
PWID	People who inject drugs
SFDPH	San Francisco Department of Public Health
STI	Sexually transmitted infection
TWSM	Trans women who have sex with men
TWSM-PWID	Trans women who have sex with men and who also inject drugs

E Executive Summary

In 2023, 133 new diagnoses were reported; a 20% drop from the 167 diagnoses reported in 2022. By racial/ethnic group, the decline in new HIV diagnoses from 2022 to 2023 was most pronounced in Latinx individuals, for whom diagnoses declined from 74 in 2022 to 40 in 2023 (46%).

For 2023 new diagnoses confirmed through laboratory testing, 95% were linked to care within one month of diagnosis, and 84% of people diagnosed the first nine months of 2023 were virally suppressed within six months. Higher proportions of people living with HIV (PLWH) received at least one HIV lab test in 2023 (80%), compared with 2022. Ninety-two percent of PLWH were documented to have ever received antiretroviral treatment and 93% of people in care were virally suppressed as of December 2023.

The year 2023 also saw the expansion in HIV prevention services such as San Francisco's HIV/STI home testing program (Take Me Home) and the wider availability of pre-exposure prophylaxis (PrEP), including a newly-approved regimen (approved December 2021) that is injectable and long-acting (cabotegravir, LA-CAB). Home test kits ordered increased from 619 kits to 1,026 kits from 2022 to 2023. Increased client enrollment occurred in several large PrEP programs from 2022 to 2023.

Demographic distributions of new diagnoses have shifted. Gender-wise, cis women, trans women and trans men together accounted for increasing proportion of new diagnoses. With respect to age, new diagnoses starting in 2019 have been among adults 18 years and older; no diagnoses were reported in 2019 to 2023 among persons under 18 years of age.

Several indicators involving people experiencing homelessness (PEH) continue to be of concern. PEH still comprise an elevated proportion of new diagnoses each year, accounting for 23% of 2023 diagnoses. Among PEH who were last unhoused in San Francisco, only two-thirds (67%) were virally suppressed in 2023.

PLWH in San Francisco are living well past 50 years of age, with 74% aged 50 years and older and 45% aged 60 years and older. This aging population partially accounts for the increasing trend in annual deaths. Age-related causes of deaths such as heart disease and cancers (not HIV-related) contributed to 39% and 20%, respectively, of deaths in people with HIV during 2019 to 2022. However, drug overdoses, which are preventable causes of death, also impacted a large proportion of decedents in 2019 to 2022 contributing to 19% of deaths. This was even more pronounced among people who inject drugs (PWID) who died in this time period; drug overdoses contributed to one-third of deaths among PWID [non-men who have sex with men (MSM)] and 29% of deaths among men who have sex with men and who also inject drugs (MSM-PWID).

Trends and indicators in this report will continue to be closely monitored and disseminated to provide relevant information for HIV prevention and care program planning and implementation in San Francisco.

1 Overview of HIV in San Francisco

15,544
SAN FRANCISCO RESIDENTS WERE DIAGNOSED AND LIVING WITH HIV AS OF 12/31/2023

11%
OF PLWH IN CALIFORNIA RESIDED IN SAN FRANCISCO

1%
OF PLWH IN THE UNITED STATES RESIDED IN SAN FRANCISCO

By the end of 2023 there were 15,544 residents of San Francisco living with a diagnosis of HIV (Table 1.1). San Franciscans represented 11% of the total number of people diagnosed and living with HIV infection (PLWH) in the state of California and 1% of people diagnosed and living with HIV in the United States. In 2023, there were 133 people diagnosed with HIV in San Francisco, the majority of whom were cis men who have sex with men (MSM). The total number of PLWH declined each year from 2019 to 2023 and annual deaths have been greater than number of diagnoses in recent years (Figure 1.2). As PLWH live increasingly longer lives, the proportion of people aged 60 and older increased from 33% in 2019 to 45% in 2023 (Table 1.2).

Among the 15,544 San Francisco residents at time of diagnosis, 8,561 were still living in the city based on their most recent available address (Table 1.4). In addition, people who reside outside of San Francisco (Out-of-Jurisdiction, OOJ) are often diagnosed at San Francisco facilities and testing sites. The annual number of OOJ residents diagnosed in San Francisco trended downward since 2014, accounting for 26% of people diagnosed by San Francisco providers (Figure 1.3). The total number of PLWH with a known current San Francisco address was 11,572 by the end of 2023 (people diagnosed OOJ made up 26% of these PLWH). The demographic characteristics of current residents both diagnosed in San Francisco and diagnosed OOJ are similar to those of all San Francisco residents diagnosed and living with HIV except that San Francisco residents diagnosed OOJ were younger than those diagnosed in San Francisco (51% age <50 years vs. 28%, respectively; Table 1.4).

In 2023 the proportion of Whites diagnosed was 37% with Latinx diagnosed at 30% (Table 1.5). Though cis men made up the largest share of diagnoses each year, the proportion of diagnoses among women and trans women was 10% and 8%, respectively, in 2023. Data since 2015 indicates a small annual increase of diagnoses in trans men. No children (<13 years) were diagnosed with HIV during 2014 to 2023, and no people aged 13-17 were diagnosed during 2019 to 2023. The proportion of MSM diagnosed declined over time, from 74% in 2014 to 63% in 2023.

Table 1.1 Characteristics of people living with HIV and people newly diagnosed with HIV in San Francisco, California and the United States

		People Living with HIV			People Newly Diagnosed with HIV		
		San Francisco[1] 2023 (N=15,544)	California[2] 2022 (N=142,772)	United States[3] 2022 (N=1,109,418)	San Francisco[1] 2023 (N=133)	California[2] 2022 (N=4,882)	United States[3] 2022 (N=38,043)
Gender	Cis Men	91%	86%	76%	80%	84%	79%
	Cis Women	6%	12%	23%	10%	13%	18%
	Trans Women	3%	2%	1%	8%	3%	2%
	Trans Men	<1%	<1%	<1%	2%	<1%	<1%
Race/Ethnicity	White	56%	34%	28%	37%	21%	24%
	Black/African American	11%	16%	39%	19%	15%	38%
	Latinx	22%	41%	26%	30%	57%	32%
	Asian/Pacific Islander	7%	5%	2%	14%	5%	2%
	Native American	<1%	<1%	<1%	0%	<1%	<1%
	Other/Unknown	4%	4%	5%	0%	2%	3%
Transmission Category[4]	MSM	74%	66%	58%	63%	55%	67%
	TWSM	2%	2%	--	6%	3%	--
	PWID	5%	5%	10%	7%	5%	7%
	MSM-PWID	13%	6%	5%	10%	3%	3%
	TWSM-PWID	1%	--	--	2%	--	--
	Heterosexual	4%	15%	25%	9%	20%	22%
	Other/Unidentified	1%	6%	2%	3%	14%	1%

1 San Francisco data are reported through March 18, 2024 for HIV diagnoses through December 31, 2023. San Francisco 2023 new diagnoses may be revised due to case reporting delay. Death reporting is incomplete for 2023; the number of San Francisco PLWH may be revised downward.

2 California data are reported through December 31, 2023 for HIV diagnoses through December 31, 2022. California Department of Public Health, Office of AIDS, California HIV Surveillance Report - 2022. Released on February 9, 2024. https://www.cdph.ca.gov/Programs/CID/DOA/Pages/OA_case_surveillance_reports. aspx. The number of California's new diagnoses does not include people with unreported race and ethnicity.

3 U.S. data are reported through December 31, 2023 and reflect HIV diagnoses through December 31, 2022. U.S. data reflect unadjusted numbers for 50 states and 6 dependent areas and may be found in the Centers for Disease Control and Prevention, CDC. Diagnoses, deaths, and prevalence of HIV in the United States and 6 territories and freely associated states, 2022. HIV Surveillance Report, 2022; vol. 35. http://www.cdc.gov/hiv-data/nhss/hiv-diagnoses-deaths-prevalence. html. Published May 2024. Accessed May 22, 2024. U.S. racial/ethnic group data for new diagnoses only reflect people with racial/ethnic group information.

4 U.S. transmission category data for adults and adolescents have been statistically adjusted for missing values and not released separately for transgender people.

Table 1.2   Trends in people living with HIV by demographic and risk characteristics, 2019-2023, San Francisco

		2019	2020	2021	2022	2023[2]
		Number (%)				
	Total[1]	15,996	15,860	15,753	15,602	15,544
Gender	Cis Men	14,647 (92)	14,512 (92)	14,404 (91)	14,266 (91)	14,206 (91)
	Cis Women	908 (6)	905 (6)	902 (6)	890 (6)	888 (6)
	Trans Women	433 (3)	434 (3)	437 (3)	436 (3)	438 (3)
	Trans Men	8 (<1)	9 (<1)	10 (<1)	10 (<1)	12 (<1)
Race/Ethnicity	White	9,091 (57)	8,952 (56)	8,848 (56)	8,713 (56)	8,656 (56)
	Black/African American	1,871 (12)	1,854 (12)	1,822 (12)	1,779 (11)	1,765 (11)
	Latinx	3,345 (21)	3,371 (21)	3,392 (22)	3,417 (22)	3,429 (22)
	Asian/Pacific Islander	1,023 (6)	1,031 (7)	1,046 (7)	1,053 (7)	1,067 (7)
	Native American	58 (<1)	57 (<1)	58 (<1)	60 (<1)	60 (<1)
	Multi-race	600 (4)	587 (4)	579 (4)	572 (4)	559 (4)
	Unknown	8 (<1)	8 (<1)	8 (<1)	8 (<1)	8 (<1)
Age in Years (at end of each year)	0 - 12	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
	13 - 17	3 (<1)	3 (<1)	2 (<1)	0 (0)	0 (0)
	18 - 24	91 (1)	83 (1)	59 (<1)	57 (<1)	59 (<1)
	25 - 29	343 (2)	311 (2)	281 (2)	262 (2)	213 (1)
	30 - 39	1,774 (11)	1,662 (10)	1,589 (10)	1,502 (10)	1,423 (9)
	40 - 49	2,901 (18)	2,682 (17)	2,523 (16)	2,389 (15)	2,309 (15)
	50 - 59	5,690 (36)	5,517 (35)	5,258 (33)	4,922 (32)	4,575 (29)
	60 - 69	3,945 (25)	4,124 (26)	4,324 (27)	4,534 (29)	4,766 (31)
	70+	1,249 (8)	1,478 (9)	1,717 (11)	1,936 (12)	2,199 (14)
Transmission Category	MSM	11,672 (73)	11,612 (73)	11,550 (73)	11,474 (74)	11,451 (74)
	TWSM	253 (2)	261 (2)	266 (2)	271 (2)	272 (2)
	PWID	863 (5)	847 (5)	822 (5)	788 (5)	775 (5)
	MSM-PWID	2,181 (14)	2,116 (13)	2,078 (13)	2,027 (13)	1,998 (13)
	TWSM-PWID	176 (1)	169 (1)	167 (1)	161 (1)	162 (1)
	Heterosexual	644 (4)	647 (4)	655 (4)	659 (4)	664 (4)
	Other/Unidentified	207 (1)	208 (1)	215 (1)	222 (1)	222 (1)

1 People living with HIV at the end of each year.

2 Provisional number will be revised when death reporting for 2023 is complete.

Figure 1.1 HIV disease stage 3 (AIDS) diagnoses, deaths, and prevalence, 1980-2023, San Francisco

Legend:
- People living with HIV ever classified as stage 3
- New HIV disease stage 3 diagnoses
- HIV disease stage 3 deaths[1]

Y-axis: Number of Diagnoses/Deaths (0 to 10,000)
X-axis: Year of Diagnosis/Death (80 to 22)
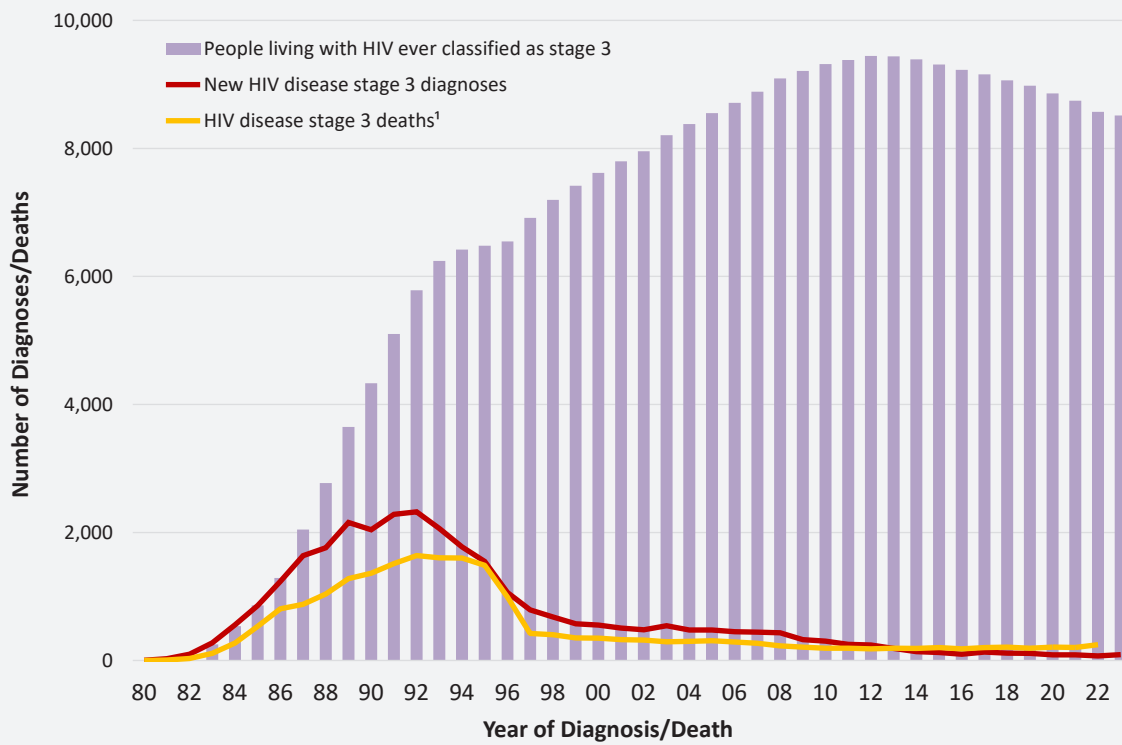
1 Death reporting for 2023 is not complete.

Figure 1.2 HIV diagnoses, deaths, and prevalence, 2006-2023, San Francisco

Legend:
- People living with HIV
- New HIV diagnoses[1]
- Deaths[2]

Left Y-axis: Number of New HIV Diagnoses/Deaths (0 to 800)
Right Y-axis: Number of People Living with HIV (0 to 20,000)
X-axis: Year (2006 to 2023)

People living with HIV (prevalence): 14,413; 14,625; 14,890; 15,119; 15,354; 15,554; 15,802; 15,953; 16,040; 16,094; 16,113; 16,113; 16,076; 15,996; 15,860; 15,753; 15,602; 15,544

New HIV diagnoses: 542; 535; 529; 478; 479; 436; 483; 409; 326; 310; 253; 253; 220; 183; 152; 170; 167; 133

Deaths: 325; 323; 264; 249; 244; 236; 235; 258; 239; 256; 234; 253; 257; 263; 288; 277; 318

1 See Technical Notes "Date of Initial HIV Diagnosis."
2 Death reporting for 2023 is not complete.

Table 1.3　Characteristics of people living with HIV through December 2023, San Francisco

			White	Black/African American	Latinx	Asian/Pacific Islander & Native American	Multi-Race	Total Number[1]
					Number (%)			
Cis Men	Transmission Category	MSM	6,879 (82)	842 (64)	2,524 (83)	845 (85)	360 (72)	11,451
		PWID	154 (2)	148 (11)	67 (2)	24 (2)	18 (4)	411
		MSM-PWID	1,235 (15)	230 (17)	344 (11)	81 (8)	108 (22)	1,998
		Heterosexual	30 (<1)	61 (5)	54 (2)	19 (2)	6 (1)	170
		Other/Unidentified	53 (1)	40 (3)	53 (2)	20 (2)	5 (1)	176
	Age in Years (as of 12/31/2023)	0 - 12	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0
		13 - 17	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0
		18 - 24	5 (<1)	10 (1)	29 (1)	6 (1)	1 (<1)	51
		25 - 29	34 (<1)	31 (2)	75 (2)	21 (2)	5 (1)	166
		30 - 39	391 (5)	153 (12)	493 (16)	165 (17)	41 (8)	1,243
		40 - 49	900 (11)	167 (13)	620 (20)	232 (23)	105 (21)	2,025
		50 - 59	2,448 (29)	345 (26)	925 (30)	326 (33)	161 (32)	4,207
		60 - 69	2,998 (36)	430 (33)	694 (23)	175 (18)	131 (26)	4,431
		70+	1,575 (19)	185 (14)	206 (7)	64 (6)	53 (11)	2,083
		Cis Men Total	**8,351**	**1,321**	**3,042**	**989**	**497**	**14,206**
Cis Women	Transmission Category	PWID	126 (54)	142 (45)	61 (28)	12 (14)	17 (47)	358
		Heterosexual	98 (42)	160 (51)	145 (66)	66 (79)	16 (44)	485
		Other/Unidentified	8 (3)	12 (4)	14 (6)	6 (7)	3 (8)	45
	Age in Years (as of 12/31/2023)	0 - 12	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0
		13 - 17	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0
		18 - 24	0 (0)	2 (1)	2 (1)	0 (0)	1 (3)	5
		25 - 29	1 (<1)	9 (3)	12 (5)	2 (2)	5 (14)	29
		30 - 39	23 (10)	25 (8)	32 (15)	7 (8)	2 (6)	89
		40 - 49	37 (16)	54 (17)	45 (20)	23 (27)	10 (28)	170
		50 - 59	71 (31)	79 (25)	54 (25)	26 (31)	11 (31)	241
		60 - 69	77 (33)	108 (34)	48 (22)	17 (20)	5 (14)	256
		70+	23 (10)	37 (12)	27 (12)	9 (11)	2 (6)	98
		Cis Women Total	**232**	**314**	**220**	**84**	**36**	**888**
		Trans Women Total	**71**	**128**	**161**	**53**	**25**	**438**
		Total	**8,656**	**1,765**	**3,429**	**1,127**	**559**	**15,544**

1 Includes people whose racial/ethnic information is not available. Data on trans men are not released separately due to small numbers. See Technical Notes "Gender Status."

Table 1.4 Characteristics of people living with HIV through December 2023 by residence status, San Francisco

		PLWH who were SF residents at diagnosis	PLWH who were SF residents based on most recent address[1] (N=11,572)	
			SF residents at diagnosis	OOJ residents at diagnosis
		Number (%)		
	Total	**15,544**	**8,561**	**3,011**
Gender[2]	Cis Men	14,206 (91)	7,654 (89)	2,764 (92)
	Cis Women	888 (6)	595 (7)	123 (4)
	Trans Women	438 (3)	303 (4)	123 (4)
Race/Ethnicity	White	8,656 (56)	4,280 (50)	1,388 (46)
	Black/African American	1,765 (11)	1,044 (12)	442 (15)
	Latinx	3,429 (22)	2,193 (26)	817 (27)
	Asian/Pacific Islander	1,067 (7)	719 (8)	164 (5)
	Other/Unknown	627 (4)	325 (4)	200 (7)
Age in Years (as of 12/31/2023)	0 - 12	0 (0)	0 (0)	2 (<1)
	13 - 17	0 (0)	0 (0)	1 (<1)
	18 - 24	59 (<1)	41 (<1)	26 (1)
	25 - 29	213 (1)	147 (2)	102 (3)
	30 - 39	1,423 (9)	872 (10)	686 (23)
	40 - 49	2,309 (15)	1,316 (15)	704 (23)
	50 - 59	4,575 (29)	2,438 (28)	807 (27)
	60 - 69	4,766 (31)	2,469 (29)	538 (18)
	70+	2,199 (14)	1,278 (15)	145 (5)
Transmission Category	MSM	11,451 (74)	6,038 (71)	2,254 (75)
	TWSM	272 (2)	187 (2)	87 (3)
	PWID	775 (5)	516 (6)	111 (4)
	MSM-PWID	1,998 (13)	1,107 (13)	331 (11)
	TWSM-PWID	162 (1)	114 (1)	35 (1)
	Heterosexual[3]	664 (4)	450 (5)	113 (4)
	Other/Unidentified	222 (1)	149 (2)	80 (3)

1 See Technical Notes "Residence and Receipt of Care for PLWH."
2 Data on trans men are not released separately due to small numbers. See Technical Notes "Gender Status."
3 Includes female presumed heterosexual.

Figure 1.3 San Francisco residents and out-of-jurisdiction residents diagnosed with HIV in San Francisco, 2014-2023
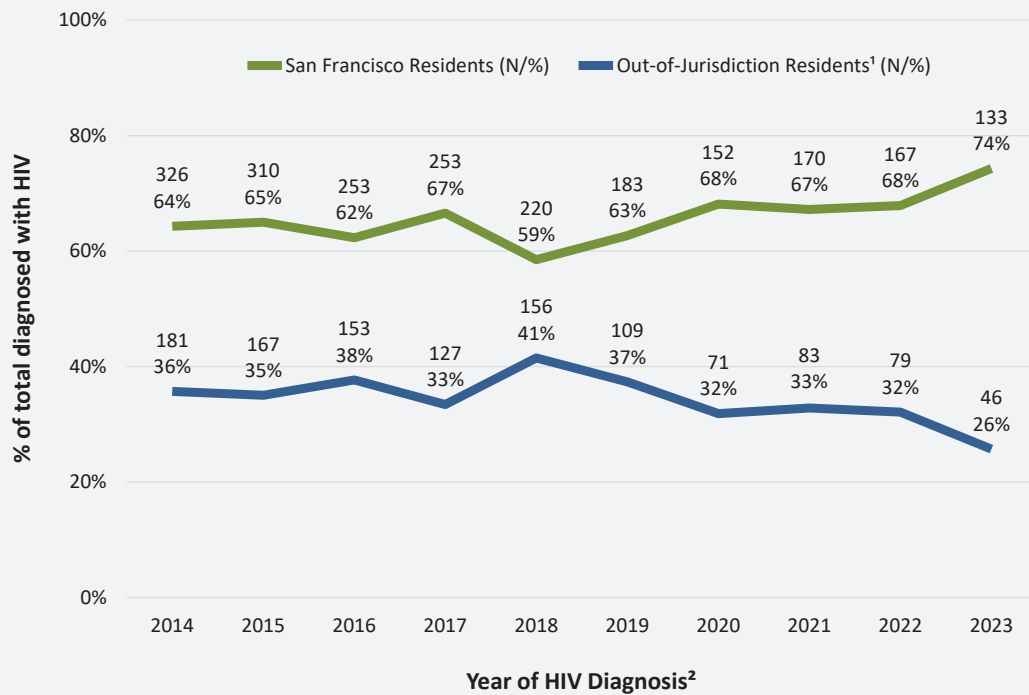
1 See Technical Notes "Out-of-Jurisdiction Residents Diagnosed with HIV."
2 See Technical Notes "Date of Initial HIV Diagnosis."

Table 1.5   Trends in people diagnosed with HIV by demographic and risk characteristics, 2014-2023, San Francisco

Total Number	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
	326	310	253	253	220	183	152	170	167	133

Year of Initial HIV Diagnosis[1]

		2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Gender	Cis Men	92%	88%	85%	87%	87%	83%	81%	78%	85%	80%
	Cis Women	4%	9%	10%	11%	8%	9%	11%	13%	8%	10%
	Trans Women	4%	3%	5%	2%	5%	8%	7%	9%	6%	8%
	Trans Men	0%	0%	<1%	0%	<1%	1%	1%	1%	1%	2%
Race/Ethnicity	White	41%	39%	36%	33%	28%	32%	26%	32%	28%	37%
	Black/African American	10%	14%	13%	17%	18%	16%	18%	15%	15%	19%
	Latinx	30%	27%	32%	31%	41%	36%	42%	37%	44%	30%
	Asian/Pacific Islander	14%	13%	17%	13%	10%	11%	11%	12%	10%	14%
	Native American	<1%	<1%	0%	1%	<1%	2%	1%	2%	2%	0%
	Multi-race	5%	6%	3%	5%	3%	3%	1%	2%	1%	0%
	Unknown	0%	<1%	0%	0%	0%	0%	0%	0%	0%	0%
Age at HIV Diagnosis (years)	13 - 17	<1%	1%	<1%	1%	<1%	0%	0%	0%	0%	0%
	18 - 24	13%	14%	18%	11%	16%	11%	14%	8%	11%	16%
	25 - 29	18%	25%	21%	18%	20%	16%	17%	20%	22%	12%
	30 - 39	29%	29%	31%	34%	32%	37%	32%	34%	29%	35%
	40 - 49	23%	21%	15%	21%	20%	16%	18%	20%	22%	20%
	50+	16%	10%	15%	15%	12%	20%	19%	18%	16%	17%
Transmission Category	MSM	74%	74%	68%	61%	63%	65%	63%	50%	63%	63%
	TWSM	2%	2%	3%	1%	3%	5%	7%	6%	6%	6%
	PWID	7%	5%	9%	10%	12%	6%	9%	11%	7%	7%
	MSM-PWID	12%	9%	9%	13%	12%	9%	9%	13%	10%	10%
	TWSM-PWID	1%	<1%	2%	1%	1%	3%	1%	3%	0%	2%
	Heterosexual	3%	8%	8%	8%	7%	9%	8%	12%	8%	9%
	Other/Unidentified	<1%	1%	1%	6%	2%	3%	4%	6%	5%	3%

1   Data include people diagnosed with HIV in any stage and reported as of March 18, 2024. Percentages may not add to 100 due to rounding. See Technical Notes "Date of Initial HIV Diagnosis."

2 Trends in HIV Diagnoses

From 2014 through 2023, there has been an overall decline in the number of new HIV diagnoses for all racial/ethnic groups (Figure 2.1). During this time, Whites and Latinx each accounted for 34% of new diagnoses. From 2018 to 2022, the highest number of new diagnoses was among Latinx. When taking into account population size, HIV diagnosis rates (per 100,000) of cis men in 2023 were 79 among Black/African Americans, 50 for Latinos, and 27 for Whites (Figure 2.2). Cis women of all race/ethnic groups had substantially lower diagnosis rates compared to cis men of all racial/ethnic groups (Figure 2.3). Rates were highest for Black/African American cis women in most years compared to women of other racial/ethnic groups.

The majority of cis men diagnosed with HIV during 2014 through 2023 were MSM and the number of diagnoses among MSM declined from 241 in 2014 to 84 in 2023 (Figure 2.4). The number of cis men who acquired HIV through heterosexual contact gradually decreased during this time period; in 2023 there were no cis men who acquired HIV through heterosexual contact.

Among cis women since 2015, heterosexual contact remained the most frequent transmission category, and annual diagnoses by heterosexual contact have been fairly level since 2018 (Figure 2.5). In the last 10 years, the number of cis women who were PWID and diagnosed with HIV gradually declined from 10 in 2014 to 3 in 2023.

Among cis men during the years 2019 to 2023, the highest proportion of diagnoses were in those aged 30 to 39 years, accounting for more than one-third of 2023 diagnoses in cis men (Table 2.1). The number of diagnoses among cis women were much lower relative to cis men and fluctuated over time and by age group.

Of the 951 San Francisco residents diagnosed with HIV during 2019 through 2023, 191 (20%) were diagnosed at stage 0 (an indicator of recent HIV acquisition) and 712 (75%) at stages 1-3 (Table 2.2). Forty-eight (5%) could not be staged due to not having a documented CD4 T-lymphocyte (CD4) test ≤ 3 months after their HIV diagnosis. The proportion of stage 0 diagnoses was highest among trans women, Whites, people aged 13-24 years at time of diagnosis, and MSM-PWID. Late HIV diagnosis is defined as having a stage 3 (AIDS) diagnosis within three months of HIV diagnosis. The proportion of people newly diagnosed with late-stage HIV was consistent between 2019 and 2023, ranging from a high of 17% in 2020 to 13% in 2022 (Table 2.3). In 2023, the proportion of late diagnoses was highest among cis women and among people aged 50 years and older.

Figure 2.1 Number of people diagnosed with HIV by race/ethnicity, 2014-2023, San Francisco
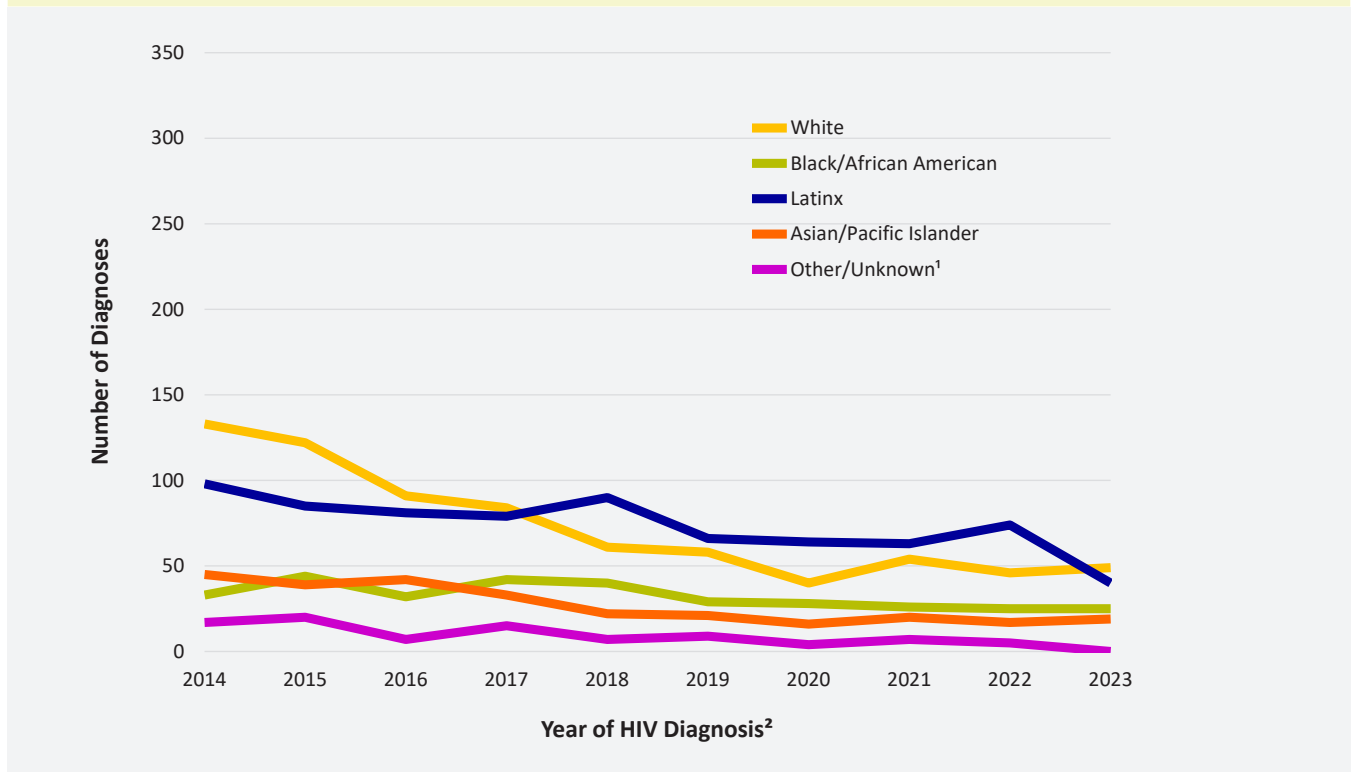
1 HIV diagnoses in the "Other/Unknown" racial/ethnic category include 20% Native Americans, 79% multi-race, and 1% unknown.
2 See Technical Notes "Date of Initial HIV Diagnosis."

Figure 2.2 Annual rates[1] of cis men diagnosed with HIV per 100,000 population by race/ethnicity, 2014-2023, San Francisco
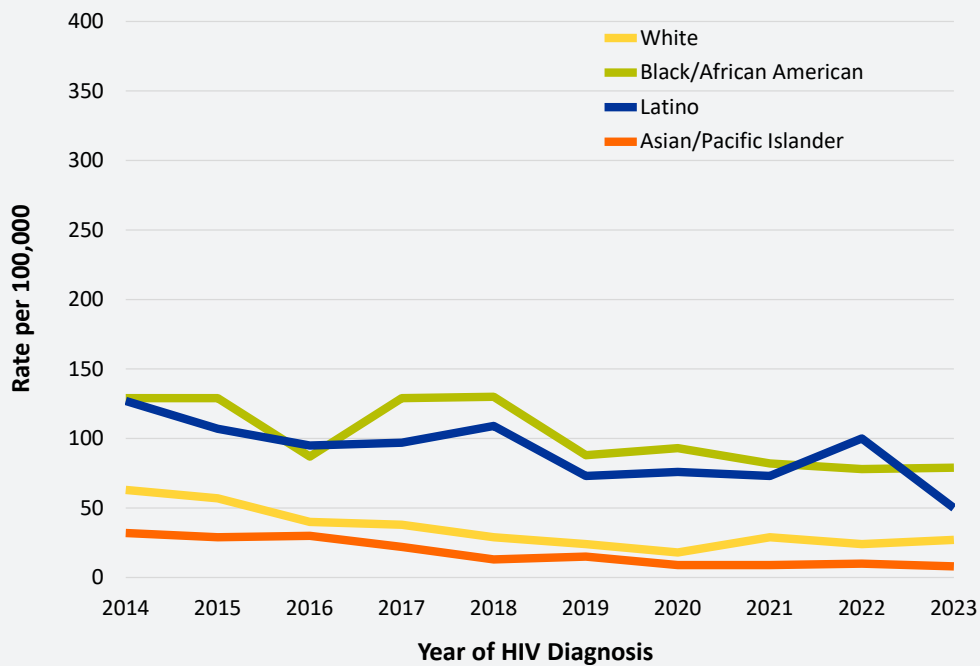
1 See Technical Notes "HIV Case Rates and HIV Mortality Rates." Includes people with HIV by year of their initial HIV diagnosis. Rates for Native Americans and multi-racial new diagnoses are not calculated due to small numbers.

Figure 2.3 Annual rates[1] of cis women diagnosed with HIV per 100,000 population by race/ethnicity, 2014-2023, San Francisco
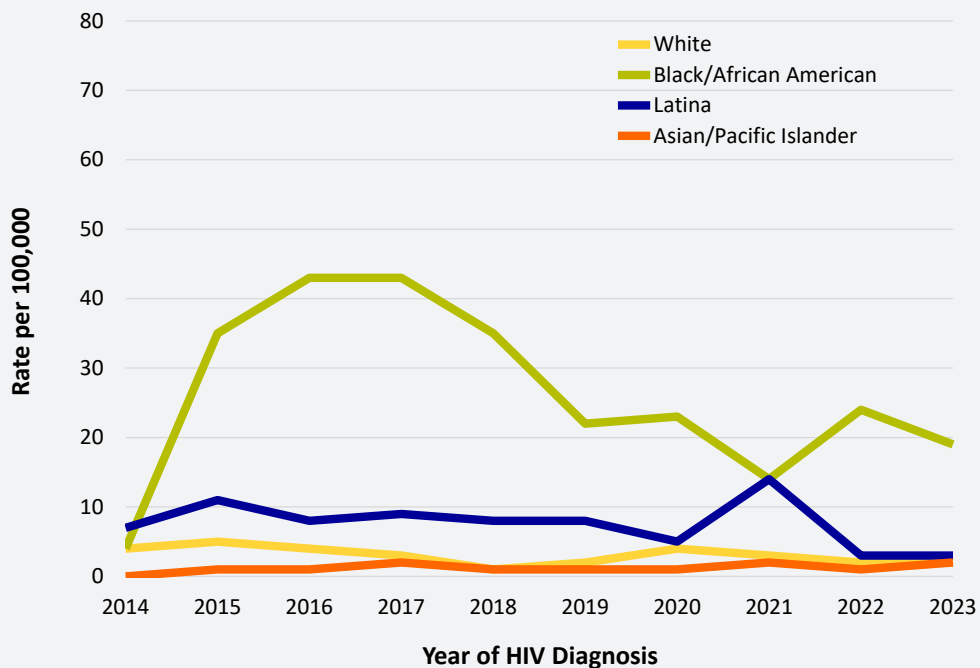
1 See Technical Notes "HIV Case Rates and HIV Mortality Rates." Includes people with HIV by year of their initial HIV diagnosis. Rates for Native Americans and multi-racial new diagnoses are not calculated due to small numbers.

