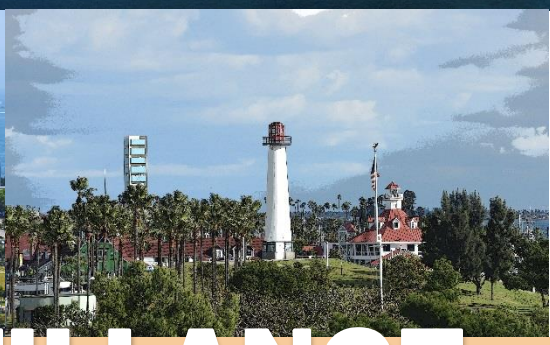

STD/HIV SURVEILLANCE

Annual Report

2015

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

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ACKNOWLEDGMENTS

This report was prepared by the HIV/STD Surveillance Program staff. We wish to thank our colleagues at the California Department of Public Health, STD Control Branch and Office of AIDS for providing data.

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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Dear Community Members:

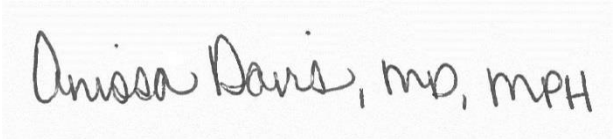
We are proud to present the 2015 STD/HIV Surveillance Annual report. This report provides data regarding the number of chlamydia, gonorrhea, syphilis, and HIV cases from 2011 to 2015 in the City of Long Beach.

The City of Long Beach is located along the south Los Angeles County coast in Southern California. As of 2015, the City's population was approximately 486,000. Long Beach is considered to have one of the most diverse populations in the United States in term of ethnicity, culture, income, and sexual orientation.

In recent years, the City has seen sexually transmitted diseases (STDs) rise at an alarming rate. The STD rates in Long Beach are among the highest in the State of California. Significant highlights include:

- From 2011 to 2015, chlamydia rates have risen by 36%, gonorrhea rates by 126%, and total early syphilis rates by 171%.
- Left untreated, these infections can lead to chronic pain, neurological complications, infertility, congenital defects, and for women specifically, cause permanent damage to the reproductive system.
- In 2014, Long Beach saw a rate of 28 newly diagnosed HIV infections per 100,000 population. This rate is higher compared to newly diagnosed rates of Los Angeles County (20 per 100,000) and the State of California (13 per 100,000)

These rates are concerning; however, they provide a clear picture of the STD trends in the City of Long Beach, which is an essential step in raising awareness. The Long Beach Department of Health and Human Services is committed to using the data provided in this STD/HIV Annual Surveillance Report to inform our public health decisions and prioritize the Health Department's limited resources. We plan to continue to support our healthcare providers, community based organizations, educational institutions, and the residents of Long Beach in their efforts to test, treat, and prevent STDs. We will continue to seek innovative and proactive prevention and intervention approaches to combat this epidemic, and will work with our county, state, and national partners to reach Long Beach's vision of a safe and healthy community for all.



Anissa Davis, MD, MPH
City Health Officer, Long Beach Department of Health and Human Services

CONTENTS

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

Annual Report

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STD FIGURES AND TABLES

STD CLINICAL 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 on. 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 ≥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.

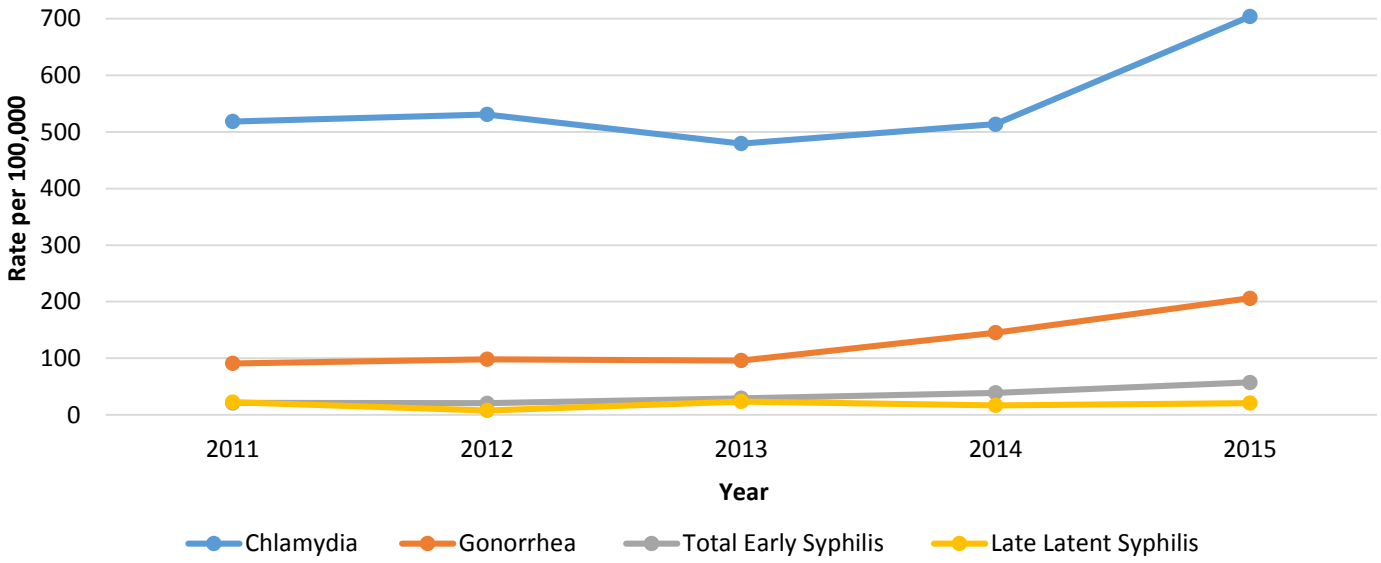
The City of Long Beach acknowledges that data presented in this report may not meet the National Center for Health Statistics guidelines on stable rates. However, the City must utilize the available data for programmatic evaluation and recommendations. In the context of this report, unstable rates are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

STD HIGHLIGHTS

- Chlamydia, gonorrhea, and total early syphilis rates in Long Beach have seen an overall increase from 2011 to 2015 (Table 1). The majority of sexually transmitted disease (STD) diagnoses in Long Beach are concentrated among young adults aged 20-29 years (Tables 3, 6). From 2011 to 2015, African Americans had the highest rates of infection for chlamydia and gonorrhea (Tables 4, 7). In 2015, African Americans had the highest rates of total early syphilis (Table 10).
- Zip code 90805 has the highest number of chlamydia cases; gonorrhea 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 36% (518 to 704 per 100,000) from 2011 to 2015 (Table 2). Long Beach had the second highest rate of chlamydia in the State of California, with San Francisco having the highest. In 2015, the highest rates of chlamydia occurred among those aged 20-24 years. In the same year, the total rate of chlamydia for females was 181% higher than the total rate for males (898 per 100,000 compared to 496 per 100,000) (Table 3).
- Gonorrhea rates in Long Beach have increased by 126% (91 to 206 per 100,000) from 2011 to 2015 (Table 5). Long Beach had the fourth highest rate of gonorrhea in the State of California. In 2015, the highest rates of gonorrhea occurred among those aged 20-24 years. In the same year, the total rate of gonorrhea for males was almost double that of females (269 per 100,000 compared to 142 per 100,000) (Table 6).
- Total early syphilis rates in the City of Long Beach have increased by 171% (21 to 57 per 100,000) from 2011 to 2015 (Table 8). Long Beach had the second highest rate of total early syphilis in the State of California, with San Francisco having the highest. In 2015, the highest rates of total early syphilis occurred among men aged 35-44 years and women aged 30-34 years. In the same year, total early syphilis rates for men were much higher than those of women (110 per 100,000 compared to 7 per 100,000) (Table 9).
- In 2015, the Long Beach late latent syphilis rate 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 2011 to 2015, the number of total early syphilis cases among women tripled (Table 9). Though we cannot report Long Beach congenital syphilis cases due to small numbers, the data does reveal a continued upward trend in congenital syphilis cases, especially considering the 1-2 year delay and correlation with the rise of total early syphilis cases among women.

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, 2011-2015



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 2015.

Table 1. Chlamydia, gonorrhea, total early syphilis, and late latent syphilis cases incidence rates per 100,000 population, Long Beach, 2011-2015

	Year									
	2011		2012		2013		2014		2015	
	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate
Chlamydia	2,404	518.3	2,473	530.8	2,256	479.5	2,422	513.6	3,346	703.9
Gonorrhea	422	91.0	458	98.3	451	95.9	685	145.3	980	206.1
Total Early Syphilis	98	21.1	95	20.4	137	29.2	183	38.8	273	57.4
Late Latent Syphilis	104	22.4	36	7.7	112	23.7	80	16.9	99	20.8

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, 2011-2016. Sacramento, California, December 2015.

CHLAMYDIA IN LONG BEACH

Figure 2. Chlamydia incidence rates per 100,000 population, Long Beach, Los Angeles, and California, 2011-2015

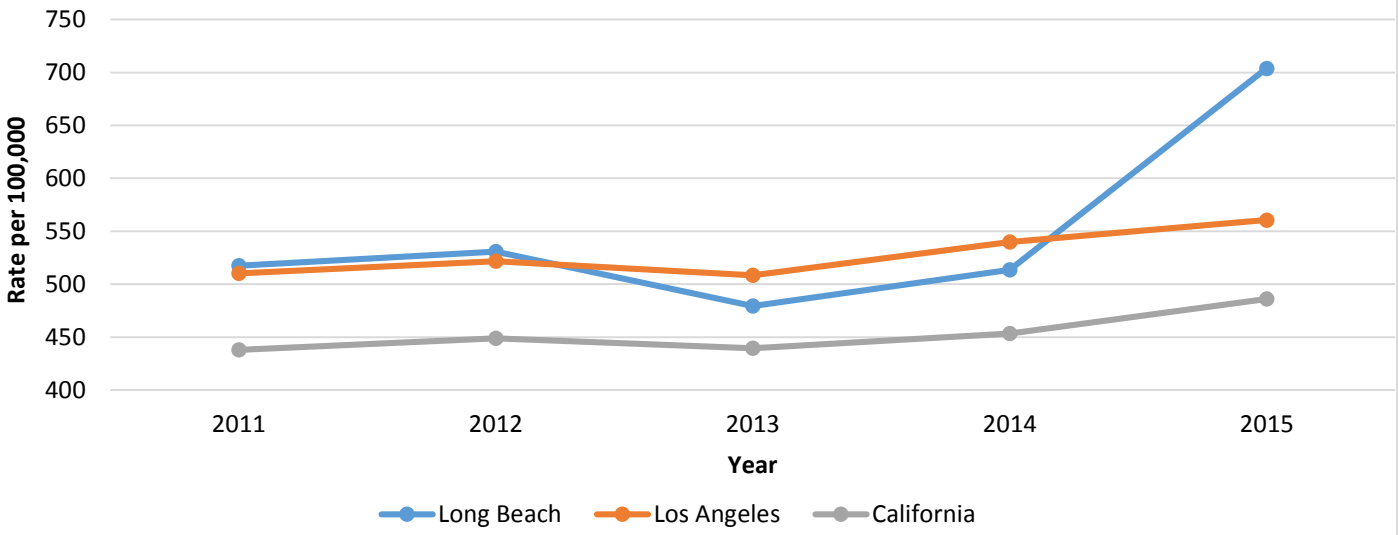


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Table 2. Chlamydia cases and incidence rates per 100,000 population, Long Beach, Los Angeles, and California, 2011-2015

	Year									
	2011		2012		2013		2014		2015	
	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate
Long Beach	**2,404**	**518.3**	**2,473**	**530.8**	**2,256**	**479.5**	**2,422**	**513.6**	**3,346**	**703.9**
Los Angeles	50,333	510.3	51,706	521.7	50,949	508.5	54,363	539.9	57,134	560.6
California	164,591	438.0	169,795	448.9	167,916	439.5	174,557	453.4	189,937	486.1

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 2015.

Table 3. Chlamydia cases and incidence rates per 100,000 population by gender and age group, Long Beach, 2011-2015

	Year									
	2011		2012		2013		2014		2015	
	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate
LONG BEACH TOTAL	**2,404**	**518.3**	**2,473**	**530.8**	**2,256**	**479.5**	**2,422**	**513.6**	**3,346**	**703.9**
Males by Age (Years)										
Male Total	**735**	**322.6**	**752**	**329.4**	**710**	**307.9**	**885**	**383.0**	**1,156**	**496.2**
0-9	<5	-	<5	-	<5	-	<5	-	<5	-
10-14	<5	-	<5	-	<5	-	<5	-	<5	-
15-19	143	853.8	110	618.9	96	534.8	113	628.2	123	678.3
20-24	231	1,341.6	254	1,324.9	219	1,131.2	273	1,407.0	342	1,748.5
25-29	147	768.1	152	791.1	168	865.9	195	1,002.8	258	1,316.1
30-34	83	405.1	94	550.3	94	544.9	99	572.6	147	843.4
35-44	76	207.3	83	246.0	71	208.4	116	339.8	151	438.7
45+	44	75.5	50	68.7	56	76.2	75	101.8	109	146.8
Not Specified	9*	-	9*	-	5*	-	10*	-	25	-
Females by Age (Years)										
Female Total	**1,658**	**702.6**	**1,717**	**722.6**	**1,538**	**641.0**	**1,526**	**634.6**	**2,178**	**898.4**
0-9	<5	-	<5	-	<5	-	<5	-	<5	-
10-14	<5	-	11*	69.9	9*	56.6	9*	56.5	<5	-
15-19	528	3,112.8	437	2,402.9	408	2,221.5	382	2,075.4	496	2,673.1
20-24	635	3,406.7	759	3,771.5	648	3,188.5	628	3,083.2	882	4,295.5
25-29	270	1,339.8	266	1,340.1	262	1,307.1	273	1,359.0	419	2,069.0
30-34	91	451.3	130	727.4	107	592.8	111	613.6	182	998.1
35-44	81	224.7	72	210.0	65	187.8	76	219.1	112	320.2
45+	21	31.2	21	26.1	18*	22.2	26	31.9	40	48.7
Not Specified	19*	-	17*	-	19*	-	17*	-	42	-

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 2015.
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, 2011-2015

	Year									
	2011		2012		2013		2014		2015	
	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate
LONG BEACH TOTAL	**2,404**	**518.3**	**2,473**	**530.8**	**2,256**	**479.5**	**2,422**	**513.6**	**3,346**	**703.9**
Males by Race/Ethnicity										
Male Total	**735**	**322.6**	**752**	**329.4**	**710**	**307.9**	**885**	**383.0**	**1,156**	**496.2**
Native American/Alaska Native	<5	-	<5	-	<5	-	<5	-	<5	-
Asian/Pacific Islander	27	94.7	30	101.5	24	80.4	34	113.7	26	86.3
African American	176	567.9	179	647.2	131	469.0	136	485.8	155	549.3
Latino	165	195.3	196	206.2	192	200.0	136	141.4	208	214.5
White	85	112.2	83	120.6	82	118.0	87	124.9	105	148.4
Other/Multi/Not Specified	282	-	263	-	277	-	490	-	658	-
Females by Race/Ethnicity										
Female Total	**1,658**	**702.6**	**1,717**	**722.6**	**1,538**	**641.0**	**1,526**	**634.6**	**2,178**	**898.4**
Native American/Alaska Native	<5	-	<5	-	<5	-	<5	-	7*	964.1
Asian/Pacific Islander	101	314.4	108	316.3	100	290.0	90	260.5	99	284.2
African American	372	1,028.2	364	1,111.7	262	792.4	241	727.2	331	990.8
Latino	470	577.2	484	510.2	406	423.8	361	376.0	479	494.9
White	109	139.9	122	179.5	107	155.9	103	149.7	175	250.2
Other/Multi/Not Specified	602	-	634	-	659	-	728	-	1,087	-

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 2015.

