

# SEXUALLY TRANSMITTED DISEASES IN SAN DIEGO COUNTY 2019 DATA SLIDES

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









#### **Preface**

This publication, Sexually Transmitted Diseases in San Diego County, 2019 Data Slides, includes reported disease data collected through 2019 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 disease (STD) 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 STD programs, and other public health agencies.

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#### **Suggested Citation**

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### **Case Counts and Rates**



- These slides include **case counts** and **rates** of reportable STDs.
- Rates take population size into account and indicate the impact of STDs 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: 2019 Revised Vintage Population Estimates; County of San Diego, Health and Human Services Agency, Public Health Services Division, Community Health Statistics Unit. 6/2020.
- The following is an example of the difference between cases and rates:

Region	Case Count	Population	Rate per 100,000  Case Count * 100,000  Population
A	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.



## STD/HIV Screening Recommendations United States Preventive Services Task Force

- 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 persons 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 high risk of HIV acquisition (Grade A)

Source: <a href="https://www.uspreventiveservicestaskforce.org">https://www.uspreventiveservicestaskforce.org</a>



### **Key Points**

### STDs in San Diego County

From 2018 to 2019, reported cases and rates of chlamydia, gonorrhea, and early syphilis increased in San Diego County as follows:

### Chlamydia:

- 23,007 cases (4.1% increase from 2018)
- Rate of 686.4 cases per 100,000 (3.7% increase from 2018)

#### Gonorrhea:

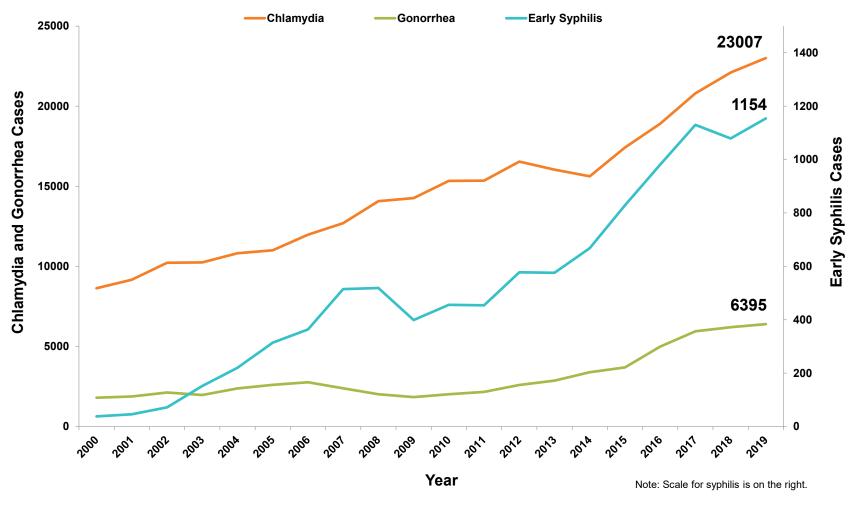
- 6,395 cases (3.1% increase from 2018)
- Rate of 190.8 cases per 100,000 (2.7% increase from 2018)

### Early Syphilis:

- 1,154 cases (7.0% increase from 2018)
- Rate of 34.4 cases per 100,000 (6.5% increase from 2018)

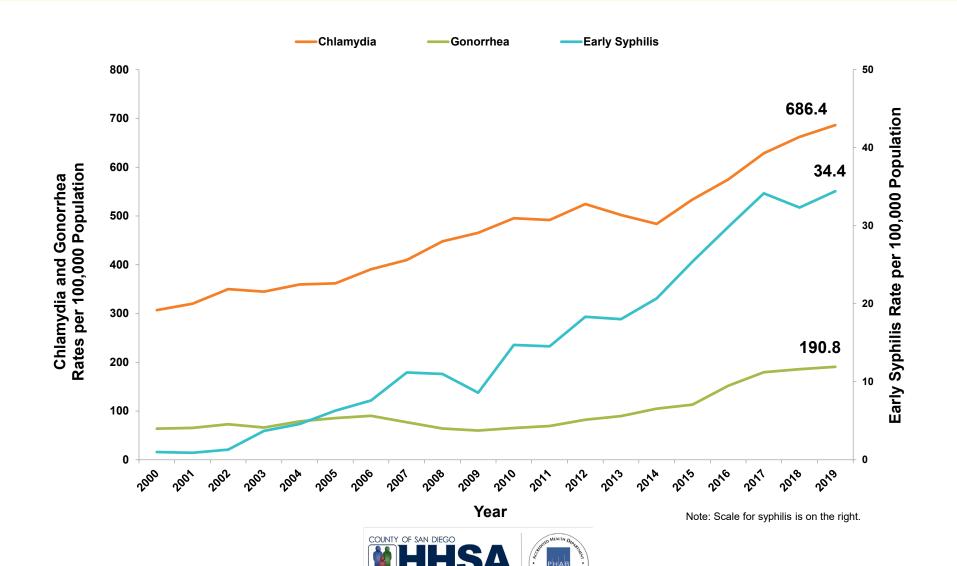


## Chlamydia, Gonorrhea, and Early Syphilis Cases, San Diego County, 2000 - 2019 LIVE WELL SAN DIEGO





## Chlamydia, Gonorrhea, and Early Syphilis LIVE WELL Rates, San Diego County, 2000 - 2019



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## Chlamydia



# Key Points

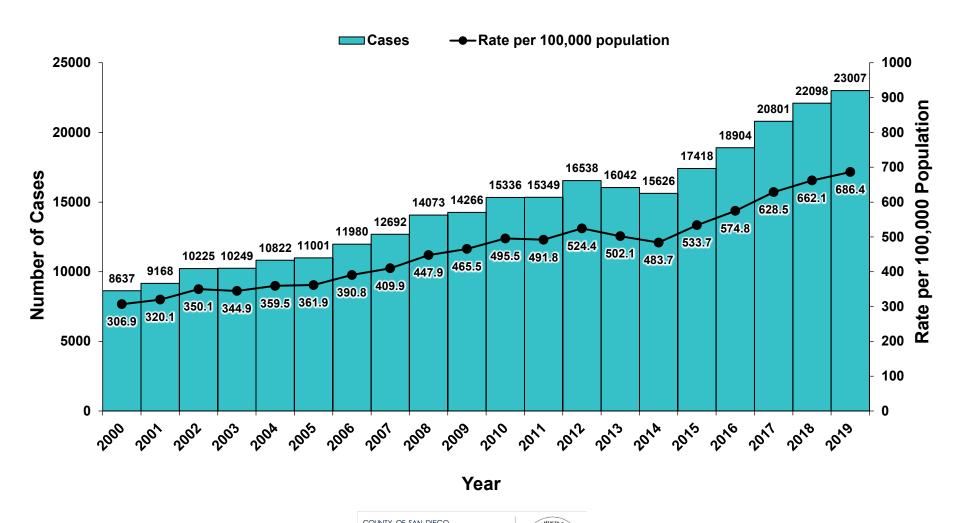
### **Chlamydia in San Diego County**

- Chlamydia was the most commonly reported communicable disease in San Diego County and in California in 2019.
- Cases of chlamydia increased by 4.1% from 22,098 cases in 2018 to 23,007 cases in 2019.
- The overall rate of chlamydia increased by 3.7% from 662.1 cases per 100,000 in 2018 to 686.4 cases per 100,000 in 2019.
- 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 among African-American/black women and men were higher than those of other populations.



## Chlamydia Cases and Rates by Year San Diego County, 2000 - 2019

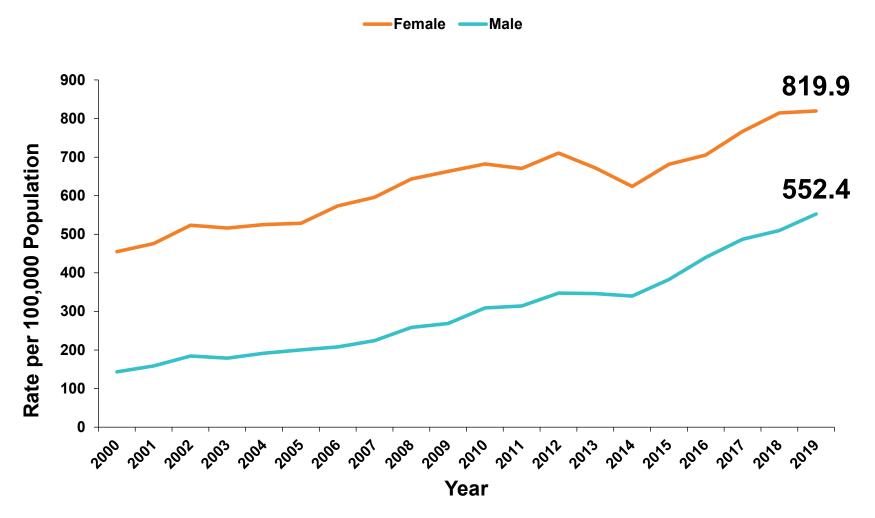




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## Chlamydia Rates by Gender and Year San Diego County, 2000 - 2019



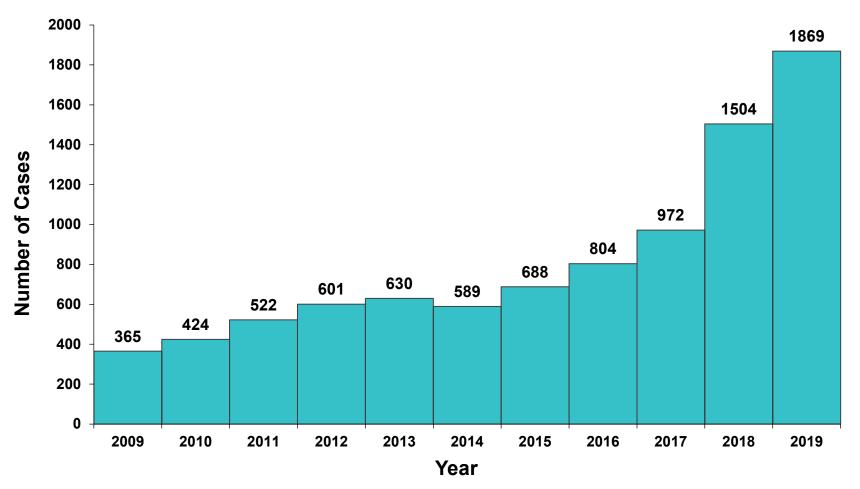




### Rectal or Pharyngeal Chlamydia Infections in Males San Diego County, 2009 - 2019





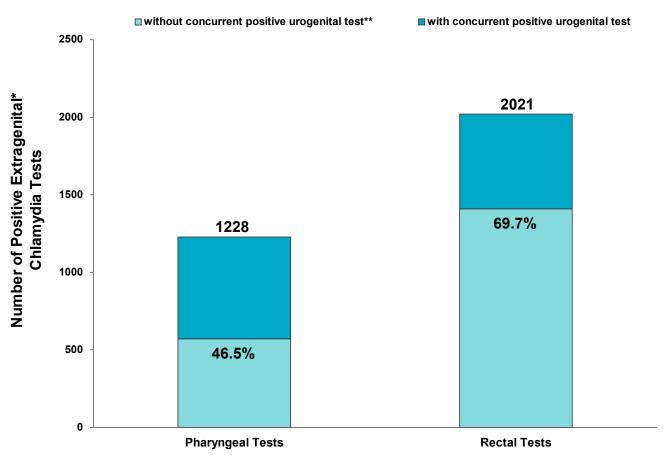


Note: The number of rectal or pharyngeal cases in 2018 is different from the number of rectal or pharyngeal cases published in 2018 STD Data Slides due to recalculation with revised methodology.



