



STD/HIV SURVEILLANCE

Annual Report
2018



LONG BEACH
HEALTH & HUMAN SERVICES



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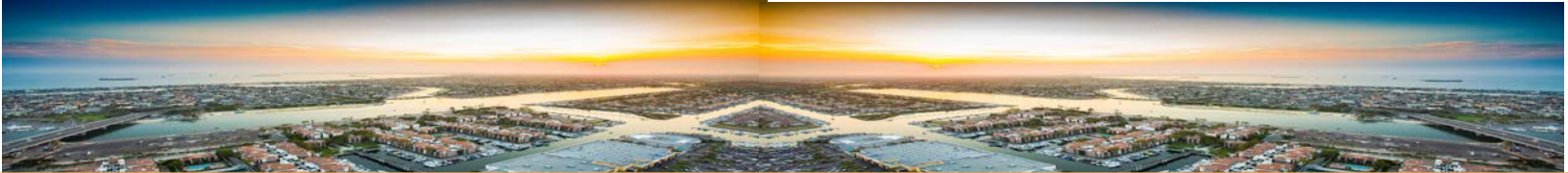
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To report cases, call or fax: p:(562)570-4321 or f:(562)570-4374
STD/HIV Hotline: (562) 570-4321



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) 570-4180 to make an appointment or for more information.

HIV Care Coordination (HCC) Clinic: The HIV Care 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 5pm (No appointment is necessary). Mobile HIV testing services are provided throughout the community at various locations.

HIV/STD Surveillance Program: The Long Beach HIV/STD Surveillance Program aims to inform Long Beach residents of the morbidity of STD/HIV and make data informed decisions to mitigate disease morbidity. Please call (562) 570-4321 for any STD/HIV related questions.



CONTENTS

LIST OF ACRONYMS..... 5

STD SURVEILLANCE 7

STD TABLES AND FIGURES 8

STD TABLE AND FIGURE DEFINITIONS 11

STD LIMITATIONS 13

STD HIGHLIGHTS 14

OVERVIEW OF STDs IN LONG BEACH..... 16

CHLAMYDIA IN LONG BEACH 18

CHLAMYDIA SITE TESTING 21

GONORRHEA IN LONG BEACH 23

GONORRHEA SITE TESTING 26

SYPHILIS IN LONG BEACH 28

ADDITIONAL STD FIGURES 36

HIV SURVEILLANCE..... 40

HIV TABLES AND FIGURES 41

HIV LIMITATIONS 43

HIV HIGHLIGHTS..... 44

OVERVIEW OF HIV IN LONG BEACH 46

TRENDS IN INDIVIDUALS IN STAGE 3 (AIDS) 59

TRENDS IN HIV MORTALITY..... 61

HEALTH INSURANCE STATUS AT TIME OF HIV DIAGNOSIS 63

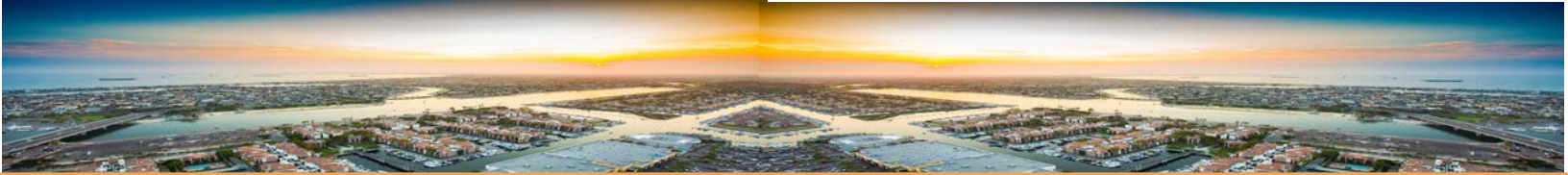
HIV AMONG MEN WHO HAVE SEX WITH MEN (MSM)..... 65

HIV AMONG TRANSGENDER PERSONS 66

HIV CARE CONTINUUM 68

HIV TECHNICAL NOTES..... 73

REFERENCES..... 76



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

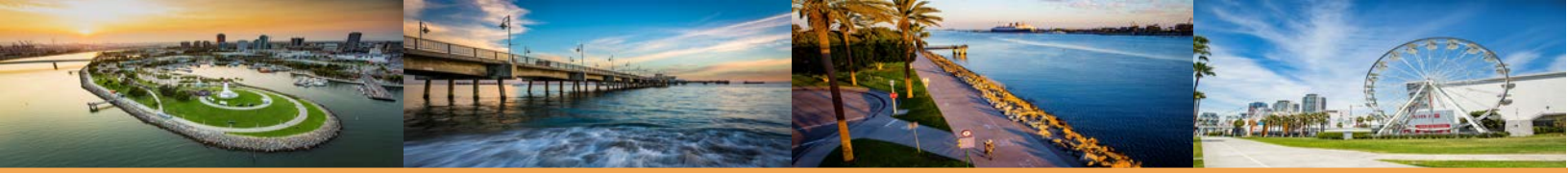
MSM-PWID Men who have Sex with Men and who also Inject Drugs

OOJ Out-of-Jurisdiction

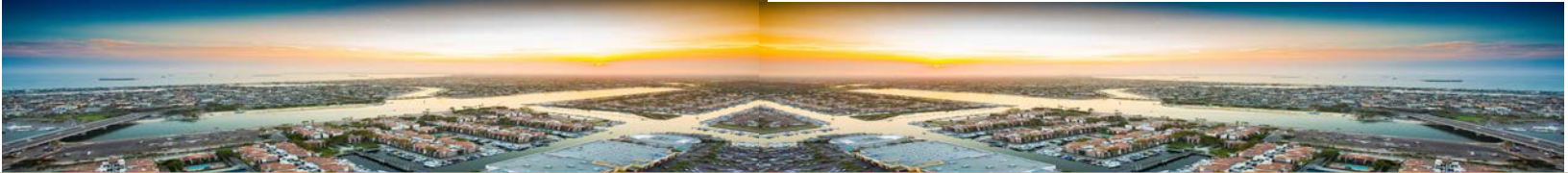
PWID People Who Inject Drugs

STD Sexually Transmitted Disease

CS Congenital syphilis



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STD SURVEILLANCE

Annual Report **2018**



STD TABLES AND FIGURES

STD TABLE AND FIGURE DEFINITIONS 11

STD LIMITATIONS 13

STD HIGHLIGHTS 14

OVERVIEW OF STDS IN LONG BEACH..... 16

 Figure 1. Reportable STD incidence rates per 100,000 population, Long Beach, 2014-2018..... 16

 Table 1. Reportable STD cases and incidence rates per 100,000 population, Long Beach, 2014-2018 16

 Table 2. State ranking by reportable STDs, Long Beach, 2014-2018 17

 Table 3. Percent change by reportable STDs, Long Beach, 2014-2018..... 17

CHLAMYDIA IN LONG BEACH 18

 Figure 2. Chlamydia incidence rates per 100,000 population, Long Beach, Los Angeles, and California,..... 18

 2014-2018 18

 Table 4. Chlamydia cases and incidence rates per 100,000 population, Long Beach, Los Angeles, and California, 2014-2018 18

 Table 5. Chlamydia cases and incidence rates per 100,000 population by sex and age group, Long Beach, 2014-2018..... 19

 Table 6. Chlamydia cases and incidence rates per 100,000 population by sex and race/ethnicity, Long Beach, 2014-2018 20

 Table 7. Positive chlamydia site testing by sex, Long Beach, 2014-2018..... 21

CHLAMYDIA SITE TESTING 21

 Figure 3. Positive throat site testing by sex, Long Beach, 2014-2018..... 21

 Figure 4. Positive rectal site testing by sex, Long Beach, 2014-2018..... 21

 Figure 5. Chlamydia cases by zip code, Long Beach, 2018..... 22

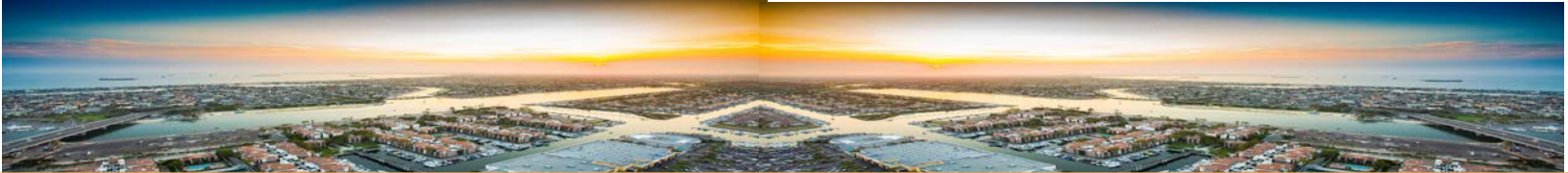
GONORRHEA IN LONG BEACH 23

 Figure 6. Gonorrhea incidence rates per 100,000 population, Long Beach, Los Angeles, and California, 2014-2018.... 23

 Table 8. Gonorrhea cases and incidence rates per 100,000 population, Long Beach, Los Angeles, and California 2014-2018 23

 Table 9. Gonorrhea cases and incidence rates per 100,000 population by sex and age group, Long Beach, 2014-2018..... 24

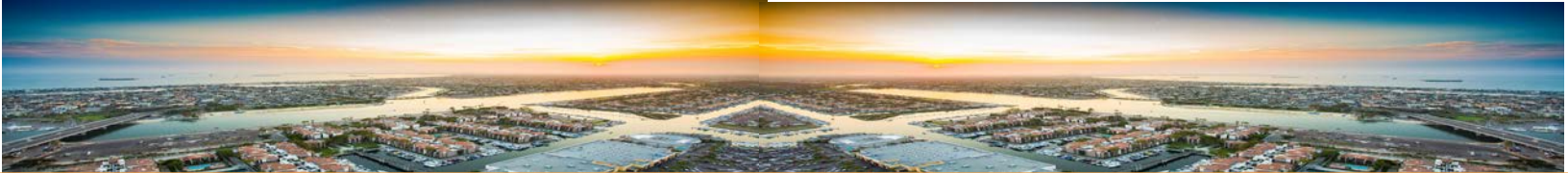
 Table 10. Gonorrhea cases and incidence rates per 100,000 population by sex and race/ethnicity, Long Beach, 2014-2018 25



GONORRHEA SITE TESTING	26
Table 11. Positive gonorrhea site testing by sex, Long Beach, 2014-2018	26
Figure 7. Positive throat site testing by sex, Long Beach, 2014-2018.....	26
Figure 8. Positive rectal site testing by sex, Long Beach, 2014-2018.....	26
Figure 9. Gonorrhea cases by zip code, Long Beach, 2018	27
SYPHILIS IN LONG BEACH	28
Figure 10. Total early syphilis ¹ incidence rates per 100,000 population, Long Beach, Los Angeles, and California, 2014-2018	28
Table 12. Total early syphilis ¹ cases and incidence rates per 100,000 population, Long Beach, Los Angeles, and California, 2014-2018.....	28
Table 13. Total early syphilis ¹ cases and incidence rates per 100,000 population by sex and age group, Long Beach, 2014-2018	29
Table 14. Total early syphilis ¹ cases and incidence rates per 100,000 population by sex and race/ethnicity, Long Beach, 2014-2018	30
Figure 11. Total early syphilis ¹ cases by zip code, Long Beach, 2018	31
Figure 12. Late latent syphilis incidence rates per 100,000 population, Long Beach, 2014-2018.....	32
Table 15. Late latent syphilis cases and incidence rates per 100,000 population, Long Beach, 2014-2018	32
Figure 13. Percent of male syphilis ¹ cases who have sex with men ² (MSM), Long Beach, 2014-2018	33
Figure 14. Congenital syphilis incidence rates per 100,000 population, Long Beach, Los Angeles, and California, 2014-2018	34
Figure 15. Congenital syphilis cases, Long Beach, 2014-2018	34
Figure 17. Congenital syphilis cascade, Long Beach, 2018	35
Figure 16. Congenital syphilis incidence rates per 100,000 population, and female cases of total early syphilis ¹ , Long Beach, 2014-2018	35
ADDITIONAL STD FIGURES	36
Figure 18. Chlamydia cases by sex, Long Beach, 2018.....	37
Figure 19. Gonorrhea cases by sex, Long Beach, 2018	37
Figure 20. Total early syphilis cases by sex, Long Beach, 2018.....	37
Figure 21. Male chlamydia cases by race/ethnicity, Long Beach, 2018.....	38
Figure 22. Female chlamydia cases by race/ethnicity, Long Beach, 2018	38



Figure 24. Female gonorrhea cases by race/ethnicity, Long Beach, 2018.....	38
Figure 23. Male gonorrhea cases by race/ethnicity, Long Beach, 2018	38
Figure 26. Female total early syphilis cases by race/ethnicity, Long Beach, 2018	38
Figure 25. Male total early syphilis cases by race/ethnicity, Long Beach, 2018	38
HIV TABLES AND FIGURES	41
HIV LIMITATIONS	43
HIV HIGHLIGHTS.....	44
OVERVIEW OF HIV IN LONG BEACH	46
TRENDS IN INDIVIDUALS IN STAGE 3 (AIDS)	59
TRENDS IN HIV MORTALITY.....	61
HEALTH INSURANCE STATUS AT TIME OF HIV DIAGNOSIS	63
HIV AMONG MEN WHO HAVE SEX WITH MEN (MSM).....	65
HIV AMONG TRANSGENDER PERSONS	66
HIV CARE CONTINUUM	68
HIV TECHNICAL NOTES.....	73



STD TABLE AND FIGURE DEFINITIONS

Chlamydia (*Chlamydia trachomatis*): Chlamydia is the most commonly reported sexually transmitted disease in the US. It can infect both men and women, causing infections in the genitals, rectum, throat, and eye. 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), as well as Pelvic Inflammatory Disease and chronic pelvic pain. It is most commonly diagnosed and reported among women ages 15-24.

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, and eye. It can cause serious, permanent damage to a woman's reproductive system, making it difficult or impossible for her to get pregnant later. Gonorrhea can also cause a potentially fatal ectopic pregnancy (pregnancy that occurs outside the womb), as well as Pelvic Inflammatory Disease and chronic pelvic pain. It is most commonly diagnosed in men ages 20-29.

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, early latent, and late latent syphilis. Syphilis can be spread by direct contact with a syphilis sore during vaginal, anal, or oral sex. Sores can be found anywhere on your body, for example: 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

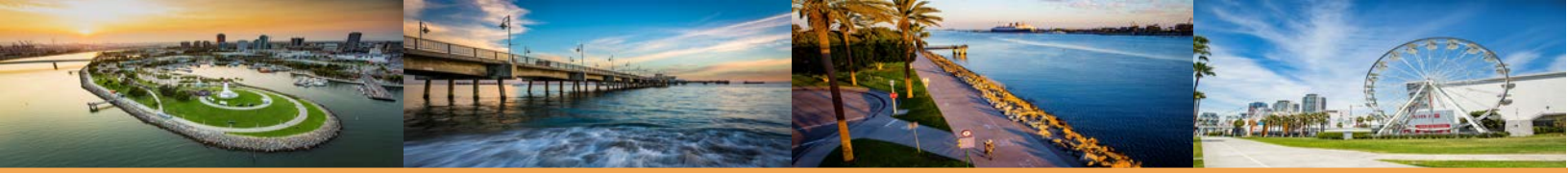
Early Latent Syphilis: A subcategory of latent syphilis. When the initial infection has occurred within the previous 12 months, latent syphilis is classified as early latent.

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: Consists of primary syphilis, secondary syphilis and early latent syphilis diagnosis.

Congenital Syphilis: A condition caused by infection in utero with *Treponema pallidum*. Congenital syphilis can have devastating effects on the baby in utero if the mother is left untreated; A wide spectrum of severity exists (neurological or ocular symptoms, low birth weight, miscarriage, stillbirth, and death), and only severe cases are clinically apparent at birth. An infant or child (aged <2 years) may have signs such as hepatosplenomegaly, rash, condylomata lata, snuffles,

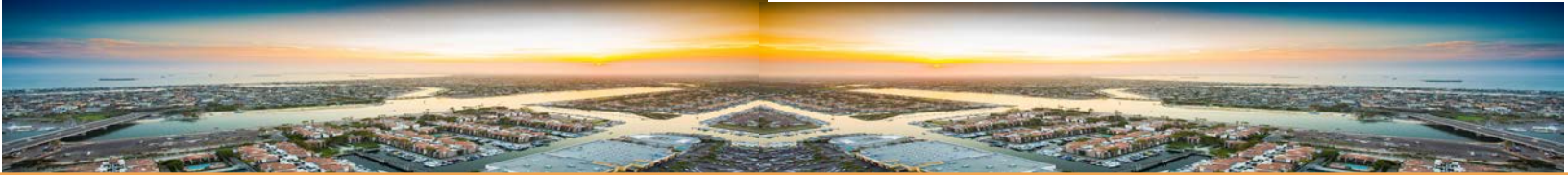


jaundice (nonviral hepatitis), pseudoparalysis, anemia, or edema (nephrotic syndrome and/or malnutrition). An older child may have various stigmata (e.g., interstitial keratitis, nerve deafness, anterior bowing of shins, frontal bossing, mulberry molars, Hutchinson teeth, saddle nose, rhagades, or Clutton joints).

- **First prenatal care visit:** Females who delivered infants with congenital syphilis with a date documented for first prenatal care visit at least 30 days prior to delivery.
- **Syphilis testing:** Females who delivered infants with congenital syphilis with documentation of being tested for syphilis at least 30 days prior to delivery.
- **Initiated treatment:** Females who delivered infants with congenital syphilis that received their first dose of treatment at least 30 days prior to delivery, regardless of treatment course completion or dose timing.
- **Correct treatment:** Pregnant females infected with syphilis must complete all doses of treatment, using 6-8 days between doses.

Extra Genital Site Testing: Three-site testing, also known as triple-site testing; testing pharyngeal, rectal, and urethral/first void urine samples for chlamydia and gonorrhea detection using nucleic acid amplification tests (NAATs).

Disease Intervention Specialist (DIS): DIS are trained professionals informed on the causes and spread of STDs and skilled in taking sexual histories, identifying and locating individuals who may have been exposed to an STD, and knowing where to refer individuals for evaluation and treatment. DIS provide counseling on behaviors that put individuals at risk for STDs including HIV.



STD 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 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 to make programmatic recommendations.

Due to fewer than 12 cases of CT, GC, and TES being reported in individuals who identified as transgender, this portion of the report will not release data for those who identified themselves as transgender. This is to ensure the protection of these individuals' personal health information.

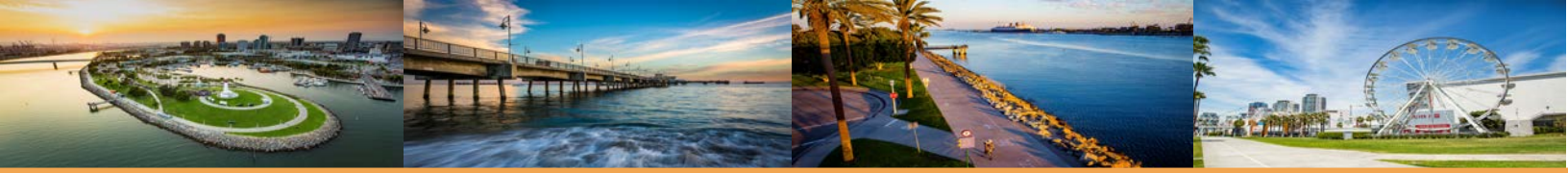
Unstable Rates: The National Center for Health Statistics considers rates based on 20 or fewer observations unstable. The Center for Health Statistics utilizes relative standard error (RSE):

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

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

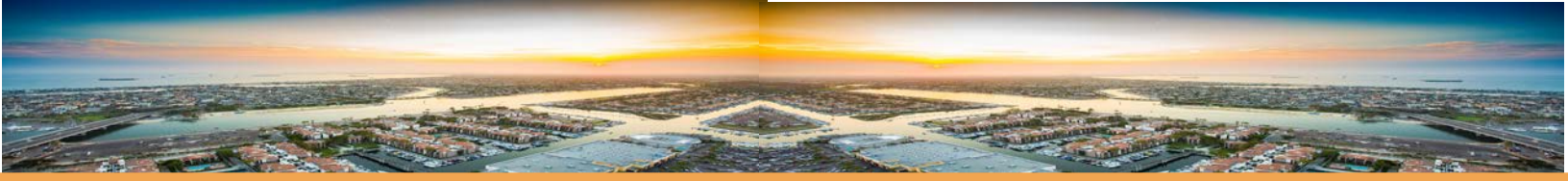
The City of Long Beach acknowledges that data presented in this report may not meet the National Center for Health Statistics guidelines on stable rates. However, the City must utilize the available data for programmatic evaluation and recommendations. In the context of this report, unstable rates are 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 31st 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 2014 to 2018 ([Table 1](#)). However, chlamydia was the only sexually transmitted disease (STD) that decreased by 7% from 2017 to 2018. The majority of STD diagnoses in Long Beach were concentrated among people aged 15-34 years ([Tables 5, 9, and 13](#)). Unfortunately, about 57% of the race/ethnicity data for chlamydia, gonorrhea, and syphilis was missing. Among those with available race/ethnicity data, African Americans had the highest rates of infection for chlamydia, gonorrhea, and total early syphilis in 2017 ([Tables 6, 10, and 14](#)).
- The highest rates of chlamydia occurred in the 90804 and 90802 zip codes; gonorrhea rates were highest in 90802; and total early syphilis rates were highest in 90802 zip code ([Figures 5, 9, and 11](#)).
- *Chlamydia trachomatis* is the most common reportable communicable disease in the City of Long Beach. Chlamydia rates in Long Beach increased by 62% ([Table 3](#)) (513.6 to 832.9 per 100,000) from 2014 to 2018 ([Table 4](#)). In 2018, Long Beach had the third highest rate of chlamydia in the State of California ([Table 2](#)), with San Francisco having the highest. In 2018, the highest rates of chlamydia occurred among those aged 15-29 years ([Table 5](#)). In the same year, the total rate for females was significantly higher than that of males (969.5 per 100,000 compared to 679.7 per 100,000) ([Table 5](#)).
- Gonorrhea rates in Long Beach increased by 154% ([Table 3](#)) (145.3 to 369.3 per 100,000) from 2014 to 2018 ([Table 8](#)). In 2018, Long Beach had the second highest rate of gonorrhea in the State of California ([Table 2](#)). In 2018, the highest rates of gonorrhea occurred among those aged 20-29 years ([Table 9](#)). In the same year, the total rate for males was significantly higher compared to females (522.2 per 100,000 compared to 213.3 per 100,000) ([Table 9](#)).
- There were fewer cases of extra genital site tests in comparison to urogenital site tests for both chlamydia and gonorrhea (396 extragenital site tests performed compared to 1,539 urogenital site test) in 2018 ([Tables 7 and 11](#)). Despite this finding, there was a 257% increase in the number of extragenital site tests being performed since 2014 ([Tables 7 and 11](#)). Women received fewer extragenital site tests than men ([Tables 7 and 11](#)).
- Total early syphilis (primary, secondary, early latent syphilis) rates in Long Beach increased by 85% ([Table 3](#)) (38.8 to 71.9 per 100,000) from 2014 to 2018 ([Table 12](#)). In 2018, Long Beach had the third highest rate of total early syphilis in the State of California ([Table 2](#)). In 2018, the highest rates of total early syphilis occurred among men aged 25-34 years and women aged 20-34 years ([Table 13](#)). In the same year, total early syphilis rates for men were much higher than women (130.0 per 100,000 compared to 16.1 per 100,000) ([Table 13](#)). Men who have sex with men (MSM) comprised 62.5% of syphilis cases in Long Beach ([Figure 13](#)); however, due to the large amount of missing data this may be an underestimation of syphilis among MSM.
- Rates of late latent syphilis in Long Beach have steadily increased from 2014 to 2018 (16.9 per 100,000 compared to 42.1 per 100,000) ([Figure 12](#)).
- Trends in congenital syphilis usually follow trends for total early syphilis among women, with a lag of 1-2 years (CDC, 2016). From 2014 to 2018, the number of total early syphilis cases among women increased by 388% ([Figure 15](#)). During 2018, a total of 10 (181.3 per 100,000 live births) cases of congenital syphilis were diagnosed, an increase from 0 cases (0 per 100,000 live births) in 2014 ([Figure 15](#)).

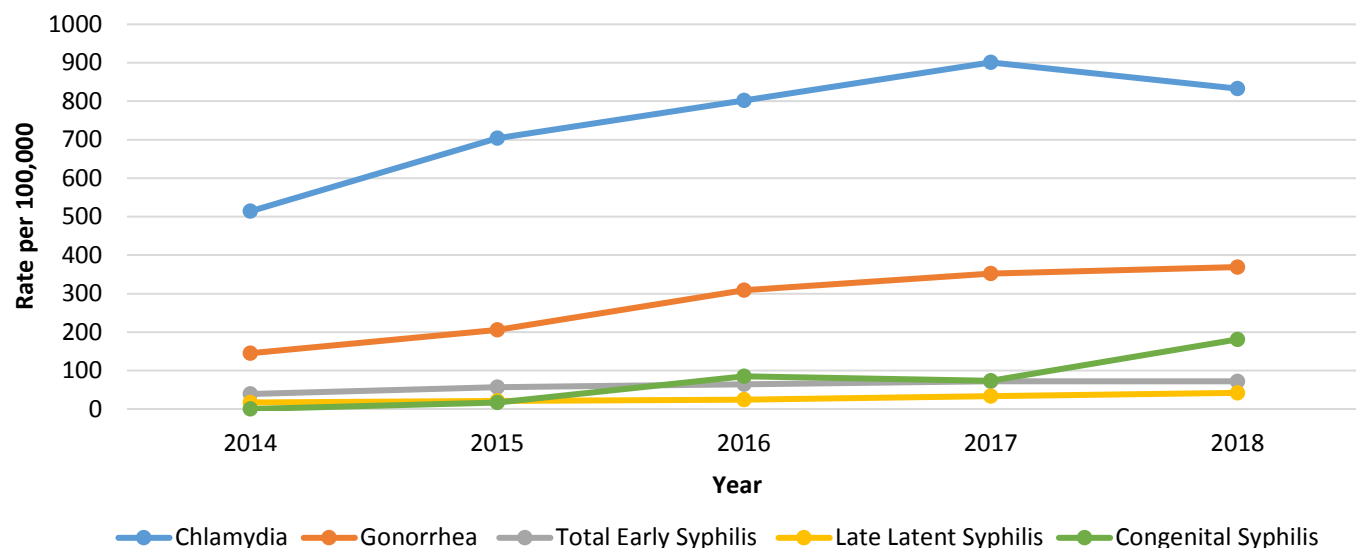


- Congenital syphilis is preventable if detected and treated at least 30 days prior to delivery. In 2018, among pregnant females with syphilis, 28% did not seek prenatal care and 24% did not receive testing 30 days prior to delivery. This demonstrates there were missed opportunities to prevent congenital syphilis in Long Beach.
- Disease Intervention Specialists prevented 44% of congenital syphilis cases in 2018. Most successful outcomes occurred when pregnant females engaged in early prenatal care.



OVERVIEW OF STDs IN LONG BEACH

Figure 1. Reportable STD incidence rates per 100,000 population, Long Beach, 2014-2018



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, 2014-2018. Sacramento, California, December 2018.

Table 1. Reportable STD cases and incidence rates per 100,000 population, Long Beach, 2014-2018

	2014		2015		2016		2017		2018	
	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate
Chlamydia	2,422	513.6	3,346	703.9	3,863	801.6	4,321	901.1	3,974	832.9
Gonorrhea	685	145.3	980	206.1	1,489	309.0	1,690	352.4	1,762	369.3
Total Early Syphilis	183	38.8	273	57.4	307	63.7	343	71.5	343	71.9
Late Latent Syphilis	80	16.9	99	20.8	115	23.9	156	32.5	201	42.1
Congenital Syphilis	0	0.0	1	16.6	5	84.6	4	72.5	10	181.3

Note: Incidence rates are per 100,000 population.

Source: California Department of Public Health, STD Control Branch

*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.

State of California, Department of Finance, *California County Population Estimates and Components of Change by County*, July, 1, 2014-2018. Sacramento, California, December 2018.