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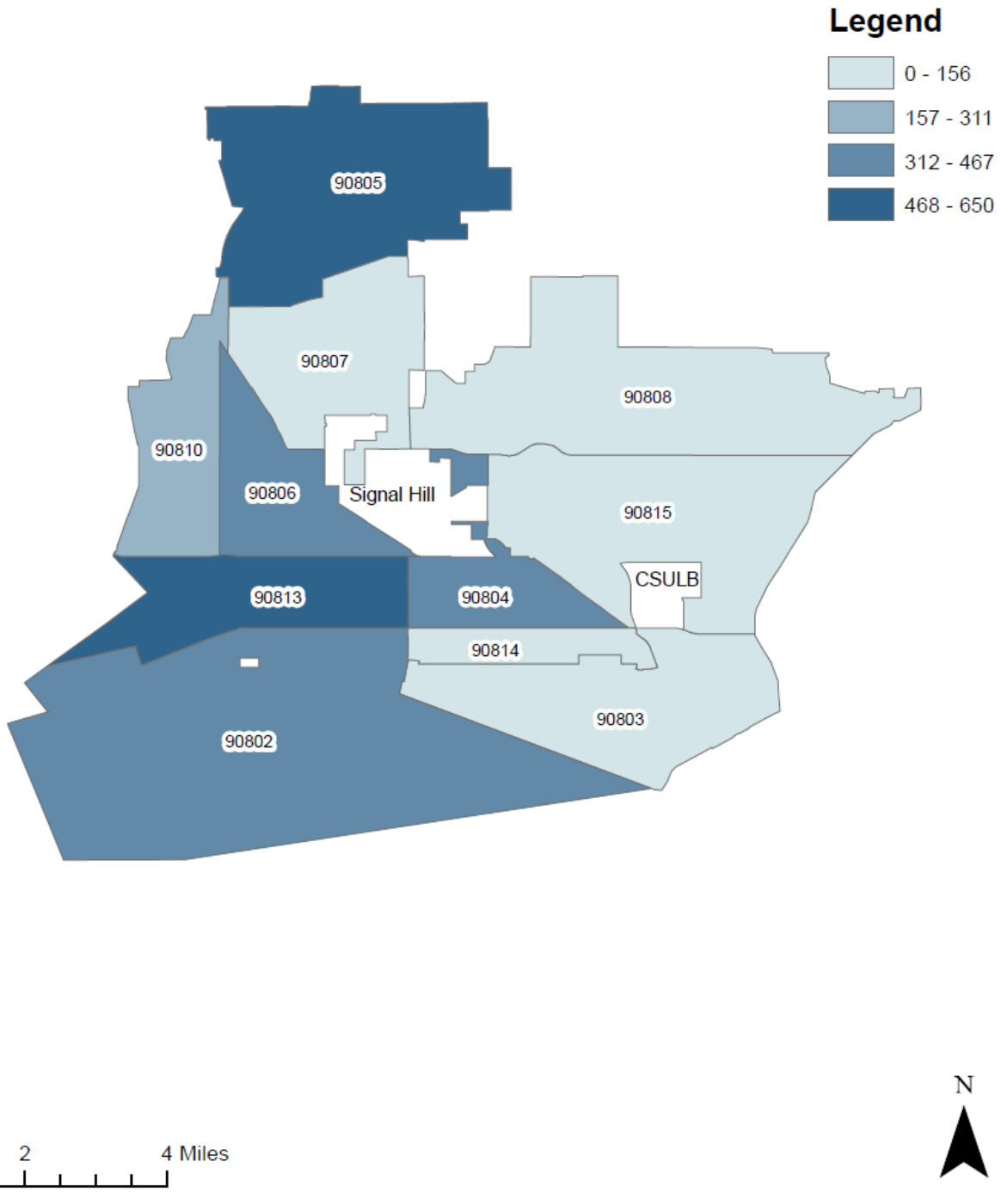
Figure 3. Chlamydia cases by zip code, Long Beach, 2015



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, 2011-2015

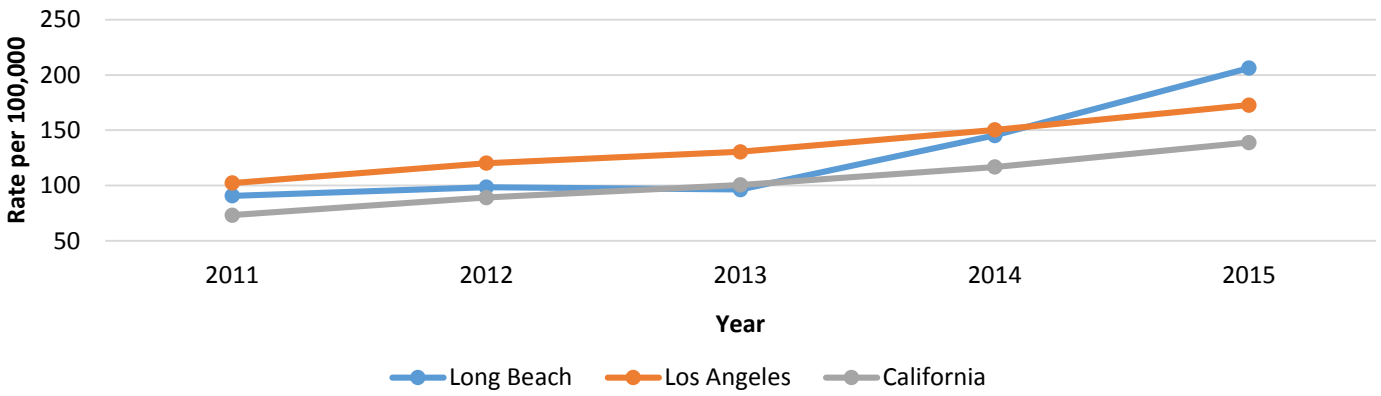


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Table 5. Gonorrhea cases and incidence rates per 100,000 population, Long Beach, Los Angeles, and California, 2011-2015

	Year									
	2011		2012		2013		2014		2015	
	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate
Long Beach	**422**	**91.0**	**458**	**98.3**	**451**	**95.9**	**685**	**145.3**	**980**	**206.1**
Los Angeles	10,089	102.3	11,959	120.7	13,065	130.4	15,135	150.3	17,614	172.8
California	27,455	73.1	33,778	89.3	38,365	100.4	44,974	116.8	54,255	138.9

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, 2011-2016. Sacramento, California, December 2015.

Table 6. Gonorrhea cases and incidence rates per 100,000 population by gender and age group, Long Beach, 2011-2015

	Year									
	2011		2012		2013		2014		2015	
	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate
LONG BEACH TOTAL	**422**	**91.0**	**458**	**98.3**	**451**	**95.9**	**685**	**145.3**	**980**	**206.1**
Males by Age (Years)										
Male Total	**269**	**118.1**	**284**	**124.4**	**275**	**119.3**	**446**	**193.0**	**627**	**269.2**
0-9	<5	-	<5	-	<5	-	<5	-	<5	-
10-14	<5	-	<5	-	<5	-	<5	-	<5	-
15-19	37	220.9	32	180.0	17*	94.7	45	250.2	44	242.6
20-24	65	377.5	73	380.8	62	320.2	95	489.6	148	756.6
25-29	50	261.2	43	223.8	54	278.3	96	493.7	132	673.4
30-34	36	175.7	52	304.4	35	202.9	67	387.5	88	504.9
35-44	38	103.6	45	133.4	61	179.1	82	240.2	114	331.2
45+	41	70.4	38	52.2	40	54.4	57	77.4	94	126.6
Not Specified	<5	-	<5	-	<5	-	<5	-	7*	-
Females by Age (Years)										
Female Total	**152**	**64.4**	**172**	**72.4**	**174**	**72.5**	**227**	**94.4**	**343**	**141.5**
0-9	<5	-	<5	-	<5	-	<5	-	<5	-
10-14	<5	-	<5	-	<5	-	<5	-	<5	-
15-19	53	312.5	46	252.9	46	250.5	50	271.7	74	398.8
20-24	47	252.1	61	303.1	55	270.6	82	402.6	112	545.5
25-29	28	138.9	36	181.4	34	169.6	46	229.0	50	246.9
30-34	9*	44.6	15*	83.9	19*	105.3	21	116.1	36	197.4
35-44	9*	25.0	7*	20.4	13*	37.6	17*	49.0	41	117.2
45+	<5	-	<5	-	<5	-	10*	12.3	17*	20.7
Not Specified	<5	-	<5	-	<5	-	<5	-	11*	-

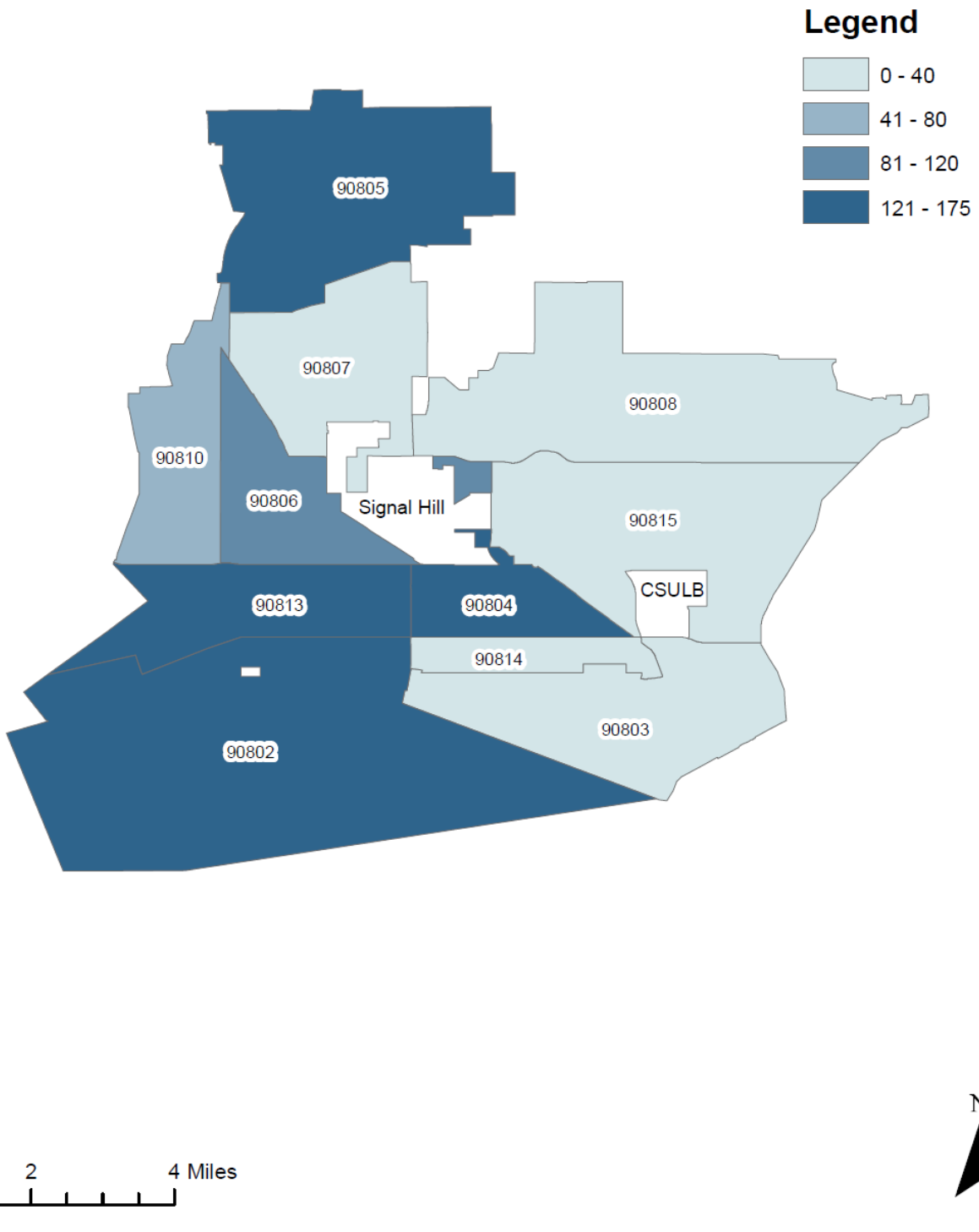
Note: Incidence rates are per 100,000 population.
Source: California Department of Public Health, STD Control Branch
State of California, Department of Finance, *California County Population Estimates and Components of Change by County*, July, 1, 2011-2016. Sacramento, California, December 2015.
Gender 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, 2011-2015

	Year									
	2011		2012		2013		2014		2015	
	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate
LONG BEACH TOTAL	**422**	**91.0**	**458**	**98.3**	**451**	**95.9**	**685**	**145.3**	**980**	**206.1**
Males by Race/Ethnicity										
Male Total	**269**	**118.1**	**284**	**124.4**	**275**	**119.3**	**446**	**193.0**	**627**	**269.2**
Native American/Alaska Native	<5	-	<5	-	<5	-	<5	-	5*	756.1
Asian/Pacific Islander	<5	-	<5	-	11*	36.9	10*	33.4	13*	43.1
African American	69	222.6	88	318.2	76	272.1	111	396.5	132	467.8
Latino	57	67.5	57	60.0	51	53.1	60	62.4	78	80.4
White	47	62.0	41	59.6	43	61.9	78	112.0	84	118.7
Other/Multi/Not Specified	91	-	93	-	94	-	186	-	315	-
Females by Race/Ethnicity										
Female Total	**152**	**64.4**	**172**	**72.4**	**174**	**72.5**	**227**	**94.4**	**343**	**141.5**
Native American/Alaska Native	<5	-	<5	-	<5	-	<5	-	<5	-
Asian/Pacific Islander	<5	-	<5	-	<5	-	6*	17.4	16*	45.9
African American	70	193.5	65	198.5	57	172.4	61	184.1	95	284.4
Latino	19*	23.3	29	30.6	28	29.2	35	36.5	42	43.4
White	9*	11.6	12*	17.7	11*	16.0	23	33.4	30	42.9
Other/Multi/Not Specified	49	-	63	-	73	-	101	-	159	-

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 2015.
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.

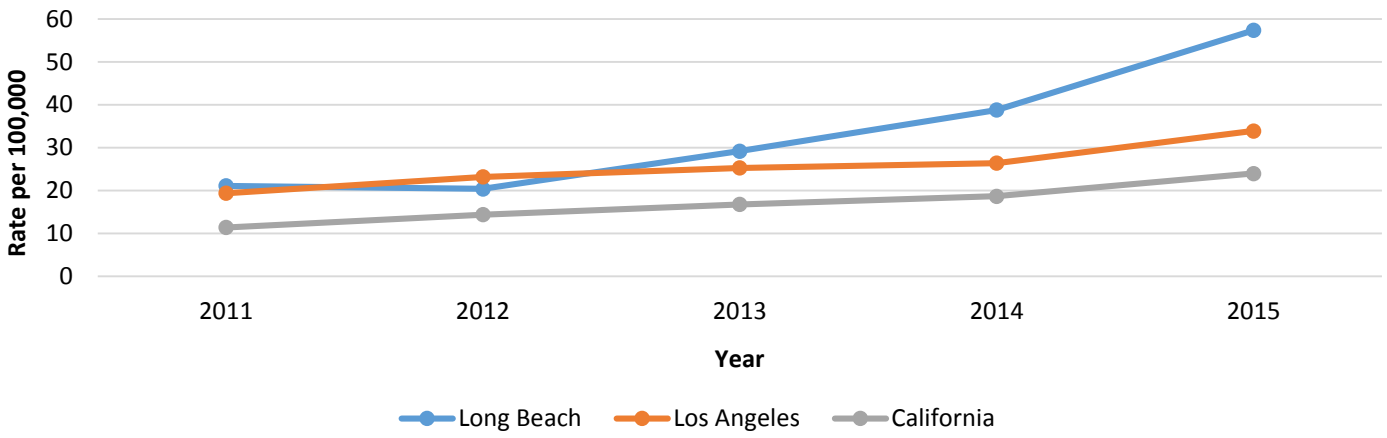
Figure 5. Gonorrhea cases by zip code, Long Beach, 2015



Source: California Department of Public Health, STD Control Branch

SYPHILIS IN LONG BEACH

Figure 6. Total early syphilis[1] incidence rates per 100,000 population, Long Beach, Los Angeles, and California, 2011-2015



[1] 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, 2011-2016. Sacramento, California, December 2015.

Table 8. Total early syphilis[1] cases and incidence rates per 100,000 population, Long Beach, Los Angeles, and California, 2011-2015

	Year									
	2011		2012		2013		2014		2015	
	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate
Long Beach	**98**	**21.1**	**95**	**20.4**	**137**	**29.2**	**183**	**38.8**	**273**	**57.4**
Los Angeles	1,921	19.4	2,300	23.2	2,531	25.3	2,662	26.4	3,454	33.9
California	4,501	11.4	5,488	14.4	6,433	16.8	7,256	18.7	9,359	24.0

[1] 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, 2011-2016. Sacramento, California, December 2015.