## Proportion of Extragenital Chlamydia Infections With & Without Concurrent Positive Urogenital Test, San Diego County, 2019





<sup>\*</sup>Extragenital refers to pharyngeal and rectal anatomic sites.

<sup>\*\*</sup>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.

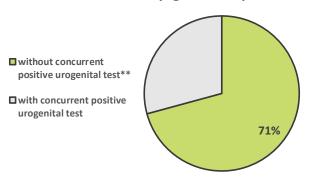


## Proportion of Extragenital Chlamydia Infections With & Without Concurrent Positive Urogenital Test by Gender, San Diego County, 2019

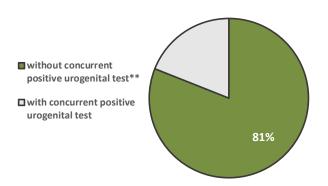




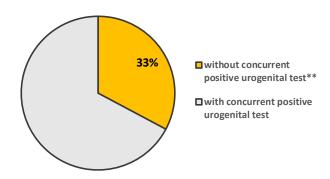




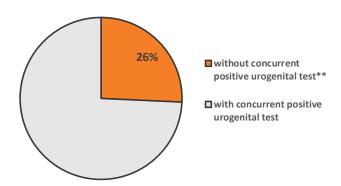
#### **Rectal Chlamydia in Males**



#### **Pharyngeal Chlamydia in Females**



#### **Rectal Chlamydia in Females**



<sup>\*\*</sup>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.

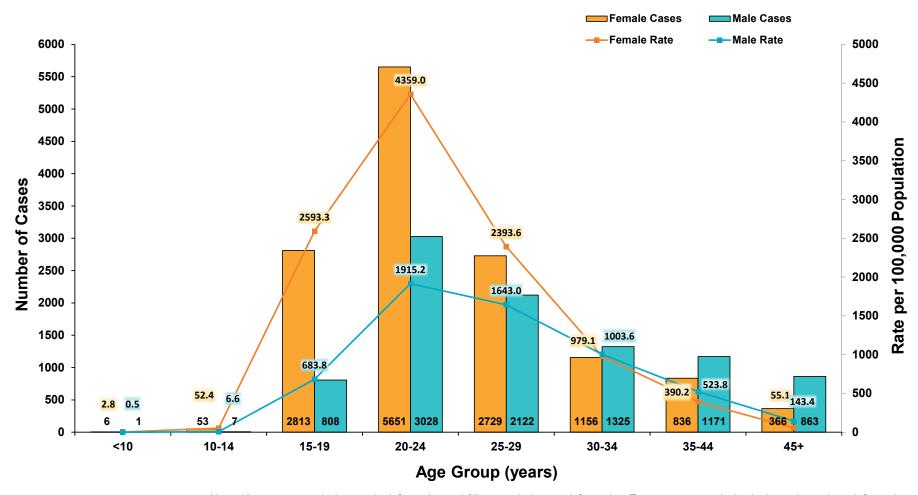




<sup>\*</sup>Extragenital refers to pharyngeal and rectal anatomic sites.

### Chlamydia Cases and Rates by Gender and Age San Diego County, 2019



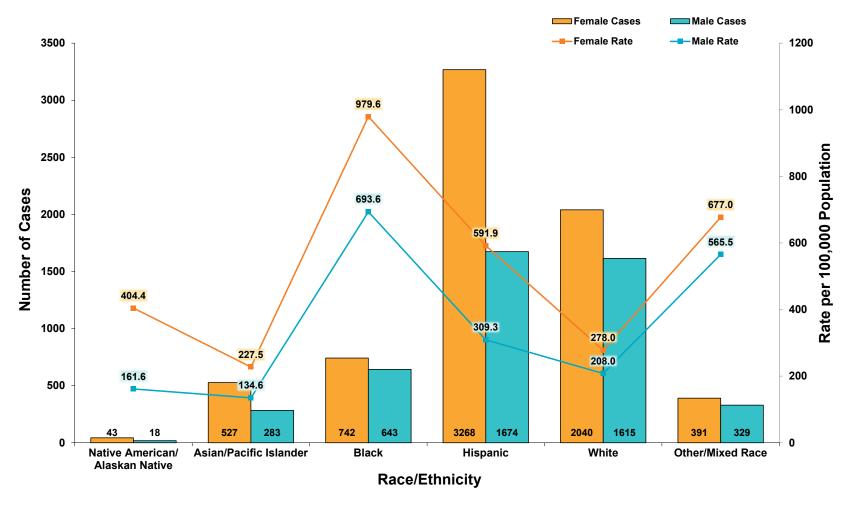


Note: 45 cases were missing gender information and 25 were missing age information. Two cases were missing both gender and age information.



### Chlamydia Cases and Rates by Gender and Race/Ethnicity San Diego County, 2019



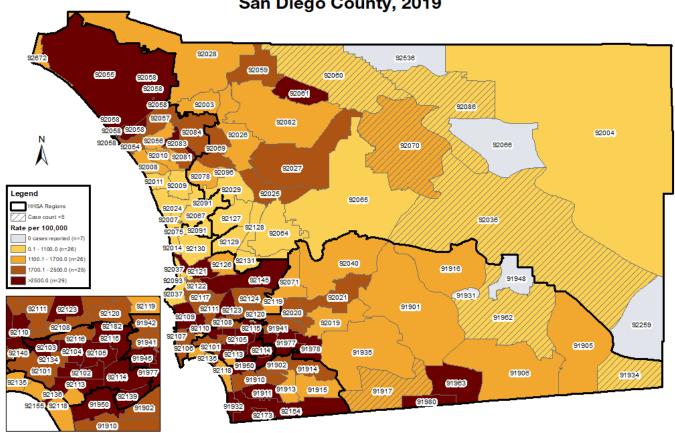


Note: 49.7% of cases are missing race/ethnicity or gender information and are not included in counts above.





### Chlamydia Rates by Zip Code Among Persons Aged 15 to 29 Years, San Diego County, 2019

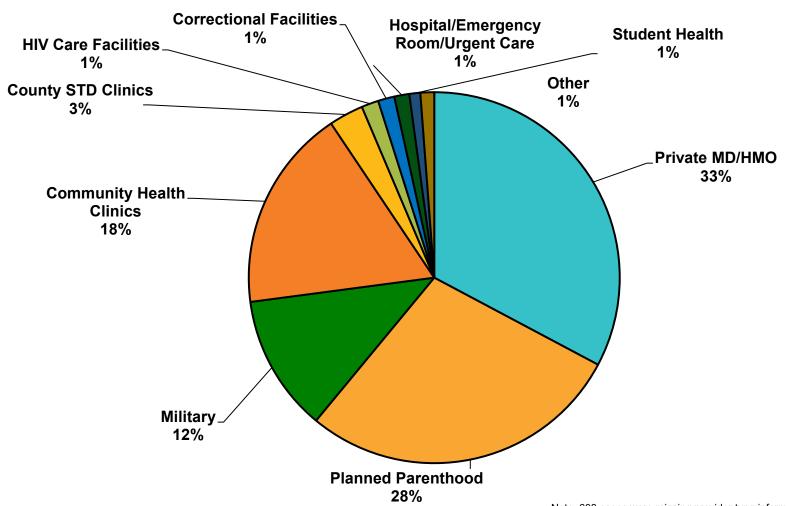


Source: County of San Diego, Health and Human Services Agency, HSHB (HIV, STD, Hepatitis Branch), CalREDIE Database Map Date: March 3, 2021



# **Chlamydia Cases by Reporting Facility Type San Diego County, 2019**



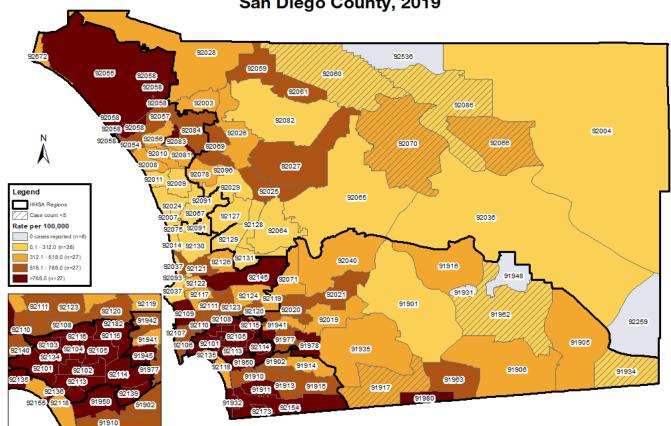


Note: 608 cases were missing provider type information.





### Chlamydia Rates by Zip Code San Diego County, 2019



Source: County of San Diego, Health and Human Services Agency, HSHB (HIV, STD, Hepatitis Branch), CalREDIE Database Map Date: March 3, 2021



## Gonorrhea



### **Key Points**

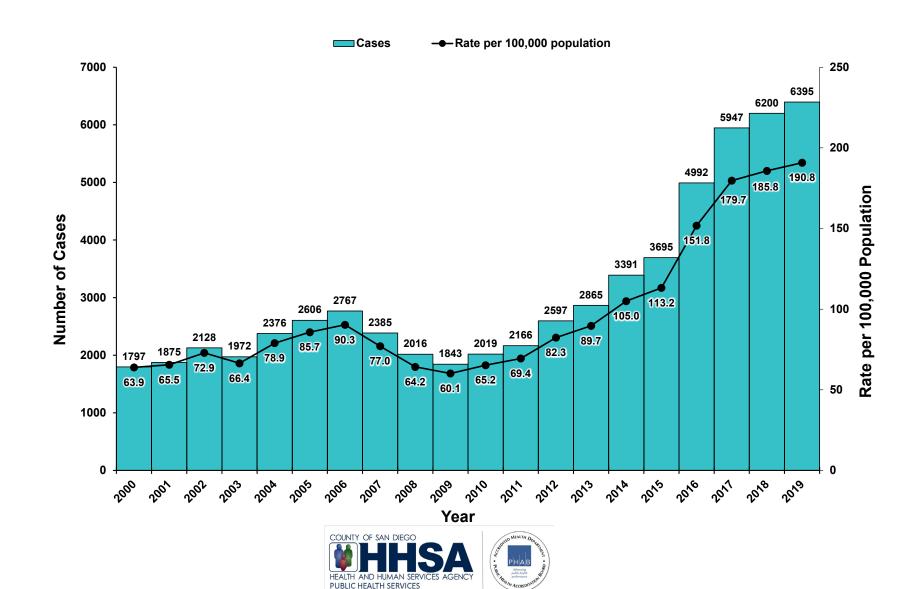
### **Gonorrhea in San Diego County**

- Cases of gonorrhea increased by 3.1% from 6,200 cases in 2018 to 6,395 cases in 2019.
- The overall rate of gonorrhea increased by 2.7% from 185.8 cases per 100,000 in 2018 to 190.8 cases per 100,000 in 2019.
- The rate of gonorrhea in males is almost two times the rate in females and increased by 2.7% between 2018 and 2019.
- Men aged 20 to 34 years have the highest rates of infection.
- The rate of gonorrhea in African-American/black males is 4.3 times that of white males and 2.4 times that of Hispanic males; the rate of infection in African-American/black females is 4.7 times that of white females and 2.5 times that of Hispanic females.



