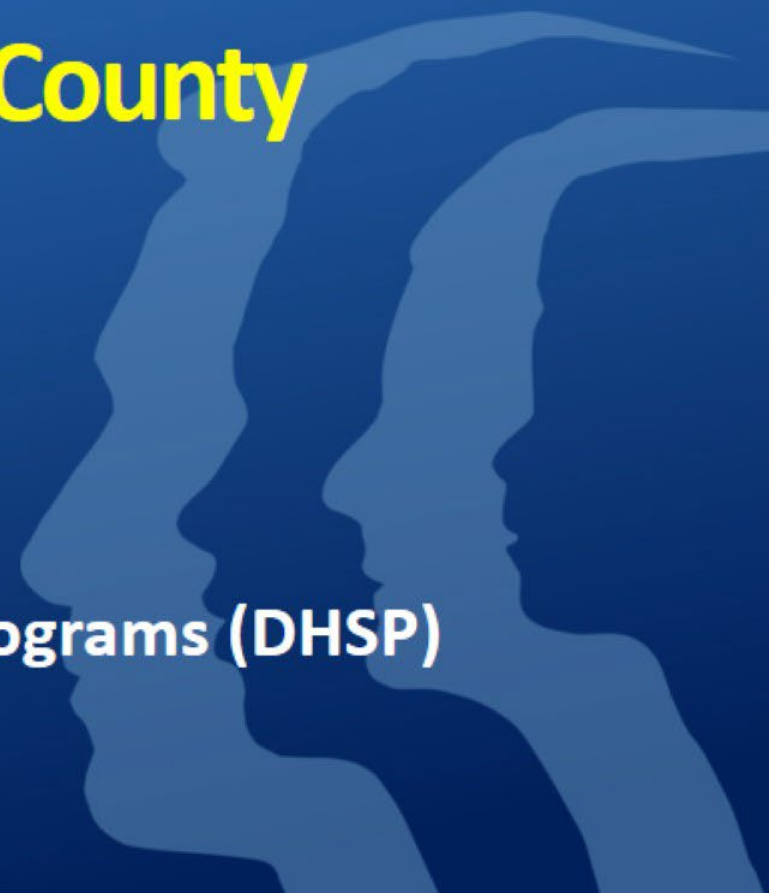




Epidemiology of HIV in Los Angeles County

Division of HIV and STD Programs (DHSP)





Ending the HIV Epidemic in Los Angeles County





Tracking achievements in national targets for the EHE initiative, 2021-2022

	EHE 2025 targets	EHE 2030 targets	LAC results
Estimated number of new infections ¹	380	150	1,400 [900-1,900] (2021)
Number of new HIV diagnoses ²	450	180	1,518 (2021)
Estimated percentage of PLWH with knowledge of HIV-positive status ¹	95%	95%	89% [86% - 91%] (2021)
Percentage of PLWDH linked to HIV care within 1 month of diagnosis ²	95%	95%	76% (2021)
Percentage of PLWDH with viral suppression ²	95%	95%	61% (2022)
Percentage of HIV-negative persons with indications for PrEP having been prescribed PrEP ³	50%	50%	53% (2021)

¹Using the CD4-based model developed by the Centers for Disease Control and Prevention, modified for use by Los Angeles County.

²Using Los Angeles County HIV surveillance data in the CDC Enhanced HIV/AIDS Reporting system (eHARS). Viral suppression: numerator includes PLWDH whose last VL test in 2022 was suppressed (HIV-1 RNA < 200 copies/mL); denominator includes PLWDH diagnosed through 2021 and living in LAC at year-end 2022 based on most recent residence.

³Using Los Angeles County data from the HIV case and laboratory surveillance systems, National HIV Behavioral Surveillance system, STD clinic data, online Apps survey, COE program data, and AHEAD dashboard.

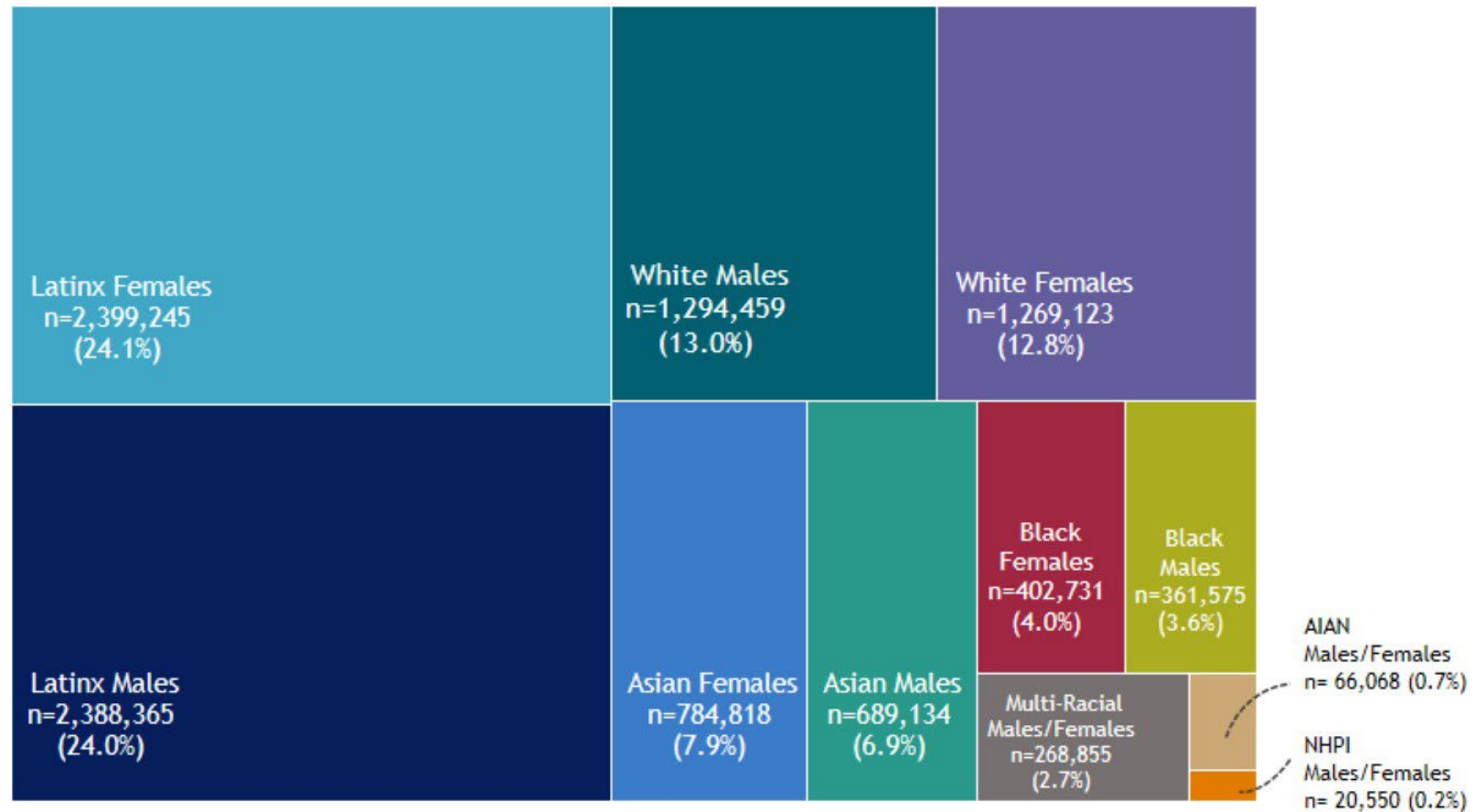


HIV Epidemic Monitoring





Distribution of sex¹ and race/ethnicity² among Los Angeles County residents in 2021 (N=9,944,923)



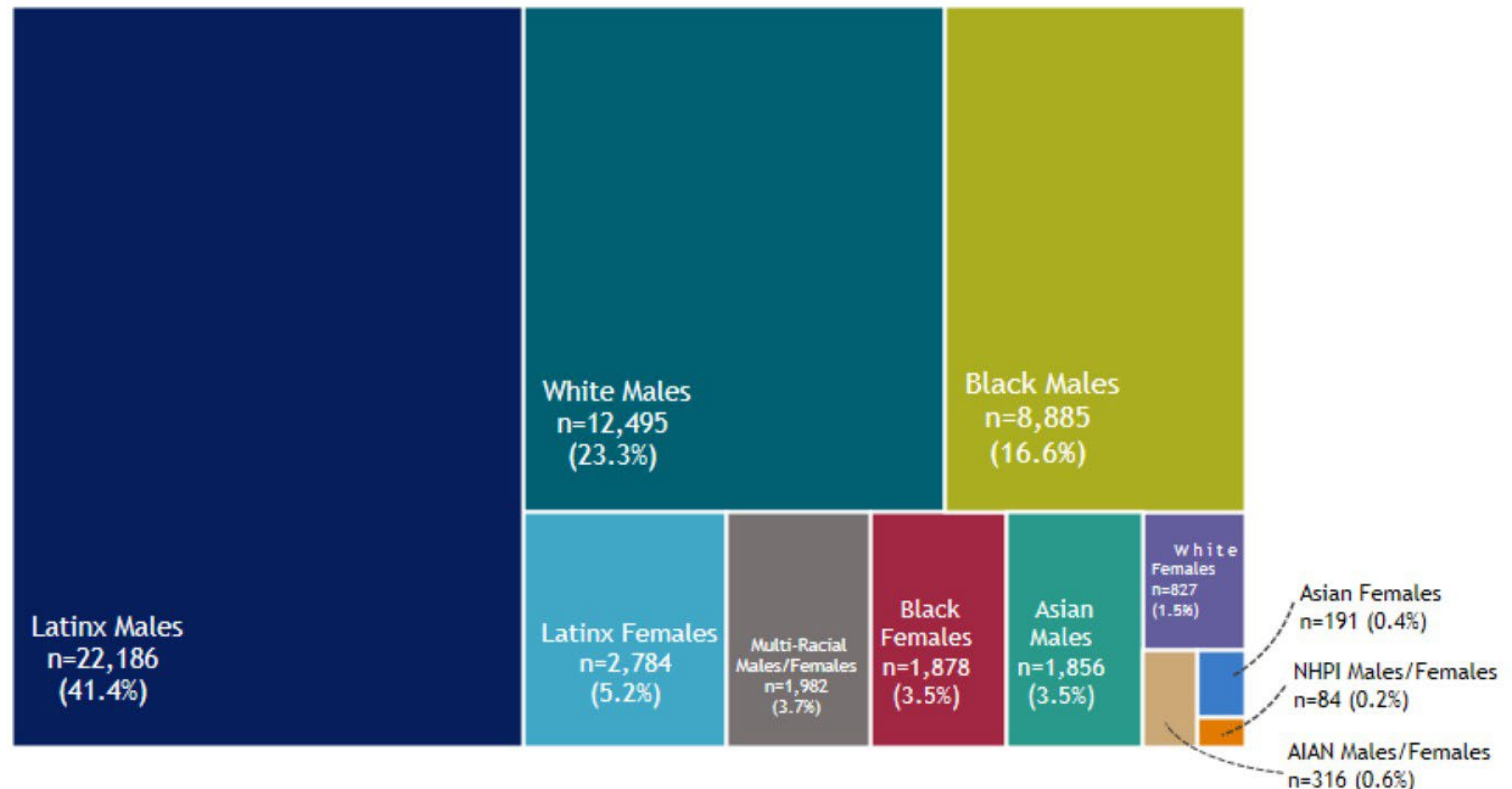
Abbreviations: AI/AN = American Indian/Alaskan Native; NHPI = Native Hawaiian and Pacific Islander

¹ Population estimates are not currently available for transgender persons, therefore male and female categories are based on sex at birth.

² Based on adjusted Population Estimates for 2021 prepared by County of Los Angeles, Internal Services Department, Information Technology Service, Urban Research-GIS Section. Original estimates were adjusted to reflect AIAN alone and in combination with other race using U.S. Census Bureau American Community Survey PUMS 1-year estimates for 2021. Adjusted estimates were produced by LAC DPH OHAE, Vital Records and Demography Unit.



Distribution of sex¹ and race/ethnicity among persons living with diagnosed HIV at year-end 2022, Los Angeles County (N=53,599)



Abbreviations: AI/AN = American Indian/Alaskan Native; NHPI = Native Hawaiian and Pacific Islander

¹ Population estimates are not currently available for transgender persons, therefore male and female categories are based on sex at birth.

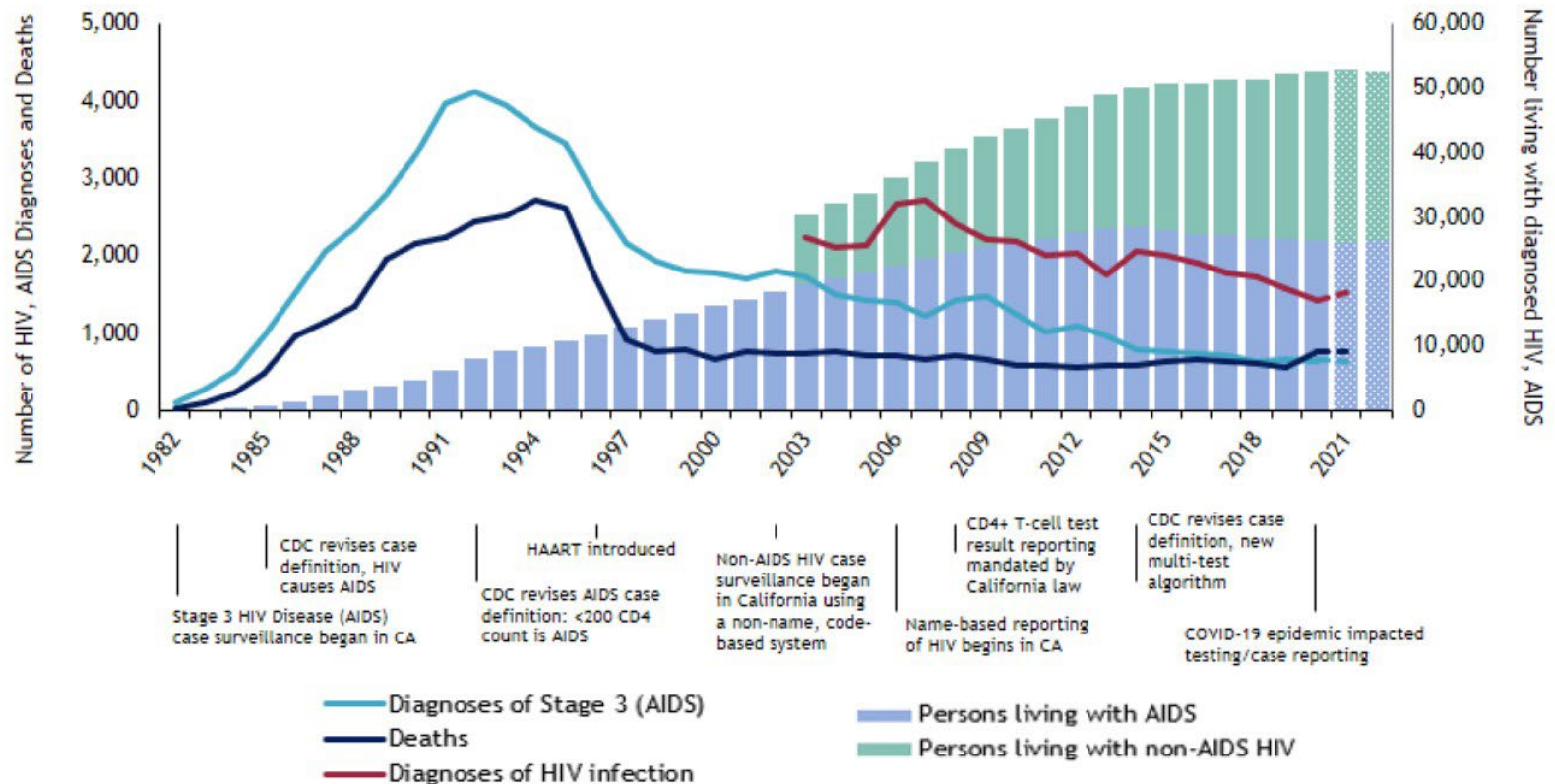


History of HIV disease surveillance in Los Angeles County (LAC)

- 1982** Stage 3 HIV Disease (AIDS) case surveillance began in LAC
- 2002** Non-AIDS HIV case surveillance began in California using a non-name, code-based system
- 2006** California law revised to require reporting of HIV cases and laboratory test results indicative of HIV infection by name
- 2008** CD4+ T-cell test result reporting mandated by California law
- 2011** California law changed to allow use of HIV surveillance data for public health purposes – such as linking newly infected persons to care
- 2013** Use of new HIV testing algorithm for California laboratories was approved by a State Emergency Public Health Regulation to allow for better identification of acute HIV
- 2016** California law required reporting of acute HIV infection within one day of diagnosis



History of the HIV epidemic: HIV diagnoses, AIDS diagnoses, persons living with AIDS and non-AIDS HIV, and deaths among persons living with diagnosed HIV, Los Angeles County 1982-2022^{1,2,3,4}



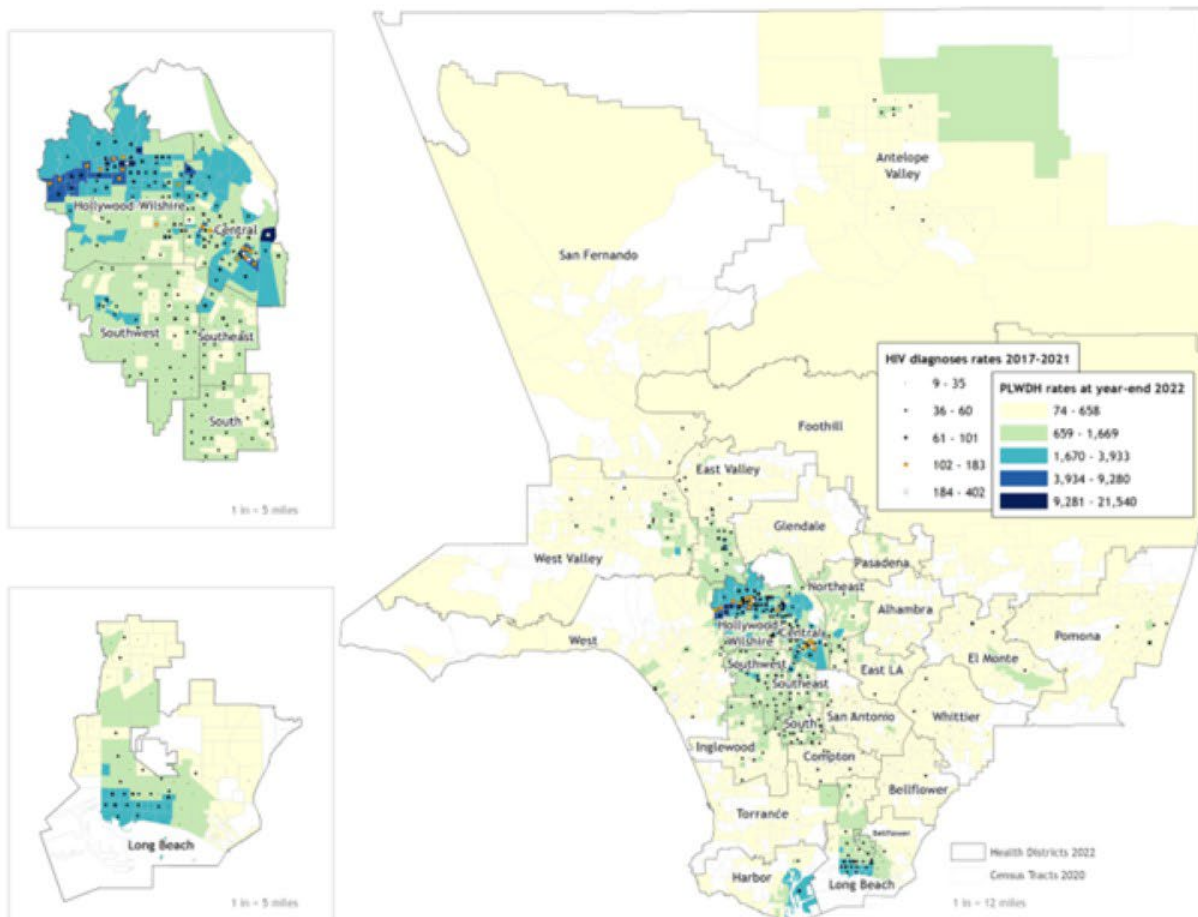
¹ Includes new diagnoses of HIV infection regardless of the disease stage at time of diagnosis.

² Persons living with non-AIDS HIV and AIDS in Los Angeles County (LAC) are based on last reported address at the end of each calendar year.

³ Includes persons whose residence at death was in LAC or whose most recent known address before death was in LAC, when residence at death is missing.

⁴ 2021 data for diagnoses of HIV/AIDS and deaths and 2021/2022 data for persons living with non-AIDS HIV and AIDS are provisional as indicated by the dashed line and patterned bar. 2022 diagnoses of HIV/AIDS and deaths are underreported/unreliable due to significant reporting delay, and therefore are not shown.

Geographic distribution¹ of rates per 100,000 population for PLWDH aged ≥13 years at year-end 2022 and persons newly diagnosed with HIV in 2017-2021, LAC



Within LAC, the highest density of new HIV diagnoses occurred in the central and southern regions. Among all 26 Health Districts, the Hollywood-Wilshire, Central, and Long Beach Health Districts were identified as the three epicenters for HIV, reporting the highest rates of new HIV diagnoses in 2017-2021 and persons living with diagnosed HIV at year-end 2022. We have zoomed in on the three epicenters with the highest concentrations of new HIV diagnoses and PLWDH.

¹ Census tract information for new diagnoses is based on projected coordinates of residential address at diagnosis, the census tract information for PLWDH is assigned based on projected coordinates of the most recently reported residential addresses. Persons missing valid street address information were aggregated to the census tract level based on the corresponding ZIP Code using the HUD ZIP-TRACT file. PLWDH and diagnoses rates are based on provisional population estimates 2021 and are per 100,000 population, whereby rates for census tracts with < 5 numerator or < 500 population are suppressed. Source: HIV Surveillance data as of December 31, 2022; U.S. Department of Housing and Urban Development (HUD), Office of Policy Development and Research (PD&R). HUD United States Postal Service ZIP Code Crosswalk Files. https://www.huduser.gov/portal/datasets/usps_crosswalk.html; U.S. Census Bureau, Geography Division. 2021. 2021 TIGER/Line Shapefiles: Census Tracts. 2021 TIGER/Line Shapefiles (machine-readable data files). Accessed 12/28/2021. <https://www.census.gov/caj-bin/geo/shapefiles/index.php?year=2021&layergroup=Census+Tracts>. County of Los Angeles, Department of Public Health. 2022. Health Districts 2022 (view). County of Los Angeles, California, Enterprise GIS Repository. Accessed 03/21/2023. <https://egis-lacounty.hub.arcgis.com/datasets/health-districts-2022-view/>; July 1, 2021 Population Estimates (Provisional), prepared by Hedderson Demographic Services for Los Angeles County Internal Services Department, released October 2022. SPA, HD and SD geographies integrated in by Population Health Assessment Team, Office of Health Assessment and Epidemiology.

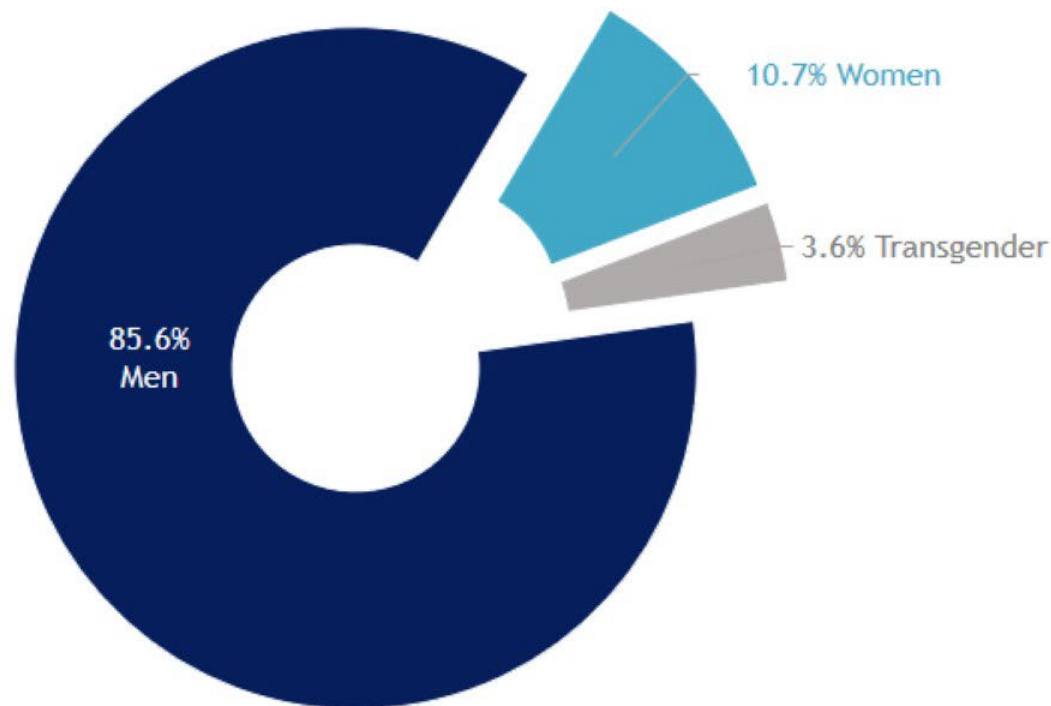


Trend in HIV diagnosis

- This section presents information among persons newly diagnosed with HIV in LAC.
- Trends are presented from 2006 when name-based HIV reporting began in California through year-end 2021.
- Due to reporting delays, the 2021 HIV diagnosis data are provisional as indicated by dashed lines or patterned bars.



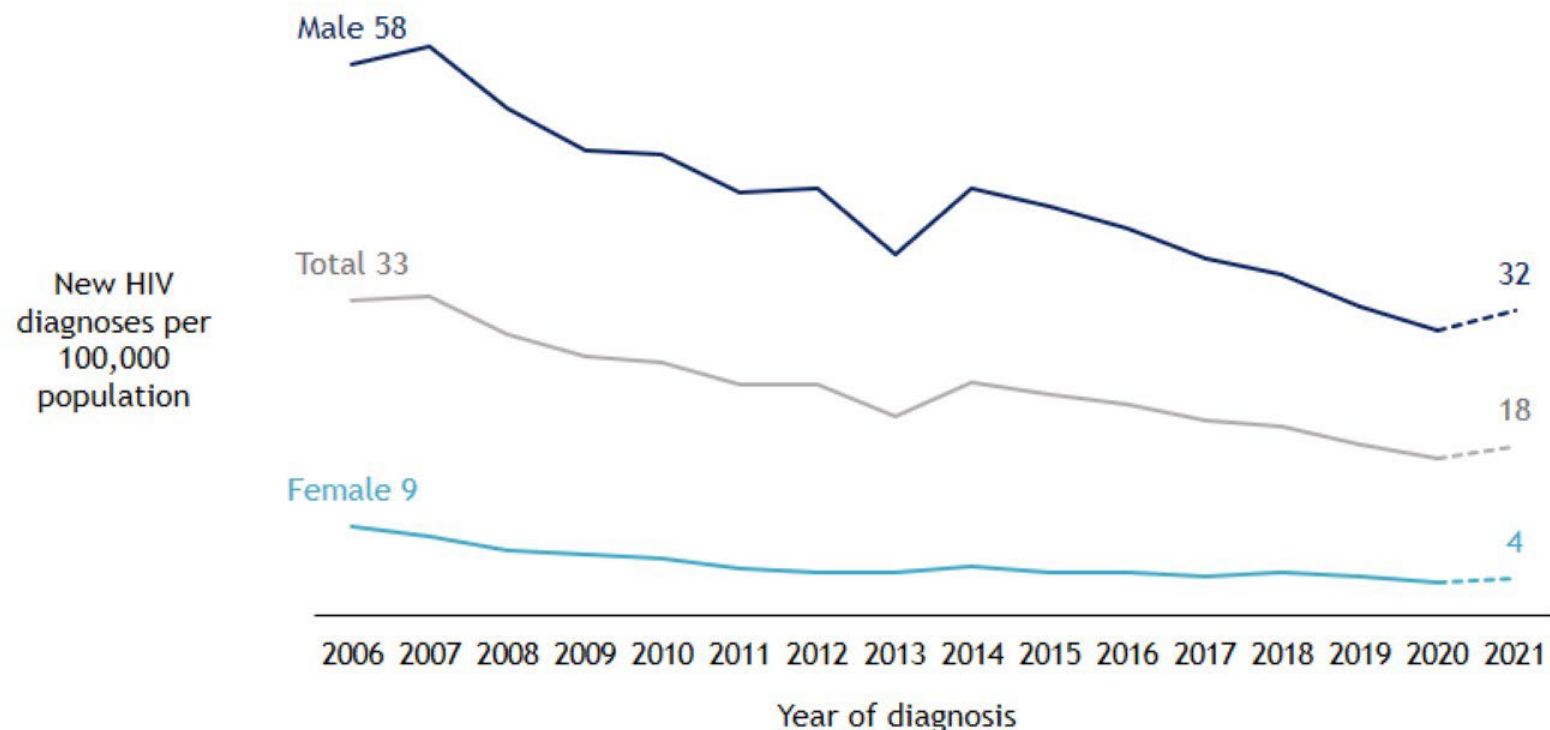
New HIV diagnoses by gender among persons aged ≥ 13 years, LAC 2021



Note: Among the 56 transgender persons newly diagnosed with HIV in 2021, most identified as transgender women. Since transgender reporting relies on accurate gender classification from laboratories and health care providers it is likely to be underreported.



HIV diagnoses rates by sex¹ among persons aged ≥ 13 years, LAC 2006-2021²

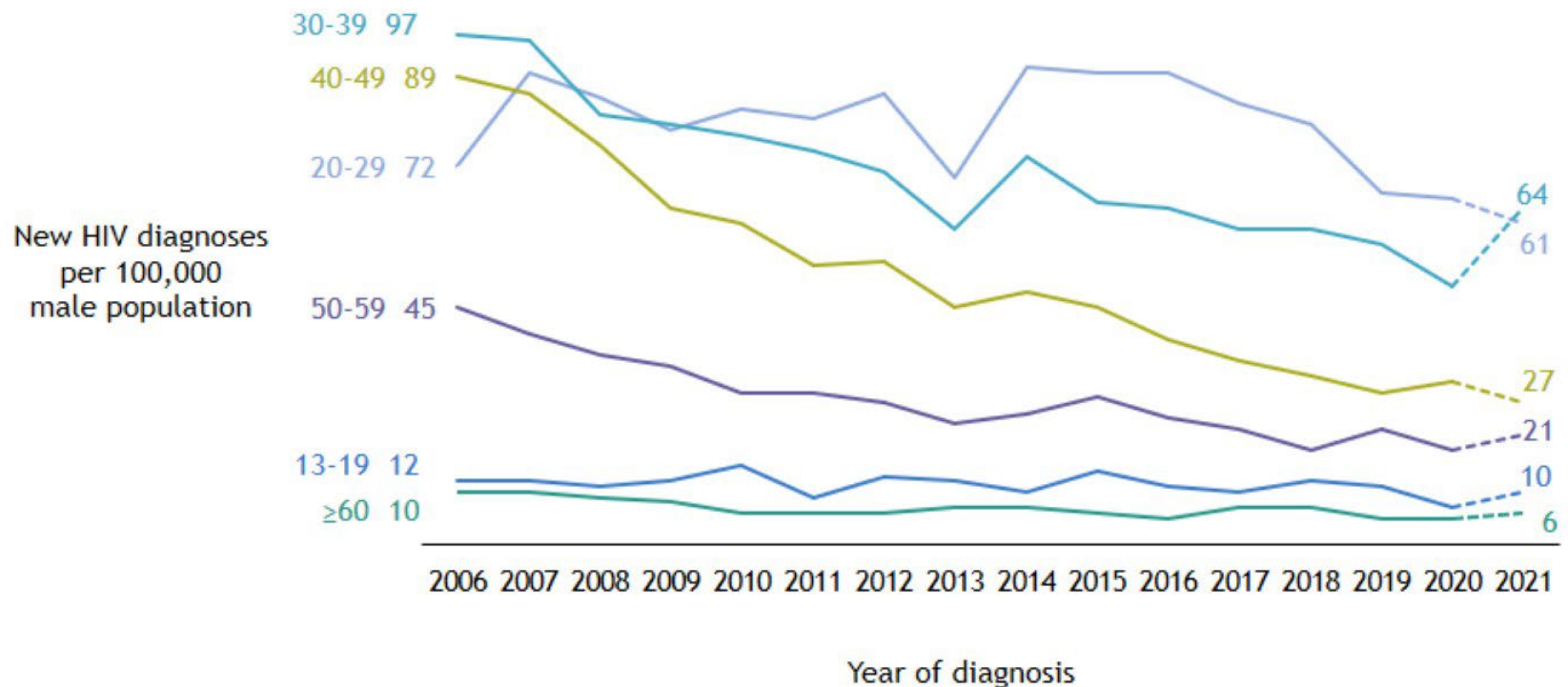


¹Rates are presented by sex at birth due to the unavailability of population size estimates in LAC by gender categories.

²Due to reporting delay, 2021 HIV diagnosis data are provisional as indicated by the dashed line.



HIV diagnoses rates among males¹ aged ≥ 13 years by age group, LAC 2006-2021²

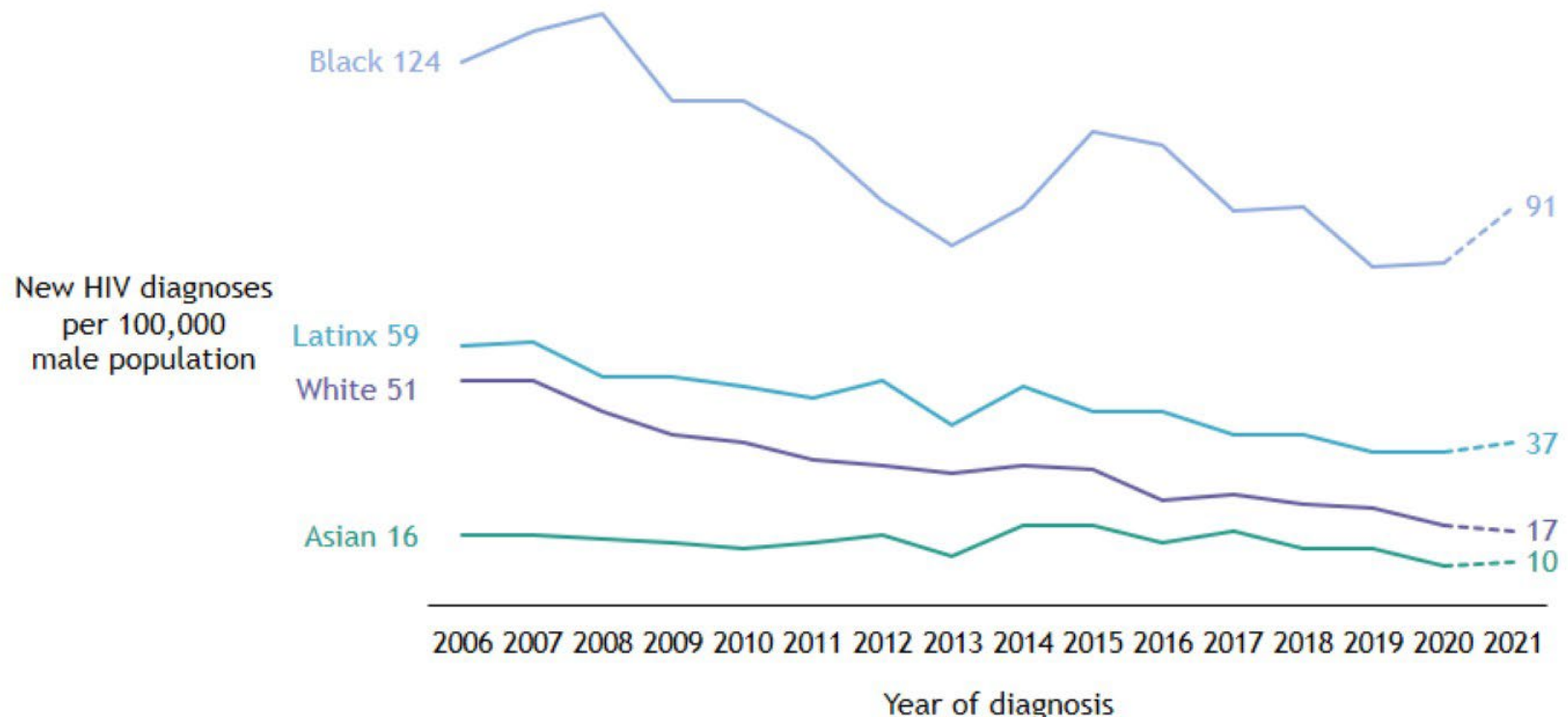


¹Based on sex at birth.

