COUNTY OF LOS ANGELES
Public Health

ANNUAL HIV SURVEILLANCE REPORT, 2017

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LOS ANGELES COUNTY
HEALTH AGENCY

County of Los Angeles, Department of Public Health
Division of HIV/STD Programs

The *HIV Surveillance Report* is published annually by the HIV Surveillance Unit, Division of HIV and STD Programs, Los Angeles Department of Public Health, Los Angeles, California. Data presented in this report includes diagnoses of HIV infection reported to Los Angeles County Department of Public Health through June 30, 2018.

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Additional HIV Surveillance Data Available on the Web

LA HealthDataNow!: https://dqs.publichealth.lacounty.gov/queries.aspx
AIDSVu: https://aidsvu.org/resources/downloadable-maps-and-resources/
Online Data Request Form: http://publichealth.lacounty.gov/HIV-Stats-Form.htm

Acknowledgements

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NOTICE TO HEALTH CARE PROVIDERS, LABORATORIES, AND OTHERS RESPONSIBLE FOR DISEASE REPORTING:

California Code of Regulations, Title 17, Section 2500 requires that all diagnosed or suspected cases of AIDS as defined by CDC must be reported within seven (7) days to the Health Officer. California Code of Regulations, Title 17, Section 2600/2641.5-2643.20 require both health care providers and laboratories to report HIV cases by name to the Health Officer within seven (7) days. In addition, Senate Bill (SB) 1184 requires each clinical laboratory to report all CD4+ T-cell tests within seven (7) days of the completion of a CD4+ T-cell test. 17 CCR 2500(h) and (k).

Acute HIV Infection Reporting:

Effective June 2016, Title 17 CCR 2500(h) and (k) requires all health care providers report cases of acute HIV infection within one (1) working day to the local health officer of the jurisdiction in which the patient resides by telephone. If evidence of acute HIV infection is based on presence of HIV p24 antigen, providers shall not wait until HIV-1 RNA is detected before reporting to the local health officer.

To obtain more information on the HIV reporting requirement, obtain case report forms, or report a case, please visit our web site: http://publichealth.lacounty.gov/dhsp/ReportCase.htm#HIV_Reporting_Information , or contact Division of HIV and STD Programs (DHSP), 600 South Commonwealth Avenue, Suite 1260, Los Angeles, CA 90005. Phone (213) 351-8516.

Los Angeles County Department of Public Health

2017 Annual HIV Surveillance Report

TABLE OF CONTENTS

Overview of HIV/AIDS in Los Angeles County

This report summarizes information about persons diagnosed with HIV infection, including stage 3 diagnoses (AIDS), deaths, and HIV care continuum indicators. Data presented in this report are preliminary and subject to change.

Consistent with the current guidelines set forth by the Centers for Disease Control and Prevention (CDC), HIV infections are classified into stages of disease.[1] HIV diagnosis refers to all diagnoses of HIV infection regardless of the stage of disease (stage 0, 1, 2, 3 [AIDS], or unknown). Readers are encouraged to review the CDC "Revised Surveillance Case Definition for HIV Infection – United States, 2014" for further information on case classification.[1] Additional information describing the methods used for this report can be found in the Technical Notes.

Diagnoses of HIV Infection

The number of diagnoses of HIV infection has remained relatively stable in Los Angeles County (LAC) since 2010 (Figure 1). In 2016, a total of 1,949 residents were reported as newly diagnosed with HIV infection in LAC, corresponding to a rate of 19 per 100,000 (Tables 1 and 2).

Sex/Gender: Among persons with a new HIV diagnosis in 2016, 1,744 (89%) were male and 205 (11%) were female (Tables 1 and 2). A total of 41 new diagnoses were reported among people who identify as transgender (Table 3). It is important to note that among transgender persons, cases may be incorrectly reported as male or female, resulting in potential underreporting of HIV among transgender persons.

Age: As seen in Tables 1 and 3, the greatest number of HIV diagnoses in 2016 was among persons 20-29 years of age (36%), followed by persons 30-39 years of age (29%), persons 40-49 years of age (18%), and persons 50 years and older (13%). Males had a younger age distribution than females; 38% of diagnoses among males were reported among individuals aged 20-29 years, compared to 20% among females. Changes in HIV diagnoses over time by age group and among males and females are presented in Table 3, Figures 2 and 3.

Race/Ethnicity: In 2016, while the greatest number of HIV diagnoses was among Latinos (48%; Table 1), the highest overall rate of HIV diagnoses was among African Americans (56 per 100,000), followed by Latinos (19 per 100,000), whites (12 per 100,000), and Asians (6 per 100,000). These differences in rates were also observed by sex, most notably among African American females (17 per 100,000) where the rate of HIV diagnoses was 8 times higher than that of white females (2 per 100,000) and 5 times higher than the rate for Latinas (3 per 100,000). Among males, the rate of HIV diagnoses among African Americans (101 per 100,000) was 5 times higher than among whites (22 per 100,000) and 3 times higher than the rate for Latinos (34 per 100,000) (Table 1). Changes in HIV diagnoses over time by race/ethnicity and among males and females are presented in Table 3, Figures 4 and 5.

Transmission Category: The transmission category for HIV infection summarizes a person's HIV risk factors or how they likely contracted HIV. Because a substantial proportion of persons with HIV infection are reported without an identified risk factor, multiple imputation methods were

applied to assign a transmission category (see Technical Notes). With this adjustment, it was estimated that 84% of HIV diagnoses in 2016 were among men who have sex with men (MSM; Table 1), 9% among heterosexuals (mostly females), 5% among heterosexual injection drug users, and 3% among MSM who also inject drugs (MSM/IDU). Separate breakdowns of transmission category for males and females are presented in Figures 6 and 7, respectively.

Geographic Distribution: The distribution of new HIV diagnoses in 2014-2016 across LAC by census tract and service planning area (SPA) is illustrated in Figure 8. The highest rate of new HIV infections in 2016 was among persons living in the Metro SPA (48 per 100,000) at the time of diagnosis, followed by the South (32 per 100,000) and South Bay (17 per 100,000) SPAs (Tables 2 and 4). Within the SPAs, there were also differences in rate by health district (HD); the Central HD had the highest rate (69 per 100,000), followed by the Hollywood-Wilshire HD (54 per 100,000) (Table 2). Changes in HIV diagnoses over time by SPA are presented in Table 4 and Figure 9.

Persons Living with Diagnosed HIV Infection (PLWH)

As of December 31, 2017 there were 51,438 persons living with diagnosed HIV infection (PLWH) in Los Angeles County, corresponding to a prevalence of 501 PLWH per 100,000 population (Tables 1 and 2). From 2010 through 2017, the number of PLWH in LAC steadily increased overall (see Figure 1). The slight decrease observed in number of PLWH from 2015 to 2016 may be attributed to the implementation of enhanced electronic lab reporting (ELR) in November 2015. As a result, the availability and reporting of updated residential information has allowed for better documentation of migration in and out of LAC and a more accurate representation of PLWH currently living in LAC.

Sex: Among PLWH in LAC, 45,624 were male and 5,814 were female. Males currently represent 89% of PLWH in LAC (Table 1).

Age: Unlike new HIV diagnoses in 2016 which occurred primarily among persons younger than 40 years of age (68%), almost three quarters (72%) of PLWH were aged 40 years or older (Table 1). Fewer than 1% of PLWH were under 20 years of age, while 17% were 60 years and older.

Race/Ethnicity: Among PLWH in LAC, 44% were Latino, 29% were white, 20% were African American, 3% were Asian/Pacific Islander, 3% were multi-race/unknown, and 1% were American Indian/Alaskan Native (Table 1). The racial/ethnic distribution of PLWH differed by sex. Among female PLWH, the majority was Latina (45%), followed by African American (33%), while among male PLWH, the majority was Latino (44%) followed by white (30%).

Transmission Category: Multiple imputation methods were used to adjust for persons with an undetermined risk factor reported for HIV infection; 78% of infections were estimated to be attributable to male-to-male sexual contact (Table 1) and 6% to male-to-male sexual contact *and* injection drug use (MSM/IDU). Other major transmission categories include non-MSM injection drug use (5%) and heterosexual contact with a person known to have, or to be at high risk for, HIV infection (10%). Separate breakdowns of transmission category for males and females are presented in Figures 6 and 7, respectively.

Geographic Distribution: The distribution of PLWH in LAC by census tract and SPA are presented in Figure 10. The Metro SPA had the highest rate of PLWH (1,547 per 100,000) among all SPAs in LAC; the next highest rates were in the South (600 per 100,000) and South Bay (500 per 100,000) SPAs (Table 2). At the Health District level, Hollywood-Wilshire had the highest rate of PLWH (1,921 per 100,000), followed closely by the Central HD (1,870 per 100,000) (Table 2).

Diagnoses of Stage 3 HIV Infection (AIDS)

Acquired Immunodeficiency Syndrome, or AIDS, is also known as stage 3 HIV infection. The introduction of antiretroviral therapy in 1996 greatly improved HIV treatment and contributed to a significant delay in the progression of HIV to stage 3 HIV infection for many individuals. The number of stage 3 (AIDS) diagnoses has decreased in LAC since 2010 (Figure 1). Due to delays in reporting, the 2016 and 2017 estimates should be considered preliminary.

Sex: Eighty-eight percent of stage 3 diagnoses in 2016 were among males and 12% were among females (Table 1). These proportions were similar to the respective proportions for HIV diagnoses in 2016 and PLWH as of December 31, 2017.

Age: In 2016, the largest proportion of diagnoses of stage 3 infection was among persons aged 30-39 years (30%), followed by persons aged 50 years and older (26%), persons 40-49 years of age (23%), and persons 20-29 years of age (20%). Females had an older distribution than males; thirty-six percent of stage 3 diagnoses among females occurred among persons 50 years and older, compared to 25% among males (Table 1).

Race/ethnicity: While half (50%) of stage 3 diagnoses in 2016 occurred among Latinos (Table 1), the highest rate of stage 3 diagnoses was among African Americans (18 per 100,000). The rate of stage 3 diagnoses for African American females (6 per 100,000) was 9 times higher than the rate for white females (<1 per 100,000) and 3 times higher than the rate for Latinas (2 per 100,000). Among males, the rate of stage 3 diagnoses for African Americans (32 per 100,000) was 4 times higher than the rate for whites (9 per 100,000) and 3 times higher than the rate for Latinos (13 per 100,000).

HIV Care Continuum

To assess HIV care continuum among persons with HIV in LAC, results from laboratory test reports are used to estimate initial linkage to care for newly diagnosed HIV-infected patients and to monitor engagement in care, retention in care, and degree of viral suppression among PLWH.

Linkage to Care (LTC): Sixty-four percent of persons newly diagnosed with HIV were linked to care within 1 month. Estimates for LTC within 1 month by gender, age group, race/ethnicity can be found in Table 5 and Figures 11-14. Estimates for LTC within 1 month by SPA/HD can be found in Table 6. Trends in LTC fluctuated from 2010 to 2016 (Figure 15).

Engagement in Care: Of the 48,974 persons diagnosed with an HIV infection through 2015 and living in LAC at year-end 2016, 69% were engaged in care. Estimates for engagement in care

among reported PLWH by gender, age group, race/ethnicity can be found in Table 5 and Figures 11-14. Estimates for engagement in care by SPA/HD can be found in Table 6. Figure 16 shows relatively steady engagement in care from 2010 to 2016.

Retention in Care: Of the 48,974 persons diagnosed with an HIV infection through 2015 and living in LAC at year-end 2016, 54% were retained in care. Estimates for retention in care among reported PLWH by gender, age group, and race/ethnicity can be found in Table 5 and Figures 11-14. Estimates for retention in care by SPA/HD can be found in Table 6. Figure 16 shows relatively steady retention in care over time, from 2010 to 2016.

HIV Viral Suppression: Of the 48,974 persons diagnosed with an HIV infection through 2015 and living in LAC at year-end 2016, 60% were virally suppressed. Estimates for viral suppression among reported PLWH by gender, age group, and race/ethnicity can be found in Table 5 and Figures 11-14. Estimates for viral suppression by SPA/HD can be found in Table 6. Figure 16 shows an improvement in viral suppression from 2010 (53%) to 2016 (60%).

Technical Notes

Surveillance of HIV in Los Angeles County

Surveillance of HIV infections, including stage 3 (AIDS) in Los Angeles County (LAC) is conducted through active and passive surveillance to identify and collect information on cases of HIV diagnosed at hospitals, clinics, private physician offices, laboratories, community-based organizations (CBOs), and hospices. Active HIV surveillance requires staff to routinely contact and visit sites to facilitate the completion of HIV case reports. Mandated reporters participating in passive HIV surveillance submit case reports to the LAC Department of Public Health (DPH) Division of HIV and STD Programs (DHSP) without any contact from surveillance staff. In LAC, about 75%-80% of persons reported with a diagnosis of HIV infection are collected through active surveillance activities. The Enhanced HIV/AIDS Reporting System (eHARS) is a CDC-developed information system for collecting, storing and retrieving HIV surveillance data. Case definitions are based on CDC documents "Stage-3-Defining Opportunistic Illnesses in HIV Infection" and "Revised Surveillance Case Definition for HIV Infection — United States, 2014".[1]

Reporting Delay

Reporting delays can impact reliability of trends and rates over time. HIV reporting delay is defined as the time interval between diagnosis or death and the reporting of diagnosis or death to DHSP. The reporting completeness among persons diagnosed with HIV in 2016 is estimated to be over 95% in this report. This reduces to less than 80% for HIV diagnoses in 2017. Thus, tabulated data for HIV diagnoses presented in this report only pertains to 2016. Data for PLWH is for 2017. The impact of reporting delay must be considered when evaluating trends in case numbers and rates over time.

