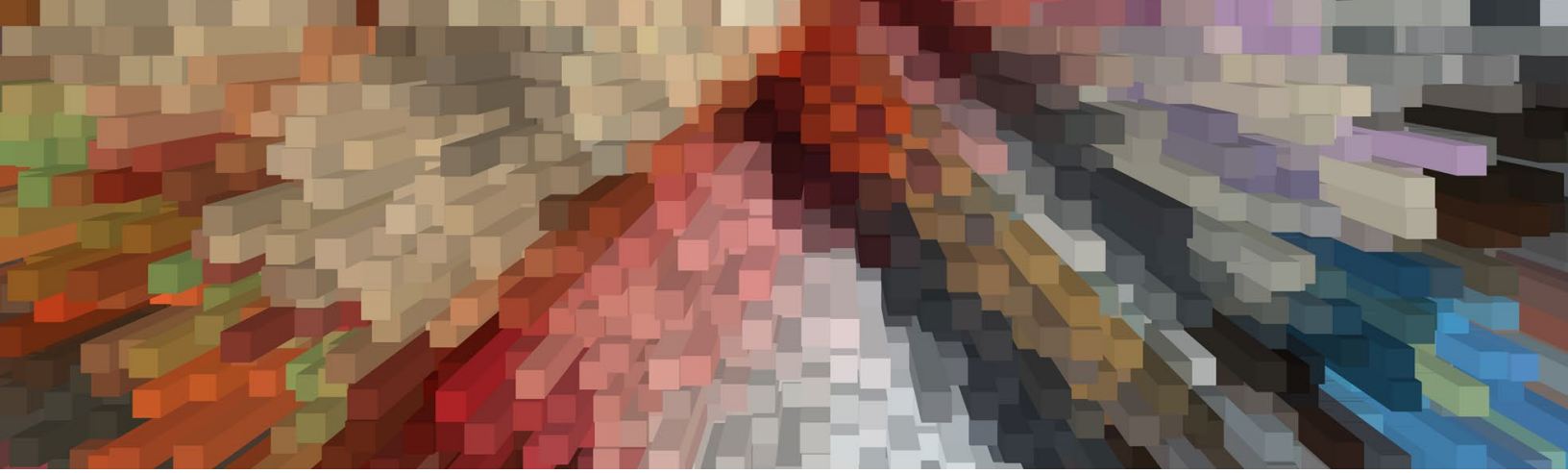

Sexually Transmitted Infections Surveillance 2022

Sexually Transmitted Infections Surveillance 2022

CDC's 2022 STI Surveillance Report underscores that STIs must be a public health priority

Yet again, more than 2.5 million cases of chlamydia, gonorrhea, and syphilis were reported in the United States

Sexually Transmitted Infections Surveillance, 2022 provides the most current and complete data for nationally notifiable STIs for federally funded control programs. CDC's annual report underscores that STIs must be a public health priority. In 2022, more than 2.5 million cases of syphilis, gonorrhea, and chlamydia were reported in the United States. The most alarming concerns center around the syphilis and congenital syphilis epidemics, signaling an urgent need for swift innovation and collaboration from all STI prevention partners. In addition to the syphilis epidemic worsening, reported gonorrhea cases declined for the first time in at least a decade while reported chlamydia cases were level. CDC will continue to examine this finding closely and look to 2023 data for better understanding, but recognize this finding may be a cause for an even closer look at public health efforts and redoubled prevention strategies. As STI services and related resources continue to rebound from the U.S. COVID-19 pandemic and mpox outbreak, we must act now to mobilize and execute a whole-of-nation approach if we hope to turn the tide.

Disease	Cases					Percent Change	
	2018	2019	2020	2021	2022	5 Year	1 Year
Chlamydia	1,758,668	1,808,703	1,579,885	1,644,416	1,649,716	-6.2	0.3
Gonorrhea	583,405	616,392	677,769	710,151	648,056	11.1	-8.7
Syphilis (All Stages)	113,739	127,943	131,797	173,858	203,500	78.9	17.0
Congenital Syphilis	1,325	1,882	2,162	2,875	3,755	183.4	30.6
Total Reported STIs	2,457,137	2,554,920	2,391,613	2,531,300	2,505,027	1.9	-1.0

STI surveillance data collected during the COVID-19 pandemic and presented in this report should be interpreted cautiously. See Impact of COVID-19 on STIs for more information.

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Announcement

Dear Partners in Prevention,

Today, CDC released Sexually Transmitted Infections (STI) Surveillance, 2022. The annual report – which highlights that the syphilis epidemic continues to escalate – underscores that STIs must be a public health priority.

Overall, in 2022, more than 2.5 million cases of syphilis, gonorrhea, and chlamydia were reported in the United States.

According to the report, syphilis cases (all stages and congenital syphilis) have increased 80 percent in the past five years. More than 3,700 congenital syphilis cases were reported in 2022, reflecting an alarming 937 percent increase in the past decade.

While reported syphilis cases continued to increase, reported chlamydia cases were level and reported gonorrhea cases declined by nearly 9 percent in 2022. Given this is the first drop in reported gonorrhea cases in at least a decade, we are examining this finding closely and will be looking to 2023 data to better understand if this signals a true decline in infections, or if this is related to changes in gonorrhea diagnoses and reporting in 2022. Although gonorrhea declined, this finding may be a cause for an even closer look at public health efforts and redoubled prevention strategies, including those that improve access to STI testing and treatment.

U.S. syphilis epidemic continues to climb – we must stop syphilis in babies

The U.S. syphilis epidemic worsened yet another year, and swift action is urgently needed to slow the curve. Cases of primary and secondary (P&S) syphilis—the most infectious stages of the disease—increased 10 percent in 2022 alone and 68 percent since 2018.

Steady growth in P&S syphilis among women fuels the congenital syphilis epidemic, threatening the health of babies. Building on a decade of increases, reported congenital syphilis cases increased 31 percent in just one year, from 2021-2022. Nearly every state reported having at least one congenital syphilis case. Some states are feeling the impact more than others – Texas, California, Arizona, Florida, and Louisiana represented 57 percent of all reported congenital syphilis cases. Tragically, these infections resulted in 282 stillbirths and infant deaths in 2022.

> "There are no shortcuts, and we have to meet people where they are. Some people face tremendous barriers to STI prevention and health services. So, the most important work is often outside the clinic, whether it be reaching out to communities with testing, interviewing patients to offer services to their partners, or delivering treatment directly to someone."
>
> – Laura Bachmann, MD, MPH, Acting Director, CDC's Division of STD Prevention

Racial and ethnic minorities continue to be disproportionately affected. The highest number of cases occurred among those who are Black or African American, Hispanic and Latino, and White. American Indian or Alaska Native people experienced the highest rate of congenital syphilis—for every 155 births in 2022, there was one congenital syphilis case. Black or African American people experienced about 30 percent of congenital syphilis cases in 2022. As disparities persist among some groups, it is evident that our nation must keep striving to address longstanding social inequalities that often lead to health inequalities and, ultimately, health disparities.

CDC's recent Vital Signs report, Missed Opportunities for Preventing Congenital Syphilis — United States, 2022, showed that timely syphilis testing and treatment during pregnancy might have prevented almost 9 in 10 (or 88%) congenital syphilis cases in 2022.

Collaboration is key in reversing the STI epidemic

The STI field has reached a tipping point. We have long known that these infections are common, but we have not faced such severe effects of syphilis in decades. Recent public health emergencies diverted program resources and threatened the health of those already disproportionately affected by STIs. We must move now to pick up the pieces.

We cannot continue to use decades-old prevention strategies to address today's STI epidemic. People need testing and treatment to meet them where they are. We know treatment is not always received in traditional healthcare settings. We must continue supporting opportunities and initiatives that enhance and expand STI service delivery, care, monitoring, research, and training. Innovative solutions like partnerships with retail health or pharmacies, STI express clinics, and setting up injectable syphilis treatment delivery programs can jump-start care for people. CDC is working quickly to offer final guidance on the use of doxycycline post-exposure prophylaxis to prevent bacterial STIs. This is the first major bacterial STI prevention innovation in decades.

Within the STI epidemic, syphilis is one infection that stands alone. It has emerged as a unique public health challenge. We are calling on all partners, particularly healthcare providers, to understand who should be tested for syphilis in their community, talk with patients about sexual health, treat patients and their partners immediately, and work with local and state health departments to improve syphilis management and access to care. Every case is one too many when we have the tools to prevent it. We must find a way to apply the tools we have more effectively and acknowledge that innovation is overdue and new primary prevention strategies are now necessary. We urgently need better tools for immediate diagnosis and new treatment options.

We are encouraged as the U.S. Department of Health and Human Services mobilizes the first-ever National Syphilis and Congenital Syphilis Syndemic Federal (NSCSS) Task Force. The NSCSS Task Force is a cohesive, coordinated response among federal agencies and external partners to help move syphilis prevention forward. Together, partners seek to address the syndemic of syphilis and congenital syphilis, reduce their rates, promote health equity, and share resources with affected communities.

We are grateful for the continued collaboration of our STI prevention partners and look forward to supporting partners outside of our field as we collaboratively mobilize to turn the tide on the STI epidemic.

Best regards,

Laura Bachmann, MD, MPH, FIDSA, FACP
Acting Director, Division of STD Prevention
National Center for HIV, Viral Hepatitis, STD, and TB Prevention
US Centers for Disease Control and Prevention

National Overview of STIs, 2022

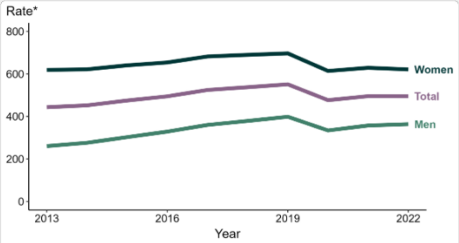
As noted in the 2021 National Academies of Sciences Engineering and Medicine report, *Sexually Transmitted Infections: Adopting a Sexual Health Paradigm*, surveillance is key to understanding the magnitude of sexually transmitted infections (STIs) in the United States (US) and in subpopulations that are most affected.[1] *Sexually Transmitted Infections Surveillance, 2022* provides trends in nationally notifiable STIs for which there are federally funded control programs: chlamydia, gonorrhea, and syphilis, including congenital syphilis. This overview summarizes the national and sentinel surveillance data provided in the accompanying tables and figures in this report.

Because STIs often do not show symptoms, and screening is necessary for timely diagnosis and treatment, changes in access to sexual health care can affect the number of infections diagnosed and reported. Disruptions in STI-related prevention and care activities related to the US response to the COVID-19 pandemic had a pronounced impact on trends in STI surveillance data; therefore, trends for STI surveillance data collected during the pandemic and presented in *Sexually Transmitted Infections Surveillance, 2022* should be interpreted cautiously. For more information, please see *Impact of COVID-19 on STIs*.

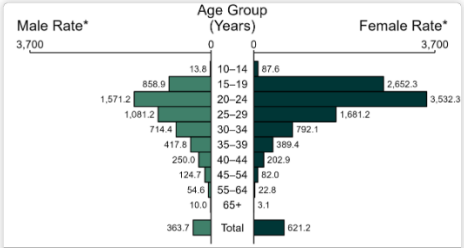
Chlamydia

In 2022, a total of 1,649,716 cases of Chlamydia trachomatis infection were reported, making it the most common nationally notifiable sexually transmitted infection in the United States for that year. The rate of reported chlamydia in 2022 (495.0 per 100,000) was similar to the rate in 2021 (495.5 per 100,000). During 2021 to 2022, the rate of reported chlamydia among men increased 1.8% (from 357.4 to 363.7 per 100,000) and the rate among women decreased 1.2% (from 628.8 to 621.2 per 100,000). Decreases in rates of reported chlamydia among women were most pronounced among women aged 20 to 24 years (7.0% decrease from 2021), mirroring decreases among men aged 20 to 24 years (6.5% decrease from 2021). Nevertheless, rates of reported chlamydia remain highest among adolescents and young adults and in 2022, 57.7% of all cases of chlamydia were reported among persons aged 15–24 years.

As chlamydial infections are usually asymptomatic, case rates are heavily influenced by screening coverage. During the COVID-19 pandemic, many health care clinics limited in-person visits to patients with symptoms or closed entirely, and preventive health care visits where STI screening usually happens, such as annual reproductive health visits for young women decreased. During 2020, the number of chlamydia cases decreased substantially, likely reflecting disruptions in STI-related care during the initial shelter in place orders. Although rates have increased since 2020, the national rate of reported chlamydia in 2022 is still lower than the rate in 2019, suggesting that reductions in chlamydia screening coverage may have persisted.



Chlamydia — Rates of Reported Cases by Sex, United States, 2013–2022

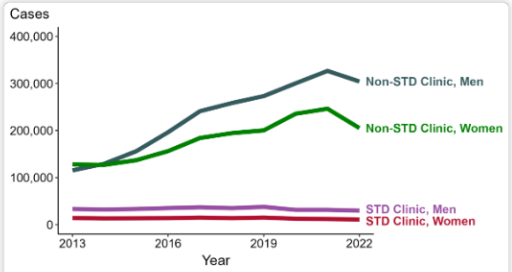


Chlamydia — Rates of Reported Cases by Age Group and Sex, United States, 2022

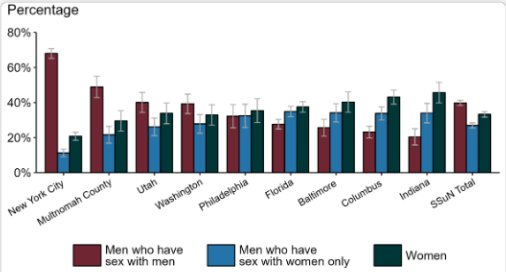
Gonorrhea

In 2022, a total of 648,056 cases of gonorrhea were reported, making it the second most common nationally notifiable sexually transmitted infection in the United States for that year. After reaching a historic low in 2009, rates of reported gonorrhea increased through 2021; however, during 2021 to 2022, the overall rate of gonorrhea decreased 9.2%. During 2021 to 2022, rates decreased among both men and women, among all age groups, among most racial/Hispanic ethnicity groups, and decreases were observed in 41 states. Decreases were most pronounced among women (14.5% decrease), reflecting substantial decreases among women aged 20 to 24 years (18.1% decrease) and among women diagnosed in non-sexually transmitted disease (STD) clinic settings (16.7% decrease).

Since 2013, rates of reported gonorrhea have been higher among men compared to women, likely reflecting cases identified in both gay, bisexual, and other men who have sex with men (MSM) and men who have sex with women only (MSW). Although there are limited data available on sexual behaviors of persons reported with gonorrhea at the national level, enhanced data from jurisdictions participating in a sentinel surveillance system, the STD Surveillance Network (SSuN), suggest that almost 40% of gonorrhea cases occurred among MSM in 2022; however, this proportion varied across jurisdictions participating in SSuN.



Gonorrhea — Reported Cases by Reporting Source and Sex, United States, 2013–2022



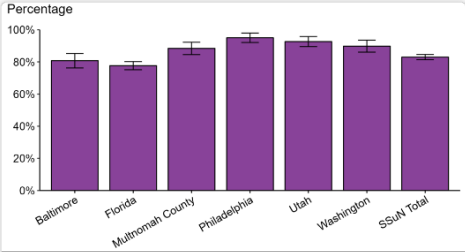
Gonorrhea — Estimated Proportion of Cases by Sex and Sex of Sex Partners and Jurisdiction, STD Surveillance Network (SSuN), 2022

Antibiotic Resistant Gonorrhea

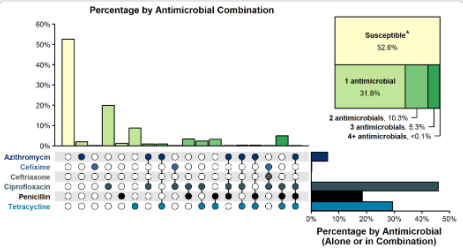
Gonorrhea can quickly develop resistance to antibiotics used to treat infection. Based on gonococcal isolates collected through sentinel surveillance in the Gonococcal Isolate Surveillance Project (GISP), about half of all infections were estimated to be resistant or have elevated minimum inhibitory concentrations (MICs) to at least one antibiotic in 2022; however, almost all circulating strains in the United States remain susceptible to ceftriaxone, the primary recommended treatment for uncomplicated gonorrhea. In 2022, <0.1% of isolates displayed elevated ceftriaxone MICs. Continued monitoring of susceptibility patterns to antibiotics is critical to inform gonorrhea treatment guidelines.

Despite continued disruptions in access to health care related to the COVID-19 pandemic, over 80% of reported gonorrhea cases in jurisdictions participating in the sentinel surveillance system SSuN in 2022 received the recommended treatment. Continued surveillance of treatment

practices is a critical public health priority to help ensure that patients receive the highest quality of care and to address the emerging threat of antimicrobial-resistant gonorrhea.



Gonorrhea — Estimated Proportion of Cases Treated with Recommended Regimen by Jurisdiction, STD Surveillance Network (SSuN), 2022

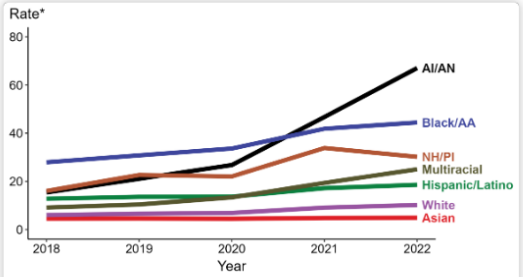


Resistance or Elevated Minimum Inhibitory Concentration (MIC) Patterns of *Neisseria gonorrhoeae* Isolates to Antimicrobials, Gonococcal Isolate Surveillance Project (GISP), 2022

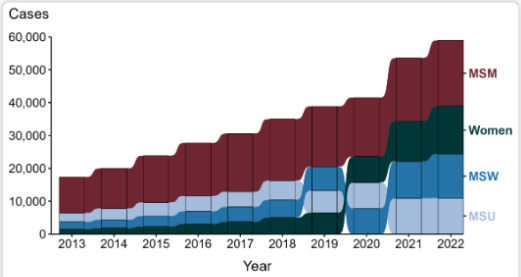
Syphilis

In 2022, 207,255 cases of syphilis (all stages and congenital syphilis) were reported which is the greatest number of cases reported since 1950 and an increase of 17.3% since 2021. In 2022, there were 59,016 cases of primary and secondary (P&S) syphilis, the most infectious stages of the disease, reported for a national rate of 17.7 per 100,000. Since reaching a historic low in 2000 and 2001, the rate of P&S syphilis has increased almost every year, increasing 9.3% during 2021 to 2022. Rates of P&S syphilis increased among both men and women, among all age groups, and in all regions of the United States. Rates of P&S syphilis increased in most racial/Hispanic ethnicity groups, with greatest increases among non-Hispanic American Indian/Alaska Native persons who also had the highest P&S syphilis rate in 2022 (67.0 per 100,000).

Rates of P&S syphilis among women have increased since 2013. During 2021 to 2022, the national rate of P&S syphilis among women increased 19.2% with increases observed in 36 states and the District of Columbia. These increases among women are concurrent with increases in cases among MSW, reflecting an expanding heterosexual syphilis epidemic in the United States. Additionally, MSM continue to be disproportionately impacted by syphilis, accounting for almost half (45.1%) of all male P&S syphilis cases in 2022. During 2021 to 2022, the number of cases of P&S syphilis among MSM increased 4.0%.