²Due to reporting delay, 2021 HIV diagnosis data are provisional as indicated by the dashed line.



HIV diagnoses rates among males¹ aged ≥ 13 years by race/ethnicity,² LAC 2006-2021³



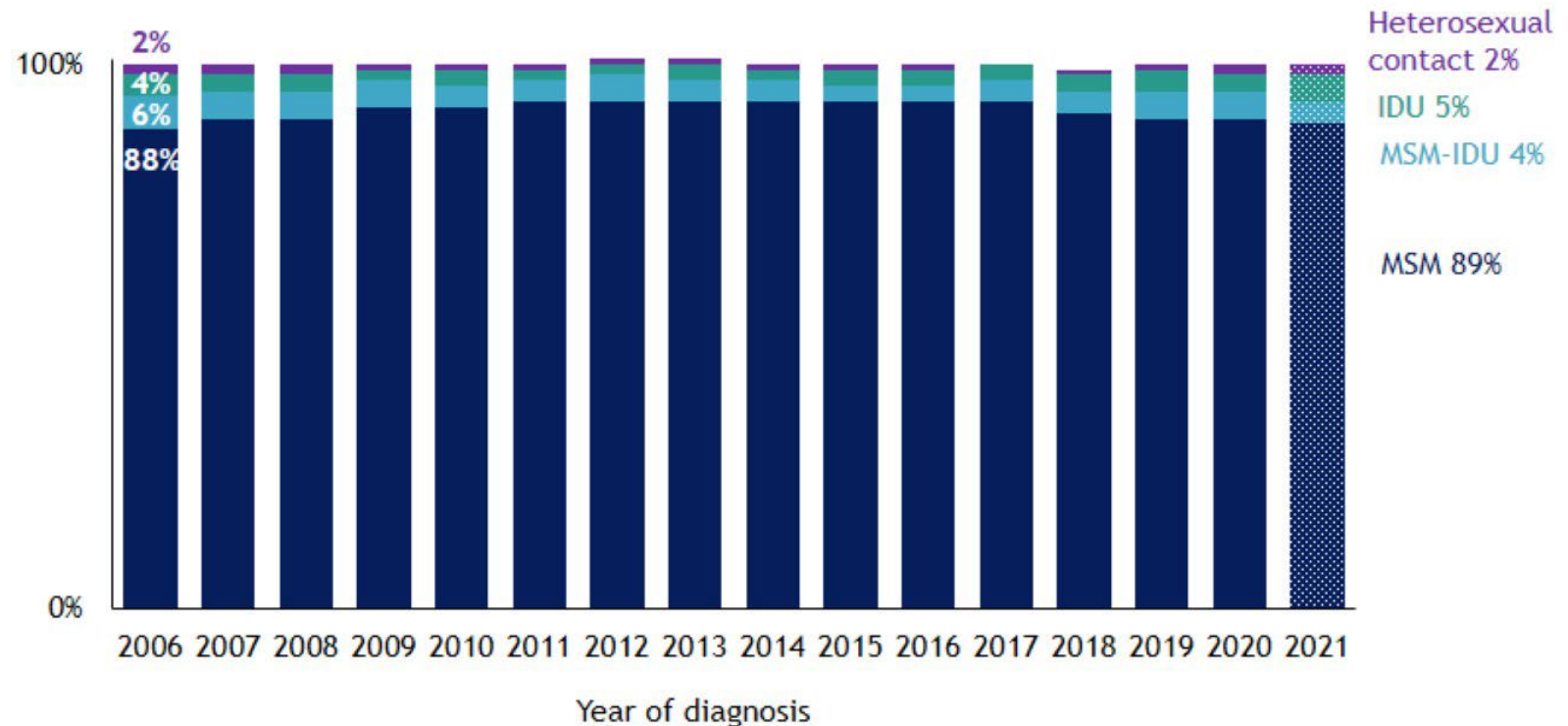
¹Based on sex at birth.

²Native Hawaiian and Pacific Islanders (NHPI) and American Indians and Alaska Natives (AIAN) were not included in the analysis due to small numbers, while persons of multiple race/ethnicities were not included due to lack of denominator data to calculate rates. In 2021, NHPI, AIAN and multi-racial persons represented 0.2%, 0.7%, and 1.3% of males newly diagnosed with HIV, respectively.

³Due to reporting delay, 2021 HIV diagnosis data are provisional as indicated by the dashed line.



Transmission risk¹ among males² newly diagnosed with HIV, LAC 2006-2021³



Abbreviations: IDU = injection drug use; MSM = men who have sex with men

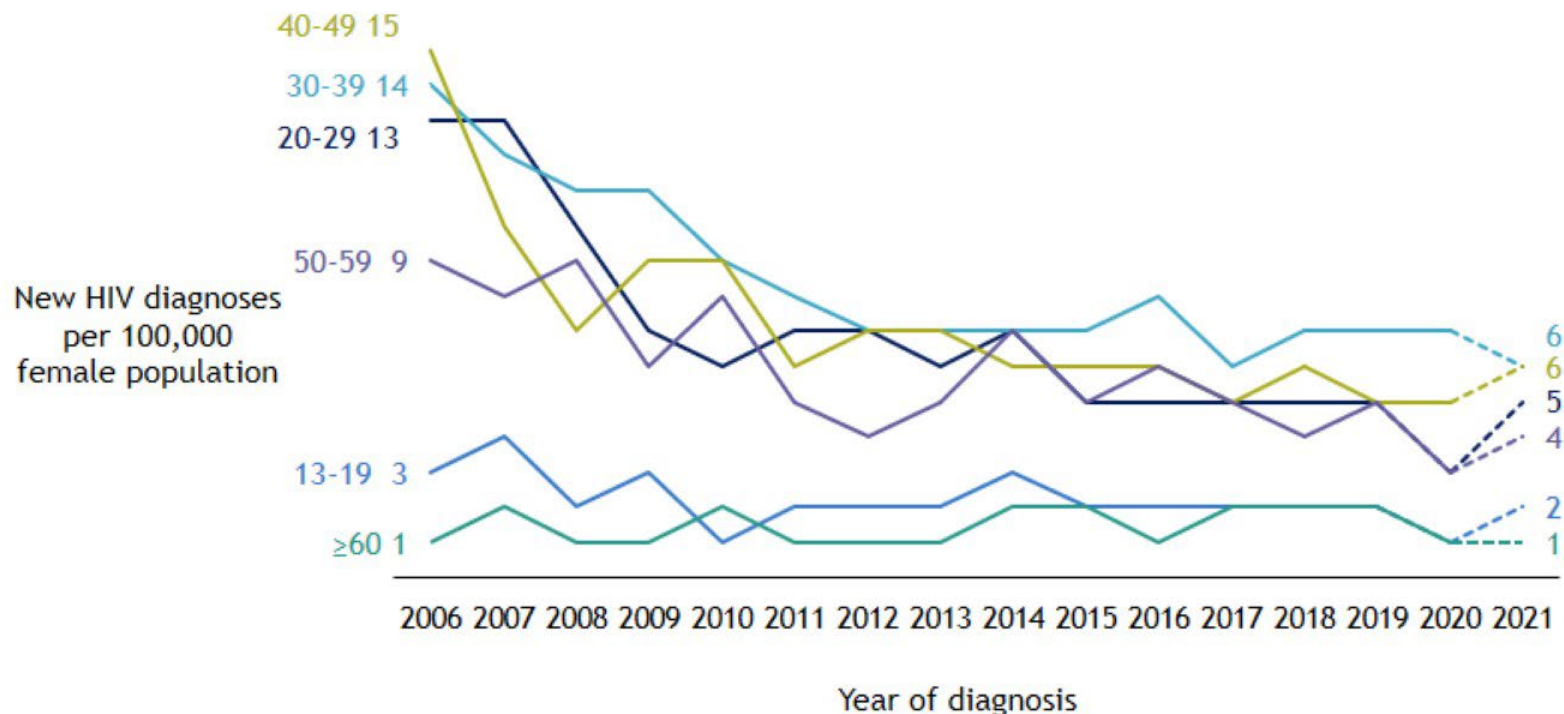
¹A diagnosis of HIV is counted only once in the hierarchy of transmission categories. Persons with more than one reported risk factor for HIV are classified in the transmission category listed first in the hierarchy. The exception is men who had sexual contact with other men and injected drugs; this group makes up a separate transmission category. Not presented in the chart are less than 1% other risks, which include perinatal exposure, hemophilia, coagulation disorder, blood transfusion, and risk factor not reported/identified, due to small numbers. Persons without an identified risk factor were assigned a risk factor using CDC-recommended multiple imputation methods.

²Based on sex at birth.

³Due to reporting delay, 2021 HIV diagnosis data are provisional as indicated by the patterned bar.



HIV diagnoses rates among females¹ aged ≥ 13 years by age group, LAC 2006-2021²

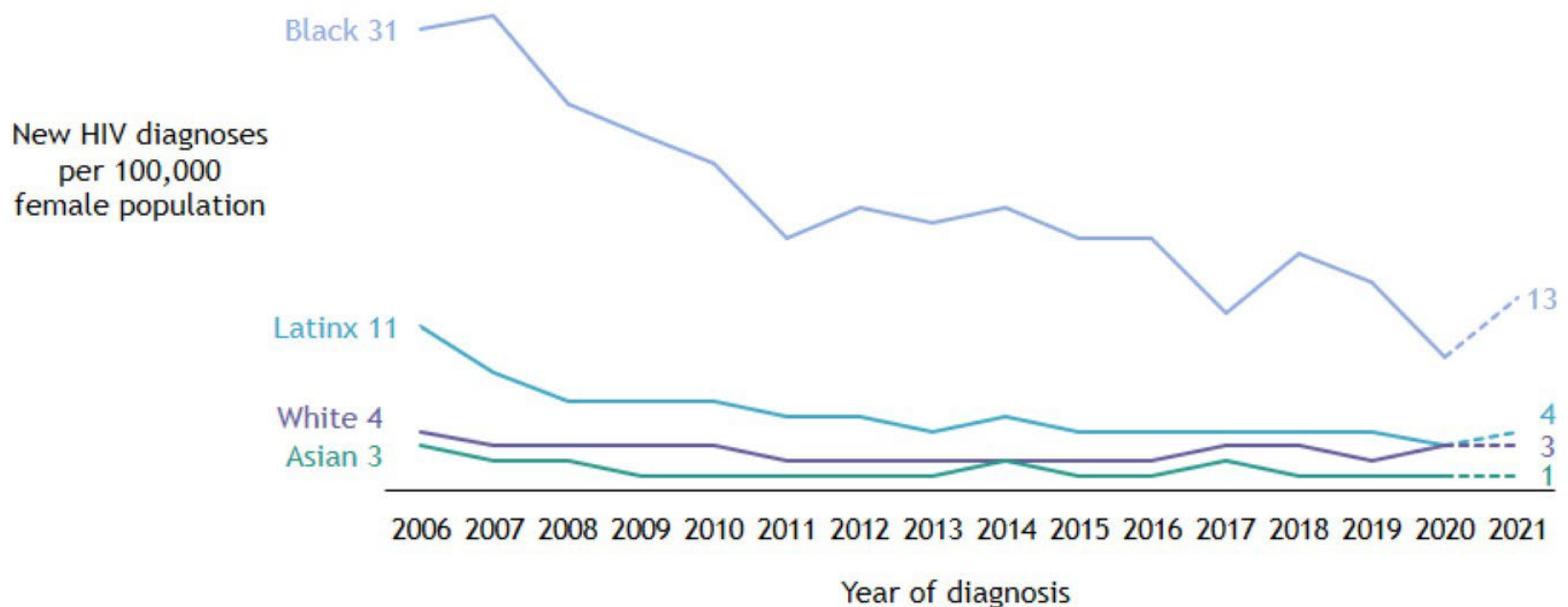


¹Based on sex at birth.

²Due to reporting delay, 2021 HIV diagnosis data are provisional as indicated by the dashed line.



HIV diagnoses rates among females¹ aged ≥ 13 years by race/ethnicity,² LAC 2006-2021³



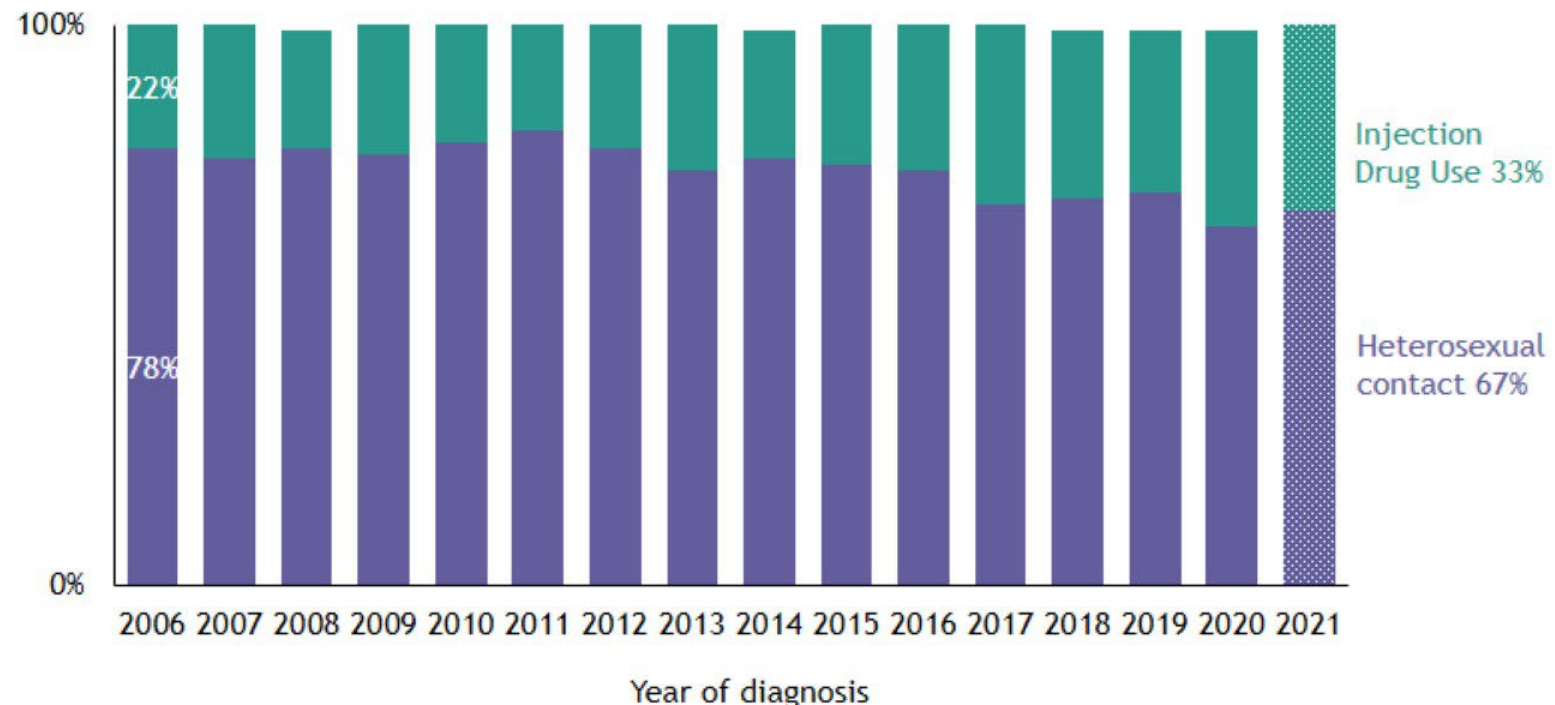
¹Based on sex at birth.

²Native Hawaiian and Pacific Islanders (NHPI) and American Indians and Alaska Natives (AIAN) were not included in the analysis due to small numbers, while persons of multiple race/ethnicities were not included due to lack of denominator data to calculate rates. In 2021, NHPI and AIAN represented 0% of females newly diagnosed with HIV, while multi-racial persons represented 1.2% of females newly diagnosed with HIV.

³Due to reporting delay, 2021 HIV diagnosis data are provisional as indicated by the dashed line.



Transmission risk¹ among females² newly diagnosed with HIV, LAC 2006-2021³



Abbreviation: IDU = injection drug use

¹Not presented in the chart are less than 1% other risks, which include perinatal, hemophilia, coagulation disorder, blood transfusion, and risk factor not reported/identified, due to small numbers. Persons without an identified risk factor were assigned a risk factor using CDC-recommended multiple imputation methods.

²Based on sex at birth.

³Due to reporting delay, 2021 HIV diagnosis data are provisional as indicated by the patterned bar.



HIV incidence and undiagnosed HIV

- Several indicators important for planning, monitoring, and evaluating the local HIV response are not directly measured through HIV surveillance, including:
 - the number of persons who acquired HIV each year (i.e., new HIV infections), regardless of whether they received an HIV diagnosis and
 - the number of people living with HIV (PLWH) who do not yet know they have HIV (i.e., undiagnosed HIV).
- An estimate of these indicators can be computed using a mathematical model developed by the US Centers for Disease Control and Prevention.
 - the model produces estimates (not true values) of these indicators, given that the exact numbers of PLWH and persons newly infected with HIV cannot be directly measured each year.

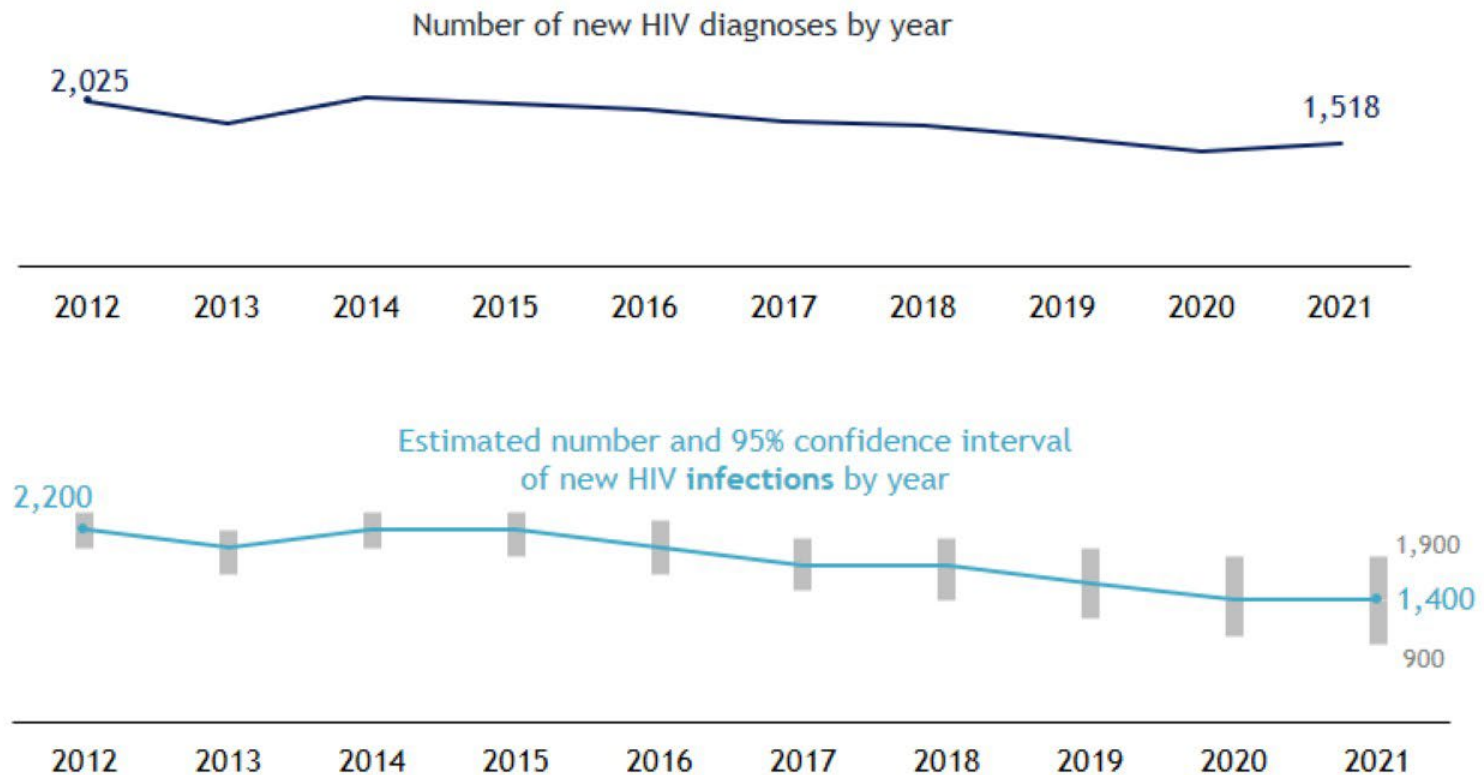


HIV incidence and undiagnosed HIV - continued

- The estimates are presented with their 95% confidence intervals to show the range of values likely to contain the true value.
- Estimates are also subject to change over time due to updates in surveillance data as well as methodological changes in CDC's model.
- Estimates in 2020-2021 may be particularly unreliable due to disruptions in HIV testing and reporting during the COVID-19 pandemic.
- In this section, we present estimates of newly acquired HIV (new HIV infection) and undiagnosed HIV among PLWH in LAC based on CDC's model.



Number of persons newly diagnosed with HIV compared with the estimated number of persons with new HIV infection among PLWH aged ≥ 13 years, LAC 2012-2021^{1,2}

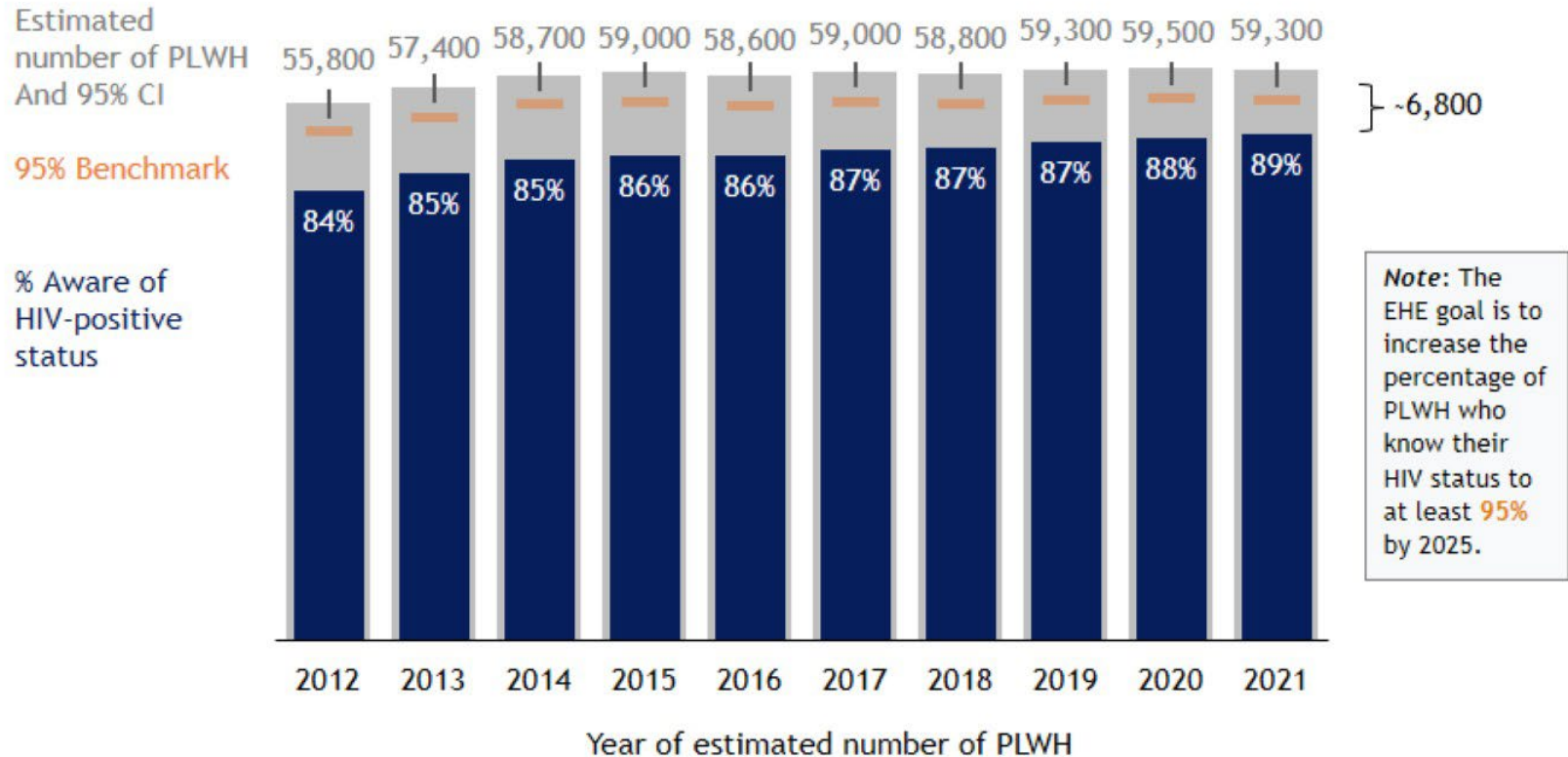


Abbreviation: PLWH = persons living with HIV

¹ Estimates based on the CD4-Based Model v4.1 developed by CDC, which derived by using HIV surveillance and CD4 data for persons aged ≥ 13 years at diagnosis. Estimates rounded to the nearest 100 for estimates of $>1,000$ and to the nearest 10 for estimates of $\leq 1,000$ to reflect model uncertainty.



Awareness of HIV-positive serostatus among PLWH aged ≥ 13 years, LAC 2012-2021^{1,2}



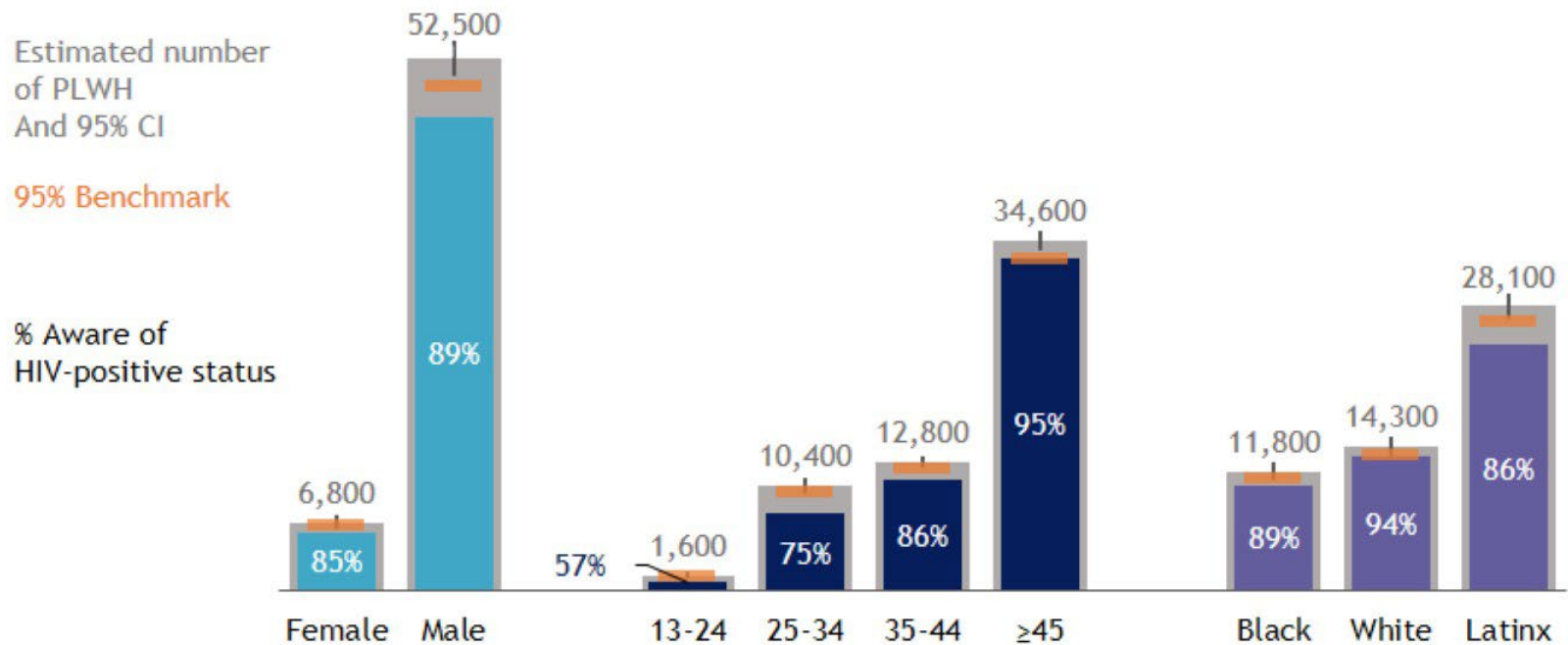
Abbreviation: PLWH = persons living with HIV

¹Estimates based on the CD4-Based Model v4.1 developed by CDC, which derived by using HIV surveillance and CD4 data for persons aged ≥ 13 years at diagnosis. Estimates rounded to the nearest 100 for estimates of >1,000 and to the nearest 10 for estimates of ≤ 1,000 to reflect model uncertainty.

²The numbers above the bars indicate the total estimated number of PLWH. The colored inner bars indicate the percentage of PLWH aware of HIV serostatus.



Awareness of HIV-positive serostatus among PLWH aged ≥ 13 years by sex at birth, age group, and race/ethnicity, LAC 2021^{1,2,3}



Abbreviation: PLWH = persons living with HIV

¹Estimates based on the CD4-Based Model v4.1 developed by CDC, which derived by using HIV surveillance and CD4 data for persons aged ≥ 13 years at diagnosis. Estimates rounded to the nearest 100 for estimates of >1,000 and to the nearest 10 for estimates of ≤ 1,000 to reflect model uncertainty.

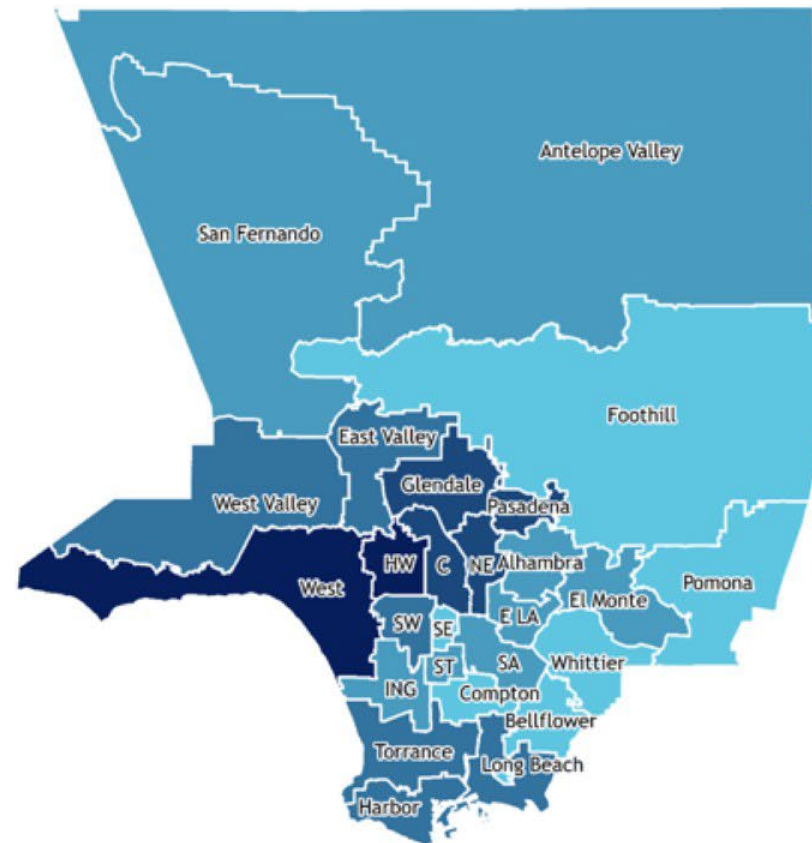
²The numbers above the bars indicate the total estimated number of PLWH. The colored inner bars indicate the percentage of PLWH aware of HIV serostatus.

³Asians, Native Hawaiian and Pacific Islanders, American Indians and Alaska Natives, and persons of multiple races/ethnicities were not included in the analysis due to small numbers.



Percentage of PLWH aged ≥ 13 years who were aware of their HIV-positive status by Health District, LAC 2021^{1,2}

Hollywood-Wilshire (HW)	94.0%
West	92.2%
Northeast (NE)	91.6%
Central (C)	90.4%
Pasadena	89.8%
Glendale	89.6%
Harbor	89.3%
Southwest (SW)	89.1%
Long Beach	89.0%
Torrance	89.0%
East Valley	88.7%
West Valley	88.3%
San Fernando	86.8%
Antelope Valley	86.6%
Alhambra	86.0%
Inglewood (ING)	85.6%
San Antonio (SA)	85.4%
East LA (E LA)	85.0%
El Monte	85.0%
South (ST)	85.0%
Foothill	84.0%
Bellflower	83.6%
Southeast (SE)	83.0%
Compton	82.9%
Pomona	82.9%
Whittier	82.4%



¹Based on HIV surveillance data as of December 31, 2022, for persons aged ≥ 13 years at year-end 2021.

²Estimates based on the CD4-Based Model v4.1 developed by CDC, which derived by using HIV surveillance and CD4 data for persons aged ≥ 13 years at diagnosis. Estimates rounded to the nearest 100 for estimates of $>1,000$ and to the nearest 10 for estimates of $\leq 1,000$ to reflect model uncertainty.



Stage of HIV disease at diagnosis

- Information on stage of HIV disease at the time of diagnosis provides direct insight into the timeliness of a HIV diagnosis.
- The HIV surveillance case definition of HIV has four stages: Stage 0, 1, 2, and 3. Stage 0 HIV disease indicates early infection which includes acute HIV (infection occurred within 60 days of HIV diagnosis) and early but not acute HIV (infection occurred within 61-180 days of HIV diagnosis).
- This section presents information on stage of HIV disease at the time of diagnosis.



HIV disease staging for surveillance purposes

HIV disease stage	Acute HIV status	Staging criteria
Stage 0	Acute HIV	Based on the difference in days between the first HIV-positive test result and last documented HIV-negative test result. ¹ If the difference falls within 60 days, HIV is classified as stage 0 disease with acute HIV.
	Not Acute HIV or Unknown	Based on the difference in days between the first HIV-positive test result and last documented HIV-negative test result. ¹ If the difference falls between 61 and 180 days, HIV is classified stage 0 disease with “not acute HIV” or “unknown if acute HIV”.
Stage 1	N/A	Based on first CD4 test result within 90 days of HIV diagnosis. If $CD4 \geq 500$ cells/ μ L, HIV is classified as Stage 1 disease.
Stage 2	N/A	Based on first CD4 test result within 90 days of HIV diagnosis. If CD4 is between 200-499 cells/ μ L, HIV is classified as Stage 2 disease.
Stage 3	N/A	Based on either first CD4 test result or a diagnosis of an opportunistic illness within 90 days of HIV diagnosis. If $CD4 < 200$ cells/ μ L, HIV is classified as Stage 3 disease.
Unknown	N/A	Based on first CD4 test result within 90 days of HIV diagnosis. If there is no CD4 test result within this timeframe, HIV is classified as unknown stage.

¹The date of the last HIV-negative test is based on a laboratory result, or client’s self-report of last HIV-negative test date when laboratory information is not available.