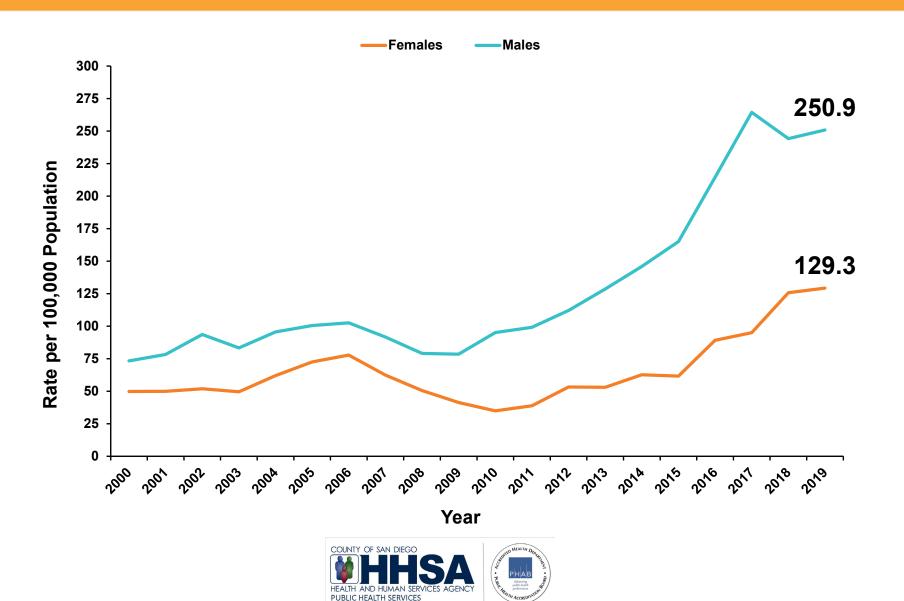
## Gonorrhea Cases and Rates by Year San Diego County, 2000 - 2019





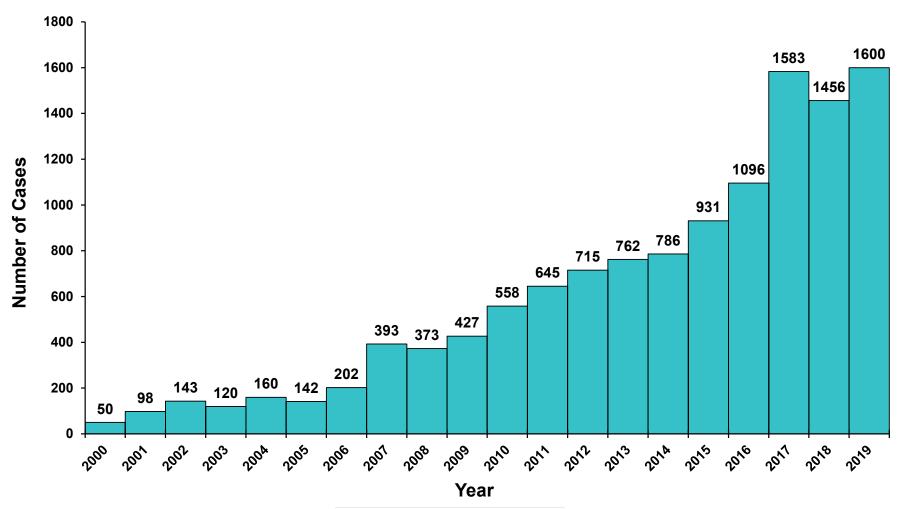
## Gonorrhea Rates by Gender and Year San Diego County, 2000 - 2019





## Rectal or Pharyngeal Gonorrhea in Males San Diego County, 2000 - 2019

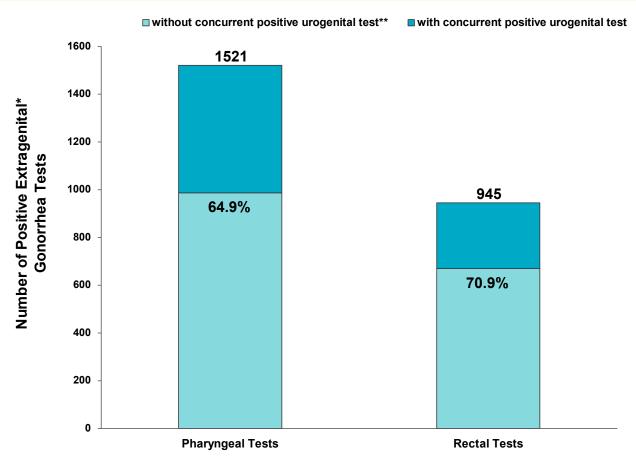






## Proportion of Extragenital Gonorrhea With & Without Concurrent Positive Urogenital Test, San Diego County, 2019





<sup>\*</sup>Extragenital refers to pharyngeal and rectal anatomic sites.

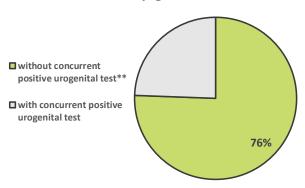
<sup>\*\*</sup>Note: Due to negative gonorrhea laboratory results not being reportable to the local public health departments, "without concurrent positive urogenital test" category means that no positive urogenital test result was reported to the County of San Diego HIV, STD, and Hepatitis Branch for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



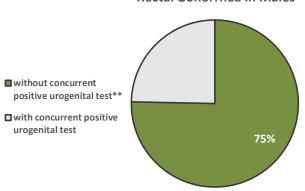
## Proportion of Extragenital\* Gonorrhea With & Without Concurrent Positive Urogenital Test by Gender, San Diego County, 2019



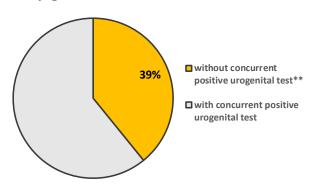




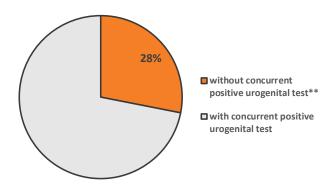
#### **Rectal Gonorrhea in Males**



#### **Pharyngeal Gonorrhea in Females**



#### **Rectal Gonorrhea in Females**



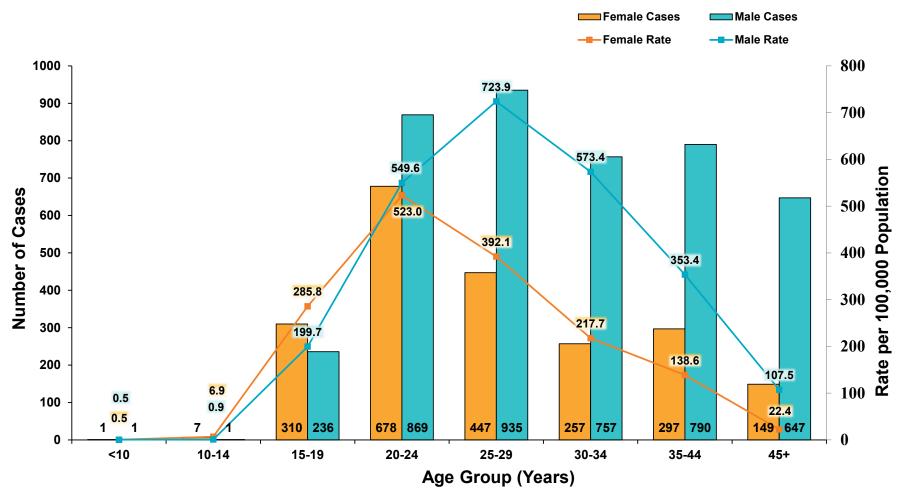
<sup>\*\*</sup>Note: Due to negative gonorrhea laboratory results not being reportable to the local public health departments, "without concurrent positive urogenital test" category means that no positive urogenital test result was reported to the County of San Diego HIV, STD, and Hepatitis Branch for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



<sup>\*</sup>Extragenital refers to pharyngeal and rectal anatomic sites.

### Gonorrhea Cases and Rates by Gender and Age San Diego County, 2019



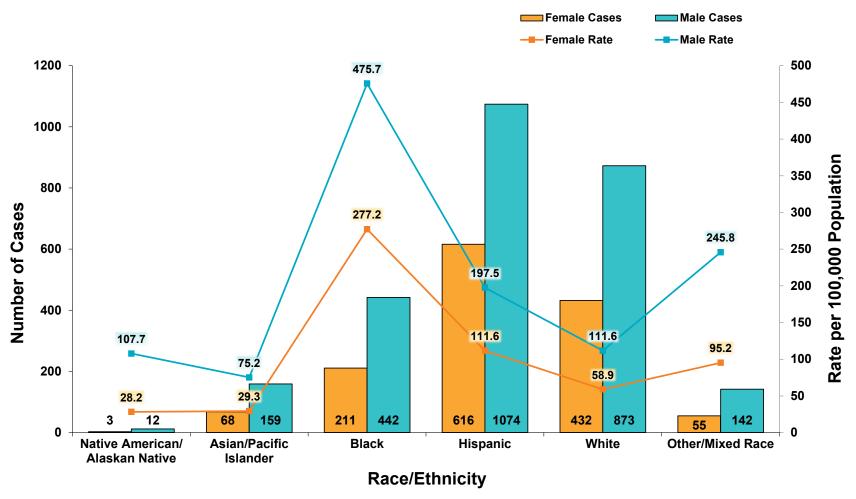


Note: 6 cases were missing gender information and 6 cases were missing age information. One case was missing both gender and age information.



