

March 2023
www.STDSanDiego.org



SEXUALLY TRANSMITTED DISEASES IN SAN DIEGO COUNTY 2021 DATA SLIDES

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



Acknowledgements



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Preface

This publication, *Sexually Transmitted Diseases in San Diego County, 2021 Data Slides*, includes reported disease data collected through 2021 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: SANDAG Vintage 2021 Population Estimates; County of San Diego, Health and Human Services Agency, Public Health Services Division, Community Health Statistics Unit. 9/2022.
- The following is an example of the difference between cases and rates:

| Region | Case Count | Population | Rate per 100,000 |
|--------|------------|------------|---|
| | | | $\frac{\text{Case Count} * 100,000}{\text{Population}}$ |
| A | 10,000 | 200,000 | 5,000 |
| B | 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



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- 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, in order to maintain confidentiality.
 - Cases with missing gender information or gender reported as "unknown," "identity not listed," or "declined to answer," and missing sex assigned at birth information were excluded from the calculations involving the gender variable.



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).

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

Source: <https://www.uspreventiveservicestaskforce.org>



STDs in San Diego County

Reported cases and rates of chlamydia, gonorrhea, and early syphilis changed in San Diego County from pre-pandemic 2019 and pandemic 2020 to 2021 as follows:

- **Chlamydia:**

- 18,075 cases (0.5% decrease from 2020 and 21.4% decrease from 2019)
- Rate of 545.2 cases per 100,000 (0.3% increase from 2020 and 20.6% decrease from 2019)

- **Gonorrhea:**

- 7,884 cases (30.1% increase from 2020 and 23.3% increase from 2019)
- Rate of 237.8 cases per 100,000 (31.2% increase from 2020 and 24.6% increase from 2019)

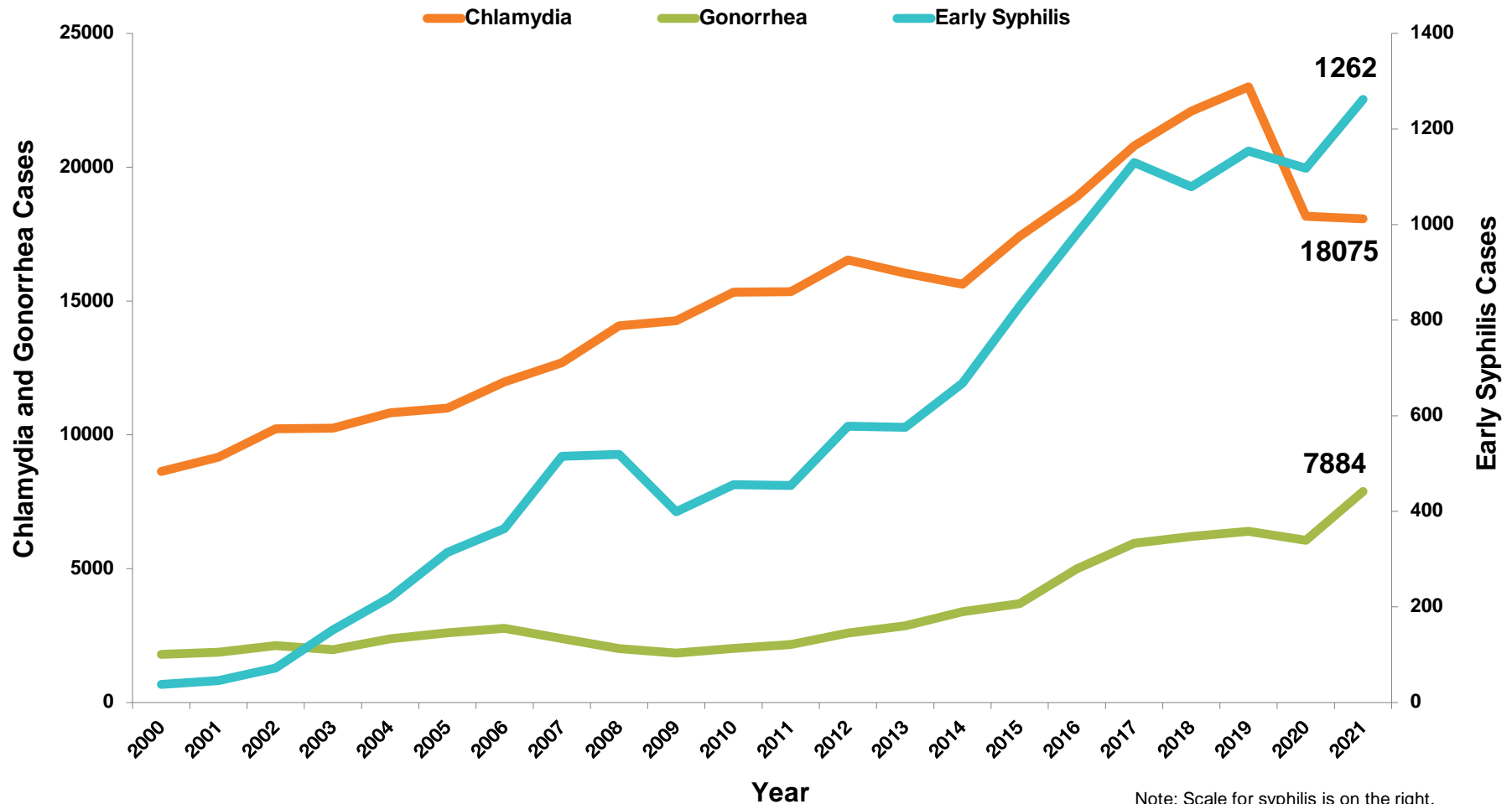
- **Early Syphilis:**

- 1,262 cases (12.9% increase from 2020 and 9.4% increase from 2019)
- Rate of 38.1 cases per 100,000 (14.1% increase from 2020 and 10.8% increase from 2019)

Chlamydia, Gonorrhea, and Early Syphilis Cases, San Diego County, 2000 - 2021

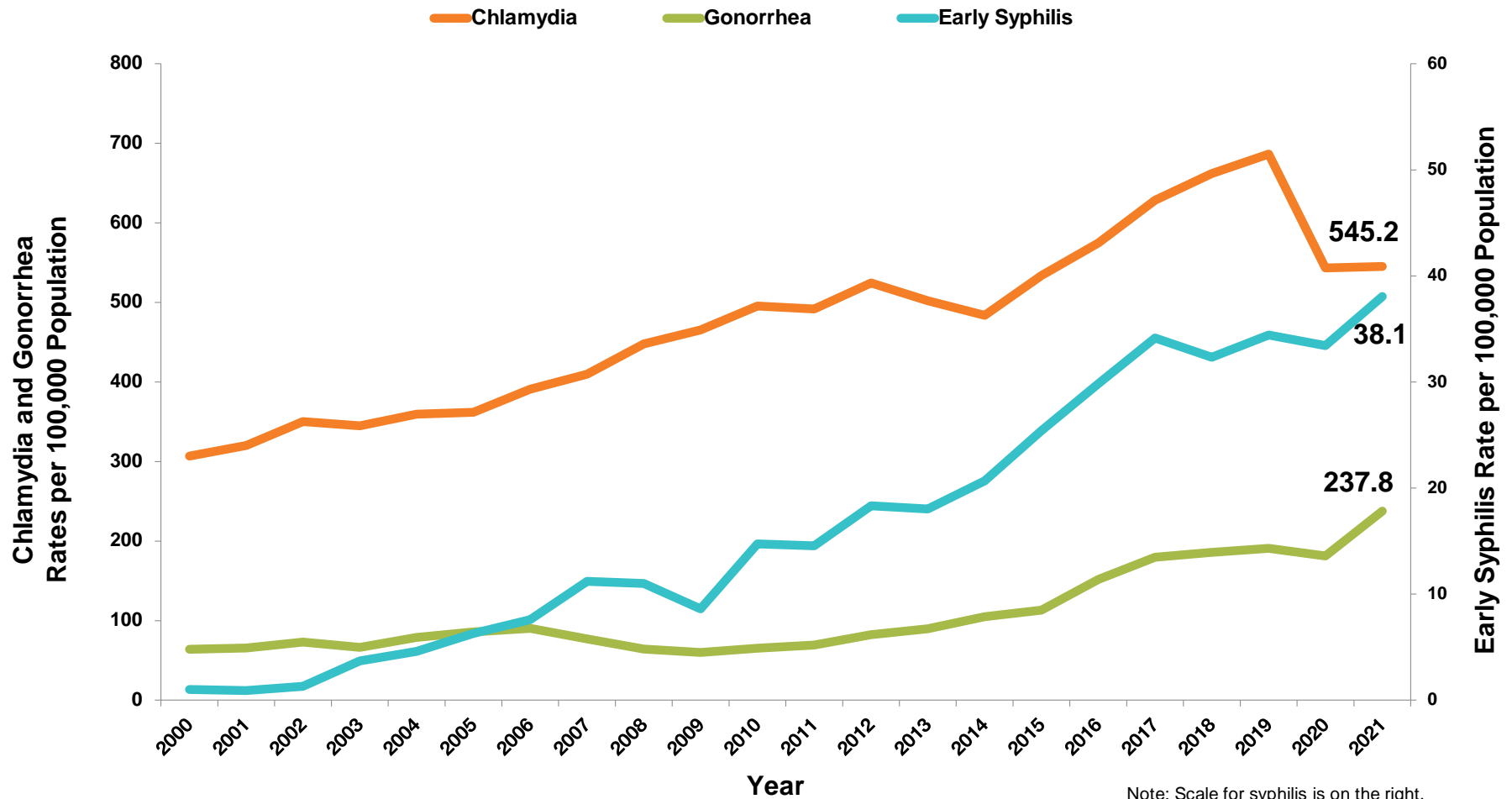


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Note: Scale for syphilis is on the right.



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Chlamydia



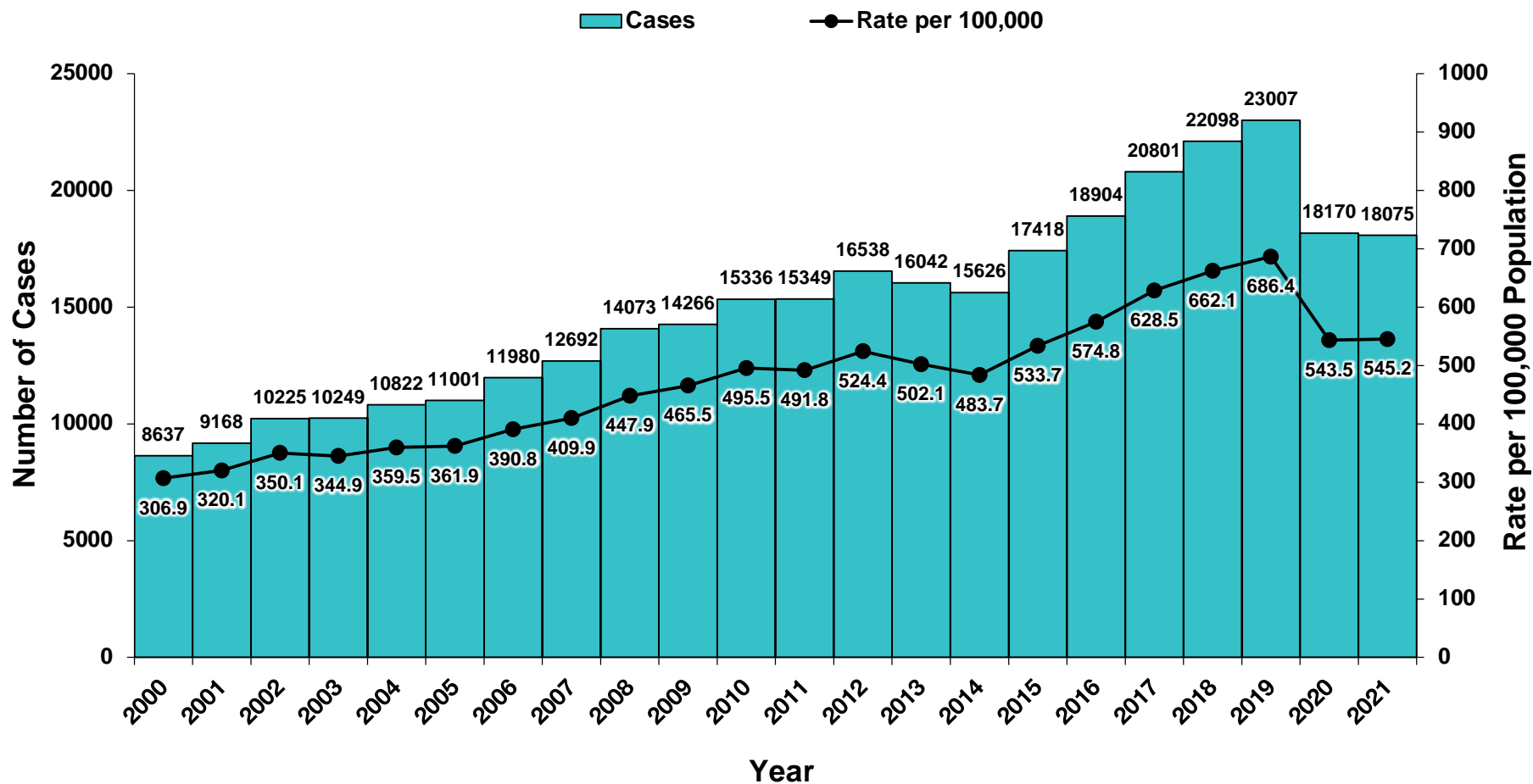
Chlamydia in San Diego County

- Chlamydia was the second most commonly-reported communicable disease in San Diego County and in California in 2021 after Coronavirus Disease 2019 (COVID-19).
- Cases of chlamydia decreased by 0.5% from 18,170 cases in 2020 to 18,075 cases in 2021.
- The overall rate of chlamydia increased by 0.3% from 543.5 cases per 100,000 in 2020 to 545.2 cases per 100,000 in 2021.
- 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 - 2021



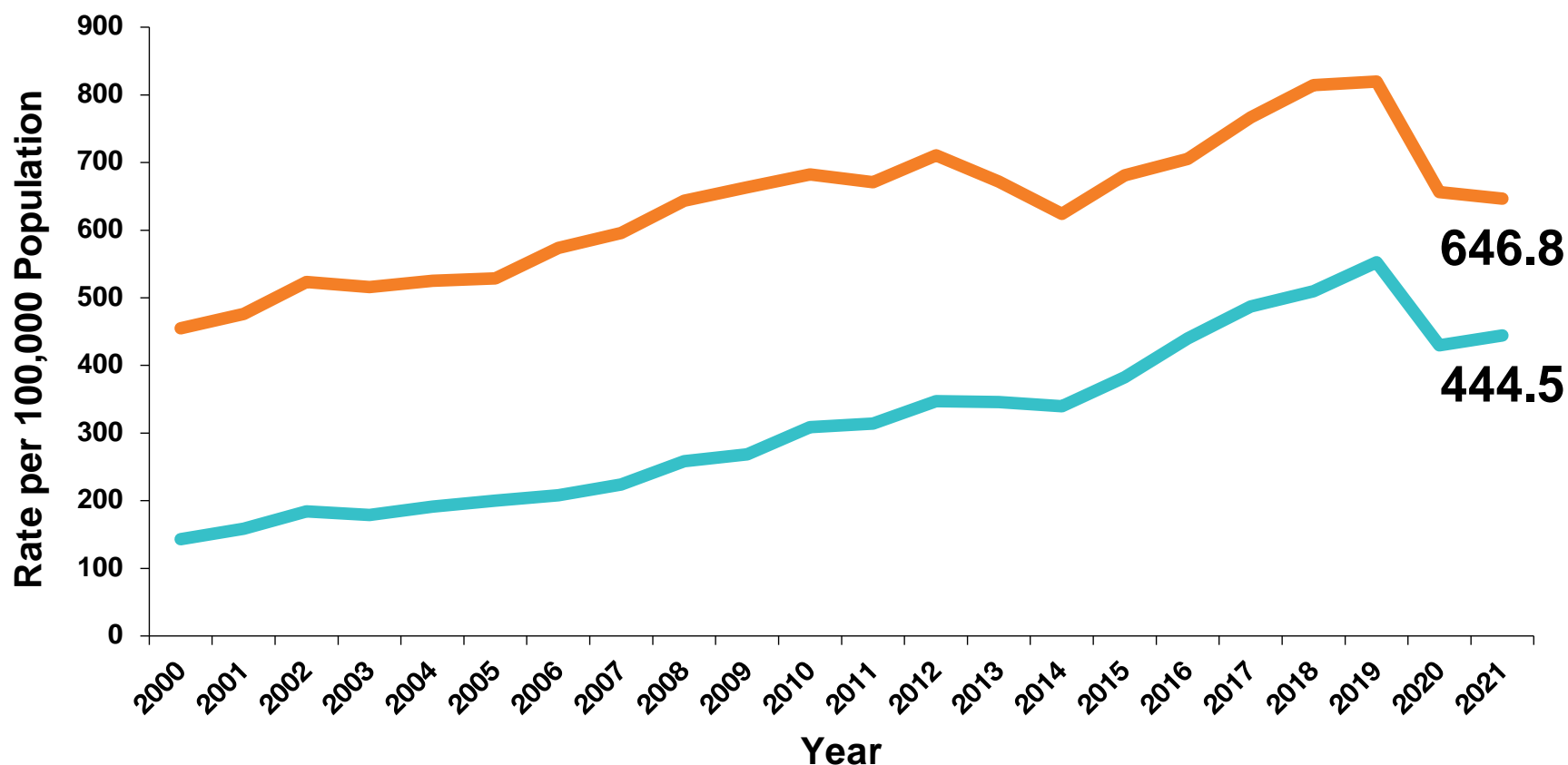
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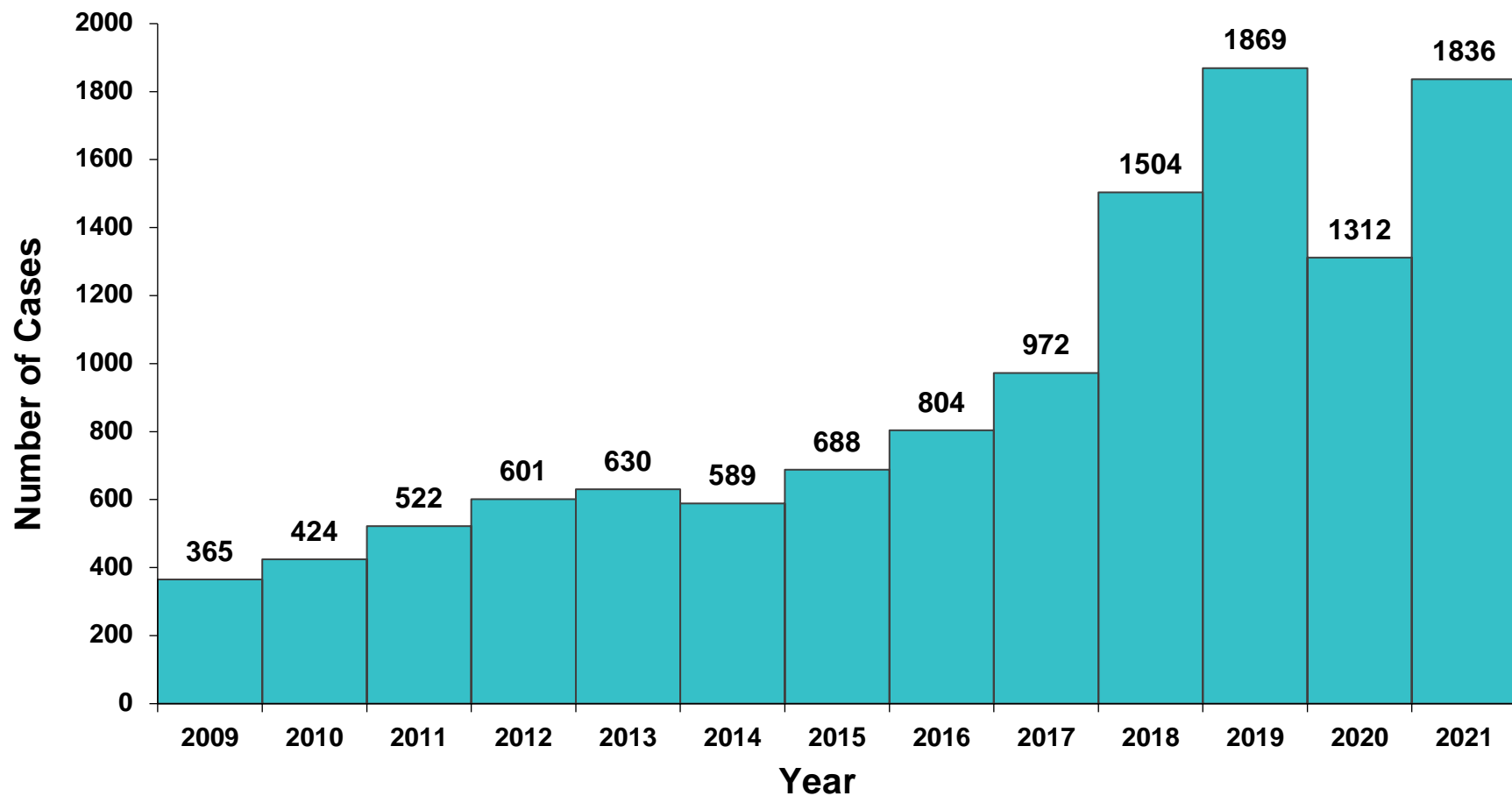
Chlamydia Rates by Gender and Year, San Diego County, 2000 - 2021



Females Males

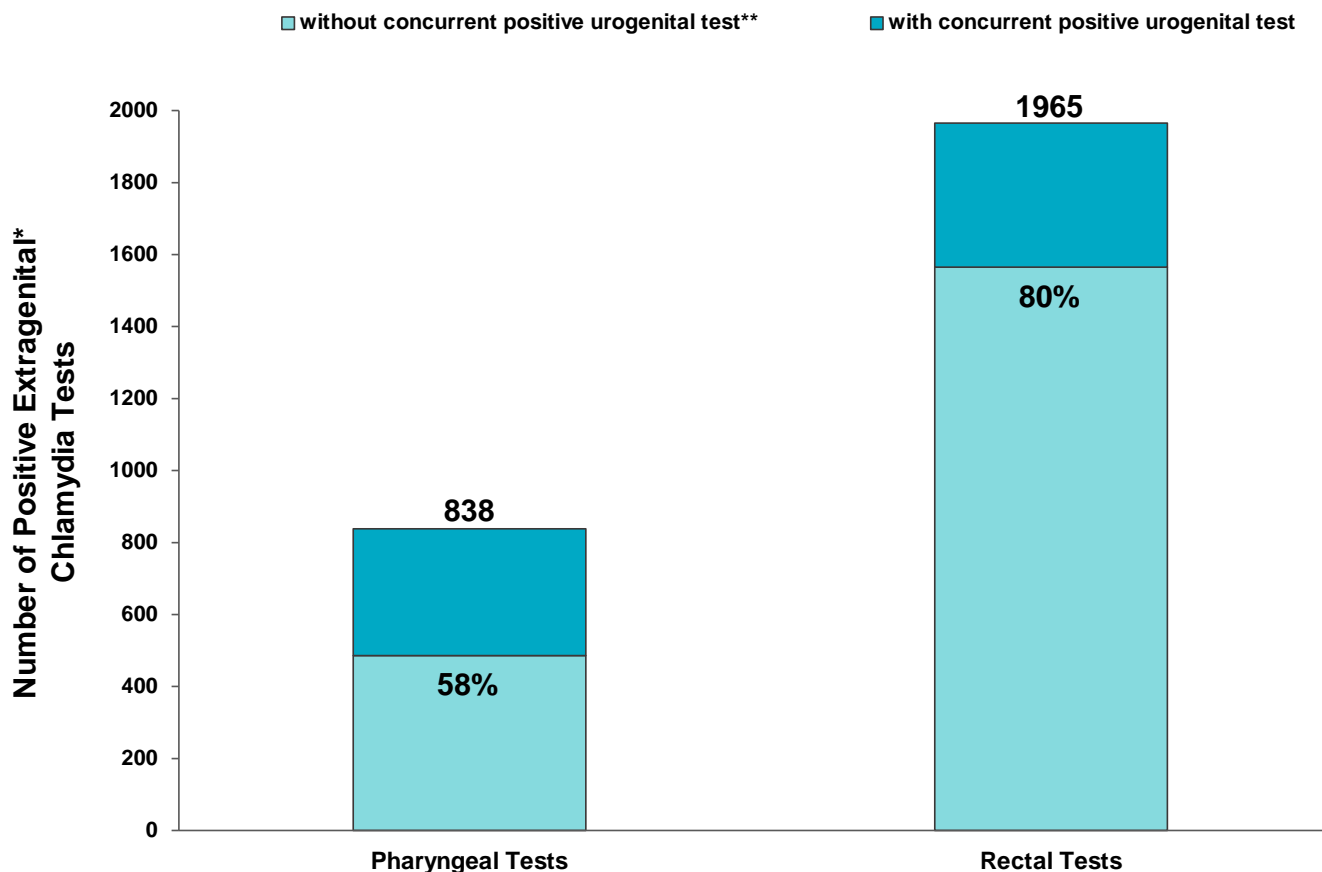


Rectal or Pharyngeal Chlamydia Infections in Males, San Diego County, 2009 - 2021



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, 2021



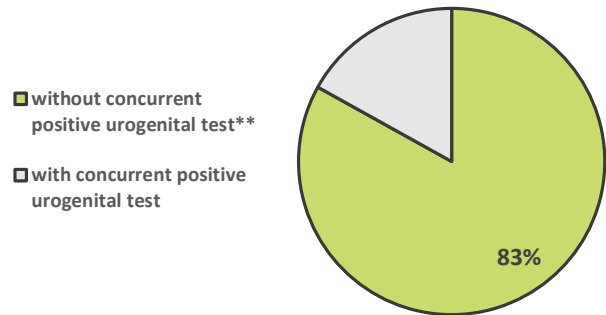
*Extragenital refers to pharyngeal and rectal anatomic sites.

