May 2024 www.STDSanDiego.org

SEXUALLY TRANSMITTED INFECTIONS IN SAN DIEGO COUNTY 2022 DATA SLIDES

County of San Diego Health and Human Services Agency Public Health Services HIV, STD, and Hepatitis Branch







Acknowledgements



Preface

This publication, Sexually Transmitted Infections in San Diego County, 2022 Data Slides, includes reported disease data collected through 2022 for chlamydia, gonorrhea and syphilis. All tables and figures published here supersede those in prior publications.

This slide set provides a comprehensive picture of reported sexually transmitted infection (STI) trends and current morbidity in San Diego. These data are compiled to guide policy and program development within the County of San Diego HIV, STD, and Hepatitis Branch, local STI programs, and other public health agencies.

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Suggested Citation

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TECHNICAL NOTES & STI/HIV SCREENING RECOMMENDATIONS







Case Counts and Rates



- These slides include case counts and rates of reportable STIs.
- Rates take population size into account and indicate the impact of STIs on a group or population.
- In this report, most rates are expressed as the number of cases per 100,000 persons in a group or population. Congenital syphilis rates are expressed as the number of cases per 100,000 live births.
- Population estimate source: SANDAG Vintage 2022 Population Estimates; County of San Diego, Health and Human Services Agency, Public Health Services Department, Community Health Statistics Unit. 10/2023.
- The following is an example of the difference between cases and rates:

Region	Count	Population	Rate per 100,000 <u>Case Count * 100,000</u> <u>Population</u>
А	10,000	200,000	5,000
В	10,000	100,000	10,000

 Despite having the same number of affected individuals (10,000), the rate for Region B is higher than Region A because there are fewer inhabitants. Accounting for the population size allows for a more consistent comparison of the level of disease per person between regions.

Gender Information



- In these slides, the gender variable may not coincide with the gender identities of the individuals.
 - Gender represents person's reported current gender.
 - Transgender/Genderqueer/Non-binary individuals were included in the gender categories representing their sex assigned at birth.
 - Cases were excluded from the calculations involving the gender variable if they were missing sex assigned at birth information and
 - missing gender information or
 - gender reported as "unknown," "identity not listed," or "declined to answer."

STI/HIV Screening Recommendations



United States Preventive Services Task Force (USPSTF)

- Chlamydia and gonorrhea screening in sexually active females* aged 24 years and younger (Grade B)
- Chlamydia and gonorrhea screening in sexually active females* aged 25 years and older with risk factors (Grade B)
- Screening for syphilis in asymptomatic, nonpregnant adolescents and adults who are at increased risk for infection (Grade A)
- Early screening for syphilis in all pregnant persons (Grade A)
- Screening for HIV infection in adolescents and adults aged 15 to 65 years, and younger adolescents and older adults at increased risk of infection (Grade A)
- Screening for HIV infection in all pregnant persons (Grade A)
- Offering of pre-exposure prophylaxis (PrEP) to persons who are at increased risk of HIV acquisition (Grade A)

*Note: Recommendation and net benefit are based on sex assigned at birth, rather than gender identity.

Source: https://www.uspreventiveservicestaskforce.org

STI DATA OVERVIEW







Key Points STI Data Overview, San Diego County

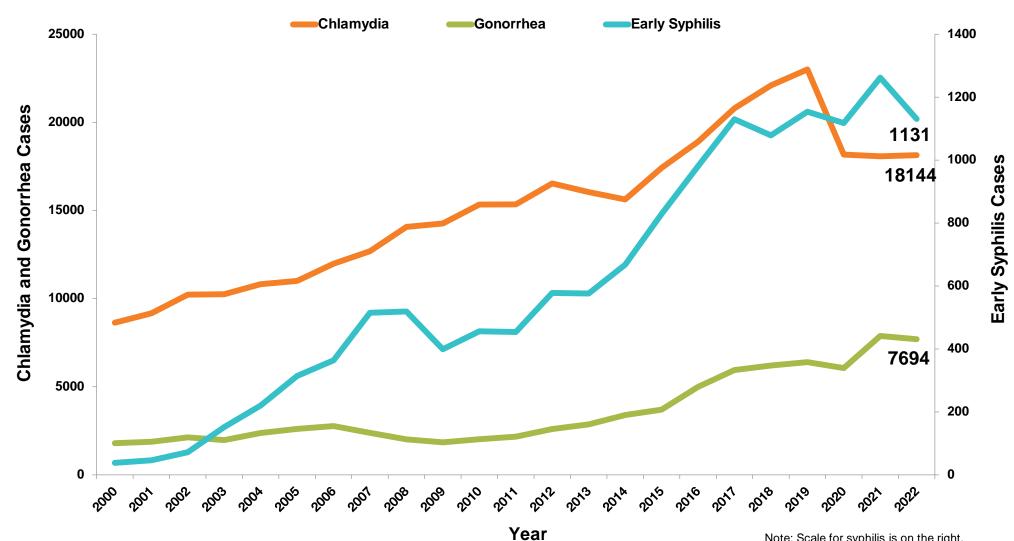


Reported cases and rates of chlamydia, gonorrhea, early syphilis and congenital syphilis changed in San Diego County from 2021 to 2022 as follows:

- Chlamydia
 - 18,144 cases (0.4% increase from 2021)
 - Rate of 551.9 cases per 100,000 (1.2% increase from 2021)
- Gonorrhea
 - 7,694 cases (2.4% decrease from 2021)
 - Rate of 234.1 cases per 100,000 (1.6% decrease from 2021)
- Early Syphilis
 - 1,131 cases (10.4% decrease from 2021)
 - Rate of 34.4 cases per 100,000 (9.7% decrease from 2021)
- Congenital Syphilis
 - 35 cases (16.7% increase from 2021)
 - Rate of 87.8 cases per 100,000 live births (14.3% increase from 2021)

Chlamydia, Gonorrhea, and Early Syphilis Cases, San Diego County, 2000-2022

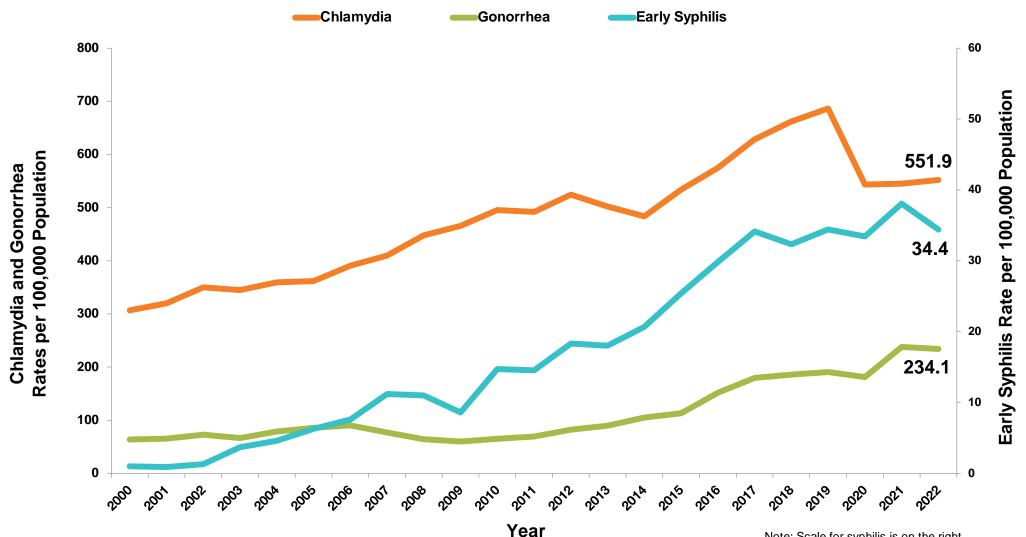




Note: Scale for syphilis is on the right.

Chlamydia, Gonorrhea, and Early Syphilis Rates, San Diego County, 2000-2022

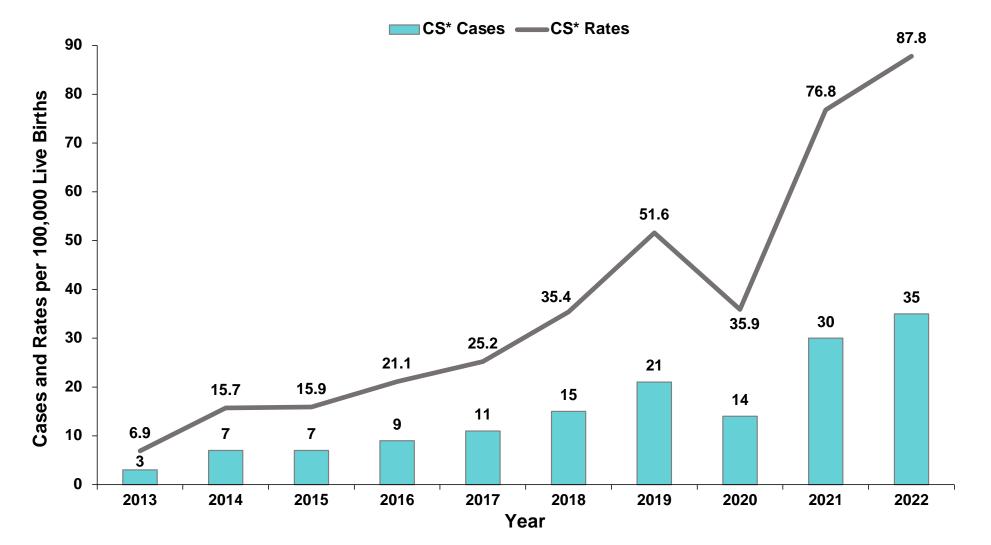




Note: Scale for syphilis is on the right.

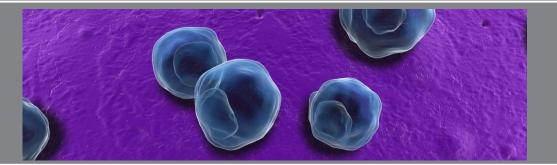
Congenital Syphilis Cases and Rates, San Diego County, 2013-2022





^{*}CS: Congenital Syphilis. CS cases inlcude syphilitic stillbirths. Rates for CS were defined based on the number of live births.

CHLAMYDIA









Key Points

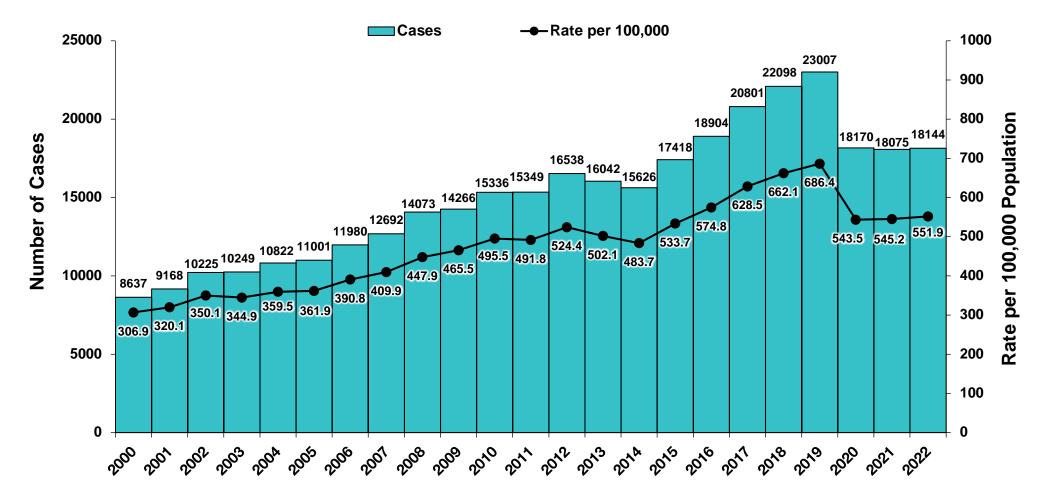


Chlamydia in San Diego County

- Chlamydia was the most commonly reported STI in San Diego County and in California in 2022.
- Cases of chlamydia increased by 0.4% from 18,075 cases in 2021 to 18,144 cases in 2022
- The overall rate of chlamydia increased by 1.2% from 545.2 cases per 100,000 in 2021 to 551.9 cases per 100,000 in 2022.
- The rate of chlamydia in women is 1.5 times the rate in men.
- Young women, aged 20 to 24 years, have the highest rate of infection.
- Based on limited race/ethnicity data, rates of chlamydia were higher among African-American/black and other/mixed race women and men than those of other populations.

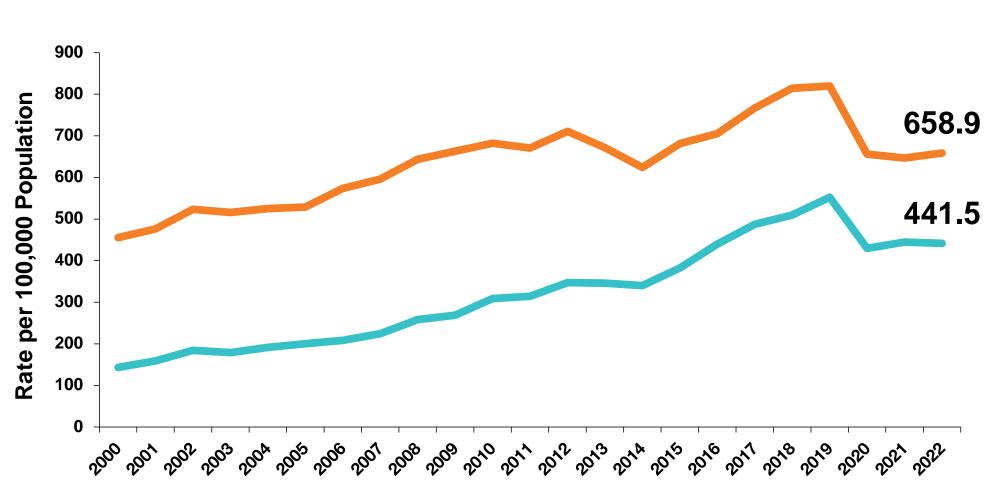
Chlamydia Cases and Rates by Year, San Diego County, 2000-2022





Chlamydia Rates by Gender and Year, San Diego County, 2000 - 2022



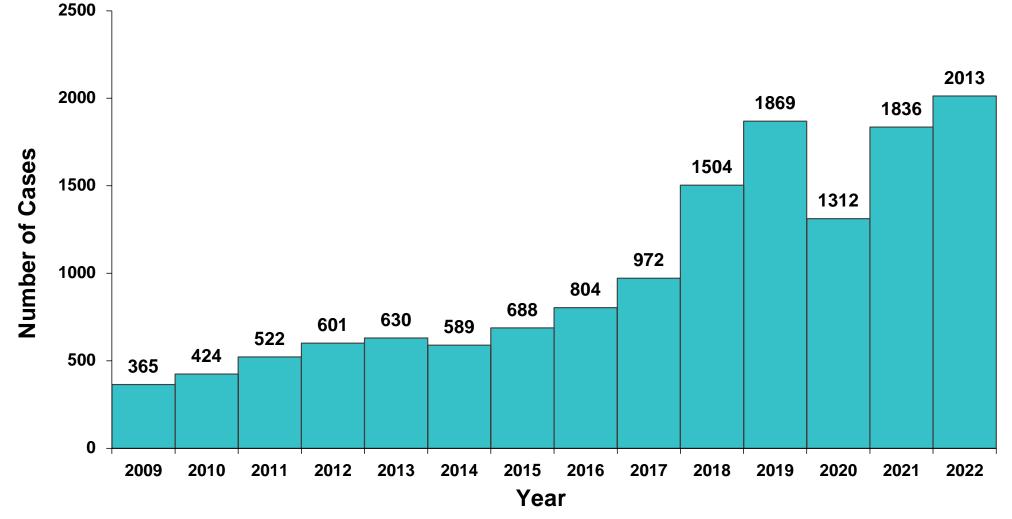


Females

Males

Rectal or Pharyngeal Chlamydia Infections in Males, San Diego County, 2009 - 2022

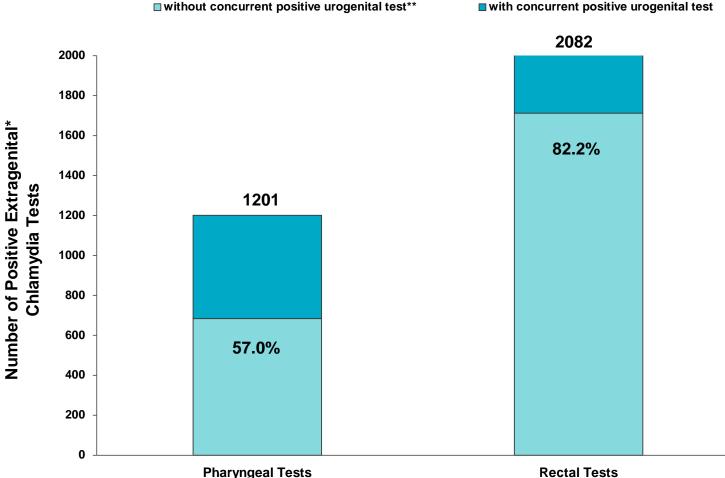




Note: The number of rectal or pharyngeal cases in 2018 is different from the number of rectal or pharyngeal cases published in 2018 STD Data Slides due to recalculation with revised methodology.