Transmission category

Figure 2.4 Number of cis men diagnosed with HIV by transmission category, 2014-2023, San Francisco
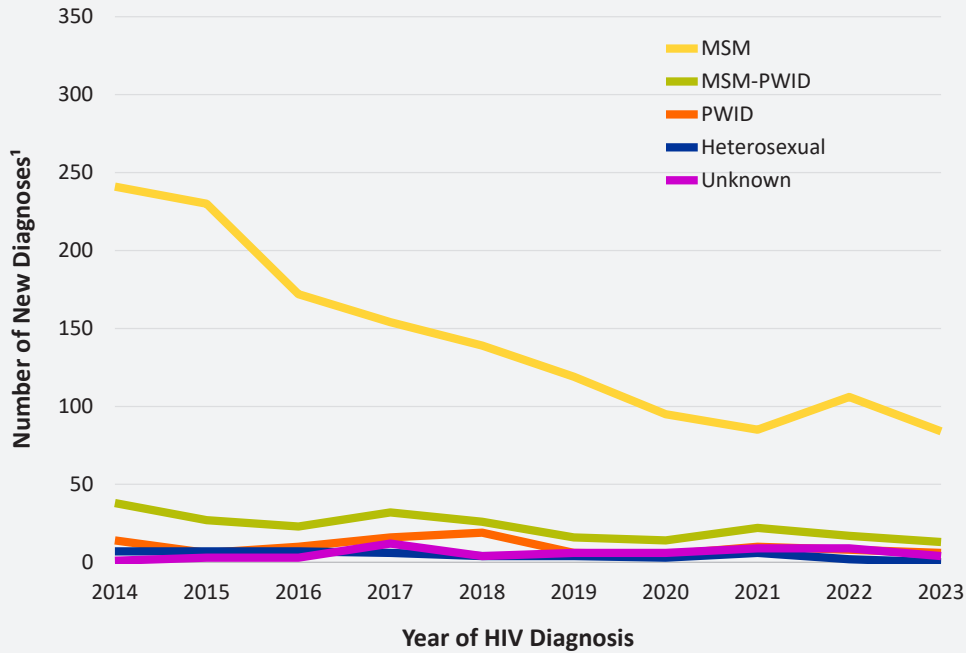
1 Includes people with HIV by year of their initial HIV diagnosis.

Figure 2.5 Number of cis women diagnosed with HIV by transmission category, 2014-2023, San Francisco
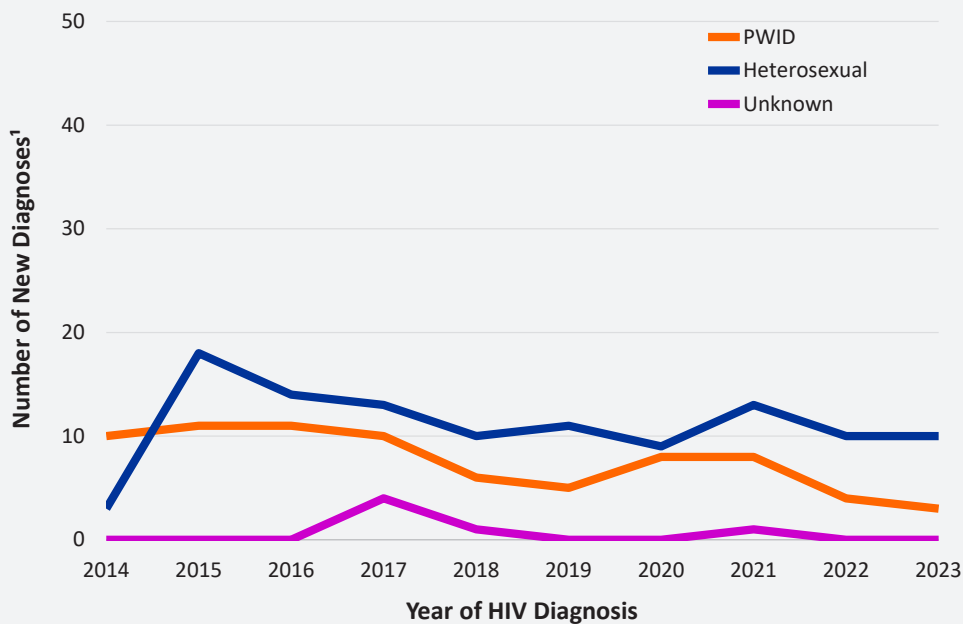
1 Includes people with HIV by year of their initial HIV diagnosis.

Age

Table 2.1   Number of people diagnosed with HIV by gender[1] and age at diagnosis, 2019-2023, San Francisco

		Year of Initial HIV Diagnosis[2]				
		2019	**2020**	**2021**	**2022**	**2023**
		Number (%)				
Cis Men (Age in years)	0 - 12	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
	13 - 17	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
	18 - 24	15 (10)	20 (16)	12 (9)	18 (13)	18 (17)
	25 - 29	28 (19)	22 (18)	22 (17)	32 (23)	13 (12)
	30 - 39	53 (35)	37 (30)	47 (36)	43 (30)	36 (34)
	40 - 49	25 (17)	21 (17)	26 (20)	28 (20)	23 (21)
	50+	30 (20)	23 (19)	25 (19)	21 (15)	17 (16)
	Cis Men Total	**151**	**123**	**132**	**142**	**107**
Cis Women (Age in years)	0 - 12	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
	13 - 17	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
	18 - 24	2 (13)	0 (0)	1 (5)	1 (7)	1 (8)
	25 - 29	1 (6)	3 (18)	7 (32)	2 (14)	2 (15)
	30 - 39	7 (44)	5 (29)	6 (27)	4 (29)	4 (31)
	40 - 49	3 (19)	4 (24)	3 (14)	4 (29)	3 (23)
	50+	3 (19)	5 (29)	5 (23)	3 (21)	3 (23)
	Cis Women Total	**16**	**17**	**22**	**14**	**13**

1 Data on trans women and trans men by age are not presented due to small numbers and small population size.
2 See Technical Notes "Date of Initial HIV Diagnosis."

People diagnosed with HIV disease stage 0

Table 2.2 Stage of HIV disease at diagnosis among people diagnosed with laboratory-confirmed HIV, 2019-2023, San Francisco

		New Diagnoses[1]	Stage at Diagnosis[2]		
			Stage 0	Stage 1-3	Unknown
			Number (row % of new diagnoses)		
	Total	**951**	**191 (20)**	**712 (75)**	**48 (5)**
Year of HIV Diagnosis	2019	209	47 (22)	153 (73)	9 (4)
	2020	156	41 (26)	110 (71)	5 (3)
	2021	190	42 (22)	134 (71)	14 (7)
	2022	213	32 (15)	168 (79)	13 (6)
	2023	183	29 (16)	147 (80)	7 (4)
Gender[3]	Cis Men	789	155 (20)	594 (75)	40 (5)
	Cis Women	90	17 (19)	68 (76)	5 (6)
	Trans Women	65	15 (23)	47 (72)	3 (5)
Race/Ethnicity	White	283	67 (24)	200 (71)	16 (6)
	Black/African American	141	30 (21)	102 (72)	9 (6)
	Latinx	380	73 (19)	291 (77)	16 (4)
	Asian/Pacific Islander	123	16 (13)	103 (84)	4 (3)
	Other/Unknown	24	5 (21)	16 (67)	3 (13)
Age at HIV Diagnosis (years)	13-24	90	23 (26)	60 (67)	7 (8)
	25-29	162	39 (24)	115 (71)	8 (5)
	30-39	350	73 (21)	260 (74)	17 (5)
	40-49	191	33 (17)	152 (80)	6 (3)
	50+	158	23 (15)	125 (79)	10 (6)
Transmission Category	MSM	614	125 (20)	460 (75)	29 (5)
	PWID	66	13 (20)	49 (74)	4 (6)
	MSM-PWID	83	22 (27)	57 (69)	4 (5)
	Heterosexual	84	13 (15)	67 (80)	4 (5)
	Other/Unidentified[4]	104	18 (17)	79 (76)	7 (7)

1 Includes people diagnosed in the time period based on a confirmed laboratory HIV test regardless of whether they had an earlier self-report of HIV positive date.
2 The surveillance case definition includes five HIV stages at diagnosis. See Technical Notes "Stage of Disease at HIV Diagnosis."
3 Data on trans men are not released separately due to small numbers. See Technical Notes "Gender Status."
4 Includes TWSM, TWSM-PWID and people with no identified risk factor.

People diagnosed with late-stage HIV disease

Table 2.3   Late diagnoses among people diagnosed with laboratory-confirmed HIV by demographic and risk characteristics, 2019-2023, San Francisco

		Year of Diagnosis[1]				
		2019	2020	2021	2022	2023
		Number of new diagnoses (% who had a late diagnosis[2])				
	Total	**209 (15)**	**156 (17)**	**190 (15)**	**213 (13)**	**183 (14)**
Gender[3]	Cis Men	175 (15)	128 (19)	150 (15)	183 (14)	153 (14)
	Cis Women	17 (12)	17 (12)	23 (13)	18 (17)	15 (20)
	Trans Women	15 (20)	10 (10)	16 (13)	11 (0)	13 (8)
Race/Ethnicity	White	66 (11)	43 (23)	65 (14)	53 (15)	56 (16)
	Black/African American	33 (21)	28 (11)	28 (14)	26 (12)	26 (15)
	Latinx	74 (8)	64 (16)	66 (14)	105 (12)	71 (11)
	Asian/Pacific Islander	28 (36)	17 (18)	24 (21)	24 (17)	30 (17)
	Other/Unknown	8 (25)	4 (25)	7 (14)	5 (0)	0 (0)
Age at HIV Diagnosis (Years)	13-24	16 (13)	19 (11)	12 (0)	21 (10)	22 (5)
	25-29	33 (6)	24 (8)	33 (12)	47 (9)	25 (12)
	30-39	81 (15)	51 (20)	72 (8)	67 (10)	79 (14)
	40-49	41 (12)	32 (13)	40 (25)	48 (17)	30 (17)
	50+	38 (29)	30 (30)	33 (24)	30 (23)	27 (22)
Transmission Category[4]	MSM	137 (13)	98 (17)	105 (17)	147 (12)	127 (17)
	PWID	13 (23)	15 (13)	17 (24)	12 (25)	9 (0)
	MSM-PWID	17 (12)	15 (20)	21 (0)	17 (12)	13 (8)
	Heterosexual	19 (21)	12 (8)	21 (14)	16 (13)	16 (19)
	Other/Unidentified	23 (22)	16 (25)	26 (12)	21 (14)	18 (6)
Housing Status	Homeless	42 (17)	30 (13)	41 (10)	32 (13)	39 (8)
	Housed	163 (15)	122 (19)	145 (17)	179 (13)	144 (16)
	Unknown	4 (0)	4 (0)	4 (0)	2 (50)	0 (0)
Country of Birth	US	78 (15)	72 (17)	91 (20)	81 (16)	73 (16)
	Non-US	72 (15)	49 (20)	58 (12)	93 (11)	76 (11)
	Unknown	59 (15)	35 (14)	41 (7)	39 (13)	34 (18)

1   Date of HIV diagnosis is based on a confirmed laboratory HIV test and does not take into account self-report of HIV infection.

2   Percent of people with new diagnoses in the year who developed AIDS within 3 months of HIV diagnosis.

3   Data on trans men are not released separately due to small numbers. See Technical Notes "Gender Status."

4   Heterosexual includes heterosexual and female presumed heterosexual. Other/Unidentified includes TWSM, TWSM-PWID and people with no identified risk factor.

3 Spectrum of Engagement in HIV Prevention and Care

The population reflected for the HIV Care indicators of new diagnoses includes those with a laboratory-confirmed HIV diagnosis in or outside of San Francisco and categorizes HIV diagnosis year as the earliest year of a laboratory-confirmed HIV positive test. HIV Care indicator trends for the five-year period, 2019 through 2023, show that levels of linkage to care and viral suppression after diagnoses in 2023 have returned to or exceeded the pre-COVID 19 pandemic levels in 2019. In 2023, the proportion linked to care within one month was 95% and the proportion virally suppressed within six months was 84% (Figure 3.1). Viral suppression within 12 months of diagnosis increased to 86% for 2022 diagnoses. Similarly for retention in care, the proportion of 2022 diagnoses rebounded to 71% after declining to 64% in 2020.

Care indicators for PLWH were assessed using two populations. Using data through the end of 2023, there were 14,653 PLWH who were diagnosed through December 31, 2022, and who resided in San Francisco at time of diagnosis (Figure 3.2). Of these, 67% received care, 46% were retained in care, and 62% were virally suppressed in 2023. When analyzing the 11,384 PLWH who resided in San Francisco based on their most recent address (regardless of residence at diagnosis), 80% received care, 55% were retained in care, and 74% were virally suppressed in 2023. When modelling all PLWH - including those unaware of their HIV status (see Technical Notes "People Living with HIV"), it is estimated that 97% were aware of their HIV diagnosis, 78% received care, 54% were retained in care, and 72% were virally suppressed in 2023 (Figure 3.3).

Table 3.1 summarizes several care indicators for people with new laboratory-confirmed diagnoses and for PLWH living in San Francisco in 2019-2023. These include the proportion of late-stage HIV diagnosis within three months of initial HIV diagnosis, the proportion linked to care within one month of diagnosis, the proportion virally suppressed within 12 months of diagnosis, and the median time from HIV diagnosis to viral suppression. Notably, the median number of days from HIV diagnosis to first viral suppression fell back down to 41 days for 2022 diagnoses, similar what it was in 2020.

When care indicators for demographic and risk groups were assessed for new laboratory-confirmed diagnoses, trans women and people experiencing homelessness (PEH) at diagnosis had the poorest outcomes on all three care indicators (linkage to care, retention in care, and viral suppression) among people diagnosed in 2022 (Table 3.2). Among people diagnosed in 2023, cis women and PWID had lower rates of linkage within one month and viral suppression within 6 months (Table 3.3); however, these percentages must be interpreted with caution due to small numbers.

Among PLWH who were San Francisco residents as of the end of 2023 (regardless of receiving care in that year), approximately three-quarters (74%) were virally suppressed; among those who received care in 2023, 93% were virally suppressed (Table 3.4). The proportion virally suppressed was lowest among trans women, Black/African Americans and Latinx, people aged 30-49 years, TWSM-PWID, and PEH.

For PLWH who were assisted by the SFDPH-run Linkage, Integration, Navigation and Comprehensive Services (LINCS) program in 2022, 85 people were enrolled and received services (Table 3.5). This number was comparable to the 2020 and 2021 totals (N=84 and 81, respectively). Overall, 84% of clients were linked to care within three months of LINCS initiation, 60% were retained in care, and 59% showed evidence of viral suppression at most recent test within 12 months after LINCS enrollment. The percentages linked to care and retained in care were higher compared to 2021, whereas the percentage virally suppressed was lower. Some

notable disparities were seen: LINCS clients experiencing homelessness at intake were less likely to reach viral suppression - less than half (48%) were suppressed at most recent test in the period, versus 65% of clients who were housed.

Comparisons of San Francisco's HIV prevention and care indicators with California and U.S. indicators show that in San Francisco, higher proportions of people were aware of their HIV serostatus, and received care, and had suppressed viral loads in a more timely manner compared to statewide and national indicators (Table 3.6). Data reflecting high ART use in San Francisco (see Technical Notes "Estimate of ART Use") support the faster time to viral suppression: 90% of people newly diagnosed in 2022 and 92% of PLWH as of December 2023 received ART (Table 3.7). Overall and among people diagnosed with HIV during 2018 through 2022, a greater proportion initiated ART sooner in the more recent years but differed by socio-demographic characteristics (Table 3.8). The median time from HIV diagnosis to viral suppression also improved over time but differed by socio-demographic characteristics (Figure 3.4).

Among 15,554 PLWH in 2023 who resided in San Francisco at time of diagnosis, 67% were known to have received HIV care in 2023 (48% received care in San Francisco, 19% received care outside of San Francisco) and 33% did not receive HIV care (Figure 3.5). Of the 33% not known to be in care, 12% had a current San Francisco address and represent a high priority population for re-engagement into care. Of the 11,392 PLWH who received care in San Francisco in 2023, over one-third (34%) were originally diagnosed elsewhere and 21% currently reside outside of San Francisco (Figure 3.6). The majority of these 11,392 people were cis men, White, over 50 years old, and MSM (Table 3.9).

Home testing (through San Francisco's HIV/STI Home Testing Program-Take Me Home) increased by 66% in 2023, with 1,026 test kits ordered in 2023 compared to 619 kits ordered in 2022 (Table 3.10). Specimen return rates decreased by 3% from 2022 to 2023. Similar to 2022, in 2023 the majority of people who ordered the self-collected test kits were men and those between the ages of 25-39. Of those who ordered test kits in 2023, 30% were White, 14% Latinx, 14% Asian and 6% Black/African American. Eight percent reported taking PrEP and 42% reported having three or more sex partners in the past 12 months. In 2023, the specimen return rate was higher among men, Whites, people who had three or more sex partners in the past 12 months, and people who were taking PrEP.

In 2023, of 481 individuals who returned at least one sample for chlamydia and gonorrhea through home testing, 22 (5%) had at least one anatomic site that tested positive for chlamydia and 12 (55%) were confirmed to have been treated; 11 (2%) had at least one anatomic site that tested positive for gonorrhea and seven (64%) were confirmed to have been treated (data not shown). Overall, among individuals who returned at least one specimen in 2023, 36 (7%) were found to have gonorrhea, chlamydia, syphilis, HIV, and/or HCV.

Figure 3.1 Continuum of HIV care among people diagnosed with laboratory-confirmed HIV, 2019-2023, San Francisco
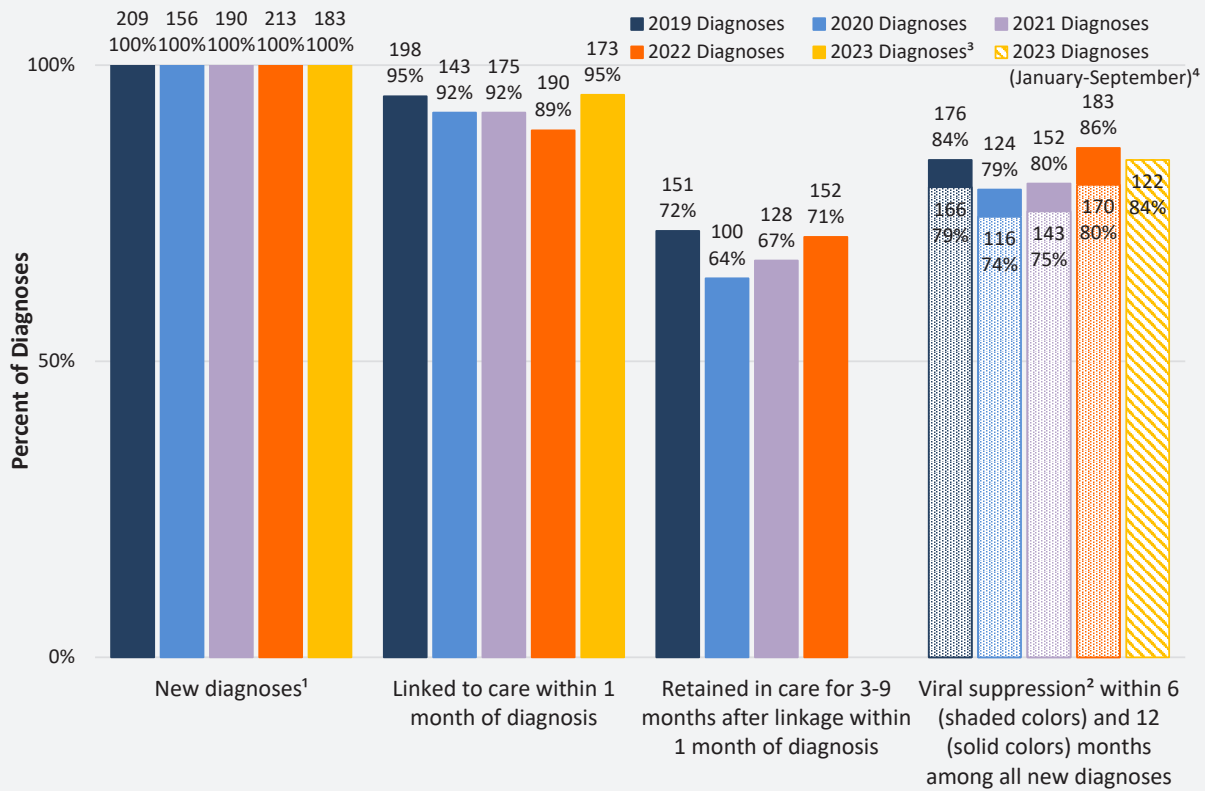
1 Number of new diagnoses shown each year is based on evidence of a confirmed HIV test and does not take into account self-report of HIV infection. The proportion of people who died within 12 months of their HIV diagnosis were 2% in 2019, 5% in 2020, 1% in 2021, 3% in 2022, and 1% in 2023. All these individuals had at least one laboratory test before dying.

2 Defined as the latest viral load test within 6 and 12 months of HIV diagnosis <200 copies/mL. See Technical Notes "HIV Care Outcomes and Definitions."

3 Retention in care and viral suppression data are not available yet for the entire year of 2023.

4 People who were diagnosed between January and September 2023 (N=146) and virally suppressed within 6 months of HIV diagnosis.

Figure 3.2   Continuum of HIV care among people living with HIV, 2023, San Francisco

Legend:
- PLWH who resided in San Francisco at diagnosis[1] (N=14,653)
- PLWH who were last known to reside in San Francisco as of 12/31/2023 regardless of where they were diagnosed[2] (N=11,384)

Y-axis: Percent of Diagnoses

Category	Green	Blue
Total living with HIV in 2023[3]	100%	100%
Had ≥1 lab test in 2023	67%	80%
Had ≥2 lab tests in 2023	46%	55%
Virally suppressed in 2023[4]	62%	74%
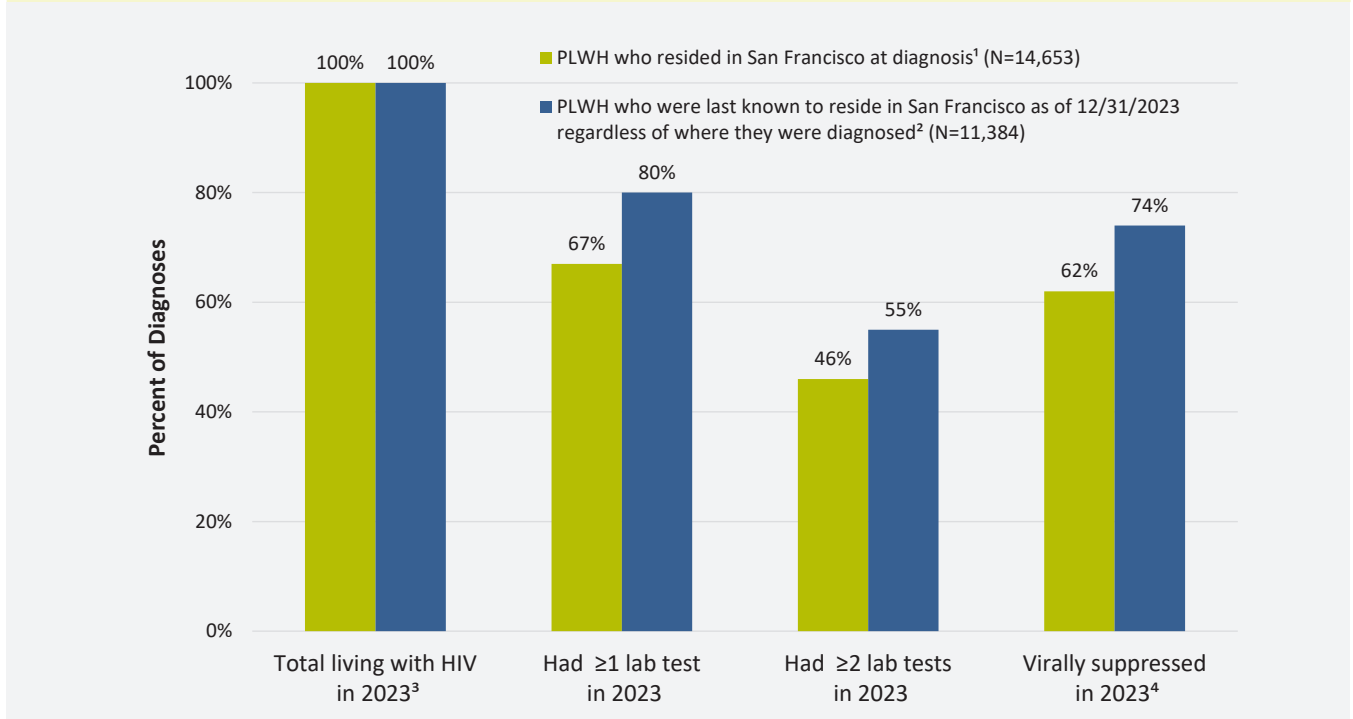
1 Excludes people who were not San Francisco residents at time of HIV diagnosis but were San Francisco residents at HIV stage 3 (AIDS) diagnosis.
2 See Technical Notes "Residence and Receipt of Care for PLWH."
3 Includes people living with HIV at the end of 2023 (≥ 13 years old) and diagnosed by the end of 2022.
4 Defined as the latest viral load in 2023 <200 copies/mL.

Figure 3.3   Continuum of HIV care among people living with diagnosed or undiagnosed HIV infection, 2023, San Francisco

Y-axis: Estimated Percent

Category	Percent
Infected	100%
Diagnosed/Aware[1]	97%
Received care[2]	78%
Retained in care[2]	54%
Virally suppressed[2]	72%
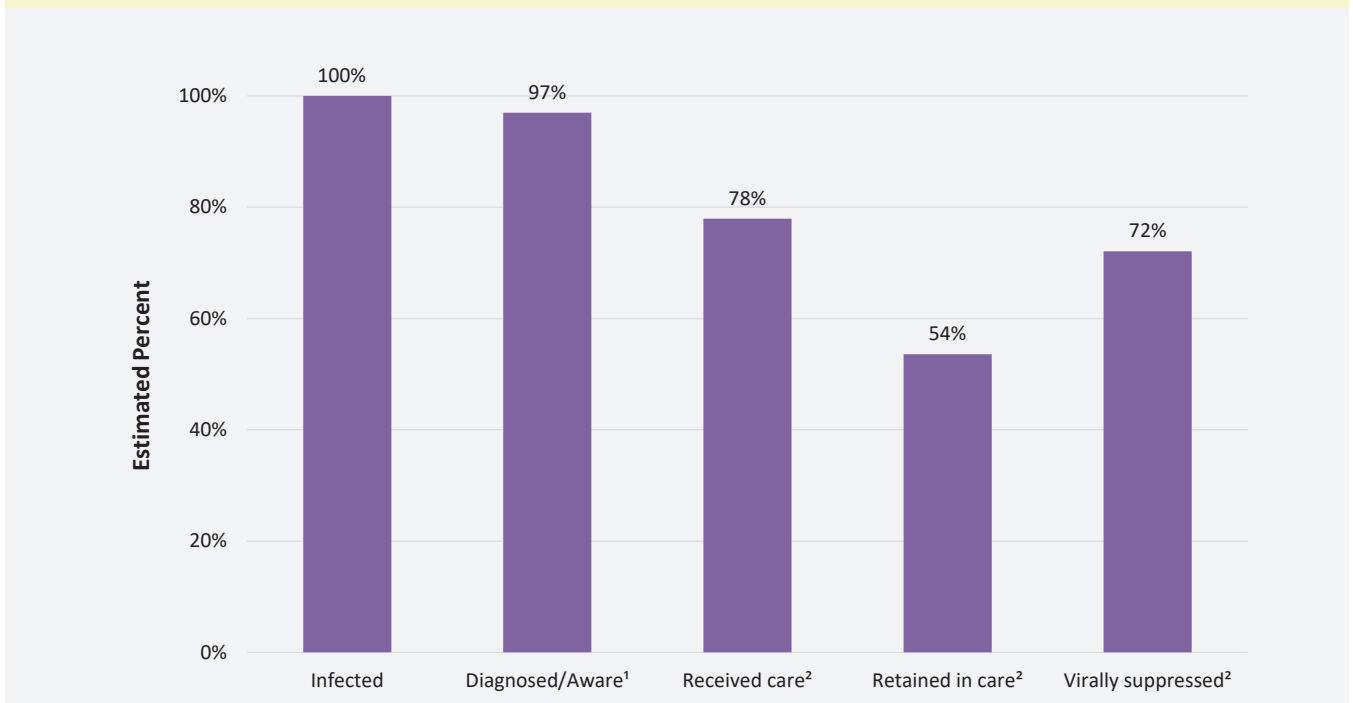
1 The estimated percent aware of HIV diagnosis for San Francisco was based on 2021 and derived from the CD4 depletion model. See Technical Notes "CD4-based Model."
2 The estimated percent received care, retained in care, and virally suppressed among all PLWH (diagnosed and undiagnosed) was derived by applying the 97% diagnosed/aware to the 80% who had ≥1 lab tests, 55% who had ≥2 lab tests, and 74% who were virally suppressed among people living with diagnosed HIV who were last known to reside in San Francisco as shown in Figure 3.2, respectively.

Trends in HIV care and prevention indicators

Table 3.1   Care and prevention indicators among people with a new laboratory-confirmed HIV diagnosis and living with HIV, 2019-2023, San Francisco

Indicators	Year				
	2019	**2020**	**2021**	**2022**	**2023**
New HIV diagnoses[1]	**N=209**	**N=156**	**N=190**	**N=213**	**N=183**
Proportion developed HIV stage 3 (AIDS) within 3 months of diagnosis	15%	17%	15%	13%	14%
Proportion linked to care within 1 month of diagnosis	95%	92%	92%	89%	95%
Proportion virally suppressed[2] within 12 months of diagnosis	84%	79%	80%	86%	NA
Median time (days) from HIV diagnosis to first viral suppression	41	48	43	41	NA
Median time (days) from HIV diagnosis to first care	1	1	1	1	NA
Median time (days) from first care to ART initiation[3]	0	0	0	0	NA
Median time (days) from ART initiation to first viral suppresssion[3]	37	42	35	34	NA
People living with HIV[4] (≥13 years old)	**N=12,278**	**N=12,010**	**N=11,671**	**N=11,551**	**N=11,384**
Proportion of cases who had ≥1 CD4/viral load/genotype test	81%	77%	79%	79%	80%
Proportion received ≥2 tests among those with ≥1 test	72%	61%	67%	66%	69%
Proportion virally suppressed[2] among living cases	75%	71%	72%	74%	74%
Proportion virally suppressed among those with ≥1 viral load test	93%	94%	94%	94%	94%

1   Includes people diagnosed each year based on a confirmed HIV test and does not take into account self-report of HIV infection.

2   Defined as the latest viral load test within 12 months of HIV diagnosis <200 copies/mL. Viral suppression among PLWH is measured using the latest test in the year.

3   Calculation is limited to people diagnosed with HIV who were known to have started ART. See Technical Notes "Estimate of ART Use."

4   Includes PLWH who were alive and resided in San Francisco as of the end of each year and diagnosed as of the previous year. See Technical Notes "Residence and Receipt of Care for PLWH."

Care indicators among people with HIV by demographic and risk characteristics

Table 3.2 Care indicators[1] among people with laboratory-confirmed HIV in 2022 by demographic and risk characteristics, San Francisco

		Number of diagnoses[2]	% Linked to care within 1 month of diagnosis[3]	% Retained in care 3-9 months after linkage[3]	% Virally suppressed within 6 months of diagnosis[3]	% Virally suppressed within 12 months of diagnosis[3]
	Total	**213**	**89%**	**71%**	**80%**	**86%**
Gender[4]	Cis Men	183	92%	74%	81%	87%
	Cis Women	18	72%	56%	83%	94%
	Trans Women	11	64%	45%	45%	55%
Race/Ethnicity	White	53	87%	70%	70%	79%
	Black/African American	26	73%	50%	62%	81%
	Latinx	105	94%	78%	89%	91%
	Asian/Pacific Islander	24	92%	71%	88%	88%
	Other/Unknown	5	80%	60%	60%	60%
Age at Diagnosis (Years)	13-24	21	86%	62%	71%	81%
	25-29	47	96%	70%	83%	85%
	30-39	67	88%	75%	84%	88%
	40-49	48	90%	77%	77%	85%
	50+	30	83%	63%	77%	87%
Transmission Category[5]	MSM	147	93%	75%	86%	90%
	PWID	12	83%	67%	67%	83%
	MSM-PWID	17	94%	71%	59%	71%
	Heterosexual	16	81%	63%	88%	94%
	Other/Unidentified	21	71%	57%	57%	67%
Housing Status at Diagnosis	Homeless	32	75%	66%	63%	75%
	Housed	179	92%	73%	83%	88%
	Unknown	2	50%	50%	50%	50%
Country of Birth	US	81	86%	70%	74%	81%
	Non-US	93	94%	76%	88%	95%
	Unknown	39	85%	62%	72%	74%

1 See Technical Notes "HIV Care Outcomes and Definitions."
2 Includes people diagnosed in 2022 based on a confirmed HIV test and does not take into account self-report of HIV infection.
3 Percent of total diagnoses.
4 Data on trans men are not released separately due to small numbers. See Technical Notes "Gender Status."
5 Heterosexual includes female presumed heterosexual. Other/Unidentified includes TWSM, TWSM-PWID and people with no identified risk factor.

Table 3.3   Care indicators[1] among people with laboratory-confirmed HIV in 2023 by demographic and risk characteristics, San Francisco

		Number of diagnoses[2]	% Linked to care within 1 month of diagnosis[3]	% Virally suppressed within 6 months of diagnosis among people diagnosed in January-September 2023 (N=146)
	Total	**183**	**95%**	**84%**
Gender[4]	Cis Men	153	94%	85%
	Cis Women	15	93%	60%
	Trans Women	13	100%	89%
Race/Ethnicity	White	56	93%	70%
	Black/African American	26	92%	94%
	Latinx	71	96%	92%
	Asian/Pacific Islander	30	97%	83%
	Other/Unknown	0	0%	0%
Age at Diagnosis (Years)	13-24	22	86%	88%
	25-29	25	96%	87%
	30-39	79	95%	88%
	40-49	30	97%	65%
	50+	27	96%	86%
Transmission Category	MSM	127	94%	86%
	PWID	9	78%	50%
	MSM-PWID	13	92%	92%
	Heterosexual	16	100%	80%
	Other/Unidentified[5]	18	100%	83%
Housing Status at Diagnosis	Homeless	39	95%	72%
	Housed	144	94%	87%
	Unknown	0	0%	0%
Country of Birth	US	73	96%	81%
	Non-US	76	95%	90%
	Unknown	34	91%	73%

1   See Technical Notes "HIV Care Outcomes and Definitions." Retention in care and viral suppression data are not available yet for the entire year of 2023.

2   Includes people diagnosed in 2023 based on a confirmed HIV test and does not take into account self-report of HIV infection.

3   Percent of total diagnoses.

4   Data on trans men are not released separately due to small numbers. See Technical Notes "Gender Status."

5   Other/Unidentified includes TWSM, TWSM-PWID and people with no identified risk factor.

Table 3.4 **Care indicators among people living with HIV in 2023 who were known to reside in San Francisco as of December 2023, by demographic and risk characteristics**

| | | Number of PLWH[1] | % with >= 1 laboratory test in 2023[2] | % with >= 2 laboratory tests in 2023[2] | % Virally suppressed (most recent viral load test in 2023 <200 copies/mL) | |
					among all PLWH	among PLWH with >= 1 laboratory test in 2023
	Total	**11,384**	**80%**	**55%**	**74%**	**93%**
Gender[3]	Cis Men	10,264	79%	54%	75%	94%
	Cis Women	700	81%	59%	73%	90%
	Trans Women	412	83%	61%	69%	84%
Race/Ethnicity	White	5,613	81%	55%	77%	95%
	Black/African American	1,455	81%	56%	71%	88%
	Latinx	2,938	76%	54%	71%	93%
	Asian/Pacific Islander	854	77%	52%	73%	95%
	Other/Unknown	524	81%	56%	75%	92%
Age in Years (as of 12/31/2023)	13-24	45	91%	76%	76%	83%
	25-29	227	85%	57%	76%	90%
	30-39	1,477	78%	51%	68%	87%
	40-49	1,990	75%	49%	68%	91%
	50-59	3,223	78%	52%	74%	94%
	60-69	3,000	82%	59%	79%	96%
	70+	1,422	83%	64%	81%	98%
Transmission Category	MSM	8,168	80%	55%	76%	95%
	TWSM	263	87%	65%	76%	87%
	PWID	617	77%	52%	66%	86%
	MSM-PWID	1,426	79%	54%	71%	89%
	TWSM-PWID	146	75%	53%	58%	77%
	Heterosexual	545	79%	58%	73%	92%
	Other/Unidentified	219	62%	39%	55%	89%
Housing Status, Most Recent	Homeless	395	51%	36%	34%	67%
	Non-Homeless[4]	10,989	81%	55%	76%	94%
Country of Birth	US	7,691	82%	57%	77%	93%
	Non-US	2,409	71%	50%	68%	96%
	Unknown	1,284	81%	51%	74%	91%

1 Includes San Francisco residents living with HIV as of the end of 2023 (≥13 years old) and diagnosed by the end of 2022. See Technical Notes "Residence and Receipt of Care for PLWH."
2 Percent of total PLWH.
3 Data on trans men are not released separately due to small numbers. See Technical Notes "Gender Status."
4 Includes people whose most recent residence in San Francisco was unknown.

Table 3.5   Care indicators among people who accepted and completed LINCS services in 2022 by demographic and risk characteristics, San Francisco

		Number who received LINCS services	% Linked to care within 3 months of LINCS initiation[1]	% Retained in care 3-9 months after linkage[1]	% Virally suppressed at most recent test in 12 months after LINCS initiation[1]
	Total	**85**	**84%**	**60%**	**59%**
Gender[2]	Cis Men	58	84%	59%	57%
	Cis Women	17	82%	65%	65%
	Trans Women	10	80%	60%	60%
Race/Ethnicity	White	27	81%	52%	59%
	Black/African American	25	80%	60%	60%
	Latinx	25	84%	60%	60%
	Asian/Pacific Islander	3	100%	67%	67%
	Other/Unknown	5	100%	100%	40%
Age in Years (as of 12/31/2021)	13-24	7	100%	71%	43%
	25-29	7	86%	71%	57%
	30-39	32	81%	53%	50%
	40-49	18	89%	61%	72%
	50+	21	76%	62%	67%
Transmission Category	MSM	33	85%	58%	58%
	PWID	16	75%	50%	63%
	MSM-PWID	20	85%	65%	55%
	Heterosexual	4	100%	75%	25%
	Other/Unidentified[3]	12	83%	67%	75%
Housing Status[4]	Homeless	33	85%	61%	48%
	Housed	52	83%	60%	65%

1   Percent of people who received LINCS.
2   Data on trans men are not released separately due to small numbers. See Technical Notes "Gender Status."
3   Includes TWSM, TWSM-PWID and people with no identified risk factor.
4   Housing status is based on the most recent residence at time of LINCS initiation in 2022.