### Gonorrhea Cases and Rates by Gender and Race/Ethnicity San Diego County, 2019



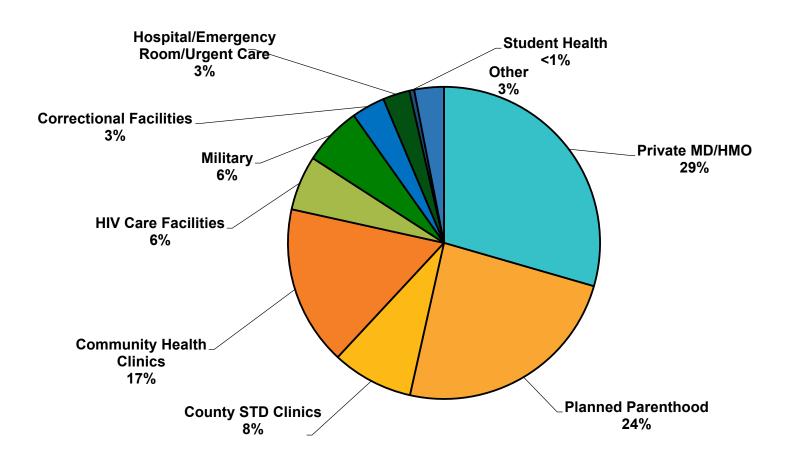


Note: 36.4% of cases are missing race/ethnicity or gender information and are not included in counts above.



### Gonorrhea Cases by Reporting Facility Type San Diego County, 2019



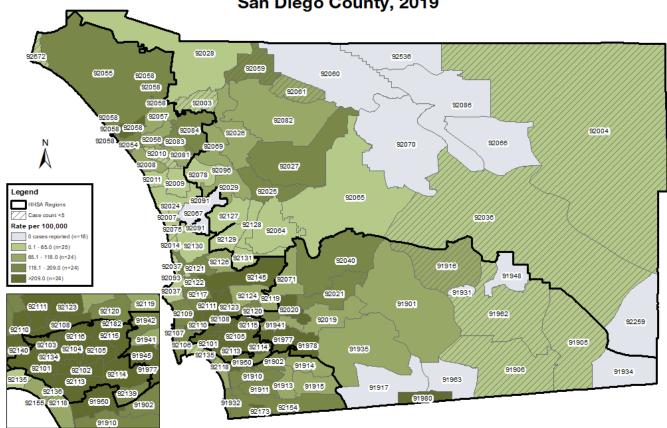


Note: 360 cases were missing provider type information.





#### Gonorrhea Rates by Zip Code San Diego County, 2019



Source: County of San Diego, Health and Human Services Agency, HSHB (HIV, STD, Hepatitis Branch), CalREDIE Database Map Date: March 3, 2021



## Syphilis



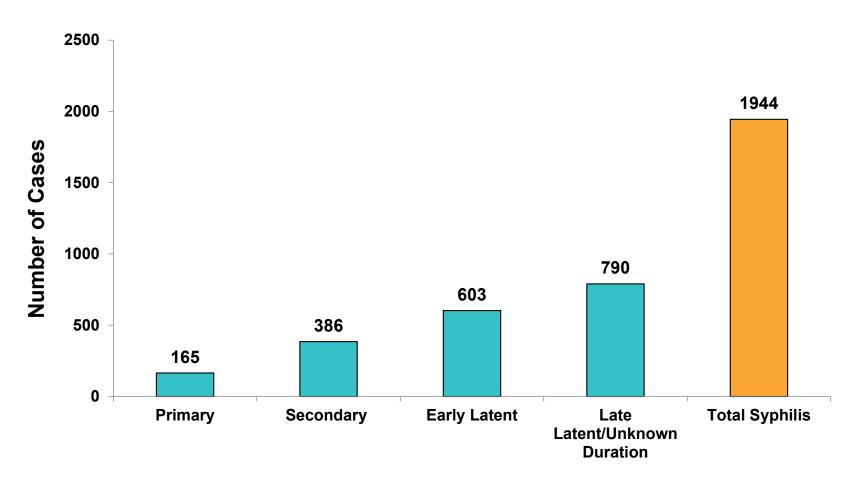
### Syphilis Stages and Significance

- Primary: 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.
- Early latent: no signs or symptoms of active infection; infection can be proven to have occurred <1 year ago.</li>
- <u>Late latent</u>: 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, 2019



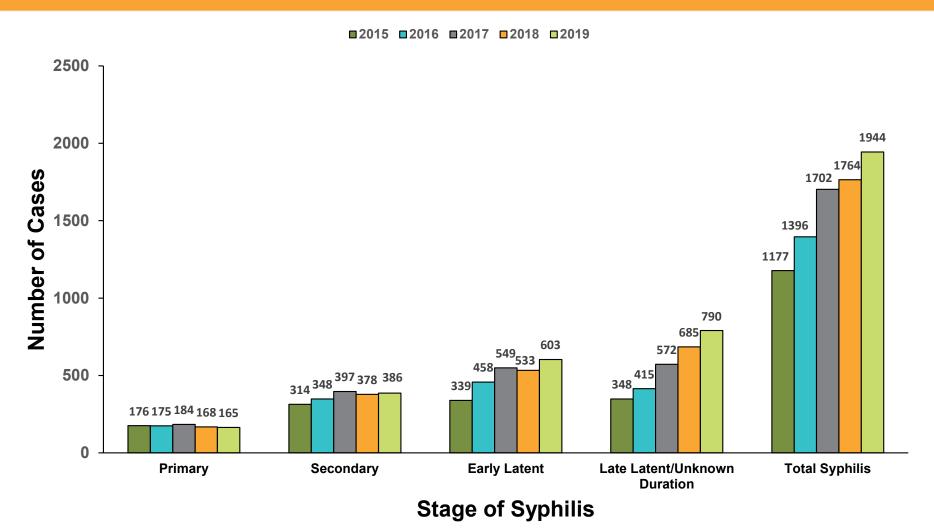


#### **Stage of Syphilis**



## Case Count by Stage of Syphilis San Diego County, 2015 - 2019



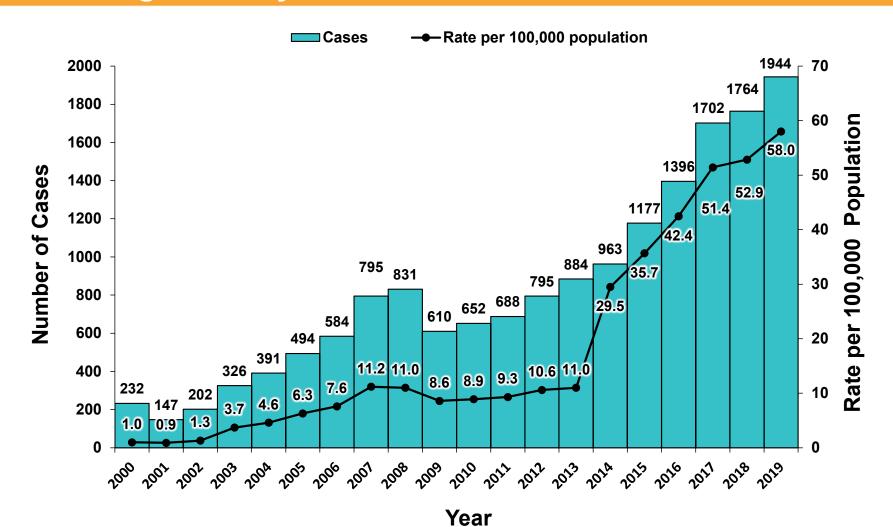




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# Syphilis (All Stages) Cases and Rates by Year San Diego County, 2000 - 2019

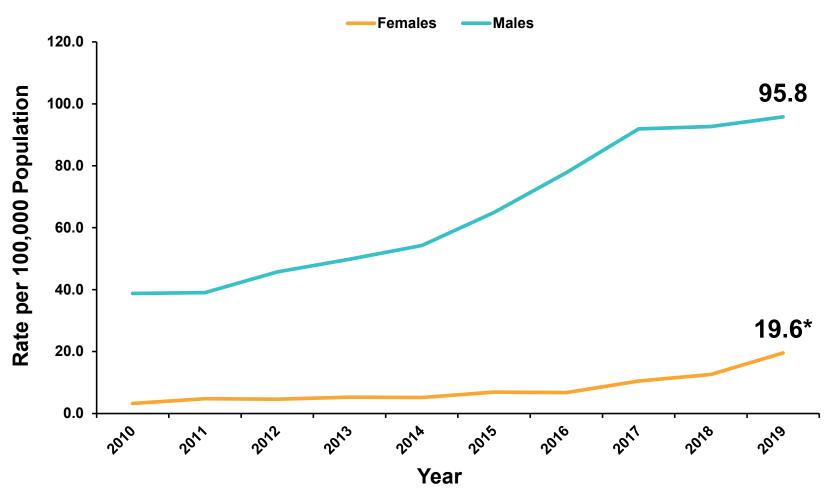






# Syphilis (All Stages) Rates by Gender and Year San Diego County, 2010 - 2019



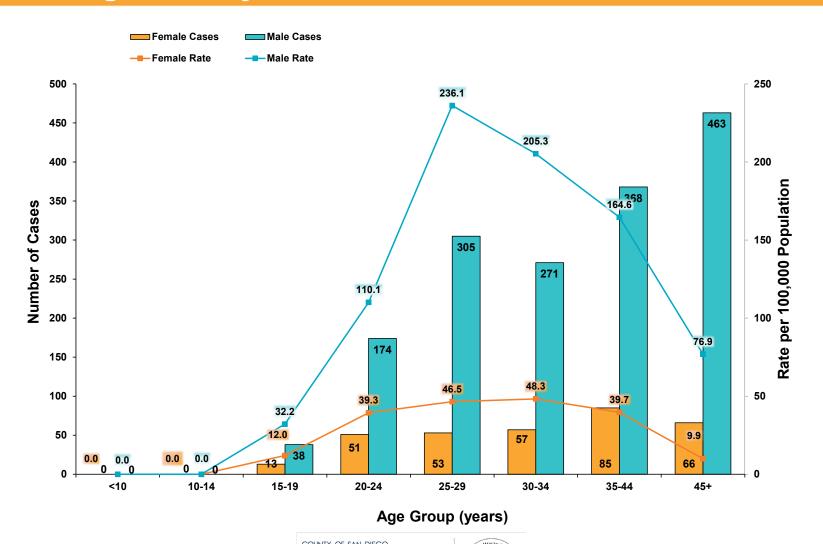


\* Between 2018 and 2019 the female syphilis rate and the number of cases both increased by 56%.