Proportion of Extragenital* Chlamydia Infections With & Without Concurrent Positive Urogenital Test, San Diego County, 2022





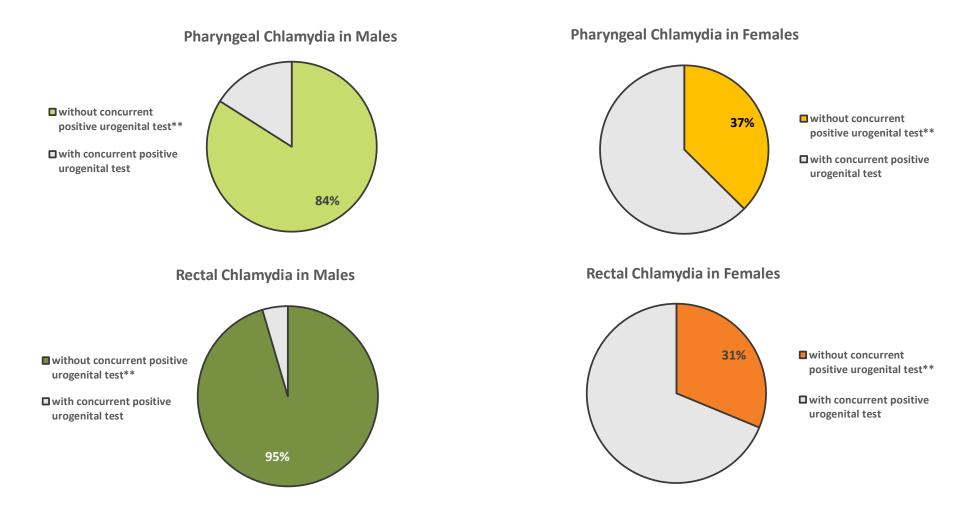
*Extragenital refers to pharyngeal and rectal anatomic sites.

**Note: Due to negative chlamydia laboratory results not being reportable to the local public health departments, "without concurrent positive urogenital test" category means that no positive urogenital test result was reported to the County of San Diego HIV, STD, and Hepatitis Branch for the specified episode of extragenital infection and does not mean that the case had a negative urogenital test.

with concurrent positive urogenital test

Proportion of Extragenital* Chlamydia Infections With & Without Concurrent Positive Urogenital Test by Gender, San Diego County, 2022



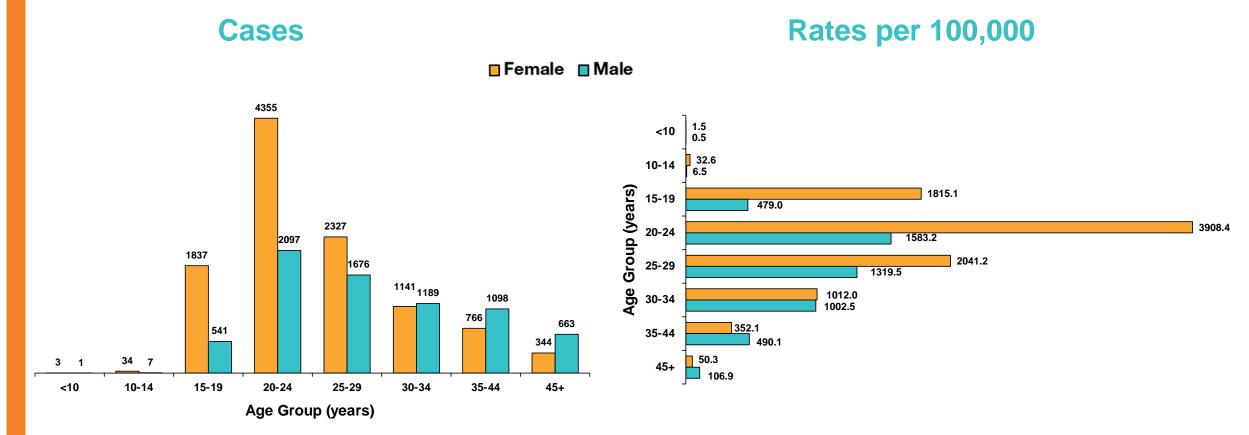


*Extragenital refers to pharyngeal and rectal anatomic sites.

**Note: Due to negative chlamydia laboratory results not being reportable to the local public health departments, "without concurrent positive urogenital test" category means that no positive urogenital test result was reported to the County of San Diego HIV, STD, and Hepatitis Branch for the specified episode of extragenital infection and does not mean that the case had a negative urogenital test.

Chlamydia Cases and Rates by Gender and Age, San Diego County, 2022



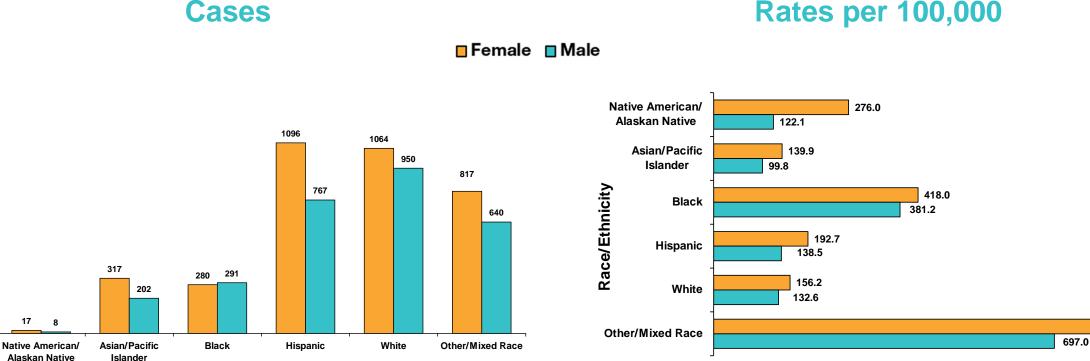


Note: 65 cases were missing gender information and are not included in the counts above.

Chlamydia Cases and Rates by Gender and Race/Ethnicity, San Diego County, 2022



901.7



Rates per 100,000

Note: 64.5% of cases were missing race/ethnicity or gender information and are not included in the counts above.

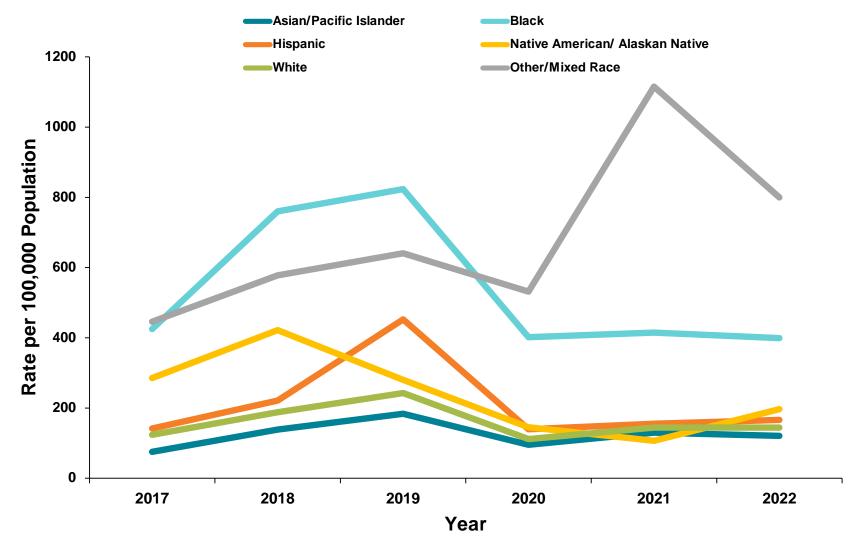
Race/Ethnicity

17

As of October 1, 2019, Chlamydia trachomatis (CT) infections have no longer been required to be reported to the local health department by healthcare providers; positive CT tests have continued to be reported by laboratories.

Chlamydia Rates by Race/Ethnicity, San Diego County, 2017-2022

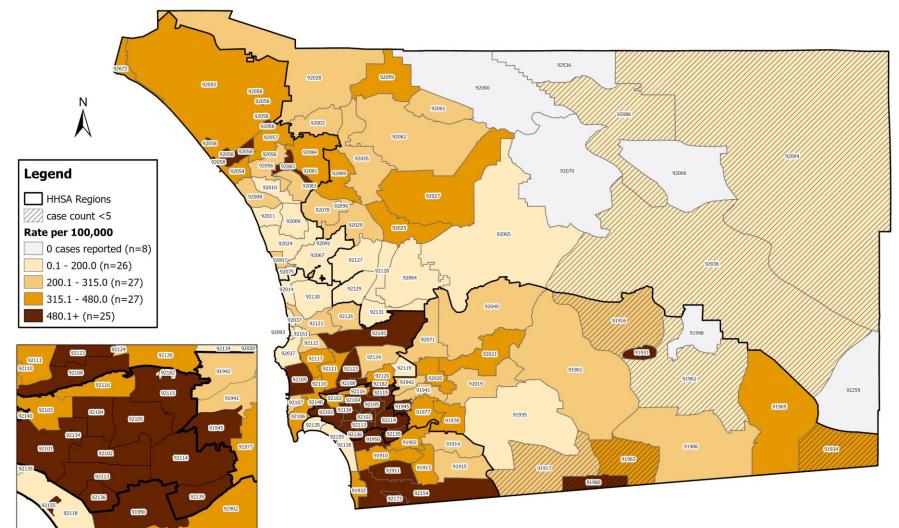




Note: Race/Ethnicity data for chlamydia are limited. The sharp increase in chlamydia rate among Other/Mixed category is most likely due to reporting. As of October 1, 2019, Chlamydia trachomatis (CT) infections have no longer been required to be reported to the local health department by healthcare providers; positive CT tests have continued to be reported by laboratories.

Chlamydia Rates by Zip Code Among Persons of 15-29 Years of Age, San Diego County, 2022

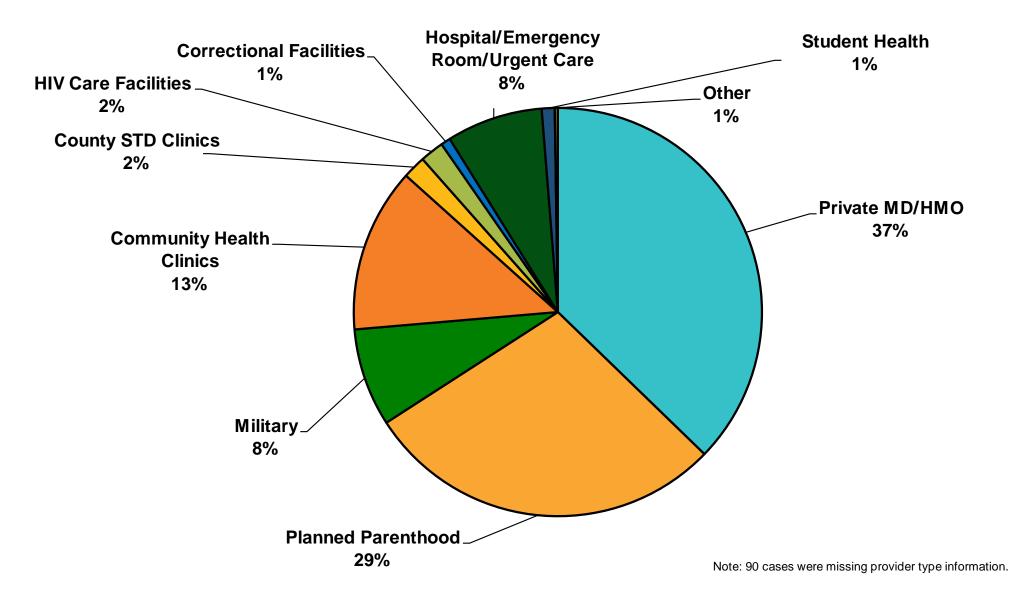




Source: County of San Diego, Health and Human Services Agency, HIV, STD, and Hepatitis Branch; May 3, 2024

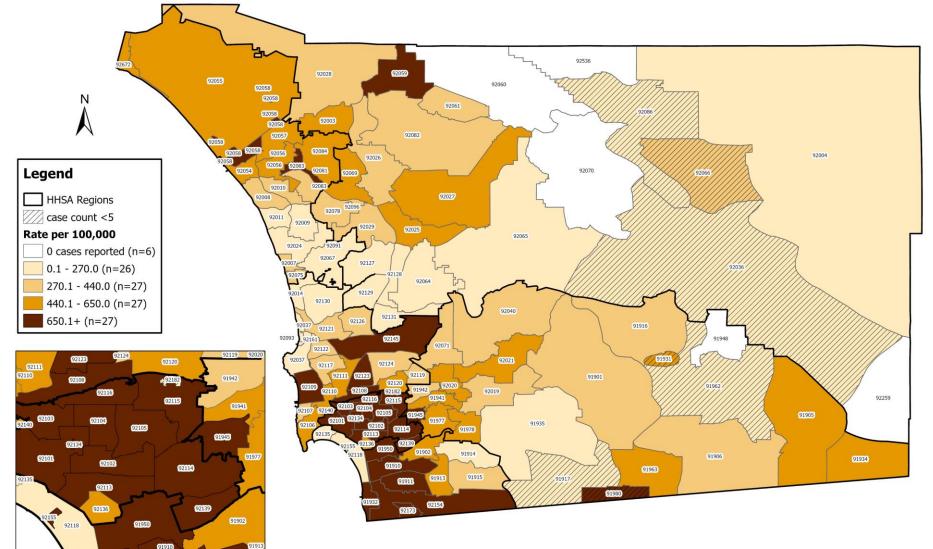
Chlamydia Cases by Reporting Facility Type San Diego County, 2022