Underreporting

Data on diagnoses of HIV infection should be interpreted with caution. HIV surveillance reports may not be representative of all persons infected with HIV because not all infected persons have been tested or reported to the health department. Furthermore, the results of anonymous tests are not required to be reported in California. Therefore, reports of confidential test results may not represent all persons with HIV infection. Many factors, including the extent to which testing is routinely offered to specific groups and the availability of, and access to, medical care and testing services, may influence testing patterns. These data only provide a minimum estimate of persons known to be HIV infected.

Rates

All rates are per 100,000 population. The population denominators used to compute the rates are based on 2010-2017 estimates provided by LAC Internal Services Department and contracted through Hedderson Demographic Services. All health statistics are subject to random variation. This variation is inversely related to the number of cases and a small number of cases can result in unstable rates or proportions. Conforming to standard criterion used by the National Center for Health Statistics, rates presented in this report are considered unreliable when the relative

standard error of the rate is greater than or equal to 30%, which corresponds to rates based on less than or equal to 12 observations.

Place of Acquisition

Residence at earliest diagnosis of HIV is used to determine the geographical location of a case. In tables or maps that present data for stage 3 (AIDS) diagnoses, the residential information at time of stage 3 (AIDS) diagnosis is used to determine the geographical location. For stage 3 (AIDS) cases for whom the specific residential information at time of diagnosis is not available, the residence at time of HIV diagnosis information is used, provided that the address is valid and within Los Angeles County jurisdiction.

Caution should be exercised when interpreting census tract level case counts and rates because these values are inclusive of any correctional populations and may be artificially inflated when an institution is housed within a given census tract.

Race and ethnicity

Mandated collection of race and ethnicity data for HIV was implemented in January 1, 2003 as required by the OMB Statistical Policy Directive 15. A minimum of 5 race categories should be collected including: American Indian or Alaskan Native, Asian, African American, Pacific Islander, and white. Additionally, systems must be able to retain information when multiple racial categories are reported. Two ethnicity categories should be collected regardless of race: Latino and non-Latino.

Race and ethnicity in this report are grouped using the following criteria exclusively: A person is considered to be 'Latino' if so indicated in race or ethnicity field, regardless of any other race information found for the person. When not indicated as 'Latino', a person is considered to be 'American Indian/Alaskan Native (AI/AN)' if the race field contains AI/AN information, regardless of any other race information found for this person. While the 'Asian' and 'Pacific Islander' categories are separated whenever possible in this report, these two groups were collected as a single racial category in HIV surveillance prior to January,2003. Since persons living with HIV (PLWH) could have been reported to DHSP before this date, tables that present data for PLWH provide information on these groups separately and as a collapsed 'Asian/Pacific Islander' category. Aside from the above criteria, a person is categorized as 'Multi-race' when two or more races are indicated in the above race fields. All other persons with a single race indicated are placed in the corresponding race category.

HIV Transmission Categories

For surveillance purposes, a diagnosis of HIV infection is counted only once in the hierarchy of transmission categories. Persons with more than 1 reported risk factor for HIV infection 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.

Persons whose transmission category is classified as male-to-male sexual contact include men who have ever had sexual contact with other men (i.e., homosexual contact) and men who

have ever had sexual contact with both men and women (i.e., bisexual contact). Persons whose transmission category is classified as heterosexual contact are persons who have ever had heterosexual contact with a person known to have, or to be at high risk for, HIV infection (e.g., a person who injects drugs). The heterosexual contact category excludes men who have ever had sexual contact with both men and women.

Transfusion or hemophilia transmission category is limited to persons who received blood transfusion no later than 1985 or persons who had been investigated and confirmed as having received transfusion of contaminated blood after 1985.

Cases of HIV infection reported without a risk factor listed in the hierarchy of transmission categories are classified as "undetermined" transmission category. These include cases that are being followed up by county staff; cases whose risk-factor information is missing because they died, declined to be interviewed, or were lost to follow-up; and cases who were interviewed or for whom other follow-up information was available but for whom no risk factor was identified.

Because a substantial proportion of persons with an HIV infection are reported without an identified risk factor, multiple imputation is used to assign a transmission category. Multiple imputation is a statistical approach in which each missing transmission category is replaced with a set of plausible values that represent the uncertainty about the true, but missing value. The plausible values are analyzed by using standard procedures, and the results from these analyses are then combined to produce the final results.

HIV Care Continuum

On July 3, 2015 the White House released the updated National HIV/AIDS Strategy (NHAS).[2] This plan describes the nation's comprehensive coordinated HIV/AIDS roadmap with clear and measurable targets to be achieved by the end of 2020. Key targets from the NHAS include: 1) increasing the proportion of newly diagnosed patients linked to clinical care within one month (30 days) of their HIV diagnosis to 85%; 2) increasing the proportion of persons with diagnosed HIV infection who are retained in HIV medical care to 90%; and, 3) increasing the proportion of persons with diagnosed HIV infection who are virally suppressed to 80%.

HIV viral load (VL), T-Cell (CD4), and genotype testing are considered important clinical markers of successful treatment. Since the start of mandatory name-based HIV reporting in California in April 2006, laboratories have been required to report all tests that are indicative of HIV-including tests for HIV itself, a component of HIV, or antibodies to or antigen of HIV (Title 17 CCR 2641.30) to their local health department. In 2008, the reporting of all CD4 tests was mandated in California as well. These laboratory tests are used to estimate initial linkage to care for newly diagnosed HIV-infected patients and to monitor engagement in care, retention in care, and degree of viral suppression among PLWH.

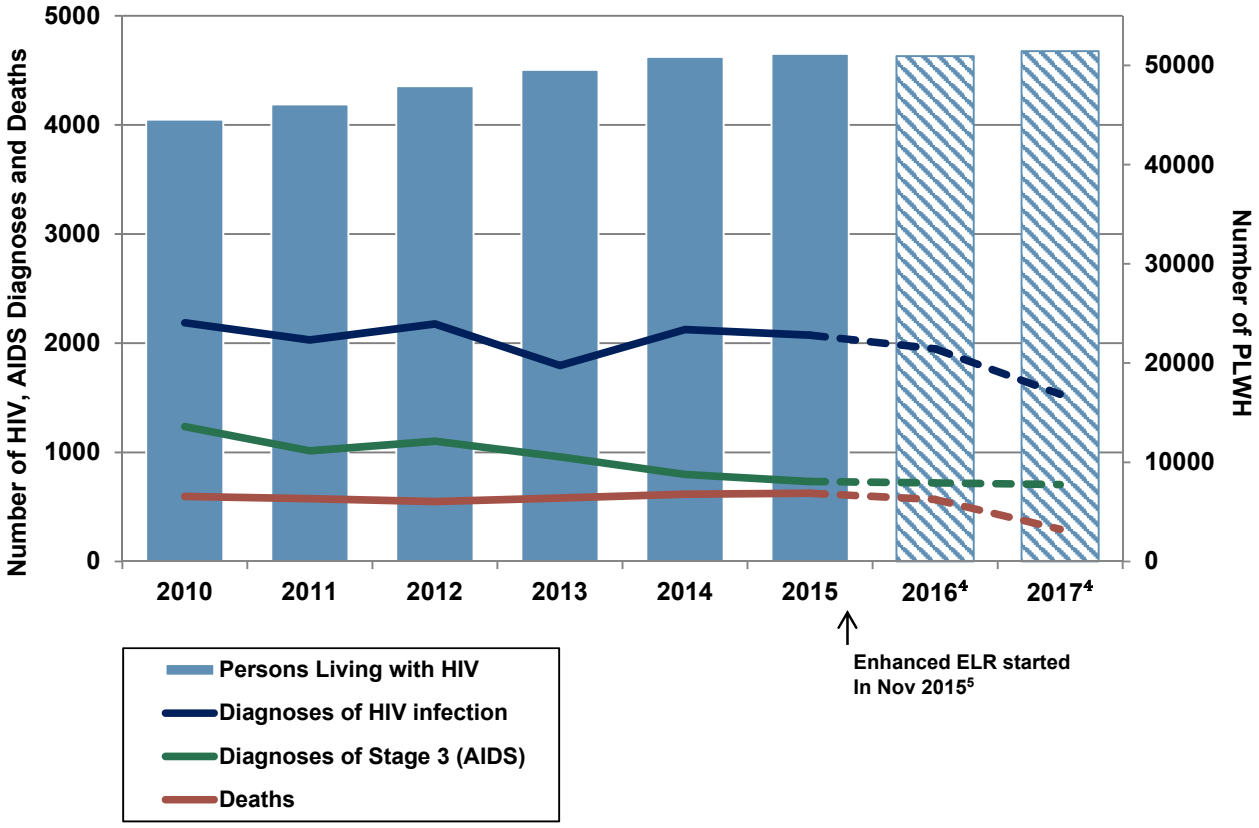
Linkage to Care (LTC): In this report, LTC was defined as having a VL, CD4, or HIV genotype test performed within 1 month, 3 months, 6 months, or 12 months after an HIV diagnosis.

Engagement in Care: In this report, consistent with NHAS, engagement in care was defined as having at least one VL, CD4, or HIV genotype test reported during a twelve-month period.
Retention in Care: Retention in care was defined as two or more VL, CD4, or HIV genotype tests performed at least three months apart during a twelve-month period.
HIV Viral Suppression: Viral suppression was defined as having one or more VL tests performed during a twelve-month period with the most recent result indicating <200 viral copies per milliliter of blood plasma.
Because at least twelve months of follow-up time are needed, the calculation of the engagement in care, retention in care, and viral suppression indicators are limited to those 48,974 PLWH diagnosed with HIV through December 31, 2015 and reported to be living in LAC as of December 31, 2016.

References:

1. CDC. Revised Surveillance Case Definition for HIV Infection – United States, 2014. *MMWR* 2014; 63(No. RR03):1-10.
2. National HIV/AIDS Strategy for the United States: Updated to 2020. Washington, DC: White House Office of National AIDS Policy; 2015

Figure 1. Annual Diagnoses of HIV Infection[1], Stage 3 HIV Infection (AIDS), Persons Living with HIV (PLWH)[2], and Deaths[3] among Persons Diagnosed with HIV Infection, Los Angeles County, 2010-2017



[1] Includes new diagnoses of HIV infection regardless of the disease stage at time of diagnosis.
[2] PLWH in 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] Data are provisional due to reporting delay (as indicated by the dashed lines).
[5] The slight decrease in number of PLWH from 2015 to 2016 may be artificial due to enhanced electronic lab reporting (ELR) starting in November 2015. Since then, more up-to-date residential information has been received by health departments to account for outward migration from LAC, resulting in a more accurate report of PLWH in LAC in 2016. This decrease should not be interpreted as a downward trend in PLWH in LAC.

Table 1. 2016 HIV, Stage 3 (AIDS) Diagnoses and Deaths, Persons Living with HIV (PLWH) as of 2017 by Sex at Birth, Age Group, Race/Ethnicity, and Transmission Category, Los Angeles County, Reported by June 30, 2018