HIV disease stage among persons aged ≥ 13 years newly diagnosed with HIV, LAC 2021

	New HIV Diagnoses	Stage 0				Stage 1	Stage 2	Stage 3	Unknown				
		Acute HIV		Not Acute HIV					N	%	N	%	
		N	%	N	%								
Total	1,518	128	8%	85	6%	309	20%	454	30%	293	19%	249	16%
Gender													
Man	1,300	115	9%	70	5%	258	20%	393	30%	262	20%	202	16%
Woman	162	10	6%	10	6%	38	23%	44	27%	26	16%	34	21%
Transgender	56	<5		5		13	23%	17	30%	5	9%	13	23%
Race/Ethnicity													
White	242	24	10%	7	3%	74	31%	64	26%	36	15%	37	15%
Black	350	28	8%	21	6%	60	17%	104	30%	61	17%	76	22%
Latinx	803	76	9%	42	5%	152	19%	250	31%	164	20%	119	15%
Asian	71	<5		<5		13	18%	20	28%	24	34%	7	10%
Multi-racial	20	<5		<5		<5		<5		<5		<5	
Age at Diagnosis													
13-19	55	12	22%	<5		10	18%	14	25%	6	11%	11	20%
20-29	472	45	10%	42	9%	95	20%	152	32%	55	12%	83	18%
30-39	525	39	7%	27	5%	118	22%	168	32%	97	18%	76	14%
40-49	222	16	7%	8	4%	44	20%	60	27%	58	26%	36	16%
50-59	170	11	6%	6	4%	33	19%	43	25%	46	27%	31	18%
60+	74	5	7%	<5		9	12%	17	23%	31	42%	12	16%
Transmission Category													
MSM	1,206	106	9%	73	6%	239	20%	372	31%	226	19%	191	16%
IDU	119	8	7%	<5		24	20%	29	24%	28	24%	28	24%
MSM/IDU	52	5	10%	<5		16	31%	15	29%	8	15%	6	12%
Heterosexual	133	9	7%	7	5%	30	23%	36	27%	32	24%	19	14%

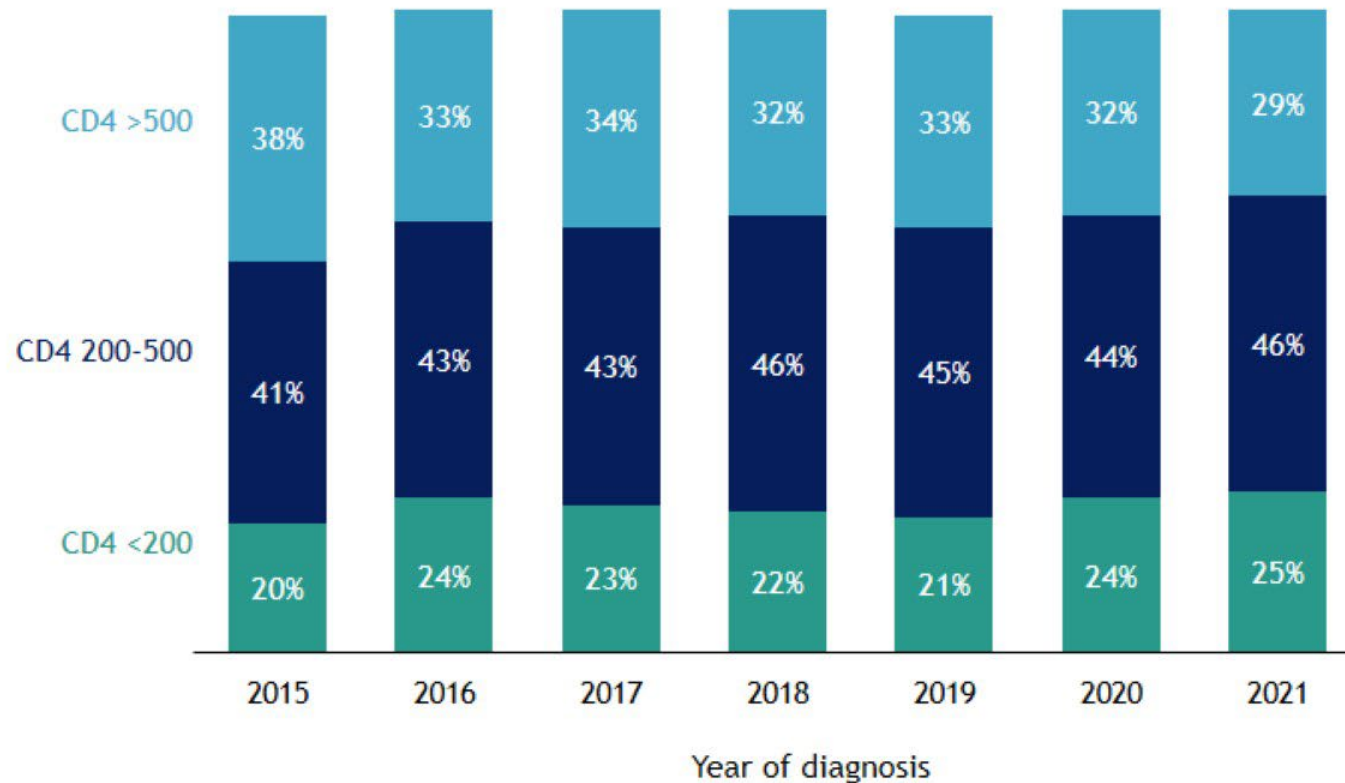


Monitoring trends in CD4 counts at diagnosis

- One approach for evaluating the timeliness of HIV diagnosis is based on baseline CD4+ T-cell counts within 1 month of HIV diagnosis.
- Early disease is defined as CD4 > 500 cells/ μ L within 1 month of HIV diagnosis, and late-stage disease is defined as CD4 < 200 cells/ μ L within 1 month of diagnosis.



CD4+ T-cell count within 1 month of HIV diagnosis, LAC 2015-2021¹



¹Based on first CD4 test within 1 month of HIV diagnosis. Among persons who were 13 years of age or older and were newly diagnosed with HIV between 2015-2021, 50% had a CD4 test within this period. Sum of percentages in 2015 and 2019 do not add to 100% due to rounding.



Molecular HIV surveillance, transmitted drug resistance, and cluster detection

- Federal guidelines for the care and treatment of PLWDH recommend HIV viral genotype testing at initiation of HIV care to determine whether an individual's HIV strain is resistant to certain drugs.
- The genotype testing, which results in a genetic sequence report reflecting an individual's HIV viral strain, is reported to Public Health along with other HIV laboratory and clinical test results.
- Through a comparison of the viral genotype reports of PLWDH in the local area, it can be determined if there are multiple people with a highly similar HIV strain.

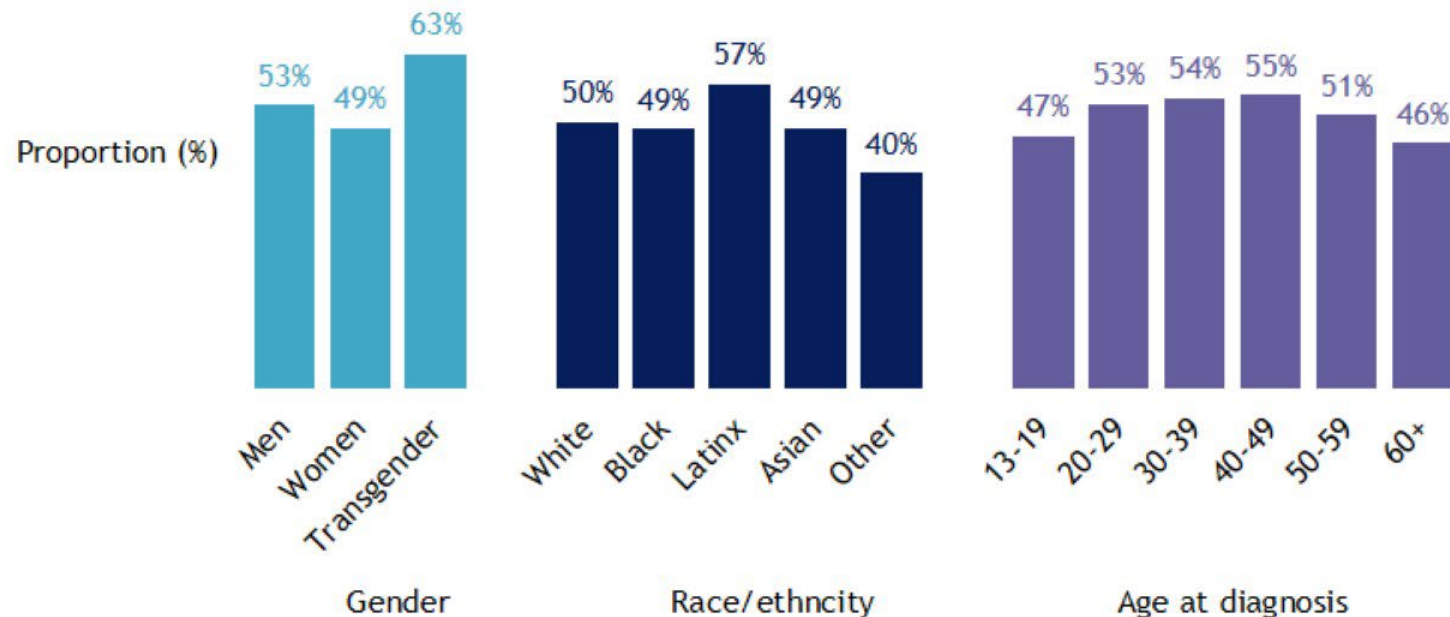


Molecular HIV surveillance, transmitted drug resistance, and cluster detection - continued

- Because HIV's genetic sequence constantly evolves, people whose viral strains are highly similar are likely to be in the same social HIV transmission network (i.e., transmission cluster); it is important to note that this information cannot be used to determine either direct transmission or the direction of transmission between any two individuals.
- Transmission clusters with numerous individuals newly diagnosed with HIV may indicate that recent and rapid HIV transmission is occurring among a group of individuals.
- When a cluster is identified, it can inform the delivery of services and interventions to minimize transmission in a geographic area and prioritize efforts to those who need them the most.



Proportion of new HIV diagnoses¹ with a genotype resistance test within 90 days of HIV diagnosis,² LAC 2021

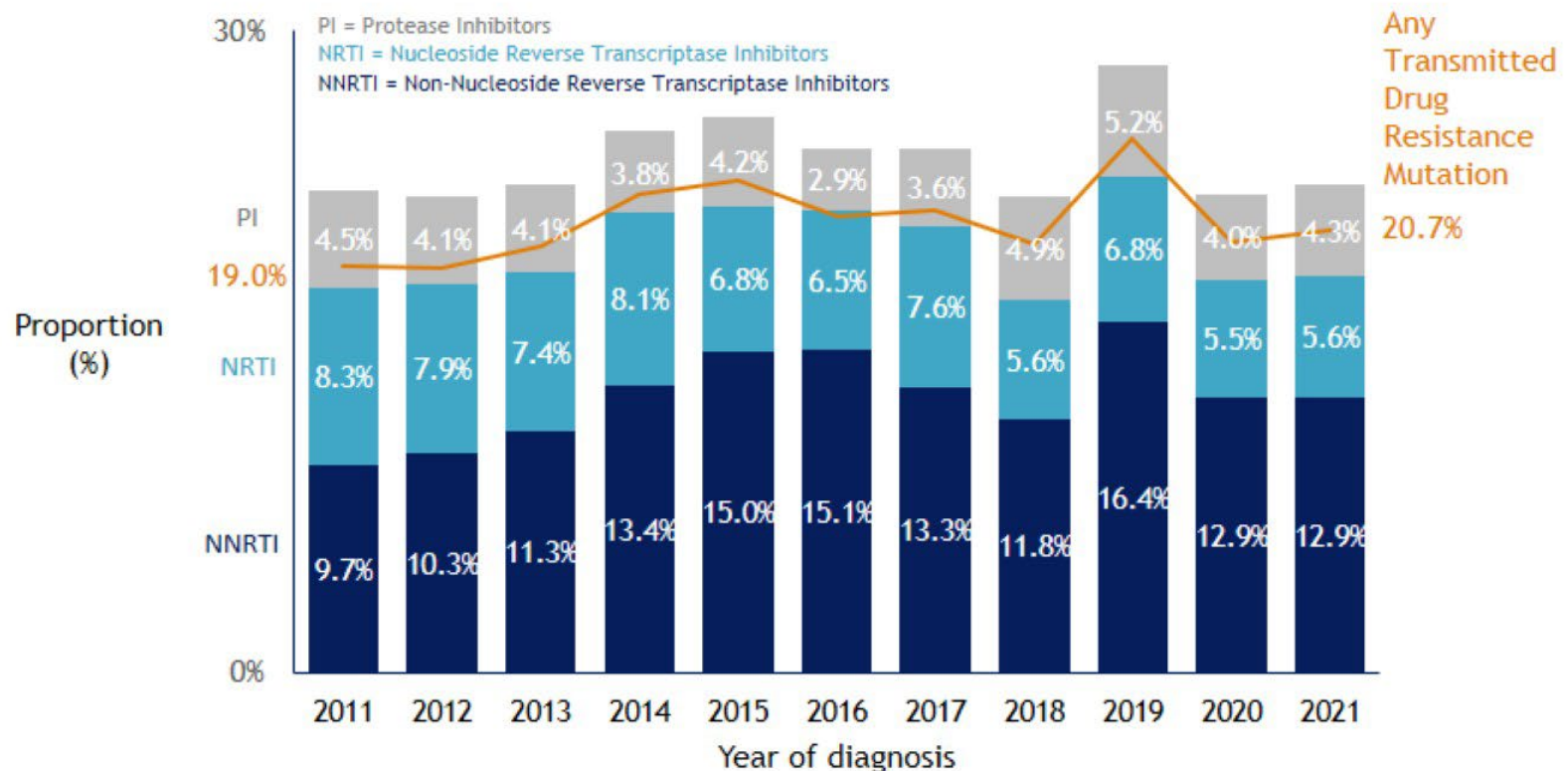


¹Persons aged ≥ 13 years newly diagnosed with HIV in 2021. Data are provisional due to reporting delay.

²Race/ethnicity categories with fewer than 10 diagnoses (Native Hawaiian and Other Pacific Islander and American Indian/Alaska Native) and Multi-race persons were included in Other.



Proportion of transmitted drug resistance (TDR) by drug class¹ among persons aged ≥ 13 years newly diagnosed with HIV with an eligible sequence,² LAC 2011-2021

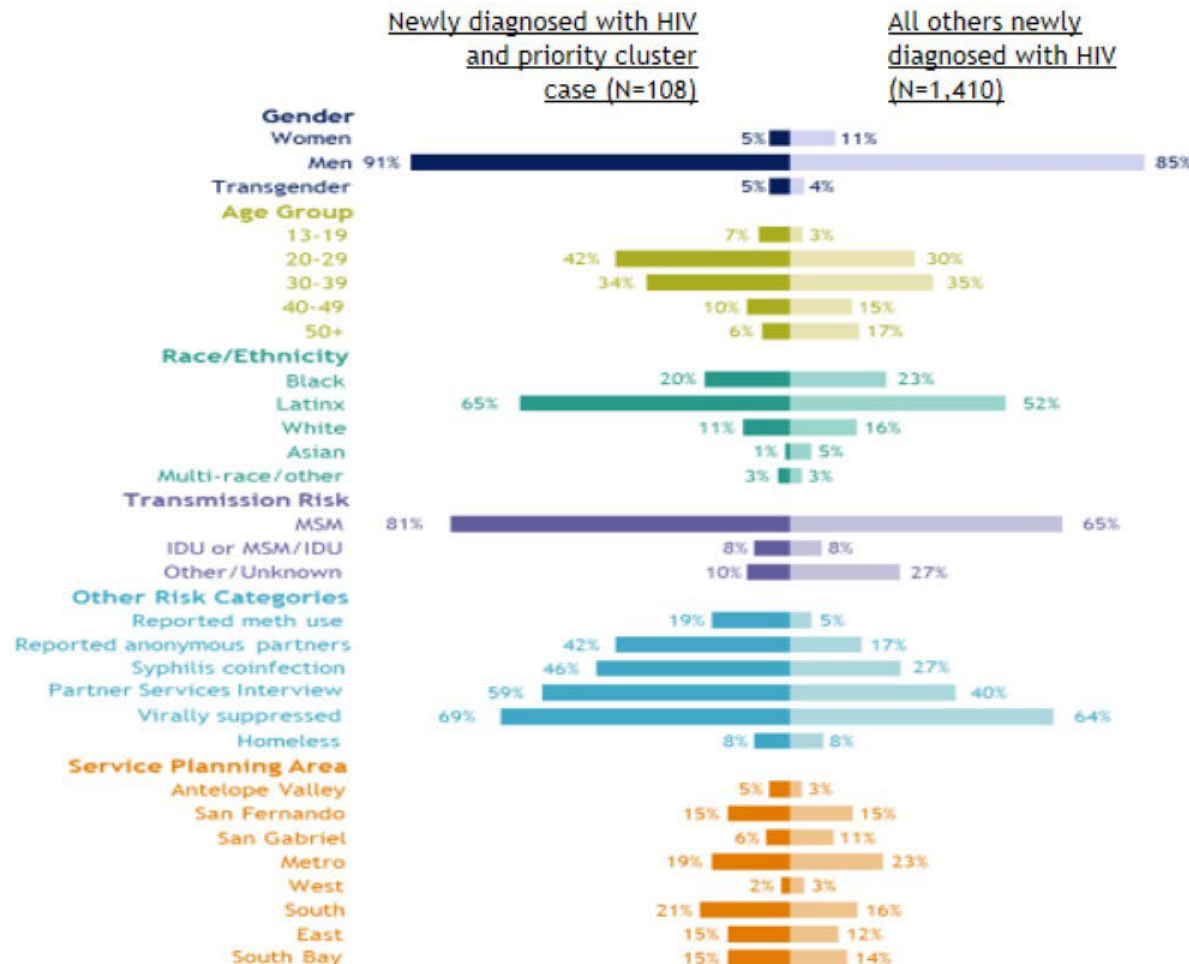


¹NNRTI= Non-nucleoside reverse transcriptase inhibitors; NRTI= Nucleoside reverse transcriptase inhibitor; PI= Protease inhibitor; TDRM= Transmitted drug resistance mutation; Resistance can include multi-drug classes and individuals may have been represented in more than one category.

²An eligible sequence is a genotypic resistance test which has met the following criteria: obtained within 3 months of HIV diagnosis and has a sequence length that is ≥ 100 bases. Cases who have a prior history of anti-retroviral use are excluded as eligible.



Priority¹ cluster diagnoses compared to non-cluster diagnoses among those newly diagnosed with HIV by selected characteristics,² LAC 2021



¹Priority transmission clusters are identified by HIV-TRACE and have at least five people diagnosed within the prior 12 months at a 0.5% genetic distance threshold.

²Age groups, race/ethnicity groups, and transmission risk categories with fewer than five persons are suppressed.

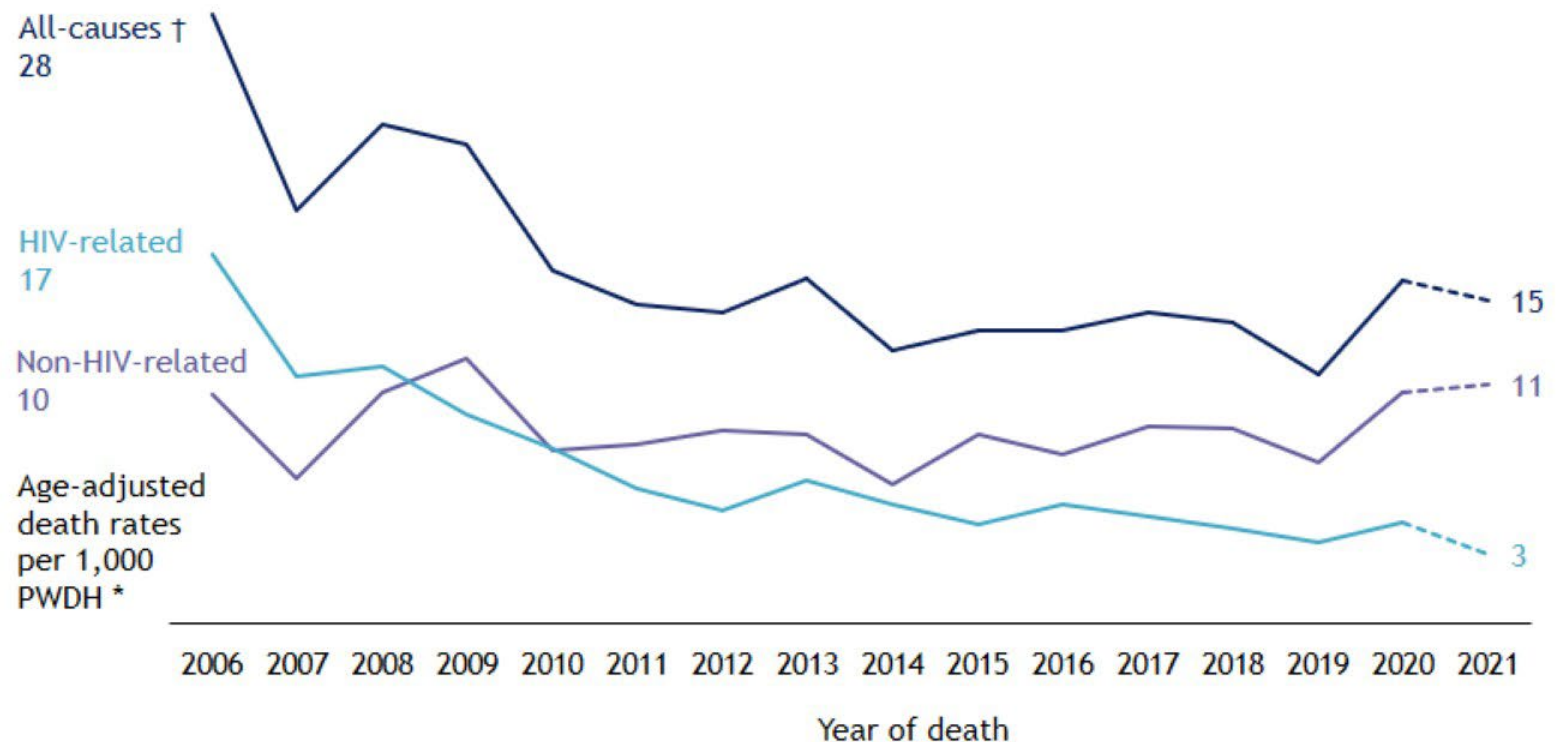


HIV Mortality

- Ultimately the most important goal in the public health response to HIV is for persons living with HIV to live long and healthy lives.
- Rapid access to and consistent use of high-quality services across the HIV care continuum is fundamental to achieving this goal.
- This section presents trends in cause of death and death rates among PLWDH.



Age-adjusted death rates among persons aged ≥ 13 years living with diagnosed HIV, by HIV-related and non-HIV related cause of death, LAC 2006-2021^{1,2}



¹ Age-adjusted to the U.S. 2000 standard population.

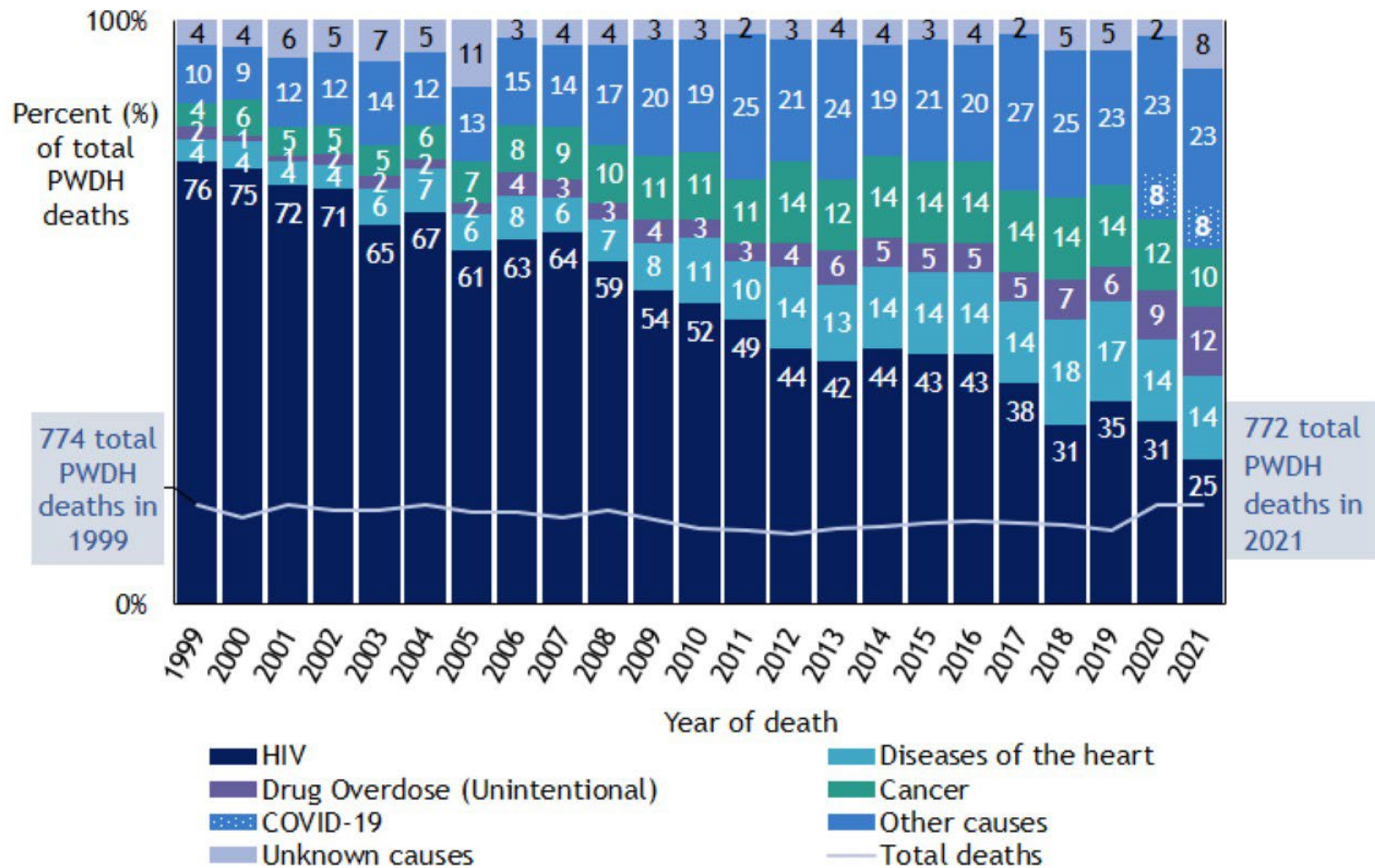
² 2021 death rate data among PWDH are provisional due to reporting delay as indicated by the dashed line.

* For each calendar year in which the deaths occurred, PWDH includes persons living with HIV infection at the beginning of the calendar year plus persons newly diagnosed in the calendar year.

† All-causes death rates include persons with unknown causes of death (2.5 % of all deaths during this period (2006-2021)).



Trends in underlying causes of death among persons aged ≥ 13 years with diagnosed HIV, LAC 1999-2021¹



¹Annual percentages may not add to 100% due to rounding error.

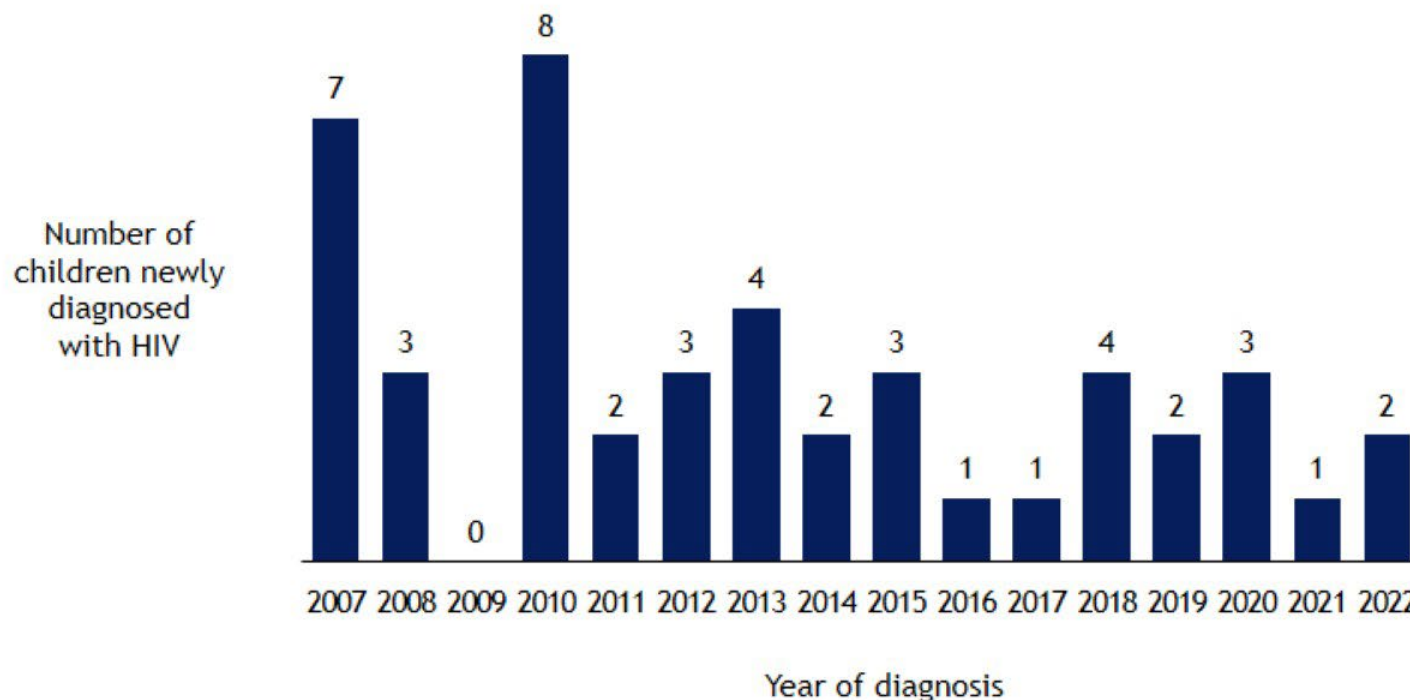


Vulnerable Populations





Number of children aged < 13 years newly diagnosed with HIV, LAC 2007-2022¹

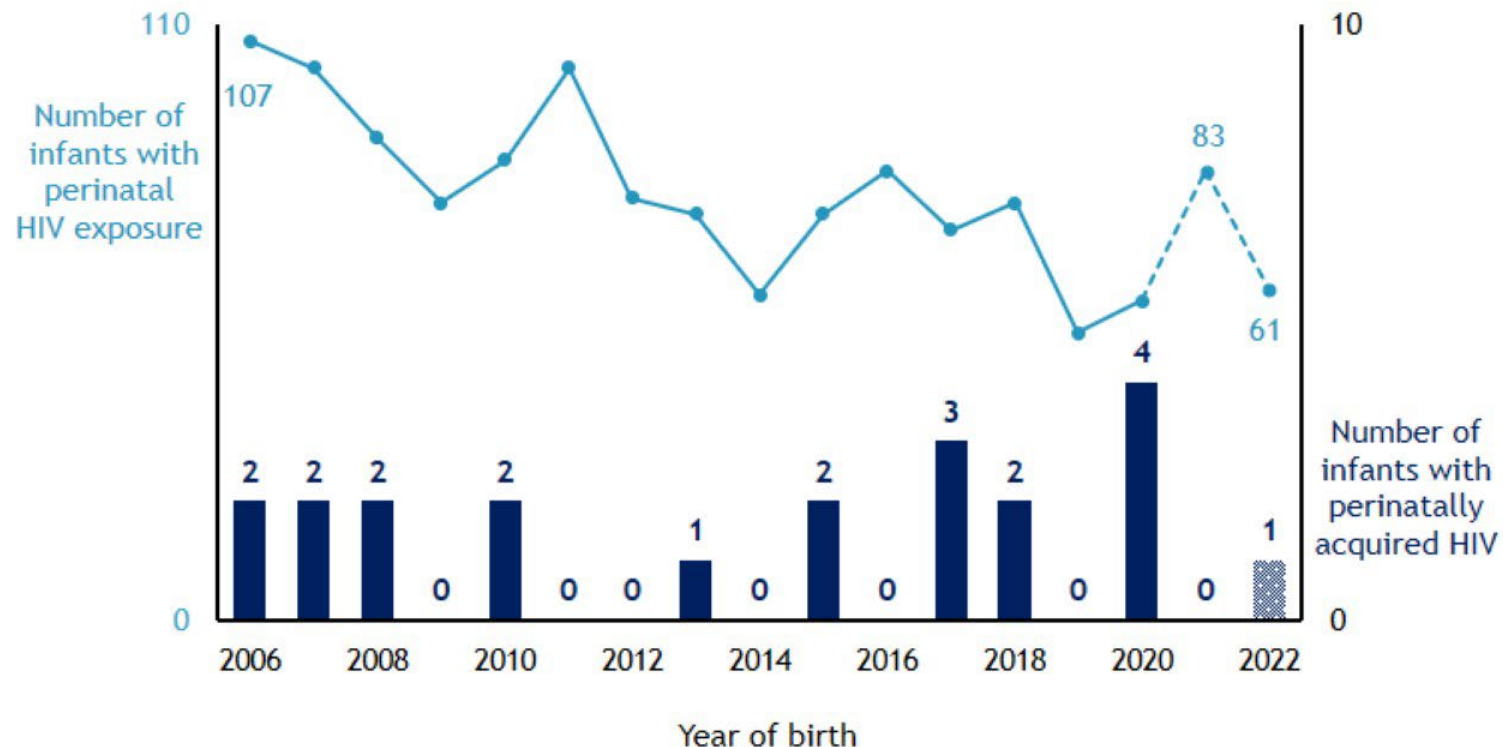


Note: Of the 46 children diagnosed with HIV since 2007, the majority had perinatally acquired HIV.

¹ Year of diagnosis may not indicate year of birth, nor indicate infants newly diagnosed with HIV at birth. Data include children who were born in a foreign country and/or who may have first been diagnosed in a foreign country before moving to Los Angeles County.



Number of infants with perinatal HIV exposure and perinatally acquired HIV, LAC 2006-2022^{1,2}



¹ Due to reporting delay, 2020 and 2021 HIV data are provisional as indicated by the patterned bar and dashed line.

² The number of infants with perinatally acquired HIV includes perinatal transmissions among babies born and/or diagnosed in LAC for a given birth year. The number of infants with perinatal HIV exposure was derived from 7 pediatric HIV-specialty sites which serve over 90% of the HIV-exposed children and infected children seeking HIV evaluation and care in Los Angeles County as well as an annual birth registry match. This is an underestimate of the total number of infants with perinatal HIV exposure in the County since HIV exposure reporting is not mandated.



HIV incidence and perinatal transmission among infants aged < 18 months, LAC 2006-2022¹

Birth Year	Number of infants newly diagnosed with HIV	Live births	Number of HIV-exposed infants	Perinatal HIV incidence rate per 100,000 live births	Perinatal HIV transmission rate per 100 HIV-exposed infants
2006	2	151,837	107	1.3	1.9
2007	2	151,813	102	1.3	2.0
2008	2	147,684	89	1.4	2.2
2009	0	139,679	77	0	0
2010	2	133,160	85	1.5	2.4
2011	0	130,313	102	0	0
2012	0	131,697	78	0	0
2013	1	128,526	75	0.8	1.3
2014	0	130,150	60	0	0
2015	2	124,438	75	1.6	2.7
2016	0	123,092	83	0	0
2017	3	116,850	72	2.6	4.2
2018	2	116,063	77	1.7	2.6
2019	0	113,027	53	0	0
2020	4	102,610	57	3.9	7.0
2021	0	100,641	83	0	0
2022	1	99,921	61	1.0	1.6

National targets for elimination of mother-to-child transmission of HIV

1. Perinatal HIV incidence <1 per 100,000 live births
2. Perinatal transmission rate <1 per 100 HIV-exposed infants

¹ Over 90% of the HIV exposed and infected infants identified in birth years 2021 and 2022 were born at and/or received care at one of the 7 pediatric HIV-specialty sites. Additionally, since 2018 the CA SOA has conducted a birth registry match with HIV+ women in IHARS and LAC birth certificates. This is an underestimate of the total number of infants with a perinatal HIV exposure in Los Angeles County since perinatal HIV exposure reporting is not mandated in California. For this reason, perinatal HIV transmission rates are not generalizable to Los Angeles County. Data for 2021 and 2022 are provisional due to reporting delay. Live birth data for 2006-2017 were derived from the Los Angeles Almanac and live birth data after 2017 were derived from the California Department of Public Health-California Vital Data (Cal-ViDa) Query Tool since this tool was not available for birth years prior to 2018.



