



HIV/AIDS EPIDEMIOLOGY AND HEALTH DISPARITIES IN CALIFORNIA 2022

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EXECUTIVE SUMMARY

New HIV Diagnoses

From 2018 through 2022, both the annual number and rate of new HIV diagnoses remained relatively the same in California. The number of new diagnoses increased by 0.4% from 4,863 in 2018 to 4,882 in 2022, while the rate of new diagnoses per 100,000 population declined by 0.8%, from 12.3 to 12.2 during the same time period. Although new HIV diagnoses have declined overall, disparities persist among racial/ethnic groups, gender, age, and transmission categories.

Among all racial/ethnic groups, Black/African Americans are the most disproportionately affected by HIV. In 2022, Black/African Americans made up approximately 6 percent of California's population, yet they accounted for 16 percent of California's HIV epidemic. Rates among newly diagnosed Black/African American men are 4.4 times higher than White men, and among Black/African American women, 5.7 times higher than White women. Viral suppression among Black/African Americans is typically lower than other race/ethnicities regardless of gender, age, or transmission category.

Latinx make up the largest racial/ethnic group among new HIV diagnoses, accounting for 57 percent of all new HIV diagnoses in 2022; however, they also make up the largest racial/ethnic group in California at almost 40 percent. Disparities among Latinx include higher rates of HIV diagnoses and lower viral suppression, especially among transgender women, and IDU men and women. Rates among newly diagnosed Latinx men are 2.7 times higher than White men, and among Latinx women 1.6 times higher than White women. In addition, among MMSC, disparities between Latinx and Whites have increased from 2018 to 2022. In 2018, the rate of new diagnoses among Latinx MMSC was 2.2 times that of White MMSC; in 2022 it was 3.3 times that of Whites. In addition, Latinx had a higher proportion of late HIV diagnoses compare to Black/African Americans and White individuals.

Transmission by MMSC, including MMSCIDU, makes up the majority of the HIV epidemic in California, accounting for 60 percent of new HIV diagnoses and 71 percent of all living HIV cases in 2022. Overall, the number of new HIV diagnoses among MMSC has declined by 14 percent since 2018. However, progress for MMSC has been uneven across race/ethnicities. While the number of new diagnoses among White MMSC has declined by 33 percent since 2018, numbers among other groups have declined at a slower pace resulting in increasing disparities.

The lowest rates of viral suppression by transmission category are for IDU. Rates of viral suppression were especially low among Latinx and White IDU even though linkage to care is similar to the statewide average, which suggests that retention in care may be an issue. Continued support of medication for opioid use disorder, syringe services and other harm reduction programs are important in order to improve retention in care. Efforts to root out stigma and bias within the healthcare system are critical to this effort.

Trans women of color are disproportionately affected by HIV. Of the new HIV diagnoses in 2022 among transgender people, 83% were among Latinx and Black/African Americans and 98% were among trans women. Overall, the number of new HIV diagnoses among transgender people has increased by 42 percent since 2018.

People Living with Diagnosed HIV

From 2018 through 2022, the number of persons in California living with diagnosed HIV infection increased from approximately 136,100 to over 142,700. In 2022, the prevalence rate of diagnosed HIV infection was 355.6 per 100,000 population, compared to 343.1 in 2018— an increase of 3.7%, with the highest percentages of living cases from select demographic groups among cisgender men, persons aged 45 to 64 years, Latinx, and MMSC transmission. Similar to new diagnoses, Black/African American individuals had a significantly higher rate of HIV compared to White individuals for both males and females in 2022.

All-Cause Deaths Among PLWDH

From 2018 through 2022, the annual number of deaths of persons with diagnosed HIV infection in California increased from 1,824 to 2,169. In 2022, the crude death rate of persons with diagnosed HIV infection was 5.4 per 100,000 population — a 17.5% increase since 2018. Data on deaths of persons with diagnosed HIV infection represent all causes of death, and may or may not be related to HIV infection. MMSC including MMSCIDU, accounted for 66% of all-cause deaths among persons with diagnosed HIV in 2022.

INTRODUCTION

In 2022, there were 142,772 people living with diagnosed HIV (PLWDH) in California and 4,882 new diagnoses. While the number of PLWDH has steadily increased over time, the number of new HIV diagnoses has decreased since the peak of the epidemic. Since the HIV epidemic began in 1981, approximately 110,000 Californians diagnosed with HIV have died, with over 2,100 dying in 2022 alone (Figure 1).