Primary and Secondary Syphilis — Rates of Reported Cases by Race/Hispanic Ethnicity, United States, 2018–2022

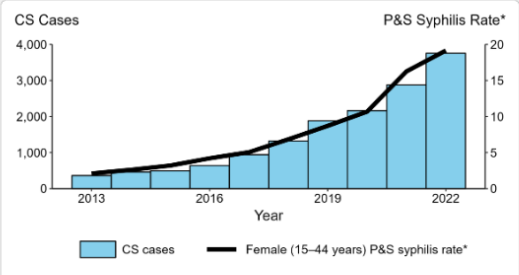


Primary and Secondary Syphilis — Reported Cases by Sex and Sex of Sex Partners, United States, 2013–2022

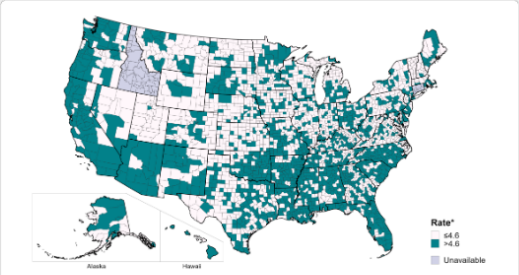
Congenital syphilis

In 2022, 3,755 cases of congenital syphilis were reported, including 282 congenital syphilis-related stillbirths and infant deaths. The national congenital syphilis rate of 102.5 cases per 100,000 live births in 2022 represents a 30.6% increase relative to 2021 and is the highest reported rate since 1991. Although the majority of congenital syphilis cases were reported from a few states, in 2022, almost all jurisdictions (47 states and the District of Columbia) reported at least one case of congenital syphilis and 39 states and the District of Columbia had increases in rates congenital syphilis during 2021 to 2022.

These increases in congenital syphilis mirror increases in syphilis among reproductive aged women. During 2021 to 2022 the rate of P&S syphilis increased 17.2% among women aged 15–44 years and rates increased in 35 states. In 2022, 46% of counties had a rate of P&S syphilis among women aged 15–44 years higher than the national Healthy People 2030 goal for reducing syphilis among women (4.6 per 100,000).



Congenital Syphilis — Reported Cases by Year of Birth and Rates of Reported Cases of Primary and Secondary Syphilis Among Women Aged 15–44 Years, United States, 2013–2022



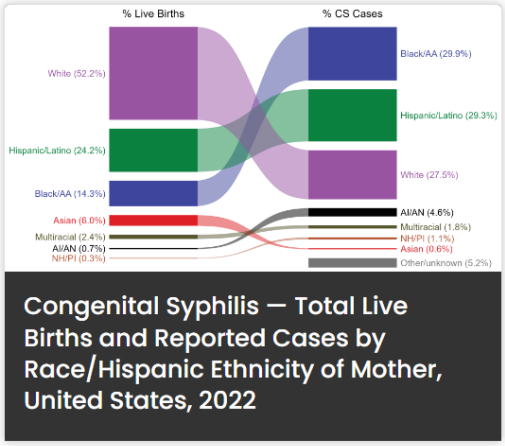
Primary and Secondary Syphilis — Rates of Reported Cases Among Women Aged 15–44 Years by County, United States, 2022

Disparities in STIs

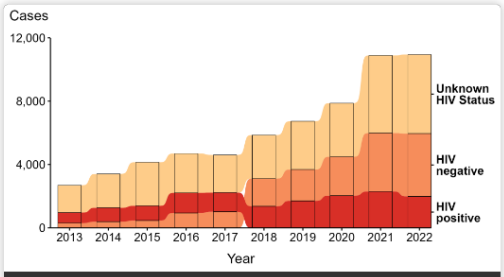
As in past years, there were significant disparities in reported STIs. In 2022, half (49.8%) of reported cases of chlamydia, gonorrhea, and syphilis (all stages) were among adolescents and young adults aged 15–24 years. Additionally, MSM are disproportionally impacted by STIs, including gonorrhea and P&S syphilis, and co-infection with HIV is common; in 2022, 36.4% of MSM with P&S syphilis were persons with diagnosed HIV. Disparities continue to persist in rates of reported STIs among some racial minority or Hispanic ethnicity groups when compared with rates among non-Hispanic White persons. In 2022, 31.1% of all cases of chlamydia, gonorrhea, and P&S syphilis were among non-Hispanic Black or African American persons, even though they made up only 12.6% of the US population.

It is important to note that these disparities are unlikely explained by differences in sexual behavior and rather reflect differential access to quality sexual health care, as well as differences in sexual network characteristics. For example, in communities with higher prevalence of STIs, with each

sexual encounter, people face a greater chance of encountering an infected partner than those in lower prevalence settings do, regardless of similar sexual behavior patterns.
Acknowledging inequities in STI rates as well as their root causes is a critical first step toward empowering affected groups and the public health community to collaborate in addressing systemic inequities in the burden of disease — with the goal of minimizing the health impact of STIs on individuals and populations.



Congenital Syphilis — Total Live Births and Reported Cases by Race/Hispanic Ethnicity of Mother, United States, 2022



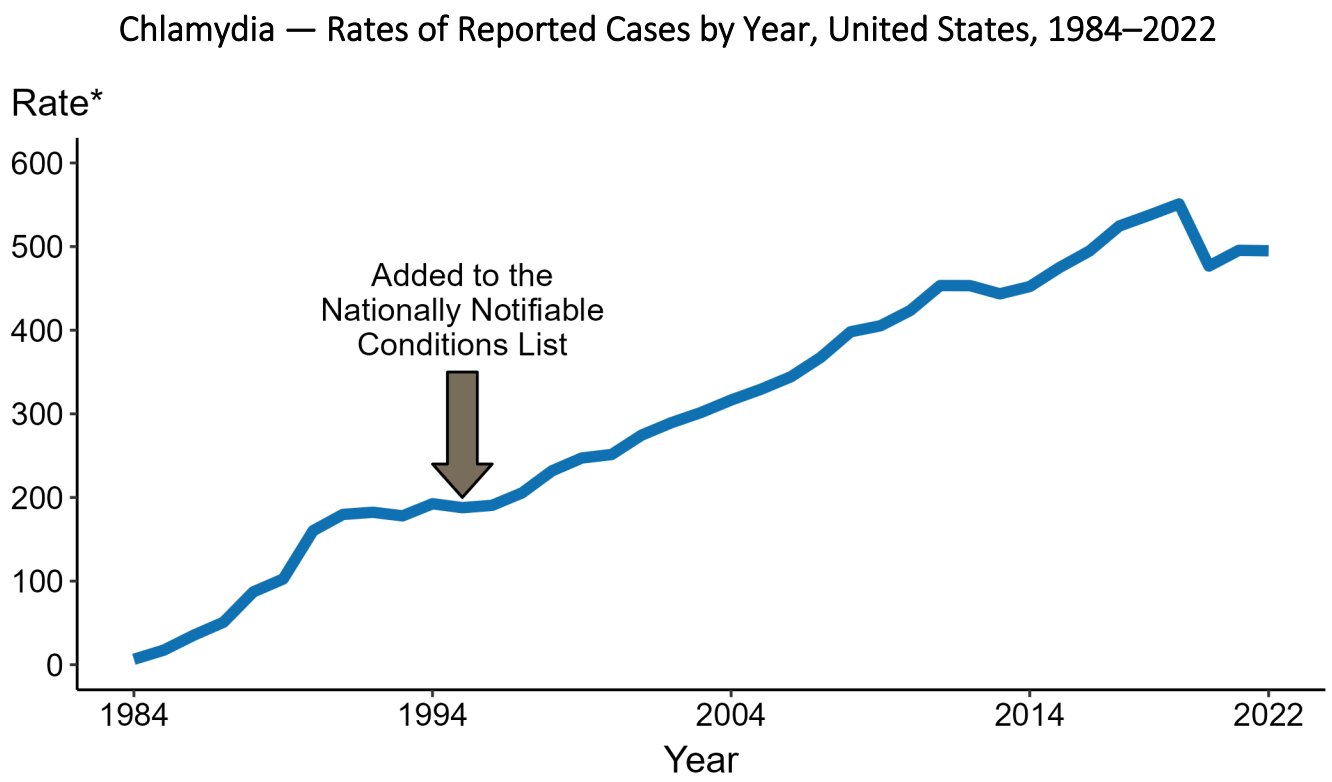
Primary and Secondary Syphilis — Reported Cases Among Men with Unknown Sex of Sex Partners by HIV Status, United States, 2013–2022

References

1. National Academies of Sciences, Engineering, and Medicine 2021. Sexually Transmitted Infections: Adopting a Sexual Health Paradigm. Washington, DC: The National Academies Press. https://doi.org/10.17226/25955

Figures

The figures in this report highlight current trends for three nationally notifiable STIs, including chlamydia, gonorrhea, and syphilis, and supersede those in earlier publications of these data. Interpretive text is included with each figure to help with describing the presented results. STI data collected during the COVID-19 pandemic and presented in *Sexually Transmitted Infections Surveillance, 2022* should be interpreted cautiously. For more information, see Impact of COVID-19 on STIs.



* Per 100,000

Summary

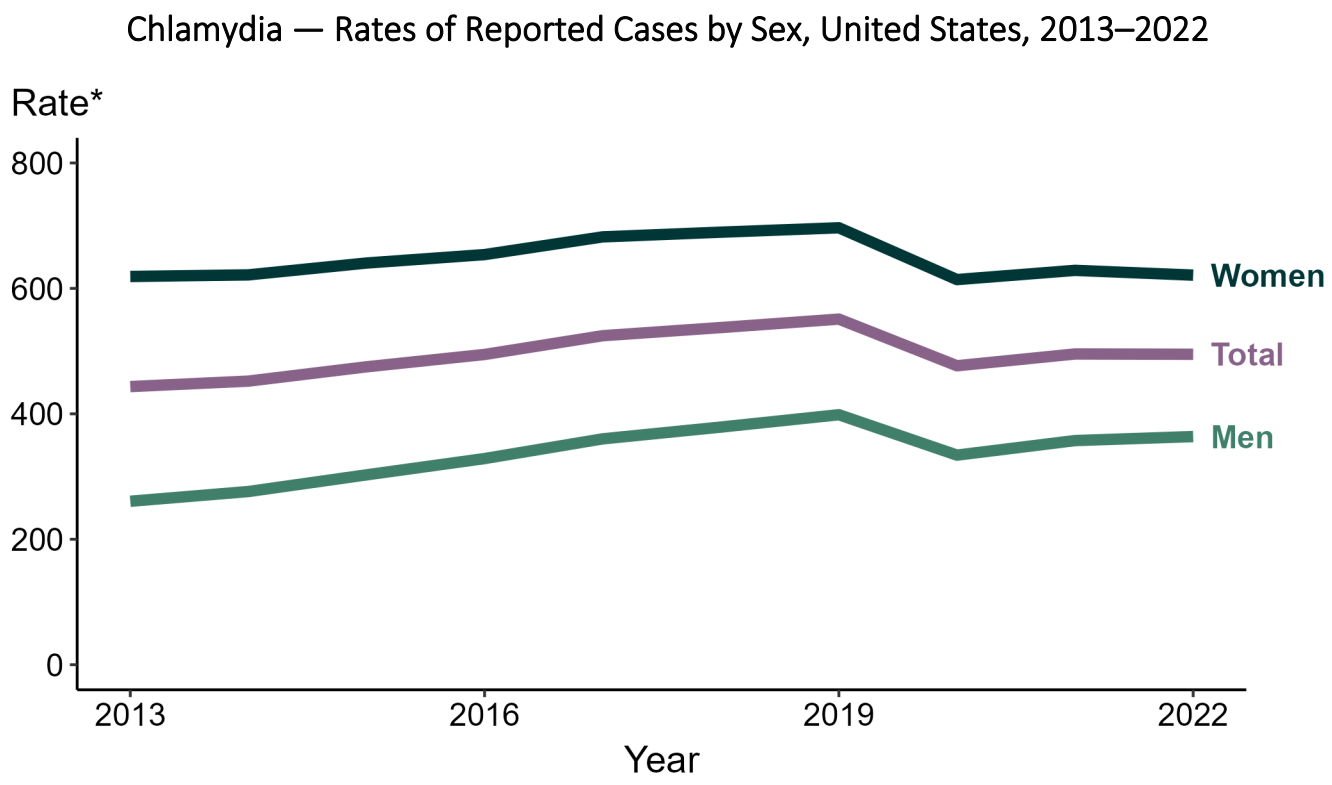
Data collection for chlamydia began in 1984 and chlamydia was made a nationally notifiable condition in 1995; however, chlamydia was not reportable in all 50 states and the District of Columbia until 2000. Steady increases in chlamydia case rates beginning in 1996 are due, in part, to improved reporting, increased screening, and the use of more sensitive diagnostic tests.

In 2022, a total of 1,649,716 cases of chlamydia were reported in the United States. During 2021 to 2022, the rate of reported chlamydia did not change substantially (<1.0% change; from 495.5 to 495.0 per 100,000).

This report includes data from years that coincide with the COVID-19 pandemic, which introduced uncertainty and difficulty in interpreting STI surveillance data. See Impact of COVID-19 on STIs for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2022/technical-notes.htm) for information on chlamydia case reporting.

Data for all figures are available at https://www.cdc.gov/std/statistics/2022/data.zip. The file “CT - Rates by Year (US 1984-2022).xlsx” contains the data for the figure presented on this slide.



* Per 100,000

Summary

During 2021 to 2022, the rate of reported chlamydia among men increased 1.8% (from 357.4 to 363.7 per 100,000) and the rate among women decreased 1.2% (from 628.8 to 621.2 per 100,000).

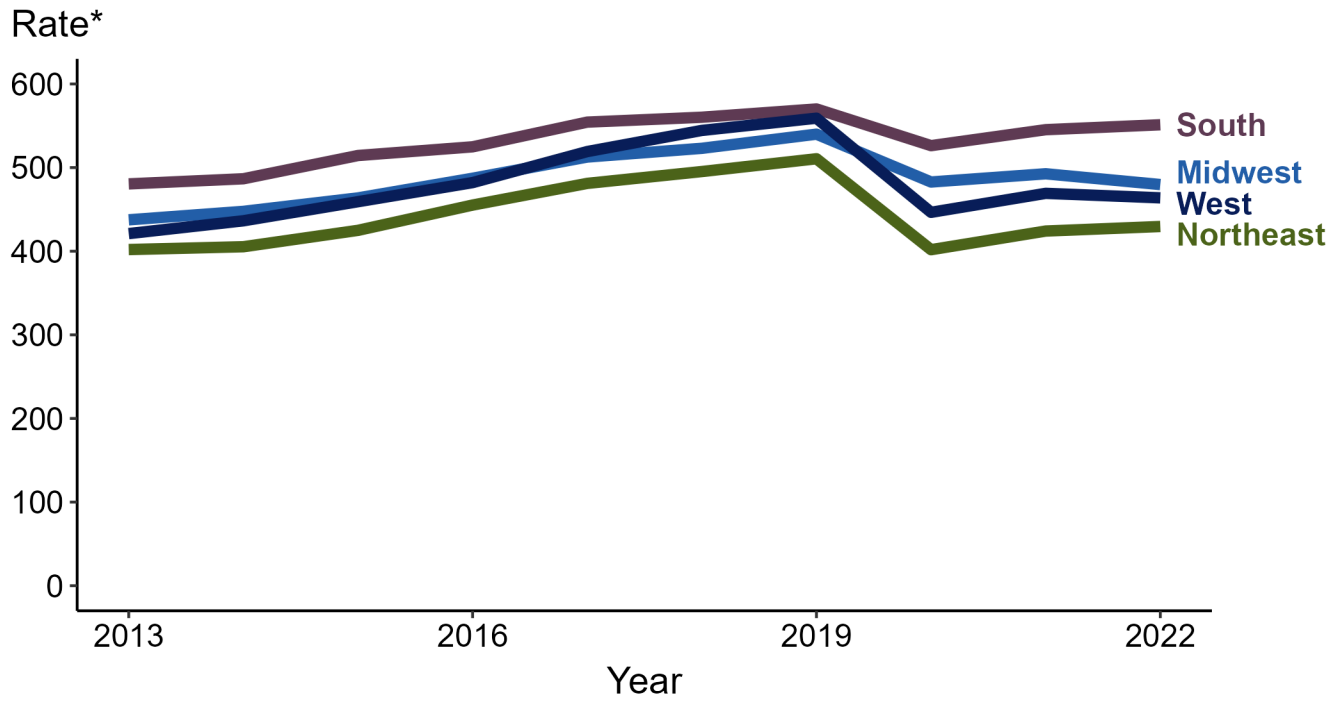
Over the last five years, the rate of reported chlamydia among men decreased 4.0% (from 378.9 to 363.7 per 100,000) and the rate among women decreased 9.9% (from 689.6 to 621.2 per 100,000). Over the last 10 years, the rate among men increased 39.6% (from 260.6 to 363.7 per 100,000) and the rate among women did not change substantially (<1.0% change; from 619.0 to 621.2 per 100,000).

This report includes data from years that coincide with the COVID-19 pandemic, which introduced uncertainty and difficulty in interpreting STI surveillance data. See Impact of COVID-19 on STIs for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2022/technical-notes.htm) for information on chlamydia case reporting. Table A1 (https://www.cdc.gov/std/statistics/2022/tables/a1.htm) provides information on unknown, missing, or invalid values of select variables.

Data for all figures are available at https://www.cdc.gov/std/statistics/2022/data.zip. The file “CT - Rates by Sex (US and Terr 2013-2022).xlsx” contains the data for the figure presented on this slide.

Chlamydia — Rates of Reported Cases by Region, United States, 2013–2022



* Per 100,000

Summary

In 2022, the South had the highest rate of reported chlamydia (551.2 cases per 100,000; 1.1% increase from 2021), followed by the Midwest (479.7 cases per 100,000; 2.6% decrease from 2021), the West (463.8 cases per 100,000; 1.2% decrease from 2021), and the Northeast (429.5 cases per 100,000; 1.3% increase from 2021).

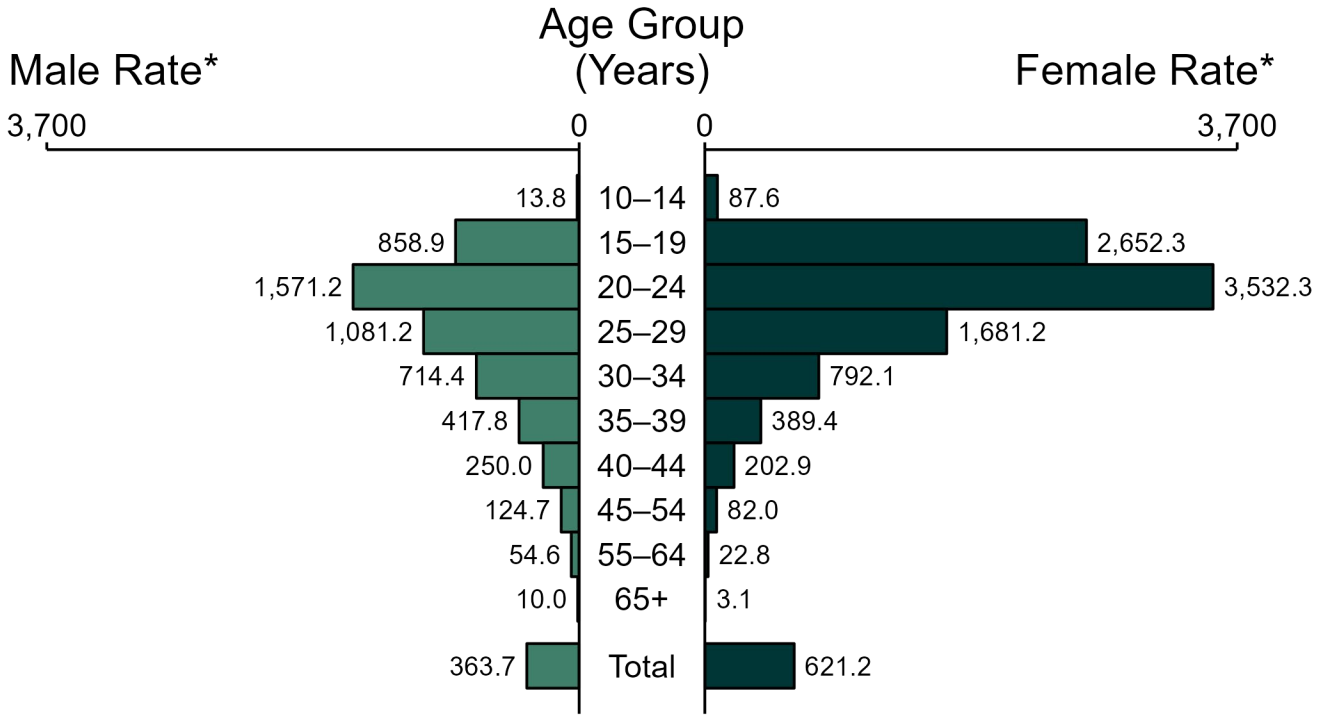
There were no substantial increases (≥1.0%) in the rate of reported cases of chlamydia in any region during the five-year period from 2018 to 2022. The South had the greatest 10-year increase in rates of reported cases of chlamydia (480.5 to 551.2 per 100,000; 14.7% increase from 2013).