#### Syphilis (All Stages) Cases and Rates by Gender and Age San Diego County, 2019

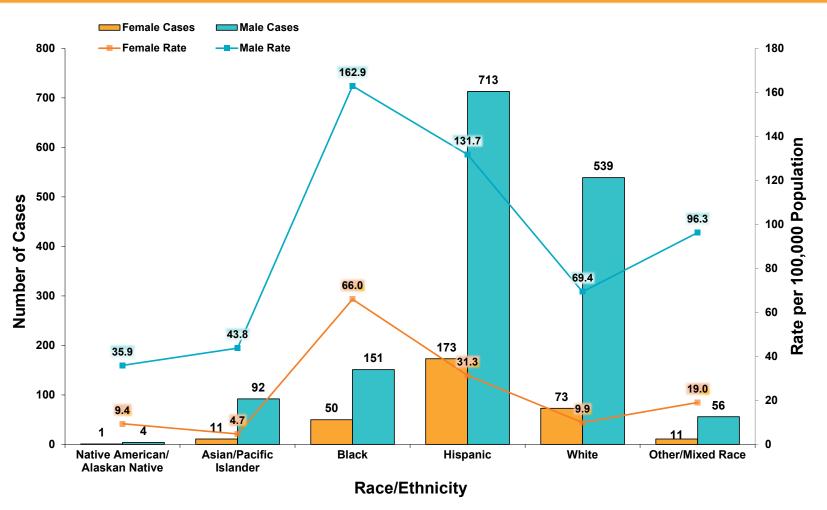




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# Syphilis (All Stages) Cases and Rates by Gender and Race/Ethnicity San Diego County, 2019





Note: Counts exclude 70 cases missing race/ethnicity information.





#### San Diego County, 2019 Legend HHSA Regions Rate per 100,000 0.1 - 20.0 (n=22) 20.1 - 35.0 (n=24) 35.1 - 55.0 (n=22)

Syphilis (All Stages) Rates by Zip Code

Source: County of San Diego, Health and Human Services Agency, HSHB (HIV, STD, Hepatitis Branch), CalREDIE Database Map Date: March 19, 2021

92111 / 92123



# Primary & Secondary Syphilis



## **Key Points**

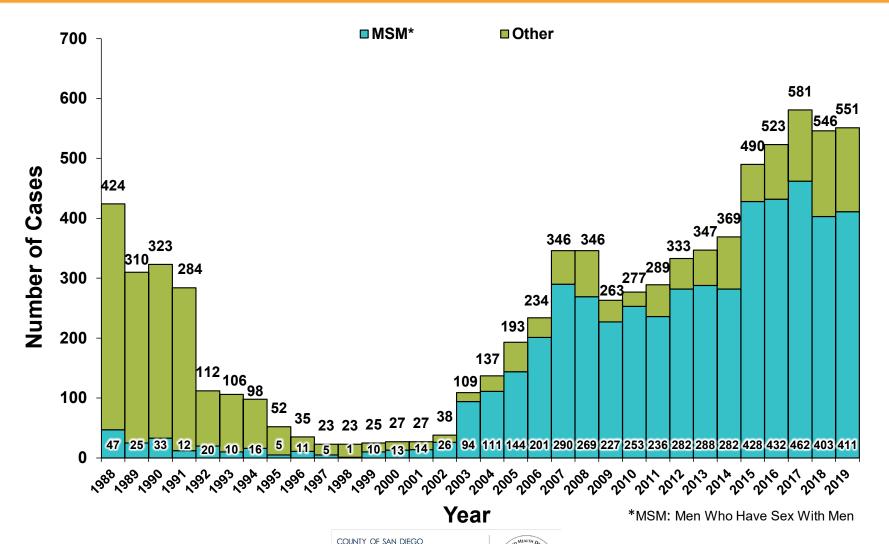
#### Primary & Secondary Syphilis in San Diego County

- Cases of primary and secondary syphilis increased by 1% from 546 cases in 2018 to 551 cases in 2019.
- There was no change in the overall rate of primary and secondary syphilis between 2018 and 2019 (16.4 cases per 100,000).
- The majority of primary and secondary syphilis cases (74.6%) are men who have sex with men (MSM).
- Rates are highest among males aged 25 to 34 years.
- African-American/black males have the highest rate of infection; the rate of infection in African-American/black males is 2.5 times that of white males.
- An estimated 37% of MSM primary and secondary syphilis cases are co-infected with HIV.



#### Primary & Secondary Syphilis Cases by Year San Diego County, 1988 - 2019

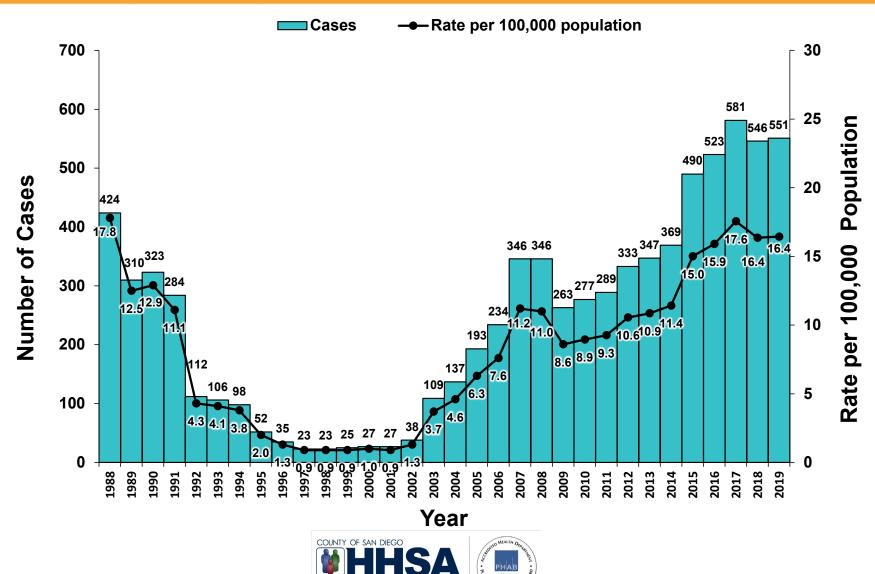




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# Primary & Secondary Syphilis Cases and Rates by Year San Diego County, 1988 - 2019

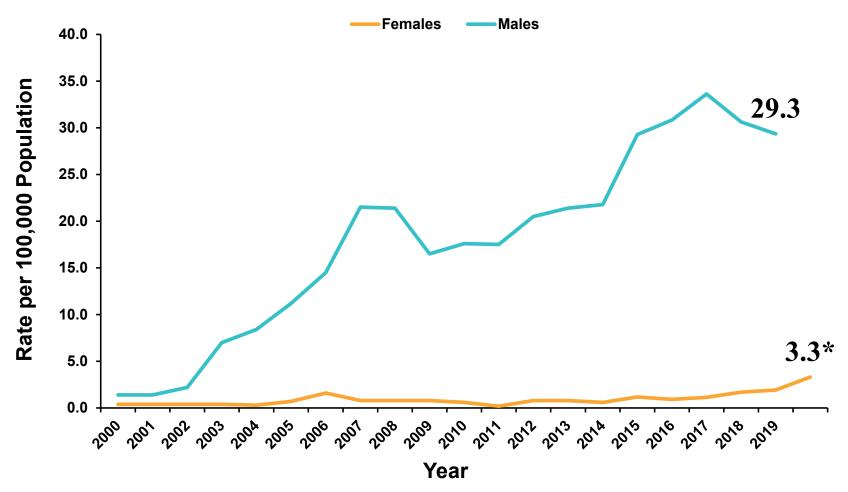




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#### Primary & Secondary Syphilis Rates by Gender and Year San Diego County, 2000 - 2019



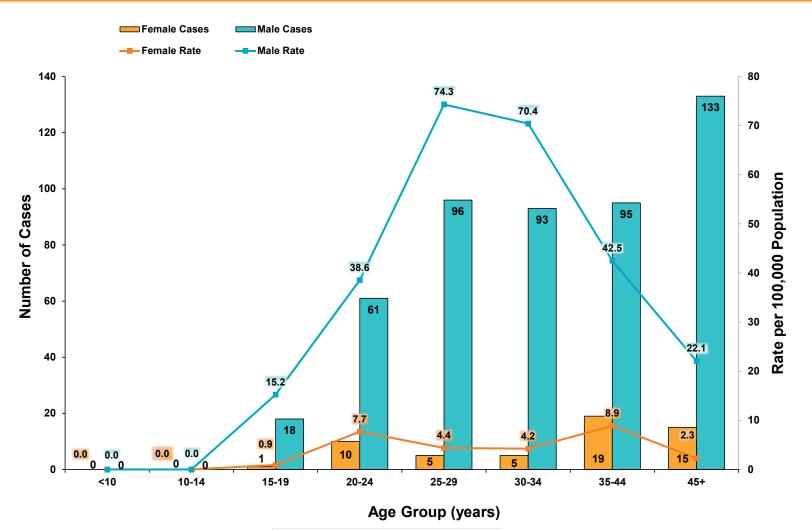


<sup>\*</sup> Between 2018 and 2019 primary and secondary syphilis rates increased by 73.7% in females and decreased by 4.2% in males.



# Primary & Secondary Syphilis Cases and Rates by Gender and Age San Diego County, 2019

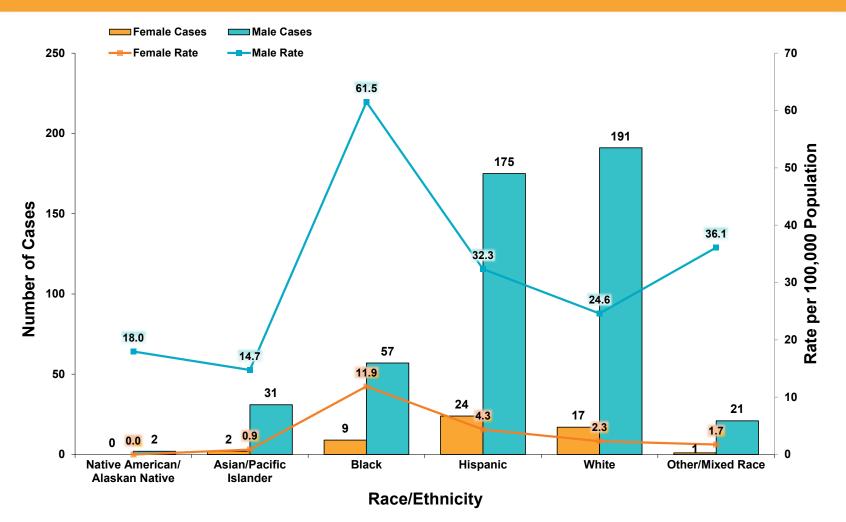






## Primary & Secondary Syphilis Cases and Rates by Gender and Race/Ethnicity San Diego County, 2019



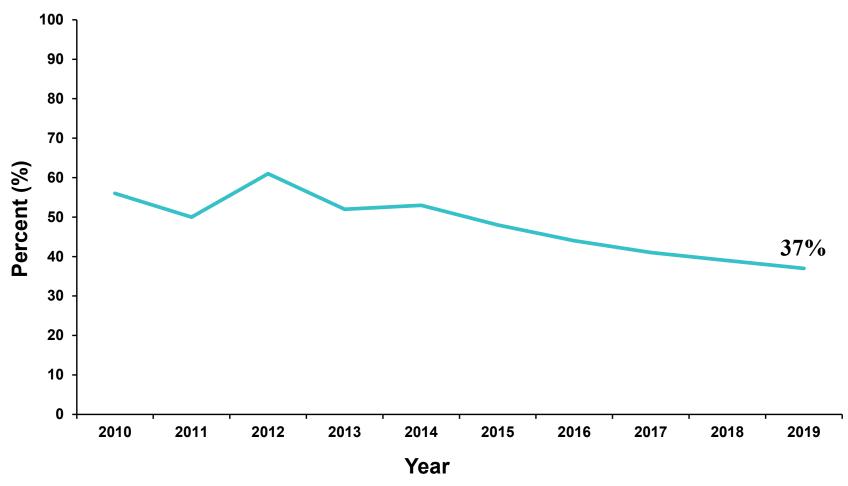


Note: Counts exclude 21 cases missing race/ethnicity information.