Figure 1. HIV/AIDS Diagnoses, AIDS Diagnoses, Deaths, and Persons Living with HIV or AIDS in California: 1981-2022

Although there has been progress in addressing California's HIV/AIDS epidemic, HIV continues to disproportionately affect many populations. The HIV/AIDS Epidemiology and Health Disparities Report, published by the Office of AIDS (OA), provides detailed information on the HIV/AIDS epidemic in California and examines health disparities across various groups. This report highlights differences in HIV burden and health outcomes by gender, race/ethnicity, and transmission category. Data in this report are intended to be used by OA, stakeholders, and community partners to identify needs, gaps, and the status of the HIV/AIDS epidemic in the state to form strategies to continue to address the epidemic and reduce or eliminate HIV health disparities.

NEWLY DIAGNOSED HIV INFECTIONS IN CALIFORNIA

From 2018 to 2020, the number and rates of cases declined slightly. Note that both transmission and case reporting were most likely depressed in 2020 as a result of the COVID-19 pandemic and resulting stay-at-home order. In 2021 and 2022, both case counts and rates rebounded, resulting in case counts and rates largely similar to those in 2018. Overall, the number of new diagnoses increased slightly by 0.4% from 4,863 in 2018 to 4,882 in 2022, while the rate of new diagnoses per 100,000 population declined slightly by 0.8% from 12.3 to 12.2 during the same time period (Figure 2).





Men continue to be the most affected by HIV, accounting for 83% of new HIV diagnoses in 2022 (Figure 3). Male-to-male sexual contact (MMSC), including MMSC-IDU, accounted for 60% of new HIV diagnoses in 2022. Heterosexual contact accounted for 20% of new HIV diagnoses in 2022, 3% of new HIV diagnoses were attributed to injection drug use (IDU) alone, 3% attributed to transgender sexual contact (TGSC), and 14% were attributed to unknown/other risk (Figure 3). Latinx made up the largest racial/ethnic group among new HIV diagnoses, accounting for 57 percent of all new HIV diagnoses in 2022 (Figure 3).

	New Diagnoses		
Characteristic	#		% of Total
Cisgender men	4,075	83%	
Cisgender women	637	13%	
Trans women	156	3%	
Trans men	3	0%	
Alternative gender identity	11	0%	
0 to 12	5	0%	
13 to 24	761	16%	
25 to 44	3,030	62%	
45 to 64	983	20%	
≥65	103	2%	
American Indian/Alaska Native	21	0%	
Asian	249	5%	
Black/African American	717	15%	
Latinx	2,767	57%	
Native Hawaiian/Pacific Islander	17	0%	
White	1,013	21%	
Multiple Races	98	2%	
Unknown	0	0%	
Transgender sexual contact (TGSC)	155	3%	
Male-to-male sexual contact (MMSC)	2,672	55%	
MMSCIDU	234	5%	
Injection drug use (IDU)	161	3%	1
Heterosexual contact	957	20%	
Perinatal	6	0%	
Unknown risk/other risk	697	14%	
TOTAL	4,882		

Figure 3.	New HIV	Diagnoses	by Selected	Demographic	Characteristics,
California	a, 2022				

Among all racial/ethnic groups, Black/African Americans are the most disproportionately affected by HIV. The rate of new HIV diagnoses among Black/African Americans is 4.4 times higher than Whites among men and 5.7 times higher among women. Latinx are also disproportionately affected by HIV with rates of new HIV diagnoses 2.7 times higher than Whites among men and 1.6 times higher among women (Figure 4). While Latinx and Whites make up the largest percentage of persons newly diagnosed with HIV, the rate of HIV among Blacks/African Americans is substantially higher (31.0 per 100,000 population, versus 6.7 per 100,000 among Whites and 17.4 per 100,000 among Latinx).





In 2022, the rate of new HIV diagnoses among Black/African American MMSC was 4.8 times higher than White MMSC; Latinx MMSC was 3.3 times higher than White MMSC (Figure 5). From 2018-2022, racial/ethnic disparities among MMSC have increased for both Black/African Americans and Latinx MMSC compared to White MMSC, primarily due to a decrease in rates among White MMSC. The rate of new HIV diagnoses for Latinx MMSC has not changed while the rates for Black MMSC declined.





Late HIV Diagnoses

In 2022, 22% of new HIV diagnoses were late HIV diagnoses defined as having Stage 3 (AIDS) at the time of initial HIV diagnosis or within 12 months of the HIV diagnosis date. Latinx (22.8%) have a higher proportion of late HIV diagnoses compared to Black/African American (16.5%) and White individuals (20.5%) (Figure 6). Although late diagnoses for Black/African Americans have reached the goal of 17% for two of the most recent five years, other groups have not, and recent progress in this area is not evident.