Chlamydia Rates by Zip Code, San Diego County, 2022





GONORRHEA







Key Points

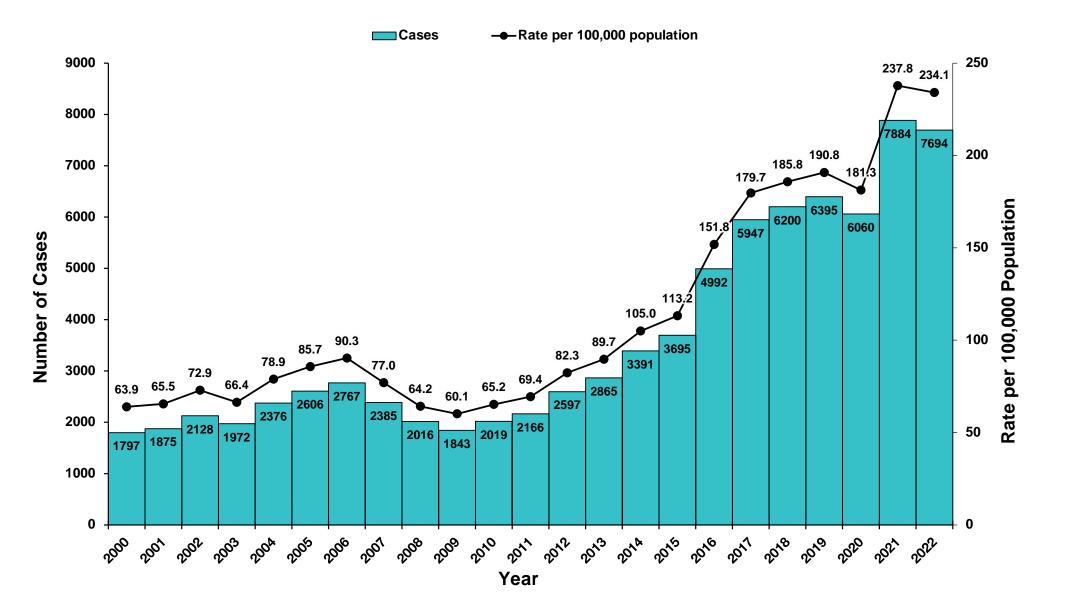


Gonorrhea in San Diego County

- Cases of gonorrhea decreased by 2.4% from 7884 cases in 2021 to 7694 cases in 2022.
- The overall rate of gonorrhea decreased by 1.6% from 237.8 cases per 100,000 in 2021 to 234.1 cases per 100,000 in 2022.
- The rate of gonorrhea in males is 2.2 times the rate in females and increased by 2.3% between 2021 and 2022.
- Men aged 25 to 34 years have the highest rates of infection.
- The rate of gonorrhea in African-American/black males is 5.2 times that of white males and 3.7 times that of Hispanic males; the rate of infection in African-American/black females is 5.4 times that of white females and 3.4 times that of Hispanic females.

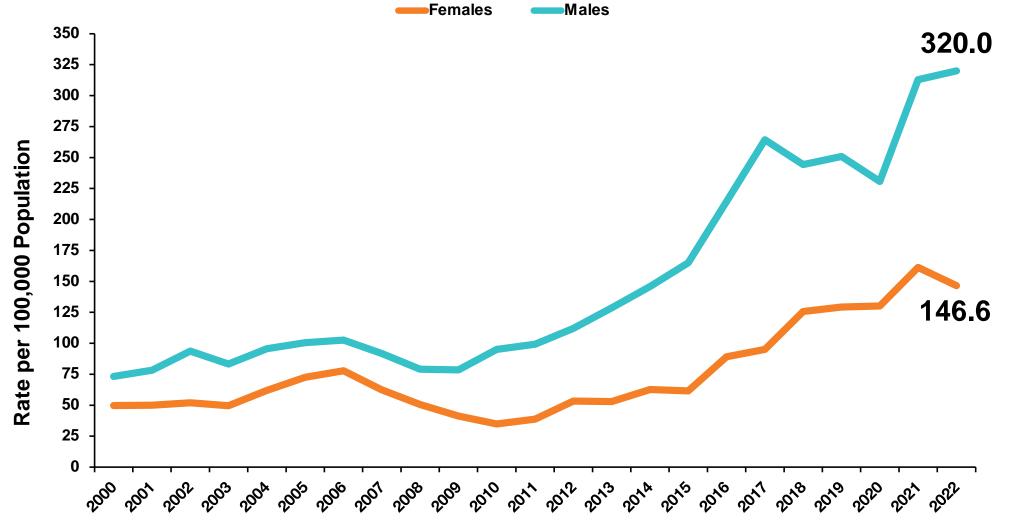
Gonorrhea Cases and Rates by Year, San Diego County, 2000 -2022





Gonorrhea Rates by Gender and Year, San Diego County, 2000 - 2022

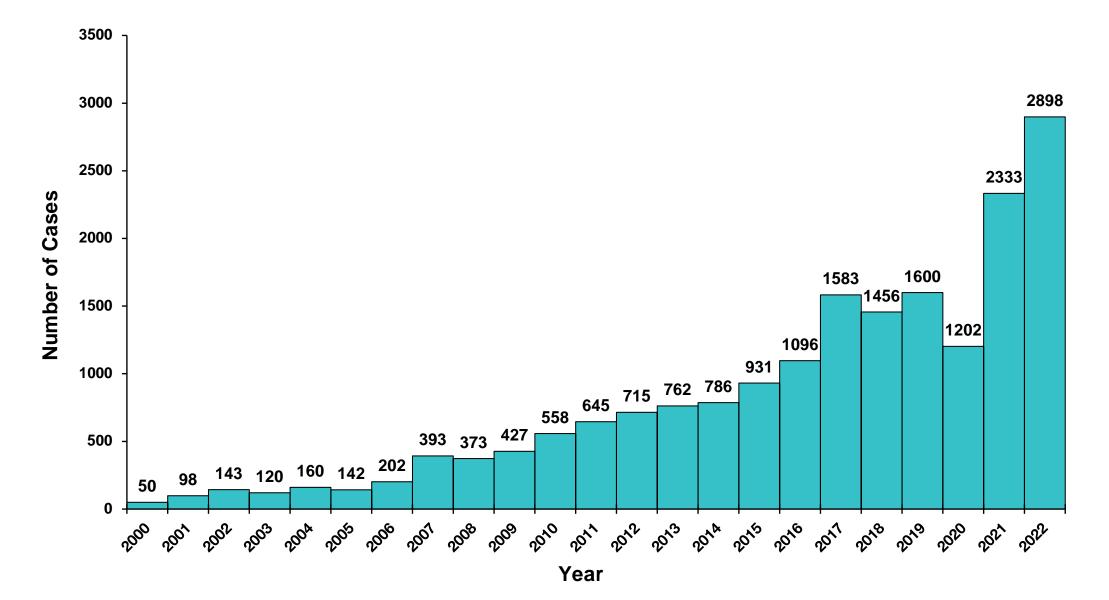




Year

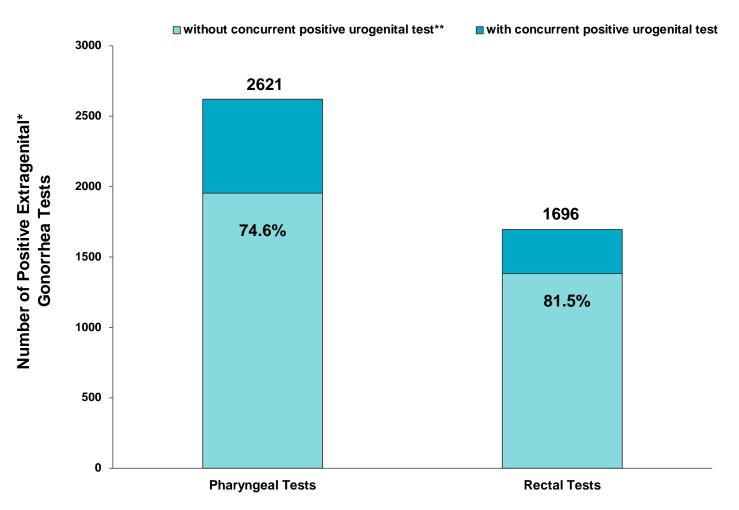
Rectal or Pharyngeal Gonorrhea in Males, San Diego County, 2000 - 2022





Proportion of Extragenital* Gonorrhea With & Without Concurrent Positive Urogenital Test, San Diego County, 2022



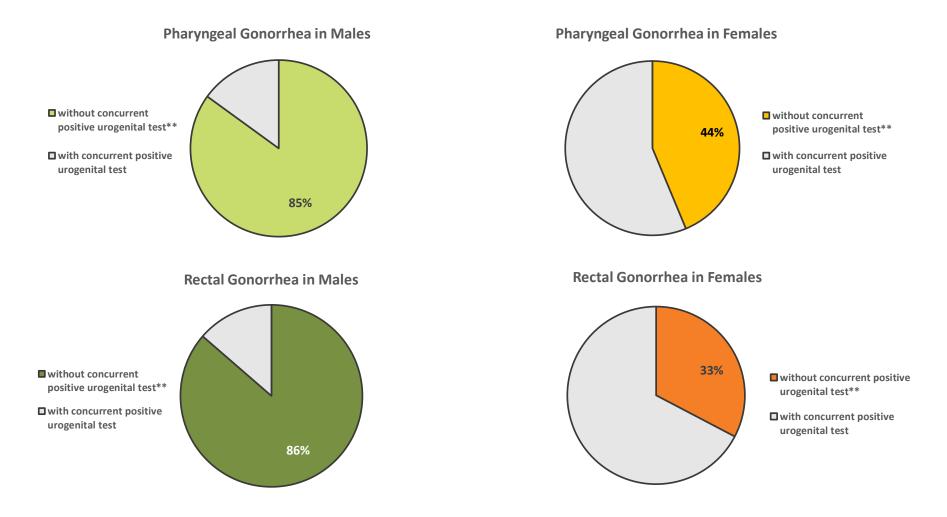


*Extragenital refers to pharyngeal and rectal anatomic sites.

**Note: Due to negative gonorrhea laboratory results not being reportable to the local public health departments, "without concurrent positive urogenital test" category means that no positive urogenital test result was reported to the County of San Diego HIV, STD, and Hepatitis Branch for the specified episode of extragenital infection and does not mean that the case had a negative urogenital test.

Proportion of Extragenital* Gonorrhea With & Without Concurrent Positive Urogenital Test by Gender, San Diego County, 2022



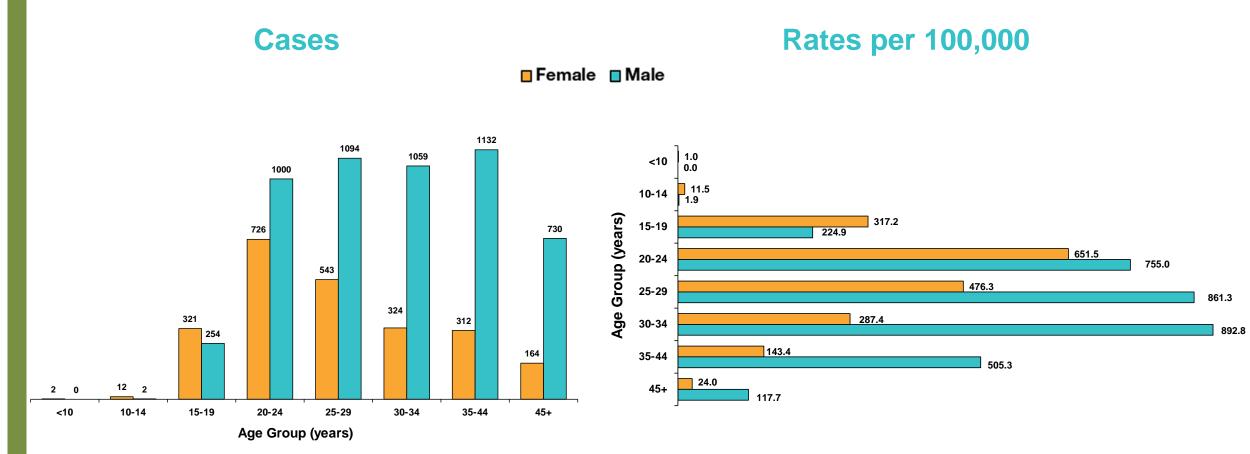


*Extragenital refers to pharyngeal and rectal anatomic sites.

**Note: Due to negative gonorrhea laboratory results not being reportable to the local public health departments, "without concurrent positive urogenital test" category means that no positive urogenital test result was reported to the County of San Diego HIV, STD, and Hepatitis Branch for the specified episode of extragenital infection and does not mean that the case had a negative urogenital test.

Gonorrhea Cases and Rates by Gender and Age, San Diego County, 2022

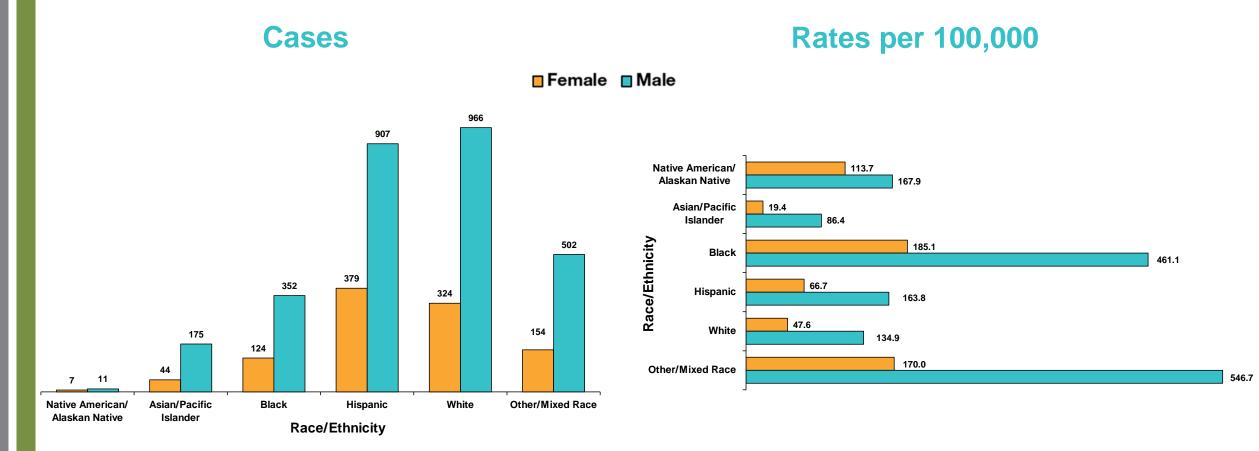




Note: 19 cases were missing gender information and are not included in the counts above.

Gonorrhea Cases and Rates by Gender and Race/Ethnicity, San Diego County, 2022

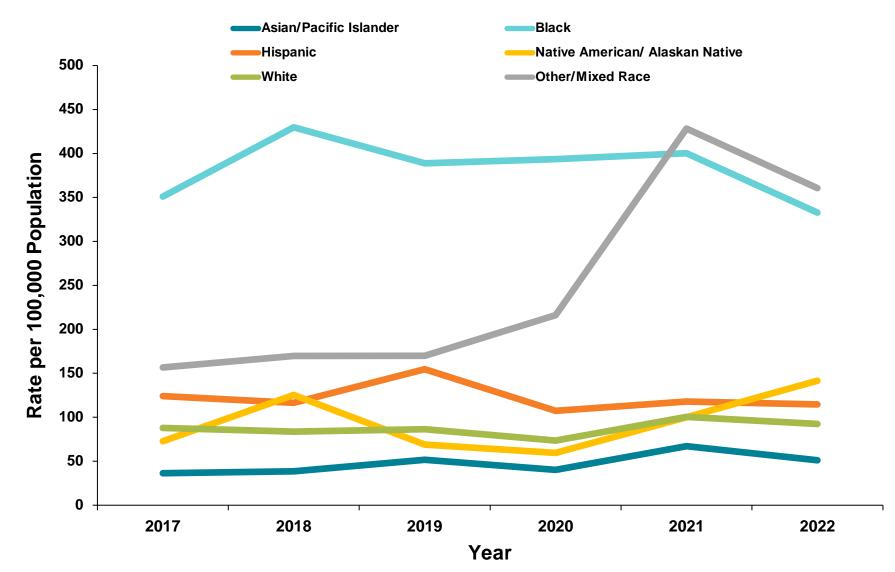




Note: 48.7% of cases were missing race/ethnicity or gender information and are not included in the counts above.

