



## ANNUAL HIV SURVEILLANCE REPORT, 2016



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 December 31, 2016.

## **Suggested Citation**

Division of HIV and STD Programs, Los Angeles County Department of Public Health. 2016 Annual HIV Surveillance Report. <u>http://publichealth.lacounty.gov/dhsp/Reports.htm</u>. Published June 2018. Accessed [date].

## Additional HIV Surveillance Data Available on the Web

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

## Acknowledgements

This report was prepared by the following Los Angeles County staff: Virginia Hu, Zhijuan Sheng, Christina Hohe, Kathleen Poortinga, Wendy Garland, Janice Casil, and the HIV Surveillance Unit.

## 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.

## 2016 Annual HIV Surveillance Report

TABLE OF CONTENTS		
Overview of Surv	veillance Data for HIV, Los Angeles County, 2016	5
<b>Technical Notes</b>		9
Tables and Figur	es	
Figure 1.	Annual Diagnoses of HIV Infection, Stage 3 HIV Infection (AIDS), Persons Living with HIV, and Deaths among Persons Diagnosed with HIV Infection, Los Angeles County, 2006-2016	12
Table 1.	2015 HIV, Stage 3 (AIDS) Diagnoses and Deaths, Persons Living with HIV (PLWH) as of 2016 by Sex at Birth, Age Group, Race/Ethnicity, and Transmission Category, Los Angeles County, Reported by December 31, 2016	13
Table 2.	HIV Diagnoses and Rates (per 100,000) by Gender, Age Group, Race/Ethnicity, Transmission Category, and Service Planning Area (SPA), Los Angeles County, 2010-2015, Reported by December 31, 2016	14
Figure 2A.	Rate of HIV Diagnoses among Males by Age Group, Los Angeles County, 2006- 2015	15
Figure 2B.	Rate of HIV Diagnoses among Females by Age Group, Los Angeles County, 2006- 2015	15
Figure 3A.	Rate of HIV Diagnoses among Adult/Adolescent Males by Race/Ethnicity, Los Angeles County, 2006-2015	16
Figure 3B.	Rate of HIV Diagnoses among Adult/Adolescent Females by Race/Ethnicity, Los Angeles County, 2006-2015	16
Figure 4A.	Transmission Risk Category among Males Living with HIV at Year-end 2016 and HIV Diagnoses in 2015, Los Angeles County	17
Figure 4B.	Transmission Risk Category among Females Living with HIV at Year-end 2016 and HIV Diagnoses in 2015, Los Angeles County	17
Figure 5.	New HIV Diagnoses by Census Tract and Service Planning Area (SPA), Los Angeles County, 2013-2015	18
Table 3.	HIV Diagnoses from 2011-2015 and Persons Living with HIV (PLWH) as of 2016, by Service Planning Area (SPA) and Health District (HD) of Residence, Los Angeles County, Reported by December 31, 2016	19
Figure 6.	Rate of HIV Diagnoses by Service Planning Area, Los Angeles County, 2006-2015	20
Figure 7.	Persons Living with a Diagnosis of HIV Infection as of 12/31/2016 by Census Tract and Service Planning Area (SPA), Los Angeles County	21

3

Table 4.	2015 HIV Care Continuum Indicators among Persons with Diagnosed HIV Infection in Los Angeles County by Selected Characteristics, Reported by December 31, 2016	22
Figure 8A.	HIV Care Continuum, Los Angeles County, 2015	23
Figure 8B.	HIV Care Continuum by Gender, Los Angeles County, 2015	23
Figure 8C.	HIV Care Continuum by Age Group, Los Angeles County, 2015	24
Figure 8D.	HIV Care Continuum by Race/Ethnicity, Los Angeles County, 2015	24
Figure 9.	Linkage to Care for Persons Reported with HIV in Los Angeles County, 2008-2015	25
Figure 10.	Engagement, Retention and Viral Load Suppression for Persons Living with HIV, Los Angeles County, 2008-2015	25

4

## **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<sup>2</sup>. 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.<sup>1</sup> 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.<sup>1</sup> Additional information describing the methods used for this report can be found in the Technical Notes.

## **Diagnoses of HIV Infection**

The rate of diagnoses of HIV infection has been decreasing in Los Angeles County (LAC) since 2007 (Figure 1). In 2015, a total of 1,952 residents were reported as newly diagnosed with HIV infection in LAC, corresponding to a rate of 19 per 100,000 (Table 1).

**Sex/Gender:** Among persons with a new HIV diagnosis in 2015, 1,757 (90%) were male, 195 (10%) were female (Table 1). A total of 38 new diagnoses were reported with transgender information (Table 2). 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 Table 1, the greatest number of HIV diagnoses in 2015 was reported among persons 20-29 years of age (38%), followed by persons 30-39 years of age (27%), persons 40-49 years of age (18%), and persons 50 years and older (13%). Males had a younger age distribution than females; 39% of diagnoses among males were reported among individuals aged 20-29 years, compared to 24% among females. Changes in HIV diagnoses over time by age group and among males and females are presented in Figures 2A and 2B.

**Race/Ethnicity:** In 2015, while the greatest number of HIV diagnoses was among Latinos (47%; Table 1), the highest overall rate of HIV diagnoses was among African Americans (50 per 100,000), followed by Latinos (19 per 100,000), whites (15 per 100,000), and Asians (7 per 100,000). These differences in rates were also observed by gender, most notably among African American females (15 per 100,000) where the rate of HIV diagnoses was 7.5 times higher than that of white females (2 per 100,000) and 3.8 times higher than the rate for Latinas (4 per 100,000). Among males, the rate of HIV diagnoses among African Americans (90 per 100,000) was 3.2 times higher than among whites (28 per 100,000) and 2.6 higher than that for Latinos (34 per 100,000). Changes in HIV diagnoses over time by race/ethnicity and among males and females are presented in Figures 3A and 3B.