— Latinx

Non-Hispanic White

Black/African American

Figure 6. Proportion of Individuals Diagnosed with Stage 3 (AIDS) within 12 Months of HIV Diagnosis by Race/Ethnicity, California, 2018-2022

The Continuum of HIV Care: Persons Newly Diagnosed with HIV

A key pillar of the Ending the HIV Epidemic initiative is to facilitate early linkage to HIV treatment to enable rapid viral suppression. Among the 4,882 individuals newly diagnosed with HIV in 2022, 82% were linked to care (LTC) within one month of diagnosis – a 4% increase since 2018 (Figure 7). Viral suppression is an important factor in enabling persons living with diagnosed HIV to live long, healthy lives and preventing new HIV infections. Among individuals newly diagnosed in 2022, 66% achieved VS within six months of diagnosis, a 3% increase compared to 2018 (Figure 7).

Figure 7. Percent of People Newly Diagnosed with HIV Infection Linked to HIV Medical Care within 1 Month of Diagnosis and Virally Suppressed within 6 Months of Diagnosis – California, 2018-2022



The groups with the lowest rates of LTC within one month of diagnosis were Black/African Americans (77%, 78%, and 72% for cisgender men, cisgender women and trans individuals respectively), American Indian/Alaska Native cisgender men and cisgender women (77% and 75%, respectively), and multiracial trans individuals (57%) (Tables 1, 2).

The groups with the lowest rates of VS within six months of diagnosis were American Indian/Alaska Native cisgender men (53%), Native Hawaiian/Pacific Islander cisgender men (53%), White cisgender women (52%), multiracial cisgender women (53%), Black/African American transgender individuals (56%), and persons who inject drugs (49%) (Tables 1, 2).

Table 1. Linkage to HIV within 1 Month of Diagnosis by Gender, Race/Ethnicity,Age Group, and Risk/Exposure Group, 2022

New HIV Diagnoses, 2022							
		Diagnosed	Linked to C	Care in 1 Month	th Achieved Viral Suppression in 6 Mo		
Characteristic		N	N	%	Ν	%	
Gender	Cisgender Men	4,075	3,372	83%	2,736	67%	
	Cisgender Women	637	506	79%	393	62%	
	Trans Women	156	128	82%	98	63%	
	Trans Men	3	-		-		
Race/Ethnicity	American Indian/Alaska Native	21	16	76%	13	62%	
	Asian	249	228	92%	195	78%	
	Black/African American	717	553	77%	427	60%	
	Latinx	2,767	2,298	83%	1,883	68%	
	Native Hawaiian/Other Pacific Islander	17	14	82%	8	47%	
	White	1,013	827	82%	645	64%	
	Multiple Races	98	84	86%	68	69%	
Age	0 to 12	5	-		3	60%	
	13 to 24	761	608	80%	502	66%	
	25 to 44	3,030	2,518	83%	2,048	68%	
	45 to 64	983	807	82%	620	63%	
	≥65	103	82	80%	66	64%	
Risk/Expoure Group	TGSC	155	129	83%	98	63%	
	MMSC	2,672	2,262	85%	1,933	72%	
	IDU	234	189	81%	114	49%	
	MMSC & IDU	161	135	84%	95	59%	
	High-Risk Heterosexual Contact (HRH)	202	169	84%	139	69%	
	Perinatal	6	-		3	50%	
	Heterosexual Contact (Non-HRH)	755	621	82%	502	66%	

Table 2. Linkage to HIV Care within 1 Month of HIV Diagnosis by Gender andRace/Ethnicity, 2022

New HIV Diagnoses, 2022						
Gondor	Paco/Ethnicity	Linked to Care in 1	Achieved Viral			
Gender	Race/Etrinicity	Month	Suppression in 6 Months			
Cisgender Men	American Indian/Alaska Native	77%	53%			
	Asian	92%	78%			
	Black/African American	77%	59%			
	Latinx	83%	69%			
	Native Hawaiian/Other Pacific Islander	80%	53%			
	White	82%	66%			
	Multiple Races	88%	74%			
Cisgender Women	American Indian/Alaska Native	75%	-			
0	Asian	84%	84%			
	Black/African American	78%	63%			
	Latinx	80%	65%			
	Native Hawaiian/Other Pacific Islander	-	-			
	White	77%	52%			
	Multiple Races	90%	53%			
Transgender Individuals	American Indian/Alaska Native	-	-			
	Asian	-	60%			
	Black/African American	72%	56%			
	Latinx	83%	65%			
	Native Hawaiian/Other Pacific Islander	-	-			
	White	-	63%			
	Multiple Races	57%	71%			

Note: Some numbers were suppressed to ensure the confidentiality of personally identifiable information.