HIV prevention and care indicators in San Francisco, California and the United States

Table 3.6   Comparison of HIV prevention and care indicators for San Francisco, California, and the United States, 2022

Indicators	San Francisco 2022	California[1] 2022	United States[1] 2022
Awareness of HIV status			
Estimated % people living with HIV who know their serostatus	97%[2]	87%[3]	87%[3]
Late HIV diagnosis			
% people diagnosed with AIDS within 3 months of HIV diagnosis	14%	20%	21%
HIV care access and outcome			
% newly diagnosed people linked to care within 1 month of HIV diagnosis	89%	82%	82%
% newly diagnosed people virally suppressed within 6 months of HIV diagnosis	80%	67%	69%
% PLWH who are in care (≥1 laboratory tests)	79%	75%	76%
% PLWH who are virally suppressed	74%	67%	65%
HIV mortality			
Death rate per 1,000 people with HIV (all stages) diagnosis	19.4	15.2	17.1
Death rate per 1,000 people with HIV stage 3 (AIDS) diagnosis	28.5	23.0	26.0

1 CDC. Monitoring selected national HIV prevention and care objectives by using HIV surveillance data—United States and 6 territories and freely associated states, 2022. HIV Surveillance Supplemental Report 2024; 29 (No. 2). https://www.cdc.gov/hiv-data/nhss/national-hiv-prevention-and-care-outcomes.html. Published May 2024. Accessed June 3, 2024.

2 The estimated percent people living with HIV who know their serostatus in San Francisco is for 2021.

3 CDC. Estimated HIV incidence and prevalence in the United States, 2018–2022. HIV Surveillance Supplemental Report, 2024; 29 (No.1). https://www.cdc.gov/hiv-data/nhss/estimated-hiv-incidence-and-prevalence.html. Published May 2024. Accessed June 3, 2024.

Use of antiretroviral therapy

Table 3.7   Estimate of ART use among people living with HIV through December 2023 and diagnosed in 2022 by demographic and risk characteristics, San Francisco

		People living with HIV[1], December 2023 Percent receiving ART, ever (N=14,653)	People newly diagnosed with HIV[1], 2022 Percent receiving ART (N=213)
	Overall	**92%**	**90%**
Gender[2]	Cis Men	92%	91%
	Cis Women	92%	94%
	Trans Women	92%	55%
Race/Ethnicity	White	92%	83%
	Black/African American	89%	85%
	Latinx	92%	93%
	Asian/Pacific Islander	91%	92%
	Other/Unknown	89%	100%
Age[3]	13 - 24	97%	95%
	25 - 29	95%	94%
	30 - 39	90%	91%
	40 - 49	88%	85%
	50 +	93%	83%
Transmission Category	MSM	92%	93%
	PWID	87%	92%
	MSM-PWID	93%	88%
	Heterosexual	94%	94%
	Other/Unidentified[4]	86%	62%
Housing Status[5]	Homeless	71%	84%
	Non-Homeless	92%	91%

1   Includes people living with HIV at the end of 2023 and diagnosed by the end of 2022. Excludes people who did not reside in San Francisco at time of HIV diagnosis but resided in San Francisco at time of HIV stage 3 (AIDS) diagnosis.

2   Data on trans men are not released separately due to small numbers. See Technical Notes "Gender Status."

3   Age as of December 31, 2023 for PLWH. Age at HIV diagnosis for people newly diagnosed with HIV.

4   Includes TWSM, TWSM-PWID and people with no identified risk factor.

5   Housing status is based on the most recent residence as of December 31, 2023 for PLWH and the residence at HIV diagnosis for people newly diagnosed with HIV. Non-homeless PLWH include people whose most recent residence was unknown or in other jurisdiction. Non-homeless people newly diagnosed with HIV include people whose residence at HIV diagnosis was unknown.

Table 3.8   Time from HIV diagnosis to ART initiation among people diagnosed with HIV by demographic and risk characteristics, 2018-2022, San Francisco

		Number of diagnoses[1]	% Started ART within 7 days of diagnosis (rapid ART initiation)	% Started ART 8-30 days after diagnosis	% Started ART > 30 days after diagnosis	% Not known to have started ART
	Total	**883**	**62%**	**20%**	**10%**	**9%**
Year of Diagnosis[2]	2018	213	57%	23%	10%	10%
	2019	180	64%	19%	9%	8%
	2020	143	66%	15%	8%	10%
	2021	172	60%	25%	10%	5%
	2022	175	63%	14%	13%	10%
Gender[3]	Cis Men	735	63%	20%	9%	9%
	Cis Women	86	59%	15%	16%	9%
	Trans Women	56	55%	25%	11%	9%
Race/Ethnicity	White	261	55%	21%	11%	13%
	Black/African American	144	58%	20%	17%	6%
	Latinx	349	68%	19%	7%	6%
	Asian/Pacific Islander	100	65%	18%	8%	9%
	Other/Unknown	29	62%	10%	14%	14%
Age at Diagnosis	13-24	88	74%	16%	9%	1%
	25-29	160	66%	20%	8%	7%
	30-39	306	60%	18%	10%	11%
	40-49	183	60%	20%	12%	8%
	50+	146	56%	23%	10%	11%
Transmission Category[4]	MSM	545	65%	19%	8%	8%
	PWID	79	52%	15%	15%	18%
	MSM-PWID	93	61%	20%	10%	9%
	Heterosexual	77	62%	25%	9%	4%
	Other/Unidentified	89	52%	24%	17%	8%
Housing Status at Diagnosis	Homeless	176	53%	15%	17%	15%
	Housed	689	64%	21%	8%	7%
	Unknown	18	61%	17%	17%	6%
Country of Birth	US	416	66%	19%	8%	7%
	Non-US	277	65%	16%	9%	10%
	Unknown	190	49%	25%	14%	11%
Insurance at Diagnosis	Private	365	61%	18%	13%	8%
	Public	243	59%	26%	9%	6%
	None	221	70%	13%	7%	10%
	Unknown	54	44%	28%	7%	20%

1 Excludes people who were not in care (N=20) or people who reported taking ART prior to diagnosis (N=105).
2 Year of diagnosis is based on a confirmed HIV test and does not take into account patient self-report of HIV infection.
3 Data on trans men are not released separately due to small numbers. See Technical Notes "Gender Status."
4 Heterosexual includes female presumed heterosexual. Other/Unidentified includes TWSM, TWSM-PWID and people with no identified risk factor.

Figure 3.4 Trends in median time from HIV diagnosis to viral suppression by race/ethnicity, transmission category, and housing status, 2018-2022, San Francisco
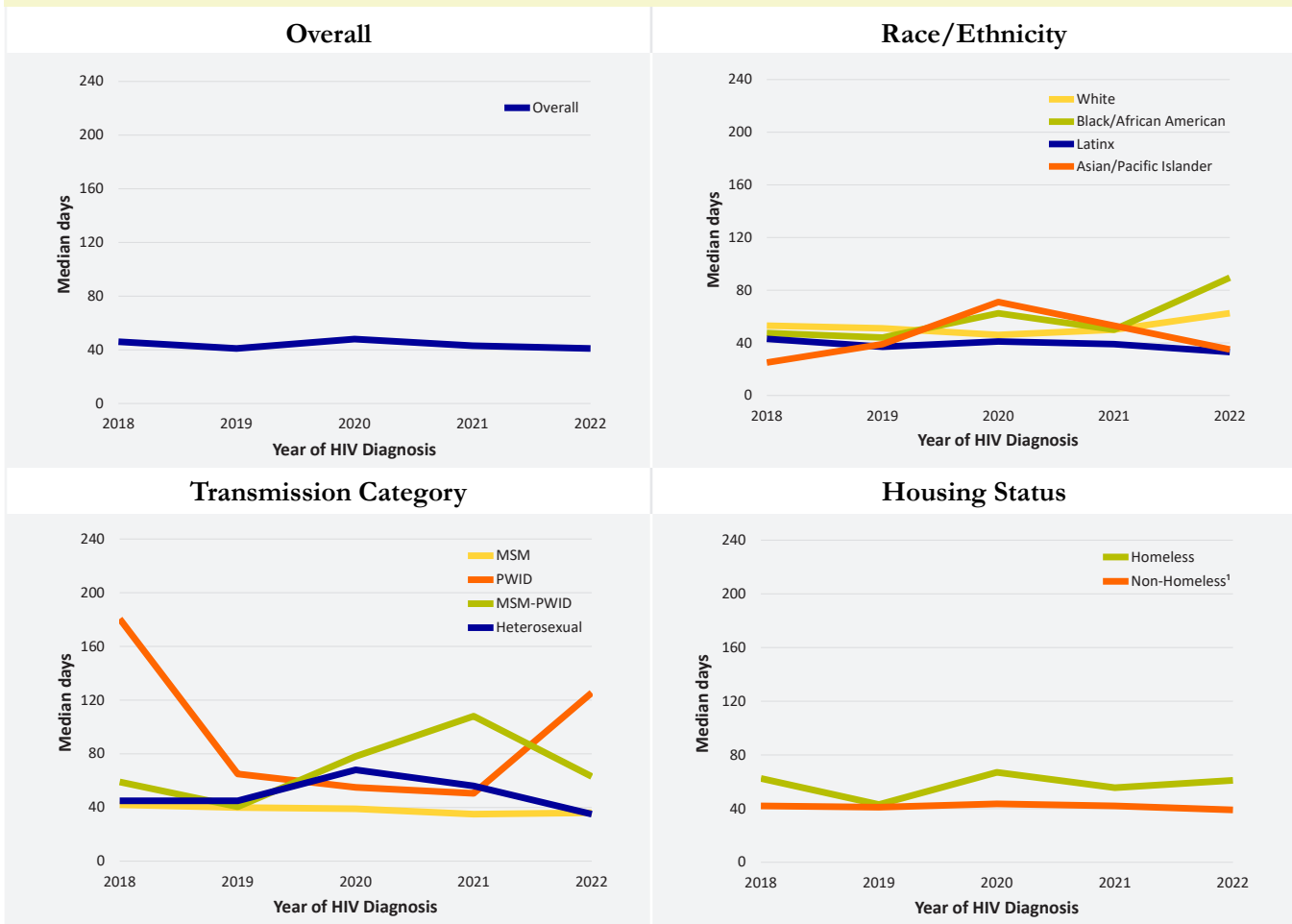
1 Includes people whose addresses at diagnosis were unknown.

Receipt of HIV care among people living with HIV by residence status

Figure 3.5 People living with HIV in 2023 who resided in San Francisco at diagnosis by care and most recent residence status

N=15,544[1]

Not known to be in care (N=5,098) 33%
Most recent address, OOJ, 21%
Most recent address, SF, 12%
Most recent address, SF, 1%
Received care elsewhere (N=2,979) 19%
Most recent address, OOJ, 18%
Most recent address, SF, 43%
Most recent address, OOJ, 5%
Received care in SF (N=7,467) 48%
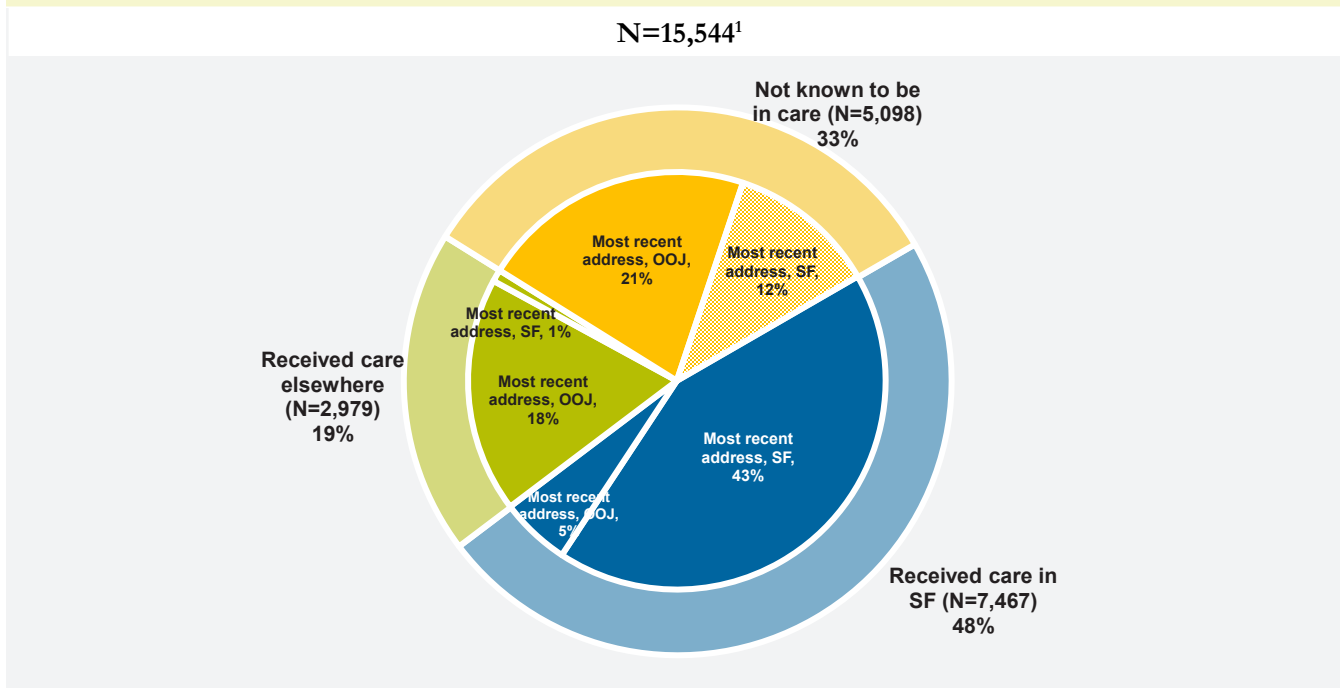
1 Includes people who resided in San Francisco at diagnosis and were alive as of December 2023. See Technical Notes "Residence and Receipt of Care for PLWH."

Figure 3.6 People living with HIV who received care in San Francisco in 2023 by residence at diagnosis and most recent residence status

N=11,392[1]

OOJ at diagnosis (N=3,925) 34%
Most recent address, OOJ[2] 14%
Most recent address, OOJ 7%
Most recent address, SF[2] 21%
Most recent address, SF 58%
SF at diagnosis (N=7,467) 66%
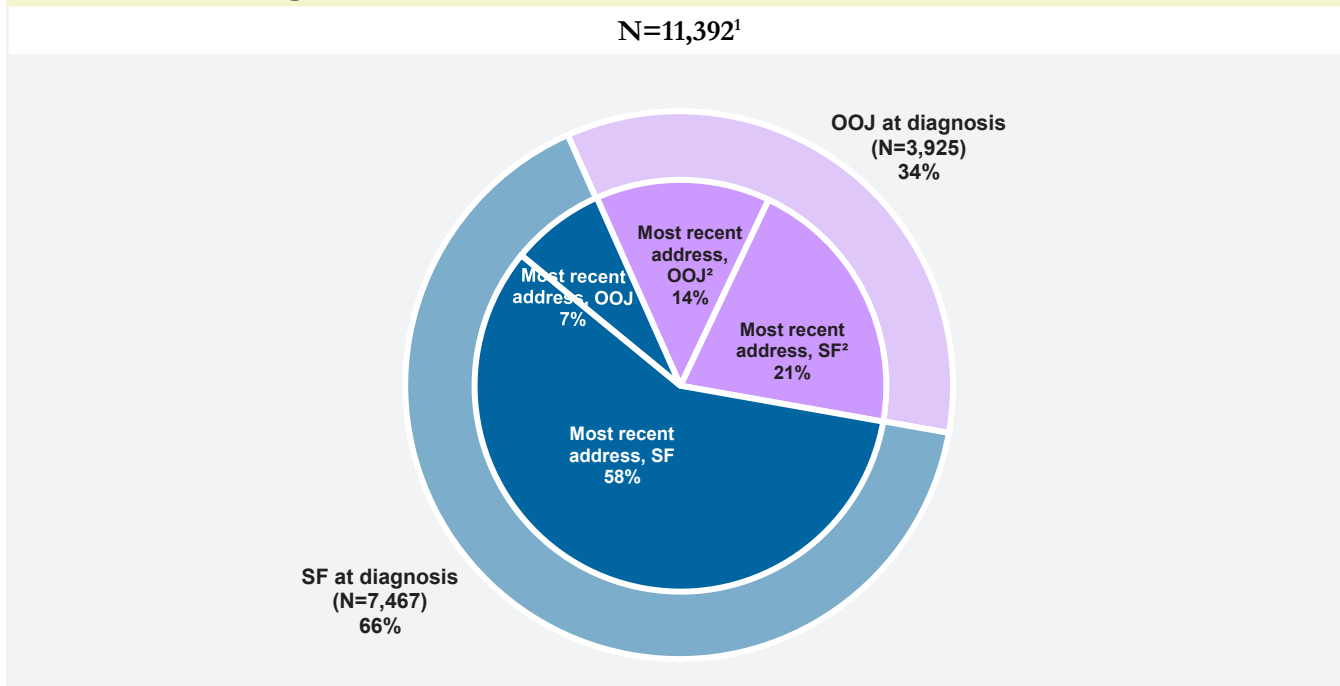
1 Includes people who received HIV care in San Francisco in 2023 regardless of where they were initially diagnosed with HIV. Receipt of care in San Francisco is defined as having at least one CD4, viral load, or genotype test ordered by San Francisco HIV providers. See Technical Notes "Residence and Receipt of Care for PLWH."

2 Most recent address for OOJ residents at diagnosis is less complete because the update on their address information is not conducted regularly or consistently.

Table 3.9 Characteristics of people living with HIV who received care in San Francisco in 2023 by most recent residence status

		People receiving HIV care in San Francisco[1]		
		Total people receiving care in 2023	Most recent residence in San Francisco[2]	Most recent residence outside San Francisco[2]
		Number (%)		
	Total	**11,392 (100)**	**8,987 (100)**	**2,405 (100)**
Gender[3]	Cis Men	10,191 (89)	8,054 (90)	2,137 (89)
	Cis Women	782 (7)	574 (6)	208 (9)
	Trans Women	406 (4)	351 (4)	55 (2)
Race/Ethnicity	White	5,664 (50)	4,488 (50)	1,176 (49)
	Black/African American	1,588 (14)	1,184 (13)	404 (17)
	Latinx	2,774 (24)	2,240 (25)	534 (22)
	Asian/Pacific Islander	836 (7)	658 (7)	178 (7)
	Other/Unknown	530 (5)	417 (5)	113 (5)
Age in Years (as of 12/31/2023)	0-12	2 (<1)	1 (<1)	1 (<1)
	13-17	4 (<1)	1 (<1)	3 (<1)
	18-24	99 (1)	63 (1)	36 (1)
	25-29	295 (3)	204 (2)	91 (4)
	30-39	1,570 (14)	1,194 (13)	376 (16)
	40-49	1,844 (16)	1,482 (16)	362 (15)
	50-59	3,060 (27)	2,481 (28)	579 (24)
	60-69	3,064 (27)	2,407 (27)	657 (27)
	70+	1,454 (13)	1,154 (13)	300 (12)
Transmission Category	MSM	8,190 (72)	6,453 (72)	1,737 (72)
	TWSM	283 (2)	240 (3)	43 (2)
	PWID	584 (5)	473 (5)	111 (5)
	MSM-PWID	1,335 (12)	1,132 (13)	203 (8)
	TWSM-PWID	121 (1)	110 (1)	11 (<1)
	Heterosexual[4]	622 (5)	440 (5)	182 (8)
	Other/Unidentified	257 (2)	139 (2)	118 (5)

1   Includes people living with HIV at end of 2023 who received care in San Francisco in 2023 regardless of where they were initially diagnosed with HIV. Receipt of care in San Francisco is defined as having at least one CD4, viral load, or genotype test ordered by San Francisco HIV providers. See Technical Notes "Residence and Receipt of Care for PLWH."

2   Based on most recent available address.

3   Data on trans men are not released separately due to small numbers. See Technical Notes "Gender Status."

4   Includes female presumed heterosexual.

Table 3.10   Number of home test kits ordered and number of people who ordered the kits by select characteristics, Take Me Home, 2022-2023, San Francisco

		2022		2023	
		Orders/Test kits[1]	Returned Specimens[2]	Orders/Test kits[1]	Returned Specimens[2]
		Number	Number (Row %)	Number	Number (Row %)
	Total Orders	619	325 (53)	1026	514 (50)
	HIV	533	265 (50)	843	403 (48)
	Hepatitis C	270	135 (50)	581	280 (48)
	Chlamydia (3 Sites)	525	295 (56)	917	481 (52)
	Gonorrhea (3 Sites)	525	295 (56)	917	481 (52)
	Syphilis	473	239 (51)	815	400 (49)
		Unique Persons[3]	Returned Specimens[2]	Unique Persons[3]	Returned Specimens[2]
		Number (% of Total)	Number (Row %)	Number (% of Total)	Number (Row %)
	Total	566	287 (51)	925	426 (46)
Sex at Birth	Male	413 (73)	206 (50)	594 (64)	286 (48)
	Female	153 (27)	81 (53)	331 (36)	140 (42)
Gender[4]	Men	294 (52)	148 (50)	385 (42)	188 (49)
	Women	107 (19)	59 (55)	224 (24)	96 (43)
	Transgender	7 (1)	2 (29)	13 (1)	1 (8)
	Other	27 (5)	13 (48)	33 (4)	14 (42)
	Unknown	131 (23)	65 (50)	270 (29)	127 (47)
Race/Ethnicity	White	188 (33)	113 (60)	275 (30)	143 (52)
	Black/African American	30 (5)	10 (33)	60 (6)	23 (38)
	Latinx	79 (14)	28 (35)	126 (14)	49 (39)
	Asian/Pacific Islander	107 (19)	55 (51)	133 (14)	57 (43)
	Other/Unknown	162 (29)	81 (50)	331 (36)	154 (47)
Age in Years	13-24	91 (16)	47 (52)	153 (17)	73 (48)
	25-29	159 (28)	86 (54)	247 (27)	126 (51)
	30-39	175 (31)	86 (49)	296 (32)	132 (45)
	40-49	76 (13)	29 (38)	138 (15)	55 (40)
	50-59	54 (10)	35 (65)	65 (7)	27 (42)
	60+	11 (2)	4 (36)	26 (3)	13 (50)
Number of Sex Partners in Past 12 months	0	4 (1)	1 (25)	15 (2)	3 (20)
	1	66 (12)	27 (41)	93 (10)	42 (45)
	2	64 (11)	32 (50)	113 (12)	44 (39)
	≥3	275 (49)	151 (55)	389 (42)	192 (49)
	Missing	157 (28)	76 (48)	315 (34)	145 (46)
Region[5]	Ballpark/Mission Bay	43 (8)	23 (53)	87 (9)	42 (48)
	Bayview	15 (3)	6 (40)	31 (3)	11 (35)
	Castro	37 (7)	21 (57)	51 (6)	23 (45)
	Civic Center	38 (7)	20 (53)	67 (7)	26 (39)
	Downtown	24 (4)	11 (46)	44 (5)	21 (48)
	Lake Merced	7 (1)	2 (29)	17 (2)	6 (35)
	Mission	63 (11)	28 (44)	82 (9)	45 (55)
	Outer Mission/Ingleside	27 (5)	12 (44)	43 (5)	18 (42)
	Pacific Heights/Marina	93 (16)	45 (48)	134 (14)	61 (46)
	Panhandle/Haight Ashbury	34 (6)	23 (68)	69 (7)	39 (57)
	Richmond/Presidio	40 (7)	22 (55)	77 (8)	47 (61)
	South of Market	69 (12)	36 (52)	103 (11)	42 (41)
	Sunset	39 (7)	22 (56)	61 (7)	20 (33)
	Treasure Island	1 (<1)	0 (0)	3 (<1)	0 (0)
	Twin Peaks	18 (3)	7 (39)	25 (3)	14 (56)
	Visitacion Valley	11 (2)	6 (55)	22 (2)	8 (36)
	West Portal	7 (1)	3 (43)	9 (1)	3 (33)
Taking PrEP	No	356 (63)	180 (51)	576 (62)	258 (45)
	Yes	76 (13)	41 (54)	72 (8)	36 (50)
	Missing	134 (24)	66 (49)	277 (30)	132 (48)

1 Data were reported as of April 16, 2024. Each order may contain different combination of test kits; total number of test kits does not equal to the number of orders. See Technical Notes "San Francisco HIV/STI Home Testing Program."

2 At least one specimen from 3-site Chlamydia/Gonorrhea test kit was returned. Same people who returned more than one specimens are counted once.

3 Included people who ordered self-collected test kits within same year and were de-duplicated by name and date of birth.

4 Other gender includes queer and non-binary.

5 Region is grouped by zip codes where the test kits were mailed. It is assumed that the person lived in the zip code where the test kit was mailed.

4 Survival among People with HIV Disease Stage 3 (AIDS)

87%
OF PEOPLE DIAGNOSED WITH **HIV** STAGE **3** IN **2012-2022** SURVIVED FOR THREE OR MORE YEARS

Survival time in people diagnosed with HIV stage 3 (AIDS) has dramatically improved in recent years compared to survival time in earlier periods[1] of the epidemic. The probability of living at least 36 months (three years) after HIV stage 3 for people diagnosed during 2012 to 2022 was 87% (Figure 4.1). By racial/ethnic group, transmission category, gender and homeless status, Whites (84%), PWID (77%) and PEH (84%) had the lowest three-year survival probability, respectively.

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1 HIV Epidemiology Section, San Francisco Department of Public Health. HIV Epidemiology Annual Report 2022. San Francisco: San Francisco Department of Public Health December; 2023: Available at: https://www.sf.gov/sites/default/files/2024-07/AnnualReport2022%20Orange%2020240415Final%20w%20 Covers%20fix%20upd%20CD4Model%20TN%2020240722.pdf.

Figure 4.1   Three-year survival probabilities for people diagnosed with HIV disease stage 3 (AIDS) by race/ethnicity, transmission category, gender, and housing status at diagnosis, 2012-2022, San Francisco
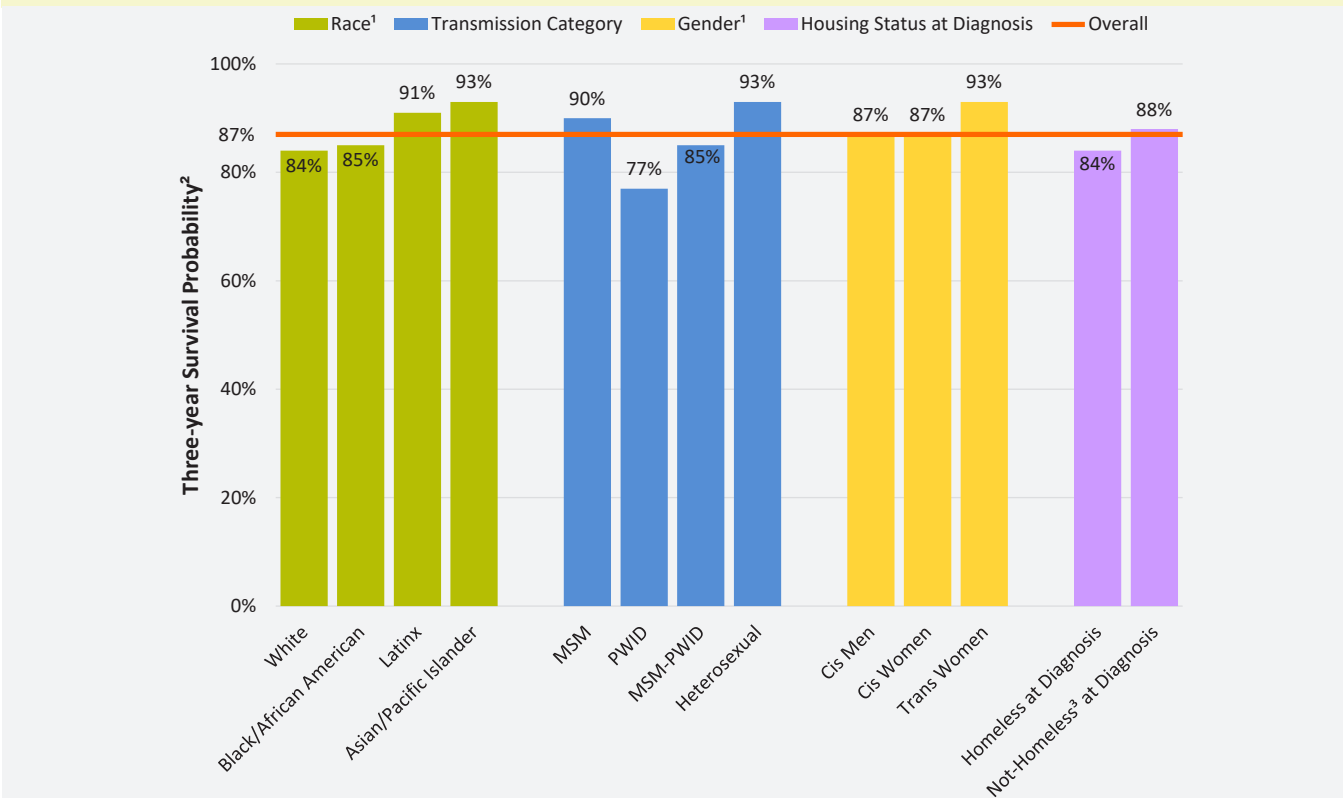
1 Native American, multiracial, and trans men data are not released separately due to small numbers.
2 Calculated from Kaplan-Meier method.
3 Includes people whose addresses at diagnosis were unknown.

5 Trends in HIV Mortality

81%
OF DEATHS IN 2022 WERE DUE TO NON-HIV-RELATED CAUSES

As of December 31, 2022, the cumulative number of deaths from all causes among people diagnosed with HIV in San Francisco was 22,915 (Table 5.1). The total number of deaths among people diagnosed with HIV increased from 2018 to 2022, likely due to the aging of the PLWH. Yet the proportion of deaths due to HIV, including deaths from illnesses and conditions that define HIV disease stage as stage 3 HIV (AIDS), decreased each year, mostly likely due to effective ART.

In assessments of death rates, case-fatality rates increased in 2022 for all causes of deaths compared to rates in 2021. Among PLWH in all stages of disease, the case-fatality rates for 2022 were 5.03 per 1,000 for HIV-related causes and 14.32 per 1,000 for non-HIV-related causes (Table 5.2). The age-adjusted mortality rates among people diagnosed with HIV aged 18 and older varied by gender and racial/ethnic group with the highest rates for trans women (unadjusted rate) and Black/African American cis men (Figure 5.1).

HIV can cause or affect many other diseases. HIV-related causes of death presented in this report section are those listed on death certificates, including those which qualify as stage 3 HIV (AIDS)-defining illnesses according to 2014 revised surveillance case definition for HIV infection in the United States[1].

Underlying causes of death were assessed among decedents with HIV from 2011 to 2022 (Table 5.3). The National Death Index began coding for COVID-19 deaths in 2020, therefore COVID-19 deaths were evaluated for 2020 to 2022 and accounted for the underlying cause for 3% of deaths in those years (see Technical Notes "Death Ascertainment"). Underlying causes of death related to HIV continued to decline while deaths due to accidents (including drug overdoses), heart disease, and chronic obstructive pulmonary disease (COPD) increased during this time period.

By gender, HIV was the most frequent, yet declining, underlying cause of death for cis men from 2011 to 2022 (Table 5.4). Latinx decedents had the highest proportion of deaths attributed to HIV as the underlying cause in the first two time periods compared to Black/African American and White decedents, while accidents accounted for the highest proportion of deaths in Latinx and Black/African Americans during 2019-2022. (Table 5.5). The proportion of deaths where HIV was the underlying cause of death declined across three time periods for MSM, PWID, and MSM-PWID (Table 5.6).

Deaths due to accidental causes in the recent time period (2019-2022) accounted for one-fifth of deaths, primarily due to drug overdoses which increased from 10% to 18% between the first and last time periods (Table 5.3). In 2019 to 2022, accidents accounted for the highest proportion of deaths in cis women (33%) and trans women (43%) (Table 5.4). Drug overdose was the most common underlying cause of death among PWID and MSM-PWID at 32% and 28% of deaths, respectively, in the most recent time period. (Table 5.6).

When multiple causes of death are considered, which include both underlying and contributory causes, the proportion of deaths due to HIV declined from 65% in the period 2011-2014 to 55% in 2015-2018 and

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1 1 Selik, RE, Mokotoff, ED, Branson B, Owen SM, Whitmore S, Hall HI. Revised Surveillance Case Definition for HIV Infection – United States, 2014. MMWR 2014;63(No. RR-3):1-10.

to 47% in 2019-2022[1] (Table 5.7). Heart disease was the second most common cause contributing to 39% of deaths in 2019-2022. Deaths due to accidents increased to 22% in 2019-2022, with those due to drug overdoses increasing to 19%. Similar to the rise in drug overdose deaths, deaths caused by mental disorders due to substance use became the fifth most common in 2019-2022. One fifth of all deaths in 2019-2022 had a non-AIDS cancer as a contributory cause. For 2020 to 2022, COVID-19 was a contributory cause of death for 5% of decedents with HIV.

Among cis men, cis women, and trans women, deaths with a cause related to HIV were the most frequent among underlying or contributory causes of death in all time periods (Table 5.8). Heart disease was the second most frequent underlying or contributory cause of death in cis men across three time periods, and for cis women, heart disease and accidents were tied as second most frequent cause of death in the most recent time period. Trans women had higher proportions of accident-related deaths compared to cis men and cis women in the second and third time periods. In 2019-2022, drug overdoses increased for cis men (17%), cis women (31%), and trans women (43%).

When multiple causes of death were compared for Latinx, Black/African American, and White decedents, the proportion of deaths HIV contributed to decreased across three time periods for all racial/ethnic groups; this decrease was the most pronounced for Latinx and Black/African American decedents (Table 5.9). Deaths due to liver disease and viral hepatitis declined substantially for Latinx and Black/African American decedents in the last time period. When multiple causes of death were considered by transmission categories (MSM, PWID, and MSM-PWID), in the first two time periods, heart disease was observed as the second most frequent underlying or contributory cause of death, after HIV (Table 5.10). Drug overdose-related deaths increased substantially among PWID and MSM-PWID between the first and last time periods.

Table 5.1 Deaths among people diagnosed with HIV by demographic and risk characteristics, 2018-2022, San Francisco

		Year of Death					Cumulative Totals as of 12/31/2022
		2018	**2019**	**2020**	**2021**	**2022**	
		Number (%)					
Gender[1]	Cis Men	229 (89)	239 (91)	258 (90)	240 (87)	280 (88)	21,576
	Cis Women	22 (9)	19 (7)	20 (7)	25 (9)	26 (8)	1,009
	Trans Women	5 (2)	5 (2)	10 (3)	12 (4)	11 (3)	330
Race/Ethnicity	White	133 (52)	146 (56)	179 (62)	158 (57)	181 (57)	16,413
	Black/African American	57 (22)	43 (16)	45 (16)	58 (21)	67 (21)	3,036
	Latinx	38 (15)	44 (17)	38 (13)	42 (15)	49 (15)	2,486
	Asian/Pacific Islander/ Native American	15 (6)	14 (5)	11 (4)	8 (3)	11 (3)	609
	Multi-Race	13 (5)	16 (6)	15 (5)	11 (4)	9 (3)	371
Transmission Category	MSM	146 (57)	149 (57)	155 (54)	147 (53)	182 (57)	16,264
	PWID	32 (13)	32 (12)	30 (10)	43 (16)	46 (15)	1,991
	MSM-PWID	60 (23)	63 (24)	79 (27)	60 (22)	68 (21)	3,688
	Heterosexual	12 (5)	10 (4)	9 (3)	12 (4)	8 (3)	322
	Other/Unidentified[2]	6 (2)	9 (3)	15 (5)	15 (5)	13 (4)	650
Age at Death (years)	0 - 29	4 (2)	3 (1)	0 (0)	5 (2)	6 (2)	1,134
	30 - 39	8 (3)	13 (5)	20 (7)	13 (5)	14 (4)	7,428
	40 - 49	29 (11)	28 (11)	31 (11)	32 (12)	31 (10)	7,850
	50 - 59	79 (31)	81 (31)	88 (31)	72 (26)	74 (23)	3,950
	60 - 69	91 (36)	82 (31)	90 (31)	92 (33)	112 (35)	1,816
	70+	45 (18)	56 (21)	59 (20)	63 (23)	80 (25)	737
HIV Disease Stage	Stage 0, 1, 2, or unknown	36 (14)	64 (24)	54 (19)	61 (22)	60 (19)	895
	Stage 3 (AIDS)	220 (86)	199 (76)	234 (81)	216 (78)	257 (81)	22,020
Cause of Death[3]	HIV-related	73 (29)	70 (27)	72 (25)	60 (22)	80 (25)	--
	Non-HIV-related	171 (67)	188 (71)	208 (72)	213 (77)	227 (72)	--
	Unknown	12 (5)	5 (2)	8 (3)	4 (1)	10 (3)	--
	Total	**256 (100)**	**263 (100)**	**288 (100)**	**277 (100)**	**317 (100)**	**22,915**

1 Data on trans men are not released separately due to small numbers. See Technical Notes "Gender Status."
2 Includes TWSM, TWSM-PWID and people with no identified risk factor.
3 Underlying cause of death obtained from the NDI is available through 2022. See Technical Notes "Death Ascertainment."