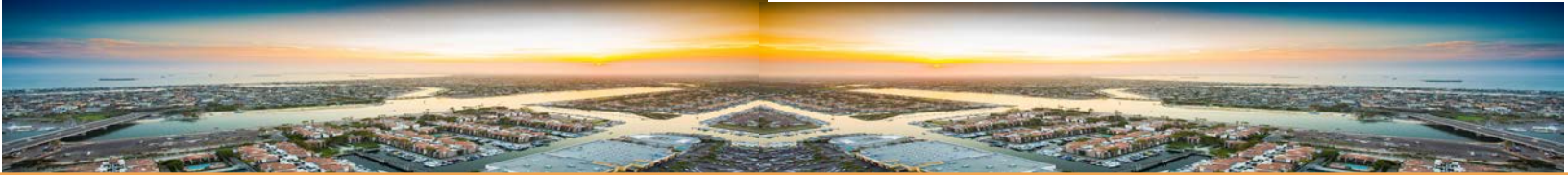


Table 2. State ranking by reportable STDs, Long Beach, 2014-2018

	2014		2015		2016		2017		2018	
	Rate	Rank	Rate	Rank	Rate	Rank	Rate	Rank	Rate	Rank
Chlamydia	513.6	9 th	703.9	2 nd	801.6	2 nd	901.1	2 nd	832.9	3 rd
Gonorrhea	145.3	9 th	206.1	4 th	309.0	3 rd	352.4	2 nd	369.3	2 nd
Total Early Syphilis	38.8	2 nd	57.4	2 nd	63.7	3 rd	71.5	3 rd	71.9	3 rd
Late Latent Syphilis	16.9	-	20.8	-	23.9	-	32.5	-	42.1	-
Congenital Syphilis	0.0	17 th	16.6	14 th	84.6	9 th	72.5	13 th	181.3	6 th

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, 2014-2018. Sacramento, California, December 2018.

*If data was not available, values were left blank.

Table 3. Percent change by reportable STDs, Long Beach, 2014-2018

	2014-2015	2015-2016	2016-2017	2017-2018	2014-2018
	Percent change	Percent change	Percent change	Percent change	Percent Change
Chlamydia	37.1%	13.9%	12.4%	- 7.6%	62.2%
Gonorrhea	41.8%	49.9%	14.1%	4.8%	154.2%
Total Early Syphilis	47.9%	11.0%	12.2%	0.6%	85.3%
Late Latent Syphilis	23.1%	14.9%	36.0%	29.5%	149.1%
Congenital Syphilis	-	409.6%	-14.3%	150.1%	-

Source: California Department of Public Health, STD Control Branch

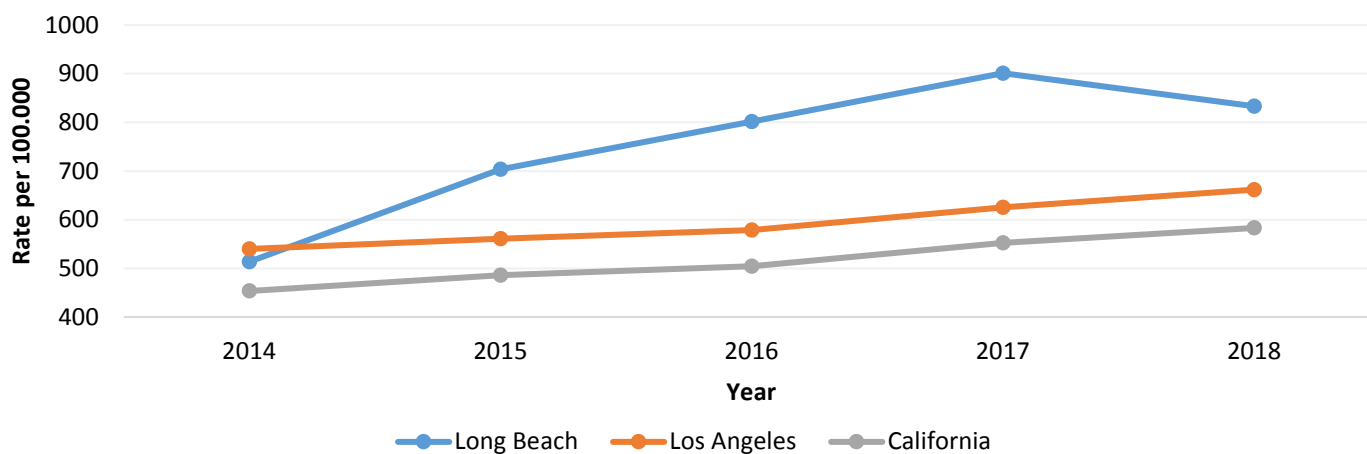
State of California, Department of Finance, *California County Population Estimates and Components of Change by County*, July, 1, 2014-2018. Sacramento, California, December 2018.

Note: Percent change cannot be calculated from 2014-2015 and 2014-2018 due to the number of congenital syphilis cases in 2014 being zero.



CHLAMYDIA IN LONG BEACH

Figure 2. Chlamydia incidence rates per 100,000 population, Long Beach, Los Angeles, and California, 2014-2018



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, 2014-2018. Sacramento, California, December 2018.

Table 4. Chlamydia cases and incidence rates per 100,000 population, Long Beach, Los Angeles, and California, 2014-2018

	2014		2015		2016		2017		2018	
	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate
Long Beach	2,422	513.6	3,346	703.9	3,863	801.6	4,321	901.1	3,974	832.9
Los Angeles	54,363	539.9	57,134	560.6	59,176	578.5	64,225	625.3	68,021	661.8
California	174,557	453.4	189,937	486.1	198,503	504.4	218,710	552.1	232,181	583.0

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, 2014-2018. Sacramento, California, December 2018.

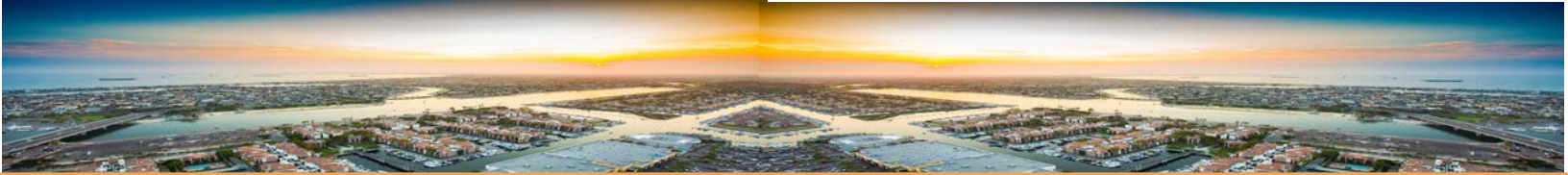


Table 5. Chlamydia cases and incidence rates per 100,000 population by sex and age group, Long Beach, 2014-2018

	2014		2015		2016		2017		2018	
	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate
LONG BEACH TOTAL	2,422	513.6	3,346	703.9	3,863	801.6	4,321	901.1	3,074	832.9
Male at Birth Total	885	383.0	1,156	496.2	1,349	571.2	1,690	719.2	1,589	679.7
0-9	<5	-	<5	-	<5	-	<5	-	<5	-
10-14	<5	-	<5	-	<5	-	<5	-	<5	-
15-19	113	628.2	123	678.3	136	739.7	171	934.8.0	140	769.2
20-24	273	1,407.0	342	1,748.5	399	2,012.1	478	2,422.7	416	2,119.1
25-29	195	1,002.8	258	1,316.1	294	1,479.4	370	1,871.2	358	1,819.6
30-34	99	572.6	147	843.4	162	916.8	221	1,257.0	213	1,217.7
35-44	116	339.8	151	438.7	199	570.3	254	731.6	282	816.4
45+	75	101.8	109	146.8	148	196.6	182	243.0	171	229.4
Not Specified	10	-	25	-	11	-	12	-	8	-
Female at Birth Total	1,526	634.6	2,178	898.4	2,489	1,012.70	2,605	1,065.3	2,359	969.5
0-9	<5	-	<5	-	<5	-	<5	-	<5	-
10-14	9*	56.5	<5	-	7*	43.0	8*	49.4	6*	37.2
15-19	382	2,075.4	496	2,673.1	534	2,838.7	607	3,243.1	508	2,727.9
20-24	628	3,083.2	882	4,295.5	938	4,506.1	996	4,808.9	873	4,236.3
25-29	273	1,359.0	419	2,069.0	550	2,679.0	508	2,486.9	523	2,573.2
30-34	111	613.6	182	998.1	222	1,200.9	256	1,391.7	198	1,081.9
35-44	76	219.1	112	320.2	154	434.3	145	411.0	170	484.3
45+	26	31.9	40	48.7	64	76.9	71	85.7	61	74.0
Not Specified	17	-	42	-	20	-	14	-	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, 2014-2018. Sacramento, California, December 2018.

Gender specific age groups and race/ethnicity rate 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 6. Chlamydia cases and incidence rates per 100,000 population by sex and race/ethnicity, Long Beach, 2014-2018

	2014		2015		2016		2017		2018	
	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate
LONG BEACH TOTAL	2,422	513.6	3,346	703.9	3,863	801.6	4,321	901.1	3,074	832.9
Male at Birth Total	885	383	1,156	496.2	1,349	571.2	1,690	719.2	1,589	679.7
Native American/Alaska Native	<5	-	<5	-	9*	1,342.5**	10*	1,499.2**	9*	1,356.1**
Asian/Pacific Islander	34	113.7	26	86.3	41	134.2	56	184.2	54	178.5
African American	136	485.8	155	549.3	208	727.1	248	871.3	188	663.5
Latino	136	141.4	208	214.5	218	221.7	274	280.1	227	233.2
White	87	124.9	105	148.4	130	181.3	157	220.0	175	246.5
Other/Multi/Not Specified	490	-	658	-	743	-	945	-	936	-
Female at Birth Total	1,526	634.6	2,178	898.4	2,489	1,012.7	2,605	1,065.3	2,359	969.5
Native American/Alaska Native	<5	-	7*	964.1**	8*	1,086.9**	8*	1,092.4**	18*	2,470.2**
Asian/Pacific Islander	90	260.5	99	284.2	129	365.3	92	261.8	93	266.0
African American	241	727.2	331	990.8	317	936.0	292	866.5	252	751.6
Latina	361	376	479	494.9	533	543.2	418	428.2	305	314.0
White	103	149.7	175	250.2	164	231.2	172	243.8	154	219.3
Other/Multi/Not Specified	728	-	1,087	-	1,338	-	1,623	-	1,537	-

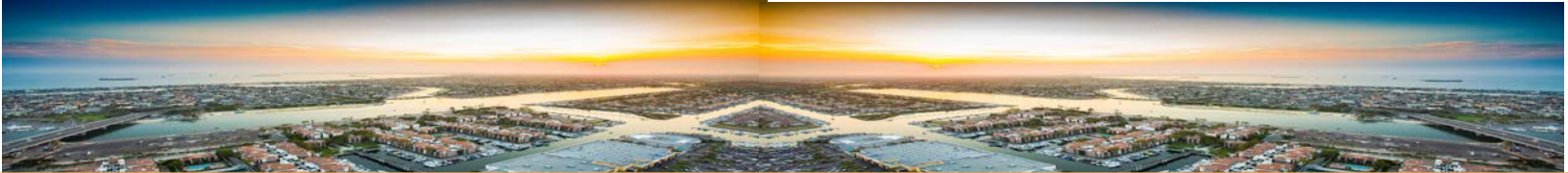
Note: Incidence rates are per 100,000 population.

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, 2014-2018. Sacramento, California, December 2018.

*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 are included for reporting purposes only.

**Any incidence rate calculated from an indicator with less than 20 cases will not be included in the race/ethnicity analysis, due to the NA/AN population count being too low to be accurate. Rates are included for reporting purposes only.



CHLAMYDIA SITE TESTING

Table 7. Positive chlamydia site testing by sex, Long Beach, 2014-2018

	2014		2015		2016		2017		2018	
	Cases		Cases		Cases		Cases		Cases	
LONG BEACH TOTAL	2,422	%	3,346	%	3,863	%	4,321	%	3,919	%
Male at Birth Total	885	37%	1,156	35%	1,349	35%	1,690	39%	1,559	40%
Urine	423	88%	614	84%	551	78%	515	76%	354	68%
Urethral	16*	3%	39	5%	30	4%	24	4%	18*	3%
Rectal	38	8%	63	9%	102	15%	121	18%	129	25%
Throat	6*	1%	11*	2%	20	3%	20	3%	18*	3%
Unknown Site	402	-	429	-	646	-	1,010	-	1040	-
Female at Birth Total	1,526	63%	2,178	65%	2,489	65%	2,605	61%	2,334	60%
Urine	663	64%	1,050	68%	1,097	73%	759	71%	535	72%
Urethral	22	2%	44	3%	38	3%	25	2%	39	5%
Rectal	<5	-	<5	-	<5	-	12*	1%	6*	1%
Throat	<5	-	<5	-	6*	0.4%	<5	-	5*	1%
Cervical	282	27%	358	23%	256	17%	182	17%	112	15%
Vaginal	62	6%	91	6%	100	7%	87	8%	47	6%
Unknown Site	496	-	633	-	988	-	1,536	-	1590	-

Source: California Department of Public Health, STD Control Branch

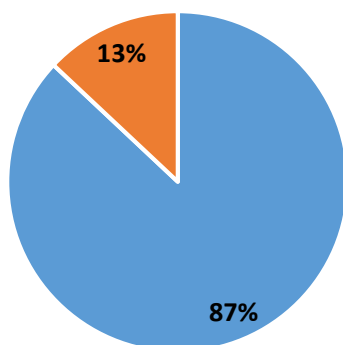
State of California, Department of Finance, *California County Population Estimates and Components of Change by County*, July, 1, 2014-2018. Sacramento, California, December 2018.

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

*Gender and site test percent calculations exclude "Unknown" 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.

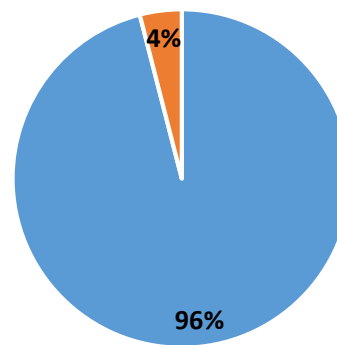
Figure 3. Positive throat site testing by sex, Long Beach, 2014-2018



*See Table 7.

■ Male ■ Female

Figure 4. Positive rectal site testing by sex, Long Beach, 2014-2018



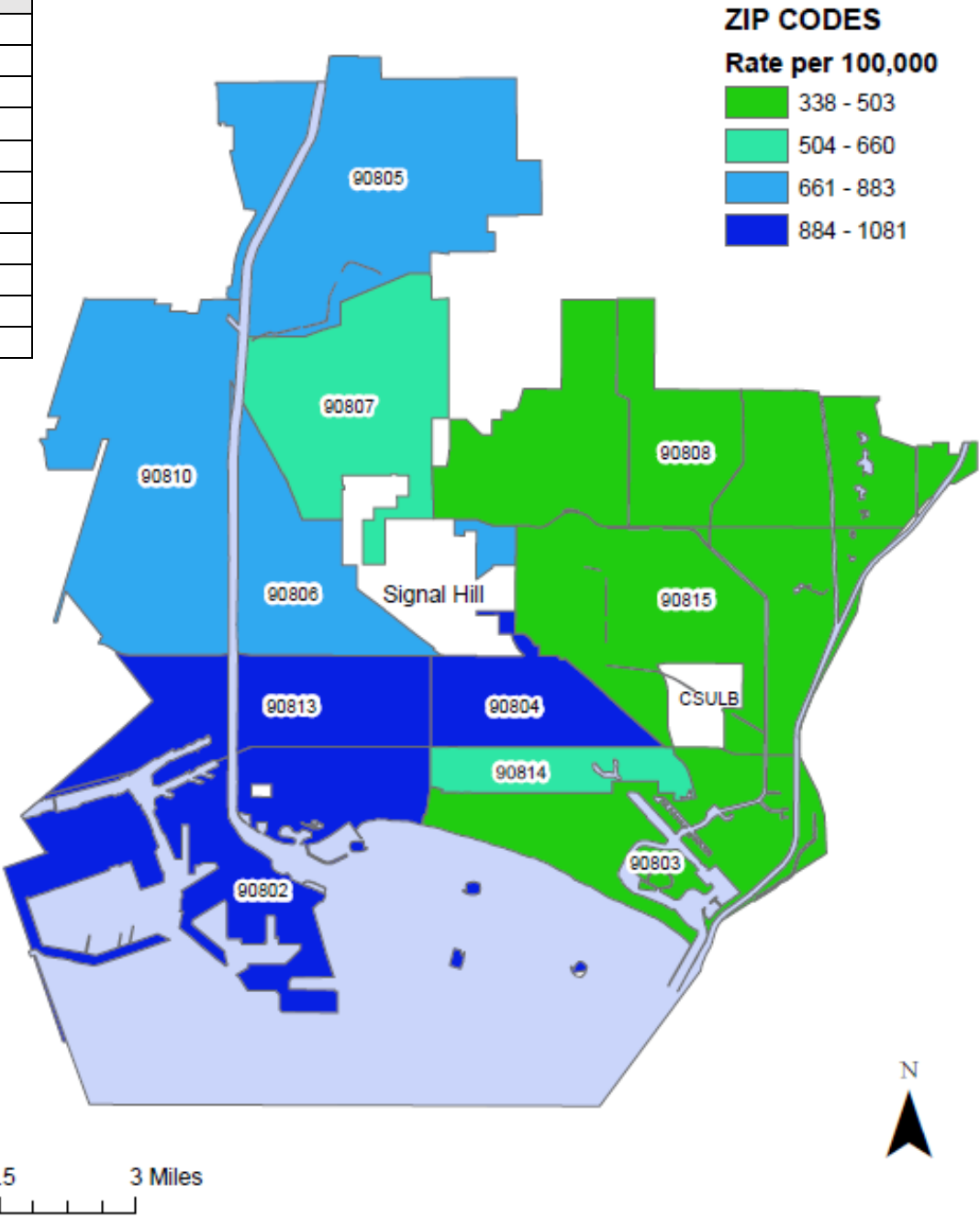
*See Table 7.

■ Male ■ Female

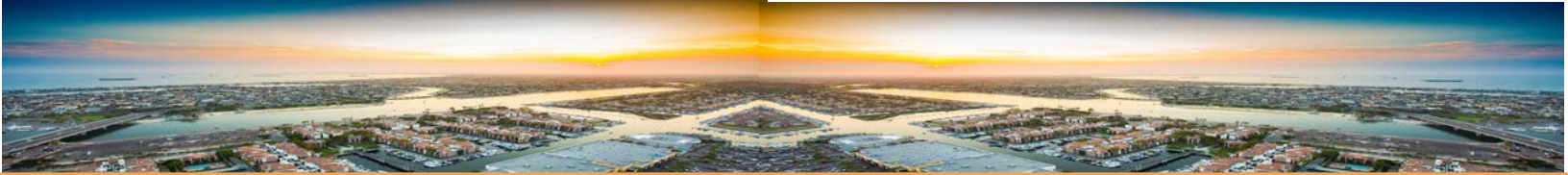


Figure 5. Chlamydia cases by zip code, Long Beach, 2018

Zip code	Incidence Rate (per 100,000)
90802	1081
90803	480
90804	1024
90805	822
90806	883
90807	568
90808	338
90910	779
90813	975
90814	660
90815	503

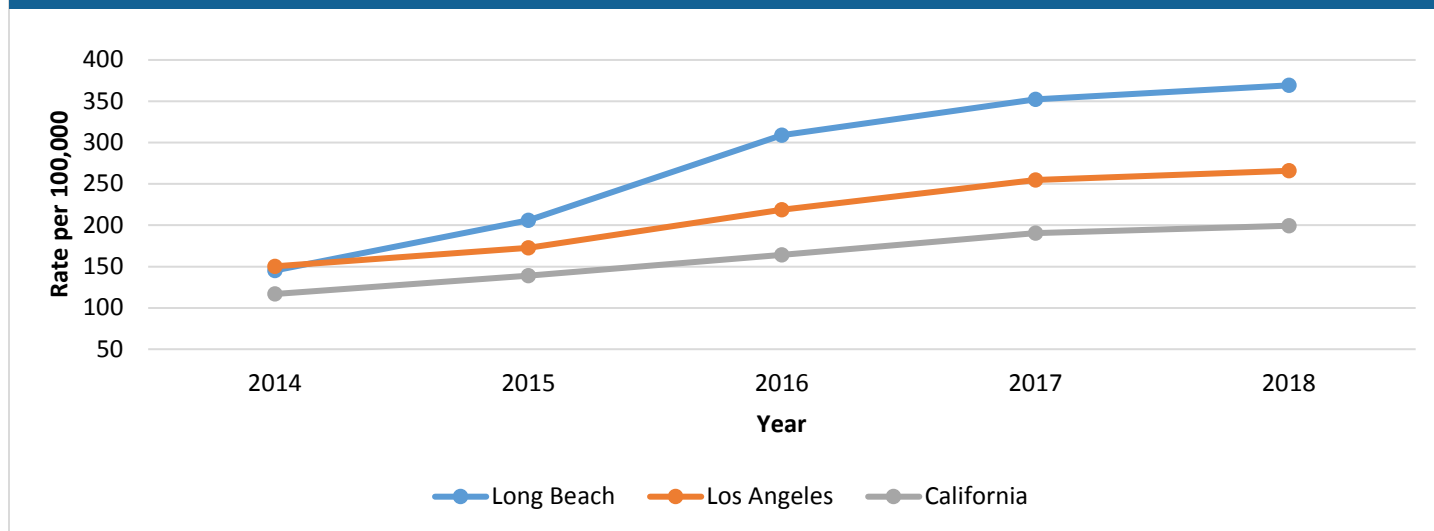


*Map does not include people experiencing homelessness or individuals who did not provide a zip code.
Source: California Department of Public Health, STD Control Branch.



GONORRHEA IN LONG BEACH

Figure 6. Gonorrhea incidence rates per 100,000 population, Long Beach, Los Angeles, and California, 2014-2018



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, 2014-2018. Sacramento, California, December 2018.

Table 8. Gonorrhea cases and incidence rates per 100,000 population, Long Beach, Los Angeles, and California 2014-2018

	2014		2015		2016		2017		2018	
	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate
Long Beach	685	145.3	980	206.1	1,489	309.0	1,690	352.4	1,762	369.3
Los Angeles	15,135	150.3	17,614	172.8	22,361	218.6	26,160	254.7	27,333	265.9
California	44,974	116.8	54,255	138.9	64,677	164.3	75,450	190.5	79,397	199.4

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, 2014-2018. Sacramento, California, December 2018.



Table 9. Gonorrhea cases and incidence rates per 100,000 population by sex and age group, Long Beach, 2014-2018

	2014		2015		2016		2017		2018	
	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate
LONG BEACH TOTAL	685	145.3	980	206.1	1,489	309.0	1,690	352.4	1,762	369.3
Male at Birth Total	446	193	627	269.2	1,031	436.6	1,125	478.8	1,221	522.2
0-9	<5	-	<5	-	<5	-	<5	-	<5	-
10-14	<5	-	<5	-	<5	-	<5	-	<5	-
15-19	45	250.2	44	242.6	66	359.0	53	289.7	44	241.8
20-24	95	489.6	148	756.6	209	1,054.0	261	1,322.8	232	1,181.8
25-29	96	493.7	132	673.4	222	1,117.1	232	1,173.3	285	1,448.6
30-34	67	387.5	88	504.9	158	894.2	188	1,069.3	199	1,137.6
35-44	82	240.2	114	331.2	206	590.4	215	619.3	269	778.7
45+	57	77.4	94	126.6	161	213.9	173	231.0	184	246.9
Not Specified	<5	-	7	-	8*	-	<5	-	7*	-
Female at Birth Total	227	94.4	343	141.5	440	179.0	550	224.9	519	213.3
0-9	<5	-	<5	-	<5	-	<5	-	<5	-
10-14	<5	-	<5	-	<5	-	<5	-	<5	-
15-19	50	271.7	74	398.8	76	404.0	128	683.9	82	440.3
20-24	82	402.6	112	545.5	138	663.0	150	724.2	141	684.2
25-29	46	229	50	246.9	90	438.4	113	553.2	118	580.6
30-34	21	116.1	36	197.4	47	254.2	72	391.4	76	415.3
35-44	17*	49	41	117.2	51	143.8	55	155.9	60	170.9
45+	10*	12.3	17*	20.7	34	40.9	25	30.2	29	35.2
Not Specified	<5	-	11*	-	<5	-	6*	-	12*	-

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, 2014-2018. Sacramento, California, December 2018.

Gender specific age groups and race/ethnicity rate 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.

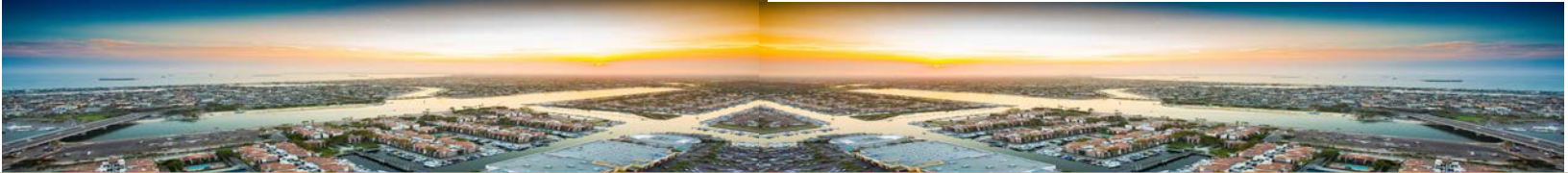


Table 10. Gonorrhea cases and incidence rates per 100,000 population by sex and race/ethnicity, Long Beach, 2014-2018

	2014		2015		2016		2017		2018	
	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate
LONG BEACH TOTAL	685	145.3	980	206.1	1,489	309.0	1,690	352.4	1,762	369.3
Male at Birth Total	446	193	627	269.2	1,031	436.6	1,125	478.8	1,221	522.2
American Indian/Alaska Native	<5	-	5*	756.1	10*	1,491.7	16*	2,398.8	14*	2,109.5
Asian/Pacific Islander	10*	33.4	13*	43.1	18*	58.9	23	75.6	41	135.5
Black/African American	111	396.5	132	467.8	191	667.6	206	723.7	203	716.8
Latino	60	62.4	78	80.4	153	155.6	165	168.7	202	207.5
White	78	112	84	118.7	121	168.7	151	211.6	168	236.6
Other/Multi/Not Specified	186	-	315	-	538	-	564	-	593	-
Female at Birth Total	227	94.4	343	141.5	440	179.0	550	224.9	519	213.3
American Indian/Alaska Native	<5	-	<5	-	<5	-	5*	682.7	2*	274.5
Asian/Pacific Islander	6*	17.4	16*	45.9	10*	28.3	10*	28.5	17*	48.6
Black/African American	61	184.1	95	284.4	78	230.3	112	332.4	80	238.6
Latina	35	36.5	42	43.4	83	84.6	64	65.6	78	80.3
White	23	33.4	30	42.9	40	56.4	64	90.7	44	62.7
Other/Multi/Not Specified	101	-	159	-	228	-	295	-	298	-

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, 2014-2018. Sacramento, California, December 2018.

*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.



GONORRHEA SITE TESTING

Table 11. Positive gonorrhea site testing by sex, Long Beach, 2014-2018

	2014		2015		2016		2017		2018	
	Cases	%	Cases	%	Cases	%	Cases	%	Cases	%
LONG BEACH TOTAL	685		980		1,489		1,690		1,723	
Male at Birth Total	446	66%	627	65%	1,031	70%	1,125	67%	1,196	70%
Urine	227	75%	273	71%	366	63%	307	57%	225	49%
Urethral	8*	3%	26	7%	30	5%	33	6%	11*	2%
Rectal	35	12%	53	14%	96	16%	113	21%	136	29%
Throat	32	11%	35	9%	90	15%	85	16%	90	19%
Unknown Site	144	-	240	-	449	-	587	-	734	-
Female at Birth Total	227	34%	343	35%	440	30%	550	33%	505	30%
Urine	85	57%	172	75%	184	73%	190	76%	159	76%
Urethral	<5	-	<5	-	6*	2%	<5	-	<5	-
Rectal	<5	-	<5	-	<5	-	5*	2%	<5	-
Throat	<5	-	5*	2%	7*	3%	7*	3%	12*	6%
Cervical	44	29%	29	13%	39	15%	26	10%	20	10%
Vaginal	18*	12%	17	7%	15*	6%	22	9%	19*	9%
Unknown Site	77	-	114	-	188	-	299	-	292	-

Source: California Department of Public Health, STD Control Branch

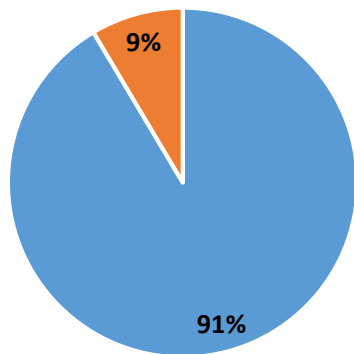
State of California, Department of Finance, *California County Population Estimates and Components of Change by County*, July, 1, 2014-2018. Sacramento, California, December 2018.