Table 9. Total early syphilis[1] cases and incidence rates per 100,000 population by gender and age group, Long Beach, 2011-2015

	Year									
	2011		2012		2013		2014		2015	
	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate
LONG BEACH TOTAL	**98**	**21.1**	**95**	**20.4**	**137**	**29.2**	**183**	**38.8**	**273**	**57.4**
Males by Age (Years)										
Male Total	**94**	**41.3**	**91**	**39.9**	**130**	**56.4**	**175**	**75.7**	**256**	**109.9**
0-9	<5	-	<5	-	<5	-	<5	-	<5	0.0
10-14	<5	-	<5	-	<5	-	<5	-	<5	0.0
15-19	<5	-	<5	-	<5	-	<5	-	5*	27.6
20-24	<5	-	10*	52.2	15*	77.5	14*	72.2	27	138.0
25-29	10*	52.2	15*	78.1	26	134.0	29	149.1	36	183.6
30-34	16*	78.1	14*	82.0	10*	58.0	22	127.2	31	177.9
35-44	23	62.7	22	65.2	35	102.7	50	146.4	80	232.4
45+	38	65.2	26	35.7	40	54.4	57	77.4	77	103.7
Not Specified	<5	-	<5	-	<5	-	<5	-	<5	-
Females by Age (Years)										
Female Total	**<5**	**-**	**<5**	**-**	**7***	**2.9**	**8***	**3.3**	**17***	**7.0**
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	-	5*	24.6	<5	-	5*	24.4
25-29	<5	-	<5	-	<5	-	<5	-	<5	-
30-34	<5	-	<5	-	<5	-	<5	-	6*	33.0
35-44	<5	-	<5	-	<5	-	<5	-	<5	-
45+	<5	-	<5	-	<5	-	<5	-	<5	-
Not Specified	<5	-	<5	-	<5	-	<5	-	<5	-

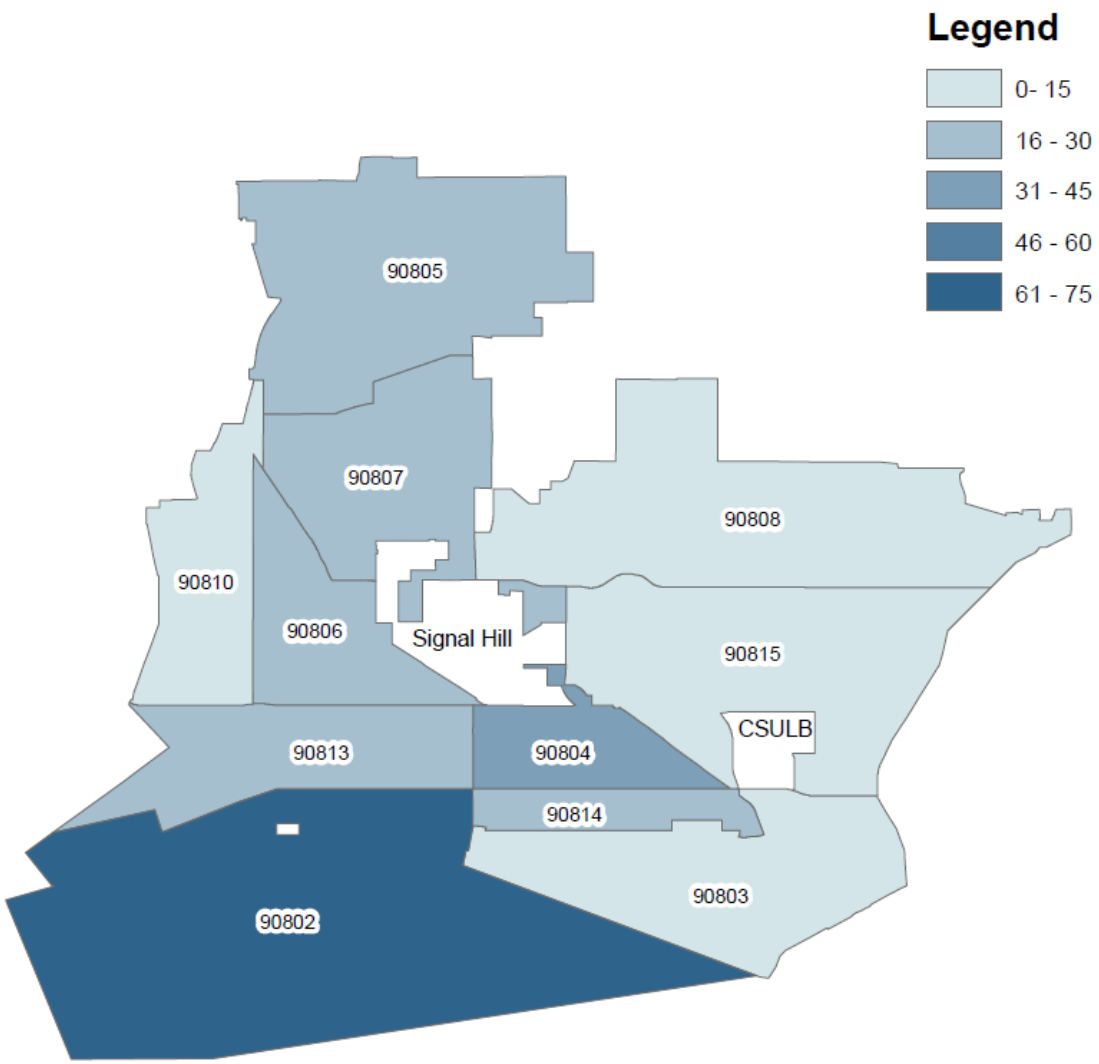
[1] Early syphilis includes primary, secondary and early latent syphilis.
Gender specific age groups and race/ethnicity percent calculations exclude "Not Specified" from the denominator.
Note: Incidence rates are per 100,000 population.
Source: California Department of Public Health, STD Control Branch
State of California, Department of Finance, *California County Population Estimates and Components of Change by County*, July, 1, 2011-2016. Sacramento, California, December 2015.
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 10. Total early syphilis[1] cases and incidence rates per 100,000 population by gender and race/ethnicity, Long Beach, 2011-2015

	Year									
	2011		2012		2013		2014		2015	
	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate
LONG BEACH TOTAL	**98**	**21.1**	**95**	**20.4**	**137**	**29.2**	**183**	**38.8**	**273**	**57.4**
Males by Race/Ethnicity										
Male Total	**94**	**41.3**	**91**	**39.9**	**130**	**56.4**	**175**	**75.7**	**256**	**109.9**
Native American/Alaska Native	<5	-	<5	-	<5	-	<5	-	<5	-
Asian/Pacific Islander	5*	17.5	<5	-	<5	-	7*	23.4	12*	39.8
African American	10*	32.3	13*	47.0	21	75.2	23	82.2	38	134.7
Latino	31	36.7	32	33.7	46	48.0	60	62.4	93	95.9
White	44	58.1	35	50.9	26	37.4	41	58.9	79	111.7
Other/Multi/Not Specified	<5	-	7*	-	33	-	44	-	34	-
Females by Race/Ethnicity										
Female Total	**<5**	**-**	**<5**	**-**	**7***	**2.9**	**8***	**3.3**	**17***	**7.0**
Native American/Alaska Native	<5	-	<5	-	<5	-	<5	-	<5	-
Asian/Pacific Islander	<5	-	<5	-	<5	-	<5	-	<5	-
African American	<5	-	<5	-	<5	-	<5	-	6*	18.0
Latino	<5	-	<5	-	5*	5.2	<5	-	5*	5.2
White	<5	-	<5	-	<5	-	<5	-	<5	-
Other/Multi/Not Specified	<5	-	<5	-	<5	-	<5	-	<5	-

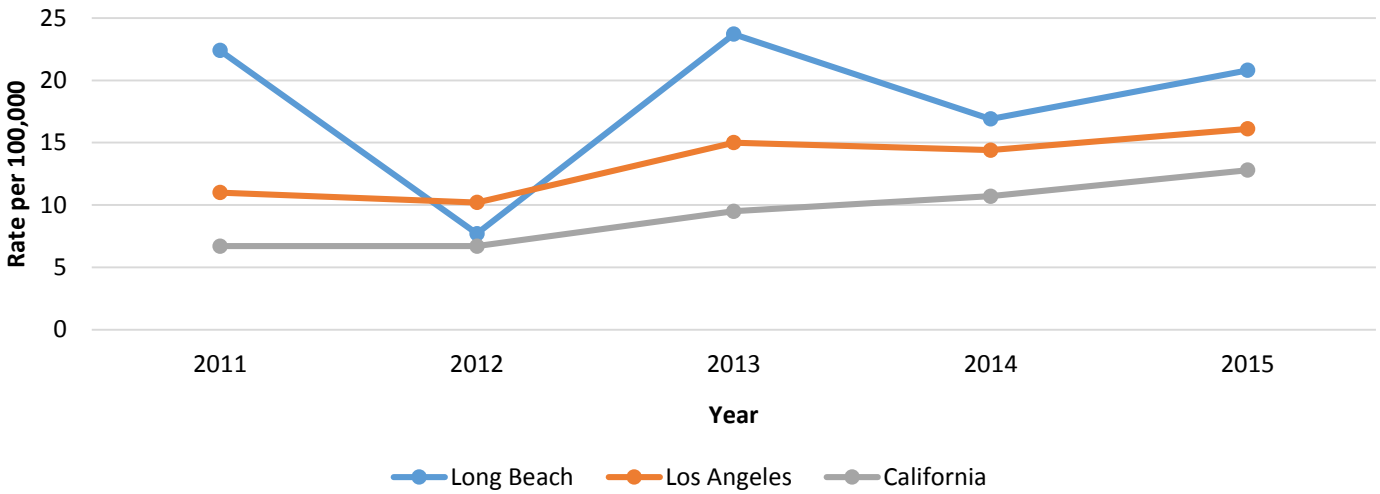
[1] Early syphilis includes primary, secondary and early latent syphilis.
Note: Incidence rates are per 100,000 population.
Source: California Department of Public Health, STD Control Branch
State of California, Department of Finance, *California County Population Estimates and Components of Change by County*, July, 1, 2011-2016. Sacramento, California, December 2015.
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[1] cases by zip code, Long Beach, 2015



[1] Early syphilis includes primary, secondary and early latent syphilis.
Source: California Department of Public Health, STD Control Branch

Figure 8. Late latent syphilis incidence rates per 100,000 population, Long Beach, Los Angeles, and California, 2011-2015



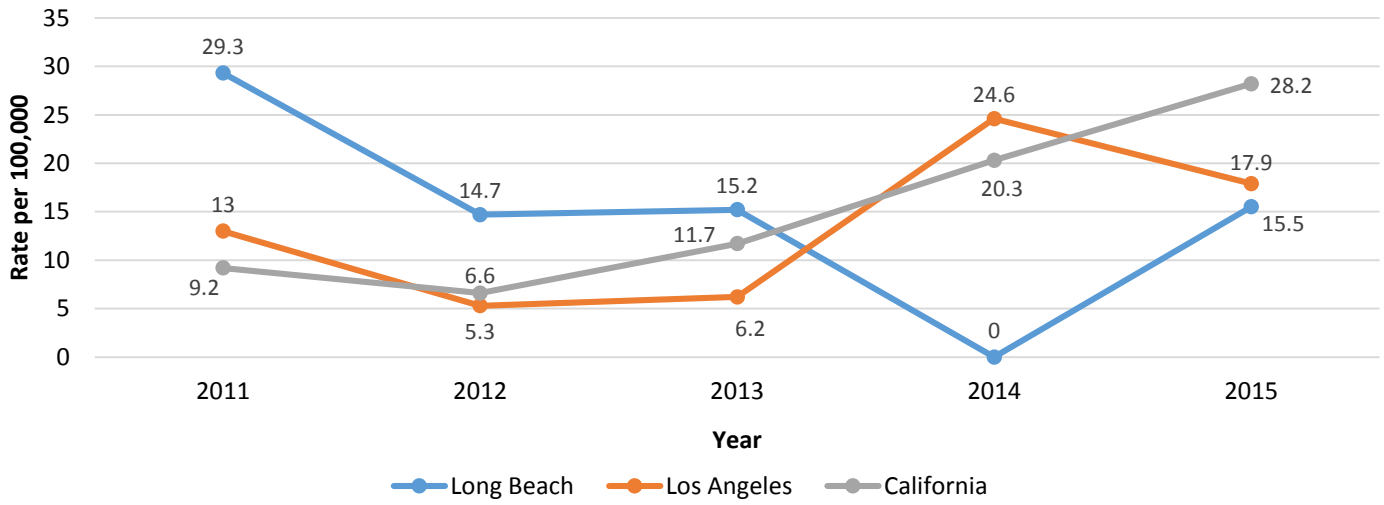
Note: Incidence rates are per 100,000 population.
Source: California Department of Public Health, STD Control Branch
State of California, Department of Finance, *California County Population Estimates and Components of Change by County*, July, 1, 2011-2016. Sacramento, California, December 2015.

Table 11. Late latent syphilis cases and incidence rates per 100,000 population, Long Beach, Los Angeles, and California, 2011-2015

	Year									
	2011		2012		2013		2014		2015	
	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate
Long Beach	**104**	**22.4**	**36**	**7.7**	**112**	**23.7**	**80**	**16.9**	**99**	**20.8**
Los Angeles	1,087	11.0	1,015	10.2	1,508	15.0	1,455	14.4	1,636	16.1
California	2,510	6.7	2,567	6.7	3,646	9.5	4,139	10.7	4,991	12.8

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, 2011-2016. Sacramento, California, December 2015.

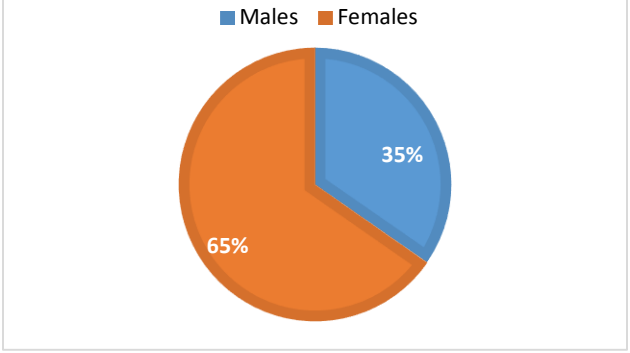
Figure 9. Total congenital syphilis incidence rates per 100,000 population, Long Beach, Los Angeles, and California, 2011-2015



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 2015.

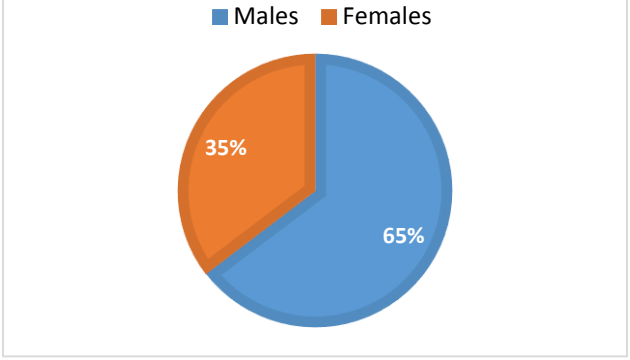
ADDITIONAL STD FIGURES

Figure 10. Chlamydia cases by gender, Long Beach, 2015



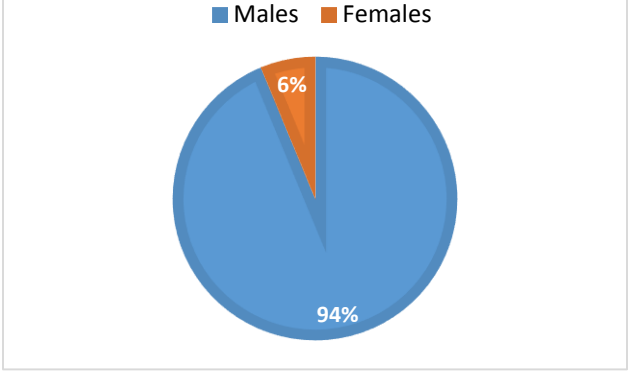
*See Table 3.

Figure 11. Gonorrhea cases by gender, Long Beach, 2015



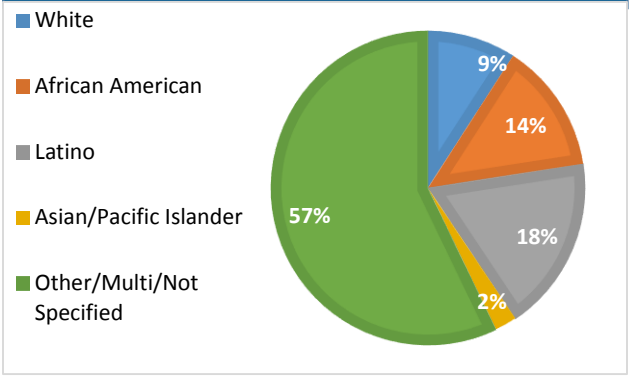
*See Table 6.

Figure 12. Total early syphilis cases by gender, Long Beach, 2015



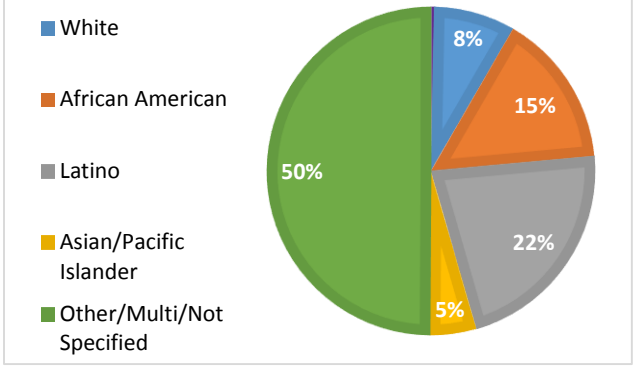
*See Table 9.

Figure 13. Male chlamydia cases by race/ethnicity, Long Beach, 2015



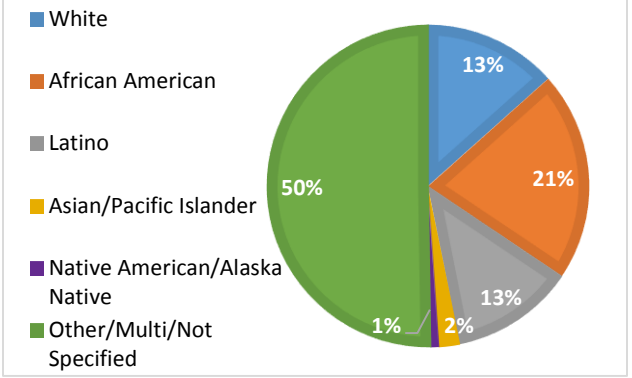
*See Table 4.

Figure 14. Female chlamydia cases by race/ethnicity, Long Beach, 2015



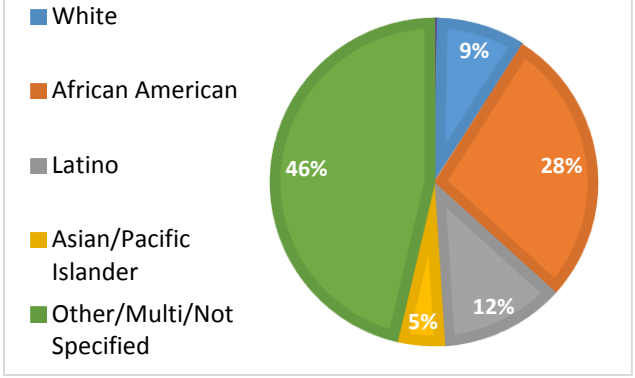
*See Table 4.

Figure 15. Male gonorrhea cases by race/ethnicity, Long Beach, 2015



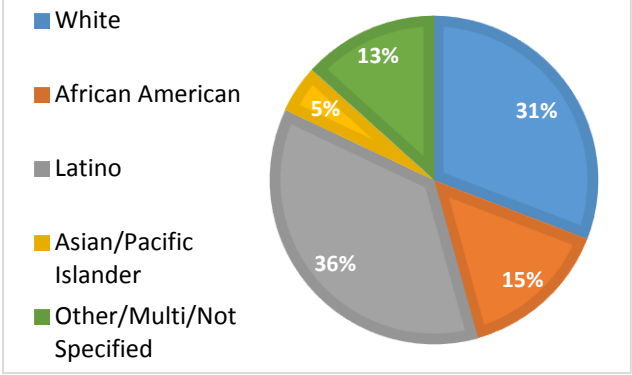
*See Table 7.