**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, CDC recommends the use of

HIV infection are reported without an identified risk factor, CDC recommends the use of multiple imputation methods to assign a transmission category (see Technical Notes). With this adjustment, it was estimated that 84% of HIV diagnoses in 2015 were among men who have sex with men (MSM; Table 2), 8% 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 4A and 4B, respectively.

*Geographic Distribution:* The distribution of new HIV diagnoses in 2015 across LAC by census tract and service planning area (SPA) is illustrated in Figure 5. The highest rate of new HIV infections in 2015 was among persons living in the Metro SPA (54 per 100,000) at the time of diagnosis, followed by the South (28 per 100,000) and South Bay (17 per 100,000) SPAs (Table 3). Within the SPAs, there were also differences in rate by health district (HD); the Central HD had the highest rate (70 per 100,000), followed closely by the Hollywood-Wilshire HD (66 per 100,000) (Table 3). Changes in HIV diagnoses over time by SPA are presented in Figure 6.

## Persons Living with Diagnosed HIV Infection (PLWH)

As of December 31, 2016 there were 50,289 persons living with diagnosed HIV infection (PLWH) in Los Angeles County, corresponding to a prevalence of 492 PLWH per 100,000 population (Table 1). From 2006 through 2016, 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, 44,689 were male, 5,662 were female. Males currently represent 89% of PLWH in LAC (Table 1).

*Age:* Unlike new HIV diagnoses in 2015 which occurred primarily among persons younger than 40 years of age, almost three quarters (73%) of PLWH were aged 40 years or older (Table 1). Fewer than 1% of PLWH were under 20 years of age, while 16% were 60 years and older.

**Race/Ethnicity:** Among PLWH in LAC, 43% were Latino, 30% were white, 21% were African American, 4% were Asian/Pacific Islander, 2% 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 (34%), while among male PLWH, the majority was Latino (43%) followed by white (32%).

**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 4A and 4B, respectively.

*Geographic Distribution:* The distribution of PLWH in LAC by census tract and SPA are presented in Figure 7. The Metro SPA had the highest rate of PLWH (1,531 per 100,000) among all SPAs in LAC; the next highest rates were in South (565 per 100,000) and South Bay (495 per 100,000) SPAs (Table 3). At Health District level, Hollywood-Wilshire had the highest rate of PLWH (1,949 per 100,000), followed closely by Central HD (1,788 per 100,000) (Table 3).

## **Diagnoses of Stage 3 HIV Infection (AIDS)**

Stage 3 HIV Infection is also known as Acquired Immunodeficiency Syndrome, or AIDS. 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 annual number of stage 3 diagnoses in LAC has decreased substantially from a high of approximately 4,129 cases in 1992 to an estimated 708 cases in 2015 (Figure 1 and Table 1). Due to delays in reporting, the 2015 estimate should be considered preliminary.

*Sex:* Eighty-seven percent of stage 3 diagnoses in 2015 were among males, 13% were among females (Table 1). These proportions were similar to the respective proportions for HIV diagnoses in 2015 and PLWH as of December 31, 2016.

*Age:* In 2015, the largest proportion of diagnoses of stage 3 infection was among persons aged 40-49 years (28%), followed by persons 30-39 years of age (26%), persons 50 years and older (23%), and persons 20-29 years of age (22%). Males had a younger age distribution than females; fifty-one percent of stage 3 diagnoses among males occurred among persons younger than 40 years of age, compared to 34% among females (Table 1).

**Race/ethnicity:** While close to half (44%) of stage 3 diagnoses in 2015 occurred among Latinos (Table 1), the highest rate of stage 3 diagnosis was among African Americans (19 per 100,000). The rate of stage 3 diagnosis for African American females (7 per 100,000) was 7 times higher than the rate for white females (1 per 100,000) and 3.5 times higher than the rate for Latinas (2 per 100,000). Among males, the rate of stage 3 diagnosis for African Americans (10 per 100,000) and 3.5 times higher than the rate for Latinas (32 per 100,000) was over 3 times higher than the rate for whites (10 per 100,000) and almost 3 times higher than the rate for Latinos (11 per 100,000).

## **HIV Care Continuum**

On July 3, 2015 the White House released the updated National HIV/AIDS Strategy (NHAS).<sup>2</sup> This plan described 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) and T-Cell (CD4) 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 VL tests to their local health department. In 2008, the reporting of all CD4 tests was mandated in California, and in 2014 the reporting of all HIV genotyping data was mandated 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.

The characteristics of PLWH in LAC by HIV care continuum indicators in 2015 are presented in Table 4 and Figures 8A-8D. Because at least twelve months of follow-up time is needed, the calculation of the engagement in care, retention in care, and viral suppression indicators is limited to those 48,825 PLWH diagnosed with HIV through December 31, 2014 and reported to be living in LAC as of December 31, 2015.

*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. Trends in LTC fluctuated from 2009 to 2014. In 2015, 62% of persons newly diagnosed with HIV were linked to care within 1 month (see Figure 9). Estimates for LTC within 1 month by gender, age, race/ethnicities can be found in Table 4 and Figures 8A-8D.

**Engagement in Care:** In this report, consistent with the NHAS, engagement in care was defined as having at least one VL, CD4, or HIV genotype test reported during a twelve-month period. Of the 48,825 persons diagnosed with an HIV infection through 2014 and living in LAC at year-end 2015, 71% were engaged in care. Changes in engagement in care over time are presented in Figure 10. Estimates for engagement in care among reported PLWH by gender, age, race/ethnicities can be found in Table 4 and Figures 8A-8D.

**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. Of the 48,825 persons diagnosed with an HIV infection through 2014 and living in LAC at year-end 2015, 57% were retained in care. Changes in retention in care over time are presented in Figure 10. Estimates for retention in care among reported PLWH by gender, age, and race/ethnicity can be found in Table 4 and Figures 8A-8D.

*HIV Viral Suppression:* Viral suppression was defined as having one or more VL tests performed during a twelve-month period with a result indicating <200 viral copies per milliliter of blood plasma. Of the 48,825 persons diagnosed with an HIV infection through 2014 and living in LAC at year-end 2015, 61% were virally suppressed. Improvements in viral suppression over time are presented in Figure 10. Estimates for viral suppression among reported PLWH by gender, age, and race/ethnicity can be found in Table 4 and Figures 8A-8D.