Gonorrhea Rates by Race/Ethnicity, San Diego County, 2017-2022

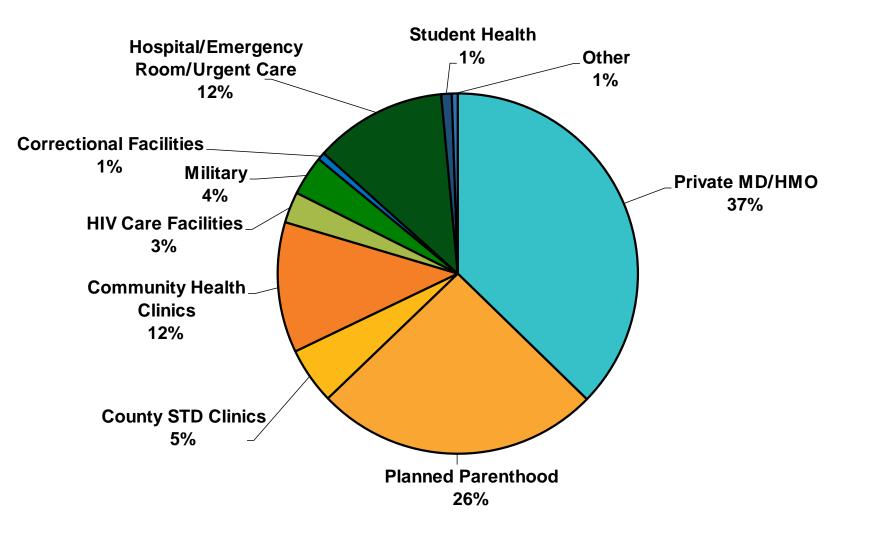




Note: Race/Ethnicity data for gonorrhea are limited. The sharp increase in gonorrhea rate among Other/Mixed category is most likely due to reporting.

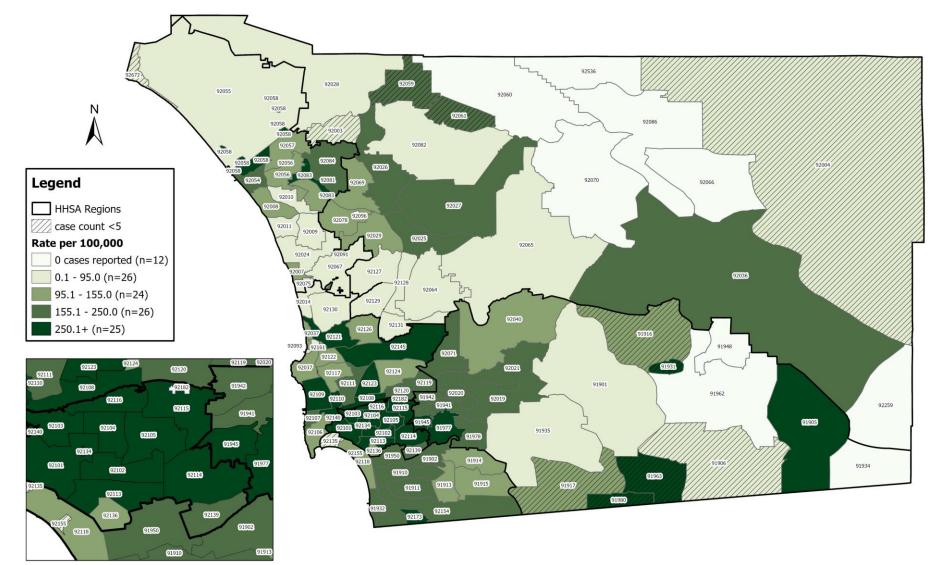
Gonorrhea Cases by Reporting Facility Type, San Diego County, 2022





Gonorrhea Cases by Zip Code, San Diego County, 2022





Source: County of San Diego, Health and Human Services Agency, HIV, STD, and Hepatitis Branch; May 3, 2024

SYPHILIS











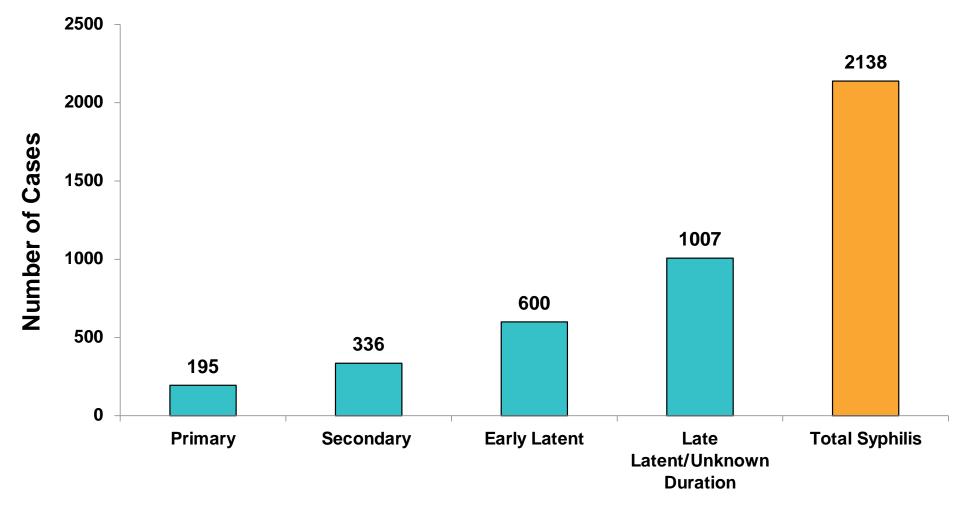


All Syphilis Stages and Significance

- <u>Primary</u>: painless ulcer(s) at site of initial contact with bacteria (*Treponema pallidum*); atypical (i.e., painful) lesions may occur.
- <u>Secondary</u>: widespread infection with variable presentation; typical findings include, but are not limited to, rash (may involve palms and soles), condylomata lata (wart-like lesions), mucous patches, and/or patchy alopecia.
- <u>Early latent</u>: no signs or symptoms of active infection; infection can be proven to have occurred
 <1 year ago.
- Late latent: no signs or symptoms of active infection; infection occurred ≥1 year ago, or duration is unknown.
- Sexual transmission between adults is only possible during early syphilis (i.e., primary, secondary, & early latent stages).
- Transmission from mother to child can occur during any stage of infection.

Case Count by Stage of Syphilis, San Diego County, 2022

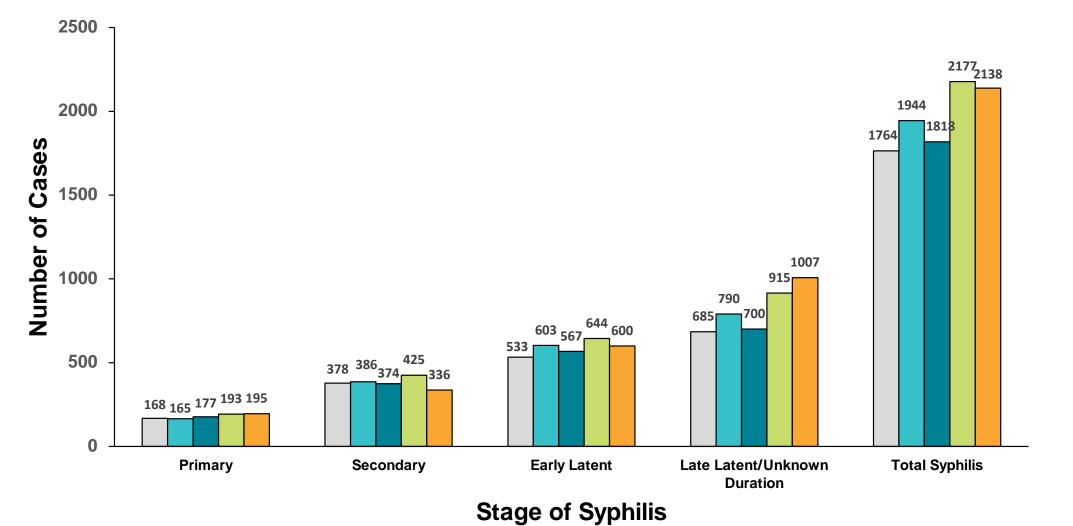




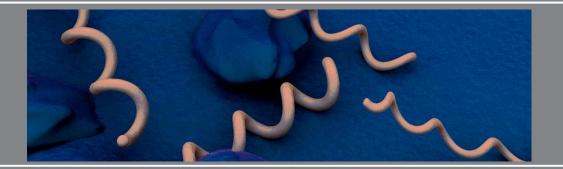
Stage of Syphilis

Case Count by Stage of Syphilis, San Diego County, 2018-2022





SYPHILIS (ALL STAGES)



Primary, Secondary, Early Latent, and Late/Unknown Duration Stages of Syphilis

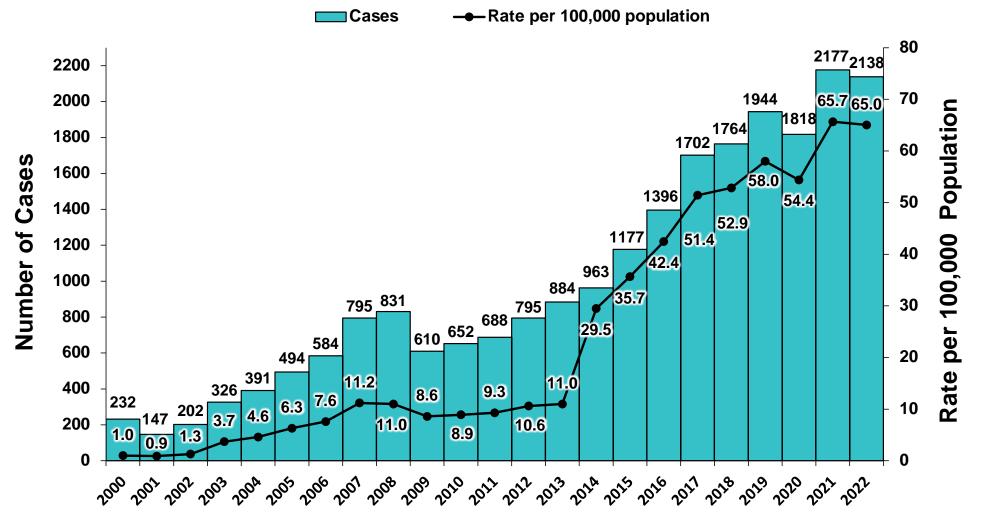






Syphilis (All Stages) Cases and Rates by Year, San Diego County, 2000-2022

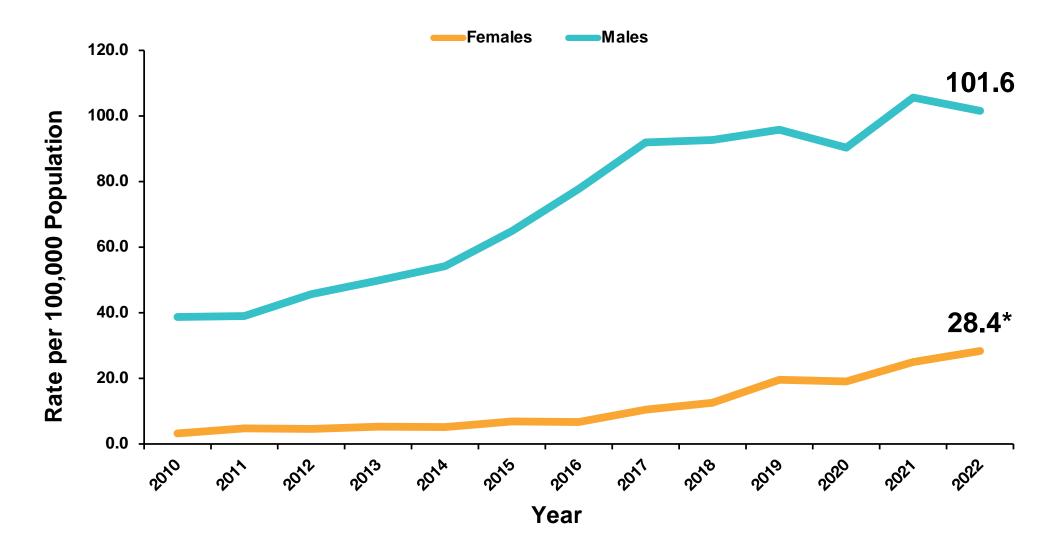




Year

Syphilis (All Stages) Rates by Gender and Year, San Diego County, 2010-2022

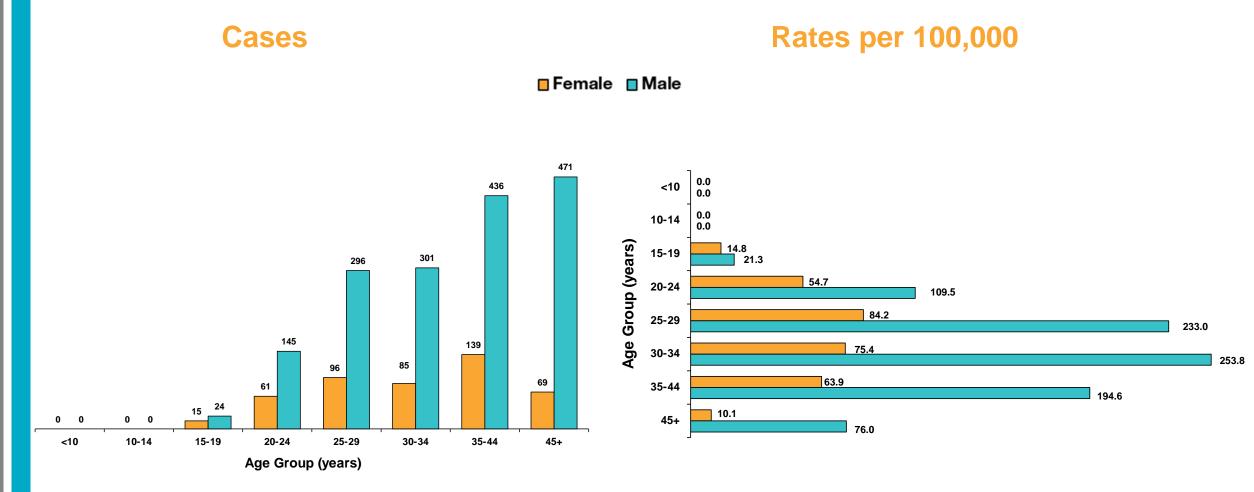




*Between 2021 and 2022 the female syphilis rate increased by 13.6% and the number of cases increased by 13.1%.