Figure 16. Female gonorrhea cases by race/ethnicity, Long Beach, 2015



*See Table 7.

Figure 17. Male total early syphilis cases by race/ethnicity, Long Beach, 2015



*See Table 10.

*Female total early syphilis case counts were too small to report.

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HIV SURVEILLANCE

Annual Report

2015

HIV FIGURES AND TABLES

LIMITATIONS

Health Insurance Data: There was a large amount of missing insurance data in our data set, potentially skewing percentages in Figures 30 and 31.

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 2014.

Late Reporting: Due to reporting delays, the City of Long Beach's 2015 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.

HIV HIGHLIGHTS

- As of December 31, 2015, there were 4,785 Long Beach residents diagnosed and living with HIV (Table 12). The number of new HIV diagnoses declined overall from 172 individuals in 2011 to 130 individuals in 2015 (Figure 18). The majority of persons newly diagnosed with HIV between 2011 and 2015 were Latino (Figure 19, 23). However, the highest overall rates of new diagnoses in this time period were among African American males and females (Figure 25, 26). From 2011 to 2015 the majority of males primarily contracted HIV through MSM (men who have sex with men) contact (Figure 24). Most newly diagnosed males and females were between 30-39 years of age (Table 17).
- In 2014, Long Beach had a rate of 28 new HIV infections per 100,000 population. This rate is higher than the new infection rates of Los Angeles County (20 per 100,000) and the State of California (13 per 100,000) (Figure 20). In 2015, men in Long Beach had a new infection rate of 48 per 100,000, which is six times higher than that of women (8 per 100,000) (Table 14).
- Males living with HIV were predominately White, aged 40 plus years and MSM. Females living with HIV were predominately African American, aged 40 plus years, and heterosexual (Table 16). For all persons living with HIV in 2015, African Americans accounted for 40% of heterosexual HIV cases, followed by Latinos with 36%, and Whites with 15% (Table 16). In 2015, African American women accounted for 41% of females living with HIV in the city (Table 16).
- Between 2011 and 2015, 338 deaths occurred among Long Beach HIV cases, however, deaths declined for both males and females during this time. The largest decline in deaths by cases occurred among Whites. The majority of deaths occurred among persons aged 50-59 years (Table 18). In 2015, African American men and Latinas experienced the highest mortality rates (Figures 28, 29).
- In 2015, 45% of African Americans were publicly insured at the time of their initial HIV diagnoses. Latinos had the highest amount of private coverage with 26% (Figure 30). Between 2011 and 2015, more females were insured by Medicaid than males (16% for females and 7% for males) (Figure 31).
- Between 2014 and 2015, the number of total early syphilis cases increased by 27% among HIV positive MSM (Figure 33).
- In 2014, 72% of newly diagnosed HIV patients were retained in HIV care and 71% achieved viral suppression in the City of Long Beach (Figure 34). African Americans newly diagnosed with HIV had the lowest percentages of HIV care retention in 2014; Latinos had the lowest percentages of viral suppression (Figure 35). For all persons living with HIV in Long Beach in 2014, 58% were retained in HIV care and 59% achieved viral suppression (Figure 36). In 2014, African Americans living with HIV had the lowest percentages of HIV care retention and viral suppression (Figure 37).
- 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[1], California[2], and the United States[3], 2014

	Living with HIV Cases			Newly Diagnosed HIV Cases	
	Long Beach	California	United States	Long Beach, 2014	United States, 2014
Gender[4] [5]					
Male	4,158	109,792	715,204	109	32,185
Female	497	14,982	231,739	22	7,533
Race/Ethnicity					
White	1,967	53,076	296,763	40	10,967
African American	921	22,953	395,667	30	17,592
Latino	1,463	42,523	207,199	54	9,227
Asian/Pacific Islander	186	5,060	12,217	5*	994
Native American/Alaska Native	13*	443	2,861	<5	208
Other/Unknown	101	2,186	32,236	<5	889
Transmission Category					
MSM	3,453	83,441	431,350	73	21,566
PWID	216	8,317	107,927	<5	1,304
MSM-PWID	326	9,250	46,348	<5	870
Heterosexual	308	18,542	182,352	<5	5,331
Other/Unidentified	344	6,852	178,966	54	10,647

[1] All HIV data taken from California Office of AIDS eHARS database.

[2] California data are reported through December 2015, for cases living as of December 31, 2014. California data taken from California Department of Public Health HIV Surveillance Report – 2014; https://www.cdph.ca.gov/programs/aids/Pages/TOASurv.aspx. Published October 2016.

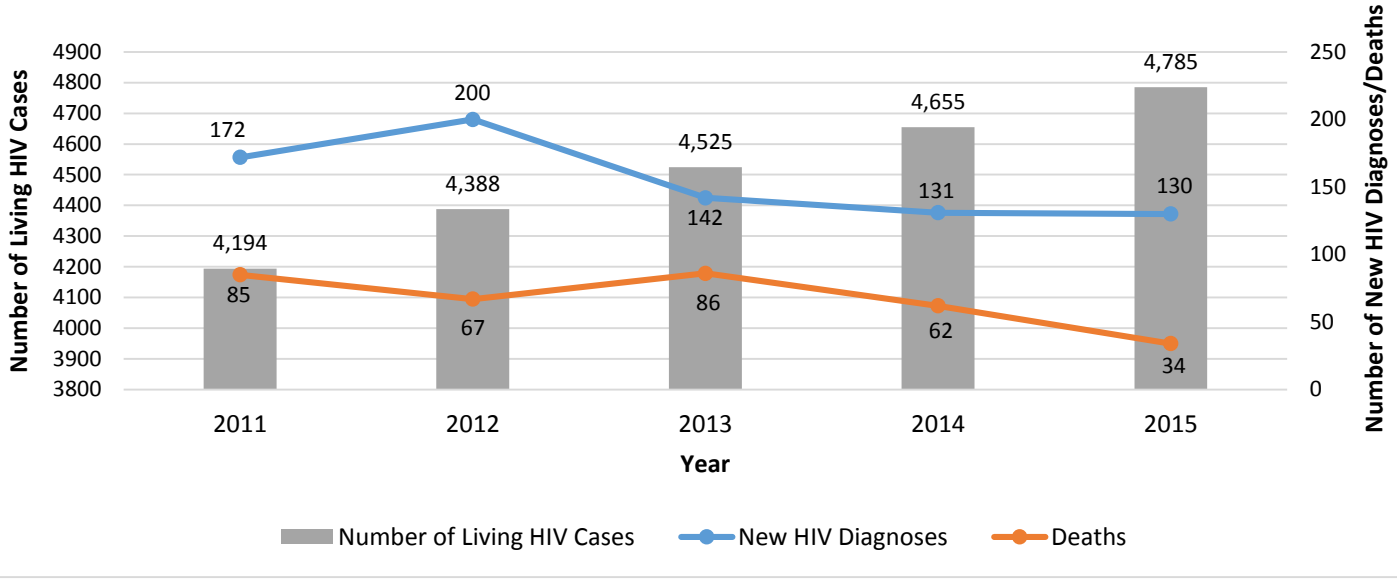
[3] U.S. data are reported through July 31, 2015 and reflect cases diagnosed through December 31, 2014. U.S. data reflect unadjusted numbers for 50 states and 6 dependent areas and may be found in the CDC HIV Surveillance Report, 2014; vol. 26 http://www.cdc.gov/hiv/library/reports/sureveillance. Published November 2015.

[4] Transgender data are not reported by the United States. See Technical Notes "Transgender Status."

[5] 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 for Health Statistics. Case counts/rates are included for reporting purposes only.

Figure 18. New HIV diagnoses[1], deaths, and prevalence, Long Beach[2], 2011-2015



[1] See Technical Notes "Date of Initial HIV Diagnosis."

[2] All HIV data taken from California Office of AIDS eHARS database.

Table 13. Number of persons newly diagnosed[1] with HIV by year, Long Beach[2], 2011-2015

	Year									
	2011		2012		2013		2014		2015	
	Num.	%	Num.	%	Num.	%	Num.	%	Num.	%
Total	**172**		**200**		**142**		**131**		**130**	
Gender[3]										
Male	148	86%	180	90%	125	88%	109	83%	111	85%
Female	24	14%	20	10%	17*	12%	22	17%	19*	15%
Race/Ethnicity										
White	42	24%	58	29%	42	30%	40	31%	28	22%
African American	52	30%	48	24%	29	20%	30	23%	38	29%
Latino	69	40%	82	41%	57	40%	54	41%	54	42%
Asian/Pacific Islander	6*	3%	5*	3%	8*	6%	5*	4%	7*	5%
Native American/Alaska Native	<5	-	<5	-	<5	-	<5	-	<5	-
Other/Unknown	<5	-	7*	4%	<5	-	<5	-	<5	-
Age at HIV Diagnosis (Years)										
0-12	<5	-	<5	-	<5	-	<5	-	<5	-
13 - 17	<5	-	<5	-	<5	-	<5	-	<5	-
18 - 24	37	22%	30	15%	19*	13%	15*	11%	29	22%
25 - 29	32	19%	39	20%	17*	12%	14*	11%	24	18%
30 - 39	50	29%	61	31%	39	27%	52	40%	37	28%
40 - 49	33	19%	39	20%	43	30%	23	18%	24	18%
50+	20	12%	31	16%	21	15%	26	20%	16*	12%
Transmission Category										
MSM	122	71%	140	70%	95	67%	73	56%	66	51%
PWID	6*	3%	<5	-	5*	4%	<5	-	9*	7%
MSM-PWID	5*	3%	5*	3%	<5	-	<5	-	<5	-
Heterosexual	9*	5%	5*	3%	<5	-	<5	-	<5	-
Other/Unidentified	30	17%	48	24%	39	27%	54	41%	48	37%
HIV Disease Stage[4]										
HIV only	113	66%	146	73%	94	66%	100	76%	109	84%
HIV and later AIDS	18*	10%	23	12%	12*	8%	11*	8%	6*	5%
HIV and AIDS diagnosed simultaneously	40	23%	31	16%	36	25%	20	15%	15*	12%
Unknown	<5	-								

[1] Data include persons newly diagnosed with HIV infection in any stage and reported as of April 6, 2016.

[2] All HIV data taken from California Office of AIDS eHARS database.

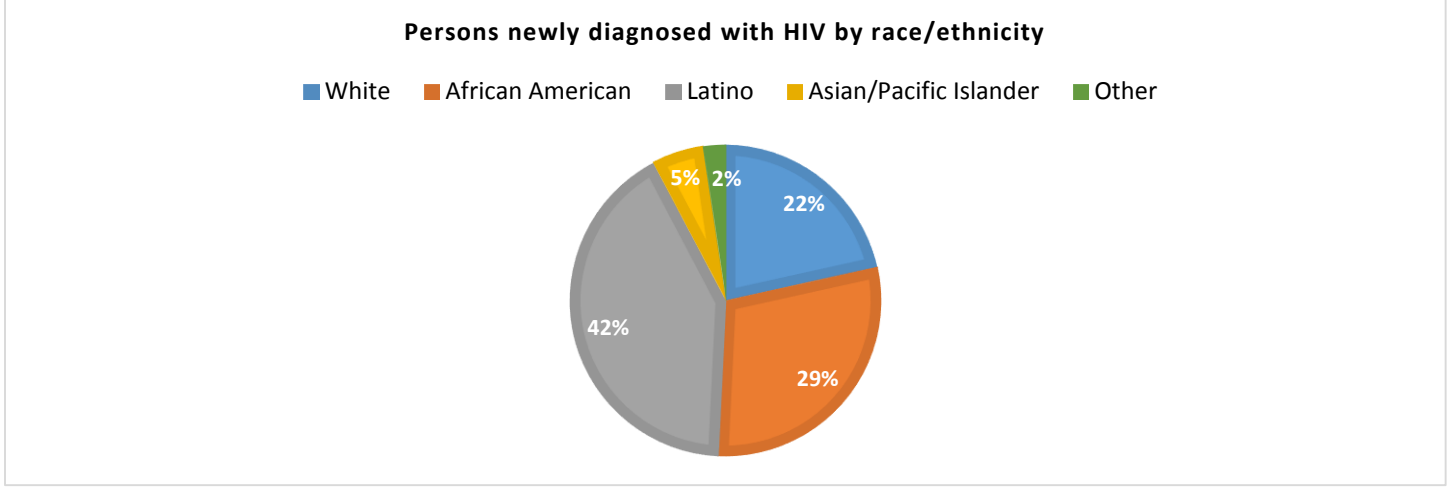
[3] Transgender cases are not reported separately in our data due to the small population size. See Technical Notes "Transgender Status."

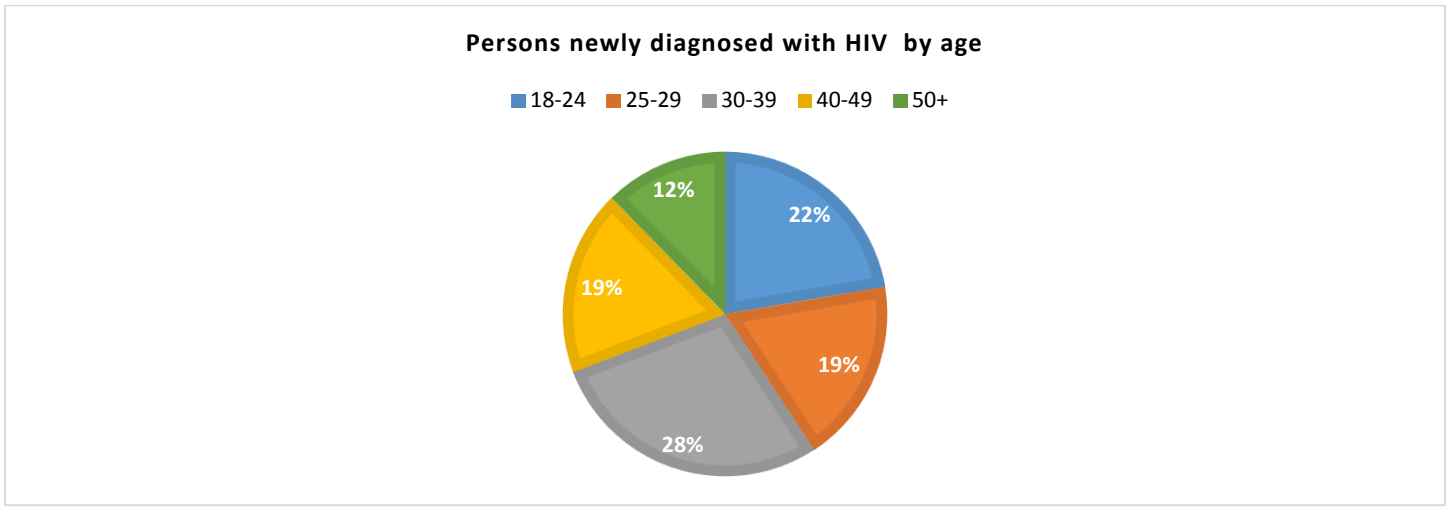
[4] For how the HIV Disease Stage is determined, see Technical Notes "Stage of Disease at Diagnosis of HIV Infection."

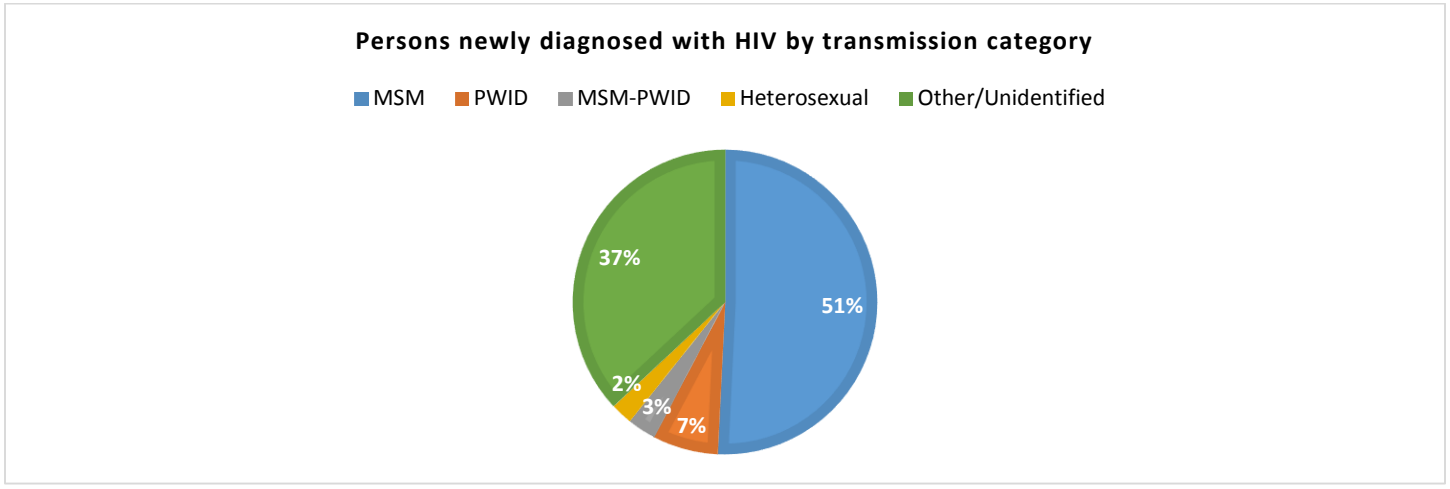
*Percentages may not add to 100% due to rounding and not displaying data when less than 5 cases.