Social Determinants of Health

California HIV surveillance data continues to show that HIV disproportionately impacts specific subpopulations. To eliminate health inequities, the California OA has developed a five-year strategic plan – Ending the HIV Epidemic – incorporating social determinants of health (SDH) in its elimination strategy. SDH are non-medical factors, such as communal, economic, and environmental conditions that can impact a person's health. Examples of SDH include a region's access to education, income, housing, and transportation. At the national level, the Office of Disease Prevention and Health Promotion recognizes that promoting good healthcare and lifestyle choices alone will not eliminate health inequities; therefore, they have incorporated SDH across their five overarching goals for promoting health and well-being for all ages in the Healthy People's 2030 initiative. Given the significance of SDH as contributing factors to health inequities, it is important to understand their relationship with the health outcomes of HIV infection, LTC, and VS.

Table 3 below depicts HIV-related outcomes (i.e., the rate of new HIV diagnoses, percent linked to care within one month of diagnosis, and percent virally suppressed within six months of diagnosis) by SDH (i.e., poverty level, education level, health care coverage, income inequality, and median household income). Each SDH is divided into quartiles that delineate the percentage of households/residents that meet the definition of the given SDH. For example, the first row under the heading "Less than a high school diploma" is labeled "<5" and depicts HIV cases living in census tracts in which less than 5% of adult residents do not have a high school diploma (i.e., more than 95% of adult residents DO have a high school diploma).

	Total dia	Total diagnoses		Linked to Care in 1 month		ppressed onths
	N	Rate	Ν	%	N	%
Below federal poverty level (%) ¹						
<6	650	8.1	466	71.7	556	85.5
6.00-9.99	1,016	11.8	704	69.3	860	84.6
10.00-14.99	1,092	16.2	740	67.8	886	81.1
≥ 15	1,735	24.2	1,131	65.2	1,421	81.9
CA Overall	4,493	14.7	3,041	67.7	3,723	82.9
Less than high school diploma (%) ²						
<5	581	8.2	443	76.2	499	85.9
5 00-10 99	831	10.3	587	70.6	717	86.3

Table 3. Persons Newly Diagnosed with HIV Infection by Census Tract,Characterized by Continuum of Care, by Selected Social Determinants of Health,2022 – California

	Total diagnoses		Linked to Care in 1 month		Virally Suppressed in 6 months	
	N	Rate	Ν	%	N	%
11.00-23.00	1,344	16.2	899	66.9	1,104	82.1
≥ 23	1,760	24.7	1,130	64.2	1,421	80.7
CA Overall	4,516	14.8	3,059	67.7	3,741	82.8
Without health insurance (%) ³						
<4	759	8.2	561	73.9	660	87.0
4.00-6.99	913	12.9	615	67.4	768	84.1
7.00-11.99	1,193	16.4	801	67.1	987	82.7
≥ 12	1,628	23.4	1,064	65.4	1,308	80.3
CA Overall	4,493	14.7	3,041	67.7	3,723	82.9
Gini index (%) ⁴						
<38	1,155	13.7	770	66.7	942	81.6
38.00-41.99	1,049	14.0	694	66.2	878	83.7
42.00-45.99	1,077	15.1	762	70.8	901	83.7
≥ 46	1,205	16.2	808	67.1	995	82.6
CA Overall	4,486	14.7	3,034	67.6	3,716	82.8
Median household income (U.S. \$)						
≥ 123,000	602	7.6	447	74.3	532	88.4
90,000-122,999	927	11.5	661	71.3	792	85.4
67,000-89,999	1,223	16.5	819	67.0	999	81.7
<67,000	1,716	24.5	1,091	63.6	1,378	80.3
CA Overall	4,468	14.7	3,018	67.5	3,701	82.8

¹The federal poverty level of a household consisting of one individual in 2022 is \$13,590/year, while for a household of four persons it is \$27,750.

²Percentage of adult residents in a region having received less than a high school diploma.

³Percentage of residents within a region who possess some form of health insurance coverage for a given year.

⁴Measure of a region's income inequality. 0% corresponds to perfect equality; 100% corresponds to perfect inequality.

A remarkably consistent pattern emerged among each of the depicted SDH factors such that increasing levels of disadvantage (e.g., lower income, education, health insurance coverage, etc.) were associated with both increased rates of infection and worse health outcomes. This suggests that effective approaches to reducing disparities in HIV infection rates and outcomes will require consideration of these social determinants of health.

Federal Poverty Level

Adults living in census tracts with the highest poverty rates (\geq 15% of residents) were newly diagnosed at a rate three times (299%) higher than those in areas with the lowest poverty rates (<6% of residents). Additionally, this group consisted of 6.5% fewer individuals linked to care and 3.6% fewer achieving viral suppression compared to those in lowest poverty areas.

Education Level

Adults living in census tracts with the lowest levels of education ($\geq 23\%$ of residents without a high school diploma) were newly diagnosed at a rate 2.9 times (285%) higher than those in areas with the highest education levels (<5% without a high school diploma). This group consisted of 12.0% fewer individuals linked to care and 5.2% fewer achieving viral suppression compared to those in highest education areas.