**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.

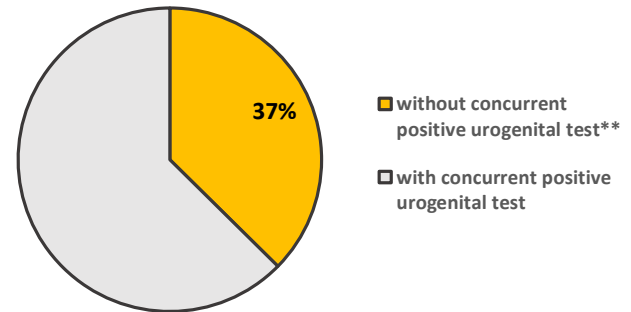
Proportion of Extragenital* Chlamydia Infections With & Without Concurrent Positive Urogenital Test by Gender, San Diego County, 2021



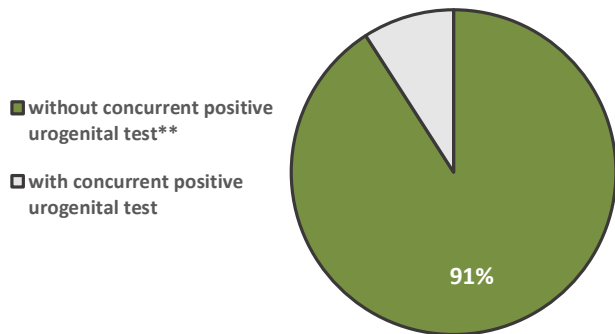
Pharyngeal Chlamydia in Males



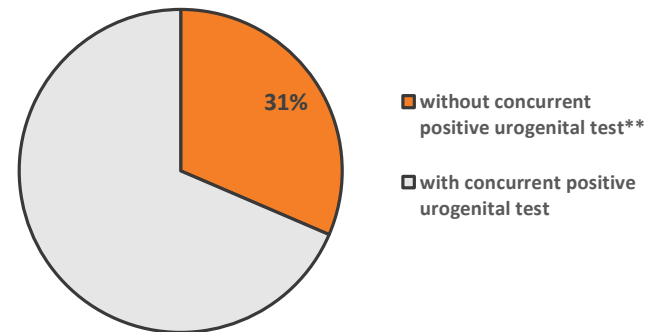
Pharyngeal Chlamydia in Females



Rectal Chlamydia in Males



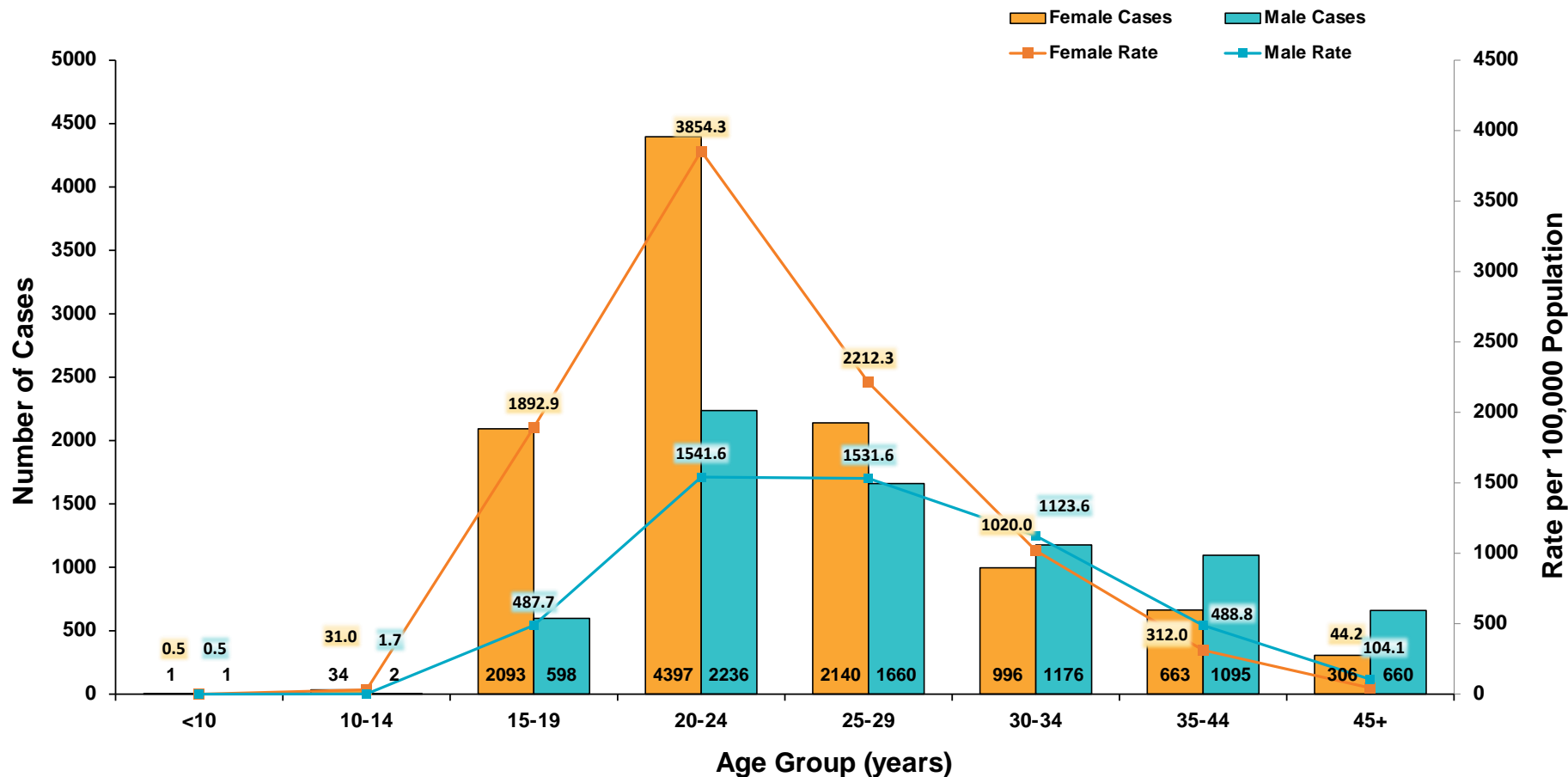
Rectal Chlamydia in Females



*Extragenital refers to pharyngeal and rectal anatomic sites.

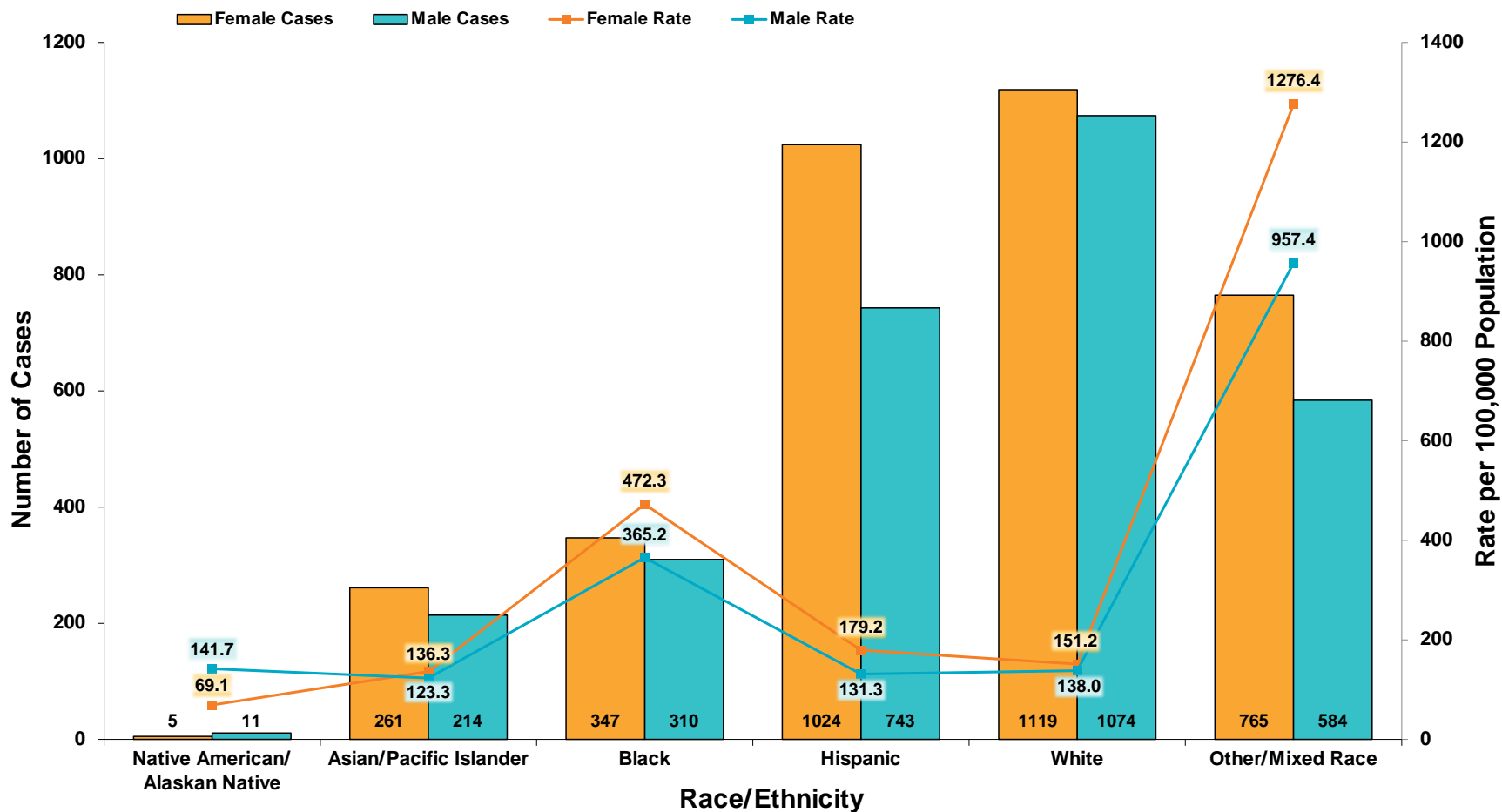
**Note: Due to negative chlamydia laboratory results not being reportable to the local public health departments, "without concurrent positive urogenital test" category means that no positive urogenital test result was reported to the County of San Diego HIV, STD, and Hepatitis Branch for the specified 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, 2021



Note: 17 cases were missing gender and/or age information and are not included in the counts above.

Chlamydia Cases and Rates by Gender and Race/Ethnicity, San Diego County, 2021

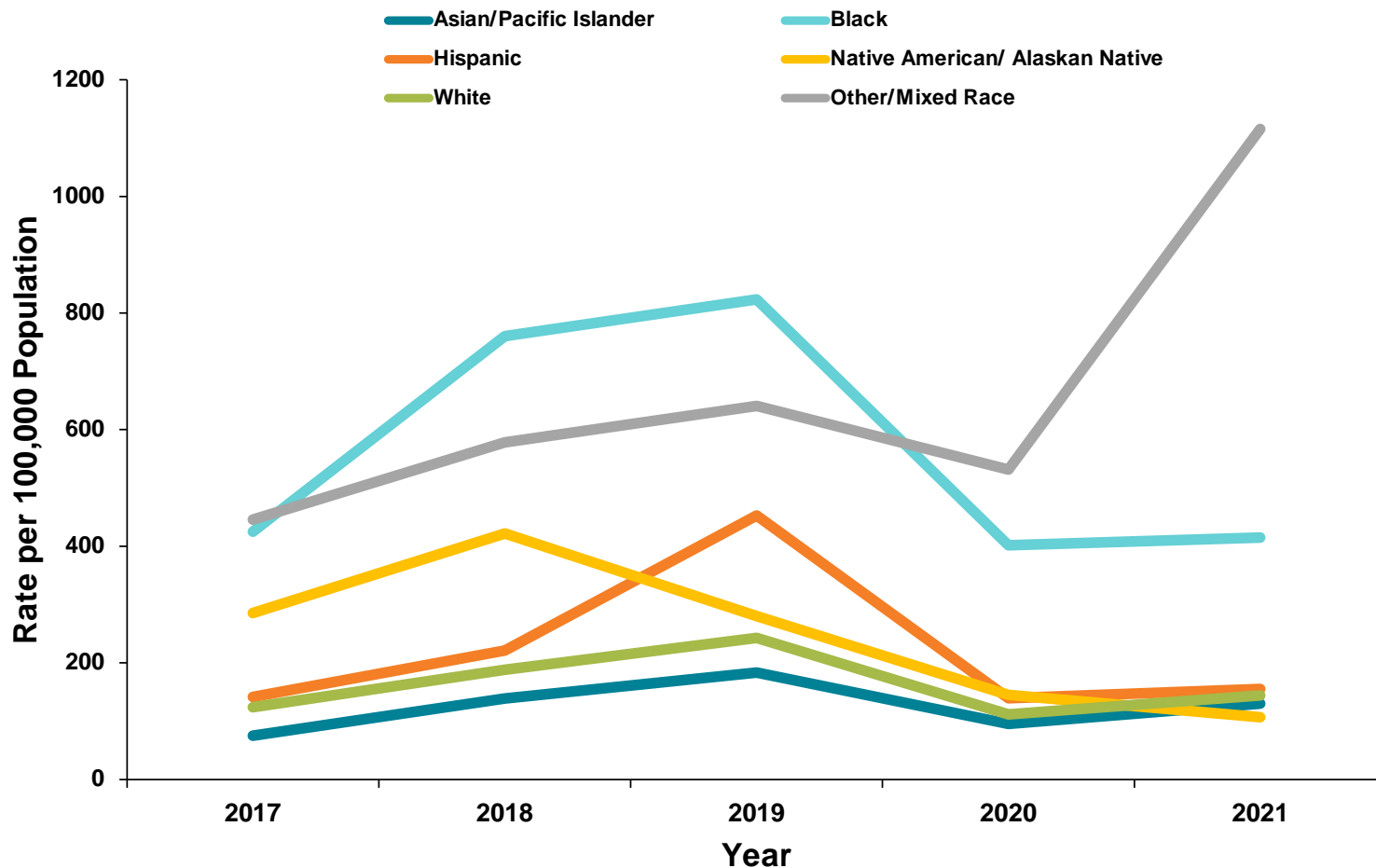


Note: 64.3% of cases are missing race/ethnicity or gender information and are not included in the counts above.

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.



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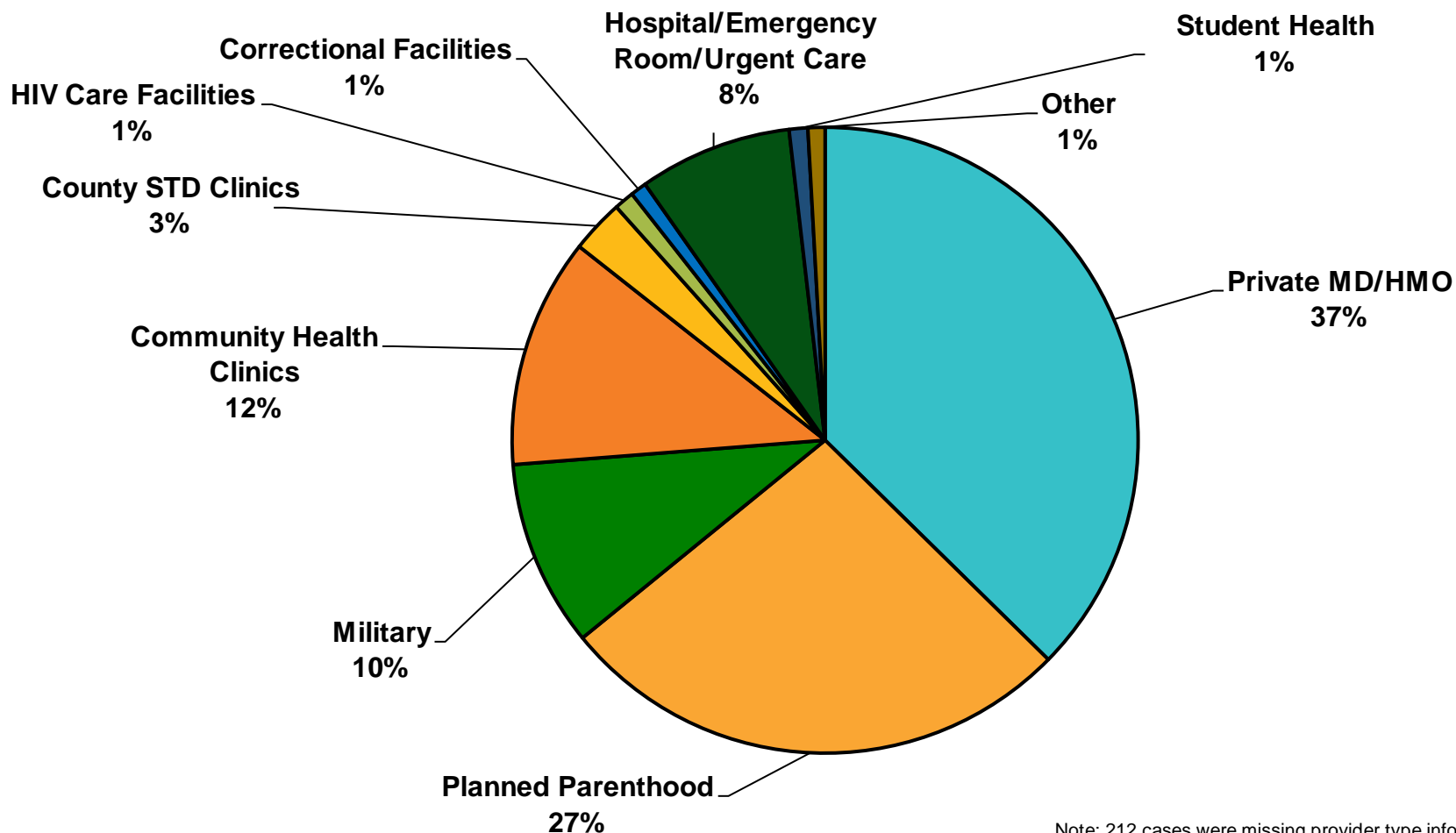


Note: Race/Ethnicity data for chlamydia are limited. The sharp increase in chlamydia rate among Other/Mixed category is most likely due to reporting. As of October 1, 2019, Chlamydia trachomatis (CT) infections have no longer been required to be reported to the local health department by healthcare providers;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

Chlamydia Cases by Reporting Facility Type San Diego County, 2021



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Note: 212 cases were missing provider type information.



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Gonorrhea

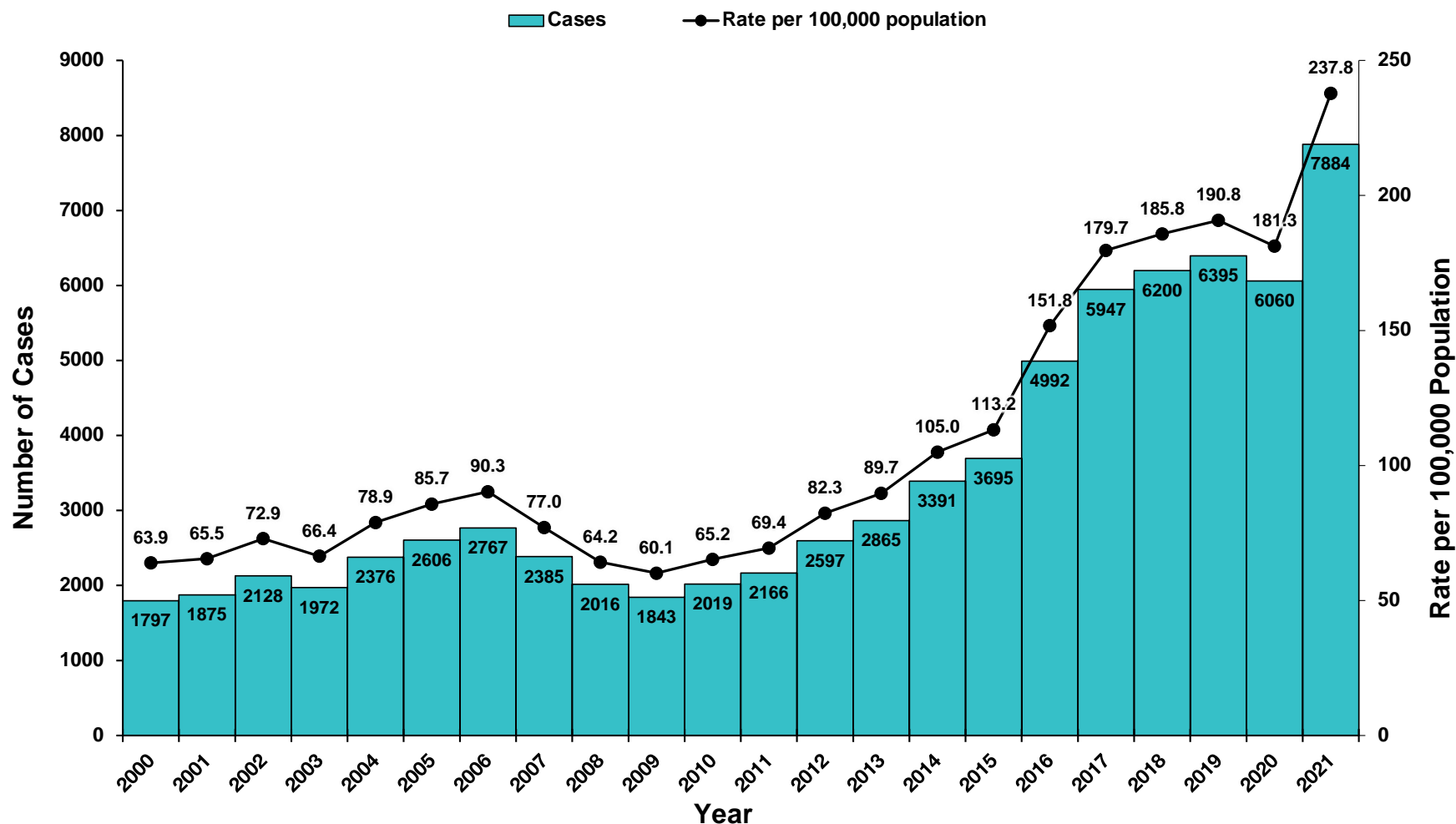


Gonorrhea in San Diego County

- Cases of gonorrhea increased by 30.1% from 6,060 cases in 2020 to 7,884 cases in 2021.
- The overall rate of gonorrhea decreased by 31.2% from 181.3 cases per 100,000 in 2020 to 237.8 cases per 100,000 in 2021.
- The rate of gonorrhea in males is 1.9 times the rate in females and increased by 35.6% between 2020 and 2021.
- 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.