## **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".<sup>1</sup>

### **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 median delay for all HIV cases reported in 2015 was 2 months (range 0 to 366 months). As a result of this delay, data for HIV diagnoses, stage 3 (AIDS) and deaths among persons living with HIV (PLWH) presented in this report only pertains to 2015. Data for PLWH is for 2016. 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. There is no single data source that provides smoothed population estimates for LAC across two census years, 2000 and 2010. Thus population data from two different sources are used to calculate rates: 1) 2010-2016 population estimates provided by LAC Internal Services Department and contracted through Hedderson Demographic Services; 2) 2001-2009 smoothed population estimates provided by the LAC DPH Office of Health Assessment and Epidemiology. For comparisons over time, rates for certain years may be based on the population estimates before or after that year depending on what is available from the same

data source. Caution should be made while comparing the rates over time, especially from 2009 to 2010.

All vital 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, HIV rates 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**

Transmission categories are assigned in a hierarchical order (listed from highest to lowest in the column headed "Transmission Category"). Persons who have been identified with two or more

transmission categories are assigned to the category listed highest in the hierarchy. For example, a man who reports sexual contact with another man and heterosexual contact with an HIV-positive woman would be classified as "male-male sexual contact." The only exception to this rule includes men who report both categories for sexual contact with another man and injection-drug use; a separate transmission category is created for these cases.

The heterosexual contact transmission category is limited to persons who had heterosexual contacts with an HIV-infected or a sexual partner with an increased risk for HIV. 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.

Persons with no reported exposure to HIV through any of the routes listed in the hierarchy of transmission categories are classified as "undetermined" transmission category. These include persons still under investigation; persons whose exposure history is missing because they died; persons who have been followed up but declined to be interviewed, or were lost to follow-up; and persons who were interviewed or for whom other follow-up information was available but for whom no mode of exposure was identified. If the investigation identifies a mode of exposure, the case is reclassified into the corresponding transmission category.

Due to a substantial proportion of persons with an HIV infection being reported without an identified risk factor, we use CDC-recommended multiple imputation methods to assign a risk factor for these cases. Multiple imputation is a statistical approach in which each missing risk factor is replaced with a set of plausible values that represent the uncertainty about the true, but missing value. The plausible values are analyzed using standard procedures, and the results from these analyses are then combined to produce the final results. In this report, multiple imputation has been used in tables showing estimated distribution by HIV transmission category for diagnoses among adults and adolescents.

## **References:**

- 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<sup>1</sup>, Stage 3 HIV Infection (AIDS), Persons Living with HIV<sup>2</sup>, and Deaths<sup>3</sup> among Persons Diagnosed with HIV Infection, Los Angeles County, 2006-2016

<sup>1</sup> Based on named reports for persons with a diagnosis of HIV infection regardless of the disease stage at time of diagnosis.

<sup>2</sup> PLWH in LAC are based on last reported address at the end of each calendar year.

<sup>3</sup> 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.

<sup>4</sup> Data are provisional due to reporting delay (as indicated by the dashed lines).

<sup>5</sup> The apparent slight decrease in number of PLWH from 2015 to 2016 can be explained by enhanced electronic lab reporting (ELR). Beginning around November 2015, ELR started to increase the availability of up-to-date residential information which resulted in an adjustment to the number of PLWH that accounted for past outward migration from LAC. The 2016 data more accurately represents actual PLWH currently living in LAC. This should not be interpreted as a downward trend in PLWH in LAC.

**Table 1.** 2015 HIV, Stage 3 (AIDS) Diagnoses and Deaths, Persons Living with HIV (PLWH) as of 2016 by Sex at Birth, Age Group, Race/Ethnicity, and Transmission Category, Los Angeles County, Reported by December 31, 2016