Health Care Coverage

Adults who lived in census tracts with the lowest levels of health care coverage ($\geq 12\%$ of residents without health insurance coverage) were newly diagnosed at a rate 2.9 times (285%) higher than those in areas with the highest coverage levels (<4% without coverage). Additionally, this group consisted of 8.5% fewer individuals linked to care and 6.7% fewer achieving viral suppression compared to those in highest health care coverage areas.

Income Inequality (Gini Index)

Adults who lived in census tracts with the highest levels of income inequality (Gini index \geq 46%) were newly diagnosed at a rate 1.2 times (119%) higher than those in areas with the lowest inequality levels (Gini index <38%).

Median Household Income

Adults who lived in census tracts with the lowest median household incomes (< \$67,000 per year) were newly diagnosed at a rate 3.2 times (322%) higher than those in areas with highest median household incomes (\geq \$123,000 per year). Additionally, this group consisted of 10.7% fewer individuals linked to care and 8.1% fewer achieving viral suppression compared to those in highest median household income areas.

PEOPLE LIVING WITH DIAGNOSED HIV IN CALIFORNIA

From 2018 through 2022, the number of PLWDH in California increased from 136,100 to 142,772. In 2022, the prevalence rate of diagnosed HIV infection was 355.6 per 100,000 population, compared to 343.1 in 2018— an increase of 3.6% (Figure 8). This gradual increase in the number of living cases is an expected result of new diagnoses, along with effective treatments for those living with diagnosed HIV.



Figure 8. Number and Rate of People Living with Diagnosed HIV, California, 2018-2022

In 2022, MMSC, including MMSC-IDU, accounted for 72% of all living HIV cases. Heterosexual contact accounted for 15% of living HIV cases, IDU alone accounted for 6%, TGSC accounted for 2%, perinatal exposure accounted for 1%, and 5% were unknown/other risk (Figure 9).

	Living Cases			
Characteristic	#		% of Total	
Cisgender men	123,109	86%		
Cisgender women	16,864	12%		
Trans women	2,685	2%		
Trans men	90	0%		
Alternative gender identity	24	0%		
0 to 12	84	0%		
13 to 24	2,626	2%		
25 to 44	47,045	33%		
45 to 64	70,799	50%		
≥65	22,218	16%		
American Indian/Alaska Native	309	0%		
Asian	6,291	4%		
Black/African American	23,393	16%		
Latinx	58,067	41%		
Native Hawaiian/Pacific Islander	272	0%		
White	48,656	34%		
Multiple Races	5 <i>,</i> 780	4%		
Unknown	4	0%		
Transgender sexual contact (TGSC)	2,693	2%		
Male-to-male sexual contact (MMSC)	94,648	66%		
MMSCIDU	7,524	5%		
Injection drug use (IDU)	8,546	6%		
Heterosexual contact	21,465	15%		
Perinatal	741	1%		
Unknown risk/other risk	7,155	5%		
TOTAL	142,772			

Figure 9. Living HIV Ca	ses by Selected De	emographic Char	acteristics, C	alifornia,
2022				

The Continuum of HIV Care: All Persons Living with Diagnosed HIV

Of the 142,772 people living with diagnosed HIV infection in 2022, 74% were in HIV care and 65% achieved viral suppression (Figure 10). Among living cases, rates of care were low in American Indian/Alaska Native cisgender men (63%) and transgender individuals (44%). Black/African American men (69%), Native Hawaiian/Pacific Islander cisgender women (65%), and people who inject drugs (PWID; 63%) also had low rates of care (Tables 4, 5). VS rates in living cases in 2022 were low among American Indian/Alaska Natives (51%), Black/African American cisgender men (57%) and transgender individuals (58%), Native Hawaiian/Pacific Islander and American Indian/Alaska Native transgender individuals (both 44%), and persons who inject drugs (51%) (Tables 4, 5).





Table 4. Receipt of Medical Care and Viral Suppression Status Among PersonsLiving with Diagnosed HIV by Gender, Race/Ethnicity, Age Group, andRisk/Exposure Group, 2022

