

# STD/HIV SURVEILLANCE

Annual Report  
**2016**



The City of Long Beach  
Department of Health and Human Services  
HIV/STD Surveillance Program



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Additionally, the Long Beach Department of Health and Human Services wishes to acknowledge all contributions made by health care providers, laboratories, community groups, and members of the community who are committed to reducing HIV and STD morbidity within the city.

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## DEPARTMENT OF HEALTH AND HUMAN SERVICES RESOURCES

**Website:** [www.longbeach.gov/health](http://www.longbeach.gov/health)

**Address:** 2525 Grand Avenue, Long Beach, CA 90815

**To report cases, call or fax:** p:(562)570-4321 or f:(562)570-4374



## DEPARTMENT OF HEALTH AND HUMAN SERVICES CLINICAL SERVICES

**Sexual Health (STD) Clinic:** The Sexual Health Clinic offers comprehensive sexual health services Monday through Friday from 8am to 5pm. Services include: STD testing and treatment and Biomedical HIV prevention services. Please call (562) 570-4315 to make an appointment or for more information.

**HIV Care and Coordination (HCC) Clinic:** The HIV Care and Coordination (HCC) Clinic provides medical services, health education, case management, treatment advocacy, support and direct linkage to outside services when needed. Please call (562) 570-4348 to make an appointment or for more information.

**HIV Prevention Services:** FREE anonymous and confidential HIV testing services are available on a walk-in basis Monday through Friday 8am to 9pm (No appointment is necessary). Mobile HIV testing services are provided throughout the community at various locations.



## CONTENTS

LIST OF ACRONYMS.....	5
STD SURVEILLANCE .....	7
STD FIGURES AND TABLES .....	8
STD CLINICAL DEFINITIONS .....	10
LIMITATIONS .....	11
STD HIGHLIGHTS .....	12
OVERVIEW OF STDS IN LONG BEACH.....	13
CHLAMYDIA IN LONG BEACH .....	14
GONORRHEA IN LONG BEACH .....	18
SYPHILIS IN LONG BEACH.....	22
ADDITIONAL STD FIGURES .....	28
HIV SURVEILLANCE.....	32
HIV FIGURES AND TABLES .....	33
LIMITATIONS .....	35
HIV HIGHLIGHTS.....	36
OVERVIEW OF HIV IN LONG BEACH .....	37
TRENDS IN HIV DIAGNOSES .....	46
TRENDS IN HIV MORTALITY.....	50
HEALTH INSURANCE STATUS AT TIME OF HIV DIAGNOSIS.....	52
HIV AMONG MEN WHO HAVE SEX WITH MEN.....	54
HIV CARE CONTINUUM .....	55
HIV TECHNICAL NOTES.....	57
REFERENCES.....	60



## **LIST OF ACRONYMS**

**AIDS** Acquired Immunodeficiency Syndrome

**eHARS** Enhanced HIV/AIDS Reporting System

**HIV** Human Immunodeficiency Virus

**LBDHHS** Long Beach Department of Health and Human Services

**MSM** Men who have Sex with Men

**MSM-PWID** Men who have Sex with Men and who also Inject Drugs

**OOJ** Out-of-Jurisdiction

**PWID** People Who Inject Drugs

**STD** Sexually Transmitted Disease



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# **STD SURVEILLANCE**

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## STD FIGURES AND TABLES

STD TABLE AND FIGURE DEFINITIONS .....	10
LIMITATIONS .....	11
STD HIGHLIGHTS .....	12
OVERVIEW OF STDS IN LONG BEACH.....	13
Figure 1. Chlamydia, gonorrhea, total early syphilis, and late latent syphilis incidence rates per 100,000 population, Long Beach, 2012-2016.....	13
Table 1. Chlamydia, gonorrhea, total early syphilis, and late latent syphilis cases and incidence rates per 100,000 population, Long Beach, 2012-2016 .....	13
CHLAMYDIA IN LONG BEACH .....	14
Figure 2. Chlamydia incidence rates per 100,000 population, Long Beach, Los Angeles, and California, 2012-2016.....	14
Table 2. Chlamydia cases and incidence rates per 100,000 population, Long Beach, Los Angeles, and California, 2012-2016 .....	14
Table 3. Chlamydia cases and incidence rates per 100,000 population by gender and age group, Long Beach, 2012-2016 .....	15
Table 4. Chlamydia cases and incidence rates per 100,000 population by gender and race/ethnicity, Long Beach, 2012-2016 .....	16
Figure 3. Chlamydia cases by zip code, Long Beach, 2016.....	17
GONORRHEA IN LONG BEACH .....	18
Figure 4. Gonorrhea incidence rates per 100,000 population, Long Beach, Los Angeles, and California, 2012-2016.....	18
Table 5. Gonorrhea cases and incidence rates per 100,000 population, Long Beach, Los Angeles, and California 2012-2016 .....	18
Table 6. Gonorrhea cases and incidence rates per 100,000 population by gender and age group, Long Beach, 2012-2016 .....	19
Table 7. Gonorrhea cases and incidence rates per 100,000 population by gender and race/ethnicity, Long Beach, 2012-2016 .....	20
Figure 5. Gonorrhea cases by zip code, Long Beach, 2016.....	21
SYPHILIS IN LONG BEACH .....	22
Figure 6. Total early syphilis incidence rates per 100,000 population, Long Beach, Los Angeles, and California, 2012-2016 .....	22



Table 8. Total early syphilis <sup>1</sup> cases and incidence rates per 100,000 population, Long Beach, Los Angeles, and California, 2012-2016.....	22
Table 9. Total early syphilis <sup>1</sup> cases and incidence rates per 100,000 population by gender and age group, Long Beach, 2012-2016 .....	23
Table 10. Total early syphilis cases and incidence rates per 100,000 population by gender and race/ethnicity, Long Beach, 2012-2016 .....	24
Figure 7. Total early syphilis <sup>1</sup> cases by zip code, Long Beach, 2016 .....	25
Figure 8. Late latent syphilis incidence rates per 100,000 population, Long Beach, Los Angeles, and California, 2012-2016 .....	26
Table 11. Late latent syphilis cases and incidence rates per 100,000 population, Long Beach, Los Angeles, and California, 2012-2016.....	26
Figure 9. Congenital syphilis incidence rates per 100,000 population, Long Beach, Los Angeles, and California, 2012-2016 .....	27
Figure 10. Congenital syphilis incidence rates per 100,000 population, and female cases, 2012-2016 .....	27
ADDITIONAL STD FIGURES .....	28
Figure 11. Chlamydia cases by gender, Long Beach, 2016.....	29
Figure 12. Gonorrhea cases by gender, Long Beach, 2016.....	29
Figure 13. Total early syphilis cases by gender, Long Beach, 2016.....	29
Figure 14. Male chlamydia cases by race/ethnicity, Long Beach, 2016.....	30
Figure 15. Female chlamydia cases by race/ethnicity, Long Beach, 2016 .....	30
Figure 16. Male gonorrhea cases by race/ethnicity, Long Beach, 2016 .....	30
Figure 17. Female gonorrhea cases by race/ethnicity, Long Beach, 2016.....	30
Figure 18. Male total early syphilis cases by race/ethnicity, Long Beach, 2016 .....	30



## STD TABLE AND FIGURE DEFINITIONS

**Chlamydia (*Chlamydia trachomatis*):** Chlamydia is a common sexually transmitted disease that can infect both men and women. It can cause serious, permanent damage to a woman's reproductive system, making it difficult or impossible for her to get pregnant later. Chlamydia can also cause a potentially fatal ectopic pregnancy (pregnancy that occurs outside the womb).

**Gonorrhea (*Neisseria gonorrhoeae*):** Gonorrhea is a sexually transmitted disease that can infect both men and women. It can cause infections in the genitals, rectum, and throat. It is a very common infection, especially among young people ages 15-24 years.

**Syphilis (*Treponema pallidum*):** Syphilis is a sexually transmitted disease that can infect both men and women. It can cause long-term complications if not treated correctly. Symptoms in adults are divided into stages. These stages are primary, secondary, latent, and late syphilis. Syphilis can be spread by direct contact with a syphilis sore during vaginal, anal, or oral sex. Sores can be found on the penis, vagina, anus, in the rectum, or on the lips and in the mouth. Syphilis can also be spread from an infected mother to her unborn baby.

**Primary Syphilis:** A stage of infection with *T. pallidum* characterized by one or more ulcerative lesions (e.g. chancre), which might differ considerably in clinical appearance.

**Secondary Syphilis:** A stage of infection caused by *T. pallidum* characterized by localized or diffuse mucocutaneous lesions (e.g., rash — such as non-pruritic macular, maculopapular, papular, or pustular lesions), often with generalized lymphadenopathy. Other symptoms can include mucous patches, condyloma lata, and alopecia. The primary ulcerative lesion may still be present. Because of the wide array of symptoms possibly indicating secondary syphilis, serologic tests for syphilis and a thorough sexual history and physical examination are crucial to determine if a case should be classified as secondary syphilis.

**Latent Syphilis:** A stage of infection caused by *T. pallidum* in which organisms persist in the body of the infected person without causing symptoms or signs. Latent syphilis is subdivided into early, late, and unknown categories based on the duration of infection

**Early Latent Syphilis:** A subcategory of latent syphilis. When the initial infection has occurred within the previous 12 months, latent syphilis is classified as early latent.

**Late Latent Syphilis:** A subcategory of latent syphilis. When initial infection has occurred >1 year previously, latent syphilis is classified as late latent.

**Latent Syphilis of Unknown Duration:** A subcategory of latent syphilis. When the date of initial infection cannot be established as having occurred within the previous year, the patient's age is between 13-35 years and patient's titer is  $\geq 32$ , latent syphilis is classified as latent syphilis of unknown duration.

**Total Early Syphilis:** For the purpose of this report total early syphilis consists of: primary syphilis, secondary syphilis and early latent syphilis.

**Congenital Syphilis:** A condition caused by infection in utero with *Treponema pallidum*. A wide spectrum of severity exists, and only severe cases are clinically apparent at birth. An infant or child (aged <2 years) may have signs such as hepatosplenomegaly, rash, condyloma lata, snuffles, jaundice (nonviral hepatitis), pseudoparalysis, anemia, or edema (nephrotic syndrome and/or malnutrition). An older child may have stigmata (e.g., interstitial keratitis, nerve deafness, anterior bowing of shins, frontal bossing, mulberry molars, Hutchinson teeth, saddle nose, rhagades, or Clutton joints).



## LIMITATIONS

**Suppression of Small Numbers:** The Long Beach HIV/STD Surveillance program must balance providing data to the public, stakeholders, and policymakers while simultaneously protecting client confidentiality. Thus, when dealing with data concerning small and/or sensitive populations (e.g., number of female Native American chlamydia cases) in our report, cells containing 0–4 cases were suppressed in order to eliminate the possibility of identification. It is important to note that this data is still valuable and is used internally to evaluate STDs/HIV in Long Beach and make programmatic recommendations.

**Unstable Rates:** The National Center for Health Statistics considers rates based on 20 or fewer observations unstable. The Center for Health Statistics utilizes relative standard error (RSE):

$$RSE(X) = \sqrt{A + \frac{B}{X}}$$

Any RSE less than 30% does not meet the requirement for a minimum degree of accuracy.

The City of Long Beach acknowledges that data presented in this report may not meet the National Center for Health Statistics guidelines on stable rates. However, the City must utilize the available data for programmatic evaluation and recommendations. In the context of this report, unstable rates are displayed for reporting purposes only.

**Year Totals:** While case counts are continuously updated from previous years by the California Department of Public Health, STD Control Branch, year totals in this report are not updated. This report captures data as of the March 31<sup>st</sup> state deadline for reporting all chlamydia, gonorrhea, and syphilis cases of the previous year.



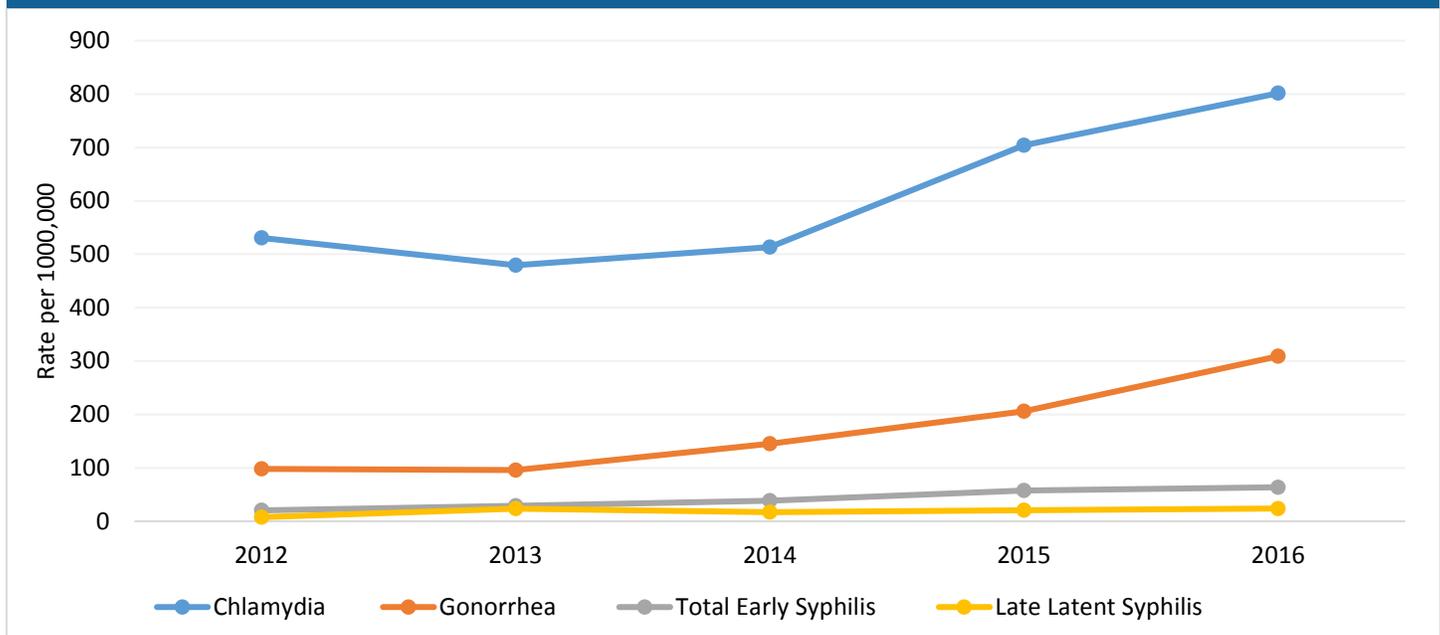
## STD HIGHLIGHTS

- The rates for chlamydia, gonorrhea, and total early syphilis in Long Beach have seen an overall increase from 2012 to 2016 ([Figure 1](#)). The majority of sexually transmitted disease (STD) diagnoses in Long Beach are concentrated among young adults aged 15-29 years (Tables [3](#), [6](#)). Unfortunately, we are missing about 50% of the race/ethnicity for chlamydia, gonorrhea, and syphilis. For those that we were able to collect race/ethnicity, African Americans had the highest rates of infection for chlamydia, gonorrhea, and total early syphilis in 2016 (Tables [4](#), [7](#), [10](#)).
- Most chlamydia cases occurred in the 90805 zip code; gonorrhea cases occurred most often in 90802, 90804, 90805, 90813 and total early syphilis occurred most often in the 90802 zip code (Figures [3](#), [5](#), [7](#)).
- *Chlamydia trachomatis* is the most common reportable communicable disease in the City of Long Beach. Chlamydia rates in Long Beach have increased by 51% (530.8 to 801.6 per 100,000) from 2012 to 2016 ([Table 2](#)). In 2016, Long Beach had the second highest rate of chlamydia in the State of California, with San Francisco having the highest. In 2016, the highest rates of chlamydia occurred among those aged 20-29 years. In the same year, the total rate for females was almost double that of males (1,012.7 per 100,000 compared to 571.2 per 100,000) ([Table 3](#)).
- Gonorrhea rates in Long Beach have increased by 214% (98.3 to 309.0 per 100,000) from 2012 to 2016 ([Table 5](#)). In 2016, Long Beach had the third highest rate of gonorrhea in the State of California. In 2016, the highest rates of gonorrhea occurred among those aged 20-29 years. In the same year, the total rate for males was more than double that of females (436.6 per 100,000 compared to 179.0 per 100,000) ([Table 6](#)).
- Total early syphilis rates in the City of Long Beach have increased by 212% (20.4 to 63.7 per 100,000) from 2012 to 2016 ([Table 8](#)). In 2016, Long Beach had the third highest rate of total early syphilis in the State of California. In 2016, the highest rates of total early syphilis occurred among men aged 25-34 years and women aged 20-24 years. In the same year, total early syphilis rates for men were much higher than those of women (124.9 per 100,000 compared to 4.9 per 100,000) ([Table 9](#)).
- In 2016, the late latent syphilis rate in Long Beach surpassed both the rates of Los Angeles County and the State of California ([Table 11](#)).
- Trends in congenital syphilis usually follow trends for total early syphilis among women, with a lag of 1-2 years (CDC, 2016). From 2012 to 2016, the number of total early syphilis cases among women increased ([Figure 10](#)). During the same time period, we saw a total of 5 (77.5 per 100,000 live births) cases of congenital syphilis ([Figure 9](#)).



## OVERVIEW OF STDS IN LONG BEACH

**Figure 1. Chlamydia, gonorrhea, total early syphilis, and late latent syphilis incidence rates per 100,000 population, Long Beach, 2012-2016**



Note: Incidence rates are per 100,000 population.

Source: California Department of Public Health, STD Control Branch

State of California, Department of Finance, *California County Population Estimates and Components of Change by County*, July 1, 2012-2016. Sacramento, California, December 2016.

**Table 1. Chlamydia, gonorrhea, total early syphilis, and late latent syphilis cases and incidence rates per 100,000 population, Long Beach, 2012-2016**

	Year									
	2012		2013		2014		2015		2016	
	Cases	Rate								
Chlamydia	2,473	530.8	2,256	479.5	2,422	513.6	3,346	703.9	3,863	801.6
Gonorrhea	458	98.3	451	95.9	685	145.3	980	206.1	1,489	309.0
Total Early Syphilis	95	20.4	137	29.2	183	38.8	273	57.4	307	63.7
Late Latent Syphilis	36	7.7	112	23.7	80	16.9	99	20.8	115	23.9

Note: Incidence rates are per 100,000 population.

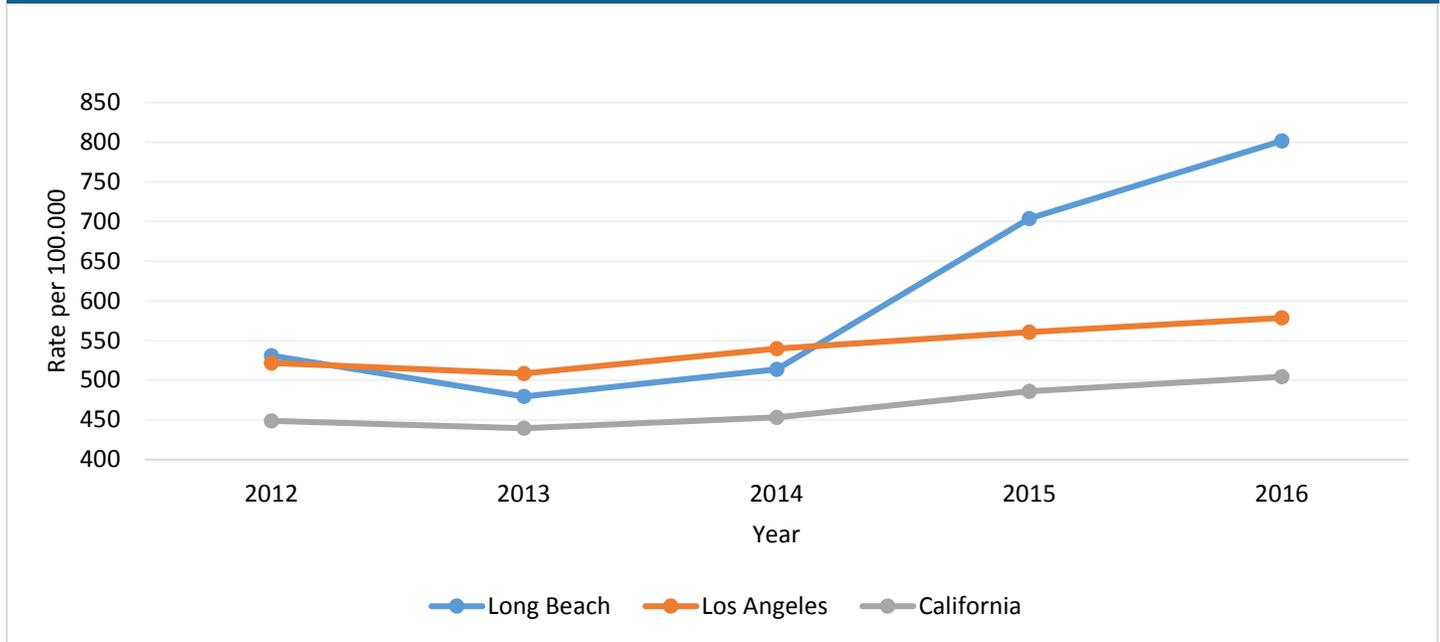
Source: California Department of Public Health, STD Control Branch

State of California, Department of Finance, *California County Population Estimates and Components of Change by County*, July 1, 2012-2016. Sacramento, California, December 2016.