	Male[1]												Female[1]												Total											
	2016 HIV Diagnoses[2]			2016 AIDS Diagnoses[2]			PLWH as of 2017[2,3]			2016 Deaths[2,4]			2016 HIV Diagnoses[2]			2016 AIDS Diagnoses[2]			PLWH as of 2017[2,3]			2016 Deaths[2,4]			2016 HIV Diagnoses[2]			2016 AIDS Diagnoses[2]			PLWH as of 2017[2,3]			2016 Deaths[2,4]		
	N	(%)	Rt	N	(%)	Rt	N	(%)	Rt	N	(%)	Rt	N	(%)	Rt	N	(%)	Rt	N	(%)	Rt	N	(%)	Rt	N	(%)	Rt	N	(%)	Rt	N	(%)	Rt	N	(%)	Rt
Age Group(Yr)[5]																																				
<13	<5	(-)	-	<5	(-)	-	12	(<1)	1	<5	(-)	-	<5	(-)	-	<5	(-)	-	14	(<1)	2	<5	(-)	-	<5	(-)	-	<5	(-)	-	26	(<1)	2	<5	(-)	-
13-19	48	(3)	10	<5	(-)	-	81	(<1)	17	<5	(-)	-	9	(4)	2	<5	(-)	-	37	(1)	8	<5	(-)	-	57	(3)	6	5	(1)	1	118	(<1)	12	<5	(-)	-
20-29	666	(38)	85	130	(21)	17	3,997	(9)	514	15	(3)	2	41	(20)	5	13	(15)	2	440	(8)	59	7	(10)	1	707	(36)	46	143	(20)	9	4,437	(9)	291	22	(4)	1
30-39	501	(29)	67	189	(30)	25	8,787	(19)	1,160	71	(14)	9	64	(31)	9	27	(31)	4	1,016	(17)	138	<5	(-)	-	565	(29)	38	216	(30)	15	9,803	(19)	657	74	(13)	5
40-49	314	(18)	45	152	(24)	22	10,945	(24)	1,551	92	(19)	13	46	(22)	6	14	(16)	2	1,523	(26)	214	14	(20)	2	360	(18)	26	166	(23)	12	12,468	(24)	879	106	(19)	8
50-59	171	(10)	26	109	(17)	17	14,263	(31)	2,140	171	(34)	26	38	(19)	6	23	(26)	3	1,715	(30)	247	23	(32)	3	209	(11)	16	132	(18)	10	15,978	(31)	1,173	194	(34)	14
60+	43	(2)	5	47	(7)	6	7,539	(17)	893	148	(30)	18	7	(3)	1	9	(10)	1	1069	(18)	102	24	(34)	2	50	(3)	3	56	(8)	3	8,608	(17)	454	172	(30)	9
Race/Ethnicity																																				
White	323	(19)	22	125	(20)	9	13,865	(30)	959	182	(37)	13	32	(16)	2	9	(10)	1	823	(14)	58	10	(14)	1	355	(18)	12	134	(19)	5	14,688	(29)	511	192	(34)	7
African American	409	(23)	101	129	(20)	32	8,535	(19)	2,087	134	(27)	33	77	(38)	17	26	(30)	6	1,939	(33)	420	34	(48)	7	486	(25)	56	155	(22)	18	10,474	(20)	1,203	168	(30)	19
Latino	860	(49)	34	319	(50)	13	20,019	(44)	801	145	(29)	6	82	(40)	3	42	(48)	2	2,634	(45)	105	19	(27)	1	942	(48)	19	361	(50)	7	22,653	(44)	453	164	(29)	3
Asian/PI[6]	87	(5)	12	25	(4)	4	1,611	(4)	229	11	(2)	2	5	(2)	1	<5	(-)	-	185	(3)	23	<5	(-)	-	92	(5)	6	29	(4)	2	1,796	(3)	119	12	(2)	1
Asian	83	(5)	12	22	(3)	3	1,473	(3)	213	10	(2)	1	5	(2)	1	<5	(-)	-	168	(3)	21	<5	(-)	-	88	(5)	6	26	(4)	2	1,641	(3)	111	10	(2)	1
Pacific Islander	<5	(-)	-	<5	(-)	-	43	(<1)	351	<5	(-)	-	<5	(-)	-	<5	(-)	-	6	(<1)	48	<5	(-)	-	<5	(-)	-	<5	(-)	-	49	(<1)	198	<5	(-)	-
Unspecified	<5	(-)	-	<5	(-)	-	95	(<1)	-	<5	(-)	-	<5	(-)	-	<5	(-)	-	11	(<1)	-	<5	(-)	-	<5	(-)	-	<5	(-)	-	106	(<1)	-	<5	(-)	-
American Indian/Alaskan Native	11	(1)	118	7	(1)	75	308	(1)	3,460	<5	(-)	-	<5	(-)	-	<5	(-)	-	48	(1)	508	<5	(-)	-	13	(1)	68	8	(1)	42	356	(1)	1,941	<5	(-)	-
Multi-race/Unknown	54	(3)	-	27	(4)	-	1286	(3)	-	22	(4)	-	7	(3)	-	6	(7)	-	185	(3)	-	7	(10)	-	61	(3)		33	(5)	-	1471	(3)	-	29	(5)	-
Transmission Category[7]																																				
MSM	1633	(94)	-	563	(89)	-	40,180	(88)	-	391	(79)	-	-	-	-	-	-	-	-	-	-	-	-	-	1633	(84)	-	563	(78)	-	40,180	(78)	-	391	(69)	-
IDU	44	(3)	-	21	(3)	-	1,412	(3)	-	38	(8)	-	50	(24)	-	21	(24)	-	1,248	(21)	-	25	(35)	-	94	(5)	-	42	(6)	-	2,660	(5)	-	63	(11)	-
MSM/IDU	52	(3)	-	38	(6)	-	2,915	(6)	-	55	(11)	-	-	-	-	-	-	-	-	-	-	-	-	-	52	(3)	-	38	(5)	-	2,915	(6)	-	55	(10)	-
Hemophi/Transfusion	<5	(-)	-	<5	(-)	-	71	(<1)	-	<5	(-)	-	<5	(-)	-	<5	(-)	-	48	(1)	-	<5	(-)	-	<5	(-)	-	<5	(-)	-	119	(<1)	-	<5	(-)	-
Heterosexual contact	14	(1)	-	9	(1)	-	905	(2)	-	11	(2)	-	154	(75)	-	65	(74)	-	4,371	(75)	-	43	(60)	-	169	(9)	-	74	(10)	-	5276	(10)	-	54	(9)	-
Perinatal exposure	<5	(-)	-	<5	(-)	-	116	(<1)	-	<5	(-)	-	<5	(-)	-	<5	(-)	-	137	(2)	-	<5	(-)	-	<5	(-)	-	<5	(-)	-	253	(<1)	-	<5	(-)	-
Other/Undetermined	<5	(-)	-	<5	(-)	-	25	(<1)	-	<5	(-)	-	<5	(-)	-	<5	(-)	-	10	(<1)	-	<5	(-)	-	<5	(-)	-	<5	(-)	-	35	(<1)	-	<5	(-)	-
Total[8]	1,744	[89]	35	632	[88]	13	45,624	[89]	900	497	[88]	10	205	[11]	4	88	[12]	2	5,814	[11]	112	71	[13]	1	1,949	[100]	19	720	[100]	7	51,438	[100]	501	568	[100]	6

[1] Male and female categories are based on biological sex at birth.
[2] Data are provisional due to reporting delay. Rates based on fewer than 12 observations may not be reliable (see Technical Notes).
[3] Persons living with HIV are based on most recent known address at the end of 2017 in Los Angeles County.
[4] Includes persons whose residence at death was in Los Angeles County (LAC) or whose most recent known address before death was in LAC, when residence at death is missing.
[5] Age distributions for HIV and AIDS diagnoses are based on age at time of respective diagnoses. Age distribution for persons living with diagnosed HIV infection is based on age as of December 31, 2017. Age distribution for deaths is based on age at death.
[6] Percent for Asian, Pacific Islander(PI) and unspecified races are calculated based on total cases.
[7] Persons without an identified risk factor are assigned a risk factor using multiple imputation (MI) methods (see technical notes). Rate for transmission category is not calculated, because of the lack of denominator data.
[8] Percent of total cases that are male and female is shown in this row.

Table 2. 2016 HIV, Stage 3 (AIDS) Diagnoses and Deaths, Persons Living with HIV (PLWH) as of 2017 by Service Planning Area (SPA) and Health District (HD), Los Angeles County, Reported by June 30, 2018

SPA/HD[5]	Male[1]												Female[1]												Total								
	2016 HIV Diagnoses[2]			2016 AIDS Diagnoses[2]			PLWH as of 2017[2,3]			2016 Deaths[2,4]			2016 HIV Diagnoses[2]			2016 AIDS Diagnoses[2]			PLWH as of 2017[2,3]			2016 Deaths[2,4]			2016 HIV Diagnoses[2]			2016 AIDS Diagnoses[2]			PLWH as of 2017[2,3]			2016 Deaths[2,4]		
	N	(%)	Rt	N	(%)	Rt	N	(%)	Rt	N	(%)	Rt	N	(%)	Rt	N	(%)	Rt	N	(%)	Rt	N	(%)	Rt	N	(%)	Rt	N	(%)	Rt	N	(%)	Rt	N	(%)	Rt
Antelope Valley [1]	**30**	**(2)**	**15**	**9**	**(1)**	**5**	**843**	**(2)**	**433**	**20**	**(4)**	**10**	**10**	**(5)**	**5**	**<5**	**(-)**	**-**	**258**	**(4)**	**131**	**<5**	**(-)**	**-**	**40**	**(2)**	**10**	**12**	**(2)**	**3**	**1,101**	**(2)**	**281**	**23**	**(4)**	**6**
Antelope Valley	30	(2)	15	9	(1)	5	843	(2)	433	20	(4)	10	10	(5)	5	<5	(-)	-	258	(4)	131	<5	(-)	-	40	(2)	10	12	(2)	3	1,101	(2)	281	23	(4)	6
San Fernando [2]	**250**	**(14)**	**23**	**79**	**(13)**	**7**	**6,613**	**(14)**	**592**	**65**	**(13)**	**6**	**32**	**(16)**	**3**	**13**	**(15)**	**1**	**831**	**(14)**	**73**	**10**	**(14)**	**1**	**282**	**(14)**	**13**	**92**	**(13)**	**4**	**7,444**	**(14)**	**330**	**75**	**(13)**	**3**
East Valley	79	(5)	34	17	(3)	7	2,233	(5)	953	22	(4)	9	11	(5)	5	6	(7)	3	198	(3)	85	<5	(-)	-	90	(5)	19	23	(3)	5	2,431	(5)	519	25	(4)	5
Glendale	23	(1)	14	8	(1)	5	828	(2)	495	9	(2)	5	<5	(-)	-	<5	(-)	-	87	(1)	48	<5	(-)	-	24	(1)	7	9	(1)	3	915	(2)	263	10	(2)	3
San Fernando	42	(2)	16	20	(3)	8	759	(2)	287	6	(1)	2	6	(3)	2	<5	(-)	-	115	(2)	44	<5	(-)	-	48	(2)	9	23	(3)	4	874	(2)	165	9	(2)	2
West Valley	106	(6)	24	34	(5)	8	2,793	(6)	618	28	(6)	6	14	(7)	3	<5	(-)	-	431	(7)	93	<5	(-)	-	120	(6)	13	37	(5)	4	3,224	(6)	353	31	(5)	3
San Gabriel [3]	**158**	**(9)**	**18**	**61**	**(10)**	**7**	**3,258**	**(7)**	**371**	**40**	**(8)**	**5**	**13**	**(6)**	**1**	**9**	**(10)**	**1**	**511**	**(9)**	**55**	**6**	**(8)**	**1**	**171**	**(9)**	**10**	**70**	**(10)**	**4**	**3,769**	**(7)**	**209**	**46**	**(8)**	**3**
Alhambra	22	(1)	13	7	(1)	4	514	(1)	304	9	(2)	5	<5	(-)	-	<5	(-)	-	76	(1)	42	<5	(-)	-	26	(1)	7	9	(1)	3	590	(1)	168	10	(2)	3
El Monte	51	(3)	24	24	(4)	11	829	(2)	381	<5	(-)	-	<5	(-)	-	<5	(-)	-	134	(2)	61	<5	(-)	-	54	(3)	12	25	(3)	6	963	(2)	219	5	(1)	1
Foothill	20	(1)	13	6	(1)	4	539	(1)	354	8	(2)	5	<5	(-)	-	<5	(-)	-	77	(1)	48	<5	(-)	-	22	(1)	7	7	(1)	2	616	(1)	196	9	(2)	3
Pasadena	13	(1)	19	5	(1)	7	487	(1)	681	9	(2)	13	<5	(-)	-	<5	(-)	-	57	(1)	76	<5	(-)	-	14	(1)	10	5	(1)	4	544	(1)	372	10	(2)	7
Pomona	52	(3)	19	19	(3)	7	889	(2)	330	10	(2)	4	<5	(-)	-	5	(6)	2	167	(3)	59	<5	(-)	-	55	(3)	10	24	(3)	4	1,056	(2)	192	12	(2)	2
Metro [4]	**523**	**(30)**	**86**	**167**	**(26)**	**27**	**17,221**	**(38)**	**2,822**	**138**	**(28)**	**23**	**43**	**(21)**	**7**	**9**	**(10)**	**2**	**1,162**	**(20)**	**201**	**12**	**(17)**	**2**	**566**	**(29)**	**48**	**176**	**(24)**	**15**	**18,383**	**(36)**	**1547**	**150**	**(26)**	**13**
Central	216	(12)	114	61	(10)	32	6,073	(13)	3,185	62	(12)	33	31	(15)	19	8	(9)	5	615	(11)	368	8	(11)	5	247	(13)	69	69	(10)	19	6,688	(13)	1,870	70	(12)	20
Hollywood-Wilshire	263	(15)	102	78	(12)	30	9,446	(21)	3,622	60	(12)	23	9	(4)	4	<5	(-)	-	373	(6)	149	<5	(-)	-	272	(14)	54	79	(11)	16	9,819	(19)	1,921	62	(11)	12
Northeast	44	(3)	28	28	(4)	18	1,702	(4)	1,072	16	(3)	10	<5	(-)	-	<5	(-)	-	174	(3)	108	<5	(-)	-	47	(2)	15	28	(4)	9	1,876	(4)	587	18	(3)	6
West [5]	**57**	**(3)**	**18**	**15**	**(2)**	**5**	**2,303**	**(5)**	**707**	**23**	**(5)**	**7**	**5**	**(2)**	**1**	**<5**	**(-)**	**-**	**226**	**(4)**	**65**	**<5**	**(-)**	**-**	**62**	**(3)**	**9**	**18**	**(3)**	**3**	**2,529**	**(5)**	**376**	**24**	**(4)**	**4**
West	57	(3)	18	15	(2)	5	2,303	(5)	707	23	(5)	7	5	(2)	1	<5	(-)	-	226	(4)	65	<5	(-)	-	62	(3)	9	18	(3)	3	2,529	(5)	376	24	(4)	4
South [6]	**300**	**(17)**	**57**	**105**	**(17)**	**20**	**5,187**	**(11)**	**995**	**71**	**(14)**	**14**	**39**	**(19)**	**7**	**22**	**(25)**	**4**	**1,225**	**(21)**	**224**	**20**	**(28)**	**4**	**339**	**(17)**	**32**	**127**	**(18)**	**12**	**6,412**	**(12)**	**600**	**91**	**(16)**	**9**
Compton	53	(3)	38	17	(3)	12	899	(2)	641	8	(2)	6	6	(3)	4	<5	(-)	-	182	(3)	123	<5	(-)	-	59	(3)	20	19	(3)	7	1,081	(2)	375	10	(2)	3
South	68	(4)	69	17	(3)	17	884	(2)	903	21	(4)	21	11	(5)	11	7	(8)	7	265	(5)	259	6	(8)	6	79	(4)	39	24	(3)	12	1,149	(2)	574	27	(5)	13
Southeast	52	(3)	55	20	(3)	21	792	(2)	853	10	(2)	11	6	(3)	7	<5	(-)	-	172	(3)	189	<5	(-)	-	58	(3)	31	24	(3)	13	964	(2)	525	14	(2)	8
Southwest	127	(7)	67	51	(8)	27	2,612	(6)	1,372	32	(6)	17	16	(8)	8	9	(10)	4	606	(10)	294	8	(11)	4	143	(7)	37	60	(8)	15	3,218	(6)	812	40	(7)	10
East [7]	**166**	**(10)**	**26**	**55**	**(9)**	**9**	**3,054**	**(7)**	**473**	**29**	**(6)**	**4**	**14**	**(7)**	**2**	**7**	**(8)**	**1**	**518**	**(9)**	**77**	**<5**	**(-)**	**-**	**180**	**(9)**	**14**	**62**	**(9)**	**5**	**3,572**	**(7)**	**272**	**33**	**(6)**	**3**
Bellflower	37	(2)	21	21	(3)	12	685	(2)	394	5	(1)	3	6	(3)	3	<5	(-)	-	125	(2)	69	<5	(-)	-	43	(2)	12	23	(3)	7	810	(2)	228	7	(1)	2
East Los Angeles	34	(2)	34	9	(1)	9	634	(1)	633	8	(2)	8	<5	(-)	-	<5	(-)	-	66	(1)	64	<5	(-)	-	35	(2)	17	10	(1)	5	700	(1)	345	9	(2)	4
San Antonio	66	(4)	31	21	(3)	10	1,132	(2)	532	9	(2)	4	5	(2)	2	<5	(-)	-	232	(4)	107	<5	(-)	-	71	(4)	16	23	(3)	5	1,364	(3)	317	9	(2)	2
Whittier	29	(2)	18	<5	(-)	-	603	(1)	378	7	(1)	4	<5	(-)	-	<5	(-)	-	95	(2)	57	<5	(-)	-	31	(2)	10	6	(1)	2	698	(1)	214	8	(1)	2
South Bay [8]	**228**	**(13)**	**29**	**85**	**(13)**	**11**	**6,831**	**(15)**	**885**	**98**	**(20)**	**13**	**43**	**(21)**	**5**	**14**	**(16)**	**2**	**1,056**	**(18)**	**131**	**13**	**(18)**	**2**	**271**	**(14)**	**17**	**99**	**(14)**	**6**	**7,887**	**(15)**	**500**	**111**	**(20)**	**7**
Harbor	20	(1)	19	6	(1)	6	574	(1)	553	<5	(-)	-	<5	(-)	-	<5	(-)	-	94	(2)	88	<5	(-)	-	23	(1)	11	7	(1)	3	668	(1)	318	5	(1)	2
Inglewood	80	(5)	39	29	(5)	14	1,537	(3)	751	23	(5)	11	11	(5)	5	<5	(-)	-	373	(6)	172	6	(8)	3	91	(5)	21	31	(4)	7	1,910	(4)	453	29	(5)	7
Long Beach	102	(6)	43	38	(6)	16	4,020	(9)	1,698	55	(11)	23	25	(12)	10	9	(10)	4	463	(8)	188	<5	(-)	-	127	(7)	26	47	(7)	10	4,483	(9)	929	59	(10)	12
Torrance	26	(1)	11	12	(2)	5	700	(2)	309	16	(3)	7	<5	(-)	-	<5	(-)	-	126	(2)	53	<5	(-)	-	30	(2)	7	14	(2)	3	826	(2)	179	18	(3)	4
Unknown	**32**	**(2)**	**-**	**56**	**(9)**	**-**	**314**	**(1)**	**-**	**13**	**(3)**	**-**	**6**	**(3)**	**-**	**8**	**(9)**	**-**	**27**	**(<1)**	**-**	**<5**	**(-)**	**-**	**38**	**(2)**	**-**	**64**	**(9)**	**-**	**341**	**(1)**	**-**	**15**	**(3)**	**-**
Total[6]	**1,744**	**[100]**	**35**	**632**	**[100]**	**13**	**45,624**	**[100]**	**900**	**497**	**[100]**	**10**	**205**	**[100]**	**4**	**88**	**[100]**	**2**	**5,814**	**[100]**	**112**	**71**	**[100]**	**1**	**1,949**	**[100]**	**19**	**720**	**[100]**	**7**	**51,438**	**[100]**	**501**	**568**	**[100]**	**6**