Persons Living with Diagnosed HIV, 2022							
		Diagnosed	In HIV Care (01/01/2022-12/31/2022)		Achieved Viral Suppress 2) (01/01/2022-12/31/202		
Characteristic		N	N	%	N	%	
Gender	Cisgender Men	123,109	90,891	74%	80,226	65%	
	Cisgender Women	16,864	12,155	72%	10,443	62%	
	Trans Women	2,685	2,052	76%	1,660	62%	
	Trans Men	90	68	76%	62	69%	
Race/Ethnicity	American Indian / Alaska Native	309	197	64%	159	51%	
	Asian	6,291	4,825	77%	4,421	70%	
	Black/African American	23,393	16,260	70%	13,594	58%	
	Latinx	58,067	41,666	72%	36,486	63%	
	Native Hawaiian / Other Pacific Islander	272	198	73%	168	62%	
	White	48,656	37,227	77%	33,356	69%	
	Multiple Races	5,780	4,812	83%	4,220	73%	
Age	0 to 12	84	72	86%	68	81%	
	13 to 24	2,626	2,128	81%	1,670	64%	
	25 to 44	47,045	34,532	73%	29,042	62%	
	45 to 64	70,799	51,977	73%	46,429	66%	
	≥65	22,218	16,477	74%	15,196	68%	
Risk/Expoure Group	TGSC	2,693	2,070	77%	1,680	62%	
	MMSC	94,648	72,263	76%	64,718	68%	
	IDU	7,524	4,758	63%	3,805	51%	
	MMSC & IDU	8,546	6,396	75%	5,314	62%	
	HRH	11,666	8,501	73%	7,457	64%	
	Perinatal	741	570	77%	467	63%	
	Non-HRH	9,799	6,828	70%	5,831	60%	

Table 5. Receipt of Medical Care and Viral Suppression Status Among Persons Living with Diagnosed HIV Infection by Gender and Race/Ethnicity, 2022 Persons Living with Diagnosed HIV, 2022

Gondor	Paco/Ethnicity		Achieved Viral
Gender	Race/Etimicity		Suppression
Cisgender Men	American Indian/Alaska Native	63%	49%
	Asian	77%	71%
	Black/African American	69%	57%
	Latinx	72%	63%
	Native Hawaiian/Other Pacific Islander	74%	65%
	White	77%	69%
	Multiple Races	84%	74%
Cisgender Women	American Indian/Alaska Native	72%	62%
	Asian	72%	65%
	Black/African American	72%	61%
	Latinx	72%	63%
	Native Hawaiian/Other Pacific Islander	65%	49%
	White	71%	60%
	Multiple Races	82%	70%
Transgender Individuals	American Indian/Alaska Native	44%	44%
	Asian	87%	77%
	Black/African American	76%	58%
	Latinx	75%	62%
	Native Hawaiian/Other Pacific Islander	78%	44%
	White	79%	68%
	Multiple Races	80%	64%

DEATHS AMONG PEOPLE LIVING WITH DIAGNOSED HIV

Data on deaths of persons with diagnosed HIV infection represent all causes of death and may or may not be related to HIV infection. From 2018 through 2022, the annual number of deaths of persons with diagnosed HIV infection in California increased from 1,824 to 2,169. In 2022, the crude death rate of persons with diagnosed HIV infection was 5.4 per 100,000 population — a 17.4% increase since 2018 (Figure 11). Death rates among people with HIV were largely stable in the 3-4 years prior to COVID-19, so the increase during 2020 and subsequent years may be due to one or more factors associated with the COVID-19 pandemic, including COVID-19 itself, reduced access to medical care and treatment, or other factors.





MMSC, including MMSC-IDU, accounted for 66% of all-cause deaths among persons with diagnosed HIV in 2022. Heterosexual contact accounted for 15% of all-cause deaths among persons with diagnosed HIV, 12% were attributed to injection drug use (IDU) alone, 2% attributed to transgender sexual contact (TGSC), and 6% were attributed to unknown/other risk (Figure 12). The average death rate among people living with diagnosed HIV is about 1.5%, with IDU categories being 2 times that rate. In 2022, the death rate among MMSCIDU (3.4%) was 2.2 times higher than the overall average; IDU (3.0%) was 1.9 times higher than the overall average.

	De	Deaths Among PLWDH	
Characteristic	#		% of Total
Cisgender men	1,850	85%	
Cisgender women	277	13%	
Trans women	40	2%	
Trans men	2	0%	
Alternative gender identity	0	0%	
0 to 12	0	0%	
13 to 24	7	0%	
25 to 44	428	20%	
45 to 64	1,036	48%	
≥65	698	32%	
American Indian/Alaska Native	5	0%	
Asian	42	2%	
Black/African American	433	20%	
Latinx	700	32%	
Native Hawaiian/Pacific Islander	1	0%	
White	852	39%	
Multiple Races	136	6%	
Unknown	0	0%	
Transgender sexual contact (TGSC)	41	2%	
Male-to-male sexual contact (MMSC)	1,163	54%	
MMSCIDU	257	12%	
Injection drug use (IDU)	253	12%	
Heterosexual contact	317	15%	
Perinatal	9	0%	
Unknown risk/other risk	129	6%	
TOTAL	2,169		

Figure 12. Deaths among people diagnosed with HIV by selected demographic characteristics, California, 2022



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HIV and Latinx California, 2022

LATINX ARE THE LARGEST RACIAL/ETHNIC GROUP IN CALIFORNIA (ABOUT 40% OF THE POPULATION). IN 2022, THEY ACCOUNTED FOR **41% of living HIV cases** and **57% of new HIV diagnoses**.