*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 19. Persons newly diagnosed with HIV by demographic and transmission category, Long Beach, 2015







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

Table 14. Number and rate per 100,000[1] population of new HIV infections by year, Long Beach[2], 2011-2015

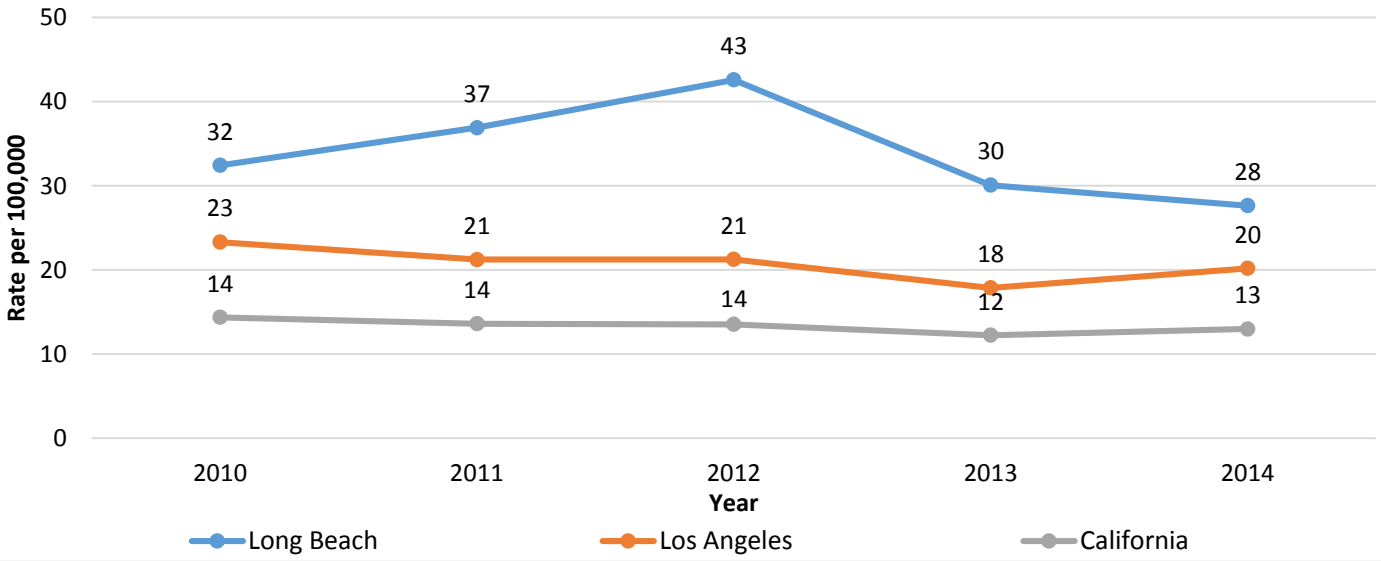
	Year									
	2011		2012		2013		2014		2015	
	Num.	Rate	Num.	Rate	Num.	Rate	Num.	Rate	Num.	Rate
Total	**172**	**37**	**200**	**43**	**142**	**30**	**131**	**28**	**130**	**27**
Sex at Birth										
Male	148	65	180	78	125	54	109	47	111	48
Female	24	10	20	8	17*	7	22	9	19*	8
Race/Ethnicity										
White	42	30	58	42	42	30	40	29	28	20
African American	52	86	48	79	29	47	30	49	38	62
Latino	69	36	82	43	57	30	54	28	54	28

[1] 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/.

[2] 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 20. Incidence rates per 100,000 population[1] of new HIV infections, Long Beach[2], Los Angeles, and California, 2010-2014[3]



[1] 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/.

[2] Long Beach HIV data taken from California Office of AIDS eHARS database.

[3] The latest available HIV data for Los Angeles County and California is for 2014. Therefore, 2010-2014 data was used for this figure to create a 5 year comparison.

Table 15. Number of persons living with HIV[1] by year, Long Beach[2], 2011-2015

	Year									
	2011		2012		2013		2014		2015	
	Num.	%	Num.	%	Num.	%	Num.	%	Num.	%
Total	**4,194**		**4,388**		**4,525**		**4,655**		**4,785**	
Gender[3]										
Male	3,751	89%	3,927	89%	4,049	89%	4,158	89%	4,269	89%
Female	443	11%	461	11%	476	11%	497	11%	516	11%
Race/Ethnicity										
White	1,832	44%	1,887	43%	1,927	43%	1,967	42%	1,995	42%
African American	816	19%	863	20%	891	20%	921	20%	959	20%
Latino	1,273	30%	1,353	31%	1,409	31%	1,463	31%	1,517	32%
Asian/Pacific Islander	174	4%	179	4%	186	4%	190	4%	197	4%
Native American/Alaska Native	10*	0%	10*	0%	13*	0%	13*	0%	13*	0%
Other/Unknown	89	2%	96	2%	99	2%	101	2%	104	2%
Age in Years										
0 - 12	<5	-	<5	-	<5	-	<5	-	<5	-
13 - 17	<5	-	<5	-	<5	-	<5	-	<5	-
18 - 24	16*	0%	26	1%	35	1%	43	1%	71	1%
25 - 29	94	2%	122	3%	138	3%	151	3%	173	4%
30 - 39	544	13%	614	14%	655	14%	708	15%	743	16%
40 - 49	1,180	28%	1,228	28%	1,268	28%	1,297	28%	1,323	28%
50 - 59	1,600	38%	1,628	37%	1,646	36%	1,667	36%	1,679	35%
60 - 69	621	15%	631	14%	642	14%	647	14%	652	14%
70+	137	3%	137	3%	137	3%	138	3%	140	3%
Transmission Category										
MSM	3,149	75%	3,287	75%	3,380	75%	3,453	74%	3,519	74%
PWID	208	5%	210	5%	213	5%	216	5%	225	5%
MSM-PWID	319	8%	324	7%	326	7%	326	7%	330	7%
Heterosexual	302	7%	306	7%	307	7%	308	7%	311	6%
Transfusion/ Hemophilia	8*	0%	8*	0%	8*	0%	8*	0%	8*	0%
Other/Unidentified	208	5%	253	6%	291	6%	344	7%	392	8%
HIV Disease Stage[4]										
HIV only	1,263	30%	1,408	32%	1,501	33%	1,600	34%	1,709	36%
HIV and later AIDS	1,933	46%	1,954	45%	1,966	43%	1,977	42%	1,983	41%
HIV and AIDS diagnosed simultaneously	786	19%	814	19%	846	19%	866	19%	881	18%
Unknown	212	5%	212	5%	212	5%	212	5%	212	4%

[1] Persons living with HIV at the end of each year. Data include persons living with HIV infection in any stage and reported as of April 6, 2016.

[2] All HIV data taken from California Office of AIDS eHARS database.

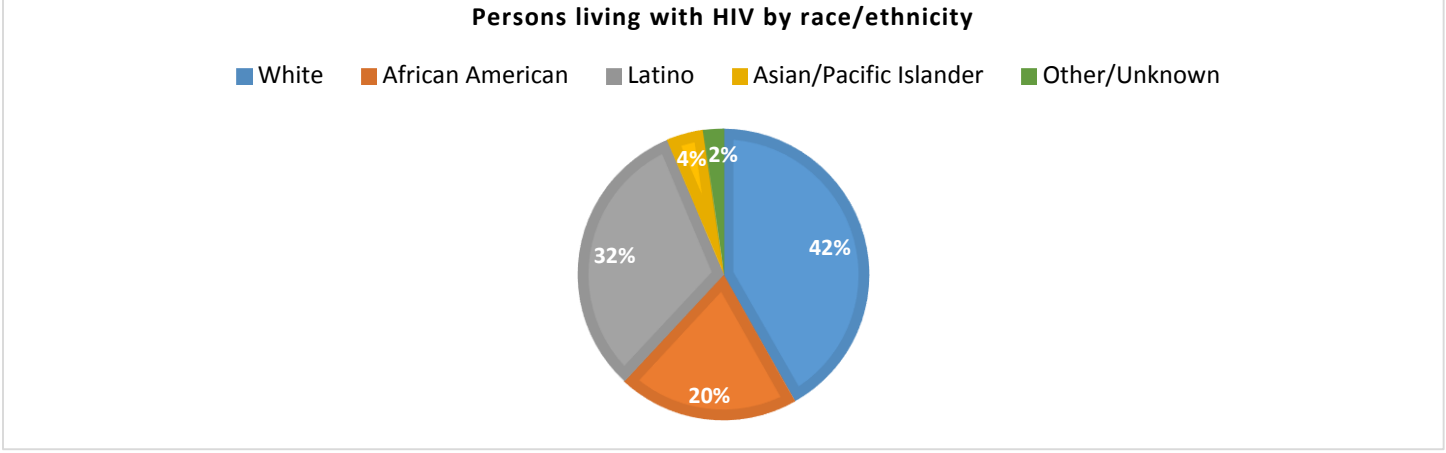
[3] Transgender cases are not reported separately in our data due to the small population size. See Technical Notes "Transgender Status."

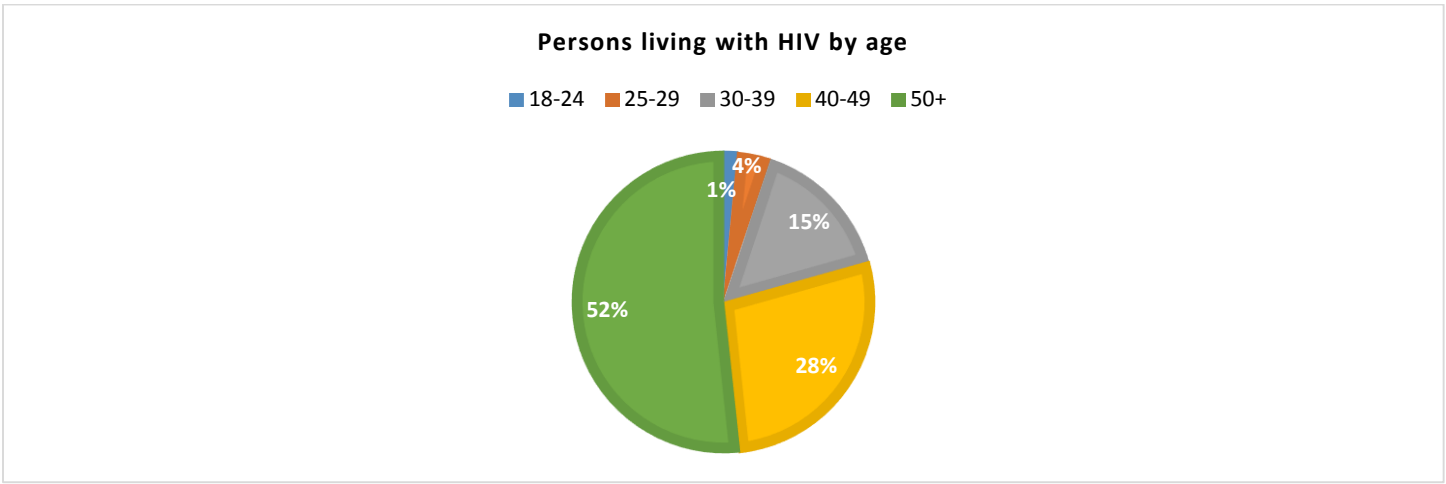
[4] For how the HIV Disease Stage is determined, see Technical Notes "Stage of Disease at Diagnosis of HIV Infection."

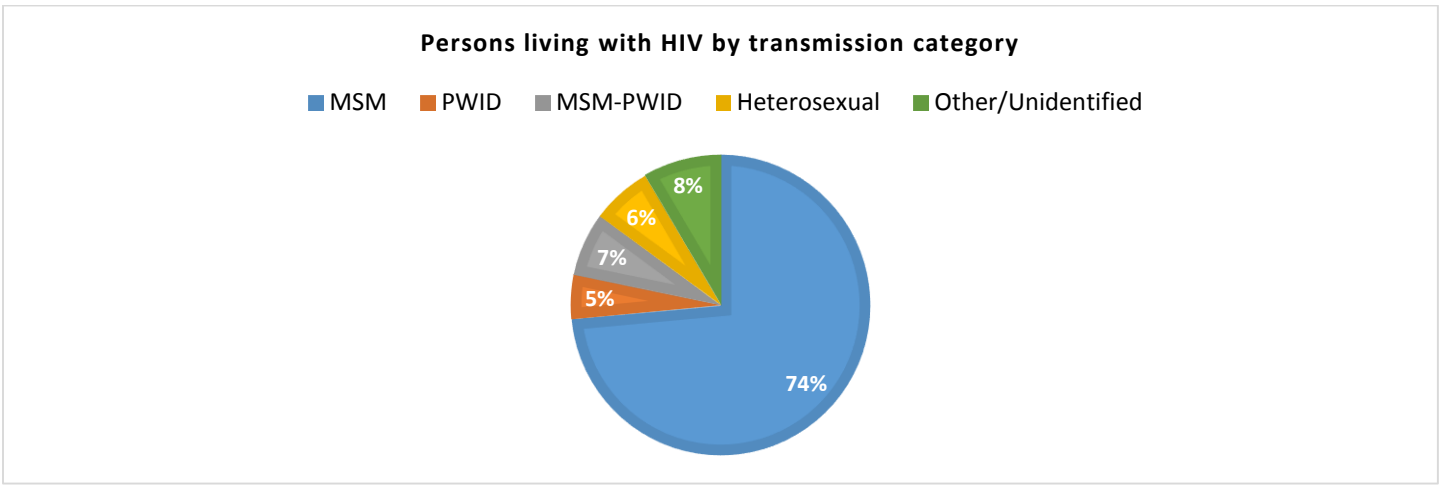
*Percentages may not add to 100% due to rounding and not displaying data when less than 5 cases.

*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 21. Persons living with HIV by demographic and transmission category, Long Beach, 2015







*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[1], 2015

	Race/Ethnicity										
	White		African American		Latino		Asian/Pacific Islander		Other/ Unknown[2]		Total
	Num.	%	Num.	%	Num.	%	Num.	%	Num.	%	Num.
Total	**1,995**		**959**		**1,517**		**197**		**117**		**4,785**
Male											
Transmission Category											
MSM	1,632	86%	515	69%	1,142	85%	151	87%	79	75%	3,519
PWID	54	3%	37	5%	31	2%	<5	-	<5	-	128
MSM-PWID	154	8%	80	11%	76	6%	<5	-	17*	16%	330
Heterosexual	16*	1%	31	4%	23	2%	7*	4%	<5	-	79
Transfusion/ Hemophilia	<5	-	<5	-	<5	-	<5	-	<5	-	<5
Other/Unidentified	39	2%	84	11%	75	6%	10*	6%	<5	-	211
Age in Years											
0 - 12	<5	-	<5	-	<5	-	<5	-	<5	-	<5
13 - 17	<5	-	<5	-	<5	-	<5	-	<5	-	<5
18 - 24	9*	0%	24	3%	19*	1%	<5	-	<5	-	56
25 - 29	28	1%	56	7%	55	4%	7*	4%	13*	12%	159
30 - 39	147	8%	129	17%	309	23%	46	27%	14*	13%	645
40 - 49	434	23%	182	24%	454	34%	64	37%	25	24%	1,159
50 - 59	856	45%	248	33%	356	26%	38	22%	35	33%	1,533
60 - 69	337	18%	96	13%	135	10%	14*	8%	15*	14%	597
70+	84	4%	13*	2%	19*	1%	<5	-	<5	-	118
Male Subtotal	**1,896**		**748**		**1,347**		**173**		**105**		**4,269**
Female											
Transmission Category											
PWID	30	30%	35	17%	25	15%	<5	-	<5	-	97
Heterosexual	31	31%	92	44%	90	53%	14*	58%	5*	42%	232
Transfusion/ Hemophilia	<5	-	<5	-	<5	-	<5	-	<5	-	6*
Other/Unidentified	37	37%	81	38%	53	31%	7*	29%	<5	-	181
Age in Years											
0 - 12	<5	-	<5	-	<5	-	<5	-	<5	-	<5
13 - 17	<5	-	<5	-	<5	-	<5	-	<5	-	<5
18 - 24	<5	-	7*	3%	7*	4%	<5	-	<5	-	15*
25 - 29	<5	-	7*	3%	<5	-	<5	-	<5	-	14*
30 - 39	12*	12%	35	17%	41	24%	7*	29%	<5	-	98
40 - 49	40	40%	66	31%	49	29%	6*	25%	<5	-	164
50 - 59	27	27%	68	32%	44	26%	6*	25%	<5	-	146
60 - 64	12*	12%	25	12%	13*	8%	<5	-	<5	-	55
65+	5*	5%	<5	-	11*	6%	<5	-	<5	-	22
Female Subtotal	**99**		**211**		**170**		**24**		**12***		**516**