This report includes data from years that coincide with the COVID-19 pandemic, which introduced uncertainty and difficulty in interpreting STI surveillance data. See Impact of COVID-19 on STIs for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2022/technical-notes.htm) for information on chlamydia case reporting.

Data for all figures are available at https://www.cdc.gov/std/statistics/2022/data.zip. The file “CT - Rates by Region (US 2013-2022).xlsx” contains the data for the figure presented on this slide.

Chlamydia — Rates of Reported Cases by Age Group and Sex, United States, 2022



* Per 100,000

NOTE: Total includes cases of all ages, including those with unknown age.

Summary

In 2022, the rate of reported chlamydia was higher among women (621.2 per 100,000) compared to men (363.7 per 100,000).

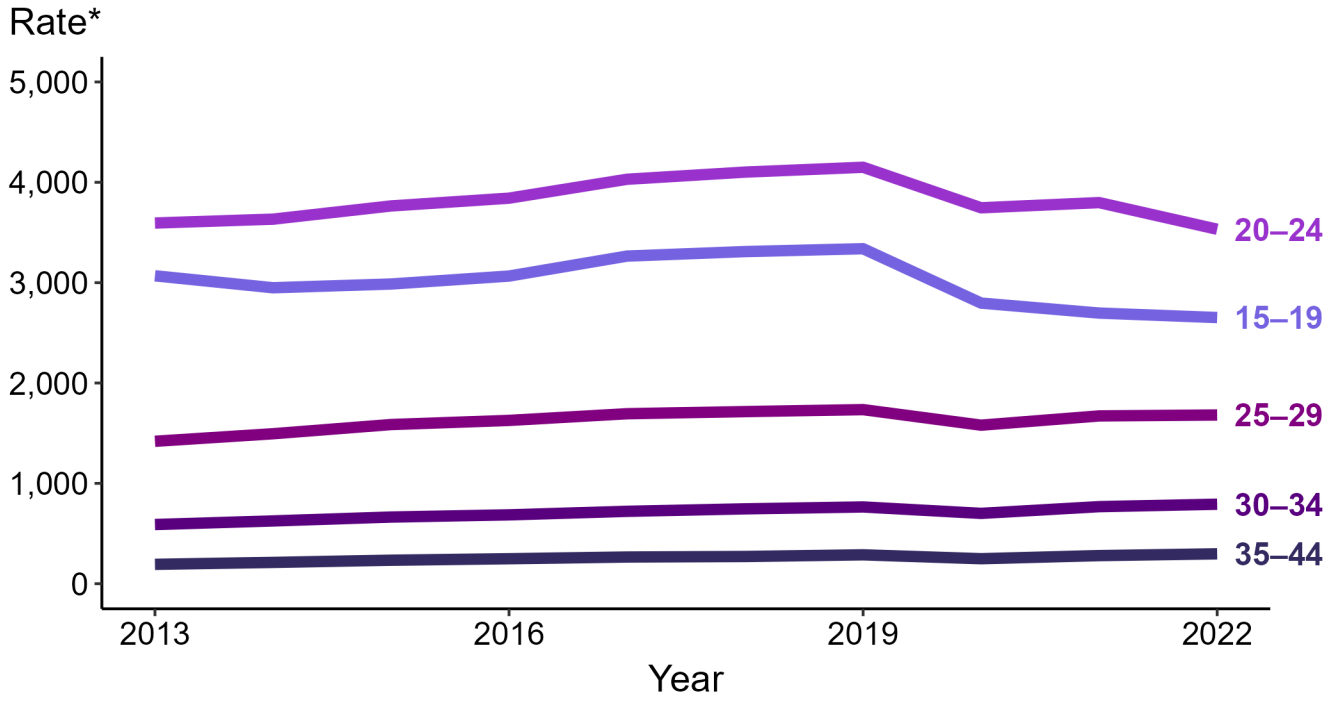
Among women, those aged 20 to 24 years had the highest rate of reported cases of chlamydia (3,532.3 per 100,000), followed by women aged 15 to 19 years (2,652.3 per 100,000) and women aged 25 to 29 years (1,681.2 per 100,000). Among men, those aged 20 to 24 years also had the highest rate of reported cases of chlamydia (1,571.2 per 100,000), followed by men aged 25 to 29 years (1,081.2 per 100,000) and men aged 15 to 19 years (858.9 per 100,000).

This report includes data from years that coincide with the COVID-19 pandemic, which introduced uncertainty and difficulty in interpreting STI surveillance data. See Impact of COVID-19 on STIs for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2022/technical-notes.htm) for information on chlamydia case reporting. Table A1 (https://www.cdc.gov/std/statistics/2022/tables/a1.htm) provides information on unknown, missing, or invalid values of select variables.

Data for all figures are available at https://www.cdc.gov/std/statistics/2022/data.zip. The file “CT - Rates by Age Group and Sex (US 2022).xlsx” contains the data for the figure presented on this slide.

Chlamydia — Rates of Reported Cases Among Women Aged 15–44 Years by Age Group, United States, 2013–2022



* Per 100,000

Summary

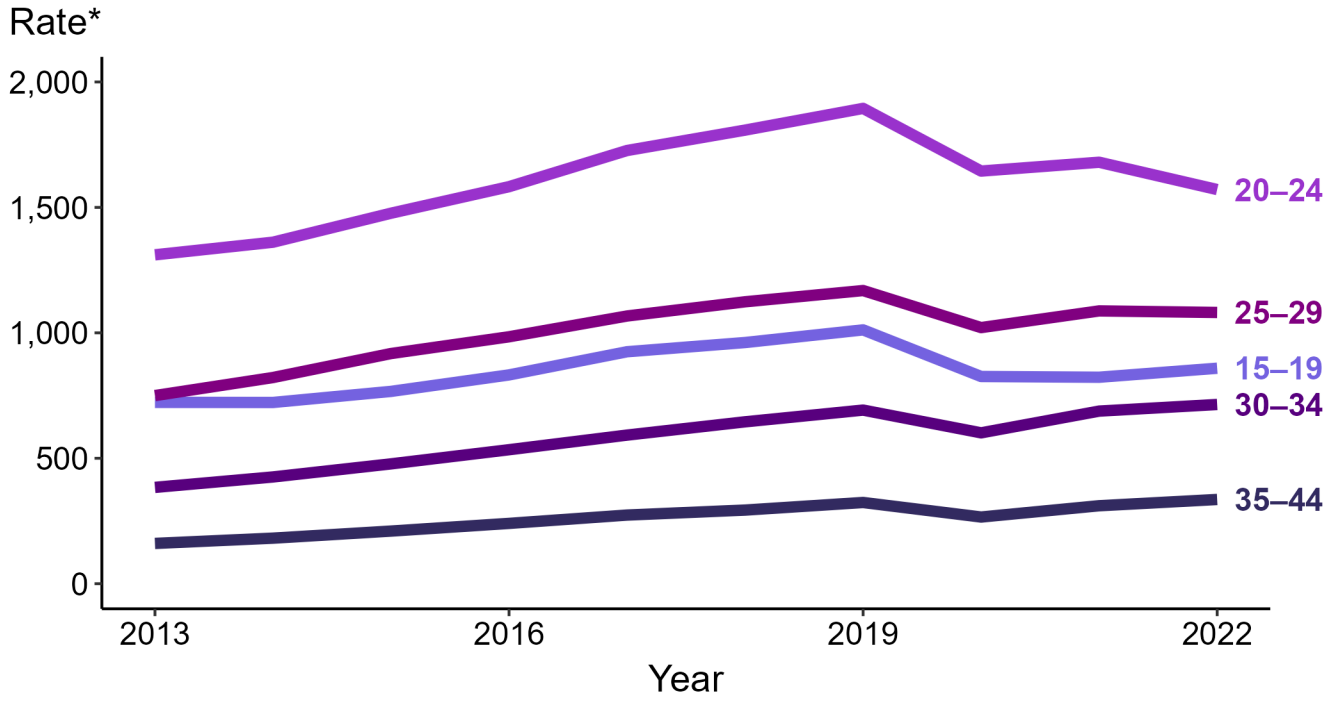
Among women aged 15 to 44 years in 2022, those aged 20 to 24 years had the highest rate of reported cases of chlamydia (3,532.3 cases per 100,000; 7.0% decrease from 2021), followed by those aged 15 to 19 years (2,652.3 cases per 100,000; 1.7% decrease from 2021), those aged 25 to 29 years (1,681.2 cases per 100,000; <1.0% change from 2021), those aged 30 to 34 years (792.1 cases per 100,000; 3.2% increase from 2021), and those aged 35 to 44 years (297.7 cases per 100,000; 6.3% increase from 2021).

This report includes data from years that coincide with the COVID-19 pandemic, which introduced uncertainty and difficulty in interpreting STI surveillance data. See Impact of COVID-19 on STIs for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2022/technical-notes.htm) for information on chlamydia case reporting. Table A1 (https://www.cdc.gov/std/statistics/2022/tables/a1.htm) provides information on unknown, missing, or invalid values of select variables.

Data for all figures are available at https://www.cdc.gov/std/statistics/2022/data.zip. The file “CT - Rates Women 15-44 Years by Age Group (US 2013-2022).xlsx” contains the data for the figure presented on this slide.

Chlamydia — Rates of Reported Cases Among Men Aged 15–44 Years by Age Group, United States, 2013–2022



* Per 100,000

Summary

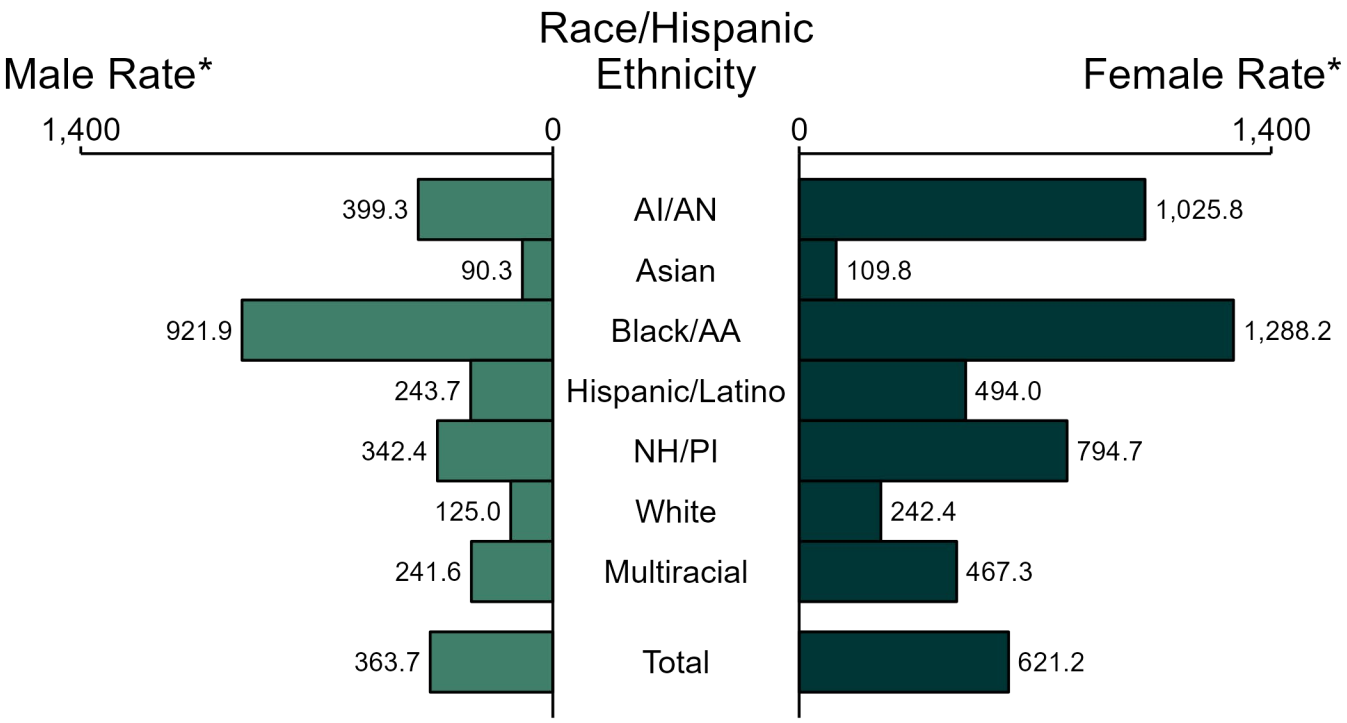
Among men aged 15 to 44 years in 2022, those aged 20 to 24 years had the highest rate of reported cases of chlamydia (1,571.2 cases per 100,000; 6.5% decrease from 2021), followed by those aged 25 to 29 years (1,081.2 cases per 100,000; <1.0% change from 2021), those aged 15 to 19 years (858.9 cases per 100,000; 4.4% increase from 2021), those aged 30 to 34 years (714.4 cases per 100,000; 3.8% increase from 2021), and those aged 35 to 44 years (335.7 cases per 100,000; 8.0% increase from 2021).

This report includes data from years that coincide with the COVID-19 pandemic, which introduced uncertainty and difficulty in interpreting STI surveillance data. See Impact of COVID-19 on STIs for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2022/technical-notes.htm) for information on chlamydia case reporting. Table A1 (https://www.cdc.gov/std/statistics/2022/tables/a1.htm) provides information on unknown, missing, or invalid values of select variables.

Data for all figures are available at https://www.cdc.gov/std/statistics/2022/data.zip. The file “CT - Rates Men 15-44 Years by Age Group (US 2013-2022).xlsx” contains the data for the figure presented on this slide.

Chlamydia — Rates of Reported Cases by Race/Hispanic Ethnicity and Sex, United States, 2022



* Per 100,000

ACRONYMS: AI/AN = American Indian or Alaska Native; Black/AA = Black or African American; NH/PI = Native Hawaiian or other Pacific Islander

NOTE: Total includes all cases including those with unknown race/Hispanic ethnicity.

Summary

In 2022, the rate of reported chlamydia was higher among women (621.2 per 100,000) compared to men (363.7 per 100,000).

Among women, non-Hispanic Black or African American women had the highest rate of reported cases of chlamydia (1,288.2 per 100,000), followed by non-Hispanic American Indian or Alaska Native women (1,025.8 per 100,000) and non-Hispanic Native Hawaiian or other Pacific Islander women (794.7 per 100,000). Among men, non-Hispanic Black or African American men also had the highest rate of reported cases of chlamydia (921.9 per 100,000), followed by non-Hispanic American Indian or Alaska Native men (399.3 per 100,000) and non-Hispanic Native Hawaiian or other Pacific Islander men (342.4 per 100,000).

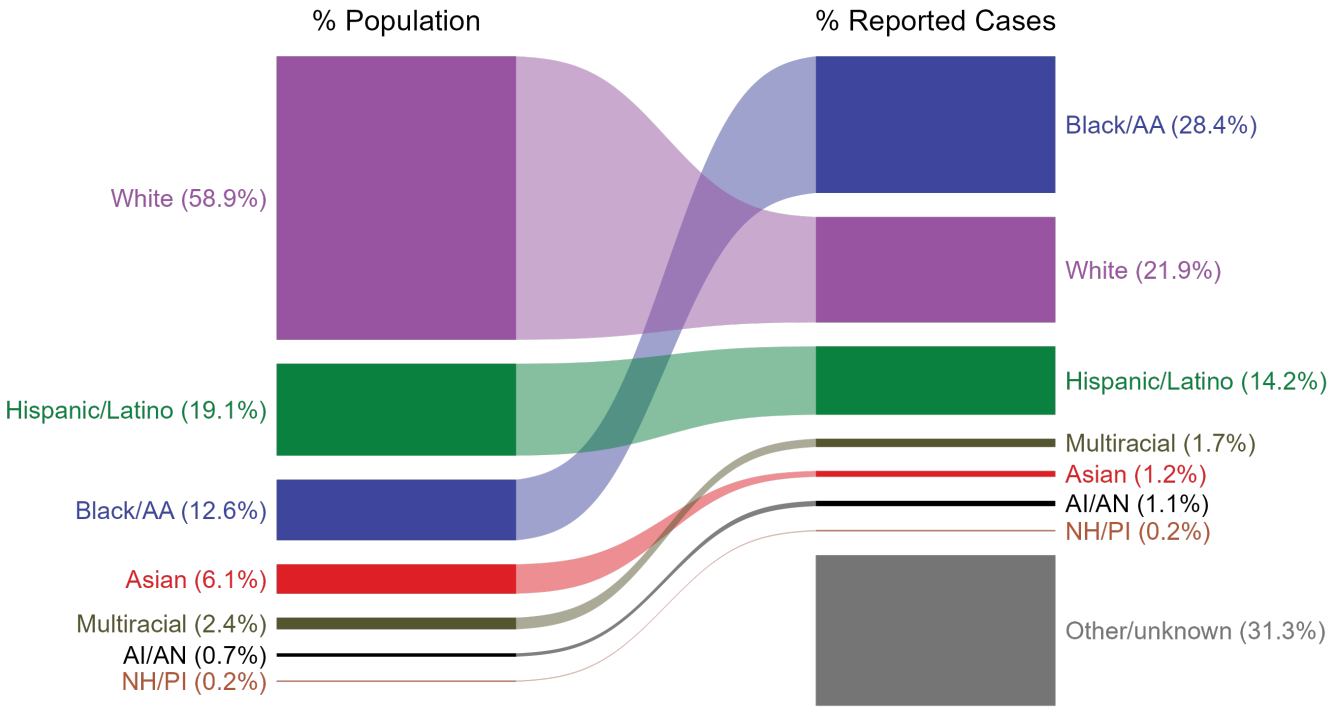
Using non-Hispanic White persons as the referent category, the greatest relative racial disparity in rates of reported chlamydia across both sexes was observed among non-Hispanic Black or African American men, with a rate ratio of 7.4 times that of non-Hispanic White men. Among women, the greatest relative disparity was observed among non-Hispanic Black or African American women as well, with a rate 5.3 times that of non-Hispanic White women.

This report includes data from years that coincide with the COVID-19 pandemic, which introduced uncertainty and difficulty in interpreting STI surveillance data. See Impact of COVID-19 on STIs for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2022/technical-notes.htm) for information on chlamydia case reporting, race/Hispanic ethnicity categorization, and reporting of race/Hispanic ethnicity for STI cases. Table A1 (https://www.cdc.gov/std/statistics/2022/tables/a1.htm) provides information on unknown, missing, or invalid values of select variables.