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

* Gender and site test percent calculations exclude "Unknown" 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.

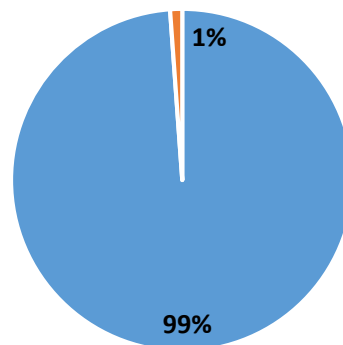
Figure 7. Positive throat site testing by sex, Long Beach, 2014-2018



*Table 11.

■ Male ■ Female

Figure 8. Positive rectal site testing by sex, Long Beach, 2014-2018



*Table 11.

■ Male ■ Female

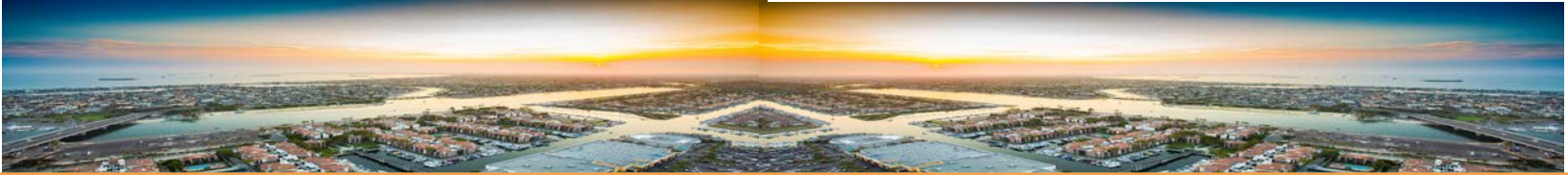
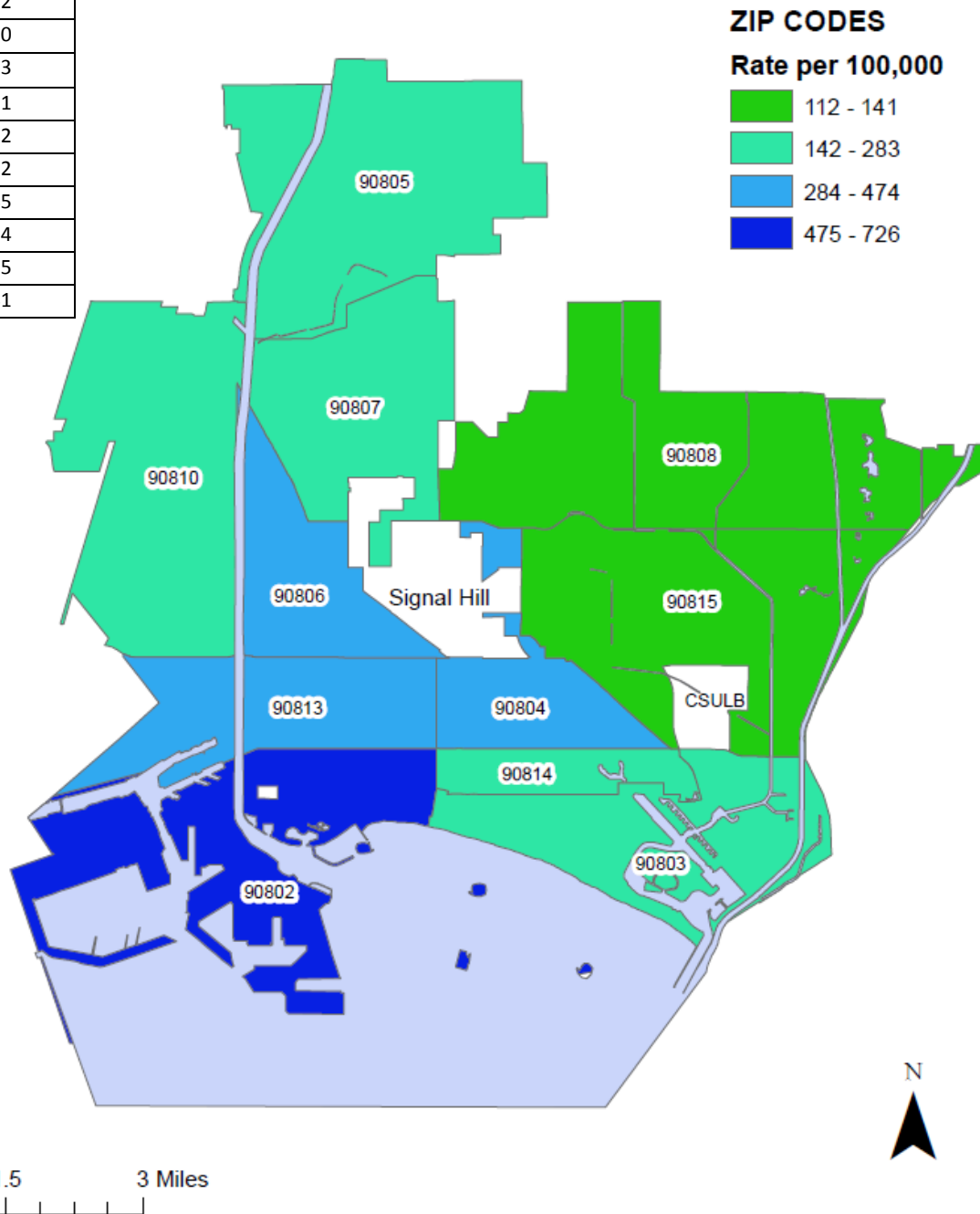


Figure 9. Gonorrhea cases by zip code, Long Beach, 2018

Zip code	Incidence Rate (per 100,000)
90802	726
90803	212
90804	460
90805	283
90806	411
90807	262
90808	112
90910	245
90813	474
90814	275
90815	141

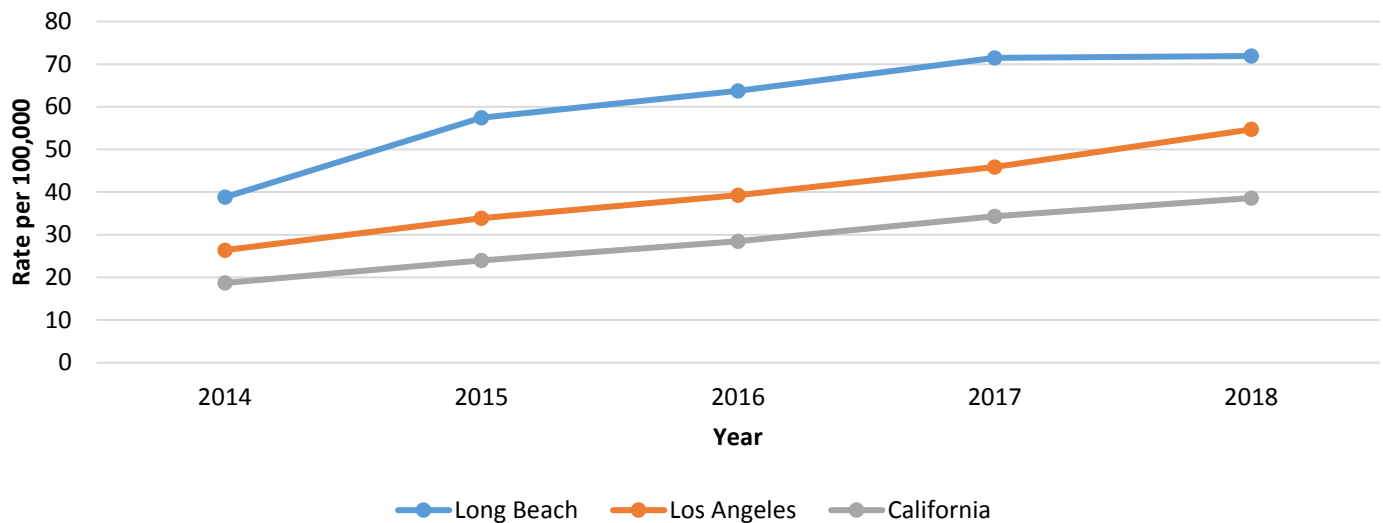


*Map does not include people experiencing homelessness or individuals who did not provide a zip code.
Source: California Department of Public Health, STD Control Branch



SYPHILIS IN LONG BEACH

Figure 10. Total early syphilis¹ incidence rates per 100,000 population, Long Beach, Los Angeles, and California, 2014-2018



¹Total 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, 2014-2018. Sacramento, California, December 2018.

Table 12. Total early syphilis¹ cases and incidence rates per 100,000 population, Long Beach, Los Angeles, and California, 2014-2018

	2014		2015		2016		2017		2018	
	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate
Long Beach	183	38.8	273	57.4	307	63.7	343	71.5	343	71.9
Los Angeles	2,662	26.4	3,454	33.9	4,018	39.3	4,717	45.9	5,627	54.7
California	7,256	18.7	9,359	24	11,222	28.5	13,605	34.3	15,368	38.6

¹Total 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, 2014-2018. Sacramento, California, December 2018.

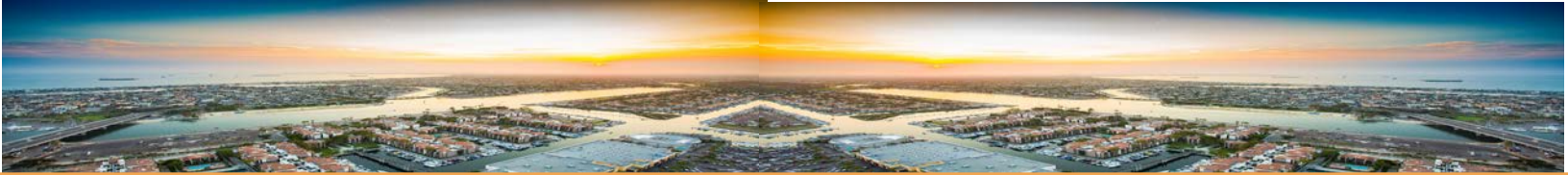


Table 13. Total early syphilis¹ cases and incidence rates per 100,000 population by sex and age group, Long Beach, 2014-2018

	2014		2015		2016		2017		2018	
	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate
LONG BEACH TOTAL	183	38.8	273	57.4	307	63.7	343	71.5	343	71.9
Male at Birth Total	175	75.7	256	109.9	295	124.9	315	134.1	304	130.0
0-9	<5	-	<5	-	<5	-	<5	-	<5	-
10-14	<5	-	<5	-	<5	-	<5	-	<5	-
15-19	<5	-	5*	27.6	<5	-	6*	32.8	<5	-
20-24	14*	72.2	27	138	39	196.7	38	192.6	35	178.3
25-29	29	149.1	36	183.6	48	241.5	50	252.9	60	304.9
30-34	22	127.2	31	177.9	49	277.3	42	238.9	51	291.6
35-44	50	146.4	80	232.4	64	183.4	80	230.4	68	196.9
45+	57	77.4	77	103.7	92	122.2	99	132.2	86	115.4
Not Specified	<5	-	<5	-	<5	-	<5	-	<5	-
Female at Birth Total	8*	3.3	17*	7.0	12*	4.9	27	11.0	39	16.1
0-9	<5	-	<5	-	<5	-	<5	-	<5	-
10-14	<5	-	<5	-	<5	-	<5	-	<5	-
15-19	<5	-	<5	-	<5	-	5*	26.7	<5	-
20-24	<5	-	5*	24.4	5*	24.0	9*	43.5	9*	43.7
25-29	<5	-	<5	-	<5	-	7*	34.3	7*	34.5
30-34	<5	-	6*	33	<5	-	<5	-	8*	43.7
35-44	<5	-	<5	2.9	<5	-	<5	-	6*	17.0
45+	<5	-	<5	1.2	<5	-	<5	-	6*	7.3
Not Specified	<5	-	<5	-	<5	-	<5	-	<5	-

¹ Total early syphilis includes primary, secondary and early latent syphilis.

Gender specific age groups and race/ethnicity rate 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, 2014-2018. Sacramento, California, December 2018.

*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 14. Total early syphilis¹ cases and incidence rates per 100,000 population by sex and race/ethnicity, Long Beach, 2014-2018

	2014		2015		2016		2017		2018	
	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate
LONG BEACH TOTAL	183	38.8	273	57.4	307	63.7	343	71.5	343	71.9
Male at Birth Total	175	75.7	256	109.9	295	124.9	315	134.0	304	130
American Indian/Alaska Native	<5	-	<5	-	<5	-	<5	-	<5	-
Asian/Pacific Islander	7*	23.4	12*	39.8	14*	45.8	23	75.6	6*	19.8
Black/African American	23	82.2	38	134.7	51	178.3	61	214.3	39	137.7
Latino	60	62.4	93	95.9	102	103.7	124	126.8	44	45.2
White	41	58.9	79	111.7	89	124.1	87	121.9	38	53.5
Other/Multi/Not Specified	44	-	34	-	38	-	19*	-	19*	-
Female at Birth Total	8*	3.3	17*	7.0	12*	4.9	27	11.0	39	16.1
American Indian/Alaska Native	<5	-	<5	-	<5	-	<5	-	<5	-
Asian/Pacific Islander	<5	-	<5	-	<5	-	<5	-	<5	-
Black/African American	<5	-	6*	18	5*	14.8	8*	23.7	6*	17.8
Latina	<5	-	5*	5.2	6*	6.1	14*	14.3	11*	11.3
White	<5	-	<5	-	<5	-	<5	-	11*	15.7
Other/Multi/Not Specified	<5	-	<5	-	<5	-	<5	-	7*	1.5

¹ 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, 2014-2018. Sacramento, California, December 2018.

*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.

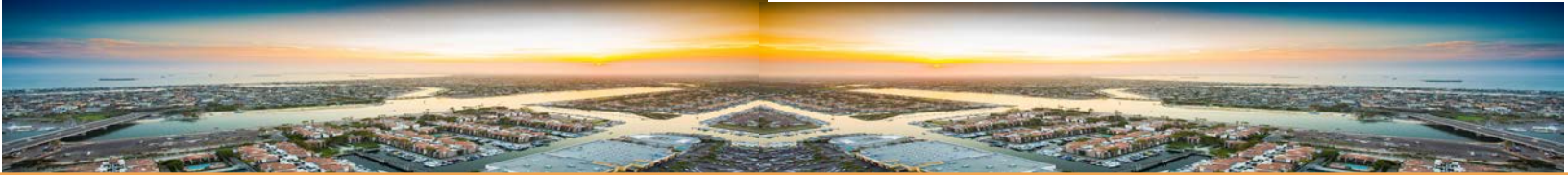
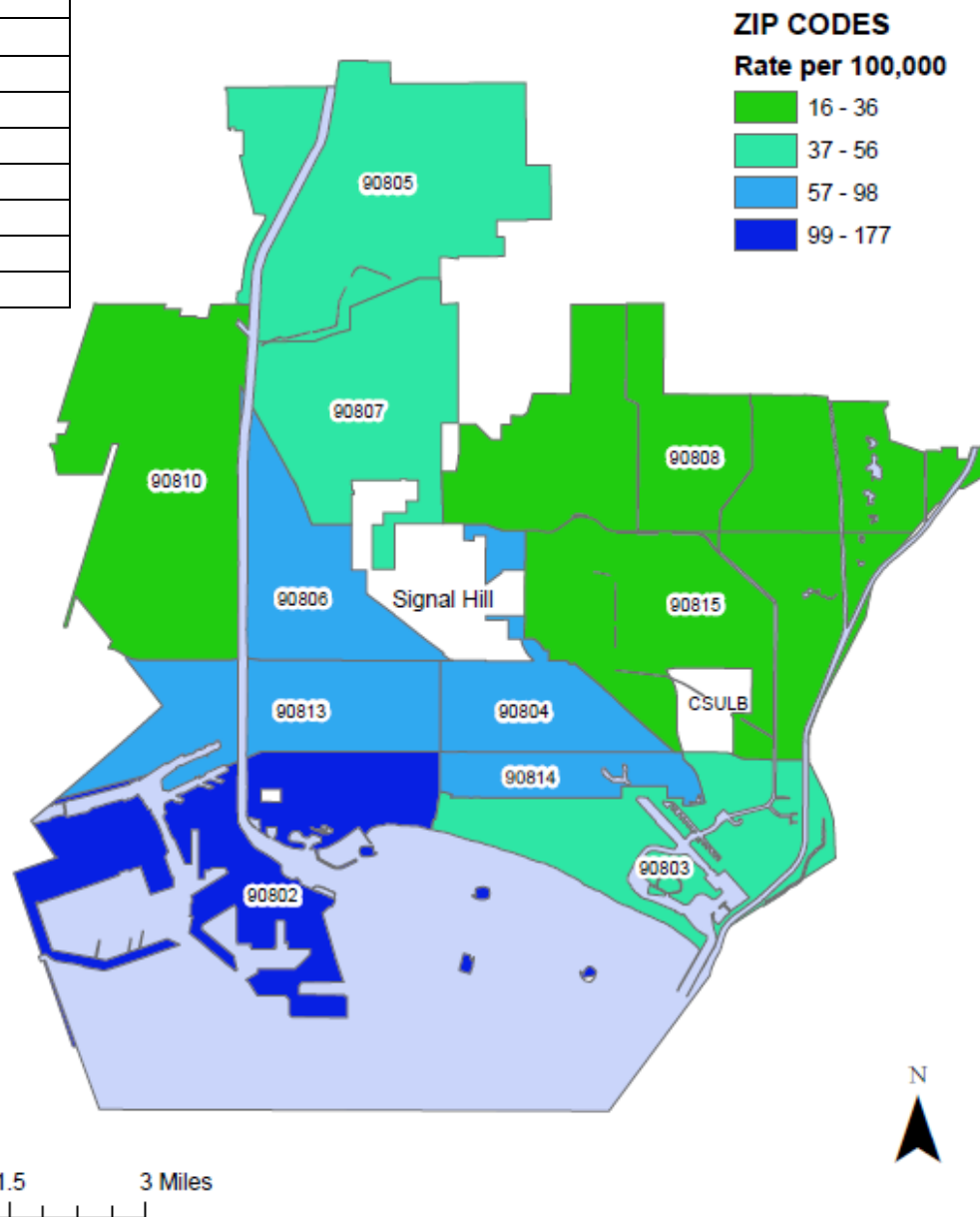


Figure 11. Total early syphilis¹ cases by zip code, Long Beach, 2018

Zip code	Incidence Rate (per 100,00)
90802	177
90803	47
90804	89
90805	53
90806	75
90807	56
90808	16
90810	36
90813	98
90814	72
90815	27



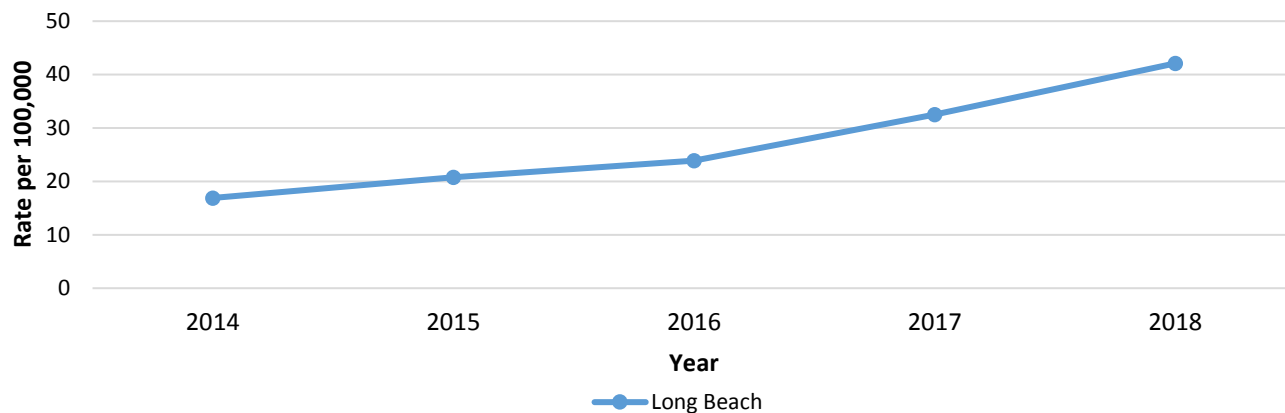
*Map does not include people experiencing homelessness or individuals who did not provide a zip code.

Source: California Department of Public Health, STD Control Branch

¹Total early syphilis includes primary, secondary and early latent syphilis.



Figure 12. Late latent syphilis incidence rates per 100,000 population, Long Beach, 2014-2018



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, 2014-2018. Sacramento, California, December 2018.

*County and State level data was not available for late latent syphilis comparison.

Table 15. Late latent syphilis cases and incidence rates per 100,000 population, Long Beach, 2014-2018

	2014		2015		2016		2017		2018	
	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate
Long Beach	80	16.9	99	20.8	115	23.9	156	32.5	201	42.1

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, 2014-2018. Sacramento, California, December 2018.

*County and State level data was not available for late latent syphilis comparison.

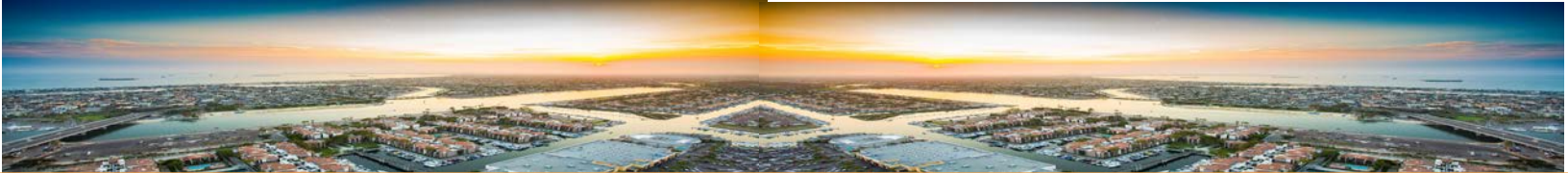
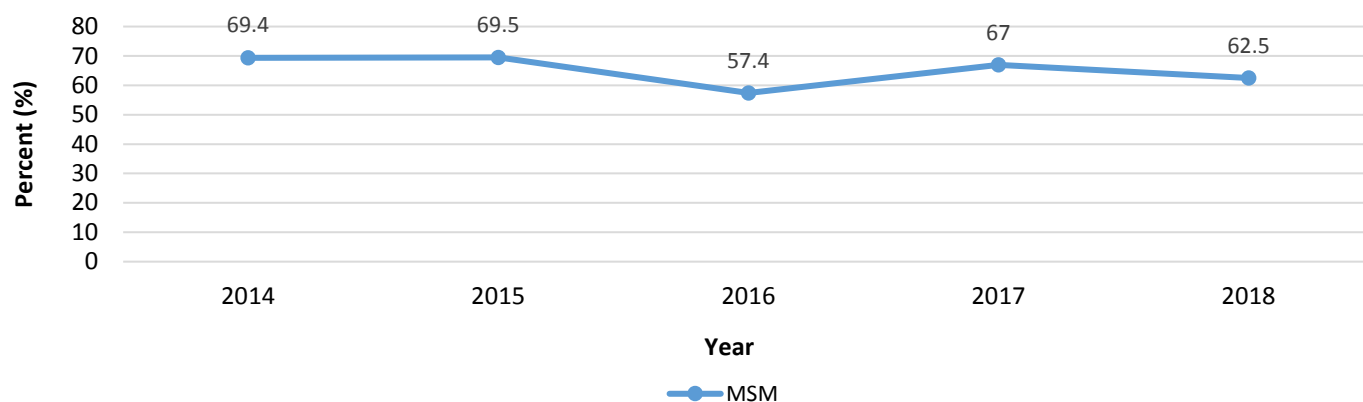


Figure 13. Percent of male syphilis¹ cases who have sex with men²(MSM), Long Beach, 2014-2018



Source: California Department of Public Health, STD Control Branch

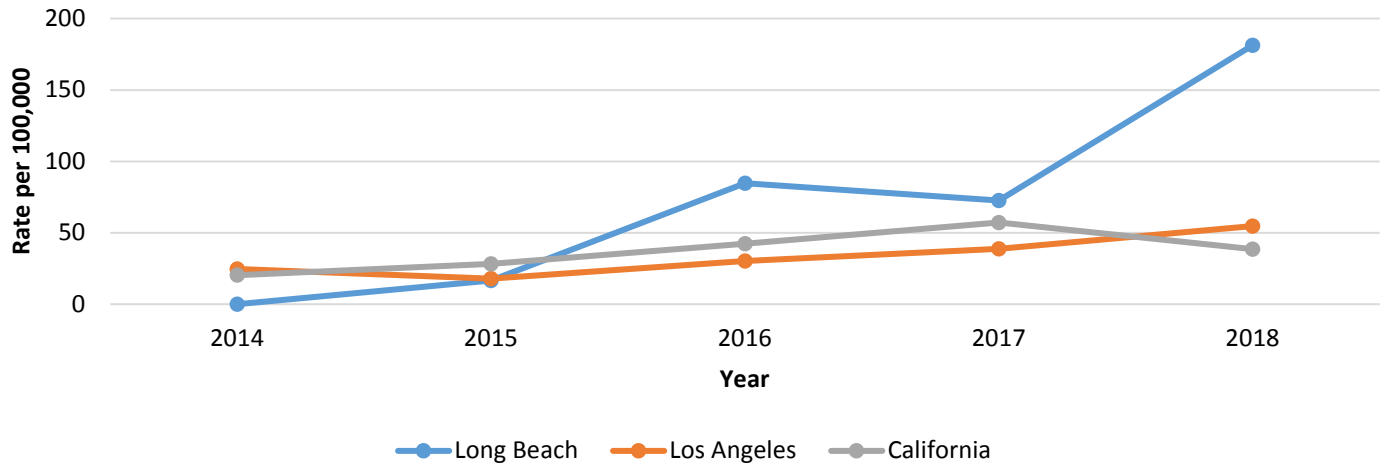
State of California, Department of Finance, *California County Population Estimates and Components of Change by County*, July, 1, 2014-2018. Sacramento, California, December 2018.

¹Includes primary, secondary, early latent, and late latent cases.

²This percent does not include males with unknown or missing sex partner information.



Figure 14. Congenital syphilis incidence rates per 100,000 population, Long Beach, Los Angeles, and California, 2014-2018

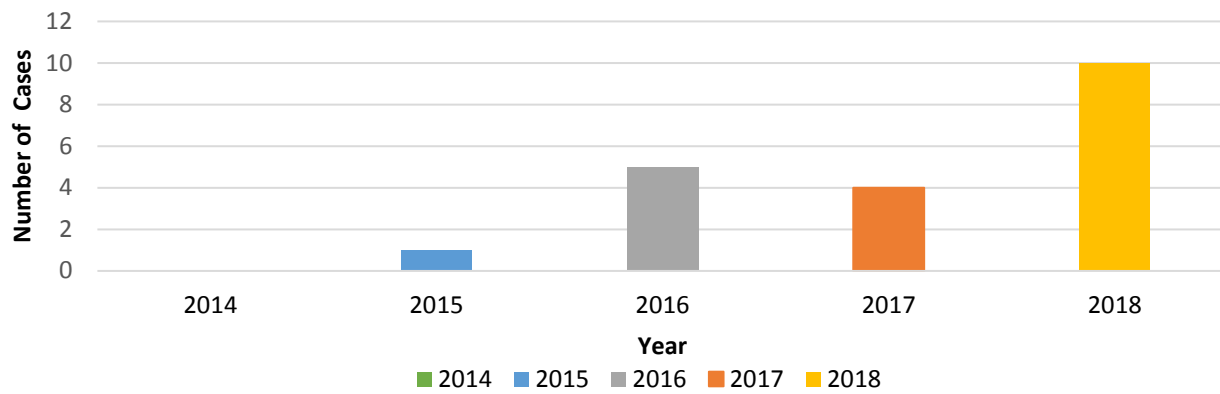


Note: Incidence rates are per 100,000 population.

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, 2014-2018. Sacramento, California, December 2018.

Figure 15. Congenital syphilis cases, Long Beach, 2014-2018



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, 2014-2018. Sacramento, California, December 2018.