[1] Male and female categories are based on biological sex at birth.
[2] Data are provisional due to reporting delay. Rate per 100,000. Rates for 2016 and PLWH as of 2017 are based on Census 2010 population estimates for 2016 and 2017 respectively. Rates based on fewer than 12 observations may not be reliable (see Technical Notes).
[3] Persons living with HIV are based on most recent known address at the end of 2017 in Los Angeles County.
[4] Includes persons whose residence at death was in Los Angeles County (LAC) or whose most recent known address before death was in LAC, when residence at death is missing.
[5] Service Planning Area and Health District are based on 2012 boundaries.
[6] Percent of total cases that are male and female is shown in this row.

Table 3. HIV Diagnoses and Rates[1] (per 100,000) by Gender, Age Group, Race/Ethnicity, Transmission Category, and Service Planning Area (SPA), Los Angeles County, 2012-2016
Reported by June 30, 2018

	Year of Diagnosis											
	2012			2013			2014			2015			2016[2]		
	No.	(%)	Rt	No.	(%)	Rt	No.	(%)	Rt	No.	(%)	Rt	No.	(%)	Rt
Gender															
Male	1,911	(88)	39	1,553	(86)	31	1,869	(88)	38	1,825	(88)	36	1,707	(88)	34
Female	214	(10)	4	206	(11)	4	229	(11)	4	208	(10)	4	201	(10)	4
Transgender[3]	51	(2)	-	37	(2)	-	28	(1)	-	41	(2)	-	41	(2)	-
Age Group (Yr)															
<13	<5	(-)	-	<5	(-)	-	<5	(-)	-	<5	(-)	-	<5	(-)	-
13-19	104	(5)	10	71	(4)	7	67	(3)	7	70	(3)	7	57	(3)	6
20-29	765	(35)	50	598	(33)	38	783	(37)	51	771	(37)	50	707	(36)	46
30-39	581	(27)	41	495	(28)	34	604	(28)	42	556	(27)	38	565	(29)	38
40-49	456	(21)	32	377	(21)	27	392	(18)	28	391	(19)	28	360	(18)	26
50-59	211	(10)	17	191	(11)	15	209	(10)	16	216	(10)	16	209	(11)	16
≥60	56	(3)	3	60	(3)	4	69	(3)	4	67	(3)	4	50	(3)	3
Race/Ethnicity															
White	469	(22)	16	418	(23)	15	429	(20)	15	438	(21)	15	355	(18)	12
African American	438	(20)	51	378	(21)	44	394	(19)	45	463	(22)	53	486	(25)	56
Latino	1,090	(50)	23	853	(47)	18	1,112	(52)	23	986	(48)	20	942	(48)	19
Asian/PI[4]	110	(5)	8	80	(4)	5	118	(6)	8	112	(5)	8	92	(5)	6
Asian	104	(5)	7	71	(4)	5	108	(5)	7	102	(5)	7	88	(5)	6
Pacific Islander	<5	(-)	-	<5	(-)	-	<5	(-)	-	5	(<1)	20	<5	(-)	-
Unspecified	<5	(-)	-	7	(<1)	-	9	(<1)	-	5	(<1)	-	<5	(-)	-
American Indian/Alaskan Native	15	(1)	77	8	(<1)	41	14	(1)	70	17	(1)	86	13	(1)	68
Multi-race	54	(2)	-	59	(3)	-	59	(3)	-	58	(3)	-	61	(3)	-
Transmission Category[3,5]															
MSM	1,829	(84)	-	1,475	(82)	-	1,776	(84)	-	1,744	(84)	-	1,633	(84)	-
IDU	83	(4)	-	92	(5)	-	88	(4)	-	101	(5)	-	94	(5)	-
MSM/IDU	74	(3)	-	50	(3)	-	58	(3)	-	53	(3)	-	52	(3)	-
Heterosexual contact	187	(9)	-	175	(10)	-	200	(9)	-	172	(8)	-	169	(9)	-
Perinatal exposure	<5	(-)	-	<5	(-)	-	<5	(-)	-	<5	(-)	-	<5	(-)	-
Other/Undetermined	<5	(-)	-	<5	(-)	-	<5	(-)	-	<5	(-)	-	<5	(-)	-
Service Planning Area															
Antelope Valley[1]	41	(2)	11	32	(2)	8	48	(2)	12	30	(1)	8	40	(2)	10
San Fernando[2]	283	(13)	13	244	(14)	11	297	(14)	14	306	(15)	14	282	(14)	13
San Gabriel[3]	196	(9)	11	153	(9)	9	191	(9)	11	180	(9)	10	171	(9)	10
Metro[4]	735	(34)	65	606	(34)	53	713	(34)	62	640	(31)	55	566	(29)	48
West[5]	102	(5)	16	83	(5)	13	107	(5)	16	101	(5)	15	62	(3)	9
South[6]	269	(12)	26	234	(13)	23	271	(13)	26	309	(15)	29	339	(17)	32
East[7]	177	(8)	14	147	(8)	11	181	(9)	14	173	(8)	13	180	(9)	14
South Bay/LB[8]	361	(17)	24	284	(16)	18	294	(14)	19	299	(14)	19	271	(14)	17
Unknown	12	(1)	-	13	(1)	-	24	(1)	-	36	(2)	-	38	(2)	-
Total	2,176	[100]	22	1,796	[100]	18	2,126	[100]	21	2,074	[100]	20	1,949	[100]	19

[1] Rates for 2012-2016 are based on Census 2010 population estimates for 2012-2016. Rates based on fewer than 12 observations may not be reliable (see Technical Notes).

[2] Data are provisional due to reporting delay.

[3] Rates for transgender, transmission category, and multi-race are not calculated because of the lack of denominator data.

[4] Percentages for Asian, Pacific Islander (PI), and unspecified races are calculated based on the total cases.

[5] Persons without an identified risk factor are assigned a risk factor using multiple imputation (MI) methods (see Technical Notes).

Figure 2. Rates of HIV Diagnoses among Males by Age Group, Los Angeles County, 2010-2016

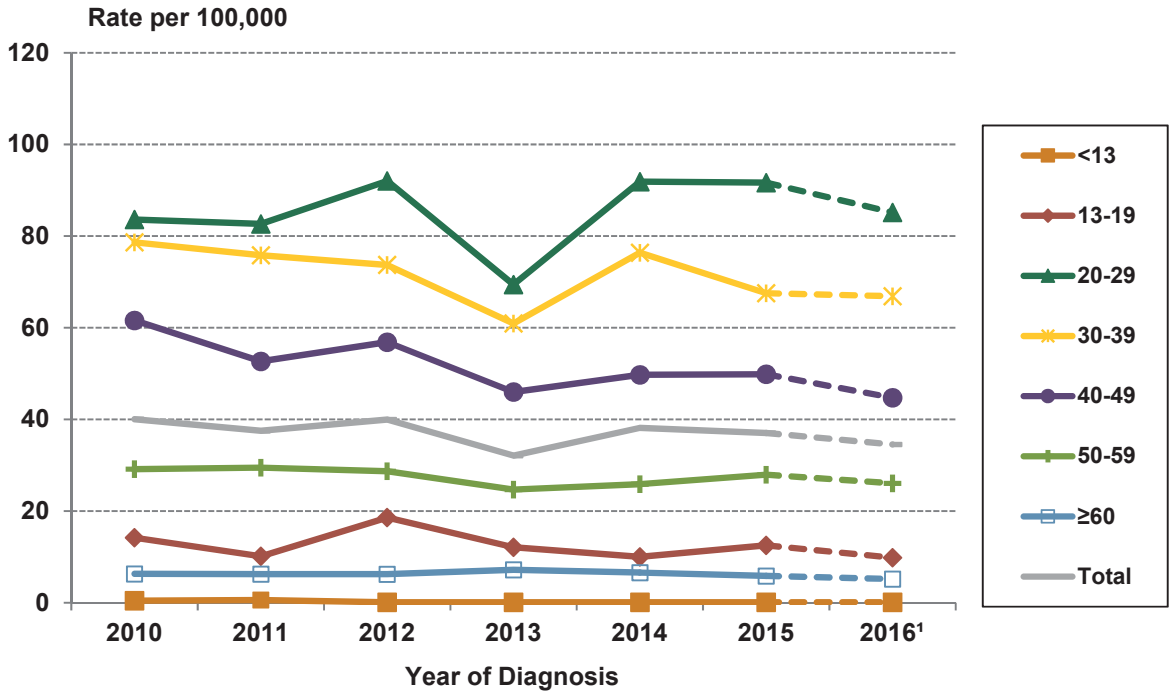
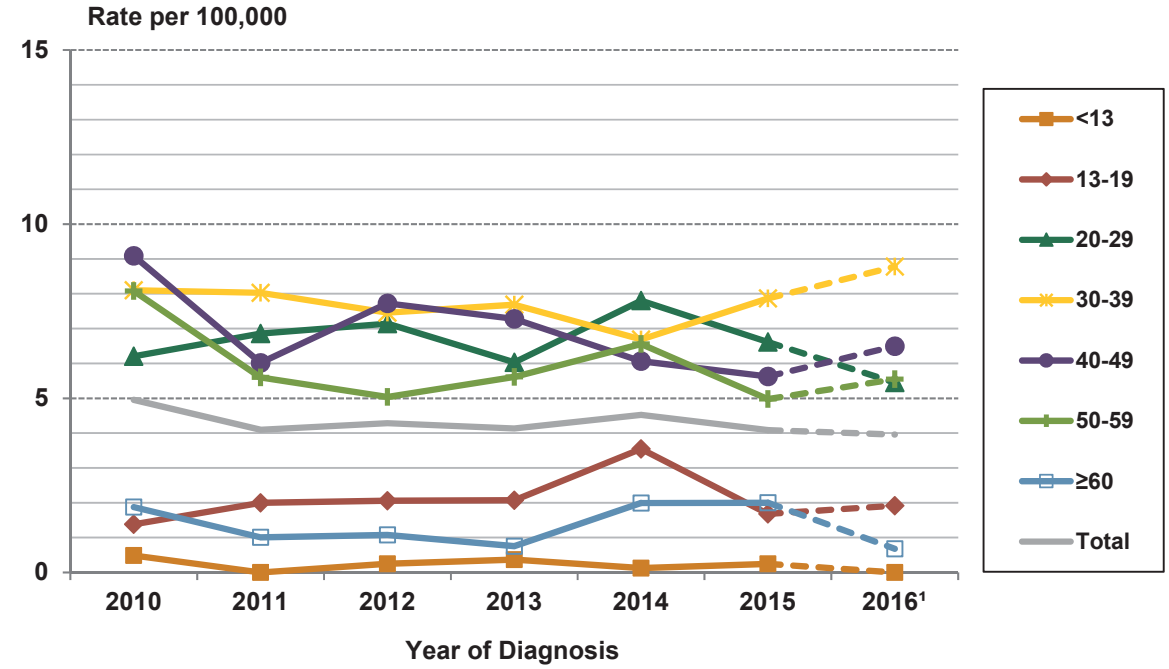


Figure 3. Rates of HIV Diagnoses among Females by Age Group, Los Angeles County, 2010-2016



[1] Data are provisional due to reporting delay.