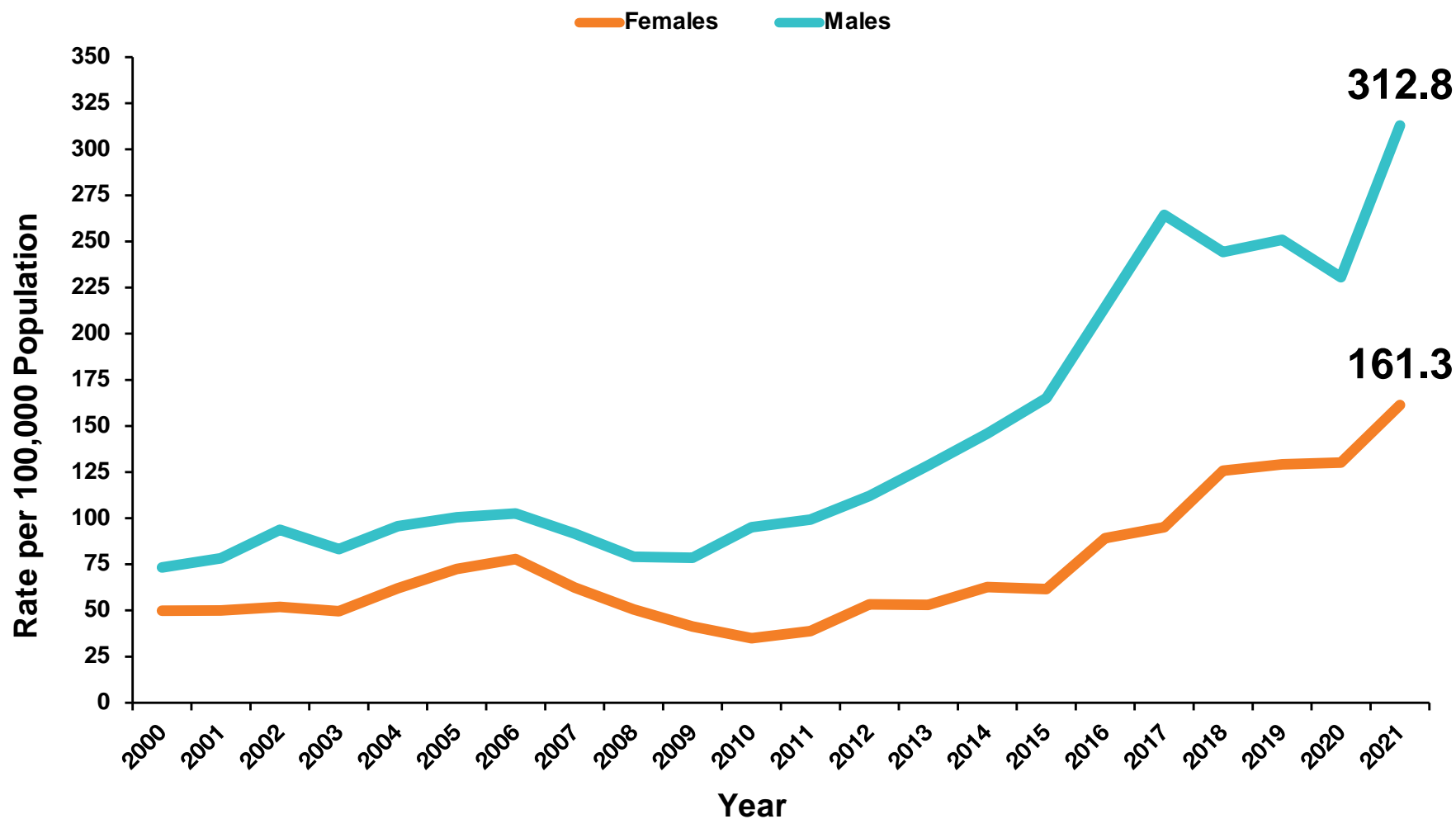


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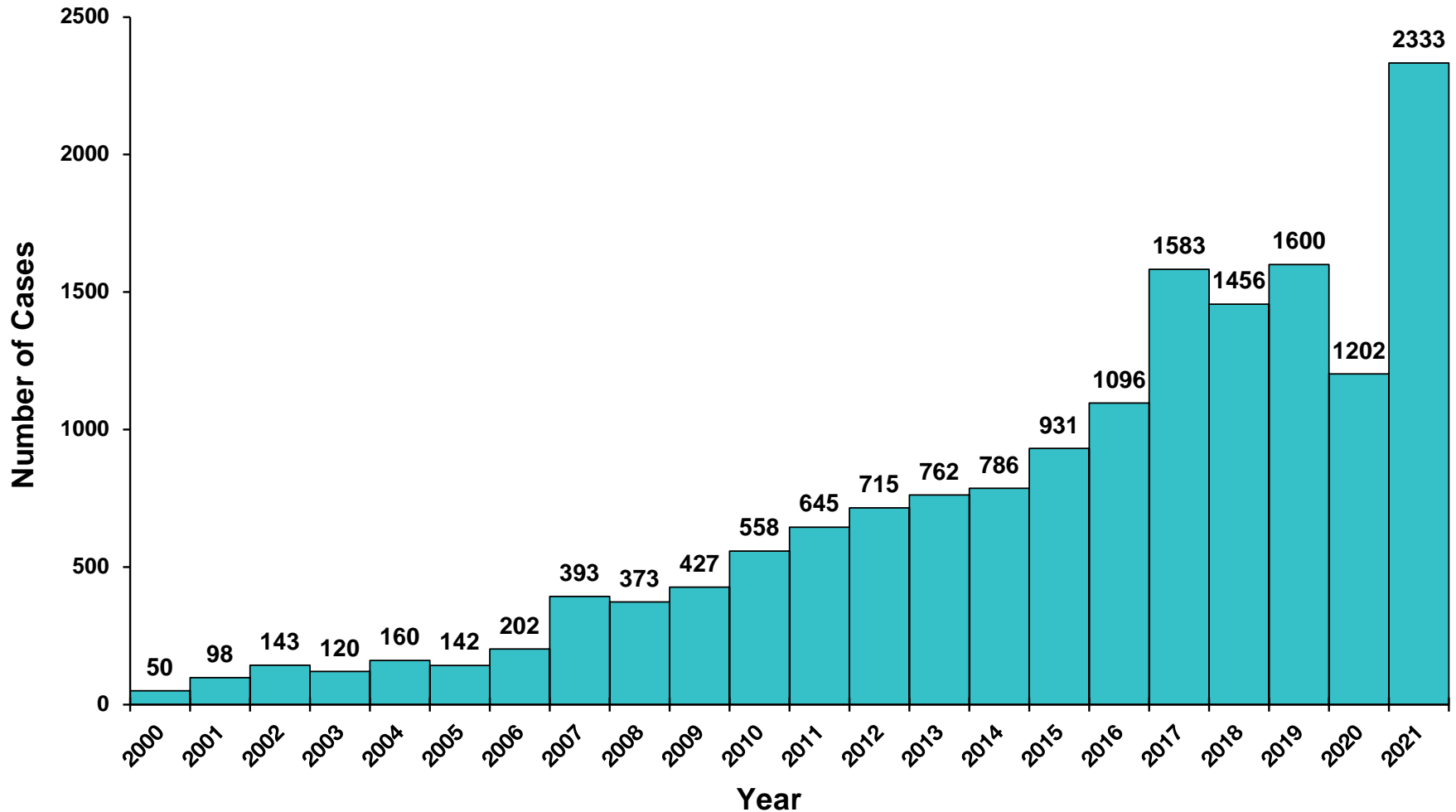




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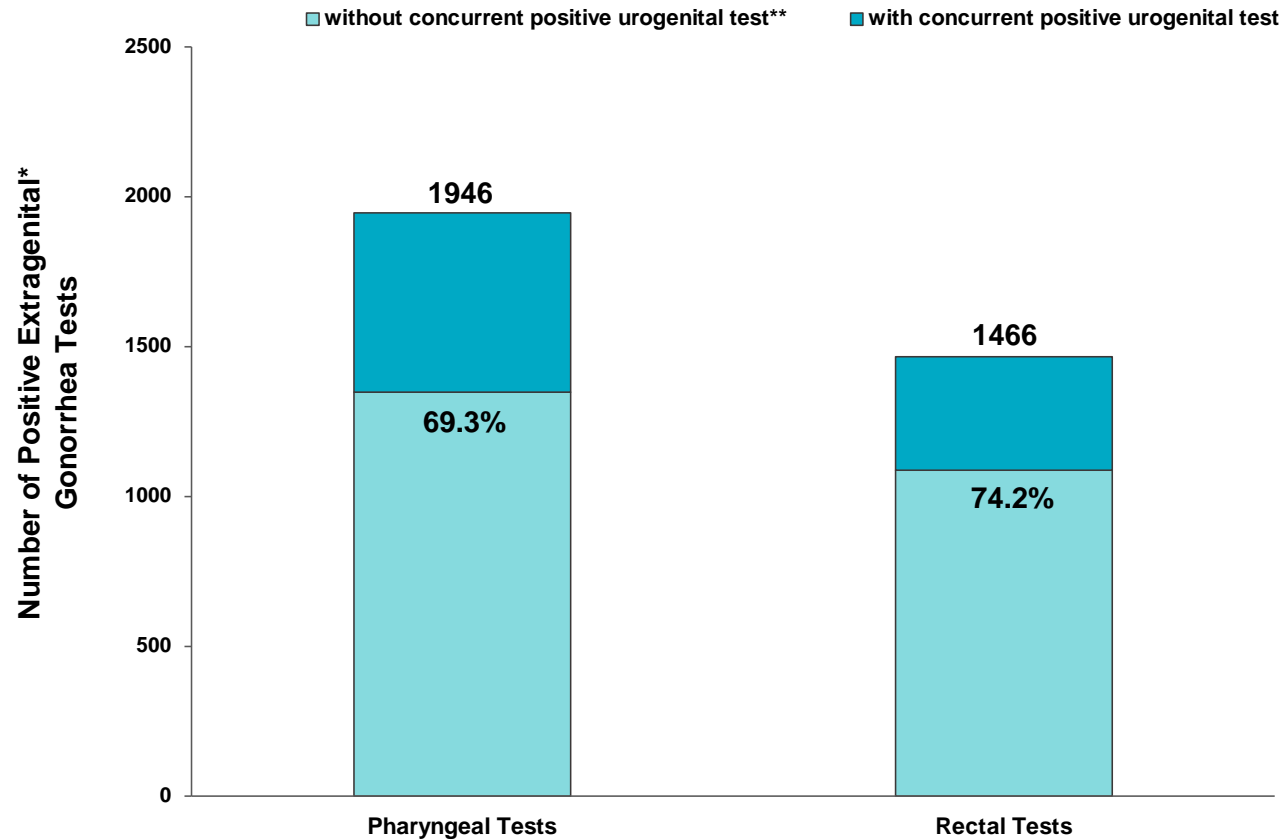


Rectal or Pharyngeal Gonorrhea in Males, San Diego County, 2000 - 2021





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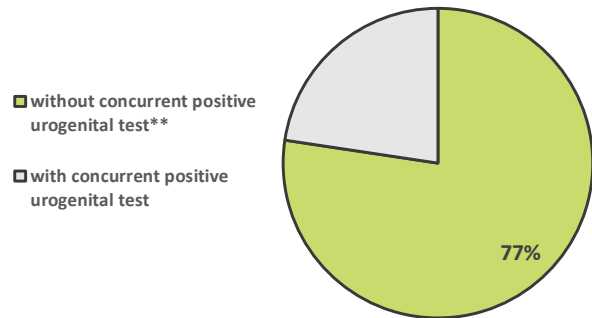
*Extragenital refers to pharyngeal and rectal anatomic sites.

****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.

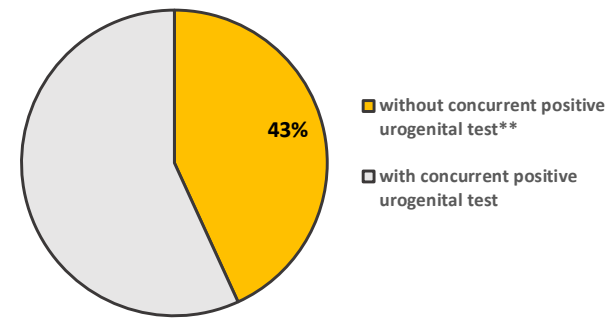
Proportion of Extragenital* Gonorrhea With & Without Concurrent Positive Urogenital Test by Gender, San Diego County, 2021



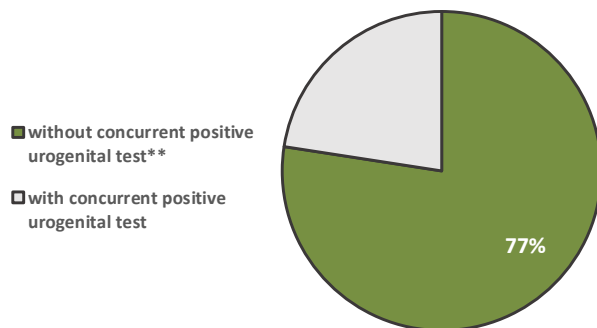
Pharyngeal Gonorrhea in Males



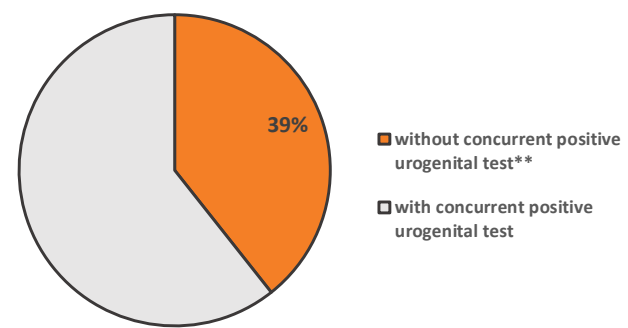
Pharyngeal Gonorrhea in Females



Rectal Gonorrhea in Males



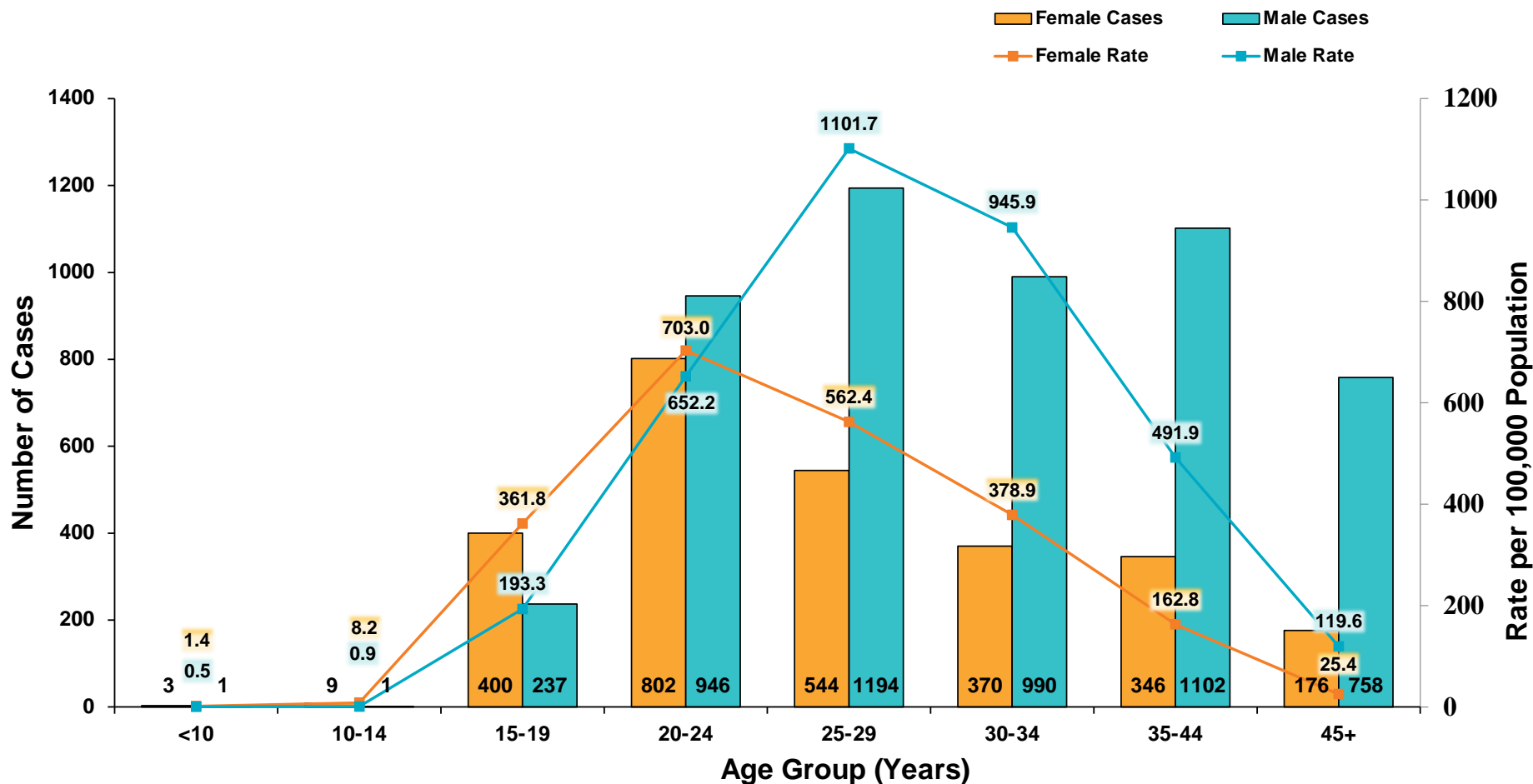
Rectal Gonorrhea in Females



*Extragenital refers to pharyngeal and rectal anatomic sites.

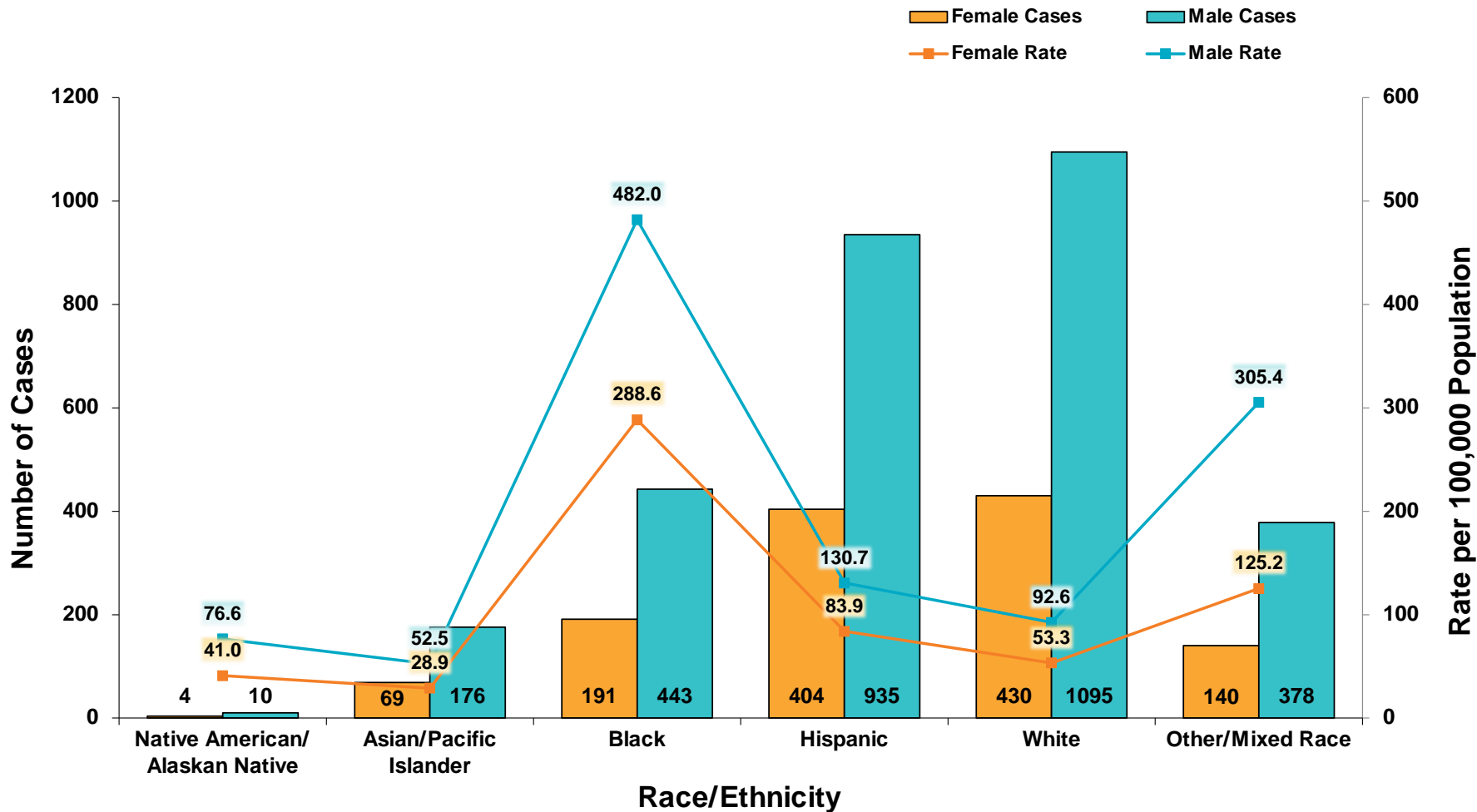
**Note: Due to negative gonorrhea laboratory results not being reportable to the local public health departments, "without concurrent positive urogenital test" category means that no positive urogenital test result was reported to the County of San Diego HIV, STD, and Hepatitis Branch for the specified 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, 2021



Note: 5 cases were missing age or gender information.

Gonorrhea Cases and Rates by Gender and Race/Ethnicity, San Diego County, 2021

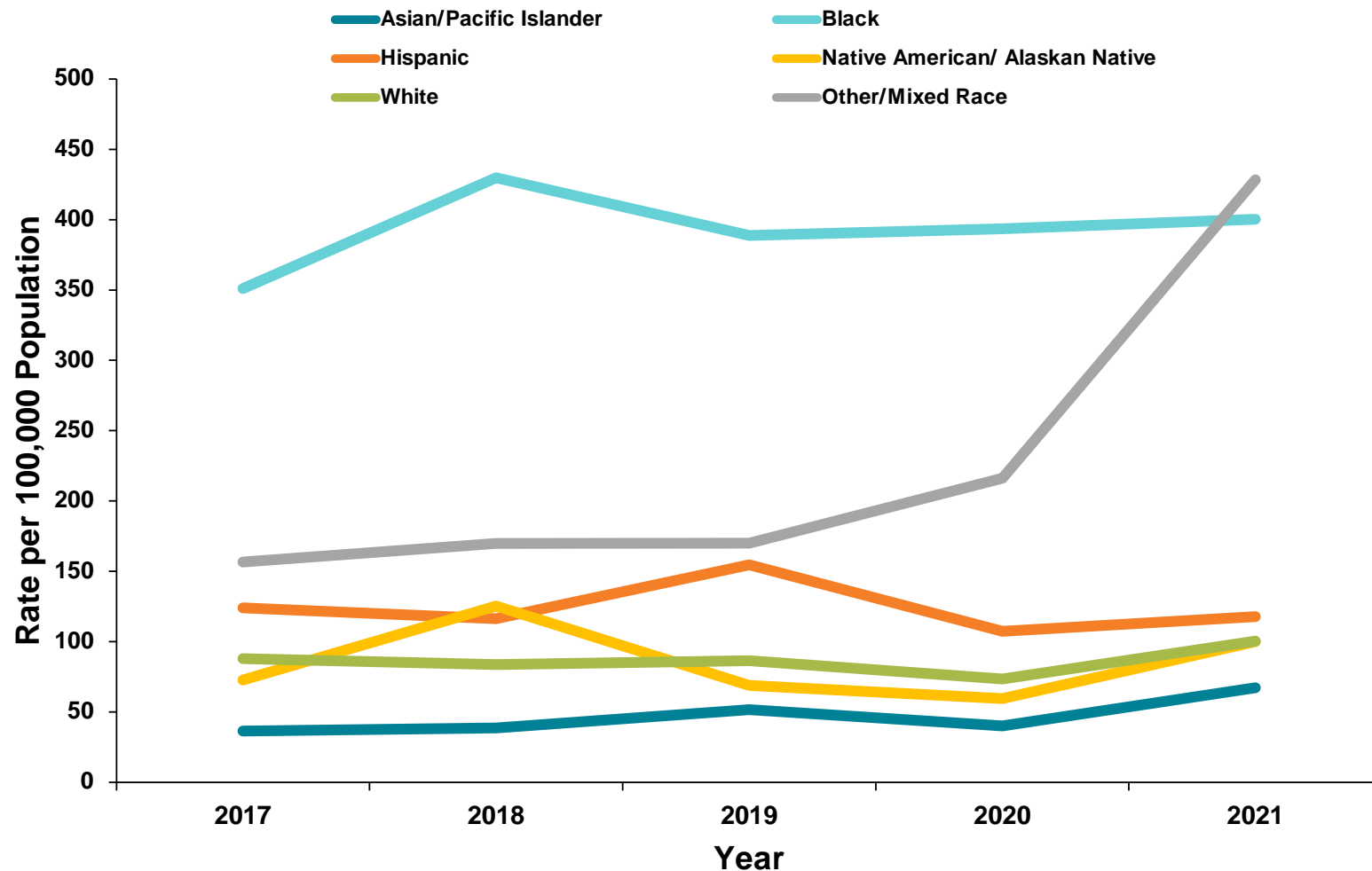


Note: 45.8% of cases are missing race/ethnicity or gender information and are not included in counts above.