Demographic and clinical characteristics of pregnant persons with diagnosed HIV and exposed infants, LAC 2021-2022¹

Characteristics	N=144 ²	(%)
Maternal age at delivery		
13-19	4	(2.8)
20-29	49	(34.0)
30-39	71	(49.3)
≥40	20	(13.9)
Maternal race/ethnicity		
Latinx	64	(44.4)
Black	47	(32.6)
Multi-race	13	(9.0)
White	10	(6.9)
Asian/PI	6	(4.2)
Other ³	4	(2.8)
Maternal transmission risk		
Heterosexual Contact	121	(84.0)
IDU	11	(7.6)
Perinatal Exposure	10	(6.9)
Transfusion	1	(0.7)
Other confirmed risk	1	(0.7)

¹Data are provisional due to reporting delay.

²Data include one set of twins born in 2021.

³Other race category includes American Indian/Alaska Native and Unknown race.



Demographic and clinical characteristics of pregnant persons with diagnosed HIV and exposed infants, LAC 2021-2022¹ - continued

Characteristics	N=144 ²	(%)
Maternal timing of HIV test		
Known HIV+ before pregnancy	120	(83.3)
Known HIV+ during pregnancy ³	23	(16.0)
Known HIV+ at time of delivery	1	(0.7)
Known HIV+ sometime after birth	0	(-)
Receipt of any prenatal care		
Yes	138	(95.8)
No	6	(4.2)
Maternal ART use during pregnancy and delivery		
Yes	137	(95.1)
No	5	(3.5)
Unknown	2	(1.4)
Timing of maternal ART use during pregnancy and delivery		
Prenatal and intrapartum ART	100	(69.4)
Prenatal ART only	34	(23.6)
Intrapartum ART only	3	(2.1)
Did not receive ART	5	(3.5)
ART use unknown	2	(1.4)

¹Data are provisional due to reporting delay.

²Data include one set of twins born in 2021.

³Of the 23 women diagnosed with HIV during pregnancy, 11 were diagnosed during the first trimester, 7 during the second trimester, and 5 during the third trimester.



Demographic and clinical characteristics of pregnant persons with diagnosed HIV and exposed infants, LAC 2020-2021¹ - continued

Characteristics	N=144 ²	(%)
Type of delivery		
Vaginal	79	(54.9)
Cesarean	65	(45.1)
Was Infant Breastfed?		
Yes	2	(1.4)
No	134	(93.1)
Unknown	8	(5.6)
Infant ART use		
Yes	140	(97.2)
Unknown	4	(2.8)
Infant's HIV Status		
HIV Negative	89	(61.8)
Confirmed HIV ³	1	(0.7)
HIV Indeterminate ⁴	54	(37.5)

¹Data are provisional due to reporting delay.

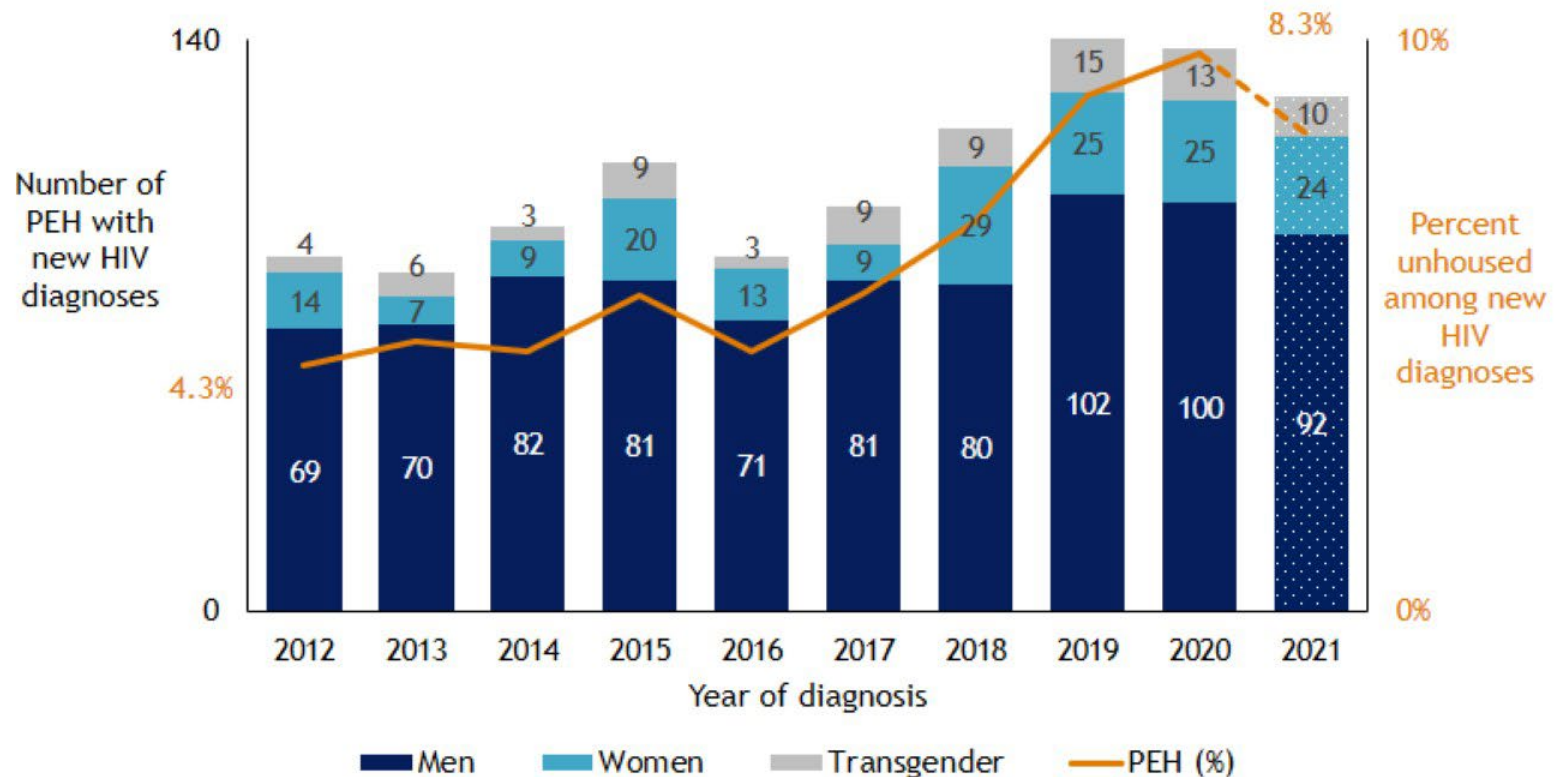
²Data include one set of twins born in 2021.

³The infant perinatally infected with HIV received ART shortly after birth for the prevention of mother to child transmission.

⁴Indeterminate status includes infants who have not had definitive testing to rule out HIV and/or those infants lost to follow-up.



Number of persons experiencing homelessness and newly diagnosed with HIV,¹ by gender and percentage of persons aged ≥ 13 years newly diagnosed with HIV, LAC 2012-2021²

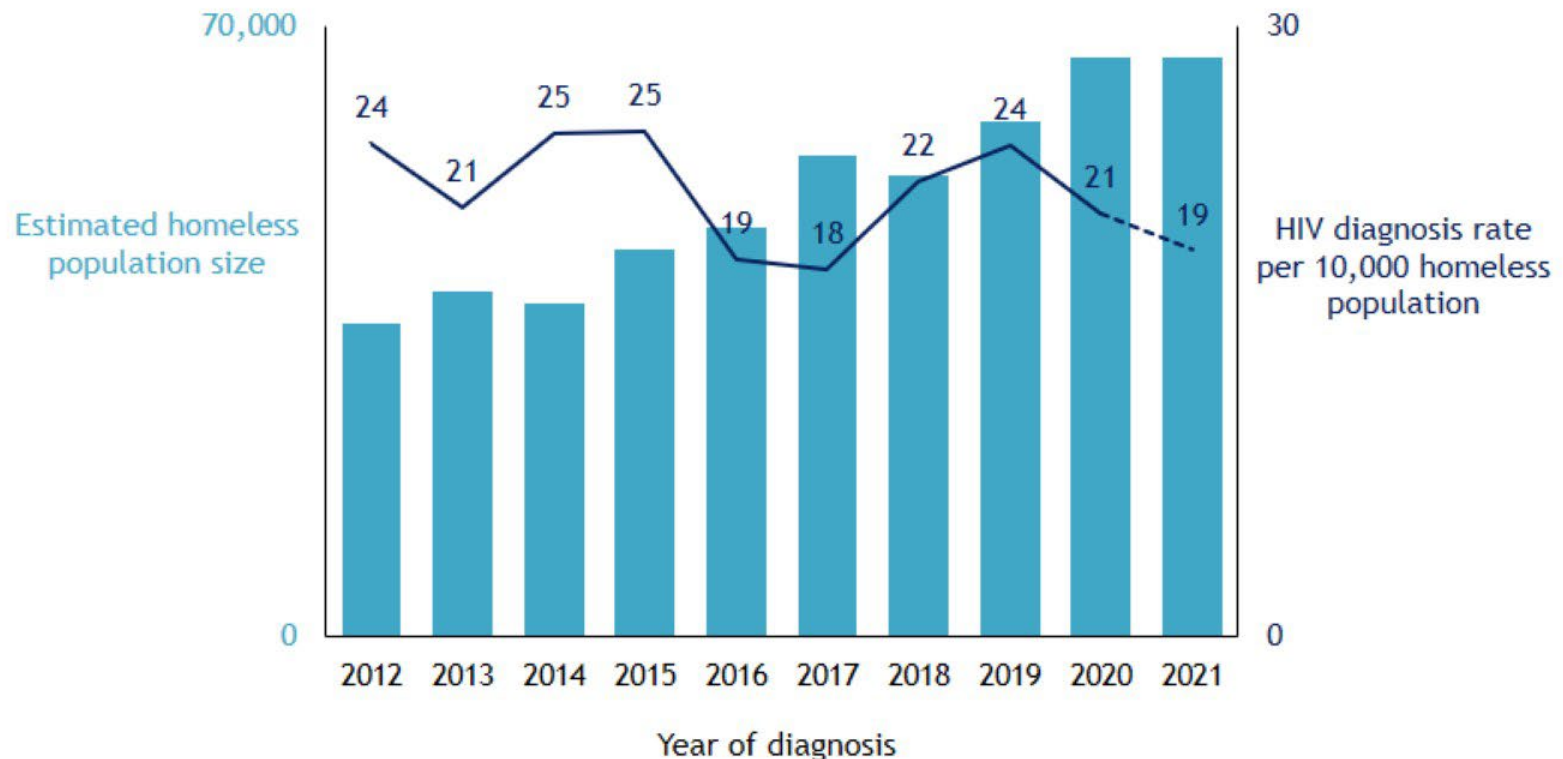


¹Persons newly diagnosed with HIV were classified as PEH if they were experiencing homelessness within 6 months of their HIV diagnosis date. For the PEH definition used, please refer to the Los Angeles Housing Services Authority (LAHSA) definition under “Category 1” at <https://www.lahsa.org/documents?id=1349-homeless-definition-part-1-.pdf>.

²Due to reporting delay, 2021 HIV diagnosis data are provisional as indicated by the patterned bar and dashed line.



HIV diagnoses rates among persons aged ≥ 13 years experiencing homelessness, LAC 2012-2021^{1,2}

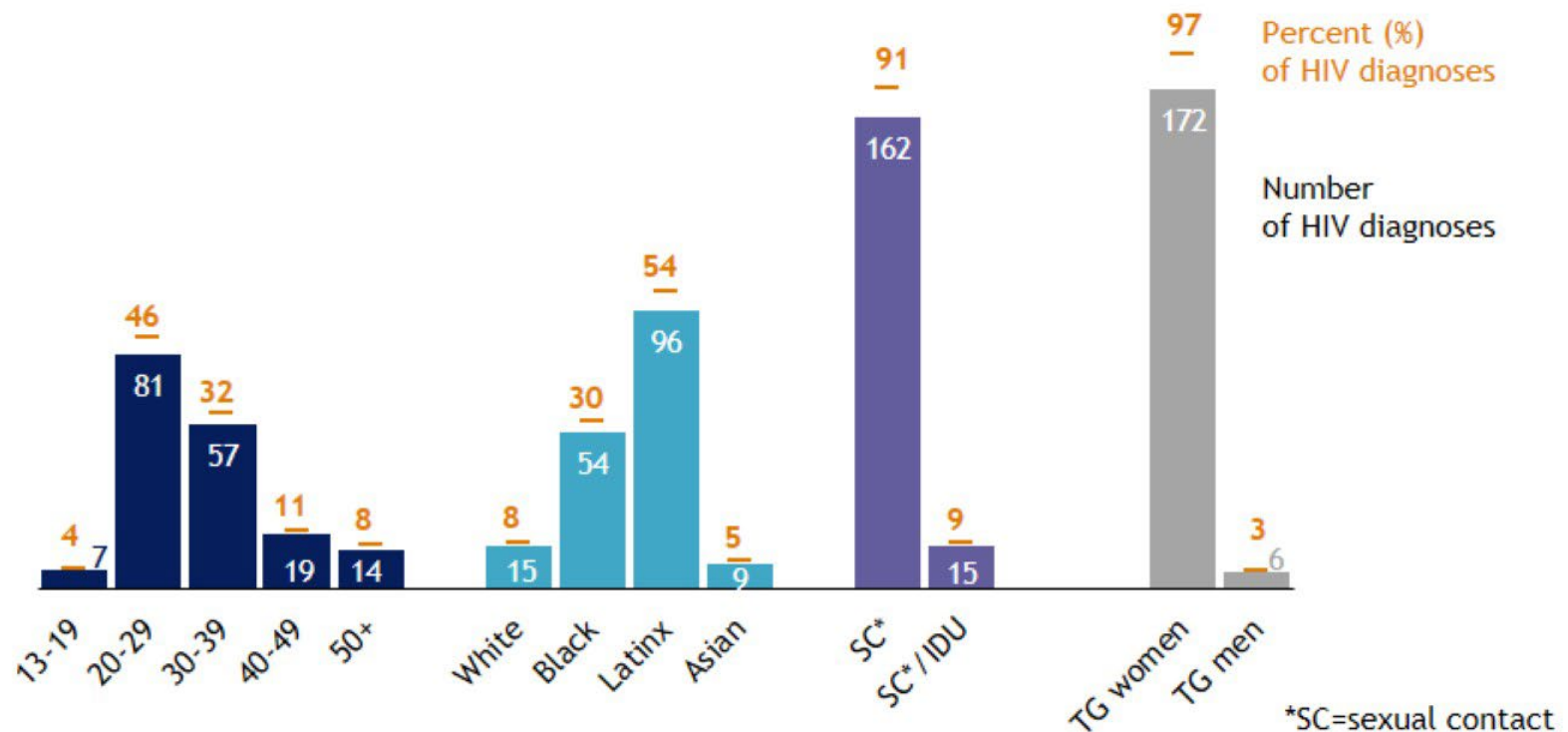


¹Due to reporting delay, 2021 HIV diagnosis data are provisional as indicated by the dashed line.

²Data from the Greater Los Angeles County Homeless Count, [2020 Results](#). Note that the count was not performed in 2021, so the 2020 count results were applied to 2021.



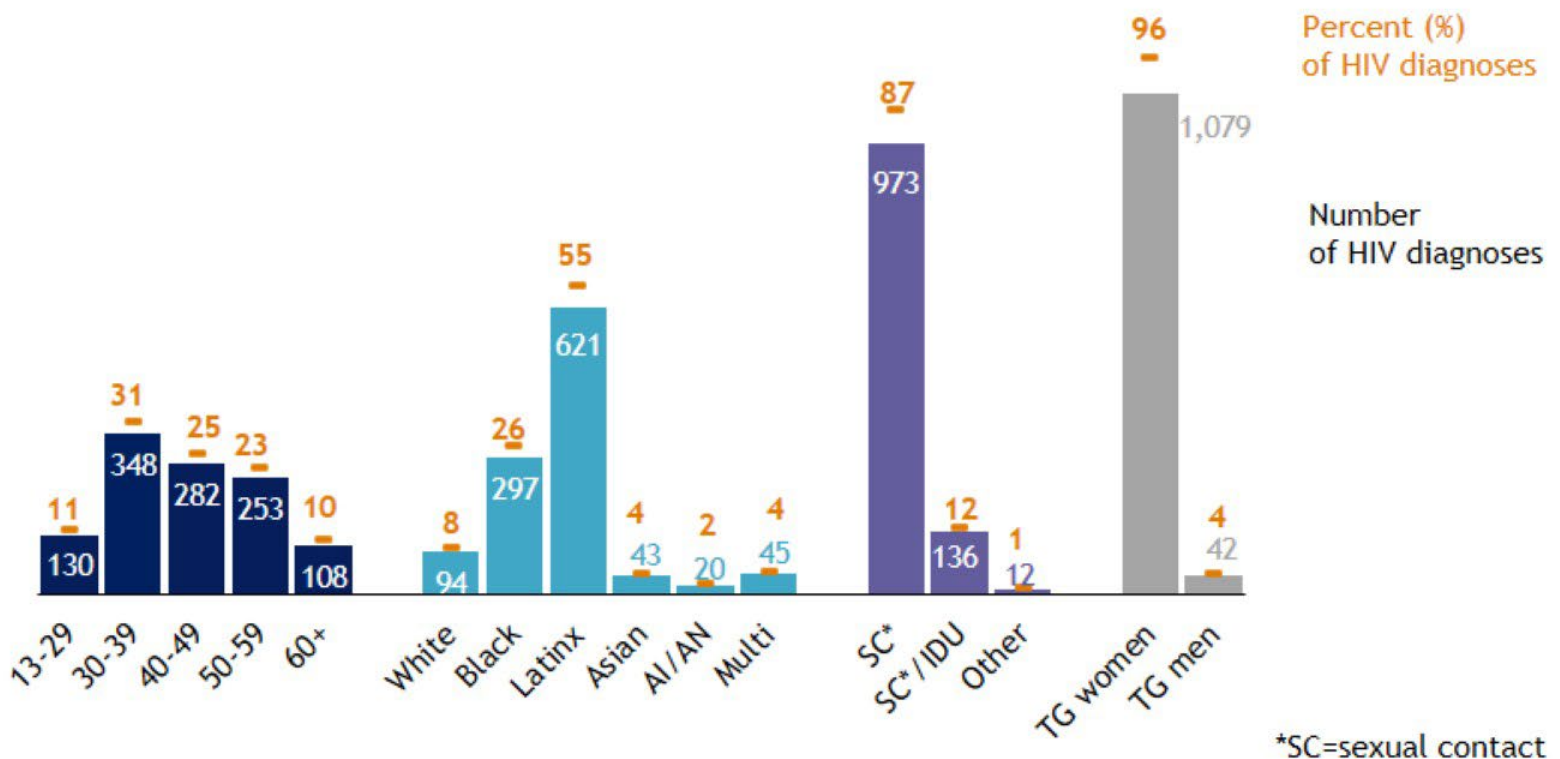
HIV diagnoses among transgender people aged ≥ 13 years by age, race/ethnicity,¹ and transmission category² (n=178), LAC 2019-2021



¹American Indians and Alaska Natives (AIAN) and persons of multiple races are not included due to small numbers. Although some race/ethnicity categories are suppressed due to small numbers, they are included in the denominator for the percent calculation.
²SC = Sexual contact; SC/IDU = Sexual contact and injection drug use. Sexual contact is based on sex at birth: MSM or heterosexual contact with a person known to have, or with a risk factor for, HIV. Persons whose transmission category is injection drug use alone are not shown due to small numbers. Persons without an identified transmission category were assigned a transmission category using CDC-recommended multiple imputation methods.



Transgender people living with diagnosed HIV infection aged ≥ 13 years by age group, race/ethnicity,¹ and transmission category² (n=1,121), LAC 2022



¹Native Hawaiian and Pacific Islanders (NHPI) are not shown due to small numbers. Although some race/ethnicity categories are suppressed due to small numbers, they are included in the denominator for the percent calculation.

²Other transmission categories include injection drug use (IDU) and perinatal exposure.

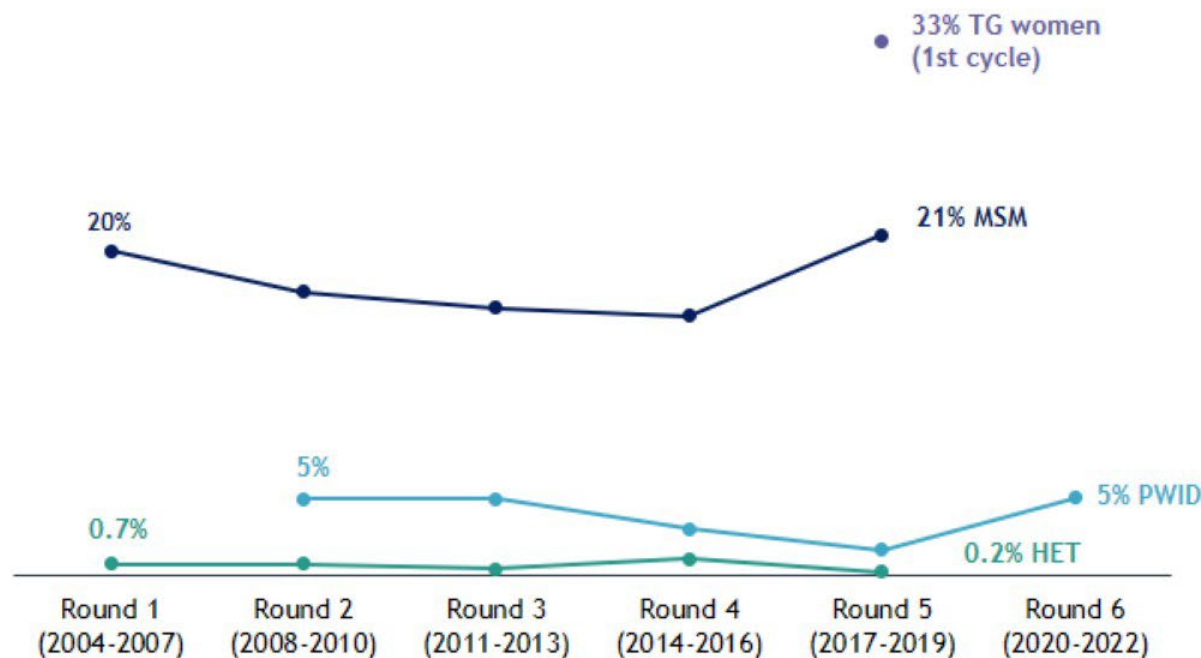


HIV biobehavioral surveillance

- HIV biobehavioral surveys are surveillance tools that use probability-based sampling methods for estimating HIV prevalence and relevant behavioral and clinical indicators in a given population. Information from biobehavioral surveys helps us understand factors that may be associated with behavioral and clinical outcomes in vulnerable populations at increased risk for HIV or living with HIV.
- National HIV Behavioral Surveillance (NHBS) is a CDC-funded HIV surveillance activity that allows state and local health departments to monitor HIV prevalence and risk behaviors among select populations at elevated risk for HIV. These populations include men who have sex with men (MSM), persons who inject drugs (PWID), heterosexual persons at increased risk for HIV (HET), and transgender (TG) women. Probability-based sampling methods are used to recruit survey participants, including venue-based, time space sampling for the MSM survey and respondent driven sampling for PWID, HET, and TG surveys.
- The Medical Monitoring Project (MMP) is a CDC-funded HIV surveillance activity that provides national and local data on behavioral and clinical outcomes in a representative sample of PLWH. MMP uses a 2-stage sampling strategy to select a sample of persons from which nationally and locally representative data are derived.
- In this section, we highlight key findings from NHBS and MMP efforts in LAC. While the data in this section provide the best estimates available for the populations presented, they are estimates (not true values) and thus any generalizations to broader population groups represented should be made with caution.



Trends in HIV prevalence¹ by NHBS population, LAC 2004-2022^{2,3}



Note: Testing frequency among MSM and transgender women was high compared with PWID and HET. MSM (84%) and Transgender women (85%) reported high levels of HIV testing in the past year. By contrast, only 42% of PWID reported testing for HIV in the past year.

Abbreviation: NHBS = National HIV Behavioral Surveillance; TG = transgender; MSM = men who have sex with men; PWID = persons who inject drugs; HET = heterosexuals at increased risk for HIV infection

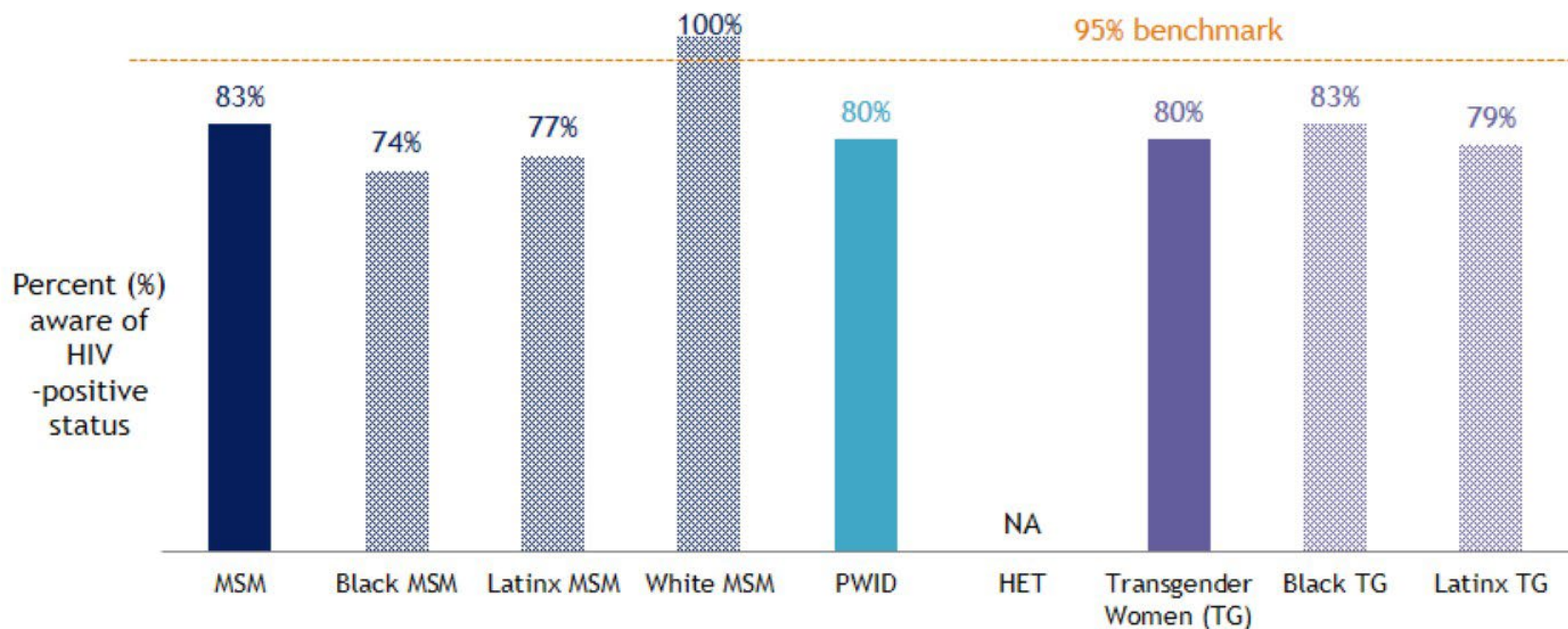
¹"HIV Prevalence" refers to the percentage of participants with a confirmed positive HIV test result among the total number of participants tested in NHBS.

²Participants were recruited into NHBS using a probability-based sampling method. MSM were recruited using time location sampling; PWID, HET, and Transgender Women were recruited using respondent driven sampling. MSM and HET were surveyed in all 5 NHBS rounds; PWID were surveyed starting in NHBS Round 2; Transgender women were surveyed starting in NHBS Round 5; Data are not weighted. The purpose of this figure is to provide a detailed summary of surveillance data collected as part of NHBS. Unweighted data provide an efficient and transparent way to do so.

³In the most recent PWID cycle in 2022, we observed a slightly higher HIV prevalence than the last PWID cycle in 2018. One factor that likely contributed to the higher HIV prevalence rate is the identification of MSM-PWID participants. Among PWID in 2022, it was found that 6% of PWID were sexually active MSM, and the HIV prevalence rate among this group was 39%, which is notably higher than the prevalence among non-MSM PWID (approximately 2.5%).



Awareness of HIV-positive status among participants aged ≥ 18 years living with HIV by NHBS population and race/ethnicity, LAC 2017-2022^{1,2,3,4}



¹National HIV Behavioral Surveillance (NHBS) is a national behavioral surveillance system designed to generate nationally representative estimates of HIV prevalence and behaviors among groups at highest risk for HIV infection. Data presented in this figure are not weighted. The purpose of this figure is to provide a detailed summary of surveillance data collected as part of NHBS. Unweighted data provide an efficient and transparent way to do so.

²MSM: Gay, bisexual, and other men who have sex with men; A total of 519 MSM participated in NHBS-MSM in 2017;

PWID: Persons who inject drugs; A total of 518 PWID participated in NHBS-PWID in 2022;

HET: Heterosexually active persons at increased risk for HIV infection; A total of 509 HET participated in NHBS-HET in 2019;

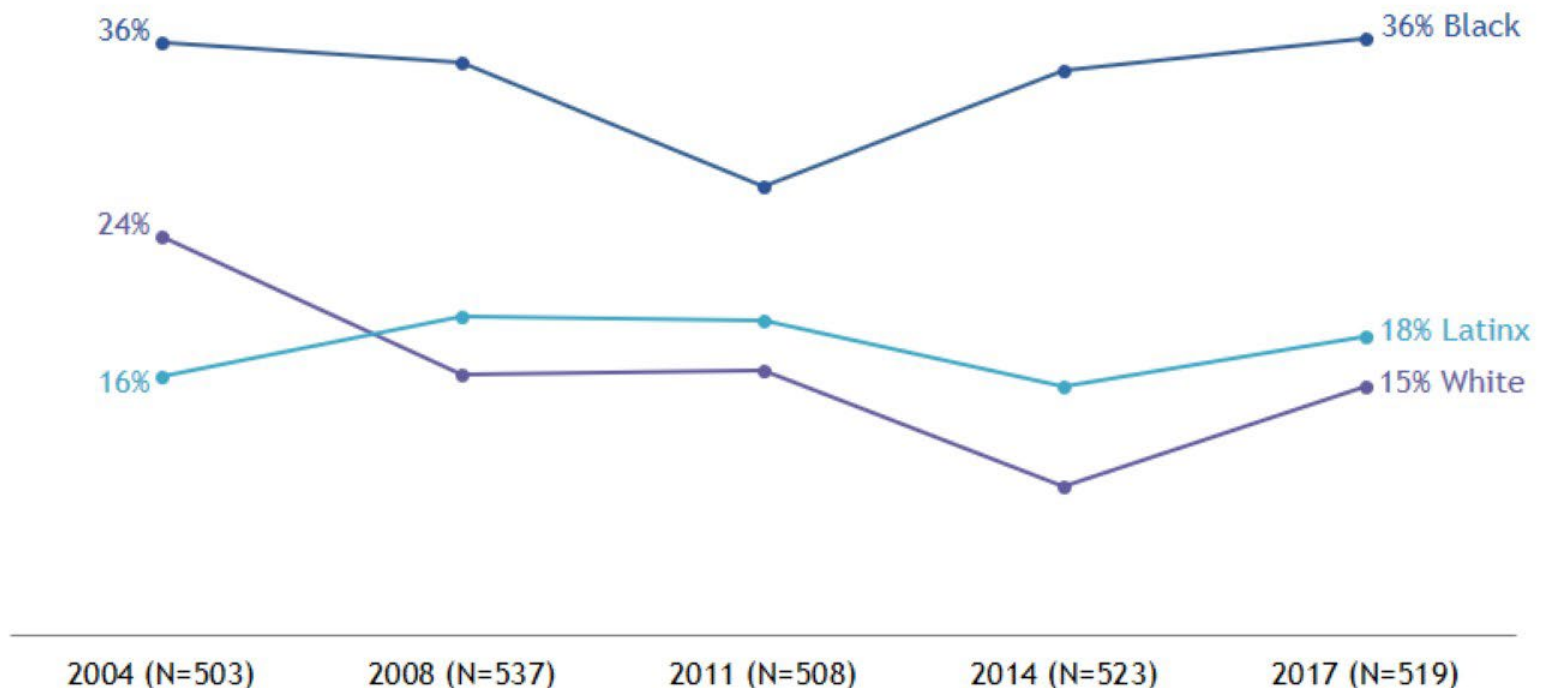
Transgender women (TG): Persons who (1) reported a gender identity of woman or transgender woman, and (2) were assigned male or intersex at birth. A total of 501 transgender women enrolled in NHBS-Trans in 2019.

³Awareness of HIV infection among PWID and HET is unstable due to small numbers.

⁴Data on HIV testing in the past 12 months excludes participants diagnosed with HIV >12 months prior to the survey interview.