## CHLAMYDIA IN LONG BEACH

**Figure 2. Chlamydia incidence rates per 100,000 population, Long Beach, Los Angeles, and California, 2012-2016**



Note: Incidence rates are per 100,000 population.

Source: California Department of Public Health, STD Control Branch

State of California, Department of Finance, *California County Population Estimates and Components of Change by County*, July 1, 2012-2016. Sacramento, California, December 2016.

**Table 2. Chlamydia cases and incidence rates per 100,000 population, Long Beach, Los Angeles, and California, 2012-2016**

	2012		2013		Year 2014		2015		2016	
	Cases	Rate								
<b>Long Beach</b>	<b>2,473</b>	<b>530.8</b>	<b>2,256</b>	<b>479.5</b>	<b>2,422</b>	<b>513.6</b>	<b>3,346</b>	<b>703.9</b>	<b>3,863</b>	<b>801.6</b>
Los Angeles	51,706	521.7	50,949	508.5	54,363	539.9	57,134	560.6	59,176	578.5
California	169,795	448.9	167,916	439.5	174,557	453.4	189,937	486.1	198,503	504.4

Note: Incidence rates are per 100,000 population.

Source: California Department of Public Health, STD Control Branch

State of California, Department of Finance, *California County Population Estimates and Components of Change by County*, July 1, 2012-2016. Sacramento, California, December 2016.



**Table 3. Chlamydia cases and incidence rates per 100,000 population by gender and age group, Long Beach, 2012-2016**

	2012		2013		Year 2014		2015		2016	
	Cases	Rate								
<b>LONG BEACH TOTAL</b>	<b>2,473</b>	<b>530.8</b>	<b>2,256</b>	<b>479.5</b>	<b>2,422</b>	<b>513.6</b>	<b>3,346</b>	<b>703.9</b>	<b>3,863</b>	<b>801.6</b>
<b><i>Males by Age (yrs)</i></b>										
<b>Male Total</b>	<b>752</b>	<b>329.4</b>	<b>710</b>	<b>307.9</b>	<b>885</b>	<b>383</b>	<b>1,156</b>	<b>496.2</b>	<b>1,349</b>	<b>571.2</b>
0-9	<5	-	<5	-	<5	-	<5	-	<5	-
10-14	<5	-	<5	-	<5	-	<5	-	<5	-
15-19	110	618.9	96	534.8	113	628.2	123	678.3	136	739.7
20-24	254	1,324.90	219	1,131.20	273	1,407.00	342	1,748.50	399	2,012.10
25-29	152	791.1	168	865.9	195	1,002.80	258	1,316.10	294	1,479.40
30-34	94	550.3	94	544.9	99	572.6	147	843.4	162	916.8
35-44	83	246	71	208.4	116	339.8	151	438.7	199	570.3
45+	50	68.7	56	76.2	75	101.8	109	146.8	148	196.6
Not Specified	9*	-	5*	-	10*	-	25	-	11*	-
<b><i>Females by Age (yrs)</i></b>										
<b>Female Total</b>	<b>1,717</b>	<b>722.6</b>	<b>1,538</b>	<b>641</b>	<b>1,526</b>	<b>634.6</b>	<b>2,178</b>	<b>898.4</b>	<b>2,489</b>	<b>1,012.70</b>
0-9	<5	-	<5	-	<5	-	<5	-	<5	-
10-14	11*	69.9	9*	56.6	9*	56.5	<5	-	7*	43.0
15-19	437	2,402.90	408	2,221.50	382	2,075.40	496	2,673.10	534	2,838.70
20-24	759	3,771.50	648	3,188.50	628	3,083.20	882	4,295.50	938	4,506.10
25-29	266	1,340.10	262	1,307.10	273	1,359.00	419	2,069.00	550	2,679.00
30-34	130	727.4	107	592.8	111	613.6	182	998.1	222	1,200.90
35-44	72	210	65	187.8	76	219.1	112	320.2	154	434.3
45+	21	26.1	18*	22.2	26	31.9	40	48.7	64	76.9
Not Specified	17*	-	19*	-	17*	-	42	-	20	-

Note: Incidence rates are per 100,000 population.

Source: California Department of Public Health, STD Control Branch

State of California, Department of Finance, *California County Population Estimates and Components of Change by County*, July, 1, 2012-2016. Sacramento, California, December 2016.

Gender specific age groups and race/ethnicity percent calculations exclude "Not Specified" from the denominator.

\*Any indicators with less than 20 cases do not meet the requirement for a minimum degree of accuracy outlined by the National Center for Health Statistics. Case counts/rates are included for reporting purposes only.



**Table 4. Chlamydia cases and incidence rates per 100,000 population by gender and race/ethnicity, Long Beach, 2012-2016**

	2012		2013		Year 2014		2015		2016	
	Cases	Rate								
<b>LONG BEACH TOTAL</b>	<b>2,473</b>	<b>530.8</b>	<b>2,256</b>	<b>479.5</b>	<b>2,422</b>	<b>513.6</b>	<b>3,346</b>	<b>703.9</b>	<b>3,863</b>	<b>801.6</b>
<b><i>Males by Race/Ethnicity</i></b>										
<b>Male Total</b>	<b>752</b>	<b>329.4</b>	<b>710</b>	<b>307.9</b>	<b>885</b>	<b>383</b>	<b>1,156</b>	<b>496.2</b>	<b>1,349</b>	<b>571.2</b>
Native American/Alaska Native	<5	-	<5	-	<5	-	<5	-	9*	1,342.5
Asian/Pacific Islander	30	101.5	24	80.4	34	113.7	26	86.3	41	134.2
African American	179	647.2	131	469	136	485.8	155	549.3	208	727.1
Latino	196	206.2	192	200	136	141.4	208	214.5	218	221.7
White	83	120.6	82	118	87	124.9	105	148.4	130	181.3
Other/Multi/Not Specified	263	-	277	-	490	-	658	-	743	-
<b><i>Females by Race/Ethnicity</i></b>										
<b>Female Total</b>	<b>1,717</b>	<b>722.6</b>	<b>1,538</b>	<b>641</b>	<b>1,526</b>	<b>634.6</b>	<b>2,178</b>	<b>898.4</b>	<b>2,489</b>	<b>1,012.7</b>
Native American/Alaska Native	<5	-	<5	-	<5	-	7*	964.1	8*	1,086.9
Asian/Pacific Islander	108	316.3	100	290	90	260.5	99	284.2	129	365.3
African American	364	1,111.70	262	792.4	241	727.2	331	990.8	317	936.0
Latino/Hispanic	484	510.2	406	423.8	361	376	479	494.9	533	543.2
White	122	179.5	107	155.9	103	149.7	175	250.2	164	231.2
Other/Multi/Not Specified	634	-	659	-	728	-	1,087	-	1,338	-

Note: Incidence rates are per 100,000 population.

Source: California Department of Public Health, STD Control Branch

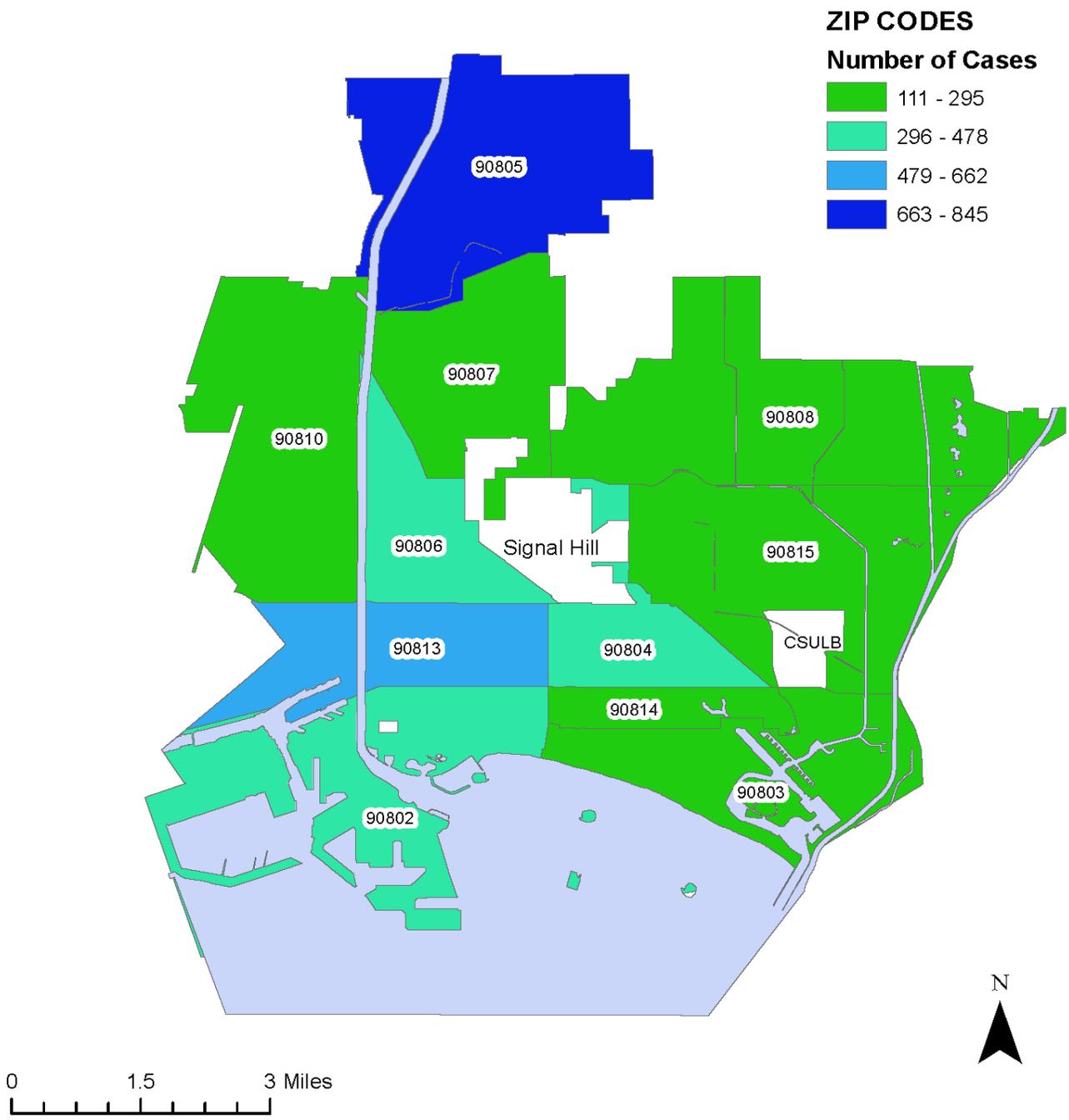
State of California, Department of Finance, *California County Population Estimates and Components of Change by County*, July, 1, 2012-2016. Sacramento, California, December 2016.

Gender specific age groups and race/ethnicity percent calculations exclude "Not Specified" from the denominator.

\*Any indicators with less than 20 cases do not meet the requirement for a minimum degree of accuracy outlined by the National Center for Health Statistics. Case counts/rates are included for reporting purposes only.



**Figure 3. Chlamydia cases by zip code, Long Beach, 2016**

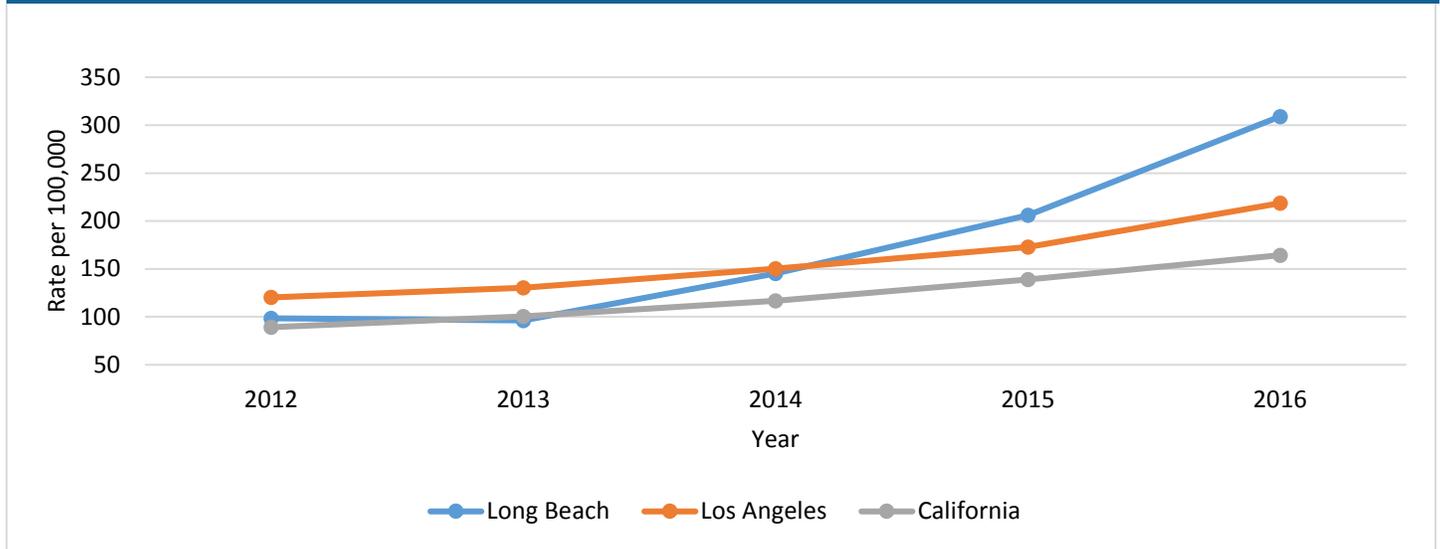


\*Map does not include people experiencing homelessness or individuals who did not provide a zip code.  
Source: California Department of Public Health, STD Control Branch



## GONORRHEA IN LONG BEACH

**Figure 4. Gonorrhea incidence rates per 100,000 population, Long Beach, Los Angeles, and California, 2012-2016**



Note: Incidence rates are per 100,000 population.

Source: California Department of Public Health, STD Control Branch

State of California, Department of Finance, *California County Population Estimates and Components of Change by County*, July, 1, 2012-2016. Sacramento, California, December 2016.

**Table 5. Gonorrhea cases and incidence rates per 100,000 population, Long Beach, Los Angeles, and California 2012-2016**

	Year									
	2012		2013		2014		2015		2016	
	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate
<b>Long Beach</b>	<b>458</b>	<b>98.3</b>	<b>451</b>	<b>95.9</b>	<b>685</b>	<b>145.3</b>	<b>980</b>	<b>206.1</b>	<b>1,489</b>	<b>309.0</b>
Los Angeles	11,959	120.7	13,065	130.4	15,135	150.3	17,614	172.8	22,361	218.6
California	33,778	89.3	38,365	100.4	44,974	116.8	54,255	138.9	64,677	164.3

Note: Incidence rates are per 100,000 population.

Source: California Department of Public Health, STD Control Branch

State of California, Department of Finance, *California County Population Estimates and Components of Change by County*, July, 1, 2012-2016. Sacramento, California, December 2016.



**Table 6. Gonorrhea cases and incidence rates per 100,000 population by gender and age group, Long Beach, 2012-2016**

	Year									
	2012		2013		2014		2015		2016	
	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate
<b>LONG BEACH TOTAL</b>	<b>458</b>	<b>98.3</b>	<b>451</b>	<b>95.9</b>	<b>685</b>	<b>145.3</b>	<b>980</b>	<b>206.1</b>	<b>1,489</b>	<b>309.0</b>
<i>Males by Age (Years)</i>										
<b>Male Total</b>	<b>284</b>	<b>124.4</b>	<b>275</b>	<b>119.3</b>	<b>446</b>	<b>193</b>	<b>627</b>	<b>269.2</b>	<b>1,031</b>	<b>436.6</b>
0-9	<5	-	<5	-	<5	-	<5	-	<5	-
10-14	<5	-	<5	-	<5	-	<5	-	<5	-
15-19	32	180	17*	94.7	45	250.2	44	242.6	66	359.0
20-24	73	380.8	62	320.2	95	489.6	148	756.6	209	1,054.0
25-29	43	223.8	54	278.3	96	493.7	132	673.4	222	1,117.1
30-34	52	304.4	35	202.9	67	387.5	88	504.9	158	894.2
35-44	45	133.4	61	179.1	82	240.2	114	331.2	206	590.4
45+	38	52.2	40	54.4	57	77.4	94	126.6	161	213.9
Not Specified	<5	-	<5	-	<5	-	7*	-	8*	-
<i>Females by Age (Years)</i>										
<b>Female Total</b>	<b>172</b>	<b>72.4</b>	<b>174</b>	<b>72.5</b>	<b>227</b>	<b>94.4</b>	<b>343</b>	<b>141.5</b>	<b>440</b>	<b>179.0</b>
0-9	<5	-	<5	-	<5	-	<5	-	<5	-
10-14	<5	-	<5	-	<5	-	<5	-	<5	-
15-19	46	252.9	46	250.5	50	271.7	74	398.8	76	404.0
20-24	61	303.1	55	270.6	82	402.6	112	545.5	138	663.0
25-29	36	181.4	34	169.6	46	229	50	246.9	90	438.4
30-34	15*	83.9	19*	105.3	21	116.1	36	197.4	47	254.2
35-44	7*	20.4	13*	37.6	17*	49	41	117.2	51	143.8
45+	<5	-	<5	-	10*	12.3	17*	20.7	34	40.9
Not Specified	<5	-	<5	-	<5	-	11*	-	<5	-

Note: Incidence rates are per 100,000 population.

Source: California Department of Public Health, STD Control Branch

State of California, Department of Finance, *California County Population Estimates and Components of Change by County*, July, 1, 2012-2016. Sacramento, California, December 2016.

Gender specific age groups and race/ethnicity percent calculations exclude "Not Specified" from the denominator.

\*Any indicators with less than 20 cases do not meet the requirement for a minimum degree of accuracy outlined by the National Center for Health Statistics. Case counts/rates are included for reporting purposes only.



**Table 7. Gonorrhea cases and incidence rates per 100,000 population by gender and race/ethnicity, Long Beach, 2012-2016**

	Year									
	2012		2013		2014		2015		2016	
	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate
<b>LONG BEACH TOTAL</b>	<b>458</b>	<b>98.3</b>	<b>451</b>	<b>95.9</b>	<b>685</b>	<b>145.3</b>	<b>980</b>	<b>206.1</b>	<b>1,489</b>	<b>309.0</b>
<b>Males by Race/Ethnicity</b>										
<b>Male Total</b>	<b>284</b>	<b>124.4</b>	<b>275</b>	<b>119.3</b>	<b>446</b>	<b>193</b>	<b>627</b>	<b>269.2</b>	<b>1,031</b>	<b>436.6</b>
American Indian/Alaska Native	<5	-	<5	-	<5*	-	5*	756.1	10*	1,491.7
Asian/Pacific Islander	<5	-	11*	36.9	10*	33.4	13*	43.1	18*	58.9
Black/African American	88	318.2	76	272.1	111	396.5	132	467.8	191	667.6
Latino/Hispanic	57	60	51	53.1	60	62.4	78	80.4	153	155.6
White	41	59.6	43	61.9	78	112	84	118.7	121	168.7
Other/Multi/Not Specified	93	-	94	-	186	-	315	-	538	-
<b>Females by Race/Ethnicity</b>										
<b>Female Total</b>	<b>172</b>	<b>72.4</b>	<b>174</b>	<b>72.5</b>	<b>227</b>	<b>94.4</b>	<b>343</b>	<b>141.5</b>	<b>440</b>	<b>179.0</b>
American Indian/Alaska Native	<5	-	<5	-	<5	-	<5	-	<5	-
Asian/Pacific Islander	<5	-	<5	-	6*	17.4	16*	45.9	10*	28.3
Black/African American	65	198.5	57	172.4	61	184.1	95	284.4	78	230.3
Latino/Hispanic	29	30.6	28	29.2	35	36.5	42	43.4	83	84.6
White	12*	17.7	11*	16	23	33.4	30	42.9	40	56.4
Other/Multi/Not Specified	63	-	73	-	101	-	159	-	228	-

Note: Incidence rates are per 100,000 population.