Figure 4. Rates of HIV Diagnoses among Adult/Adolescent Males by Race/Ethnicity[1], Los Angeles County, 2010-2016

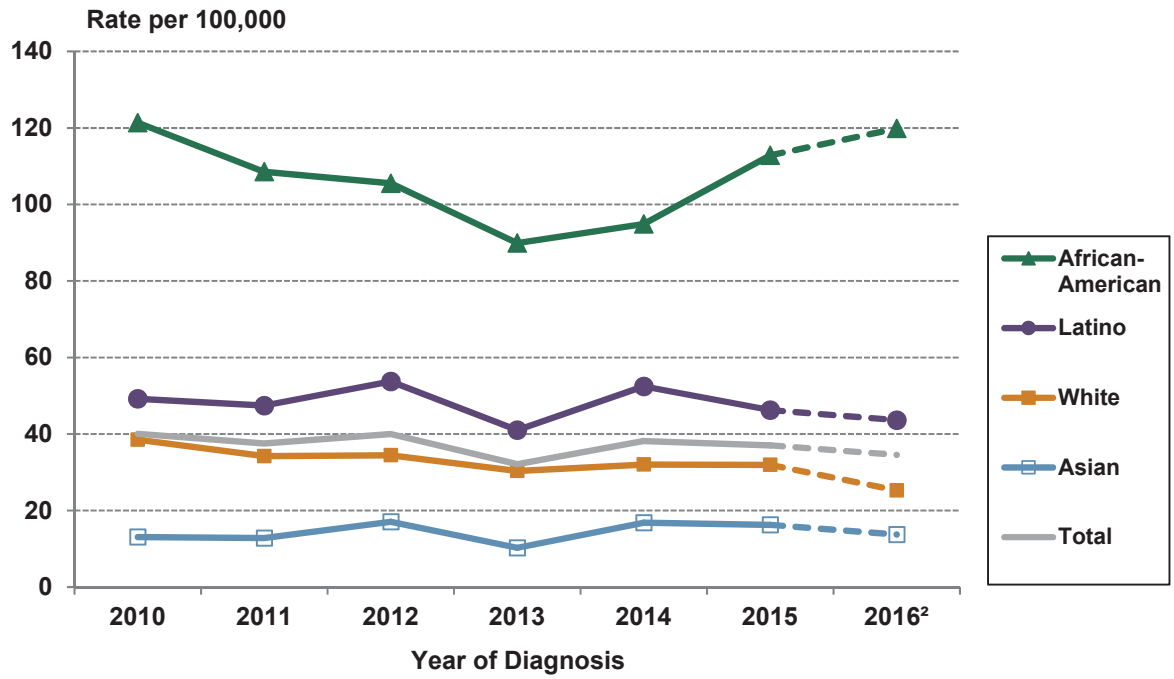
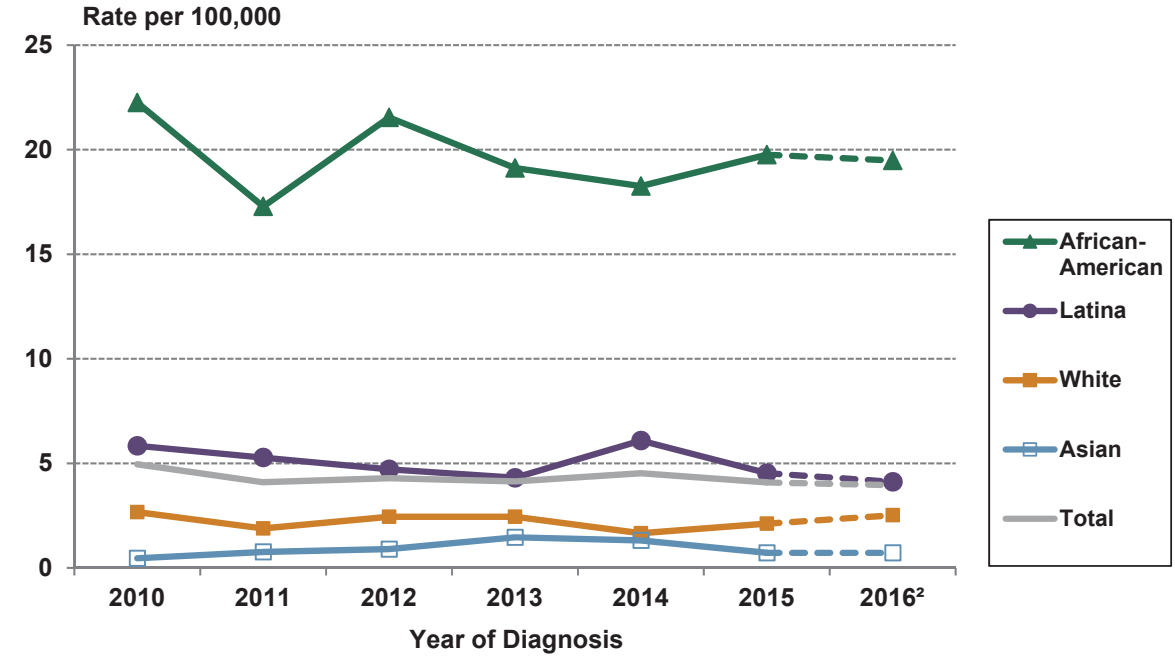


Figure 5. Rates of HIV Diagnoses among Adult/Adolescent Females by Race/Ethnicity[1], Los Angeles County, 2010-2016



[1] Data for Pacific Islanders and American Indians/Alaskan Natives are not presented due to small numbers that may cause unstable estimates.
[2] Data are provisional due to reporting delay.

Figure 6. Transmission Risk Category[1] among Males Living with HIV[2] at Year-end 2017 and HIV Diagnoses in 2016, Los Angeles County

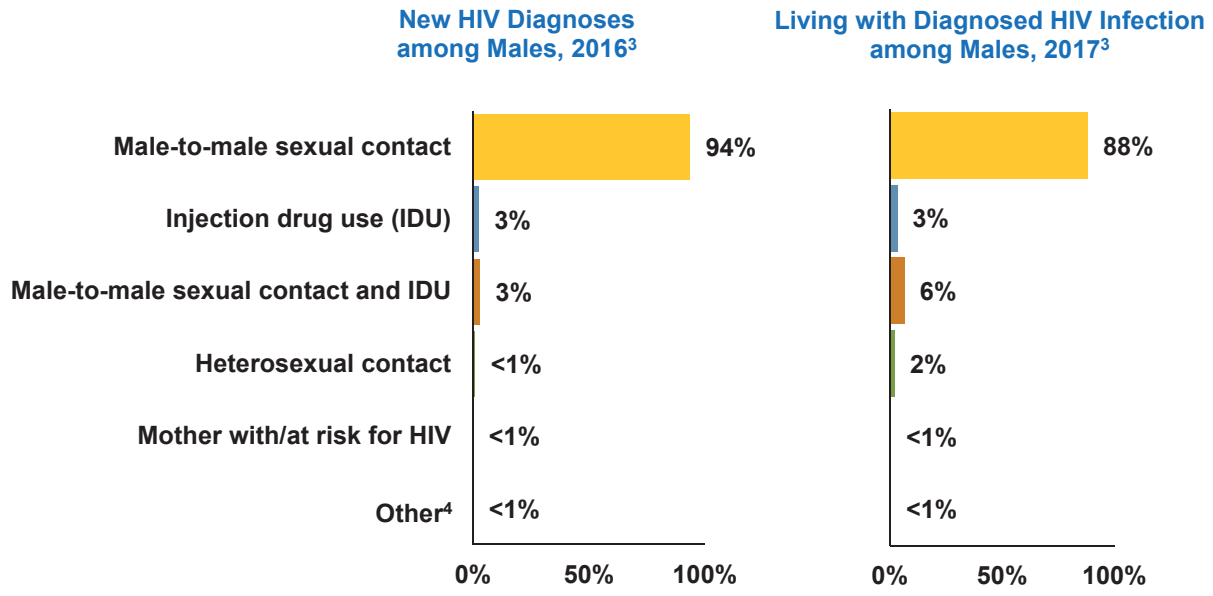
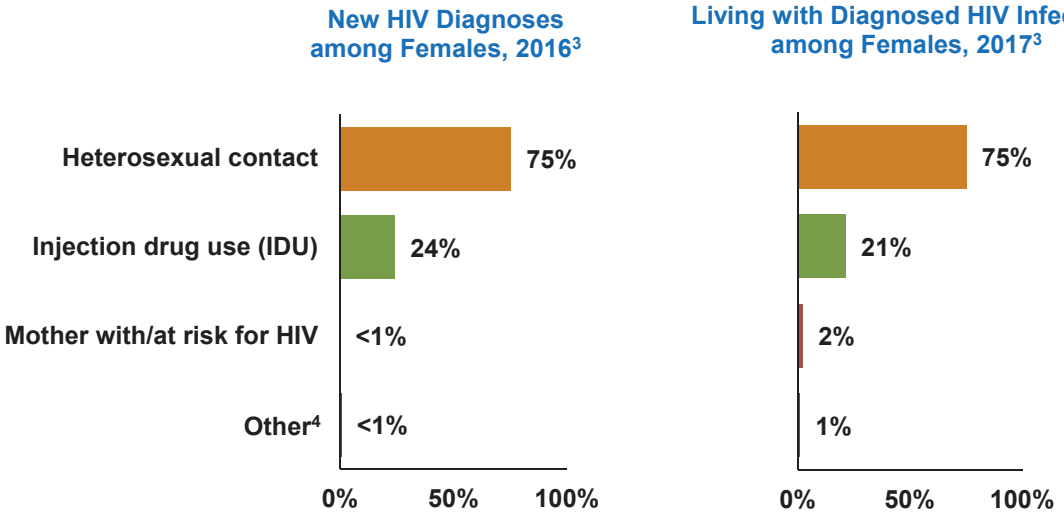
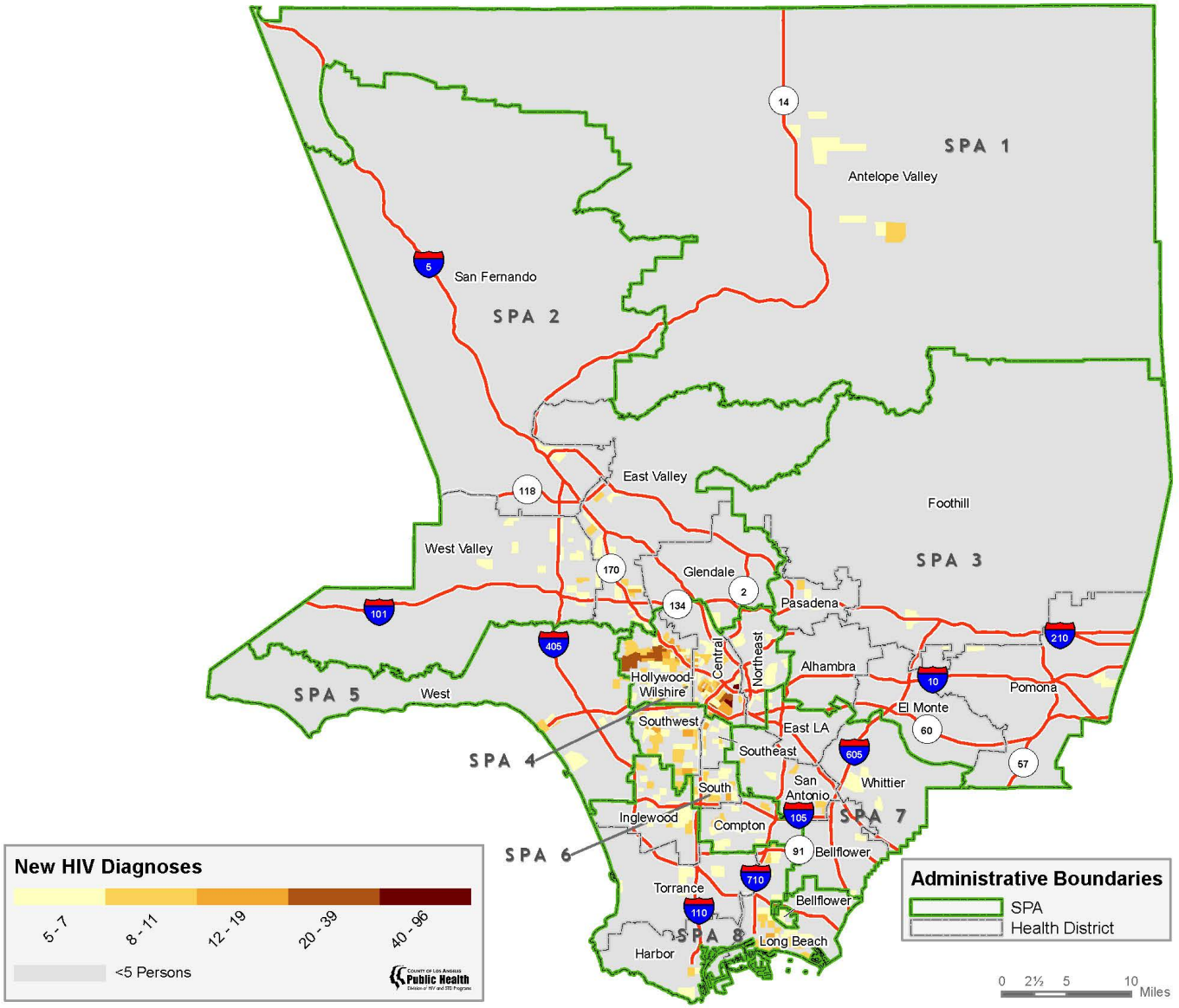


Figure 7. Transmission Risk Category[1] among Females Living with HIV[2] at Year-end 2017 and HIV Diagnoses in 2016, Los Angeles County



[1] Persons without an identified risk factor are assigned a risk factor using CDC-recommended multiple imputation (MI) methods.
[2] Based on most recent residential address in Los Angeles County.
[3] Data are provisional due to reporting delay.
[4] Other risks include hemophilia, coagulation disorder, blood transfusion, and risk factor not reported/identified.