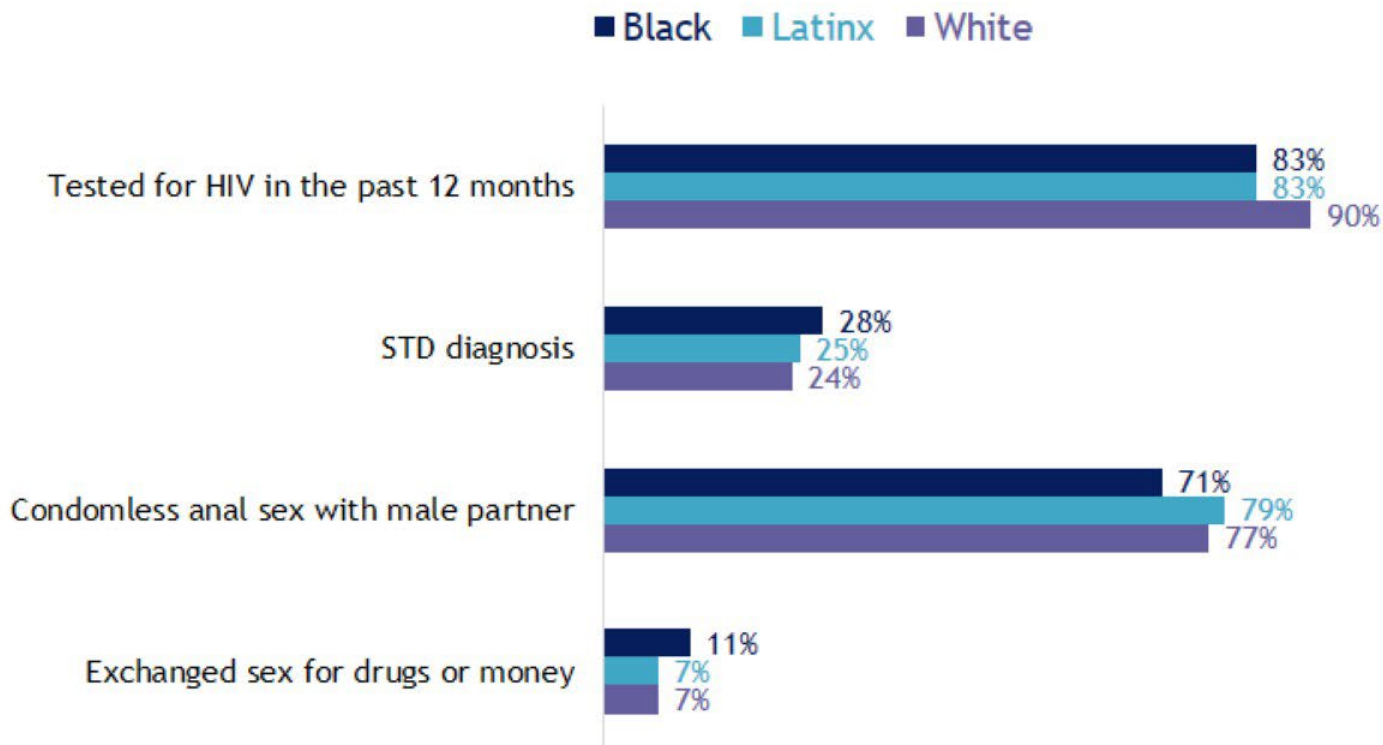
Trends in HIV prevalence among NHBS-MSM participants by race/ethnicity, LAC 2004-2017



Abbreviation: MSM = men who have sex with men; NHBS = National HIV Behavioral Surveillance



HIV testing behavior, STD diagnosis, and sexual behavior among NHBS-MSM participants by race/ethnicity, LAC 2017¹

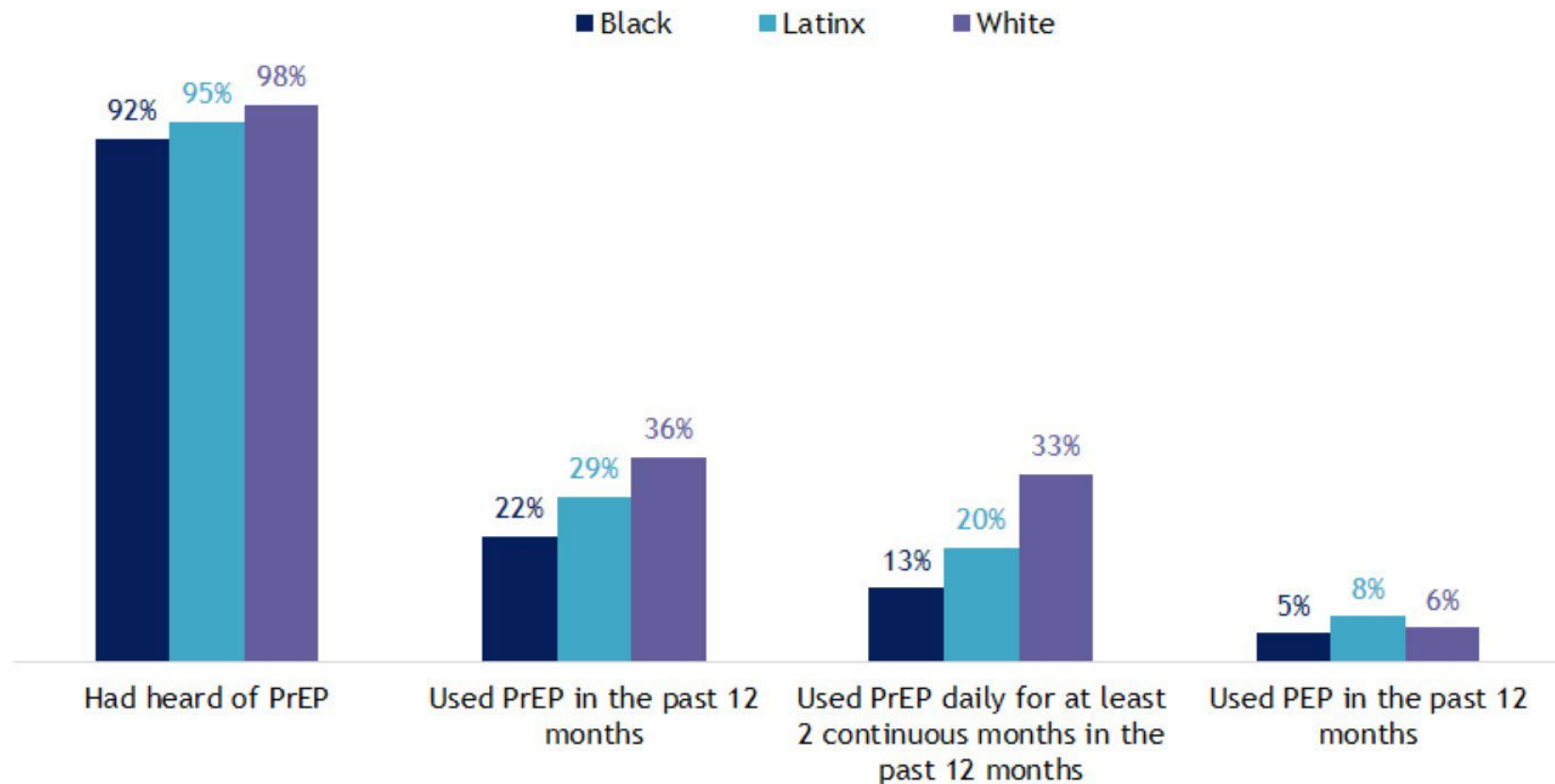


Abbreviation: MSM = men who have sex with men; NHBS = National HIV Behavioral Surveillance

¹There were 111 Black MSM, 148 White MSM, and 214 Latinx MSM NHBS participants in the 2017 surveillance round. All sexual behavior indicators reflect behavior in the 12 months prior to the interview. HIV testing in the past 12 months excluded participants who were diagnosed with HIV more than 12 months prior to the interview. STD diagnosis was based on respondent's self-report of at least 1 STD diagnosis by a health care provider's diagnosis in the 12 months prior to the interview. Condomless anal sex refers to either or both condomless receptive and/or condomless insertive anal sex.



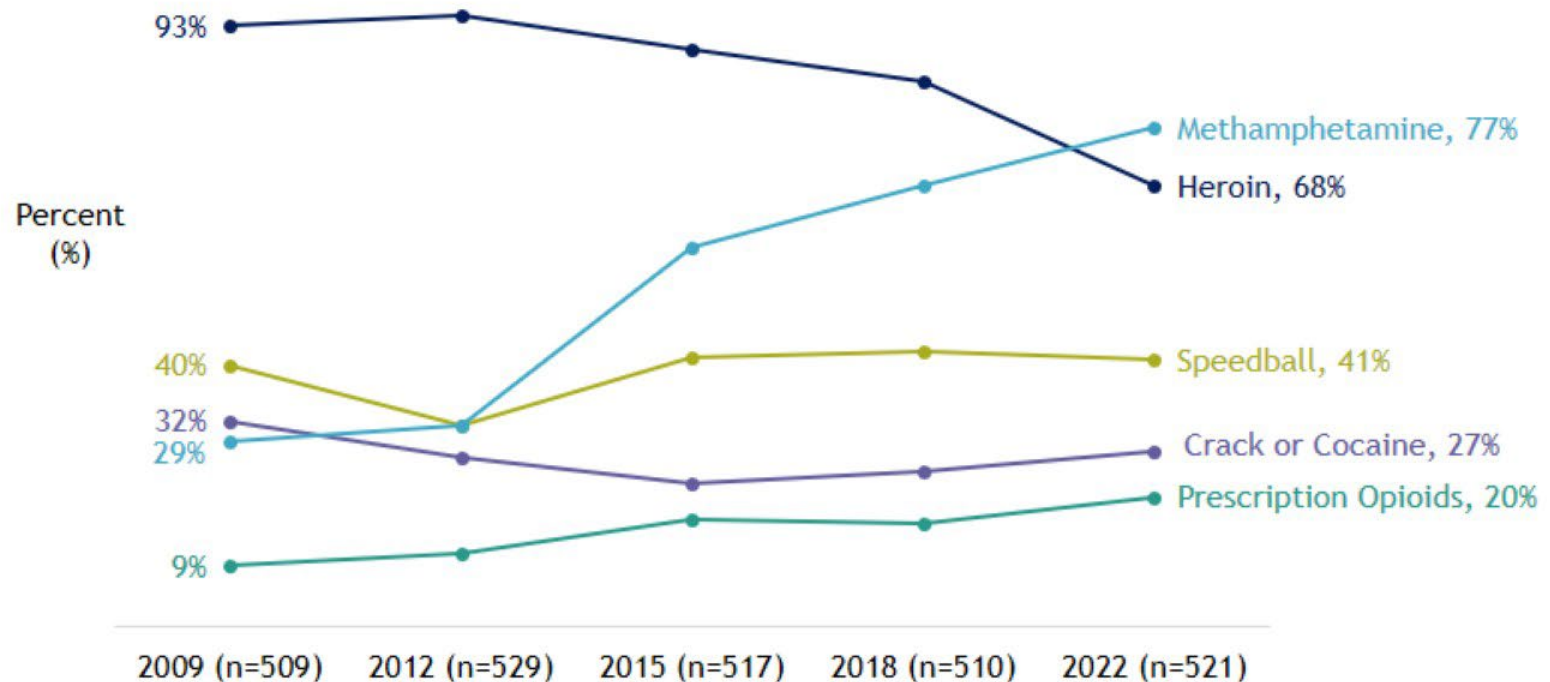
PrEP and PEP among NHBS-MSM participants by race/ethnicity, LAC 2017¹



Abbreviation: PrEP =pre-exposure prophylaxis; PEP = post-exposure prophylaxis; MSM = men who have sex with men; NHBS = National HIV Behavioral Surveillance
¹One local analysis conducted within DHSP estimated 66% of MSM with PrEP indications had been prescribed PrEP between 2018 and 2020 (internal communication)



Drugs injected in the past 12 months among NHBS-PWID participants, LAC 2009-2022¹

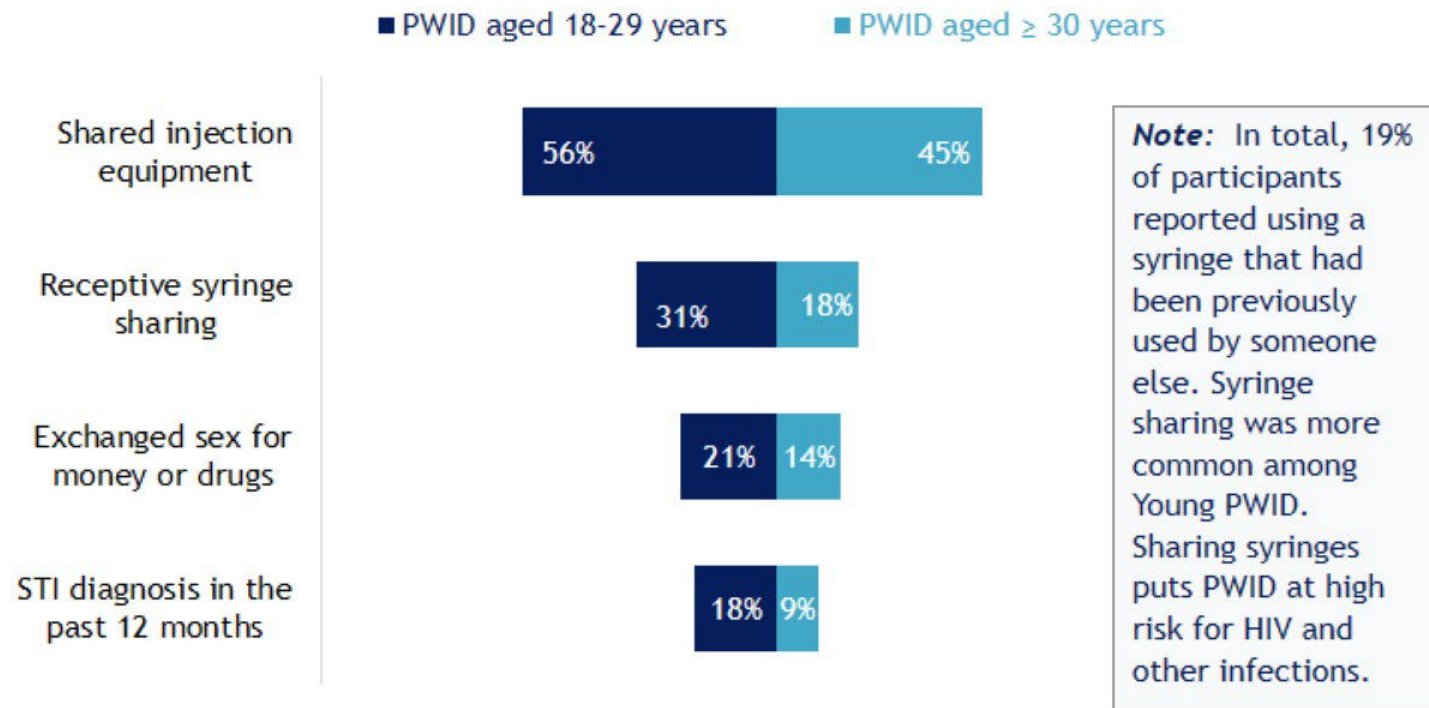


Abbreviation: PWID = persons who inject drugs; NHBS = National HIV Behavioral Surveillance

¹Speedball is a polydrug mixture of heroin and cocaine.



Injection drug use behavior and recent sexual behavior among NHBS-PWID participants by age group, LAC 2022¹

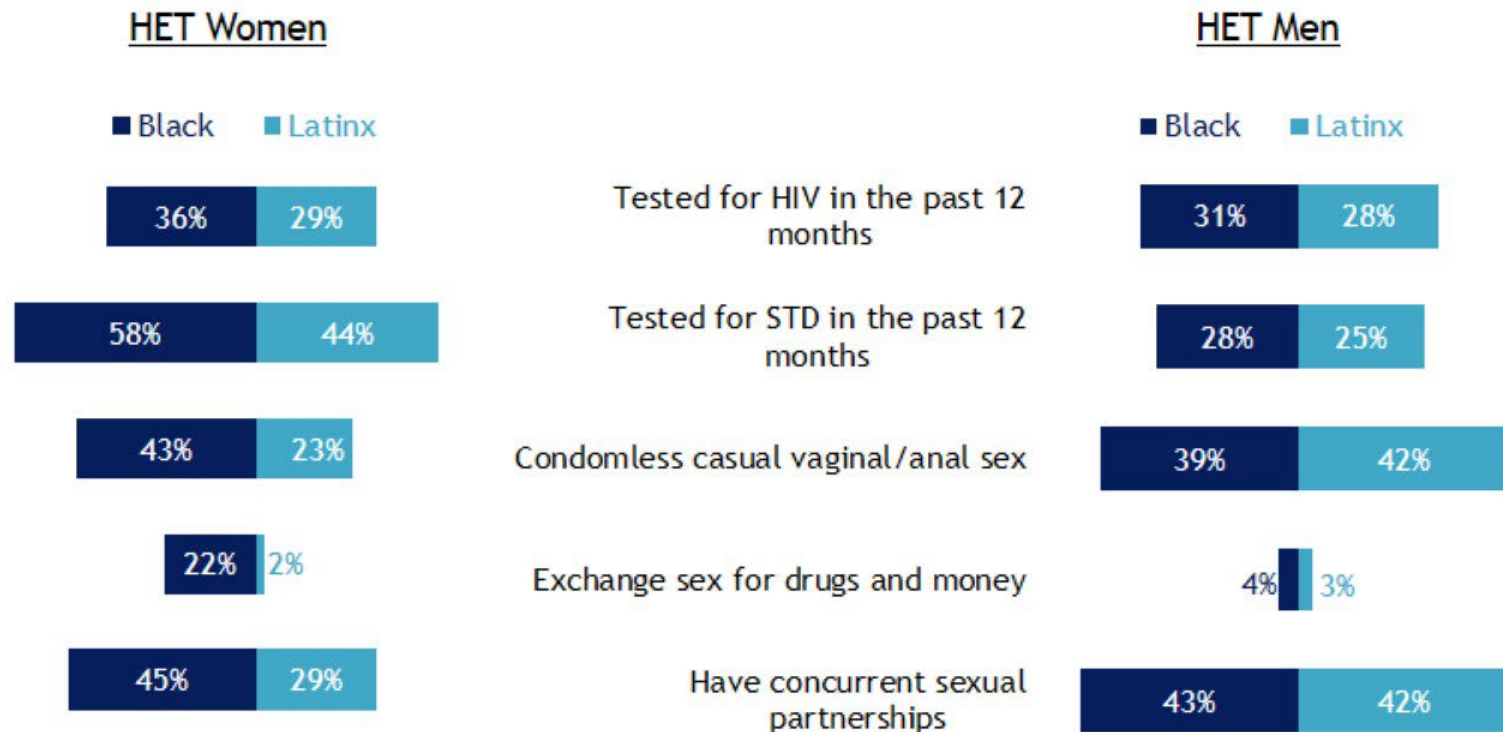


Abbreviation: PWID = persons who inject drugs; NHBS = National HIV Behavioral Surveillance

¹Receptive sharing of syringes or injection equipment refers to using a syringe or injective equipment that has already been used by someone else. All injection and sexual behavior indicators reflect behavior in the 12 months prior to the survey interview.



Testing and sexual behavior among NHBS heterosexuals at increased risk of HIV (HET) by sex and race/ethnicity, LAC 2019¹

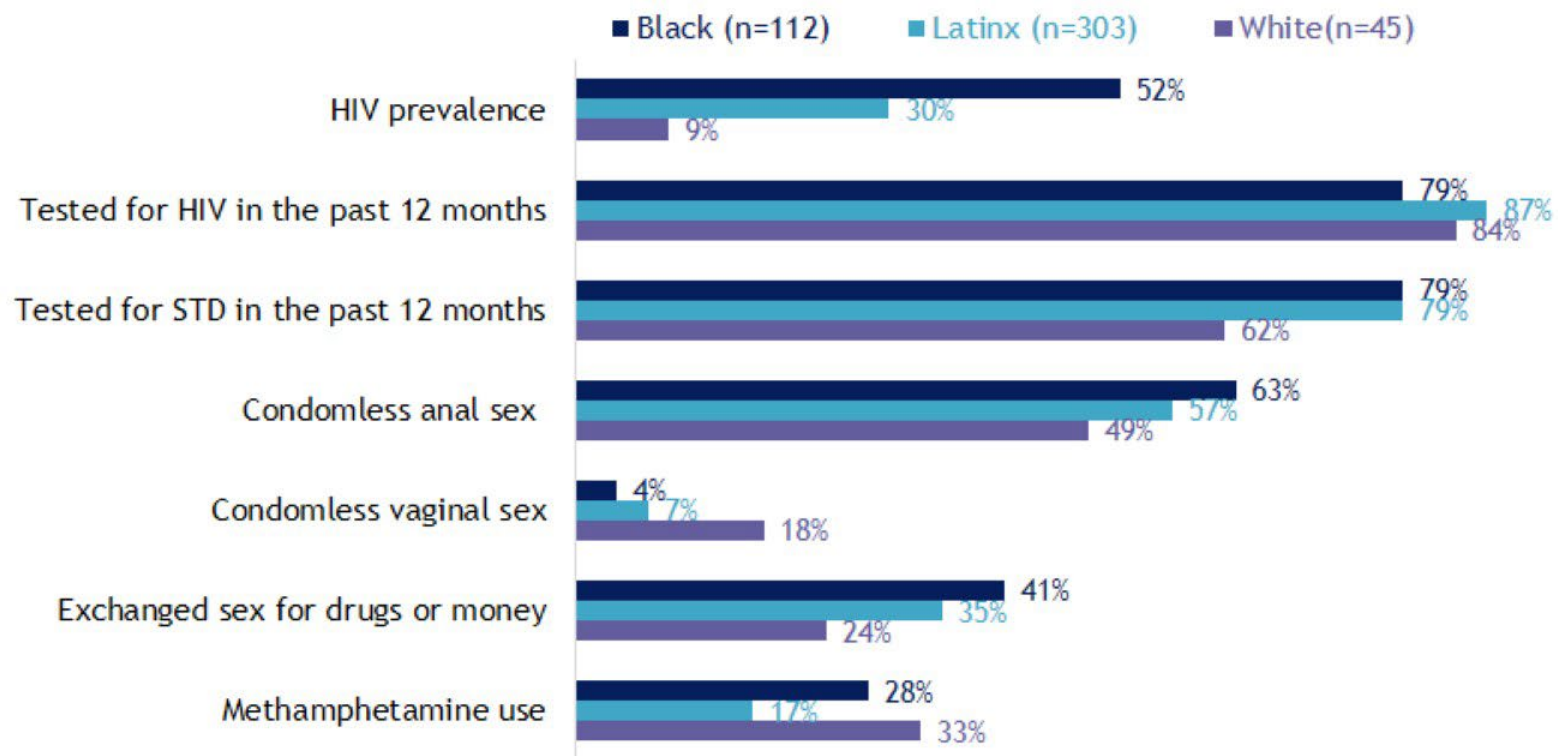


Abbreviation: NHBS = National HIV Behavioral Surveillance

¹136 Black males, 118 Latinx males, 142 Black females, and 98 Latinx females participated in the 2019 NHBS-HET cycle. All sexual behavior indicators reflect sexual behavior with the opposite sex in the 12 months prior to the survey interview. Tested for HIV in the past 12 months excludes participants who reported being diagnosed with HIV more than 12 months prior to the interview. Tested for STDs in the past 12 months included respondent's self-report of being tested for any STD other than HIV and hepatitis by a health care provider within 12 months prior to the interview. A casual partner is a sex partner that the respondent does not feel committed to or does not know very well. Having concurrent partners with last partner is measured by asking participants "when you were having a sexual relationship with last partner, did you have sex with other people?".



HIV prevalence, HIV/STD testing behavior, sexual behavior, and drug use among NHBS-Transgender Women (TGW) by race/ethnicity, LAC 2019^{1,2}



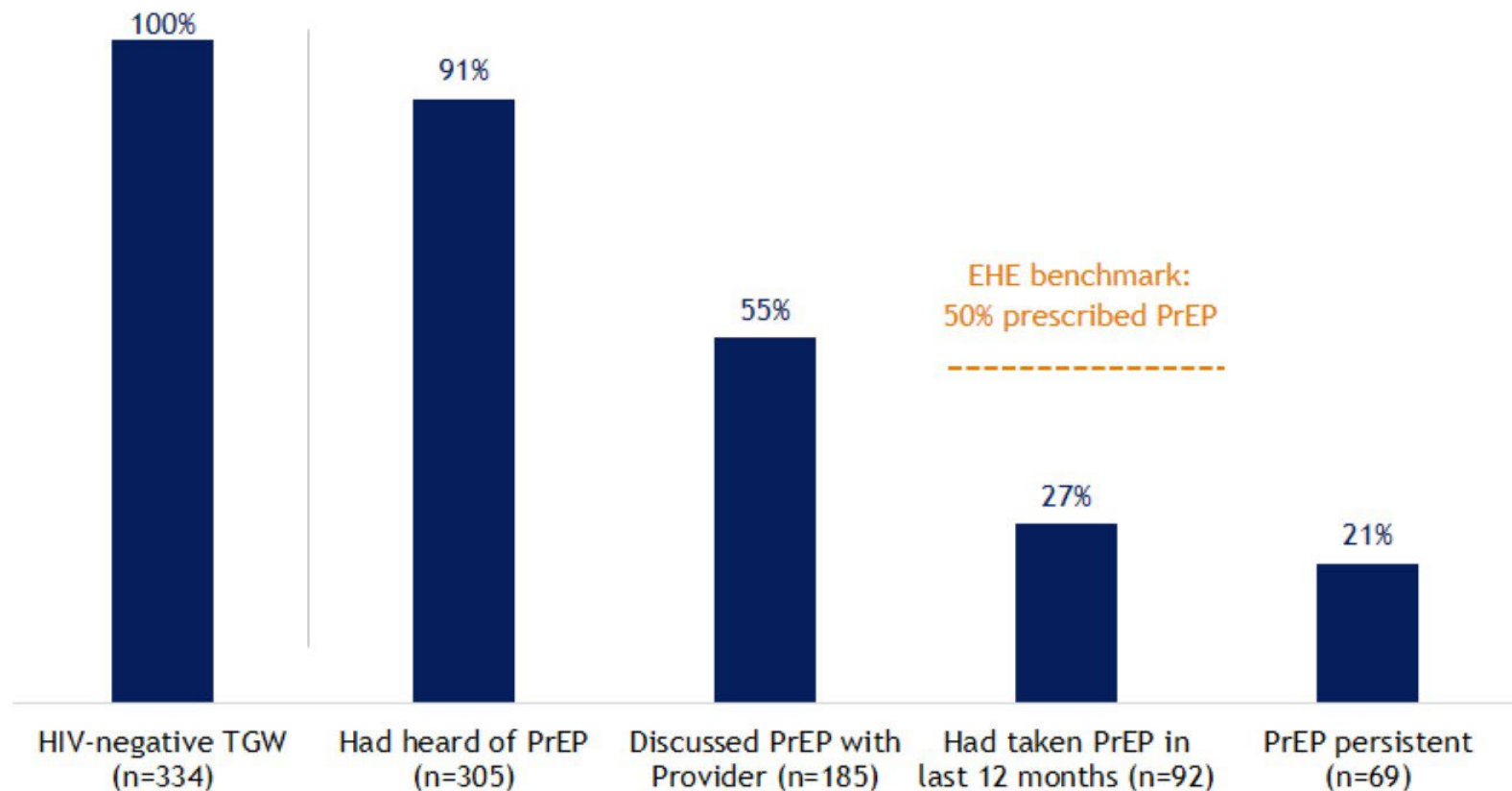
Abbreviation: NHBS = National HIV Behavioral Surveillance

¹HIV prevalence refers to the percentage of participants with a confirmed positive NHBS HIV test result among the total number of participants tested in NHBS. Tested for HIV in the past 12 months excluded participants who reported being diagnosed with HIV more than 12 months prior to the interview. Tested for STDs in the past 12 months included respondent's self-report of being tested for any STD other than HIV and hepatitis by a health care provider within 12 months prior to the interview. All sexual behavior indicators reflect behavior in the 12 months prior to the interview. Condomless anal sex refers to self-reports of either or both receptive and/or insertive anal sex without a condom. Condomless vaginal sex refers to self-reports of either or both receptive and/or insertive vaginal sex without a condom (vaginal sex refers to penis in the vagina or neovagina). Methamphetamine use includes self-reports of meth, crystal, speed, or crank use in the 12 months prior to the interview.

²Estimates for white transgender women may be unstable and must be interpreted with caution due to small numbers.



PrEP cascade among NHBS-Transgender Women (TGW), LAC 2019¹



Abbreviation: NHBS = National HIV Behavioral Surveillance; PrEP =pre-exposure prophylaxis

¹PrEP persistent is defined as having taken PrEP every day or almost every day for at least 2 months in a row in the past 12 months.



Sexual behavior during the 12 months before interview among men who had sex with men (MSM), men who had sex only with women (MSW), and women who had sex with men (WSM) with diagnosed HIV—Medical Monitoring Project, LAC, 2015-2020

Behavior	Men who had sex with men (MSM) (N=627)		Men who had sex only with women (MSW) (N=149)		Women who had sex with men (WSM) (N=123)	
	%	(95% CI)	%	(95% CI)	%	(95% CI)
Engaged in any sex without using an HIV prevention strategy, among all persons						
Yes	7.9	(5.2 - 10.6)	6.4	(0.9 - 11.8)	6.8	(1.6 - 11.9)
No	92.1	(89.4 - 94.8)	93.6	(88.2 - 99.1)	93.2	(88.1 - 98.4)
Engaged in any sex without using an HIV prevention strategy, among sexually active persons						
Yes	12.5	(8.3 - 16.7)	10.9	(1.9 - 19.8)	14.6	(4.0 - 25.2)
No	87.5	(83.3 - 91.7)	89.1	(80.2 - 98.1)	85.4	(74.8 - 96.0)
Percentages of sexually active persons who used an HIV prevention strategy with at least 1 partner						
Sex while having sustained viral suppression						
Yes	65.1	(59.4 - 70.9)	70.4	(58.7 - 82.1)	58.7	(43.7 - 73.6)
No	34.9	(29.1 - 40.6)	29.6	(17.9 - 41.3)	41.3	(26.4 - 56.3)
Condom-protected sex						
Yes	53.3	(47.6 - 59.0)	74	(63.6 - 84.5)	63.2	(49.6 - 76.9)
No	46.7	(41.0 - 52.4)	26	(15.5 - 36.4)	36.8	(23.1 - 50.4)
Condomless sex with a partner on PrEP						
Yes	14.4	(10.3 - 18.5)	3.4	(0.0 - 7.3)	0*	()
No	85.6	(81.5 - 89.7)	96.6	(92.7-100.0)	100*	()
Sex with a partner with HIV						
Yes	60.8	(55.3 - 66.4)	14.5	(7.1 - 21.8)	22	(10.2 - 33.8)
No	39.2	(33.6 - 44.7)	85.5	(78.2 - 92.9)	78	(66.2 - 89.8)
Total	100		100		100	

Percentages and confidence intervals (CI) incorporate weighted percentages. Percentages might not sum to 100 because of rounding. Estimates with an absolute CI width ≥ 30 , estimates with an absolute CI width between 5 and 30 and a relative CI width $>130\%$, and estimates of 0% or 100% are marked with an asterisk () and should be interpreted with caution.



Needs assessment for housing assistance among PLWDH, Medical Monitoring Project (MMP), LAC 2015-2019¹

	%	95% CI
Needed shelter/housing assistance	27.2	23.6-30.9
Unmet need for shelter/housing assistance (among PLWDH who needed services)	37.6	29.8-45.5
Among persons with unmet needs for shelter or housing assistance, reasons for unmet needs:		
Could not find information needed to get service	45.2	31.8-58.7
Service did not meet needs or were not eligible for service	41.3	26.3-56.2
Personal reasons, such as fear or embarrassment, or had other things going on in life that made it difficult to receive service	19.8	10.0-29.5
>1 reason reported	15.3	7.2-23.4

¹The housing needs assessment analyzed data from MMP 2015-2019. Weighted percentages and 95% confidence intervals (CIs) were reported. The needs were assessed by asking participants questions: 1) During the past 12 months, have you needed shelter or housing services? 2) During the past 12 months, did you get shelter or housing services where you got help with temporary or long-term housing including section 8 vouchers?

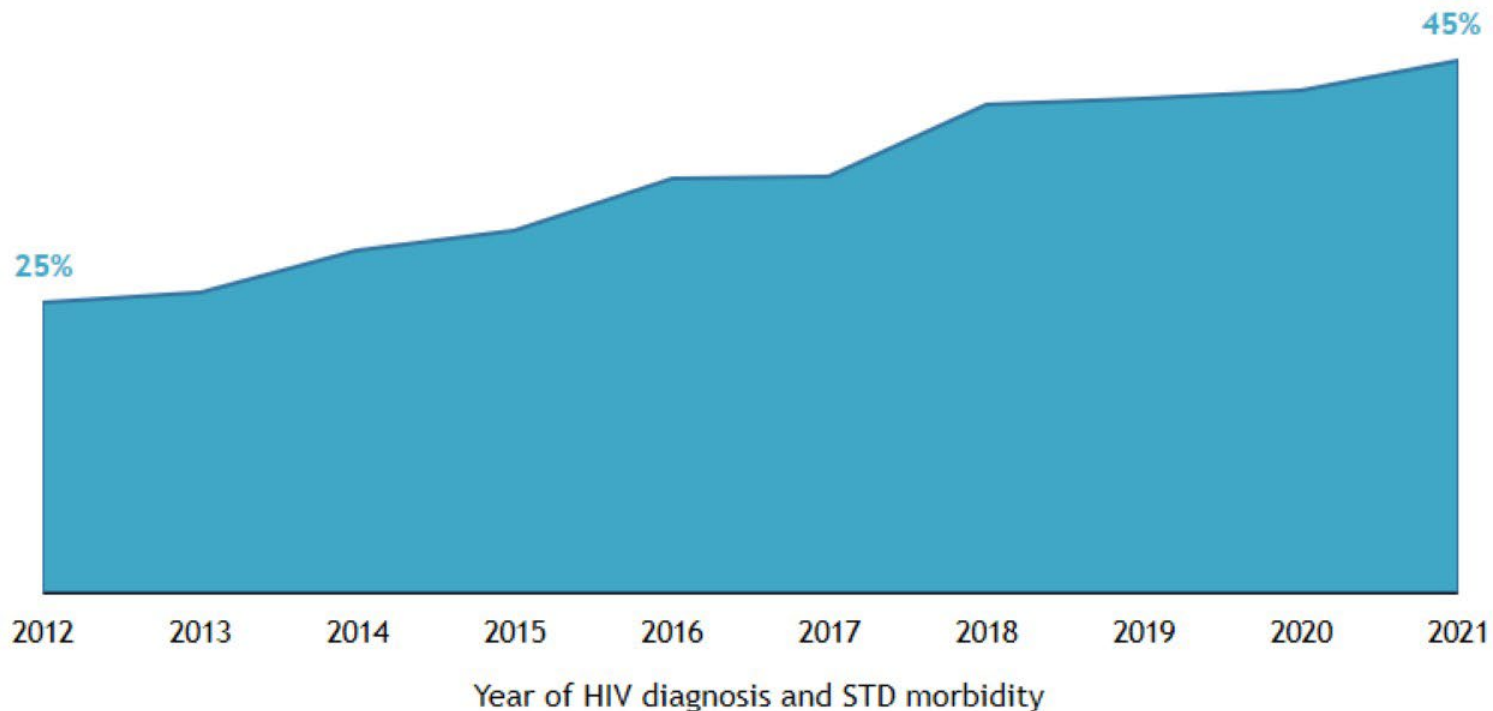


STD and HIV co-infection

- HIV and other STDs are syndemic in LAC.
- Persons with syphilis, gonorrhea, and/or chlamydia are at an increased risk of acquiring HIV due to biological and behavioral factors.
- STDs among PLWH can also increase HIV viral load and the risk of forward HIV transmission.
- We examined the co-occurrence of HIV and STD diagnoses in the same year among persons with newly diagnosed HIV. This method estimates the percentage of HIV-STD co-infections around the time of HIV diagnosis. Note that a person may be living with HIV for months or years before they are diagnosed, and other STDs may remain untreated.
- The cities of Long Beach and Pasadena are not included in this analysis due to reporting delays (these cities have their own health departments and report STD cases directly to the State of California, who then shares the data with LAC).



Percentage of persons newly diagnosed with HIV aged ≥ 13 years who had syphilis, gonorrhea, and/or chlamydia in the same calendar year as HIV diagnosis, LAC (excluding Long Beach and Pasadena), 2012-2021^{1,2,3,4}



¹PLWDH with more than one STD case per year are counted only once.

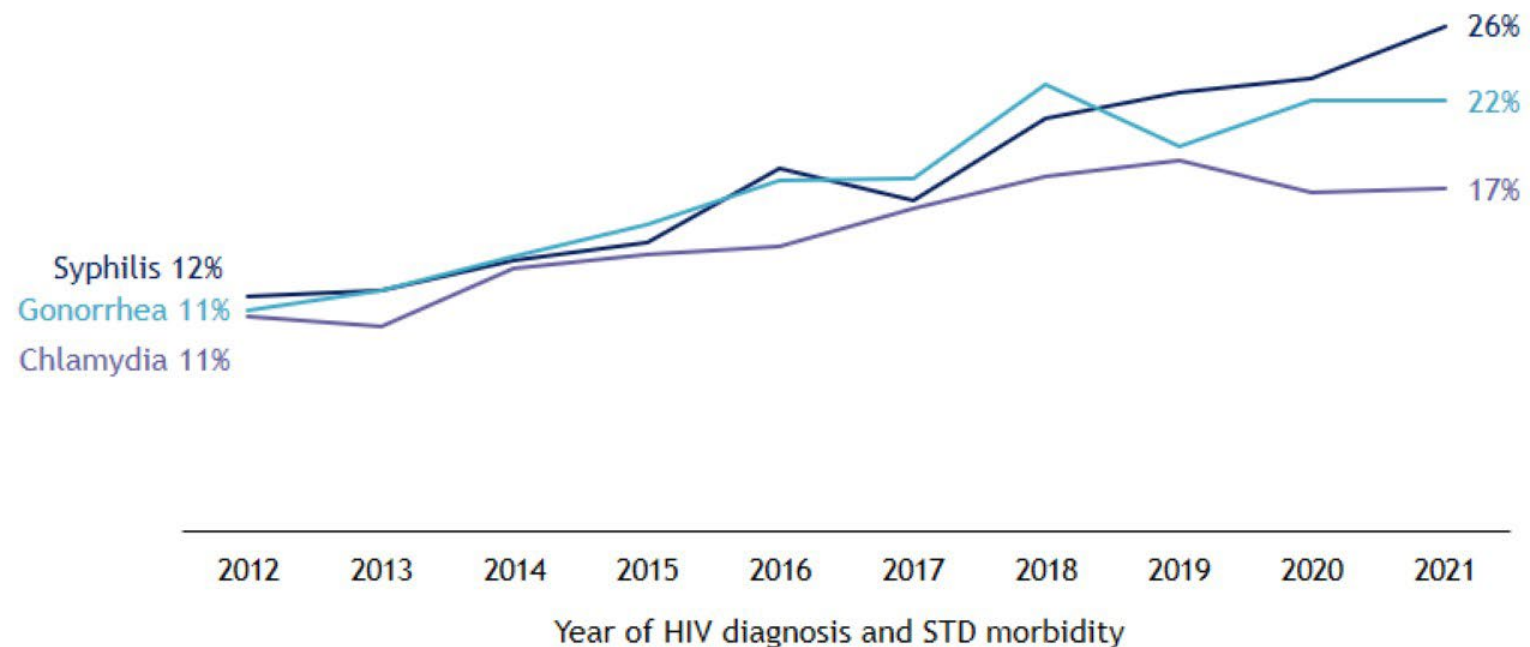
²DHSP prioritizes HIV, syphilis, and congenital syphilis cases for investigation.