				ſ	Vale <sup>1</sup>				Female <sup>1</sup>								Total										
	2015 HI	v	2015 AI	DS	PLWH		2015		2015 HIV		2015 All	S	PLWH		2015		2015	HIV	2	015 AI	DS	F	PLWH		2	2015	-
	Diagnose	es <sup>2</sup>	Diagnos	Diagnoses <sup>2</sup> as of 2016 <sup>2</sup>		2,3	Deaths <sup>2,4</sup>		Diagnoses <sup>2</sup>		Diagnoses <sup>2</sup>		as of 2016 <sup>2,3</sup>		Deaths <sup>2,4</sup>		Diagnoses <sup>2</sup>		D	Diagnoses <sup>2</sup>		as of 2016 <sup>2,3</sup>		De	Deaths <sup>2,4</sup>		
	No. (%)	Rt	No. (%)	Rt	No. (%)	Rt	No. (%)	Rt	No. (%)	Rt	No. (%)	Rt	No. (%)	Rt	No. (%) R	t	No.	(%) Rt	N	o. (%	) Rt	No.	(%)	Rt	No.	(%) R	t
Age Group(Yr) <sup>5</sup>																											
<13	<5 ( - )	-	<5 ( - )	-	12 (<1)	1	<5 ( - )	-	<5 ( - )	-	<5 ( - )	-	16 (<1)	2	<5 ( - )	-	<5 (	-) -	<	5 (-	) -	28	(<1)	2	<5	(-)	-
13-19	60 (3)	12	<5 (-)	-	80 (<1)	16	<5 (-)	-	8 (4)	2	<5 (-)	-	32 (1)	7	<5 ( - )	-	68 (	3) 7		5 (1	) 1	112	(<1)	12	<5	(-)	-
20-29	694 (39)	88	142 (23)	18	3,779 (8)	483	7 (2)	1	46 (24)	6	16 (17)	2	432 (8)	57	<5 (-)	-	740 (	, 38) 48	15	8 (22	) 10	4,211	(8)	274	9	(3) 1	1
30-39	468 (27)	63	167 (27)	23	8,331 (19)	1,112	31 (11)	4	52 (27)	7	16 (17)	2	1,018 (18)	140	7 (17)	1	520 (	27) 36	18	3 (26	) 13	9,349	(19)	633	38	(11) 3	3
40-49	322 (18)	46	168 (27)	24	11,455 (26)	1,632	64 (22)	9	37 (19)	5	28 (30)	4	1,526 (27)	215	10 (24)	1	359 (	18) 25	19	6 (28	) 14	12,981	(26)	921	74	(22) 5	5
50-59	170 (10)	26	100 (16)	15	14,032 (31)	2,139	116 (40)	18	31 (16)	5	16 (17)	2	1,675 (30)	245	13 (31)	2	201 (	10) 15	11	6 (16	) 9	15,707	(31)	1,172	129	(39) 1(	C
≥60	42 ( 2)	5	34 (6)	4	6,938 (16)	836	73 (25)	9	19 (10)	2	16 (17)	2	963 (17)	93	10 (24)	1	61 (	3) 3	5	0 (7	, ) 3	7,901	(16)	425	83	(25) 5	5
Race/Ethnicity																											
White	408 (23)	28	148 (24)	10	14,364 (32)	996	79 (27)	5	24 (12)	2	16 (17)	1	836 (15)	59	7 (17) <	1	432 (	22) 15	16	4 (23	) 6	15,200	(30)	530	86	(26) 3	3
African American	367 (21)	90	131 (21)	32	8,365 (19)	2,057	96 (33)	24	69 (35)	15	30 (32)	7	1,952 (34)	426	19 (45)	4	436 (	, 22) 50	16	1 (23	) 19	10,317	(21)	1,192	115	(35) 13	3
Latino	838 (48)	34	276 (45)	11	19,158 (43)	769	95 (33)	4	87 (45)	4	38 (40)	2	2,545 (45)	102	14 (33)	1	925 (	, 47) 19	31	4 (44	) 6	21,703	(43)	435	109	(33) 2	2
Asian/PI <sup>6</sup>	101 ( 6)	14	34 (6)	5	1,597 (4)	229	<5 (-)	-	6 (3)	1	<5 (-)	-	181 (3)	23	<5 (-)	-	107 (	5) 7	З	8 (5	) 3	1,778	(4)	119	5	(2) <1	1
Asian	90 (5)	13	31 (5)	5	1,480 (3)	216	<5 ( - )	-	6 (3)	1	<5 (-)	-	169 (3)	22	<5 ( - )	-	96 (	5) 7	З	5 (5	) 2	1,649	(3)	113	5	(2) (	J
Pacific Islander	5 (<1)	41	<5 ( - )	-	46 (<1)	378	<5 ( - )	-	<5 ( - )	-	<5 ( - )	-	6 (<1)	48	<5 ( - )	-	5 (	<1) 20	<	5 (-	) -	52	(<1)	211	<5	(-)	-
Unspecified	6 (<1)	-	<5 ( - )	-	71 (<1)	-	<5 ( - )	-	<5 ( - )	-	<5 ( - )	-	6 (<1)	-	<5 ( - )	-	6 (	<1) -	<	5 (-	) -	77	(<1)	-	<5	(-)	-
American Indian/Alaskan Native	13 ( 1)	135	6 (1)	63	249 (1)	2,671	<5 ( - )	-	<5 ( - )	-	<5 ( - )	-	32 (1)	324	<5 ( - )	-	15 (	1) 76		8 (1	) 41	281	(1)	1,464	<5	(-)	-
Multi-race/Unknown	30 (2)	-	19 ( 3)	-	894 (2)	-	15 ( 5)	-	7 (4)	-	<5 ( -)	-	116 ( 2)	-	<5 ( - )	-	37 (	2) -	2	3 (3	) -	1010	(2)	-	16	(5)	-
Transmission Category <sup>7</sup>																											
MSM	1,639 (93)	-	557 (91)	-	39,072 (88)	-	226 (78)	-		-		-		-		-	1,639 (	84) -	55	7 (79	) -	39,072	(78)	-	226	(68)	-
IDU	51 (3)	-	12 (2)	-	1,461 (3)	-	24 (8)	-	47 (24)	-	24 (25)	-	1,216 (21)	-	16 (39)	-	98 (	5) -	З	6 (5	) -	2,677	(5)	-	40	(12)	-
MSM/IDU	53 (3)	-	34 (6)	-	2,951 (7)	-	34 (12)	-		-		-		-		-	53 (	3) -	З	4 (5	) -	2,951	(6)	-	34	(10)	-
Hemophi/Transfusion	<5 ( - )	-	<5 ( - )	-	70 (<1)	-	<5 ( - )	-	<5 ( - )	-	<5 ( - )	-	53 (1)	-	<5 ( - )	-	<5 (	-) -	<	5 (-	) -	123	(<1)	-	<5	(-)	-
Heterosexual contact	11 ( 1)	-	9 (1)	-	933 (2)	-	6 (2)	-	146 (75)	-	67 (71)	-	4,248 (75)	-	24 (56)	-	157 (	8) -	7	6 (11	) -	5,181	(10)	-	29	(9)	-
Perinatal exposure	<5 ( - )	-	<5 ( - )	-	122 (<1)	-	<5 ( - )	-	<5 ( - )	-	<5 ( - )	-	136 ( 2)	-	<5 ( - )	-	<5 (	-) -		5 (1	) -	258	(1)	-	<5	(-)	-
Other/Undetermined	<5 ( - )	-	<5 ( - )	-	18 (<1)	-	<5 ( - )	-	<5 ( - )	-	<5 ( - )	-	9 (<1)	-	<5 ( - )	-	<5 (	-) -	<	5 (-	) -	27	(<1)	-	<5	(-)	-
Total <sup>8</sup>	1,757 [90]	35	614 [87]	12	44,627 [89]	884	291 [87]	6	195 [10]	4	94 [13]	2	5,662 [11]	109	42 [13]	1	1,952 [1	00] 19	70	8 [100	] 7	50,289	[100]	492	333	[100] :	3

<sup>1</sup> Male and female categories are based on biological sex at birth.