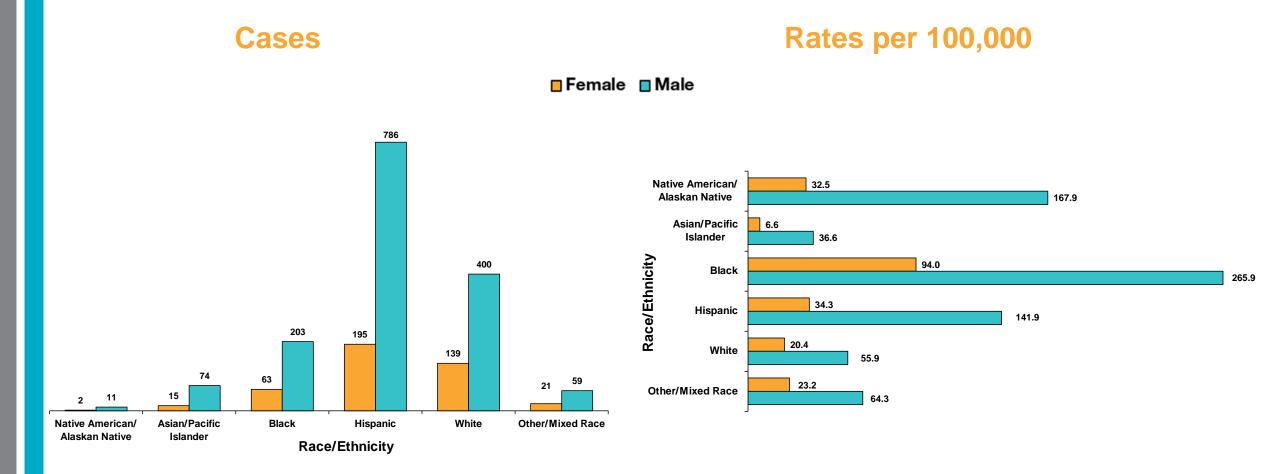
Syphilis (All Stages) Cases and Rates by Gender and Age, San Diego County, 2022





Syphilis (All Stages) Cases and Rates by Gender and Race/Ethnicity, San Diego County, 2022

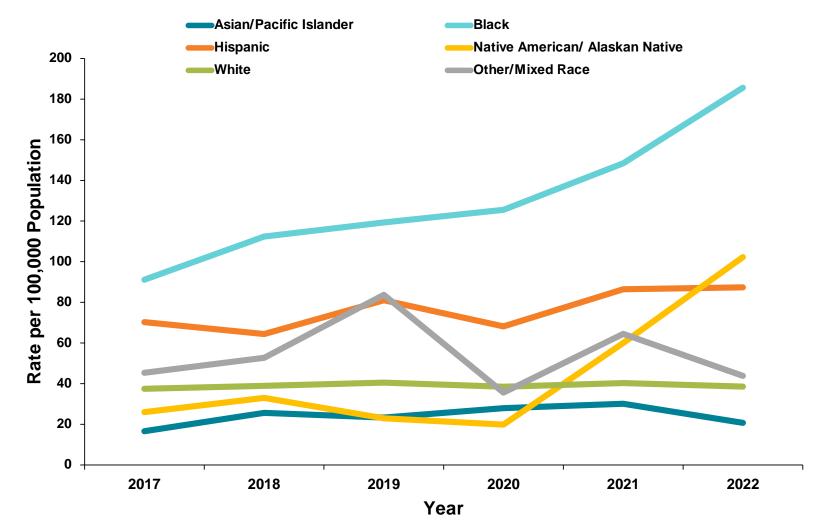




Note: Counts exclude 170 cases with missing race/ethnicity.

Syphilis (All Stages) Rates by Race/Ethnicity, San Diego County, 2017-2022

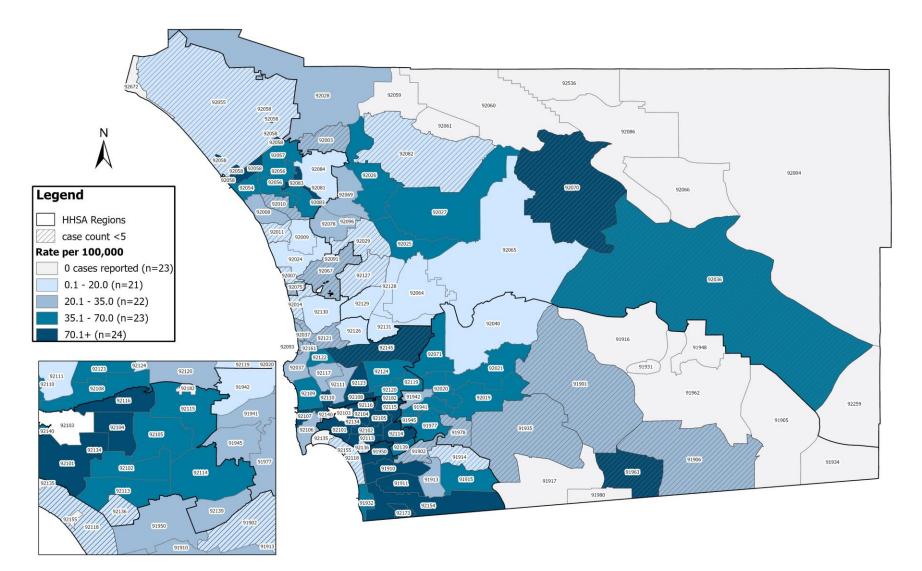




Note: Syphilis (All Stages) rates for Native American/Alaska Native race should be interpreted with caution, as the counts for this race category are small (<20) for all years.

Syphilis (All Stages) Rates by Zip Code, San Diego County, 2022





Source: County of San Diego, Health and Human Services Agency, HIV, STD, and Hepatitis Branch; May 3, 2024



Primary and Secondary Stages of Syphilis







Key Points

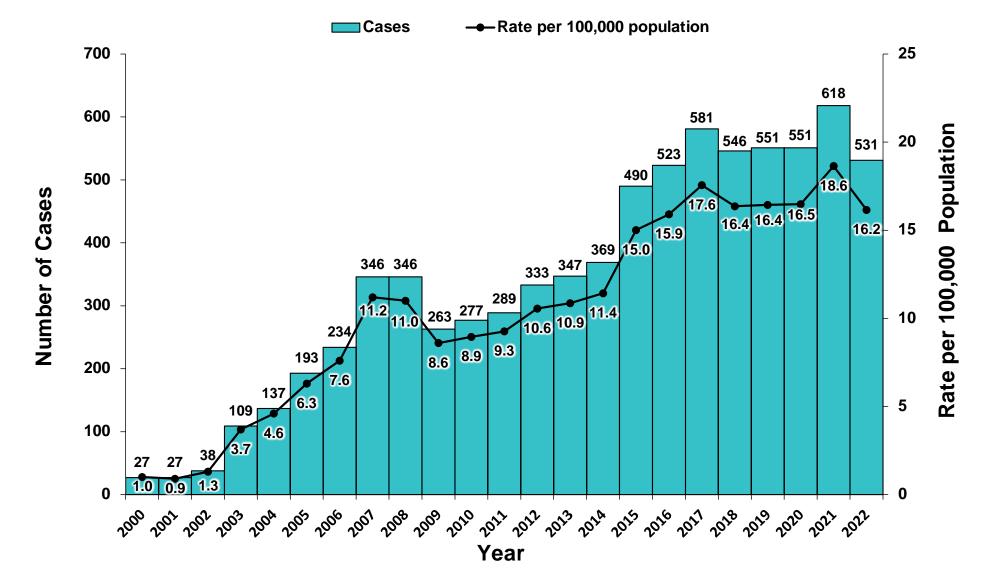


Primary & Secondary Syphilis in San Diego County

- Cases of primary and secondary syphilis decreased by 14.1% from 618 cases in 2021 to 531 cases in 2022.
- The overall rate of primary and secondary syphilis decreased by 12.9% from 18.6 cases per 100,000 in 2021 to 16.2 cases per 100,000 in 2022.
- More than half of primary and secondary syphilis cases (53%) are men who have sex with men (MSM). An estimated 42% of MSM primary and secondary syphilis cases are living with HIV.
- Rates are highest among males aged 25 to 44 years.
- African-American/black males have the highest rate of infection; the rate of infection in African-American/black males is 3.4 times that of white males.

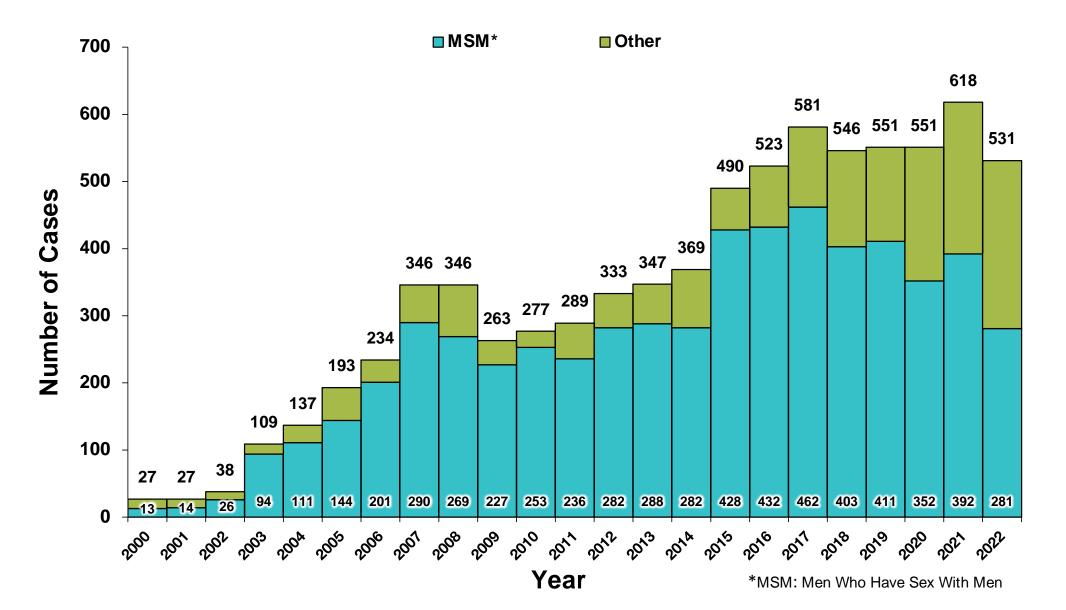
Primary & Secondary Syphilis Cases and Rates by Year, San Diego County, 2000-2022





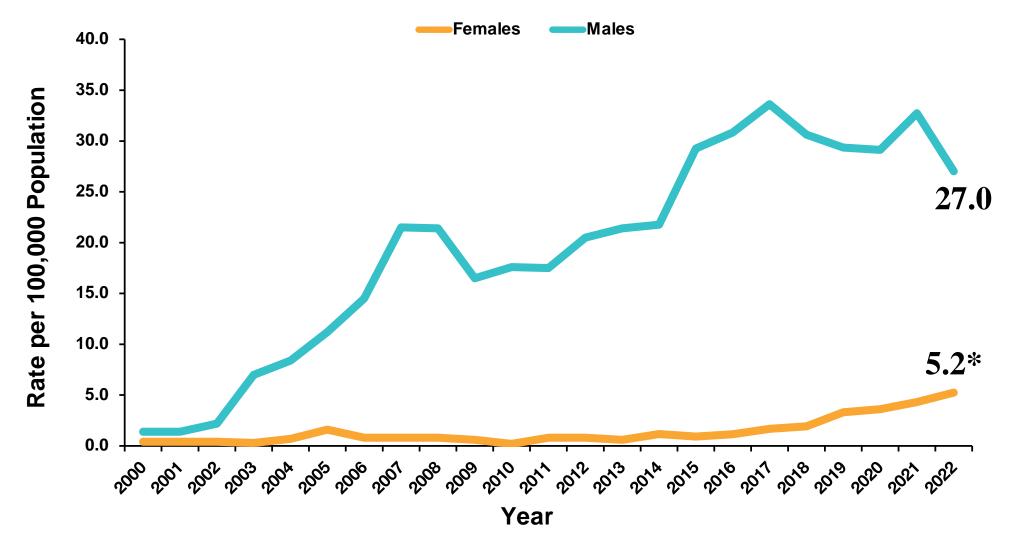
Primary & Secondary Syphilis Cases by Year, San Diego County, 2000-2022





Primary & Secondary Syphilis Rates by Gender and Year, San Diego County, 2000-2022

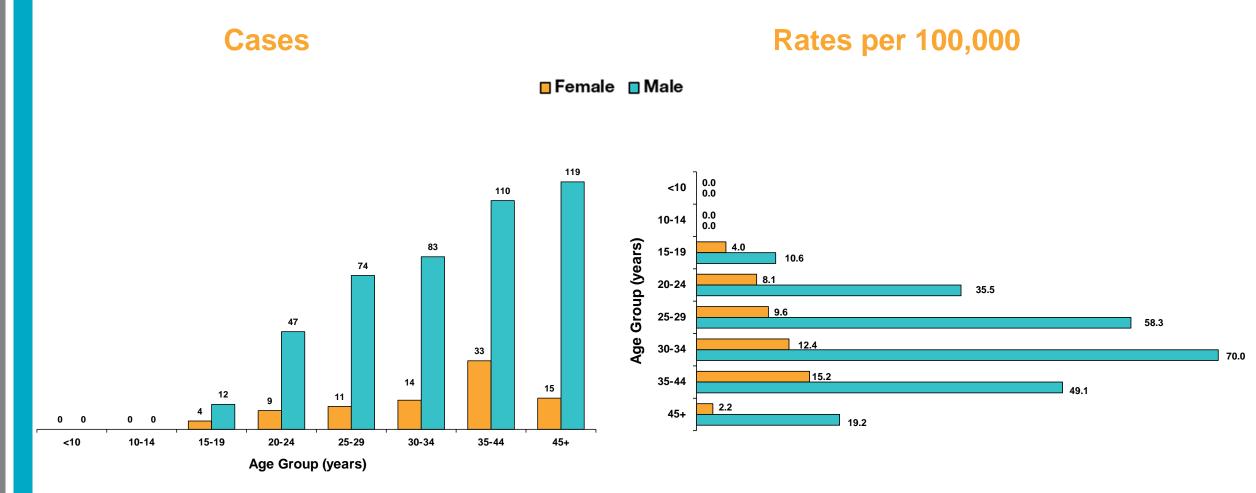




^{*} Between 2021 and 2022 primary and secondary syphilis rates increased by 20.9% in females and decreased by 17.4% in males.