## Percent of MSM\* Primary & Secondary Syphilis Cases Co-Infected with HIV by Year San Diego County, 2010 - 2019



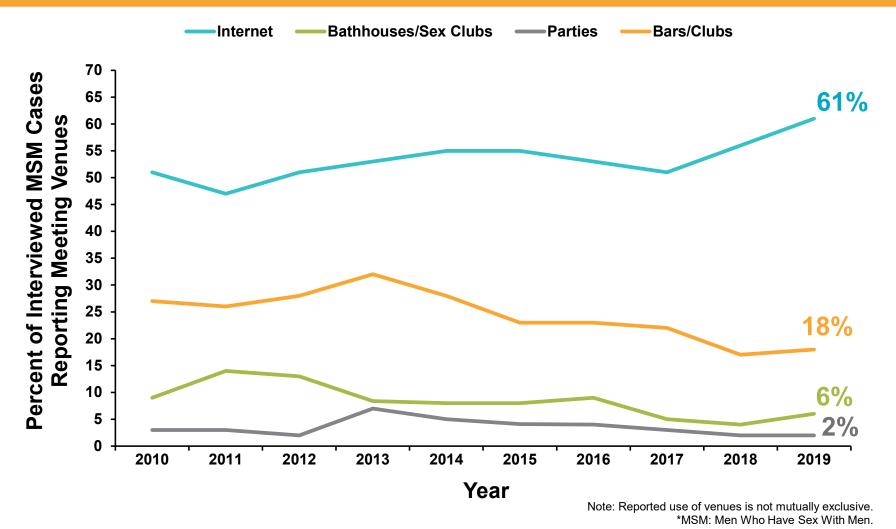






## Meeting Venues Among Interviewed MSM\* Primary & Secondary Syphilis Cases San Diego County, 2010 – 2019

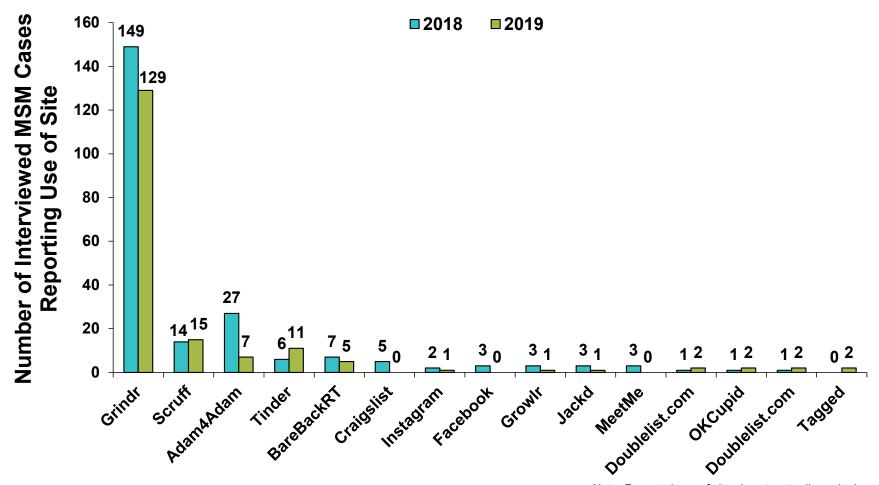






## Reported Use of Internet-Based Services\* Among MSM\*\* Primary & Secondary Syphilis Cases San Diego County, 2018 – 2019





Note: Reported use of sites is not mutually exclusive.

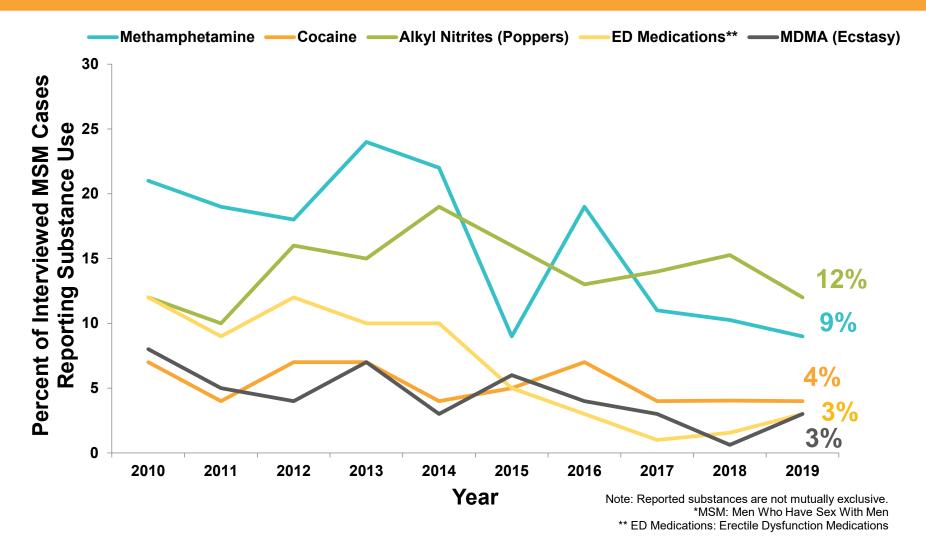
\* Included websites have been used by at least 2 MSM cases per year in 2018 or 2019.

\*\*MSM: Men Who Have Sex With Men



## Reported Substance Use of Interviewed MSM\* Primary & Secondary Syphilis Cases by Year San Diego County, 2010 – 2019

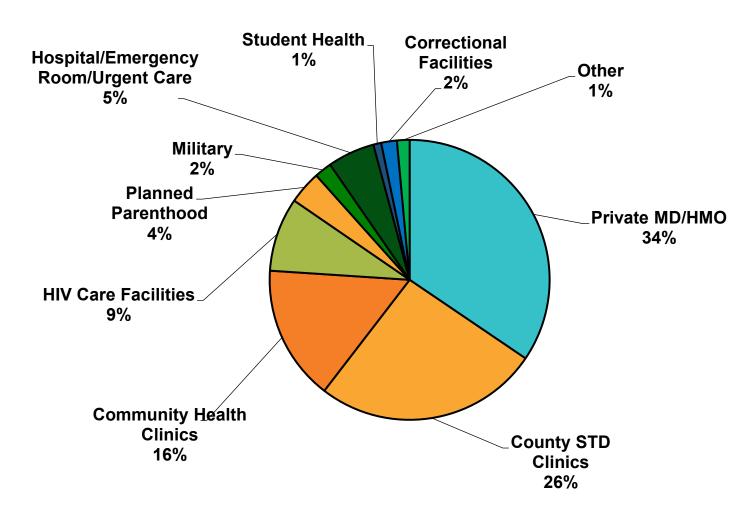






#### Primary & Secondary Syphilis Cases by Reporting Facility Type San Diego County, 2019

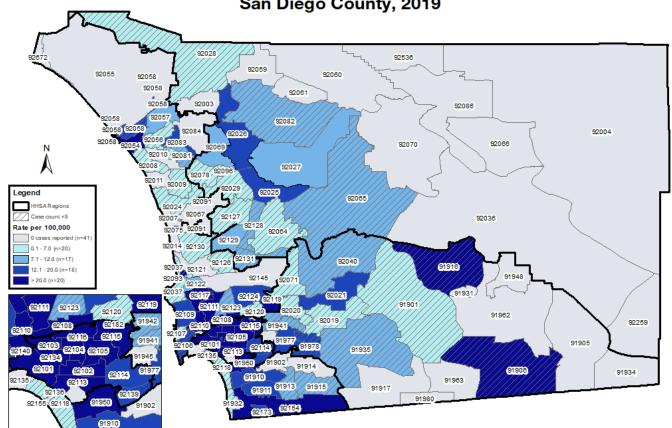








### Primary and Secondary Syphilis Rates by Zip Code San Diego County, 2019



Source: County of San Diego, Health and Human Services Agency, HSHB (HIV, STD, Hepatitis Branch), CalREDIE Database Map Date: March 19, 2021



# Early (Primary, Secondary, & Early Latent) Syphilis



## **Key Points**

#### **Early Syphilis in San Diego County**

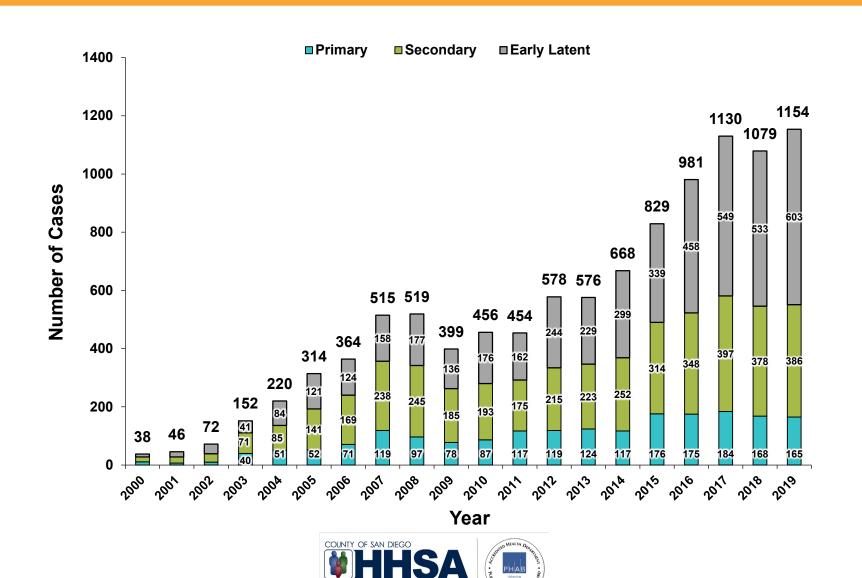
- Cases of early syphilis increased by 7% from 1,079 cases in 2018 to 1,154 cases in 2019.
- The overall rate of early syphilis increased by 6.5% from 32.3 cases per 100,000 in 2018 to 34.4 cases per 100,000 in 2019.
- The majority of early syphilis cases (81.6%) are men who have sex with men (MSM). An estimated 53.6% of MSM early syphilis cases are co-infected with HIV.
- Rates are highest among males aged 25 to 34 years.
- African-American/black males have the highest rate of infection; the rate of infection in African-American/black males is 2 times that of white males.