Data for all figures are available at https://www.cdc.gov/std/statistics/2022/data.zip. The file “CT - Rates by Race Hispanic Ethnicity and Sex (US 2022).xlsx” contains the data for the figure presented on this slide.

Chlamydia — Total Population and Reported Cases by Race/Hispanic Ethnicity, United States, 2022



* Per 100,000

NOTE: In 2022, a total of 515,552 chlamydia cases (31.3%) had missing, unknown, or other race and were not reported to be of Hispanic ethnicity. These cases are included in the "other/unknown" category.

ACRONYMS: AI/AN = American Indian or Alaska Native; Black/AA = Black or African American; NH/PI = Native Hawaiian or other Pacific Islander

Summary

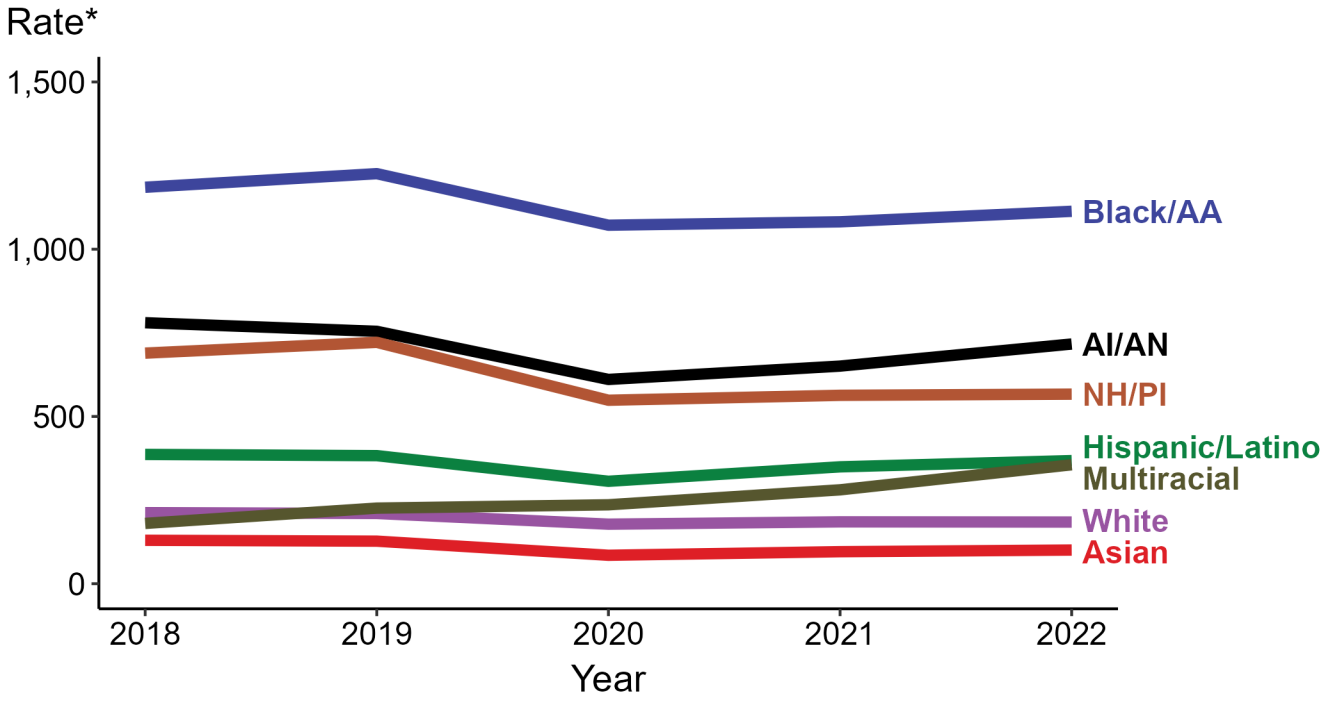
The percentages of chlamydia cases by race/Hispanic ethnicity were disproportionate to the percentages among the total population of the United States in 2022. The greatest absolute and relative disparities were observed among non-Hispanic Black or African American persons, who represented 28.4% of reported chlamydia cases (n = 468,384; 41.3% of chlamydia cases with reported race or Hispanic ethnicity) despite being 12.6% of the US population. This is means that the burden of chlamydia among non-Hispanic Black or African American persons was 15.8% greater than — or 2.3 times — what would be expected based on their proportion of the population. Additionally, non-Hispanic American Indian or Alaska Native persons were also overrepresented among chlamydia cases relative to their proportion of the population.

This report includes data from years that coincide with the COVID-19 pandemic, which introduced uncertainty and difficulty in interpreting STI surveillance data. See Impact of COVID-19 on STIs for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2022/technical-notes.htm) for information on chlamydia case reporting, race/Hispanic ethnicity categorization, and reporting of race/Hispanic ethnicity for STI cases.

Data for all figures are available at https://www.cdc.gov/std/statistics/2022/data.zip. The file “CT - Population and Cases by Race Hispanic Ethnicity (US 2022).xlsx” contains the data for the figure presented on this slide.

Chlamydia — Rates of Reported Cases by Race/Hispanic Ethnicity, United States, 2018–2022



* Per 100,000

ACRONYMS: AI/AN = American Indian or Alaska Native; Black/AA = Black or African American; NH/PI = Native Hawaiian or other Pacific Islander

Summary

In 2022, the highest rate of reported chlamydia cases per 100,000 persons was among non-Hispanic Black or African American persons (1,113.3), followed by non-Hispanic American Indian or Alaska Native persons (716.6).

During 2021 to 2022, the greatest increase in rate of reported chlamydia cases per 100,000 persons was among non-Hispanic persons of multiple races (280.7 to 355.6; 26.7% increase). Non-Hispanic persons of multiple races also had the only five-year increase in rate of reported chlamydia (180.3 to 355.6; 97.2% increase from 2018).

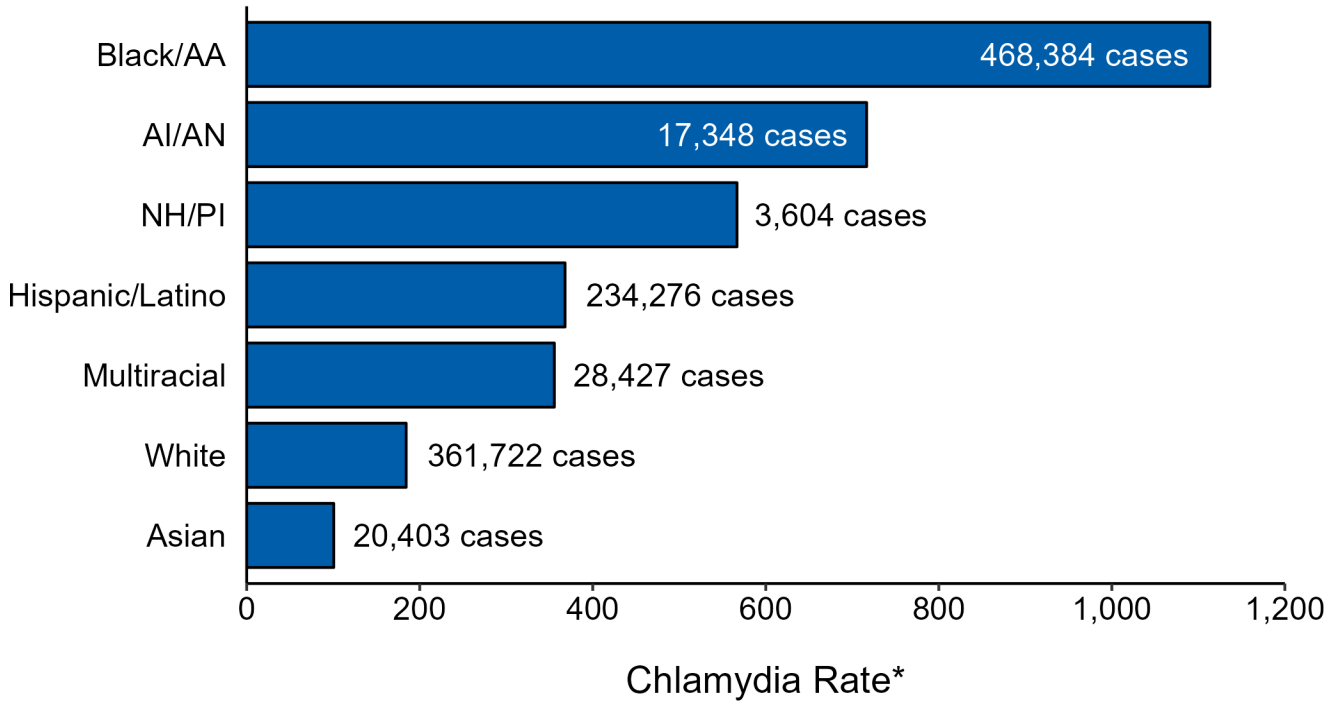
There were no substantial (≥1.0%) decreases in the rate of reported chlamydia cases per 100,000 persons among any race or Hispanic ethnicity group during 2021 to 2022. Non-Hispanic Asian persons had the greatest five-year decrease in rate of reported chlamydia (129.8 to 100.6; 22.5% decrease from 2018).

This report includes data from years that coincide with the COVID-19 pandemic, which introduced uncertainty and difficulty in interpreting STI surveillance data. See Impact of COVID-19 on STIs for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2022/technical-notes.htm) for information on chlamydia case reporting, race/Hispanic ethnicity categorization, and reporting of race/Hispanic ethnicity for STI cases. Table A1 (https://www.cdc.gov/std/statistics/2022/tables/a1.htm) provides information on unknown, missing, or invalid values of select variables.

Data for all figures are available at https://www.cdc.gov/std/statistics/2022/data.zip. The file “CT - Rates by Race Hispanic Ethnicity (US 2018-2022).xlsx” contains the data for the figure presented on this slide.

Chlamydia — Case Counts and Rates of Reported Cases by Race/Hispanic Ethnicity, United States, 2022



* Per 100,000 population

NOTE: In 2022, a total of 515,552 chlamydia cases (31.3%) had missing, unknown, or other race and were not reported to be of Hispanic ethnicity. These cases are not shown in this plot.

ACRONYMS: AI/AN = American Indian or Alaska Native; Black/AA = Black or African American; NH/PI = Native Hawaiian or other Pacific Islander

Summary

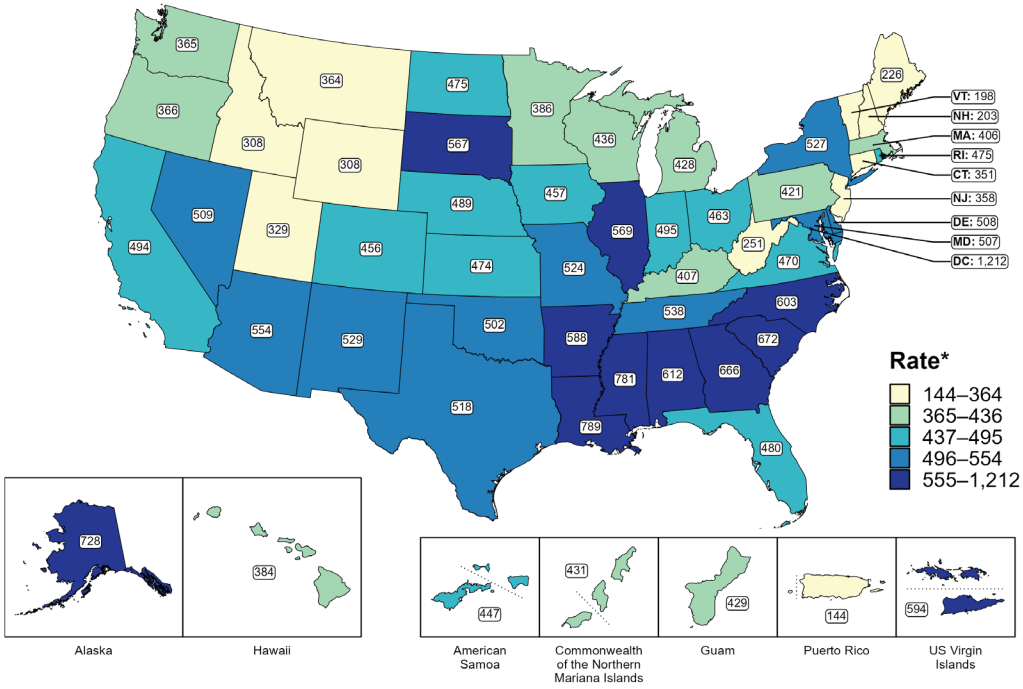
In 2022, rates of chlamydia were highest among non-Hispanic Black or African American persons (1,113.3 per 100,000), followed by non-Hispanic American Indian or Alaska Native persons (716.6 per 100,000) and non-Hispanic Native Hawaiian or other Pacific Islander persons (566.7 per 100,000). The greatest number of reported chlamydia cases was among non-Hispanic Black or African American persons (468,384 cases), followed by non-Hispanic White persons (361,722 cases) and Hispanic or Latino persons of any race(s) (234,276 cases).

This report includes data from years that coincide with the COVID-19 pandemic, which introduced uncertainty and difficulty in interpreting STI surveillance data. See Impact of COVID-19 on STIs for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2022/technical-notes.htm) for information on chlamydia case reporting and reporting of race/Hispanic ethnicity for STI cases.

Data for all figures are available at https://www.cdc.gov/std/statistics/2022/data.zip. The file “CT - Cases and Rates by Race Hispanic Ethnicity (US 2022).xlsx” contains the data for the figure presented on this slide.

Chlamydia — Rates of Reported Cases by Jurisdiction, United States and Territories, 2022



* Per 100,000

Summary

In 2022, rates of reported chlamydia ranged by state from 198 cases per 100,000 population in Vermont to 789 cases per 100,000 population in Louisiana. The rate of reported chlamydia in the District of Columbia was 1,212 per 100,000 population.

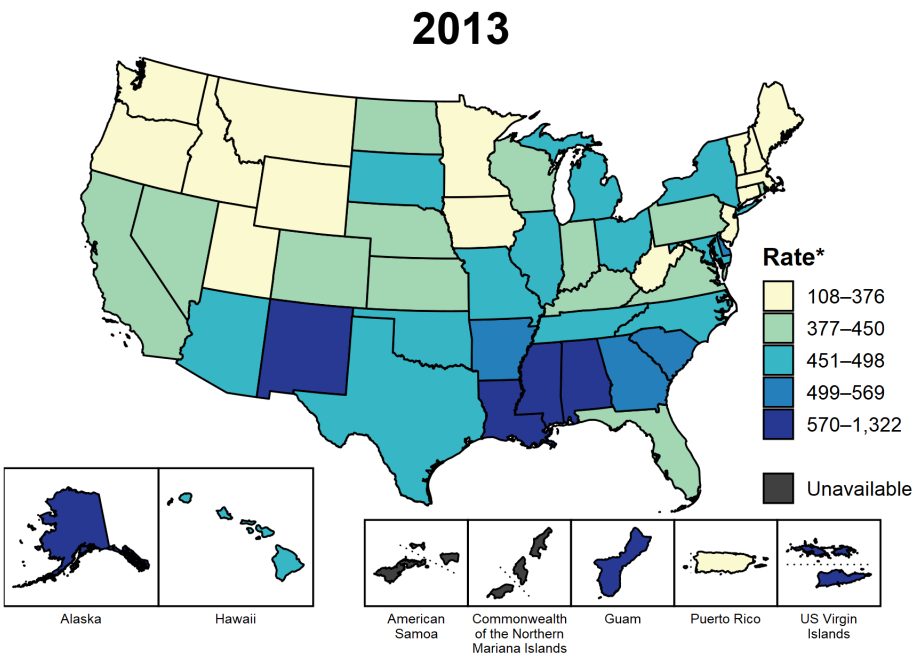
Among US territories, rates of reported chlamydia ranged from 144 cases per 100,000 population in Puerto Rico to 594 cases per 100,000 population in the US Virgin Islands.

This report includes data from years that coincide with the COVID-19 pandemic, which introduced uncertainty and difficulty in interpreting STI surveillance data. See Impact of COVID-19 on STIs for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2022/technical-notes.htm) for information on chlamydia case reporting and on interpreting reported rates in US territories.

Data for all figures are available at https://www.cdc.gov/std/statistics/2022/data.zip. The file “CT - Rates by Jurisdiction (US and Terr 2022).xlsx” contains the data for the figure presented on this slide.

Chlamydia — Rates of Reported Cases by Jurisdiction, United States and Territories, 2013–2022



* Per 100,000

Summary

This slide contains an animated figure that will play when the slide is in presentation mode. A static version of the figure that displays maps from the first and last years of the range is available as a separate slide.

In 2013, nine states, the District of Columbia (DC), and two US territories (22.2% of areas with available data) had a rate of reported chlamydia greater than or equal to 499 cases per 100,000 population. This increased to 20 states, DC, and one US territory (39.3% of areas with available data) in 2022. During 2021 to 2022, rates of reported chlamydia increased in 16 states, DC, and three territories.

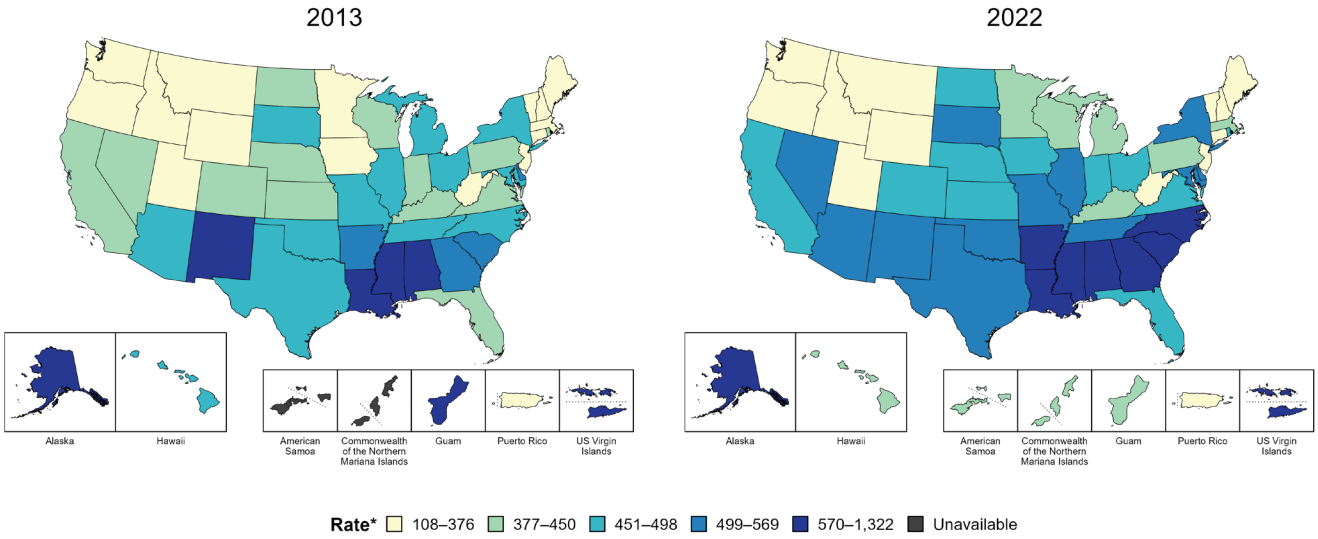
American Samoa and the Commonwealth of the Northern Mariana Islands began reporting data on chlamydia cases to CDC in 2018; data are not available for those areas prior to that year. In addition, data on reported chlamydia cases in 2018 are not available for the US Virgin Islands. Due to a network security incident in December 2021, the Maryland Department of Health could not finalize their 2021 STI case notification data. Data for 2021 from Maryland have been suppressed for this figure; however, they are included in national and regional case counts and rates displayed in other figures.