Source: California Department of Public Health, STD Control Branch

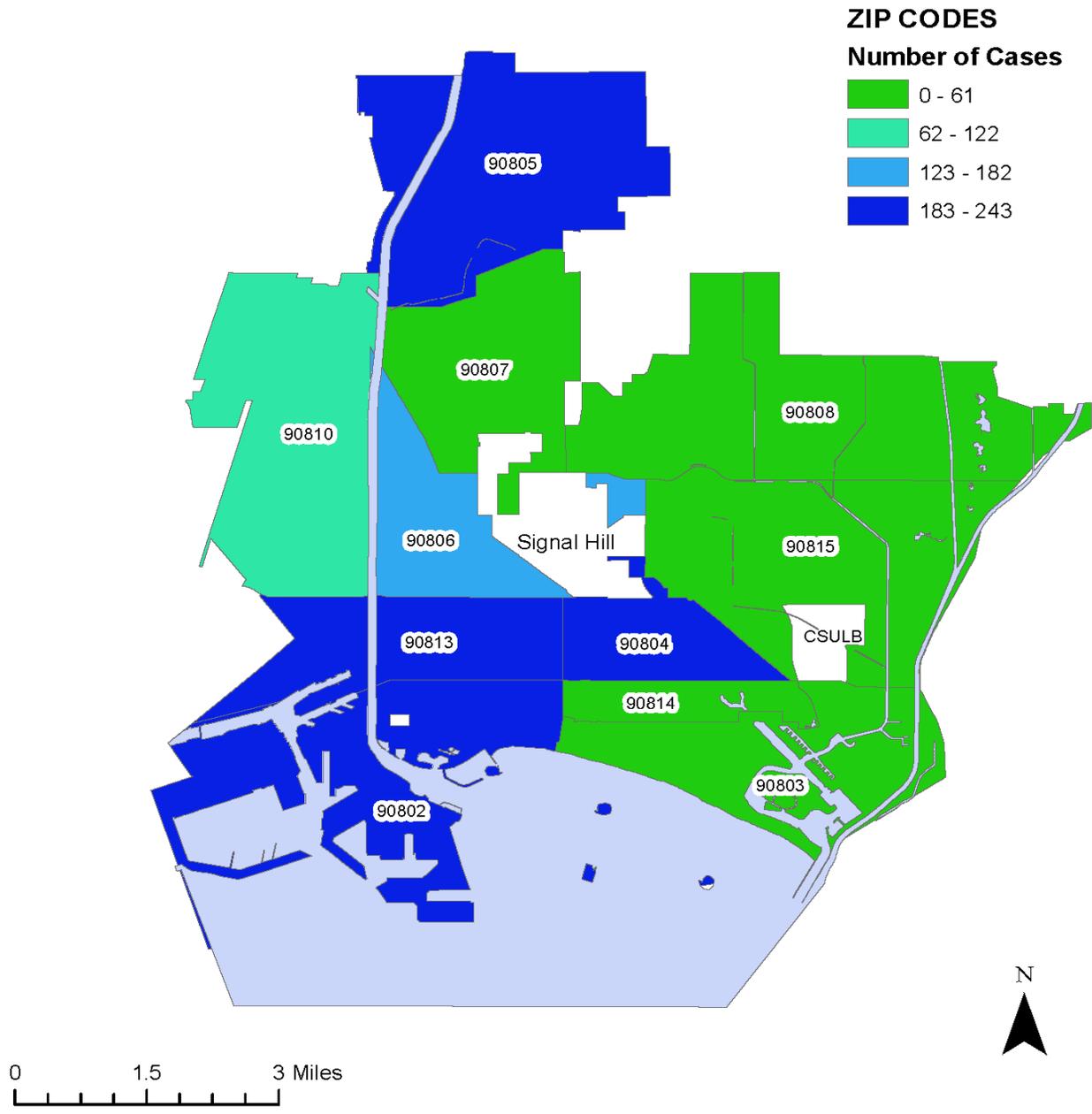
State of California, Department of Finance, *California County Population Estimates and Components of Change by County*, July, 1, 2012-2016. Sacramento, California, December 2016.

Gender specific age groups and race/ethnicity percent calculations exclude "Not Specified" from the denominator.

\*Any indicators with less than 20 cases do not meet the requirement for a minimum degree of accuracy outlined by the National Center for Health Statistics. Case counts/rates are included for reporting purposes only.



Figure 5. Gonorrhea cases by zip code, Long Beach, 2016

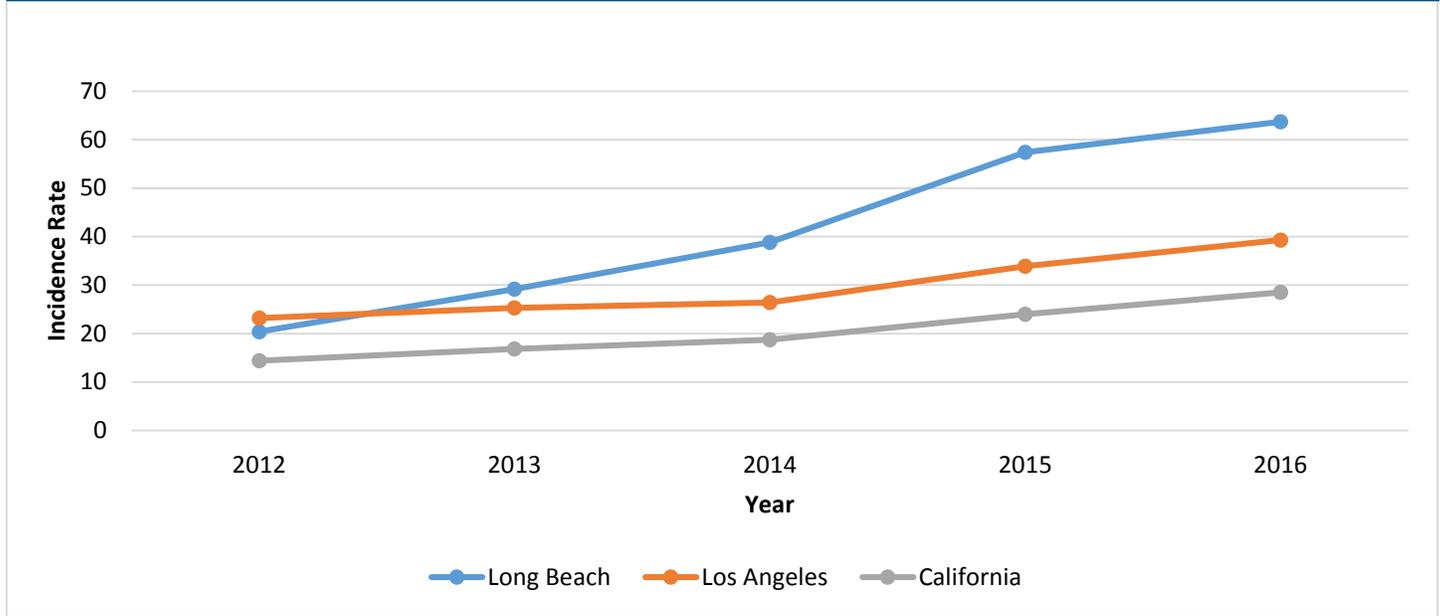


\*Map does not include people experiencing homelessness or individuals who did not provide a zip code.  
Source: California Department of Public Health, STD Control Branch



## SYPHILIS IN LONG BEACH

**Figure 6. Total early syphilis incidence rates per 100,000 population, Long Beach, Los Angeles, and California, 2012-2016**



Note: Incidence rates are per 100,000 population.

Source: California Department of Public Health, STD Control Branch

State of California, Department of Finance, *California County Population Estimates and Components of Change by County*, July, 1, 2012-2016. Sacramento, California, December 2016.

**Table 8. Total early syphilis<sup>1</sup> cases and incidence rates per 100,000 population, Long Beach, Los Angeles, and California, 2012-2016**

	Year									
	2012		2013		2014		2015		2016	
	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate
<b>Long Beach</b>	<b>95</b>	<b>20.4</b>	<b>137</b>	<b>29.2</b>	<b>183</b>	<b>38.8</b>	<b>273</b>	<b>57.4</b>	<b>307</b>	<b>63.7</b>
Los Angeles	2,300	23.2	2,531	25.3	2,662	26.4	3,454	33.9	4,018	39.3
California	5,488	14.4	6,433	16.8	7,256	18.7	9,359	24	11,222	28.5

<sup>1</sup>Total Early syphilis includes primary, secondary and early latent syphilis.

Note: Incidence rates are per 100,000 population.

Source: California Department of Public Health, STD Control Branch

State of California, Department of Finance, *California County Population Estimates and Components of Change by County*, July, 1, 2012-2016. Sacramento, California, December 2016.



**Table 9. Total early syphilis<sup>1</sup> cases and incidence rates per 100,000 population by gender and age group, Long Beach, 2012-2016**

	Year									
	2012		2013		2014		2015		2016	
	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate
<b>LONG BEACH TOTAL</b>	<b>95</b>	<b>20.4</b>	<b>137</b>	<b>29.2</b>	<b>183</b>	<b>38.8</b>	<b>273</b>	<b>57.4</b>	<b>307</b>	<b>63.7</b>
<b>Males by Age (years)</b>										
<b>Male Total</b>	<b>91</b>	<b>39.9</b>	<b>130</b>	<b>56.4</b>	<b>175</b>	<b>75.7</b>	<b>256</b>	<b>109.9</b>	<b>295</b>	<b>124.9</b>
0-9	<5	-	<5	-	<5	-	<5	-	<5	-
10-14	<5	-	<5	-	<5	-	<5	-	<5	-
15-19	<5	-	<5	-	<5	-	5*	27.6	<5	-
20-24	10*	52.2	15*	77.5	14*	72.2	27	138	39	196.7
25-29	15*	78.1	26	134	29	149.1	36	183.6	48	241.5
30-34	14*	82	10*	58	22	127.2	31	177.9	49	277.3
35-44	22	65.2	35	102.7	50	146.4	80	232.4	64	183.4
45+	26	35.7	40	54.4	57	77.4	77	103.7	92	122.2
Not Specified	<5	-	<5	-	<5	-	<5	-	<5	-
<b>Females by Age (years)</b>										
<b>Female Total</b>	<b>&lt;5</b>	<b>-</b>	<b>7*</b>	<b>2.9</b>	<b>8*</b>	<b>3.3</b>	<b>17*</b>	<b>7</b>	<b>12*</b>	<b>4.9</b>
0-9	<5	-	<5	-	<5	-	<5	-	<5	-
10-14	<5	-	<5	-	<5	-	<5	-	<5	-
15-19	<5	-	<5	-	<5	-	<5	-	<5	-
20-24	<5	-	5*	24.6	<5	-	5*	24.4	5*	24.0
25-29	<5	-	<5	-	<5	-	<5	-	<5	-
30-34	<5	-	<5	-	<5	-	6*	33	<5	-
35-44	<5	-	<5	-	<5	-	<5	2.9	<5	-
45+	<5	-	<5	-	<5	-	<5	1.2	<5	-
Not Specified	<5	-	<5	-	<5	-	<5	-	<5	-

<sup>1</sup>Total early syphilis includes primary, secondary and early latent syphilis.

Gender specific age groups and race/ethnicity percent calculations exclude "Not Specified" from the denominator.

Note: Incidence rates are per 100,000 population.

Source: California Department of Public Health, STD Control Branch

State of California, Department of Finance, *California County Population Estimates and Components of Change by County*, July, 1, 2012-2016. Sacramento, California, December 2016.

\*Any indicators with less than 20 cases do not meet the requirement for a minimum degree of accuracy outlined by the National Center for Health Statistics. Case counts/rates are included for reporting purposes only.



**Table 10. Total early syphilis cases and incidence rates per 100,000 population by gender and race/ethnicity, Long Beach, 2012-2016**

	Year									
	2012		2013		2014		2015		2016	
	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate
<b>LONG BEACH TOTAL</b>	<b>95</b>	<b>20.4</b>	<b>137</b>	<b>29.2</b>	<b>183</b>	<b>38.8</b>	<b>273</b>	<b>57.4</b>	<b>307</b>	<b>63.7</b>
<b><i>Males by Race/Ethnicity</i></b>										
<b>Male Total</b>	<b>91</b>	<b>39.9</b>	<b>130</b>	<b>56.4</b>	<b>175</b>	<b>75.7</b>	<b>256</b>	<b>109.9</b>	<b>295</b>	<b>124.9</b>
American Indian/Alaska Native	<5	-	<5	-	<5	-	<5	-	<5	-
Asian/Pacific Islander	<5	-	<5	-	7*	23.4	12*	39.8	14	45.8
Black/African American	13*	47	21	75.2	23	82.2	38	134.7	51	178.3
Latino/Hispanic	32	33.7	46	48	60	62.4	93	95.9	102	103.7
White	35	50.9	26	37.4	41	58.9	79	111.7	89	124.1
Other/Multi/Not Specified	7*	-	33	-	44	-	34	-	38	-
<b><i>Females by Race/Ethnicity</i></b>										
<b>Female Total</b>	<b>&lt;5</b>	<b>0.4</b>	<b>7*</b>	<b>2.9</b>	<b>8*</b>	<b>3.3</b>	<b>17*</b>	<b>7</b>	<b>12</b>	<b>4.9</b>
American Indian/Alaska Native	<5	-	<5	-	<5	-	<5	-	<5	-
Asian/Pacific Islander	<5	-	<5	-	<5	-	<5	-	<5	-
Black/African American	<5	-	<5	-	<5	-	6*	18	5*	14.8
Latino/Hispanic	<5	-	5*	5.2	<5	-	5*	5.2	6*	6.1
White	<5	-	<5	-	<5	-	<5	-	<5	-
Other/Multi/Not Specified	<5	-	<5	-	<5	-	<5	-	<5	-

<sup>1</sup>Total early syphilis includes primary, secondary and early latent syphilis.

Note: Incidence rates are per 100,000 population.

Source: California Department of Public Health, STD Control Branch

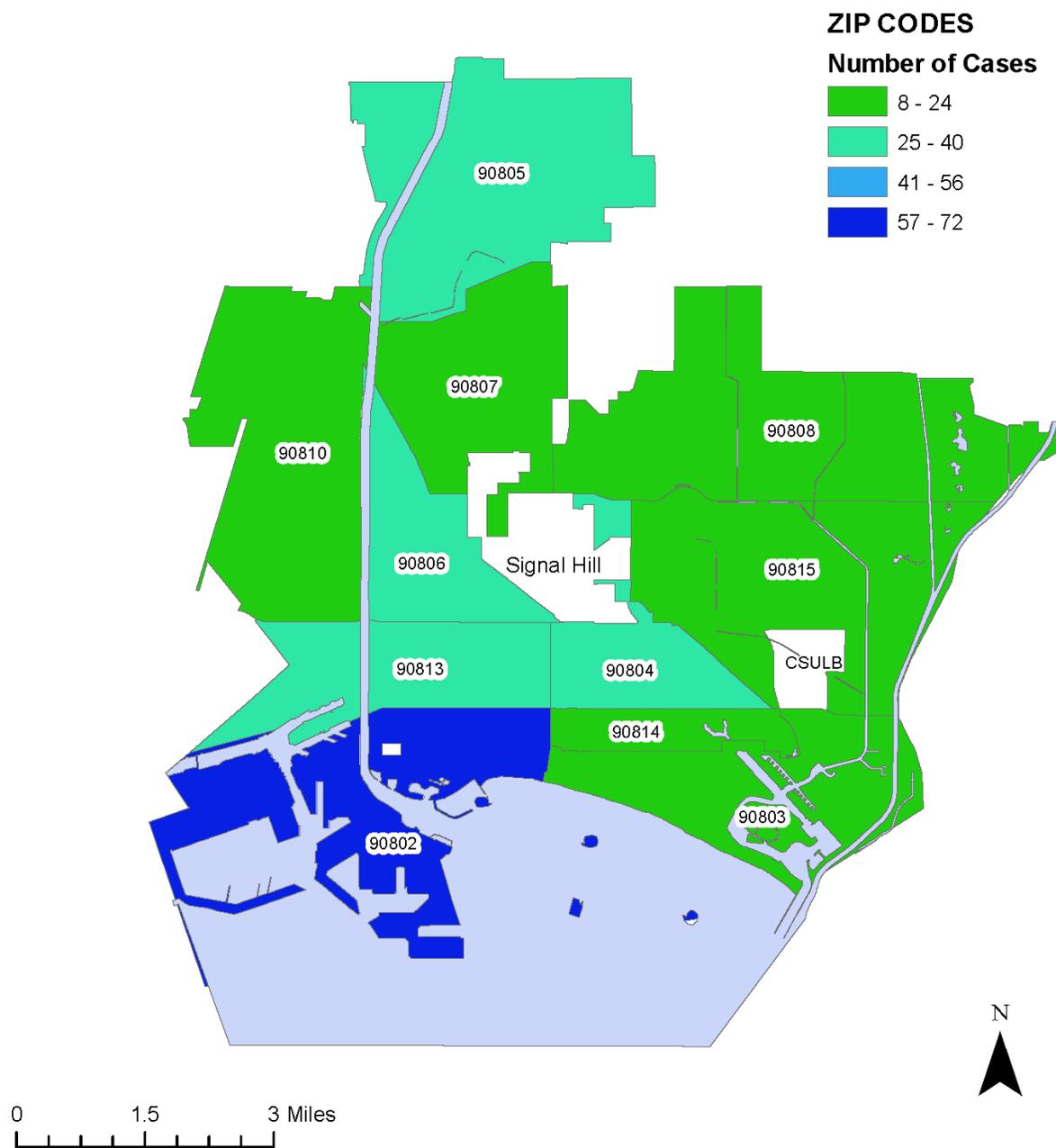
State of California, Department of Finance, *California County Population Estimates and Components of Change by County*, July, 1, 2012-2016. Sacramento, California, December 2016.

Gender specific age groups and race/ethnicity percent calculations exclude "Not Specified" from the denominator.

\*Any indicators with less than 20 cases do not meet the requirement for a minimum degree of accuracy outlined by the National Center for Health Statistics. Case counts/rates are included for reporting purposes only.



Figure 7. Total early syphilis<sup>1</sup> cases by zip code, Long Beach, 2016



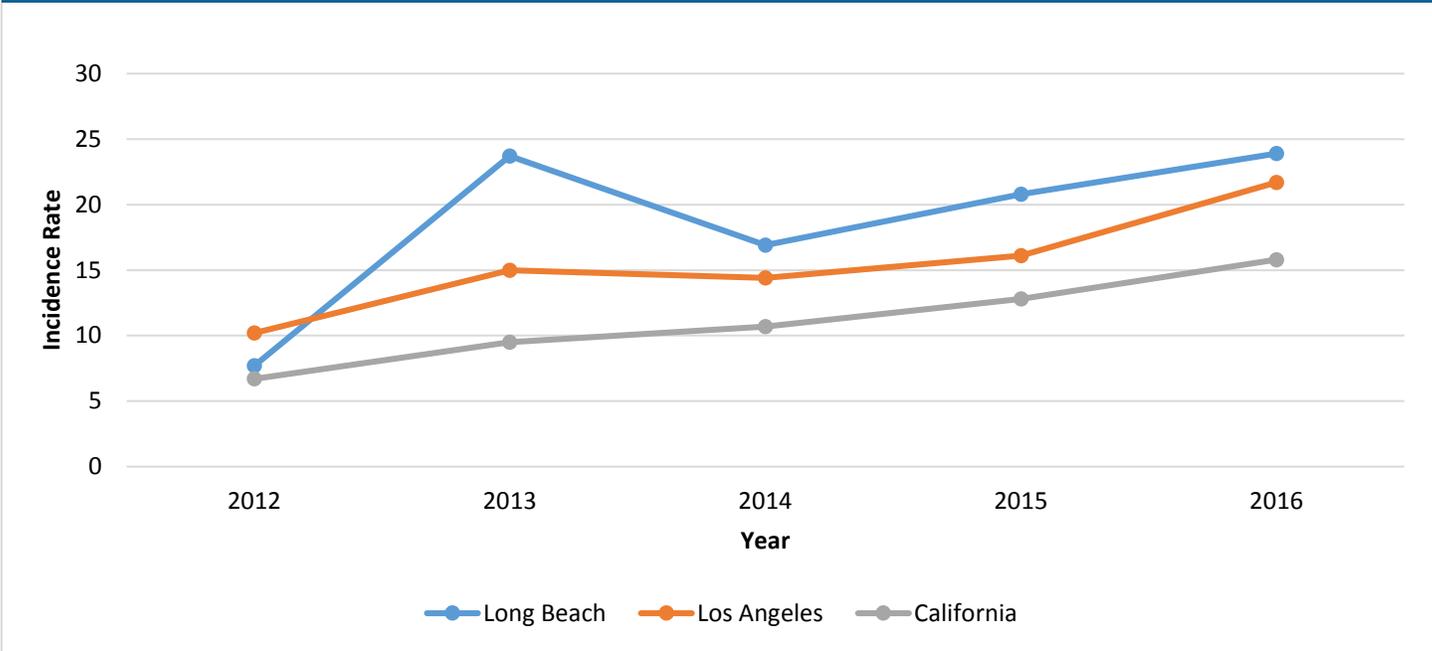
\*Map does not include people experiencing homelessness or individuals who did not provide a zip code.

Source: California Department of Public Health, STD Control Branch

<sup>1</sup>Total early syphilis includes primary, secondary and early latent syphilis.



**Figure 8. Late latent syphilis incidence rates per 100,000 population, Long Beach, Los Angeles, and California, 2012-2016**



Note: Incidence rates are per 100,000 population.

Source: California Department of Public Health, STD Control Branch

State of California, Department of Finance, *California County Population Estimates and Components of Change by County*, July, 1, 2012-2016. Sacramento, California, December 2016.