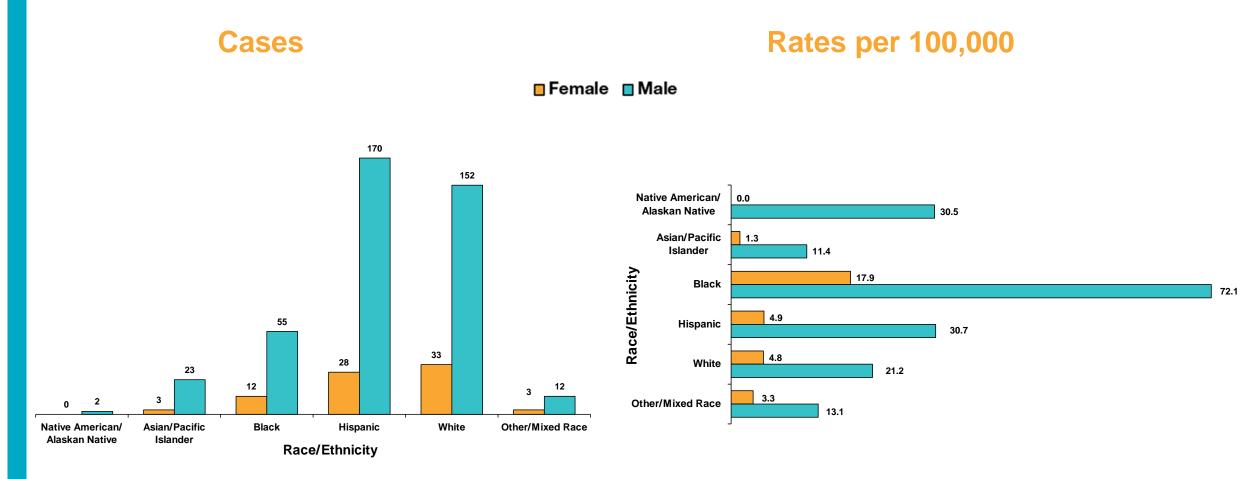
Primary & Secondary Syphilis Cases and Rates by Gender and Age, San Diego County, 2022





Primary & Secondary Syphilis Cases and Rates by Gender and Race/Ethnicity, San Diego County, 2022

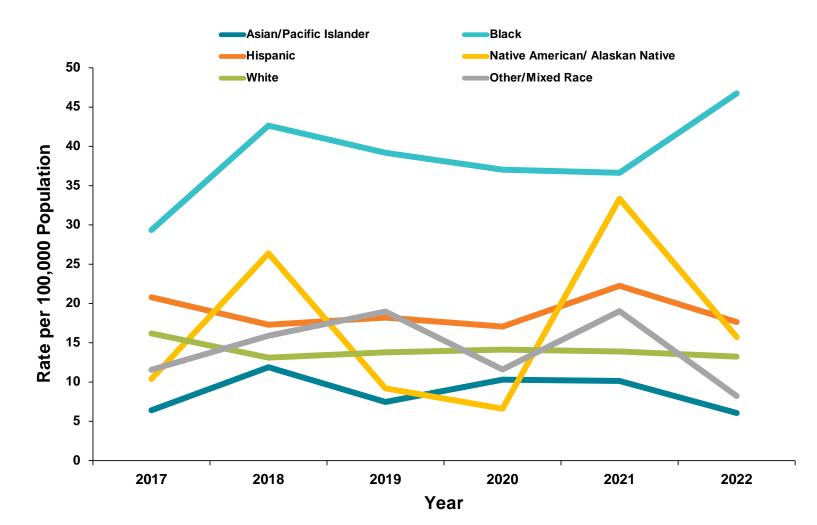




Note: Counts exclude 38 cases with missing race/ethnicity.

Primary & Secondary Syphilis Rates by Race/Ethnicity, San Diego County, 2018-2022

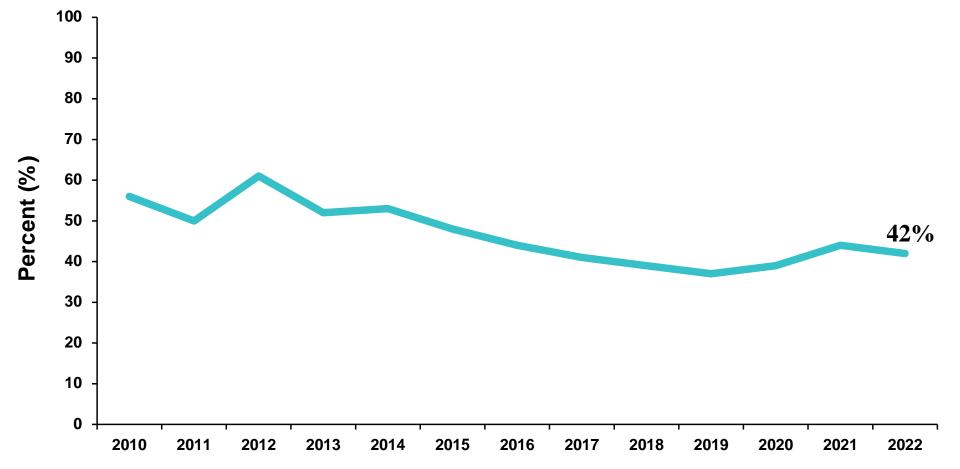




Note: Primary and secondary syphilis rates for Native American/Alaska Native race should be interpreted with caution, as the counts for this race category are small (<5) for all years.

Percent of MSM* Primary & Secondary Syphilis Cases Living with HIV by Year, San Diego County, 2010-2022

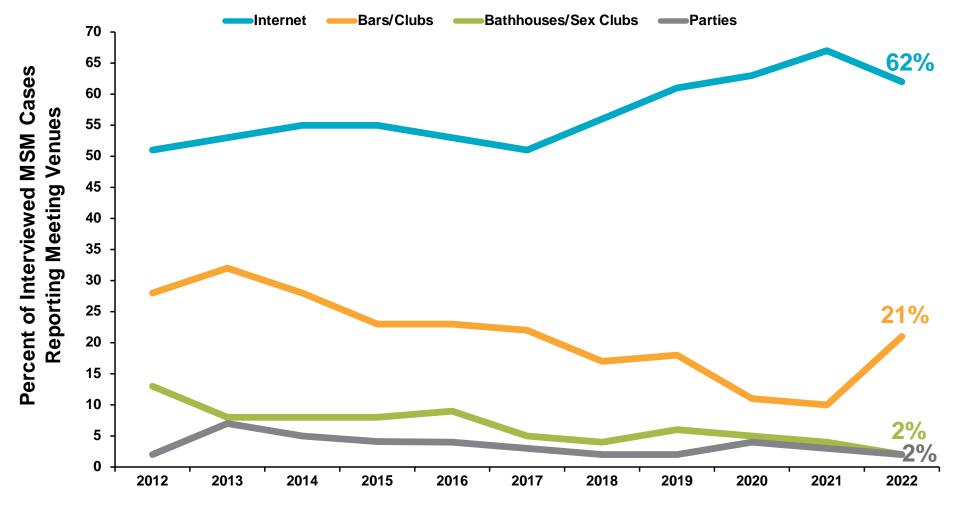




Year

Meeting Venues Reported by Interviewed MSM* Primary & Secondary Syphilis Cases, San Diego County, 2012-2022





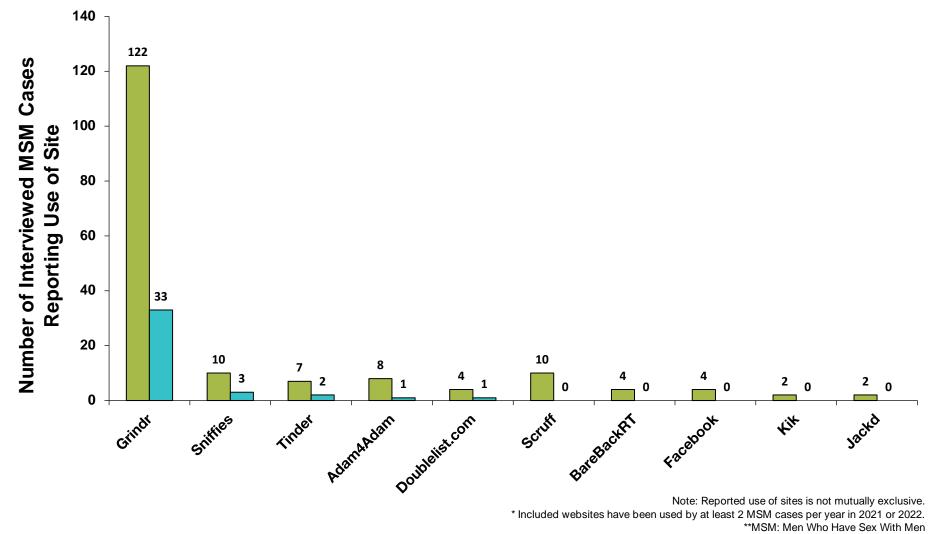
Year

Note: Reported use of venues is not mutually exclusive. *MSM: Men Who Have Sex With Men.

Reported Use of Internet-Based Services* Among MSM** Primary & Secondary Syphilis Cases, San Diego County, 2021-2022

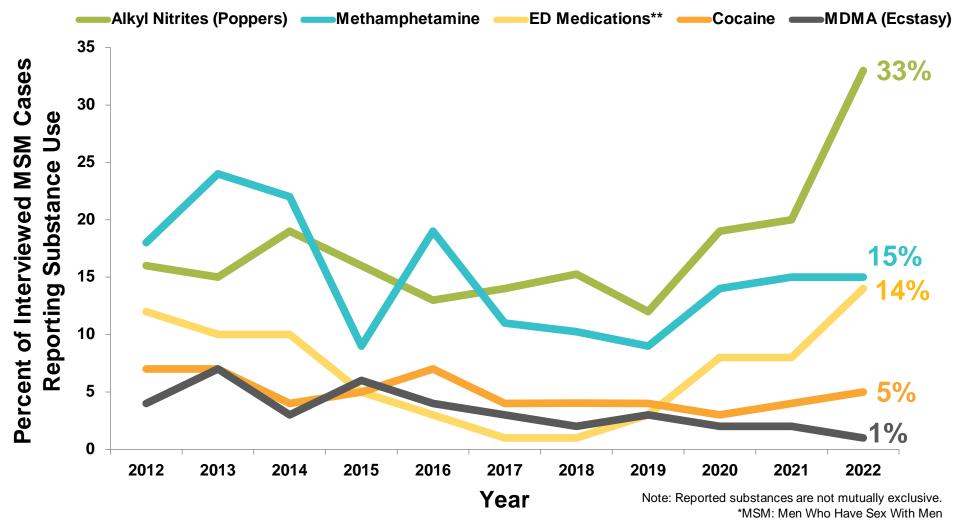


2021 2022



Reported Substance Use of Interviewed MSM* Primary & Secondary Syphilis Cases by Year, San Diego County, 2012-2022

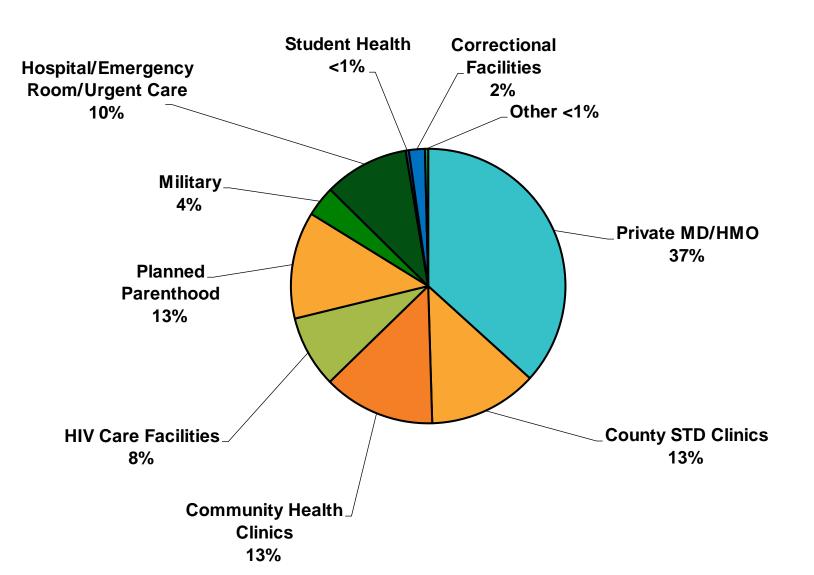




** ED Medications: Erectile Dysfunction Medications

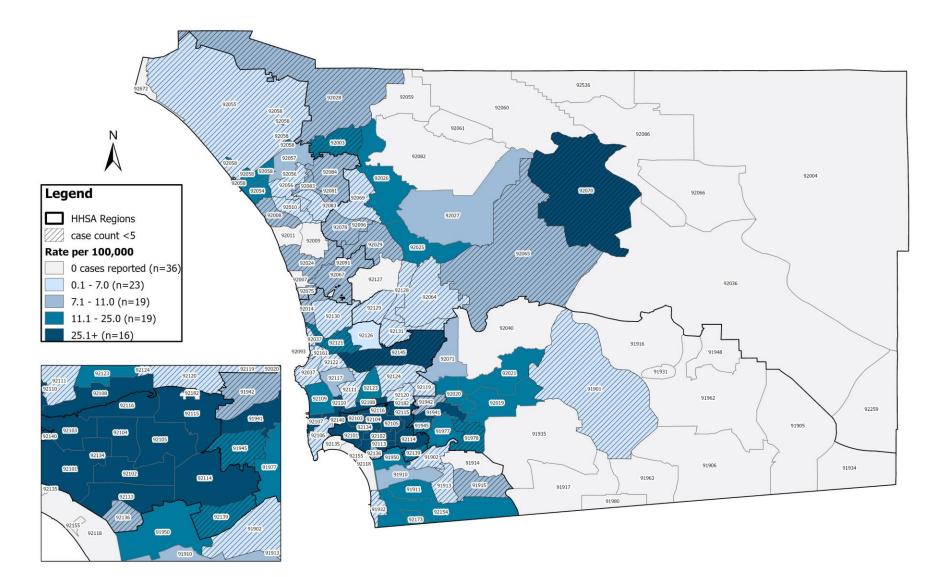
Primary & Secondary Syphilis Cases by Reporting Facility Type, San Diego County, 2022





Primary & Secondary Syphilis Rates by Zip Code, San Diego County, 2022





Source: County of San Diego, Health and Human Services Agency, HIV, STD, and Hepatitis Branch; May 3, 2024



Primary, Secondary, and Early Latent Stages of Syphilis







Key Points

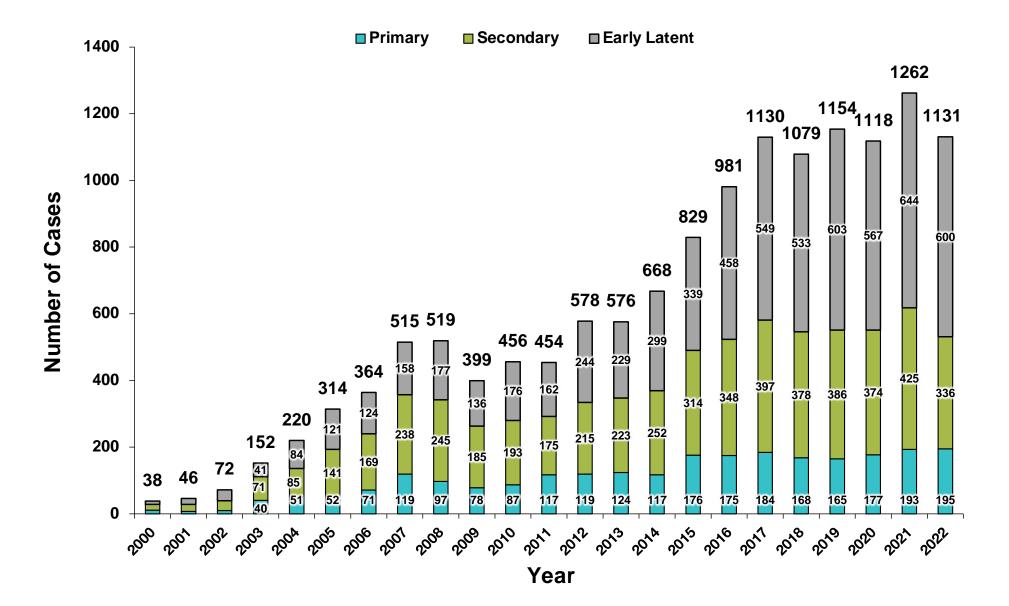


Early Syphilis in San Diego County

- Cases of early syphilis decreased by 10.4% from 1,262 cases in 2021 to 1,131 cases in 2022.
- The overall rate of early syphilis decreased by 9.7% from 38.1 cases per 100,000 in 2021 to 34.4 cases per 100,000 in 2022.
- The majority of early syphilis cases (65.7%) are men who have sex with men (MSM). An estimated 54.9% of MSM early syphilis cases are living with HIV.
- Early syphilis rate in females continues to increase. Over the last five years, early syphilis in females increased by 141.7% from 3.6 per 100,000 in 2018 to 8.7 per 100,000 in 2022.
- Rates are highest among males aged 25 to 44 years.
- The highest rates of infection are observed in the African-American/black population. The rate of early syphilis in African-American/black males is 3.5 times that of white males; the rate of early syphilis in African-American/black females is 4.3 times that of white females.