Figure 8. New HIV Diagnoses by Census Tract and Service Planning Area, Los Angeles County, 2014-2016



Census tract information is based on a person's address at HIV diagnosis. In the case of an unavailable street address, the most recent ZIP Code is used to assign census tracts based on residential proportion (3.1%). Map does not include 1.6% of persons with insufficient location information. Data are provisional due to reporting delay and suppressed for census tracts with <5 cases or population <100.

Source: HIV Surveillance data as of June 30, 2018; U.S. Department of Commerce, 2010 U.S. Census Tract; U.S. Department of Housing and Urban Development, HUD USPS ZIP Code – Census Tract Crosswalk Files 2nd quarter 2015.

Table 4. HIV Diagnoses from 2012-2016 and Persons Living with HIV (PLWH) as of 2017 by Service Planning Area (SPA) and Health District (HD) of Residence, Los Angeles County Reported by June 30, 2018

SPA/HD[1]	Year of Diagnosis 2012			2013			2014			2015[2]			2016[2]			PLWH as of 2017[2,4]		
	No.	(%)	Rt[3]	No.	(%)	Rt[3]	No.	(%)	Rt[3]	No.	(%)	Rt[3]	No.	(%)	Rt[3]	No.	(%)	Rt[3]
Antelope Valley[1]	**41**	**(2)**	**11**	**32**	**(2)**	**8**	**48**	**(2)**	**12**	**30**	**(1)**	**8**	**40**	**(2)**	**10**	**1,101**	**(2)**	**281**
Antelope Valley	41	(2)	11	32	(2)	8	48	(2)	12	30	(1)	8	40	(2)	10	1,101	(2)	281
San Fernando[2]	**283**	**(13)**	**13**	**244**	**(14)**	**11**	**297**	**(14)**	**14**	**306**	**(15)**	**14**	**282**	**(14)**	**13**	**7,444**	**(14)**	**330**
East Valley	99	(5)	22	74	(4)	16	83	(4)	18	93	(4)	20	90	(5)	19	2,431	(5)	519
Glendale	41	(2)	12	25	(1)	7	34	(2)	10	44	(2)	13	24	(1)	7	915	(2)	263
San Fernando	35	(2)	7	33	(2)	7	38	(2)	7	29	(1)	6	48	(2)	9	874	(2)	165
West Valley	108	(5)	12	112	(6)	13	142	(7)	16	140	(7)	16	120	(6)	13	3,224	(6)	353
San Gabriel[3]	**196**	**(9)**	**11**	**153**	**(9)**	**9**	**191**	**(9)**	**11**	**180**	**(9)**	**10**	**171**	**(9)**	**10**	**3,769**	**(7)**	**209**
Alhambra	35	(2)	10	23	(1)	7	33	(2)	9	29	(1)	8	26	(1)	7	590	(1)	168
El Monte	48	(2)	11	37	(2)	8	56	(3)	13	48	(2)	11	54	(3)	12	963	(2)	219
Foothill	24	(1)	8	28	(2)	9	39	(2)	13	29	(1)	9	22	(1)	7	616	(1)	196
Pasadena	28	(1)	20	25	(1)	18	24	(1)	17	30	(1)	21	14	(1)	10	544	(1)	372
Pomona	61	(3)	11	40	(2)	7	39	(2)	7	44	(2)	8	55	(3)	10	1,056	(2)	192
Metro[4]	**735**	**(34)**	**65**	**606**	**(34)**	**53**	**713**	**(34)**	**62**	**640**	**(31)**	**55**	**566**	**(29)**	**48**	**18,383**	**(36)**	**1,547**
Central	264	(12)	78	225	(13)	66	260	(12)	75	253	(12)	72	247	(13)	69	6,688	(13)	1,870
Hollywood-Wilshire	396	(18)	82	313	(17)	64	378	(18)	76	331	(16)	66	272	(14)	54	9,819	(19)	1,921
Northeast	75	(3)	24	68	(4)	22	75	(4)	24	56	(3)	18	47	(2)	15	1,876	(4)	587
West[5]	**102**	**(5)**	**16**	**83**	**(5)**	**13**	**107**	**(5)**	**16**	**101**	**(5)**	**15**	**62**	**(3)**	**9**	**2,529**	**(5)**	**376**
West	102	(5)	16	83	(5)	13	107	(5)	16	101	(5)	15	62	(3)	9	2,529	(5)	376
South[6]	**269**	**(12)**	**26**	**234**	**(13)**	**23**	**271**	**(13)**	**26**	**309**	**(15)**	**29**	**339**	**(17)**	**32**	**6,412**	**(12)**	**600**
Compton	39	(2)	14	48	(3)	17	58	(3)	20	47	(2)	16	59	(3)	20	1,081	(2)	375
South	57	(3)	30	43	(2)	22	56	(3)	29	62	(3)	31	79	(4)	39	1,149	(2)	574
Southeast	41	(2)	24	36	(2)	21	49	(2)	28	44	(2)	25	58	(3)	31	964	(2)	525
Southwest	132	(6)	35	107	(6)	28	108	(5)	28	156	(8)	40	143	(7)	37	3,218	(6)	812
East[7]	**177**	**(8)**	**14**	**147**	**(8)**	**11**	**181**	**(9)**	**14**	**173**	**(8)**	**13**	**180**	**(9)**	**14**	**3,572**	**(7)**	**272**
Bellflower	37	(2)	10	46	(3)	13	43	(2)	12	42	(2)	12	43	(2)	12	810	(2)	228
East Los Angeles	35	(2)	17	24	(1)	12	25	(1)	12	29	(1)	14	35	(2)	17	700	(1)	345
San Antonio	62	(3)	15	47	(3)	11	70	(3)	16	68	(3)	16	71	(4)	16	1,364	(3)	317
Whittier	43	(2)	13	30	(2)	9	43	(2)	13	34	(2)	10	31	(2)	10	698	(1)	214
South Bay[8]	**361**	**(17)**	**24**	**284**	**(16)**	**18**	**294**	**(14)**	**19**	**299**	**(14)**	**19**	**271**	**(14)**	**17**	**7,887**	**(15)**	**500**
Harbor	23	(1)	11	17	(1)	8	35	(2)	17	22	(1)	11	23	(1)	11	668	(1)	318
Inglewood	102	(5)	25	89	(5)	22	89	(4)	21	92	(4)	22	91	(5)	21	1,910	(4)	453
Long Beach	200	(9)	43	141	(8)	30	131	(6)	28	142	(7)	30	127	(7)	26	4,483	(9)	929
Torrance	36	(2)	8	37	(2)	8	39	(2)	8	43	(2)	9	30	(2)	7	826	(2)	179
Total[5]	**2,176**	**[100]**	**22**	**1,796**	**[100]**	**18**	**2,126**	**[100]**	**21**	**2,074**	**[100]**	**20**	**1,949**	**[100]**	**19**	**51,438**	**[100]**	**501**

[1] Service Planning Area and Health District are based on 2012 boundaries.

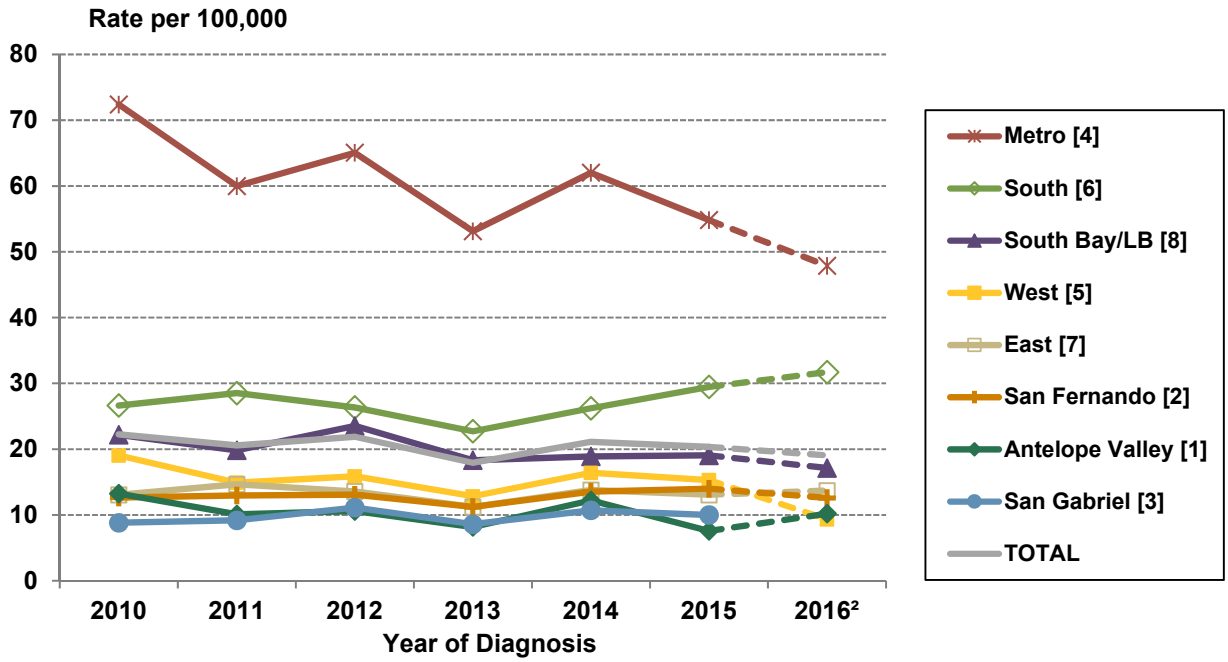
[2] Data are provisional due to reporting delay.

[3] Rate per 100,000. Rates for 2012-2016 and PLWH as of 2017 are based on Census 2010 population estimate for 2012-2016 and 2017 respectively. Rates based on fewer than 12 observations may not be reliable (see Technical Notes).

[4] Persons living with HIV were based on most recent known address at the end of 2017 in Los Angeles County.

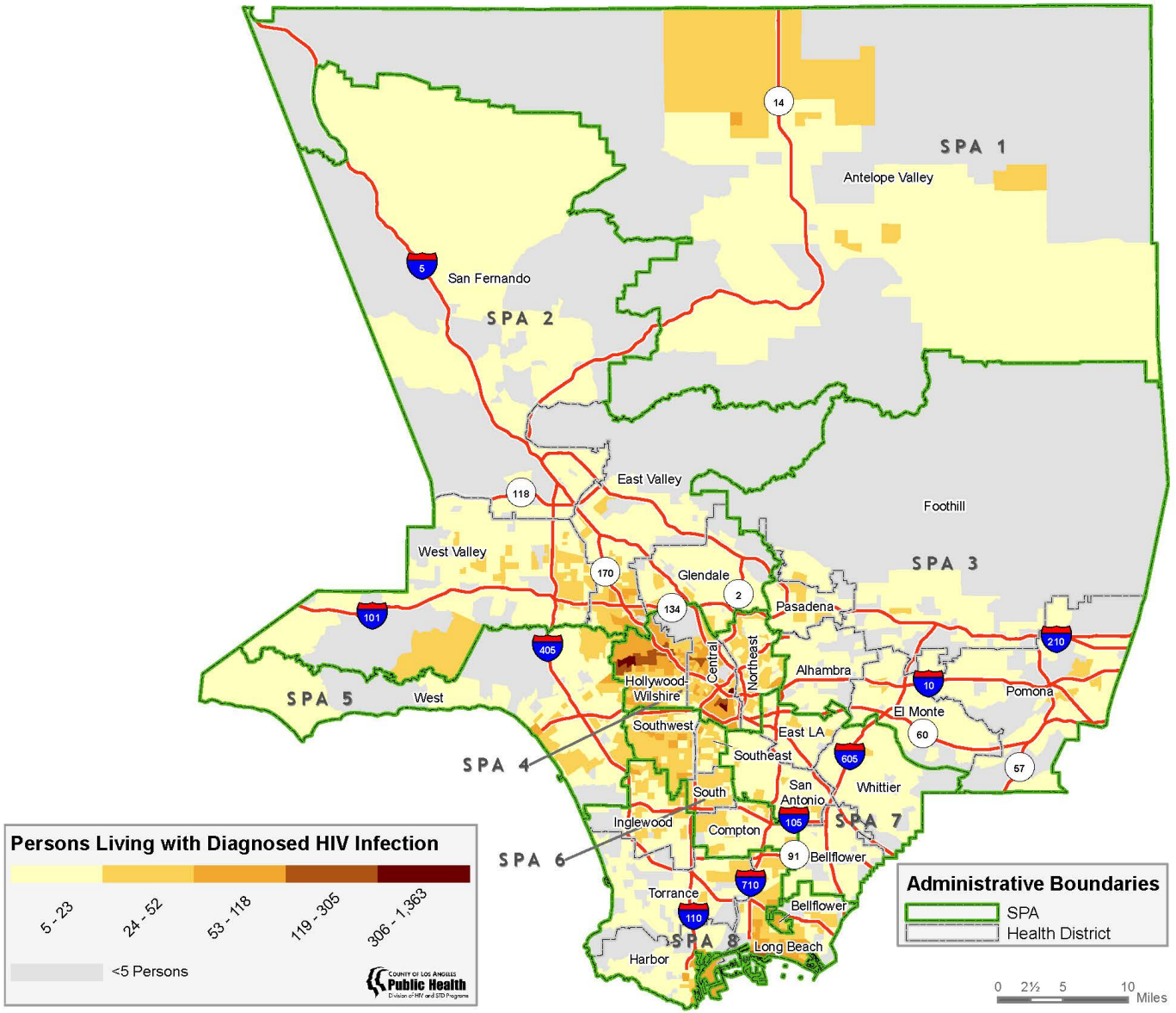
[5] Total includes persons with no information on Service Planning Area/Health District.