**Table 11. Late latent syphilis cases and incidence rates per 100,000 population, Long Beach, Los Angeles, and California, 2012-2016**

	2012		2013		2014		2015		2016	
	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate
<b>Long Beach</b>	<b>36</b>	<b>7.7</b>	<b>112</b>	<b>23.7</b>	<b>80</b>	<b>16.9</b>	<b>99</b>	<b>20.8</b>	<b>115</b>	<b>23.9</b>
Los Angeles	1,015	10.2	1,508	15	1,455	14.4	1,636	16.1	2,217	21.7
California	2,567	6.7	3,646	9.5	4,139	10.7	4,991	12.8	6,236	15.8

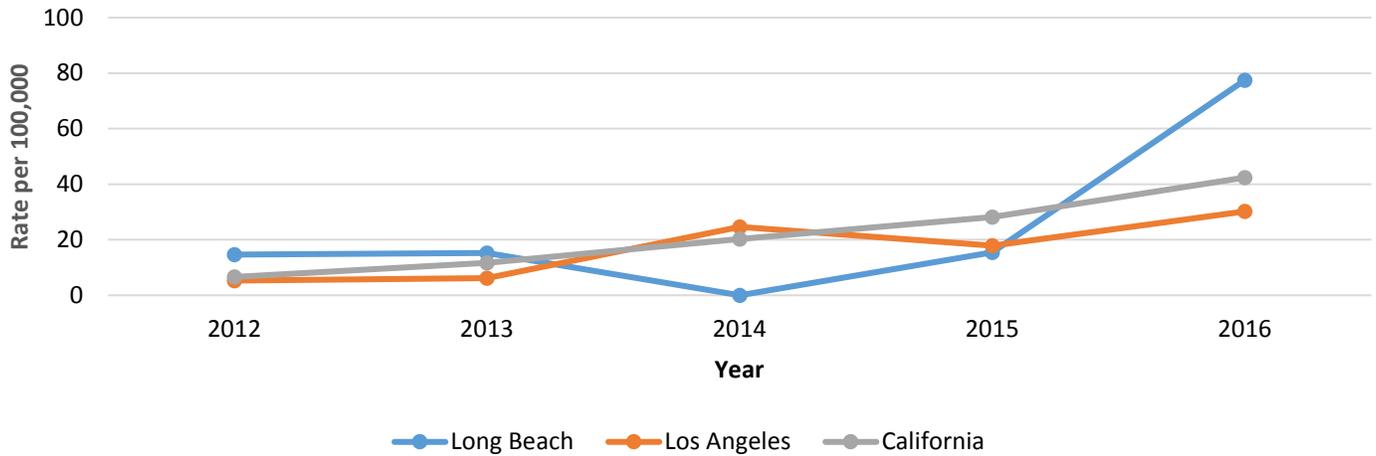
Note: Incidence rates are per 100,000 population.

Source: California Department of Public Health, STD Control Branch

State of California, Department of Finance, *California County Population Estimates and Components of Change by County*, July, 1, 2012-2016. Sacramento, California, December 2016.



**Figure 9. Congenital syphilis incidence rates per 100,000 population, Long Beach, Los Angeles, and California, 2012-2016**

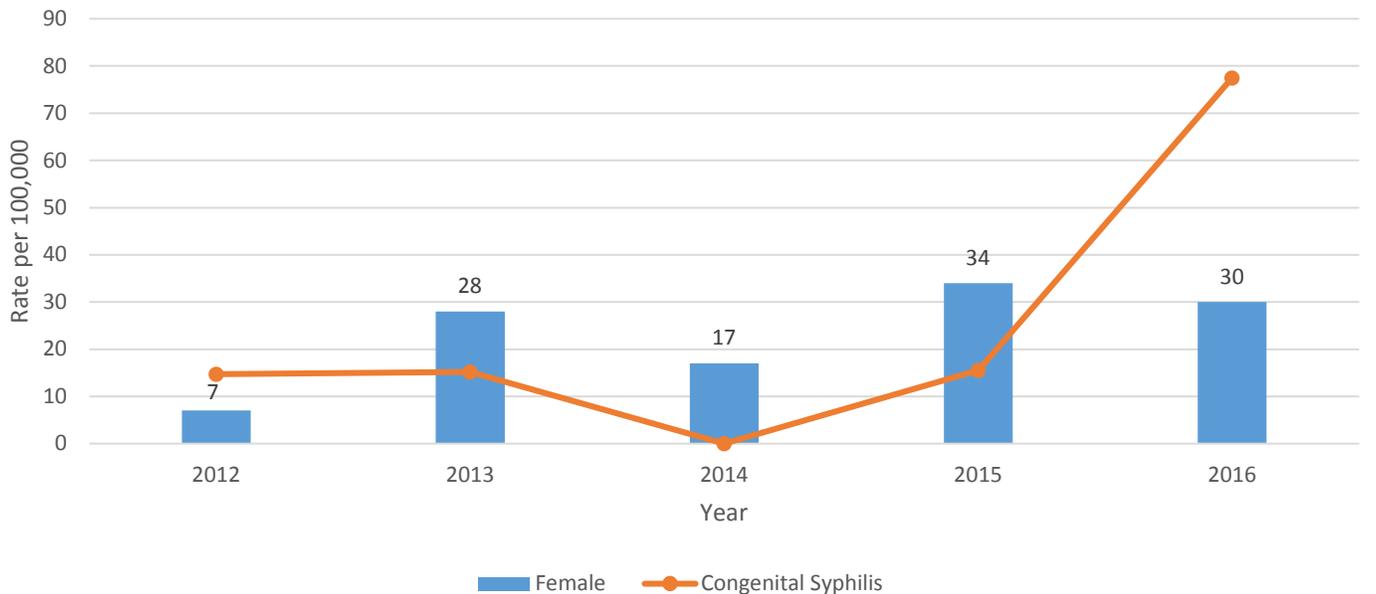


Note: Incidence rates are per 100,000 population.

Source: California Department of Public Health, STD Control Branch

State of California, Department of Finance, *California County Population Estimates and Components of Change by County*, July, 1, 2011-2016. Sacramento, California, December 2016.

**Figure 10. Congenital syphilis incidence rates per 100,000 population, and female cases, Long Beach, 2012-2016**



Note: Incidence rates are per 100,000 population.

Source: California Department of Public Health, STD Control Branch

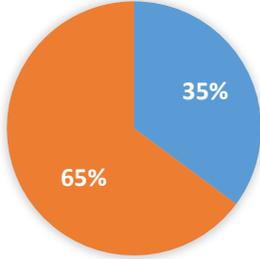
State of California, Department of Finance, *California County Population Estimates and Components of Change by County*, July, 1, 2011-2016. Sacramento, California, December 2016.



**ADDITIONAL STD FIGURES**



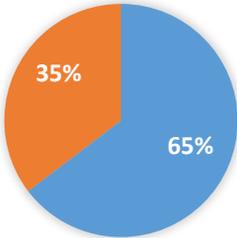
**Figure 11. Chlamydia cases by gender, Long Beach, 2016**



\*See Table 3.

■ Males ■ Females

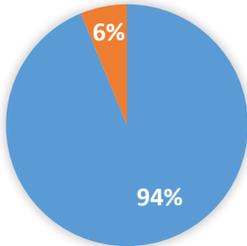
**Figure 12. Gonorrhea cases by gender, Long Beach, 2016**



\*See Table 6.

■ Males ■ Females

**Figure 13. Total early syphilis cases by gender, Long Beach, 2016**

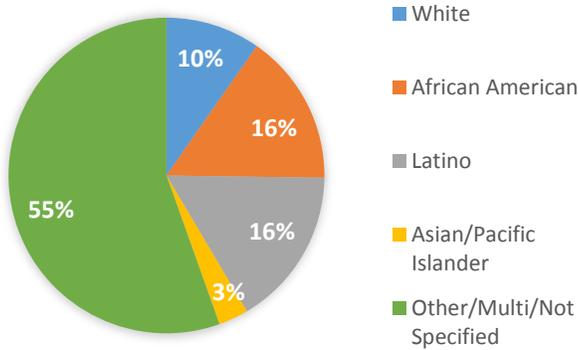


\*See Table 9.

■ Males ■ Females

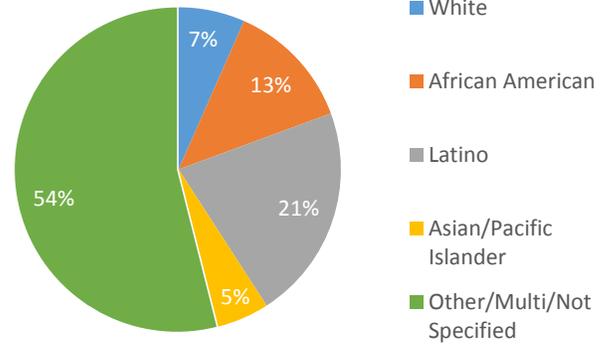


**Figure 14. Male chlamydia cases by race/ethnicity, Long Beach, 2016**



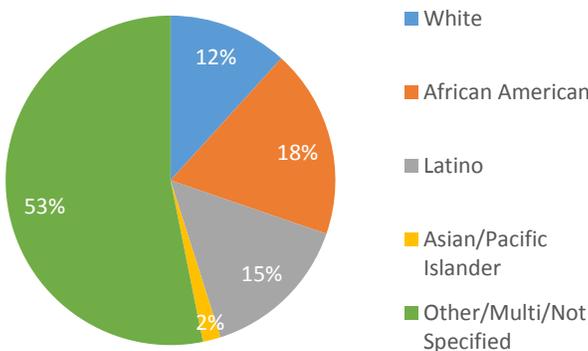
\*See Table 4.

**Figure 15. Female chlamydia cases by race/ethnicity, Long Beach, 2016**



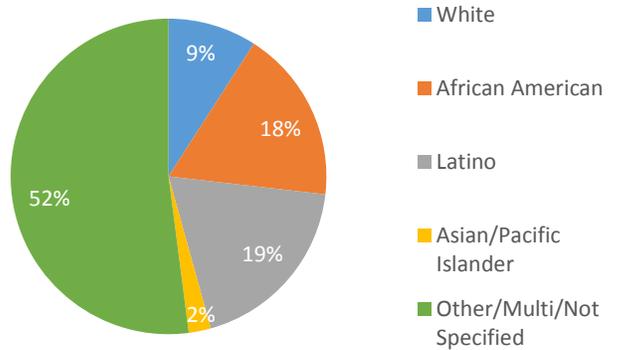
\*See Table 4.

**Figure 16. Male gonorrhea cases by race/ethnicity, Long Beach, 2016**



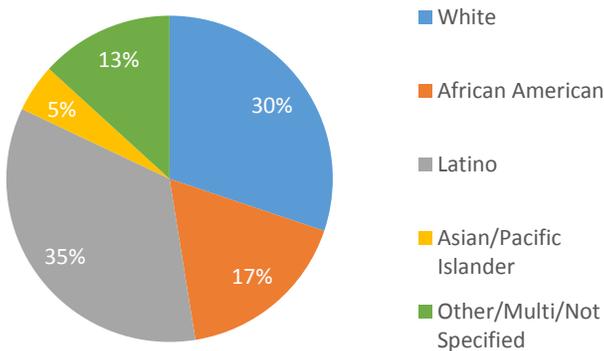
\*See Table 7.

**Figure 17. Female gonorrhea cases by race/ethnicity, Long Beach, 2016**



\*See Table 7.

**Figure 18. Male total early syphilis cases by race/ethnicity, Long Beach, 2016**



\*See Table 10.

\*Female total early syphilis cases were too small to report.



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# **HIV SURVEILLANCE**

Annual Report  
**2016**



## HIV FIGURES AND TABLES

HIV FIGURES AND TABLES .....	33
LIMITATIONS .....	35
HIV HIGHLIGHTS .....	36
OVERVIEW OF HIV IN LONG BEACH .....	37
Table 12. Characteristics of persons living with HIV and persons newly diagnosed with HIV in Long Beach <sup>1</sup> , California <sup>2</sup> , and the United States <sup>3</sup> , 2015 .....	37
Figure 19. New HIV diagnoses <sup>1</sup> , deaths, and prevalence, Long Beach <sup>2</sup> , 2012-2016.....	38
Table 13. Number of persons newly diagnosed <sup>1</sup> with HIV infection by year, Long Beach <sup>2</sup> , 2012-2016.....	39
Figure 20. Persons newly diagnosed with HIV infection by demographic and transmission category, Long Beach, 2016 .....	40
Table 14. Number and rate per 100,000 <sup>1</sup> population of new HIV infections by year, Long Beach <sup>2</sup> , 2012-2016.....	41
Figure 21. Incidence rates per 100,000 population of new HIV infections, Long Beach, Los Angeles, and California <sup>1</sup> . 2011-2015 .....	41
Table 15. Number of persons living with HIV <sup>1</sup> by year, Long Beach <sup>2</sup> , 2012-2016 .....	42
Figure 22. Persons living with HIV by demographic and transmission category, Long Beach, 2016.....	43
Table 16. Characteristics of persons living with HIV by race/ethnicity, Long Beach <sup>1</sup> , 2016.....	44
Figure 23. Persons living with HIV in Long Beach, cases by zip code, 2016.....	45
TRENDS IN HIV DIAGNOSES .....	46
Figure 24. Number of persons newly diagnosed <sup>1</sup> with HIV infection by race/ethnicity <sup>2</sup> , Long Beach <sup>3</sup> , 2012-2016 .....	46
Figure 25. Number of men <sup>1</sup> newly diagnosed <sup>2</sup> with HIV infection by transmission category <sup>3</sup> , Long Beach <sup>3</sup> , 2012-2016	46
Figure 26. Incidence rates per 100,000 population of men newly diagnosed <sup>1</sup> with HIV by race/ethnicity <sup>2</sup> , Long Beach <sup>3</sup> , 2012-2016 .....	47
Figure 27. Incidence rates per 100,000 population of women newly diagnosed <sup>1</sup> with HIV by race/ethnicity <sup>2</sup> , Long Beach <sup>3</sup> , 2012-2016 .....	47
Table 17. Number of persons newly diagnosed with HIV by gender and age group, Long Beach <sup>1</sup> , 2012-2016.....	48
Figure 28. Type of facility at HIV diagnosis, Long Beach <sup>1</sup> , 2016.....	49
TRENDS IN HIV MORTALITY.....	50
Table 18. Deaths among persons living with HIV by year, Long Beach <sup>1</sup> , 2012-2016.....	50



Figure 29. Mortality rates<sup>1</sup> per 100,000 population among men living with HIV by race/ethnicity<sup>2</sup>, LongBeach<sup>3</sup>, 2012-2016 ..... 51

Figure 30. Mortality rates<sup>1</sup> per 100,000 population among women living with HIV infection by race/ethnicity<sup>2</sup>, Long Beach<sup>3</sup>, 2012-2016 ..... 51

HEALTH INSURANCE STATUS AT TIME OF HIV DIAGNOSIS ..... 52

Figure 31. Health insurance status<sup>1</sup> at time of HIV diagnosis by race/ethnicity<sup>2</sup>, Long Beach<sup>3</sup>, 2012-2016 ..... 52

Figure 32. Health insurance status at time of HIV diagnosis by gender<sup>1</sup>, Long Beach<sup>2</sup>, 2016 ..... 53

HIV AMONG MEN WHO HAVE SEX WITH MEN ..... 54

Figure 33. Number of MSM newly diagnosed with HIV infection by race/ethnicity<sup>1</sup>, Long Beach<sup>2</sup>, 2012-2016 ..... 54

Figure 34. Total early syphilis<sup>1</sup> among MSM by HIV serostatus, Long Beach<sup>2</sup>, 2014-2016 ..... 54

HIV CARE CONTINUUM ..... 55

Figure 35. HIV care continuum for persons newly diagnosed with HIV, Long Beach<sup>1</sup>, 2015 ..... 55

Figure 36. HIV care continuum for persons newly diagnosed with HIV by race/ethnicity<sup>1</sup>, Long Beach<sup>2</sup>, 2015 ..... 55

Figure 37. HIV care continuum for persons living with HIV, Long Beach<sup>1</sup>, 2015 ..... 56

Figure 38. HIV care continuum for persons living with HIV by race/ethnicity, Long Beach<sup>1</sup>, 2015 ..... 56

HIV TECHNICAL NOTES ..... 57



## LIMITATIONS

**Health Insurance Data:** There was a large amount of missing insurance data in our data set, potentially skewing percentages in Figures 19 and 20.

**HIV Data:** The electronic HIV/STD surveillance database utilized by the City of Long Beach is different from the databases used by Los Angeles County and the State of California. Some variation in data is to be expected.

The latest available HIV data for Los Angeles County, the State of California, and the United States is for 2015.

**Late Reporting:** Due to reporting delays, the City of Long Beach’s 2016 HIV case counts may be underestimated.

**Suppression of Small Numbers:** The Long Beach HIV/STD Surveillance program must balance providing data to the public, stakeholders, and policymakers while simultaneously protecting client confidentiality. Thus, when dealing with data concerning small and/or sensitive populations (e.g., number of female Native American chlamydia cases) in our report, cells containing 0–4 cases were suppressed in order to eliminate the possibility of identification. It is important to note that this data is still valuable and is used internally to evaluate STDs/HIV in Long Beach and make programmatic recommendations.

**Unstable Rates:** The National Center for Health Statistics considers rates based on 20 or fewer observations unstable. The Center for Health Statistics utilizes relative standard error (RSE):

$$RSE(X) = \sqrt{A + \frac{B}{X}}$$

Any RSE less than 30% does not meet the requirement for a minimum degree of accuracy.

The City of Long Beach acknowledges that data presented in this report may not meet the National Center for Health Statistics guidelines on stable rates. However, the City must utilize the available data for programmatic evaluation and recommendations. In the context of this report, unstable rates are displayed for reporting purposes only.

**Year Totals:** While case counts are continuously updated from previous years by the California Department of Public Health, Office of AIDS, year totals in this report are not updated. This report captures data as of the December 31<sup>st</sup> state deadline for reporting HIV cases and updates of the previous year.



## HIV HIGHLIGHTS

- As of December 31, 2016, there were 4,837 Long Beach residents diagnosed and living with HIV ([Figure 19](#)). The number of new HIV diagnoses declined overall from 200 individuals in 2012 to 131 individuals in 2016 ([Figure 18](#)). There was a total of 55 recorded deaths in 2016. In 2016, 82% of persons newly diagnosed with HIV were male; 36% were Latino; 31% were between the age range of 30-39; 65% of persons newly diagnosed reported their transmission risk as MSM (men who have sex with men); and 79% were diagnosed with only HIV, as opposed to HIV and later AIDS, or HIV and AIDS diagnosed simultaneously ([Table 13](#)).
- In 2015, Long Beach had a rate of 27 new HIV infections per 100,000 population. This rate is higher than the new infection rates of Los Angeles County (18 per 100,000) and the State of California (12 per 100,000) ([Figure 21](#)). In 2015, men in Long Beach had a new infection rate of 45 per 100,000, which is a little over 4 times higher than that of women (10 per 100,000) ([Table 14](#)). Although African Americans have the lowest number of individuals who were newly infected with HIV in 2016, African Americans have the highest rate (53 per 100,000) when compared to their White and Latino counterparts ([Table 14](#)).
- In 2016, Persons living with HIV were predominately White, aged 50-59 years and MSM ([Table 15](#)). In 2016, African American women represented only 14% of the total female population in Long Beach, but accounted for 39% of females living with HIV in the city ([Table 16](#)).
- In 2016, 17% of individuals were simultaneously diagnosed with HIV and AIDS at the time of diagnosis ([Table 13](#)). In 2016, 2,853 (59%) of persons living with HIV have been diagnosed with stage 3 HIV (AIDS) ([Table 15](#)).
- Between 2012 and 2016, 276 deaths occurred among Long Beach PLWH, however, deaths declined during this time. The largest decline in deaths by cases occurred among Latinos. In 2016, most deaths occurred among persons aged 60-69 years ([Table 18](#)). In 2016, African American men, and Asian/Pacific Islanders women, and African American women experienced the highest mortality rates ([Figures 29, 30](#)).
- African Americans were the only race/ethnicity who did not experience an increase in public funding for health insurance between 2012-2016 ([Figure 31](#)). In 2016, more males were insured by Private Insurance/HMO than females (32% for males and 11% for females) ([Figure 32](#)).
- Between 2014 and 2016, the number of total early syphilis cases increased by 162% among HIV+ MSM ([Figure 34](#)).
- In 2015, 69% of newly diagnosed HIV patients were retained in HIV care and 66% achieved viral suppression in the City of Long Beach ([Figure 35](#)). Whites newly diagnosed with HIV had the lowest percentages of HIV care retention and viral suppression in 2015 ([Figure 36](#)). For all persons living with HIV in Long Beach in 2015, 58% were retained in HIV care and 62% achieved viral suppression ([Figure 37](#)). These percentages were similar to those of California (57% achieved viral suppression and 54% were retained in care). In 2015, Native American/Alaska Native living with HIV had the lowest percentages of HIV care retention and viral suppression ([Figure 38](#)).
- Most persons living with HIV in Long Beach reside in the 90802 zip code ([Figure 22](#)).

## OVERVIEW OF HIV IN LONG BEACH

**Table 12. Characteristics of persons living with HIV and persons newly diagnosed with HIV in Long Beach<sup>1</sup>, California<sup>2</sup>, and the United States<sup>3</sup>, 2015**

	Living with HIV Cases		Newly Diagnosed HIV Cases		
	Long Beach	California	Long Beach	California	United States
<b>Gender</b> <sup>4,5</sup>					
Male	4,269	111,763	114	4,418	32,991
Female	516	15,069	20	522	7,402
<b>Race/Ethnicity</b>					
White	1,995	52,842	30	1,436	10,509
African American	959	22,595	35	883	17,670
Latino	1,517	44,480	59	2,167	9,290
Asian/Pacific Islander	197	5,235	7*	330	1,064
Native American/Alaska Native	13*	400	<5	17	209
Other/Unknown	104	2,863	<5	115	801
<b>Transmission Category</b>					
MSM	3,519	85,554	66	3,273	26,646
PWID	225	8,049	9*	193	2,460
MSM-PWID	330	9,128	<5	156	1,215
Heterosexual	311	18,770	<5	831	9,515
Other/Unidentified	392	6,914	48	487	641

<sup>1</sup> All HIV data taken from California Office of AIDS eHARS database.