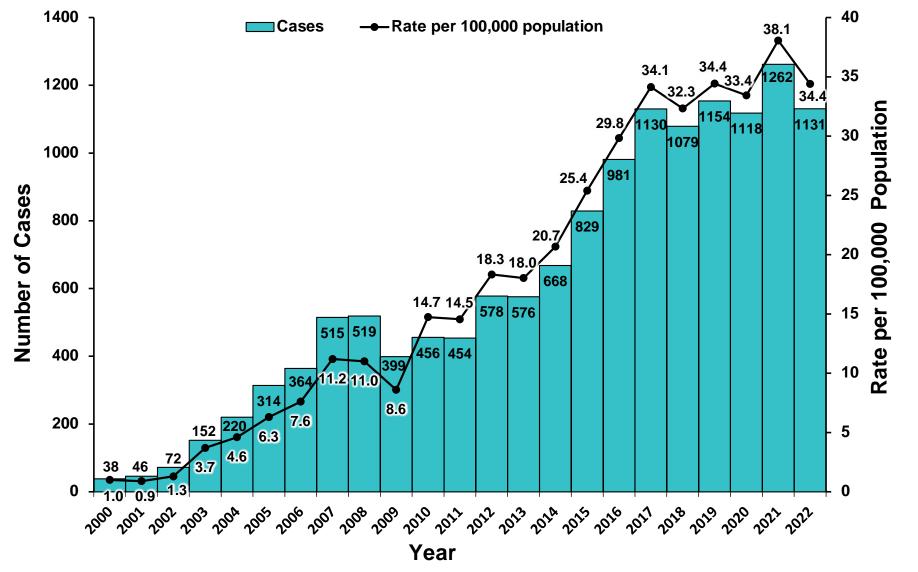
Early Syphilis Cases by Year and Stage, San Diego County, 2000-2022





Early Syphilis Cases and Rates by Year, San Diego County, 2000-2022

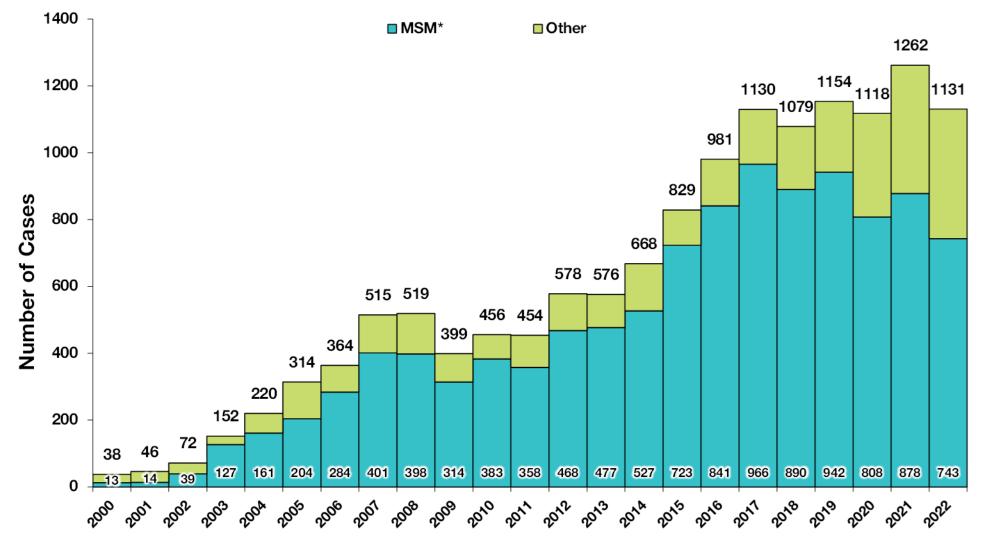




Note: Early Syphilis includes primary, secondary and early latent

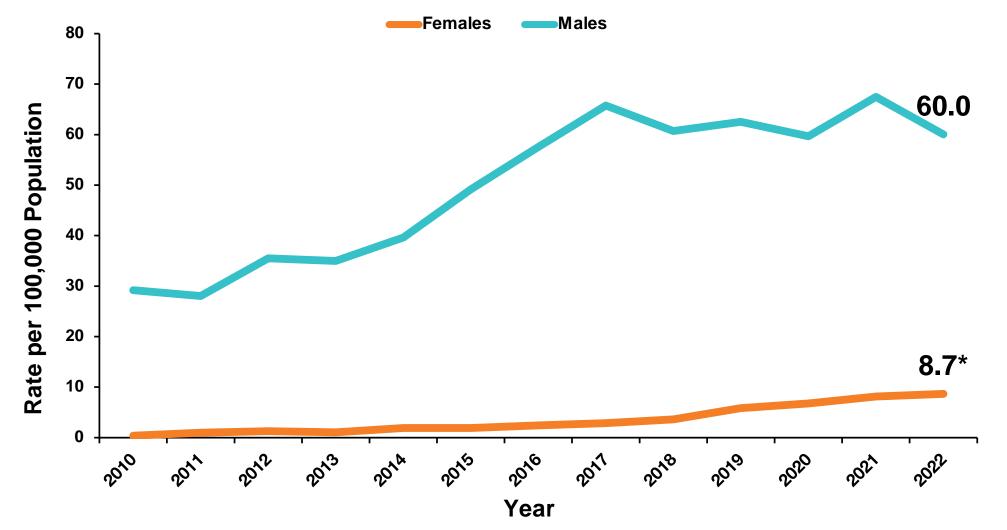
Early Syphilis Cases by Year, San Diego County, 2000-2022





Early Syphilis Rates by Gender and Year, San Diego County, 2010-2022

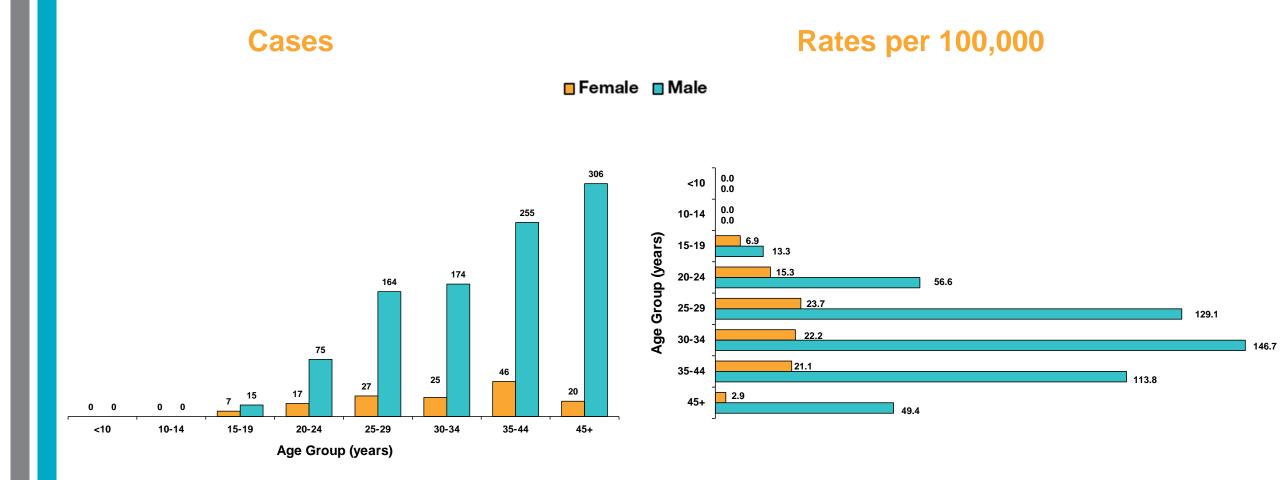




* Between 2021 and 2022, the early syphilis cases and rate among females both increased by 6%; the early syphilis cases and rate among males decreased by 12% and 11%, respectively.

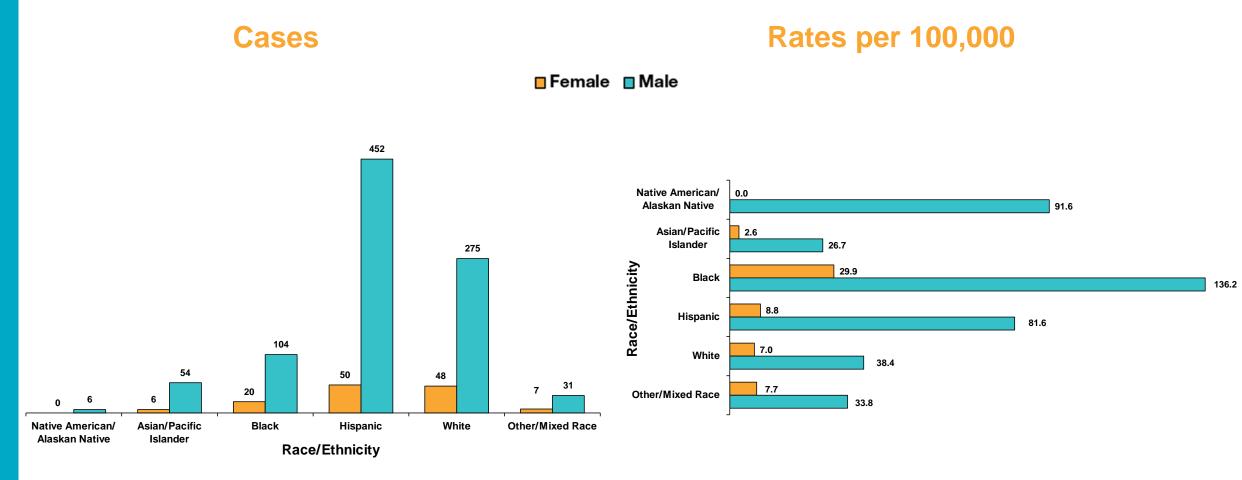
Early Syphilis Cases and Rates by Gender and Age, San Diego County, 2022





Early Syphilis Cases and Rates by Gender and Race/Ethnicity, San Diego County, 2022

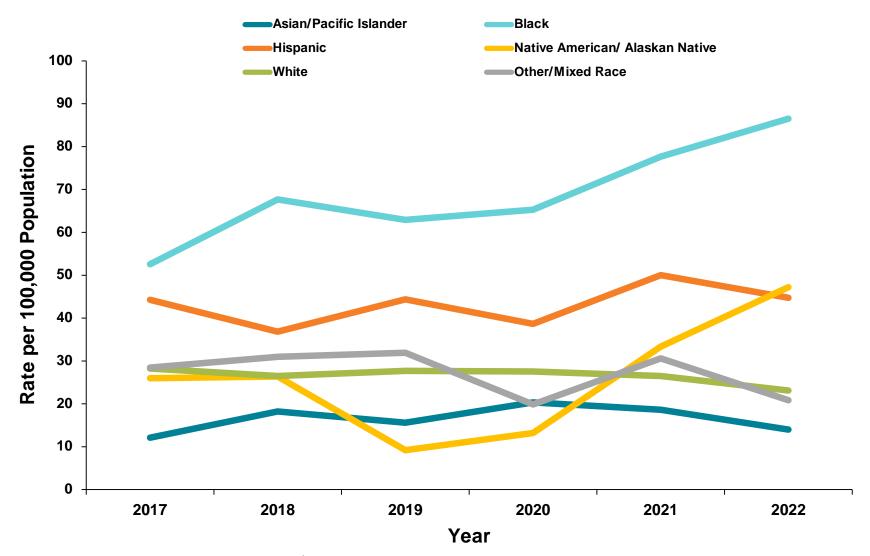




Note: Counts exclude 78 cases with missing race/ethnicity.

Early Syphilis Rates by Race/Ethnicity, San Diego County, 2017-2022

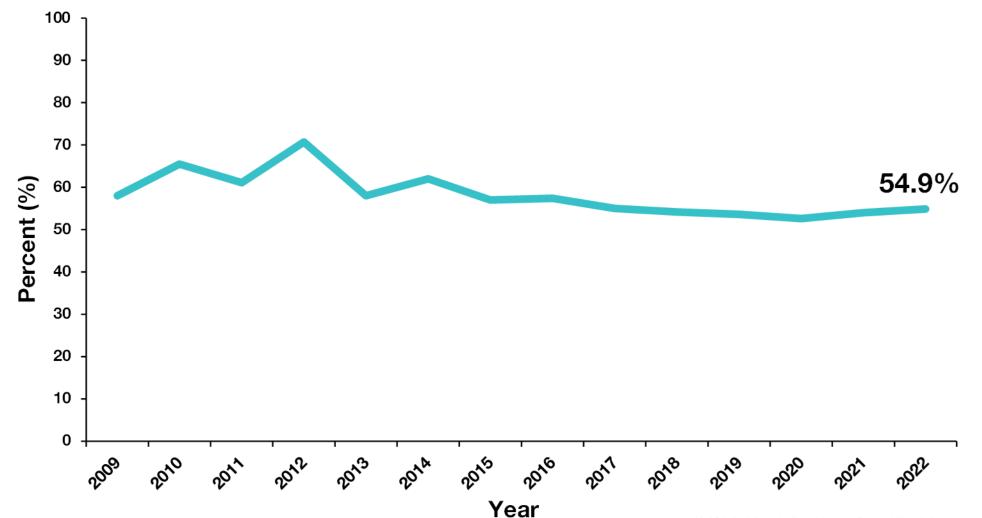




Note: Early syphilis rates for Native American/Alaska Native race should be interpreted with caution, as the counts for this race category are small (< 10) for all years.