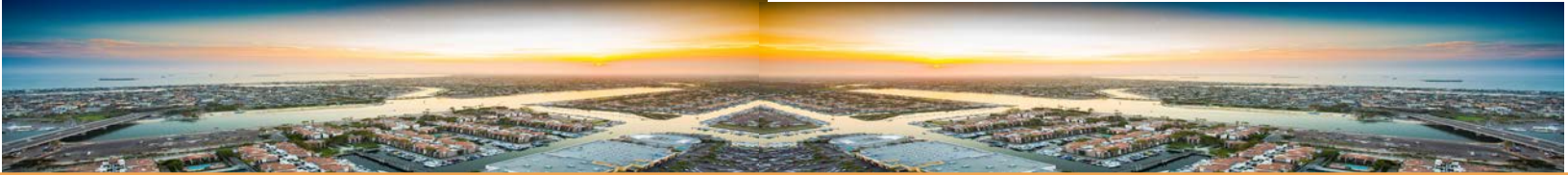
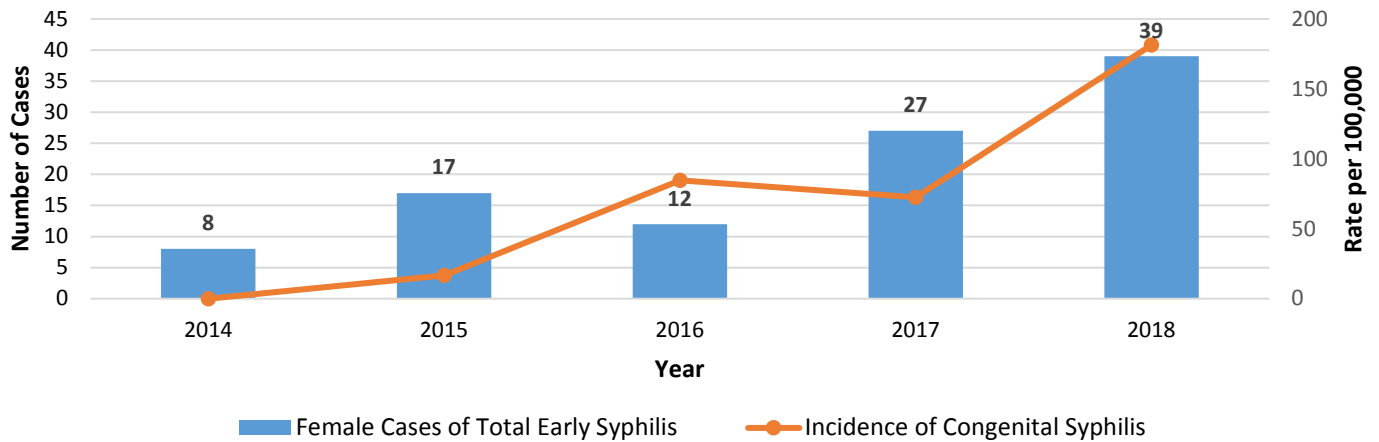


Figure 16. Congenital syphilis incidence rates per 100,000 population, and female cases of total early syphilis¹, Long Beach, 2014-2018



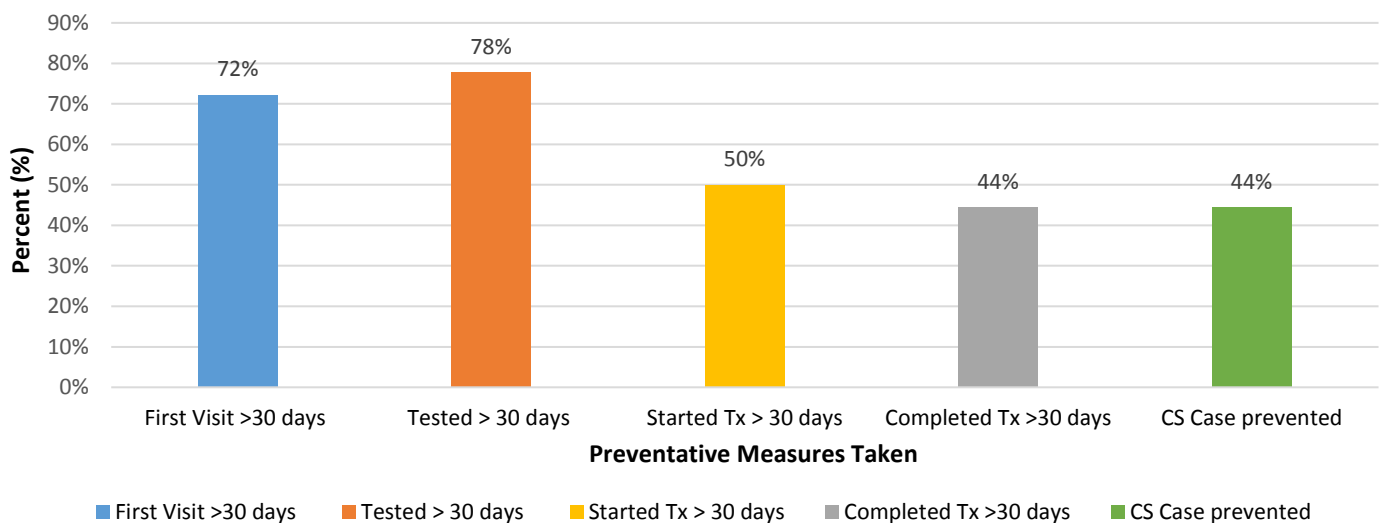
¹Total early syphilis includes primary, secondary and early latent syphilis.

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, 2014-2018. Sacramento, California, December 2018.

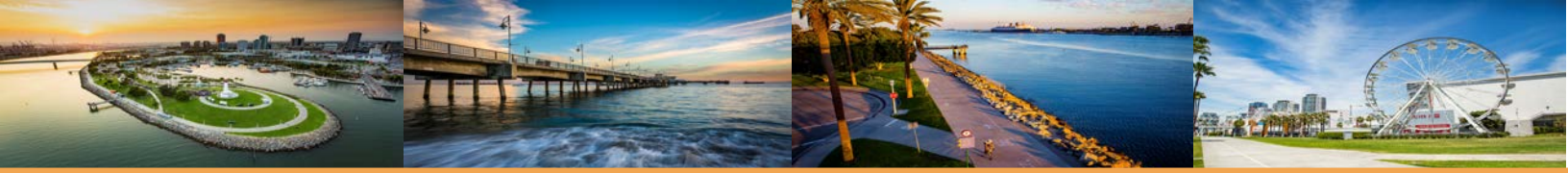
Figure 17. Congenital syphilis cascade, Long Beach, 2018



Note: Tx refers to treatment. CS refers to congenital syphilis.

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, 2014-2018. Sacramento, California, December 2018.



ADDITIONAL STD FIGURES

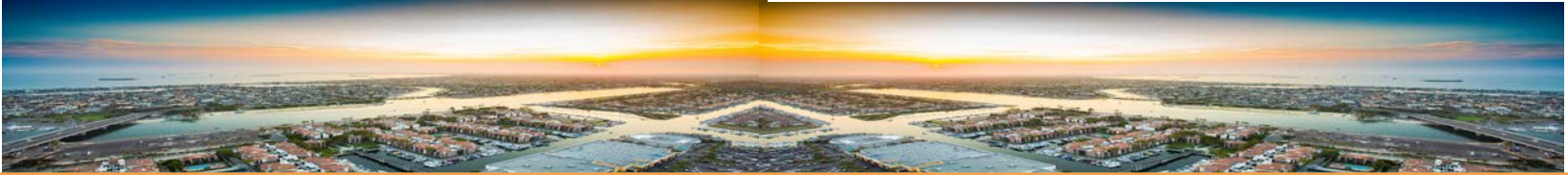
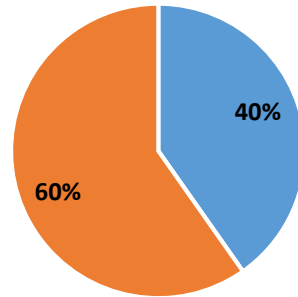


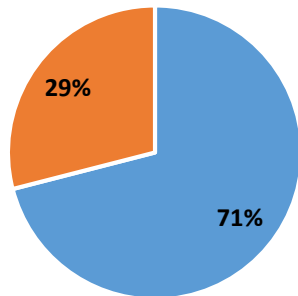
Figure 18. Chlamydia cases by sex, Long Beach, 2018



*See Table 5.

■ Males ■ Females

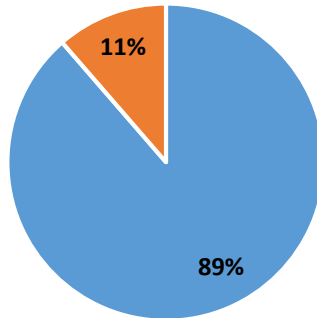
Figure 19. Gonorrhea cases by sex, Long Beach, 2018



*See Table 9.

■ Males ■ Females

Figure 20. Total early syphilis cases by sex, Long Beach, 2018

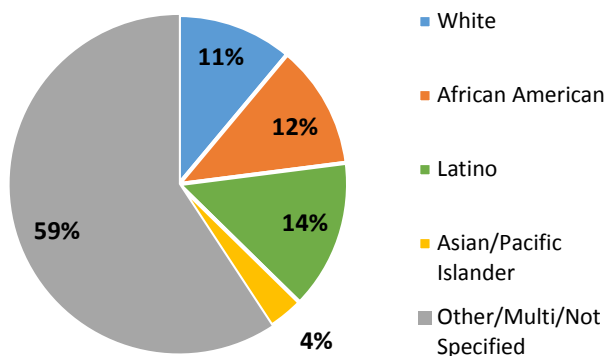


*See Table 13.

■ Males ■ Females

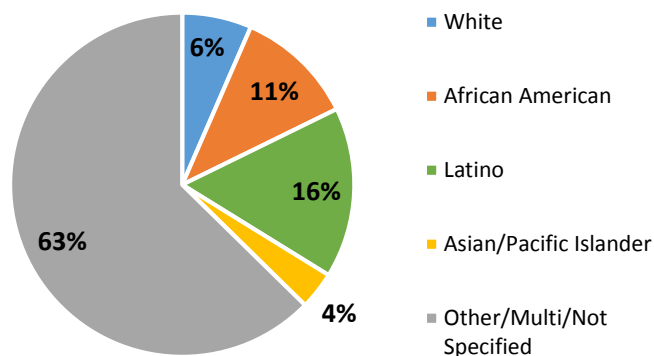


Figure 21. Male chlamydia cases by race/ethnicity, Long Beach, 2018



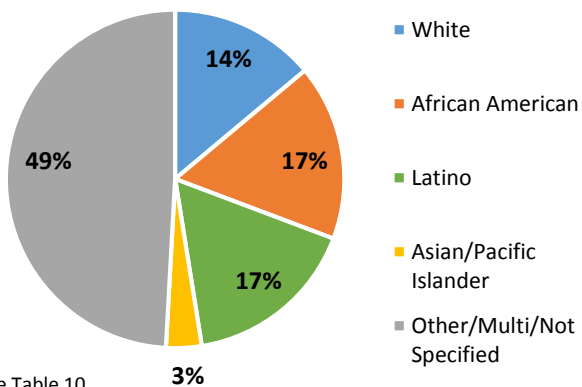
*See Table 6.

Figure 22. Female chlamydia cases by race/ethnicity, Long Beach, 2018



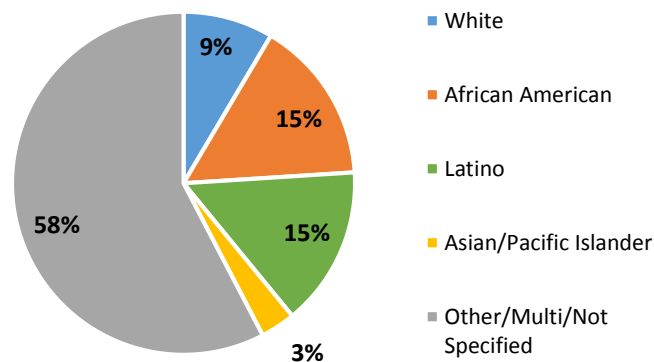
*See Table 6.

Figure 23. Male gonorrhea cases by race/ethnicity, Long Beach, 2018



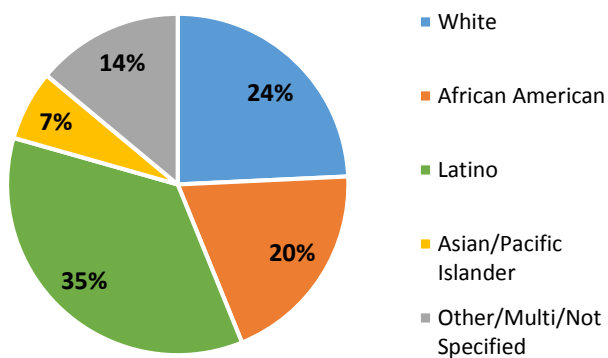
*See Table 10.

Figure 24. Female gonorrhea cases by race/ethnicity, Long Beach, 2018



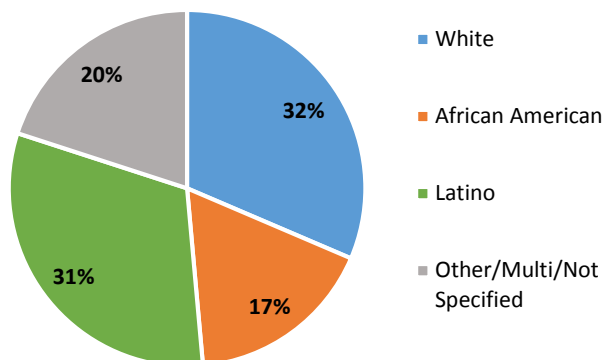
*See Table 10.

Figure 25. Male total early syphilis cases by race/ethnicity, Long Beach, 2018

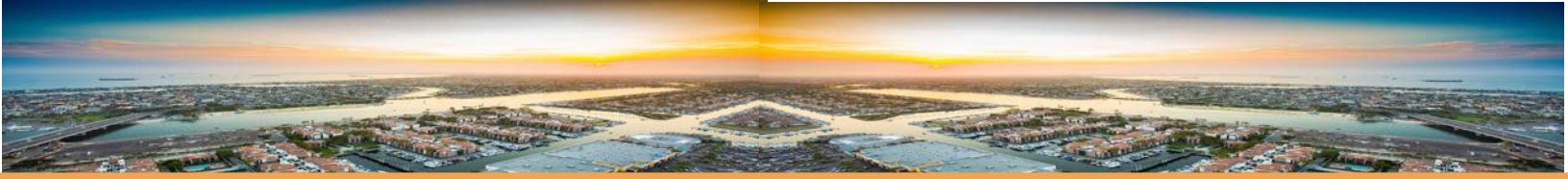


*See Table 14.

Figure 26. Female total early syphilis cases by race/ethnicity, Long Beach, 2018



*See Table 14.

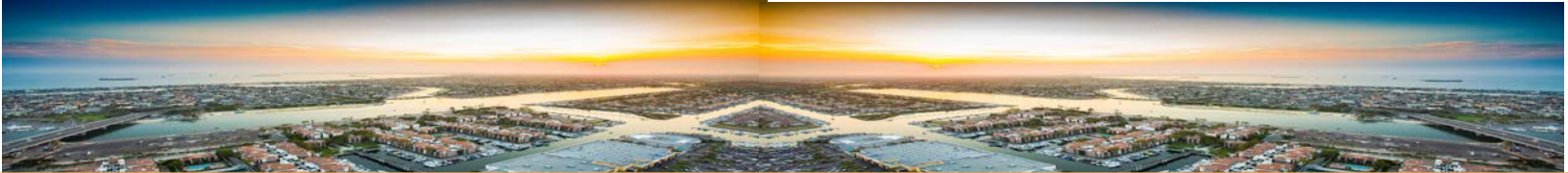


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HIV SURVEILLANCE

Annual Report **2018**



HIV TABLES AND FIGURES

STD TABLE AND FIGURE DEFINITIONS 11

STD LIMITATIONS 13

STD HIGHLIGHTS 14

HIV TABLES AND FIGURES 41

HIV LIMITATIONS 43

HIV HIGHLIGHTS 44

OVERVIEW OF HIV IN LONG BEACH 46

 Table 16. Characteristics of persons living with HIV and persons newly diagnosed¹ with HIV in Long Beach², California³, and the United States⁴, 2017 46

 Figure 27. New HIV diagnoses¹, deaths, and prevalence, Long Beach², 2014-2018..... 47

 Table 17. Number of persons newly diagnosed¹ with HIV infection by year, Long Beach^{2,3}, 2014-2018..... 48

 Figure 28. Persons newly diagnosed¹ with HIV infection by demographic and transmission category, Long Beach, 2018 49

 Table 18. Number and rate per 100,000¹ population of new HIV infections by year, Long Beach², 2014-2018..... 50

 Figure 29. Incidence rates per 100,000 population of new HIV infections, Long Beach, Los Angeles, and California. 2013-2017 50

 Table 19. Number of persons living with HIV¹ by year, Long Beach², 2014-2018 51

 Figure 30. Persons living with HIV by demographic and transmission category, Long Beach, 2018..... 52

 Table 20. Characteristics of persons living with HIV by race/ethnicity, Long Beach¹, 2018 53

 Figure 31. Persons living with HIV in Long Beach, cases by zip code, 2018..... 54

 Figure 32. Number of persons newly diagnosed¹ with HIV infection by race/ethnicity², Long Beach³, 2014-2018 55

 Figure 33. Number of men¹ newly diagnosed² with HIV infection by transmission category³, Long Beach³, 2014-2018 55

 Figure 34. Incidence rates per 100,000 population of men newly diagnosed¹ with HIV by race/ethnicity², Long Beach³, 2014-2018 56

 Figure 35. Incidence rates per 100,000 population of women newly diagnosed¹ with HIV by race/ethnicity², Long Beach³, 2014-2018 56

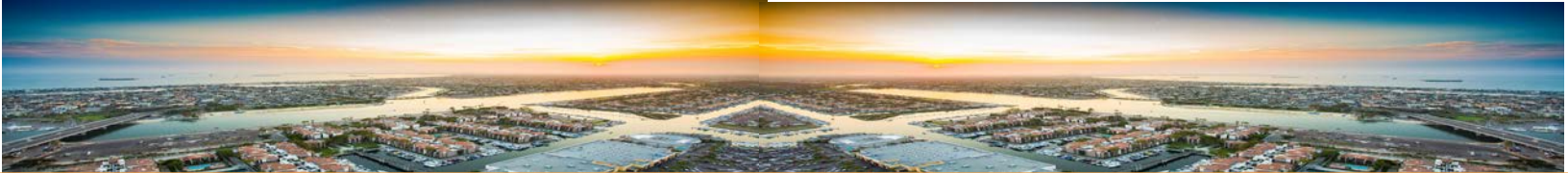
 Table 21. Number of persons newly diagnosed with HIV by gender and age group, Long Beach¹, 2014-2018..... 57

 Figure 36. Type of facility at new HIV diagnosis, Long Beach¹, 2018..... 58

TRENDS IN INDIVIDUALS IN STAGE 3 (AIDS) 59



Table 22. Number of persons living with Stage 3 (AIDS) by year, Long Beach ¹ , 2014-2018.....	59
Figure 37. Persons living with Stage 3 (AIDS) by demographic, Long Beach, 2018	60
TRENDS IN HIV MORTALITY.....	61
Table 23. Deaths among persons living with HIV by year, Long Beach ¹ , 2014-2018.....	61
Figure 38. Mortality rates ¹ per 100,000 population among men living with HIV by race/ethnicity ² , Long Beach ³ , 2014-2018	62
Figure 39. Mortality rates ¹ per 100,000 population among women living with HIV infection by race/ethnicity ² , Long Beach ³ , 2014-2018	62
HEALTH INSURANCE STATUS AT TIME OF HIV DIAGNOSIS.....	63
Figure 40. Health insurance status ¹ at time of HIV diagnosis by race/ethnicity ² , Long Beach ³ , 2014-2018	63
Figure 41. Health insurance status at time of HIV diagnosis ¹ by sex ² , Long Beach ³ , 2018.....	64
HIV AMONG MEN WHO HAVE SEX WITH MEN (MSM).....	65
Figure 42. Number of MSM newly diagnosed ¹ with HIV infection by race/ethnicity ² , Long Beach ³ , 2014-2018.....	65
Figure 43. Total early syphilis ¹ among MSM by HIV serostatus, Long Beach ² , 2016-2018.....	65
Table 24. Number of transgender persons living with HIV1 by year, Long Beach, 2014-2018	66
HIV AMONG TRANSGENDER PERSONS	66
Table 24. Number of transgender persons living with HIV ¹ by year, Long Beach, 2014-2018	66
Figure 44. Demographics of transgender persons living with HIV by year, 2018.....	67
HIV CARE CONTINUUM	68
Figure 46. HIV care continuum for persons newly diagnosed ¹ with HIV by race/ethnicity ² , Long Beach ³ , 2018.....	68
Figure 45. HIV care continuum for persons newly diagnosed ¹ with HIV, Long Beach ² , 2018	68
Figure 47. HIV care continuum for persons newly diagnosed ¹ with HIV by gender, Long Beach ² , 2018	69
Figure 48. HIV care continuum for persons newly diagnosed ¹ with HIV by age, Long Beach ² , 2018.....	69
Figure 49. HIV care continuum for persons living with HIV, Long Beach ¹ , 2018	70
Figure 50. HIV care continuum for persons living with HIV by race/ethnicity, Long Beach ¹ , 2018	70
Figure 51. HIV care continuum for persons living with HIV by gender, Long Beach ¹ , 2018	71
Figure 52. HIV care continuum for persons living with HIV by age group, Long Beach ¹ , 2018	71
Figure 53. Percent of persons living out of care by zip code, Long Beach ¹ , 2018.....	72
HIV TECHNICAL NOTES.....	73



HIV LIMITATIONS

Health Insurance Data: There was a large amount of missing insurance data in our data set, potentially skewing percentages in Figures 40 and 41.

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 2018.

HIV Care Continuum: HIV Care Continuum report includes all persons diagnosed and living with HIV who were alive as of December 31, 2018 and living in Long Beach, and an estimate of the number of persons who are living, but not yet diagnosed with HIV. The data was extracted from the California HIV Surveillance System 12 months after the end of the calendar year to allow for delays in cases and laboratory reporting. Specific populations with small numbers of diagnosed individuals were not reported to protect their personal health information.

Late Reporting: Due to reporting delays, the City of Long Beach's 2018 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 the report, cells containing 0–4 cases were suppressed 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.

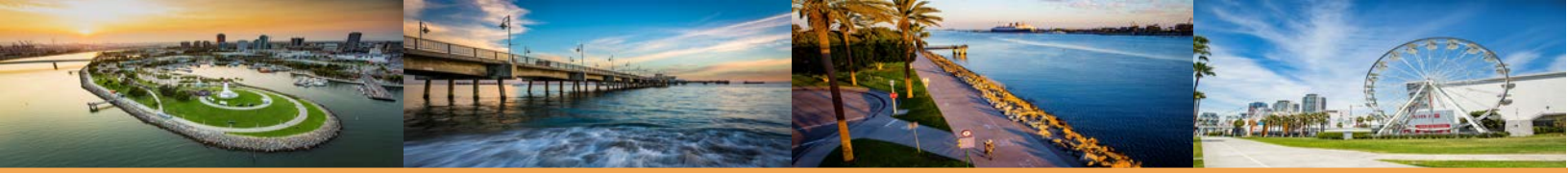
Unstable Rates: The National Center for Health Statistics considers rates based on 20 or fewer observations unstable. The Center for Health Statistics utilizes relative standard error (RSE):

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

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

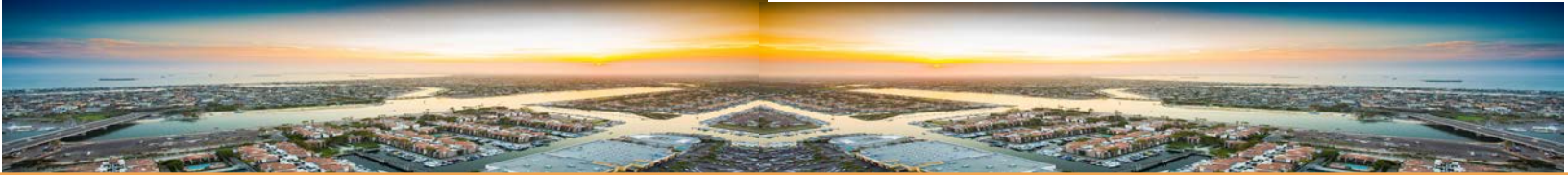
The City of Long Beach acknowledges that data presented in this report may not meet the National Center for Health Statistics guidelines on stable rates. However, the City must utilize the available data for programmatic evaluation and recommendations. In the context of this report, unstable rates are 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 31st state deadline for reporting HIV cases and updates of the previous year.



HIV HIGHLIGHTS

- As of December 31, 2018, there were 4,319 Long Beach residents diagnosed and living with HIV ([Figure 27](#)). The indicator used to calculate residence changed in 2018 and as a result, the number of total cases of HIV decreased from previous editions of the annual report.
- The overall trend remained the same and should be considered a true reduction.
- The number of new HIV diagnoses declined by 23% overall from 124 individuals in 2014 to 96 individuals in 2018 ([Figure 27](#)). There was a total of 55 recorded deaths in 2018 ([Figure 27](#)). In 2018, 85% of persons newly diagnosed with HIV were male; 35% were Latino; 32% were between the ages of 30-39; 53% reported their transmission risk as MSM; and 82% were diagnosed with only HIV, as opposed to HIV and later AIDS, or HIV and AIDS diagnosed simultaneously ([Table 17](#)).
- In 2018, Long Beach had a rate of 21 new HIV infections per 100,000 population ([Table 18](#)). Although there is no official 2018 data from Los Angeles County or the State of California to compare this incidence to, Long Beach has historically experienced higher rates than both ([Figure 29](#)). In 2018, males in Long Beach had a new infection rate of 35 per 100,000, which was about 6 times higher than that of females (6 per 100,000) ([Table 18](#)). Although African Americans had the lowest number of individuals who were newly infected with HIV in 2018, they had the highest rate (39 per 100,000) when compared to their White and Latino counterparts ([Table 18](#)).
- In 2018, persons living with HIV were predominately White, aged 50-59 years, and MSM ([Table 19](#)). In 2018, African American women represented only 14% of the total female population in Long Beach, but accounted for 34% of females living with HIV in the city ([Table 20](#)).
- In 2018, 12% of individuals were simultaneously diagnosed with HIV and AIDS at the time of diagnosis ([Table 17](#)). Of those in Long Beach, 2,317 (54%) of persons living with HIV were diagnosed with stage 3 HIV (AIDS) ([Table 19](#)).
- Between 2014 and 2018, 251 deaths occurred among people living with HIV (PLWH) in Long Beach ([Table 23](#)); however, deaths increased during this time. In 2018, most deaths occurred among persons aged 50-59 years ([Table 23](#)), and African American men and women experienced the highest mortality rates ([Figures 38, 39](#)). The largest decline in deaths from 2017 to 2018 was among Whites, followed by African Americans ([Table 23](#)).
- Public funding for health insurance increased across all ethnic groups between 2014-2018; and rates of obtaining private insurance increased for the Latino population ([Figure 40](#)). In 2018, more males were insured by Private Insurance/HMO than females (29% for males, 0% for females) ([Figure 41](#)).
- Between 2016 and 2018, the number of total early syphilis cases increased by 1% among HIV+ MSM ([Figure 43](#)).
- In 2018, 98% of transgender persons living with HIV stated they are male-to-female. From the available data, a large majority of this population were Latino (40%) ([Figure 44](#)). Most were reported as being over the age of 50 (43%) and diagnosed with HIV only (68%) ([Table 24](#)).
- In 2018, 49% of newly diagnosed HIV patients were retained in HIV care and 55% achieved viral suppression in the City of Long Beach ([Figure 45](#)). African Americans newly diagnosed with HIV had the lowest percentage (39%) of HIV care retention in 2018, while Latinos newly diagnosed with HIV had the lowest percentage (53%) of viral suppression ([Figure 46](#)). Females newly diagnosed with HIV had the lowest percentage (42%) of being retained in HIV care, while males newly diagnosed with HIV had the lowest percentage (54%) of achieving viral suppression ([Figure 47](#)). Those aged 65 years or older who were newly diagnosed with HIV had the lowest percentage of retained in HIV care at 33%, but those aged 13-24 years old had the lowest percentage of achieving viral suppression at 45% ([Figure 48](#)).