<sup>2</sup> California data are reported through December 2016, for cases living as of December 31, 2015. California data taken from California Department of Public Health HIV Surveillance Report – 2015; [https://www.cdph.ca.gov/Programs/CID/DOA/Pages/OA\\_case\\_surveillance\\_reports.aspx](https://www.cdph.ca.gov/Programs/CID/DOA/Pages/OA_case_surveillance_reports.aspx). Published October 2017.

<sup>3</sup> U.S. data are reported through July 31, 2015 and reflect cases diagnosed through December 31, 2014. U.S. data reflect unadjusted numbers for 50 states and 6 dependent areas and may be found in the CDC HIV Surveillance Report, 2015; vol. 27 <https://www.cdc.gov/hiv/library/reports/hiv-surveillance.html>. Published November 2016.

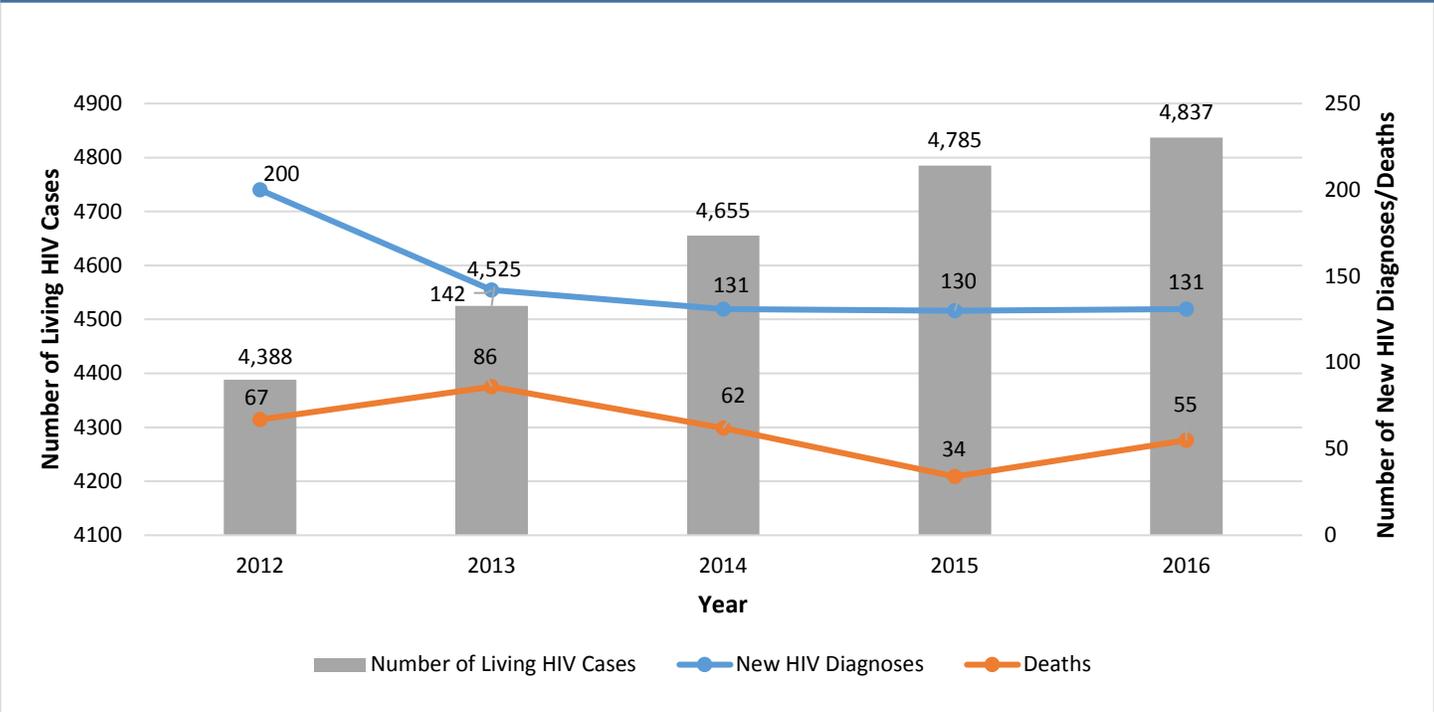
<sup>4</sup> Transgender data are not reported by the United States. See Technical Notes “Transgender Status.”

<sup>5</sup> U.S. gender data does not include children living with HIV; the CDC counts those number separately. Long Beach and California aggregate gender data with children, adolescents, and adults.

\*Any indicators with less than 20 cases do not meet the requirement for a minimum degree of accuracy outlined by the National Center of Health Statistics. Case counts/rates are included for reporting purposes only.



**Figure 19. New HIV diagnoses<sup>1</sup>, deaths, and prevalence, Long Beach<sup>2</sup>, 2012-2016**



<sup>1</sup> See Technical Notes "Date of Initial HIV Diagnosis."

<sup>2</sup> All HIV data taken from California Office of AIDS eHARS database.



**Table 13. Number of persons newly diagnosed<sup>1</sup> with HIV infection by year, Long Beach<sup>2</sup>, 2012-2016**

	Year									
	2012		2013		2014		2015		2016	
	Num.	%								
<b>Total</b>	<b>200</b>		<b>142</b>		<b>131</b>		<b>130</b>		<b>131</b>	
<b>Gender<sup>2</sup></b>										
Male	180	90%	125	88%	109	83%	111	85%	107	82%
Female	20	10%	17*	12%	22	17%	19*	15%	24	18%
<b>Race/Ethnicity</b>										
White	58	29%	42	30%	40	31%	28	22%	41	31%
African American	48	24%	29	20%	30	23%	38	29%	33	25%
Latino	82	41%	57	40%	54	41%	54	42%	47	36%
Asian/Pacific Islander	5*	3%	8*	6%	5*	4%	7*	5%	<5	-
Native American/Alaska Native	<5	-	<5	-	<5	-	<5	-	<5	-
Other/Unknown	7*	4%	<5	-	<5	-	<5	-	<5	-
<b>Age at HIV Diagnosis (years)</b>										
0-12	<5	-	<5	-	<5	-	<5	-	<5	-
13 - 17	<5	-	<5	-	<5	-	<5	-	<5	-
18 - 24	30	15%	19*	13%	15*	11%	29	22%	20	15%
25 - 29	39	20%	17*	12%	14*	11%	24	18%	23	18%
30 - 39	61	31%	39	27%	52	40%	37	28%	41	31%
40 - 49	39	20%	43	30%	23	18%	24	18%	30	23%
50+	31	16%	21	15%	26	20%	16*	12%	17*	13%
<b>Transmission Category</b>										
MSM	140	70%	95	67%	73	56%	66	51%	85	65%
PWID	<5	-	5*	4%	<5	-	9*	7%	7*	5%
MSM-PWID	5*	3%	<5	-	<5	-	<5	-	<5	-
Heterosexual	5*	3%	<5	-	<5	-	<5	-	<5	-
Other/Unidentified	48	24%	39	27%	54	41%	48	37%	35	27%
<b>HIV Disease Stage</b>										
HIV only	146	73%	94	66%	100	76%	109	84%	104	79%
HIV and later AIDS	23	12%	12*	8%	11*	8%	6*	5%	5*	4%
HIV and AIDS diagnosed simultaneously	31	16%	36	25%	20	15%	15*	12%	22	17%

<sup>1</sup>Data include persons newly diagnosed with HIV infection in any stage and reported as of December 31, 2016.

<sup>2</sup>All HIV data taken from California Office of AIDS eHARS database.

<sup>3</sup> Transgender cases are not reported separately in our data due to the small population size. See Technical Notes "Transgender Status."

<sup>4</sup>For how the HIV Disease Stage is determined, see Technical Notes "Stage of Disease at Diagnosis of HIV Infection."

\*Percentages may not add to 100% due to rounding and not displaying data when less than 5 cases.

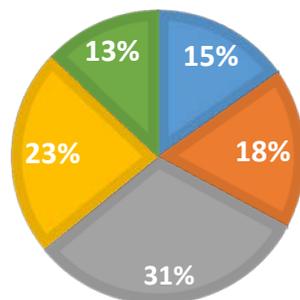
\*Any indicators with less than 20 cases do not meet the requirement for a minimum degree of accuracy outlined by the National Center for Health Statistics. Case counts/rates are included for reporting purposes only.



**Figure 20. Persons newly diagnosed with HIV infection by demographic and transmission category, Long Beach, 2016**

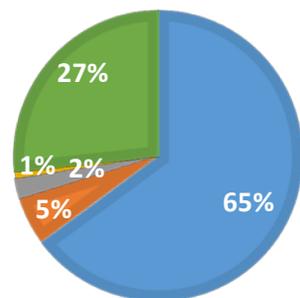
**Persons newly diagnosed with HIV by age**

■ 18-24 ■ 25-29 ■ 30-39 ■ 40-49 ■ 50+



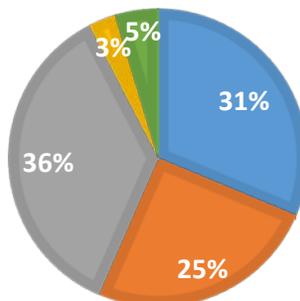
**Persons newly diagnosed with HIV by transmission category**

■ MSM ■ PWID ■ MSM-PWID ■ Heterosexual ■ Other/Unidentified



**Persons newly diagnosed with HIV by race/ethnicity**

■ White ■ African American ■ Latino ■ Asian/Pacific Islander ■ Other/Unknown



\*See Table 13. The "Other" race/ethnicity category includes Native American/Alaska Native and Other/Unknown.



**Table 14. Number and rate per 100,000<sup>1</sup> population of new HIV infections by year, Long Beach<sup>2</sup>, 2012-2016**

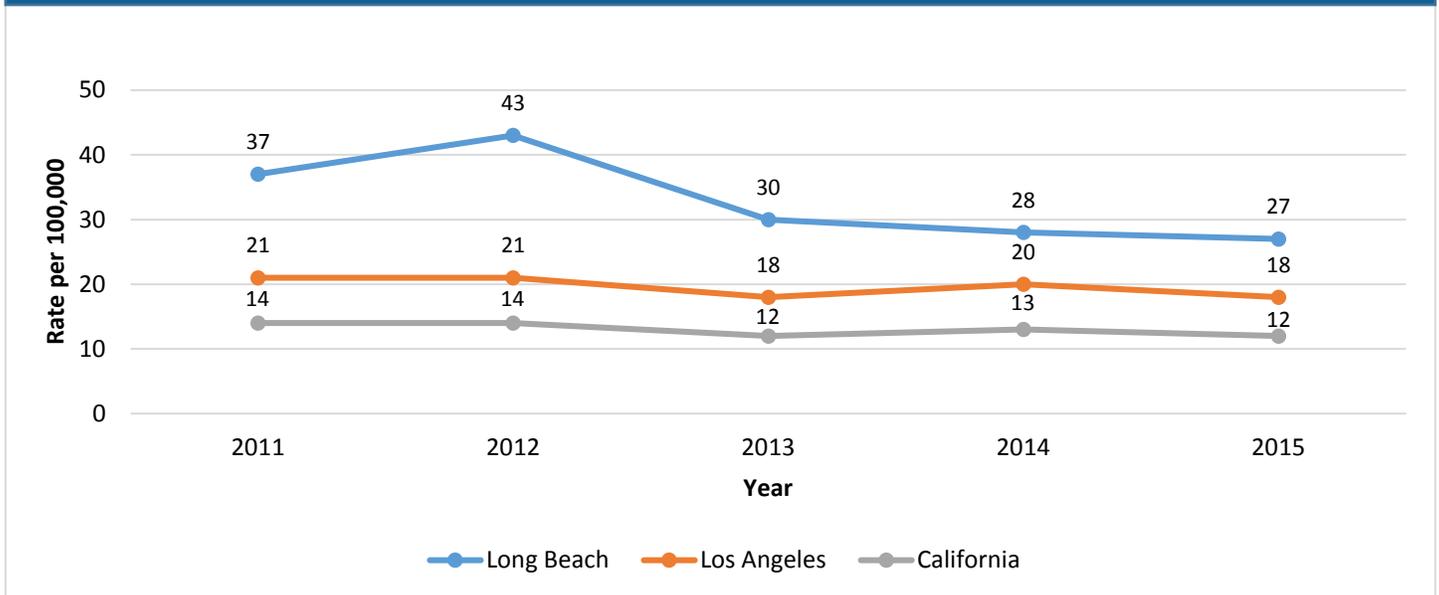
	2012		2013		2014		2015		2016	
	Number	Rate								
<b>Total</b>	<b>200</b>	<b>43</b>	<b>142</b>	<b>30</b>	<b>131</b>	<b>28</b>	<b>130</b>	<b>27</b>	<b>131</b>	<b>27</b>
<b>Sex at Birth</b>										
Male	180	78	125	54	109	47	111	48	107	45
Female	20	8	17*	7	22	9	19*	8	24	10
<b>Race/Ethnicity</b>										
White	58	42	42	30	40	29	28	20	41	29
African American	48	79	29	47	30	49	38	62	33	53
Latino	82	43	57	30	54	28	54	28	47	24

<sup>1</sup>Population data taken from California Department of Finance Demographic Research Unit Report P-3 State and County total population projections by race/ethnicity and detailed age; [www.dof.ca.gov/Forecasting/Demographics/projections/](http://www.dof.ca.gov/Forecasting/Demographics/projections/).

<sup>2</sup>All HIV data taken from California Office of AIDS eHARS database.

\*Any indicators with less than 20 cases do not meet the requirement for a minimum degree of accuracy outlined by the National Center for Health Statistics. Case counts/rates are included for reporting purposes only.

**Figure 21. Incidence rates per 100,000 population of new HIV infections, Long Beach, Los Angeles, and California<sup>1</sup>. 2011-2015**



<sup>1</sup>Population data taken from California Department of Finance Demographic Research Unit Report P-3 State and County total population projections by race/ethnicity and detailed age; [www.dof.ca.gov/Forecasting/Demographics/projections/](http://www.dof.ca.gov/Forecasting/Demographics/projections/).

<sup>2</sup>Long Beach HIV data taken from California Office of AIDS eHARS database.

<sup>3</sup>The latest available HIV data for Los Angeles County and California is for 2015. Therefore, 2011-20015 data was used for the figure to create a 5-year comparison.



**Table 15. Number of persons living with HIV<sup>1</sup> by year, Long Beach<sup>2</sup>, 2012-2016**

	2012		2013		2014		2015		2016	
	Num.	%								
<b>Total</b>	<b>4,388</b>		<b>4,525</b>		<b>4,655</b>		<b>4,785</b>		<b>4,836</b>	
<b>Gender<sup>3</sup></b>										
Male	3,927	89%	4,049	89%	4,158	89%	4,269	89%	4,321	89%
Female	461	11%	476	11%	497	11%	516	11%	515	11%
<b>Race/Ethnicity</b>										
White	1,887	43%	1,927	43%	1,967	42%	1,995	42%	1,981	41%
African American	863	20%	891	20%	921	20%	959	20%	938	19%
Latino	1,353	31%	1,409	31%	1,463	31%	1,517	32%	1,579	33%
Asian/Pacific Islander	179	4%	186	4%	190	4%	197	4%	200	4%
Native American/ Alaska Native	10	0%	13	0%	13	0%	13	0%	10	0%
Other/Unknown	96	2%	99	2%	101	2%	104	2%	128	3%
<b>Age in Years</b>										
0 - 12	<5	-	<5	-	<5	-	<5	-	<5	-
13 - 17	<5	-	<5	-	<5	-	<5	-	<5	-
18 - 24	26	1%	35	1%	43	1%	71	1%	79	2%
25 - 29	122	3%	138	3%	151	3%	173	4%	174	4%
30 - 39	614	14%	655	14%	708	15%	743	16%	739	15%
40 - 49	1,228	28%	1,268	28%	1,297	28%	1,323	28%	1,246	26%
50 - 59	1,628	37%	1,646	36%	1,667	36%	1,679	35%	1,719	36%
60 - 69	631	14%	642	14%	647	14%	652	14%	706	15%
70+	137	3%	137	3%	138	3%	140	3%	168	3%
<b>Transmission Category</b>										
MSM	3,287	75%	3,380	75%	3,453	74%	3,519	74%	3,581	74%
PWID	210	5%	213	5%	216	5%	225	5%	226	5%
MSM-PWID	324	7%	326	7%	326	7%	330	7%	332	7%
Heterosexual	306	7%	307	7%	308	7%	311	6%	364	8%
Transfusion/ Hemophilia	8	0%	8	0%	8	0%	8	0%	12	0%
Other/Unidentified	253	6%	291	6%	344	7%	392	8%	321	7%
<b>HIV Disease Stage<sup>4</sup></b>										
HIV only	1,408	32%	1,501	33%	1,600	34%	1,709	36%	1777	37%
HIV and later AIDS	1,954	45%	1,966	43%	1,977	42%	1,983	41%	1966	41%
HIV and AIDS diagnosed simultaneously	814	19%	846	19%	866	19%	881	18%	887	18%
Unknown	212	5%	212	5%	212	5%	212	4%	206	4%

<sup>1</sup> Persons living with HIV at the end of each year. Data include persons living with HIV infection in any stage and reported as of December 31, 2016.

<sup>2</sup> All HIV data taken from California Office of AIDS eHARS database.

<sup>3</sup> Transgender cases are not reported separately in our data due to the small population size. See Technical Notes "Transgender Status."

<sup>4</sup> For how the HIV Disease Stage is determined, see Technical Notes "Stage of Disease at Diagnosis of HIV Infection."

\*Percentages may not add to 100% due to rounding and not displaying data when less than 5 cases.

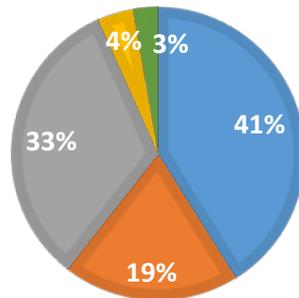
\*Any indicators with less than 20 cases do not meet the requirement for a minimum degree of accuracy outlined by the National Center for Health Statistics. Case counts/rates are included for reporting purposes only.



**Figure 22. Persons living with HIV by demographic and transmission category, Long Beach, 2016**

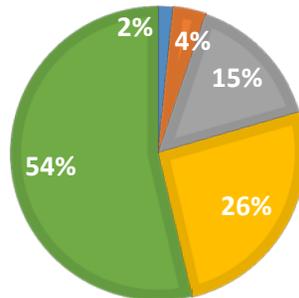
**Persons living with HIV by race/ethnicity**

■ White    ■ African American    ■ Latino    ■ Asian/Pacific Islander    ■ Other/Unknown



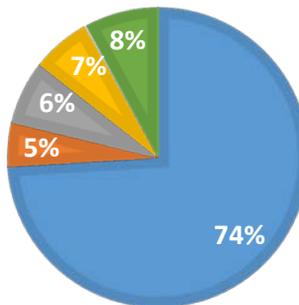
**Persons living with HIV by age**

■ 18-24    ■ 25-29    ■ 30-39    ■ 40-49    ■ 50+



**Persons living with HIV by transmission category**

■ MSM    ■ PWID    ■ MSM-PWID    ■ Heterosexual    ■ Other/Unidentified



\*See Table 15. The "Other" race/ethnicity category includes Native American/Alaska Native and Other/Unknown.



**Table 16. Characteristics of persons living with HIV by race/ethnicity, Long Beach<sup>1</sup>, 2016**

	Race/Ethnicity										Total Number
	White		African American		Latino		Asian/Pacific Islander		Other/Unknown		
	Num.	%	Num.	%	Num.	%	Num.	%	Num.	%	
<b>Total</b>	<b>1,981</b>		<b>938</b>		<b>1,579</b>		<b>199</b>		<b>139</b>		<b>4,836</b>
<b>Male</b>											
<b>Transmission Category</b>											
MSM	1,617	86%	530	72%	1,185	84%	154	87%	95	77%	3,581
PWID	51	3%	35	5%	31	2%	<5	-	<5	-	124
MSM-PWID	150	8%	78	11%	81	6%	<5	-	19*	15%	332
Heterosexual	16*	1%	33	4%	26	2%	7*	4%	<5	-	84
Transfusion/Hemophilia	<5	-	<5	-	<5	-	<5	-	<5	-	<5
Other/Unidentified	46	2%	61	8%	80	6%	10	6%	<5	-	200
<b>Age in Years</b>											
0 - 12	<5	-	<5	-	<5	-	<5	-	<5	-	<5
13 - 17	<5	-	<5	-	<5	-	<5	-	<5	-	3*
18 - 24	11*	1%	25	3%	26	2%	<5	-	<5	-	67
25 - 29	26	1%	52	7%	63	4%	7*	4%	14*	11%	162
30 - 39	146	8%	134	18%	323	23%	39	22%	14*	11%	656
40 - 49	378	20%	163	22%	446	32%	65	37%	26	21%	1,078
50 - 59	845	45%	250	34%	375	27%	47	27%	46	37%	1,563
60 - 69	373	20%	98	13%	147	10%	12*	7%	20	16%	650
70+	99	5%	15*	2%	23	2%	<5	-	<5	-	142
<b>Male Subtotal</b>	<b>1,880</b>	<b>44%</b>	<b>737</b>	<b>17%</b>	<b>1,403</b>	<b>32%</b>	<b>177</b>	<b>4%</b>	<b>124</b>	<b>3%</b>	<b>4,321</b>
<b>Female</b>											
<b>Transmission Category</b>											
PWID	31	31%	35	17%	28	16%	<5	-	5*	33%	102
Heterosexual	43	43%	114	57%	104	59%	15*	68%	7*	47%	283
Transfusion/Hemophilia	<5	-	<5	-	<5	-	<5	-	<5	-	<5
Other/Unidentified	27	27%	49	24%	43	24%	<5	-	<5	-	126
<b>Age in Years</b>											
0 - 12	<5	-	<5	-	<5	-	<5	-	<5	-	<5
13 - 17	<5	-	<5	-	<5	-	<5	-	<5	-	<5
18 - 24	<5	-	<5	1%	7*	4%	<5	-	<5	-	12*
25 - 29	<5	-	7*	3%	<5	-	<5	-	<5	-	12*
30 - 39	9*	9%	27	13%	38	22%	6*	27%	<5	-	83
40 - 49	38	38%	66	33%	55	31%	7*	32%	<5	-	168
50 - 59	32	32%	68	34%	47	27%	5*	23%	<5	-	156
60 - 69	9*	9%	27	13%	15*	9%	<5	-	<5	-	56
70+	8*	8%	<5	-	12*	7%	<5	-	<5	-	26
<b>Female Subtotal</b>	<b>101</b>	<b>20%</b>	<b>201</b>	<b>39%</b>	<b>176</b>	<b>34%</b>	<b>22</b>	<b>4%</b>	<b>15</b>	-	<b>515</b>

<sup>1</sup> All HIV data taken from California Office of AIDS eHARS database.