This report includes data from years that coincide with the COVID-19 pandemic, which introduced uncertainty and difficulty in interpreting STI surveillance data. See Impact of COVID-19 on STIs for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2022/technical-notes.htm) for information on chlamydia case reporting and on interpreting reported rates in US territories.

Data for all figures are available at https://www.cdc.gov/std/statistics/2022/data.zip. The file “CT - Rates by Jurisdiction (US and Terr 2013-2022).xlsx” contains the data for the figure presented on this slide.

Chlamydia — Rates of Reported Cases by Jurisdiction, United States and Territories, 2013 and 2022



* Per 100,000

Summary

In 2013, nine states, the District of Columbia (DC), and two US territories (22.2% of areas with available data) had a rate of reported chlamydia greater than or equal to 499 cases per 100,000 population. This increased to 20 states, DC, and one US territory (39.3% of areas with available data) in 2022.

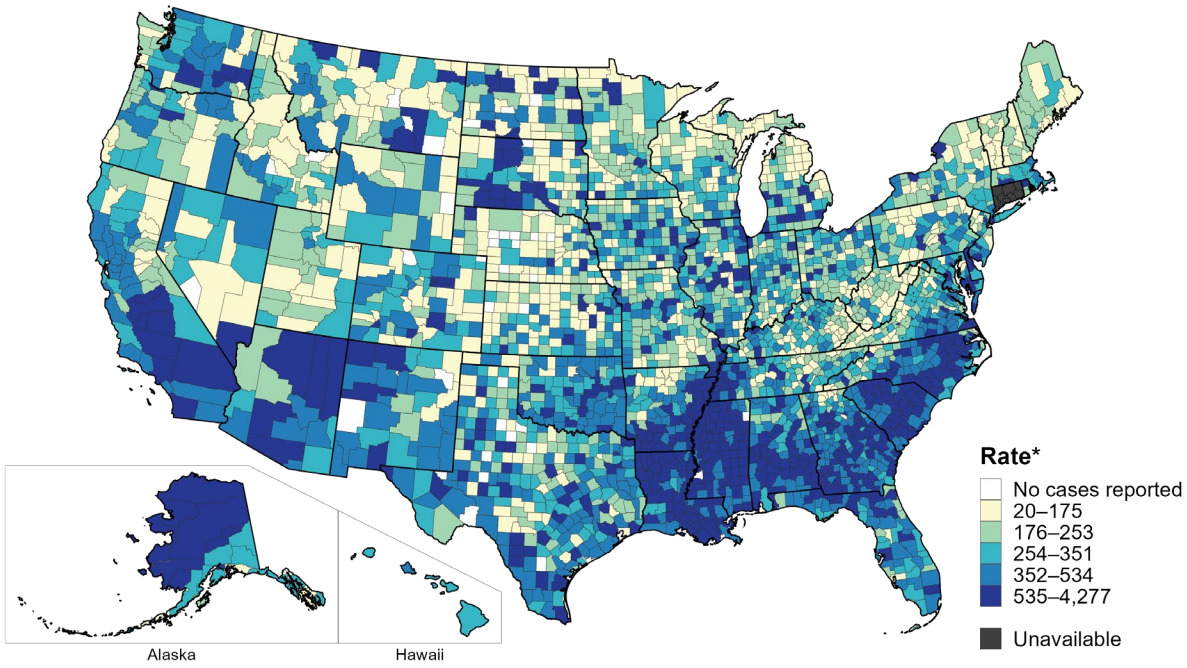
American Samoa and the Commonwealth of the Northern Mariana Islands began reporting data on chlamydia cases to CDC in 2018; data are not available for those areas prior to that year.

This report includes data from years that coincide with the COVID-19 pandemic, which introduced uncertainty and difficulty in interpreting STI surveillance data. See Impact of COVID-19 on STIs for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2022/technical-notes.htm) for information on chlamydia case reporting and on interpreting reported rates in US territories.

Data for all figures are available at https://www.cdc.gov/std/statistics/2022/data.zip. The file “CT - Rates by Jurisdiction (US and Terr 2013 and 2022).xlsx” contains the data for the figure presented on this slide.

Chlamydia — Rates of Reported Cases by County, United States, 2022



* Per 100,000

Summary

In 2022, 99% of counties and county equivalents with available data in the United States reported at least one case of chlamydia. Out of 3,135 counties and county equivalents with available data, 93 (3%) reported half of all cases of chlamydia.

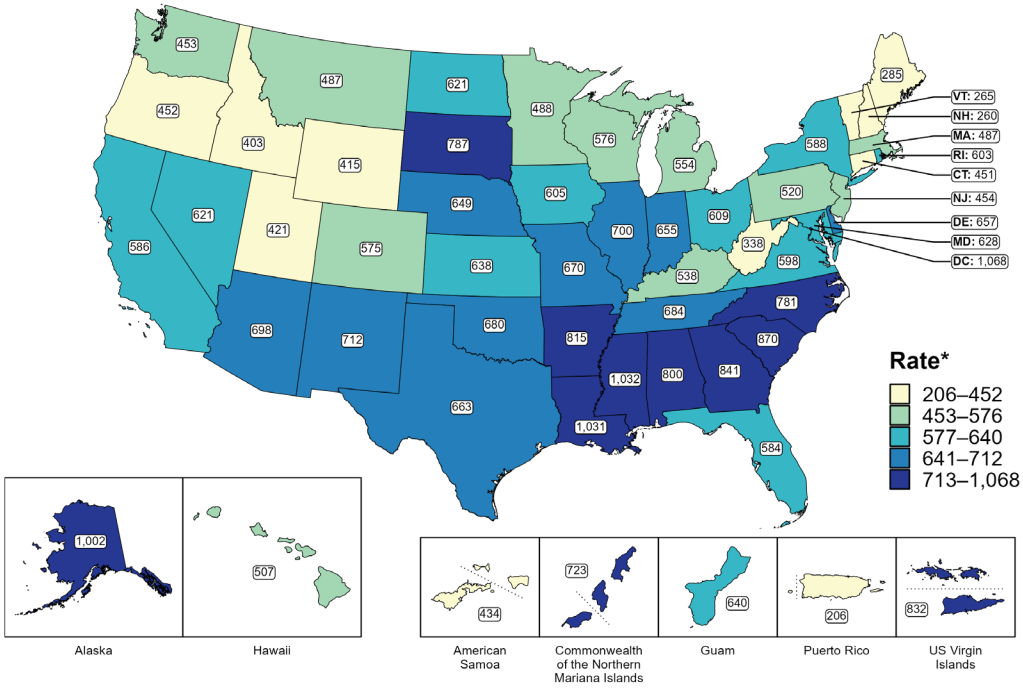
In 2022, Connecticut adopted nine planning regions as county-equivalent geographic units; as STI case notification data were not available in the new county-equivalent units for 2022, data for Connecticut have been suppressed for this figure.

This report includes data from years that coincide with the COVID-19 pandemic, which introduced uncertainty and difficulty in interpreting STI surveillance data. See Impact of COVID-19 on STIs for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2022/technical-notes.htm) for information on chlamydia case reporting. Table A1 (https://www.cdc.gov/std/statistics/2022/tables/a1.htm) provides information on unknown, missing, or invalid values of select variables.

Data for all figures are available at https://www.cdc.gov/std/statistics/2022/data.zip. The file “CT - Rates by County (US 2022).xlsx” contains the data for the figure presented on this slide.

Chlamydia — Rates of Reported Cases Among Women by Jurisdiction, United States and Territories, 2022



* Per 100,000

Summary

In 2022, rates of reported chlamydia among women ranged by state from 260 cases per 100,000 women in New Hampshire to 1,032 cases per 100,000 women in Mississippi. The rate of reported chlamydia in the District of Columbia was 1,068 per 100,000 women.

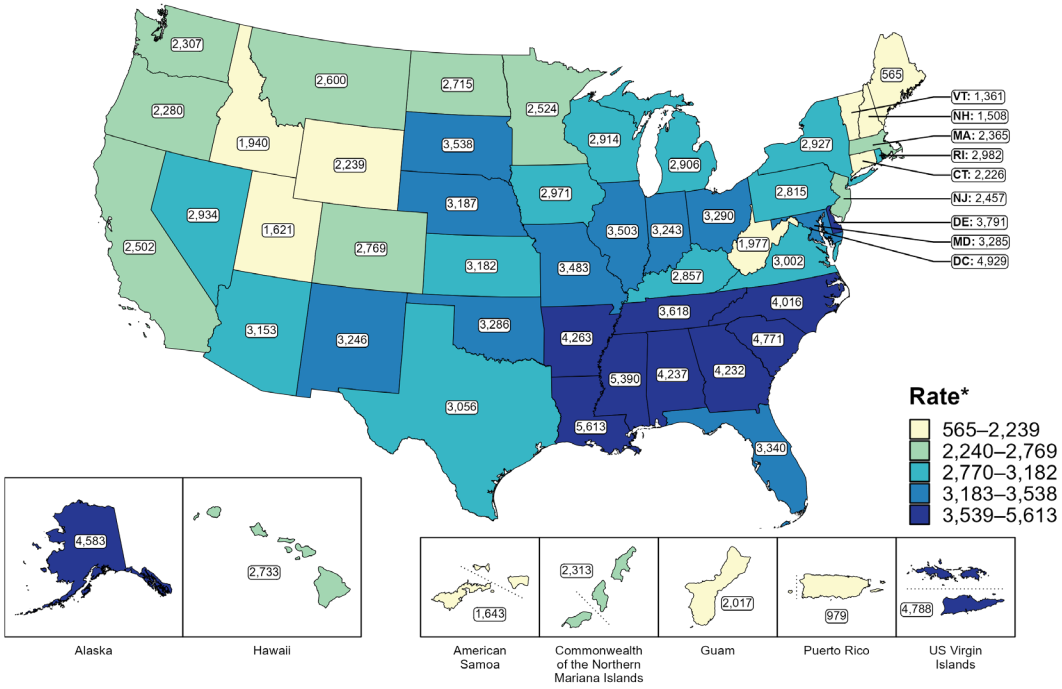
Among US territories, rates of reported chlamydia ranged from 206 cases per 100,000 women in Puerto Rico to 832 cases per 100,000 women in the US Virgin Islands.

This report includes data from years that coincide with the COVID-19 pandemic, which introduced uncertainty and difficulty in interpreting STI surveillance data. See Impact of COVID-19 on STIs for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2022/technical-notes.htm) for information on chlamydia case reporting and on interpreting reported rates in US territories. Table A1 (https://www.cdc.gov/std/statistics/2022/tables/a1.htm) provides information on unknown, missing, or invalid values of select variables.

Data for all figures are available at https://www.cdc.gov/std/statistics/2022/data.zip. The file “CT - Rates Women by Jurisdiction (US and Terr 2022).xlsx” contains the data for the figure presented on this slide.

Chlamydia — Rates of Reported Cases Among Women Aged 15–24 Years by Jurisdiction, United States and Territories, 2022



* Per 100,000

Summary

In 2022, rates of reported chlamydia among women aged 15 to 24 years ranged by state from 565 cases per 100,000 women aged 15 to 24 years in Maine to 5,613 cases per 100,000 women aged 15 to 24 years in Louisiana. The rate of reported chlamydia in the District of Columbia was 4,929 per 100,000 women aged 15 to 24 years.

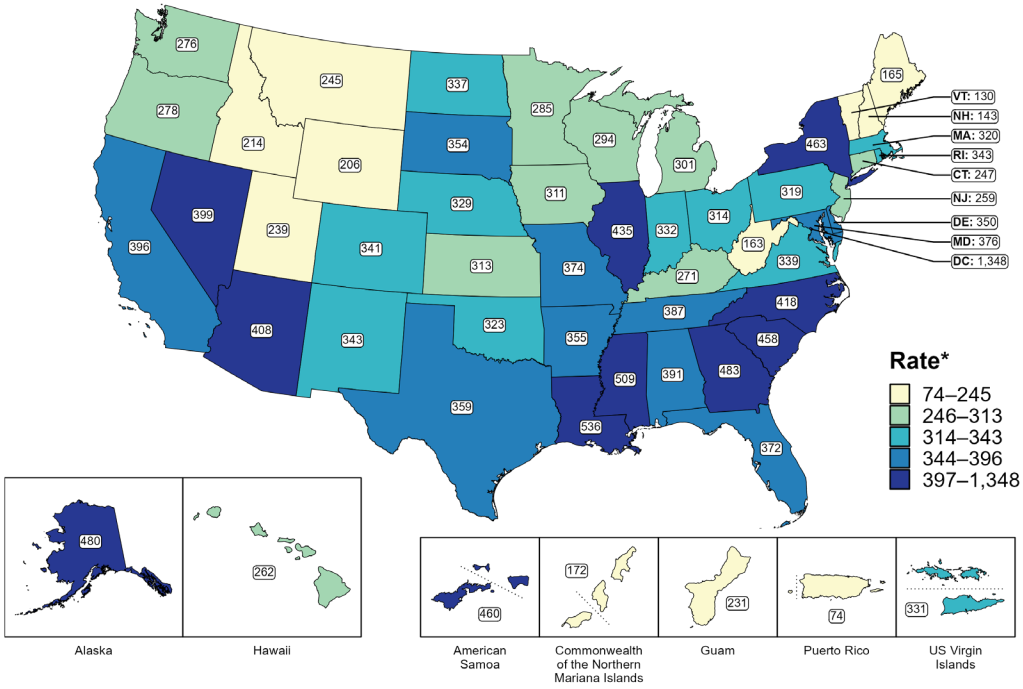
Among US territories, rates of reported chlamydia ranged from 979 cases per 100,000 women aged 15 to 24 years in Puerto Rico to 4,788 cases per 100,000 women aged 15 to 24 years in the US Virgin Islands.

This report includes data from years that coincide with the COVID-19 pandemic, which introduced uncertainty and difficulty in interpreting STI surveillance data. See Impact of COVID-19 on STIs for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2022/technical-notes.htm) for information on chlamydia case reporting and on interpreting reported rates in US territories. Table A1 (https://www.cdc.gov/std/statistics/2022/tables/a1.htm) provides information on unknown, missing, or invalid values of select variables.

Data for all figures are available at https://www.cdc.gov/std/statistics/2022/data.zip. The file “CT - Rates Women 15-24 Years by Jurisdiction (US and Terr 2022).xlsx” contains the data for the figure presented on this slide.

Chlamydia — Rates of Reported Cases Among Men by Jurisdiction, United States and Territories, 2022



*Per 100,000

Summary

In 2022, rates of reported chlamydia among men ranged by state from 130 cases per 100,000 men in Vermont to 536 cases per 100,000 men in Louisiana. The rate of reported chlamydia in the District of Columbia was 1,348 per 100,000 men.

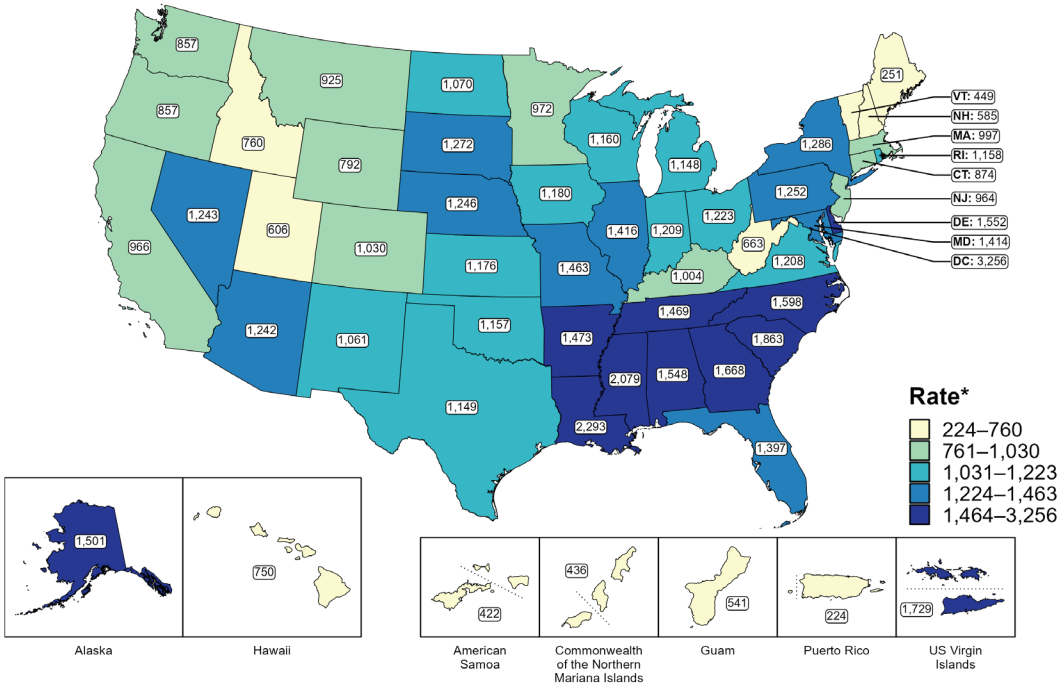
Among US territories, rates of reported chlamydia ranged from 74 cases per 100,000 men in Puerto Rico to 460 cases per 100,000 men in American Samoa.

This report includes data from years that coincide with the COVID-19 pandemic, which introduced uncertainty and difficulty in interpreting STI surveillance data. See Impact of COVID-19 on STIs for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2022/technical-notes.htm) for information on chlamydia case reporting and on interpreting reported rates in US territories. Table A1 (https://www.cdc.gov/std/statistics/2022/tables/a1.htm) provides information on unknown, missing, or invalid values of select variables.

Data for all figures are available at https://www.cdc.gov/std/statistics/2022/data.zip. The file “CT - Rates Men by Jurisdiction (US and Terr 2022).xlsx” contains the data for the figure presented on this slide.

Chlamydia — Rates of Reported Cases Among Men Aged 15–24 Years by Jurisdiction, United States and Territories, 2022



* Per 100,000

Summary

In 2022, rates of reported chlamydia among men aged 15 to 24 years ranged by state from 251 cases per 100,000 men aged 15 to 24 years in Maine to 2,293 cases per 100,000 men aged 15 to 24 years in Louisiana. The rate of reported chlamydia in the District of Columbia was 3,256 per 100,000 men aged 15 to 24 years.