<sup>2</sup> Data are provisional due to reporting delay. Rates based on fewer than 12 observations may not be reliable (see Technical Notes).

<sup>3</sup> Persons living with HIV are based on most recent known address at the end of 2016 in Los Angeles County.

<sup>4</sup> Includes persons whose residence at death was in Los Angeles County (LAC) or whose most recent known address before death was in LAC if residence at death is missing.

<sup>5</sup> 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, 2016. Age distribution for deaths is based on age at death.

<sup>6</sup> Percent for Asian, Pacific Islander (PI) and unspecified races are calculated based on total cases.

<sup>7</sup> 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.

<sup>8</sup> Percent of total cases that are male and female is shown in this row.

# **Table 2.** HIV Diagnoses and Rates<sup>1</sup> (per 100,000) by Gender, Age Group, Race/Ethnicity, Transmission Category, and Service Planning Area (SPA), Los Angeles County, 2011-2015 Reported by December 31, 2016

		2011			2012		Year o	f Diagno 2013	osis	:	2014		2	2015 <sup>2</sup>	
	No.	(%)	Rt	No.	(%)	Rt	No.	(%)	Rt	No.	(%)	Rt	No.	(%)	Rt
Gender															
Male	1 758	(88)	36	1 783	(88)	36	1 550	(87)	31	1 815	(88)	37	1 722	(88)	3/
Female	203	(10)	1	198	(10)	1	206	(12)	1	216	(00)	1	192	(10)	7
Transgender <sup>3</sup>	33	(2)	-	42	(2)	-	32	(2)	-	26	(1)	-	38	(10)	-
Age Group (Yr)															
<13	<5	(-)	-	<5	(-)	-	<5	(-)	-	<5	(-)	-	<5	(-)	-
13-19	57	(3)	6	75	(4)	8	69	(4)	7	65	(3)	7	68	(3)	7
20-29	664	(33)	45	702	(35)	46	591	(33)	38	751	(37)	49	740	(38)	48
30-39	594	(30)	42	558	(28)	39	497	(28)	35	593	(29)	41	520	(27)	36
40-49	414	(21)	29	429	(21)	30	381	(21)	27	377	(18)	27	359	(18)	25
50-59	211	(11)	17	199	(21) (10)	16	190	(11)	15	203	(10)	16	201	(10)	15
≥60	52	(3)	3	57	(3)	3	57	(3)	3	66	(3)	4	61	(3)	3
Race/Ethnicity															
White	456	(23)	16	456	(23)	16	420	(23)	15	439	(21)	15	432	(22)	15
African American	429	(22)	50	411	(20)	48	404	(23)	47	383	(19)	44	436	(22)	50
Latino	948	(48)	20	1002	(50)	21	834	(47)	17	1076	(52)	22	925	(47)	19
Asian/Pl <sup>4</sup>	88	(4)	6	100	(5)	7	84	(5)	6	116	(6)	8	107	(5)	7
Asian	80	(4)	6	95	(5)	7	76	(4)	5	108	(5)	7	96	(5)	7
Pacific Islander	<5	(-)	-	<5	(-)	-	<5	(-)	-	<5	(-)	-	5	(<1)	-
Unspecified	6	(<1)	-	<5	(-)	-	6	(<1)	-	7	(<1)	-	6	(<1)	-
American Indian/Alaskan Native	19	(1)	99	10	(<1)	52	7	(<1)	36	5	(<1)	25	15	(1)	76
Multi-race	54	(3)	-	44	(2)	-	39	(2)	-	38	(2)	-	37	(2)	-
Transmission Category <sup>3,5</sup>															
MSM	1,676	(84)	-	1,704	(84)		1,469	(82)	-	1,726	(84)	-	1,639	(84)	-
IDU	73	(4)	-	80	(4)		. 89	(5)	-	82	(4)	-	. 98	(5)	-
MSM/IDU	63	(3)	-	64	(3)		47	(3)	-	57	(3)	-	53	(3)	-
Heterosexual contact	180	(9)	-	172	(8)	-	180	(10)	-	190	(9)	-	157	(8)	-
Perinatal exposure	<5	(-)	-	<5	(-)	-	<5	(-)	-	<5	(-)	-	<5	(-)	-
Other/Undetermined	<5	(-)	-	<5	(-)	-	<5	(-)	-	<5	(-)	-	<5	(-)	-
Service Planning Area															
Antelope Valley[1]	39	(2)	10	37	(2)	10	31	(2)	8	43	(2)	11	29	(1)	7
San Fernando[2]	277	(14)	13	269	(13)	12	242	(14)	11	292	(14)	13	285	(15)	13
San Gabriel[3]	157	(8)	9	185	(9)	11	153	(9)	9	188	(9)	11	172	(9)	10
Metro[4]	656	(33)	59	673	(33)	60	606	(34)	53	704	(34)	61	626	(32)	54
West[5]	92	(5)	14	98	(5)	15	84	(5)	13	101	(5)	15	90	(5)	14
South[6]	284	(14)	28	245	(12)	24	240	(13)	23	264	(13)	26	291	(15)	28
East[7]	182	(9)	14	165	(8)	13	146	(8)	11	172	(8)	13	164	(8)	12
South Bay/LB[8]	304	(15)	20	341	(17)	22	275	(15)	18	278	(14)	18	267	(14)	17
Unknown	<5	(-)	-	10	(<1)	-	11	(1)	-	15	(1)	-	28	(1)	-
Total	1.994	[100]	20	2.023	[100]	20	1.788	[100]	18	2.057	[100]	20	1.952	[100]	19
				, -			,						, -		

<sup>1</sup> Rates for 2011-2015 are based on Census 2010 population estimates for 2011-2015. Rates based on fewer than 12 observations may not be reliable (see Technical Notes).

<sup>2</sup> Data are provisional due to reporting delay.

<sup>3</sup> Rates for transgender, transmission category, and multi-race are not calculated because of the lack of denominator data.