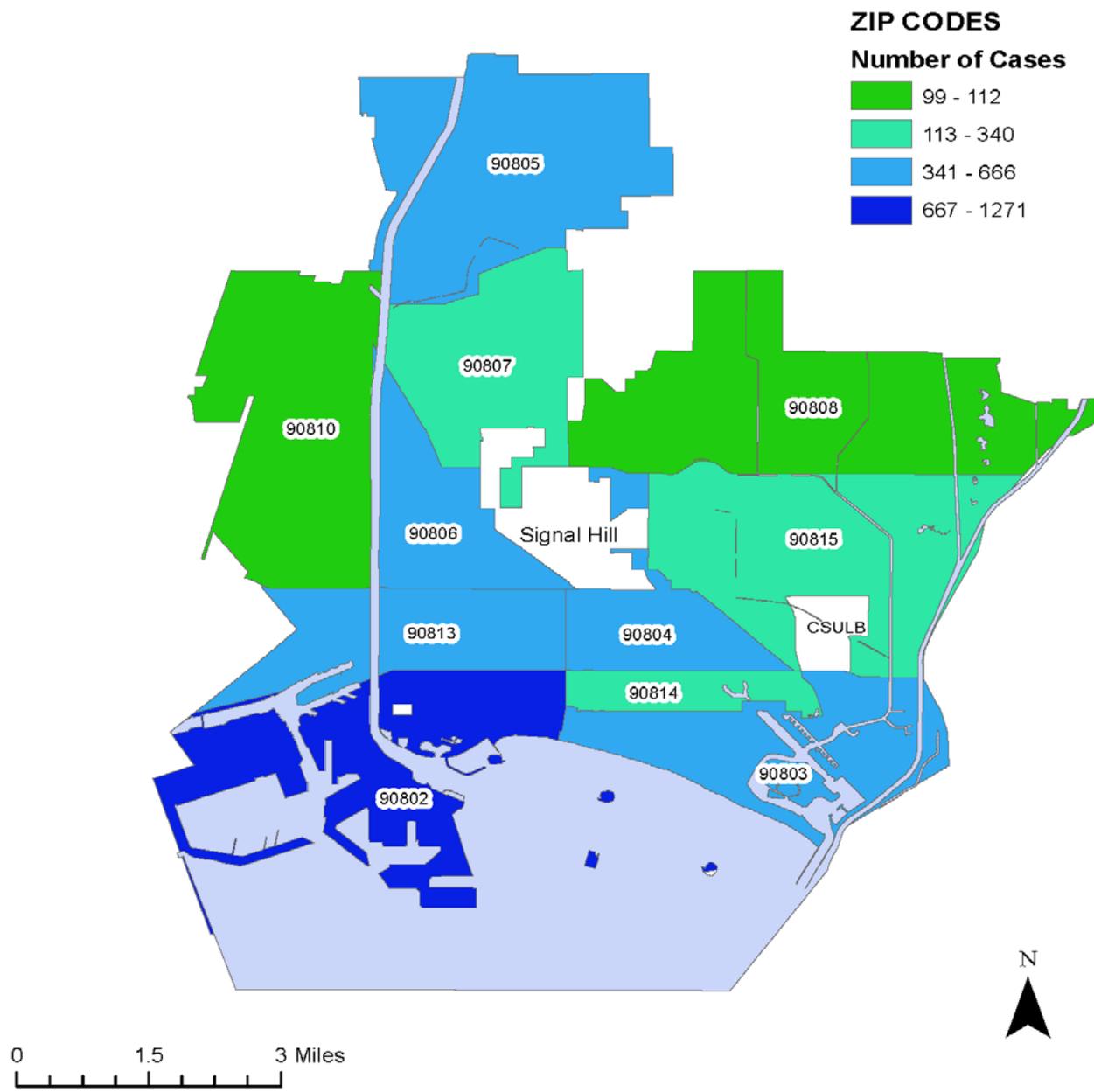
<sup>2</sup> Numbers for persons who identify as Native American/Alaska Native were included in this category due to the small number of cases. This number also includes persons with multiple race or whose racial/ethnic information is not available.

\* Percentages may not add to 100% due to rounding and not displaying data when less than 5 cases.

\*Any indicators with less than 20 cases do not meet the requirement for a minimum degree of accuracy outlined by the National Center for Health Statistics. Case counts/rates are included for reporting purposes only.



**Figure 23. Persons living with HIV in Long Beach, cases by zip code, 2016**

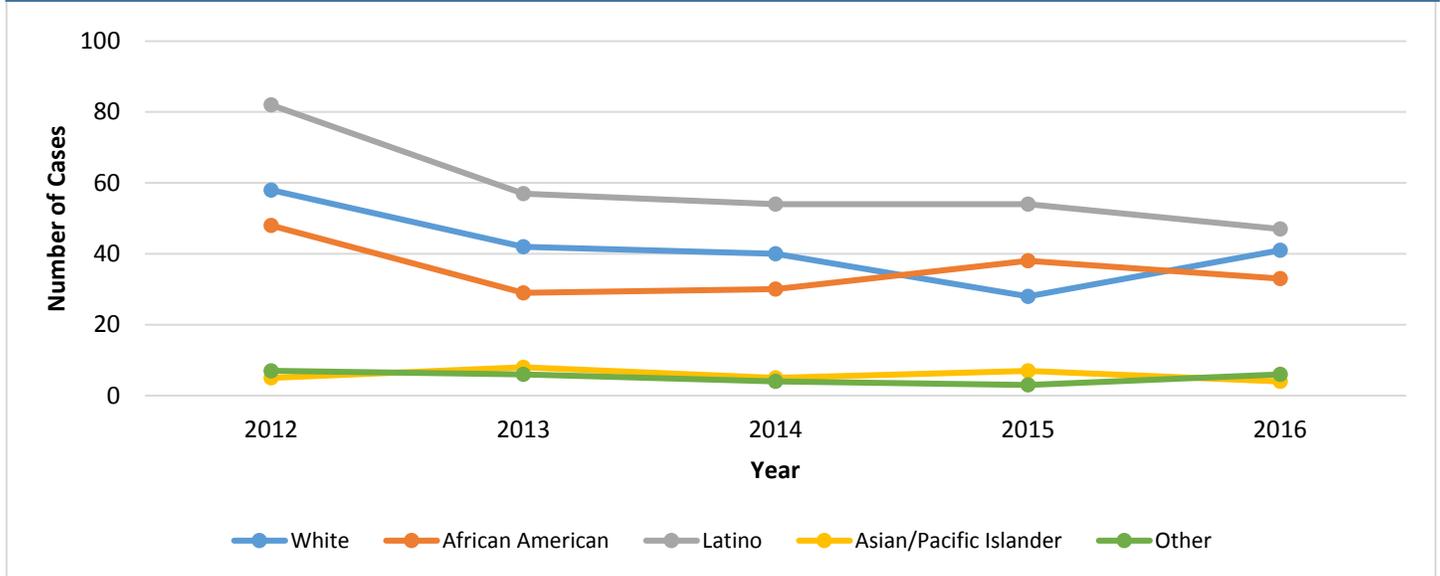


\*Map does not include people experiencing homelessness or individuals who did not provide a zip code.  
Source: California Department of Public Health, STD Control Branch



## TRENDS IN HIV DIAGNOSES

**Figure 24. Number of persons newly diagnosed<sup>1</sup> with HIV infection by race/ethnicity<sup>2</sup>, Long Beach<sup>3</sup>, 2012-2016**

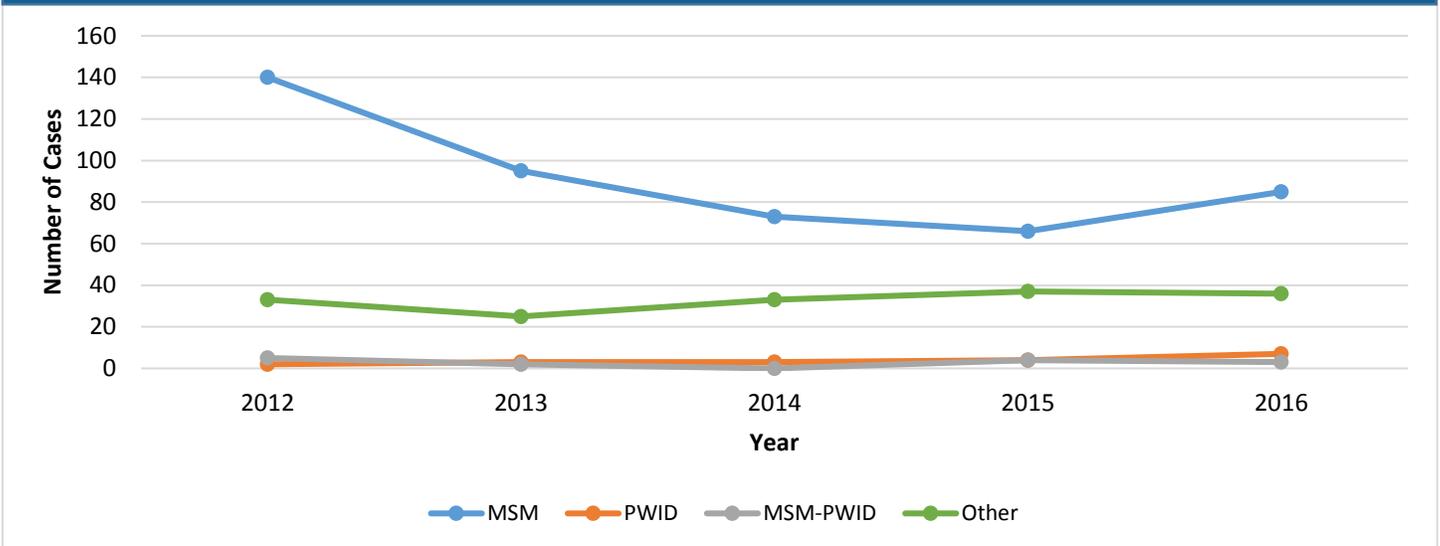


<sup>1</sup> See Technical Notes "Date of Initial Diagnosis."

<sup>2</sup> Cases in the "Other" racial/ethnic category include Native American/Alaska Native, Multi-race, and unknown.

<sup>3</sup> All HIV data taken from California Office of AIDS eHARS database.

**Figure 25. Number of men<sup>1</sup> newly diagnosed<sup>2</sup> with HIV infection by transmission category<sup>3</sup>, Long Beach<sup>3</sup>, 2012-2016**



<sup>1</sup> Data for newly diagnosed women by transmission category was too small to report.

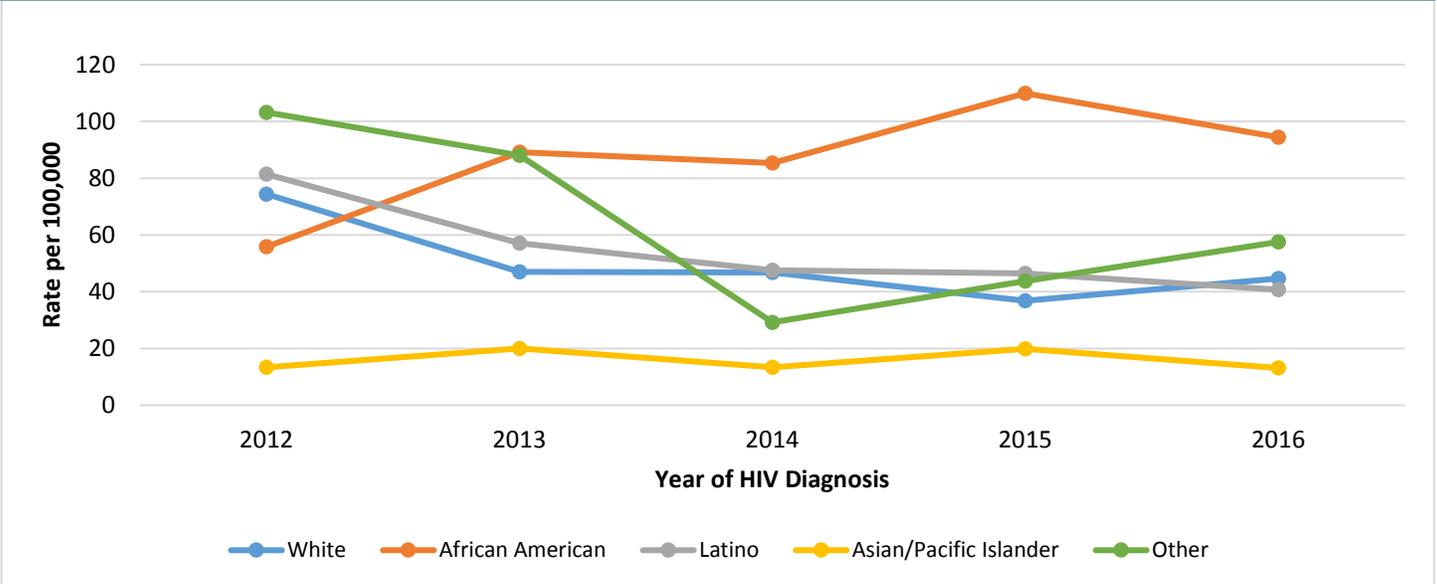
<sup>2</sup> See Technical Notes "Date of Initial Diagnosis."

<sup>3</sup> The "Other" transmission category includes adult heterosexual contact and undetermined transmission method.

<sup>4</sup> All HIV data taken from California Office of AIDS eHARS database.



**Figure 26. Incidence rates per 100,000 population of men newly diagnosed<sup>1</sup> with HIV by race/ethnicity<sup>2</sup>, Long Beach<sup>3</sup>, 2012-2016**

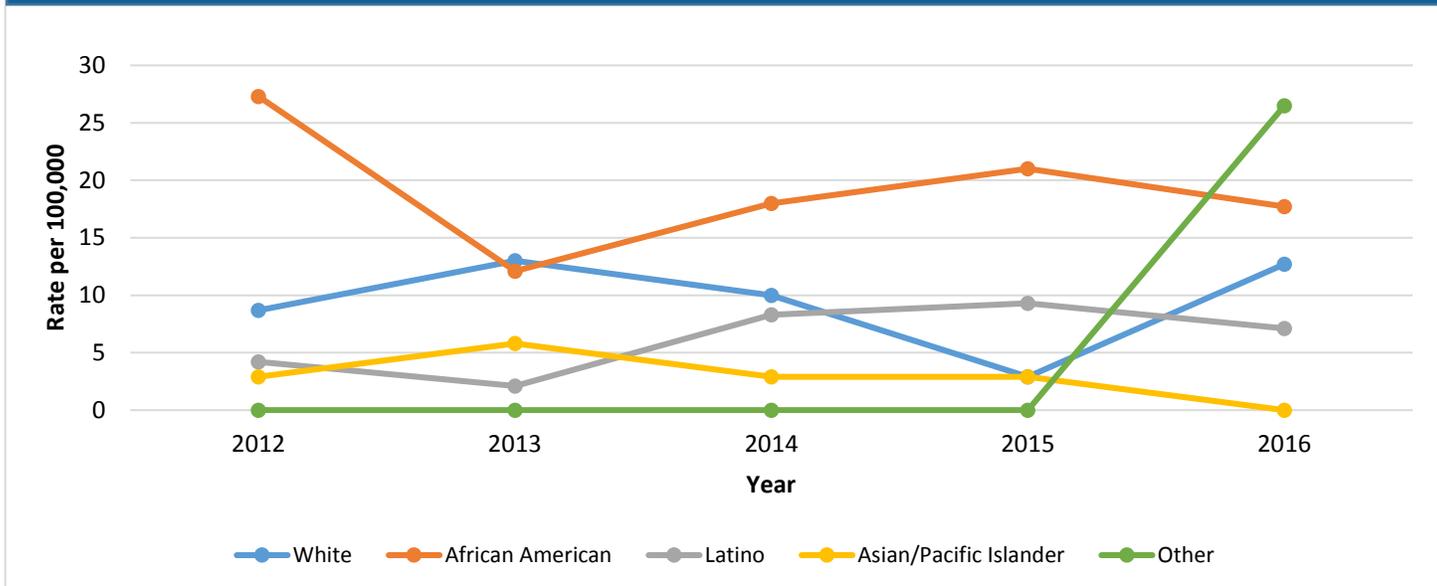


<sup>1</sup> See Technical Notes "Date of Initial Diagnosis."

<sup>2</sup> Cases in the "Other" racial/ethnic category include Native American/Alaska Native, Multi-race, and unknown.

<sup>3</sup> All HIV data taken from California Office of AIDS eHARS database.

**Figure 27. Incidence rates per 100,000 population of women newly diagnosed<sup>1</sup> with HIV by race/ethnicity<sup>2</sup>, Long Beach<sup>3</sup>, 2012-2016**



<sup>1</sup> See Technical Notes "Date of Initial Diagnosis."

<sup>2</sup> Cases in the "Other" racial/ethnic category include Native American/Alaska Native, Multi-race, and unknown.

<sup>3</sup> All HIV data taken from California Office of AIDS eHARS database.



**Table 17. Number of persons newly diagnosed with HIV by gender and age group, Long Beach<sup>1</sup>, 2012-2016**

	2012		2013		Year 2014		2015		2016	
	Num.	%	Num.	%	Num.	%	Num.	%	Num.	%
<b>Male (Years)</b>										
0 - 12	<5	-	<5	-	<5	-	<5	-	<5	-
13 - 17	<5	-	<5	-	<5	-	<5	-	<5	-
18 - 24	9*	5%	7*	6%	7*	6%	25	23%	15*	14%
25- 29	27	15%	15*	12%	12*	11%	19*	17%	17*	15%
30 - 39	65	36%	38	30%	47	43%	29	26%	39	35%
40 - 49	43	24%	34	27%	23	21%	22	20%	24	22%
50 - 59	22	12%	17*	14%	17*	16%	11*	10%	8*	7%
60 - 69	10*	5%	11*	9%	<5	-	<5	-	<5	-
70+	<5	-	<5	-	<5	-	<5	-	<5	-
No age given	6*	3%	<5	-	<5	-	<5	-	<5	-
<b>Male Subtotal</b>	<b>182</b>		<b>125</b>		<b>109</b>		<b>111</b>		<b>111</b>	
<b>Female (Years)</b>										
0 - 12	<5	-	<5	-	<5	-	<5	-	<5	-
13 - 17	<5	-	<5	-	<5	-	<5	-	<5	-
18 - 24	<5	-	<5	-	<5	-	<5	-	<5	-
25- 29	<5	-	<5	-	<5	-	<5	-	<5	-
30 - 39	5*	25%	<5	-	6*	27%	6*	32%	<5	-
40 - 49	5*	25%	6*	35%	6*	27%	<5	-	9*	38%
50 - 59	6*	30%	<5	-	<5	-	<5	-	6*	25%
60 - 69	<5	-	<5	-	<5	-	<5	-	<5	-
70+	<5	-	<5	-	<5	-	<5	-	<5	-
No age given	<5	-	<5	-	<5	-	<5	-	<5	-
<b>Female Subtotal</b>	<b>20</b>		<b>17*</b>		<b>22</b>		<b>19*</b>		<b>24</b>	

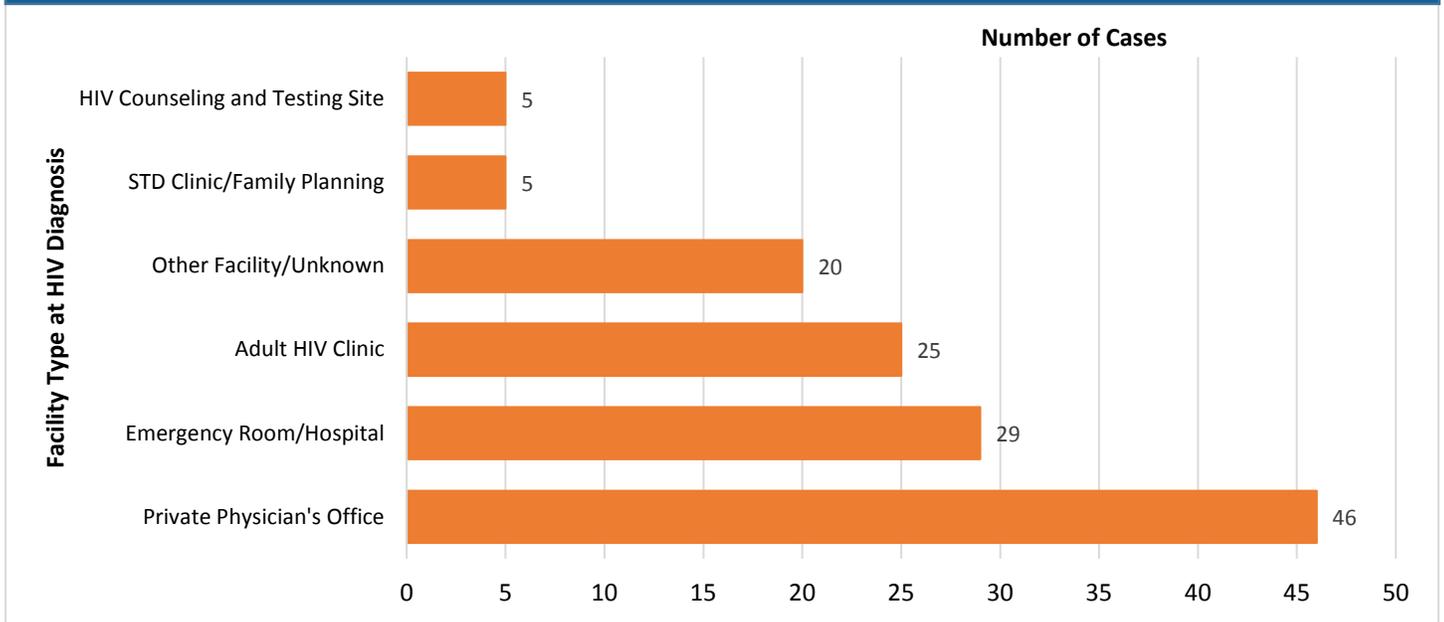
<sup>1</sup> All HIV data taken from California Office of AIDS eHARS database.