Figure 9. Rates of HIV Diagnoses by Service Planning Area[1], Los Angeles County, 2010-2016



[1] Service Planning Areas are based on residence at the time of HIV or AIDS diagnosis.
[2] Data are provisional due to reporting delay.

Figure 10. Persons Living with Diagnosed HIV Infection as of 12/31/2017 by Census Tract and Service Planning Area, Los Angeles County



Census tract information is based on a person's most recent known address as of 12/31/2017. In the case of an unavailable street address, the most recent ZIP Code is used to assign census tracts based on residential proportion (11.5%). Map does not include 0.7% of persons with insufficient location information. Data are provisional due to reporting delay and suppressed for census tracts with <5 cases or population <100.

Source: HIV Surveillance data as of June 30, 2018; U.S. Department of Commerce, 2010 U.S. Census Tract; U.S. Department of Housing and Urban Development, HUD USPS ZIP Code – Census Tract Crosswalk Files, 4th quarter 2017.

Table 5. 2016 HIV Care Continuum Indicators[1,2] among Persons with Diagnosed HIV Infection in Los Angeles County by Selected Characteristics Reported by June 30, 2018

Characteristics	HIV diagnoses 2016[2]	Linked to care in 1 month[1,2]		PLWH as of 2016[3]	Engaged in care 2016[1]		Retained in care 2016[1]		No. of persons with ≥ 1 VL test in 2016	Viral Suppression[1] (VL < 200)		
										Virally suppressed	Among PLWH[3]	Among persons with ≥ 1 VL test
	No.	No.	%	No.	No.	%	No.	%	No.	No.	%	%
Gender												
Male	1,707	1,108	65%	42,711	29,669	69%	23,270	54%	29,258	25,965	61%	89%
Female	201	112	56%	5,512	3,678	67%	2,962	54%	3,630	3,116	57%	86%
Transgender	41	26	63%	751	514	68%	428	57%	512	408	54%	80%
Age Group (Yr)												
< 18	13	9	69%	85	70	82%	61	72%	68	64	75%	94%
18-29	752	509	68%	4,782	3,242	68%	2,308	48%	3,198	2,537	53%	79%
30-49	925	577	62%	22,701	15,350	68%	11,739	52%	15,172	13,080	58%	86%
≥ 50	259	151	58%	21,406	15,199	71%	12,552	59%	14,962	13,808	65%	92%
Race/Ethnicity												
African American	486	255	52%	9,812	6,405	65%	4,855	49%	6,288	5,145	52%	82%
Latino	942	611	65%	21,289	14,533	68%	11,879	56%	14,403	12,723	60%	88%
White	355	253	71%	14,502	10,337	71%	7,882	54%	10,158	9,386	65%	92%
Asian/Pacific Islander	92	71	77%	1,641	1,200	73%	974	59%	1,186	1,103	67%	93%
American Indian/Alaskan Native[4]	13	9	69%	338	248	73%	195	58%	245	196	58%	80%
Multi-race	61	47	77%	1,392	1,138	82%	875	63%	1,120	936	67%	84%
Adjusted Transmission Category[5]												
Male-to-male sexual contact (MSM)	1,633	1,070	66%	38,035	26,589	70%	20,835	55%	26,244	23,452	62%	89%
Injection drug use (IDU)	94	54	57%	2,557	1,557	61%	1,227	48%	1,523	1,271	50%	83%
MSM and IDU	52	28	54%	2,924	2,064	71%	1,610	55%	2,023	1,619	55%	80%
Heterosexual contact [6]	169	92	55%	5,049	3,346	66%	2,738	54%	3,310	2,912	58%	88%
Other/unknown	<5	<5	--	409	306	75%	250	61%	301	234	57%	78%
Service Planning Area												
Antelope Valley [1]	40	25	63%	1,031	757	73%	582	56%	738	609	59%	83%
San Fernando [2]	282	208	74%	7,060	5,210	74%	4,144	59%	5,143	4,671	66%	91%
San Gabriel [3]	171	121	71%	3,511	2,644	75%	2,081	59%	2,604	2,340	67%	90%
Metro [4]	566	340	60%	17,688	11,540	65%	8,962	51%	11,383	10,101	57%	89%
West [5]	62	50	81%	2,490	1,672	67%	1,264	51%	1,653	1,525	61%	92%
South [6]	339	196	58%	5,837	4,134	71%	3,291	56%	4,075	3,368	58%	83%
East [7]	180	122	68%	3,319	2,405	72%	1,952	59%	2,384	2,112	64%	89%
South Bay [8]	271	168	62%	7,619	5,296	70%	4,254	56%	5,225	4,602	60%	88%
Total	1,949	1,246	64%	48,974	33,861	69%	26,660	54%	33,400	29,489	60%	88%

[1] Persons are considered linked to care if there was at least one viral load, CD4+ T-cell, or genotype test within 1 month of an HIV diagnosis; persons are considered engaged in care if there was at least one viral load, CD4+ T-test, or genotype test in 2016; persons are considered retained in care if there were ≥ 2 viral load, CD4+ T-cell, or genotype tests in 2016, at least 3 months apart; persons are considered virally suppressed when their last VL test in 2016 was < 200 copies/mL.

[2] Denominator for linkage to care includes persons who were reported with a new HIV diagnosis in 2016; does not include estimated persons unaware of HIV infection.

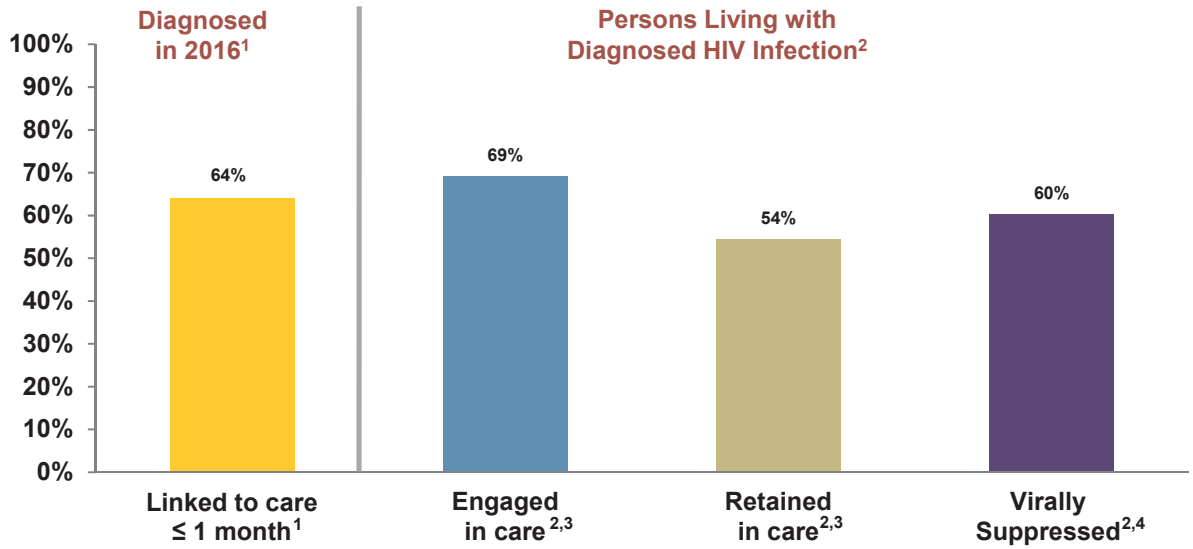
[3] Includes persons diagnosed with an HIV infection through 2015 and living in LAC at year-end 2016, based on most recent residence.

[4] Includes all non-Latino persons who have been reported with American Indian/Alaskan Native race, regardless of whether any other racial/ethnic information is reported.

[5] Persons with no reported risk information are re-distributed to a valid risk category using multiple imputation (MI) methods.

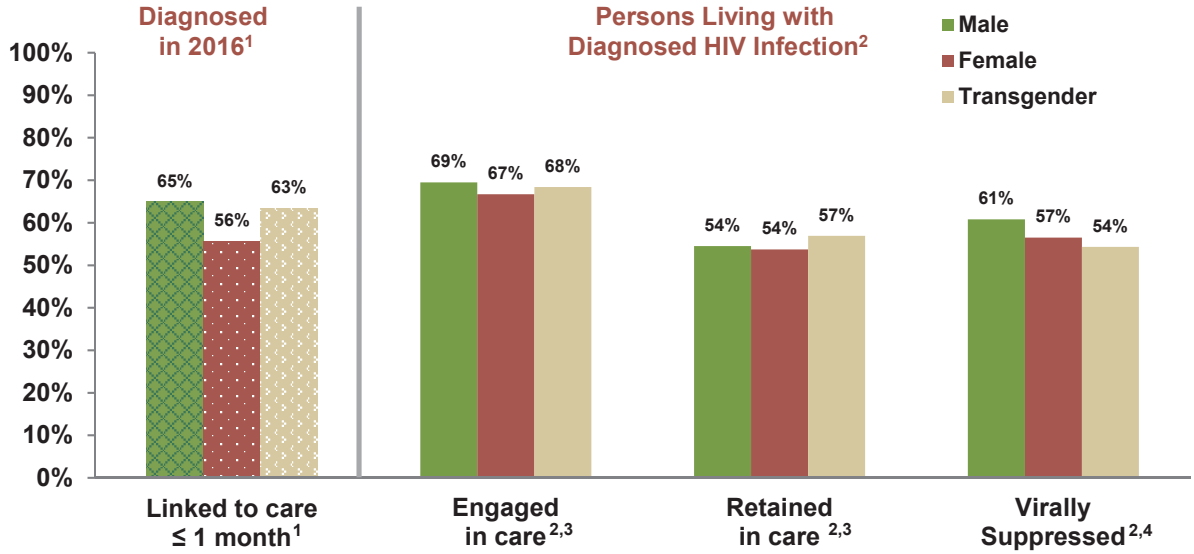
[6] Heterosexual contact with a person known to have, or to be at high risk for, HIV infection.

Figure 11. HIV Care Continuum, Los Angeles County, 2016



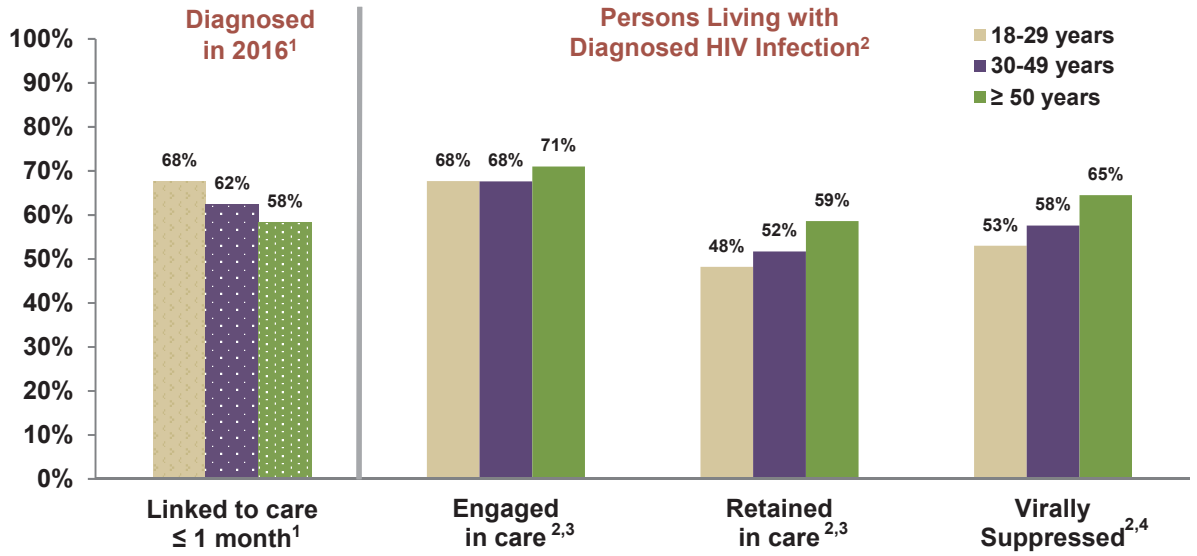
[1] Denominator includes persons who were diagnosed with HIV in 2016; numerator includes persons reported with HIV in 2016 with ≥1 CD4/VL/Genotype test reported within 1 month of HIV diagnosis; 2016 data are provisional due to reporting delay.
[2] Denominator includes persons diagnosed through 2015 and living in LAC as of 12/31/2016 based on most recent residence.
[3] Engaged in care: ≥1 CD4/VL/Geno test in 2016; retained in care: ≥2 CD4/VL/Geno tests at least 3 months days apart in 2016.
[4] Viral suppression is defined as <200 copies/ml.