³STD cases in the cities of Long Beach and Pasadena are reported to their respective health departments.

⁴Due to reporting delay and time needed for case investigations, data are shown through 2021 instead of 2022.



Percentage of persons newly diagnosed with HIV aged ≥ 13 years who had syphilis, gonorrhea, or chlamydia in the same calendar year as HIV diagnosis by STD, LAC (excluding Long Beach and Pasadena), 2012-2021^{1,2,3}



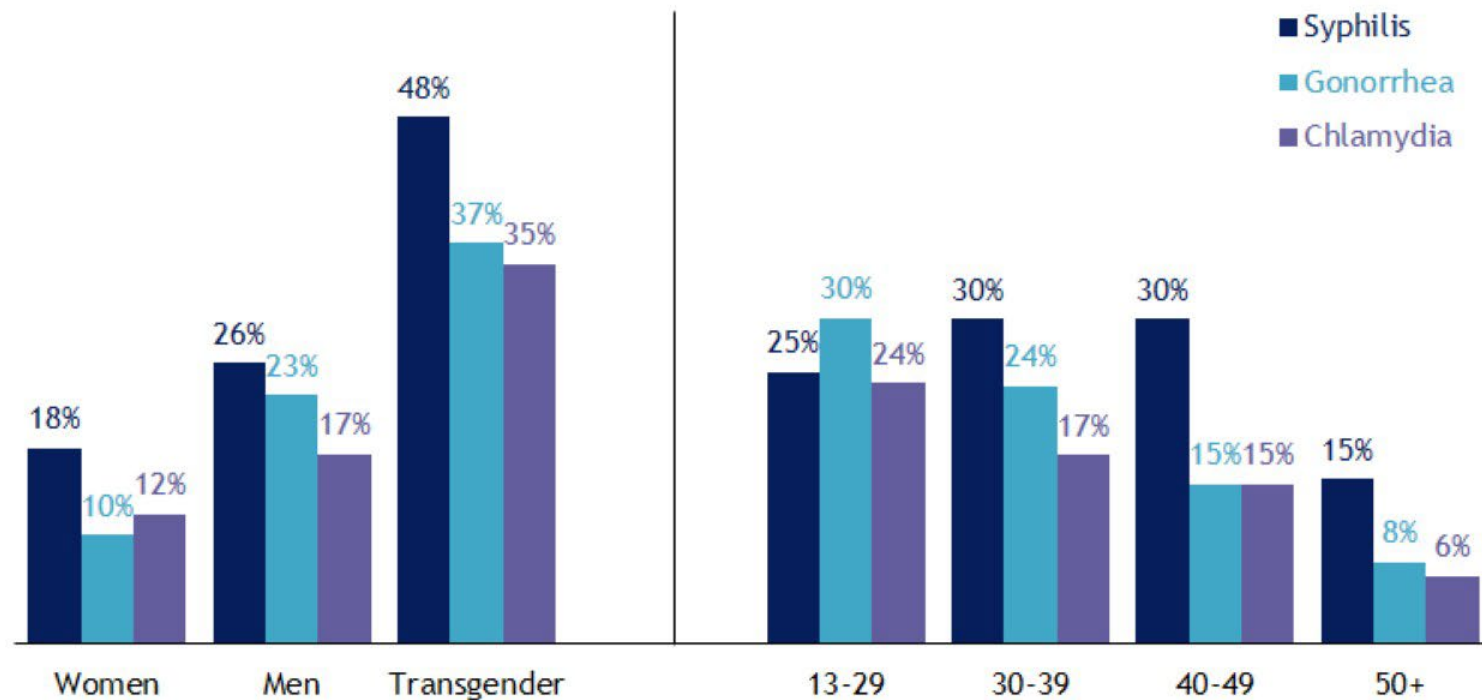
¹DHSP prioritizes HIV, syphilis, and congenital syphilis cases for investigation.

²STD cases in the cities of Long Beach and Pasadena are reported to their respective health departments.

³Due to reporting delay and time needed for case investigations, data are shown through 2021 instead of 2022.



Percentage of persons newly diagnosed with HIV aged ≥ 13 years who had syphilis, gonorrhea, or chlamydia in the same calendar year as HIV diagnosis by STD, gender, and age group, LAC (excluding Long Beach and Pasadena), 2021^{1,2,3}



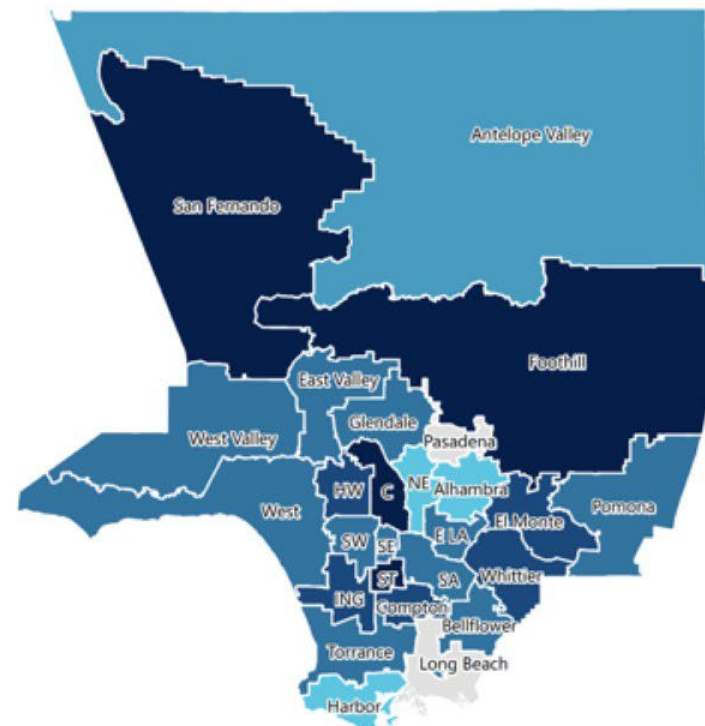
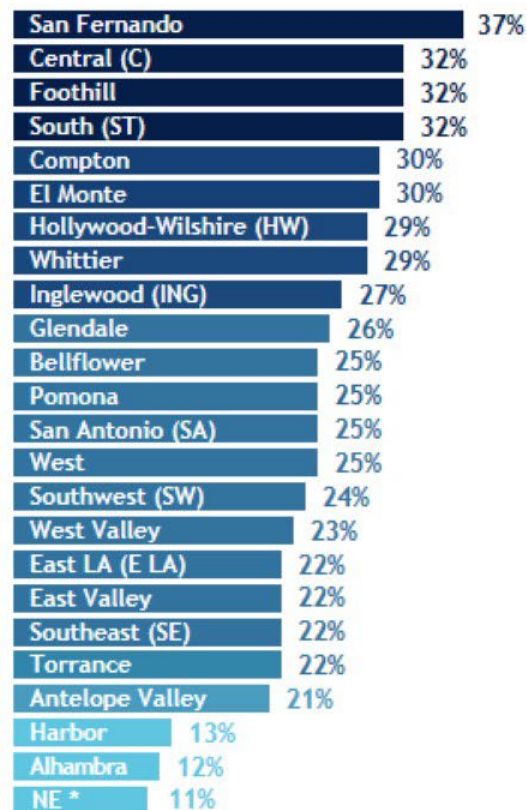
¹DHSP prioritizes HIV, syphilis, and congenital syphilis cases for investigation.

²STD cases in the cities of Long Beach and Pasadena are reported to their respective health departments.

³Due to reporting delay and time needed for case investigations, 2021 is shown as the latest year.



Percentage of persons newly diagnosed with HIV aged ≥ 13 years who had syphilis in the same calendar year as HIV diagnosis by Health District, LAC (excluding Long Beach and Pasadena) 2021^{1,2,3}



¹DHSP prioritizes HIV, syphilis, and congenital syphilis cases for investigation.

²STD cases in the cities of Long Beach and Pasadena are reported to their respective health departments.

³Due to reporting delay and time needed for case investigations, 2021 is shown as the latest year.

*NE=Northeast



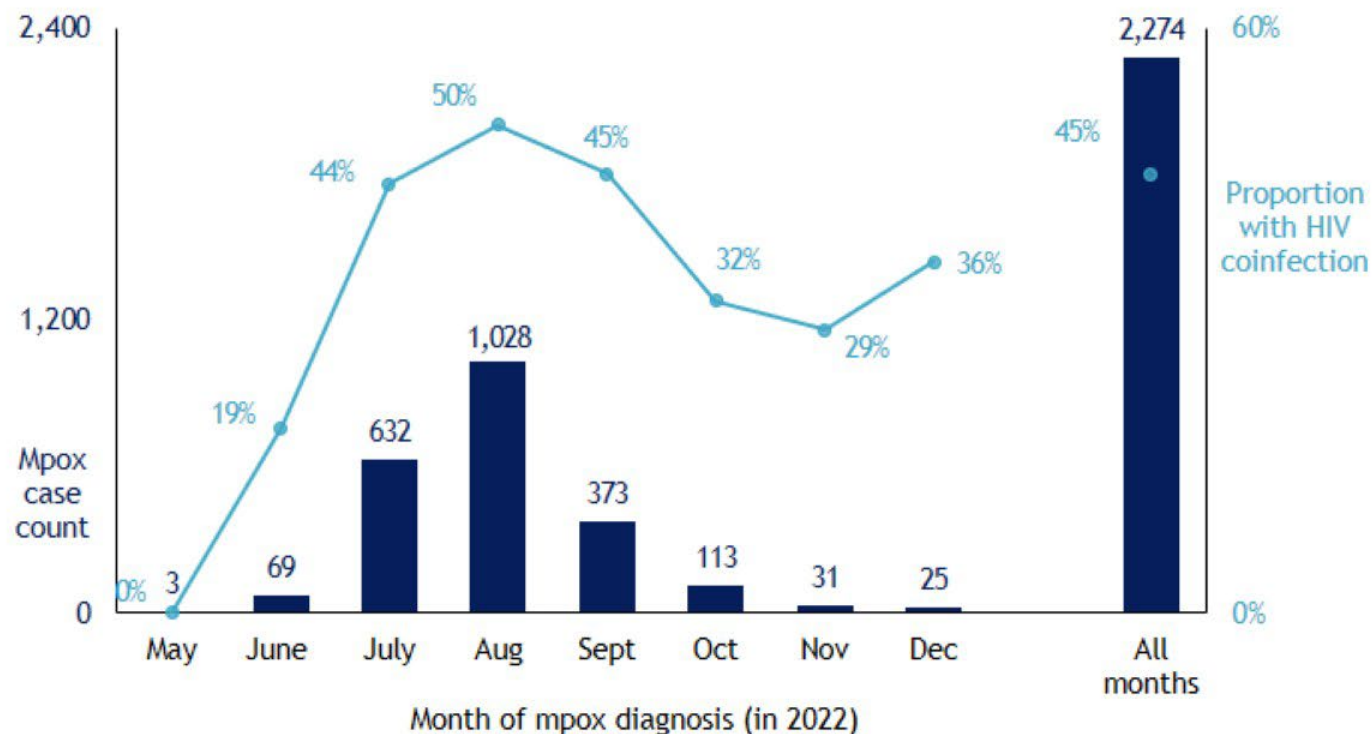
Mpox and HIV co-infection

- In 2022, there was a widespread outbreak of mpox disease in the United States which primarily affected gay, bisexual, and other men who have sex with men.
- CDC reported high prevalence of concurrent HIV infection (38%) among persons with mpox across eight U.S. jurisdictions. Concurrent HIV infection was associated with poorer mpox clinical outcomes compared with persons with mpox who did not have HIV infection.¹
- In this section, we present the HIV co-infection rate among mpox cases and compared mpox HIV co-infection among PLWDH by selected characteristics, using surveillance data on persons living with diagnosed HIV through December 2022 and newly diagnosed cases of mpox infection from the onset of the outbreak (May 2022) through end of year 2022. All data presented in this section are unadjusted and should be interpreted cautiously.
- Note that mpox and HIV co-infection data are for Los Angeles County and do not include Long Beach or Pasadena, as each of these cities have their own health departments and do not directly report mpox data to LAC.

¹ <https://www.cdc.gov/mmwr/volumes/71/wr/mm7136a1.htm>



Total mpox cases and proportion of mpox cases with HIV coinfection by month, LAC (excluding Long Beach and Pasadena) 2022





	Mpox and HIV Co-infected Cases	PLWDH Population ¹	Mpox rate per 10,000 PLWDH
Total	976	48,795	200
Gender			
Women	<5	5,425	-
Men	952	42,334	225
Transgender	20	1,036	193
Age Group			
13 to 19	<5	90	-
20 to 29	134	3,245	413
30 to 39	408	9,860	414
40 to 49	254	10,144	250
50 to 59	144	13,454	107
≥60	34	12,002	28
Race/Ethnicity			
Black	200	9,778	205
Latinx	506	23,204	218
White	196	11,740	167
Asian	22	1,743	126
American Indian/Alaska Native	8	292	274
Multi-race	40	1,773	226
Transmission Risk			
MSM	881	34,207	258
IDU	<5	1,616	-
MSM/IDU	60	2,355	255
Heterosexual	<5	2,584	-
Other/Unknown	31	8,033	39
SPA			
Antelope Valley [1]	15	1,239	121
San Fernando [2]	115	8,007	144
San Gabriel [3]	50	3,618	138
Metro [4]	392	18,203	215
West [5]	27	2,548	106
South [6]	138	6,913	200
East [7]	63	4,010	157
South Bay [8]	75	3,708	202
Viral Suppression²			
Suppressed ³	683	28,965	236
Not Suppressed	236	18,677	126
Experienced homelessness			
Yes	122	4,627	264
No	854	44,168	193

Mpox among PLWDH aged ≥ 13 years LAC (excluding Long Beach and Pasadena) May 2022 to December 2022

Rates of Mpox and HIV co-infection among PLWDH were highest among men, persons aged 20 to 39 years, Latinx, American Indian/Alaska Native, and Multi-race persons, persons with a transmission risk of MSM or MSM/IDU, residents of SPA 4 (Metro), SPA 6 (South), SPA 8 (South Bay) persons with suppressed HIV viral load (i.e., proxy for persons on HIV treatment), and unhoused persons.

¹ Includes PLWDH at year-end 2022, excluding Long Beach and Pasadena

² Viral suppression data include persons diagnosed through 2021 and living in LAC at year-end 2022 (i.e., excludes persons newly diagnosed in 2022 because they have not yet had time to achieve viral suppression).

³ HIV RNA <200 copies/mL within the prior year.



HIV Surveillance to Partner Services Continuum





HIV Surveillance to Partner Services Continuum

- EHE Partner Services Target
 - 85% of persons with a new diagnosis of HIV interviewed by Partner Services staff within 7 days of HIV diagnosis by 2025
- Partner Services (PS) are a broad array of public health field services offered to persons with HIV or other sexually transmitted diseases (STDs) and their sexual or substance-using partners (e.g., needles and syringe sharing partners) to improve the health outcomes of infected persons, offer strategies and resources to protect partners, which will reduce HIV and STD transmission.
- An important component of Partner Services is partner notification, a process through which persons newly diagnosed with STDs and/or HIV are interviewed to elicit information about their partners, who can then be confidentially notified of their possible exposure and referred to testing and other interventions to help reduce their risk of acquiring HIV.

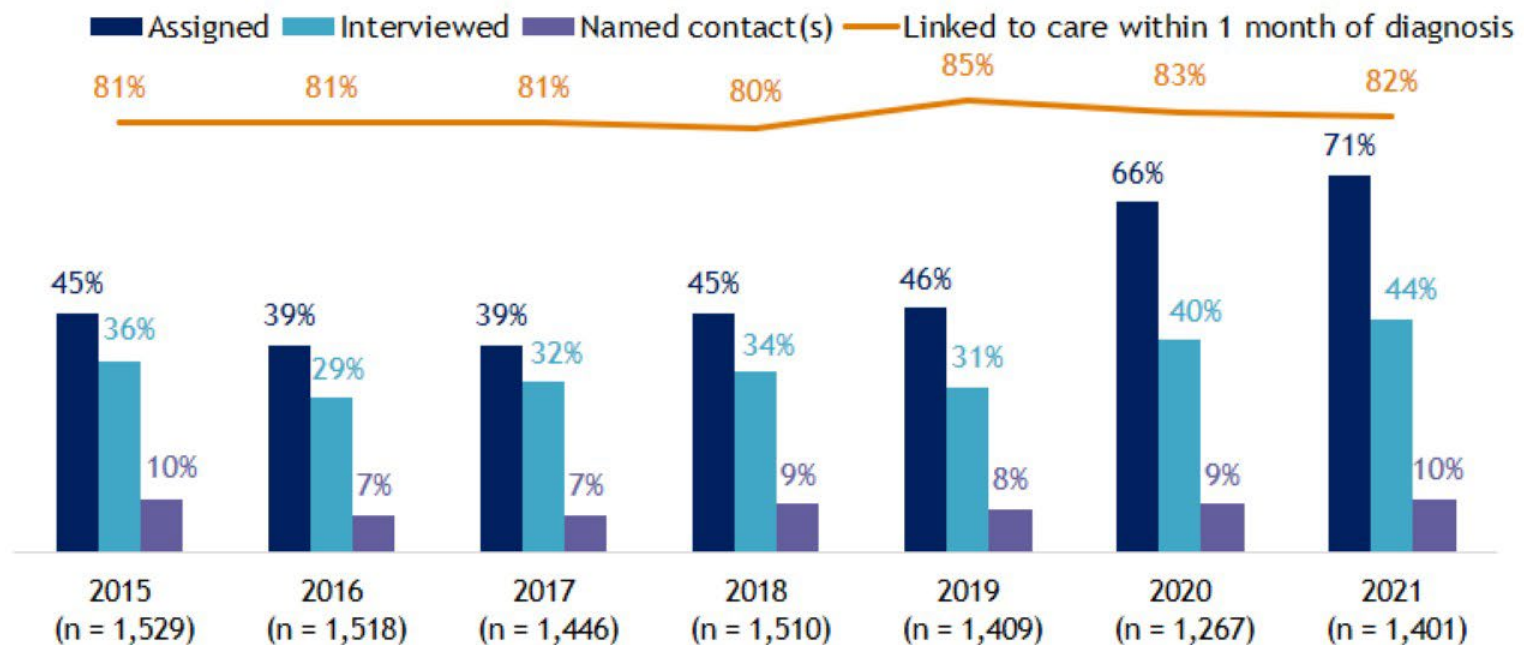


HIV Surveillance to Partner Services Continuum

- All people newly diagnosed with HIV should receive Partner Services. The EHE target for Partner Services is “85% of persons with a new diagnosis of HIV are interviewed by Partner Services staff within 7 days of HIV diagnosis” and is intended to accelerate receipt of health services, both for PLWDH and their partners. Historically, not all newly reported HIV cases were prioritized for Partner Services, creating missed opportunities for linking persons to HIV care and, for partners of PLWDH, to receive status neutral services. Through close coordination between the HIV Surveillance and Partner Services Programs, routine program analysis and dashboards have been implemented to track achievements and gaps along the HIV Surveillance to Partner Services continuum.
- The steps in the continuum start from a new diagnosis of HIV and are tracked through the following evaluation metrics:
 - referral to HIV Partner Services
 - PS interview
 - linkage to care
 - contact tracing
 - locating contacts
 - determining the HIV status of contacts
 - administering interventions to contacts
- Achievements in each of the steps in the continuum increases the likelihood of infected persons and their partners to be linked to effective interventions for prevention, care, and treatment of HIV disease, and ultimately, reductions in community transmission of HIV.



HIV Partner Services continuum among new HIV diagnoses by year, LAC (excluding Long Beach and Pasadena), 2015-2021^{1,2,3,4}



¹ New HIV diagnoses assigned for partner services within 12 months of report among LAC HIV diagnoses (excluding Long Beach and Pasadena).

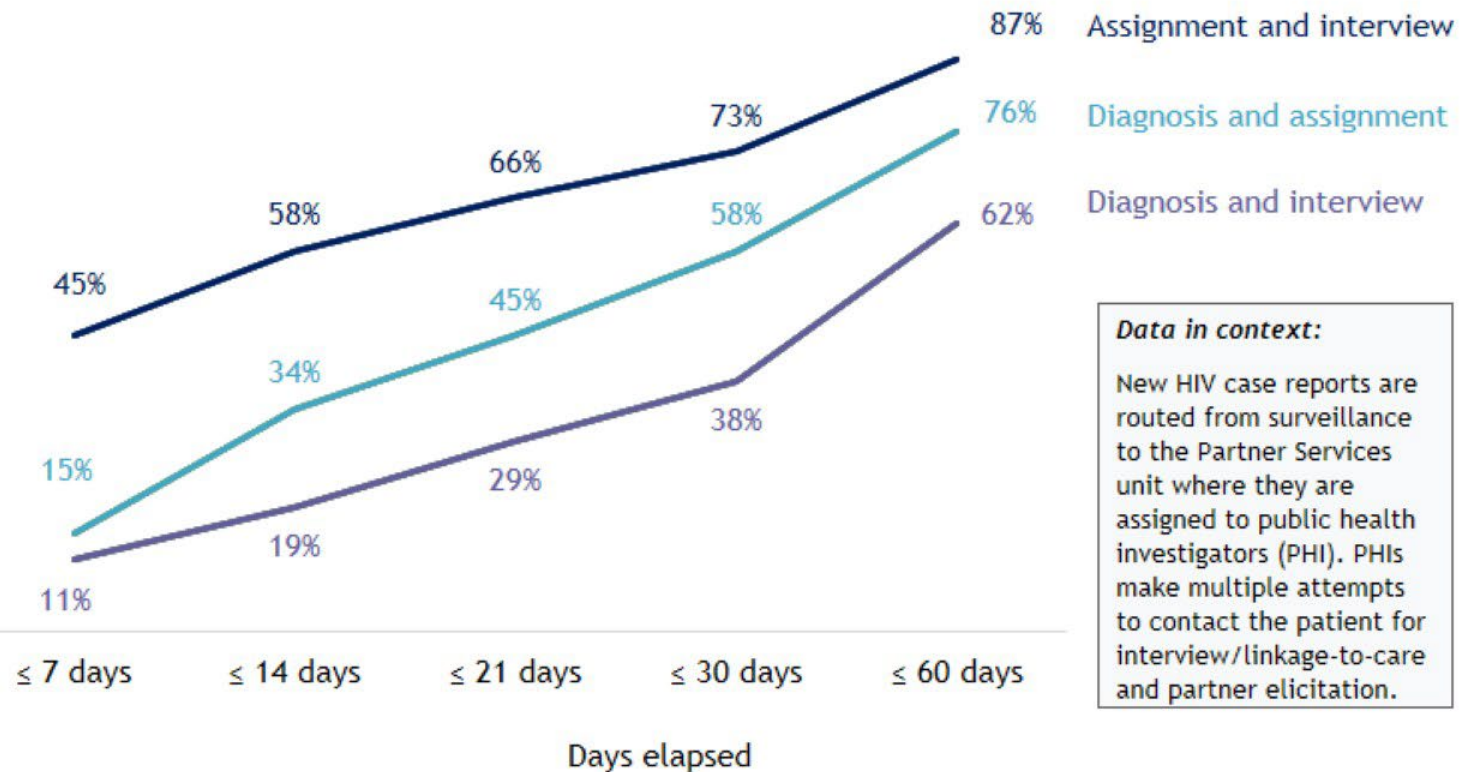
² New HIV diagnoses interviewed by public health investigators among new LAC HIV diagnoses (excluding Long Beach and Pasadena).

³ New HIV diagnoses who identified ≥ 1 sexual and/or cluster contact during interview among new LAC HIV diagnoses (excluding Long Beach and Pasadena).

⁴ Linked to care within 1 month of diagnosis among cases interviewed by public health investigators.



Time from HIV diagnosis to HIV Partner Services assignment¹ and interview,² LAC (excluding Long Beach and Pasadena), 2021

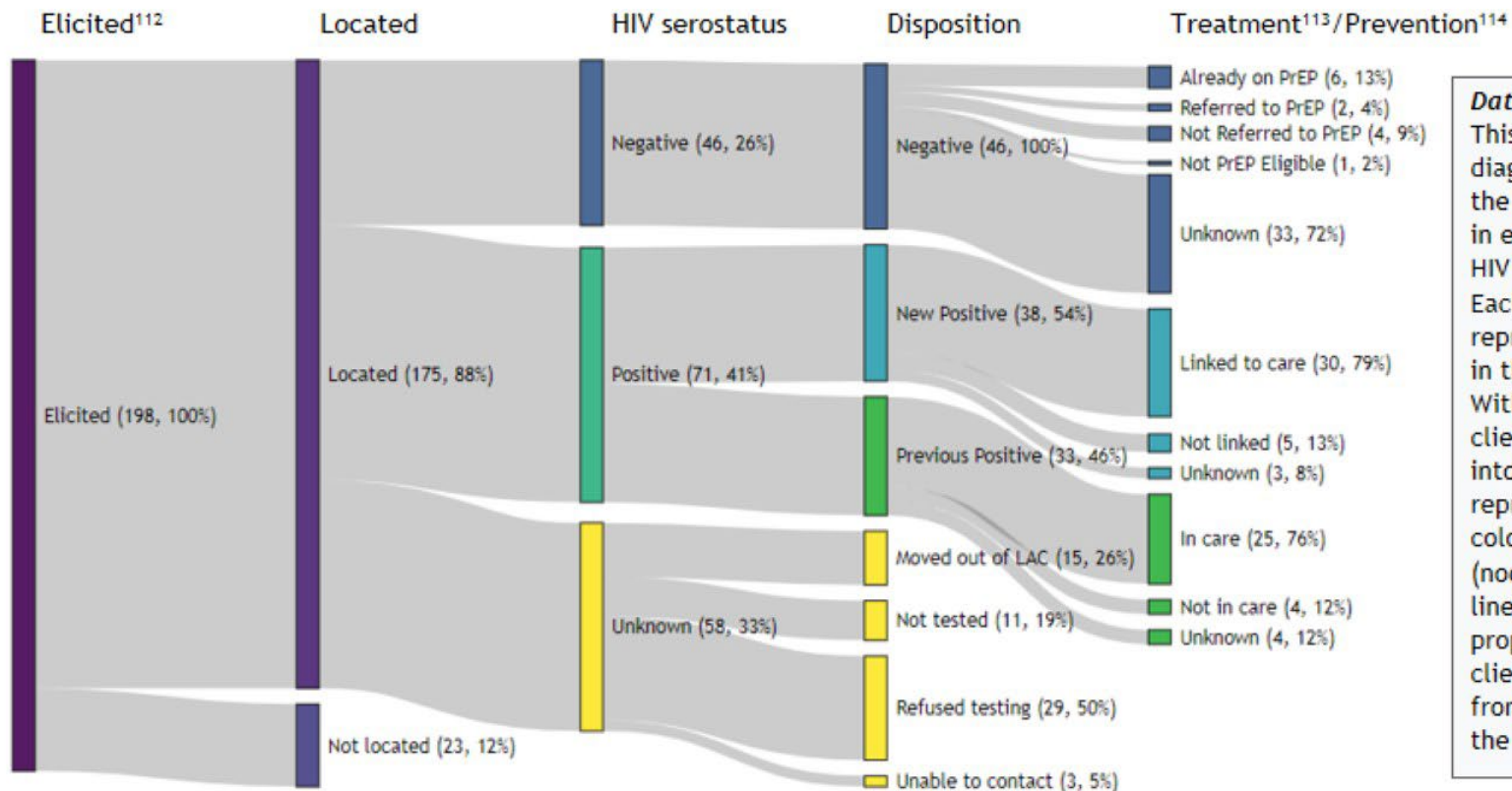


¹Denominator is the number of new HIV/AIDS diagnoses in LAC, excluding Long Beach and Pasadena, assigned for Partner Services.

²Denominator is the number of new HIV/AIDS diagnoses in LAC, excluding Long Beach and Pasadena, who received a Partner Services interview.



HIV partner services continuum¹ among named contacts, LAC (excluding Long Beach and Pasadena), 2021^{2,3,4}



Data in context:
This Sankey diagram depicts the flow of clients in each step of the HIV PS cascade. Each column represents a step in the cascade. Within each step, clients are grouped into categories represented by the colored rectangles (nodes). The gray lines show the proportion of clients moving from one node to the next.

¹The HIV partner services continuum includes the following steps: 1) identifying people who were named as sexual or social contacts by index cases, 2) locating elicited contacts, 3) confirming contacts' HIV serostatus, and 4) connecting contacts who tested positive to HIV treatment and contacts who tested negative to preventative HIV treatment.

²198 contacts named by 114 index cases newly diagnosed with HIV in 2021.

³PLWDH diagnosed through 2020 who have at least one care visit within year 2021 are considered engaged in care. Care status is available for contacts regardless of HIV testing disposition.

⁴PrEP information is unknown for clients without comorbid STD.



HIV Care Continuum





HIV care continuum targets

EHE HIV Care Continuum Targets

- Increase the percentage of newly diagnosed persons linked to care within one month to at least 95% by 2025
- Increase the percentage of persons living with diagnosed HIV who are virally suppressed to at least 95% by 2025



The HIV Care Cascade

- HIV care continuum indicators includes following:
 1. among persons receiving a diagnosis of HIV in a given calendar year, the percentage of persons who were linked to HIV care within one month of diagnosis (defined as ≥ 1 CD4/VL/Genotype test reported within one month of HIV diagnosis); and
 2. among all persons living with diagnosed HIV, the percentage of persons who
 - a. received HIV care (defined as ≥ 1 CD4/VL/Genotype test per year),
 - b. were retained in HIV care (defined as ≥ 2 CD4/VL/Genotype tests at least three months apart per year), and
 - c. were virally suppressed (defined using most recent viral load per year).

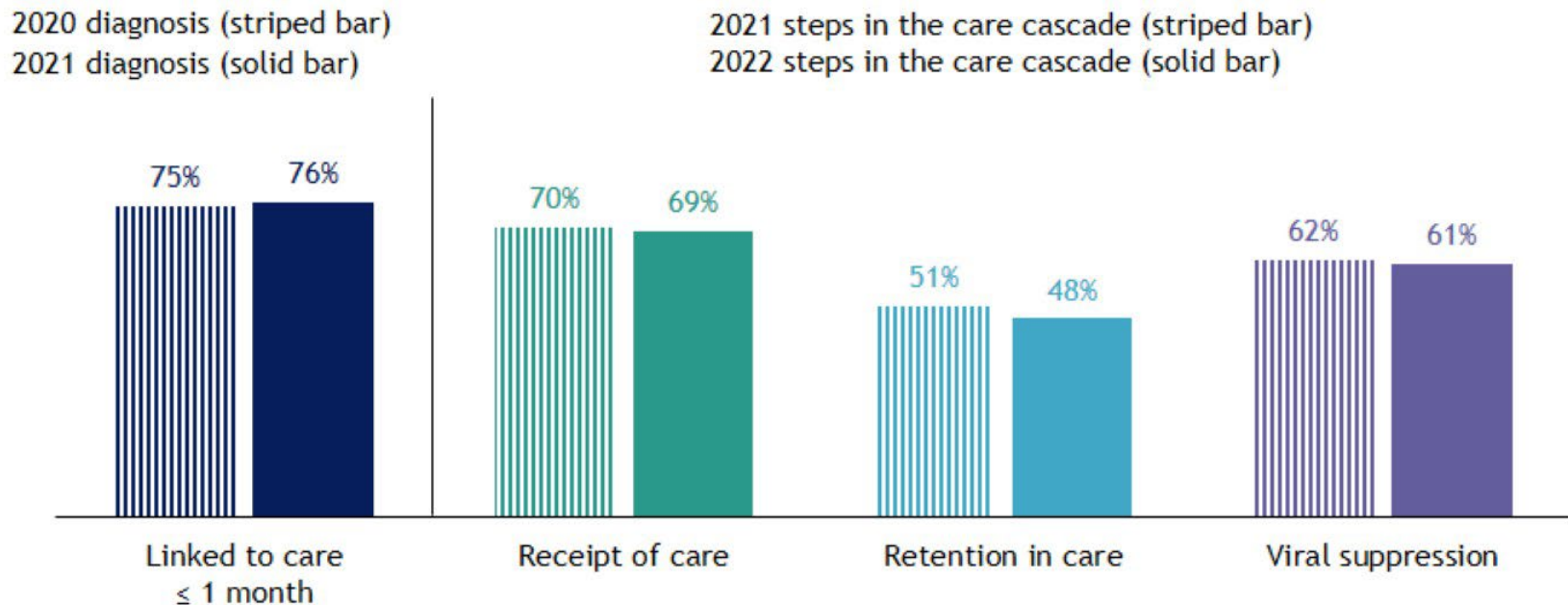


The HIV Care Cascade

- The HIV Care Continuum is a series of steps starting from when a person living with HIV receives a HIV-positive diagnosis through the achievement of viral suppression.
- By monitoring these steps at a population level, we can quantify progress at the local and national level.
- A deeper analysis of the steps along the HIV continuum of care can identify gaps in HIV care delivery.
- Knowing where and among whom the shortfalls persist along the HIV care cascade can inform where improvements are needed to support individuals in achieving and maintaining viral suppression, improving their health, and effectively eliminating further transmission to others.



HIV care continuum¹ among persons aged ≥ 13 years, LAC 2020-2021² and 2021-2022³



¹The HIV care continuum includes the following steps in the care cascade: 1) the percentage of persons receiving a diagnosis of HIV in a given calendar year who were linked to HIV care within 1 month of diagnosis (defined as ≥ 1 CD4/VL/Genotype test reported within 1 month of HIV diagnosis); and 2) the percentage of all persons living with diagnosed HIV who (1) received HIV care (defined as ≥ 1 CD4/VL/Genotype test per year), (2) were retained in HIV care (defined as ≥ 2 CD4/VL/Genotype tests at least three months apart, per year), and (3) were virally suppressed (defined using most recent viral load, per year). PLWDH without a VL test in the measurement year were categorized as having unsuppressed viral load.

²The 2020-2021 HIV care continuum denominator includes persons diagnosed in 2020 to calculate linkage to care ≤ 1 month of diagnosis, and all PLWDH diagnosed through 2020 and living in LAC at year-end 2021 to calculate receipt of care, retention in care, and viral suppression.