\* Percentages may not add to 100% due to rounding.

\*Any indicators with less than 20 cases do not meet the requirement for a minimum degree of accuracy outlined by the National Center for Health Statistics. Case counts/rates are included for reporting purposes only.



**Figure 28. Type of facility at HIV diagnosis, Long Beach<sup>1</sup>, 2016**



<sup>1</sup> All HIV data taken from California Office of AIDS eHARS database.



## TRENDS IN HIV MORTALITY

**Table 18. Deaths among persons living with HIV by year, Long Beach<sup>1</sup>, 2012-2016**

	Year										Total 2012-2016
	2012		2013		2014		2015 <sup>2</sup>		2016 <sup>2</sup>		
	Num.	%	Num.	%	Num.	%	Num.	%	Num.	%	
<b>Gender</b>											
Male	61	90%	73	85%	56	88%	30	88%	21	88%	<b>241</b>
Female	7*	10%	13*	15%	8*	13%	<5	-	<5	-	<b>35</b>
<b>Race/Ethnicity</b>											
White	42	62%	42	49%	40	63%	12*	35%	13	54%	<b>149</b>
African American	7*	10%	21	24%	13*	20%	9*	26%	8	23%	<b>58</b>
Latino	19*	28%	18*	21%	9*	14%	12*	35%	<5	-	<b>60</b>
Asian/Pacific Islander	<5	-	<5	-	<5	-	<5	-	<5	-	<b>&lt;5</b>
Native American	<5	-	<5	-	<5	-	<5	-	<5	-	<b>&lt;5</b>
Other/Unknown	<5	-	<5	-	<5	-	<5	-	<5	-	<b>&lt;5</b>
<b>Transmission Category<sup>3</sup></b>											
MSM	42	62%	49	57%	40	63%	18*	53%	18	75%	<b>167</b>
PWID	7*	10%	13*	15%	6*	9%	6*	18%	<5	-	<b>33</b>
MSM-PWID	10*	15%	12*	14%	9*	14%	8*	24%	<5	-	<b>40</b>
Heterosexual	6*	9%	<5	-	6*	9%	<5	-	<5	-	<b>20</b>
Other/ Unidentified	<5	-	9*	10%	<5	-	<5	-	<5	-	<b>16*</b>
<b>Age at Death (Years)</b>											
0 - 29	<5	-	<5	-	<5	-	<5	-	<5	-	<b>5*</b>
30 - 39	5*	7%	12*	14%	<5	-	<5	-	<5	-	<b>25</b>
40 - 49	23	34%	28	33%	14*	22%	6*	18%	7	29%	<b>78</b>
50 - 59	29	43%	30	35%	27	42%	17*	50%	6	25%	<b>109</b>
60 - 69	8*	12%	12*	14%	12*	19%	6*	18%	9	38%	<b>47</b>
70+	<5	-	<5	-	5*	8%	<5	-	<5	-	<b>12*</b>
<b>HIV Disease Stage<sup>4</sup></b>											
HIV only	7*	10%	12*	14%	<5	-	<5	-	<5	-	<b>28</b>
HIV and later AIDS	53	78%	50	58%	45	70%	22	65%	15	67%	<b>185</b>
HIV and AIDS diagnosed simultaneously	8*	12%	24	28%	15*	23%	9*	26%	5*	-	<b>61</b>
<b>Total</b>	<b>68</b>		<b>86</b>		<b>64</b>		<b>34</b>		<b>24</b>		<b>276</b>

<sup>1</sup> All HIV data taken from California Office of AIDS eHARS database.

<sup>2</sup> Data in recent years are incomplete due to reporting delays. In addition, deaths that occurred outside of Long Beach are primarily identified through matching with the National Death Index (NDI), which is complete through December 31, 2016.

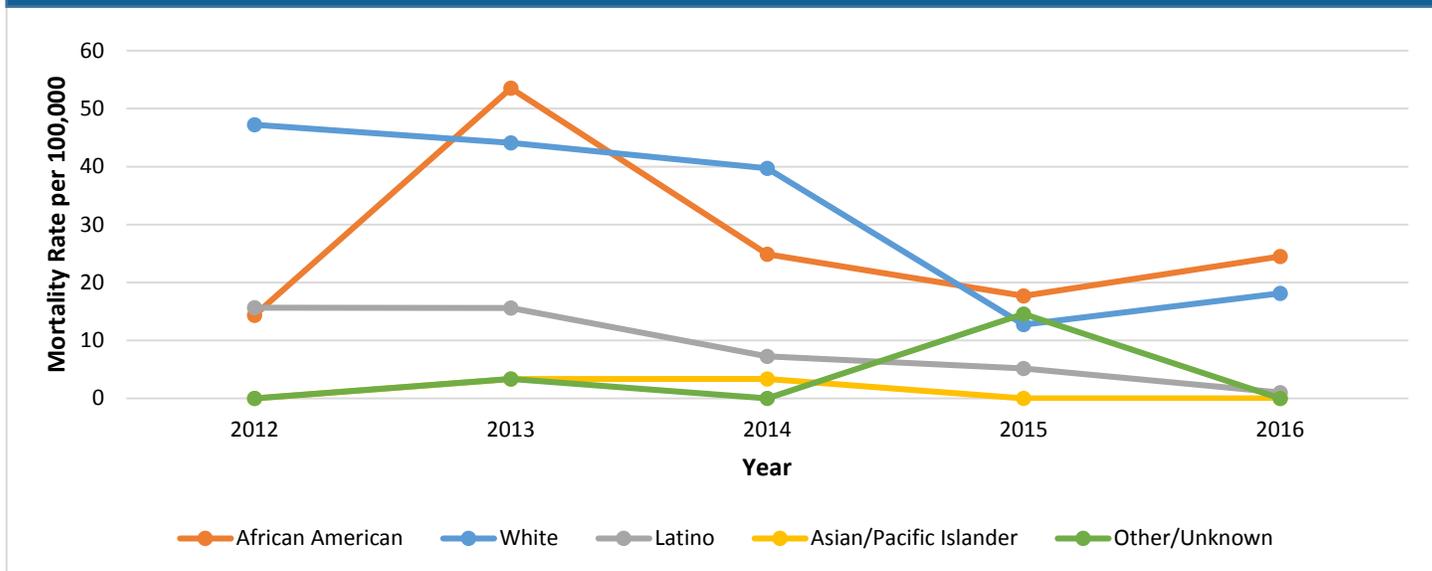
<sup>3</sup> The "Other" category also includes unidentified transmission category.

<sup>4</sup> For how the HIV Disease Stage is determined, see Technical Notes "Stage of Disease at Diagnosis of HIV Infection."

\*Any indicators with less than 20 cases do not meet the requirement for a minimum degree of accuracy outlined by the National Center for Health Statistics. Case counts/rates are included for reporting purposes only.



**Figure 29. Mortality rates<sup>1</sup> per 100,000 population among men living with HIV by race/ethnicity<sup>2</sup>, Long Beach<sup>3</sup>, 2012-2016**

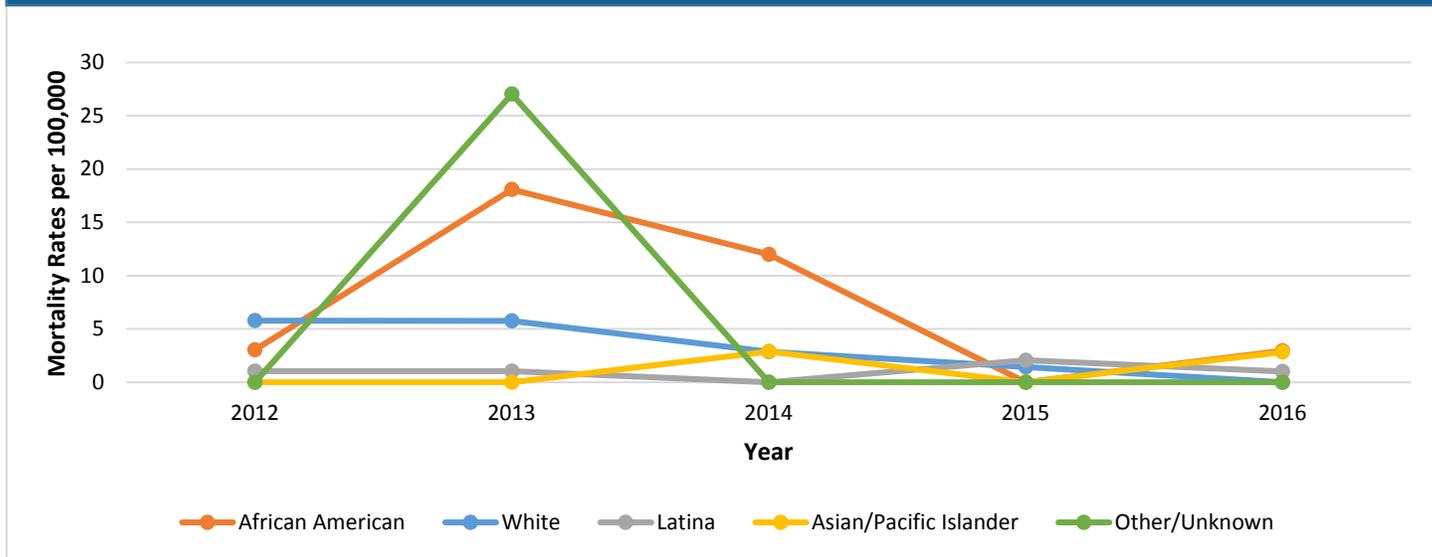


<sup>1</sup> Mortality rates are calculated as the number of HIV cases who died each year divided by the population by sex and race/ethnicity. See Technical Notes for “HIV Case Rates and HIV Mortality Rates.”

<sup>2</sup> Cases in the “Other” racial/ethnic category include Native American/Alaska Native, Multi-race, and unknown.

<sup>3</sup> All HIV data taken from California Office of AIDS eHARS database.

**Figure 30. Mortality rates<sup>1</sup> per 100,000 population among women living with HIV infection by race/ethnicity<sup>2</sup>, Long Beach<sup>3</sup>, 2012-2016**



<sup>1</sup> Mortality rates are calculated as the number of HIV cases who died each year divided by the population by sex and race/ethnicity. See Technical Notes for “HIV Case Rates and HIV Mortality Rates.”

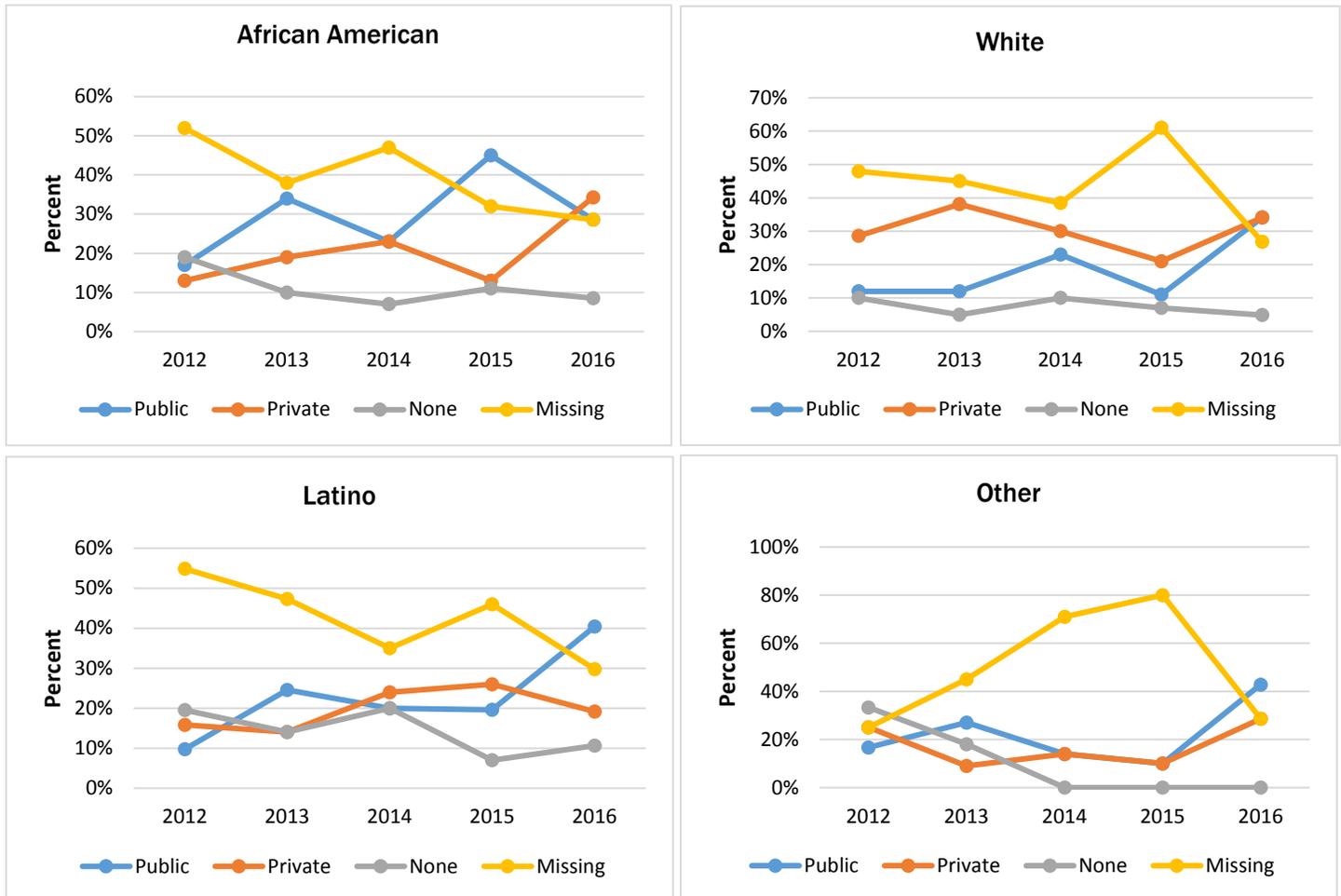
<sup>2</sup> Cases in the “Other” racial/ethnic category include Native American/Alaska Native, Multi-race, and unknown.

<sup>3</sup> All HIV data taken from California Office of AIDS eHARS database.



## HEALTH INSURANCE STATUS AT TIME OF HIV DIAGNOSIS

**Figure 31. Health insurance status<sup>1</sup> at time of HIV diagnosis by race/ethnicity<sup>2</sup>, Long Beach<sup>3</sup>, 2012-2016**



<sup>1</sup> "Public" insurance includes Medicaid, Medical, and other public funding sources. "Private" insurance includes both HMO and PPOs. "None" indicates patient reported having no insurance at time of diagnosis. "Missing" indicates that the insurance data for the patient was not given at time of diagnosis.

<sup>2</sup> Cases in the "Other" racial/ethnic category include Native American/Alaska Native, Multi-race, Asian, and unknown.

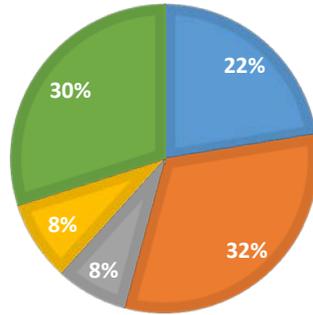
<sup>3</sup> All HIV data taken from California Office of AIDS eHARS database.



**Figure 32. Health insurance status at time of HIV diagnosis by gender<sup>1</sup>, Long Beach<sup>2</sup>, 2016**

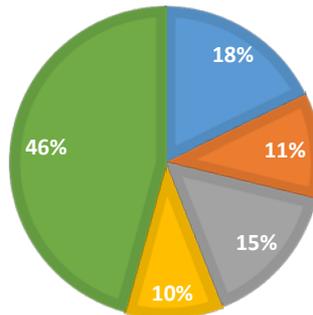
**Male**

■ Medicaid ■ Private Insurance/HMO ■ No Coverage ■ Other Public Funding ■ Unknown



**Female**

■ Medicaid ■ Private Insurance/HMO ■ No Coverage ■ Other Public Funding ■ Unknown



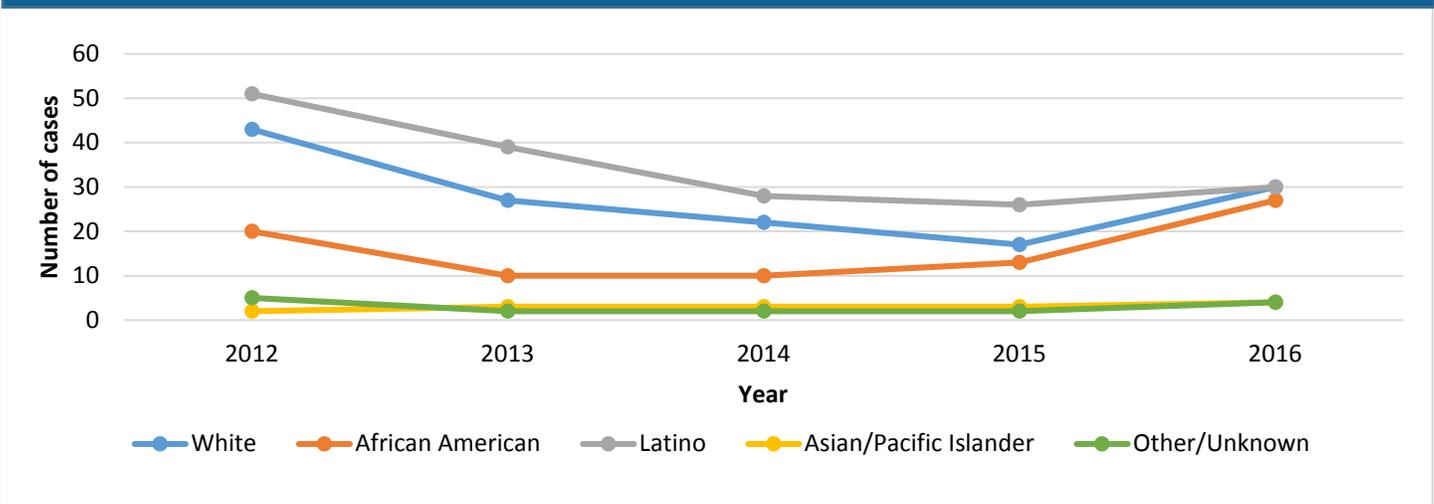
<sup>1</sup> Transgender data is not reported separately from other gender information due to small population size. See Technical Notes “Transgender Status.”

<sup>2</sup> All HIV data taken from California Office of AIDS eHARS database.