Table 5.2 Case-fatality rates per 1,000 due to HIV-related and non-HIV-related causes among people diagnosed with HIV, 2013-2022, San Francisco

Year	People with HIV (all stages)			People with HIV Stage 3 (AIDS)		
	HIV-related cause of death	Non-HIV-related cause of death	All-cause mortality	HIV-related cause of death	Non-HIV-related cause of death	All-cause mortality
	Case-fatality rate[1] per 1,000 PLWH			Case-fatality rate[1] per 1,000 people with HIV Stage 3		
2013	6.17	9.25	15.42	9.03	11.32	20.35
2014	6.39	8.11	14.50	9.71	10.75	20.46
2015	6.24	9.11	15.35	9.88	12.30	22.18
2016	4.65	9.42	14.07	7.55	12.86	20.41
2017	5.07	9.84	14.91	7.91	14.00	21.91
2018	4.47	10.53	15.00	7.44	15.53	22.98
2019	4.31	11.56	15.87	6.32	14.94	21.26
2020	4.46	12.88	17.34	7.17	17.97	25.14
2021	3.74	13.29	17.03	6.15	17.54	23.69
2022	5.03	14.32	19.35	7.48	20.98	28.46

1 Case-fatality rates are calculated as the number of people diagnosed with HIV (all disease stages) or HIV stage 3 (AIDS) who died each year divided by the number of total people living with HIV or HIV stage 3 (AIDS), during that year. See Technical Notes for "Death Ascertainment."

Figure 5.1 Age-adjusted mortality rates among people aged 18 and older with HIV per 100,000 by gender and race/ethnicity, 2013-2022, San Francisco
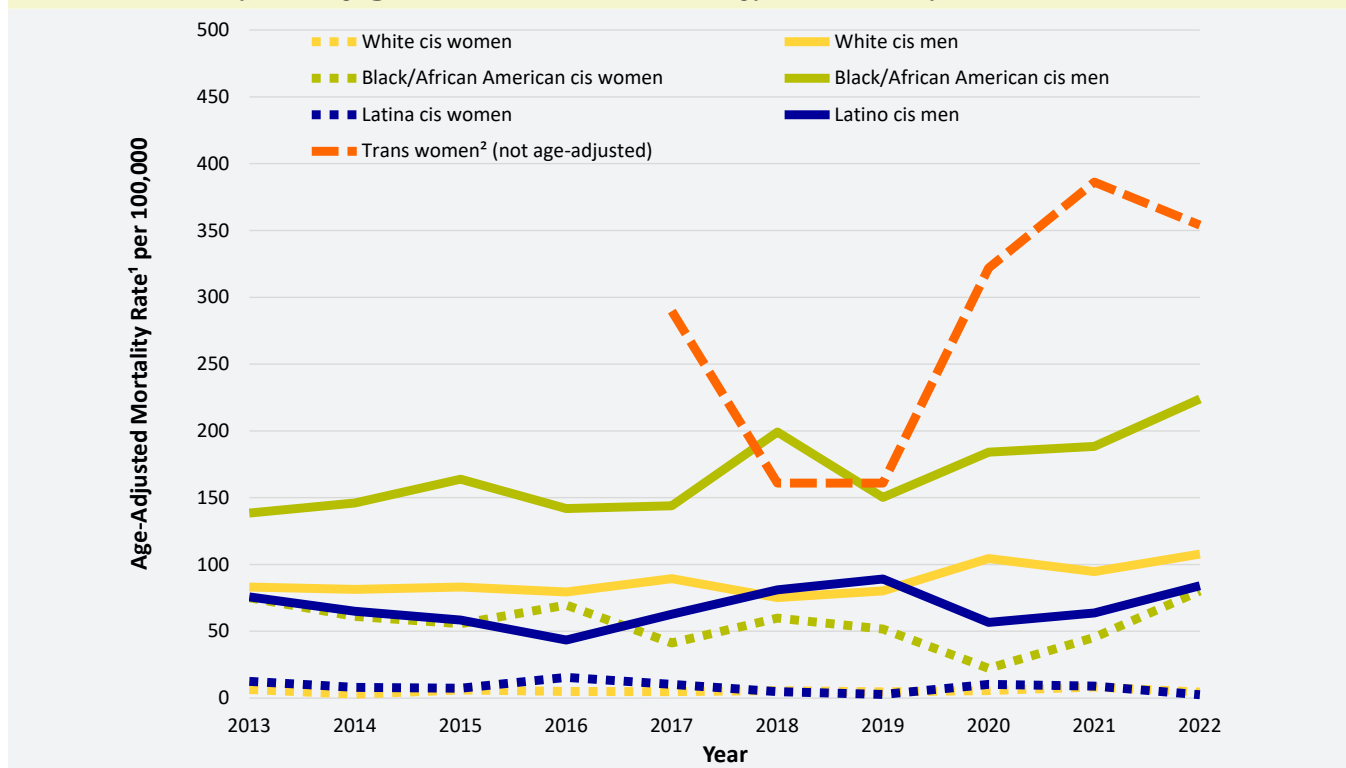
1 Age-adjusted mortality rates are calculated for people 18 years and older. For each race/ethnicity and gender, the number of people with HIV who died each year was divided by projected San Francisco population estimates across fourteen age groups (18-24, 25-29, 30-34, 35-39, 40-44, 45-49, 50-54, 55-59, 60-64, 65-69, 70-74, 75-79, 80-84, 85+) to generate crude rates applied to the standard population, defined using the California population estimates from the Department of Finance. See Technical Notes for "HIV Case Rates and HIV Mortality Rates."

2 Mortality rates for trans women are not age-adjusted. Due to small numbers, trans women are not stratified by race/ethnicity and mortality rates for trans men are not calculated. San Francisco trans women population estimate from Raymond HF, Wilson EC, McFarland W. Transwoman Population Size. Am J Public Health. 2017 Sep;107(9):e12. doi: 10.2105/AJPH.2017.303964. PMID: 28787216; PMCID: PMC5551612.

Table 5.3 Underlying causes of death among people diagnosed with HIV, 2011-2022, San Francisco

		Year of Death		
		2011-2014 **N=943**	**2015-2018** **N=970**	**2019-2022** **N=1,119**
		Number (%)		
Underlying Cause of Death[1]	HIV	388 (41.1)	334 (34.4)	282 (25.2)
	Infections	145 (15.4)	109 (11.2)	77 (6.9)
	Cancer	60 (6.4)	43 (4.4)	45 (4.0)
	Other diseases and conditions	149 (15.8)	148 (15.3)	132 (11.8)
	Unspecified HIV disease	34 (3.6)	34 (3.5)	28 (2.5)
	Accidents	111 (11.8)	136 (14.0)	226 (20.2)
	Drug overdose	93 (9.9)	120 (12.4)	199 (17.8)
	Heart disease	80 (8.5)	111 (11.4)	176 (15.7)
	Coronary heart disease	43 (4.6)	57 (5.9)	113 (10.1)
	Cardiomyopathy	2 (0.2)	10 (1.0)	9 (0.8)
	Non-AIDS cancer	137 (14.5)	151 (15.6)	165 (14.8)
	Lung cancer	35 (3.7)	31 (3.2)	18 (1.6)
	Liver cancer	20 (2.1)	15 (1.5)	17 (1.5)
	Anal cancer	10 (1.1)	12 (1.2)	15 (1.3)
	Pancreatic cancer	8 (0.8)	9 (0.9)	15 (1.3)
	Colon cancer	5 (0.5)	7 (0.7)	8 (0.7)
	Rectal cancer	<5 (--)	<5 (--)	8 (0.7)
	Chronic obstructive pulmonary disease	18 (1.9)	25 (2.6)	41 (3.7)
	COVID-19[2]	0 (0.0)	0 (0.0)	24 (2.8)
	Liver disease	25 (2.7)	19 (2.0)	18 (1.6)
	Alcoholic liver disease	12 (1.3)	11 (1.1)	12 (1.1)
	Liver cirrhosis	10 (1.1)	7 (0.7)	5 (0.4)
	Suicide	32 (3.4)	36 (3.7)	18 (1.6)
	Diabetes	13 (1.4)	9 (0.9)	17 (1.5)
	Cerebrovascular disease	9 (1.0)	20 (2.1)	17 (1.5)
	Mental disorders due to substance use	7 (0.7)	10 (1.0)	17 (1.5)
	Diseases of nervous system	4 (0.4)	6 (0.6)	16 (1.4)
	Pneumonitis	3 (0.3)	5 (0.5)	10 (0.9)
	Diseases of arteries	2 (0.2)	3 (0.3)	6 (0.5)
	Assault	9 (1.0)	14 (1.4)	5 (0.4)
	Renal disease	4 (0.4)	8 (0.8)	5 (0.4)
	Septicemia	1 (0.1)	8 (0.8)	4 (0.4)
	Viral hepatitis	8 (0.8)	7 (0.7)	2 (0.2)

1 See Technical Notes "Death Ascertainment." Deaths among people with HIV that lack cause of death information are not represented in this table.
2 The National Death Index began coding deaths due to COVID-19 in 2020. The number and percent of COVID-19 as the underlying cause of death are among 861 decedents with HIV in the years of 2020 and 2022.

Table 5.4 Underlying causes of death among people diagnosed with HIV by gender, 2011-2022, San Francisco

	Year of Death								
	2011-2014			2015-2018			2019-2022		
	Cis Men	Cis Women	Trans Women	Cis Men	Cis Women	Trans Women	Cis Men	Cis Women	Trans Women
	Number (%)								
Total	**823**	**84**	**36**	**851**	**93**	**25**	**993**	**90**	**35**
HIV	340 (41.3)	33 (39.3)	15 (41.7)	287 (33.7)	37 (39.8)	10 (40.0)	248 (25.0)	25 (27.8)	9 (25.7)
Accidents (including drug overdose)	88 (10.7)	15 (17.9)	8 (22.2)	110 (12.9)	18 (19.4)	7 (28.0)	181 (18.2)	30 (33.3)	15 (42.9)
Heart disease	72 (8.7)	5 (6.0)	3 (8.3)	104 (12.2)	6 (6.5)	- -	170 (17.1)	3 (3.3)	3 (8.6)
Non-AIDS cancer	125 (15.2)	10 (11.9)	2 (5.6)	138 (16.2)	12 (12.9)	- -	155 (15.6)	9 (10.0)	- -
Chronic obstructive pulmonary disease	14 (1.7)	3 (3.6)	- -	21 (2.5)	4 (4.3)	0 (0.0)	34 (3.4)	6 (6.7)	- -
Suicide	31 (3.8)	0 (0.0)	- -	36 (4.2)	0 (0.0)	0 (0.0)	18 (1.8)	0 (0.0)	0 (0.0)
Liver disease	22 (2.7)	2 (2.4)	- -	15 (1.8)	2 (2.2)	2 (8.0)	17 (1.7)	0 (0.0)	- -
Cerebrovascular disease	7 (0.9)	2 (2.4)	0 (0.0)	20 (2.4)	0 (0.0)	0 (0.0)	16 (1.6)	1 (1.1)	0 (0.0)
Diabetes	12 (1.5)	1 (1.2)	0 (0.0)	8 (0.9)	1 (1.1)	0 (0.0)	15 (1.5)	1 (1.1)	- -
Mental disorders due to substance use	6 (0.7)	1 (1.2)	0 (0.0)	9 (1.1)	1 (1.1)	0 (0.0)	15 (1.5)	2 (2.2)	0 (0.0)

1 See Technical Notes "Death Ascertainment." Deaths among people with HIV that lack cause of death information are not represented in this table.
-- Data are not displayed due to small number of deaths among trans women and population size.

Table 5.5 Underlying causes of death among people diagnosed with HIV by race/ethnicity, 2011-2022, San Francisco

	Year of Death								
	2011-2014			2015-2018			2019-2022		
	Latinx	Black/African American	White	Latinx	Black/African American	White	Latinx	Black/African American	White
	Number (%)								
Total	**129**	**197**	**548**	**127**	**194**	**571**	**165**	**207**	**653**
HIV	65 (50.4)	83 (42.1)	214 (39.1)	50 (39.4)	68 (35.1)	184 (32.2)	38 (23.0)	43 (20.8)	171 (26.2)
Accidents (including drug overdose)	14 (10.9)	23 (11.7)	65 (11.9)	13 (10.2)	30 (15.5)	79 (13.8)	41 (24.8)	48 (23.2)	115 (17.6)
Heart disease	7 (5.4)	15 (7.6)	52 (9.5)	12 (9.4)	19 (9.8)	72 (12.6)	16 (9.7)	39 (18.8)	112 (17.2)
Non-AIDS cancer	16 (12.4)	27 (13.7)	86 (15.7)	14 (11.0)	37 (19.1)	93 (16.3)	27 (16.4)	28 (13.5)	94 (14.4)
Chronic obstructive pulmonary disease	3 (2.3)	5 (2.5)	10 (1.8)	2 (1.6)	4 (2.1)	18 (3.2)	2 (1.2)	12 (5.8)	26 (4.0)
Suicide	3 (2.3)	1 (0.5)	23 (4.2)	5 (3.9)	3 (1.5)	24 (4.2)	3 (1.8)	0 (0.0)	13 (2.0)
Liver disease	4 (3.1)	3 (1.5)	14 (2.6)	5 (3.9)	4 (2.1)	9 (1.6)	4 (2.4)	1 (0.5)	11 (1.7)
Diabetes	2 (1.6)	6 (3.0)	5 (0.9)	2 (1.6)	1 (0.5)	5 (0.9)	4 (2.4)	2 (1.0)	10 (1.5)
Cerebrovascular disease	0 (0.0)	4 (2.0)	5 (0.9)	4 (3.1)	3 (1.5)	12 (2.1)	1 (0.6)	5 (2.4)	10 (1.5)
Mental disorders due to substance use	1 (0.8)	2 (1.0)	4 (0.7)	2 (1.6)	1 (0.5)	6 (1.1)	5 (3.0)	4 (1.9)	7 (1.1)

1 See Technical Notes "Death Ascertainment." Deaths among people with HIV that lack cause of death information are not represented in this table. Asian, Pacific Islander, Native American, and multiracial decedents were not displayed due to small numbers.

Table 5.6   Underlying causes of death among people diagnosed with HIV by transmission category, 2011-2022, San Francisco

		Year of Death								
		2011-2014			2015-2018			2019-2022		
		MSM	PWID	MSM-PWID	MSM	PWID	MSM-PWID	MSM	PWID	MSM-PWID
		Number (%)								
	Total	524	163	188	517	144	241	641	151	265
Underlying Cause of Death[1]	HIV	224 (42.7)	65 (39.9)	64 (34.0)	174 (33.7)	50 (34.7)	78 (32.4)	151 (24.6)	42 (27.8)	64 (24.2)
	Heart disease	51 (9.7)	13 (8.0)	13 (6.9)	60 (11.6)	14 (9.7)	31 (12.9)	121 (19.7)	13 (8.6)	31 (11.7)
	Non-AIDS cancer	96 (18.3)	19 (11.7)	18 (9.6)	98 (19.0)	16 (11.1)	30 (12.4)	110 (17.9)	15 (9.9)	31 (11.7)
	Accidents	41 (7.8)	23 (14.1)	37 (19.7)	44 (8.5)	30 (20.8)	51 (21.2)	69 (11.2)	52 (34.4)	81 (30.6)
	Drug overdose	31 (5.9)	20 (12.3)	34 (18.1)	37 (7.2)	28 (19.4)	46 (19.1)	54 (8.8)	48 (31.8)	74 (27.9)
	Chronic obstructive pulmonary disease	11 (2.1)	5 (3.1)	1 (0.5)	13 (2.5)	6 (4.2)	4 (1.7)	22 (3.6)	6 (4.0)	9 (3.4)
	Diabetes	7 (1.3)	2 (1.2)	2 (1.1)	5 (1.0)	1 (0.7)	2 (0.8)	14 (2.3)	1 (0.7)	1 (0.4)
	Liver disease	15 (2.9)	3 (1.8)	6 (3.2)	12 (2.3)	4 (2.8)	1 (0.4)	13 (2.1)	0 (0.0)	4 (1.5)
	Suicide	19 (3.6)	1 (0.6)	11 (5.9)	26 (5.0)	0 (0.0)	10 (4.1)	12 (2.0)	0 (0.0)	6 (2.3)
	Cerebrovascular disease	4 (0.8)	4 (2.5)	0 (0.0)	11 (2.1)	0 (0.0)	8 (3.3)	10 (1.6)	1 (0.7)	4 (1.5)
	Mental disorders due to substance use	3 (0.6)	1 (0.6)	3 (1.6)	9 (1.7)	1 (0.7)	0 (0.0)	9 (1.5)	4 (2.6)	3 (1.1)

1 See Technical Notes "Death Ascertainment." Deaths among people with HIV that lack cause of death information are not represented in this table.

Table 5.7   Multiple causes of death among people diagnosed with HIV, 2011-2022, San Francisco

		Year of Death		
		2011-2014 **N=943**	**2015-2018** **N=970**	**2019-2022** **N=1,119**
		Number (%)		
Multiple Causes of Death[1]	HIV	613 (65.0)	533 (54.9)	528 (47.2)
	Heart disease	267 (28.3)	297 (30.6)	439 (39.2)
	Coronary heart disease	80 (8.5)	107 (11.0)	172 (15.4)
	Cardiomyopathy	24 (2.5)	26 (2.7)	37 (3.3)
	Accidents	114 (12.1)	153 (15.8)	248 (22.2)
	Drug overdose	93 (9.9)	126 (13.0)	211 (18.9)
	Non-AIDS cancer	180 (19.1)	205 (21.1)	221 (19.7)
	Lung cancer	40 (4.2)	39 (4.0)	26 (2.3)
	Anal cancer	12 (1.3)	17 (1.8)	23 (2.1)
	Liver cancer	25 (2.7)	17 (1.8)	23 (2.1)
	Pancreatic cancer	11 (1.2)	9 (0.9)	17 (1.5)
	Colon cancer	5 (0.5)	11 (1.1)	15 (1.3)
	Rectal cancer	<5 (--)	7 (0.7)	9 (0.8)
	Leukemia	9 (1.0)	5 (0.5)	6 (0.5)
	Mental disorders due to substance use	93 (9.9)	106 (10.9)	148 (13.2)
	Renal disease	94 (10.0)	128 (13.2)	139 (12.4)
	Chronic obstructive lung disease	61 (6.5)	77 (7.9)	108 (9.7)
	Septicemia	88 (9.3)	103 (10.6)	85 (7.6)
	Diabetes	56 (5.9)	50 (5.2)	81 (7.2)
	Liver disease	113 (12.0)	99 (10.2)	75 (6.7)
	Liver cirrhosis	68 (7.2)	56 (5.8)	50 (4.5)
	Alcoholic liver disease	13 (1.4)	13 (1.3)	16 (1.4)
	Viral hepatitis	126 (13.4)	88 (9.1)	68 (6.1)
	Cerebrovascular disease	34 (3.6)	53 (5.5)	51 (4.6)
	COVID-19[2]	0 (0.0)	0 (0.0)	39 (4.5)
	Diseases of arteries	12 (1.3)	13 (1.3)	27 (2.4)
	Pneumonitis	14 (1.5)	20 (2.1)	23 (2.1)
	Diseases of nervous system	5 (0.5)	9 (0.9)	20 (1.8)
	Hyperlipidemia	10 (1.1)	15 (1.5)	20 (1.8)
	Suicide	32 (3.4)	36 (3.7)	18 (1.6)
	Assault	9 (1.0)	14 (1.4)	5 (0.4)

1 Includes underlying and contributory causes of death. Individuals may have more than one cause of death. See Technical Notes "Death Ascertainment." Deaths among people with HIV that lack cause of death information are not represented in this table.

2 The National Death Index began coding deaths due to COVID-19 in 2020. The number and percent of COVID-19 as a cause of death are among 861 decedents with HIV in the years 2020 and 2022.

Table 5.8 Multiple causes of death among people diagnosed with HIV by gender, 2011-2022, San Francisco

	Year of Death								
	2011-2014			**2015-2018**			**2019-2022**		
	Cis Men	Cis Women	Trans Women	Cis Men	Cis Women	Trans Women	Cis Men	Cis Women	Trans Women
	Number (%)								
Total	**823**	**84**	**36**	**851**	**93**	**25**	**993**	**90**	**35**
HIV	535 (65.0)	55 (65.5)	23 (63.9)	456 (53.6)	61 (65.6)	16 (64.0)	465 (46.8)	44 (48.9)	18 (51.4)
Heart disease	225 (27.3)	28 (33.3)	14 (38.9)	268 (31.5)	23 (24.7)	6 (24.0)	394 (39.7)	31 (34.4)	13 (37.1)
Accidents	91 (11.1)	15 (17.9)	8 (22.2)	126 (14.8)	19 (20.4)	7 (28.0)	202 (20.3)	31 (34.4)	15 (42.9)
Drug overdose	73 (8.9)	14 (16.7)	6 (16.7)	101 (11.9)	18 (19.4)	6 (24.0)	168 (16.9)	28 (31.1)	15 (42.9)
Non-AIDS cancer	163 (19.8)	13 (15.5)	- -	187 (22.0)	17 (18.3)	- -	201 (20.2)	15 (16.7)	5 (14.3)
Mental disorders due to substance	79 (9.6)	11 (13.1)	- -	90 (10.6)	12 (12.9)	- -	128 (12.9)	16 (17.8)	- -
Renal disease	79 (9.6)	12 (14.3)	- -	104 (12.2)	18 (19.4)	6 (24.0)	116 (11.7)	17 (18.9)	5 (14.3)
Chronic obstructive pulmonary disease	46 (5.6)	13 (15.5)	- -	64 (7.5)	12 (12.9)	- -	86 (8.7)	18 (20.0)	- -
Diabetes	49 (6.0)	4 (4.8)	- -	46 (5.4)	3 (3.2)	- -	73 (7.4)	4 (4.4)	- -
Septicemia	77 (9.4)	8 (9.5)	- -	88 (10.3)	14 (15.1)	- -	72 (7.3)	10 (11.1)	- -
Liver disease	104 (12.6)	7 (8.3)	- -	84 (9.9)	9 (9.7)	6 (24.0)	69 (6.9)	5 (5.6)	- -
Viral hepatitis	103 (12.5)	21 (25.0)	- -	74 (8.7)	8 (8.6)	6 (24.0)	63 (6.3)	4 (4.4)	- -

1 Includes underlying and contributory causes of death. Individuals may have more than one cause of death. See Technical Notes "Death Ascertainment." Deaths among people with HIV that lack cause of death information are not represented in this table.

-- Data are not displayed due to small number of deaths among trans women and population size.

Table 5.9 Multiple causes of death among people diagnosed with HIV by race/ethnicity, 2011-2022, San Francisco

	Year of Death								
	2011-2014			**2015-2018**			**2019-2022**		
	Latinx	Black/African American	White	Latinx	Black/African American	White	Latinx	Black/African American	White
	Number (%)								
Total	**129**	**197**	**548**	**127**	**194**	**571**	**165**	**207**	**653**
HIV	94 (72.9)	137 (69.5)	339 (61.9)	71 (55.9)	112 (57.7)	310 (54.3)	76 (46.1)	90 (43.5)	319 (48.9)
Heart disease	31 (24.0)	68 (34.5)	152 (27.7)	32 (25.2)	66 (34.0)	177 (31.0)	50 (30.3)	96 (46.4)	263 (40.3)
Non-AIDS cancer	20 (15.5)	40 (20.3)	108 (19.7)	22 (17.3)	47 (24.2)	125 (21.9)	32 (19.4)	38 (18.4)	131 (20.1)
Accidents	14 (10.9)	25 (12.7)	66 (12.0)	19 (15.0)	31 (16.0)	89 (15.6)	43 (26.1)	51 (24.6)	129 (19.8)
Drug overdose	12 (9.3)	22 (11.2)	50 (9.1)	12 (9.4)	29 (14.9)	73 (12.8)	35 (21.2)	47 (22.7)	106 (16.2)
Mental disorders due to substance use	7 (5.4)	20 (10.2)	62 (11.3)	17 (13.4)	15 (7.7)	62 (10.9)	28 (17.0)	31 (15.0)	75 (11.5)
Renal disease	13 (10.1)	31 (15.7)	43 (7.8)	14 (11.0)	44 (22.7)	61 (10.7)	15 (9.1)	42 (20.3)	70 (10.7)
Chronic obstructive pulmonary disease	4 (3.1)	20 (10.2)	35 (6.4)	5 (3.9)	17 (8.8)	50 (8.8)	10 (6.1)	30 (14.5)	57 (8.7)
Septicemia	20 (15.5)	16 (8.1)	45 (8.2)	16 (12.6)	20 (10.3)	56 (9.8)	15 (9.1)	16 (7.7)	45 (6.9)
Liver disease	20 (15.5)	23 (11.7)	63 (11.5)	18 (14.2)	16 (8.2)	56 (9.8)	12 (7.3)	7 (3.4)	49 (7.5)
Diabetes	5 (3.9)	20 (10.2)	29 (5.3)	9 (7.1)	12 (6.2)	26 (4.6)	13 (7.9)	15 (7.2)	48 (7.4)
Viral hepatitis	19 (14.7)	43 (21.8)	53 (9.7)	16 (12.6)	16 (8.2)	47 (8.2)	8 (4.8)	13 (6.3)	40 (6.1)

1 Includes underlying and contributory causes of death. Individuals may have more than one cause of death. See Technical Notes "Death Ascertainment." Deaths among people with HIV that lack cause of death information are not represented in this table.

Table 5.10 Multiple causes of death among people diagnosed with HIV by transmission category, 2011-2022, San Francisco

	Year of Death								
	2011-2014			**2015-2018**			**2019-2022**		
	MSM	PWID	MSM-PWID	MSM	PWID	MSM-PWID	MSM	PWID	MSM-PWID
	Number (%)								
Total	**524**	**163**	**188**	**517**	**144**	**241**	**641**	**151**	**265**
HIV	352 (67.2)	105 (64.4)	108 (57.4)	282 (54.5)	87 (60.4)	115 (47.7)	299 (48.7)	73 (48.3)	110 (41.5)
Heart disease	148 (28.2)	48 (29.4)	46 (24.5)	155 (30.0)	40 (27.8)	76 (31.5)	256 (41.7)	48 (31.8)	99 (37.4)
Non-AIDS cancer	121 (23.1)	28 (17.2)	21 (11.2)	129 (25.0)	23 (16.0)	44 (18.3)	144 (23.5)	25 (16.6)	38 (14.3)
Accidents	42 (8.0)	24 (14.7)	38 (20.2)	53 (10.3)	31 (21.5)	57 (23.7)	81 (13.2)	54 (35.8)	87 (32.8)
Drug overdose	31 (5.9)	20 (12.3)	34 (18.1)	38 (7.4)	29 (20.1)	50 (20.7)	61 (9.9)	49 (32.5)	77 (29.1)
Mental disorders due to substance use	44 (8.4)	18 (11.0)	27 (14.4)	51 (9.9)	18 (12.5)	30 (12.4)	71 (11.6)	25 (16.6)	39 (14.7)
Renal disease	44 (8.4)	27 (16.6)	14 (7.4)	66 (12.8)	23 (16.0)	23 (9.5)	70 (11.4)	28 (18.5)	29 (10.9)
Diabetes	39 (7.4)	7 (4.3)	5 (2.7)	28 (5.4)	9 (6.3)	10 (4.1)	58 (9.4)	8 (5.3)	9 (3.4)
Septicemia	43 (8.2)	20 (12.3)	18 (9.6)	48 (9.3)	21 (14.6)	25 (10.4)	46 (7.5)	13 (8.6)	20 (7.5)
Chronic obstructive pulmonary disease	23 (4.4)	23 (14.1)	12 (6.4)	35 (6.8)	19 (13.2)	16 (6.6)	44 (7.2)	27 (17.9)	27 (10.2)
Liver disease	52 (9.9)	24 (14.7)	32 (17.0)	43 (8.3)	19 (13.2)	29 (12.0)	40 (6.5)	9 (6.0)	24 (9.1)

Row group label (rotated): Multiple Causes of Death[1]

1   Includes underlying and contributory causes of death. Individuals may have more than one cause of death. See Technical Notes "Death Ascertainment." Deaths among people with HIV that lack cause of death information are not represented in this table.

6 Health Insurance Status at Time of HIV Diagnosis

68%
OF PEOPLE NEWLY DIAGNOSED IN 2019-2023 HAD HEALTH INSURANCE WHILE

20%
DID NOT HAVE HEALTH INSURANCE

Health insurance status at time of HIV diagnosis was assessed by racial/ethnic group, gender, and year of diagnosis between 2019-2023 (Figure 6.1). By racial/ethnic group, 74% of Whites, 81% of Black/African Americans, 56% of Latinx, and 73% of APIs had health insurance at time of diagnosis. Latinx had the highest proportion uninsured at HIV diagnosis (39%). By gender, cis men had the highest proportion with no insurance at diagnosis (28%). Overall, from 2019 to 2023, the proportion of people with health insurance at time of HIV diagnosis ranged from 63% to 73%. The highest proportion of people without insurance was in 2020 (33%) when health insurance status and retention of health coverage may have been impacted by the shelter-in-place period and other factors related to the first year of the COVID-19 pandemic.

For Whites, Black/African Americans, and Latinx, public insurance was the most common source of coverage at time of diagnosis and during the 2019-2023 time period (Figure 6.2). In 2023, private insurance was the most common source of insurance for Whites and APIs, and 40% of Latinx had no insurance at diagnosis - the only racial/ethnic group for whom no insurance was most common. These trends are similar when aggregating years 2019-2023 (Figure 6.3). MediCal, California's Medicaid program (a state-sponsored insurance for people meeting financial criteria), was the most common public insurance source for most racial/ethnic groups at diagnosis (exclusive of APIs), covering 53% of Black/African Americans, 35% of Whites and 30% of Latinx. By gender (Figure 6.4), 60% of cis women and 52% of trans women were covered by MediCal at diagnosis, compared to 31% cis men. Cis men, on the other hand, were more likely to be privately insured (29%) or have no insurance (28%) at diagnosis.

Figure 6.1 Health insurance status at time of HIV diagnosis by race/ethnicity, gender[1], and year of diagnosis, 2019-2023, San Francisco

Legend: ■ Missing ■ No insurance ■ Any insurance

Y-axis: Percent

Category	Any insurance	No insurance	Missing
White	74%	20%	6%
Black/African American	81%	14%	5%
Latinx	56%	39%	5%
Asian/Pacific Islander	73%	19%	8%
Cis Men	66%	28%	6%
Cis Women	78%	20%	2%
Trans Women	70%	25%	5%
2019	63%	28%	9%
2020	63%	33%	4%
2021	71%	23%	6%
2022	69%	26%	5%
2023	73%	23%	4%
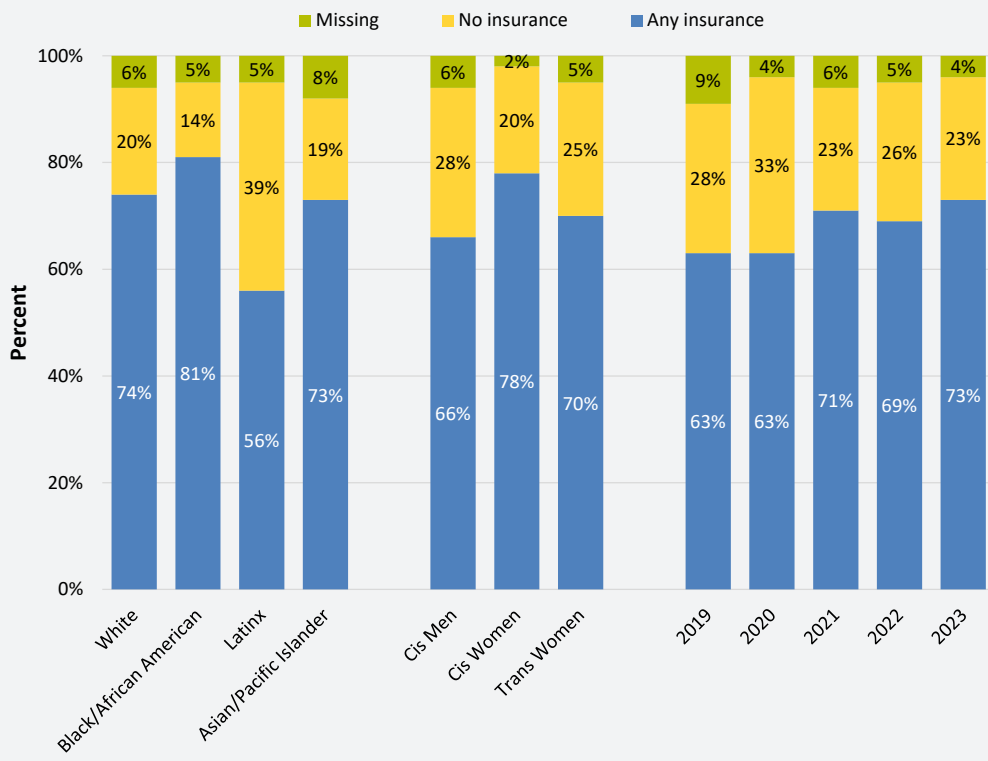
1 Data on trans men are not presented due to small numbers and small population size. See Technical Notes "Gender Status."