<sup>4</sup> Percentages for Asian, Pacific Islander (PI), and unspecified races are calculated based on the total cases.

<sup>5</sup> Persons without an identified risk factor are assigned a risk factor using multiple imputation (MI) methods (see Technical Notes).



Figure 2A. Rates of HIV Diagnoses among Males by Age Group, Los Angeles County, 2006-2015

Figure 2B. Rates of HIV Diagnoses among Females by Age Group, Los Angeles County, 2006-2015



<sup>1</sup> Data are provisional due to reporting delay.

**Figure 3A.** Rates of HIV Diagnoses among Adult/Adolescent Males by Race/Ethnicity<sup>1</sup>, Los Angeles County, 2006-2015



**Figure 3B.** Rates of HIV Diagnoses among Adult/Adolescent Females by Race/Ethnicity<sup>1</sup>, Los Angeles County, 2006-2015



<sup>1</sup> Data for Pacific Islanders and American Indians/Alaskan Natives are not presented due to small numbers that may cause unstable estimates.

<sup>2</sup> Data are provisional due to reporting delay.

**Figure 4A.** Transmission Risk Category<sup>1</sup> among Males Living with HIV<sup>2</sup> at Year-end 2016 and HIV Diagnoses in 2015, Los Angeles County



**Figure 4B.** Transmission Risk Category<sup>1</sup> among Females Living with HIV<sup>2</sup> at Year-end 2016 and HIV Diagnoses in 2015, Los Angeles County



<sup>1</sup> Persons without an identified risk factor are assigned a risk factor using CDC-recommended multiple imputation (MI) methods.

<sup>2</sup> Based on most recent residential address in Los Angeles County.

<sup>3</sup> Data are provisional due to reporting delay.

<sup>4</sup> Other risks include hemophilia, coagulation disorder, blood transfusion, and risk factor not reported/identified.





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 tract based on residential proportion (4%). Map does not include 1.1% 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 December 31, 2016; 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 2014.

# **Table 3.** HIV Diagnoses from 2011-2015 and Persons Living with HIV (PLWH) as of 2016 by Service Planning Area (SPA)/Health District (HD) of Residence, Los Angeles County, Reported by December 31, 2016

SPA/HD <sup>1</sup>		2011			2012		Year	of Diag 2013	nosis	2	2014²		2	2015²		PLWH	as of 2	016 <sup>2,4</sup>
	No.	(%)	Rt <sup>3</sup>	No.	(%)	Rt <sup>3</sup>	No.	(%)	Rt <sup>3</sup>	No.	(%)	Rt <sup>3</sup>	No.	(%)	Rt <sup>3</sup>	No.	(%)	Rt <sup>3</sup>
Antelone Valley [1]	30	(2)	10	37	(2)	10	31	(2)	8	43	(2)	11	29	(1)	7	1 053	(2)	268
Antelope Valley [1]	20	(2)	10	27	(2)	10	21	(2)	0	43	(2)	11	20	(1)	7	1 052	(2)	200
Antelope valley	29	( 2)	10	57	(2)	10	51	( 2)	0	45	( 2)	11	29	(1)	/	1,055	(2)	200
San Fernando [2]	277	(14)	13	269	(13)	12	242	(14)	11	292	(14)	13	285	(15)	13	7,237	(14)	323
East Valley	98	(5)	22	94	(5)	21	76	(4)	17	84	(4)	19	89	(5)	19	2,426	(5)	521
Glendale	23	(1)	7	36	(2)	11	23	(1)	7	33	(2)	10	43	(2)	12	892	(2)	257
San Fernando	41	(2)	8	35	(2)	7	32	(2)	6	38	(2)	7	24	(1)	5	822	(2)	156
West Valley	115	(6)	13	104	(5)	12	111	(6)	13	137	(7)	16	129	(7)	14	3,097	(6)	344
San Gabriel [3]	157	(8)	9	185	(9)	11	153	(9)	9	188	(9)	11	172	(9)	10	3,671	(7)	205
Alhambra	32	(2)	9	35	(2)	10	22	(1)	6	33	(2)	9	28	(1)	8	575	(1)	164
El Monte	33	(2)	8	48	(2)	11	36	(2)	8	54	(3)	12	45	(2)	10	929	(2)	213
Foothill	29	(1)	10	22	(1)	7	28	(2)	9	38	(2)	12	26	(1)	8	591	(1)	191
Pasadena	14	(1)	10	26	(1)	19	24	(1)	17	24	(1)	17	29	(2)	20	562	(1)	394
Pomona	49	(2)	9	54	(3)	10	43	(2)	8	39	(2)	7	44	(2)	8	1,014	(2)	185
Metro [4]	656	(33)	59	673	(33)	60	606	(34)	53	704	(34)	61	626	(32)	54	18,106	(36)	1531
Central	218	(11)	65	244	(12)	72	230	(13)	67	250	(12)	72	244	(13)	70	6,361	(13)	1,788
Hollywood-Wilshire	378	(19)	79	360	(18)	74	306	(17)	63	380	(18)	77	331	(17)	66	9,883	(20)	1,949
Northeast	60	(3)	20	69	(3)	22	70	(4)	23	74	(4)	24	51	(3)	16	1,862	(4)	582
West [5]	92	(5)	14	98	(5)	15	84	(5)	13	101	(5)	15	90	(5)	14	2,510	(5)	378
West	92	(5)	14	98	(5)	15	84	(5)	13	101	(5)	15	90	(5)	14	2,510	(5)	378
South [6]	284	(14)	28	245	(12)	24	240	(13)	23	264	(13)	26	291	(15)	28	6,036	(12)	565
Compton	65	(3)	23	36	(2)	13	49	(3)	17	57	(3)	20	45	(2)	16	994	(2)	343
South	56	(3)	30	49	(2)	26	45	(3)	23	51	(2)	26	57	(3)	29	1,077	(2)	533
Southeast	39	(2)	23	36	(2)	21	37	(2)	21	52	(3)	30	43	(2)	24	922	(2)	497
Southwest	124	(6)	33	124	(6)	33	109	(6)	29	104	(5)	27	146	(7)	38	3,043	(6)	777
East [7]	182	(9)	14	165	(8)	13	146	(8)	11	172	(8)	13	164	(8)	12	3,422	(7)	261
Bellflower	37	(2)	10	33	(2)	9	45	(3)	13	40	(2)	11	37	(2)	10	766	(2)	218
East Los Angeles	36	(2)	18	33	(2)	16	23	(1)	11	23	(1)	11	26	(1)	13	667	(1)	328
San Antonio	70	(4)	17	60	(3)	14	47	(3)	11	67	(3)	16	65	(3)	15	1,296	(3)	300
Whittier	39	(2)	12	39	(2)	12	31	(2)	10	42	(2)	13	36	(2)	11	693	(1)	213
South Bay [8]	304	(15)	20	341	(17)	22	275	(15)	18	278	(14)	18	267	(14)	17	7,819	(16)	495
Harbor	18	(1)	9	20	(1)	10	16	(1)	8	31	(2)	15	21	(1)	10	641	(1)	305
Inglewood	89	(4)	22	94	(5)	23	87	(5)	21	80	(4)	19	77	(4)	18	1,814	(4)	428
Long Beach	160	(8)	34	192	(9)	41	136	(8)	29	132	(6)	28	130	(7)	27	4,565	(9)	940
Torrance	37	(2)	8	35	(2)	8	36	(2)	8	35	(2)	8	39	(2)	8	799	(2)	173
Total <sup>5</sup>	1,994	[100]	20	2,023	[100]	20	1,788	[100]	18	2,057	[100]	20	1,952	[100]	19	50,289	[100]	492