- For all persons living with HIV in Long Beach in 2018, 57% were retained in HIV care and 64% achieved viral suppression ([Figure 49](#)). In 2018, Native Hawaiians/Pacific Islanders living with HIV had the lowest percentage (36%) of HIV care retention and African Americans living with HIV had the lowest percentage (60%) of viral suppression ([Figure 50](#)). The lowest percentage of being retained in HIV care (54%) and achieving viral suppression (60%) was in Cisgender women living with HIV ([Figure 51](#)). Those aged 13-24 years old had the lowest percentage (49%) of being retained in HIV care and the lowest percentage (56%) of achieving viral suppression ([Figure 52](#)).
- The zip code that had the highest number of those living with HIV and out of care in Long Beach was 90802 ([Figure 53](#)).
- Most persons living with HIV in Long Beach reside in the zip code 90802 ([Figure 32](#)).



OVERVIEW OF HIV IN LONG BEACH

Table 16. Characteristics of persons living with HIV and persons newly diagnosed¹ with HIV in Long Beach², California³, and the United States⁴, 2017⁵

	Living with HIV Cases		Newly Diagnosed HIV Cases		
	Long Beach	California	Long Beach	California	United States
Sex at Birth ^{6 7}					
Male	3787	119,211	82	4,260	32,563
Female	435	15,866	14	531	7,639
Race/Ethnicity					
White	1583	52,878	27	1,245	10,048
African American	825	23,237	24	802	16,690
Latino	1474	48,769	34	2,232	9,461
Asian/Pacific Islander	169	5651	8*	356	999
Native American/Alaska Native	<5	376	<5	18	212
Other/Unknown	167	3,337	<5	138	871
Transmission Category					
MSM	3,117	88,251	51	3,212	25,513
PWID	170	7,979	<5	188	2,344
MSM-PWID	258	9,218	5*	155	1,241
Heterosexual	298	19,529	<5	953	9,003
Other/Unidentified	379	7,428	36	554	179

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

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

³ California data are reported through January 2019, for cases living as of January 9, 2019. California data taken from California Department of Public Health HIV Surveillance Report – 2017; https://www.cdph.ca.gov/Programs/CID/DOA/Pages/OA_case_surveillance_reports.aspx. Published March 2019.

⁴ U.S. data are reported through June 30, 2018 and reflect cases diagnosed through December 31, 2017. U.S. data reflect unadjusted numbers for 50 states and 6 dependent areas and may be found in the CDC HIV Surveillance Report, 2017; vol. 29; <https://www.cdc.gov/hiv/library/reports/hiv-surveillance.html>. Published November 2017.

⁵ The latest available HIV data for California and the United States is for 2017. Therefore, 2013-2017 data was used for the figure to create a 5-year comparison.

⁶ Transgender data are not reported by the United States. See Technical Notes "Transgender Status."

⁷ 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.

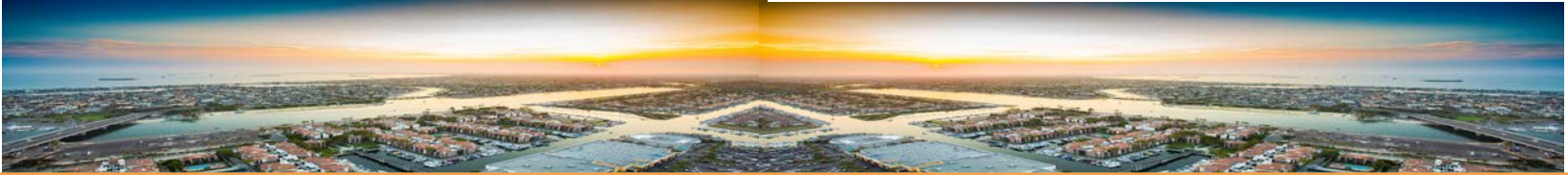
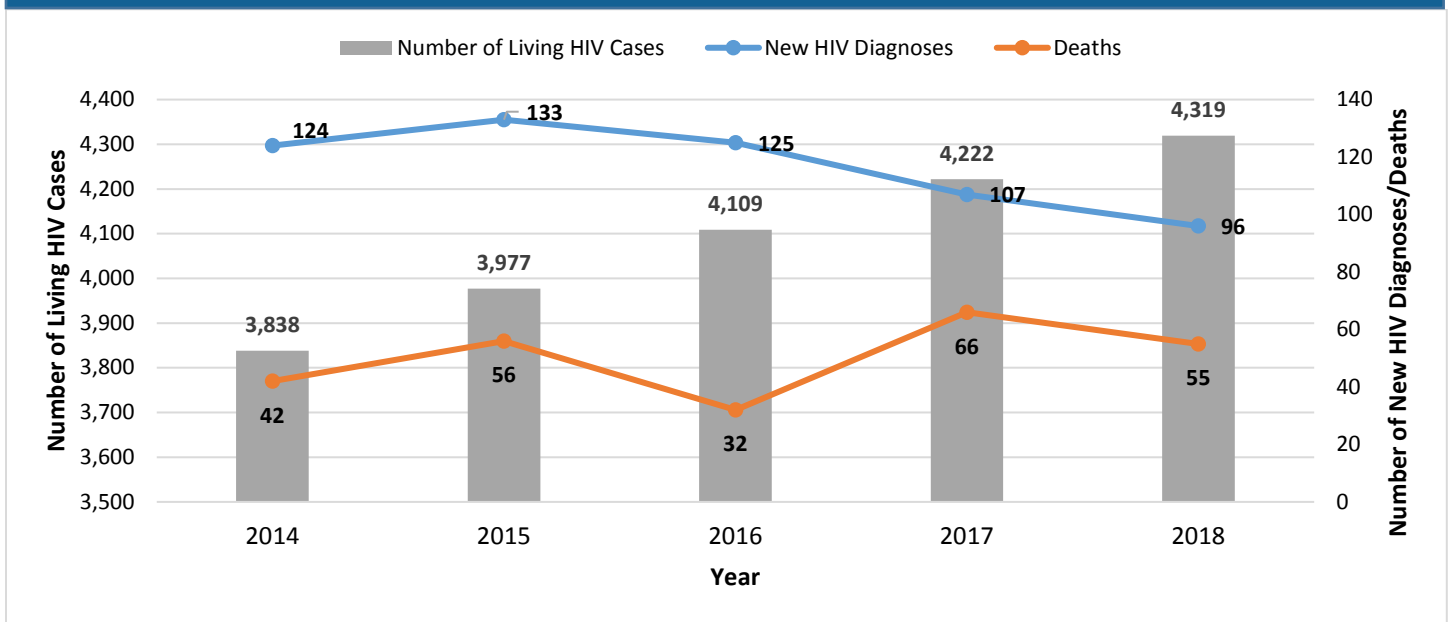


Figure 27. New HIV diagnoses¹, deaths, and prevalence, Long Beach², 2014-2018



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

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



Table 17. Number of persons newly diagnosed¹ with HIV infection by year, Long Beach^{2 3}, 2014-2018

	2014		2015		2016		2017		2018	
	Num.	%	Num.	%	Num.	%	Num.	%	Num.	%
Total	124		133		125		107		96	
Sex at Birth⁴										
Male	107	86%	117	88%	106	85%	98	92%	82	85%
Female	17*	14%	16*	12%	19	15%	9	8%	14	15%
Race/Ethnicity										
White	39	32%	28	21%	33	26%	19	18%	27	28%
African American	26	21%	33	25%	28	22%	23	21%	25	25%
Latino	50	40%	61	46%	51	41%	45	42%	34	35%
Asian/Pacific Islander	6*	5%	7*	5%	5*	4%	9	8%	8*	8%
Native American/Alaska Native	<5	-	<5	-	<5	-	<5	-	<5	-
Other/Unknown	<5	-	<5	-	<5	-	10	9%	<5	-
Age at HIV Diagnosis (years)										
0-12	<5	-	<5	-	<5	-	<5	-	<5	-
13 - 17	<5	-	<5	-	<5	-	<5	-	<5	-
18 - 24	16*	13%	24	18%	22	18%	15	14%	16	17%
25 - 29	21	17%	26	20%	22	18%	20	19%	16	17%
30 - 39	46	37%	35	26%	42	34%	26	24%	31	32%
40 - 49	21	17%	27	20%	23	18%	23	21%	18	19%
50+	19	15%	21	16%	16*	13%	19	18%	12	13%
Transmission Category										
MSM	78	63%	70	23%	79	63%	70	65%	51	53%
PWID	<5	-	8*	6%	<5	-	6*	6%	<5	-
MSM-PWID	<5	-	<5	-	5*	4%	5*	5%	5*	5%
Heterosexual	<5	-	<5	-	<5	-	<5	-	<5	-
Other/Unidentified	39	32%	48	36%	38	30%	26	24%	36	38%
HIV Disease Stage⁵										
HIV only	98	79%	111	84%	100	80%	90	84%	79	82%
HIV and later AIDS	11*	9%	7*	5%	7*	6%	<5	-	6*	6%
HIV and AIDS diagnosed simultaneously	15*	12%	15*	11%	18	14%	13	12%	11*	12%

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

²Data include persons newly diagnosed with HIV infection in any stage and reported as of December 31, 2018.

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

⁴Transgender cases are reported separately in Table 24.

⁵For 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

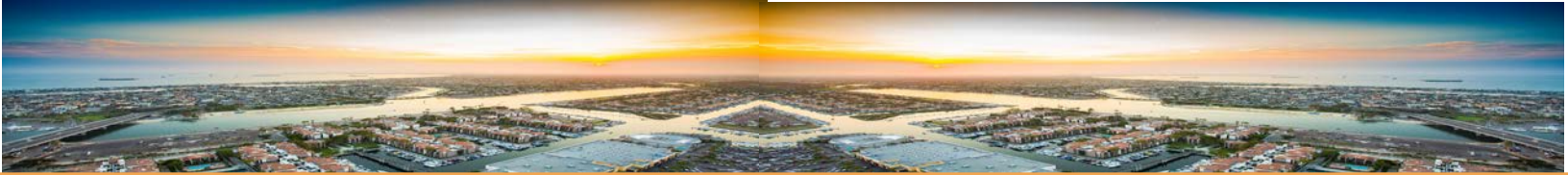
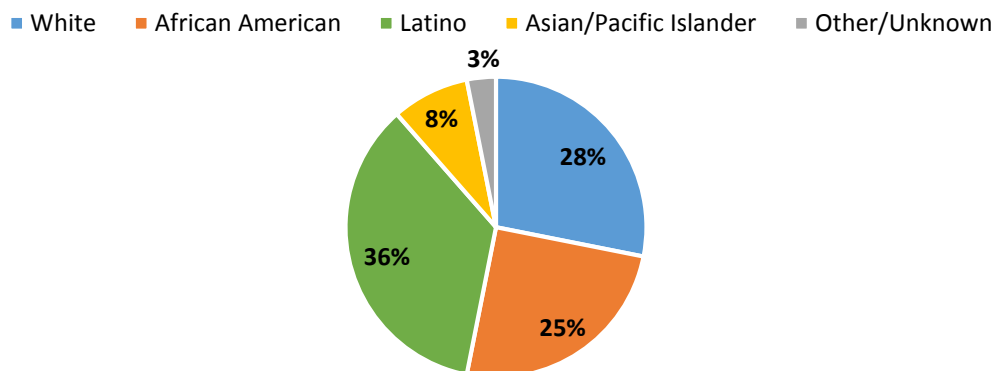
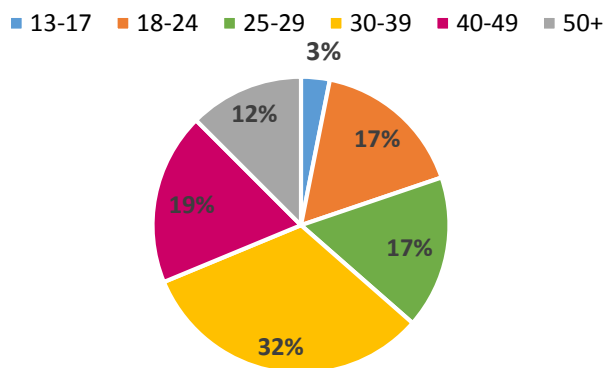


Figure 28. Persons newly diagnosed¹ with HIV infection by demographic and transmission category, Long Beach, 2018

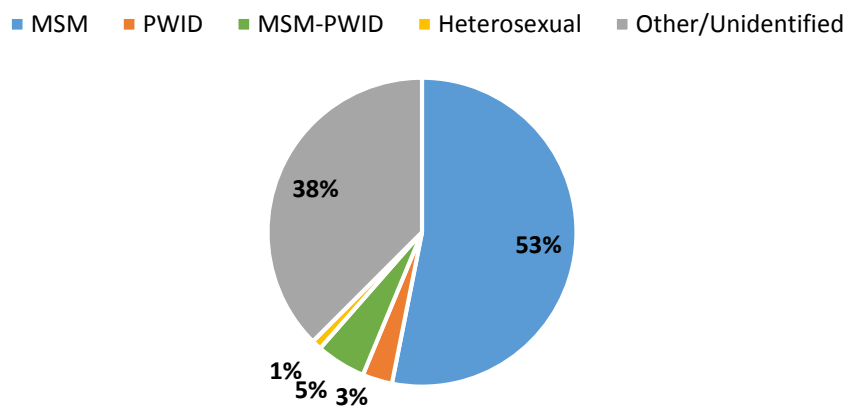
Persons newly diagnosed with HIV by race/ethnicity



Persons newly diagnosed with HIV by age



Persons newly diagnosed with HIV by transmission category



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

*See Table 17. The "Other" race/ethnicity category includes Other/Unknown.



Table 18. Number and rate per 100,000¹ population of new HIV infections by year, Long Beach², 2014-2018

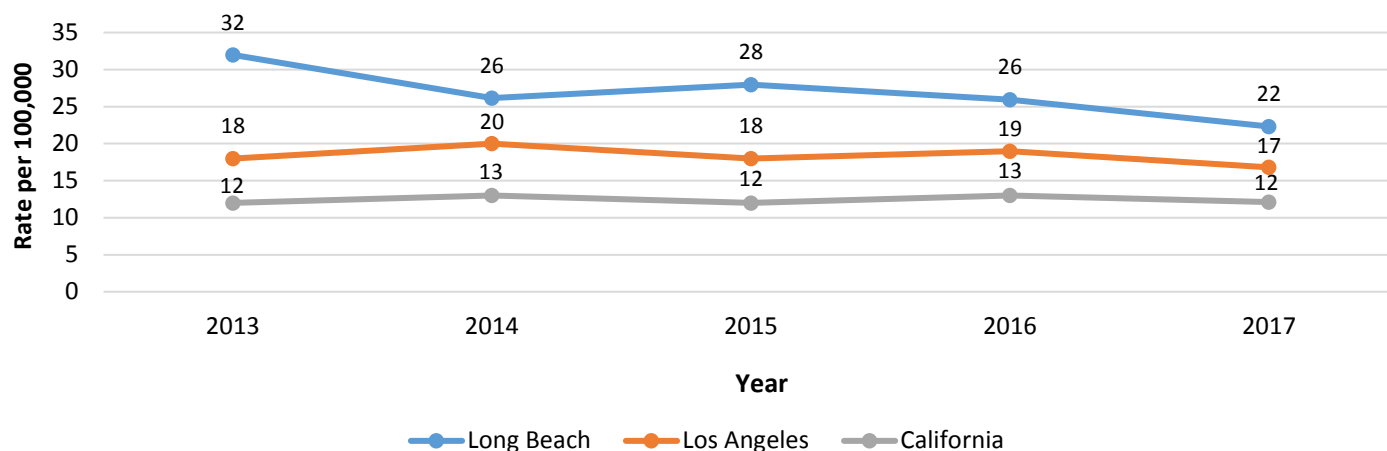
	2014		2015		2016		2017		2018	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Total	124	26	133	28	125	26	107	22	96	20
Sex at Birth										
Male	107	46	117	50	106	45	98	42	82	35
Female	17*	7	16*	7	19*	8	9*	4	14*	6
Race/Ethnicity										
White	39	28	28	20	33	23	19*	13	27	19
African American	26	42	33	54	28	45	23	37	24	39
Latino	50	26	61	31	51	26	45	23	34	17

¹Population 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/.

²All 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 29. Incidence rates per 100,000 population of new HIV infections, Long Beach, Los Angeles, and California, 2013-2017



¹Population 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/.

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

³The latest available HIV data for Los Angeles County and California is for 2017. Therefore, 2013-2017 data was used for the figure to create a 5-year comparison.

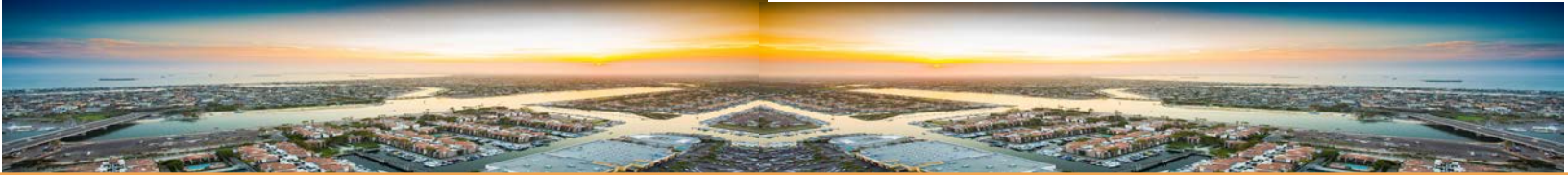


Table 19. Number of persons living with HIV¹ by year, Long Beach², 2014-2018

	2014		2015		2016		2017		2018	
	Num.	%	Num.	%	Num.	%	Num.	%	Num.	%
Total	3,838		3,977		4,109		4,222		4,319	
Sex at Birth³										
Male	3,447	90%	3,570	90%	3,683	90%	3,787	90%	3,870	90%
Female	391	10%	407	10%	426	10%	435	10%	449	10%
Race/Ethnicity										
White	1,498	39%	1,528	38%	1,563	38%	1,583	38%	1,611	37%
African American	737	19%	771	19%	801	20%	825	20%	849	20%
Latino	1,311	34%	1,373	35%	1,425	35%	1,474	35%	1,508	35%
Asian/Pacific Islander	148	4%	155	4%	160	4%	164	4%	177	4%
Native American/ Alaska Native	<5	-	<5	0%	<5	0%	<5	0%	<5	0%
Other/Unknown	141	4%	147	4%	157	4%	167	4%	170	4%
Age in Years										
0 - 12	<5	-	<5	-	<5	-	<5	-	<5	-
13 - 17	<5	-	<5	-	<5	-	<5	-	6*	0.1
18 - 24	9*	0.2%	17*	0.4%	25	1%	40	1%	51	1%
25 - 29	101	3%	124	3%	148	4%	172	4%	190	4%
30 - 39	516	13%	558	14%	608	15%	635	15%	665	15%
40 - 49	856	22%	884	22%	907	22%	931	22%	945	22%
50 - 59	1433	37%	1,456	37%	1,473	36%	1,483	35%	1,490	35%
60 - 69	737	19%	745	19%	749	18%	756	18%	763	18%
70+	171	5%	172	4%	173	4%	175	4%	175	4%
Transmission Category										
MSM	2,880	75%	2,956	74%	3,042	74%	3,117	74%	3,169	73%
PWID	155	4%	162	4%	164	4%	170	4%	173	4%
MSM-PWID	246	7%	249	6%	253	6%	258	6%	263	6%
Heterosexual	291	8%	290	7%	265	7%	298	7%	299	7%
Transfusion/ Hemophilia	8*	0.2%	9*	0.3%	7*	0.1%	7*	0.1%	7*	0.1%
Other/Unidentified	272	7%	307	8%	345	8%	372	9%	408	9%
HIV Disease Stage⁴										
HIV only	1,443	38%	1,560	39%	1,667	41%	1,762	42%	1,842	43%
HIV and later AIDS	1,519	40%	1,526	38%	1,534	37%	1,538	36%	1,544	36%
HIV and AIDS diagnosed simultaneously	717	19%	732	18%	749	18%	762	18%	773	18%
Unknown	159	4%	159	4%	159	4%	160	4%	160	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 December 31, 2018.

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

³ Transgender cases are reported separately in Table 24.

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

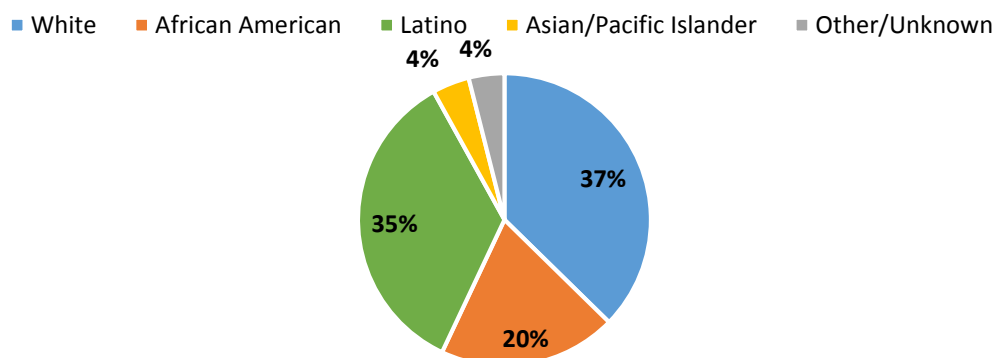
*Percentages may not add to 100% due to rounding and not displaying data when less than 5 cases.

*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.

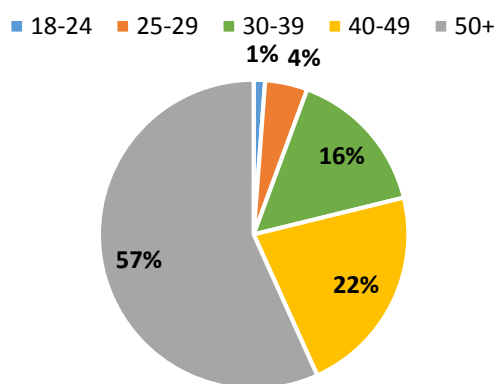


Figure 30. Persons living with HIV by demographic and transmission category, Long Beach, 2018

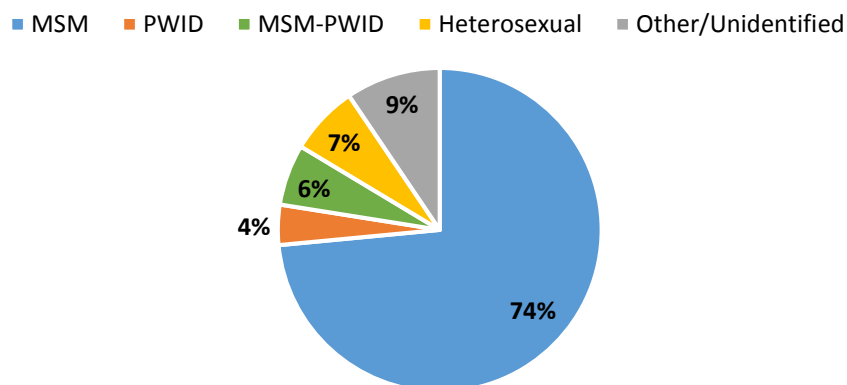
Persons living with HIV by race/ethnicity



Persons living with HIV by age group



Persons living with HIV by transmission category



*See Table 19.

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

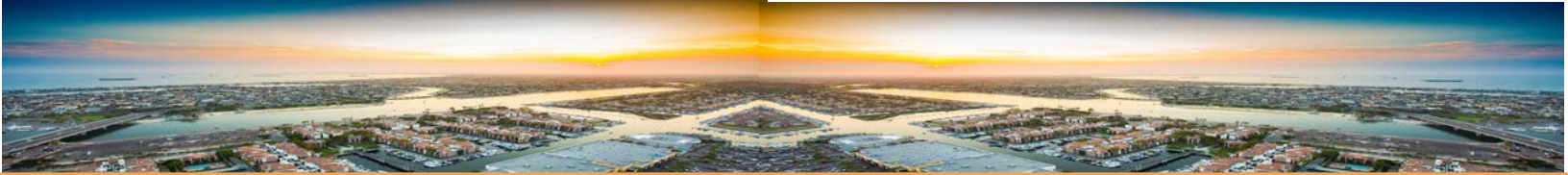


Table 20. Characteristics of persons living with HIV by race/ethnicity, Long Beach¹, 2018

	Race/Ethnicity											
	White		African American		Latino		Asian/Pacific Islander		Other/ Unknown ²		Total	
	Num.	%	Num.	%	Num.	%	Num.	%	Num.	%	Num.	%
Total	1,611		850		1,508		177		173		4,319	
Male at Birth												
Transmission Category												
MSM	1,293	85%	511	73%	1,120	83%	129	84%	116	76%	3,169	81%
PWID	40	3%	31	4%	25	2%	<5	-	7*	5%	105	3%
MSM-PWID	115	8%	62	9%	74	5%	<5	-	11*	7%	263	7%
Heterosexual	12*	1%	24	3%	27	2%	6*	4%	<5	-	72	2%
Transfusion/Hemophilia	<5	-	<5	-	<5	-	<5	-	<5	-	<5	-
Other/Unidentified	59	4%	67	10%	102	8%	14*	9%	15*	10%	278	7%
Age in Years												
0 - 12	<5	-	<5	-	<5	-	<5	-	<5	-	<5	-
13 - 17	<5	-	<5	-	<5	-	<5	-	<5	-	<5	-
18 - 24	5*	0.3%	19*	3%	12	1%	<5	-	<5	-	41	1%
25 - 29	30	2%	50	7%	73	5%	6*	4%	9*	6%	168	4%
30 - 39	118	8%	143	21%	270	20%	37	27%	24	17%	594	15%
40 - 49	230	15%	135	20%	392	29%	34	25%	37	26%	831	22%
50 - 59	668	44%	208	30%	395	29%	40	29%	39	28%	1,356	35%
60 - 69	362	24%	121	18%	166	12%	13*	9%	27	19%	691	18%
70+	99	7%	13*	2%	35	3%	<5	-	<5	-	155	4%
Male at Birth Subtotal	1,520		695		1,348		153		153		3,870	
Female at Birth												
Transmission Category												
PWID	20	22%	21	14%	22	14%	<5	-	<5	-	68	15%
Heterosexual	40	44%	66	43%	96	60%	15*	63%	8*	44%	227	50%
Transfusion/Hemophilia	<5	-	<5	-	<5	-	<5	-	<5	-	<5	-
Other/Unidentified	31	34%	65	42%	41	26%	6*	25%	8*	44%	151	35%
Age in Years												
0 - 12	<5	-	<5	-	<5	-	<5	-	<5	-	<5	-
13 - 17	<5	-	<5	-	<5	-	<5	-	<5	-	<5	-
18 - 24	<5	-	<5	-	<5	-	<5	-	<5	-	10*	2%
25 - 29	7*	8%	9*	6%	<5	-	<5	-	<5	-	22	5%
30 - 39	10*	11%	26	17%	27	17%	<5	-	<5	-	71	16%
40 - 49	22	24%	39	25%	43	27%	7*	29%	<5	-	114	26%
50 - 59	30	33%	41	27%	50	31%	<5	-	8*	44%	134	30%
60 - 69	12*	13%	30	19%	24	15%	<5	-	<5	-	72	16%
70+	5*	6%	6*	4%	7*	4%	<5	-	<5	-	20	4%
Female at Birth Subtotal	91		154		160		24		18		449	

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.