Gonorrhea Rates by Race/Ethnicity, San Diego County, 2017-2021

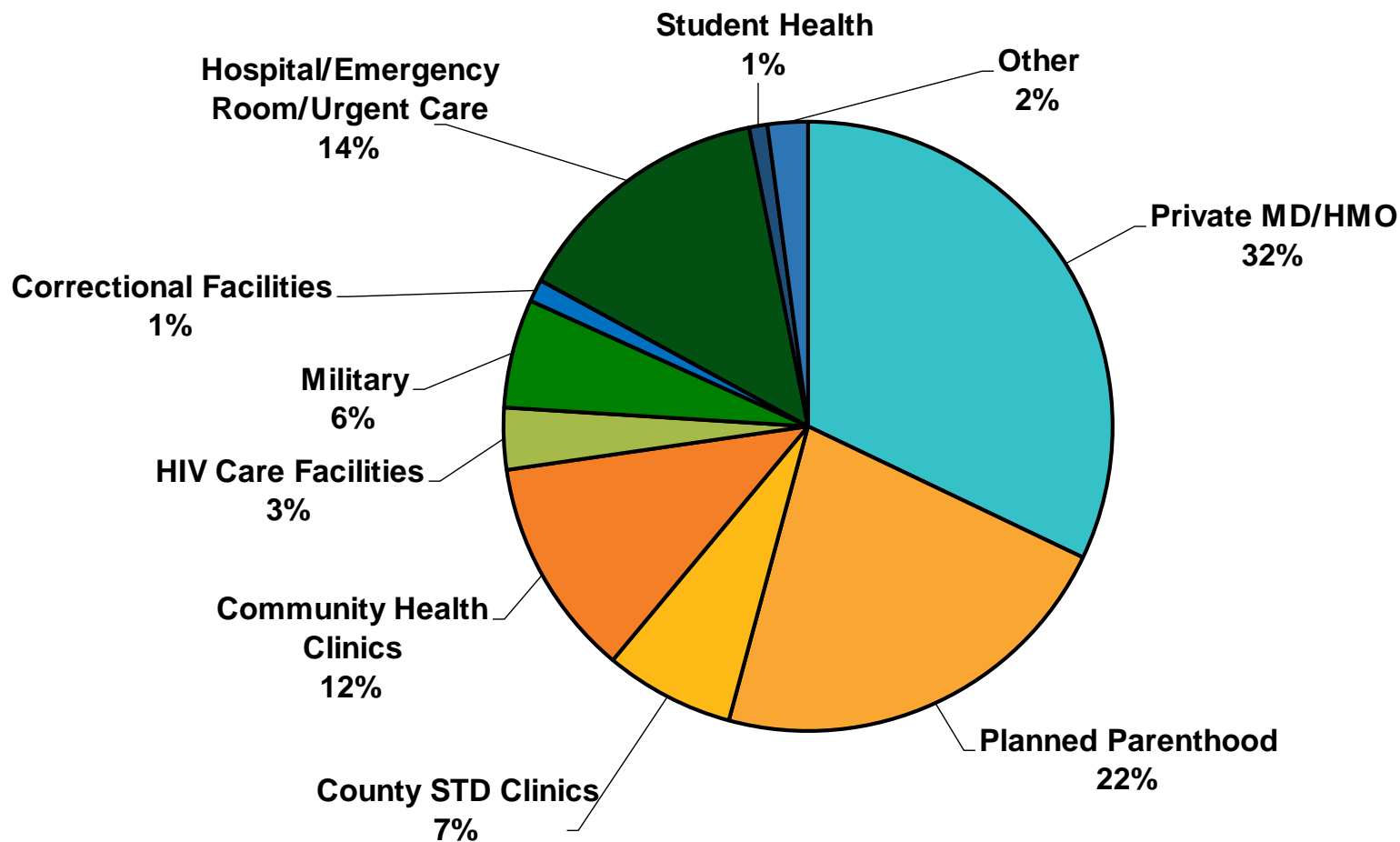


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Note: Race/Ethnicity data for gonorrhea are limited. The sharp increase in gonorrhea rate among Other/Mixed category is most likely due to reporting.

Gonorrhea Cases by Reporting Facility Type, San Diego County, 2021



Note: 126 cases were missing provider type information.



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Syphilis



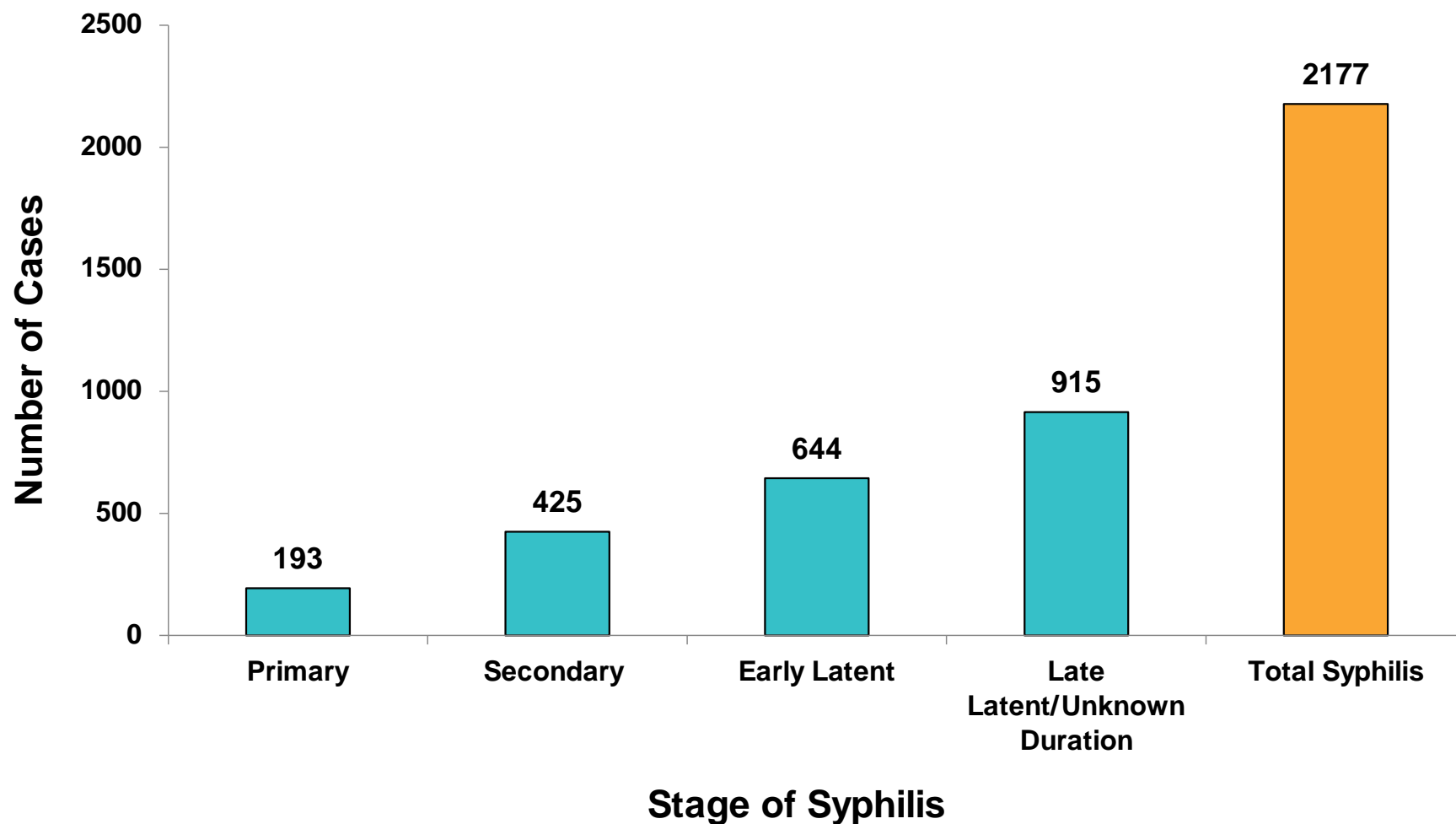
Syphilis Stages and Significance

- Primary: painless ulcer(s) at site of initial contact with bacteria (*Treponema pallidum*); atypical (i.e., painful) lesions may occur.
- Secondary: 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.
- 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, 2021



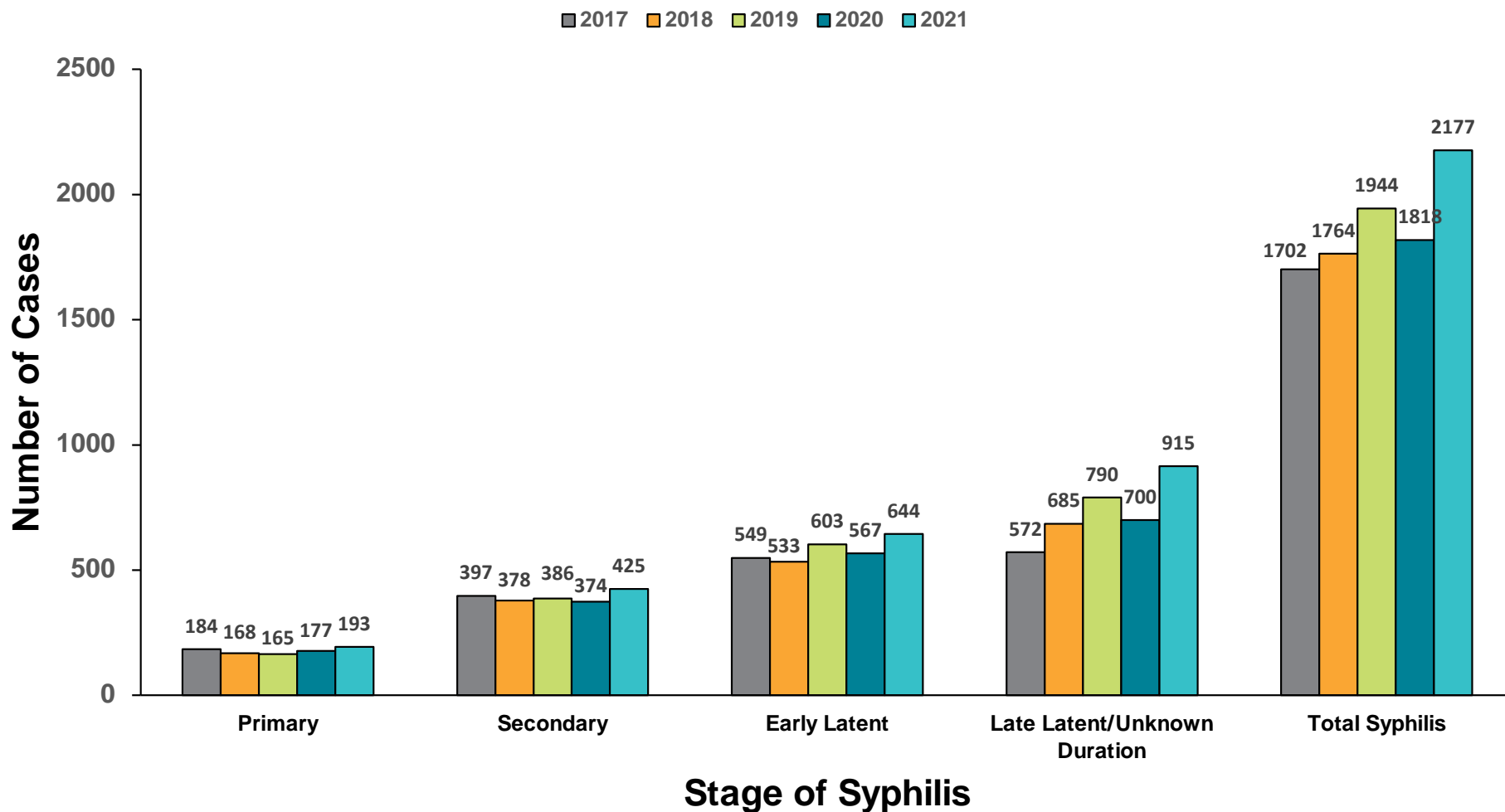
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Case Count by Stage of Syphilis, San Diego County, 2017 - 2021



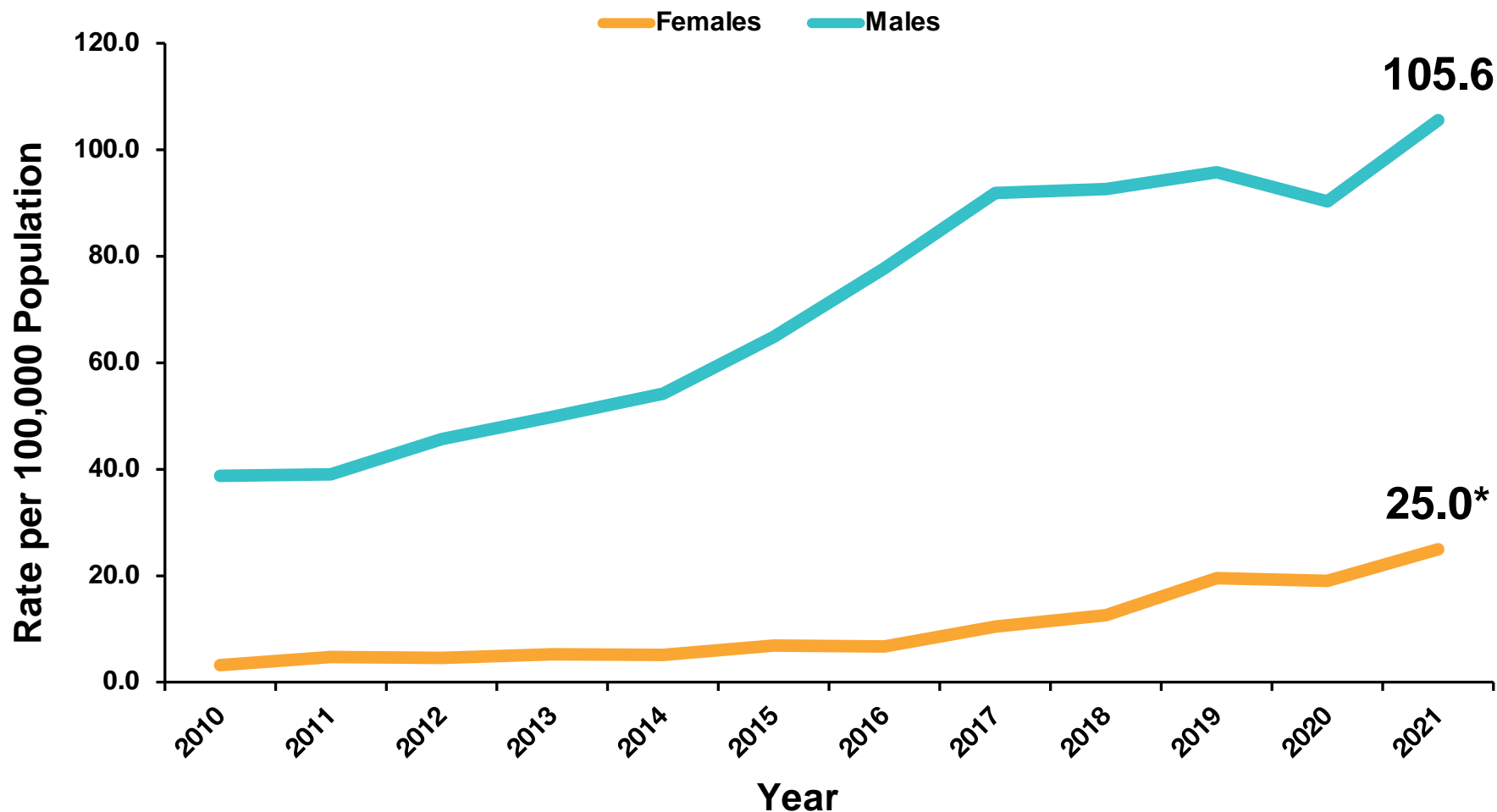
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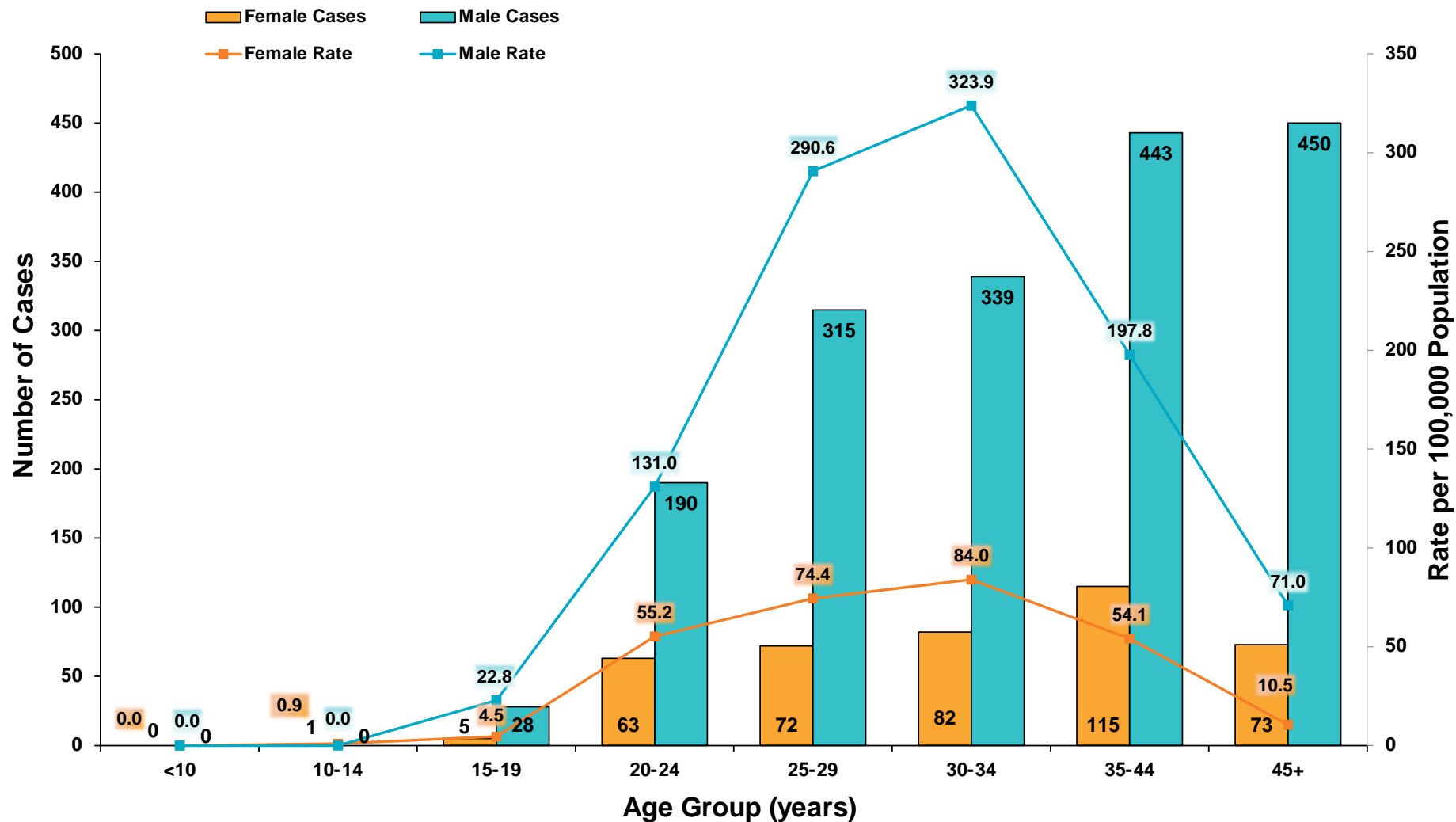


Syphilis (All Stages) Rates by Gender and Year, San Diego County, 2010 - 2021

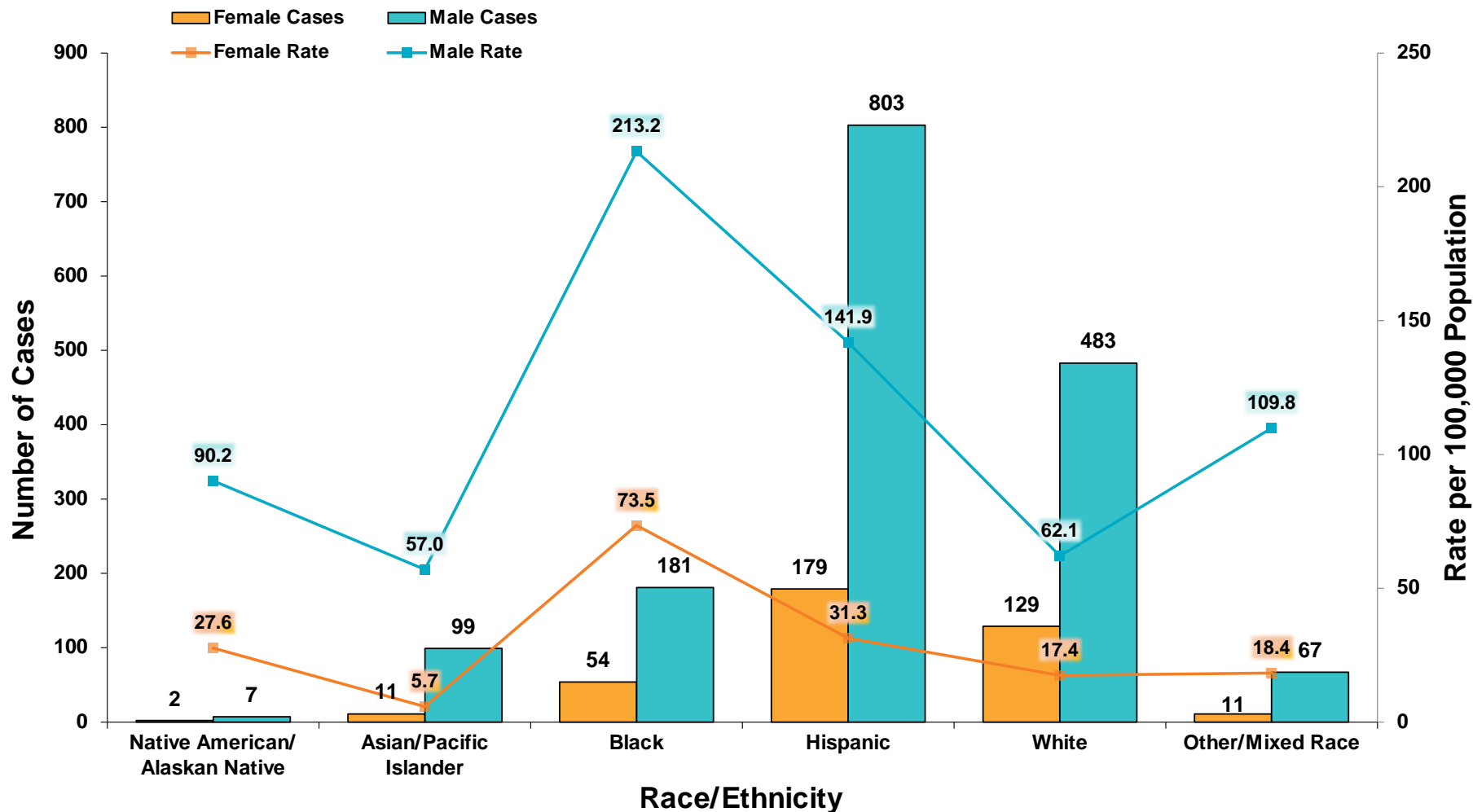


*Between 2020 and 2021 the female syphilis rate increased by 31.6% and the number of cases increased by 28.0%. Compared to 2019, female syphilis rate and cases both increased by 27.6% and 26.5%, respectively.