Percent of MSM* Early Syphilis Cases Living with HIV by Year, San Diego County, 2009-2022

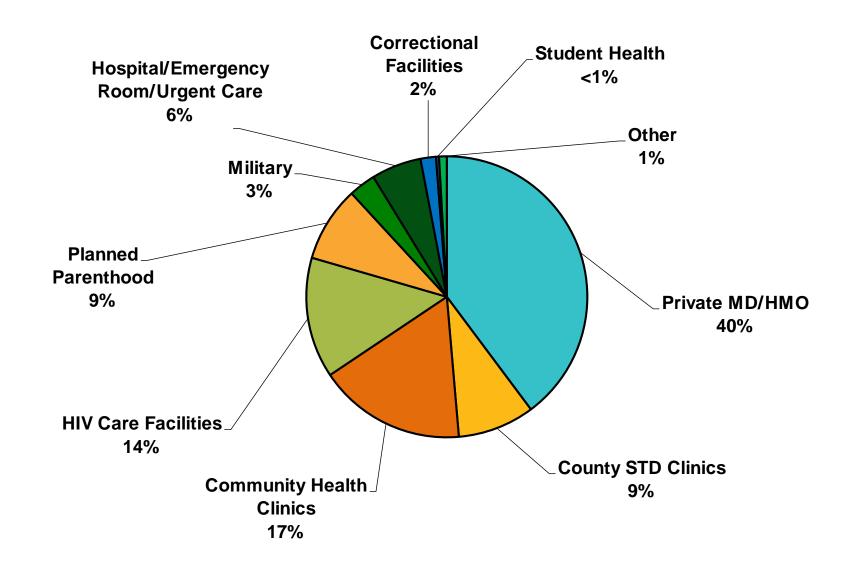




*MSM: Men Who Have Sex With Men

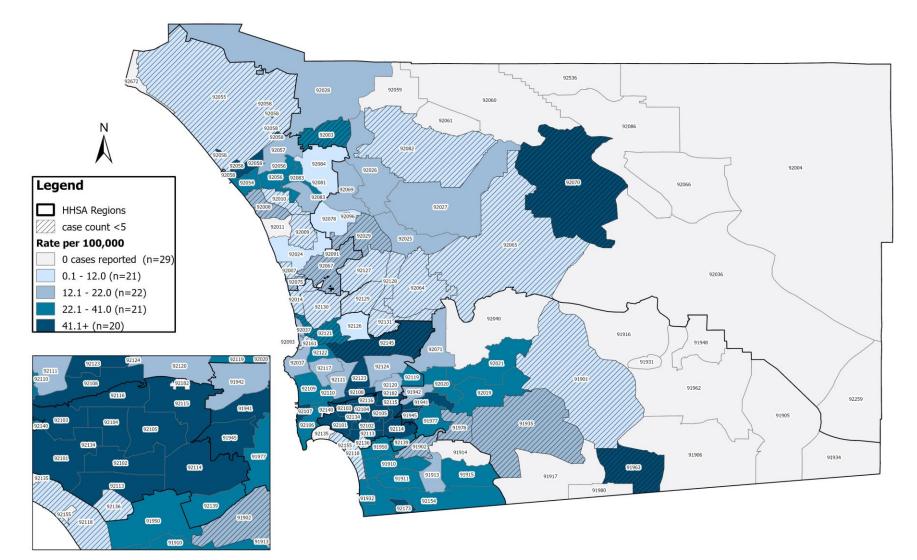
Early Syphilis Cases by Reporting Facility Type, San Diego County, 2022





Early Syphilis Rates by Zip Code, San Diego County, 2022





Source: County of San Diego, Health and Human Services Agency, HIV, STD, and Hepatitis Branch; May 3, 2024

SYPHILIS IN WOMEN & CONGENITAL SYPHILIS









Definitions



Congenital Syphilis Surveillance

- Congenital Syphilis (C.S.): Any infant whose mother had untreated or inadequately treated* syphilis at the time of delivery, regardless of findings in the infant or child.
 - Confirmed C.S.: Infant or child in whom *Treponema pallidum* is identified by darkfield microscopy, direct fluorescent antibody, or other specific stains in specimens from lesions, placenta, umbilical cord, or autopsy material.
 - Probable C.S.: Meets case definition of C.S. This may also include an infant or child with a reactive treponemal test for syphilis and evidence of C.S. on physical examination, cerebrospinal fluid analysis, and/or long bone X-ray.
 - Syphilitic Stillbirth: Fetal death in which mother had untreated or inadequately treated* syphilis at the time of delivery of either a fetus after a 20-week gestation or a fetus weighing >500 grams.

*Inadequate maternal treatment refers to incomplete treatment, treatment that is not in accordance with national guidelines, and/or treatment that was not initiated at least 30 days prior to delivery.

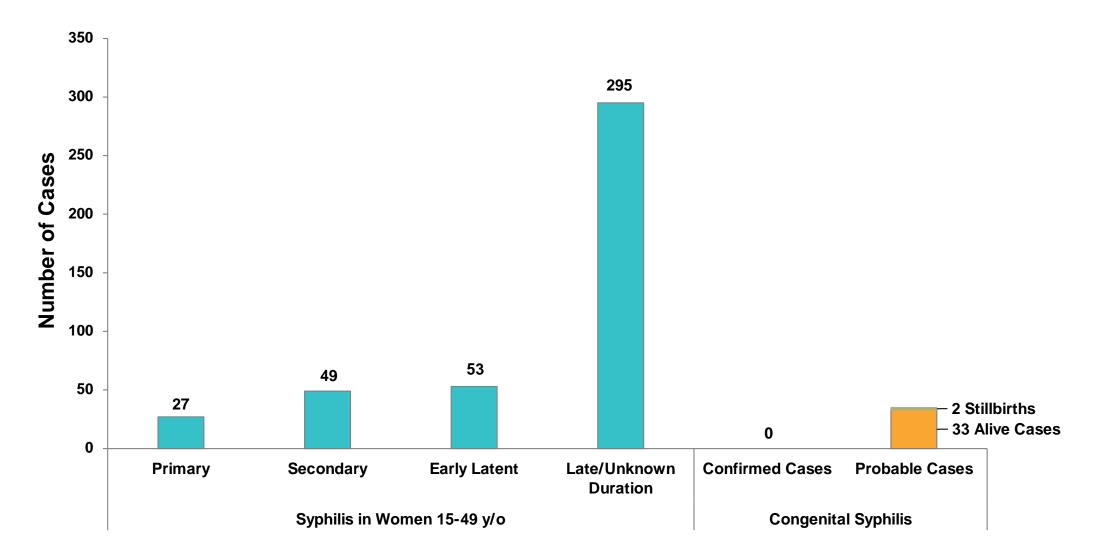
Key Points



Female & Congenital Syphilis in San Diego County

- Cases and rates of syphilis of any stage and early (i.e., primary, secondary, and early latent) syphilis in females aged 15-49 years (i.e., women of childbearing potential) have been increasing overall since 2015.
 - Cases of total syphilis (all stages) increased by 14.9% from 369 cases in 2021 to 424 cases in 2022, and the rate increased by 11.1% from 50.5 cases per 100,000 in 2021 to 56.1 cases per 100,000 in 2022. At the time of diagnosis, 18.6% of syphilis cases were pregnant.
 - Cases of early syphilis increased by 7.5% from 120 cases in 2021 to 129 cases in 2022. Among pregnant women, the early syphilis rate decreased by 9.5% from 2.1 cases per 100,000 in 2021 to 1.9 cases per 100,000 in 2022.
 - Cases of syphilis of late/unknown duration increased by 18.5% from 249 cases in 2021 to 295 cases in 2022, and the rate increased by 16.2% from 7.4 cases per 100,000 in 2021 to 8.6 cases per 100,000 in 2022. Among cases of syphilis of late/unknown duration, 22% were pregnant.
 - Congenital syphilis cases were the highest in 2022 with 35 cases reported, which included 2 syphilitic stillbirths.
 Compared to 2013 and 2021, congenital syphilis rate in 2022 increased by 1172% and 14%, respectively.

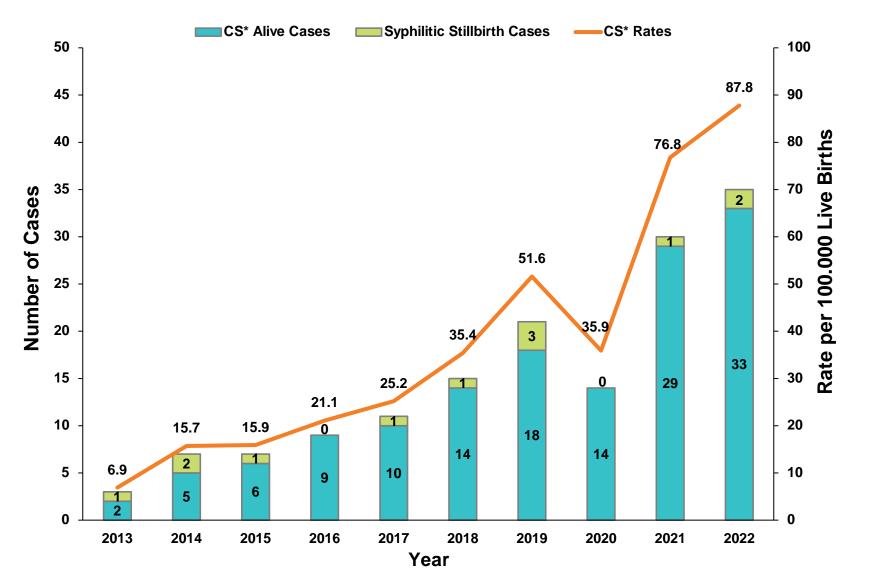
Cases of Syphilis in Women of Childbearing Age (15-49 y/o) and Congenital Syphilis, San Diego County, 2022





Congenital Syphilis Cases and Rates, San Diego County, 2013-2022

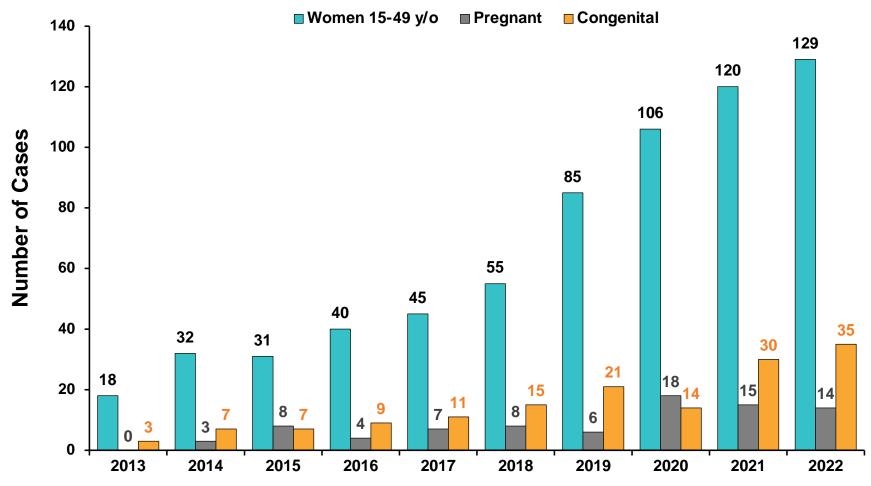




*CS: Congenital Syphilis. Rates for congenital syphilis were defined based on the number of live births and include syphilitic stillbirths.

Cases – Early Syphilis in Women of Childbearing Age (15-49 y/o) & Pregnant Women, Congenital Syphilis, San Diego County, 2013-2022



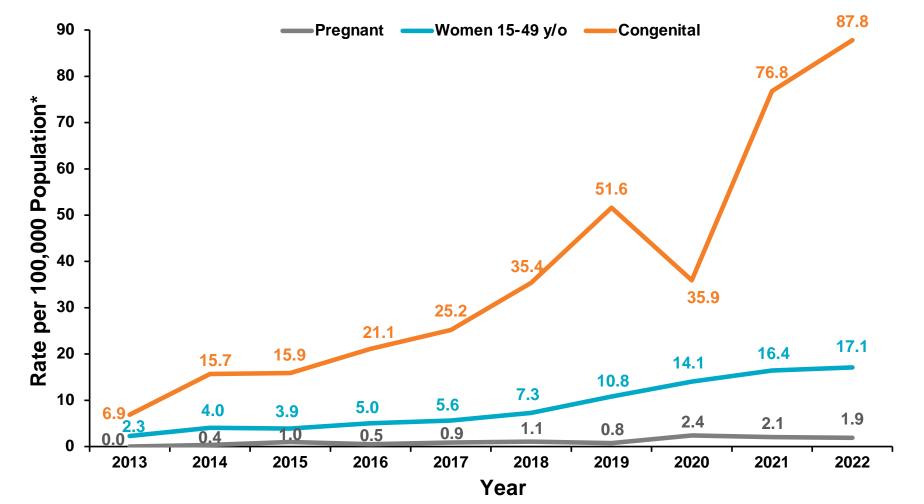


Year

Note: Congenital syphilis cases include syphilitic stillbirths.

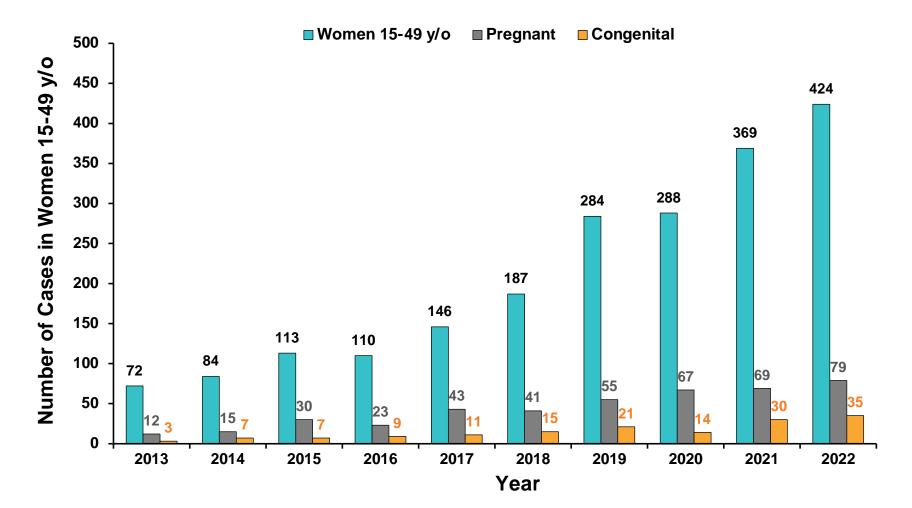
Rates – Early Syphilis in Women of Childbearing Age (15-49 y/o) & Pregnant Women, Congenital Syphilis, San Diego County, 2013-2022





*Rates for women 15-49 y/o and pregnant women were defined based on population estimates of women 15-49 years of age. Rates for congenital syphilis were defined based on the number of live births.

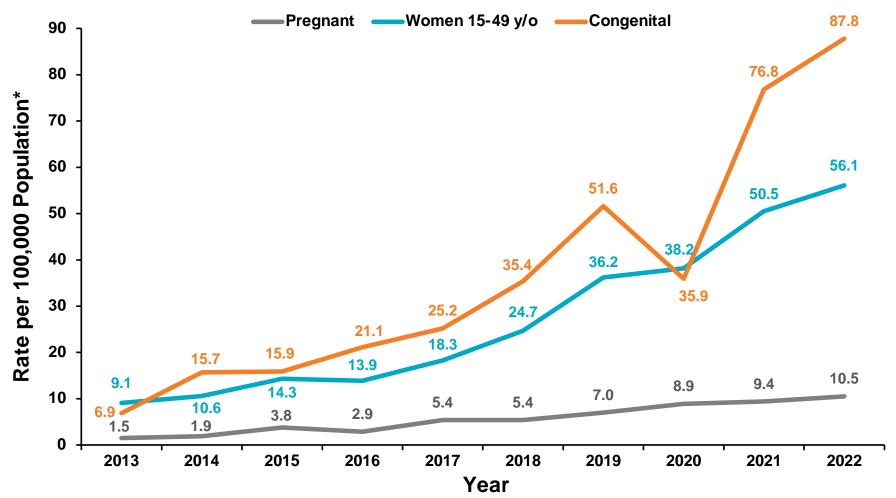
Cases – Syphilis (All Stages) in Women of Childbearing Age (15-49 y/o) & Pregnant Women, Congenital Syphilis, San Diego County, 2013-2022



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Rates – Syphilis (All Stages) in Women of Childbearing Age (15-49 y/o) & Pregnant Women, Congenital Syphilis, San Diego County, 2013-2022



*Rates for women 15-49 y/o and pregnant women were defined based on population estimates of women 15-49 years of age. Rates for congenital syphilis were defined based on the number of live births.





Contact Information

For questions or requests for data that are not included in these slides, please send an e-mail to std@sdcounty.ca.gov, or visit www.STDSanDiego.org (click on "Reports and Statistics").



The Public Health Services department, County of San Diego Health and Human Services Agency, has maintained national public health accreditation, since May 17, 2016, and was re-accredited by the Public Health Accreditation Board on August 21, 2023.