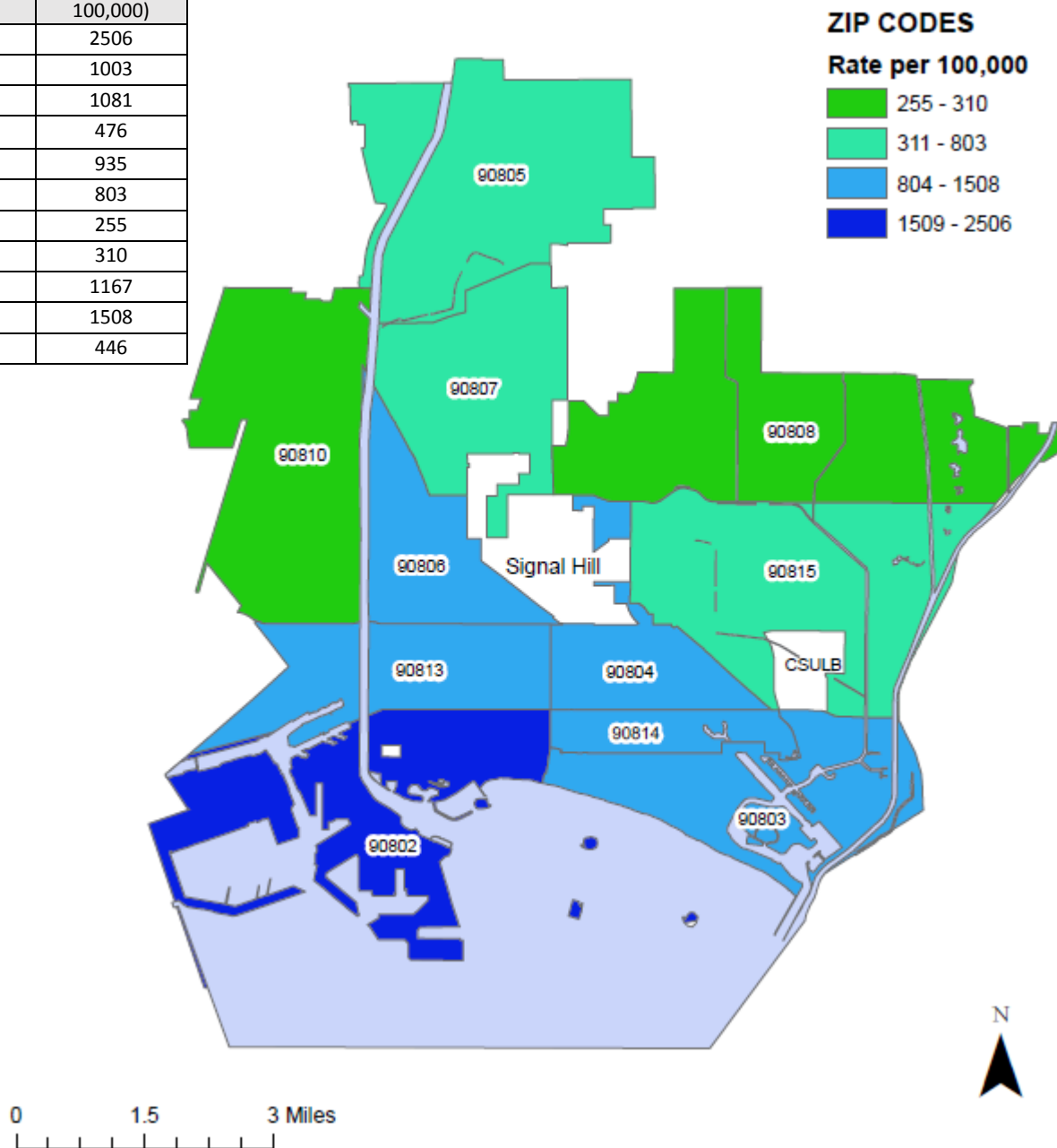
*Percentages may not add to 100% due to rounding and not displaying data when less than 5 cases.

*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.

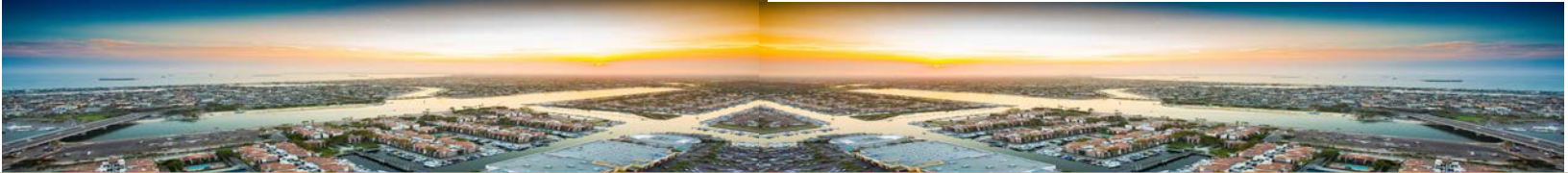


Figure 31. Persons living with HIV in Long Beach, cases by zip code, 2018

Zip code	Prevalence of HIV (per 100,000)
90802	2506
90803	1003
90804	1081
90805	476
90806	935
90807	803
90808	255
90810	310
90813	1167
90814	1508
90815	446

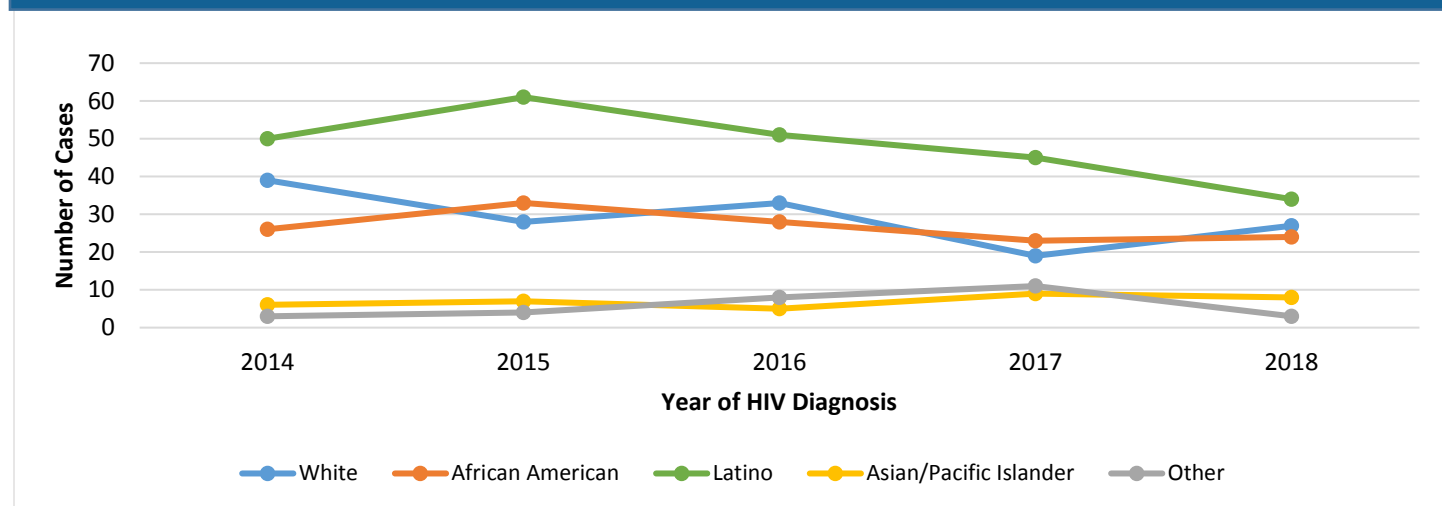


*Map does not include people experiencing homelessness or individuals who did not provide a zip code.
Source: California Department of Public Health, STD Control Branch



TRENDS IN HIV DIAGNOSES

Figure 32. Number of persons newly diagnosed¹ with HIV infection by race/ethnicity², Long Beach³, 2014-2018

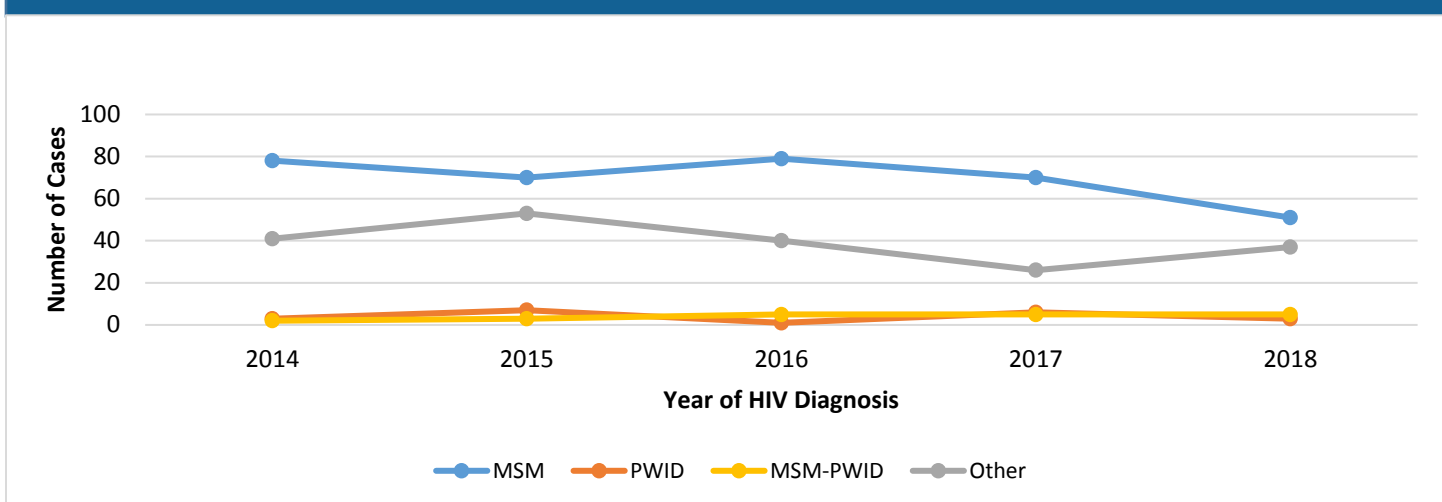


¹ See Technical Notes "Date of Initial Diagnosis."

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 33. Number of men¹ newly diagnosed² with HIV infection by transmission category³, Long Beach³, 2014-2018



¹ Data for newly diagnosed women by transmission category was too small to report.

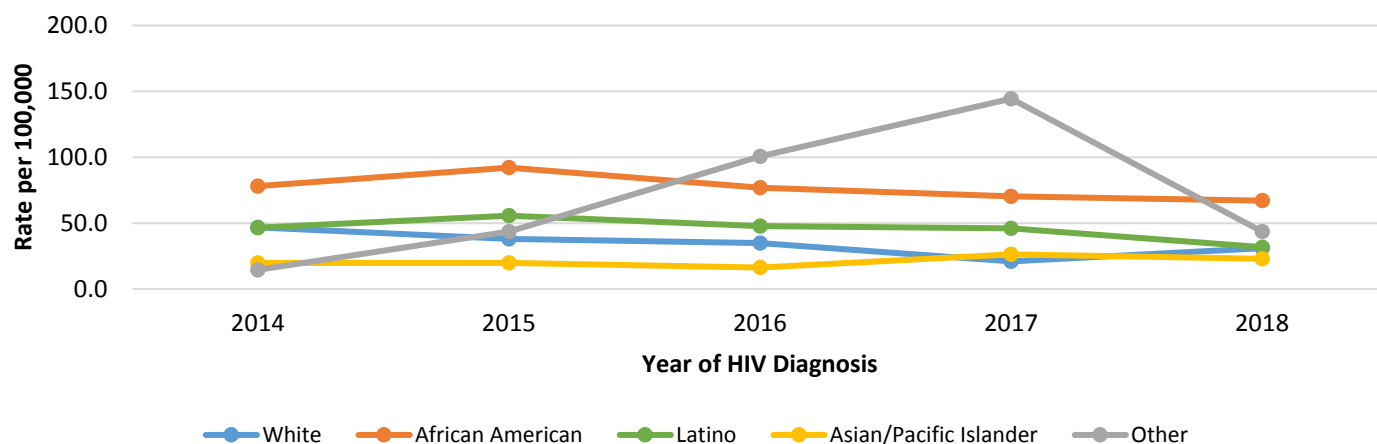
² See Technical Notes "Date of Initial Diagnosis."

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 34. Incidence rates per 100,000 population of men newly diagnosed¹ with HIV by race/ethnicity², Long Beach³, 2014-2018

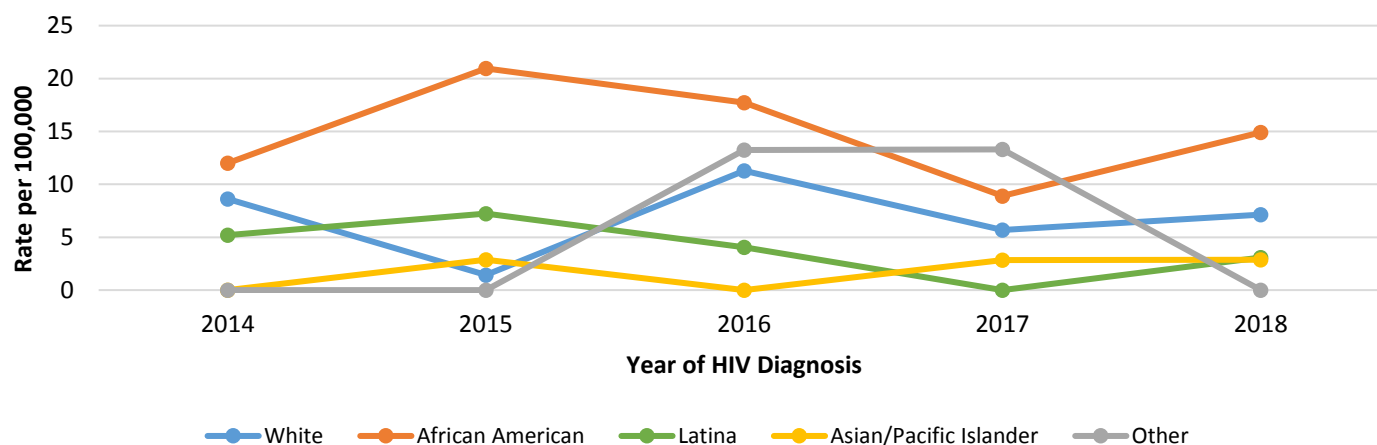


¹See Technical Notes "Date of Initial Diagnosis."

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

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

Figure 35. Incidence rates per 100,000 population of women newly diagnosed¹ with HIV by race/ethnicity², Long Beach³, 2014-2018



¹See Technical Notes "Date of Initial Diagnosis."

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

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

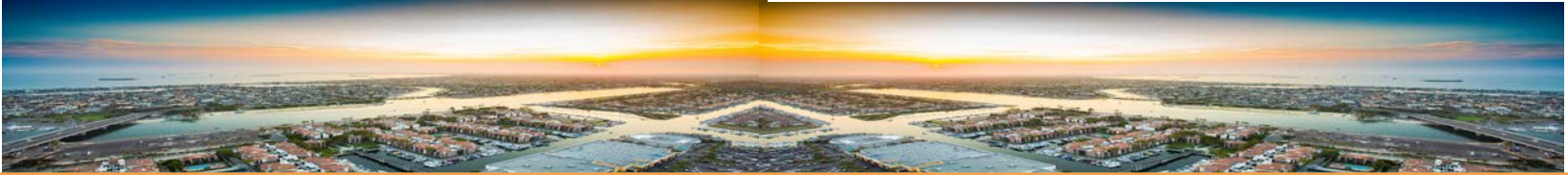


Table 21. Number of persons newly diagnosed with HIV by gender and age group, Long Beach¹, 2014-2018

	2014		2015		2016		2017		2018	
	Num.	%	Num.	%	Num.	%	Num.	%	Num.	%
Total	124		133		125		107		96	
Male at Birth (Years)										
0 - 12	<5	-	<5	-	<5	-	<5	-	<5	-
13 - 17	<5	-	<5	-	<5	-	<5	-	<5	-
18 - 24	<5	-	7*	6%	7*	7%	14*	14%	10*	12%
25- 29	16*	15%	18*	15%	19*	18%	19*	19%	17*	21%
30 - 39	37	35%	35	30%	43	41%	25	26%	24	29%
40 - 49	30	28%	21	18%	19*	18%	21	21%	12*	15%
50 - 59	12*	11%	23	20%	8*	8%	10*	10%	6*	7%
60 - 69	6*	6%	7*	6%	<5	-	<5	4%	5*	6%
70+	<5	-	<5	-	<5	-	<5	2%	<5	-
No age given	<5	-	6*	5%	5*	5%	<5	-	7*	9%
Male Subtotal	107		117		106		98		82	
Female at Birth (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	7*	41%	<5	-	5*	26%	<5	-	6*	43%
40 - 49	<5	-	5*	31%	<5	-	<5	-	<5	-
50 - 59	<5	-	<5	-	7*	37%	<5	-	<5	-
60 - 69	<5	-	<5	-	<5	-	<5	-	<5	-
70+	<5	-	<5	-	<5	-	<5	-	<5	-
Female Subtotal	17*		16*		19*		9*		14*	

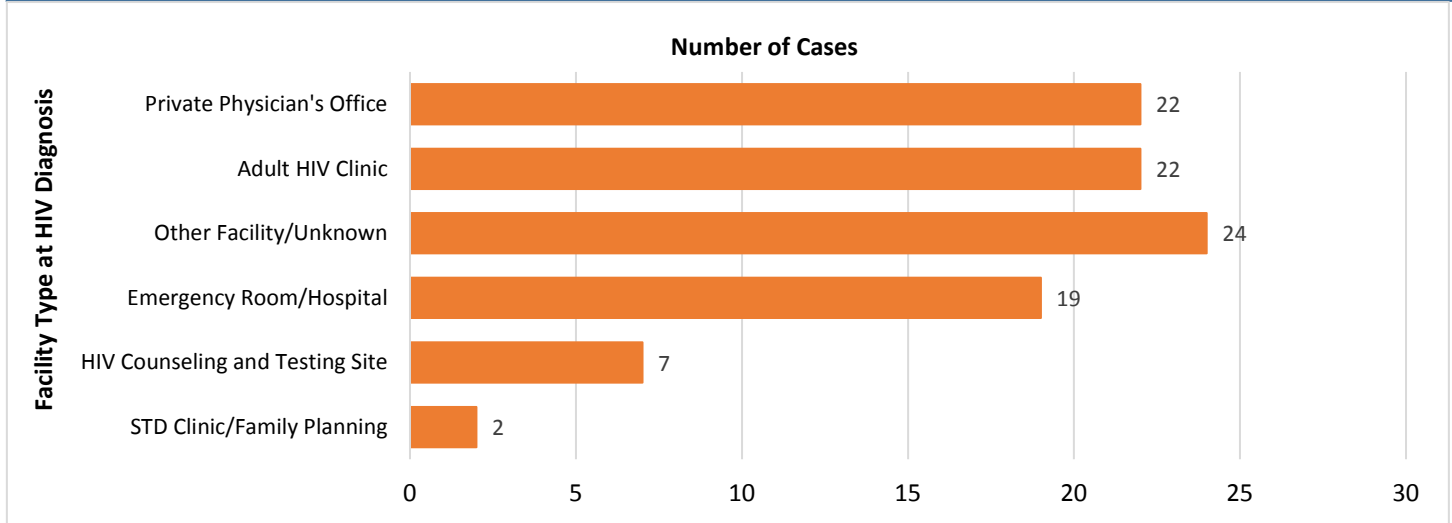
¹ All HIV data taken from California Office of AIDS eHARS database.

* 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 36. Type of facility at new HIV diagnosis, Long Beach¹, 2018



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

TRENDS IN INDIVIDUALS IN STAGE 3 (AIDS)

Table 22. Number of persons living with Stage 3 (AIDS) by year, Long Beach¹, 2014-2018

	2014		2015		2016		2017		2018	
	Num.	%	Num.	%	Num.	%	Num.	%	Num.	%
Total	2,319		2,359		2,400		2,433		2,465	
Sex at Birth²										
Male	2,103	91%	2,140	91%	2,177	91%	2,209	91%	2,236	91%
Female	216	9%	219	9%	223	9%	224	9%	229	9%
Race/Ethnicity										
White	919	40%	928	39%	940	39%	954	39%	962	39%
African American	437	19%	447	19%	454	19%	459	19%	469	19%
Latino	796	34%	813	34%	829	35%	840	35%	851	35%
Asian/Pacific Islander	85	4%	88	4%	91	4%	92	4%	93	4%
Native American/ Alaska Native	<5	-	<5	-	<5	-	<5	-	<5	-
Other/Unknown	80	3%	81	3%	83	3%	84	3%	86	3%
Age in Years										
0 - 12	<5	-	<5	-	<5	-	<5	-	<5	-
13 - 17	<5	-	<5	-	<5	-	<5	-	<5	-
18 - 24	<5	-	<5	-	<5	-	<5	-	<5	-
25 - 29	21	1%	22	1%	25	1%	31	1%	35	1%
30 - 39	155	7%	167	7%	181	8%	184	8%	195	8%
40 - 49	455	20%	468	20%	480	20%	492	20%	498	20%
50 - 59	1001	43%	1011	43%	1,019	42%	1,026	42%	1,030	42%
60 - 69	560	24%	563	24%	565	24%	570	23%	573	23%
70+	123	5%	123	5%	124	5%	124	5%	124	5%
Transmission Category										
MSM	1,727	74%	1,752	74%	1,781	74%	1,801	74%	1,815	74%
PWID	117	5%	177	8%	118	5%	119	5%	121	5%
MSM-PWID	184	8%	186	8%	188	8%	192	8%	194	8%
Heterosexual	186	8%	188	8%	188	8%	188	8%	189	8%
Transfusion/ Hemophilia	7*	0.3%	7*	0.3%	7*	0.3%	7*	0.3%	7*	0.3%
Other/Unidentified	98	4%	109	5%	118	5%	126	5%	139	6%

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

² Transgender cases are reported separately in Table 24.

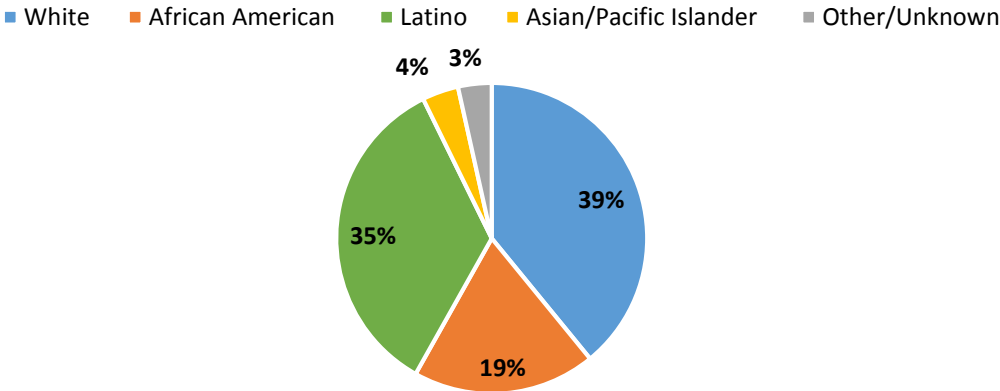
* Percentages may not add to 100% due to rounding.

*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.

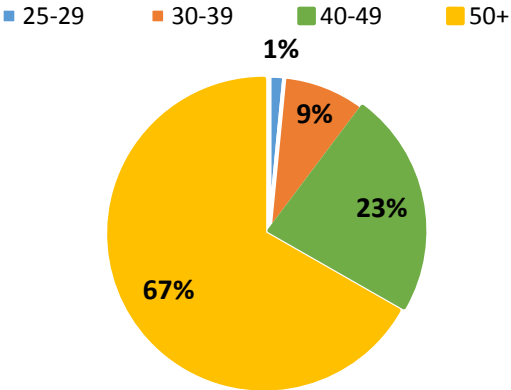


Figure 37. Persons living with Stage 3 (AIDS) by demographic, Long Beach, 2018

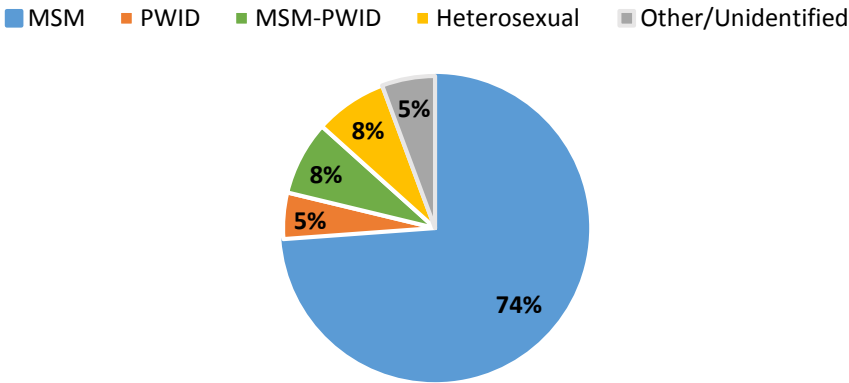
Persons living with AIDS by race/ethnicity



Persons living with AIDS by age group



Persons living with AIDS by transmission category



*See Table 22.

TRENDS IN HIV MORTALITY

Table 23. Deaths among persons living with HIV by year, Long Beach¹, 2014-2018

	2014		2015		2016		2017 ²		2018 ²		Cumulative Total 2014-2018	
	Num.	%	Num.	%	Num.	%	Num.	%	Num.	%		%
Sex at Birth												
Male	37	88%	53	95%	28	42%	60	91%	46	84%	224	89%
Female	5*	12%	<5	-	<5	-	6*	9%	9*	16%	27	11%
Race/Ethnicity												
White	27	64%	25	45%	12	38%	28	42%	22	40%	114	45%
African American	9*	21%	14*	25%	7	22%	17*	26%	12*	22%	59	24%
Latino	5*	12%	14*	25%	10	31%	15*	23%	16*	29%	60	24%
Asian/Pacific Islander	<5	-	<5	-	2	6%	<5	-	<5	-	<5	-
Native American	<5	-	<5	-	0	0%	<5	-	<5	-	<5	-
Other/Unknown	<5	-	<5	-	1	3%	6*	9%	<5	-	14*	6%
Transmission Category³												
MSM			35	63%	19	59%	38	58%	33	60%	152	61%
PWID	27	64%	7*	13%	2	6%	6*	9%	<5	-	21	8%
MSM-PWID	<5	-	6*	11%	5	16%	13	20%	8*	15%	40	16%
Heterosexual	8*	19%	<5	-	3	9%	<5	-	7*	13%	20	8%
Other/ Unidentified	<5	-	<5	-	3	9%	5*	8%	5*	9%	18*	7%
Age at Death (Years)												
0 - 29	<5	-	<5	-	2	3%	<5	-	<5	-	8*	3%
30 - 39	<5	-	<5	-	6*	9%	<5		6*	11%	30	12%
40 - 49	18*	33%	13*	22%	11*	17%	6*	16%	10*	18%	72	29%
50 - 59	18*	33%	28	47%	6*	25%	16*	43%	20	36%	95	38%
60 - 69	11*	20%	11*	18%	9*	38%	7*	19%	10*	18%	45	25%
70+	<5	-	<5	-	5*	8%	<5	-	8*	15%	20	8%
HIV Disease Stage⁴												
HIV only	<5	-	78	13%	3	9%	11*	17%	7*	13%	30	12%
HIV and later AIDS	28	67%	32	57%	19	59%	32	48%	34	62%	145	58%
HIV and AIDS diagnosed simultaneously	11*	26%	14*	25%	9	28%	19	29%	12	22%	65	26%
Total	42		56		32		66		55		251	

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, 2018.

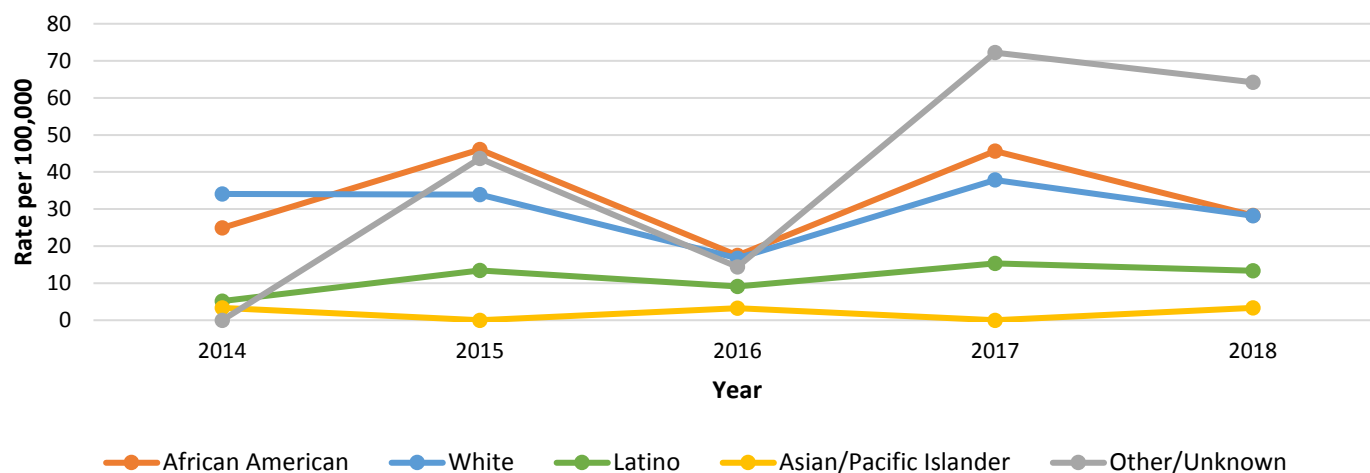
³ The "Other" category also includes unidentified transmission category.