<sup>1</sup> Service Planning Area and Health District are based on 2012 boundaries.

<sup>2</sup> Data are provisional due to reporting delay.

<sup>3</sup> Rate per 100,000. Rates for 2011-2015 and PLWH as of 2016 are based on Census 2010 population estimate for 2011-2015 and 2016 respectively. Rates

based on fewer than 12 observations may not be reliable (see Technical Notes).

<sup>4</sup> Persons living with HIV were based on most recent known address at the end of 2016 in Los Angeles County.

<sup>5</sup> Total includes persons with no information on Service Planning Area/Health District.



Figure 6. Rates of HIV Diagnoses by Service Planning Area<sup>1</sup>, Los Angeles County, 2006-2015

 $^{\rm 1}$  Service Planning Areas are based on residence at the time of HIV or AIDS diagnosis.  $^{\rm 2}$  Data are provisional due to reporting delay.





Census Tract information is based on a person's most recent known address as of 12/31/2016. In the case of an unavailable street address, the most recent ZIP Code is used to assign Census tract based on residential proportion (12.8%). Map does not include 0.9% 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 December 31, 2016; 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 2016.

<b>Table 4.</b> 2015 HIV Care Continuum Indicators <sup>1,</sup>	among Persons with Diagnosed HI	IV Infection in Los Angeles Count	ty by Selected Characteristics
Reported by December 31, 2016			

									No. of persons	persons Viral Suppression <sup>1</sup> (VL < 200)				
	HIV diagnoses in 2015 <sup>2</sup>	Linked to	care in onth <sup>1,2</sup>	Linked to	care in nths <sup>1,2</sup>	PLWH as of 2015 <sup>3</sup>	Retained in	care in 2015 <sup>1</sup>	with ≥ 1 VL test in 2015	Virally suppressed	Among PLWH <sup>3</sup>	Among persons with ≥ 1 VL test		
Characteristics		No.	%	No.	%	No.	No.	%	No.	No.	%	%		
Gender														
Male	1,722	1,097	63.7	1,257	73.0	42,643	24,209	56.8	29,956	26,150	61.3	87.3		
Female	192	95	49.5	125	65.1	5,492	3,023	55.0	3,703	3,156	57.5	85.2		
Transgender	38	27	71.1	31	81.6	690	401	58.1	491	373	54.1	76.0		
Age Group (Yr)														
< 18	10	6	60.0	7	70.0	89	65	73.0	73	59	66.3	80.8		
18-29	801	520	64.9	605	75.5	4,586	2,285	49.8	3,177	2,437	53.1	76.7		
30-49	879	524	59.6	607	69.1	23,514	12,830	54.6	16,195	13,814	58.7	85.3		
≥ 50	262	169	64.5	194	74.0	20,636	12,453	60.3	14,705	13,369	64.8	90.9		
Race/Ethnicity														
African American	436	253	58.0	289	66.3	9,943	5,216	52.5	6,631	5,231	52.6	78.9		
Latino	925	548	59.2	639	69.1	20,709	11,932	57.6	14,305	12,444	60.1	87.0		
White	432	307	71.1	357	82.6	15,255	8,732	57.2	11,043	10,117	66.3	91.6		
Asian/Pacific Islander	107	81	75.7	92	86.0	1,650	991	60.1	1,211	1,124	68.1	92.8		
American Indian/Alaskan Native <sup>4</sup>	15	7	46.7	9	60.0	275	156	56.7	189	142	51.6	75.1		
Multi-race	37	23	62.2	27	73.0	993	606	61.0	771	621	62.5	80.5		
Adjusted Transmission Category <sup>5</sup>														
Male-to-male sexual contact	1,639	1,060	64.7	1,208	73.7	37,662	21,465	57.0	26,628	23,453	62.3	88.1		
Injection drug use (IDU)	98	46	46.9	61	62.6	2,644	1,341	50.7	1,632	1,358	51.4	83.2		
MSM and IDU	53	32	60.4	39	73.6	3,029	1,765	58.3	2,153	1,672	55.2	77.6		
Heterosexual contact <sup>6</sup>	157	78	49.7	102	65.0	5,080	2,809	55.3	3,424	2,969	58.4	86.7		
Other/unknown	5	<5		<5		410	253	61.7	312	227	55.4	72.8		
Service Planning Area														
Antelope Valley [1]	29	18	62.1	24	82.8	1,009	554	54.9	692	560	55.5	80.9		
San Fernando [2]	285	202	70.9	225	78.9	6,937	4,208	60.7	5,126	4,622	66.6	90.2		
San Gabriel [3]	172	101	58.7	128	74.4	3,515	2,080	59.2	2,611	2,336	66.5	89.5		
Metro [4]	626	398	63.6	441	70.4	17,929	9,721	54.2	12,070	10,398	58.0	86.1		
West [5]	90	61	67.8	70	77.8	2,477	1,308	52.8	1,703	1,529	61.7	89.8		
South [6]	291	167	57.4	196	67.4	5,587	3,280	58.7	4,014	3,247	58.1	80.9		
East [7]	164	102	62.2	121	73.8	3,239	1,951	60.2	2,368	2,101	64.9	88.7		
South Bay [8]	267	156	58.4	193	72.3	7,657	4,344	56.7	5,306	4,678	61.1	88.2		
Total	1,952	1,219	62.4	1,413	72.4	48,825	27,633	56.6	34,150	29,679	60.8	86.9		