Figure 12. HIV Care Continuum by Gender, Los Angeles County, 2016



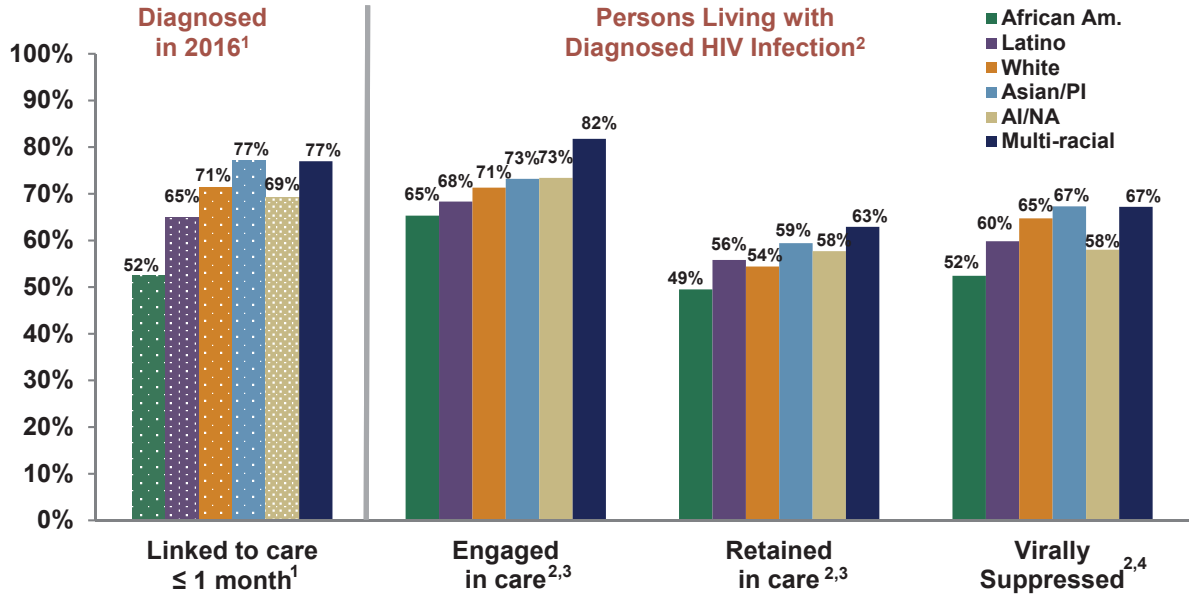
[1] Denominator includes persons who were diagnosed with HIV in 2016; numerator includes persons reported with HIV in 2016 with ≥1 CD4/VL/Genotype test reported within 1 month of HIV diagnosis; 2016 data are provisional due to reporting delay.
[2] Denominator includes persons diagnosed through 2015 and living in LAC as of 12/31/2016 based on most recent residence.
[3] Engaged in care: ≥1 CD4/VL/Geno test in 2016; retained in care: ≥2 CD4/VL/Geno tests at least 3 months apart in 2016.
[4] Viral suppression is defined as <200 copies/ml.

Figure 13. HIV Care Continuum by Age Group, Los Angeles County, 2016



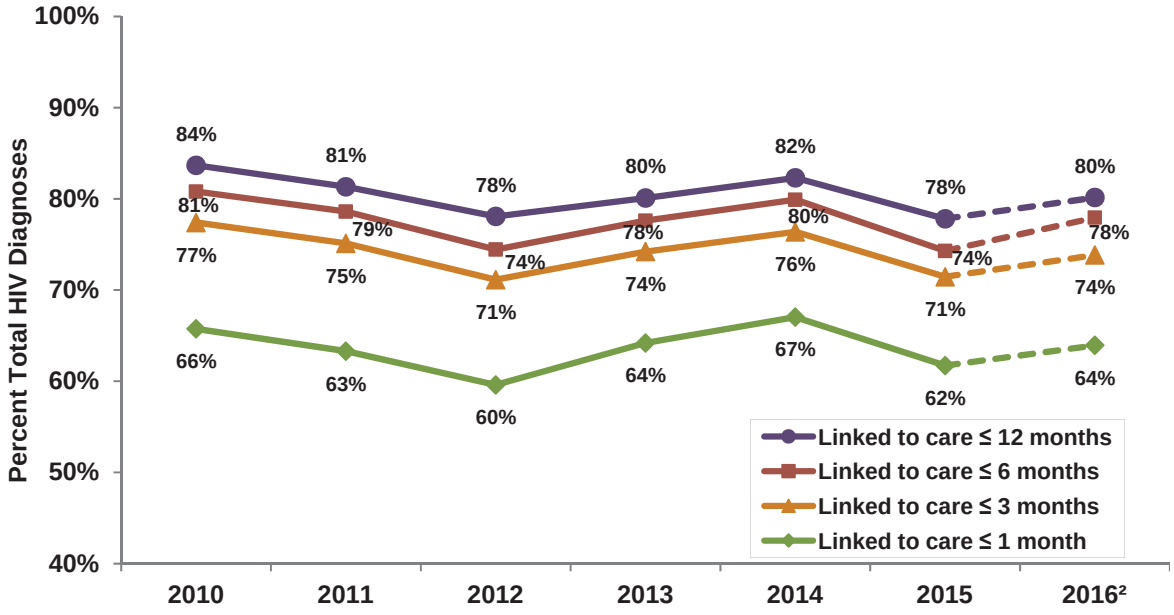
[1] Denominator includes persons aged 18 years and above who were diagnosed with HIV in 2016; numerator includes persons reported with HIV in 2016 with ≥1 CD4/VL/Genotype test reported within 1 month of HIV diagnosis; 2016 data are provisional due to reporting delay.
[2] Denominator includes persons who were diagnosed with HIV through 2015 and living in LAC as of 12/31/2016 based on most recent residence; persons <18 years of age (n=85) were not included due to unstable estimates.
[3] Engaged in care: ≥1 CD4/VL/Geno test in 2016; retained in care: ≥2 CD4/VL/Geno tests at least 3 months apart in 2016.
[4] Viral suppression is defined as <200 copies/ml.

Figure 14. HIV Care Continuum by Race/Ethnicity, Los Angeles County, 2016



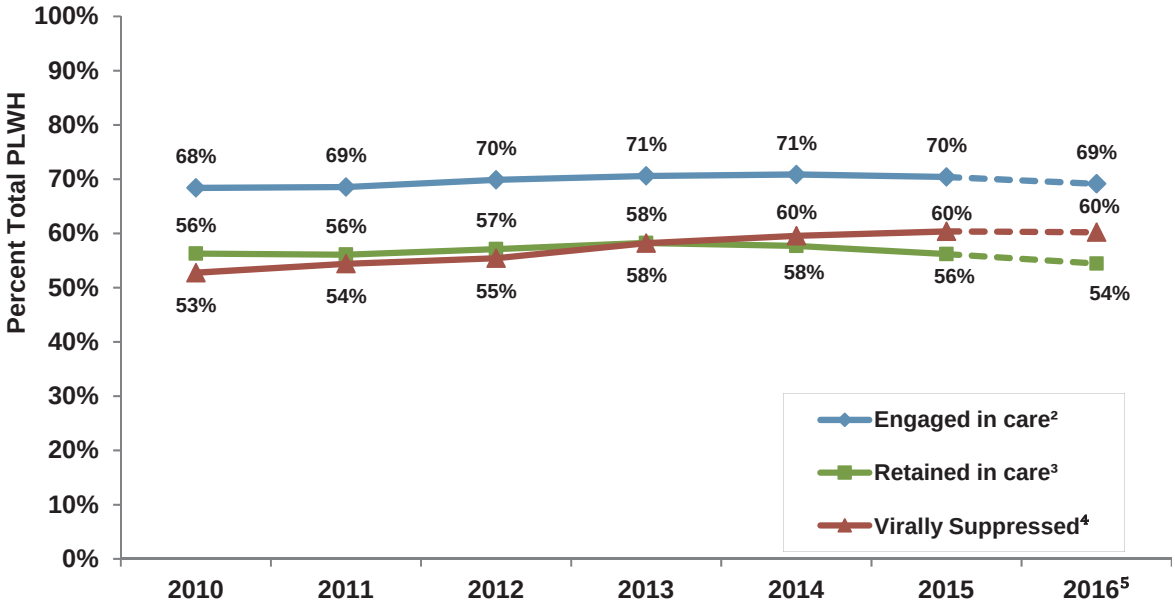
[1] Denominator includes persons who were diagnosed with HIV in 2016; numerator includes persons reported with HIV in 2016 with ≥1 CD4/VL/Genotype test reported within 1 month of HIV diagnosis; 2016 data are provisional due to reporting delay.
[2] Denominator includes persons diagnosed through 2015 and living in LAC as of 12/31/2016 based on most recent residence.
[3] Engaged in care: ≥1 CD4/VL/Geno test in 2016; retained in care: ≥2 CD4/VL/Geno tests at least 3 months apart in 2016.
[4] Viral suppression is defined as VL < 200 copies/ml.

Figure 15. Linkage to Care for Persons Reported with HIV[1] in Los Angeles County, 2010-2016



[1] Includes persons diagnosed with HIV infection in each calendar year and living through the following 12 months with ≥1 CD4/VL/Genotype test reported within 1, 3, 6, and 12 months of diagnosis.
[2] Data are provisional due to reporting delay.

Figure 16. Engagement, Retention and Viral Suppression for Persons Living with HIV[1], Los Angeles County, 2010-2016



[1] Includes persons diagnosed with HIV infection in LAC through the respective year-end (2010-2016) and diagnosed through the respective previous year (2009-2015).
[2] Engaged in care: ≥ 1 CD4/VL/Genotype test in 2010-2016.
[3] Retained in care: ≥ 2 CD4/VL/Genotype tests at least 3 months apart in 2010-2016.
[4] Viral suppression is defined as <200 copies/ml.
[5] Data are provisional due to reporting delay.

Table 6. 2016 HIV Care Continuum Indicators among Persons with Diagnosed HIV Infection by Service Planning Area (SPA) and Health District (HD) of Residence[2], Los Angeles County Reported by June 30, 2018

SPA/HD[2]	Linked to care in 1 month[1,3]	Engaged in care 2016[1,4]	Retained in care 2016[1,4]	Viral Suppression (VL < 200)[1]	
				Among PLWH [4]	Among persons with ≥ 1 VL test [5]
	%	%			
Antelope Valley[1]	**63**	**73**	**56**	**59**	**83**
Antelope Valley	63	73	56	59	83
San Fernando[2]	**74**	**74**	**59**	**66**	**91**
East Valley	73	74	59	66	91
Glendale	83	73	58	67	94
San Fernando	75	76	59	68	91
West Valley	72	73	59	65	90
San Gabriel[3]	**71**	**75**	**59**	**67**	**90**
Alhambra	88	76	59	69	91
El Monte	67	75	61	65	87
Foothill	77	77	62	70	91
Pasadena	64	77	59	69	91
Pomona	65	74	57	64	90
Metro[4]	**60**	**65**	**51**	**57**	**89**
Central	49	58	46	48	84
Hollywood-Wilshire	70	69	52	62	91
Northeast	60	71	58	63	90
West[5]	**81**	**67**	**51**	**61**	**92**
West	81	67	51	61	92
South[6]	**58**	**71**	**56**	**58**	**83**
Compton	69	70	55	58	85
South	49	69	55	54	80
Southeast	50	67	56	55	83
Southwest	61	73	57	60	83
East[7]	**68**	**72**	**59**	**64**	**89**
Bellflower	79	77	60	66	88
East Los Angeles	77	71	57	61	87
San Antonio	58	69	58	61	89
Whittier	65	76	61	67	90
South Bay[8]	**62**	**70**	**56**	**60**	**88**
Harbor	43	67	57	58	88
Inglewood	57	70	55	59	86
Long Beach	65	70	56	61	89
Torrance	77	71	55	63	90
Unknown	**42**	**48**	**31**	**38**	**83**
Total	**64**	**69**	**54**	**60**	**88**

[1] Persons are considered linked to care if there was at least one viral load, CD4+ T-cell, or genotype test within 1 month of an HIV diagnosis; persons are considered engaged in care if there were ≥ 1 viral load, CD4+ T-cell, or genotype tests in 2016; persons are considered retained in care if there were ≥ 2 viral load, CD4+ T-cell, or genotype tests in 2016, at least 3 months apart; persons are considered virally suppressed when the last VL test in 2016 was < 200 copies/mL.

[2] Service Planning Area and Health District are based on 2012 boundaries. Data are provisional due to reporting delay.

[3] Denominator for linkage to care includes persons who were reported with a new HIV diagnosis in 2016; does not include estimated persons unaware of HIV infec

[4] Denominator for engagement and retention in care and overall viral load supression in 2016 includes persons diagnosed through 2015 and living in LAC at year-end 2016 based on most recent residence.

[5] Denominator includes persons diagnosed with an HIV infection through 2015 and living in LAC at year-end 2016, based on most recent residence, who had at leas documented VL test in 2016.

County of Los Angeles, Department of Public Health
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