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

*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 38. Mortality rates¹ per 100,000 population among men living with HIV by race/ethnicity², LongBeach³, 2014-2018

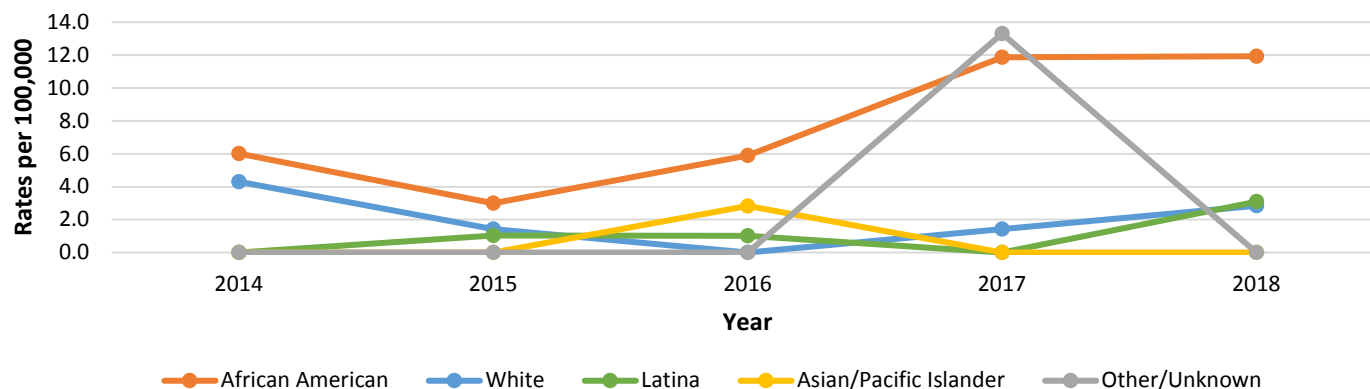


¹ Mortality rates are calculated as the number of HIV cases who died each year divided by the population by sex and race/ethnicity. See Technical Notes for “HIV Case Rates and HIV Mortality Rates.”

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.

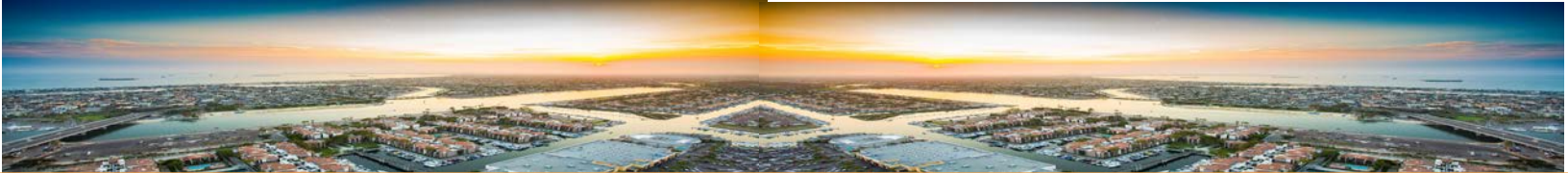
Figure 39. Mortality rates¹ per 100,000 population among women living with HIV infection by race/ethnicity², Long Beach³, 2014-2018



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.”

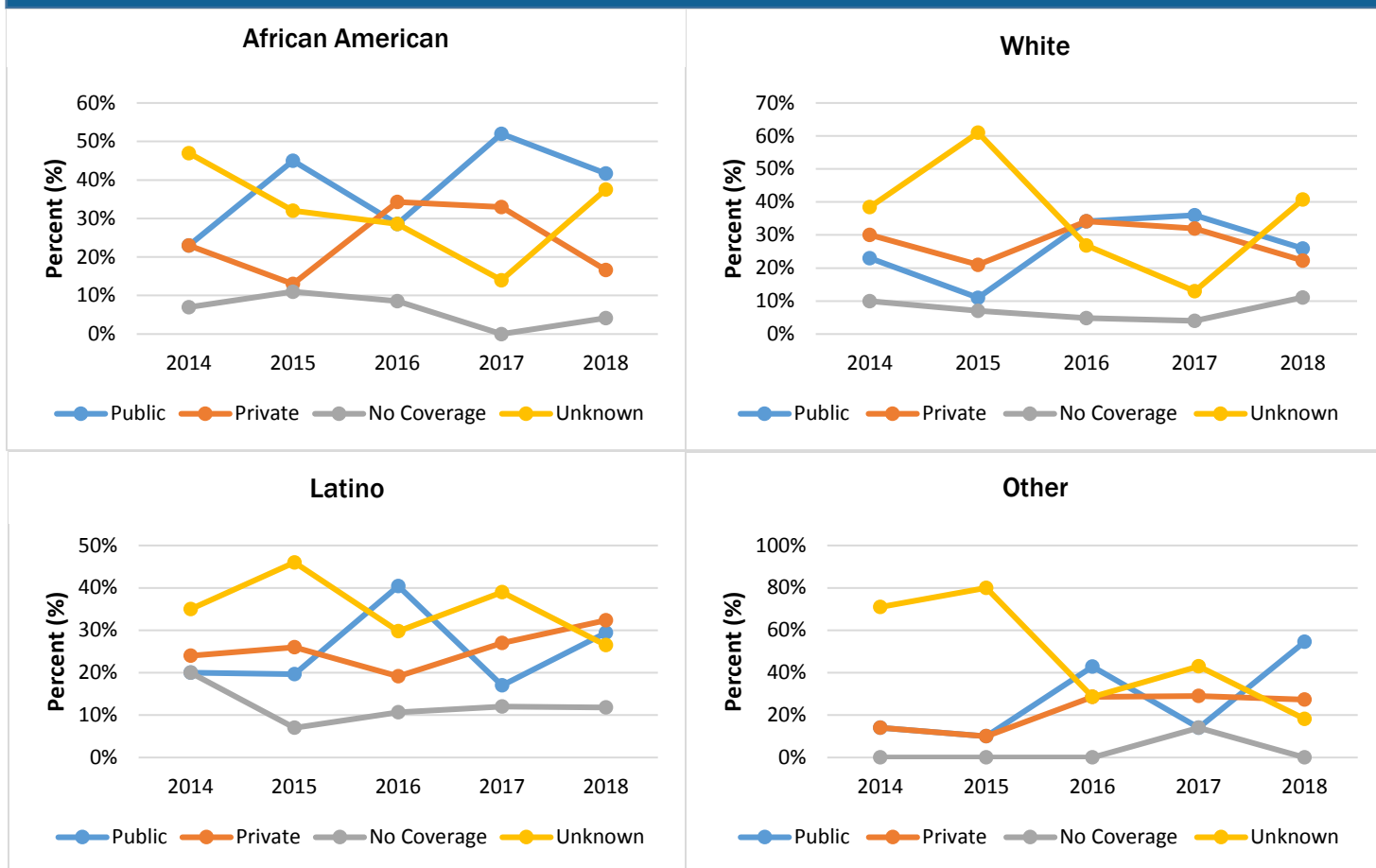
² Cases in the “Other” racial/ethnic category include Native American/Alaska Native, Multi-race, and unknown.

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



HEALTH INSURANCE STATUS AT TIME OF HIV DIAGNOSIS

Figure 40. Health insurance status¹ at time of HIV diagnosis by race/ethnicity², Long Beach³, 2014-2018



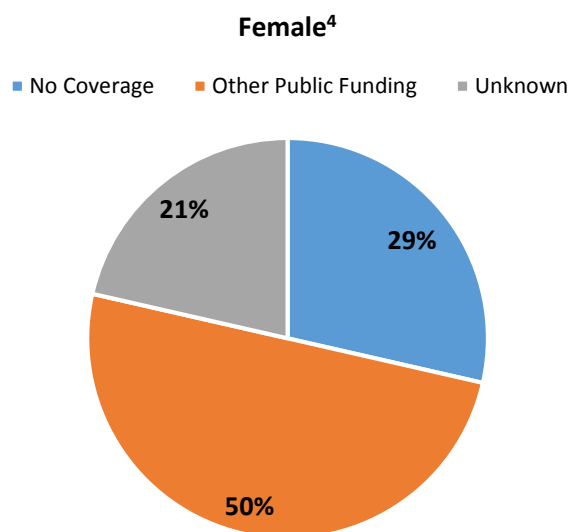
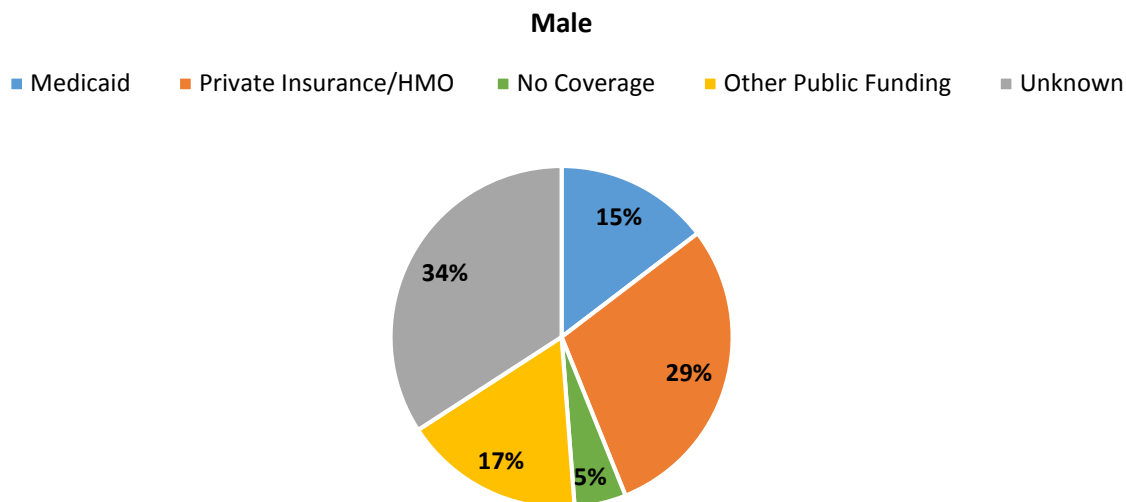
¹ "Public" insurance includes Medicaid, Medical, and other public funding sources. "Private" insurance includes both HMO and PPOs. "No Coverage" indicates patient reported having no insurance at time of diagnosis. "Unknown" indicates that the insurance data for the patient was not given at time of diagnosis.

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

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



Figure 41. Health insurance status at time of HIV diagnosis¹ by sex², Long Beach³, 2018

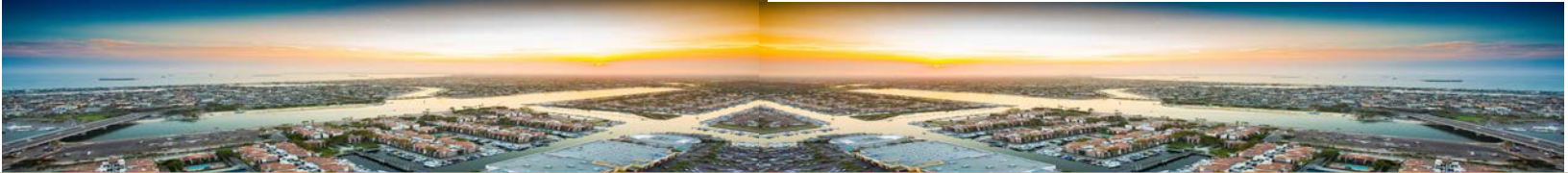


¹ “No coverage” indicates patient reported having no insurance at time of diagnosis. “Unknown” indicates that the insurance data for the patient was not given at time of diagnosis.

² Transgender data is not reported separately from other gender information due to small population size. See Technical Notes “Transgender Status.”

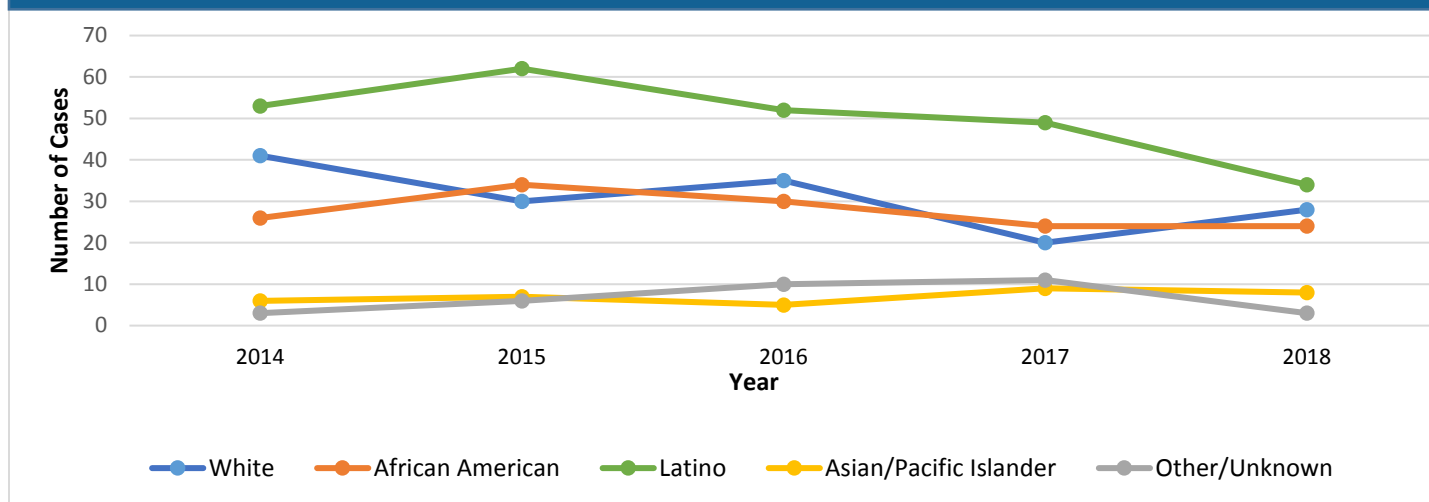
³ All HIV data taken from California Office of AIDS eHARS database.

⁴ Health insurance status of Medicaid and Private Insurance/HMO not included due to case counts of <5 cases.



HIV AMONG MEN WHO HAVE SEX WITH MEN (MSM)

Figure 42. Number of MSM newly diagnosed¹ with HIV infection by race/ethnicity², Long Beach³, 2014-2018

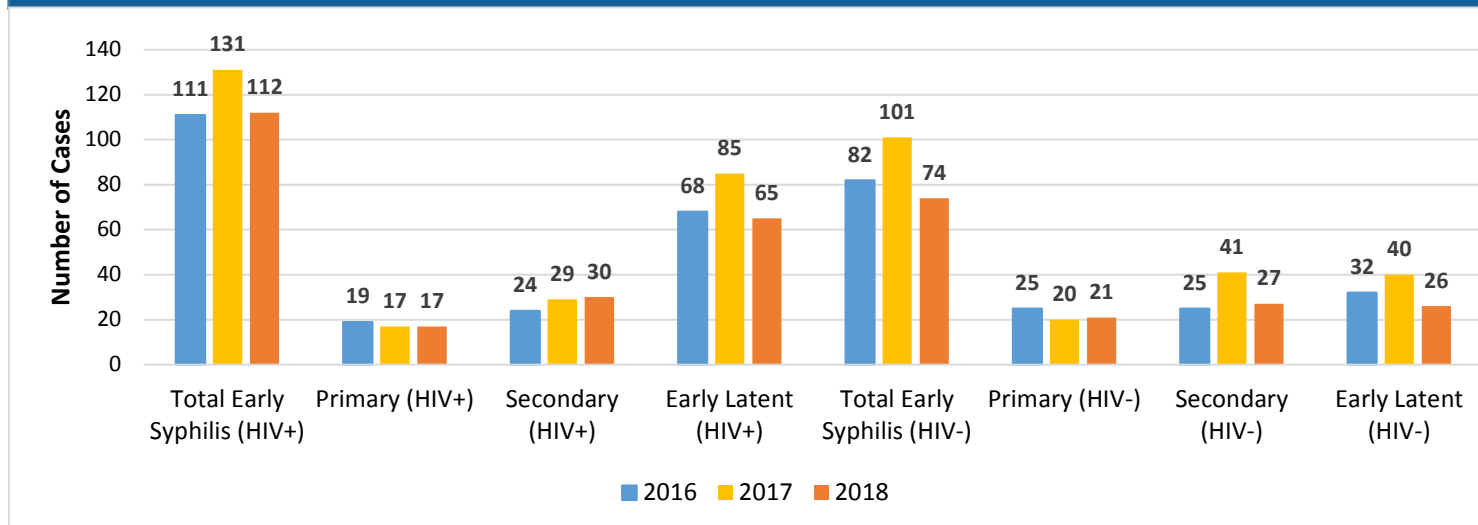


¹ See Technical Notes "Date of Initial HIV Diagnosis."

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 43. Total early syphilis¹ among MSM by HIV serostatus, Long Beach², 2016-2018



¹ Syphilis data is taken from the CalREDIE statewide reporting system.

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



HIV AMONG TRANSGENDER PERSONS

Table 24. Number of transgender persons living with HIV1 by year, Long Beach, 2014-2018

	2014		2015		2016		2017		2018	
	Num.	%	Num.	%	Num.	%	Num.	%	Num.	%
Total	31		36		37		39		40	
Sex at Birth²										
Male to Female Transgender	31	100%	36	100%	37	100%	39	100%	39	98%
Female to Male Transgender	<5	-	<5	-	<5	-	<5	-	<5	-
Race/Ethnicity										
White	<5	-	<5	-	<5	-	<5	-	5*	13%
African American	11*	35%	12*	33%	13*	35%	13*	33%	13*	33%
Latino	12*	39%	14*	39%	14*	38%	16*	41%	16*	40%
Asian/Pacific Islander	<5	-	<5	-	<5	-	<5	-	<5	-
Native American/Alaska Native	<5	-	<5	-	<5	-	<5	-	<5	-
Other/Unknown	<5	-	<5	-	<5	-	<5	-	<5	-
Age at HIV Diagnosis (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	10*	32%	11*	31%	12*	32%	12*	31%	12*	30%
40 - 49	6*	19%	8*	22%	8*	22%	8*	21%	8*	20%
50+	14*	45%	16*	44%	15*	41%	17*	44%	17*	43%
Transmission Category										
MSM	27	87%	31	86%	32	86%	34	87%	34	85%
PWID	<5	-	<5	-	<5	-	<5	-	<5	-
MSM-PWID	<5	-	<5	-	<5	-	<5	-	<5	-
Heterosexual	<5	-	<5	-	<5	-	<5	-	<5	-
Other/Unidentified	<5	-	<5	-	<5	-	<5	-	<5	-
HIV Disease Stage										
HIV only	18*	58%	23	64%	24	65%	26	67%	27	68%
HIV and later AIDS	13*	42%	13*	36%	13*	35%	13*	33%	13*	33%
HIV and AIDS diagnosed simultaneously	<5	-	<5	-	<5	-	<5	-	<5	-

¹Data include persons newly diagnosed with HIV infection in any stage and reported as of December 31, 2018.

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

³For 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.

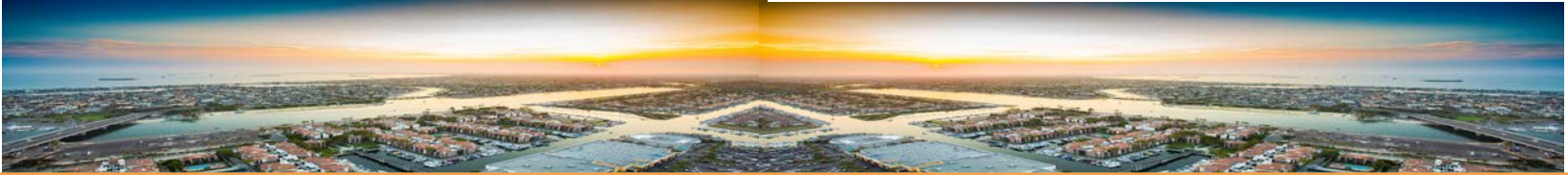
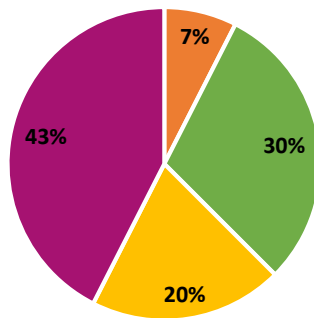


Figure 44. Demographics of transgender persons living with HIV by year, 2018

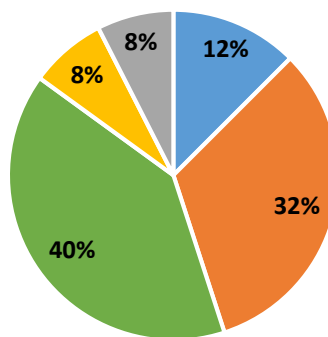
Persons living with HIV by age

■ 25-29 ■ 30-39 ■ 40-49 ■ 50+



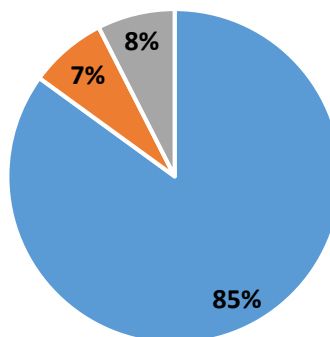
Persons living with HIV by race/ethnicity

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



Persons living with HIV by transmission category

■ MSM ■ MSM-PWID ■ Undetermined



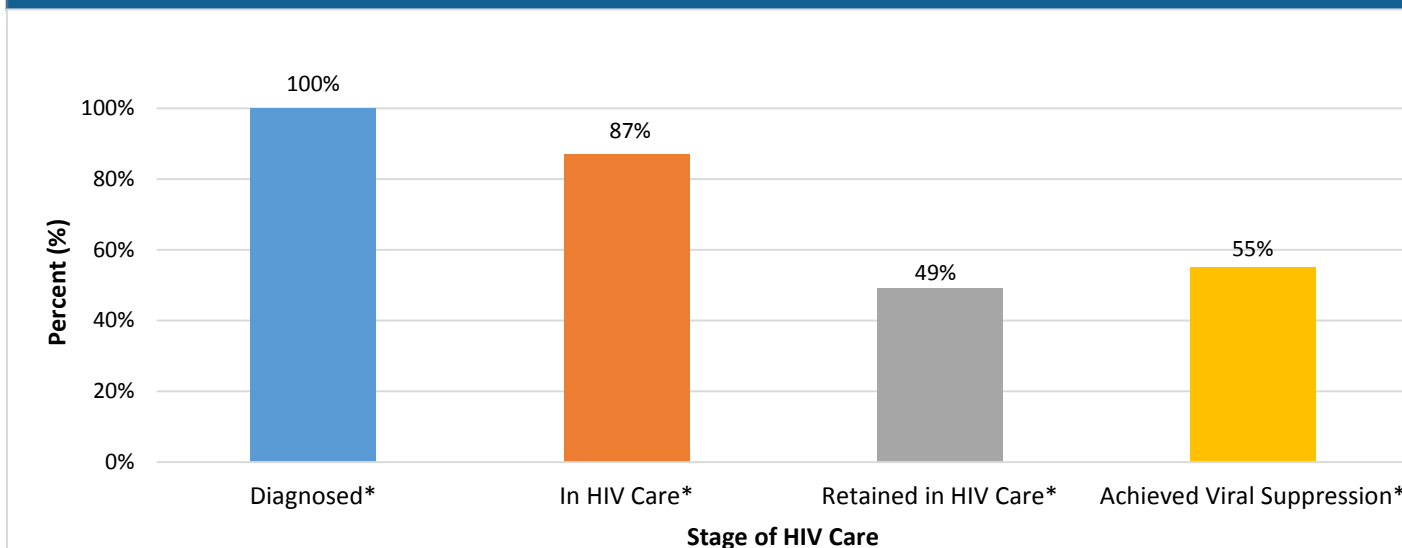
*See Table 24.

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



HIV CARE CONTINUUM

Figure 45. HIV care continuum for persons newly diagnosed¹ with HIV, Long Beach², 2018

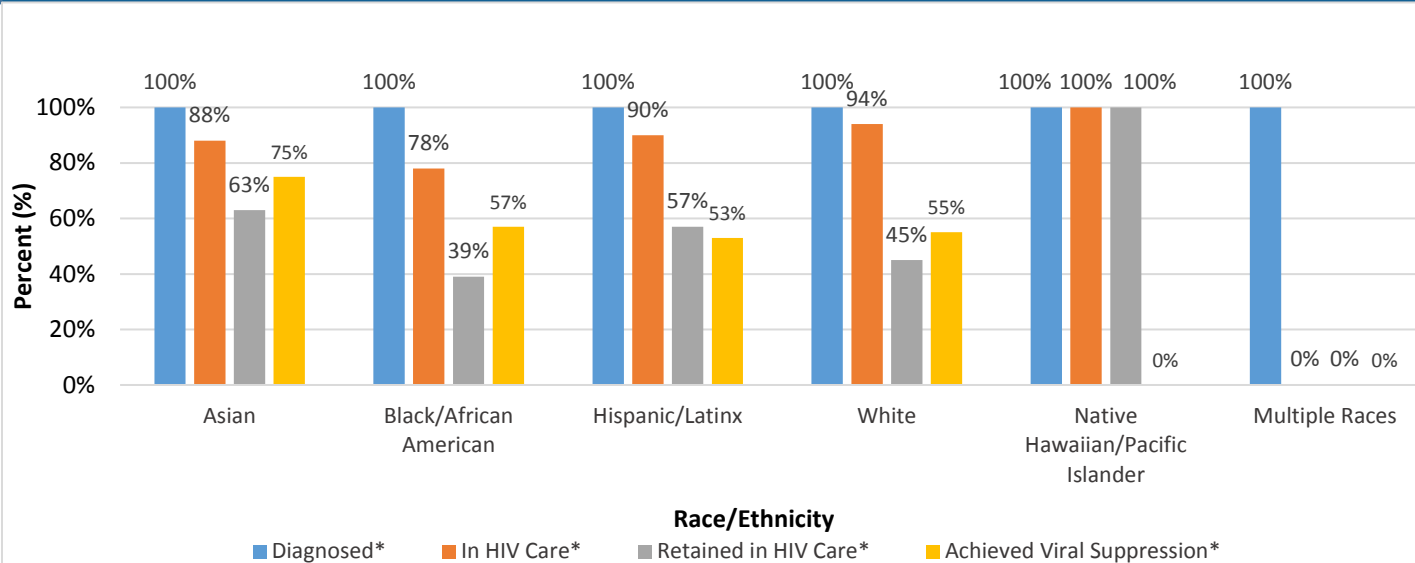


¹See Technical Notes "Date of Initial HIV Diagnosis."

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

*See Technical Notes "HIV Care Continuum."

Figure 46. HIV care continuum for persons newly diagnosed¹ with HIV by race/ethnicity², Long Beach³, 2018



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

²In 2018 there were no newly diagnosed persons in the Native American/Alaska Native racial/ethnic groups.

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

*See Technical Notes "HIV Care Continuum."