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## Early Syphilis Cases by Year and Stage San Diego County, 2000 - 2019

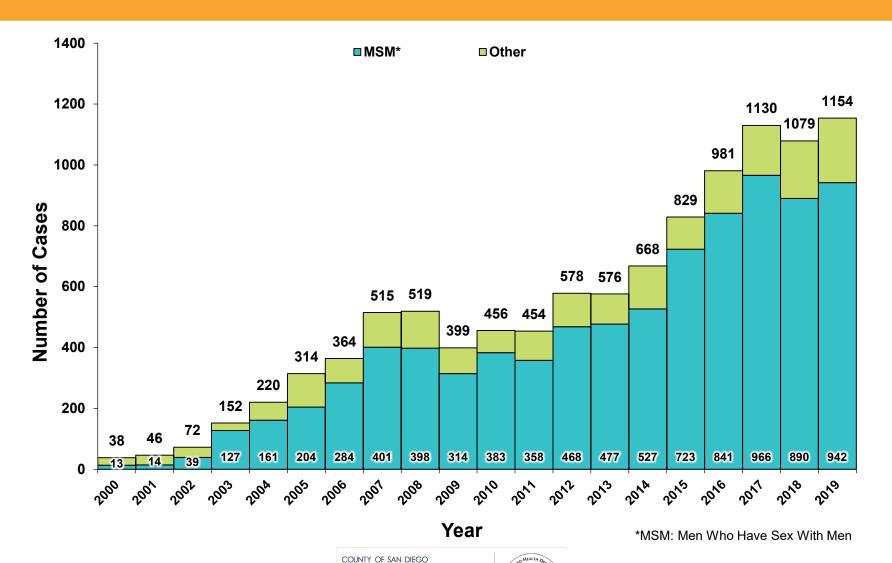




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## Early Syphilis Cases by Year San Diego County, 2000 - 2019

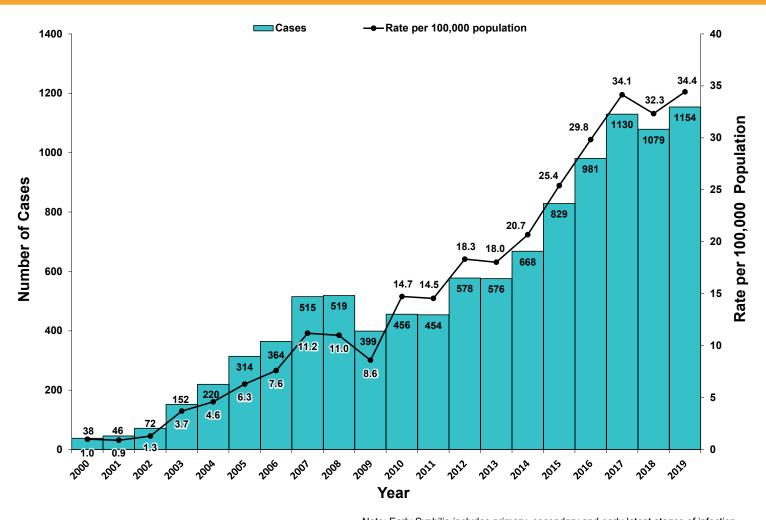




**PUBLIC HEALTH SERVICES** 

## Early Syphilis Cases and Rates by Year San Diego County, 2000 - 2019





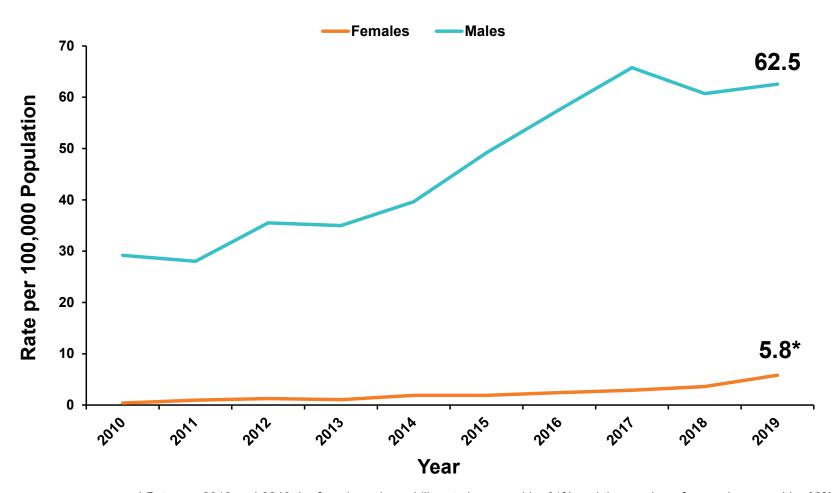
Note: Early Syphilis includes primary, secondary and early latent stages of infection.



## Early Syphilis Rates by Gender and Year San Diego County, 2010 - 2019





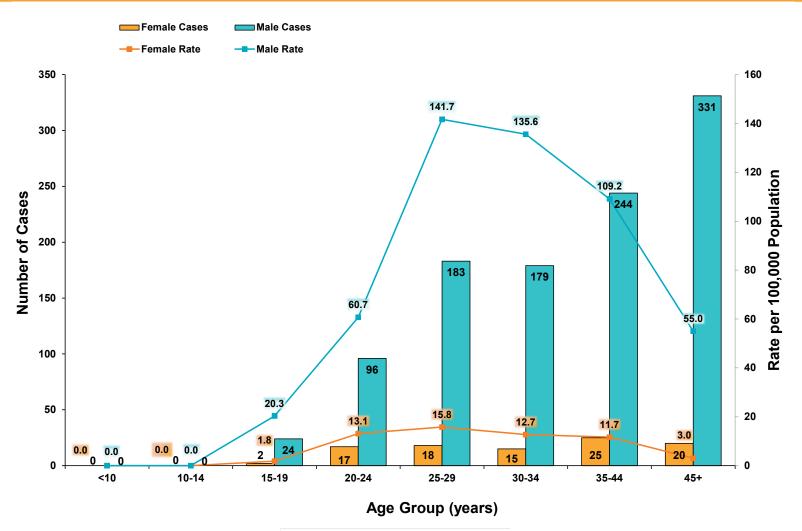


<sup>\*</sup> Between 2018 and 2019 the female early syphilis rate increased by 61% and the number of cases increased by 62%.



#### Early Syphilis Cases and Rates by Gender and Age San Diego County, 2019

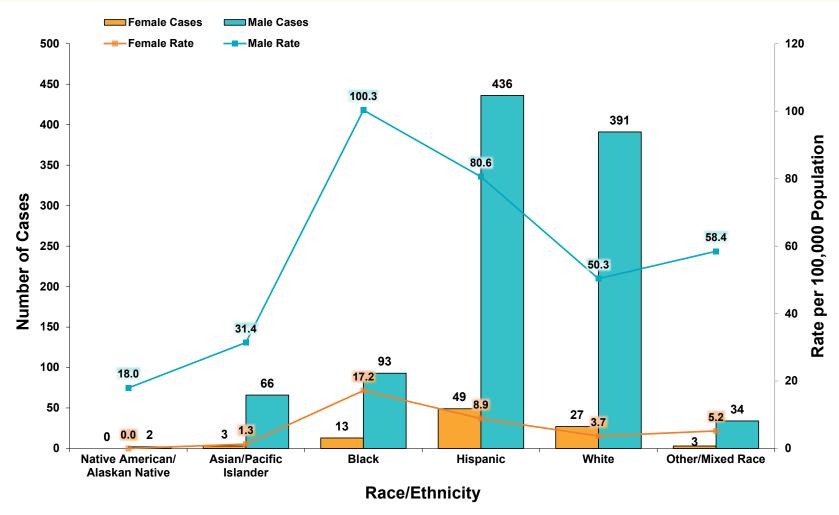






#### Early Syphilis Cases and Rates by Gender and Race/Ethnicity San Diego County, 2019



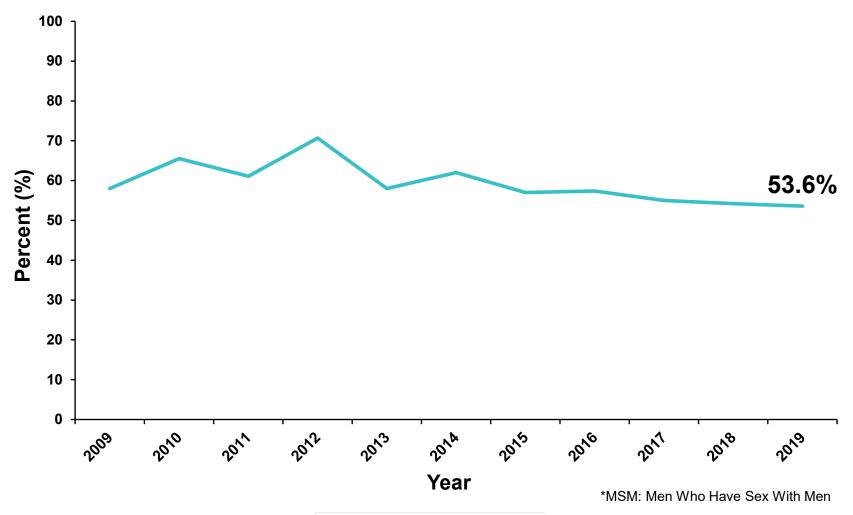


Note: Counts exclude 37 cases missing race/ethnicity information.