## HIV AMONG MEN WHO HAVE SEX WITH MEN

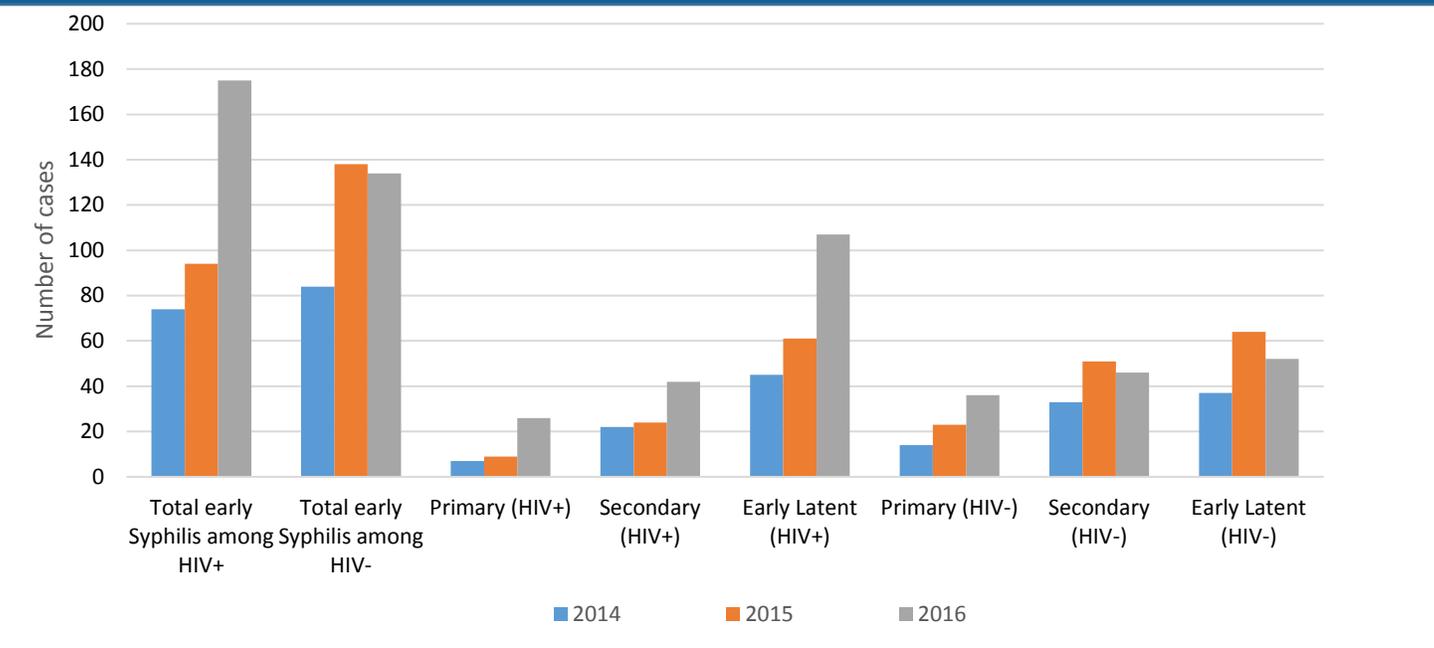
**Figure 33. Number of MSM newly diagnosed with HIV infection by race/ethnicity<sup>1</sup>, Long Beach<sup>2</sup>, 2012-2016**



<sup>1</sup> Cases in the "Other" racial/ethnic category include Native American/Alaska Native, Multi-race, and unknown.

<sup>2</sup> All HIV data taken from California Office of AIDS eHARS database.

**Figure 34. Total early syphilis<sup>1</sup> among MSM by HIV serostatus, Long Beach<sup>2</sup>, 2014-2016**



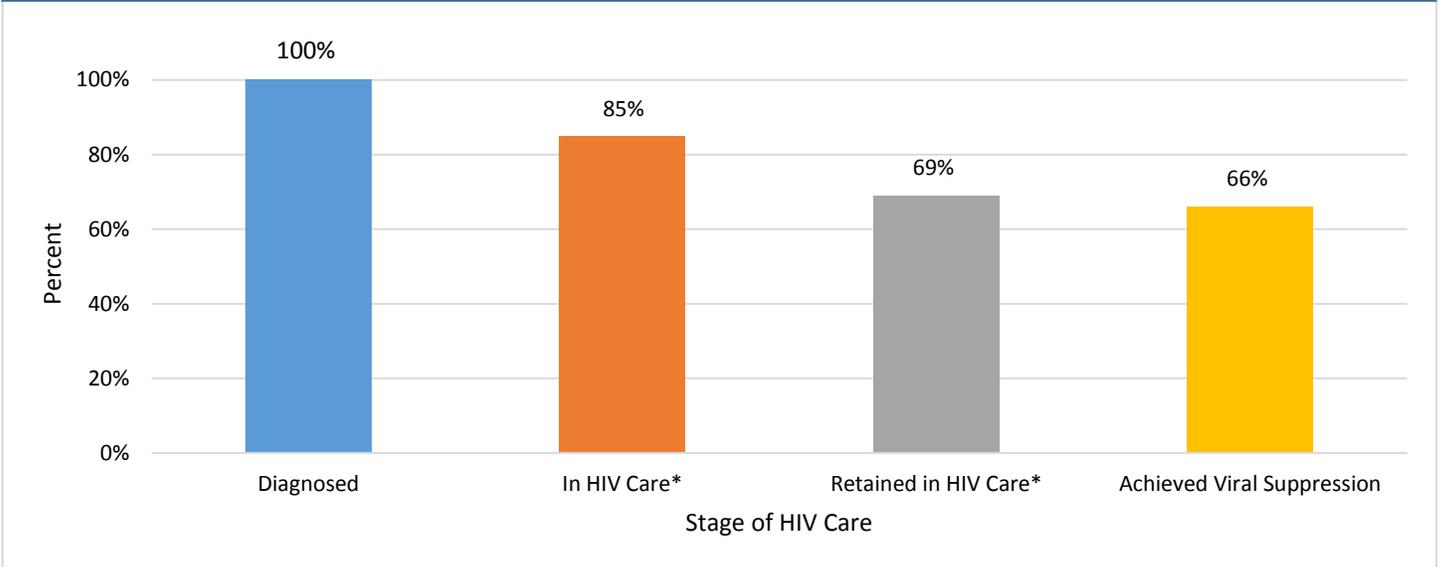
<sup>1</sup> Syphilis data is taken from the CalREDIE statewide reporting system.

<sup>2</sup> All HIV data taken from California Office of AIDS eHARS database.



## HIV CARE CONTINUUM

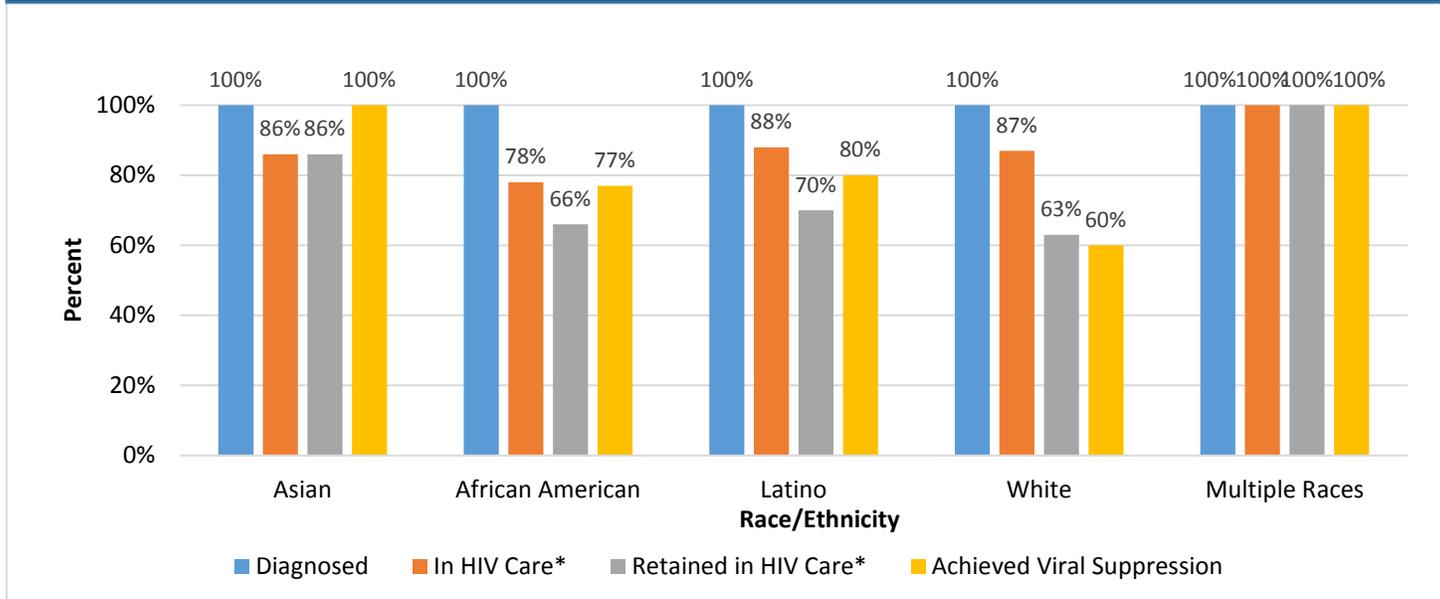
**Figure 35. HIV care continuum for persons newly diagnosed with HIV, Long Beach<sup>1</sup>, 2015**



<sup>1</sup> All HIV data taken from California Office of AIDS eHARS database.

\*See Technical Notes "HIV Care Continuum."

**Figure 36. HIV care continuum for persons newly diagnosed with HIV by race/ethnicity<sup>1</sup>, Long Beach<sup>2</sup>, 2015**



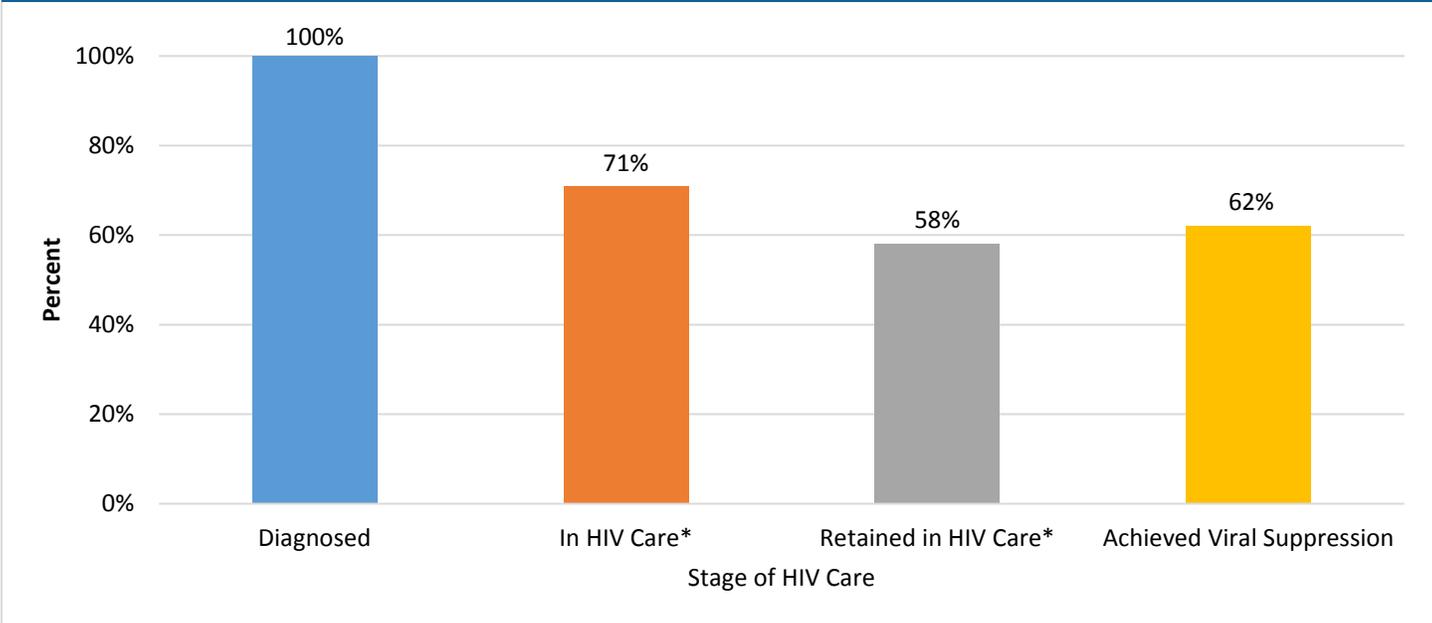
<sup>1</sup> In 2015 there were no newly diagnosed persons in the Native American/Alaska Native and Native Hawaiian/Pacific Islander racial/ethnic groups.

<sup>2</sup> All HIV data taken from California Office of AIDS eHARS database.

\*See Technical Notes "HIV Care Continuum."



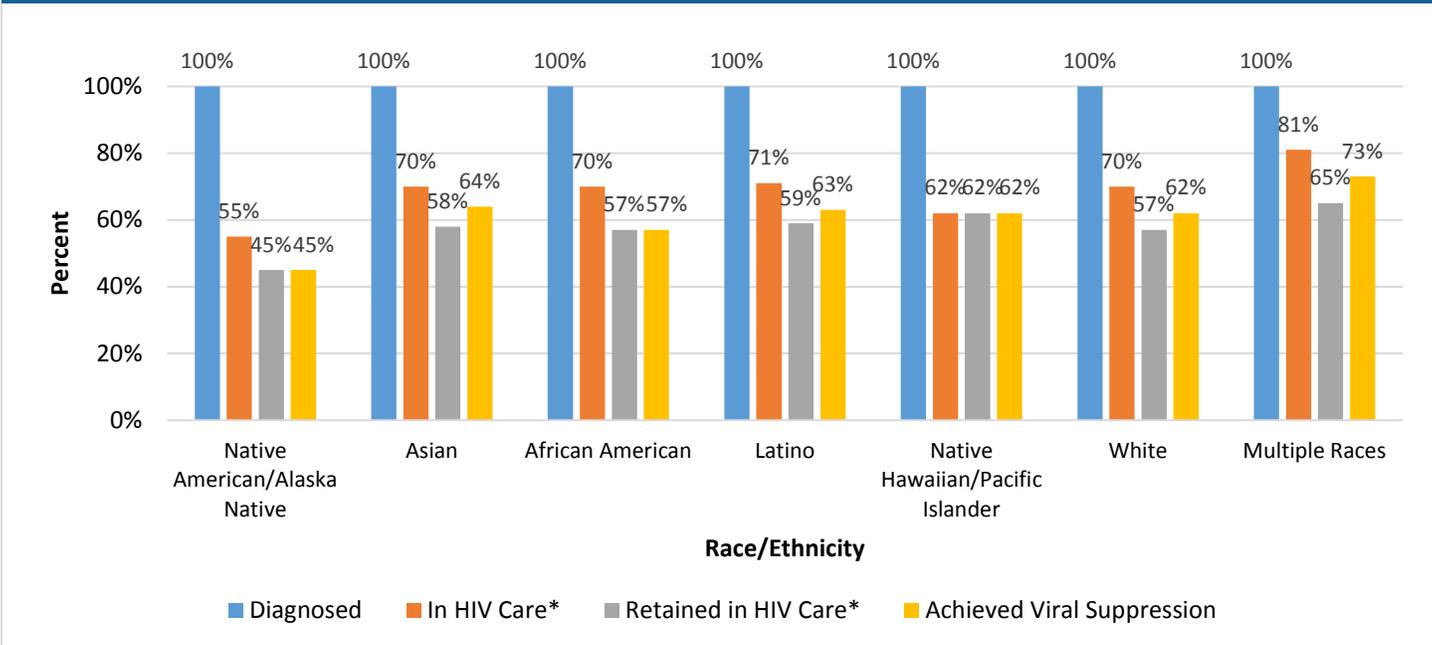
**Figure 37. HIV care continuum for persons living with HIV, Long Beach<sup>1</sup>, 2015**



<sup>1</sup> All HIV data taken from California Office of AIDS eHARS database.

\*See Technical Notes "HIV Care Continuum."

**Figure 38. HIV care continuum for persons living with HIV by race/ethnicity, Long Beach<sup>1</sup>, 2015**



<sup>1</sup> All HIV data taken from California Office of AIDS eHARS database.

\*See Technical Notes "HIV Care Continuum."



## HIV TECHNICAL NOTES

**Date of Initial HIV Diagnosis:** The date of HIV diagnosis for newly diagnosed cases is determined based on the earliest date of any of the following: positive HIV antibody test, positive HIV antigen/antibody combination test, detectable viral load test, or physician-documented diagnosis in absence of sufficient laboratory evidence. The date of initial HIV diagnosis for assessing trends in new HIV diagnoses considers patient self-report of a positive HIV test as noted in the medical record that was prior to the confirmed HIV diagnosis made by laboratory or clinical evidence. However, CD4 or undetectable viral load tests prior to the confirmed HIV diagnosis are not used to determine date of initial HIV diagnosis.

**Grouping of Data Categories:** Data in certain racial/ethnic or risk categories are grouped together when the number of persons with HIV in that group is small and/or does not present significant trends. For example, “Other” in the race/ethnicity breakdown in some tables or figures represents Asian/Pacific Islander, Native American, and people of mixed race. Whenever possible, this report presents the expanded racial/ethnic categories rather than an aggregate group labeled “Other.” The label “Other” in the transmission category breakdown may include transfusion recipients, hemophiliacs, heterosexuals, persons acquiring HIV prenatally, or persons of unidentified risk.

**HIV Case Rates and HIV Mortality Rates:** Annual race-specific rates are calculated as the number of cases diagnosed for a particular racial/ethnic group during each year divided by the population for that race/ethnicity, multiplied by 100,000. Annual race-specific mortality rates are calculated as the number of deaths (including all causes of death) for a particular racial/ethnic group during each year divided by the population for that race/ethnicity, multiplied by 100,000. These rates are calculated separately for males and females. The annual populations are not available for transgender persons. Population denominators by year are obtained from the State of California, Department of Finance, Demographic Research Unit (See References).

**HIV Surveillance Methods:** Long Beach HIV cases are reported primarily through active surveillance activities in which public health personnel review laboratory and pathology reports and medical records to identify cases and complete the case report forms. HIV cases are also identified through passive reporting, review of death certificates, validation studies using secondary data sources such as hospital billing records or other disease registries, and reports from other health departments. The surveillance system is evaluated regularly for completeness, timeliness, and accuracy.

The HIV data in this report include persons who were residents of Long Beach at the time they were diagnosed with HIV (all stages of infection) including Long Beach residents who were diagnosed in other jurisdictions. Long Beach started name-based case reporting for HIV cases in April 2006, as mandated by California law. Only cases reported confidentially by name are included in this report.

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. 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.



**Stage of Disease at Diagnosis of HIV Infection:** In 2014, the United States surveillance case definition for HIV infection among adults and adolescents aged  $\geq 13$  years and children age  $< 13$  was revised to expand the HIV infection classification staging system to five stages of HIV infection as described below.

- **HIV infection stage 0:** This stage is early HIV infection and is established by a sequence of discordant HIV test results indicative of early HIV infection in which a negative or indeterminate result was within 180 days of a positive result. This sequence of discordant results may be based on testing history (previous documented negative/indeterminate results), or by a HIV testing algorithm. If the criteria for stage 0 are met, the stage is 0 (supersedes other stages) regardless of criteria for other stages (CD4 T-lymphocyte test results and opportunistic illness diagnoses).
- **HIV infection stage 1-3:** HIV infection stage 1-3 is based on age-specific CD4 T-lymphocyte count or CD4 T-lymphocyte percentage of total lymphocytes. Data on persons with HIV infection, stage 3 (AIDS) include persons whose infection has ever been classified as stage 3 (AIDS).
- **HIV infection, stage unknown:** No information available on CD4 count or percentage and no reported information on AIDS-defining conditions (every effort is made to collect CD4 counts or percentages at time of diagnosis).

**Transgender Status:** In Long Beach HIV data, transgender individuals are listed as either male-to-female or female-to-male. Due to the small number of transgender cases in Long Beach and potential small population size, their data are included with their sex at birth category to protect confidentiality. Please note that there are several limitations of our transgender data. We believe that our report likely underestimated the number of transgender persons affected by HIV because data collected for HIV reporting are derived from medical records. Consequently, information that may be discussed with the health care provider but not recorded in the medical record is generally not available for the purposes of HIV case reporting.

CDC HIV Surveillance report data is based on a person's sex at birth. Data for transgender persons are not explicitly presented in their report because information on gender identity (a person's internal understanding of his or her gender or the gender with which a person identifies) is not consistently collected or documented in the data sources used by HIV reporting jurisdictions, like those of Long Beach.

**Out-of-Jurisdiction Cases:** Routine HIV case surveillance assigns case ownership by residence at diagnosis. HIV cases residing in Long Beach at time of diagnosis are considered Long Beach cases. HIV cases receiving care in Long Beach but who resided elsewhere at time of diagnosis are considered out-of-jurisdiction (OOJ) cases.

**HIV Care Continuum:** To direct HIV prevention resources most effectively, the CDC tracks the "HIV care continuum." The continuum is the series of steps from the time a person is diagnosed with HIV through the successful treatment of their infection with HIV medications. The ultimate goal of HIV treatment is to achieve viral suppression, meaning the amount of HIV in the body is very low or undetectable. The HIV care continuum consists of several steps required to achieve viral suppression.



### **HIV Care Continuum Continued:**

- Diagnosed: Persons currently diagnosed and living with HIV.
- In HIV Care: Persons who have at least one CD4 or viral load or HIV-1 genotype test during the calendar year are considered to be engaged in care.
- Retained in HIV Care: Persons who have two or more CD4 or viral load or HIV-1 genotype tests that were performed at least 3 months apart during the calendar year are considered to be retained in care.
- Achieved Viral Suppression: Persons who have a most recent viral load test result  $\leq 200$  copies/ml during the calendar year are considered to be virally suppressed for HIV.

For further information on HIV, please visit: <https://www.cdc.gov/hiv/>



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