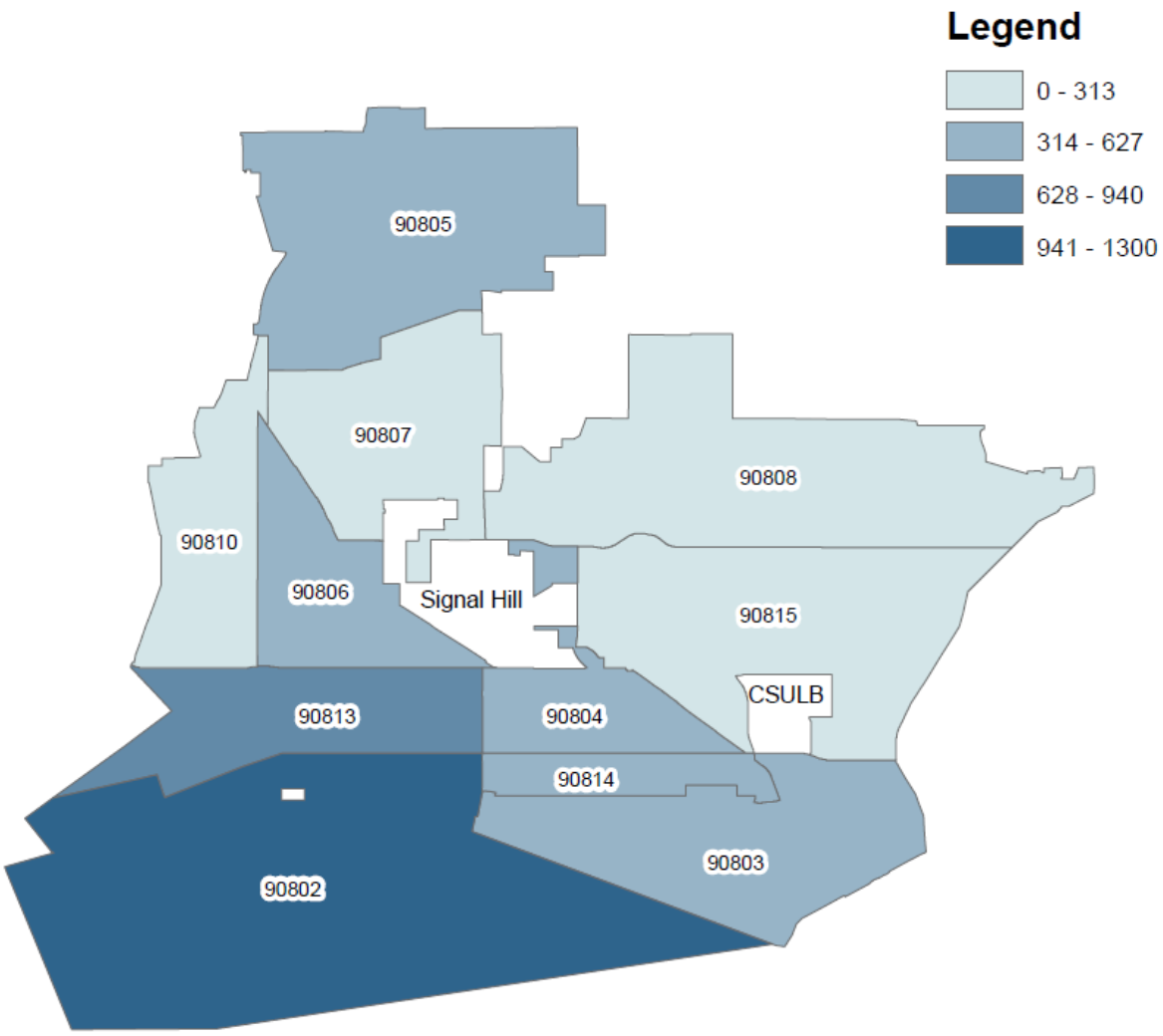
[1] All HIV data taken from California Office of AIDS eHARS database.

[2] 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.

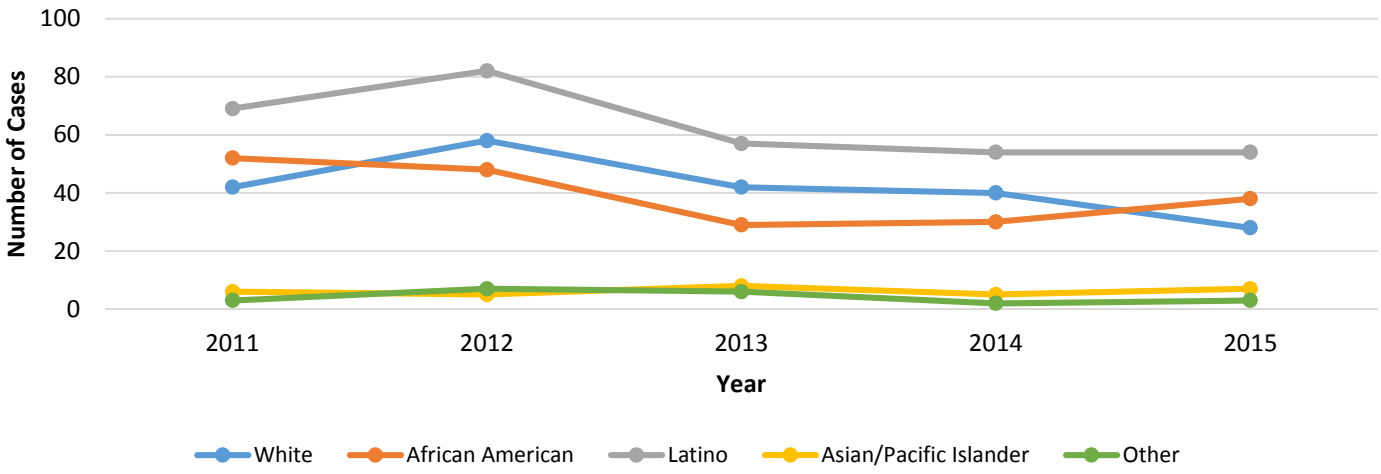
Figure 22. Persons living with HIV in Long Beach, cases by zip code, 2015



Source: California Office of AIDS eHARS database.

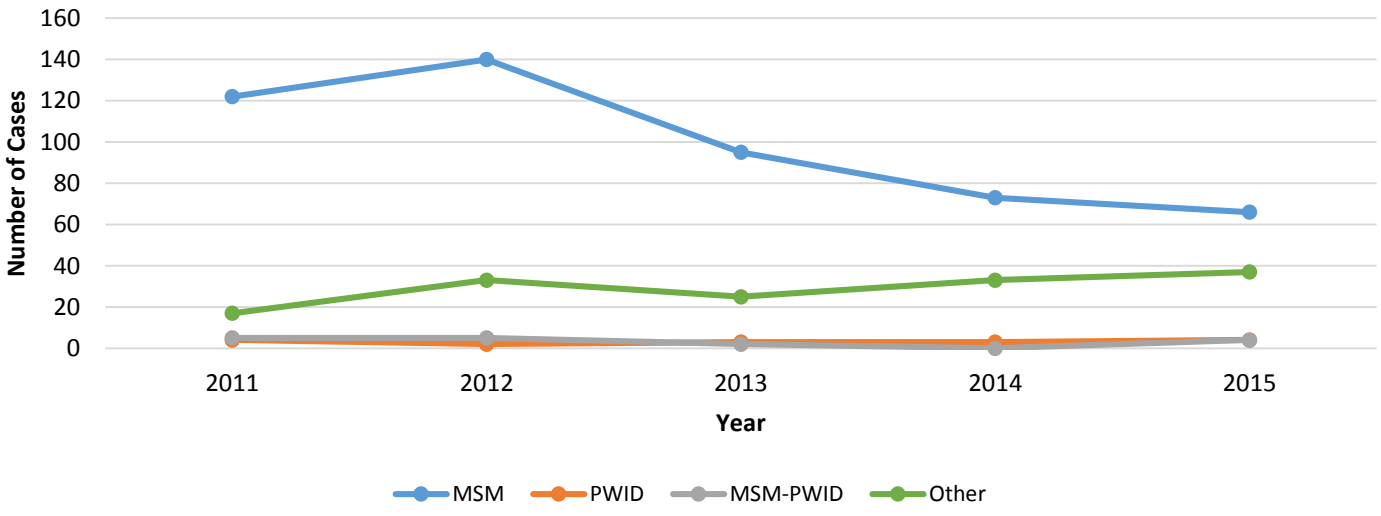
TRENDS IN HIV DIAGNOSES

Figure 23. Number of persons newly diagnosed[1] with HIV by race/ethnicity[2], Long Beach[3], 2011-2015



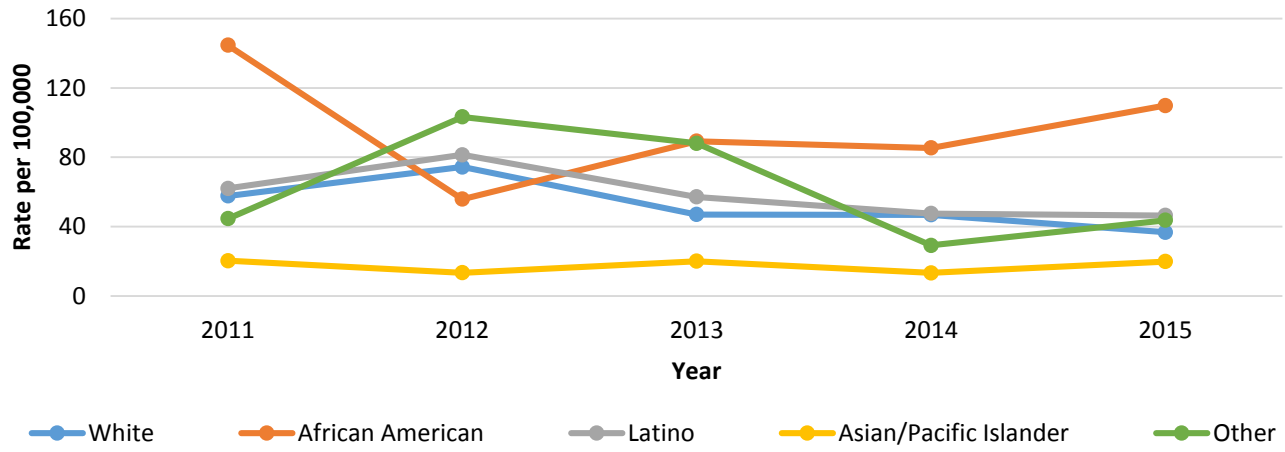
[1] See Technical Notes "Date of Initial Diagnosis."
[2] Cases in the "Other" racial/ethnic category include Native American/Alaska Native, Multi-race, and unknown.
[3] All HIV data taken from California Office of AIDS eHARS database.

Figure 24. Number of men[1] newly diagnosed[2] with HIV by transmission category[3], Long Beach[4], 2011-2015



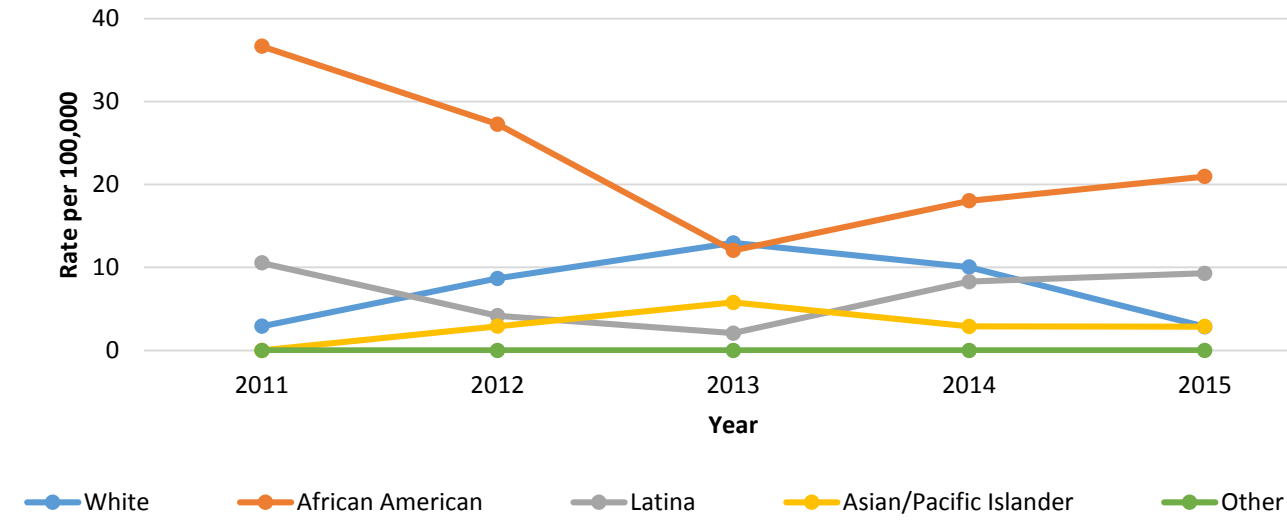
[1] Data for newly diagnosed women by transmission category was too small to report.
[2] See Technical Notes "Date of Initial Diagnosis."
[3] The "Other" transmission category includes adult heterosexual contact and undetermined transmission method.
[4] All HIV data taken from California Office of AIDS eHARS database.

Figure 25. Incidence rates per 100,000 population of men newly diagnosed[1] with HIV by race/ethnicity[2], Long Beach[3], 2011-2015



[1] See Technical Notes "Date of Initial Diagnosis."
[2] Cases in the "Other" racial/ethnic category include Native American/Alaska Native, Multi-race, and unknown.
[3] All HIV data taken from California Office of AIDS eHARS database.

Figure 26. Incidence rates per 100,000 population of women newly diagnosed with HIV by race/ethnicity[1], Long Beach[2], 2011-2015[3]



[1] See Technical Notes "Date of Initial Diagnosis."
[2] Cases in the "Other" racial/ethnic category include Native American/Alaska Native, Multi-race, and unknown.
[3] 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[1], 2011-2015

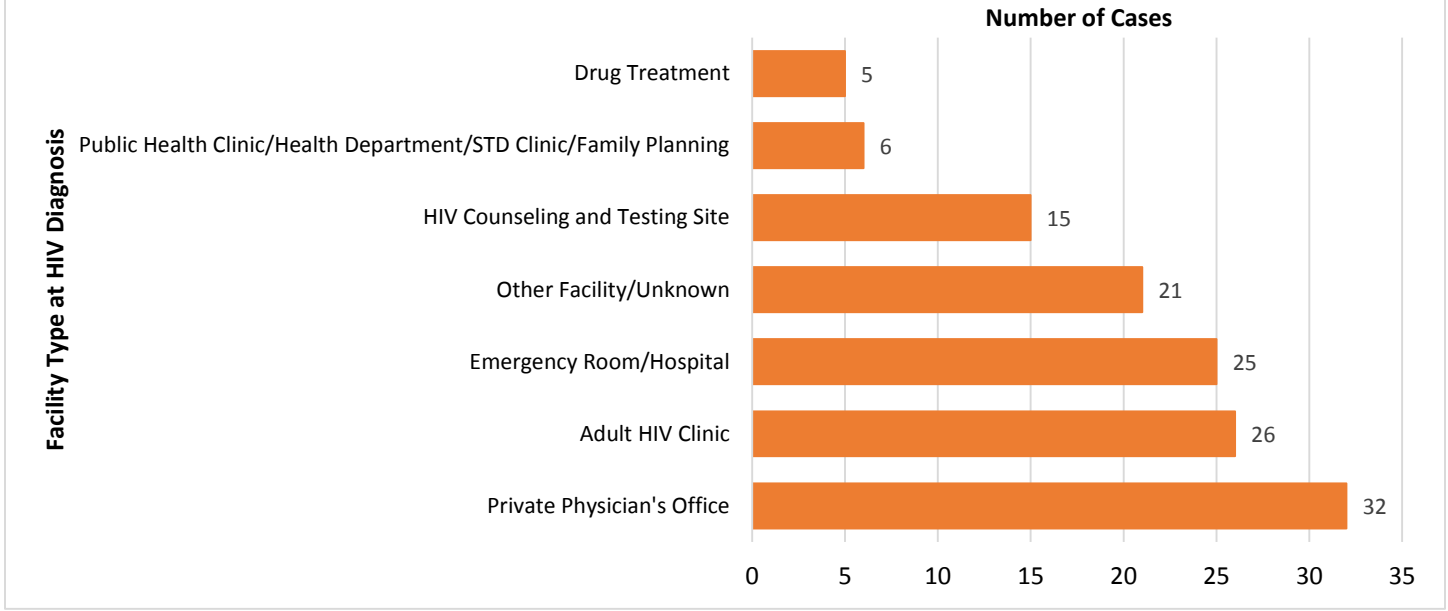
	Year									
	2011		2012		2013		2014		2015	
	Num.	%	Num.	%	Num.	%	Num.	%	Num.	%
Male (Years)										
0 – 12	<5	-	<5	-	<5	-	<5	-	<5	-
13 – 17	<5	-	<5	-	<5	-	<5	-	<5	-
18 – 24	<5	-	9*	5%	7*	6%	7*	6%	25	23%
25- 29	28	19%	27	15%	15*	12%	12*	11%	19*	17%
30 – 39	49	32%	65	36%	38	30%	47	43%	29	26%
40 – 49	37	25%	43	24%	34	27%	23	21%	22	20%
50 – 59	15*	10%	22	12%	17*	14%	17*	16%	11*	10%
60 – 69	<5	-	10*	5%	11*	9%	<5	-	<5	-
70+	<5	-	<5	-	<5	-	<5	-	<5	-
No age given	12*	8%	6*	3%	<5	-	<5	-	<5	-
Male Subtotal	**151**		**182**		**125**		**109**		**111**	
Female (Years)										
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	13*	54%	5*	25%	<5	-	6*	27%	6*	32%
40 - 49	<5	-	5*	25%	6*	35%	6*	27%	<5	-
50 - 59	<5	-	6*	30%	<5	-	<5	-	<5	-
60 - 69	<5	-	<5	-	<5	-	<5	-	<5	-
70+	<5	-	<5	-	<5	-	<5	-	<5	-
No age given	<5	-	<5	-	<5	-	<5	-	<5	-
Female Subtotal	**24**		**20**		**17***		**22**		**19***	

[1] All HIV data taken from California Office of AIDS eHARS database.