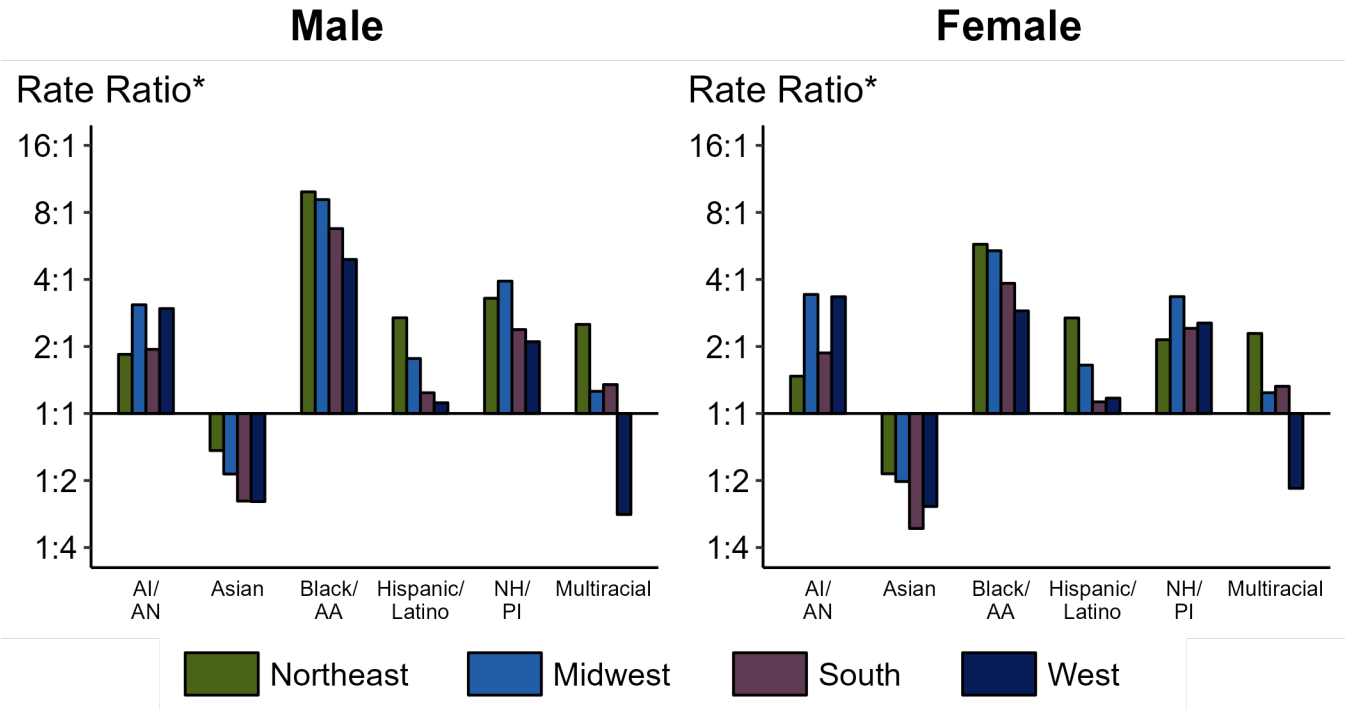
Among US territories, rates of reported chlamydia ranged from 224 cases per 100,000 men aged 15 to 24 years in Puerto Rico to 1,729 cases per 100,000 men aged 15 to 24 years in the US Virgin Islands.

This report includes data from years that coincide with the COVID-19 pandemic, which introduced uncertainty and difficulty in interpreting STI surveillance data. See Impact of COVID-19 on STIs for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2022/technical-notes.htm) for information on chlamydia case reporting and on interpreting reported rates in US territories. Table A1 (https://www.cdc.gov/std/statistics/2022/tables/a1.htm) provides information on unknown, missing, or invalid values of select variables.

Data for all figures are available at https://www.cdc.gov/std/statistics/2022/data.zip. The file “CT - Rates Men 15-24 Years by Jurisdiction (US and Terr 2022).xlsx” contains the data for the figure presented on this slide.

Chlamydia — Ratios of Rates of Reported Cases Among Persons Aged 15–24 Years by Sex, Race/Hispanic Ethnicity, and Region, United States, 2022



* For the rate ratios, non-Hispanic White persons are the referent population. Y-axis is log scale.

ACRONYMS: AI/AN = American Indian or Alaska Native; Black/AA = Black or African American; NH/PI = Native Hawaiian or other Pacific Islander

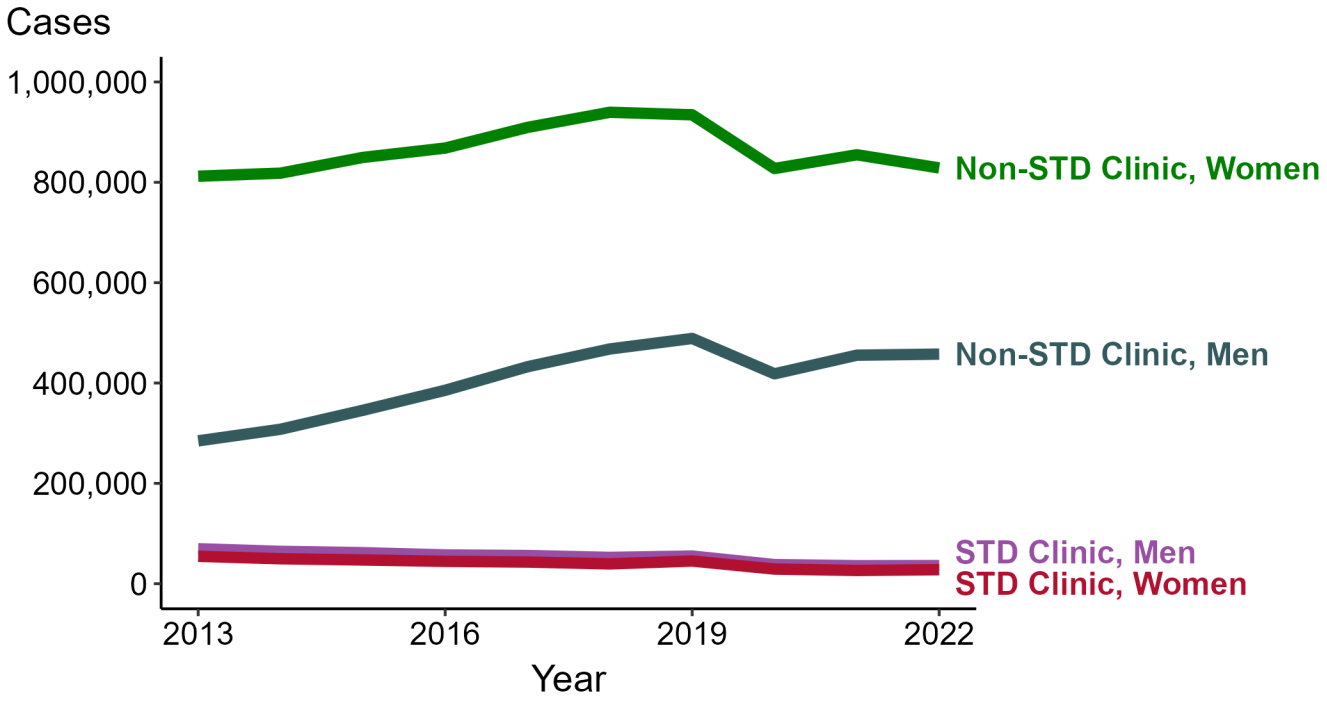
Summary

Among men and women aged 15-24 years, rate ratios of rates of reported chlamydia by race/Hispanic ethnicity (using non-Hispanic White persons as the referent population) varied by region in 2022. Among men aged 15-24 years, the greatest rate ratio was in the Northeast where the rate of reported chlamydia among non-Hispanic Black men was 9.9 times the rate among non-Hispanic White men. Among women aged 15-24 years, the greatest rate ratio was in the Northeast where the rate of reported chlamydia among non-Hispanic Black women was 5.8 times the rate among non-Hispanic White women.

This report includes data from years that coincide with the COVID-19 pandemic, which introduced uncertainty and difficulty in interpreting STI surveillance data. See Impact of COVID-19 on STIs for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2022/technical-notes.htm) for information on chlamydia case reporting, race/Hispanic ethnicity categorization, and reporting of race/Hispanic ethnicity for STI cases. Table A1 (https://www.cdc.gov/std/statistics/2022/tables/a1.htm) provides information on unknown, missing, or invalid values of select variables.

Chlamydia — Reported Cases by Reporting Source and Sex, United States, 2013–2022



NOTE: During 2013 to 2022, the proportion of all cases with unknown reporting source was 15.3%, from a low of 12.7% (n = 178,273) in 2013 to a high of 17.9% (n = 295,170) in 2022.

Summary

During 2021 to 2022, the number of chlamydia cases reported from STD clinics did not change substantially (<1.0% change) among men (35,913 to 36,135 cases) and increased 5.8% among women (26,395 to 27,930 cases), while the number of cases reported from non-STD clinics did not change substantially (<1.0% change) among men (455,459 to 457,559 cases) and decreased 3.1% among women (854,917 to 828,629 cases).

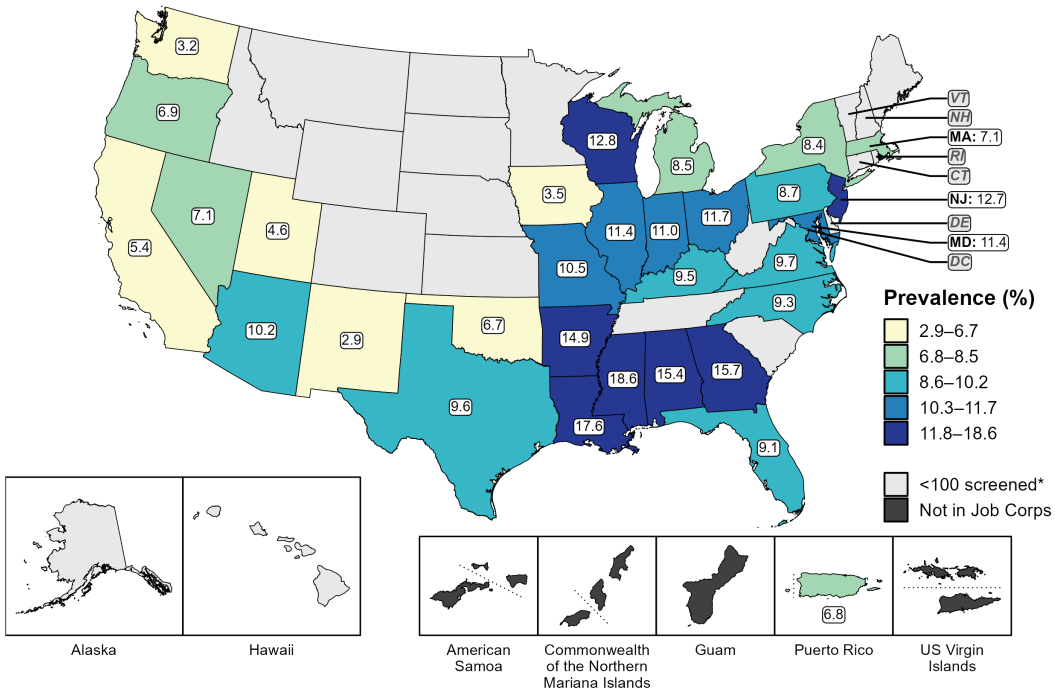
During a ten-year period (2013 to 2022), the number of chlamydia cases reported from STD clinics decreased 48.1% among men (69,680 to 36,135 cases) and decreased 48.8% among women (54,590 to 27,930 cases), while the number of cases reported from non-STD clinics increased 60.7% among men (284,722 to 457,559 cases) and increased 2.0% among women (812,153 to 828,629 cases).

This report includes data from years that coincide with the COVID-19 pandemic, which introduced uncertainty and difficulty in interpreting STI surveillance data. See Impact of COVID-19 on STIs for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2022/technical-notes.htm) for information on chlamydia case reporting. Table A1 (https://www.cdc.gov/std/statistics/2022/tables/a1.htm) provides information on unknown, missing, or invalid values of select variables.

Data for all figures are available at https://www.cdc.gov/std/statistics/2022/data.zip. The file “CT - Cases by Reporting Source and Sex (US 2013-2022).xlsx” contains the data for the figure presented on this slide.

Chlamydia — Prevalence Among Women Aged 16–24 Years Entering Job Corps by State of Residence, United States and Territories, 2022



* Fewer than 100 women who resided in these states/areas and entered Job Corps were screened for chlamydia in 2022.

Summary

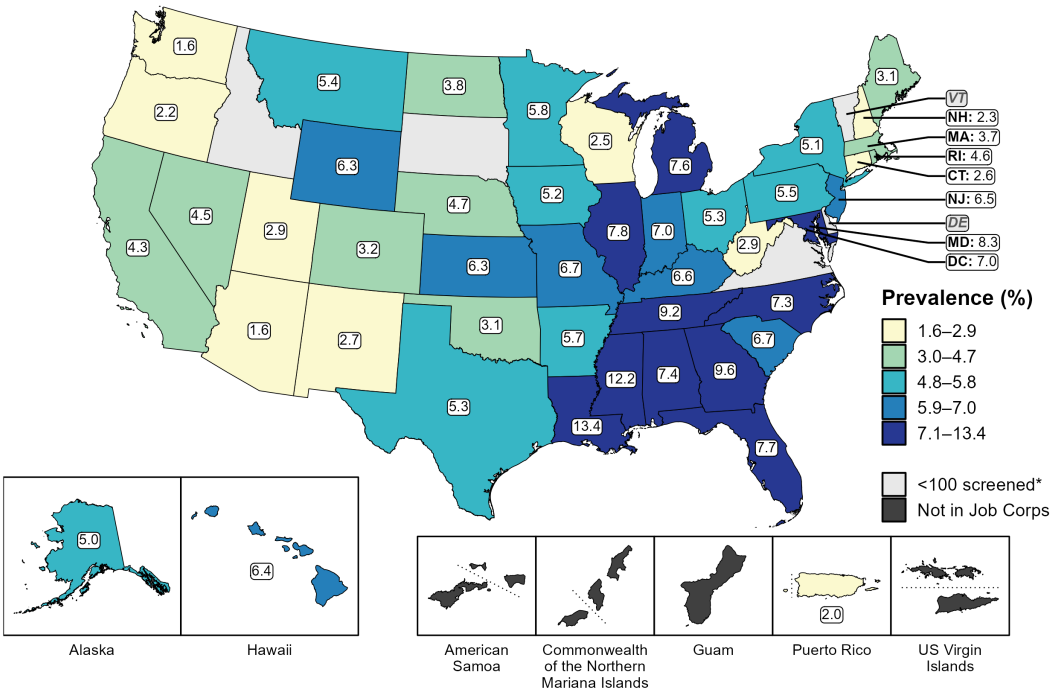
In 2022, 30 states and one US territory screened at least 100 women entering Job Corps for chlamydia. The median state-specific chlamydia prevalence among this population in the 30 states was 9.5%, ranging from 2.9% in New Mexico to 18.6% in Mississippi. The prevalence in Puerto Rico was 6.8%.

This report includes data from years that coincide with the COVID-19 pandemic, which introduced uncertainty and difficulty in interpreting STI surveillance data. See Impact of COVID-19 on STIs for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2022/technical-notes.htm) for information on Jobs Corps methodology.

Data for all figures are available at https://www.cdc.gov/std/statistics/2022/data.zip. The file “CT - Prevalence Women 16-24 Years Entering Job Corps (US and Terr 2022).xlsx” contains the data for the figure presented on this slide.

Chlamydia — Prevalence Among Men Aged 16–24 Years Entering Job Corps by State of Residence, United States and Territories, 2022



* Fewer than 100 men who resided in these states/areas and entered Job Corps were screened for chlamydia in 2022.

Summary

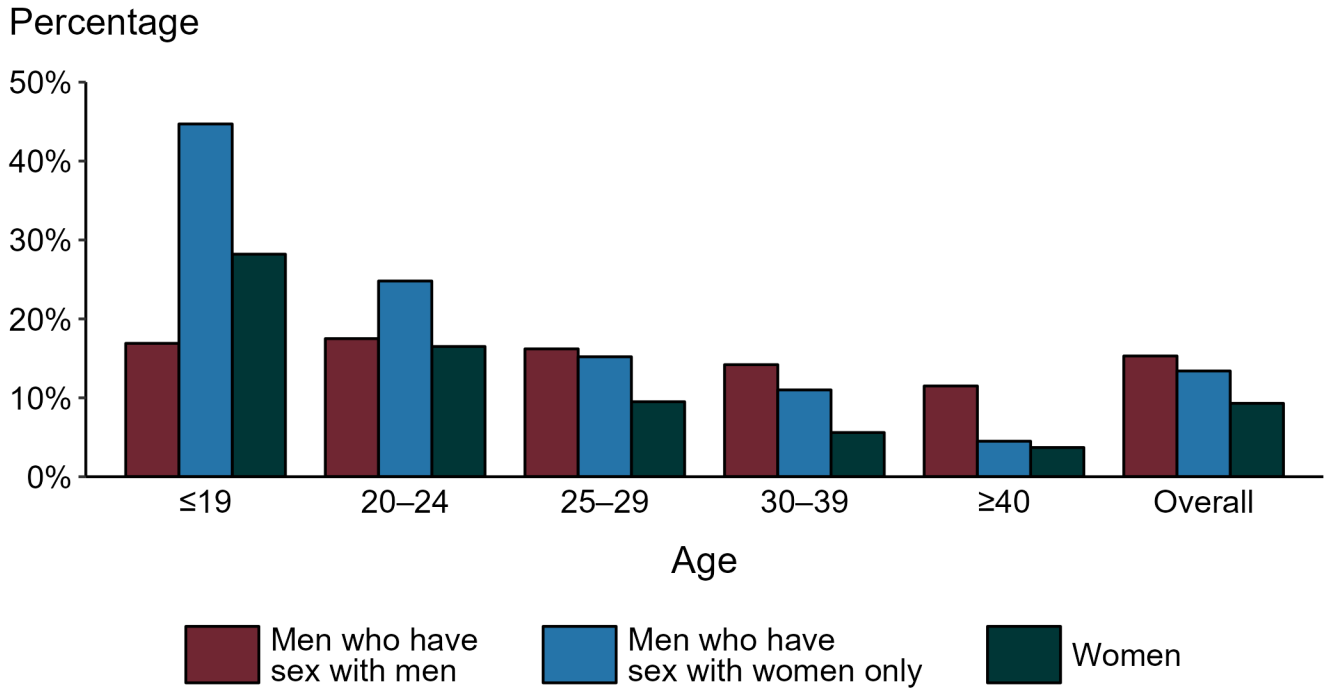
In 2022, 46 states, the District of Columbia, and one US territory screened at least 100 men entering Job Corps for chlamydia. The median state-specific chlamydia prevalence among this population in the 46 states and the District of Columbia was 5.3%, ranging from 1.6% in Arizona and Washington to 13.4% in Louisiana. The prevalence in Puerto Rico was 2.0%.

This report includes data from years that coincide with the COVID-19 pandemic, which introduced uncertainty and difficulty in interpreting STI surveillance data. See Impact of COVID-19 on STIs for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2022/technical-notes.htm) for information on Jobs Corps methodology.

Data for all figures are available at https://www.cdc.gov/std/statistics/2022/data.zip. The file “CT - Prevalence Men 16-24 Years Entering Job Corps (US and Terr 2022).xlsx” contains the data for the figure presented on this slide.

Chlamydia — Proportion of STD Clinic Patients Testing Positive by Age Group, Sex, and Sex of Sex Partners, STD Surveillance Network (SSuN), 2022



NOTE: Results are based on 49,665 unique patients in 10 participating jurisdictions (Baltimore City, California [excluding San Francisco], Columbus, Florida, Indiana, Multnomah County, New York City, Philadelphia, San Francisco, and Washington) with known sex of sex partners attending SSuN STD clinics who were tested ≥1 times for chlamydia in 2022.