Syphilis (All Stages) Cases and Rates by Gender and Age, San Diego County, 2021

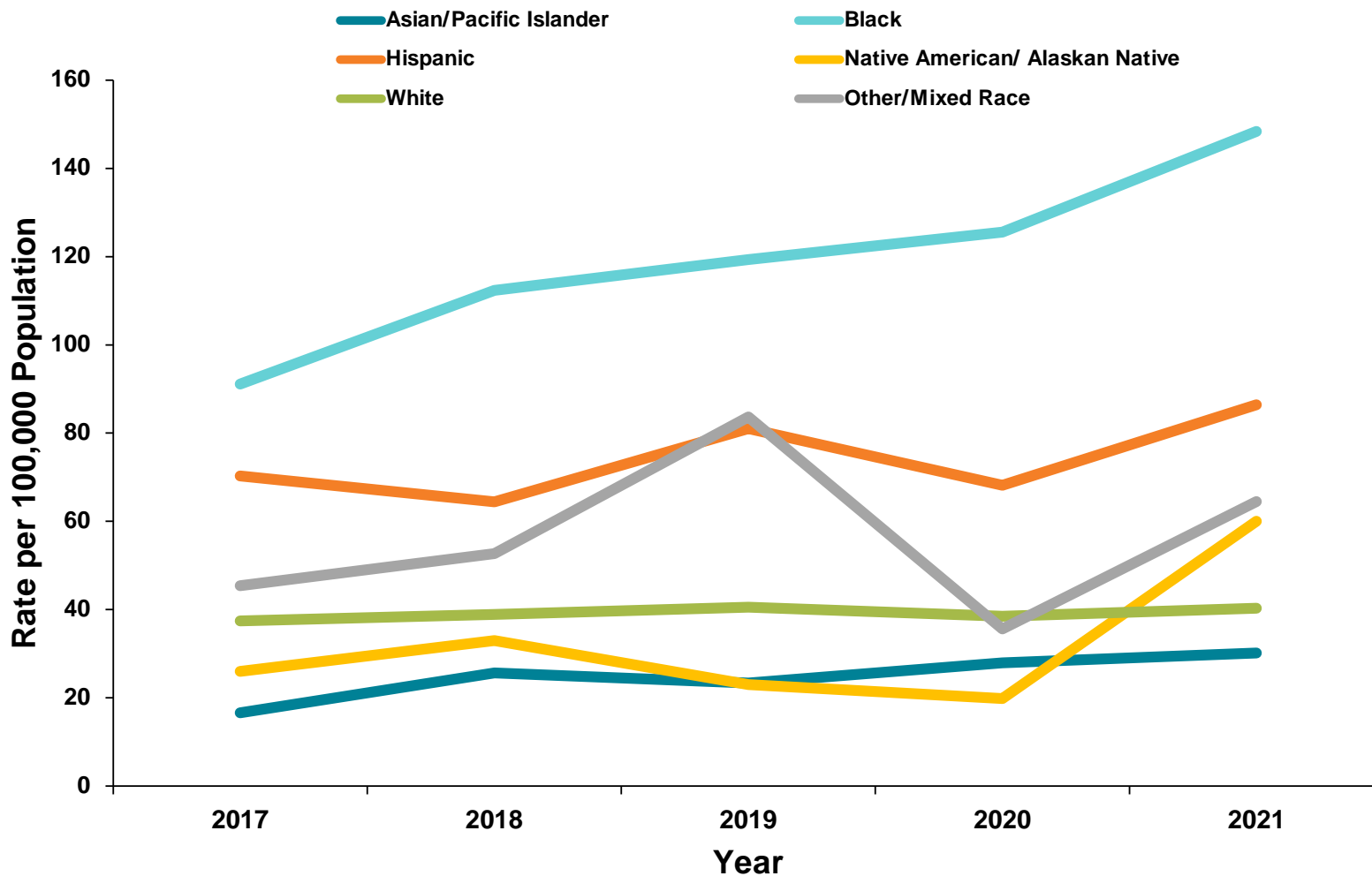


Syphilis (All Stages) Cases and Rates by Gender and Race/Ethnicity, San Diego County, 2021



Note: Counts exclude 151 cases missing race/ethnicity or gender information.

Syphilis (All Stages) Rates by Race/Ethnicity, San Diego County, 2017-2021





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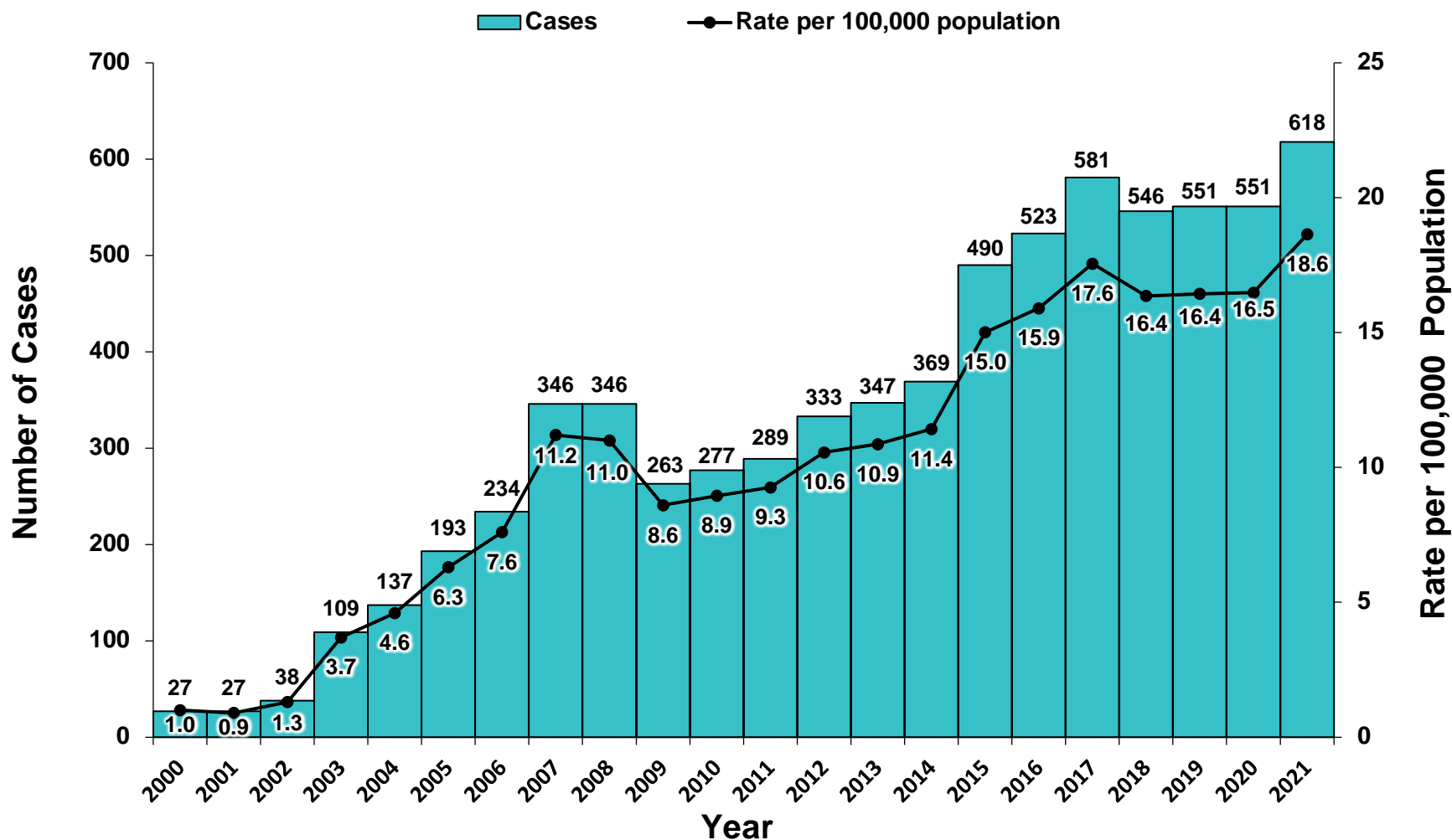
Primary & Secondary Syphilis



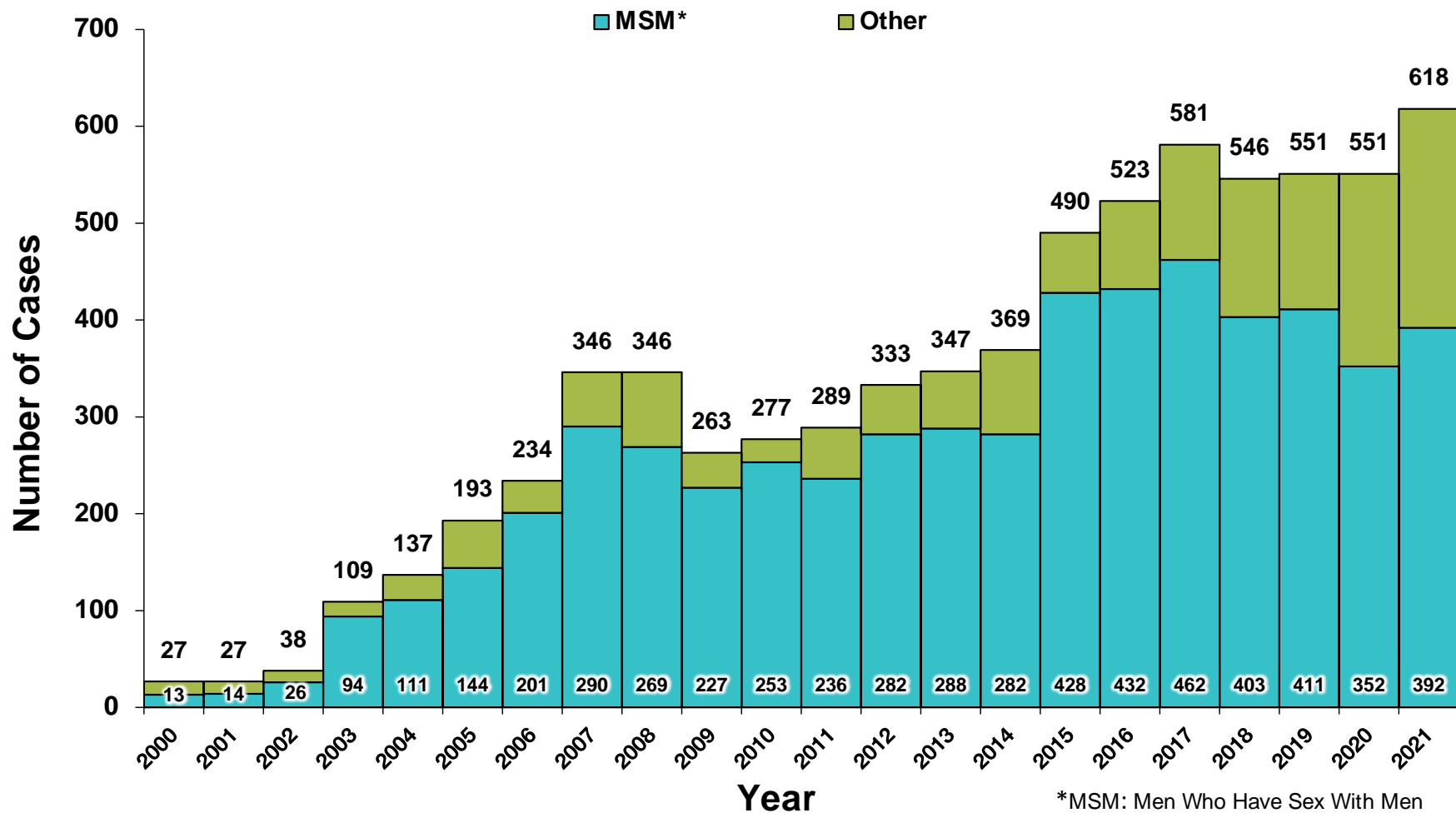
Primary & Secondary Syphilis in San Diego County

- Cases of primary and secondary syphilis increased by 12.2% from 551 cases in 2020 to 618 cases in 2021.
- The overall rate of primary and secondary syphilis increased by 12.7% from 16.5 cases per 100,000 in 2020 to 18.6 cases per 100,000 in 2021.
- The majority of primary and secondary syphilis cases (63%) are men who have sex with men (MSM). An estimated 44% 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 2.4 times that of white males.

Primary & Secondary Syphilis Cases and Rates by Year, San Diego County, 2000 - 2021

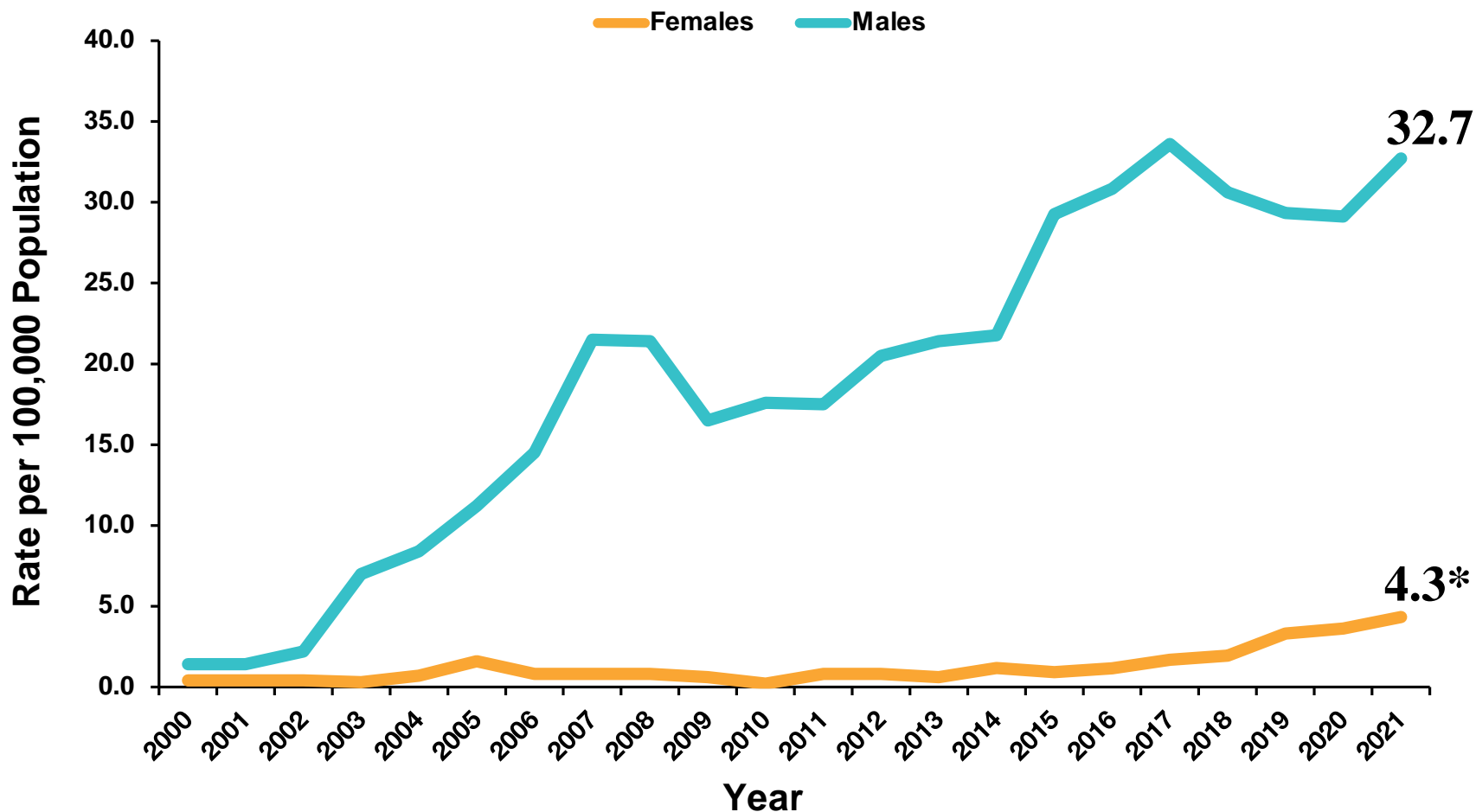


Primary & Secondary Syphilis Cases by Year, San Diego County, 2000 - 2021



*MSM: Men Who Have Sex With Men

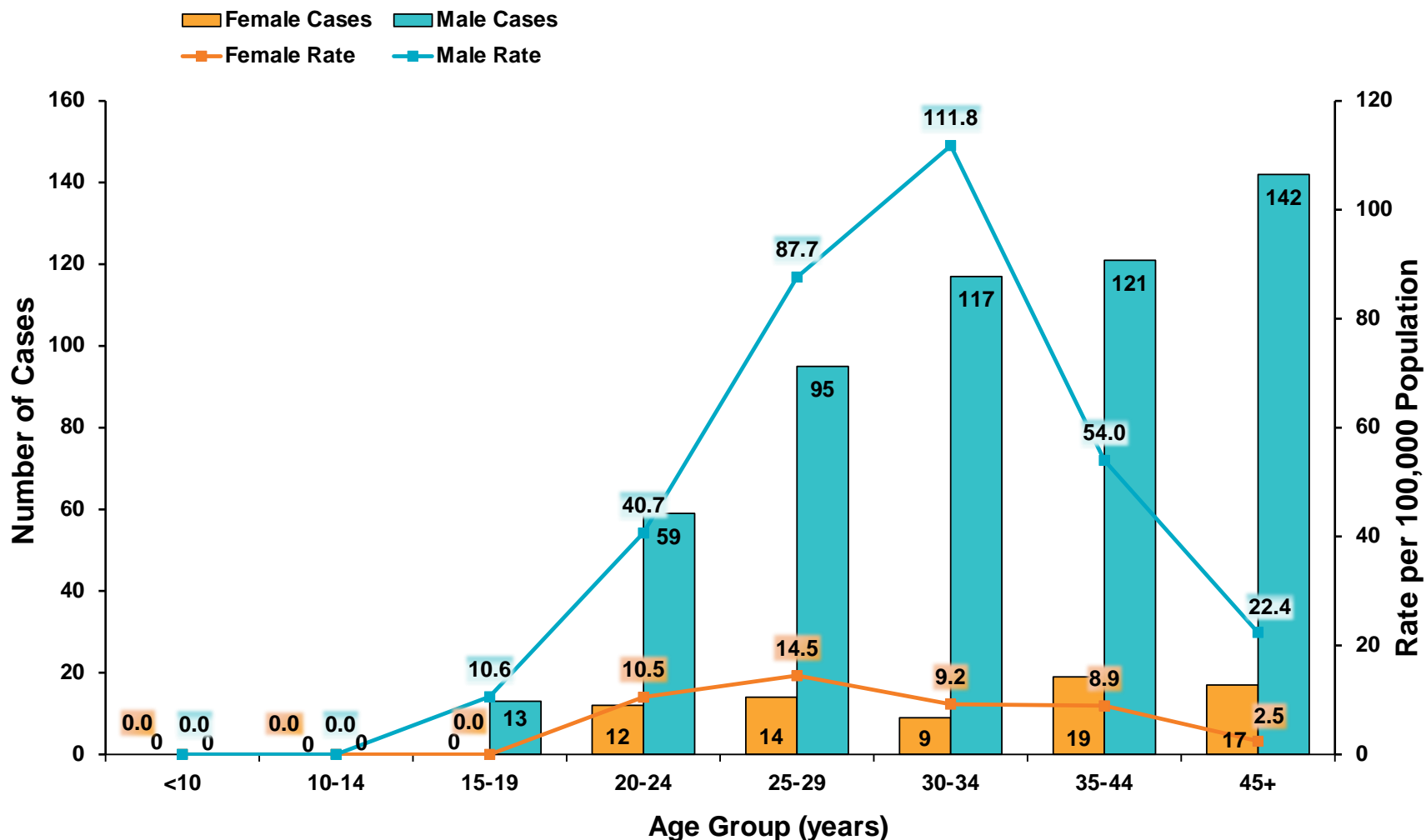
Primary & Secondary Syphilis Rates by Gender and Year, San Diego County, 2000 - 2021



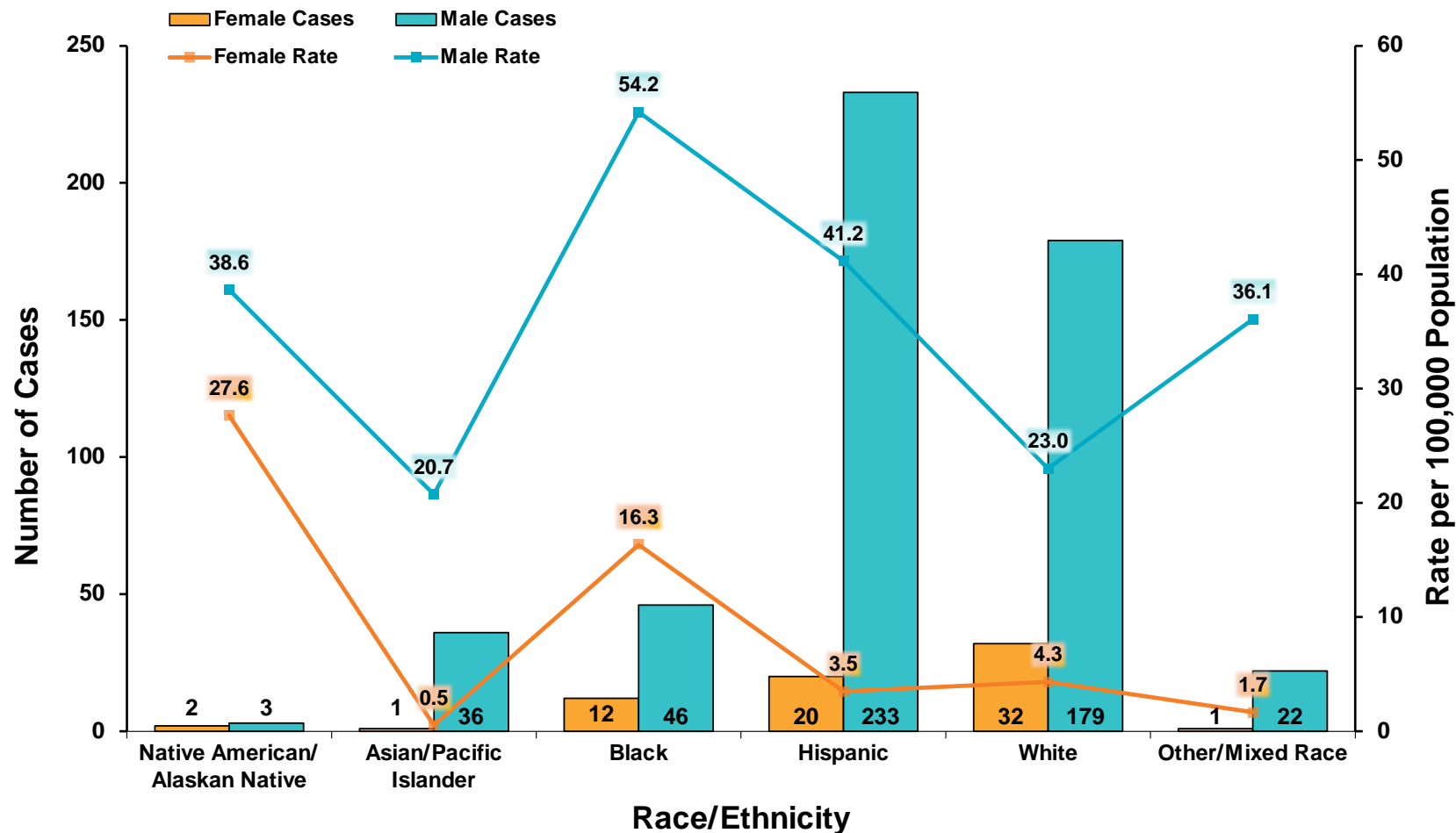
* Between 2020 and 2021 primary and secondary syphilis rates increased by 19.4% in females and 12.4% in males.



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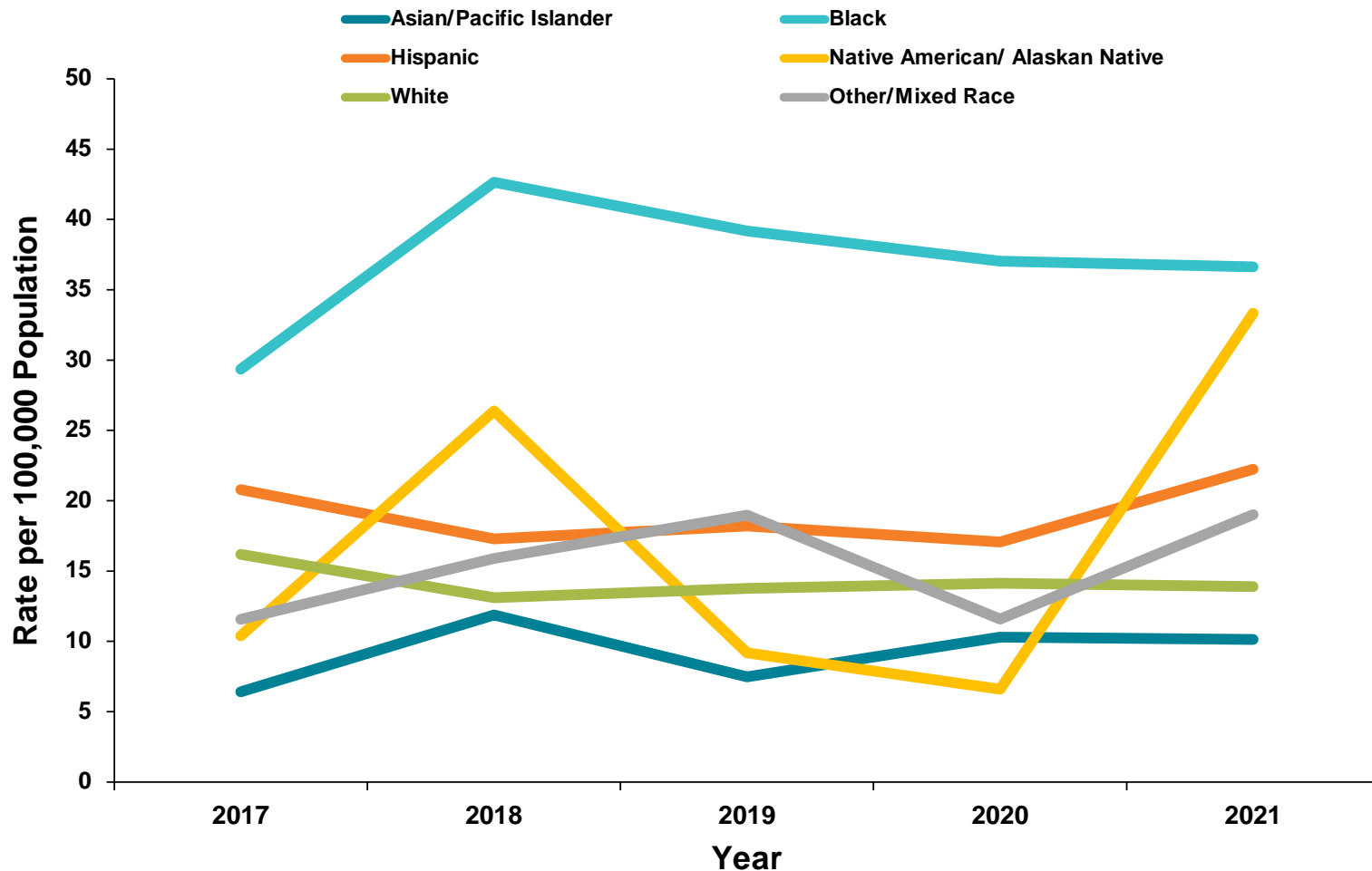
Primary & Secondary Syphilis Cases and Rates by Gender and Race/Ethnicity, San Diego County, 2021



Note: Counts exclude 31 cases missing race/ethnicity information.