**American Indian/Alaskan Native numbers were not reported due to small numbers.

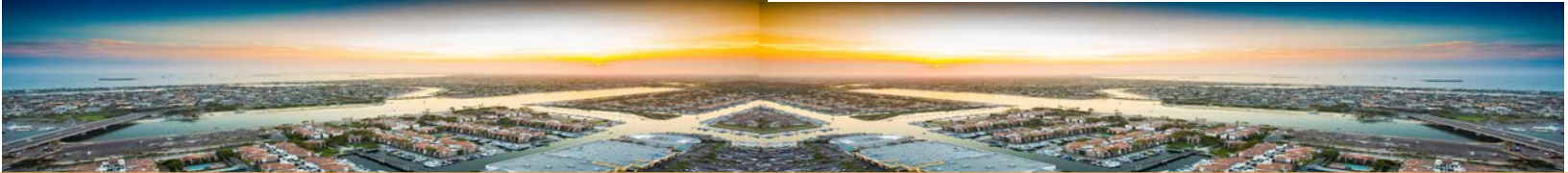
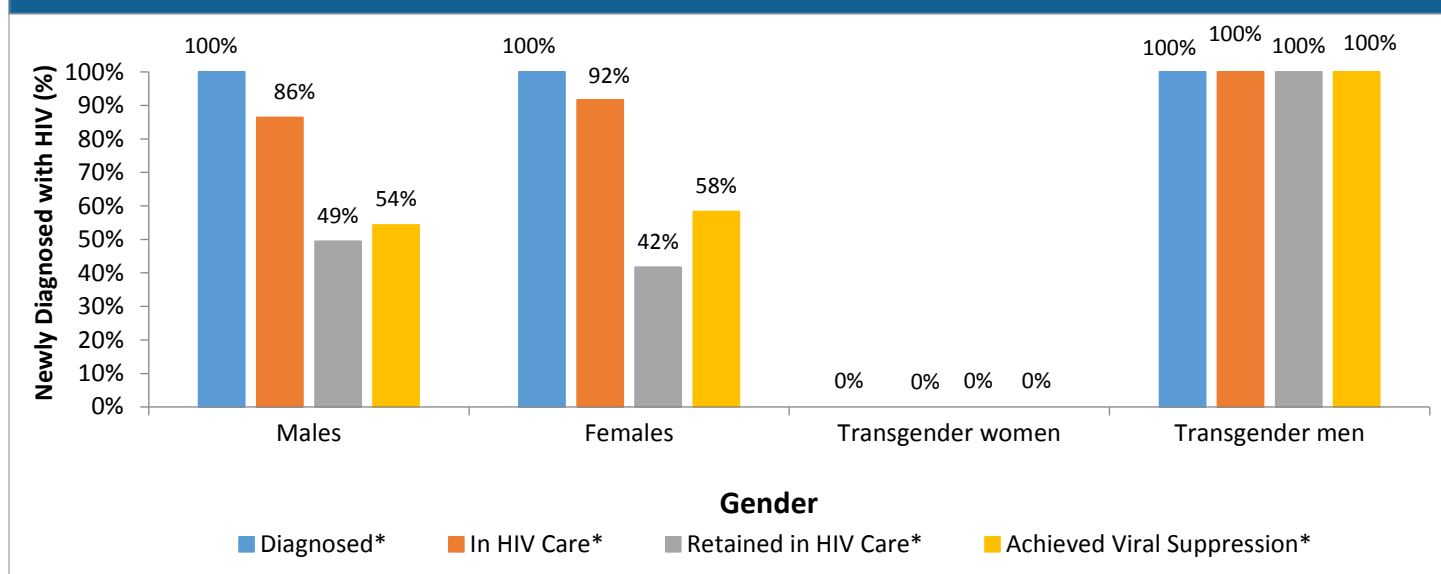


Figure 47. HIV care continuum for persons newly diagnosed¹ with HIV by gender, Long Beach², 2018

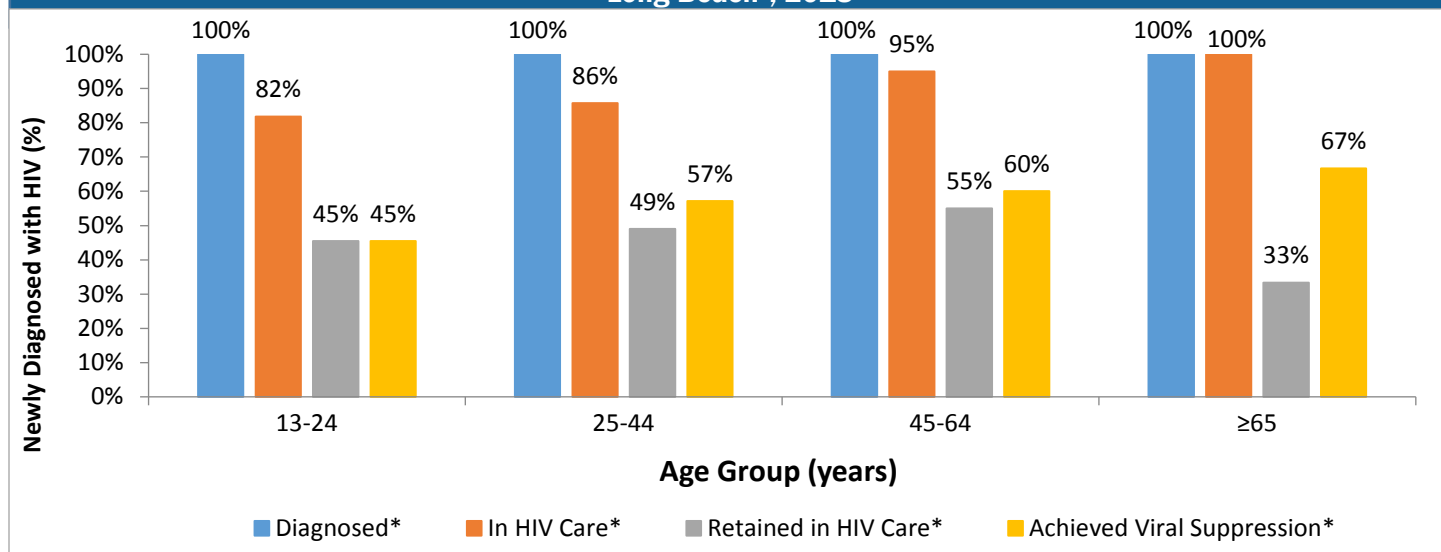


¹ See Technical Notes "Date of Initial HIV Diagnosis."

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

*See Technical Notes "HIV Care Continuum."

Figure 48. HIV care continuum for persons newly diagnosed¹ with HIV by age, Long Beach², 2018



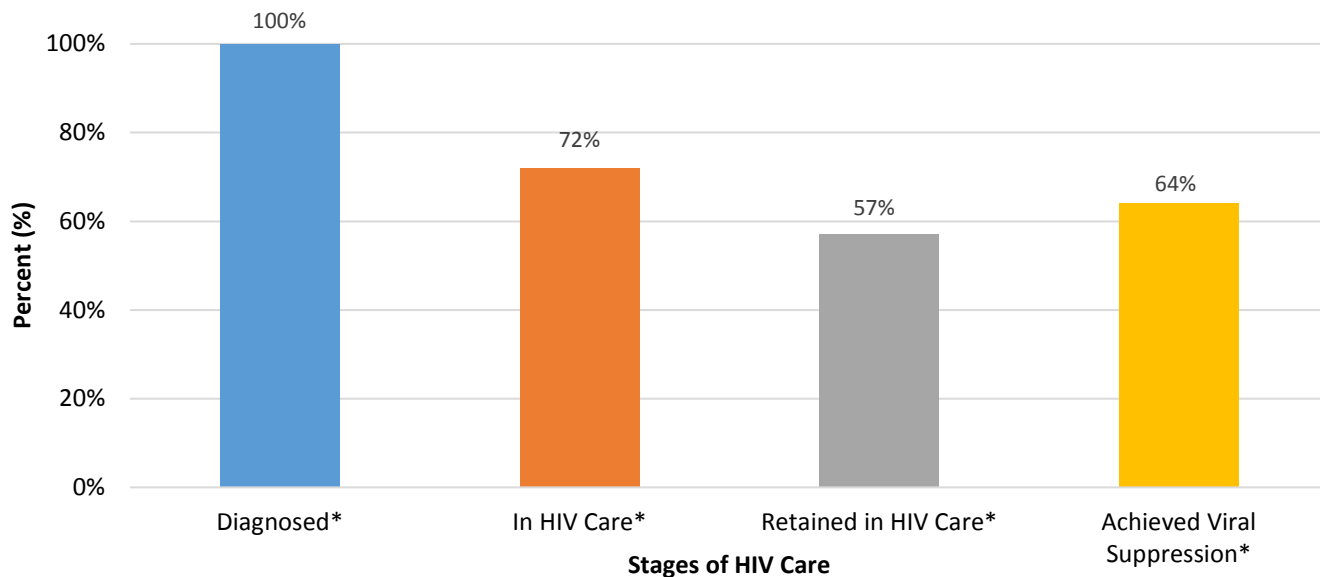
¹ See Technical Notes "Date of Initial HIV Diagnosis."

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

*See Technical Notes "HIV Care Continuum."



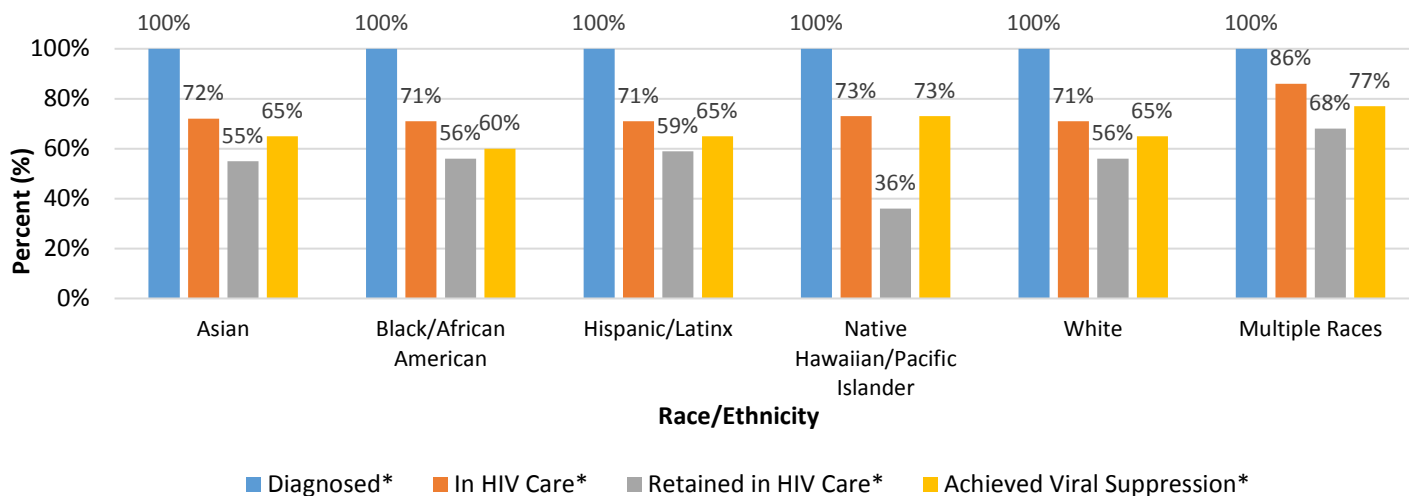
Figure 49. HIV care continuum for persons living with HIV, Long Beach¹, 2018



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

*See Technical Notes "HIV Care Continuum."

Figure 50. HIV care continuum for persons living with HIV by race/ethnicity, Long Beach¹, 2018



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

*See Technical Notes "HIV Care Continuum."

**American Indian/Alaskan Native numbers were not reported due to small numbers.

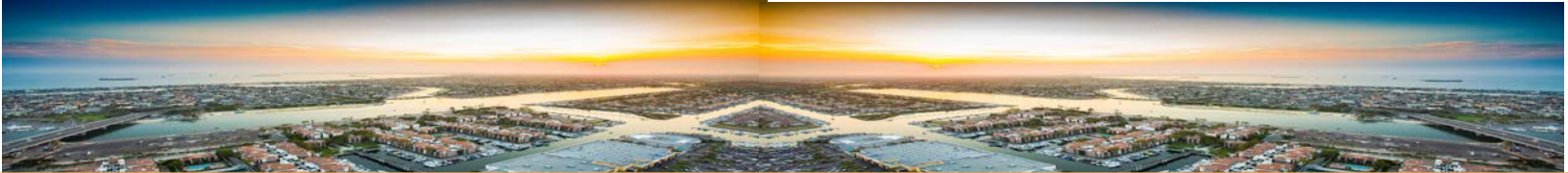
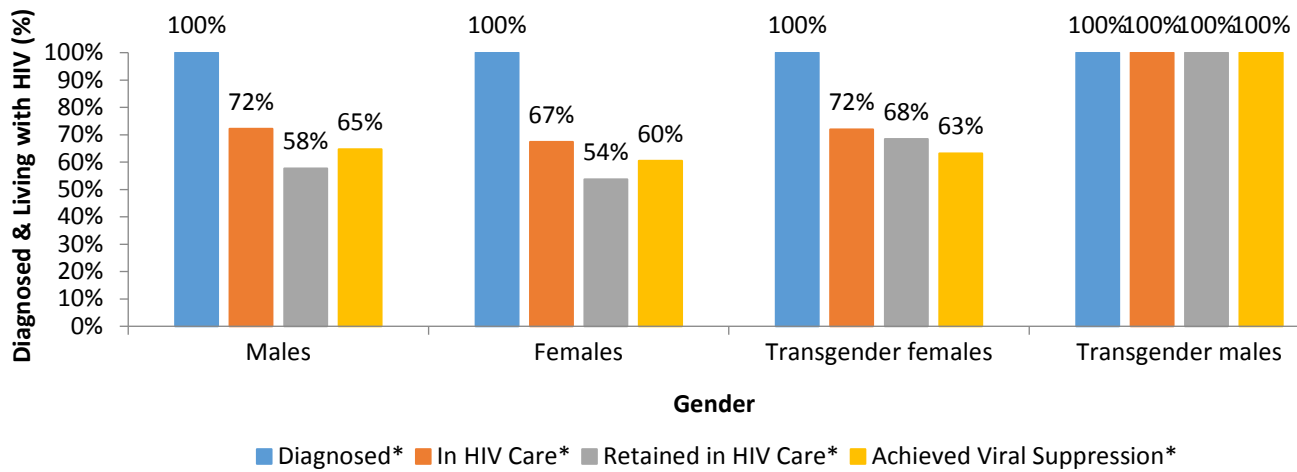


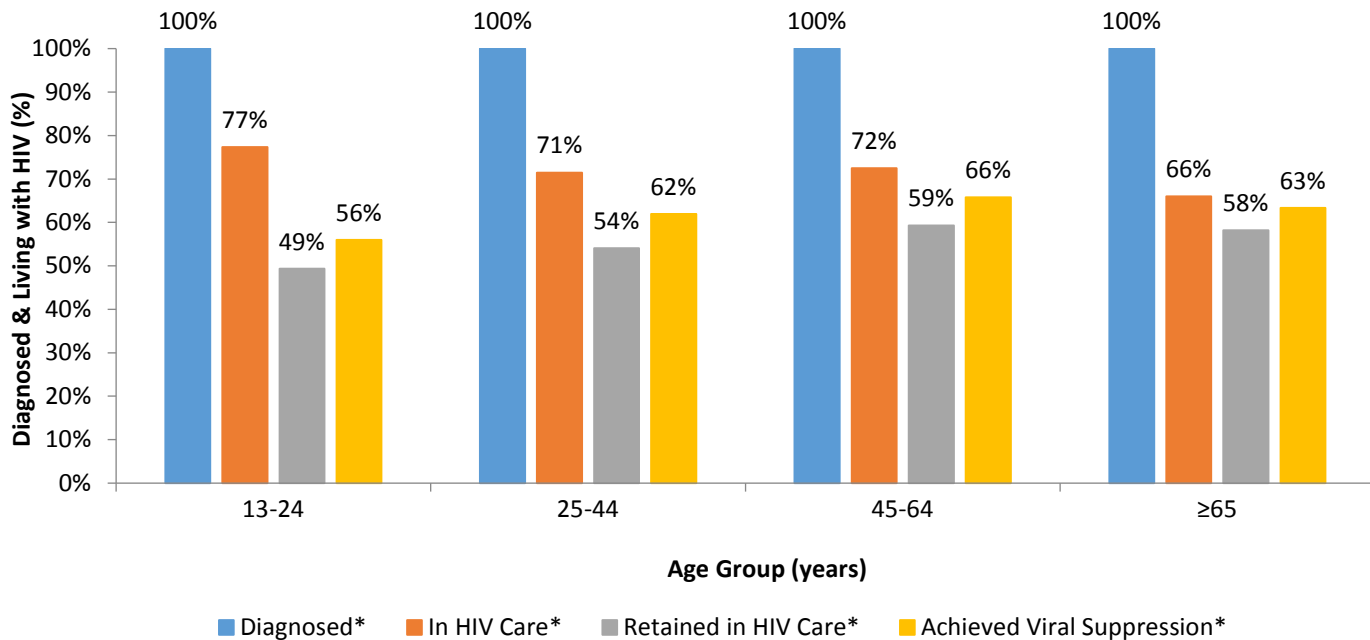
Figure 51. HIV care continuum for persons living with HIV by gender, Long Beach¹, 2018



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

*See Technical Notes "HIV Care Continuum."

Figure 52. HIV care continuum for persons living with HIV by age group, Long Beach¹, 2018



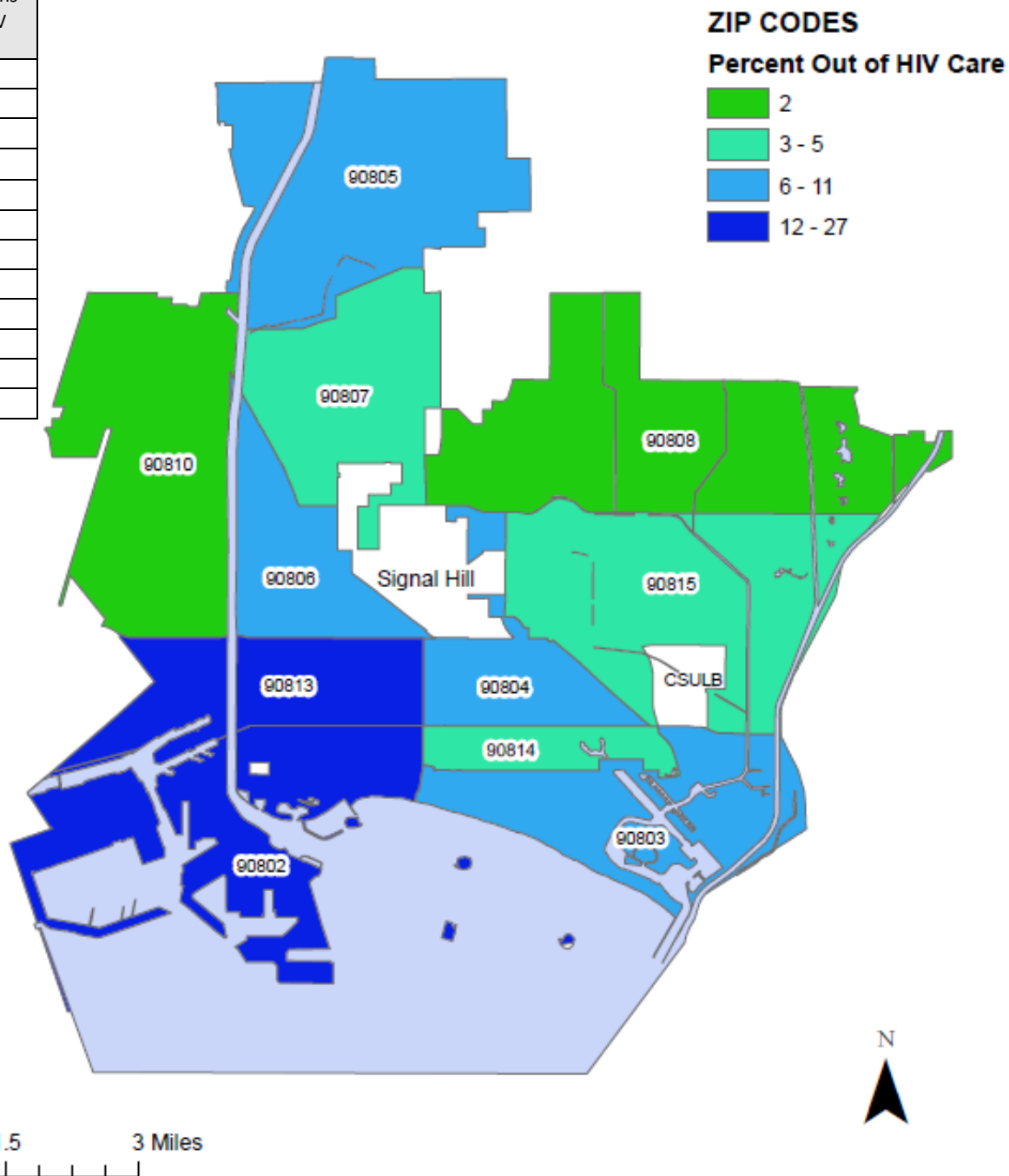
¹ All HIV data taken from California Office of AIDS eHARS database.

*See Technical Notes "HIV Care Continuum."

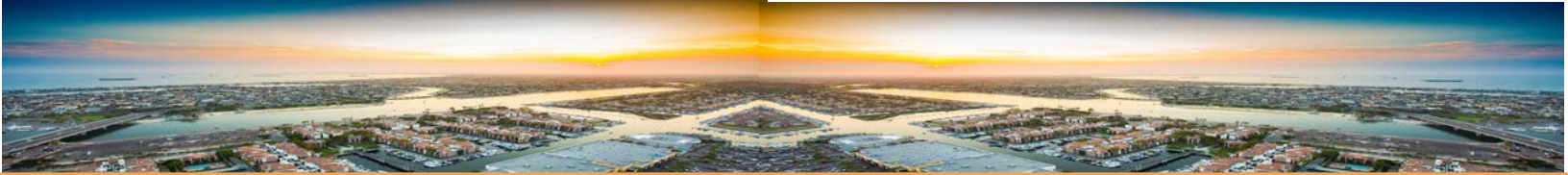


Figure 53. Percent of persons living out of care by zip code, Long Beach¹, 2018

Zip code	% of persons out of HIV care
90802	27
90803	8
90804	10
90805	10
90806	9
90807	4
90808	2
90810	2
90813	18
90814	5
90815	4
Homeless	8



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



HIV TECHNICAL NOTES

Place of Residence: As of 2018, a more up-to-date indicator is now being used to differentiate city of residence. As a result, case counts and incidence rates will have changed from previous versions of the annual report and display different values for prior years.

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.

Living with HIV: Those reported as living with HIV are those with a new diagnosis as well as those who have been diagnosed in previous years.

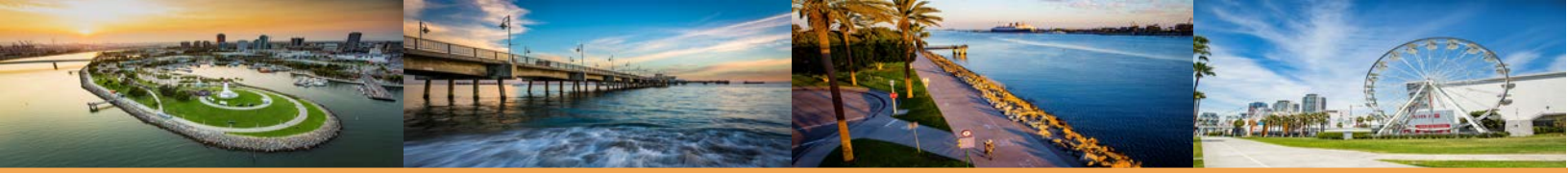
Grouping of Data Categories: Data in certain racial/ethnic or risk categories are grouped together when the number of persons with HIV in that group is small and/or does not present significant trends. For example, “Other” in the race/ethnicity breakdown in some tables or figures represents Asian/Pacific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

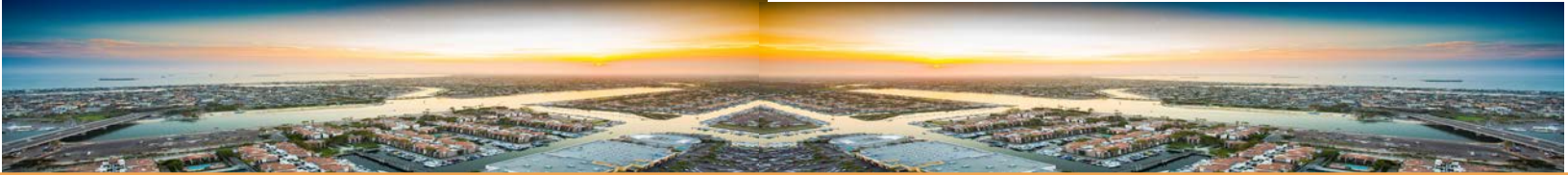
- HIV infection stage 0: This stage is early HIV infection and is established by a sequence of discordant HIV test results indicative of early HIV infection in which a negative or indeterminate result was within 180 days of a positive result. This sequence of discordant results may be based on testing 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.

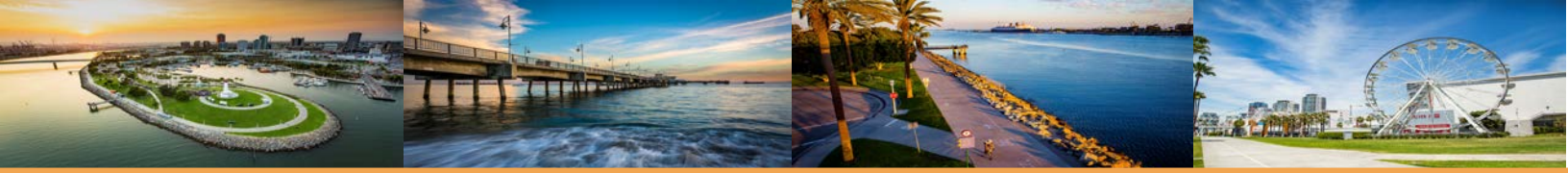
HIV Care Continuum: To direct HIV prevention resources most effectively, the CDC tracks the "HIV care continuum." The continuum is the series of steps from the time a person is diagnosed with HIV through the successful treatment of their infection with HIV medications. The goal of HIV treatment is to 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:

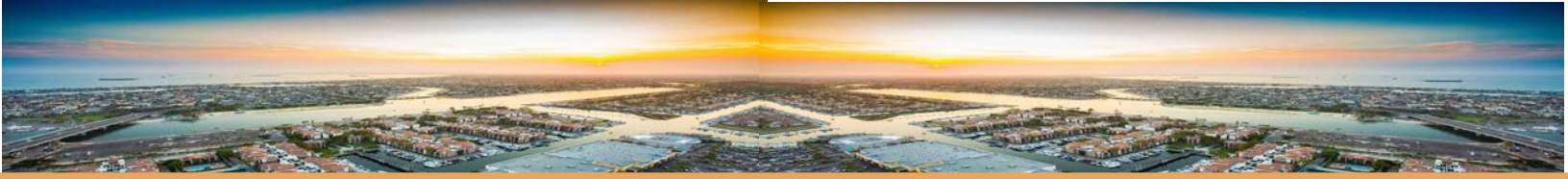
- Diagnosed: Persons currently diagnosed and living with HIV.
- In HIV Care: Persons who have at least one CD4 or viral load or HIV-1 genotype test during the calendar year are considered to be engaged in care.
- Retained in HIV Care: Persons who have two or more CD4 or viral load or HIV-1 genotype tests 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 ≤ 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/>



REFERENCES

- California Department of Public Health, Office of AIDS, Enhanced HIV/AIDS Reporting System (eHARS). Retrieved September 1, 2019.
- California Department of Public Health, Sexually Transmitted Diseases Control Branch. (2018, August). California STD Data Tables 2018. Retrieved August 22, 2019 from <https://www.cdph.ca.gov/Programs/CID/DCDC/Pages/STD-Data.aspx>.
- California Department of Public Health, Office of AIDS. (2019, March). *California HIV Surveillance Report 2017*. Retrieved September 16, 2019 from https://www.cdph.ca.gov/Programs/CID/DOA/Pages/OA_case_surveillance_reports.aspx.
- California Department of Public Health, Sexually Transmitted Disease Control Branch. (2015, June). Surveillance Case Definition for CS. *California Congenital Syphilis Surveillance and Case Management*. Retrieved September 16, 2019 from <https://www.cdph.ca.gov/Programs/CID/DCDC/CDPH%20Document%20Library/CongenitalSyphilis-Surveillance-CaseManagement-Protocol.pdf>.
- Centers for Disease Control and Prevention, (2019, July). 2018 Sexually Transmitted Diseases Surveillance. *STDs in Women and Infants*. Retrieved September 12, 2019 from <https://www.cdc.gov/std/stats18/womenandinf.htm>.
- Centers for Disease Control and Prevention. (2019, July). Understanding the HIV Care Continuum. Retrieved September 12, 2019 from <https://www.cdc.gov/hiv/pdf/library/factsheets/cdc-hiv-care-continuum.pdf>.
- Centers for Disease Control and Prevention. (2019, July). *HIV Surveillance Report, 2017*; vol. 29. Retrieved September 12, 2019 from <http://www.cdc.gov/hiv/library/reports/surveillance/>.
- National Center for Health Statistics. (2015). *Reliability of Estimates*. Retrieved September 12, 2019 from https://www.cdc.gov/nchs/ahcd/ahcd_estimation_reliability.htm.
- State of California, Department of Finance, Demographic Research Unit. (2018, December). *E-2 California County Population Estimates and Components of Change by Year*. Retrieved September 1, 2019 from <http://www.dof.ca.gov/Forecasting/Demographics/Estimates/>.
- State of California, Department of Finance. (2014-2018, July). *California County Population Estimates and Components of Change by Year*. Retrieved September 5, 2019 from <http://www.dof.ca.gov/Forecasting/Demographics/Estimates/E-2/index.html>.
- State of California, Department of Finance, Demographic Research Unit. (2018, December). *State and County Total Population Projections by Race/Ethnicity and Detailed Age*. Retrieved September 14, 2019 from www.dof.ca.gov/Forecasting/Demographics/projections/.



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