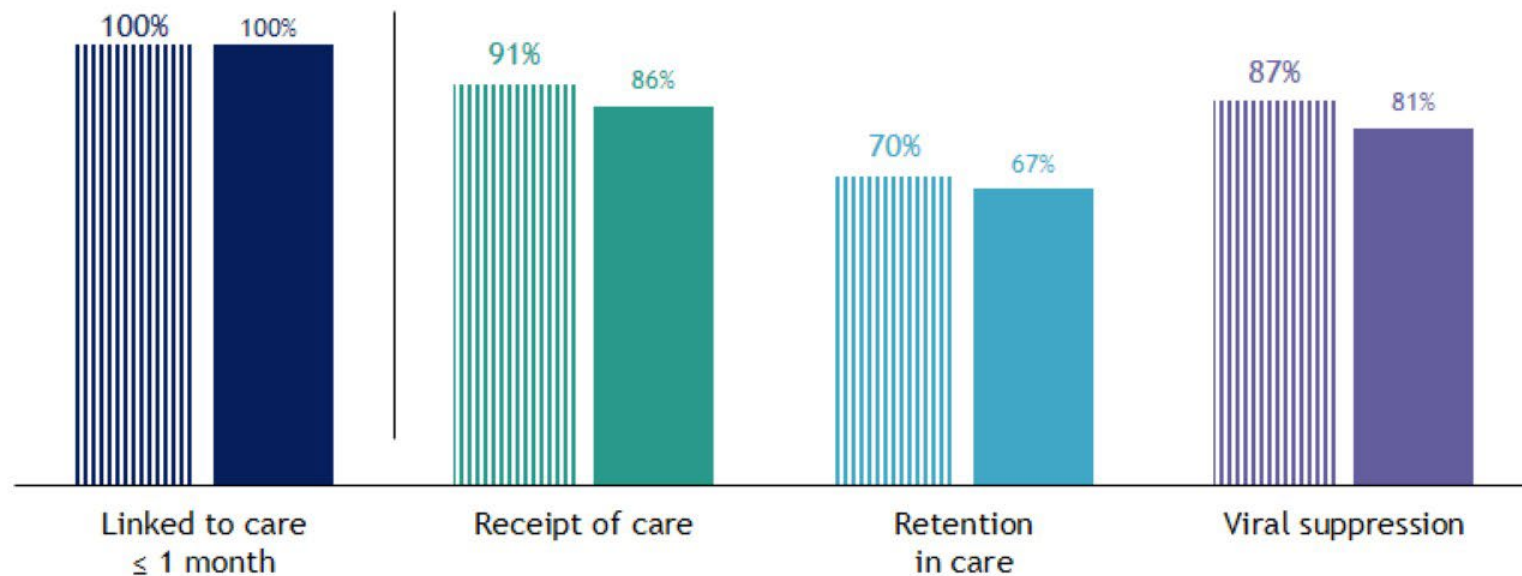
³The 2021-2022 HIV care continuum denominator includes persons diagnosed in 2021 to calculate linkage to care ≤ 1 month of diagnosis, and all PLWDH diagnosed through 2021 and living in LAC at year-end 2022 to calculate receipt of care, retention in care, and viral suppression.



HIV care continuum¹ among children aged < 13 years, LAC 2020-2021² and 2021-2022³

2020 diagnosis (patterned bar)
2021 diagnosis (solid bar)

2021 steps in the care cascade (patterned bar)
2022 steps in the care cascade (solid bar)



¹The HIV care continuum includes the following steps in the care cascade: 1) the percentage of persons receiving a diagnosis of HIV in a given calendar year who were linked to HIV care within 1 month of diagnosis (defined as ≥ 1 CD4/VL/Genotype test reported within 1 month of HIV diagnosis); and 2) the percentage of all persons living with diagnosed HIV who (1) received HIV care (defined as ≥ 1 CD4/VL/Genotype test per year), (2) were retained in HIV care (defined as ≥ 2 CD4/VL/Genotype tests at least three months apart, per year), and (3) were virally suppressed (defined using most recent viral load, per year). PLWDH without a VL test in the measurement year were categorized as having unsuppressed viral load.

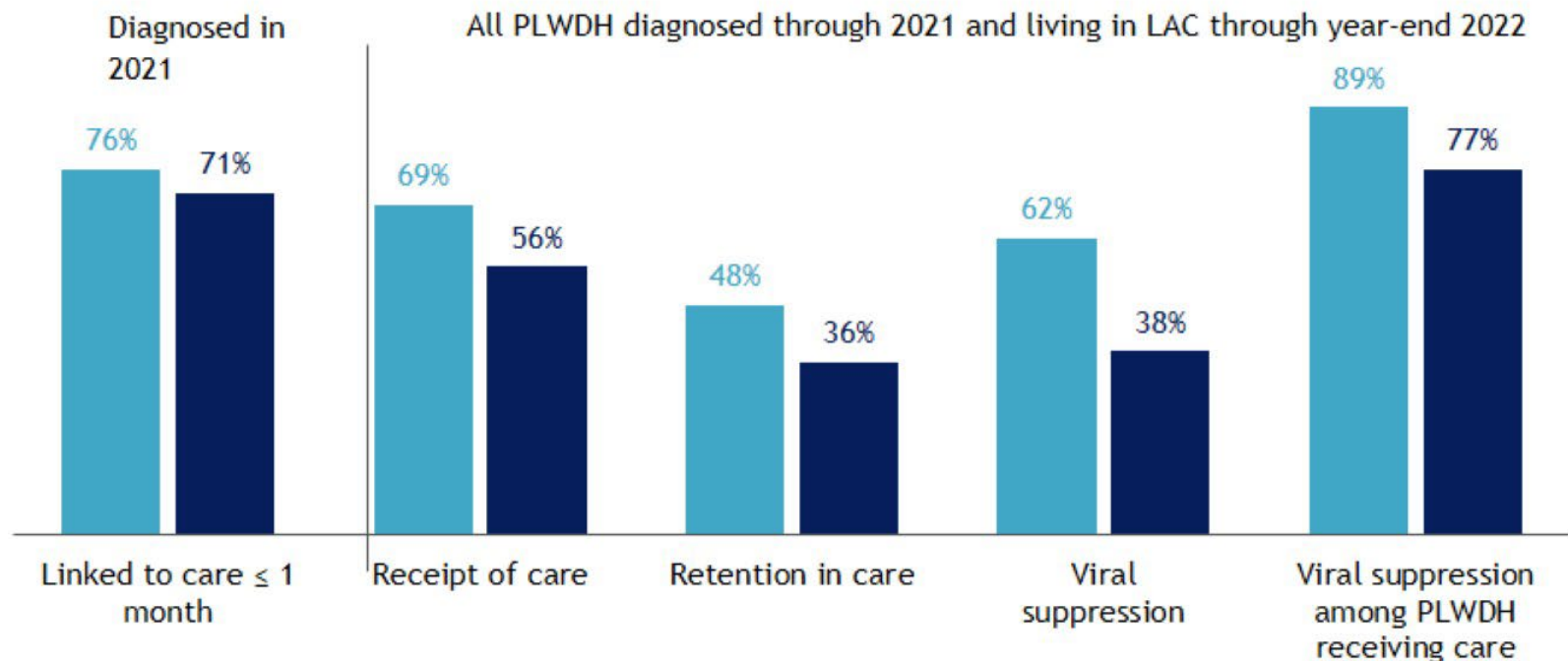
²The 2020-2021 HIV care continuum denominator includes persons diagnosed in 2020 to calculate linkage to care ≤ 1 month of diagnosis, and all PLWDH diagnosed through 2020 and living in LAC at year-end 2021 to calculate receipt of care, retention in care, and viral suppression.

³The 2021-2022 HIV care continuum denominator includes persons diagnosed in 2021 to calculate linkage to care ≤ 1 month of diagnosis, and all PLWDH diagnosed through 2021 and living in LAC at year-end 2022 to calculate receipt of care, retention in care, and viral suppression.



HIV care continuum among persons aged ≥ 13 years who were experiencing homelessness at the time of HIV diagnosis, LAC 2020-2021¹

■ Not PEH at time of diagnosis (N=50,957) ■ PEH at time of diagnosis (N=1,387)



¹Linkage to care: numerator includes persons newly diagnosed with HIV in 2021 with ≥ 1 CD4/VL/Genotype test reported within 1 month of HIV diagnosis; denominator includes persons who were diagnosed with HIV in 2021.

Receipt of care: numerator includes PLWDH with ≥ 1 CD4/VL/Genotype test in 2022; denominator includes PLWDH diagnosed through 2021 and living in LAC at year-end 2022 based on most recent residence.

Retention in care: numerator includes PLWDH with ≥ 2 CD4/VL/Genotype tests at least 3 months apart in 2022; denominator includes PLWDH diagnosed through 2021 and living in LAC at year-end 2022 based on most recent residence.

Viral suppression: numerator includes PLWDH whose last VL test in 2022 was suppressed (HIV-1 RNA < 200 copies/mL); denominator includes PLWDH diagnosed through 2021 and living in LAC at year-end 2022 based on most recent residence. PLWDH without a VL test in 2022 were categorized as having unsuppressed viral load.

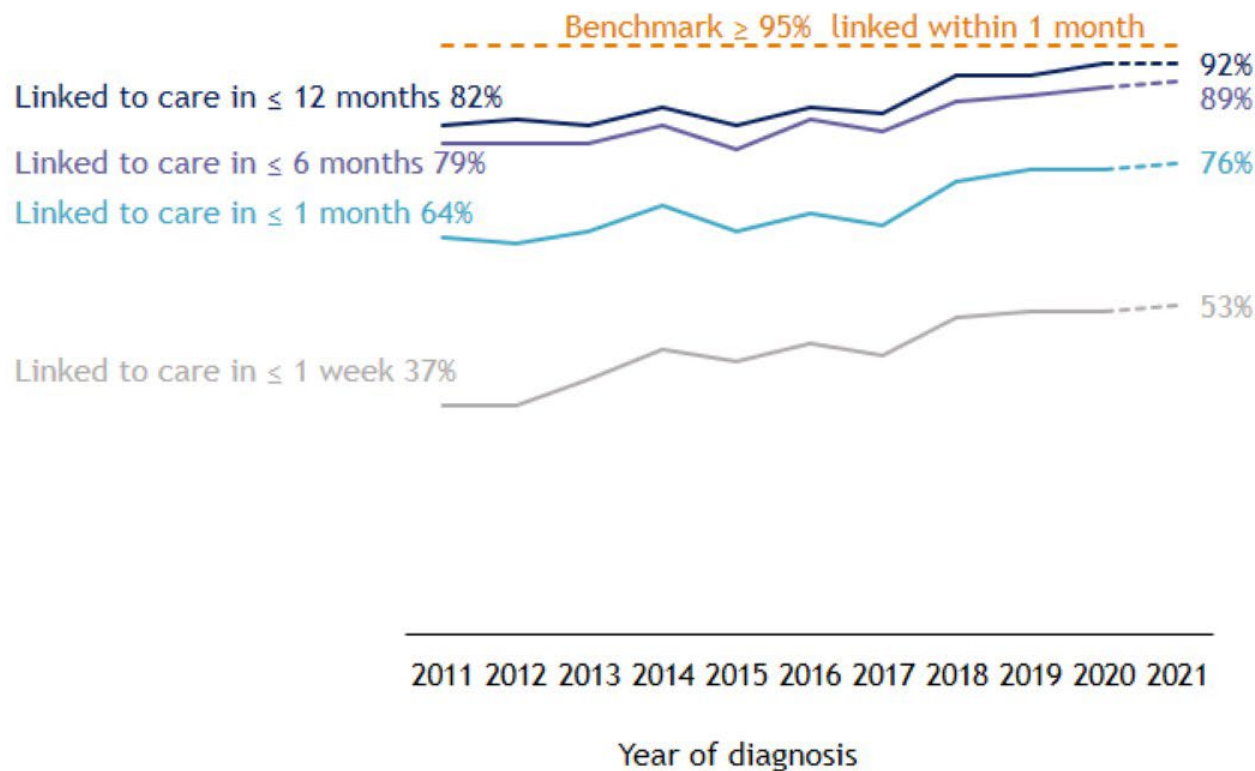


Linkage to Care

- Linkage to HIV care is the first step in the HIV care continuum. It is the necessary precursor for receiving antiretroviral therapy to treat HIV.
- Linkage to HIV care is typically tracked as being linked to HIV care within one month of HIV diagnosis.
- Initiating HIV care services should occur faster, ideally within days, to ensure that treatment of HIV can be started immediately.



Time from HIV diagnosis to linkage to care among persons aged ≥ 13 years newly diagnosed with HIV by year of HIV diagnosis, LAC 2011-2021^{1,2}



Data in context: Though not shown, populations and locations with the lowest rates of linkage to care within 1 week were females; adolescents; Black persons; persons with MSM transmission, heterosexual transmission, or IDU transmission risk; and persons residing in the East Los Angeles, Pomona, or San Antonio Health Districts.

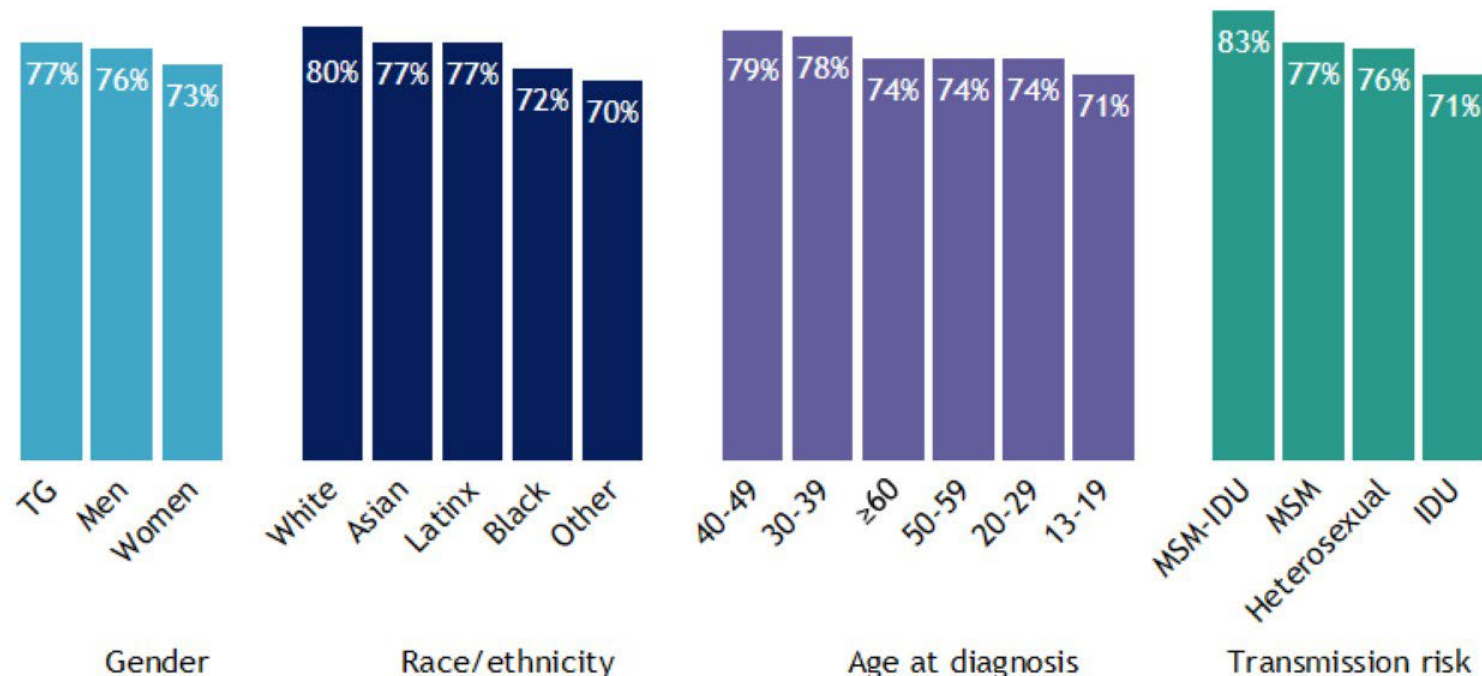
¹Includes persons diagnosed with HIV in each calendar year with ≥ 1 CD4/VL/Genotype test reported within 1 week, as well as 1, 6, and 12 months of diagnosis.

²Due to reporting delay, 2021 HIV linkage to care data are provisional as indicated by the dashed line.



Persons aged ≥ 13 years newly diagnosed with HIV and linked to care within one month of diagnosis¹ by select demographic² and risk³ characteristics, LAC 2021

Benchmark $\geq 95\%$ linked within 1 month



Abbreviations: TG = transgender persons; MSM = men who have sex with men; IDU = injection drug use

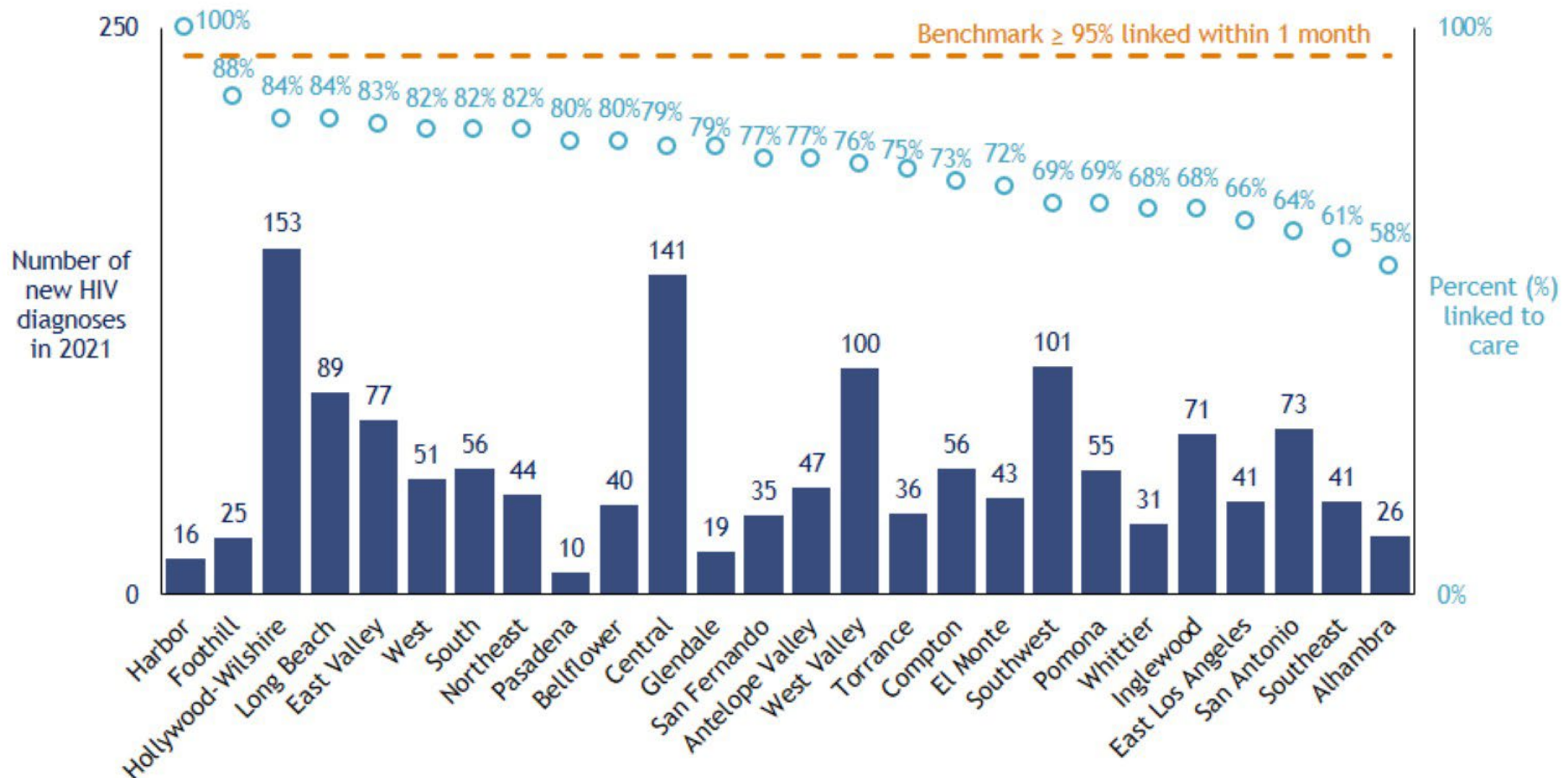
¹Linked to care: numerator includes persons newly diagnosed with HIV in 2021 with ≥ 1 CD4/VL/Genotype test reported within 1 month of HIV diagnosis; denominator includes persons who were diagnosed with HIV in 2021.

²Other race/ethnicity includes American Indian and Alaska Natives, Native Hawaiian and Pacific Islanders, persons of multiple race/ethnicities, and persons with unknown race/ethnicity.

³Other risk includes risk factor not reported/identified and is not shown due to small numbers.



Persons aged ≥ 13 years newly diagnosed with HIV and linked to care within one month of diagnosis by Health District, LAC 2021^{1,2}



¹Linked to care: numerator includes persons newly diagnosed with HIV in 2021 with ≥1 CD4/VL/Genotype test reported within 1 month of HIV diagnosis; denominator includes persons who were diagnosed with HIV in 2021.

²Health Districts are based on 2022 boundaries. Persons are assigned a Health District using their geocoded residence at diagnosis joined to census tract 2020, followed by their ZIP Code if no valid residence at diagnosis was available. The correspondence tables were provided by LAC DPH Information Management and Analytics Office, Office of Health Assessment and Epidemiology, GIS Unit team.

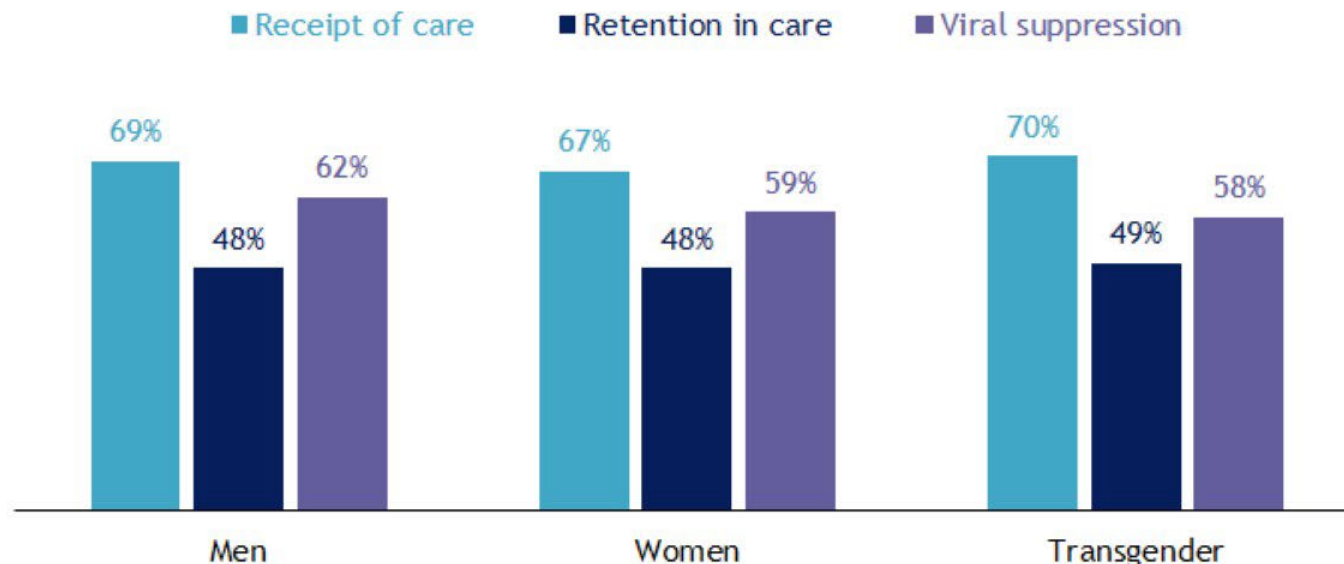


Receipt of care, retention in care, and viral suppression

- Entering and staying in HIV care is necessary to ensure that adherence to HIV treatment occurs and viral suppression is achieved.
- Identifying disparities allows us to determine whether interventions are needed to help people stay in care, get back in care, and ensure they are taking their medication as prescribed.
- This section presents how LAC performed with respect to receipt of care, retention in care, and viral suppression in 2022 across different populations of PLWDH.



Receipt of care, retention in care, and viral suppression by gender among PLWDH aged ≥ 13 years diagnosed through 2021 and living in LAC at year-end 2022,¹ LAC 2022



Abbreviation: PLWDH = persons living with diagnosed HIV

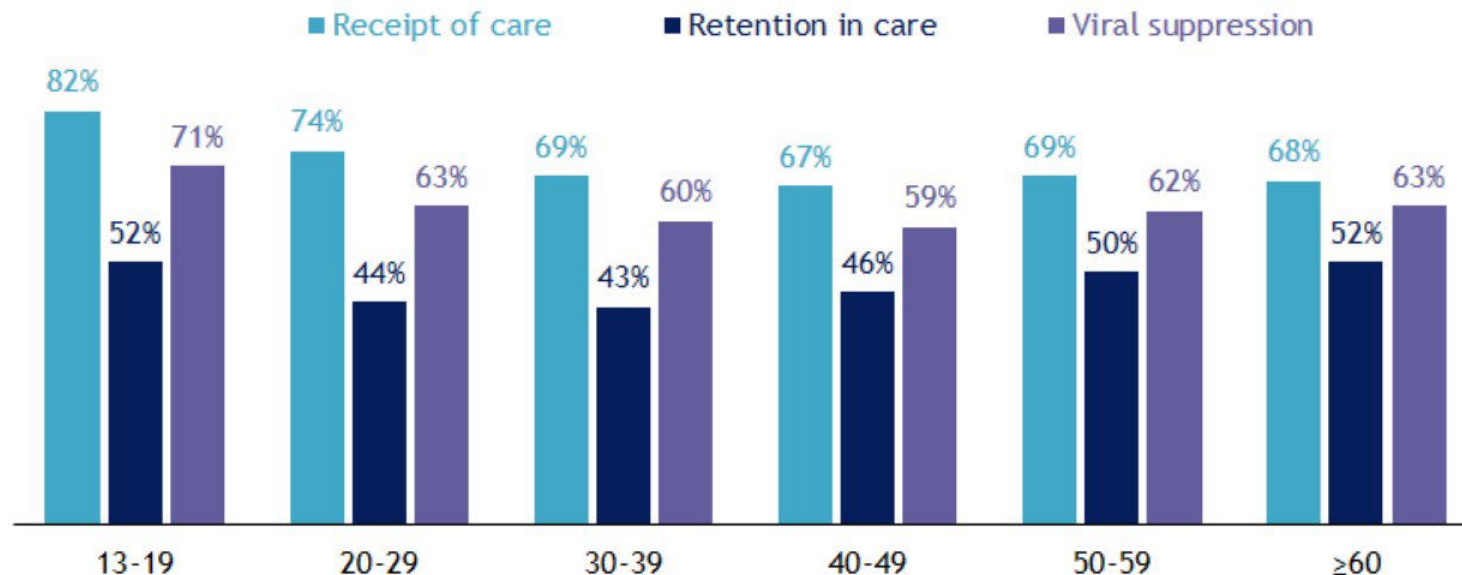
¹Receipt of care: numerator includes PLWDH with ≥ 1 CD4/VL/Genotype test in 2022; denominator includes PLWDH diagnosed through 2021 and living in LAC at year-end 2022 based on most recent residence.

Retention in care: numerator includes PLWDH with ≥ 2 CD4/VL/Genotype tests at least three months apart in 2022; denominator includes PLWDH diagnosed through 2021 and living in LAC at year-end 2022 based on most recent residence.

Viral suppression: numerator includes PLWDH whose last VL test in 2022 was suppressed (HIV-1 RNA < 200 copies/mL); denominator includes PLWDH diagnosed through 2021 and living in LAC at year-end 2022 based on most recent residence. PLWDH without a VL test in 2022 were categorized as having unsuppressed viral load.



Receipt of care, retention in care, and viral suppression by age group among PLWDH aged ≥ 13 years diagnosed through 2021 and living in LAC at year-end 2022,¹ LAC 2022



Abbreviation: PLWDH = persons living with diagnosed HIV

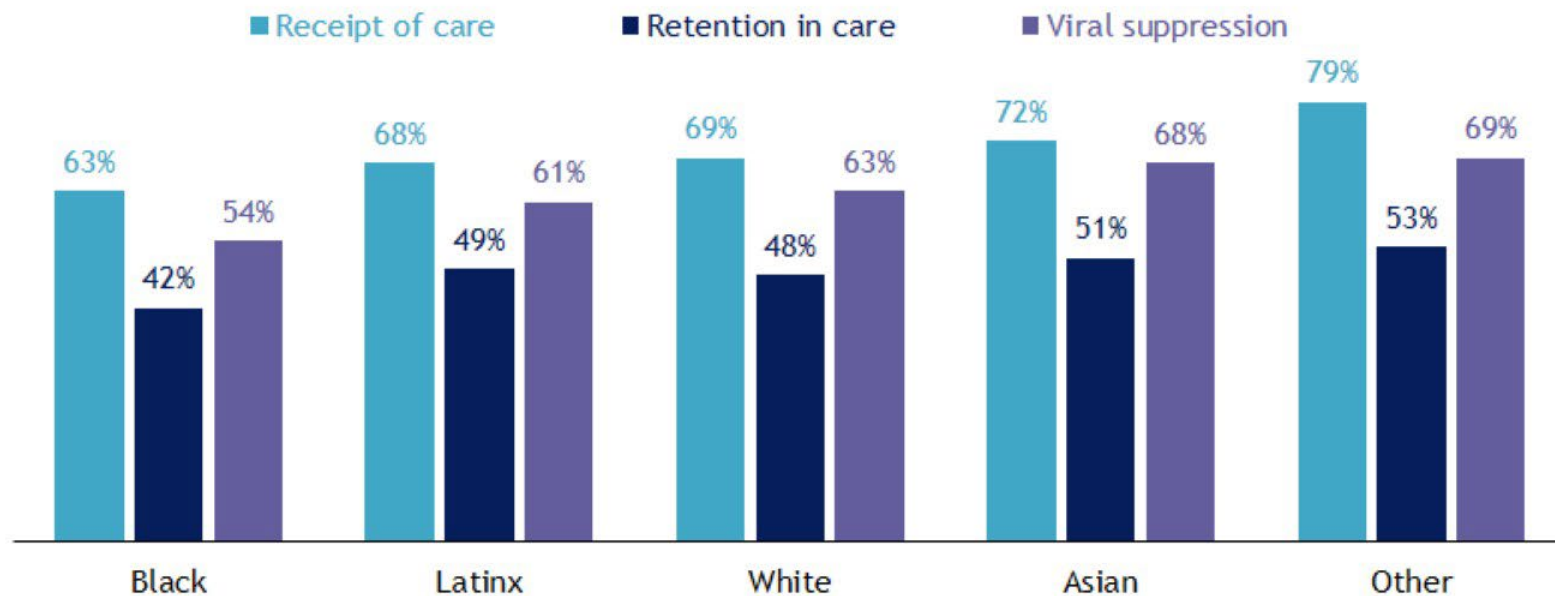
¹Receipt of care: numerator includes PLWDH with ≥ 1 CD4/VL/Genotype test in 2022; denominator includes PLWDH diagnosed through 2021 and living in LAC at year-end 2022 based on most recent residence.

Retention in care: numerator includes PLWDH with ≥ 2 CD4/VL/Genotype tests at least three months apart in 2022; denominator includes PLWDH diagnosed through 2021 and living in LAC at year-end 2022 based on most recent residence.

Viral suppression: numerator includes PLWDH whose last VL test in 2022 was suppressed (HIV-1 RNA < 200 copies/mL); denominator includes PLWDH diagnosed through 2021 and living in LAC at year-end 2022 based on most recent residence. PLWDH without a VL test in 2022 were categorized as having unsuppressed viral load.



Receipt of HIV care, retention in HIV care, and viral suppression³ by race/ethnicity among PLWDH aged ≥ 13 years diagnosed through 2021 and living in LAC at year-end 2022,^{1,2} LAC 2022



Abbreviation: PLWDH = persons living with diagnosed HIV

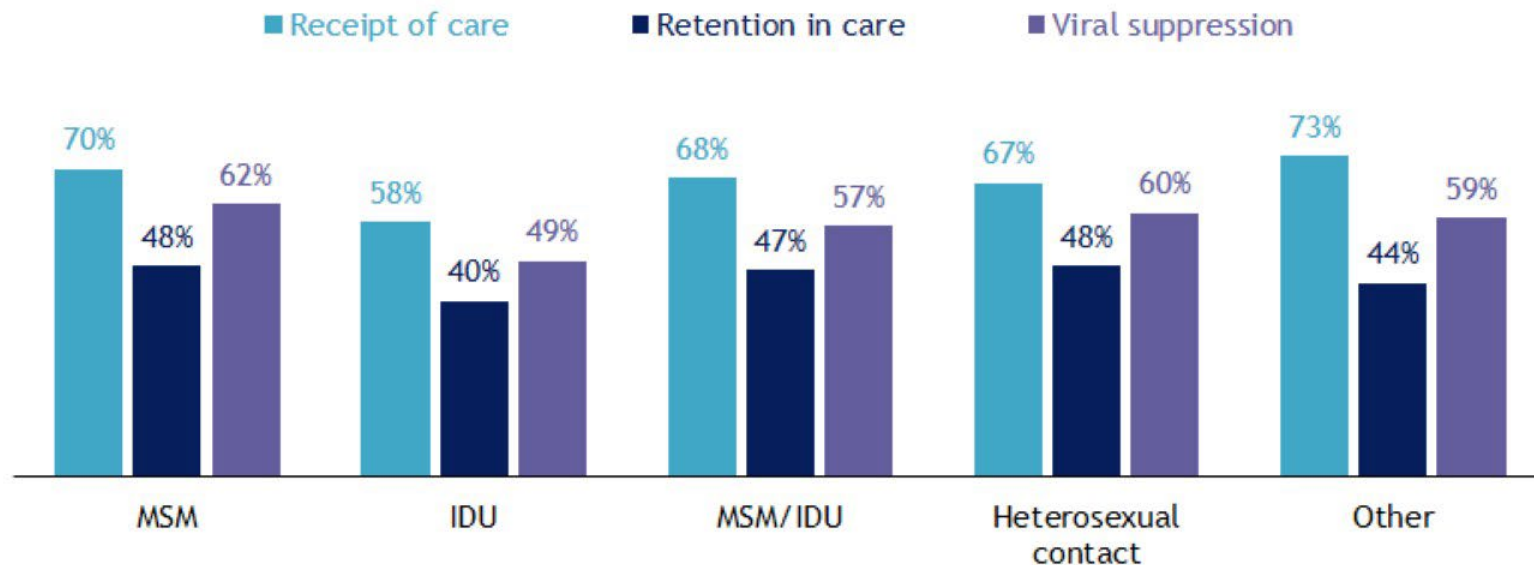
¹ Receipt of care: numerator includes PLWDH with ≥ 1 CD4/VL/Genotype test in 2022; denominator includes PLWDH diagnosed through 2021 and living in LAC at year-end 2022 based on most recent residence. Retention in care: numerator includes PLWDH with ≥ 2 CD4/VL/Genotype tests at least 3 months apart in 2022; denominator includes PLWDH diagnosed through 2021 and living in LAC at year-end 2022 based on most recent residence.

Viral suppression: numerator includes PLWDH whose last VL test in 2022 was suppressed (HIV-1 RNA < 200 copies/mL); denominator includes PLWDH diagnosed through 2021 and living in LAC at year-end 2022 based on most recent residence. PLWDH without a VL test in 2022 were categorized as having unsuppressed viral load.

² Other race/ethnicity includes American Indian and Alaska Natives, Native Hawaiian and Pacific Islanders, persons of multiple race/ethnicities, and persons with unknown race/ethnicity.