HIV and MMSC California, 2022

IN 2022, MMSC ACCOUNTED FOR 66% OF LIVING HIV CASES AND 55% OF NEW HIV DIAGNOSES.

HIV and IDU California, 2022

IN 2022, IDU ACCOUNTED FOR 5% OF LIVING HIV CASES AND 5% OF NEW HIV DIAGNOSES.

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HIV and Transgender People California, 2022

Although rates among transgender people are not available, HIV prevalence among transgender people in the US is estimated to be 9.2% overall (14.1% among trans women and 3.2% among trans men). By comparison, HIV prevalence in California is about 0.4%, which means HIV rates among transgender people are about **23 times higher**. In 2022, **98%** of transgender people who received an HIV diagnosis in California were **trans women**.

HIV and Youth California, 2022

IN 2022, YOUTH AGED 13-24 ACCOUNTED FOR 2% OF LIVING HIV CASES AND 16% OF NEW HIV DIAGNOSES.

CONCLUSION

The only way to end the HIV epidemic is by ensuring effective HIV prevention and treatment reaches all communities, especially those disproportionately affected by HIV. It is also important to consider all factors that contribute to health disparities, including structural and social factors such as racism, poverty, stigma, access to care, and education. Efforts must focus on closing disparities among the populations most impacted by HIV, especially Black/African Americans. Since Latinx are quickly becoming the largest proportion of people living with HIV, it is important to offer services that are culturally and linguistically appropriate. Both individual-level and structural interventions are necessary to reduce HIV transmission and eliminate health inequities.

ABBREVIATIONS

ACS	American Community Survey
AIDS	Acquired immunodeficiency syndrome
CD4	Clusters of differentiation 4
CDC	Centers for Disease Control and Prevention
CDPH	California Department of Public Health
HIV	Human immunodeficiency virus
HRH	High-risk heterosexual contact
IDU	Injection drug use
LTC	Linkage to care
MMSC	Male-to-male sexual contact
MMSC-IDU	Male-to-male sexual contact and injection drug use
Non-HRH	Non-high-risk heterosexual contact
OA	Office of AIDS
PLWDH	People living with diagnosed HIV
PLWH	People living with HIV
PWID	People who inject drugs
SDH	Social determinants of health
TGSC	Transgender sexual contact
VS	Viral suppression

TECHNICAL NOTES

HIV Surveillance Methodology

The information presented in this report is based on HIV surveillance data reported to the Office of AIDS (OA) through December 31, 2023, allowing for a minimum of 12 months' reporting delay. Persons are presumed to reside in California if the most recent available address is located in the state.

The term HIV infection is defined as any diagnosis of HIV infection that met the CDC surveillance case definition, regardless of the stage of disease (stage 0, 1, 2, 3 [AIDS], or unknown) at time of initial diagnosis. This report does not include estimates of the number of persons who are infected with HIV, but not yet diagnosed. Because persons test at differing times after becoming infected, the number of persons with newly diagnosed HIV infection is not necessarily representative of persons newly infected with HIV (HIV incidence).

Please use caution when interpreting data on trends for groups with fewer than 20 cases. Small fluctuations from year to year can lead to dramatic changes in rates, which may not be indicative of changes in the epidemiology of HIV in these populations.

Age: For newly diagnosed persons, the age group is based on the date of diagnosis. For persons living with HIV, the age group is based on the age at the end of the specified calendar year. For deaths, the age group is based on the age at death.

Gender: Persons were classified as being transgender if a case report form affirming their transgender status was present in HIV surveillance data by December 31, 2023. Otherwise, individuals were classified according to their sex-at-birth.

Race and ethnicity: Latinx persons can be of any race. Race/ethnicity data were collected using Asian/Native Hawaiian/Pacific Islander as a single category until 2003; therefore persons who were classified as Asian/Native Hawaiian/Pacific Islander prior to 2003 and for whom no subsequent race/ethnicity information is available are classified as Asian, because they cannot be disaggregated. Although California Government Code Section 8310.5 requires CDPH to tabulate information by expanded ethnicities for each major Asian and Pacific Islander group, the data shown here are not disaggregated into those groups in order to maintain the confidentiality of these persons.