* 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 27. Type of facility at HIV diagnosis, Long Beach[1], 2015



[1] 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[1], 2011-2015

	Year										
	2011		2012		2013		2014[2]		2015[2]		Cumulative Totals 2011-2015
	Num.	%	Num.	%	Num.	%	Num.	%	Num.	%	
Gender											
Male	70	81%	61	90%	73	85%	56	88%	30	88%	**290**
Female	16*	19%	7*	10%	13*	15%	8*	13%	<5	-	**48**
Race/Ethnicity											
White	43	50%	42	62%	42	49%	40	63%	12*	35%	**179**
African American	23	27%	7*	10%	21	24%	13*	20%	9*	26%	**73**
Latino	16*	19%	19*	28%	18*	21%	9*	14%	12*	35%	**74**
Asian/Pacific Islander	<5	-	<5	-	<5	-	<5	-	<5	-	**<5**
Native American/Alaska Native	<5	-	<5	-	<5	-	<5	-	<5	-	**<5**
Other/Unknown	<5	-	<5	-	<5	-	<5	-	<5	-	**<5**
Transmission Category											
MSM	48	56%	42	62%	49	57%	40	63%	18*	53%	**197**
PWID	11*	13%	7*	10%	13*	15%	6*	9%	6*	18%	**43**
MSM-PWID	10*	12%	10*	15%	12*	14%	9*	14%	8*	24%	**49**
Heterosexual	8*	9%	6*	9%	<5	-	6*	9%	<5	-	**24**
Other[4]	9*	10%	<5	-	9*	10%	<5	-	<5	-	**25**
Age at Death (Years)											
0 – 29	<5	-	<5	-	<5	-	<5	-	<5	-	**<5**
30 – 39	7*	8%	5*	7%	12*	14%	<5	-	<5	-	**32**
40 – 49	26	30%	23	34%	28	33%	14*	22%	6*	18%	**97**
50 – 59	30	35%	29	43%	30	35%	27	42%	17*	50%	**133**
60 – 69	15*	17%	8*	12%	12*	14%	12*	19%	6*	18%	**53**
70+	6*	7%	<5	-	<5	-	5*	8%	<5	-	**17***
HIV Disease Stage[4]											
HIV only	7*	8%	7*	10%	12*	14%	<5	-	<5	-	**33**
HIV and later AIDS	57	66%	53	78%	50	58%	45	70%	22	65%	**227**
HIV and AIDS diagnosed simultaneously	22	26%	8*	12%	24	28%	15*	23%	9*	26%	**78**
Total	**86**		**68**		**86**		**64**		**34**		**338**

[1] All HIV data taken from California Office of AIDS eHARS database.

[2] 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, 2013.

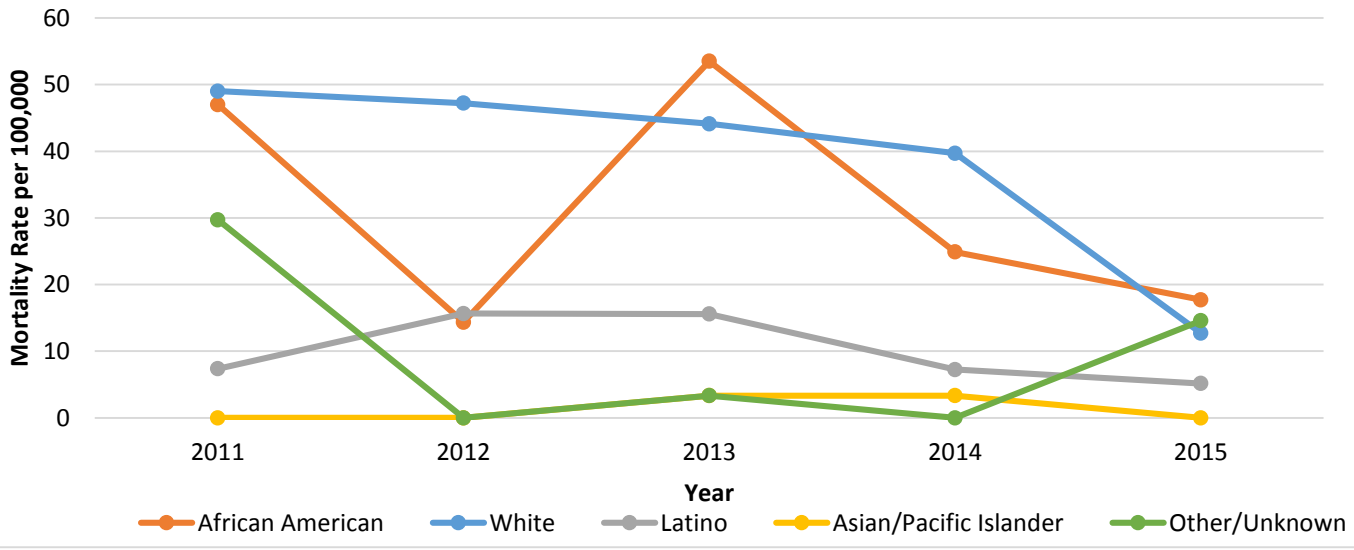
[3] The "Other" category also includes unidentified transmission category.

[4] 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 28. Mortality rates[1] per 100,000 population among men living with HIV by race/ethnicity[2], Long Beach[3], 2011-2015

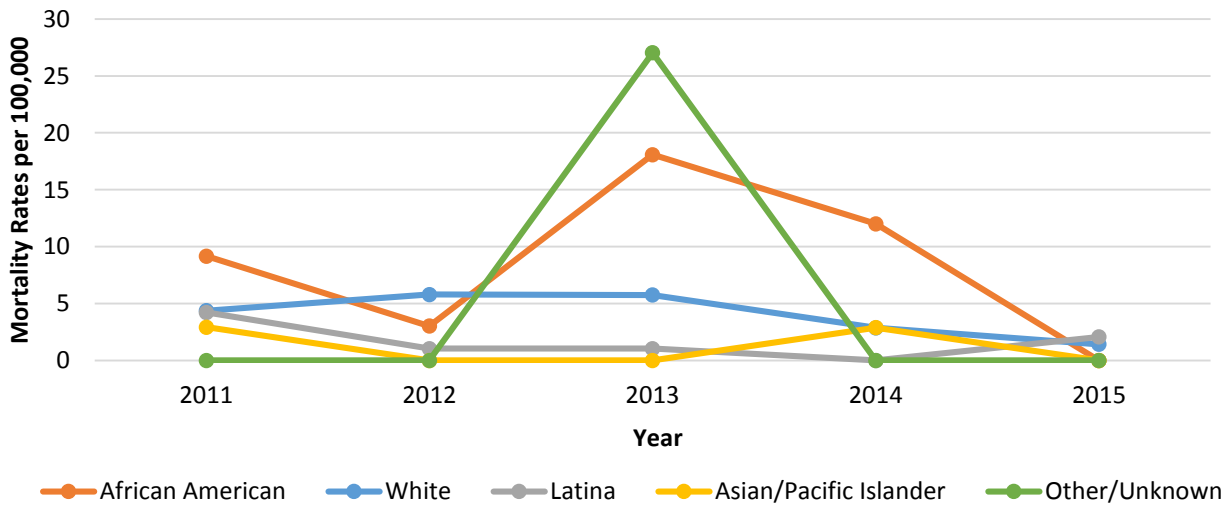


[1] Mortality rates are calculated as the number of HIV cases who died each year divided by the population by sex and race/ethnicity. See Technical Notes for "HIV Case Rates and HIV Mortality Rates."

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

[3] All HIV data taken from California Office of AIDS eHARS database.

Figure 29. Mortality rates[1] per 100,000 population among women living with HIV by race/ethnicity[2], Long Beach[3], 2011-2015



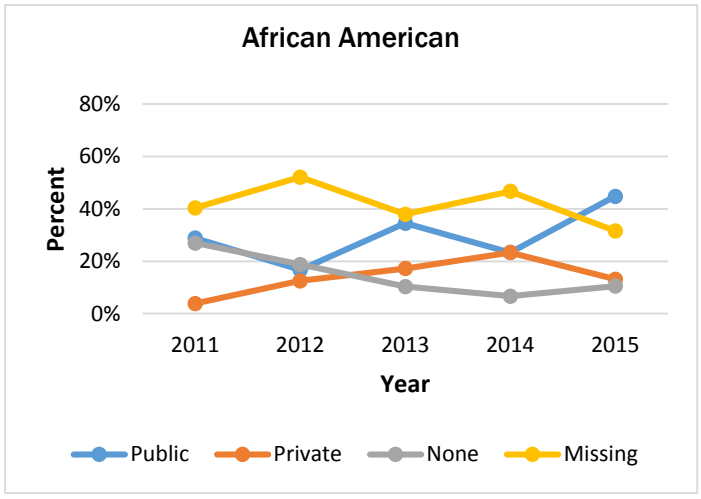
[1] Mortality rates are calculated as the number of HIV cases who died each year divided by the population by sex and race/ethnicity. See Technical Notes for "HIV Case Rates and HIV Mortality Rates."

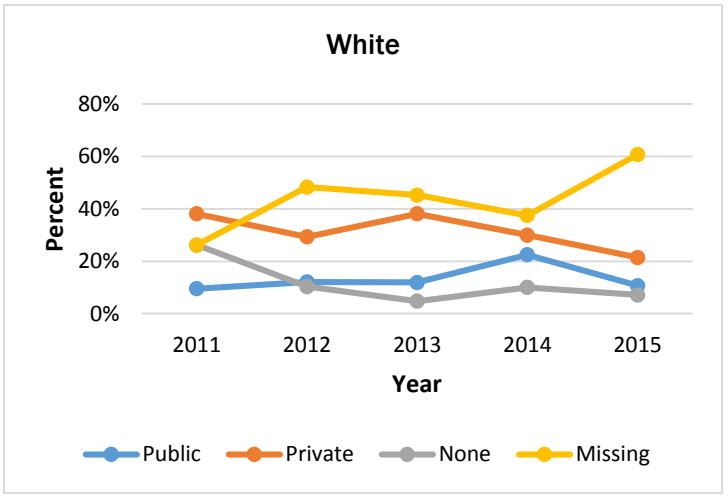
[2] Cases in the "Other" racial/ethnic category include Native American/Alaska Native, Multi-race, and unknown.

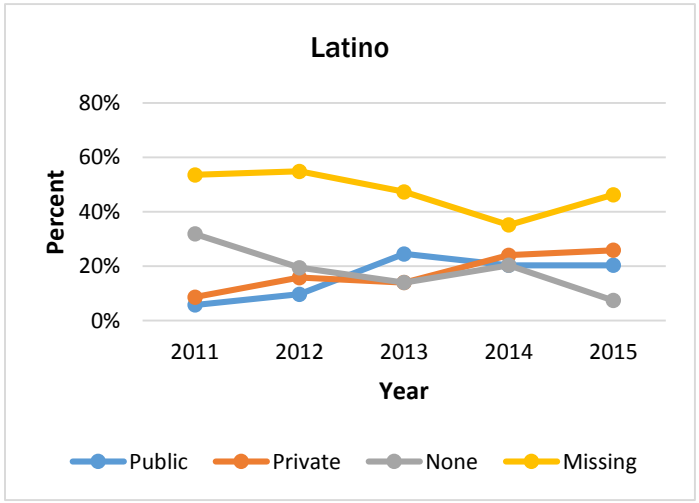
[3] All HIV data taken from California Office of AIDS eHARS database.

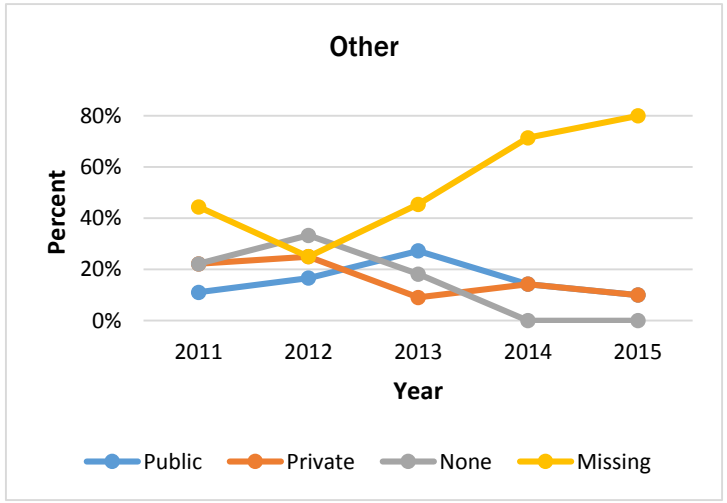
HEALTH INSURANCE STATUS AT TIME OF HIV DIAGNOSIS

Figure 30. Health insurance status[1] at time of HIV diagnosis by race/ethnicity[2], Long Beach[3], 2011-2015







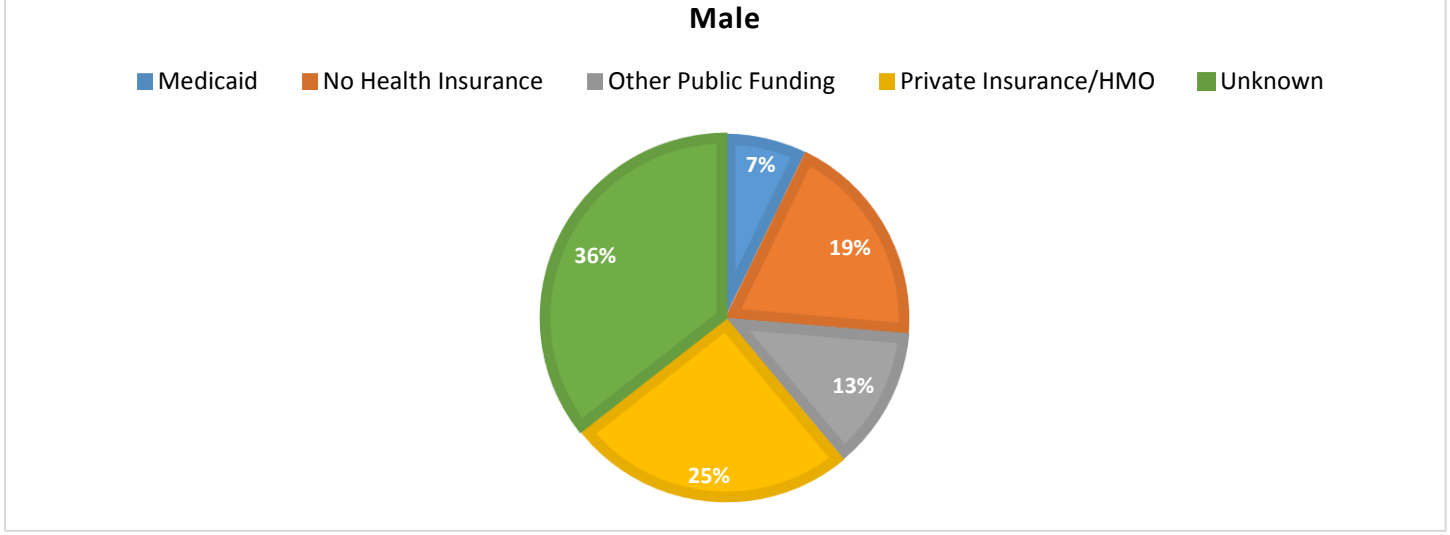


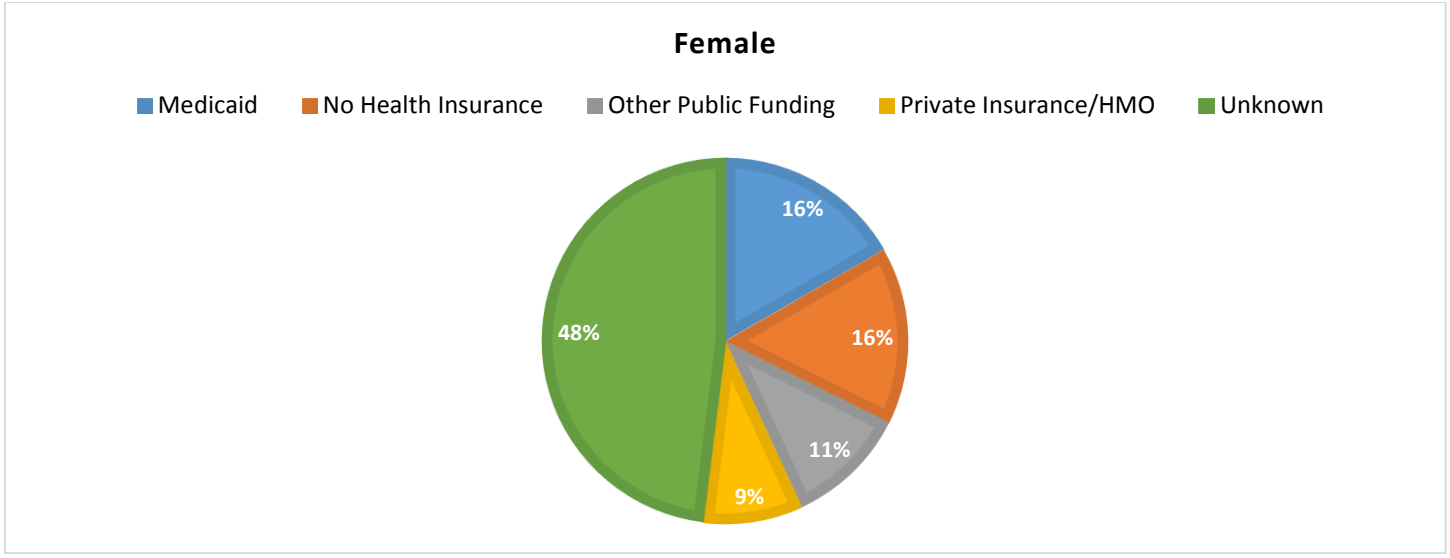
[1] "Public" insurance includes Medicaid, Medical, and other public funding sources. "Private" insurance includes both HMO and PPOs. "None" indicates patient reported having no insurance at time of diagnosis. "Missing" indicates that the insurance data for the patient was not given at time of diagnosis.