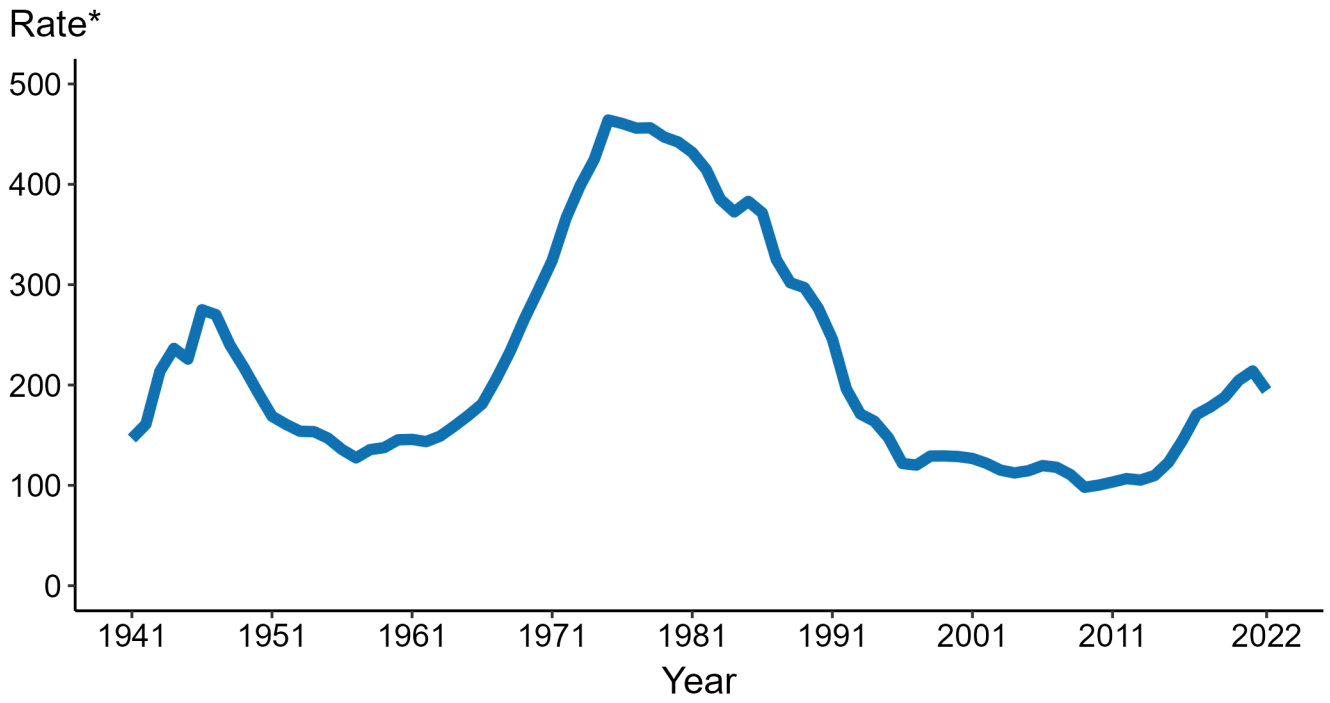
Summary

Among patients accessing care in participating STD clinics in the STD Surveillance Network (SSuN) who were tested for chlamydia in 2022 and had known sexual orientation or sex of sex partners, 15.3% of gay, bisexual and other men who have sex with men (MSM), 13.4% of men who have sex with women only (MSW), and 9.3% of women were found to be positive. The proportion testing positive for chlamydia varied by sex and sex of sex partners, as well as by age group. The highest proportion of patients testing positive were MSW aged 19 years and younger (44.7%). Of note, adolescent patients represent a relatively small subgroup of the clinic population and changes in the number of events in the numerator or a small denominator may lead to substantial fluctuations from year to year. Hence, data should be interpreted with caution.

This report includes data from years that coincide with the COVID-19 pandemic, which introduced uncertainty and difficulty in interpreting STI surveillance data. See Impact of COVID-19 on STIs for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2022/technical-notes.htm) for information on SSuN methodology.

Gonorrhea — Rates of Reported Cases by Year, United States, 1941–2022



* Per 100,000

Summary

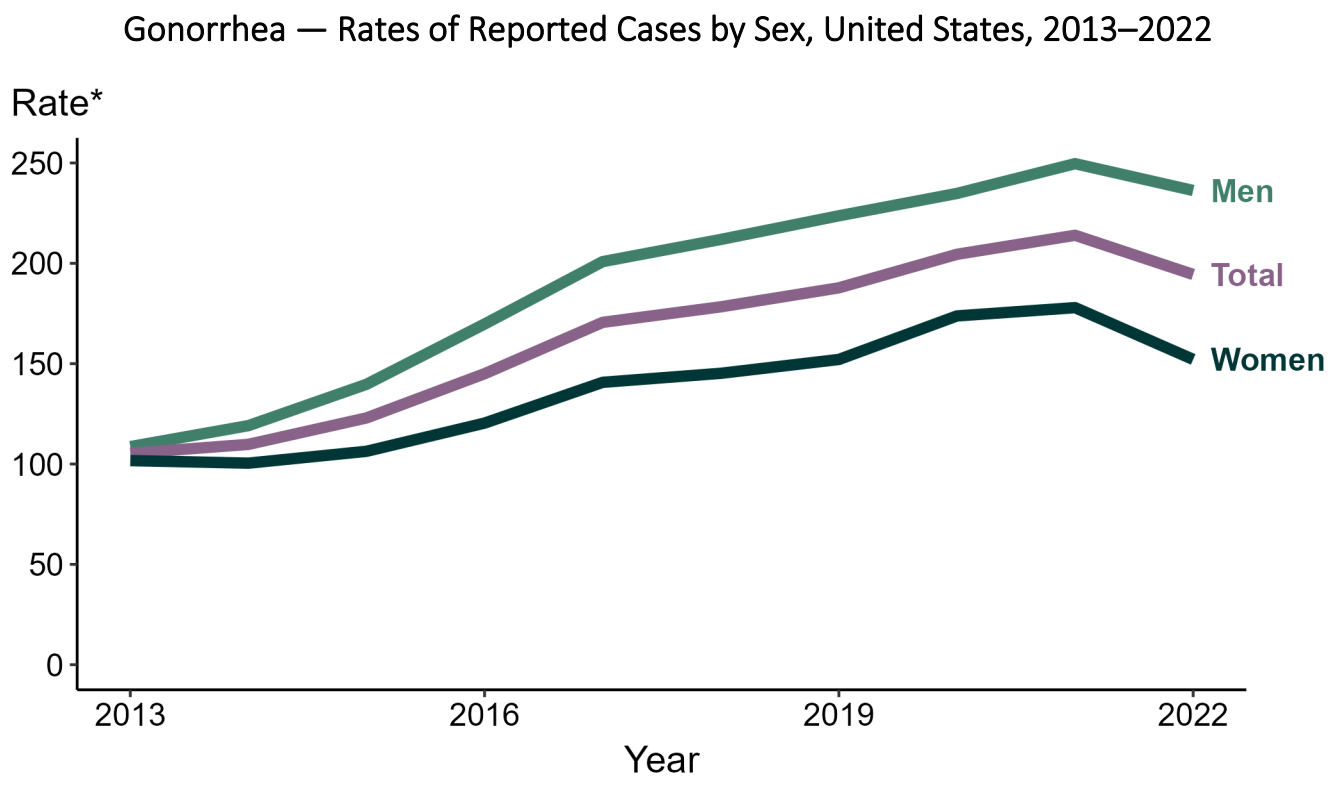
Data collection for gonorrhea began in 1941 and gonorrhea was made a nationally notifiable condition in 1944. Steep declines in case rates in the 1940s and 1950s likely reflect expanded use of penicillin to treat infection.

In 2022, a total of 648,056 cases of gonorrhea were reported in the United States. During 2021 to 2022, the rate of reported gonorrhea decreased 9.2% (from 214.0 to 194.4 per 100,000).

This report includes data from years that coincide with the COVID-19 pandemic, which introduced uncertainty and difficulty in interpreting STI surveillance data. See Impact of COVID-19 on STIs for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2022/technical-notes.htm) for information on gonorrhea case reporting.

Data for all figures are available at https://www.cdc.gov/std/statistics/2022/data.zip. The file “GC - Rates by Year (US 1941-2022).xlsx” contains the data for the figure presented on this slide.



* Per 100,000

Summary

During 2021 to 2022, the rate of reported gonorrhea among men decreased 5.4% (from 249.7 to 236.3 per 100,000) and the rate among women decreased 14.5% (from 177.9 to 152.1 per 100,000).

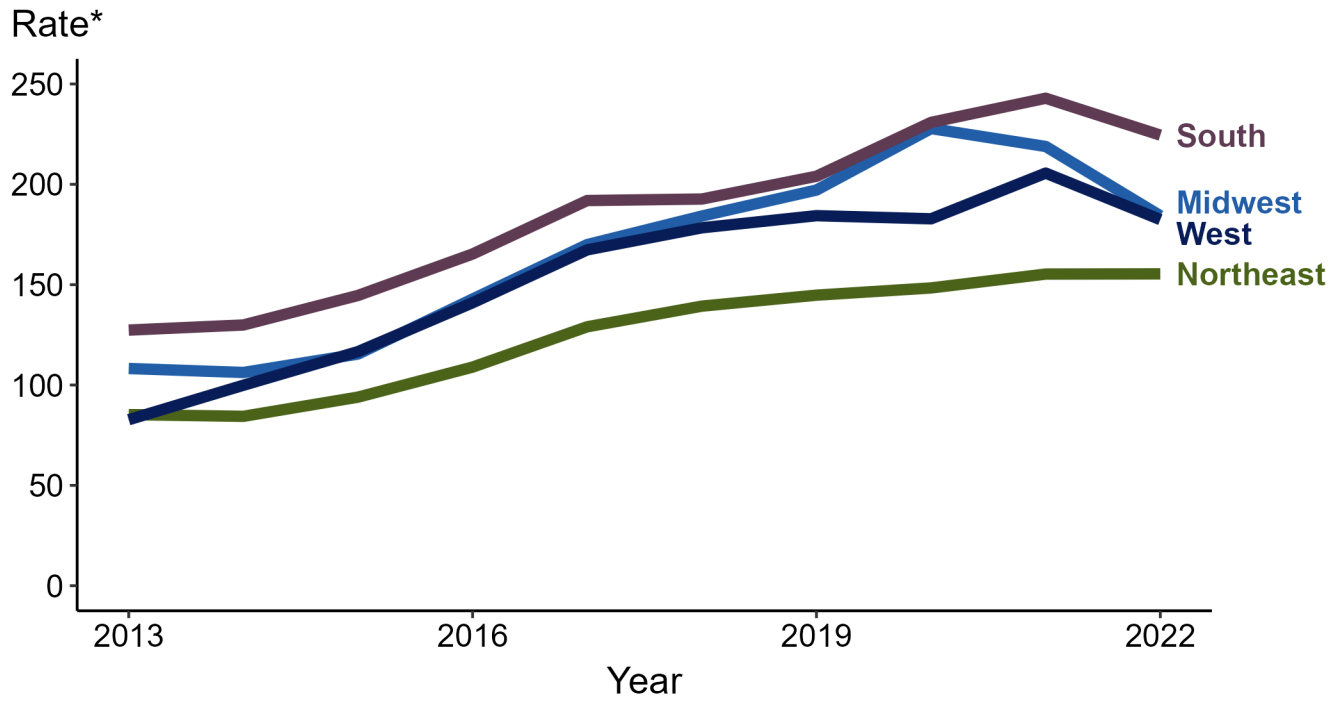
Over the last five years, the rate of reported gonorrhea among men increased 11.5% (from 211.9 to 236.3 per 100,000) and the rate among women increased 4.8% (from 145.2 to 152.1 per 100,000). Over the last 10 years, the rate among men increased 117.4% (from 108.7 to 236.3 per 100,000) and the rate among women increased 49.6% (from 101.7 to 152.1 per 100,000).

This report includes data from years that coincide with the COVID-19 pandemic, which introduced uncertainty and difficulty in interpreting STI surveillance data. See Impact of COVID-19 on STIs for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2022/technical-notes.htm) for information on gonorrhea case reporting. Table A1 (https://www.cdc.gov/std/statistics/2022/tables/a1.htm) provides information on unknown, missing, or invalid values of select variables.

Data for all figures are available at https://www.cdc.gov/std/statistics/2022/data.zip. The file “GC - Rates by Sex (US 2013-2022).xlsx” contains the data for the figure presented on this slide.

Gonorrhea — Rates of Reported Cases by Region, United States, 2013–2022



* Per 100,000

Summary

In 2022, the South had the highest rate of reported gonorrhea (224.5 cases per 100,000; 7.6% decrease from 2021), followed by the Midwest (184.3 cases per 100,000; 15.8% decrease from 2021), the West (182.4 cases per 100,000; 11.3% decrease from 2021), and the Northeast (155.4 cases per 100,000; <1.0% change from 2021).

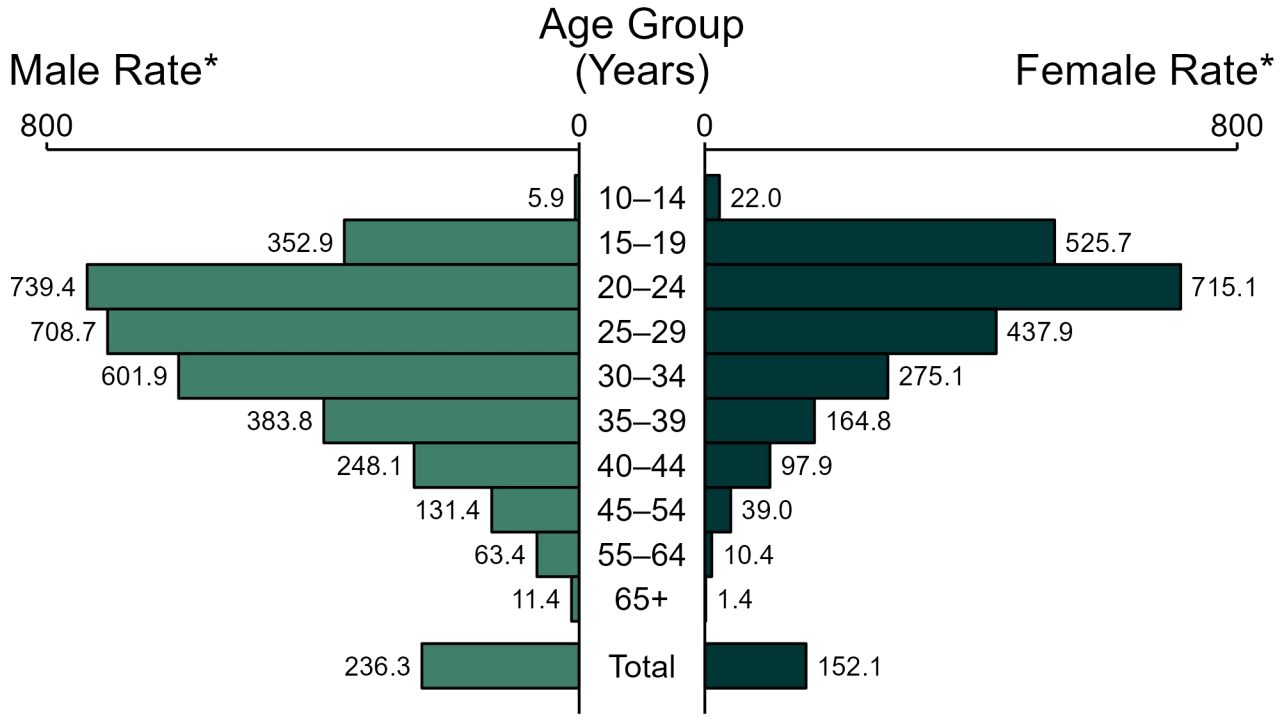
The South had the greatest five-year increase in rates of reported cases of gonorrhea (192.7 to 224.5 per 100,000; 16.5% increase from 2018). The West had the greatest 10-year increase in rates of reported cases of gonorrhea (82.7 to 182.4 per 100,000; 120.6% increase from 2013).

This report includes data from years that coincide with the COVID-19 pandemic, which introduced uncertainty and difficulty in interpreting STI surveillance data. See Impact of COVID-19 on STIs for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2022/technical-notes.htm) for information on gonorrhea case reporting.

Data for all figures are available at https://www.cdc.gov/std/statistics/2022/data.zip. The file “GC - Rates by Region (US 2013-2022).xlsx” contains the data for the figure presented on this slide.

Gonorrhea — Rates of Reported Cases by Age Group and Sex, United States, 2022



* Per 100,000

NOTE: Total includes cases of all ages, including those with unknown age.

Summary

In 2022, the rate of reported gonorrhea was higher among men (236.3 per 100,000) compared to women (152.1 per 100,000).

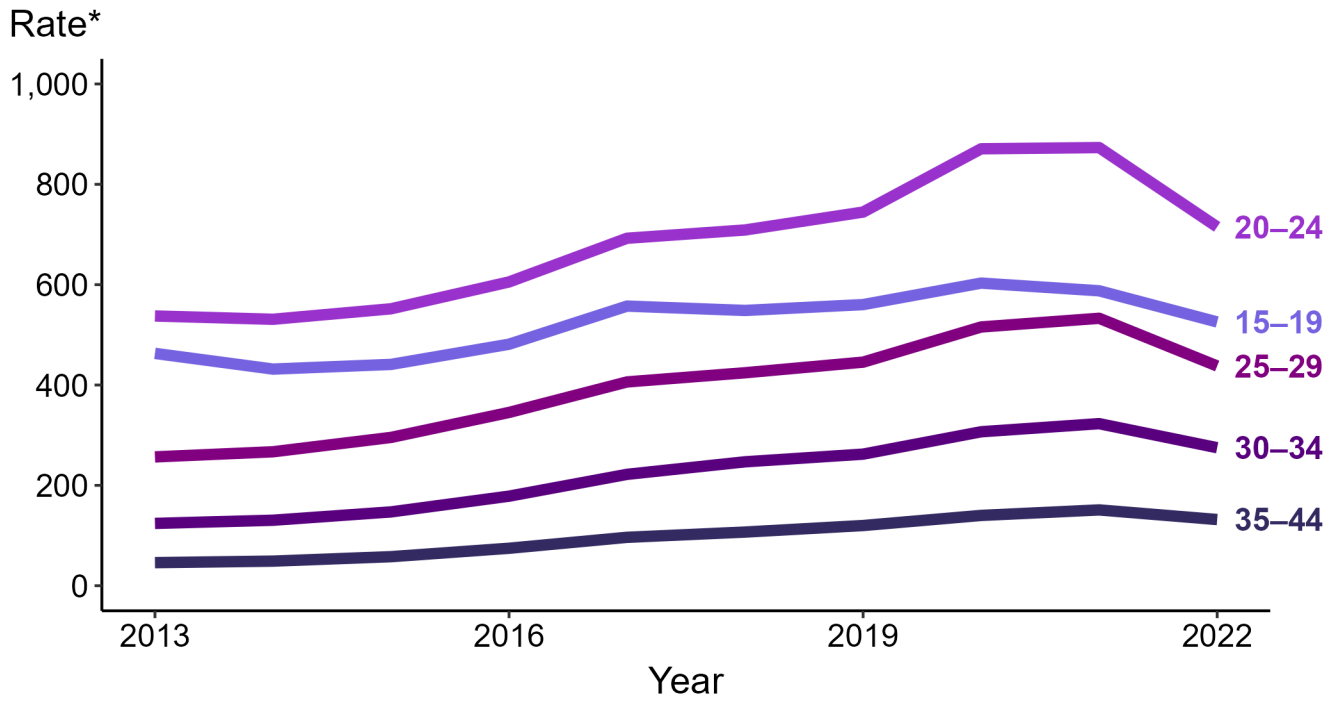
Among men, those aged 20 to 24 years had the highest rate of reported cases of gonorrhea (739.4 per 100,000), followed by men aged 25 to 29 years (708.7 per 100,000) and men aged 30 to 34 years (601.9 per 100,000). Among women, those aged 20 to 24 years also had the highest rate of reported cases of gonorrhea (715.1 per 100,000), followed by women aged 15 to 19 years (525.7 per 100,000) and women aged 25 to 29 years (437.9 per 100,000).

This report includes data from years that coincide with the COVID-19 pandemic, which introduced uncertainty and difficulty in interpreting STI surveillance data. See Impact of COVID-19 on STIs for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2022/technical-notes.htm) for information on gonorrhea case reporting. Table A1 (https://www.cdc.gov/std/statistics/2022/tables/a1.htm) provides information on unknown, missing, or invalid values of select variables.