#### Percent of MSM\* Early Syphilis Cases Co-Infected with HIV by Year San Diego County, 2009 - 2019

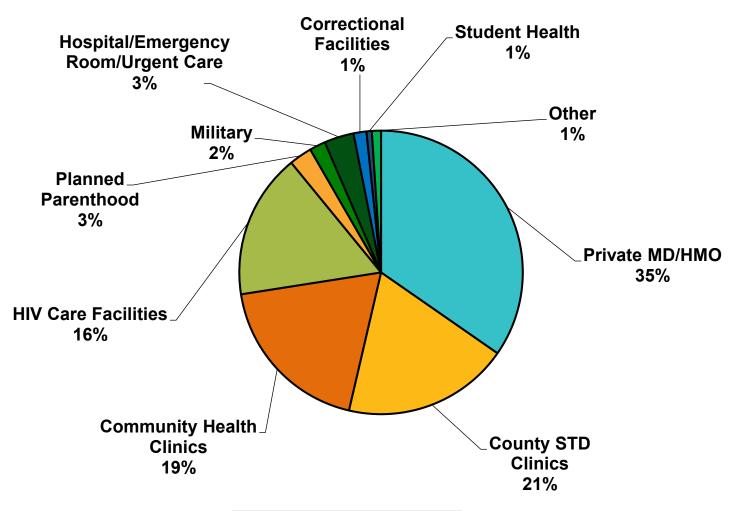






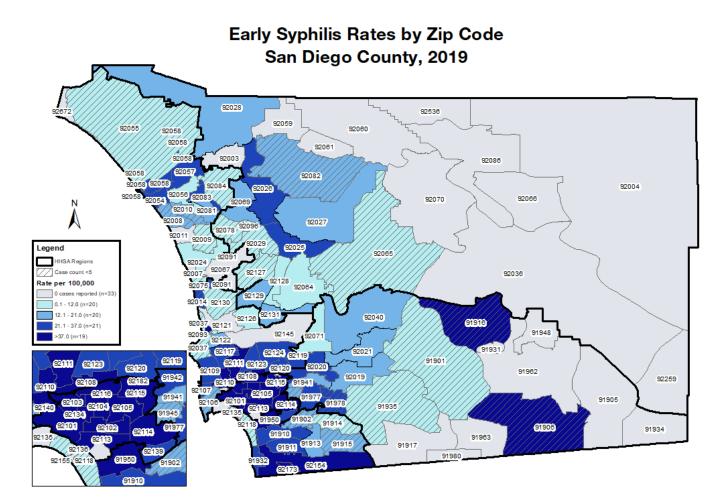
#### Early Syphilis Cases by Reporting Facility Type San Diego County, 2019











Source: County of San Diego, Health and Human Services Agency, HSHB (HIV, STD, Hepatitis Branch), CalREDIE Database Map Date: March 19, 2021



# Female & Congenital Syphilis



## **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 from 2015-2019.
  - Cases of total syphilis (all stages) increased by 52% from 187 cases in 2018 to 284 cases in 2019, and the rate increased by 47% from 24.7 cases per 100,000 in 2018 to 36.2 cases per 100,000 in 2019. Nineteen percent of syphilis cases were pregnant at the time of diagnosis.
  - Cases of early syphilis increased by 55% from 55 cases in 2018 to 85 cases in 2019. The rate of early syphilis in women of childbearing age in 2019 increased significantly and was 1.5 times higher than it was in 2018 (p < 0.05).
- Congenital syphilis rates have steadily increased from 2015 through 2019, with the largest increase by 45.8% between 2018-2019, though none of the increases in rates was statistically significant.
- Of congenital syphilis cases reported in 2019, three (14.3%) resulted in stillbirth.



### Congenital Syphilis Surveillance Definitions

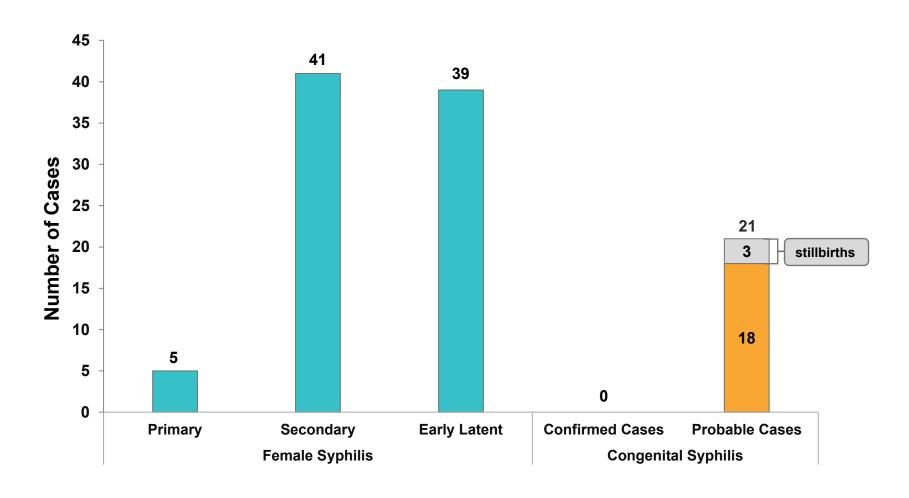
- Congenital Syphilis (C.S.): any infant whose mother had untreated or inadequately treated\* syphilis at the time of delivery, regardless of findings in the infant or child
  - Confirmed C.S.: Infant or child in whom *Treponema pallidum* is identified by darkfield microscopy, direct
     fluorescent 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 <u>and</u> 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.



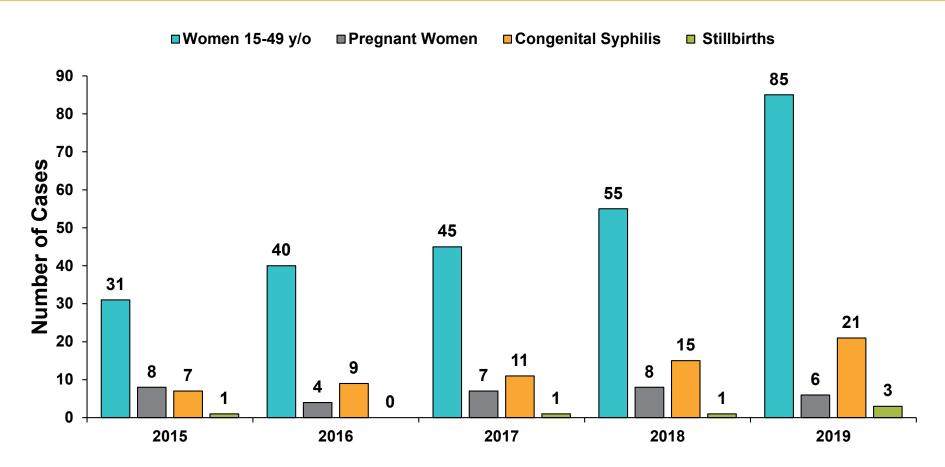
## Cases of Syphilis in Women of Childbearing Age (15–49 y/o) and Congenital Syphilis San Diego County, 2019







## Cases – Early Syphilis in Women of Childbearing Age (15-49 y/o) & Pregnant Women, Congenital Syphilis, & Stillbirths San Diego County, 2015 - 2019 LIVE WEI SAN DIEG

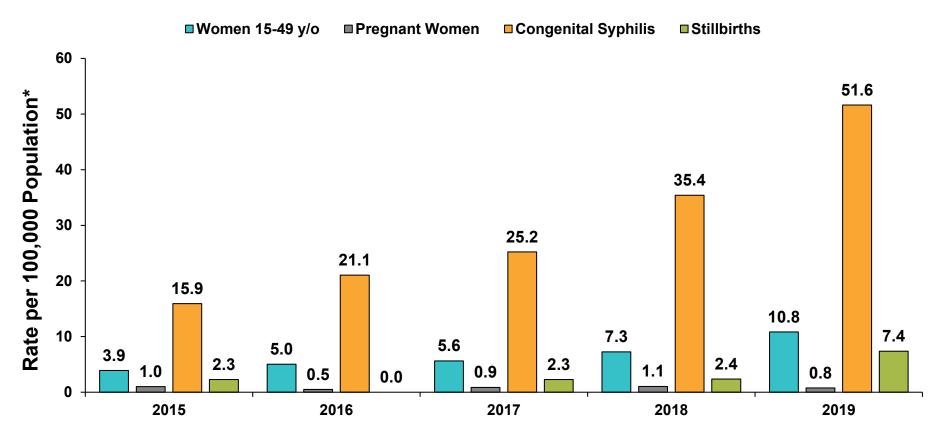


Note: Early syphilis includes primary, secondary, and early latent stages of syphilis. Syphilitic stillbirths are included in the congenital syphilis case counts.



## Rates – Early Syphilis in Women of Childbearing Age (15-49 y/o) & Pregnant Women, Congenital Syphilis, & Stillbirths San Diego County, 2015 - 2019





Note: Early syphilis includes primary, secondary, and early latent stages of syphilis.

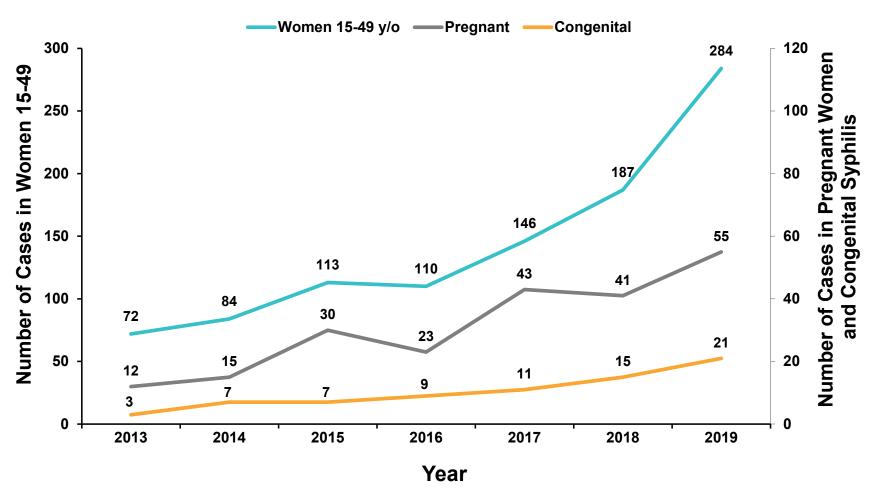
\*Rates for women 15-49 y/o and pregnant women were defined based on population estimates of women 15-49 years of age.

Rates for congenital syphilis and stillbirths 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- 2019



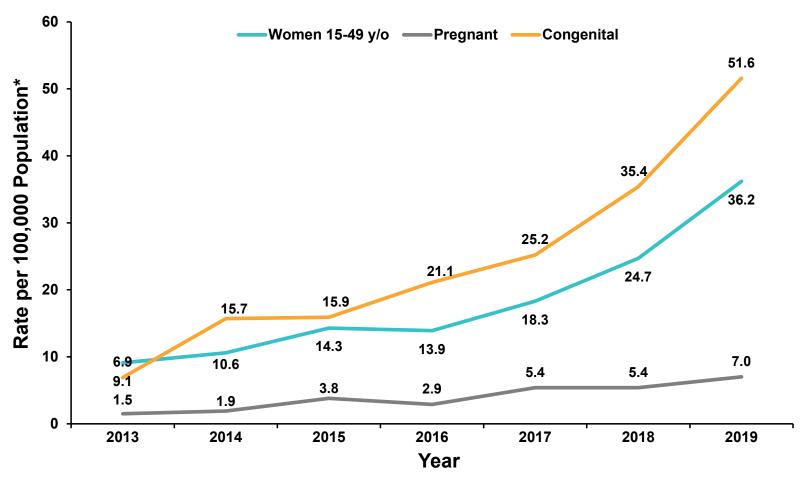


Note: Scale for syphilis cases in pregnant women and congenital syphilis cases is on the right side.



# Rates - Syphilis (All Stages) in Women of Childbearing Age (15-49 y/o) & Pregnant Women, Congenital Syphilis San Diego County, 2013- 2019





\*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 <a href="mailto:std@sdcounty.ca.gov">std@sdcounty.ca.gov</a>, or visit <a href="www.STDSanDiego.org">www.STDSanDiego.org</a> (click on "Reports and Statistics").