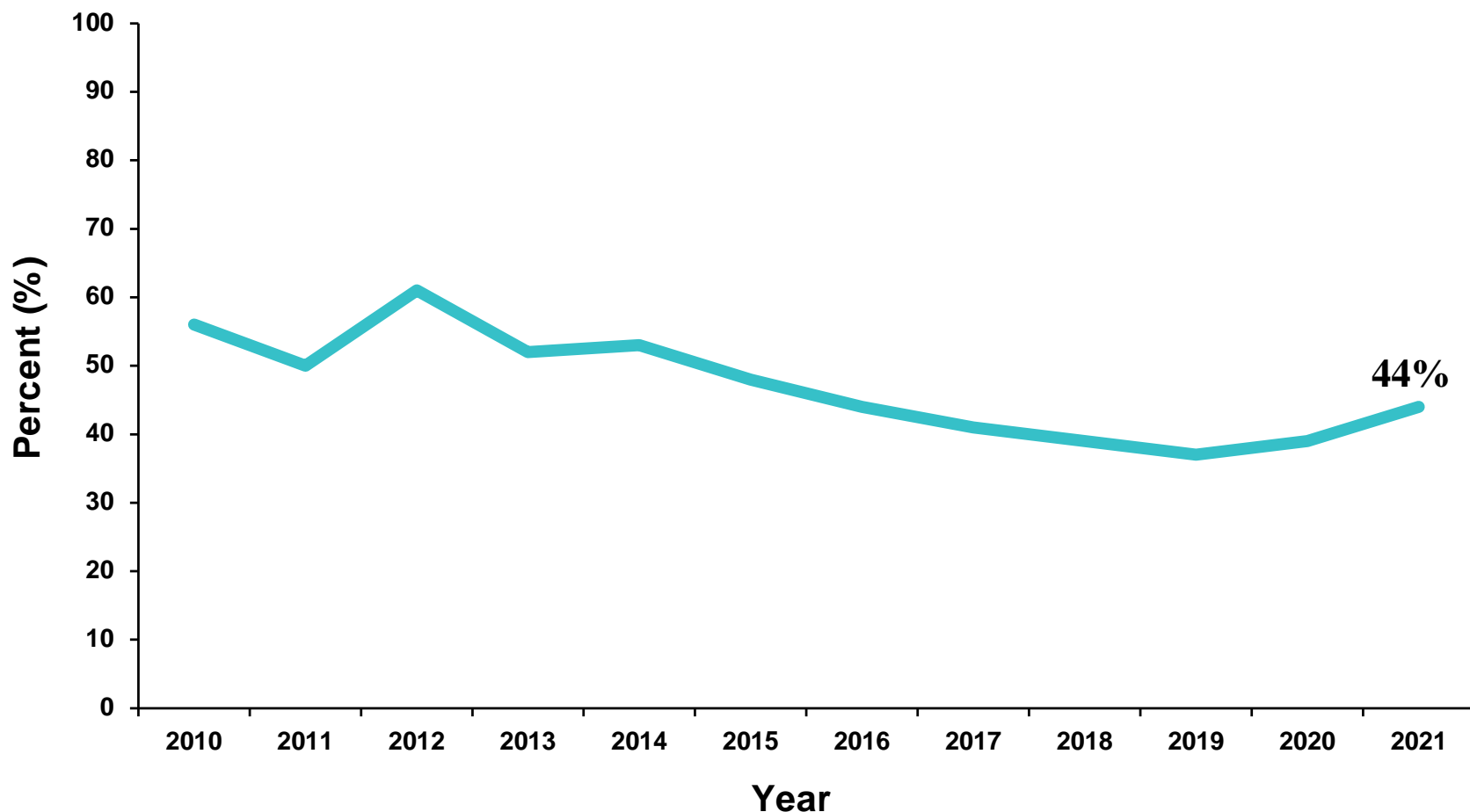


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Note: Primary and secondary syphilis rates for Native American/Alaska Native race should be interpreted with caution, as the counts for this race category are small (≤ 5) for all years.

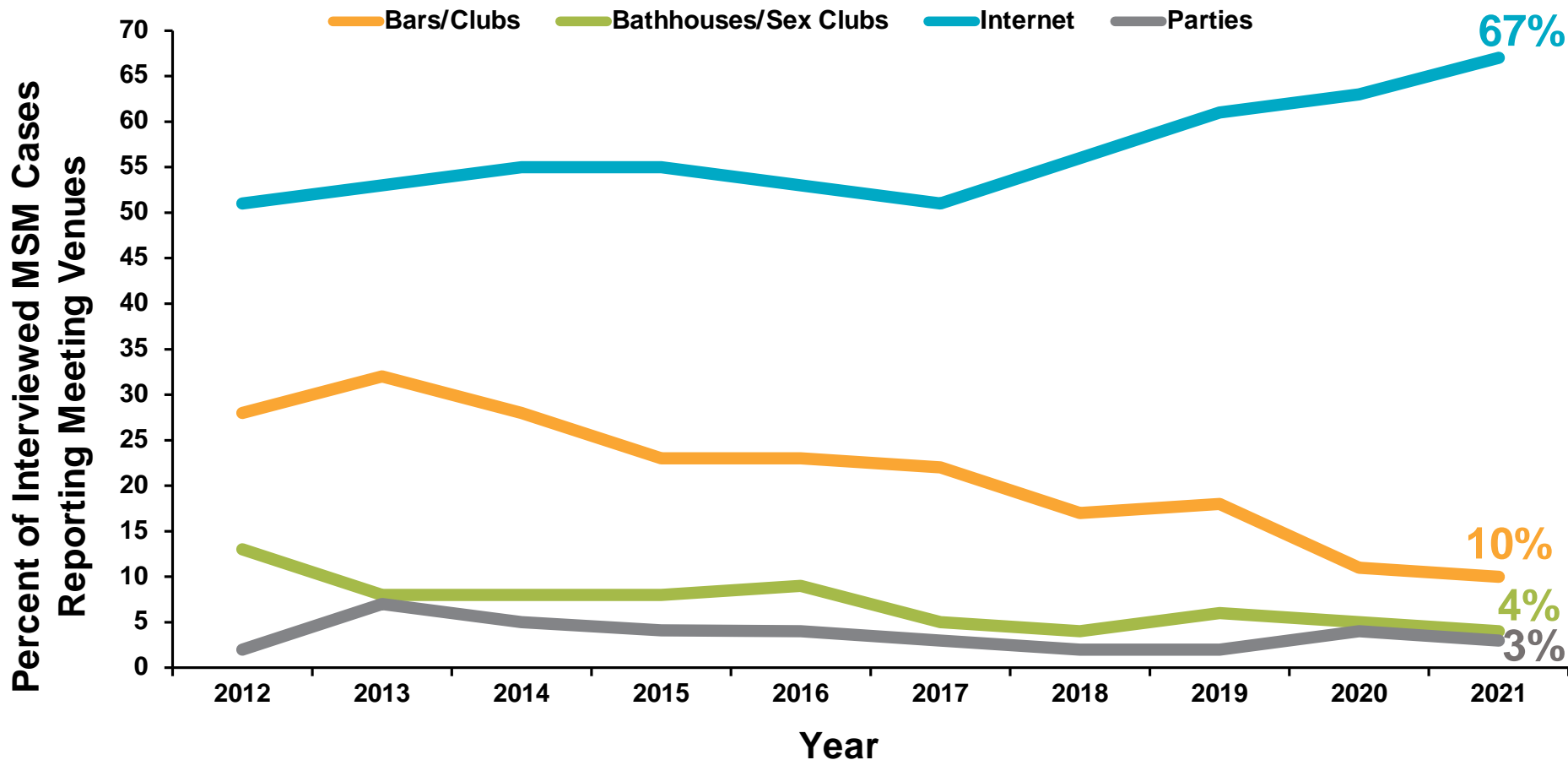
Percent of MSM* Primary & Secondary Syphilis Cases Living with HIV by Year, San Diego County, 2010 - 2021



44%

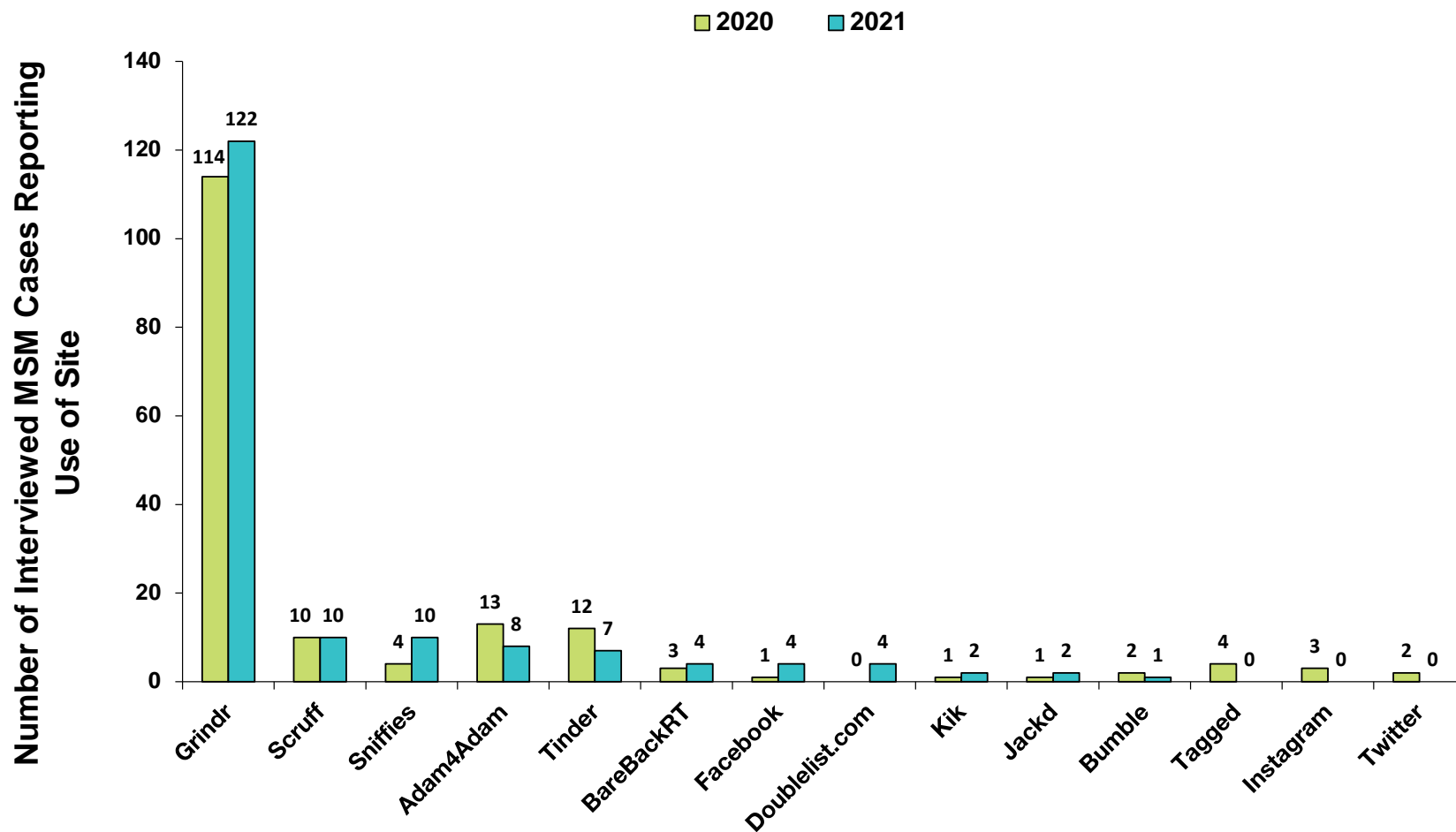
*MSM: Men Who Have Sex With Men

Meeting Venues Among Interviewed MSM* Primary & Secondary Syphilis Cases, San Diego County, 2012 – 2021



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, 2020 – 2021

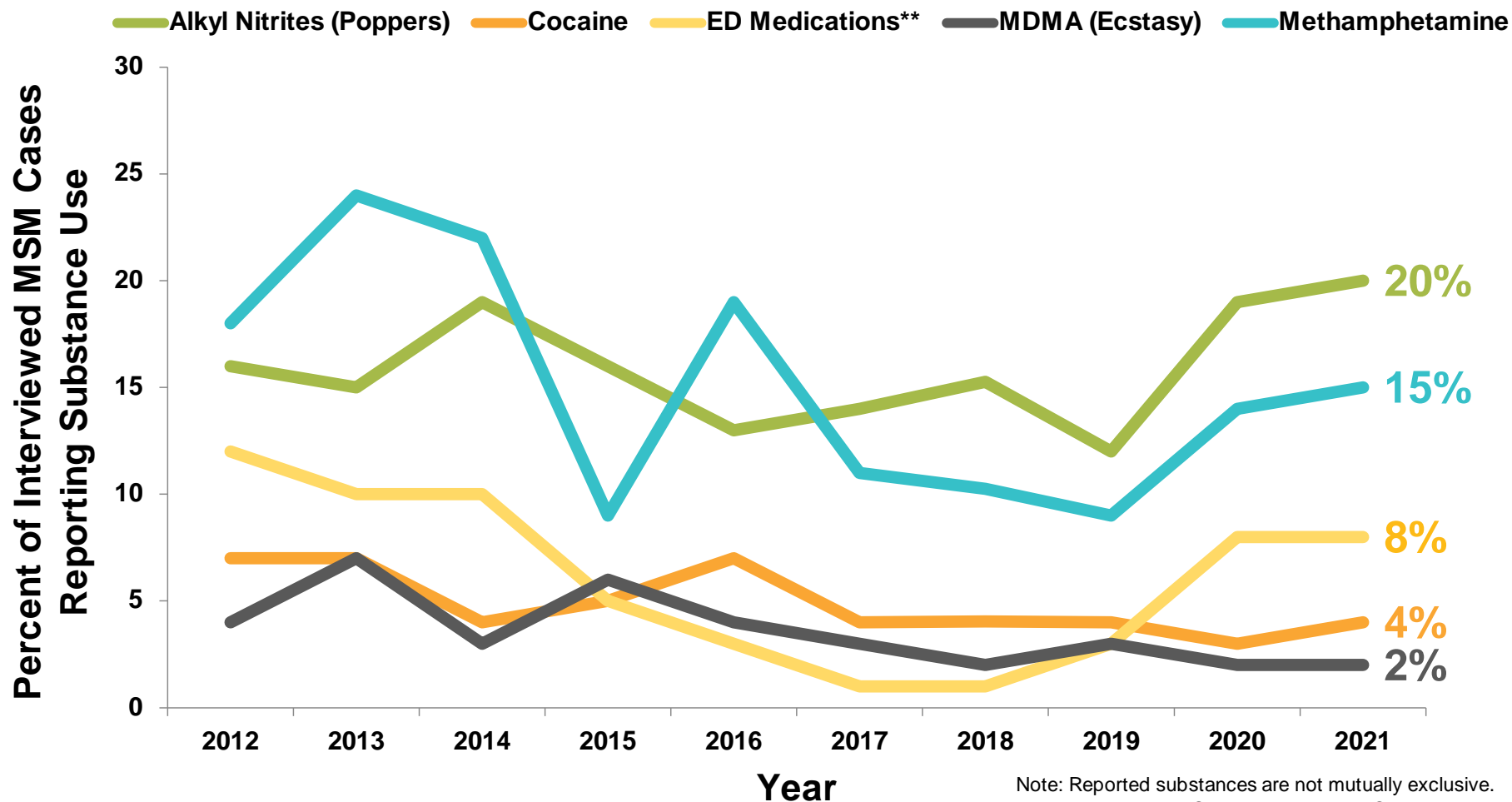


Note: Reported use of sites is not mutually exclusive.

* Included websites have been used by at least 2 MSM cases per year in 2020 or 2021.

**MSM: Men Who Have Sex With Men

Reported Substance Use of Interviewed MSM* Primary & Secondary Syphilis Cases by Year, San Diego County, 2012 – 2021

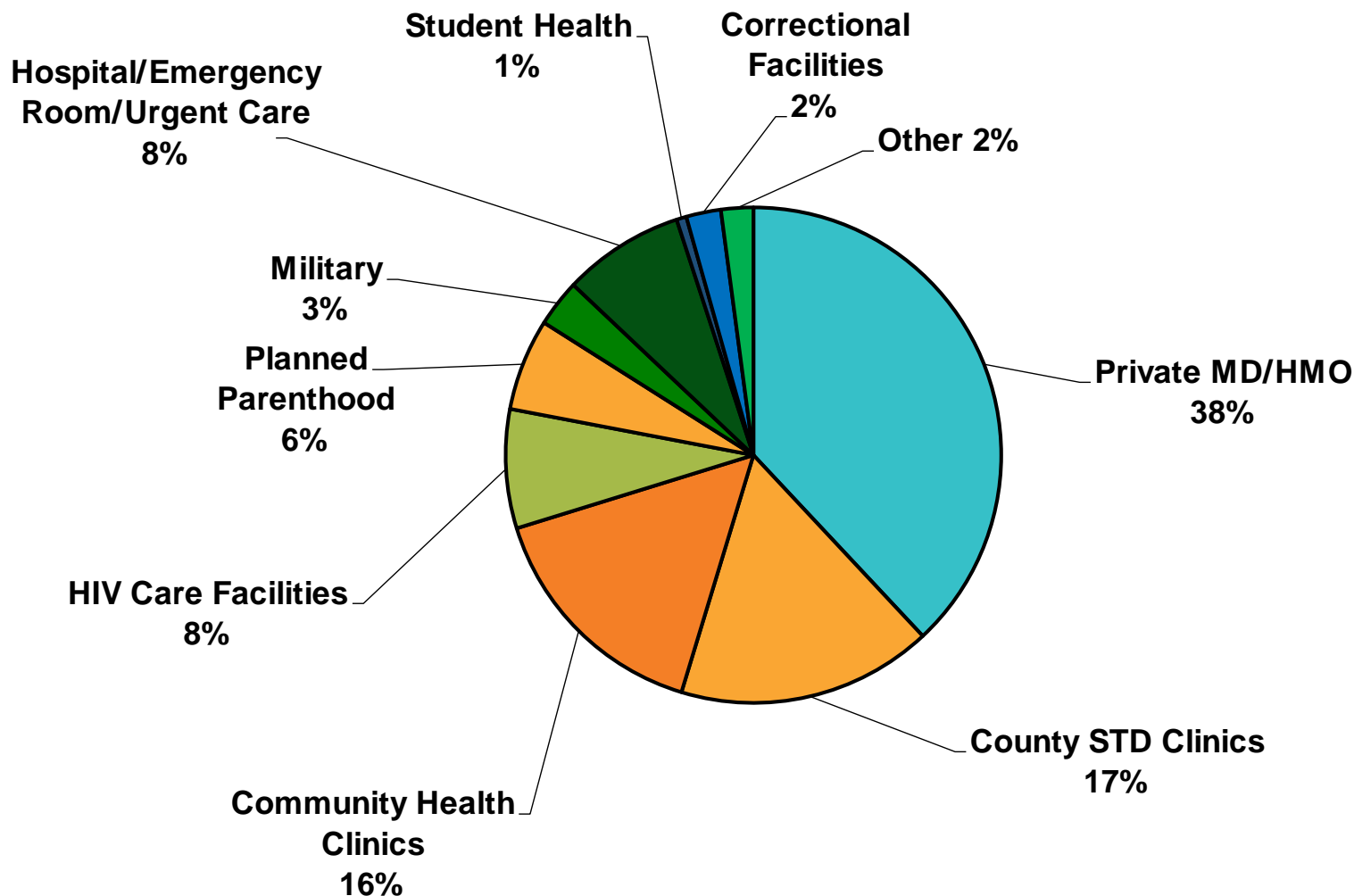


Note: Reported substances are not mutually exclusive.

*MSM: Men Who Have Sex With Men

** ED Medications: Erectile Dysfunction Medications

Primary & Secondary Syphilis Cases by Reporting Facility Type, San Diego County, 2021





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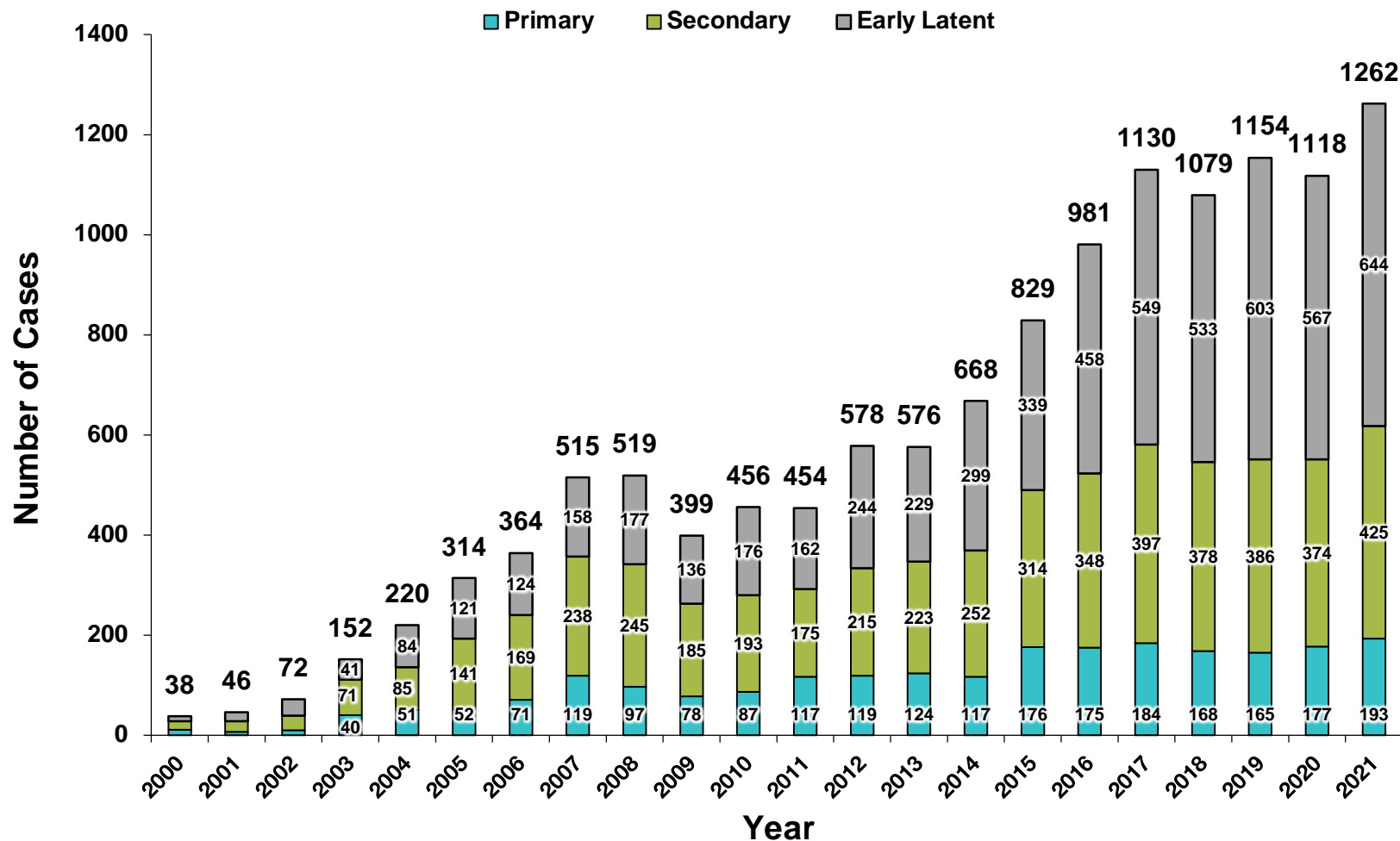
Early (Primary, Secondary, & Early Latent) Syphilis