Transmission category: Transmission category is the term for classifying cases based on a person's reported HIV risk factors. The classification is based on the CDC algorithm and results from selecting the single risk factor most likely to have been responsible for transmission, even if multiple risk factors were reported. The CDC hierarchy of risk factors, from most likely to lead to HIV transmission, to least likely, is as follows: male-to-male sexual contact (MMSC) and injection drug use (IDU), MMSC alone, IDU alone, receipt of clotting factor blood product for treatment of hemophilia or other chronic coagulation disorder, and high-risk-heterosexual (HRH) contact. Non-HRH contact was added by OA, and is last in the hierarchy. Gay, bisexual, and other men who have sex with men are in the transmission category of MMSC. Transgender persons who report sexual contact are placed in the transmission category of sexual contact, regardless of IDU. Persons who inject drugs are in the transmission category IDU. Persons whose transmission category is classified as HRH contact are persons who reported engaging in heterosexual intercourse with a person of the opposite sex-at-birth, and that partner was known to be HIV positive or engaged in an activity that put them at high risk for HIV (i.e., MMSC, IDU). The transmission category heterosexual contact non-HRH includes persons with no other identified risk, who reported engaging in heterosexual intercourse with a person of the opposite sex of their sex-at-birth. The heterosexual categories exclude men who report ever having had sexual contact with both men and women- these persons are classified as MMSC. Perinatal includes persons who were exposed immediately before or during birth, or by breastfeeding. Cases of HIV infection reported without a risk factor listed in the hierarchy of transmission categories are classified as "unknown risk." Other includes exposure to blood transfusion or blood products, receiving a transplant, and other unspecified risks.

Deaths: Persons living with diagnosed HIV infection are presumed to be alive, unless a date of death is available in the California HIV surveillance data system. Deaths from any cause were included.

Rates: Rates per 100,000 persons are based on population estimates from the 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, Jan 2021).

Rates for Transmission Categories: Traditionally, disease rates take the form of "X number of cases per 100,000" of the population group specified. However, for some populations, such as MMSC, it can be difficult to accurately estimate population denominators. For that reason, rates are not given for some groups and only the number of cases is included.

In Care: Newly diagnosed persons who had at least one CD4, viral load, or HIV-1 genotype test within one month of diagnosis were linked to HIV care in one month. For living cases, persons who had at least one CD4, viral load, or HIV-1 genotype test during the calendar year were considered to be in care.

Viral Suppression: Newly diagnosed persons whose most recent HIV viral load test result within 6 months of diagnosis was < 200 copies/ml were virally suppressed. For persons living with HIV, persons whose most recent HIV viral load test result during the calendar year was < 200 copies/ml were considered to be virally suppressed.

Social Determinants of Health Methodology

Social Determinants of Health (SDH) selection was made based on CDC recommendations, extensive literature review, and the availability of 2022 SDH-related data. The selected SDH include a given region's median annual household income,

poverty, education, access to health insurance, and income inequality (via the Gini index). The SDH variables were obtained from the American Community Survey's (ACS) 2018-2022 five-year average data, due to its timeliness and use of 2020 census tracts for estimating SDH and geographic linkage to HIV incidence. The information utilized in this report displays the relationship between SDH and persons newly diagnosed with HIV in 2022, specifically adults whose residential address information at time of diagnosis was sufficient for linkage to a specific census tract in California. Incidence is determined from known adults (\geq 18 years old) diagnosed with HIV in California during 2022, whose residence information at time of diagnosis is sufficient to geographically link to a particular 2020 census tract. The second variable explored is linkage to HIV medical care within one month of diagnosis based on data for adults with HIV infection diagnosed during 2022 in California that reported complete CD4 and viral load test results to OA. VS within 6 months of HIV diagnosis measured for adults whose infection was diagnosed during 2022 and who resided in California at time of diagnosis is the last outcome variable analyzed in the section.

Census tracts are grouped approximately into quartiles based on the values of each SDH variable, wherein 2022 HIV diagnoses linked to each are totaled, along with associated linkage to care and viral suppression outcomes. Total persons residing within each group of tracts are based on ACS 2018-2022 estimates, from which incidence rates (per 100k) are calculated. Caution should be taken when comparing both incidence counts and rates of these tables to other tables included in this profile, as they may not be similarly restricted to adults. It should also be noted that SDH data may not be available for certain census tracts, and this availability varies between SDH measures present in the ACS. Consequently, totals in Table 3 differ between the five SDH variables, and totals are provided for each.

When examined with outcomes of HIV incidence, LTC, and VS across all California counties, SDH characterize all residents within a given region, while outcomes are among residents who are specifically PLWH. The five SDH included in the analyses are: level of education (% of adult residents without possession of a high school diploma), median annual household income, level of insurance coverage (% of adult residents without health insurance), level of poverty (% of adult residents with annual incomes below the federal poverty level), and level of income inequality (Gini index, %).