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

[3] All HIV data taken from California Office of AIDS eHARS database.

Figure 31. Health insurance status at time of HIV diagnosis by gender[1], Long Beach[2], 2011-2015



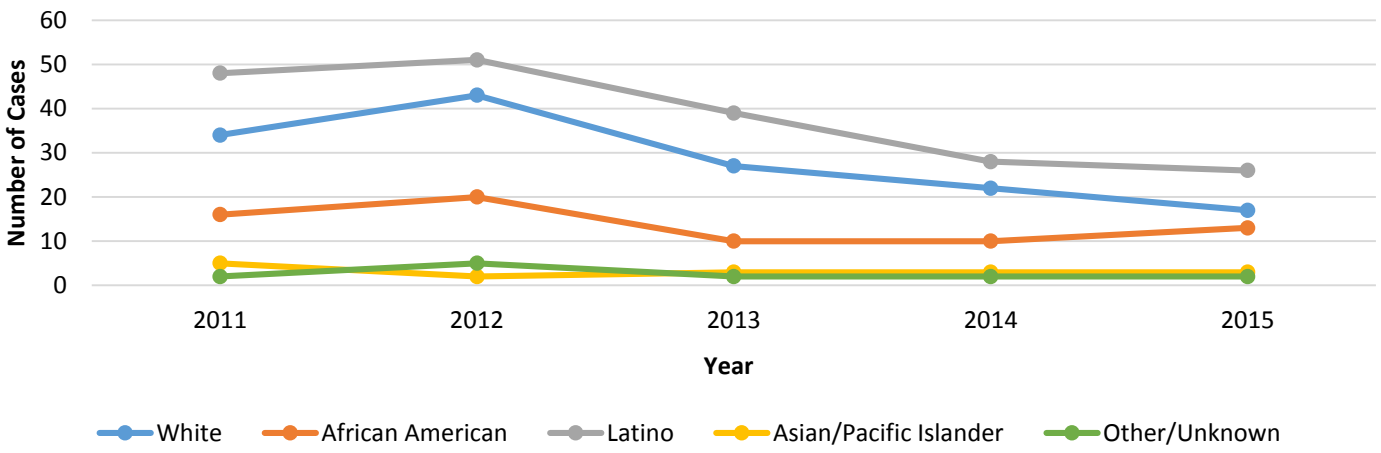


[1] Transgender data is not reported separately from other gender information due to small population size. See Technical Notes "Transgender Status."

[2] All HIV data taken from California Office of AIDS eHARS database.

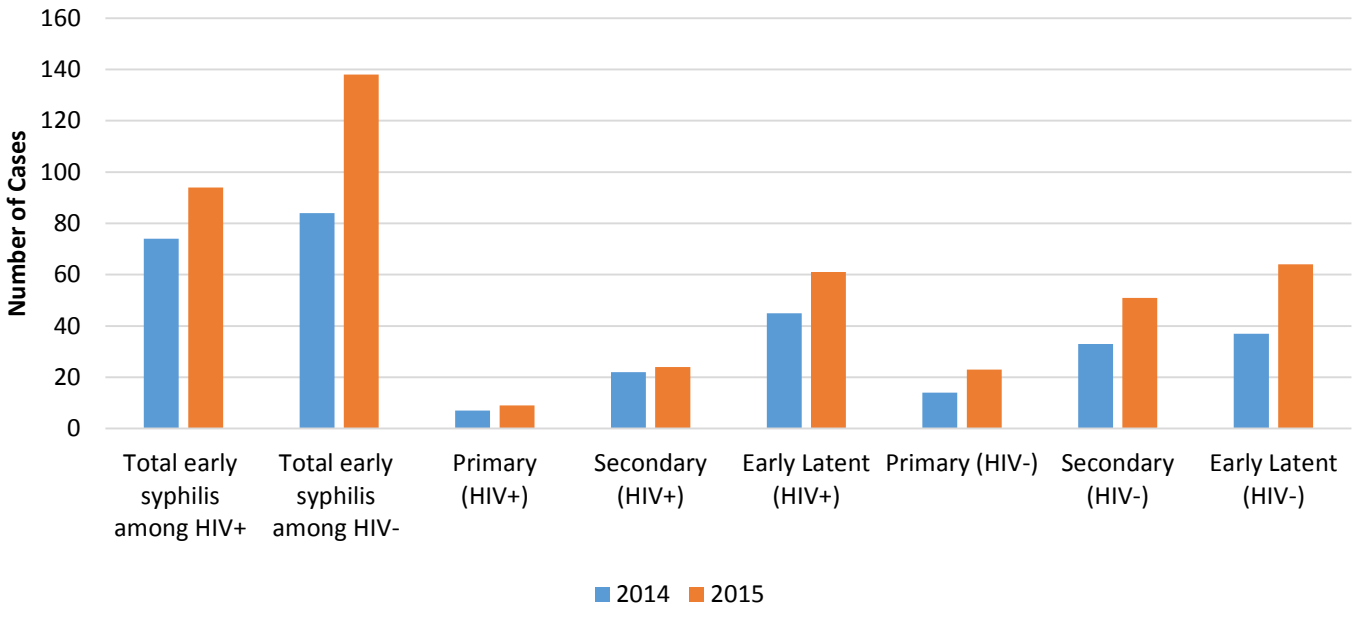
HIV AMONG MEN WHO HAVE SEX WITH MEN

Figure 32. Number of MSM newly diagnosed with HIV by race/ethnicity[1], Long Beach[2], 2011-2015



[1] Cases in the "Other" racial/ethnic category include Native American/Alaska Native, Multi-race, and unknown.
[2] All HIV data taken from California Office of AIDS eHARS database.

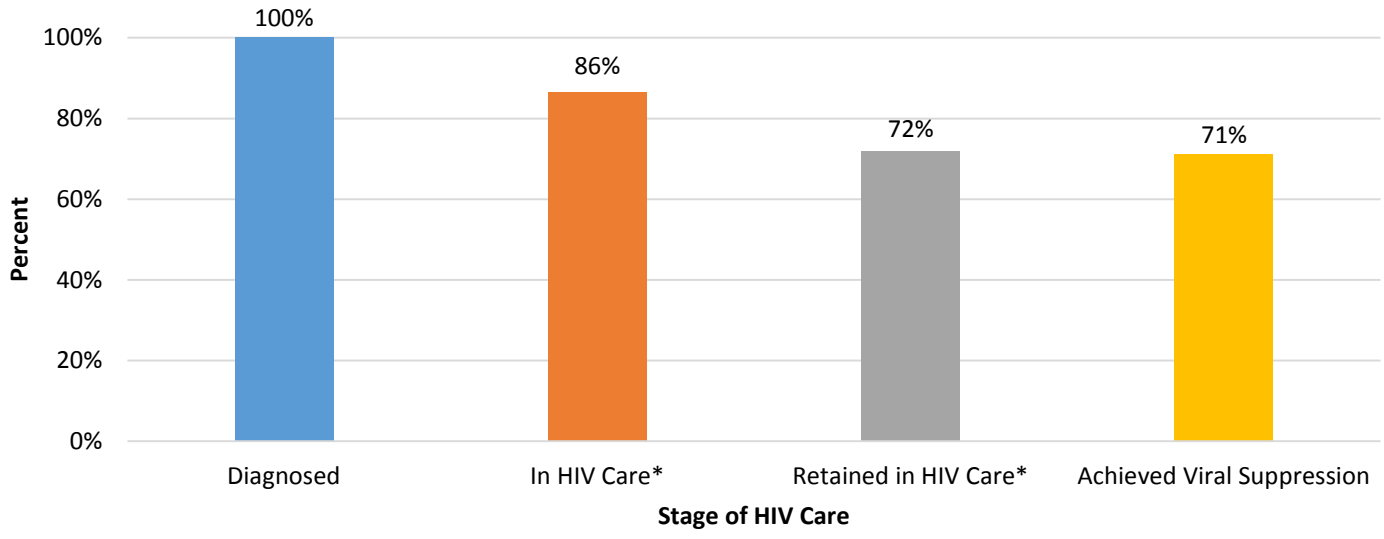
Figure 33. Total early syphilis among MSM by HIV serostatus, Long Beach[1], 2014-2015



[1] Syphilis data is taken from the CalREDIE statewide reporting system.
[2] All HIV data taken from California Office of AIDS eHARS database.

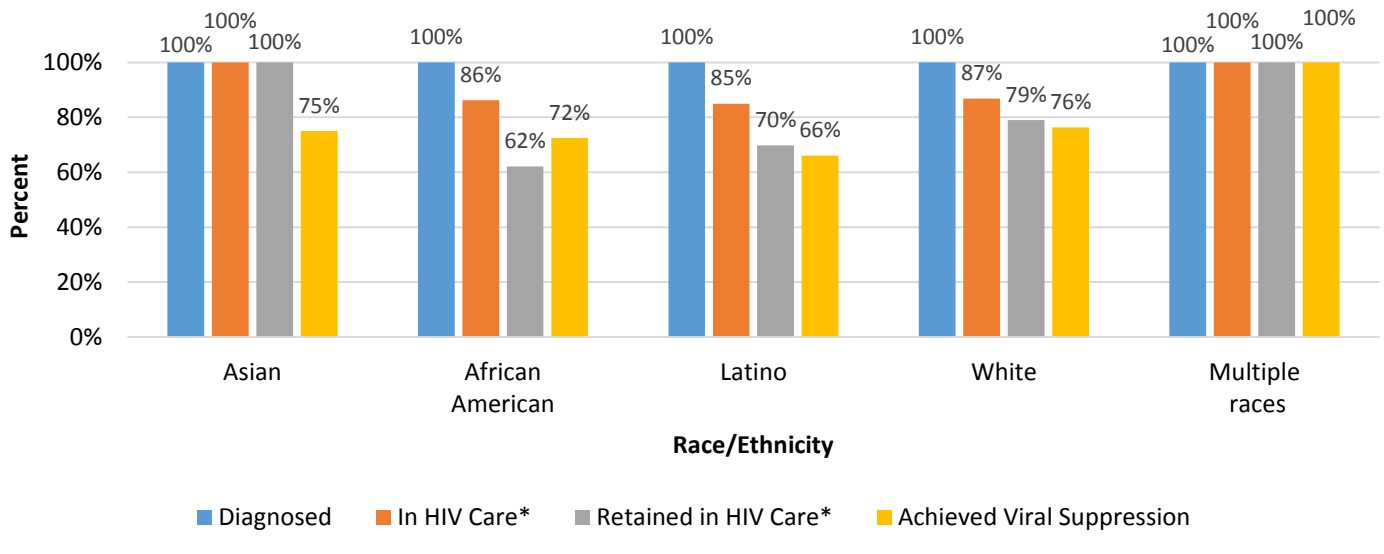
HIV CARE CONTINUUM

Figure 34. HIV care continuum for persons newly diagnosed with HIV, Long Beach[1], 2014



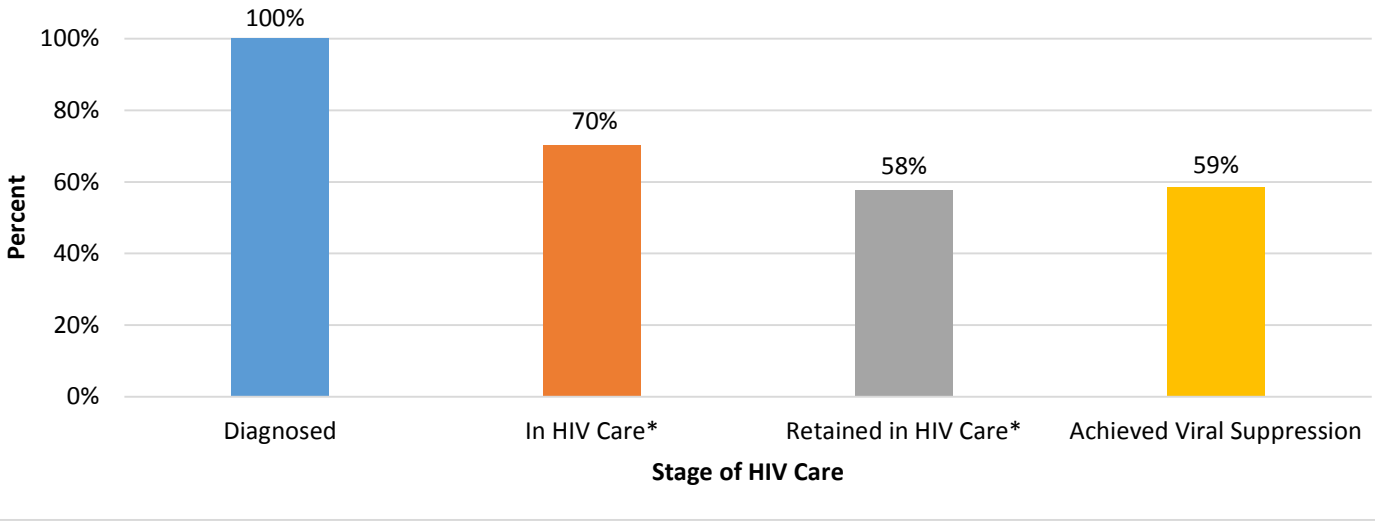
[1] All HIV data taken from California Office of AIDS eHARS database.
*See Technical Notes "HIV Care Continuum."

Figure 35. HIV care continuum for persons newly diagnosed with HIV by race/ethnicity[1], Long Beach[2], 2014



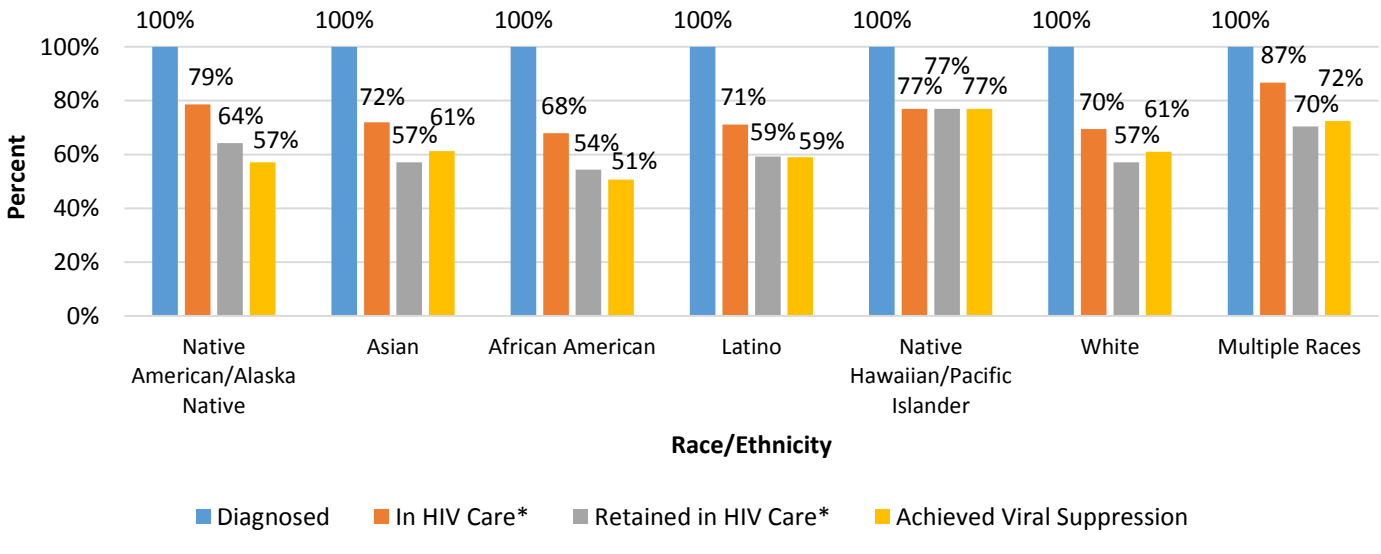
[1] In 2014 there were no newly diagnosed persons in the Native American/Alaska Native and Native Hawaiian/Pacific Islander racial/ethnic groups.
[2] All HIV data taken from California Office of AIDS eHARS database.
*See Technical Notes "HIV Care Continuum."

Figure 36. HIV care continuum for persons living with HIV, Long Beach[1], 2014



[1] 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 by race/ethnicity, Long Beach[1], 2014



[1] 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 takes into account 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. The number of newly diagnosed individuals is influenced by the number of tests that are run throughout the year.

Female Presumed Heterosexual Contact: In 2010 the CDC HIV Incidence Case Surveillance Branch accepted a definition for female presumed heterosexual contact to reclassify the transmission category for adult female cases who would otherwise be reported with no identified risk. The definition for female presumed heterosexual contact was first proposed by the Council of State and Territorial Epidemiologists. Like other transmission categories, the definition uses patient history variables collected on the HIV adult case report form. The female presumed heterosexual contact definition includes the following components: (1) the patient's sex at birth is female, (2) the patient had sex with male(s), (3) the patient had no indication of injection drug use, and (4) there is no other known information that would suggest a likely alternative source of HIV infection.

Grouping of Data Categories: Data in certain racial/ethnic or risk categories are grouped together when the number of persons with HIV in that particular group is small and/or does not present significant trends. For example, "Other" in the race/ethnicity breakdown in some tables and figures represents Native Hawaiian/Pacific Islander, Native American/Alaska Native, 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.

HIV Surveillance Methods Continued:
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 ≥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. With the new case definition, stages 1-3 are classified on the basis of the first CD4 T-lymphocyte count and age on date of CD4 T-lymphocyte test, unless there is a stage-3-defining opportunistic illness. The CD4 T-lymphocyte percentage of total lymphocytes is only uses when the corresponding CD4 T-lymphocyte count is unknown.

- 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.

- 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 ≥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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