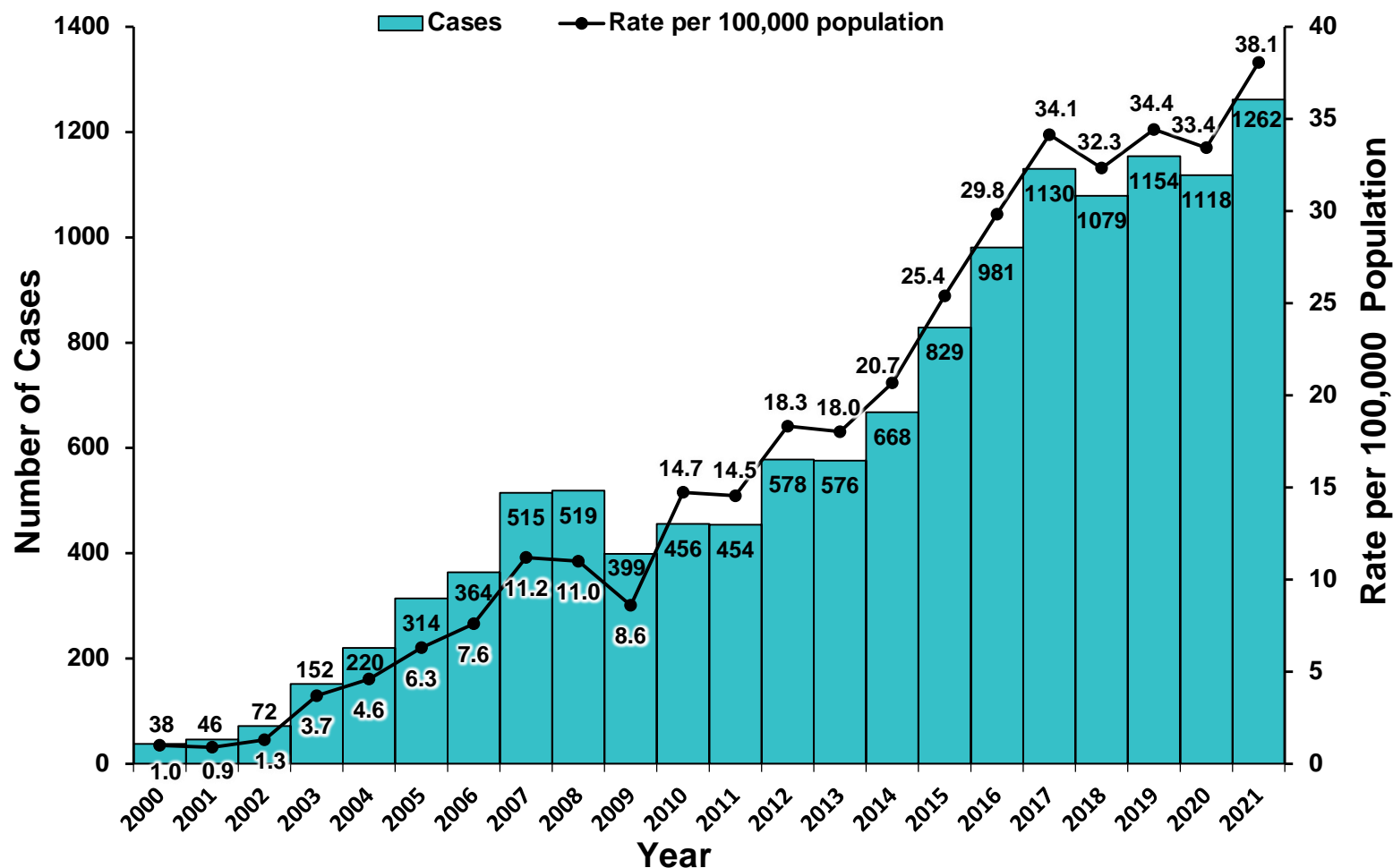
Early Syphilis in San Diego County

- Cases of early syphilis increased by 12.9% from 1,118 cases in 2020 to 1,262 cases in 2021.
- The overall rate of early syphilis increased by 14.1% from 33.4 cases per 100,000 in 2020 to 38.1 cases per 100,000 in 2021.
- The majority of early syphilis cases (69.6%) are men who have sex with men (MSM). An estimated 54.0% of MSM early 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 2.6 times that of white males.

Early Syphilis Cases by Year and Stage, San Diego County, 2000 - 2021



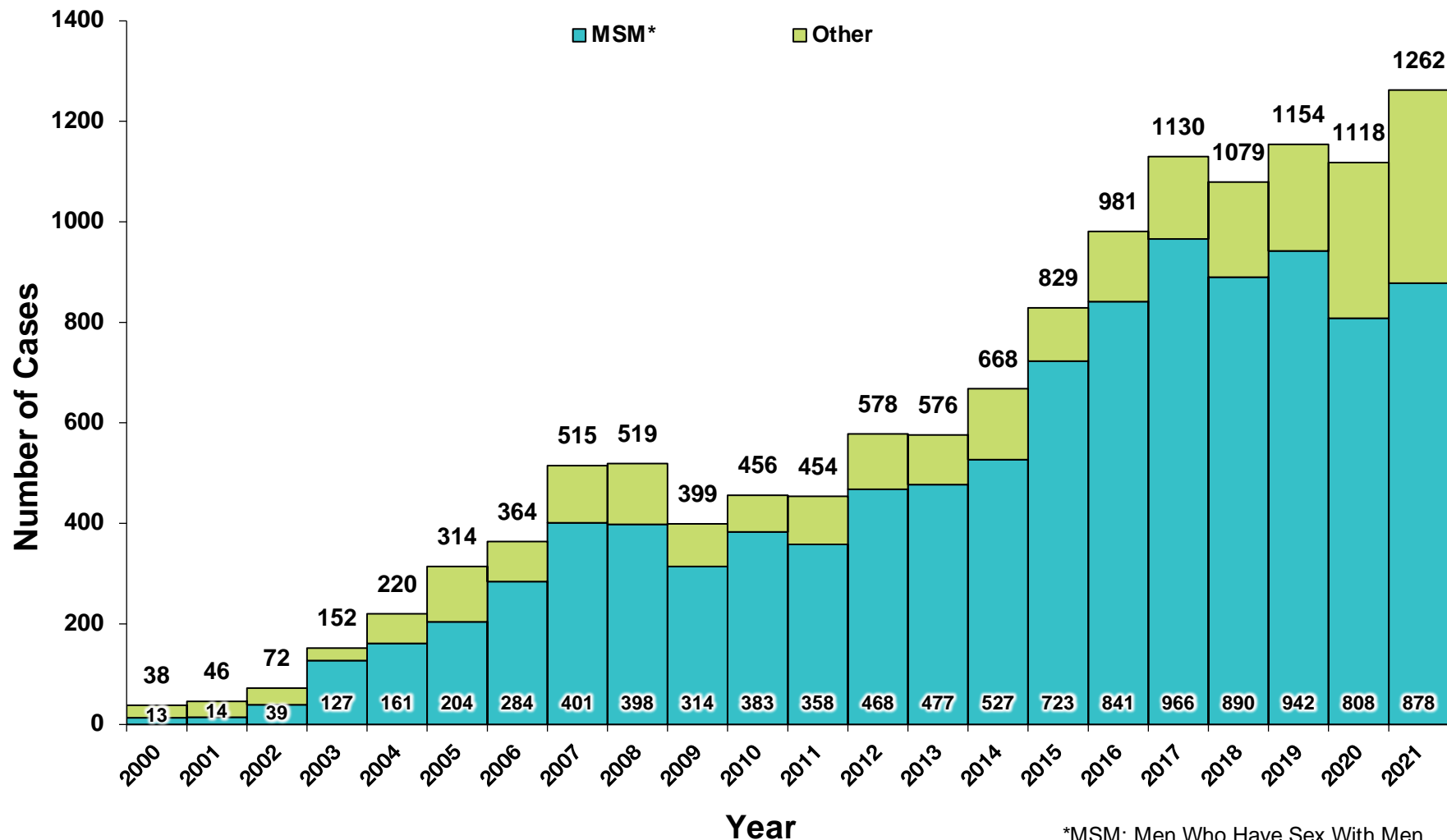
Early Syphilis Cases and Rates by Year, San Diego County, 2000 - 2021



Note: Early Syphilis includes primary, secondary and early latent

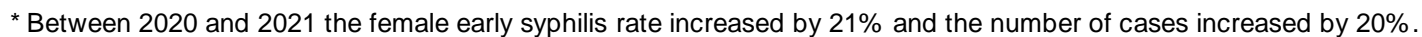


Early Syphilis Cases by Year, San Diego County, 2000 - 2021

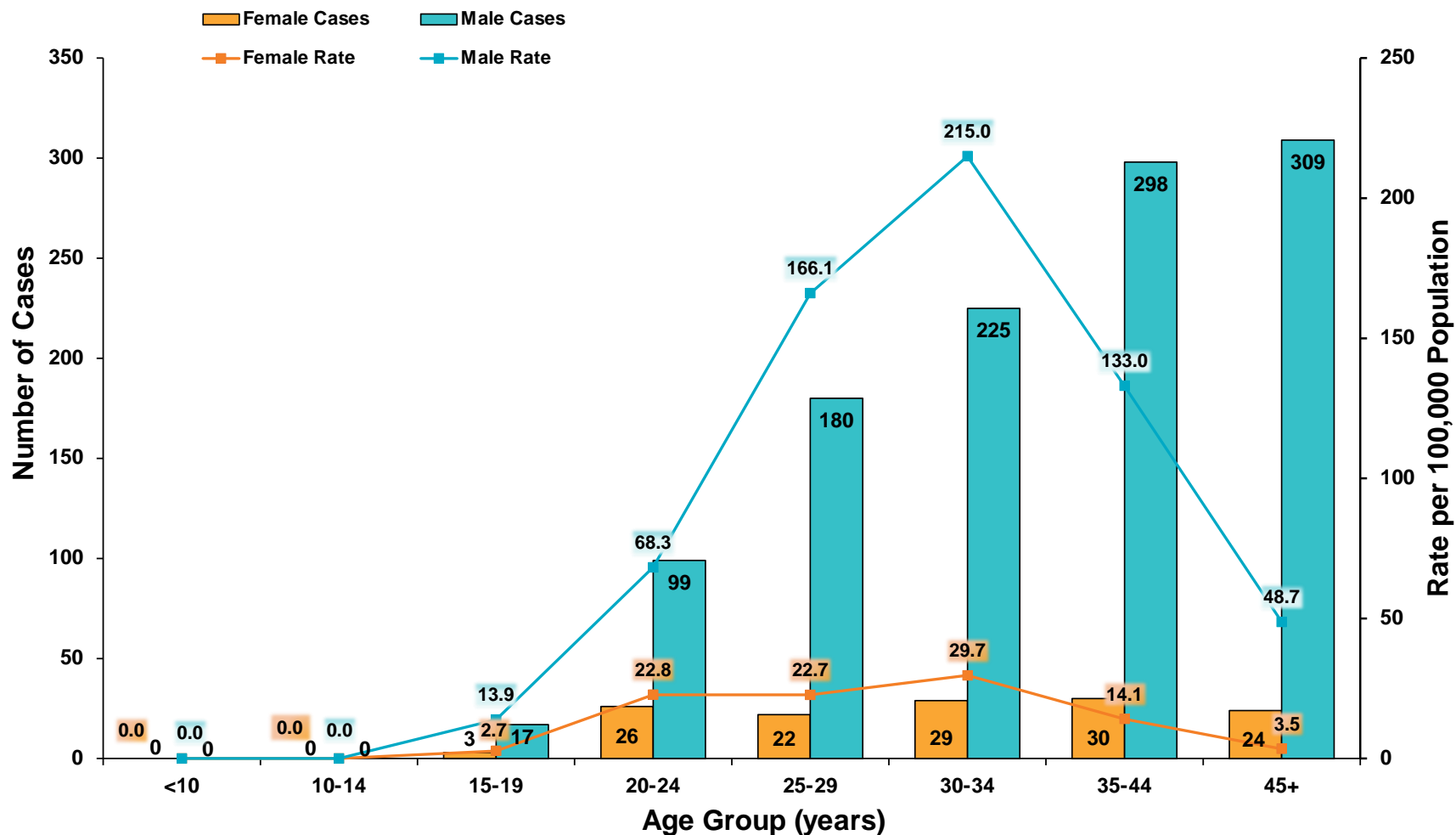


*MSM: Men Who Have Sex With Men

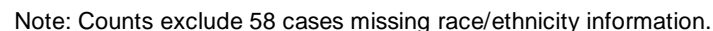
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Early Syphilis Cases and Rates by Gender and Age, San Diego County, 2021

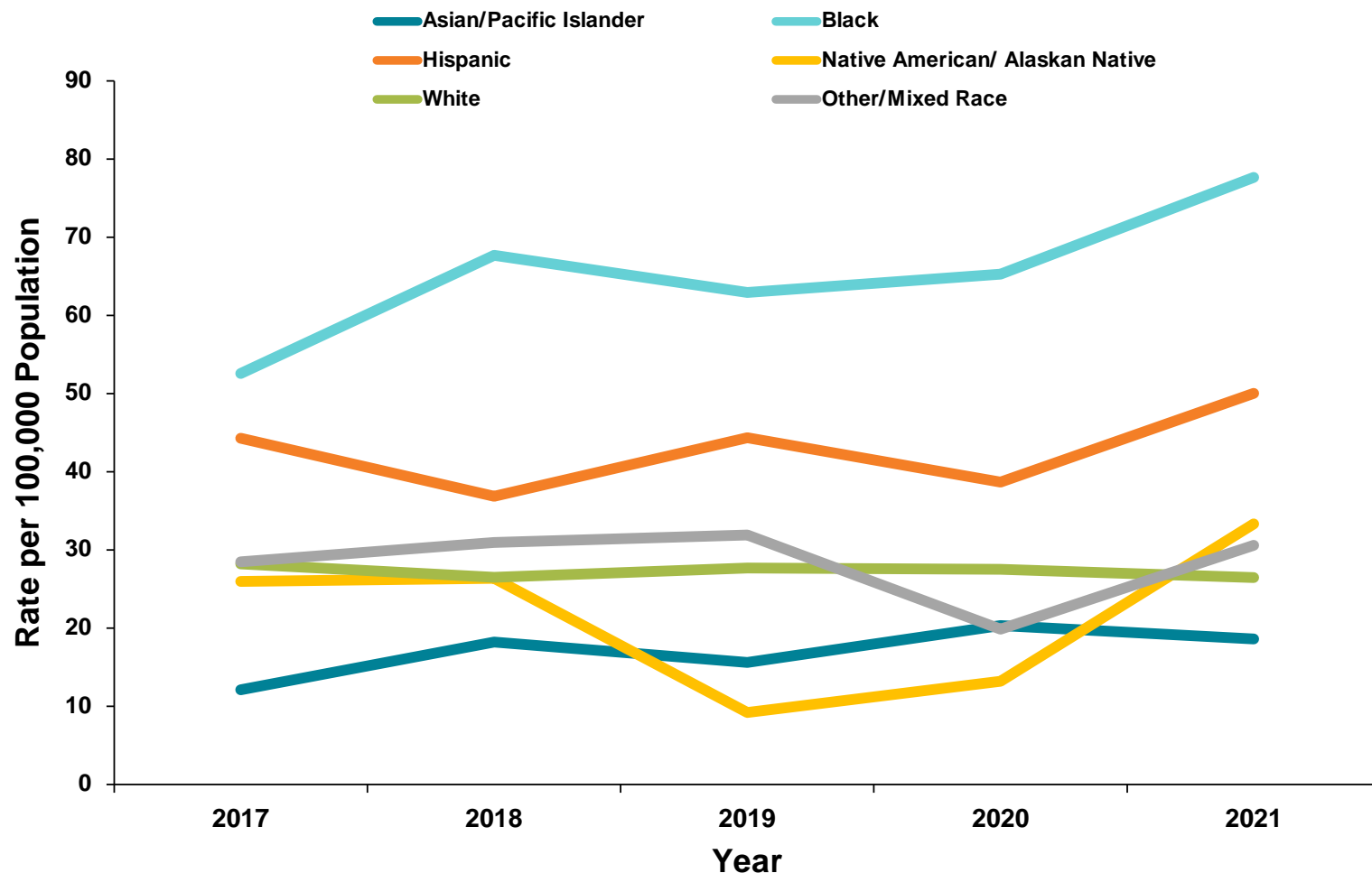


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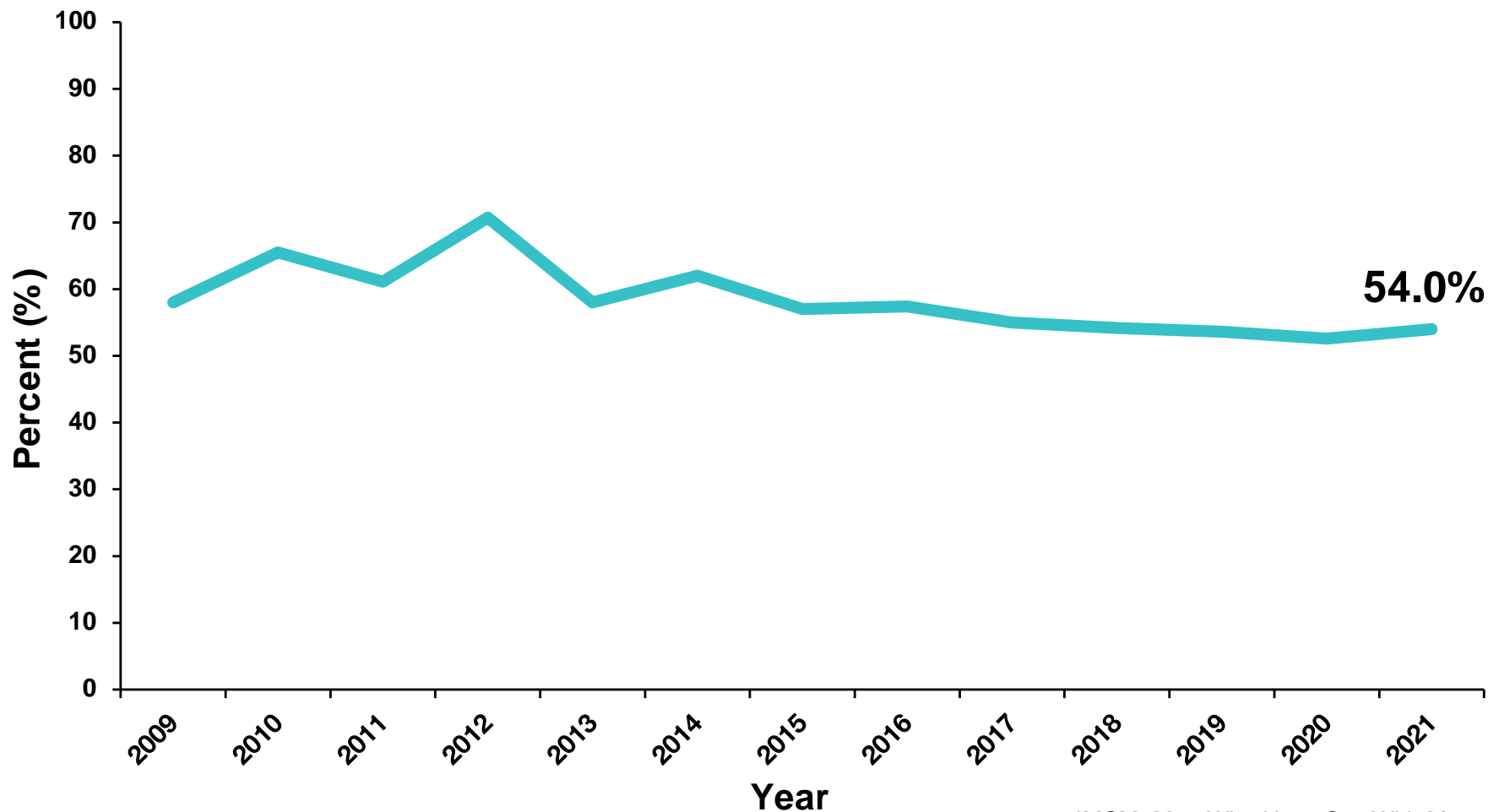


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Note: Early syphilis rates for Native American/Alaska Native race should be interpreted with caution, as the counts for this race category are small (≤ 5) for all years.

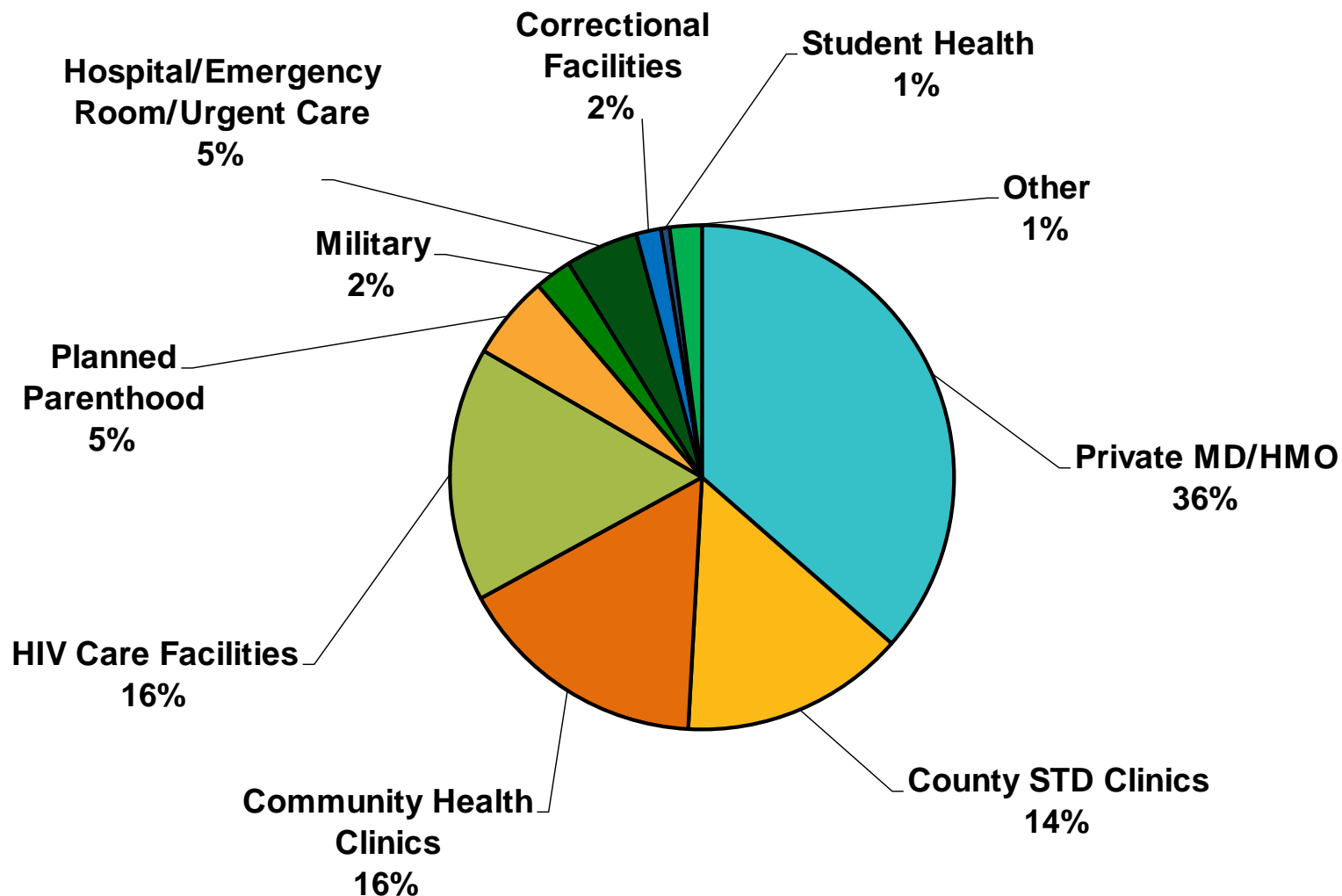
Percent of MSM* Early Syphilis Cases Living with HIV by Year, San Diego County, 2009 - 2021



54.0%

*MSM: Men Who Have Sex With Men

Early Syphilis Cases by Reporting Facility Type, San Diego County, 2021





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Female & Congenital Syphilis



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.