Figure 6.2 Trends in health insurance status at time of HIV diagnosis by race/ethnicity, 2019-2023, San Francisco

White (N=247)

Black/African American (N=133)

Latinx (N=307)

Asian/Pacific Islander (N=93)
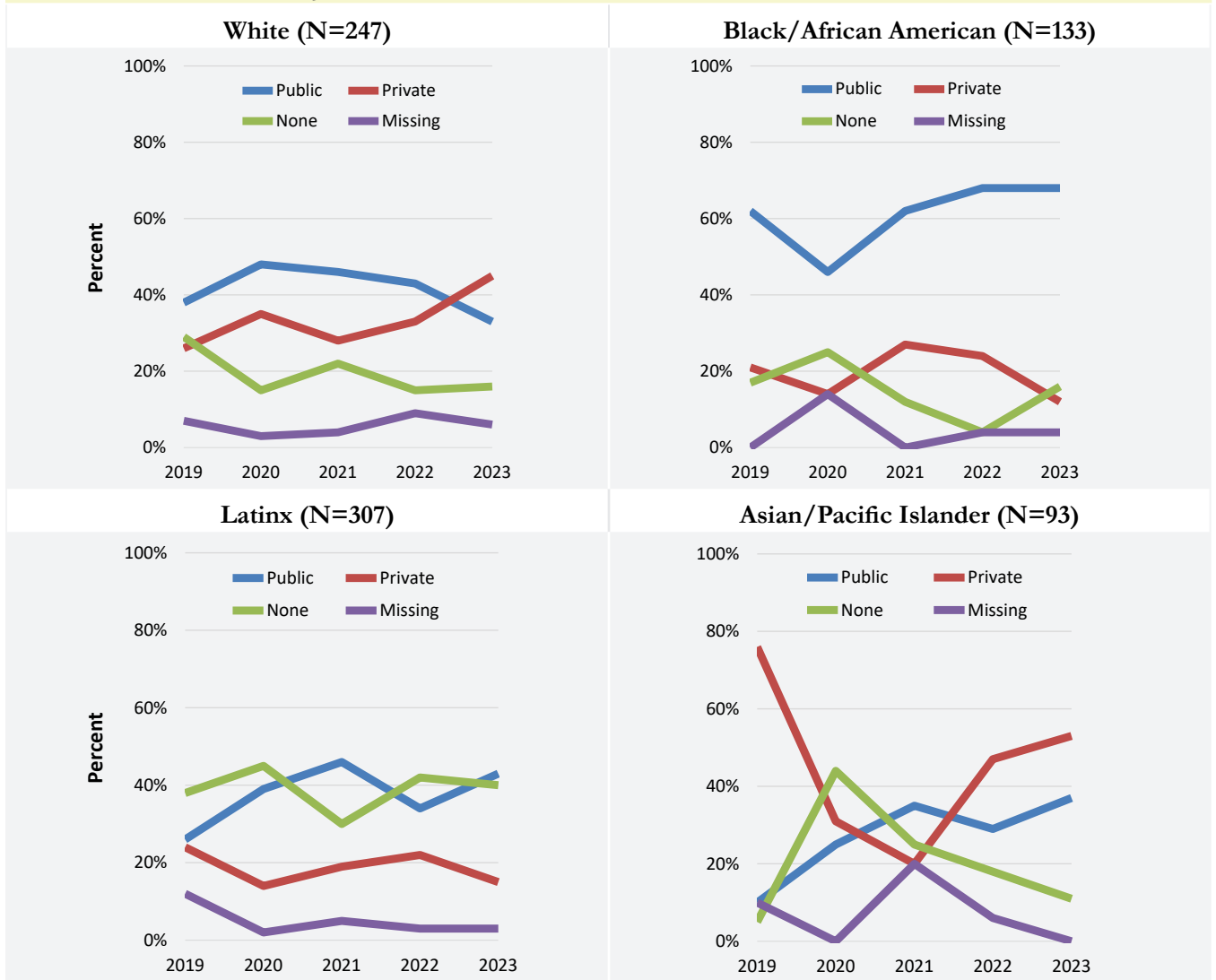
Figure 6.3 Health insurance status at time of HIV diagnosis by race/ethnicity, 2019-2023, San Francisco

White (N=247)

- Private 33%
- None 20%
- Missing 6%
- MediCal 35%
- Medicare 2%
- VA 2%
- Other Public (not specified) 1%
- HSF <1%
- Jail 1%

Black/African American (N=133)

- Private 20%
- None 15%
- Missing 5%
- MediCal 53%
- Medicare 4%
- Other Public (not specified) 3%
- Jail 1%

Latinx (N=307)

- Private 19%
- None 39%
- Missing 5%
- MediCal 30%
- Medicare 1%
- VA <1
- Other Public (not specified) 3%
- HSF 3%
- Jail <1

Asian/Pacific Islander (N=93)

- Private 46%
- None 19%
- Missing 8%
- MediCal 25%
- Other Public (not specified) 2%
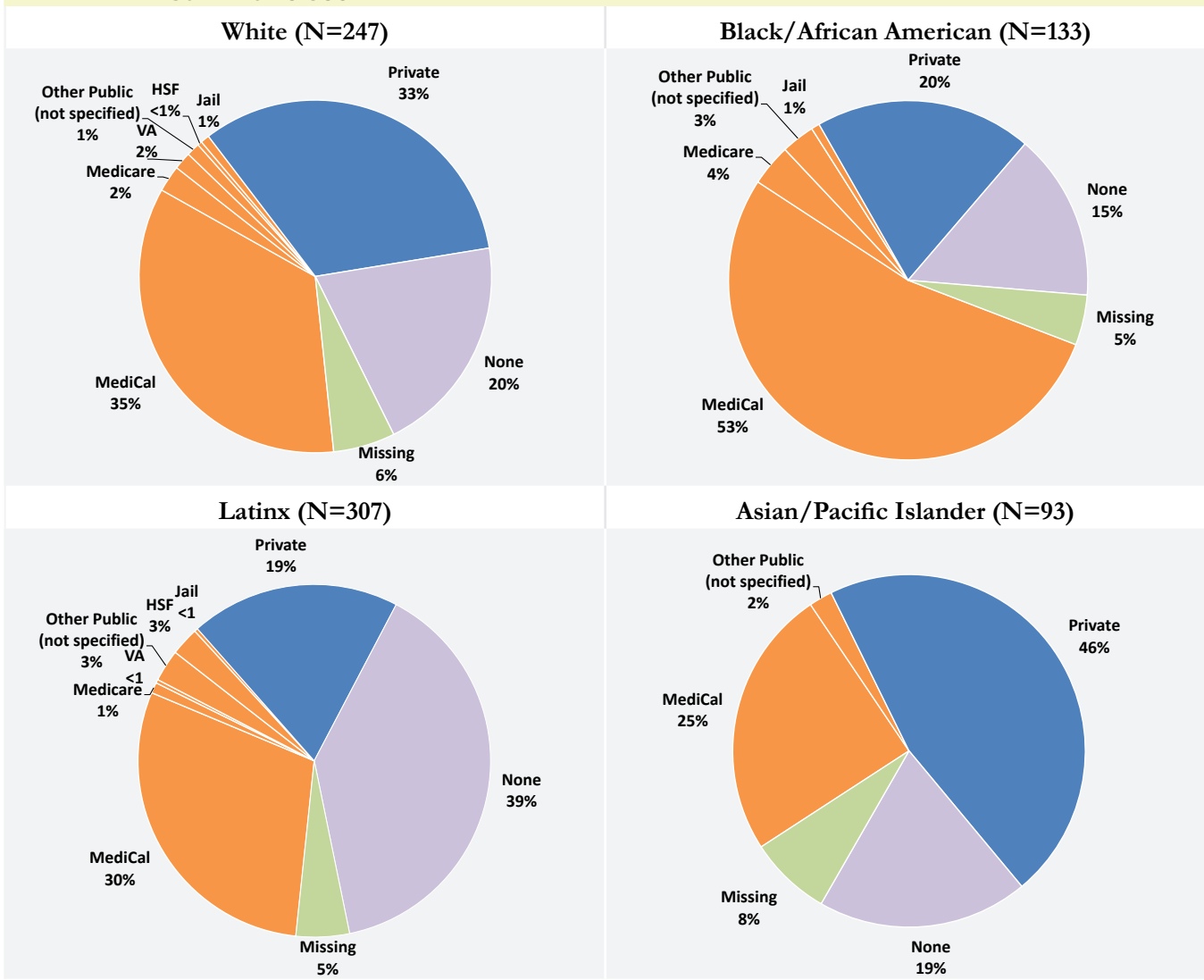
Public ■ Private ■ None ■ Missing, HSF: Healthy San Francisco.

Figure 6.4 Health insurance status at time of HIV diagnosis by gender[1], 2019-2023, San Francisco
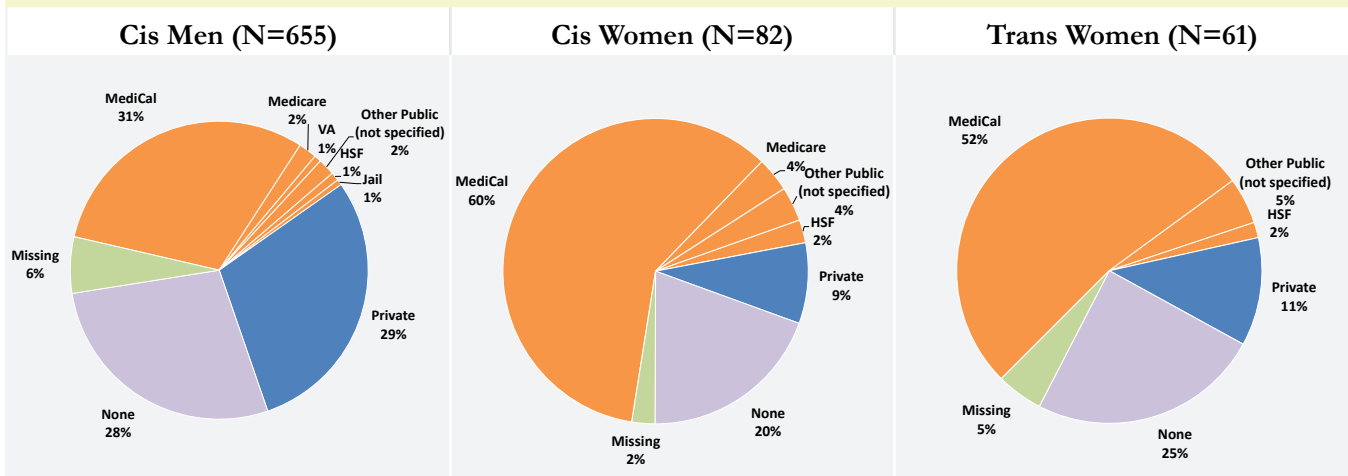
Cis Men (N=655)

- MediCal 31%
- Medicare 2%
- VA 1%
- HSF 1%
- Other Public (not specified) 2%
- Jail 1%
- Private 29%
- None 28%
- Missing 6%

Cis Women (N=82)

- MediCal 60%
- Medicare 4%
- Other Public (not specified) 4%
- HSF 2%
- Private 9%
- None 20%
- Missing 2%

Trans Women (N=61)

- MediCal 52%
- Other Public (not specified) 5%
- HSF 2%
- Private 11%
- None 25%
- Missing 5%

1 Data on trans men are not presented due to small numbers. See Technical Notes "Gender Status."

Public ■ Private ■ None ■ Missing, HSF: Healthy San Francisco.

7 HIV among Men who Have Sex with Men

Overall and from 2014 to 2019, the number of MSM newly diagnosed with HIV in all racial/ethnic groups declined (Figure 7.1). Annual diagnoses among White MSM were highest from 2014 to 2017, while Latino MSM exceeded all other racial/ethnic groups from 2018 to 2022 and declined in 2023. Annual diagnoses among White and API MSM were relatively stable from 2021 to 2023.

During 2014 to 2023, the number of reported rectal gonorrhea diagnoses among MSM without HIV peaked at 1,171 in 2022 and declined to 956 in 2023 (Figure 7.2). The number of diagnoses among MSM with HIV also decreased slightly in recent years from 421 in 2021 to 317 in 2023. By comparison, the number of male gonococcal proctitis diagnoses was notably lower, likely due to differences in how the data were reported, and has been relatively stable.

The number of early syphilis diagnoses, including primary, secondary, and early latent, increased from 2014 to 2017 and declined in recent years, irrespective of HIV serostatus (Figure 7.3).

Data from the MSM Intercept Survey (see Technical Notes "MSM Intercept Survey") showed that alcohol use was the most common among MSM for every year from 2015 to 2019 and 2021 to 2023 followed by marijuana use (Figure 7.4). Fewer than 20% of MSM reported use of injection drugs, heroin/opiates, or crack cocaine during in both time periods (2015-2019, 2021-2023). Data in 2020 is incomplete and not shown in the figure due to the San Francisco shelter-in-place order. Since 2021, the data collection method changed from in-person at events and outside bars to through social media and dating apps. From 2021 to 2023, poppers, club drugs, and cocaine use increased.

From 2017 to 2019, 67%-74% of MSM in the survey reported receiving STI testing in the past six months (Figure 7.5). During 2021-2023, the proportion of MSM who reported receiving STI testing in the past six months was lowest in 2021, which could be due to the lingering impact of the pandemic and the change in data collection methods. In 2022 and 2023, 56%-66% of MSM reported receiving STI testing.

Figure 7.1 Number of MSM diagnosed with HIV by race/ethnicity, 2014-2023, San Francisco

Legend:
- White
- Black/African American
- Latino
- Asian/Pacific Islander
- Other

X-axis: Year of HIV Diagnosis[1]
Y-axis: Number of Diagnoses
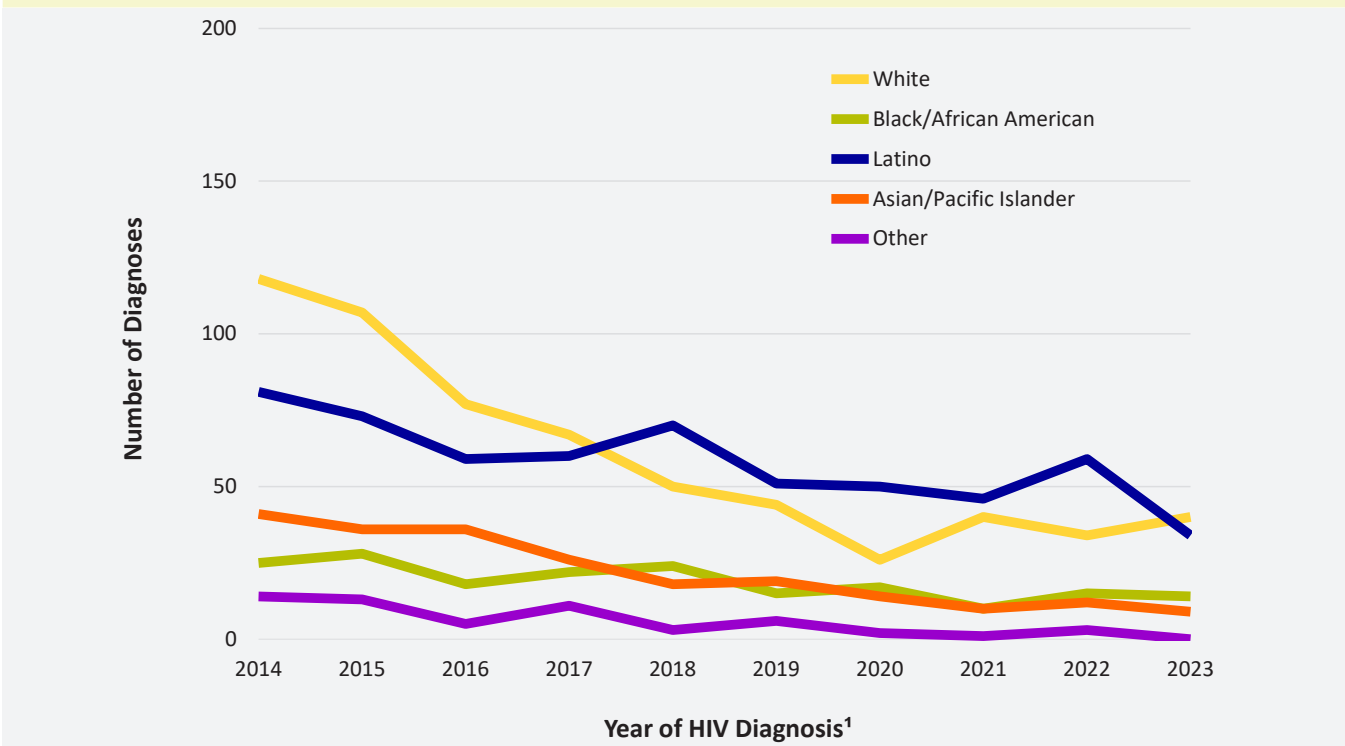
1 Includes MSM and MSM-PWID with HIV by year of their initial HIV diagnosis. See Technical Notes "Date of Initial HIV Diagnosis."

Sexually transmitted infections among MSM

Figure 7.2 Male rectal gonorrhea and male gonococcal proctitis among MSM by HIV serostatus[1], 2014-2023, San Francisco

Legend:
- Male Rectal Gonorrhea (HIV+)
- Male Rectal Gonorrhea (HIV-)
- Male Gonococcal Proctitis (HIV+)
- Male Gonococcal Proctitis (HIV-)

X-axis: Year
Y-axis: Number of Diagnoses

1 Data on male rectal gonorrhea and gonococcal proctitis originate from San Francisco Department of Public Health STI case registry.

Figure 7.3 Early syphilis among MSM by HIV serostatus[1], 2014-2023, San Francisco
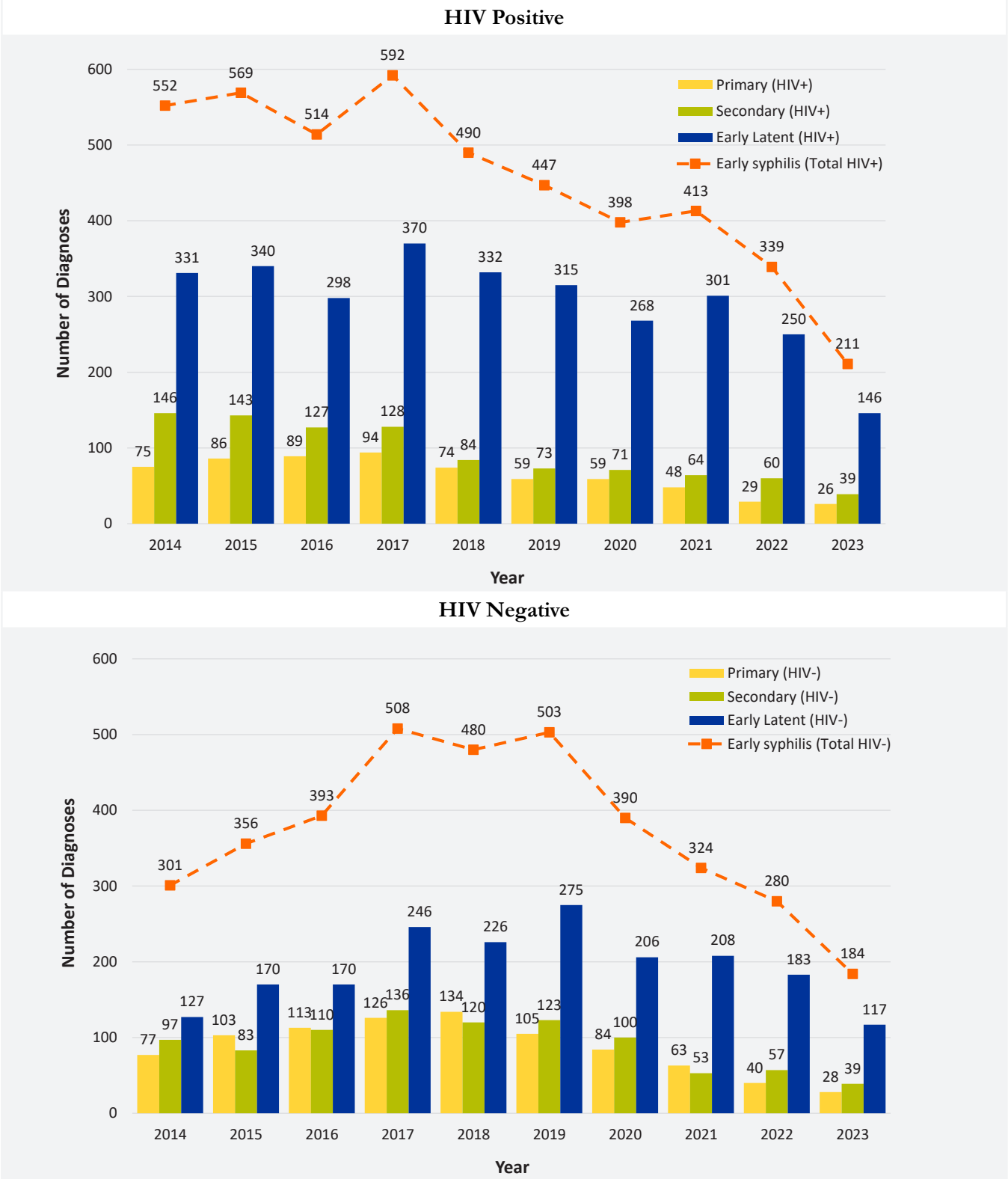
HIV Positive

HIV Negative

1 Data on early syphilis originate from San Francisco Department of Public Health STI case registry.

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Figure 7.4 Substance use in the last six months among MSM, the MSM Intercept Survey, 2015-2019, 2021-2023, San Francisco

Legend: Alcohol; Alcohol, 5+ drinks[1]; Club drugs[2]; Cocaine; Crack Cocaine; Crystal Methamphetamine; Heroin/Opiates/Pain pills; Injection drugs[3]; Poppers; Pot/Marijuana; Viagra
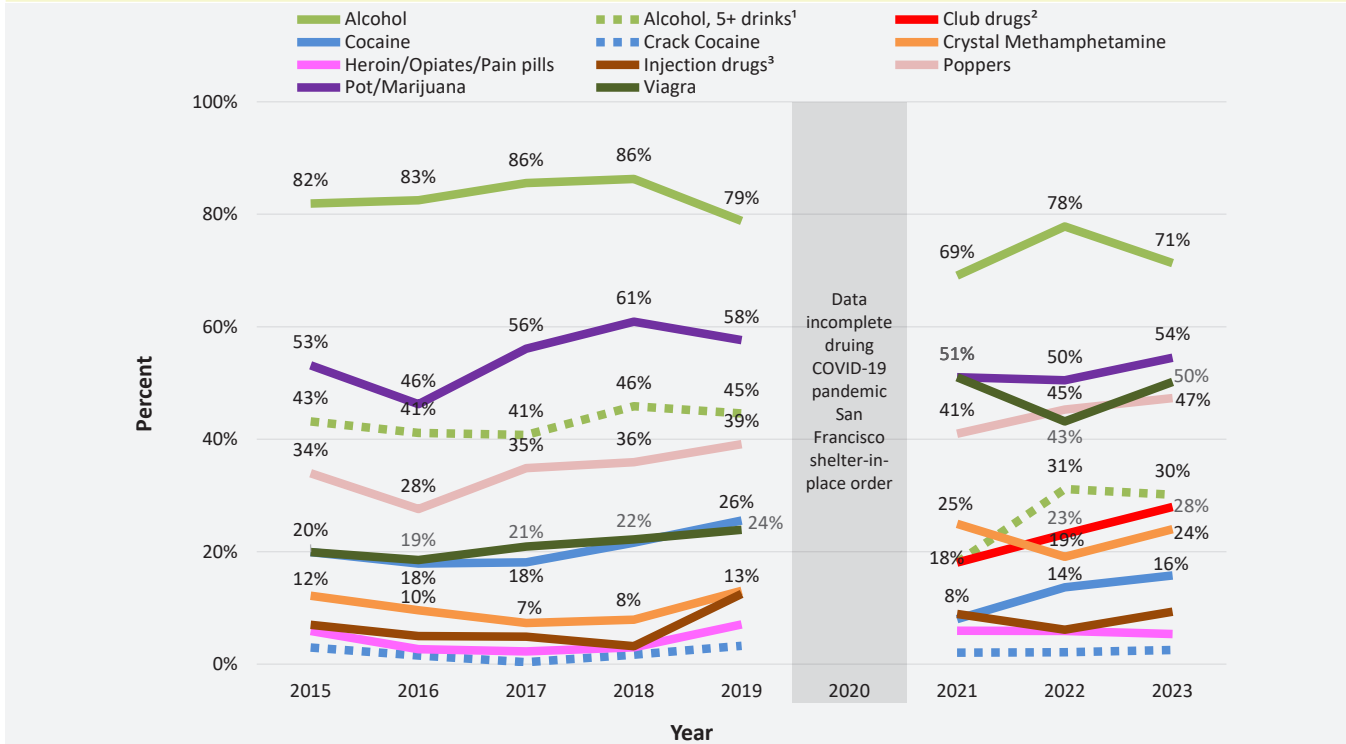
1 Alcohol, 5+ drinks are 5 or more drinks of alcohol in one sitting (binge drinking)
2 Data on the club drug use was collected since 2021. Club drugs are GHB, Ketamine, and Ecstasy.
3 Injection drugs are any drugs that are injected that were not prescribed by a doctor.

Figure 7.5 Percent of MSM receiving STI screening tests in the last six months, the MSM Intercept Survey, 2015-2019, 2021-2023, San Francisco

Legend: Rectal swab for chlamydia/gonorrhea; Blood test for Syphilis; Throat swab for chlamydia/gonorrhea
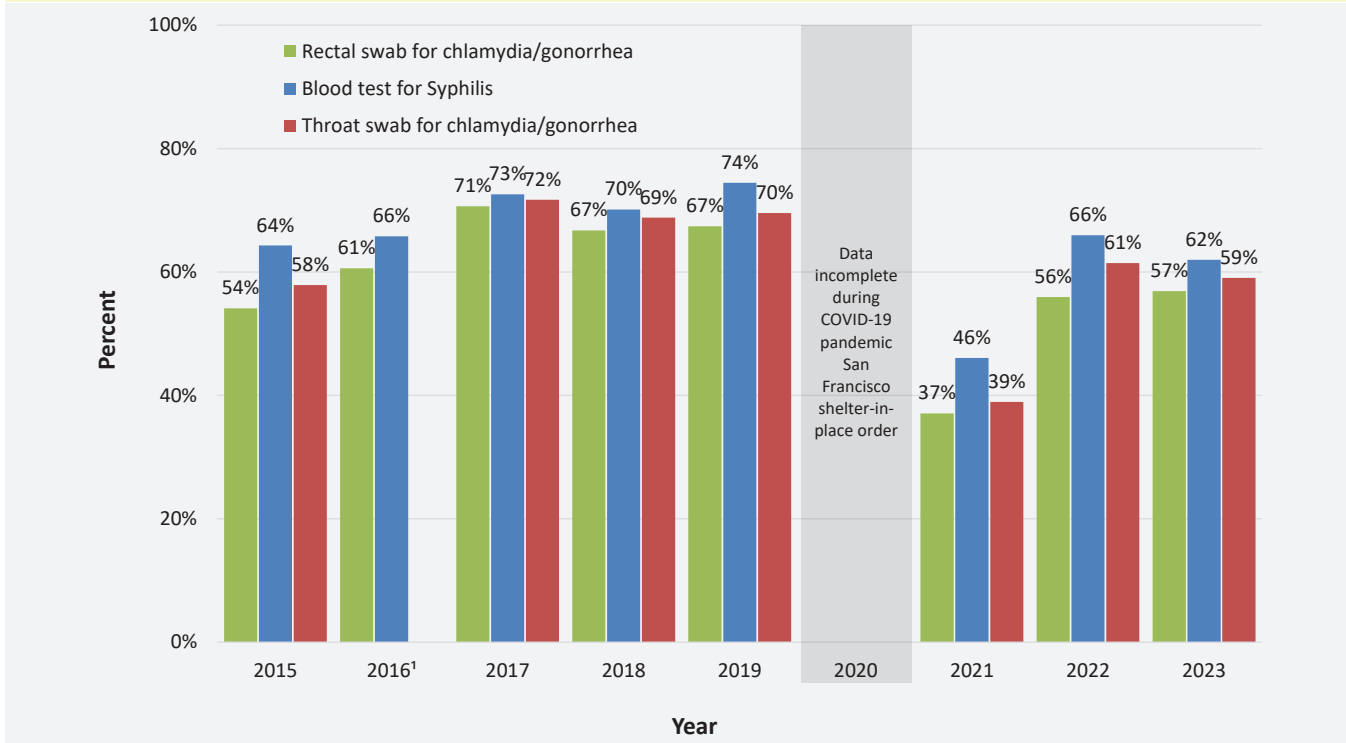
1 Data for throat swab for chlamydia/gonorrhea in 2016 are not available.

8 HIV among People who Inject Drugs

Whites

ACCOUNTED FOR 45% OF PWID NEWLY DIAGNOSED WITH HIV DURING 2014-2023

From 2014 to 2023, Whites accounted for 45% of PWID (not including MSM-PWID or TWSM-PWID) diagnosed with HIV, Black/African Americans 21%, and Latinx 21%. The number of new diagnoses each year was small and the total number of PWID diagnosed in 2023 was less than 10 (Figure 8.1). By age, people who were aged 30-39 years made up 28%, people aged 40-49 years made up 28% of newly diagnosed PWID, and 27% were aged 50 years and older. The annual numbers of HIV diagnoses among PWID aged 18-24 years have remained low; there were no diagnoses among PWID under 18 years old during the years 2014 to 2023.

Figure 8.1 Number of PWID diagnosed with HIV by race/ethnicity and age group at HIV diagnosis, 2014-2023, San Francisco

Race/Ethnicity

Legend: White, Black/African American, Latinx, Other/Unknown

Year of HIV Diagnosis[1]

Age Group

Legend: 18-24 years, 25-29 years, 30-39 years, 40-49 years, 50+ years

Year of HIV Diagnosis[1]

1 Includes PWID (who are not MSM-PWID or TWSM-PWID) by year of their initial HIV diagnosis. See Technical Notes "Date of Initial HIV Diagnosis."

9 HIV among Heterosexuals

9%

OF PEOPLE DIAGNOSED IN
2023 ACQUIRED **HIV** THROUGH
HETEROSEXUAL CONTACT

The number of heterosexuals (see Technical Notes "HIV Transmission Category Heterosexual Contact") newly diagnosed with HIV was low and fluctuated between the years 2014 to 2023 and in all racial/ethnic groups (Figure 9.1). In 2023, 12 people acquired HIV through heterosexual contact.

Overall, there has been an increase in the number of early syphilis diagnoses among heterosexual cis men from 2014 to 2023, regardless of their HIV status. This trend peaked at 124 diagnoses in 2020, after which there has been a modest decline (Figure 9.2). In most years, there was a greater number of diagnoses for early latent syphilis compared to primary and secondary syphilis. Among cis women, regardless of their HIV status, there was an upward trend in the number of early syphilis diagnoses over time. This trend reached its highest point at 99 diagnoses in 2019, then decreased to 63 in 2022, before rising again to 90 in 2023 (Figure 9.3). The number of early syphilis diagnoses among cis women was lower compared to cis men except for the year 2023.

Figure 9.1 Number of heterosexuals diagnosed with HIV by race/ethnicity, 2014-2023, San Francisco
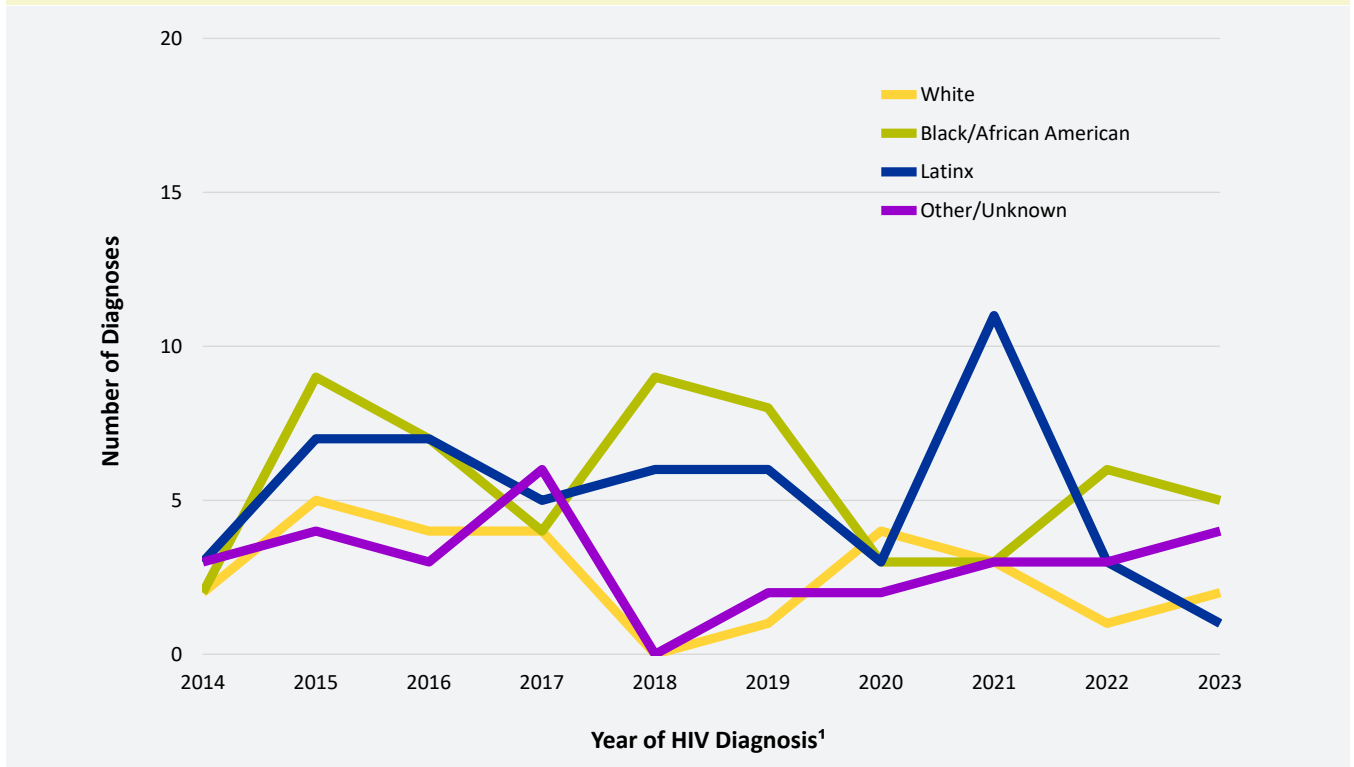
1 Includes people with HIV by year of their initial HIV diagnosis. See Technical Notes "Date of Initial HIV Diagnosis."

Sexually transmitted infections among heterosexuals

Figure 9.2 Early syphilis among heterosexual cis men[1], 2014-2023, San Francisco
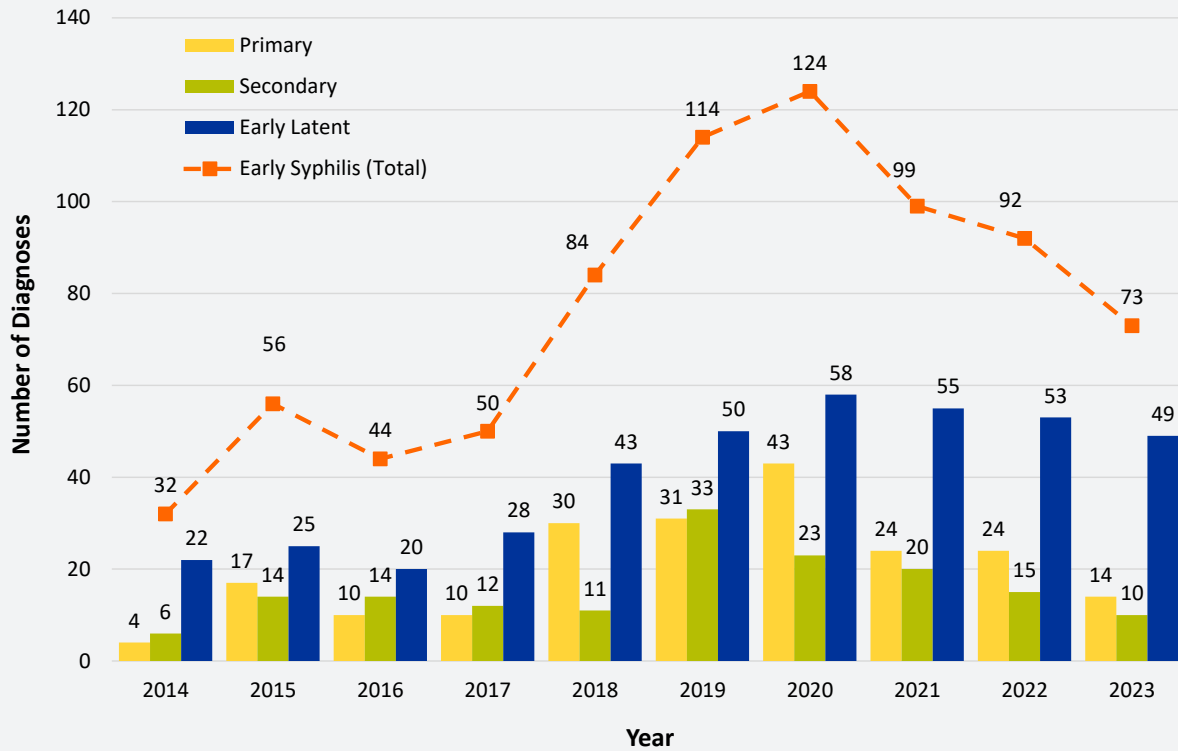
Legend:
- Primary
- Secondary
- Early Latent
- Early Syphilis (Total)

Year	Primary	Secondary	Early Latent	Early Syphilis (Total)
2014	4	6	22	32
2015	17	14	25	56
2016	10	14	20	44
2017	10	12	28	50
2018	30	11	43	84
2019	31	33	50	114
2020	43	23	58	124
2021	24	20	55	99
2022	24	15	53	92
2023	14	10	49	73

1 Data on early syphilis originate from San Francisco Department of Public Health STI case registry.

Figure 9.3 Early syphilis among cis women[1], 2014-2023, San Francisco

Legend:
- Primary
- Secondary
- Early Latent
- Early Syphilis (Total)

Year	Primary	Secondary	Early Latent	Early Syphilis (Total)
2014	3	2	13	18
2015	3	13	14	30
2016	4	10	17	31
2017	7	5	17	29
2018	9	24	34	67
2019	21	37	41	99
2020	14	36	44	94
2021	4	24	51	79
2022	6	15	42	63
2023	7	21	62	90

1 Data on early syphilis originate from San Francisco Department of Public Health STI case registry.

10 HIV among Cis Women

6%
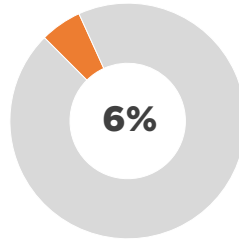
Among cis women diagnosed with HIV during 2014 through 2023, 31% were Black/African Americans, 26% Whites and 25% Latinas. There were 13 diagnoses among cis women in 2023. (Figure 10.1).