Receipt of HIV care, retention in HIV care, and viral suppression by transmission risk category among PLWDH aged ≥ 13 years diagnosed through 2021 and living in LAC at year-end 2022,^{1,2} LAC 2022



Abbreviations: Abbreviation: PLWDH = persons living with diagnosed HIV; MSM = men who have sex with men; IDU = injection drug use

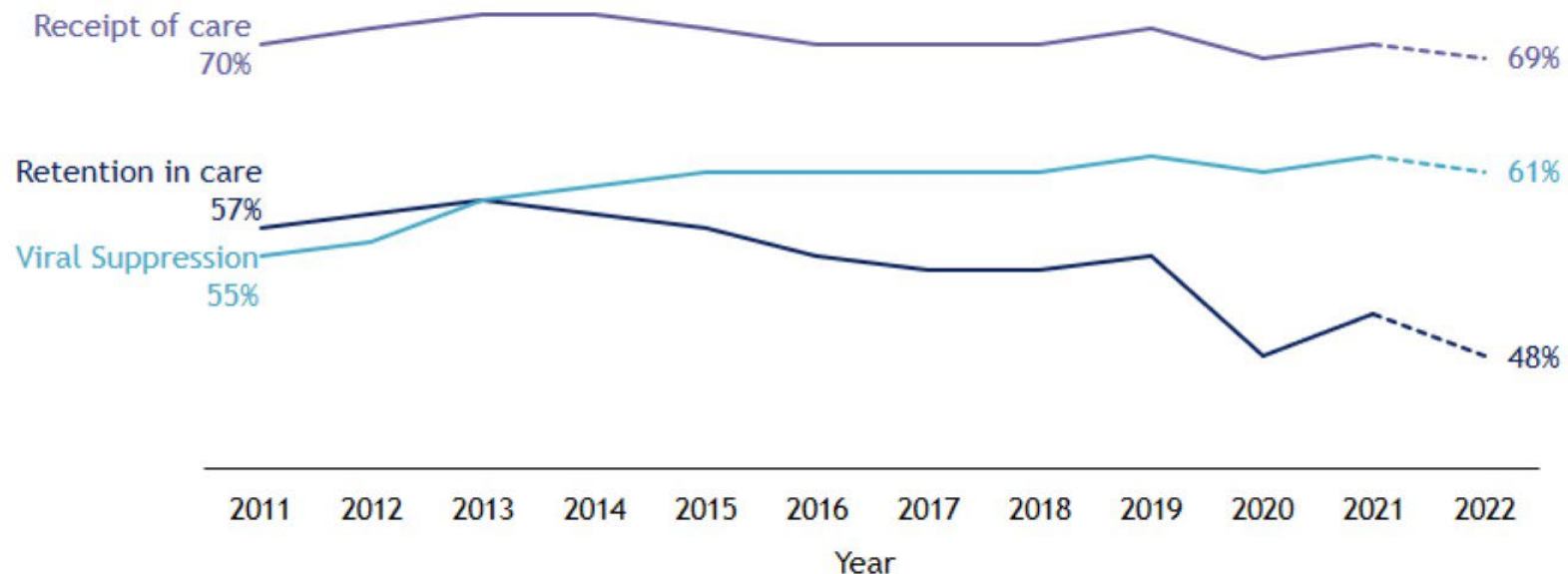
¹Receipt of care: numerator includes PLWDH with ≥ 1 CD4/VL/Genotype test in 2022; denominator includes PLWDH diagnosed through 2021 and living in LAC at year-end 2022 based on most recent residence. Retention in care: numerator includes PLWDH with ≥ 2 CD4/VL/Genotype tests at least 3 months apart in 2022; denominator includes PLWDH diagnosed through 2021 and living in LAC at year-end 2022 based on most recent residence.

Viral suppression: numerator includes PLWDH whose last VL test in 2022 was suppressed (HIV-1 RNA < 200 copies/mL); denominator includes PLWDH diagnosed through 2021 and living in LAC at year-end 2022 based on most recent residence. PLWDH without a VL test in 2022 were categorized as having unsuppressed viral load.

²Other transmission risk includes perinatal, hemophilia, coagulation disorder, blood transfusion, and risk factor not reported/identified. Persons without an identified risk factor were assigned a risk factor using CDC-recommended multiple imputation methods.



Trends in receipt of HIV care, retention in care, and viral suppression for PLWDH aged ≥ 13 years living in LAC at calendar year-end and diagnosed with HIV through the previous calendar year, LAC 2011-2022^{1,2}



Abbreviation: PLWDH = persons living with diagnosed HIV

¹Receipt of care: numerator includes PLWDH with ≥ 1 CD4/VL/Genotype test in 2022; denominator includes PLWDH diagnosed through 2021 and living in LAC at year-end 2022 based on most recent residence.

Retention in care: numerator includes PLWDH with ≥ 2 CD4/VL/Genotype tests at least three months apart in 2022; denominator includes PLWDH diagnosed through 2021 and living in LAC at year-end 2022 based on most recent residence.

Viral suppression: numerator includes PLWDH whose last VL test in 2022 was suppressed (HIV-1 RNA < 200 copies/mL); denominator includes PLWDH diagnosed through 2021 and living in LAC at year-end 2022 based on most recent residence. PLWDH without a VL test in 2022 were categorized as having unsuppressed viral load.

²Due to reporting delay, 2022 HIV data are provisional as indicated by the dashed line.

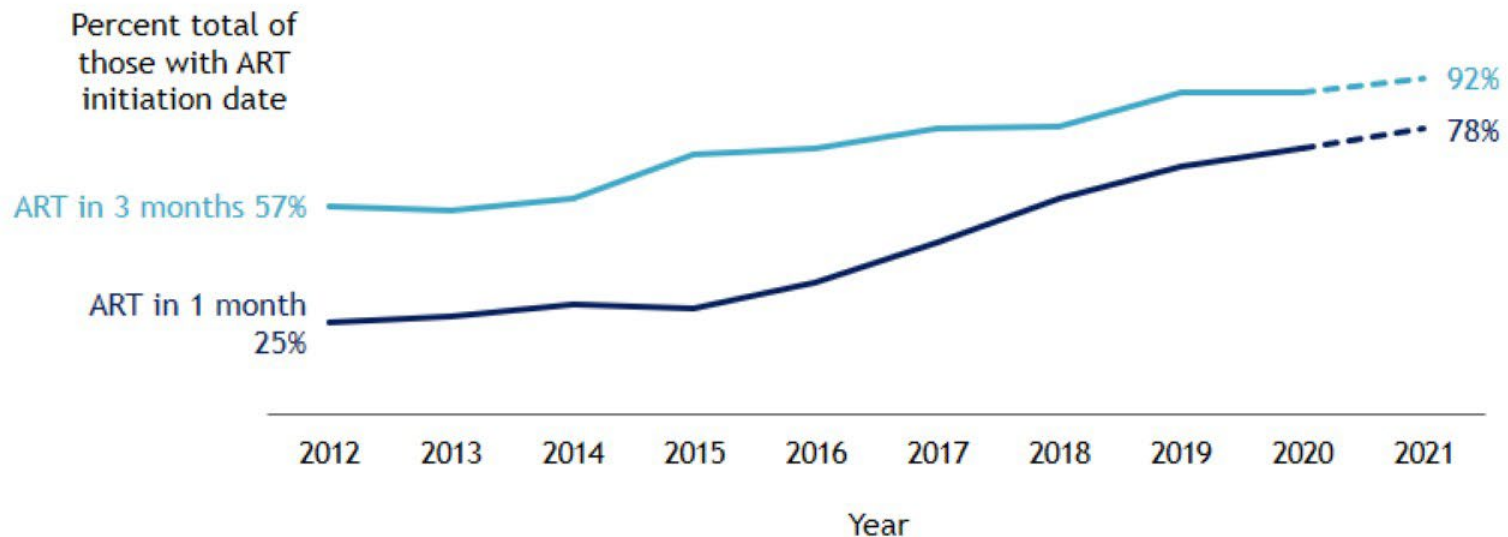


HIV treatment

- Antiretroviral therapy (ART) coverage is not routinely monitored as a step in the HIV care continuum as treatment is presumed to occur once a patient is linked to care.
- HIV case reporting includes information on ART for PLWDH but relies on HIV providers to complete this information on HIV case reports, which is not commonly done
- To fill this information gap, Public Health collects supplemental information on a subset of persons newly diagnosed with HIV through the National Medical Monitoring Project (MMP) to understand progress and gaps in HIV treatment and other HIV care services for PLWDH.
- In this section, we provide information from HIV case reporting and MMP on the status of treatment among PLWDH in Los Angeles County.



Time from HIV diagnosis to treatment initiation among persons aged ≥ 13 years newly diagnosed with HIV by year of diagnosis,¹ LAC 2012-2021



Abbreviation: ART = Antiretroviral therapy

¹Data represent a subset of persons newly diagnosed with HIV and reported in LAC. It includes 5,560 persons newly diagnosed with HIV between 2011 and 2020 for whom ART initiation date is complete and excludes 12,670 persons newly diagnosed with HIV between 2011 and 2020 for whom ART initiation date is incomplete.



Antiretroviral therapy (ART) prescription, ART dose adherence, and sustained viral suppression, among adults living with diagnosed HIV, by selected characteristics—Medical Monitoring Project (MMP), LAC 2015-2020

	Prescription of ART ¹		100% ART dose adherence ²		Sustained viral suppression ³	
	%	(95% CI)	%	(95% CI)	%	(95% CI)
Total	80.5	(77.0-83.9)	50.4	(46.7-54.0)	64.4	(60.7-68.2)
Gender						
Cisgender male	79.8	(75.9-83.6)	50.9	(46.9-54.9)	64.9	(60.7-69.0)
Cisgender female	86.7	(79.3-94.1)	47	(37.5-56.5)	64	(54.5-73.6)
Transgender ⁴	76.7*	(60.0-93.4)	47.8*	(27.1-68.5)	52.8*	(31.4-74.1)
Age at time of interview (years)						
18-29	72.2	(59.5-84.9)	29.1	(18.1-40.0)	47.9	(35.2-60.5)
30-39	75.7	(66.7-84.7)	41.8	(33.3-50.4)	56.8	(47.8-65.9)
40-49	80.8	(74.2-87.4)	45	(38.0-52.1)	59	(51.6-66.5)
≥50	83.5	(78.7-88.3)	60	(54.8-65.3)	73	(67.8-78.3)
Sexual orientation						
Gay or lesbian	79	(74.1-83.8)	51.1	(46.3-55.9)	65.1	(60.1-70.1)
Heterosexual	87.4	(82.5-92.3)	50.9	(44.4-57.5)	65.6	(58.9-72.3)
Bisexual	75.7	(64.9-86.5)	44.6	(32.7-56.5)	60.1	(47.4-72.8)
Race/ethnicity						
Black	77.2	(69.8-84.6)	46.4	(38.6-54.3)	56.5	(48.6-64.5)
Latinx ⁵	81.9	(76.6-87.2)	47.7	(42.3-53.0)	64.9	(59.1-70.7)
White	81.8	(75.6-88.1)	58.1	(51.3-65.0)	71	(64.4-77.6)

¹Prescription of ART was based on documentation in the medical record in the 12 months before interview. Percentages are weighted percentages. Confidence intervals (CI) incorporate weighted percentages.

²In past 30 days, 100% adherence to ART doses.

³All documented viral load measurements in the 12 months before interview are undetectable or <200 copies/mL. The median of documented viral load tests during the past 12 months per participants was three.

⁴Persons were classified as transgender if sex at birth and gender reported by the person were different, or if the person chose "transgender" in response to the question about self-identified gender.

⁵Latinx might be of any race. Persons are classified in only one race/ethnicity category.



Antiretroviral therapy (ART) adherence and reasons for missing ART doses among persons with diagnosed HIV taking ART—Medical Monitoring Project, LAC 2015-2020¹

	ART adherence in the past 30 days	
	%	(95% CI)
How many days did you miss at least 1 dose of any of your HIV medicines?		
0	55.2	(51.6-58.9)
1-2	31.5	(28.0-34.9)
3-5	8.4	(6.3-10.4)
6-10	3.7	(2.2- 5.3)
≥11	1.2	(0.5- 1.9)
How often did you take your HIV medicines in the way you were supposed to?		
Always	64.8	(61.2-68.3)
Almost always	24.3	(21.2-27.5)
Usually	6.6	(4.7- 8.5)
Sometimes	2.6	(1.2- 4.0)
Rarely	1.2	(0.4- 2.0)
Never	0.4	(0.1- 0.8)
How often were you troubled by ART side effects?		
Never	72.0	(68.7-75.4)
Rarely	14.0	(11.5-16.5)
About half of the time	6.7	(4.7- 8.8)
Most of the time	3.1	(1.9- 4.2)
Always	4.2	(2.5- 5.8)
Top reasons for last missed ART dose among persons who ever missed a dose ²		
Forgot to take HIV medicines		
Yes	53.9	(50.2-57.6)
No	46.1	(42.4-49.8)
Change in your daily routine or were out of town		
Yes	33.3	(29.6-36.9)
No	66.7	(63.1-70.4)
Fell asleep early or overslept		
Yes	24.6	(21.2-28.0)
No	75.4	(72.0-78.8)

¹ Percentages are weighted percentages and confidence intervals (CIs) incorporate weighted percentages.

² Persons could report more than one reason for missed last dose.

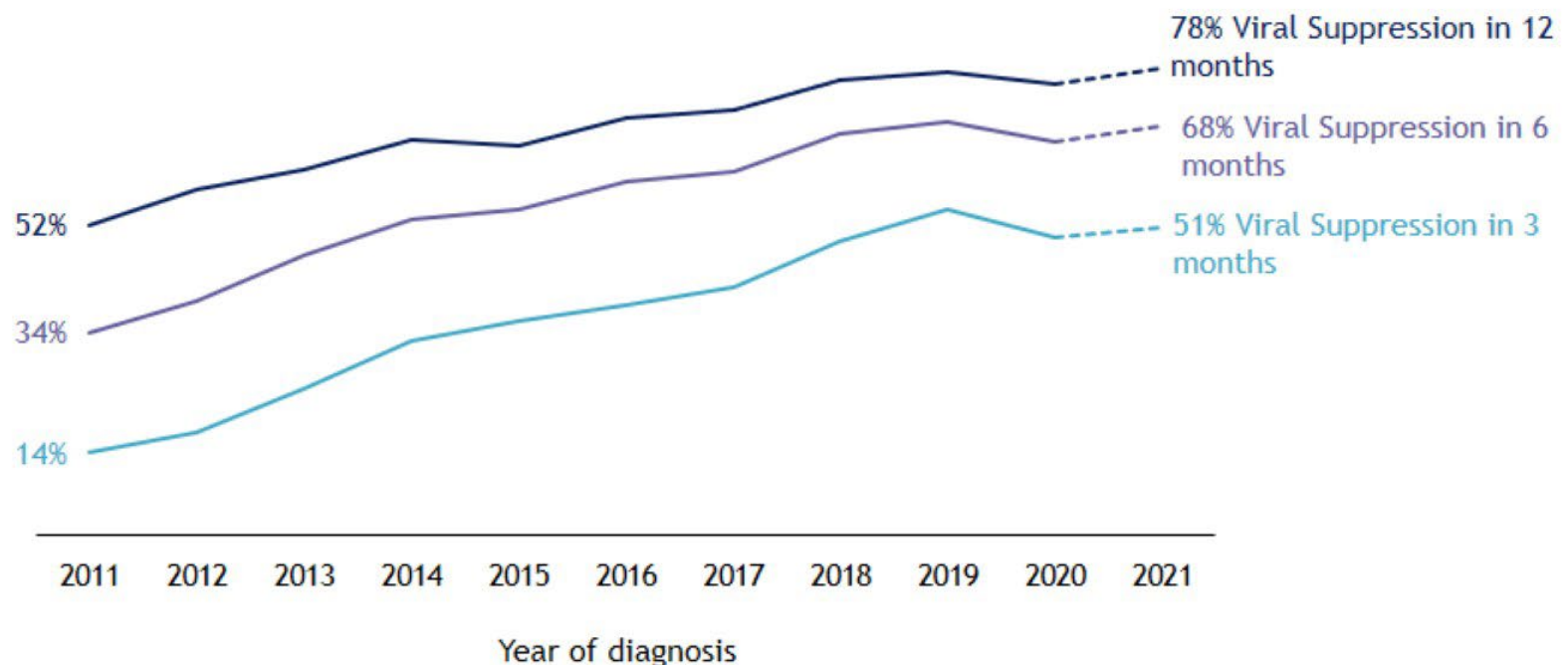


Viral load monitoring

- To end the HIV epidemic, viral suppression should be reached soon after HIV diagnosis for all PLWDH but as described earlier, this is dependent on how rapidly HIV-positive persons are linked into HIV care and receive HIV treatment.
- This section highlights where we are locally in our viral suppression achievements and highlights opportunities for where to target interventions to improve viral suppression in the population.



Time from diagnosis to viral suppression among persons diagnosed with HIV by year of HIV diagnosis, LAC 2011-2021^{1,2}

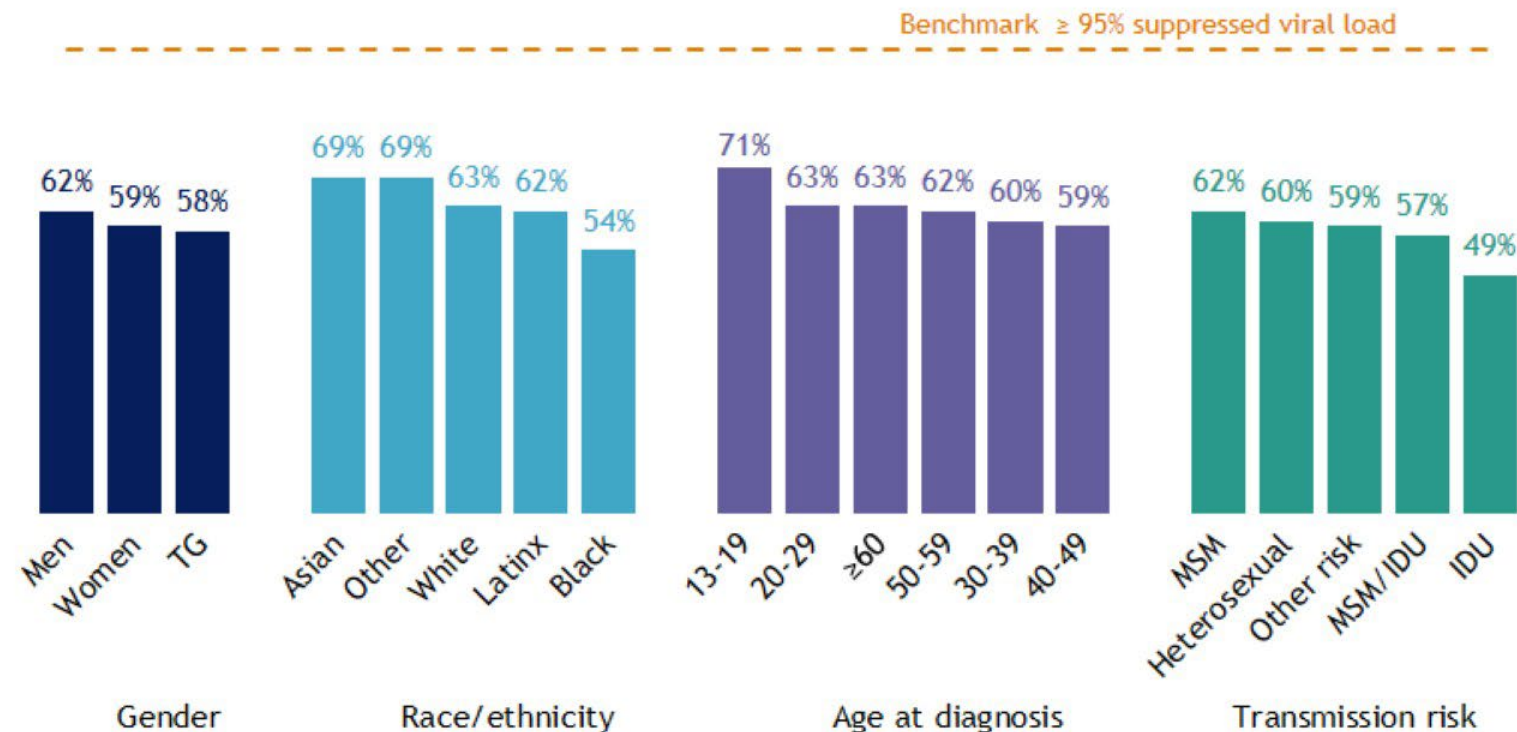


¹Analysis includes persons newly diagnosed with HIV in each calendar year. Numerator includes persons who achieved viral suppression within 3, 6, or 12 months of diagnosis. Denominator includes persons newly diagnosed with HIV in select calendar year, with or without a viral load test result in the observed months.

²Due to reporting delay, 2021 HIV data are provisional as indicated by the dashed line.



Suppressed viral load by selected demographic and risk characteristics among persons aged ≥ 13 years diagnosed through 2021 and living in LAC at year-end 2022,^{1,2} LAC 2022



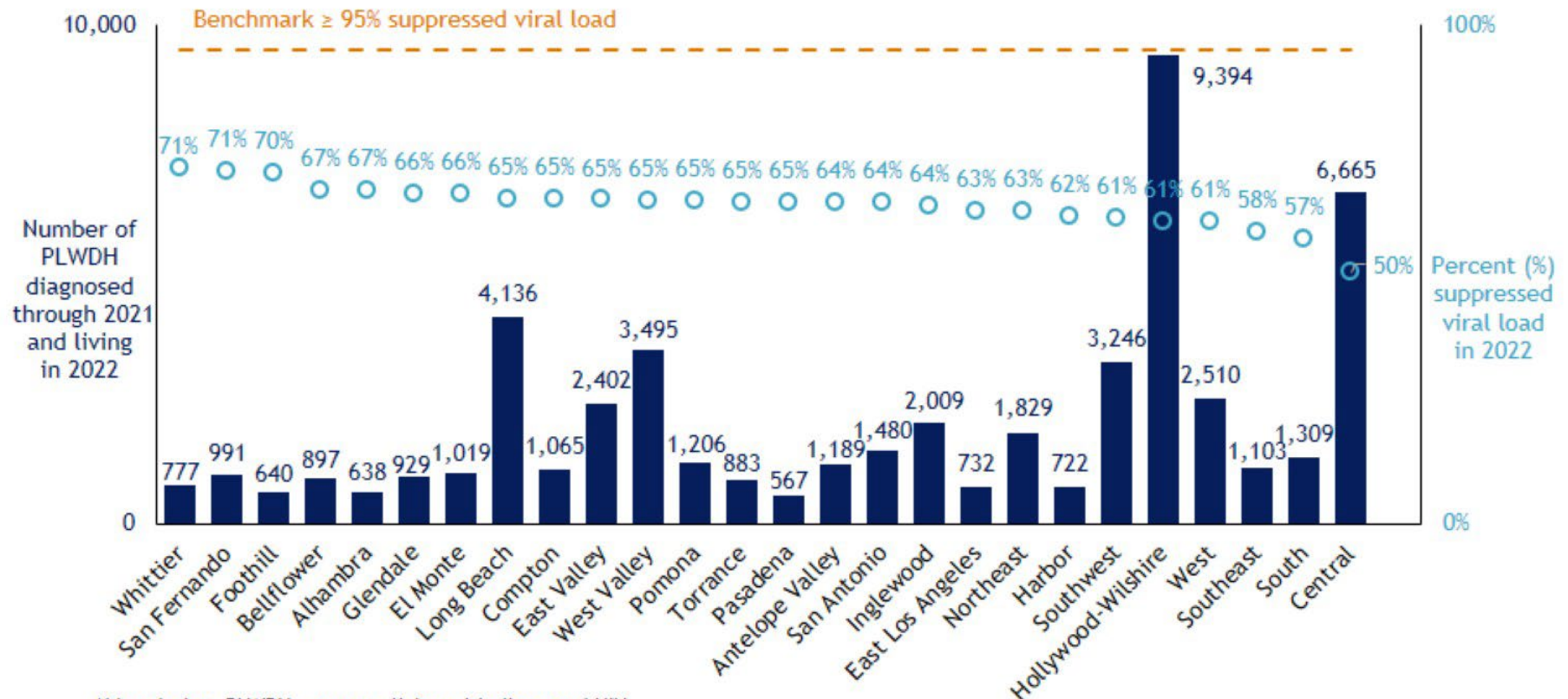
Abbreviations: TG = transgender persons; MSM = men who have sex with men; IDU = injection drug use

¹Suppressed viral load: numerator includes PLWDH whose last VL test in 2022 was suppressed (HIV-1 RNA < 200 copies/mL); denominator includes PLWDH diagnosed through 2021 and living in LAC at year-end 2022 based on most recent residence. PLWDH without a VL test in 2022 were categorized as having unsuppressed viral load.

²Other race/ethnicity includes American Indians and Alaska Natives, Native Hawaiian and Pacific Islanders, persons of multiple race/ethnicities, and persons with unknown race/ethnicity. Other risk includes perinatal exposure, hemophilia, coagulation disorder, blood transfusion, and risk factor not reported/identified.



Suppressed viral load by Health District among persons aged ≥ 13 years diagnosed through 2021 and living in LAC at year-end 2022,^{1,2} LAC 2022



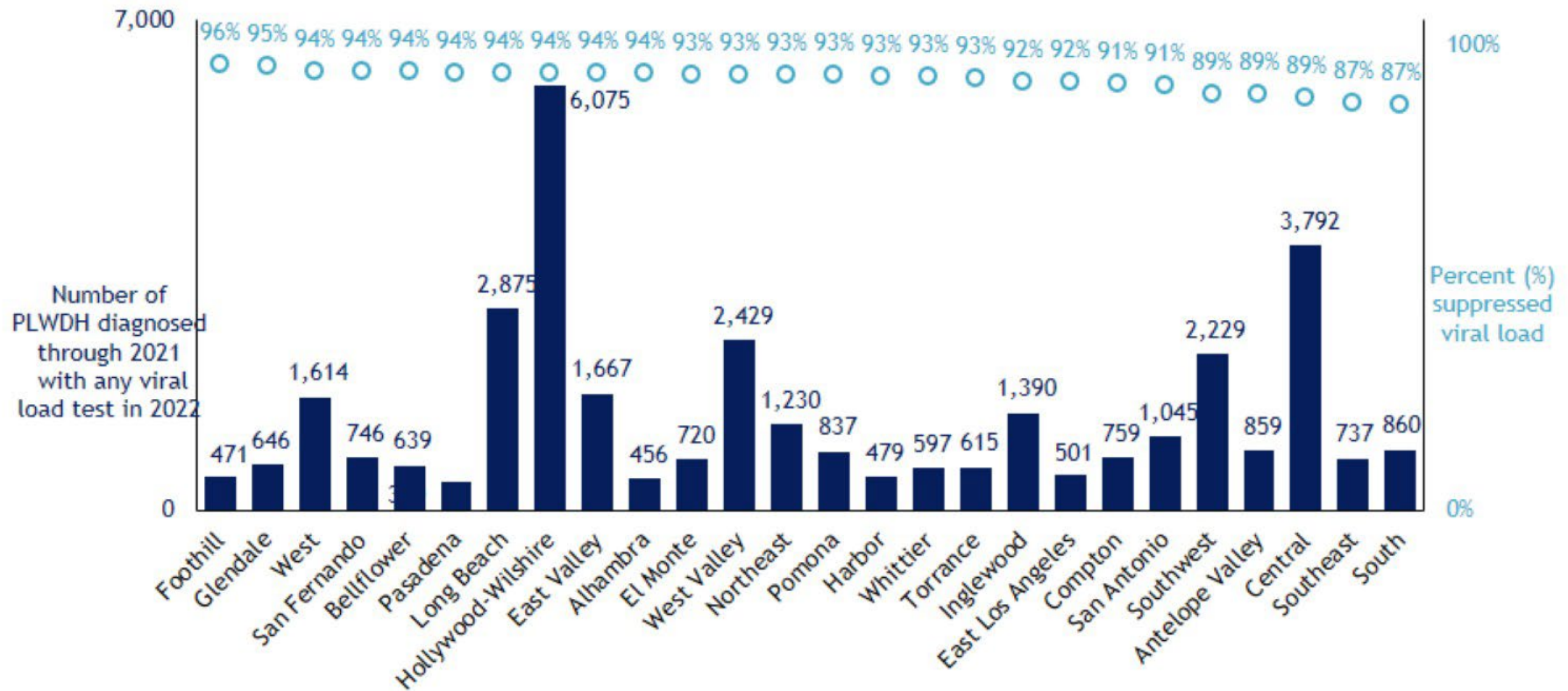
Abbreviation: PLWDH = persons living with diagnosed HIV

¹Suppressed viral load: numerator includes PLWDH whose last VL test in 2022 was suppressed (HIV-1 RNA < 200 copies/mL); denominator includes PLWDH diagnosed through 2021 and living in LAC at year-end 2022 based on most recent residence. PLWDH without a VL test in 2022 were categorized as having unsuppressed viral load.

²Health Districts are based on 2022 boundaries. Persons are assigned a Health District using their geocoded residence at diagnosis joined to census tract 2020, followed by their ZIP Code if no valid residence at diagnosis was available. The correspondence tables were provided by LAC DPH Information Management and Analytics Office, Office of Health Assessment and Epidemiology, GIS Unit team.



Suppressed viral load among persons aged ≥ 13 years receiving HIV care and who had any viral load test in 2022 by Health District, LAC 2022^{1,2}



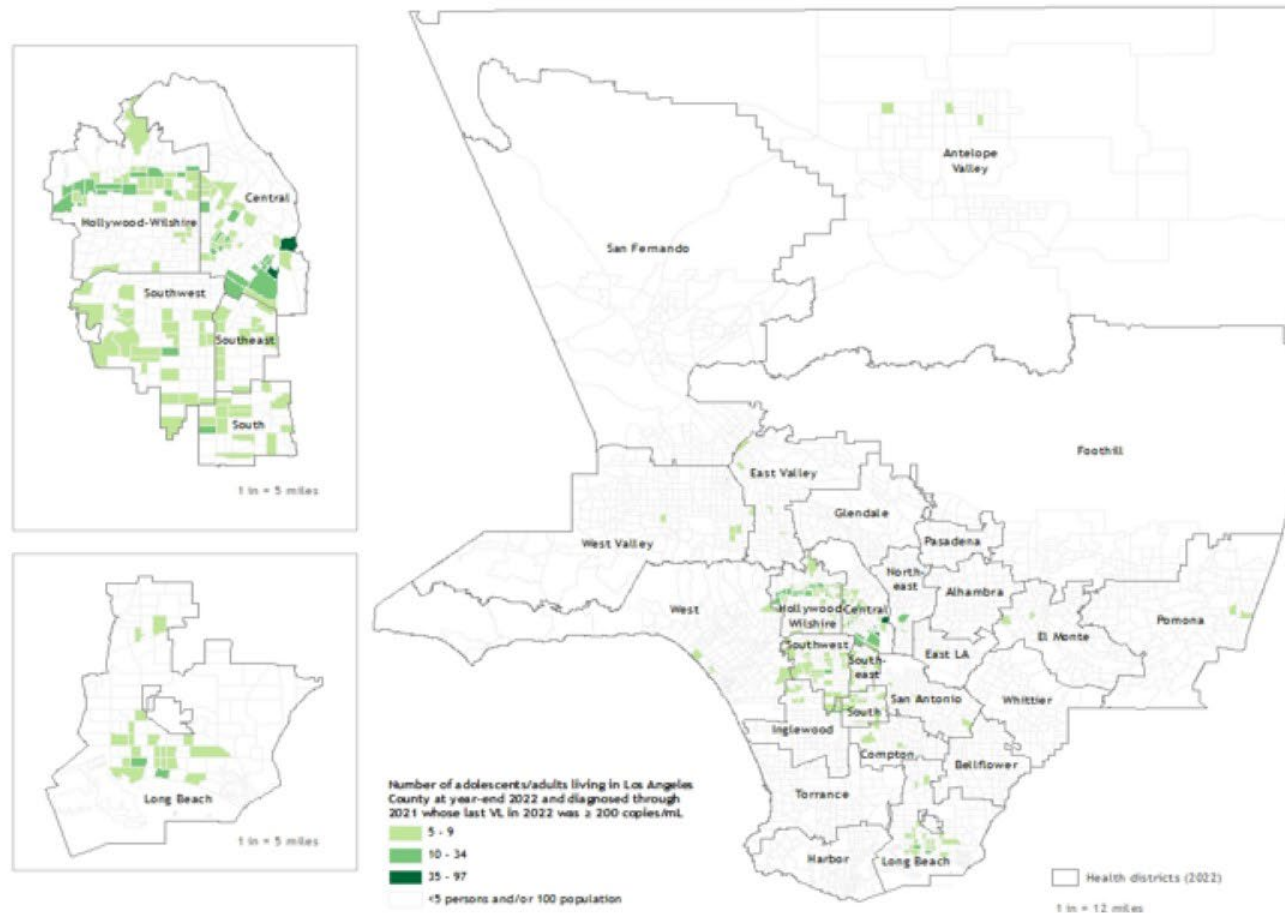
Abbreviation: PLWDH = persons living with diagnosed HIV

¹Suppressed viral load: numerator includes PLWDH whose last VL test in 2022 was suppressed (HIV-1 RNA < 200 copies/mL); denominator includes PLWDH diagnosed through 2021 and living in LAC at year-end 2022 based on most recent residence who had any viral load test in 2022. PLWDH without a VL test in 2022 were categorized as having unsuppressed viral load.

²Health Districts are based on 2022 boundaries. Persons are assigned a Health District using their geocoded residence at diagnosis joined to census tract 2020, followed by their ZIP Code if no valid residence at diagnosis was available. The correspondence tables were provided by LAC DPH Information Management and Analytics Office, Office of Health Assessment and Epidemiology, GIS Unit team.



Unsuppressed viral load by census tract among persons aged ≥ 13 years diagnosed through 2021 and living in LAC at year-end 2022 (N=1,524),¹ LAC 2022



Census tracts located in the Central and Hollywood-Wilshire Health Districts had the highest levels of unsuppressed viral load. These are locations where a robust public health response is needed to identify networks of ongoing transmission and deploy rapid interventions to minimize transmission. Other emerging hotspots of transmission that require close monitoring are in the Southwest, Southeast, South, and Long Beach Health Districts. We have zoomed in on the six HDs with the highest levels of unsuppressed VL in the maps to the left.

¹Unsuppressed viral load: numerator includes PLWDH whose last VL test in 2022 was unsuppressed (HIV-1 RNA ≥ 200 copies/mL); denominator includes PLWDH diagnosed through 2021 and living in LAC at year-end 2022 based on most recent residence. PLWDH without a VL test in 2022 were considered virally unsuppressed. Analysis excludes PLWDH diagnosed through 2021 and living at year-end 2022 who (1) had missing census tract information, (2) were receiving care but never had a viral load test, (3) were not receiving care for >12 months at year-end 2022, or (4) were in census tracts with small sample sizes (<5 persons with unsuppressed viral load or population size <100 persons). Exclusions represented 71% of PLWDH diagnosed through 2021 and living in 2022 whose last viral load was unsuppressed. Source: U.S. Census Bureau, Geography Division. 2021. 2021 TIGER/Line Shapefiles: Census Tracts. 2021 TIGER/Line Shapefiles (machine-readable data files). Accessed 12/28/21. <https://www.census.gov/cgi-bin/geo/shapefiles/index.php?year=2021&layergroup=Census+Tracts>; County of Los Angeles, Department of Public Health. 2022. Health Districts 2022 (view). County of Los Angeles, California, Enterprise GIS Repository. Accessed 03/21/2023. <https://egis-lacounty.hub.arcgis.com/datasets/health-districts-2022-view/>.



Viral load dynamics among persons aged ≥ 13 years living with diagnosed HIV and receiving HIV care, LAC 2020-2022¹

	Number of PLWDH with ≥ 1 viral load test 2020-2022	Viral suppression based on last viral load test	Sustained viral suppression ²
	N	%	%
Total	34,773	87%	76%
Gender			
Men	30,253	87%	77%
Women	3,840	85%	73%
Transgender	660	80%	61%
Race/ethnicity³			
White	8,949	92%	84%
Black	6,582	81%	66%
Latinx	16,009	87%	75%
Asian	1,348	93%	87%
NHPI	55	80%	78%
AIAN	212	81%	68%
Multi-racial	1,597	85%	74%
Age group			
<13	13	100%	100%
13-19	34	91%	62%
20-29	1,681	76%	64%
30-39	6,469	80%	69%
40-49	7,131	85%	73%
50-59	10,188	89%	78%
≥ 60	9,257	93%	84%

Abbreviations: PLWDH = persons living with diagnosed HIV; NHPI = Native Hawaiian and Pacific Islander; AIAN = American Indian and Alaskan Native

¹Analysis includes persons diagnosed with HIV through 2019, had ≥ 1 viral load test in 2020-2022 and living in LAC during 2020-2022.

²"Sustained viral suppression" is defined for any PLWDH included this analysis with all reported viral load test results as undetectable or <200 copies/mL during the 3-year period.

³Does not include 21 persons whose racial/ethnic information is unknown.



To obtain a copy of the presentation:

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Or contact DHSP, LAC DPH DHSP HIV Surveillance at
Tel. (213) 351-8516