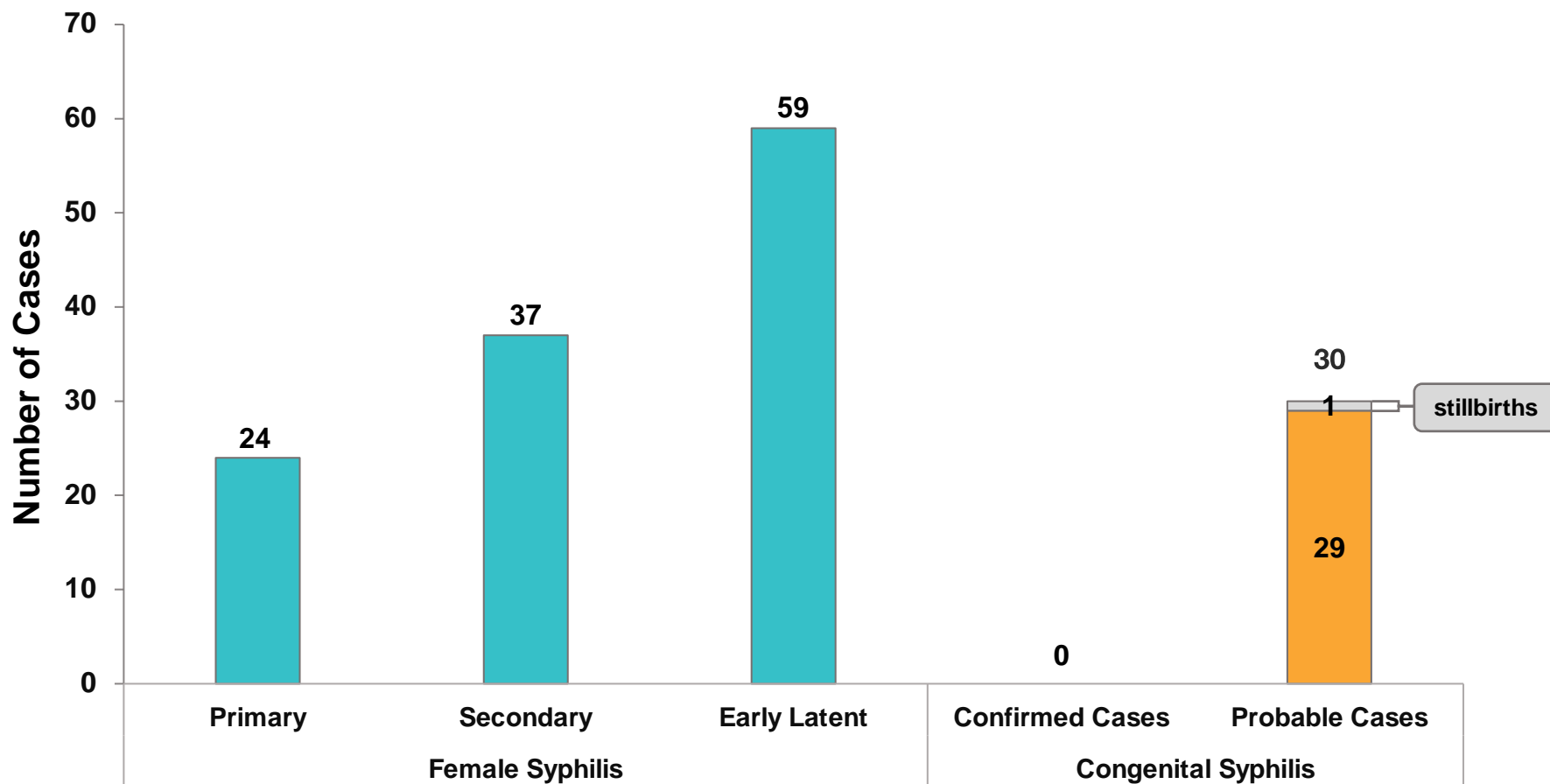
*Inadequate maternal treatment refers to incomplete treatment, treatment that is not in accordance with national guidelines, and/or treatment that was not initiated at least 30 days prior to delivery.



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 2015-2021.
 - Cases of total syphilis (all stages) increased by 28.1% from 288 cases in 2020 to 369 cases in 2021, and the rate increased by 32.2% from 38.2 cases per 100,000 in 2020 to 50.5 cases per 100,000 in 2021. At the time of diagnosis, 18.7% of syphilis cases were pregnant.
 - Cases of early syphilis increased by 13.2% from 106 cases in 2020 to 120 cases in 2021. The rate of early syphilis in women of childbearing age in 2021 was 1.2 times higher than it was in 2020. Among pregnant women, the early syphilis rate slightly decreased from 2.4 cases per 100,000 in 2020 to 2.1 cases per 100,000 in 2021.
 - The congenital syphilis rate steadily increased from 2015-2019. After a decrease in 2020, the congenital syphilis rate increased by 114% in 2021.
 - There was one syphilitic stillbirth reported in 2021.

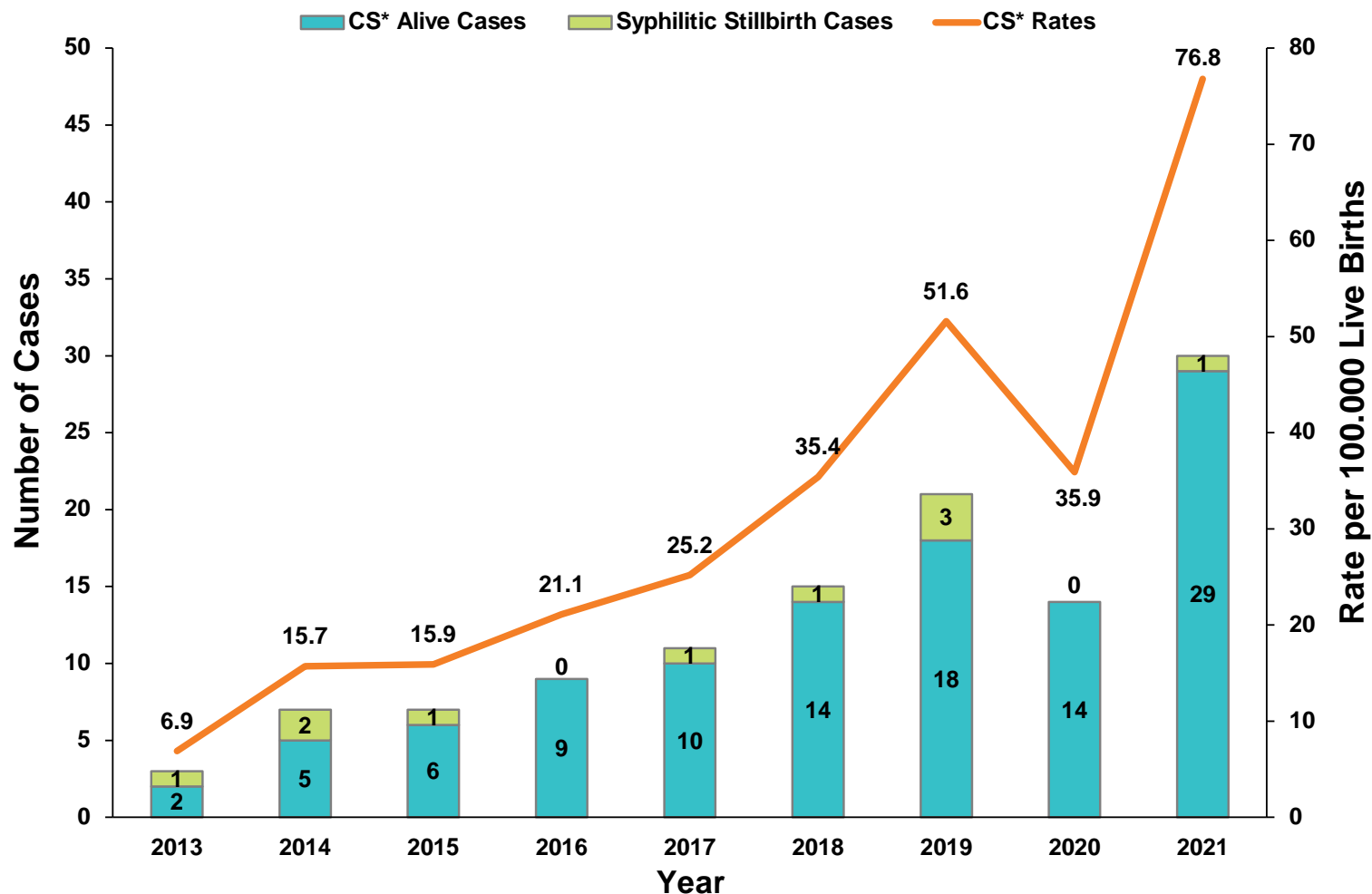
Cases of Syphilis in Women of Childbearing Age (15–49 y/o) and Congenital Syphilis, San Diego County, 2021



Congenital Syphilis Cases and Rates, San Diego County, 2013 - 2021

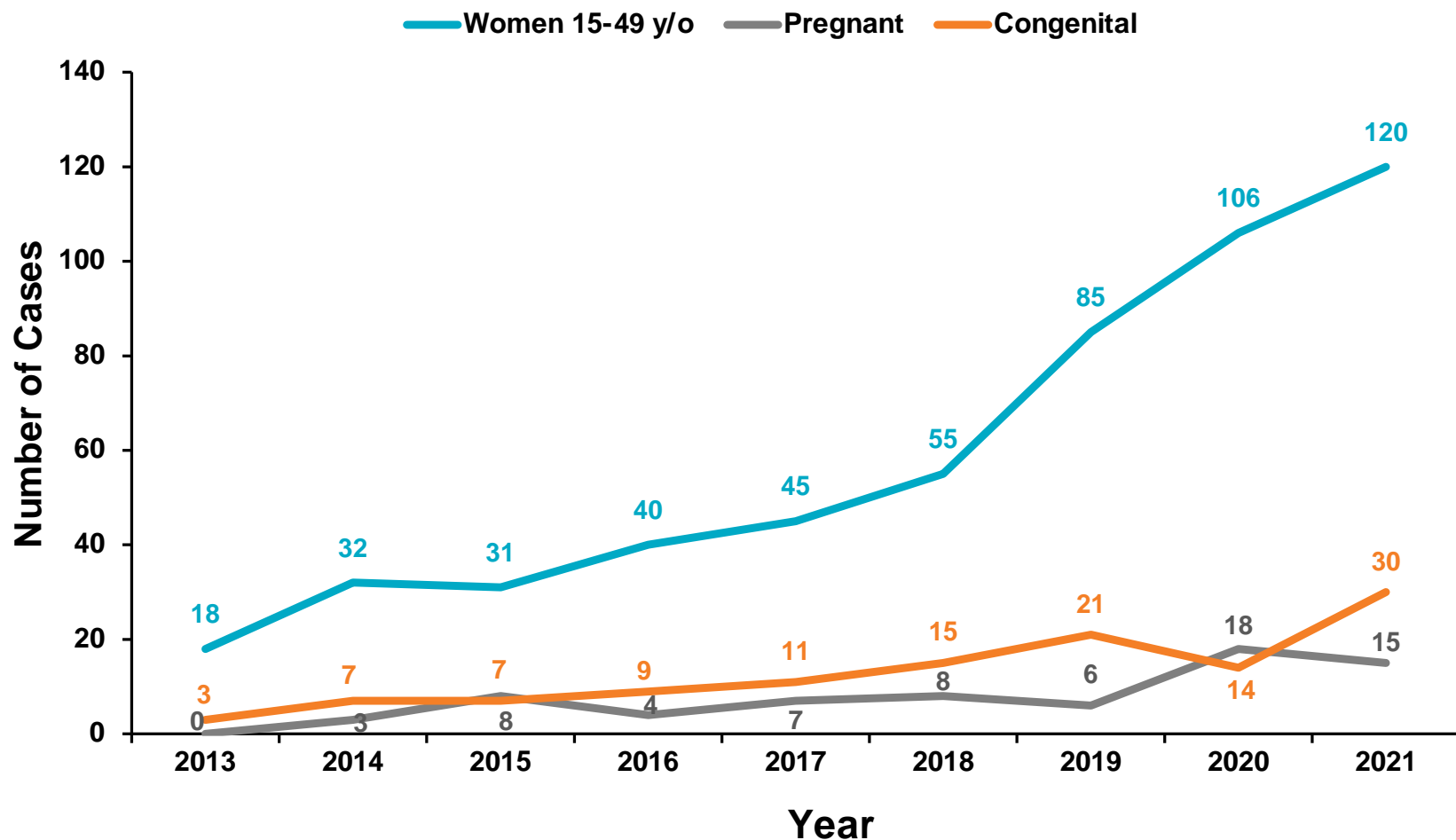


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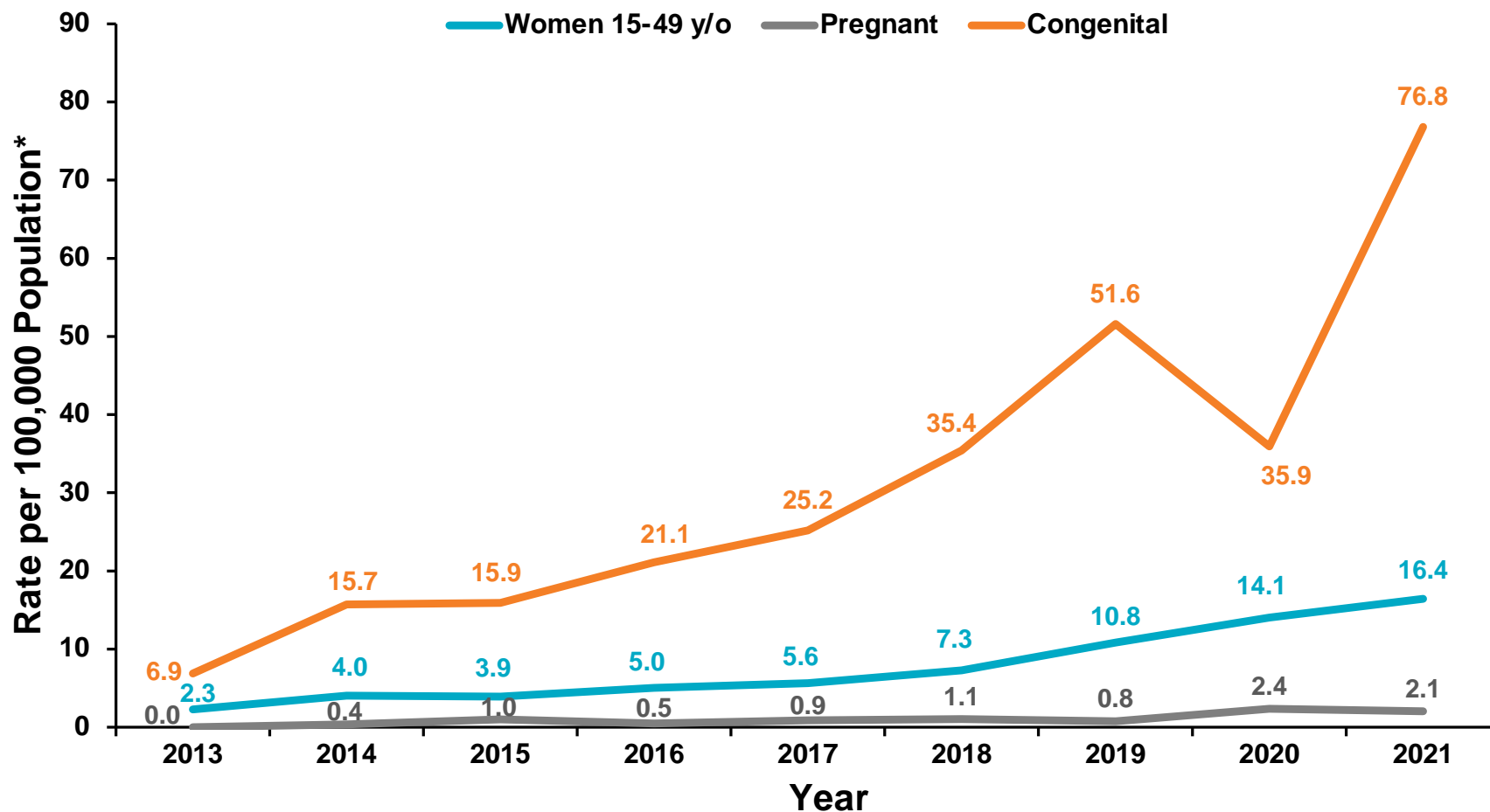
*CS: Congenital Syphilis. Rates for congenital syphilis were defined based on the number of live births and include syphilitic stillbirth.

Cases – Early Syphilis in Women of Childbearing Age (15-49 y/o) & Pregnant Women, Congenital Syphilis, San Diego County, 2013 - 2021



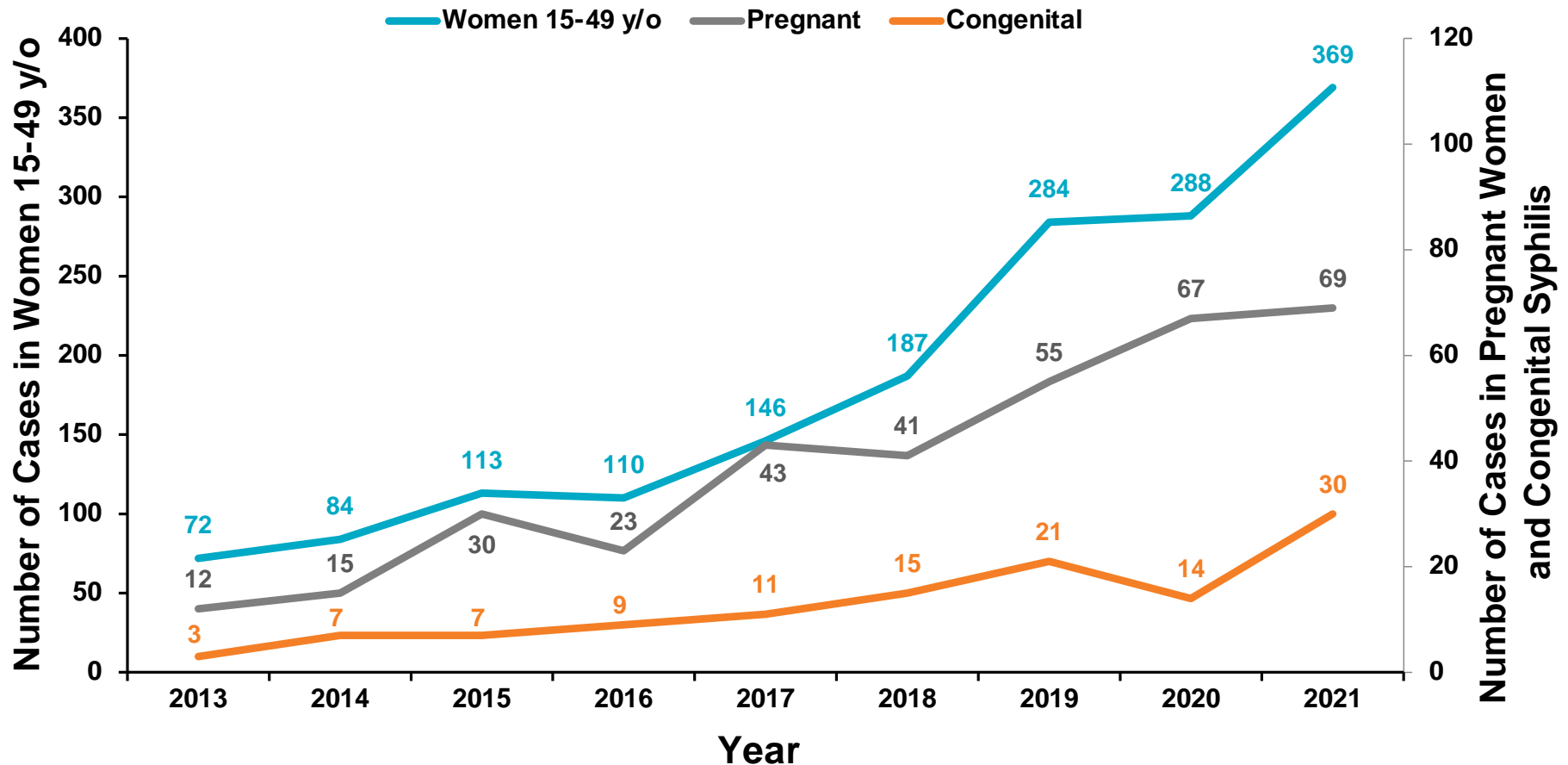
Note: Congenital syphilis cases include syphilitic stillbirths.

Rates – Early Syphilis in Women of Childbearing Age (15-49 y/o) & Pregnant Women, Congenital Syphilis, San Diego County, 2013 - 2021



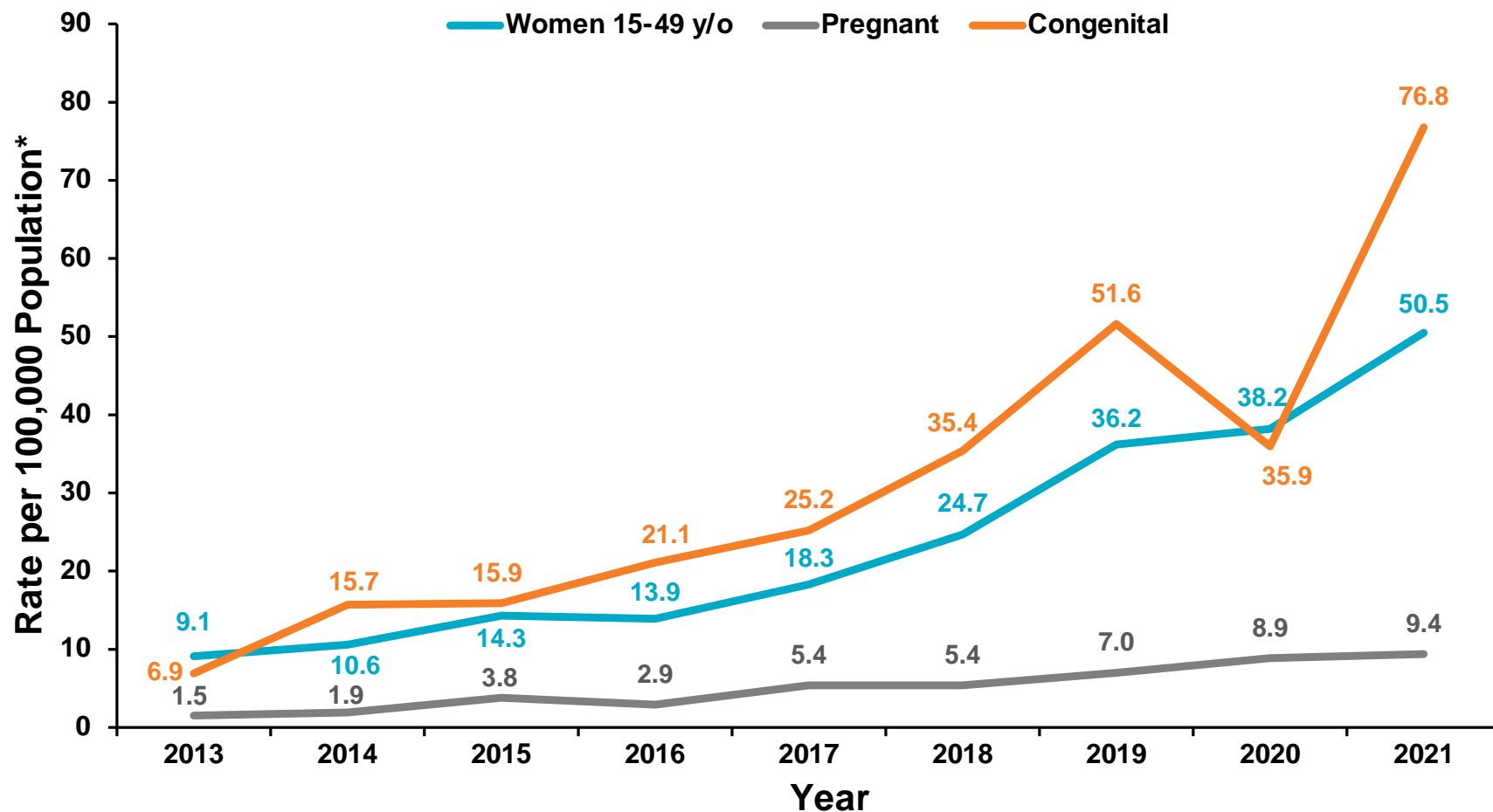
*Rates for women 15-49 y/o and pregnant women were defined based on population estimates of women 15-49 years of age. Rates for congenital syphilis were defined based on the number of live births.

Cases - Syphilis (All Stages) in Women of Childbearing Age (15-49 y/o) & Pregnant Women, Congenital Syphilis, San Diego County, 2013- 2021



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

Rates - Syphilis (All Stages) in Women of Childbearing Age (15-49 y/o) & Pregnant Women, Congenital Syphilis, San Diego County, 2013- 2021



*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



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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”).



On May 17, 2016, the County of San Diego Health and Human Services Agency Division of Public Health Services received accreditation from the Public Health Accreditation Board.

March 2023
www.STDSanDiego.org



SEXUALLY TRANSMITTED DISEASES IN SAN DIEGO COUNTY 2021 DATA SLIDES

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