Despite making up only 5% of the total female population in San Francisco, Black/African American women made up a third (35%) of cis women living with HIV (Figure 10.2). Latinas were also overrepresented; 25% of cis women living with HIV were Latinas but were only 15% of the overall population. Fifty-four percent of women living with HIV acquired HIV through heterosexual sex (see Technical Notes "HIV Transmission Category Heterosexual Contact") and 40% through injection drug use (Figure 10.3).
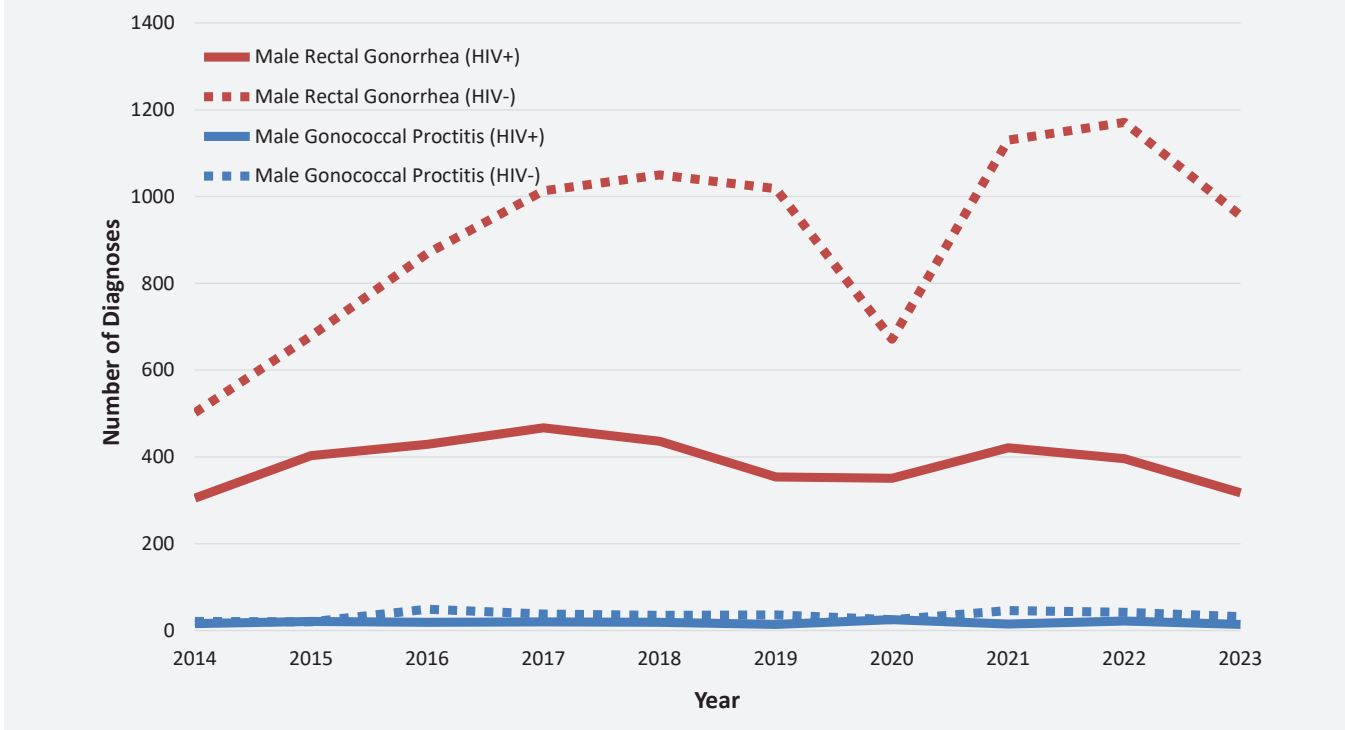
Figure 10.1   Number of cis women diagnosed with HIV by race/ethnicity, 2014-2023, San Francisco
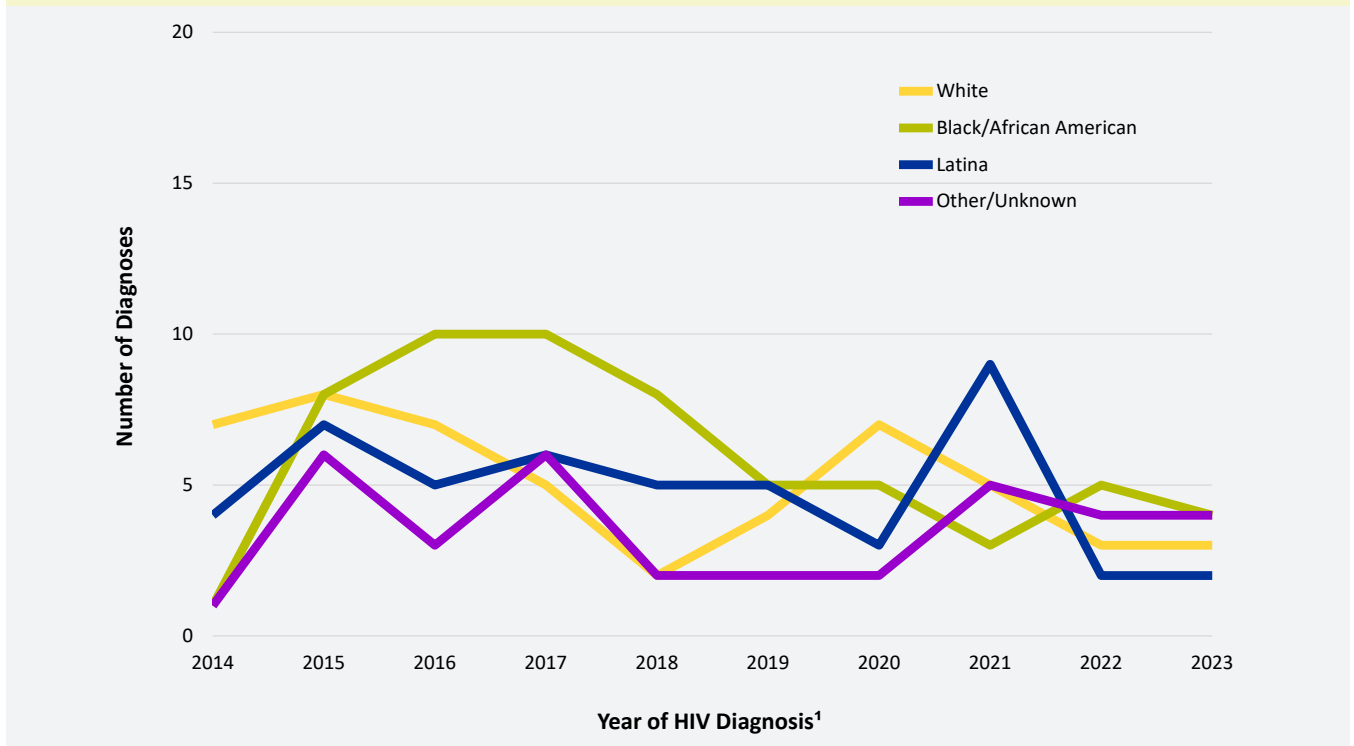
1   Includes cis women with HIV by year of their initial HIV diagnosis. See Technical Notes "Date of Initial HIV Diagnosis."

Figure 10.2 Cis women living with HIV diagnosed through December 2023 and female population by race/ethnicity, San Francisco

Cis women living with HIV
(N=888)

Latina 25%
Asian/Pacific Islander 8%
Native American 1%
Other/Unknown 4%
White 26%
Black/African American 35%

Female population of San Francisco[1]
(N=414,304)

Asian/Pacific Islander 39%
Latina 15%
Black/African American 5%
Native American <1%
Other 4%
White 37%
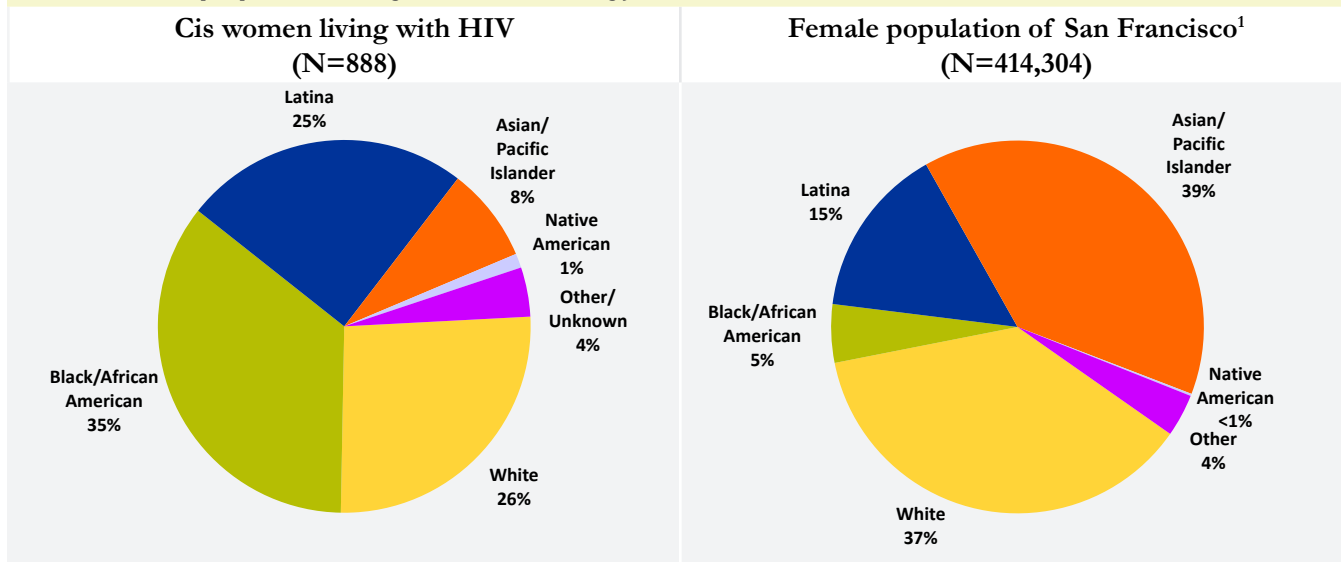
1 California Department of Finance estimates of San Francisco female population 2023.

Figure 10.3 Cis Women living with HIV diagnosed through December 2023 by transmission category, San Francisco

N=888

Presumed Heterosexual[1] 9%
Transfusion/Hemophilia 1%
Other/Unknown 4%
Heterosexual 45%
PWID 40%
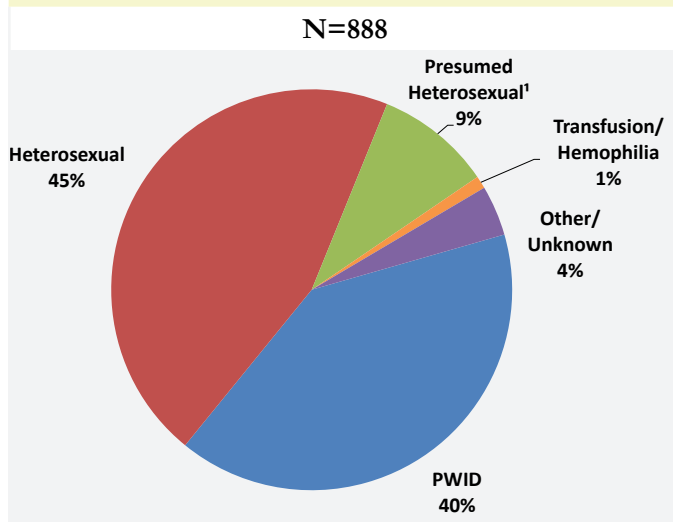
1 See Technical Notes "HIV Transmission Category Heterosexual Contact."

11 HIV among Children, Adolescents and Young Adults

Latinx
ACCOUNTED FOR **53%** OF YOUNG ADULTS LIVING WITH HIV AS OF **12/31/2023**

Youth aged 24 and under made up fewer than 1% of PLWH in San Francisco (Table 11.1). As of December 31, 2023, there were no adolescents (aged 13-17) and 59 young adults (aged 18-24) living with HIV. Among young adults living with HIV, about three-quarters (78%) were MSM and 5% were MSM-PWID. As with older adults, young adults of color were overrepresented in the population of PLWH: half (53%) of young adults living with HIV were Latinx and almost a quarter (24%) were Black/African American. The number of pediatric (children less than 13 years old) HIV diagnoses peaked during 1986 through 1995, and has declined over time, with zero pediatric HIV diagnoses among residents of San Francisco during 2006 to 2023 (Figure 11.1).

Table 11.1 Characteristics of young adults living with HIV through December 2023, San Francisco

		18 - 24 Years Old
		Number (%)
	Total	59
Transmission Category	MSM	46 (78)
	MSM-PWID	3 (5)
	Heterosexual	3 (5)
	Perinatal	4 (7)
	Other/Unidentified[1]	3 (5)
Gender[2]	Cis Men	51 (86)
	Cis and Trans Women	8 (14)
Race/Ethnicity	White	6 (10)
	Black/African American	14 (24)
	Latinx	31 (53)
	Asian/Pacific Islander	6 (10)
	Other/Unknown	2 (3)

1 Includes TWSM, TWSM-PWID, and people with no identified risk factor.
2 Data on cis and trans women are not released separately due to small numbers. See Technical Notes "Gender Status."

Figure 11.1 Number of children diagnosed with HIV, 1980-2023, San Francisco
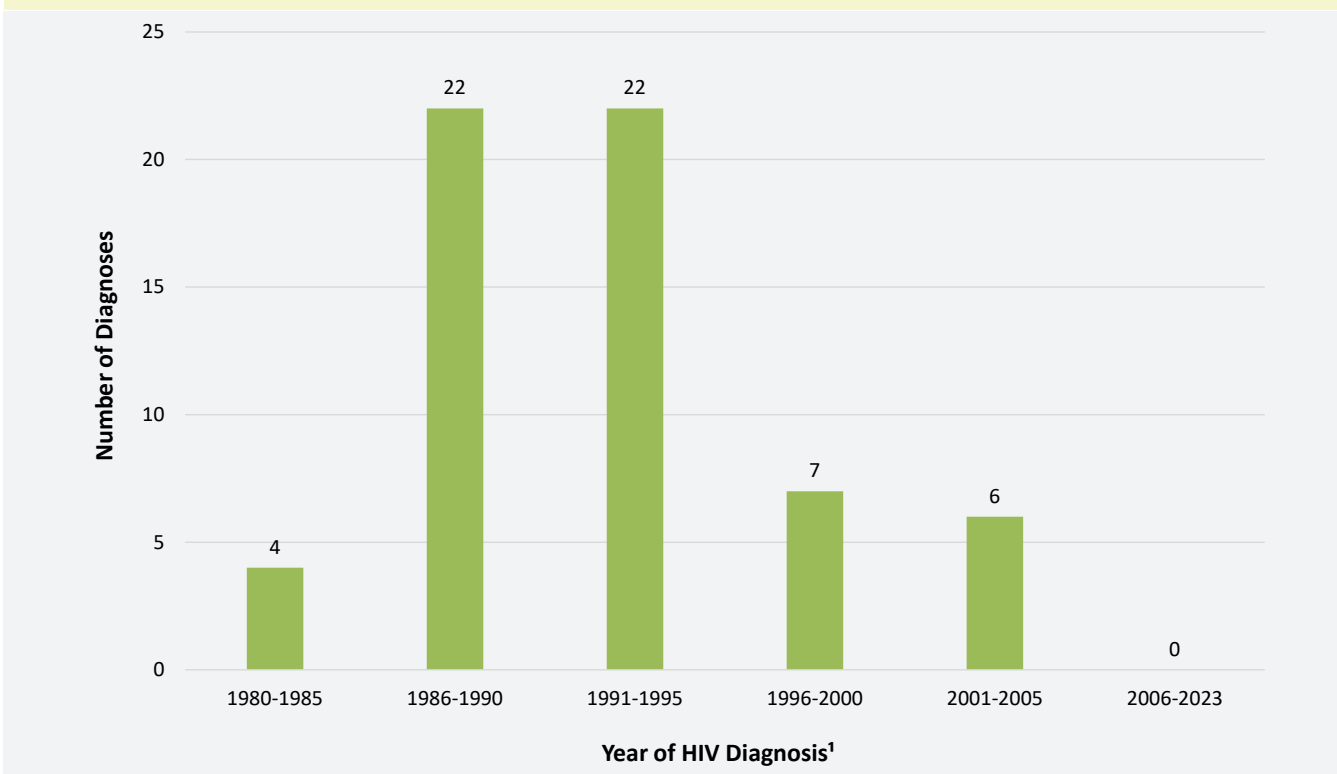
1 See Technical Notes "Date of Initial HIV Diagnosis."

12 HIV among People Aged 50 Years and Older

74%
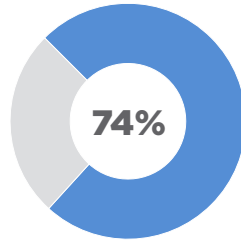
OF **PLWH** WERE AGED **50** YEARS AND OLDER AS OF **12/31/2023**

As of December 31, 2023, 74% of PLWH were aged 50 years and older and 27% aged 65 years old and older (Table 12.1). Among those aged 50 years and older, 63% were White, 18% were Latinx, 11% were Black/African American, and 5% were Asian/Pacific Islander. Most (88%) of older PLWH (50 years and older) were MSM including MSM-PWID.

While the overall number of diagnoses during 2014 to 2023 has decreased, the proportion of total diagnoses among people aged 50 years and older has increased in recent years (2019-2023, Figure 12.1). During 2014-2023, 327 people aged 50 years and older were diagnosed with HIV, including 38 who were 65 years and older. A higher proportion of people aged 50 years and older at diagnosis were cis women, Whites, Black/African Americans, PWID, and heterosexuals, compared to those who were younger at time of diagnosis (Table 12.2). Of all people diagnosed at age 50 years and older, 42% were 50-54 years old, 27% were 55-59 years old, 20% were 60-64 years old, and 12% were 65 years and older.

Table 12.1 **Characteristics of people living with HIV through December 2023 by age group, San Francisco**

		As of 12/31/2023		
		Age < 50 years	Age ≥ 50 years	Age ≥ 65 years
		Number (%)		
	Total	**4,004**	**11,540**	**4,199**
Gender[1]	Cis Men	3,485 (87)	10,721 (93)	3,949 (94)
	Cis Women	293 (7)	595 (5)	206 (5)
	Trans Women	216 (5)	222 (2)	43 (1)
Race/Ethnicity	White	1,415 (35)	7,241 (63)	2,903 (69)
	Black/African American	519 (13)	1,246 (11)	504 (12)
	Latinx	1,402 (35)	2,027 (18)	528 (13)
	Asian/Pacific Islander	463 (12)	604 (5)	142 (3)
	Native American	22 (1)	38 (<1)	5 (<1)
	Other/Unknown	183 (5)	384 (3)	117 (3)
Transmission Category	MSM	2,740 (68)	8,711 (75)	3,304 (79)
	TWSM	157 (4)	115 (1)	24 (1)
	PWID	177 (4)	598 (5)	239 (6)
	MSM-PWID	521 (13)	1,477 (13)	430 (10)
	TWSM-PWID	58 (1)	104 (1)	19 (<1)
	Heterosexual	201 (5)	371 (3)	122 (3)
	Other/Unidentified	150 (4)	164 (1)	61 (1)
Age in Years	50-54		1,888 (16)	
	55-59		2,687 (23)	
	60-64		2,766 (24)	
	65+		4,199 (36)	4,199 (100)

1 Data on trans men are not released separately due to small numbers. See Technical Notes "Gender Status."

Figure 12.1 Number and percent of people diagnosed with HIV at age 50 years and older, 2014-2023, San Francisco
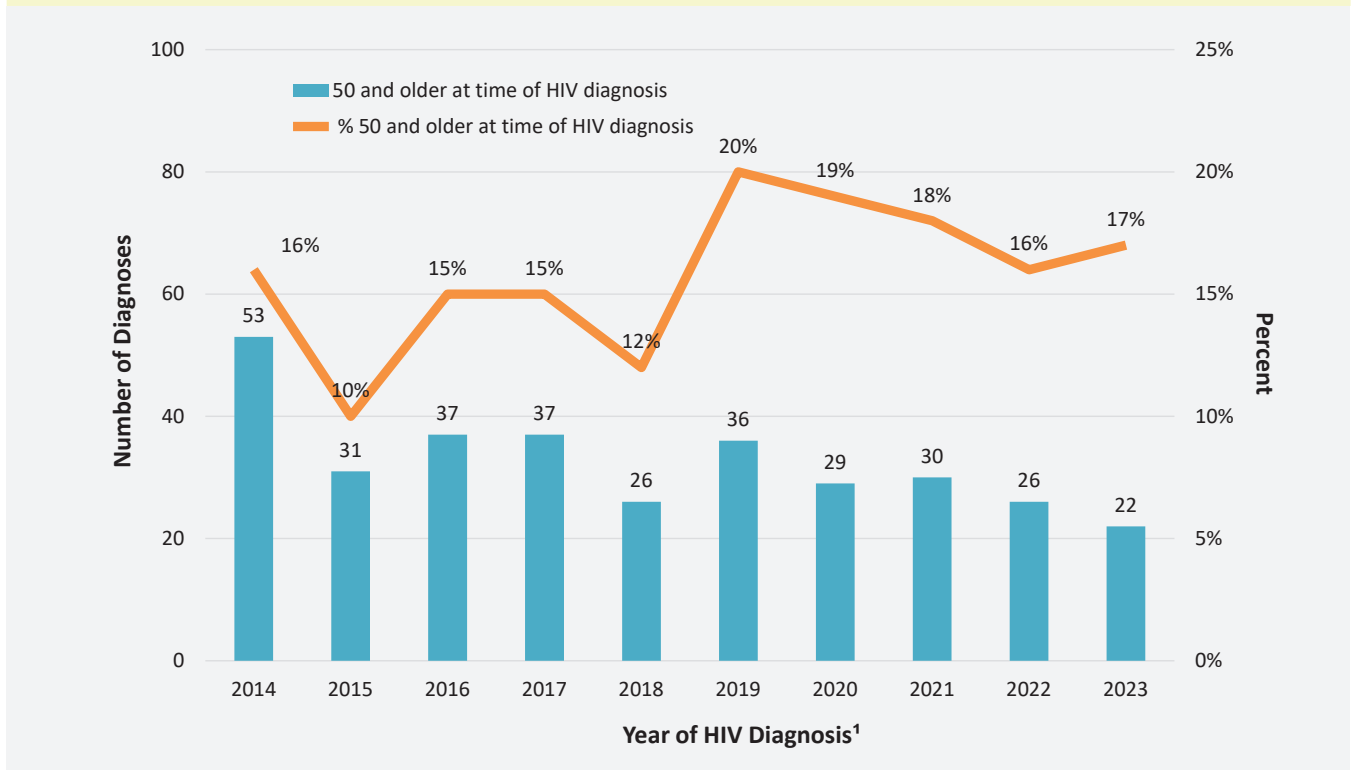
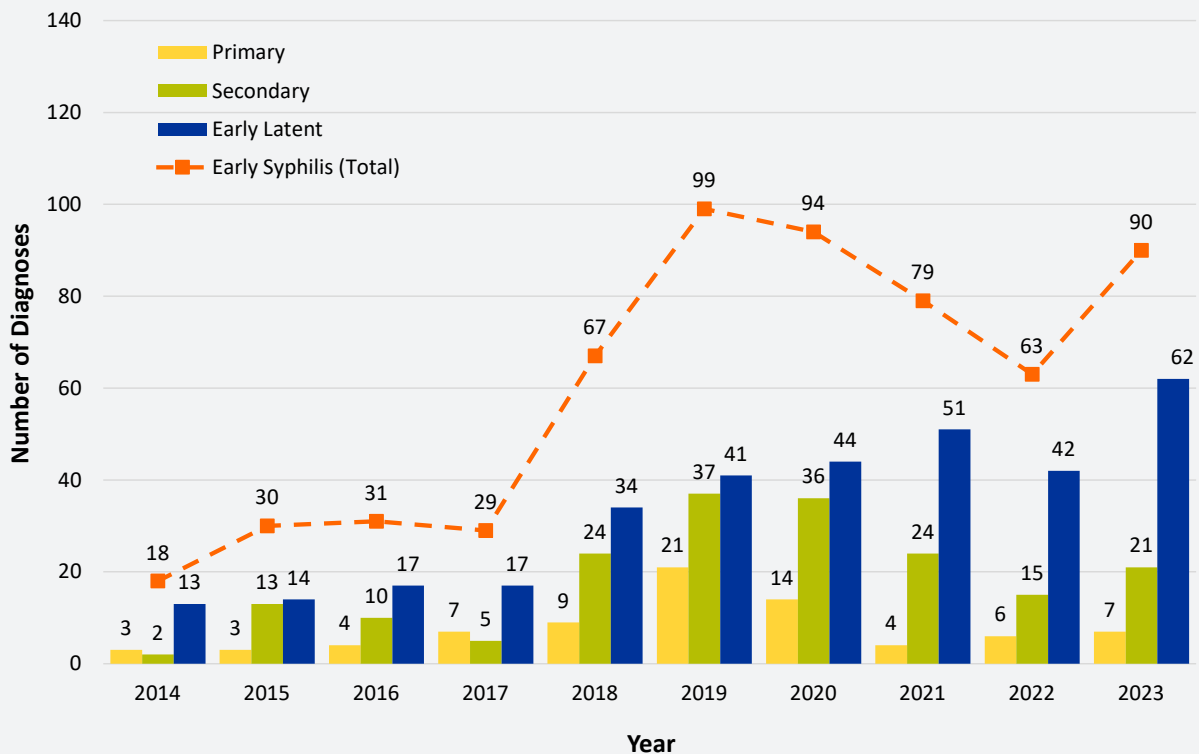1 Includes people with HIV by year of their initial HIV diagnosis. See Technical Notes "Date of Initial HIV Diagnosis."

Table 12.2 Characteristics of people diagnosed with HIV by age at diagnosis, 2014-2023, San Francisco

		Age < 50 years at diagnosis	Age ≥ 50 years at diagnosis	Age ≥ 65 years at diagnosis
		Number (%)		
	Total	**1,840**	**327**	**38**
Gender[1]	Cis Men	1,588 (86)	268 (82)	32 (84)
	Cis Women	144 (8)	49 (15)	6 (16)
	Trans Women	100 (5)	9 (3)	0 (0)
Race/Ethnicity	White	576 (31)	162 (50)	18 (47)
	Black/African American	268 (15)	56 (17)	6 (16)
	Latinx	682 (37)	58 (18)	8 (21)
	Asian/Pacific Islander	240 (13)	34 (10)	4 (11)
	Other/Unknown	74 (4)	17 (5)	2 (5)
Transmission Category[2]	MSM	1,242 (68)	183 (56)	22 (58)
	PWID	130 (7)	49 (15)	4 (11)
	MSM-PWID	199 (11)	29 (9)	2 (5)
	Heterosexual	86 (5)	30 (9)	5 (13)
	Other/Unidentified	183 (10)	36 (11)	5 (13)
Age in Years	50-54		136 (42)	
	55-59		87 (27)	
	60-64		66 (20)	
	65+		38 (12)	38 (100)

1 Data on trans men are not released separately due to small numbers. See Technical Notes "Gender Status."
2 Heterosexual includes female presumed heterosexual. Other/Unidentified includes TWSM, TWSM-PWID and people with no identified risk factor.

13 HIV among Trans Women

5%

OF **HIV** DIAGNOSES DURING **2014-2023** WERE TRANS WOMEN

From 2014 through 2023, there were 109 trans women diagnosed with HIV in San Francisco (Table 13.1). Compared to people diagnosed with HIV in this time period who were not trans women, trans women were more likely to be Black/African American (23%) or Latinx (44%). Among the 438 trans women living with HIV in San Francisco as of December 31, 2023, Latinx (37%) and Black/African Americans (29%) accounted for the largest proportions (Table 13.2). In terms of transmission risk factor, newly diagnosed trans women were more likely than people of other genders to be PWID (28%), and 38% of all trans women living with HIV were PWID. In addition, trans women were also more likely to be younger, among both the newly diagnosed and PLWH, when compared to people of other genders.

Table 13.1 Characteristics of trans women diagnosed with HIV, 2014-2023, San Francisco

		New HIV Diagnoses, 2014-2023	
		Trans Women[1]	Others
		Number (%)	
	Total	109	2,058
Race/Ethnicity	White	16 (15)	722 (35)
	Black/African American	25 (23)	299 (15)
	Latinx	48 (44)	692 (34)
	Asian/Pacific Islander	14 (13)	260 (13)
	Other/Unknown	6 (6)	85 (4)
People who Inject Drugs	Yes	30 (28)	406 (20)
	No	79 (72)	1,652 (80)
Age at Diagnosis (Years)	13 - 24	20 (18)	280 (14)
	25 - 29	19 (17)	404 (20)
	30 - 39	39 (36)	651 (32)
	40 - 49	22 (20)	405 (20)
	50+	9 (8)	318 (15)

1 See Technical Notes "Gender Status."

Table 13.2 Characteristics of trans women living with HIV through December 2023, San Francisco

		PLWH, December 2023	
		Trans Women[1]	Others
		Number (%)	
	Total	438	15,106
Race/Ethnicity	White	71 (16)	8,585 (57)
	Black/African American	128 (29)	1,637 (11)
	Latinx	161 (37)	3,268 (22)
	Asian/Pacific Islander	49 (11)	1,018 (7)
	Other/Unknown	29 (7)	598 (4)
People who Inject Drugs	Yes	165 (38)	2,770 (18)
	No	273 (62)	12,336 (82)
Age in Years (at end of 2023)	13 - 17	0 (0)	0 (0)
	18 - 24	3 (1)	56 (<1)
	25 - 29	17 (4)	196 (1)
	30 - 39	86 (20)	1,337 (9)
	40 - 49	110 (25)	2,199 (15)
	50+	222 (51)	11,318 (75)

1 See Technical Notes "Gender Status."

14 HIV among People Experiencing Homelessness

23%
OF **HIV** DIAGNOSES IN **2023** WERE AMONG PEOPLE EXPERIENCING HOMELESSNESS

From 2013 through 2022, the proportion of HIV diagnoses among people experiencing homelessness (PEH) increased over time with a high of 24% in 2021 (Figure 14.1).

Among people diagnosed from 2014 to 2023, 348 people were homeless at HIV diagnosis (Table 14.1). PEH at time of diagnosis were more likely to be cis women or trans women and Black/African Americans. In terms of transmission risk, PEH were more likely to be PWID, including MSM-PWID and TWSM-PWID compared to people who were not homeless. Forty-seven percent of the diagnoses among PEH were among PWID, including MSM-PWID and TWSM-PWID. PEH were slightly older than people who were not homeless at time of diagnosis.

Figure 14.1 Number and percent of people experiencing homelessness diagnosed with HIV, 2014-2023, San Francisco
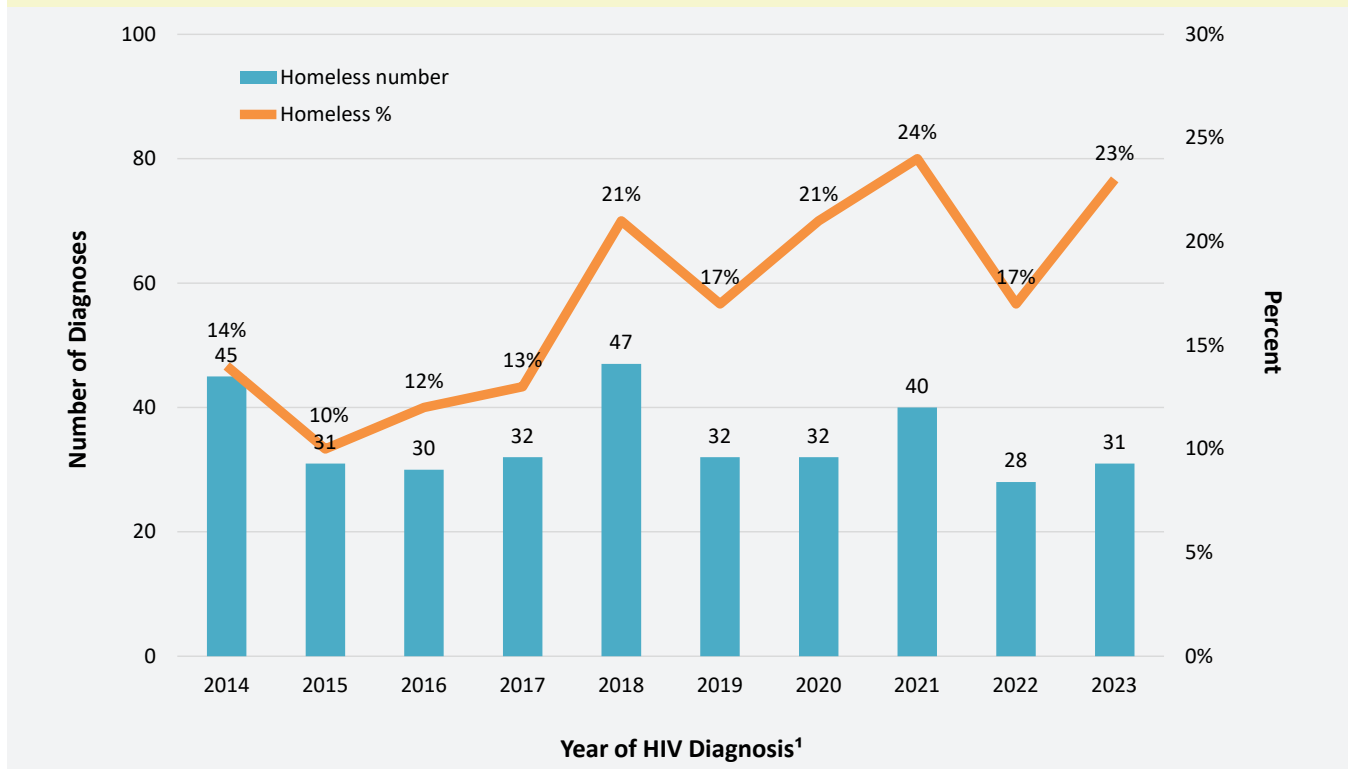
1   Includes people with HIV by year of their initial HIV diagnosis. See Technical Notes "Date of Initial HIV Diagnosis."

Table 14.1 Characteristics of people diagnosed with HIV who were homeless compared to people who were not homeless, 2014-2023, San Francisco

		New HIV Diagnoses, 2014-2023	
		Homeless	Non-Homeless
		Number (%)	
	Total	**348**	**1,819**
Gender[1]	Cis Men	268 (77)	1,588 (87)
	Cis Women	55 (16)	138 (8)
	Trans Women	25 (7)	84 (5)
Race/Ethnicity	White	122 (35)	616 (34)
	Black/African American	74 (21)	250 (14)
	Latinx	117 (34)	623 (34)
	Asian/Pacific Islander	14 (4)	260 (14)
	Other/Unknown	21 (6)	70 (4)
Transmission Category	MSM	124 (36)	1,301 (72)
	TWSM	15 (4)	64 (4)
	PWID	85 (24)	94 (5)
	MSM-PWID	70 (20)	158 (9)
	TWSM-PWID	9 (3)	20 (1)
	Heterosexual	33 (9)	131 (7)
	Other/Unidentified	12 (3)	51 (3)
Age at Diagnosis (Years)	13 - 24	40 (11)	260 (14)
	25 - 29	63 (18)	360 (20)
	30 - 39	120 (34)	570 (31)
	40 - 49	74 (21)	353 (19)
	50+	51 (15)	276 (15)

1 Trans men data are not released separately due to small numbers. See Technical Notes "Gender Status."

15 Sexually Transmitted Infections among People with HIV

91%
OF STI DIAGNOSES AMONG PLWH WERE AMONG MSM DURING 2019-2023

The number of sexually transmitted infection (STI) diagnoses among PLWH declined from 1,222 in 2019 to 787 in 2023 (Figure 15.1). Most STI diagnoses (91%) were among MSM. Over 90% of PLWH diagnosed with an STI from 2019 through 2023 were cis men (Table 15.1), and there were slight increases in the proportions of trans women and people aged 60 years and older at the time of STI diagnosis. White PLWH with STI's declined from 48% in 2019 to 39% in 2023, while there was an accompanying rise for Latinx from 30% in 2019 to 36% in 2023.

Figure 15.1 STI diagnoses[1] among people living with HIV by year of STI diagnosis, 2019-2023, San Francisco
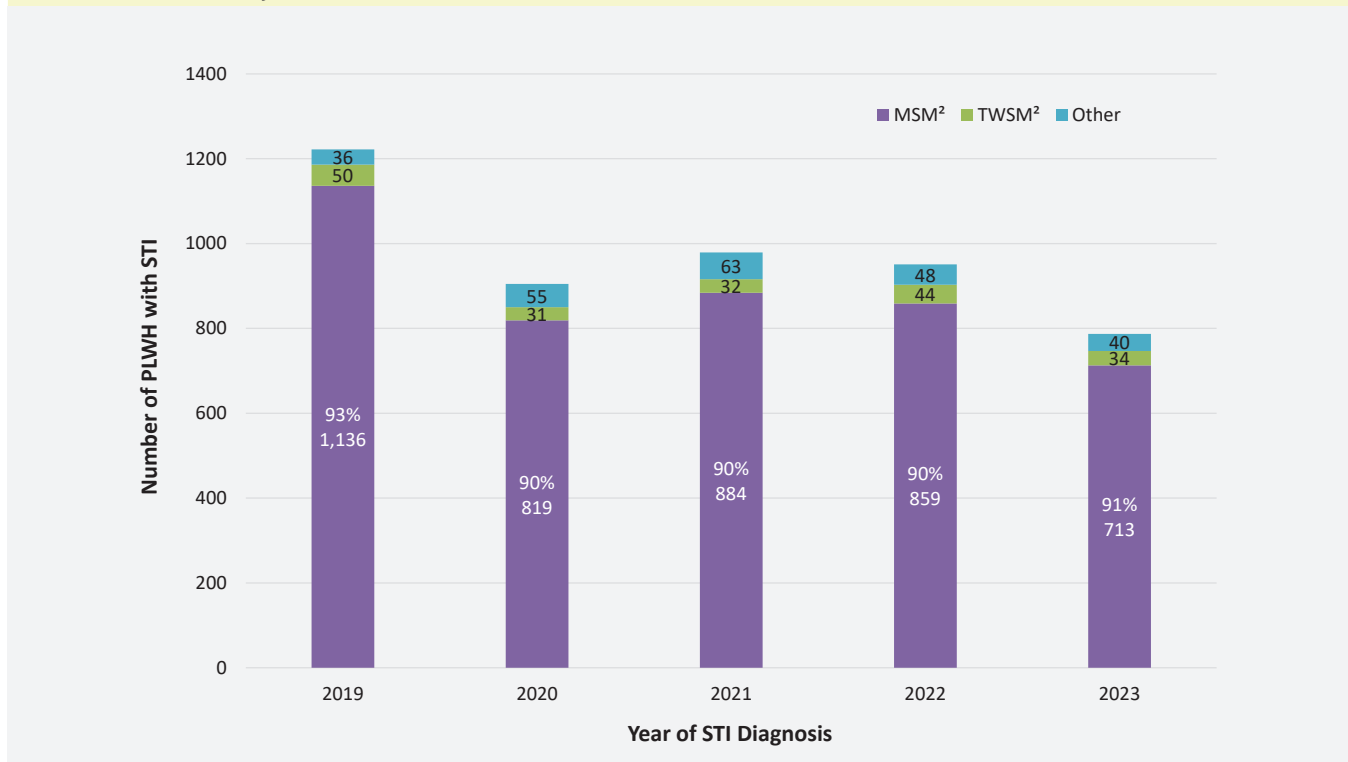
1   See Technical Notes "HIV and STI Diagnosis."
2   MSM includes MSM-IDU and TWSM excludes TWSM-PWID.