<sup>1</sup>Persons are considered linked to care if there is at least one viral load, CD4+ T-cell, or genotype test within 30 or 91 days of an HIV diagnosis; persons are considered retained in care if they have ≥ 2 viral load,

CD4+ T-cell, or genotype tests between 01/01/2015 through 12/31/2015, at least 91 days apart; persons are considered virally suppressed when last VL test in 2015 was <200 copies/ml.

<sup>3</sup> Includes persons diagnosed through 2014 and living in LAC as of 12/31/2015 based on most recent residence.

<sup>4</sup> 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.

 $\frac{5}{2}$  Persons with no reported risk information are re-distributed to a valid risk category using multiple imputation (MI) methods.

<sup>6</sup> Heterosexual contact with a person known to have, or to be at high risk for, HIV infection.

<sup>&</sup>lt;sup>2</sup>Denominator for linkage to care includes persons who were reported with a new HIV diagnosis in 2015; does not include estimated persons unaware of HIV infection.



<sup>1</sup> Denominator includes persons who were diagnosed with HIV in 2015; numerator includes persons reported with HIV in 2015 with ≥1 CD4/VL/Genotype test reported within 30 days of HIV diagnosis; 2015 data are provisional due to reporting delay.
<sup>2</sup> Denominator includes persons diagnosed through 2014 and living in LAC as of 12/31/2015 based on most recent residence.
<sup>3</sup> Engaged in care: ≥1 CD4/VL/Geno test in 2015; retained in care: ≥2 CD4/VL/Geno tests at least 91 days apart in 2015.
<sup>4</sup> Viral suppression is defined as <200 copies/mI.</p>



Figure 8B. HIV Care Continuum by Gender, Los Angeles County, 2015

Figure 8A. HIV Care Continuum, Los Angeles County, 2015

<sup>1</sup> Denominator includes persons who were diagnosed with HIV in 2015; numerator includes persons reported with HIV in 2015 with ≥1 CD4/VL/Genotype test reported within 30 days of HIV diagnosis; 2015 data are provisional due to reporting delay.
<sup>2</sup> Denominator includes persons diagnosed through 2014 and living in LAC as of 12/31/2015 based on most recent residence.
<sup>3</sup> Engaged in care: ≥1 CD4/VL/Geno test in 2015; retained in care: ≥2 CD4/VL/Geno tests at least 91 days apart in 2015.

<sup>4</sup> Viral suppression is defined as <200 copies/ml.



<sup>1</sup> Denominator includes persons aged 18 years and above who were diagnosed with HIV in 2015; numerator includes persons reported with HIV in 2015 with ≥1 CD4/VL/Genotype test reported within 30 days of HIV diagnosis; 2015 data are provisional due to reporting delay.

<sup>2</sup> Denominator includes who were diagnosed with HIV through 2014 and living in LAC as of 12/31/2015 based on most recent residence; persons <18 years of age (n=89) were not included due to unstable estimates.

<sup>3</sup> Engaged in care: ≥1 CD4/VL/Geno test in 2015; retained in care: ≥2 CD4/VL/Geno tests at least 91 days apart in 2015.

<sup>4</sup> Viral suppression is defined as <200 copies/ml.



Figure 8D. HIV Care Continuum by Race/Ethnicity, Los Angeles County, 2015

Figure 8C. HIV Care Continuum by Age Group, Los Angeles County, 2015

<sup>1</sup> Denominator includes persons who were diagnosed with HIV in 2015; numerator includes persons reported with HIV in 2015

with ≥1 CD4/VL/Genotype test reported within 30 days of HIV diagnosis; 2015 data are provisional due to reporting delay. <sup>2</sup> Denominator includes persons diagnosed through 2014 and living in LAC as of 12/31/2015 based on most recent residence.

<sup>3</sup> Engaged in care: ≥1 CD4/VL/Geno test in 2015; retained in care: ≥2 CD4/VL/Geno tests at least 91 days apart in 2015.

<sup>&</sup>lt;sup>4</sup> Viral suppression is defined as VL < 200 copies/ml.



Figure 9. Linkage to Care for Persons Reported with HIV<sup>1</sup> in Los Angeles County, 2009-2015

<sup>1</sup> Includes persons diagnosed with HIV infection in each calendar year and living through the following 365 days with ≥1 CD4/VL/Genotype test reported within 30, 91, 182, and 365 days of diagnosis; data as of December 31, 2016.
<sup>2</sup> Data are provisional due to reporting delay.





<sup>1</sup> Includes persons diagnosed with HIV infection through 2014 and living in LAC as of 12/31/2015 based on most recent residence.

<sup>2</sup> Engaged in care: ≥ 1 CD4/VL/Genotype test in 2015.

<sup>3</sup> Retained in care: ≥ 2 CD4/VL/Genotype tests at least 91 days apart in 2015.

<sup>4</sup> Viral suppression is defined as <200 copies/ml.

<sup>5</sup> Data are provisional due to reporting delay.



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