Table 15.1 Demographic characteristics of people living with HIV who were diagnosed with an STI[1], 2019-2023, San Francisco

		Year of STI diagnosis				
		2019	**2020**	**2021**	**2022**	**2023**
		Number (%)				
	Total	1,222	905	979	951	787
Gender[2]	Cis Men	1,154 (94)	837 (92)	913 (93)	872 (92)	723 (92)
	Cis Women	18 (1)	20 (2)	20 (2)	19 (2)	15 (2)
	Trans Women	50 (4)	46 (5)	45 (5)	58 (6)	49 (6)
Race/Ethnicity	White	591 (48)	401 (44)	419 (43)	385 (40)	306 (39)
	Black/African American	101 (8)	89 (10)	95 (10)	94 (10)	87 (11)
	Latinx	369 (30)	284 (31)	325 (33)	343 (36)	281 (36)
	Asian/Pacific Islander	109 (9)	89 (10)	99 (10)	96 (10)	70 (9)
	Other/Unknown	52 (4)	42 (5)	41 (4)	33 (3)	43 (5)
Age at STI Diagnosis (years)	13 - 29	90 (7)	62 (7)	68 (7)	71 (7)	45 (6)
	30 - 39	305 (25)	237 (26)	240 (25)	240 (25)	217 (28)
	40 - 49	335 (27)	236 (26)	236 (24)	229 (24)	180 (23)
	50 - 59	359 (29)	268 (30)	311 (32)	288 (30)	215 (27)
	60 +	133 (11)	102 (11)	124 (13)	123 (13)	130 (17)

1   See Technical Notes "HIV and STI Diagnosis."
2   Data on trans men are not released separately due to small numbers. See Technical Notes "Gender Status."

16 Pre-Exposure Prophylaxis among People without HIV

PrEP use among MSM living without HIV has increased for all race/ethnicities from 2015 to 2023 among San Francisco City Clinic (SFCC) patients who were San Francisco residents (Figure16.1). In 2015, PrEP use ranged from 22%-27% among MSM living without HIV across all race/ethnicities and increased to 71%-78% in 2023. Latino MSM had increasing proportions on PrEP each year since 2015. In recent years, Black/African American MSM had the lowest proportions of PrEP use compared to MSM of other race/ethnicities.

From 2015 through 2020, PrEP use increased in every age group among MSM SFCC patients living without HIV who were San Francisco residents (Figure 16.2). In 2023, PrEP use was highest among MSM aged 25-34 years and lowest among MSM 55 years and older, compared to other age groups.

Three different PrEP regimens were available at SFCC (see Technical Notes "HIV Pre-exposure Prophylaxis Regimens"): daily PrEP which consists of taking PrEP medication once per day, PrEP 2-1-1 (which involves taking PrEP medication before and after sexual intercourse instead of daily), and long-acting cabotegravir (LA-CAB) (which is an injectable form of PrEP). Individuals were able to change which regimen they used from visit to visit. All patients (San Francisco residents and patients residing outside San Francisco) were included in these data (Table 16.1).

From 2019 through 2023, the majority of SFCC patients who received PrEP used daily PrEP. The proportion of patients on daily PrEP declined across these years as proportions of patients using PrEP 2-1-1 or LA-CAB (introduced in 2022) increased (Table 16.1). In 2023 among MSM patients, 75% were using daily PrEP, 19% using PrEP 2-1-1, and 5% using LA-CAB. Compared to MSM on PrEP in 2023, cis women and trans women on PrEP was a smaller group (N=117) with 74% using daily PrEP, 8% using PrEP 2-1-1, and 15% using LA-CAB.

The number of clients screened for PrEP at the San Francisco AIDS Foundation (SFAF) ranged from 1,922 in 2021, 1,759 in 2022, to 1,686 in 2023 (Figure 16.3). Of those screened, the proportion who scheduled an appointment increased between 2021 and 2022 and was level in 2023 (64%). Enrollment in PrEP services ranged from 42% in 2021 to 49% in 2023. Data for 2022 showed a similar percentage of people that had maintained enrollment at 6-months (32%) compared to at 3 months (31%).

The numbers and proportion of PrEP screenings, appointments, enrollments and continued PrEP use at 3-month and 6-month follow-ups by priority populations at the SFAF in 2022 and 2023 is shown in Figure 16.4. In 2022, trans women and Latino MSM had the highest proportions that scheduled appointments and enrolled. Latino MSM had the highest proportion on PrEP at 6 months of follow-up (38%). For 2023, Latino MSM and MSM <25 years old had the highest proportions that scheduled appointments and enrolled. Latino MSM screened in 2023 also had the highest proportion on PrEP at 3 months of follow-up (35%).

Clients enrolled in PrEP at the SFAF in 2021 and 2022 were prescribed PrEP regimens (see Technical Notes "HIV Pre-exposure Prophylaxis Regimens"): daily PrEP or PrEP 2-1-1 (Table 16.2). Among all clients enrolled in PrEP 2022 data showed an increased proportion of clients shifted to using PrEP 2-1-1 (28%) compared to in 2021(20%). The increased proportions of clients on PrEP 2-1-1 in 2022 was observed in all priority populations displayed.

In 2022, 67% of clients enrolled on daily PrEP and 69% of clients on PrEP 2-1-1 were still enrolled at 6-month follow-up.

San Francisco City Clinic data

Figure 16.1 Proportion of MSM currently on PrEP[1] by race/ethnicity, San Francisco City Clinic patients[2], 2015-2023
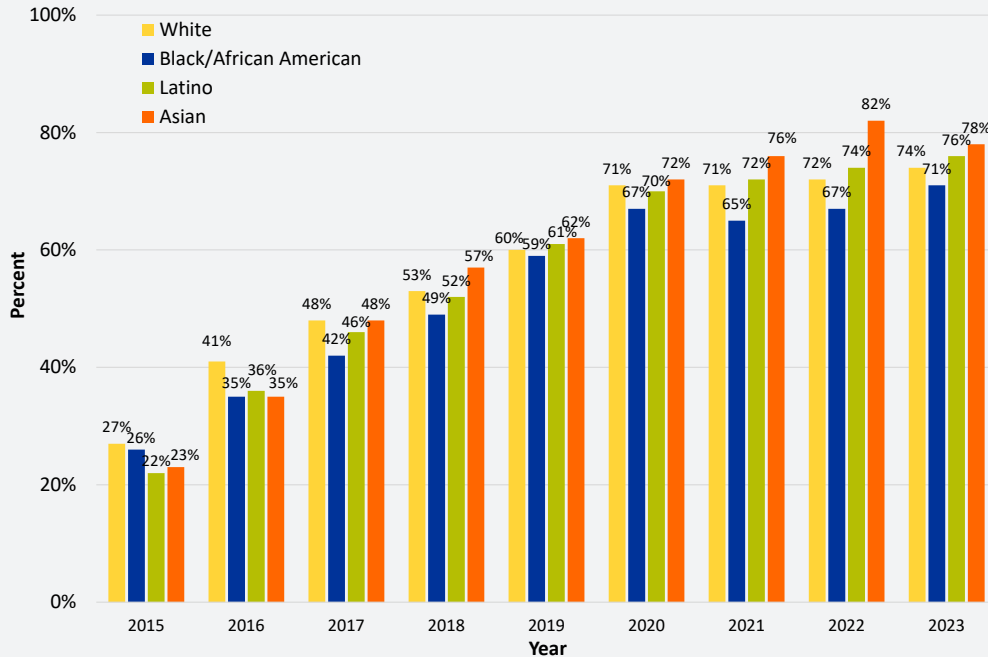
1 On PrEP at visit: (1) Answer 'yes' to are you currently on PrEP or (2) Enrolled in PrEP as of visit. Due to continuous quality improvement of data cleaning and management processes, data are subject to change and might be different in previous reports.
2 Includes San Francisco residents only.

Figure 16.2 Proportion of MSM currently on PrEP[1] by age, San Francisco City Clinic patients[2], 2015-2023
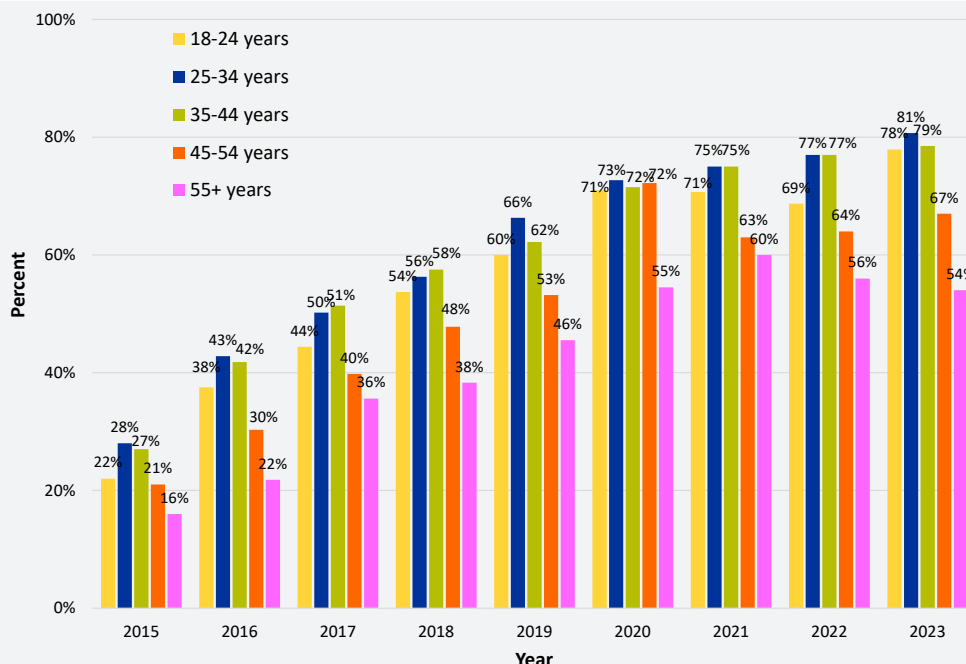
1 On PrEP at visit: (1) Answer 'yes' to are you currently on PrEP or (2) Enrolled in PrEP as of visit. Due to continuous quality improvement of data cleaning and management processes, data are subject to change and might be different in previous reports.
2 Includes San Francisco residents only.

Table 16.1 PrEP Program enrollment[1] and ongoing participation by select client characteristics and PrEP regimen, San Francisco City Clinic PrEP Program participants, 2019-2023[2]

			2019		2020		2021		2022		2023	
							Number[3] (%)					
MSM	Race/Ethnicity	**All Patients**	**1,016**		**883**		**911**		**960**		**1,118**	
		Daily PrEP	925	(91.0)	793	(89.8)	810	(88.9)	793	(82.6)	843	(75.4)
		PrEP 2-1-1	83	(8.2)	88	(10.0)	89	(9.8)	150	(15.6)	213	(19.1)
		LA-CAB	N/A		N/A		N/A		2	(0.2)	50	(4.5)
		White	**362**		**317**		**305**		**321**		**363**	
		Daily PrEP	317	(87.6)	283	(89.3)	271	(88.9)	262	(81.6)	263	(72.5)
		PrEP 2-1-1	42	(11.6)	33	(10.4)	31	(10.2)	52	(16.2)	83	(22.9)
		LA-CAB	N/A		N/A		N/A		0	(0.0)	16	(4.4)
		Black/African American	**96**		**76**		**80**		**65**		**80**	
		Daily PrEP	94	(97.9)	71	(93.4)	72	(90.0)	51	(78.5)	63	(78.8)
		PrEP 2-1-1	1	(1.0)	4	(5.3)	8	(10.0)	12	(18.5)	12	(15.0)
		LA-CAB	N/A		N/A		N/A		0	(0.0)	5	(6.3)
		Latino	**305**		**271**		**308**		**304**		**363**	
		Daily PrEP	288	(94.4)	251	(92.6)	280	(90.9)	268	(88.2)	288	(79.3)
		PrEP 2-1-1	15	(4.9)	20	(7.4)	21	(6.8)	30	(9.9)	50	(13.8)
		LA-CAB	N/A		N/A		N/A		2	(0.7)	19	(5.2)
		Asian	**198**		**160**		**144**		**154**		**171**	
		Daily PrEP	179	(90.4)	136	(85.0)	119	(82.6)	114	(74.0)	114	(66.7)
		PrEP 2-1-1	17	(8.6)	24	(15.0)	23	(16.0)	39	(25.3)	49	(28.7)
		LA-CAB	N/A		N/A		N/A		0	(0.0)	3	(1.8)
		Other/Unknown	**55**		**59**		**74**		**116**		**141**	
		Daily PrEP	47	(85.5)	52	(88.1)	68	(91.9)	98	(84.5)	115	(81.6)
		PrEP 2-1-1	8	(14.5)	7	(11.9)	6	(8.1)	17	(14.7)	19	(13.5)
		LA-CAB	N/A		N/A		N/A		0	(0.0)	7	(5.0)
	Age in Years (at beginning of year)	**18-24**	**121**		**93**		**111**		**102**		**111**	
		Daily PrEP	111	(91.7)	88	(94.6)	98	(88.3)	82	(80.4)	90	(81.1)
		PrEP 2-1-1	6	(5.0)	5	(5.4)	12	(10.8)	20	(19.6)	19	(17.1)
		LA-CAB	N/A		N/A		N/A		0	(0.0)	1	(0.9)
		25-34	**505**		**417**		**411**		**412**		**501**	
		Daily PrEP	468	(92.7)	373	(89.4)	358	(87.1)	348	(84.5)	389	(77.6)
		PrEP 2-1-1	35	(6.9)	42	(10.1)	45	(10.9)	54	(13.1)	84	(16.8)
		LA-CAB	N/A		N/A		N/A		1	(0.2)	25	(5.0)
		35-44	**232**		**229**		**252**		**281**		**319**	
		Daily PrEP	212	(91.4)	205	(89.5)	233	(92.5)	242	(86.1)	239	(74.9)
		PrEP 2-1-1	18	(7.8)	24	(10.5)	17	(6.7)	36	(12.8)	58	(18.2)
		LA-CAB	N/A		N/A		N/A		0	(0.0)	16	(5.0)
		45-54	**99**		**92**		**89**		**100**		**110**	
		Daily PrEP	84	(84.8)	84	(91.3)	79	(88.8)	80	(80.0)	78	(70.9)
		PrEP 2-1-1	15	(15.2)	8	(8.7)	9	(10.1)	18	(18.0)	25	(22.7)
		LA-CAB	N/A		N/A		N/A		0	(0.0)	5	(4.5)
		55+	**59**		**52**		**48**		**65**		**77**	
		Daily PrEP	50	(84.7)	43	(82.7)	42	(87.5)	41	(63.1)	47	(61.0)
		PrEP 2-1-1	9	(15.3)	9	(17.3)	6	(12.5)	22	(33.8)	27	(35.1)
		LA-CAB	N/A		N/A		N/A		1	(1.5)	3	(3.9)
Cis Women and Trans Women[4]		**All Patients**	**105**		**76**		**99**		**85**		**117**	
		Daily PrEP	104	(99.0)	71	(93.4)	91	(91.9)	77	(90.6)	87	(74.4)
		PrEP 2-1-1	1	(1.0)	5	(6.6)	6	(6.1)	6	(7.1)	9	(7.7)
		LA-CAB	N/A		N/A		N/A		1	(1.2)	18	(15.4)

1 Enrolled in the San Francisco City Clinic (SFCC) PrEP Program was defined as attending a PrEP enrollment visit and prescribed PrEP. Due to continuous quality improvement of data cleaning and management processes, data are subject to change and might be different in previous reports.

2 Each SFCC PrEP Program participant is represented in each year that they are enrolled and continued to receive PrEP through SFCC. Because participants can change which regimen they want to use, if a participant used more than one regimen in the year, their regimen is identified according to the following hierarchy: LA-CAB, 2-1-1, Daily.

3 Numbers in each sub-group may not add up to the total due to patients without PrEP regimen information.

4 For data stratified among cis and trans women: PrEP 2-1-1 is not typically indicated for cis women and so therefore the PrEP 2-1-1 data are among trans women only.

Figure 16.3 **PrEP screening, appointments, enrollment, and PrEP use at three- and six- month follow-ups among San Francisco AIDS Foundation clients, 2021-2023**
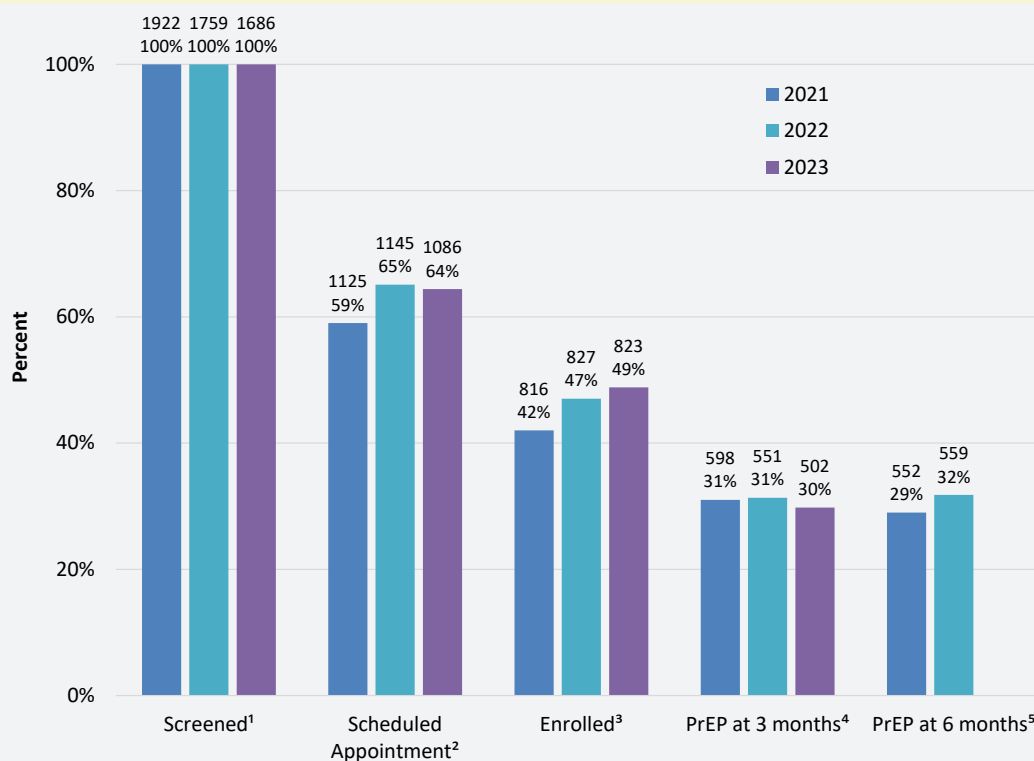
1 PrEP screening was defined as all people who were seen for sexual health care at the SFAF, were HIV-negative, and did not report current PrEP use on screening date.

2 Scheduled appointment for PrEP was defined as scheduling an appointment for PrEP enrollment.

3 Enrolled in PrEP was defined as attending a PrEP enrollment visit and having a PrEP prescription.

4 PrEP at three months was defined as still being enrolled in the SFAF PrEP program at three-month follow-up.

5 PrEP at six months was defined as still being enrolled in the SFAF PrEP program at six-month follow-up. Data on PrEP at six months are incomplete because not all PrEP enrollees in 2023 had completed six months of follow-up after enrollment.

Figure 16.4 PrEP screening, appointments, enrollment, and PrEP use at three- and six-month follow-ups by priority populations among San Francisco AIDS Foundation clients, 2022-2023

2022

Legend:
- All clients
- White MSM[1]
- Black/African American MSM[1]
- Latino MSM[1]
- Trans women[1]
- MSM <25 years[1]

Screened[2]: 1759 100%, 807 100%, 128 100%, 428 100%, 55 100%, 294 100%

Scheduled Appointment[3]: 1145 65%, 506 63%, 78 61%, 307 72%, 42 76%, 204 69%

Enrolled[4]: 827 47%, 398 49%, 57 45%, 230 54%, 30 55%, 151 51%

PrEP at 6 months[5]: 559 32%, 282 35%, 34 27%, 163 38%, 17 31%, 95 32%

2023

Legend:
- All clients
- White MSM[1]
- Black/African American MSM[1]
- Latino MSM[1]
- Trans women[1]
- MSM <25 years[1]

Screened[2]: 1686 100%, 800 100%, 115 100%, 404 100%, 49 100%, 263 100%

Scheduled Appointment[3]: 1086 64%, 492 62%, 60 52%, 276 68%, 26 53%, 187 71%

Enrolled[4]: 823 49%, 407 51%, 44 38%, 224 55%, 19 39%, 143 54%

PrEP at 3 months[5]: 502 30%, 242 30%, 26 23%, 143 35%, 12 24%, 81 31%

1 These groups are priority populations and not mutually exclusive.
2 PrEP screening was defined as all people who were seen for sexual health care at the SFAF, were HIV-negative, and did not report current PrEP use on screening date.
3 Scheduled appointment for PrEP was defined as scheduling an appointment for PrEP enrollment.
4 Enrolled in PrEP was defined as attending a PrEP enrollment visit and having a PrEP prescription.
5 PrEP at three or six months was defined as still being enrolled in the SFAF PrEP program at three- or six-month follow-up.

Table 16.2 PrEP enrollment and PrEP use at six-month follow-up by priority populations and PrEP regimen, San Francisco AIDS Foundation clients, 2021-2022

| | | 2021 | | 2022 | |
| | | Enrolled[1] | PrEP at Six Months[2] | Enrolled[1] | PrEP at Six Months[2] |
		Number (Column %)	Number (row % of Enrolled PrEP Regimen)	Number (Column %)	Number (row % of Enrolled PrEP Regimen)
	All Clients	**816**	**552**	**827**	**559**
	Daily PrEP	651 (80)	459 (71)	599 (72)	401 (67)
	PrEP 2-1-1	165 (20)	93 (56)	228 (28)	158 (69)
	White MSM	**401**	**275**	**398**	**282**
	Daily PrEP	322 (80)	231 (72)	302 (76)	210 (70)
	PrEP 2-1-1	79 (20)	44 (56)	96 (24)	72 (75)
	Black/African American MSM	**57**	**34**	**57**	**34**
	Daily PrEP	49 (86)	29 (59)	44 (77)	28 (64)
	PrEP 2-1-1	8 (14)	5 (63)	13 (23)	6 (46)
	Latino MSM	**232**	**156**	**230**	**163**
	Daily PrEP	199 (86)	140 (70)	184 (80)	124 (67)
	PrEP 2-1-1	33 (14)	16 (48)	46 (20)	39 (85)
	MSM <25 years	**144**	**78**	**151**	**95**
	Daily PrEP	118 (82)	68 (58)	112 (74)	67 (60)
	PrEP 2-1-1	26 (18)	10 (38)	39 (26)	28 (72)

Priority Populations[3] / PrEP Regimens

1 Enrolled in PrEP was defined as attending a PrEP enrollment visit and having a PrEP prescription.
2 PrEP at six months was defined as still being enrolled in the SFAF PrEP program at six-month follow-up.
3 These groups are priority populations and not mutually exclusive. Data on trans women are not displayed due to small numbers.

17 Geographic Distribution of People with HIV

THE TENDERLOIN NEIGHBORHOOD HAD THE HIGHEST CUMULATIVE RATE OF NEW DIAGNOSES AND THE HIGHEST MORTALITY RATE.

There were 11,572 San Francisco residents currently living with HIV as of December 31, 2023, regardless of their residence at HIV diagnosis. By neighborhood, the Castro had the highest number of PLWH (N=1,545), followed by the Tenderloin (N=1,487) and the Western Addition (N=1,168) (Map 17.1). The Castro, Diamond Heights, Mission, South of Market, Tenderloin, and Western Addition neighborhoods included census tracts with the highest numbers of PLWH (shown in blue). Six census tracts in the Castro had the largest number of PLWH followed by census tracts in the Western Addition and South of Market neighborhoods. The Tenderloin census tracts are smaller in geographic area but have similarly high numbers of PLWH, a reminder of the high density of PLWH by geographic area in this neighborhood.

When accounting for population size, the Castro had the highest HIV prevalence (5,774 PLWH per 100,000), followed by the Tenderloin (3,396 per 100,000), South of Market (2,968 per 100,000), and the Western Addition (2,585 per 100,000) (Map 17.2). The Tenderloin had the highest cumulative rate of new diagnoses in 2022-2023 (114 per 100,000), followed by the Castro (71 per 100,000) and South of Market (63 per 100,000) (Map 17.3).

The Tenderloin had the highest mortality rate (from all causes) in 2023 among PLWH (69 deaths per 100,000), followed by the Castro (67 deaths per 100,000), South of Market (63 deaths per 100,000), and the Western Addition (49 deaths per 100,000) (Map 17.4). Although HIV prevalence in the Castro was 1.7 times higher than the Tenderloin's (Map 17.2), the Tenderloin's mortality rate exceeded that of the Castro. The Diamond Heights, Ingleside, Lake Merced, Outer Mission, and Presidio neighborhoods had no deaths among PLWH in 2023.

Citywide, 74% of PLWH in San Francisco who were diagnosed through December 2022 were virally suppressed as of December 2023 (Map 17.5). Only three neighborhoods had a viral suppression prevalence more than one percentage point below the city-wide level: the Tenderloin (72%), Nob Hill (71%), and the Presidio (67%). At 34% virally suppressed, unhoused PLWH had a much lower prevalence of viral suppression compared to PLWH with a residential address in any neighborhoods.

Map 17.1   Geographic distribution[1] of people living with HIV who resided in San Francisco as of December 2023

Number of People Living with HIV

- 1 - 29
- 30 - 49
- 50 - 99
- 100 - 199
- 200 - 250
- Data not shown (Census tracts with population totals fewer than 500)

* Homeless PLWH (N=415) and PLWH with unknown or invalid addresses (N=352) are not displayed.
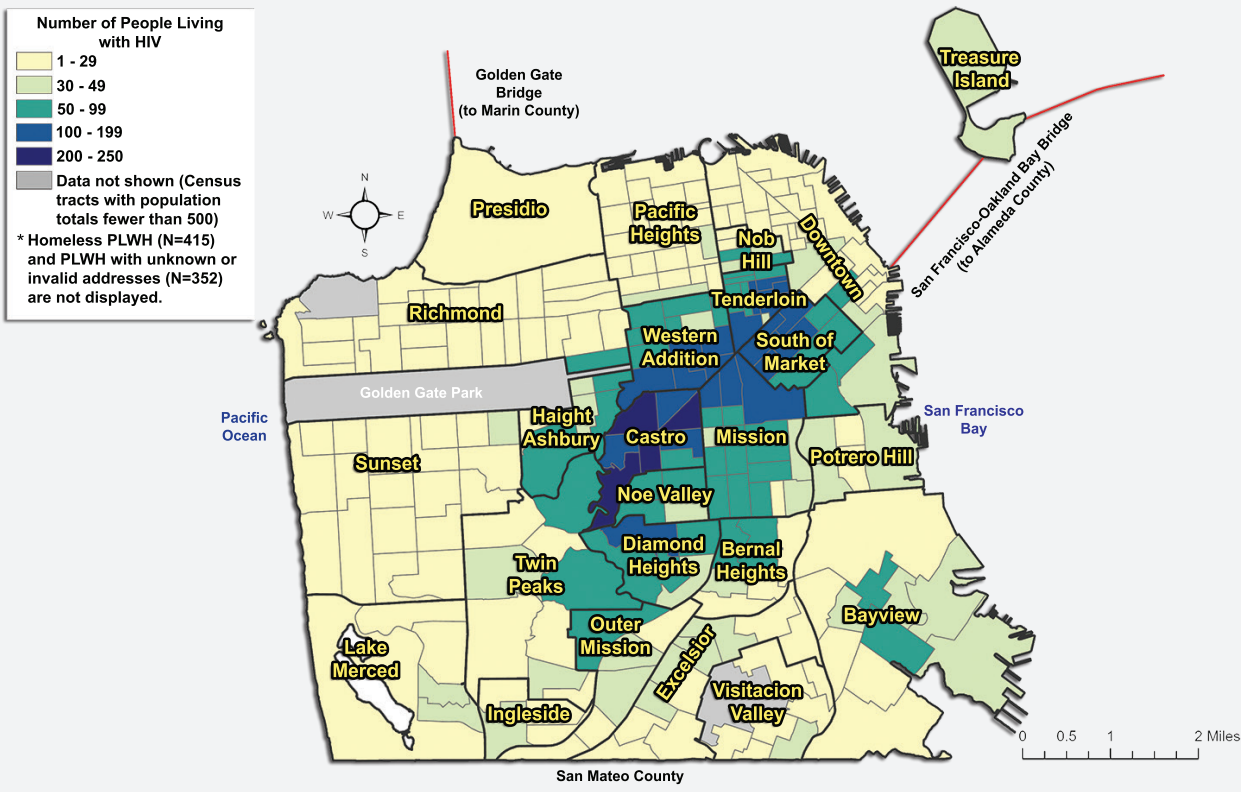
1 The most recently reported address for PLWH as of December 31, 2023 was geocoded and displayed at census tract and neighborhood level on the map. Addresses are obtained through chart review, laboratory reports, and communications with other jurisdictions. 2020 U.S. Census data from DataSF: https://data.sfgov.org/Geographic-Locations-and-Boundaries/Census-2020-Tracts-for-San-Francisco/tmph-tgz9.

Map 17.2   HIV prevalence per 100,000 population by neighborhood, 2023, San Francisco

HIV Prevalence per 100,000 population

- 309 - 799
- 800 - 1999
- 2000 - 2999
- 3000 - 5774
- Data not shown for neighborhoods with population fewer than 500
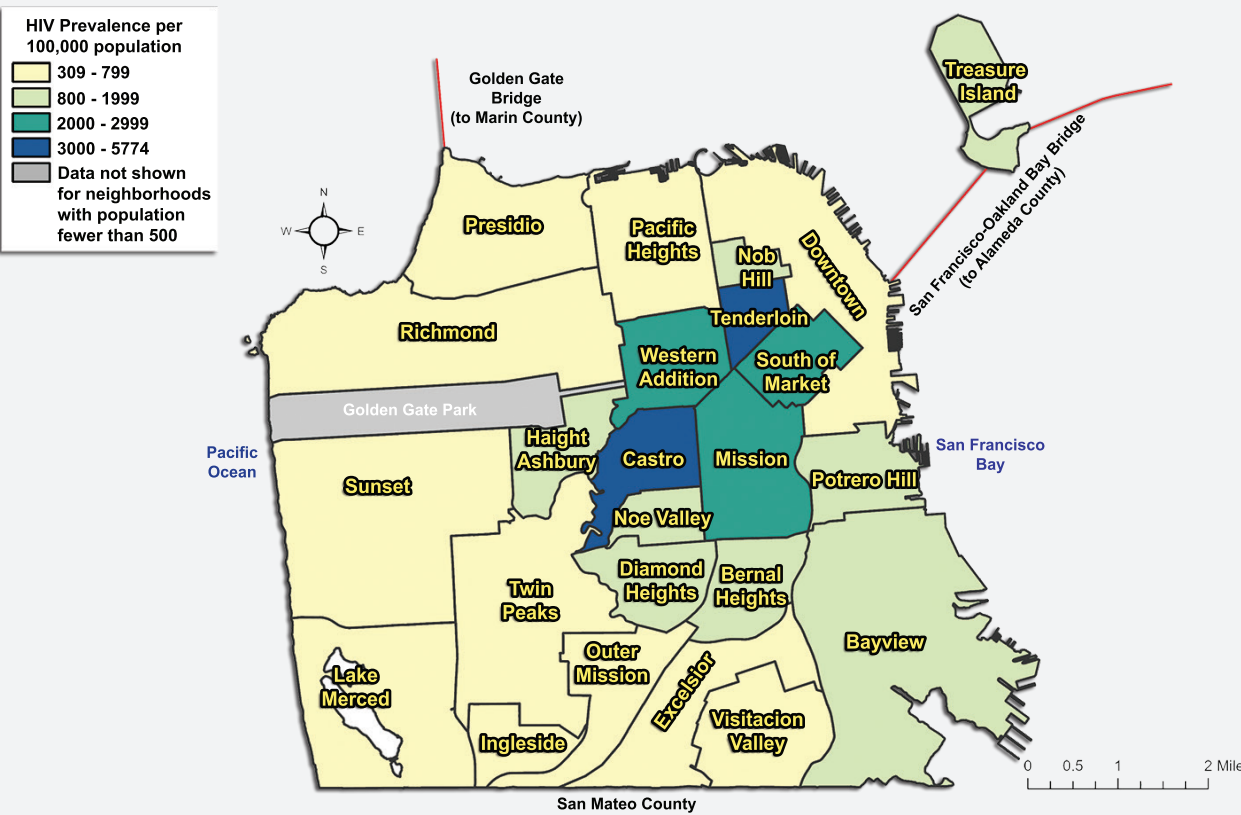
Map 17.3 Rates[1] of HIV diagnosis per 100,000 population for people diagnosed with HIV by neighborhood, 2022-2023, San Francisco

Number of HIV cases per 100,000 population
- 1 - 9
- 10 - 19
- 20 - 39
- 40 - 69
- 70 - 114
- Data not shown for neighborhoods with population fewer than 500
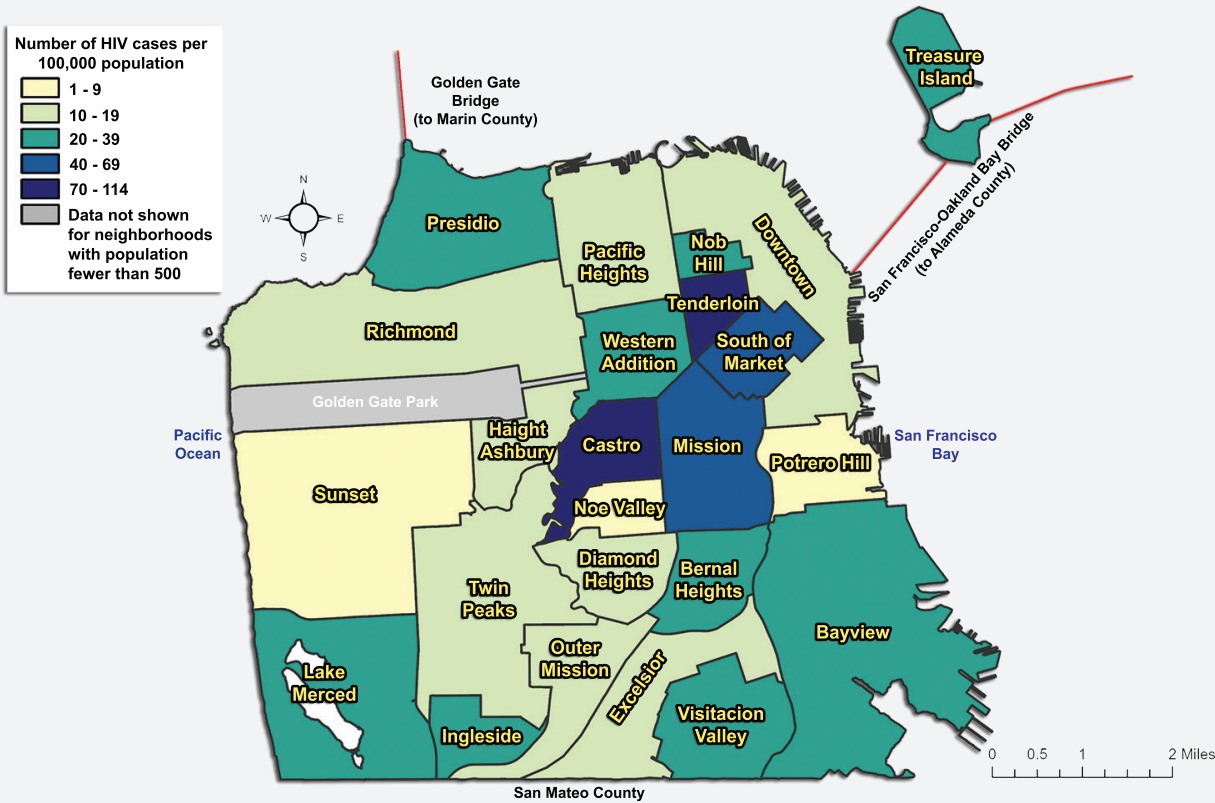
1 Two-year diagnosis rate numerators represent two years of new diagnoses. Residence at time of diagnosis is used for this map.

Map 17.4 Mortality rates among people with HIV per 100,000 population by neighborhood[1], 2023, San Francisco

HIV mortality rate per 100,000 population
- 0
- 1 - 9
- 10 - 19
- 20 - 49
- 50 - 69
- Data not shown for neighborhoods with population fewer than 500
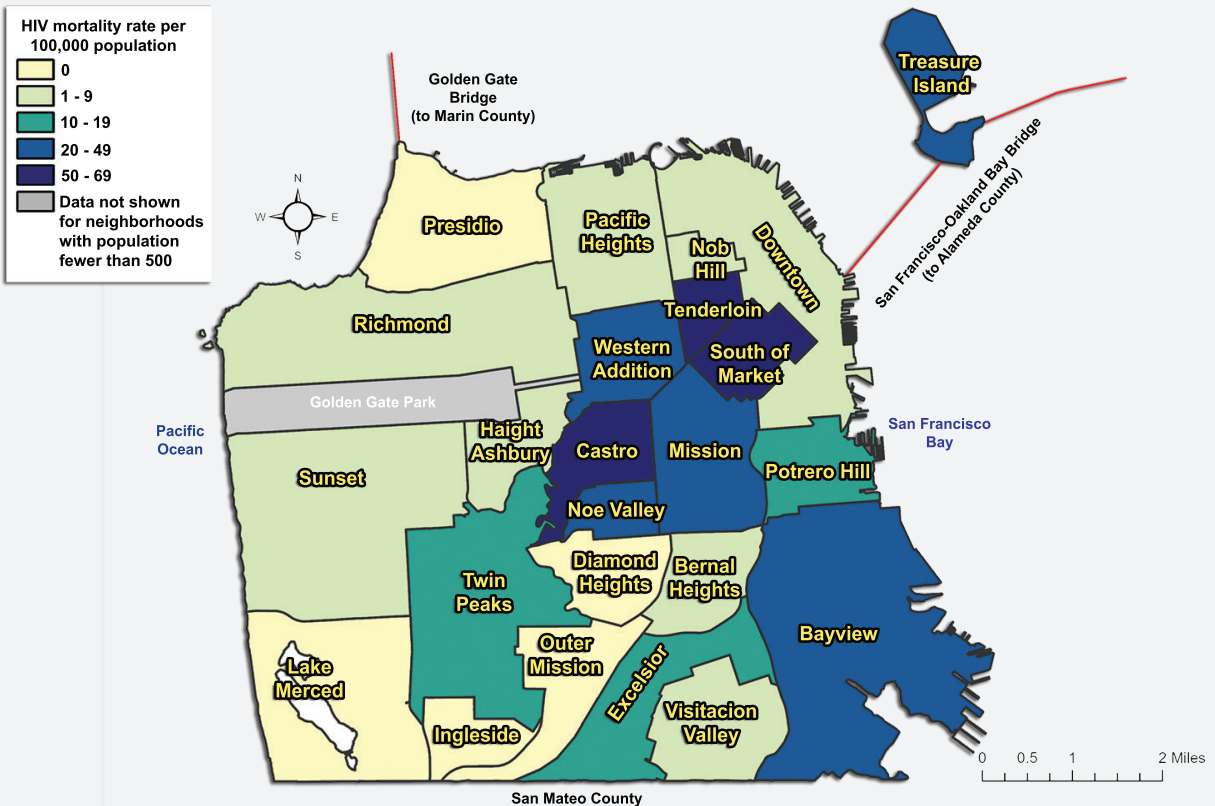
1 The usual residence reported on the death certificate is used for this map.

Map 17.5 **Geographic distribution of proportion of people living with HIV as of December 2023 and diagnosed through 2022 who were virally suppressed in 2023, San Francisco**

Percent Virally suppressed
- 66% - 70%
- 71% - 75%
- 76% - 80%
- 81% - 83%
- Data not shown for neighborhoods with population fewer than 500

* 34% of homeless PLWH and 45% of PLWH with unknown or invalid addresses were virally suppressed in 2023 (not displayed)

Golden Gate Bridge (to Marin County)

Treasure Island

San Francisco-Oakland Bay Bridge (to Alameda County)

Presidio

Pacific Heights

Nob Hill

Downtown

Richmond

Tenderloin

Western Addition

South of Market

Golden Gate Park

San Francisco Bay

Pacific Ocean

Haight Ashbury

Castro

Mission

Potrero Hill

Sunset

Noe Valley

Diamond Heights

Bernal Heights

Twin Peaks

Bayview

Lake Merced

Outer Mission

Excelsior

Visitacion Valley

Ingleside

San Mateo County

0   0.5   1   2 Miles

T Technical Notes
(in alphabetic order by topic)

CD4-based Model

The CD4 cell count can be used to estimate how long someone has been infected with HIV. HIV targets CD4 cells and without treatment, HIV reduces the number of CD4 cells in a person's body. When no treatment has been received, the CD4 cell count can be used to estimate the time since infection at the date of CD4 test. The CD4-based model uses HIV surveillance data and the first CD4 value after diagnosis to estimate HIV incidence (new infections in people with diagnosed and undiagnosed HIV), HIV prevalence (existing HIV infections among people with diagnosed and undiagnosed with HIV), and the percentage of new and existing HIV infections that are undiagnosed.

The CD4 data for people who had no evidence of antiretroviral therapy (ART) use and no viral suppression (viral load result <200 copies/mL) prior to their first CD4 test result were included in this model. The date of HIV acquisition was estimated for each person with a CD4 test by using a CD4 depletion model[1]. To account for people without a CD4 test result, people with CD4 test results were assigned a weight based on the year of HIV diagnosis, sex, race/ethnicity, transmission category, age at diagnosis, disease classification, and vital status at the end of the analytic year. Then, based on the estimated time from HIV infection to diagnosis, the diagnosis delay distribution was estimated by using standard survival analysis for right truncated data and used to estimate annual HIV incidence (new infections), which included people with diagnosed and undiagnosed infection.

The annual estimated number of new HIV infections (incidence, diagnosed and undiagnosed), HIV prevalence (diagnosed and undiagnosed), and the percentage of people with undiagnosed infection in this report were generated from the CD4 Model SAS programs (version 4.1)[2] developed by the CDC. This program applied the CD4 depletion model to estimate the distribution of delay from infection to diagnosis and used prevalence of diagnosed infection and data on deaths among people aged 13 years and older with HIV in San Francisco.

The number of people with undiagnosed HIV infection at the end of a given year was estimated by subtracting the number of cumulative reported diagnoses from cumulative infections. HIV prevalence, which represents counts of people with diagnosed or undiagnosed HIV infection who were alive at the end of a given year, was estimated by adding the number of people with undiagnosed HIV infection to the number of people living with diagnosed HIV infection reported.

The percentage of diagnosed (or undiagnosed) infections was determined by dividing the number of people living with diagnosed (or undiagnosed) infections by the total prevalence for each year.

The CD4 model relied on a series of assumptions: (1) the CD4 depletion model is accurate; (2) individuals received no ART treatment before their first CD4 test; (3) all data adjustments (e.g., multiple imputation for missing values of transmission category, weighting to account for those without a CD4 test) are unbiased (the error is random and not systematic); and (4) a person's infection, diagnosis, and death occur in a "closed" population (no migration) or balanced population (approximately the same number of infected people moved into or out of the area under consideration).

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1   Song R, Hall HI, Green TA, Szwarcwald CL, Pantazis N. Using CD4 Data to Estimate HIV Incidence, Prevalence, and Percent of Undiagnosed Infections in the United States. J Acquir Immune Defic Syndr. 2017 Jan 1; 74(1):3-9.

2   SAS Programs: Estimating HIV Incidence and Prevalence using the CD4-Based Model and eHARS Data, User Guide Version 4.1, November 2022

Date of Initial HIV Diagnosis

The date of HIV diagnosis for newly diagnosed people was based on the earliest date of any of the following: positive HIV antibody test, positive HIV antigen/antibody combination test, detectable viral load test, or physician-documented diagnosis in absence of sufficient laboratory evidence. In this report, the date of initial HIV diagnosis for assessing trends in new HIV diagnoses took into account patient self-report of a positive HIV test as noted in the medical record that was prior to the confirmed HIV diagnosis made by laboratory or clinical evidence. However, CD4 or undetectable viral load tests prior to the confirmed HIV diagnosis were not used to determine date of initial HIV diagnosis. Data for the most recent year should be interpreted with caution as the number of diagnoses may be underestimated due to reporting delays.

Death Ascertainment

Death information among people reported with HIV was obtained through the following mechanisms: (1) monthly matches with local vital statistics registry, (2) annual matches with the Social Security Death Master File, (3) annual matches with the National Death Index (NDI), (4) routine medical record review, (5) notification from other health departments, and (6) matches with other disease registry databases. Matches to the NDI include matches to both the NDI Early Release Program (https://www.cdc.gov/nchs/ndi/apply/ndi-early-release.html?CDC_AAref_Val=https://www.cdc.gov/nchs/ndi/ndi_early_release.htm) and the NDI final file.

Cause of death information on death certificates was summarized and coded using the International Classification of Diseases, 10th revision (ICD-10) for deaths that occurred since 1999. A single cause of death was identified from all reported conditions that began the chain of events that resulted in death; this is known as the underlying cause of death. All conditions (including the underlying cause of death) listed on the death certificate are known as the multiple causes of death (https://www.cdc.gov/nchs/icd/icd-10/?CDC_AAref_Val=https://www.cdc.gov/nchs/icd/icd10.htm). We obtained the ICD codes from annual matches to the NDI from 1999 to 2022. Decedents through 2022 have been matched to the NDI final file. NDI information for 2023 decedents was not available at the time of this report's preparation.

Deaths classified as B20-B24 and all Stage 3 (AIDS)-related opportunistic infections and cancers listed on the death certificate were included in the HIV-related classification. Deaths classified as R99 (ill-defined and unknown cause of mortality) were included in the non-HIV-related classification.

For Table 5.3, underlying causes of death that were HIV-related infections were classified using codes B20.0 - B20.9. Underlying causes of death ICD-10 codes for diseases and conditions that are Stage 3 opportunistic illnesses and conditions and meet case definition of Stage 3 HIV (AIDS) (excluding B20.0-B20.9 and Stage 3 (AIDS)-related cancers and malignant neoplasms) were categorized as "HIV, other diseases and conditions". Deaths with underlying cause of death code B24 were classified as "unspecified HIV disease".

Cause of death information for racial subgroups such as Asian, Pacific Islander, Native American, and multiracial decedents was not displayed due to small numbers.

Case-fatality rates in people diagnosed with HIV were calculated using the single, underlying cause of death for each person.

Estimate of ART Use

Surveillance data provided information that indicated when a person was prescribed ART but did not provide information on use or adherence. Information on the date ART is prescribed was obtained from medical chart reviews or reported by health care providers. People whose medical records indicated that they were prescribed ART were assumed to have received and used it. Surveillance data may overestimate ART use in some individuals because not everyone who is prescribed ART will begin taking it and, if they do, they may start at a later date. However, surveillance data may underestimate ART use because the initial case report may not capture subsequent ART prescription information. The San Francisco Department of Public Health (SFDPH) collected follow-up information from selected health care facilities. For people who received care at these sites, treatment prescription data were likely more complete because it allowed capture of ART prescriptions after the case report was completed. Follow-up information was not available for people who have moved out of San Francisco or who received ongoing medical care outside of the city. We calculated an estimate of ART use among all people living with HIV.

Gender Status

Sex at birth was collected as part of routine HIV case surveillance. People who were classified as female at birth and have no other gender identity noted were classified as cis women. People who were classified as male at birth and have no other gender identity noted were classified as cis men. In September 1996, SFDPH began collecting transgender status when this information is contained in the medical record. Transgender individuals were listed as either trans women or trans men and reported through active and passive surveillance methods (see Technical Notes "HIV Surveillance Methods"). Due to the small number of trans men diagnosed with HIV and small population size, data on trans men were sometimes suppressed in this report to protect confidentiality. We believe this report likely underestimated the number of trans women and trans men affected by HIV because gender status information may not be complete in HIV surveillance data sources, such as the medical record. Information that may have been discussed with the health care provider but not recorded in the medical record was generally not available for the purposes of HIV case reporting.

Grouping of Data Categories

Data in certain racial/ethnic or risk categories were grouped together when the number of people with HIV in that particular group was small and/or did not present significant trends. For example, "Other" in the race/ethnicity breakdown in some tables or figures represents API, Native American, and people of multiple race/ethnicities. Whenever possible, this report presented the expanded racial/ethnic categories rather than aggregating into the group "Other." The label "Other" in the Transmission Category breakdown may include transfusion recipients, hemophiliacs, heterosexuals, people acquiring HIV perinatally, or people of unidentified risk.

HIV and STI Diagnosis

The diagnosis of an STI among PLWH was determined through a computerized match of the SFDPH HIV and STI case registries. The data from the STI registry included data reported through March 8, 2024 for people diagnosed with gonorrhea, chlamydia, non-gonococcal urethritis, or infectious syphilis. People with STIs included in this report were diagnosed with the STI after their HIV diagnosis.

HIV Care Outcomes and Definitions

The SFDPH monitors engagement in care and care outcomes among people newly diagnosed with HIV diagnosis date based on the earliest laboratory-confirmed HIV positive test and also PLWH using reports of CD4, HIV viral load and genotype tests as indicators of care, and viral load test results to measure viral suppression, defined as a viral load less than 200 copies/mL. For new diagnoses, linkage to care within 30 days of diagnosis, retention in care 3-9 months after linkage, and viral suppression within 6 and 12 months of diagnosis were assessed. For PLWH, receipt of care (one laboratory test), retention in care (two laboratory tests at least three months apart) and viral suppression (suppressed at most recent viral load in a 12-month period) were assessed.

Complete laboratory reporting of HIV-related test results is critical to evaluating care outcomes and data-to-care activities (see Technical Notes "Linkage Integration Navigation Comprehensive Services"). Gaps in care information may have occurred for people who received care outside of San Francisco (Note: California law requires laboratories to report all HIV-related test results to the local health department where the provider is located). In addition, some patients may have been in care—in the sense of being adherent to ART and having a regular provider—and simply not have any laboratory tests performed in the time period assessed.

HIV Case Rates and HIV Mortality Rates

Annual race-specific diagnosis rates were calculated as the number of people diagnosed with HIV for a particular racial/ethnic group during each year divided by the projected San Francisco population for that racial/ethnic group, age 0 to 100 years, multiplied by 100,000. Age-adjusted mortality rates were calculated for people 18 years and older. For each racial/ethnic and gender group, the number of deaths among people with HIV each year was divided by annual projected San Francisco population estimates across 14 age groups (18-24, 25-29, 30-34, 35-39, 40-44, 45-49, 50-54, 55-59, 60-64, 65-69, 70-74, 75-79, 80-84, 85-100 years) to generate crude rates which were applied to the standard population, defined using the annual California population estimates from the Department of Finance. Population denominators by year were obtained from the State of California, Department of Finance, Demographic Research Unit: California Population Projections[3] (http://www.dof.ca.gov/Forecasting/Demographics/Projections/). The annual population estimates were not available for transgender people. The San Francisco trans women population estimate used was from Raymond HF, Wilson EC, McFarland W. Transwoman Population Size. Am J Public Health. 2017 Sep;107(9):e12. doi: 10.2105/AJPH.2017.303964. PMID: 28787216; PMCID: PMC5551612.

HIV Disease Stage 3 (AIDS) Survival

For those who died, survival time was calculated as the time between the date of HIV disease stage 3 (AIDS) diagnosis and the date of death. People not known to have died were censored on the date of their last known follow-up or on December 31, 2022, whichever was more recent. This analysis included people who met the case definition for HIV disease stage 3 (AIDS). The follow-up information for cases was obtained through retrospective and prospective reviews of laboratory records and medical charts. Dates of death were obtained through review of local death certificates, reports from the California State Office of AIDS, and matches with the National Death Index (NDI) and Social Security death files. The most recent NDI and Social Security

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3 State of California, Department of Finance, Report P-3: State and County Population Projections by Race/Ethnicity, Detailed Age, and Gender, 2010-2060. Sacramento, California, July 2021. California Department of Finance. Demographic Research Unit. Report P-3: Population Projections, California, 2020-2060 (Baseline 2019 Population Projections; Vintage 2023 Release) Sacramento: California. March 2024.

death file matches included deaths that occurred through December 31, 2022. Survival time estimates reflect deaths that were HIV- and non-HIV related.

HIV Pre-exposure Prophylaxis (PrEP) Regimens

PrEP is a highly effective HIV prevention method for people without HIV. PrEP may be prescribed using different formularies with various dosing schedules.

The daily PrEP regimen involves taking oral medication: one pill each day.

The PrEP 2-1-1 regimen schedules taking oral medication around times of sex: two pills 2-24 hours before sex, one pill 24 hours after the first dose, and one pill 24 hours after the second dose. People who have sex more than 24 hours after taking the first dose, or have sex over multiple days, continue taking one pill every day until two doses have been taken following the last time of sex.

The long-acting cabotegravir (LA-CAB) PrEP regimen is administered as an intramuscular injection by health care providers[4]. The patient initially receives an injection of cabotegravir one time each month for the first 2 months. After that, the frequency of injections of cabotegravir changes to one time every 2 months.

The San Francisco City Clinic (SFCC) PrEP regimen data (Table 16.1 on page 70) included only SFCC patients enrolled in SFCC's PrEP program, and all PrEP patients were included regardless of residency location. Each PrEP Program participant was represented in each year that they were enrolled and continued to receive PrEP through SFCC.

For the SFCC and San Francisco AIDS Foundation, participants could change which regimen they choose to use, and if a participant used more than one regimen in the year, their regimen was identified according to the following hierarchy: LA-CAB, 2-1-1, Daily. LA-CAB was defined as having received an injection in the year. If no LA-CAB injection was received, PrEP method of 2-1-1 vs. Daily was based on current PrEP methods recorded for the year. 2-1-1 was reported over Daily if both were recorded. If there was no current PrEP regimen recorded for the year, the participant's regimen at enrollment was used. The San Francisco AIDS Foundation's data on LA-CAB will be included in future reports.

HIV Surveillance Methods

San Francisco HIV cases were reported primarily through active surveillance activities whereby public health personnel reviewed laboratory and pathology reports and medical records to identify cases and completed the case report forms. HIV cases were also identified through passive reporting from HIV medical and testing providers, review of death certificates, validation studies using secondary data sources such as hospital billing records or other disease registries, and reports from other health departments. HIV cases were routinely de-duplicated (removing duplicate cases) with other California counties, states, and U.S. territories. The surveillance system was evaluated regularly for completeness, timeliness, and accuracy.

The completeness of case reporting of HIV diagnoses in 2022 was evaluated (on 12/31/2023) and found to be 98% (using CDC developed reporting delay model). In terms of timeliness of reporting, an estimated 95%

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4 ClinicalInfo.HIV.gov: Federally approved medical practice guidelines for HIV/AIDS. Available from https://clinicalinfo.hiv.gov/en/drugs/cabotegravir-1/patient#:~:text=Long%2Dacting%20injectable%20cabotegravir%20for%20HIV%20PrEP%20will%20be%20administered,one%20time%20every%202%20months.

of 2022 diagnoses were reported within six months of HIV diagnosis.

The HIV data in this report included people who were residents of San Francisco at the time they were diagnosed with HIV (all stages of infection) including San Francisco residents who were diagnosed in other jurisdictions. This report also included data in some sections for out-of-jurisdiction residents who were diagnosed or received care in San Francisco (see Technical Notes "Out-of-Jurisdiction Residents Diagnosed with HIV") or who moved to San Francisco after HIV diagnosis (see Technical Notes "Residence and Receipt of Care for PLWH"). San Francisco started confidential name-based case reporting for HIV cases in April 2006, as mandated by California law.

HIV Transmission Category Heterosexual Contact

In 2010, the CDC HIV Incidence and Case Surveillance Branch implemented a definition for female presumed heterosexual contact to reclassify the transmission category for women diagnosed with HIV who would otherwise be reported with no identified risk[5]. Like other transmission categories, the definition uses patient history variables collected on the HIV adult case report form. The female presumed heterosexual contact definition includes the following components: (1) the patient's sex at birth was female, (2) the patient had sex with male(s), (3) the patient had no indication of injection drug use, and (4) there is no other known information that would suggest a likely alternative source of HIV infection (such as an occupational exposure).

Beginning with the 2022 HIV Epidemiology Annual Report, the transmission category "Heterosexual" included people whose transmission category met the "female presumed heterosexual contact" definition.

Housing Status

Housing status for people with HIV was determined through collection of address at time of diagnosis and current address through laboratory reports, passive case reports, medical record review, death certificates, and reports from other health departments. A person was defined as homeless if: (1) the medical record states that the patient is homeless or not housed or (2) the person's address is a known homeless shelter or Navigation Center.

People with missing address information were not classified as homeless. Individuals were also considered "not homeless" if they resided in (1) single room occupancy (SRO) facility, (2) transitional housing, including shelter-in- place (SIP) shelters, (3) partner's, family member's, or other non-family member's residence, or (4) institutional facility (examples: hospice, inpatient drug/alcohol recovery facility, facility housing physically/mentally disabled people, residential treatment program, correctional facility, long-term care facility).

The HIV surveillance definition for homelessness excluded people with marginalized or unstable housing, and therefore our findings may differ from other Department of Public Health or City and County of San Francisco programs where the definition for homelessness included these populations.

Linkage Integration Navigation Comprehensive Services

Linkage, Integration, Navigation and Comprehensive Services (LINCS) is a SFDPH program that helps

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5 Council of State and Territorial Epidemiologists Position statements 2007: Heterosexual HIV transmission classification. Available from https://cdn.ymaws.com/www.cste.org/resource/resmgr/ps/07-id-09.pdf.

PLWH re-engage with care. Since 2011, health care navigators on the LINCS team have worked at the San Francisco City Clinic and other SFDPH sites to address patient needs, including finding insurance, attending care appointments and maintaining adherence to medication. Patients may have come to LINCS through direct referral by a provider, self-referral, or, since 2015, not-in-care lists generated from HIV surveillance or medical record databases. The housing status of LINCS clients was defined through LINCS programmatic data, which encompasses several sources, including STI surveillance records and patient self-attestation during interview. Trans women were classified as being transgender per HIV surveillance records or LINCS data. Transmission category is determined from HIV surveillance data.

Care outcomes for LINCS clients, including receipt of care (one laboratory test), retention in care (presence of a second test 3-6 months after the first), and viral suppression (suppressed on most recent viral load result in a 12-month period), were assessed.

LINCS outcomes varied from year to year due to staffing capacity and which referral sources were predominantly used. Provider referrals included patients who had no evidence of care after diagnosis, did not access care over many months, or were not adherent to medication. The Data to Care (DTC) program began in 2016 and included people reported in the San Francisco HIV case registry who had never had an HIV lab record after their HIV diagnosis or had no evidence of a care visit (defined as a HIV viral load, CD4 or genotype test) in 12 months or longer. Only current San Francisco residents who are confirmed to be out of care were eligible for LINCS. People referred to the LINCS program who were not eligible for navigation services included those already in HIV care, not being locatable, or being deceased or incarcerated. In addition, potential LINCS clients may have refused services or become lost to follow-up after LINCS enrollment.

MSM Intercept Survey

The STOP AIDS Project, which joined the SFAF in 2011, began collecting behavioral health survey data in the 1990s. The surveys have allowed for an ongoing stream of demographics, sexual, drug-taking, health, and health-seeking behaviors as they are collected throughout the year among MSM. The questions have evolved over the years, but an effort has been made to keep consistency to allow for trend data. This data supplements other more rigorous data collection like National HIV Behavioral Surveillance, which occurs every three years for MSM. In past years, outreach staff engaged individuals in conversations outside of bars, sex clubs, and other places that attracted a high volume of MSM. In 2019 and 2020, data collection was limited by staffing and then COVID limitations. Starting in 2021, the data collection was transitioned online and moved to Springboard Health Lab, and recruitment has been through dating apps and other online platforms.

Out-of-Jurisdiction (OOJ) Residents Diagnosed with HIV

Routine HIV case surveillance assigns case ownership by residence at diagnosis. People with HIV who resided in San Francisco at time of diagnosis were considered San Francisco cases. People with HIV who were diagnosed or received care in San Francisco but resided elsewhere at time of diagnosis were considered OOJ cases. In 2009, the California Department of Public Health upgraded the surveillance database and updated procedures, and since then case reporting for OOJ cases has been conducted and reported in the same manner as San Francisco cases.

People Living with HIV (PLWH)

We recognize that not all people living with HIV have been diagnosed as having HIV infection. In San Francisco, the proportion unaware of their HIV infection is estimated to be 3%. Therefore, in this report we use the term "people living with HIV" to mean those who have been diagnosed with HIV except where we discuss those who are unaware of their HIV diagnosis.

Residence and Receipt of Care for PLWH

The overall number of PLWH in San Francisco is affected by 1) out-migration: San Francisco residents at the time of diagnosis who later moved out of San Francisco, and 2) in-migration: OOJ residents at the time of diagnosis who moved to and received care in San Francisco. Because in- and out-migration occurred and the residence at time of diagnosis may have differed from the current residence among PLWH, SFDPH collected and updated information regarding current residence for PLWH who resided in San Francisco at time of diagnosis as well as PLWH who resided elsewhere at time of diagnosis but received care in San Francisco. This impacts the calculation of care indicators among PLWH. Care indicators (defined by using CD4, viral load, or genotype tests) were assessed for PLWH known to reside in San Francisco, based on their most recent available residence as of the end of the calendar year, regardless of their residence at time of diagnosis (Table 3.1 and Table 3.4).

San Francisco HIV/STI Home Testing Program

The San Francisco HIV/STI Home Testing Program (Take Me Home) is a partnership between the SFDPH Community Health Equity & Promotion (CHEP) Branch, Disease Prevention and Control (DPC) Branch, Applied Research, Community Health Epidemiology, and Surveillance (ARCHES) Branch, and the National Mailed HIV Testing Program developed by Building Healthy Online Communities (BHOC) and the Emory University, Rollins School of Public Health. The goal of the program is to provide a low-barrier, confidential, home-based HIV/STI testing option to reach individuals who are not accessing HIV/STI testing locations.

The free HIV/STI Home Testing Program was promoted via online social networking apps (Instagram, Facebook & Grinder), mobile platforms (Text "Good" to 21201), the San Francisco City Clinic website, traditional media (television & radio advertisements), social marketing campaign(s) (Have Good Sex, PrEPSupports), Community Engagement Partnerships (Local dating mixer events, Black Joy Parade, Viva La Vulva Podcast, Adult Happy Hour Podcast, Coffee & Conversation-Amplifying Black Voices, Gold Beams Eargasm social event, Second Saturday's-pop-up Village Bayview Hunter's Point) and direct community outreach. Clients were directed to the home testing portal, where they could order free home test kits if they had a San Francisco mailing address. Clients without a San Francisco mailing address were directed to the Centers for Disease Control (CDC) National Free Home Testing program.

The program was piloted from March to December 2020 and offered only the HIV OraQuick rapid test in this period. This was a self-administered test that allowed clients to collect their saliva sample, perform the test, and interpret the test result themselves at their location of choice based on the instructions provided in the test kit. Outcomes of this pilot phase were published in the 2020 San Francisco HIV Epidemiology Annual Report.

In January 2021, the program was expanded to include hepatitis C virus (HCV), syphilis, gonorrhea, and chlamydia testing. Clients were able to self-collect rectal and throat swabs and a urine sample for "3-site" gonorrhea and chlamydia testing. Clients were offered a laboratory-based HIV antibody test (fingerstick dried blood spot) instead of a self-administered HIV OraQuick (oral swab). The specimen collection kits were mailed to clients and contained supplies and instructions to collect samples for tests they ordered. The samples were then mailed to a designated laboratory for processing. Clients were able to access the results through a secure portal. Clients who tested positive for HIV, HCV or an STI were contacted by a disease intervention specialist from SFDPH's LINCS program and were connected to treatment and care.

Stage of Disease at HIV Diagnosis

In 2014, the United States surveillance case definition[6] for HIV infection among adults and adolescents aged ≥13 years and children age<13 years was revised to expand the HIV infection classification staging system into five stages of HIV infection as described below. Using this case definition, stages 1-3 were classified based on the first CD4 T-lymphocyte count and age on date of CD4 T-lymphocyte test, unless there was a stage-3-defining opportunistic illness. The CD4 T-lymphocyte percentage of total lymphocytes was only used when the corresponding CD4 T-lymphocyte count was unknown. This change in definition may have reduced the number of people diagnosed with stage 3 from 2014 onward.

- HIV infection stage 0: This stage is early HIV infection and is established by a sequence of discordant HIV test results indicative of early HIV infection. The criteria for stage 0 infection can be established by a testing history of 1) a confirmed HIV positive test that occurs 180 days or less after a negative or indeterminate test for HIV infection, 2) a negative or indeterminate HIV antibody test on or less than 180 days before a positive HIV virologic test and on or less than 60 days after a positive HIV antibody test, or 3) a negative or indeterminate HIV antibody test on or less than 60 days after a positive HIV virologic test. This sequence of discordant results may be based on testing history (previous laboratory documented or patient's self-report of negative/indeterminate results), or by a HIV testing algorithm. If the criteria for stage 0 are met, the stage is 0 (supersedes other stages) regardless of criteria for other stages (CD4 T-lymphocyte test results and opportunistic illness diagnoses).

- HIV infection stages 1-3: HIV infection stages 1-3 are based on age-specific CD4 T-lymphocyte count or CD4 T-lymphocyte percentage of total lymphocytes.

| | Age on date of CD4 T-lymphocyte test | | | | | |
| | <1 year | | 1-5 years | | ≥6 years | |
Stage	Cells/ μL	%	Cells/ μL	%	Cells/ μL	%
1	≥1,500	≥34	≥1,000	≥30	≥500	≥26
2	750-1,499	26-33	500-999	22-29	200-499	14-25
3	<750	<26	<500	<22	<200	<14

Data on people with HIV infection stage 3 (AIDS) include people whose infection has ever been classified as stage 3 (AIDS).

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6 Selik RE, Mokotoff ED, Branson B, Owen SM, Whitmore S, Hall HI. Revised Surveillance Case Definitions for HIV Infection -- United States, 2014. MMWR 2014;63(No. RR-3):1-10.

- <u>HIV infection, stage unknown:</u> No information available on CD4 count or percentage and no reported information on AIDS-defining conditions (every effort is made to collect CD4 counts or percentages at time of diagnosis).

D Data Tables

Year	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
HIV disease stage 3 diagnoses	3	26	99	274	557	859	1236	1636	1762	2157
HIV disease stage 3 deaths	0	8	32	111	273	534	807	878	1038	1278
People living with HIV ever classified as stage 3	3	21	88	251	535	860	1289	2047	2771	3650

Year	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
HIV disease stage 3 diagnoses	2043	2284	2322	2061	1774	1546	1061	792	681	572
HIV disease stage 3 deaths	1363	1512	1639	1603	1599	1486	992	424	401	352
People living with HIV ever classified as stage 3	4330	5102	5785	6243	6418	6478	6547	6915	7195	7415

Year	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
HIV disease stage 3 diagnoses	552	505	478	542	476	475	450	443	434	324
HIV disease stage 3 deaths	349	324	320	293	300	307	287	269	227	207
People living with HIV ever classified as stage 3	7618	7799	7957	8206	8382	8550	8713	8887	9094	9211

Year	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
HIV disease stage 3 diagnoses	301	252	243	187	139	125	97	132	114	111
HIV disease stage 3 deaths	193	190	181	191	188	203	183	202	208	192
People living with HIV ever classified as stage 3	9319	9381	9443	9439	9390	9312	9226	9156	9062	8981

Year	2020	2021	2022	2023
HIV disease stage 3 diagnoses	88	89	72	92
HIV disease stage 3 deaths	209	203	247	N/A
People living with HIV ever classified as stage 3	8860	8746	8571	8515

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
White	133	122	91	84	61	58	40	54	46	49
Black/African American	33	44	32	42	40	29	28	26	25	25
Latinx	98	85	81	79	90	66	64	63	74	40
Asian/Pacific Islander	45	39	42	33	22	21	16	20	17	19
Other/Unknown	17	20	7	15	7	9	4	7	5	0

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
White	63	57	40	38	29	24	18	29	24	27
Black/African American	129	129	87	129	130	88	93	82	78	79
Latino	127	107	95	97	109	73	76	73	100	50
Asian/Pacific Islander	32	29	30	22	13	15	9	9	10	8

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
White	4	5	4	3	1	2	4	3	2	2
Black/African American	4	35	43	43	35	22	23	14	24	19
Latina	7	11	8	9	8	8	5	14	3	3
Asian/Pacific Islander	0	1	1	2	1	1	1	2	1	2

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
MSM	241	230	172	154	139	119	95	85	106	84
PWID	14	6	10	16	19	6	5	10	8	6
MSM-PWID	38	27	23	32	26	16	14	22	17	13
Heterosexual	7	7	7	6	4	4	3	6	2	0
Unknown	1	3	3	12	4	6	6	9	9	4

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
PWID	10	11	11	10	6	5	8	8	4	3
Heterosexual	3	18	14	13	10	11	9	13	10	10
Unknown	0	0	0	4	1	0	0	1	0	0

	2018	2019	2020	2021	2022
Overall	46	41	48	43	41

	2018	2019	2020	2021	2022
White	53	51	46	50	63
Black/African American	48	44	63	50	90
Latinx	43	37	41	39	33
Asian/Pacific Islander	25	39	71	53	35

	2018	2019	2020	2021	2022
MSM	42	40	39	35	36
PWID	181	65	55	51	126
MSM-PWID	59	41	78	108	63
Heterosexual	45	45	68	56	35

	2018	2019	2020	2021	2022
Homeless	63	43	67	56	61
Non-Homeless	42	41	44	42	39

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
White cis men	83	81	83	79	89	75	80	104	95	108
Black/African American cis men	139	146	164	142	144	199	150	184	188	224
Latino cis men	76	65	58	43	63	81	89	57	64	84
White cis women	6	3	6	5	5	6	5	6	8	5
Black/African American cis women	75	61	56	70	41	60	52	22	45	80
Latina cis women	13	8	7	16	10	5	3	10	9	3
Trans women (not age-adjusted)					290	161	161	322	386	354

White	2019	2020	2021	2022	2023
Public	38%	48%	46%	43%	33%
Private	26%	35%	28%	33%	45%
None	29%	15%	22%	15%	16%
Missing	7%	3%	4%	9%	6%

Black/African American	2019	2020	2021	2022	2023
Public	62%	46%	62%	68%	68%
Private	21%	14%	27%	24%	12%
None	17%	25%	12%	4%	16%
Missing	0%	14%	0%	4%	4%

Latinx	2019	2020	2021	2022	2023
Public	26%	39%	46%	34%	43%
Private	24%	14%	19%	22%	15%
None	38%	45%	30%	42%	40%
Missing	12%	2%	5%	3%	3%

Asian/Pacific Islander	2019	2020	2021	2022	2023
Public	10%	25%	35%	29%	37%
Private	76%	31%	20%	47%	53%
None	5%	44%	25%	18%	11%
Missing	10%	0%	20%	6%	0%

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
White	118	107	77	67	50	44	26	40	34	40
Black/African American	25	28	18	22	24	15	17	10	15	14
Latino	81	73	59	60	70	51	50	46	59	34
Asian/Pacific Islander	41	36	36	26	18	19	14	10	12	9
Other	14	13	5	11	3	6	2	1	3	0

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Male Rectal Gonorrhea (HIV+)	305	403	429	467	436	354	351	421	396	317
Male Rectal Gonorrhea (HIV-)	502	679	869	1013	1050	1018	671	1130	1171	956
Male Gonococcal Proctitis (HIV+)	16	21	19	20	19	14	25	15	22	14
Male Gonococcal Proctitis (HIV-)	21	20	49	38	35	36	25	46	42	32

Race/Ethnicity	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
White	10	8	7	10	10	7	8	9	7	4
Black/African American	4	2	6	9	7	1	3	4	0	2
Latinx	8	2	5	5	6	3	3	1	3	1
Other/Unknown	2	5	4	2	3	0	0	4	2	2
Age in years	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
18-24 years	1	0	2	1	2	0	0	0	0	1
25-29 years	2	5	3	0	1	0	1	8	2	1
30-39 years	5	5	7	8	7	6	4	4	3	1
40-49 years	5	4	4	9	8	4	2	5	5	4
50+ years	11	3	6	8	8	1	7	1	2	2

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
White	2	5	4	4	0	1	4	3	1	2
Black/African American	2	9	7	4	9	8	3	3	6	5
Latinx	3	7	7	5	6	6	3	11	3	1
Other/Unknown	3	4	3	6	0	2	2	3	3	4

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
White	7	8	7	5	2	4	7	5	3	3
Black/African American	1	8	10	10	8	5	5	3	5	4
Latina	4	7	5	6	5	5	3	9	2	2
Other/Unknown	1	6	3	6	2	2	2	5	4	4

	Map 17.1	Map 17.2	Map 17.3	Map 17.4	Map 17.5
	Number of PLWH	HIV prevalence per 100,000	Two-year rate of new diagnoses per 100,000	HIV mortality rate per 100,000	Percent of PLWH virally suppressed
Bayview	363	842	28	23	80%
Bernal Heights	227	963	21	8	82%
Castro	1545	5774	71	67	78%
Diamond Heights	280	1560	17	0	80%
Downtown	662	755	19	7	75%
Excelsior	283	605	17	11	79%
Haight Ashbury	269	1163	13	9	76%
Ingleside	94	563	36	0	76%
Lake Merced	105	660	25	0	80%
Mission	1160	2006	52	26	77%
Nob Hill	279	1428	20	5	71%
Noe Valley	225	1707	8	38	79%
Outer Mission	173	604	14	0	76%
Pacific Heights	298	522	11	9	73%
Potrero Hill	183	1089	6	12	77%
Presidio	15	407	27	0	67%
Richmond	412	428	17	5	79%
South Of Market	846	2968	63	63	77%
Sunset	278	309	4	2	75%
Tenderloin	1487	3396	114	69	72%
Treasure Island	34	1238	36	36	82%
Twin Peaks	290	665	16	14	82%
Visitacion Valley	129	512	20	8	78%
Western Addition	1168	2585	29	49	79%
Homeless	415	N/A	N/A	N/A	34%
Unknown	352	N/A	N/A	N/A	45%

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