Data for all figures are available at https://www.cdc.gov/std/statistics/2022/data.zip. The file “GC - Rates by Age Group and Sex (US 2022).xlsx” contains the data for the figure presented on this slide.

Gonorrhea — Rates of Reported Cases Among Women Aged 15–44 Years by Age Group, United States, 2013–2022



* Per 100,000

Summary

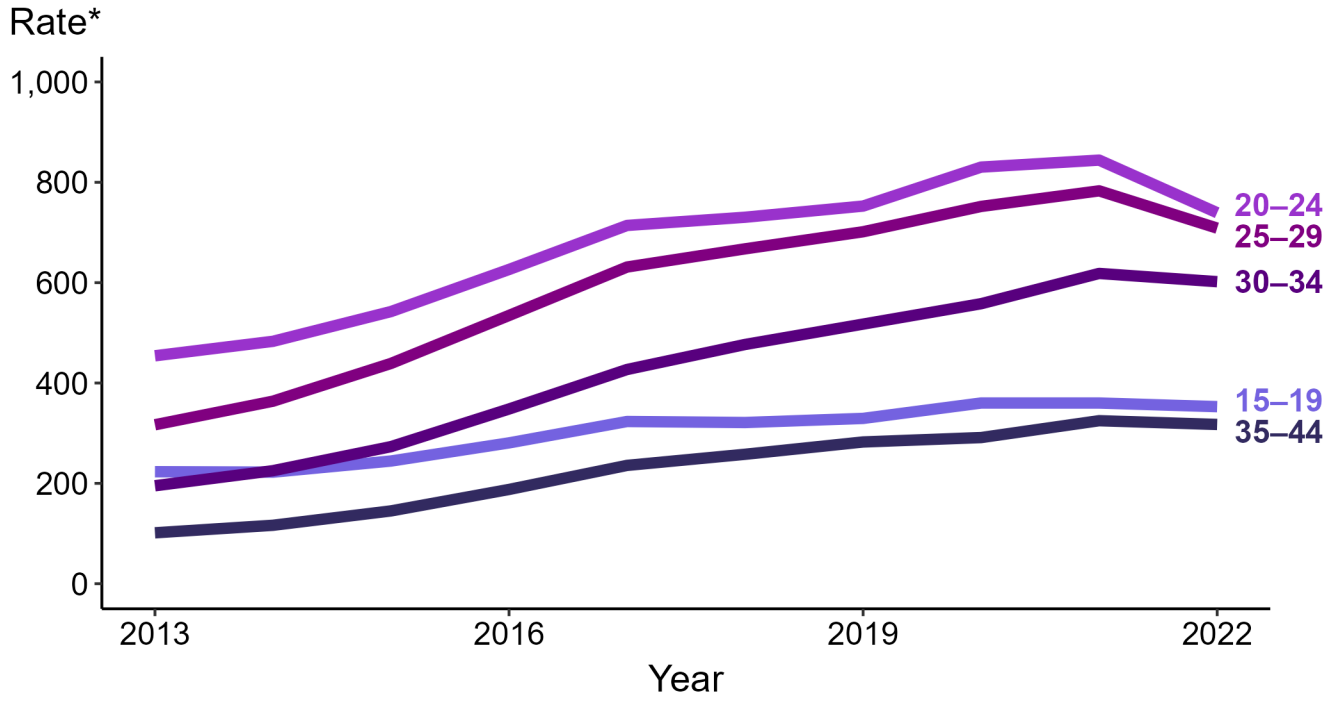
Among women aged 15 to 44 years in 2022, those aged 20 to 24 years had the highest rate of reported cases of gonorrhea (715.1 cases per 100,000; 18.1% decrease from 2021), followed by those aged 15 to 19 years (525.7 cases per 100,000; 10.6% decrease from 2021), those aged 25 to 29 years (437.9 cases per 100,000; 17.8% decrease from 2021), those aged 30 to 34 years (275.1 cases per 100,000; 14.8% decrease from 2021), and those aged 35 to 44 years (131.9 cases per 100,000; 12.6% decrease from 2021).

This report includes data from years that coincide with the COVID-19 pandemic, which introduced uncertainty and difficulty in interpreting STI surveillance data. See Impact of COVID-19 on STIs for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2022/technical-notes.htm) for information on gonorrhea case reporting. Table A1 (https://www.cdc.gov/std/statistics/2022/tables/a1.htm) provides information on unknown, missing, or invalid values of select variables.

Data for all figures are available at https://www.cdc.gov/std/statistics/2022/data.zip. The file “GC - Rates Women 15-44 Years by Age Group (US 2012-2022).xlsx” contains the data for the figure presented on this slide.

Gonorrhea — Rates of Reported Cases Among Men Aged 15–44 Years by Age Group, United States, 2013–2022



* Per 100,000

Summary

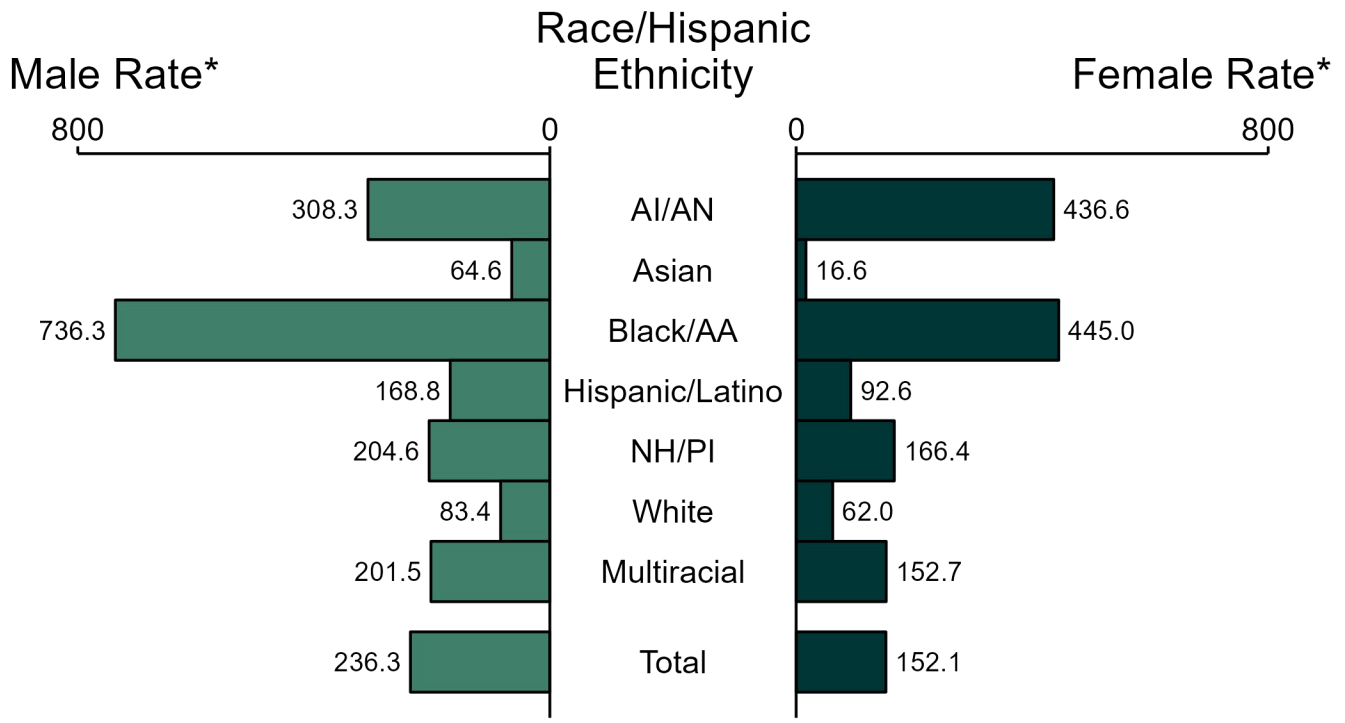
Among men aged 15 to 44 years in 2022, those aged 20 to 24 years had the highest rate of reported cases of gonorrhea (739.4 cases per 100,000; 12.4% decrease from 2021), followed by those aged 25 to 29 years (708.7 cases per 100,000; 9.5% decrease from 2021), those aged 30 to 34 years (601.9 cases per 100,000; 2.7% decrease from 2021), those aged 15 to 19 years (352.9 cases per 100,000; 2.0% decrease from 2021), and those aged 35 to 44 years (317.4 cases per 100,000; 2.3% decrease from 2021).

This report includes data from years that coincide with the COVID-19 pandemic, which introduced uncertainty and difficulty in interpreting STI surveillance data. See Impact of COVID-19 on STIs for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2022/technical-notes.htm) for information on gonorrhea case reporting. Table A1 (https://www.cdc.gov/std/statistics/2022/tables/a1.htm) provides information on unknown, missing, or invalid values of select variables.

Data for all figures are available at https://www.cdc.gov/std/statistics/2022/data.zip. The file “GC - Rates Men 15-44 Years by Age Group (US 2012-2022).xlsx” contains the data for the figure presented on this slide.

Gonorrhea — Rates of Reported Cases by Race/Hispanic Ethnicity and Sex, United States, 2022



* Per 100,000

ACRONYMS: AI/AN = American Indian or Alaska Native; Black/AA = Black or African American; NH/PI = Native Hawaiian or other Pacific Islander

NOTE: Total includes all cases including those with unknown race/Hispanic ethnicity.

Summary

In 2022, the rate of reported gonorrhea was higher among men (236.3 per 100,000) compared to women (152.1 per 100,000).

Among men, non-Hispanic Black or African American men had the highest rate of reported cases of gonorrhea (736.3 per 100,000), followed by non-Hispanic American Indian or Alaska Native men (308.3 per 100,000) and non-Hispanic Native Hawaiian or other Pacific Islander men (204.6 per 100,000). Among women, non-Hispanic Black or African American women also had the highest rate of reported cases of gonorrhea (445.0 per 100,000), followed by non-Hispanic American Indian or Alaska Native women (436.6 per 100,000) and non-Hispanic Native Hawaiian or other Pacific Islander women (166.4 per 100,000).

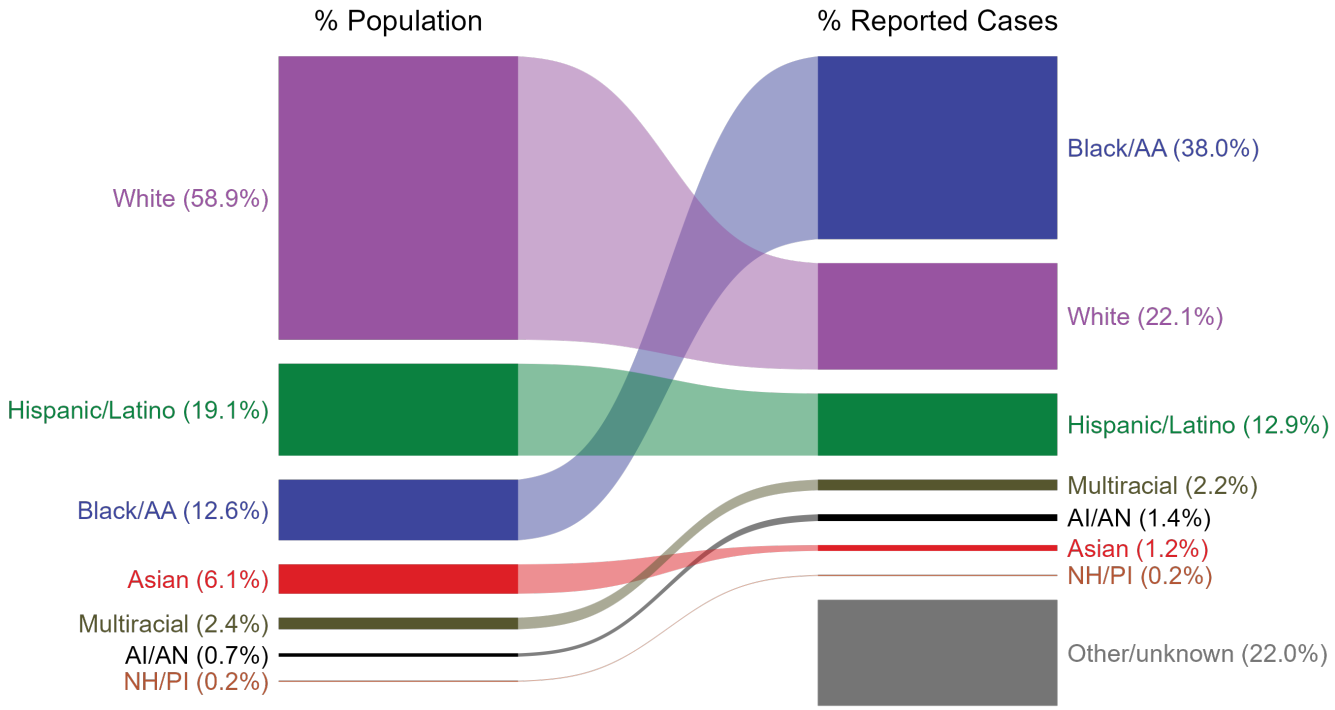
Using non-Hispanic White persons as the referent category, the greatest relative racial disparity in rates of reported gonorrhea across both sexes was observed among non-Hispanic Black or African American men, with a rate ratio of 8.8 times that of non-Hispanic White men. Among women, the greatest relative disparity was observed among non-Hispanic Black or African American women as well, with a rate 7.2 times that of non-Hispanic White women.

This report includes data from years that coincide with the COVID-19 pandemic, which introduced uncertainty and difficulty in interpreting STI surveillance data. See Impact of COVID-19 on STIs for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2022/technical-notes.htm) for information on gonorrhea case reporting, race/Hispanic ethnicity categorization, and reporting of race/Hispanic ethnicity for STI cases. Table A1 (https://www.cdc.gov/std/statistics/2022/tables/a1.htm) provides information on unknown, missing, or invalid values of select variables.

Data for all figures are available at https://www.cdc.gov/std/statistics/2022/data.zip. The file “GC - Rates by Race Hispanic Ethnicity and Sex (US 2022).xlsx” contains the data for the figure presented on this slide.

Gonorrhea — Total Population and Reported Cases by Race/Hispanic Ethnicity, United States, 2022



* Per 100,000

NOTE: In 2022, a total of 142,317 gonorrhea cases (22.0%) had missing, unknown, or other race and were not reported to be of Hispanic ethnicity. These cases are included in the "other/unknown" category.

ACRONYMS: AI/AN = American Indian or Alaska Native; Black/AA = Black or African American; NH/PI = Native Hawaiian or other Pacific Islander

Summary

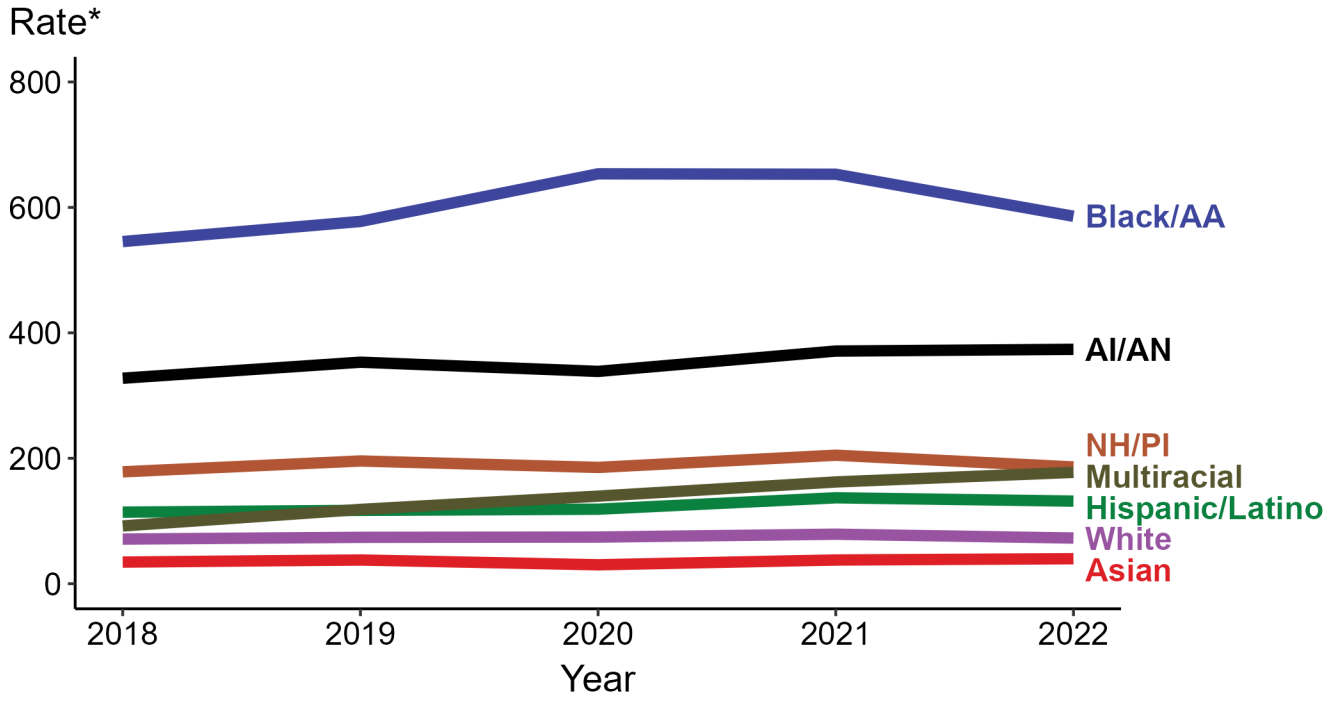
The percentages of gonorrhea cases by race/Hispanic ethnicity were disproportionate to the percentages among the total population of the United States in 2022. The greatest absolute and relative disparities were observed among non-Hispanic Black or African American persons, who represented 38.0% of reported gonorrhea cases (n = 246,480; 48.7% of gonorrhea cases with reported race or Hispanic ethnicity) despite being 12.6% of the US population. This is means that the burden of gonorrhea among non-Hispanic Black or African American persons was 25.4% greater than — or 3.0 times — what would be expected based on their proportion of the population. Additionally, non-Hispanic American Indian or Alaska Native persons were also overrepresented among gonorrhea cases relative to their proportion of the population.

This report includes data from years that coincide with the COVID-19 pandemic, which introduced uncertainty and difficulty in interpreting STI surveillance data. See Impact of COVID-19 on STIs for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2022/technical-notes.htm) for information on gonorrhea case reporting, race/Hispanic ethnicity categorization, and reporting of race/Hispanic ethnicity for STI cases.

Data for all figures are available at https://www.cdc.gov/std/statistics/2022/data.zip. The file “GC - Population and Cases by Race Hispanic Ethnicity (US 2022).xlsx” contains the data for the figure presented on this slide.

Gonorrhea — Rates of Reported Cases by Race/Hispanic Ethnicity, United States, 2018–2022



* Per 100,000

ACRONYMS: AI/AN = American Indian or Alaska Native; Black/AA = Black or African American; NH/PI = Native Hawaiian or other Pacific Islander

Summary

In 2022, the highest rate of reported gonorrhea cases per 100,000 persons was among non-Hispanic Black or African American persons (585.9), followed by non-Hispanic American Indian or Alaska Native persons (373.7).

During 2021 to 2022, the greatest increase in rate of reported gonorrhea cases per 100,000 persons was among non-Hispanic persons of multiple races (162.2 to 177.5; 9.4% increase). Non-Hispanic persons of multiple races also had the greatest five-year increase in rate of reported gonorrhea (92.1 to 177.5; 92.7% increase from 2018).

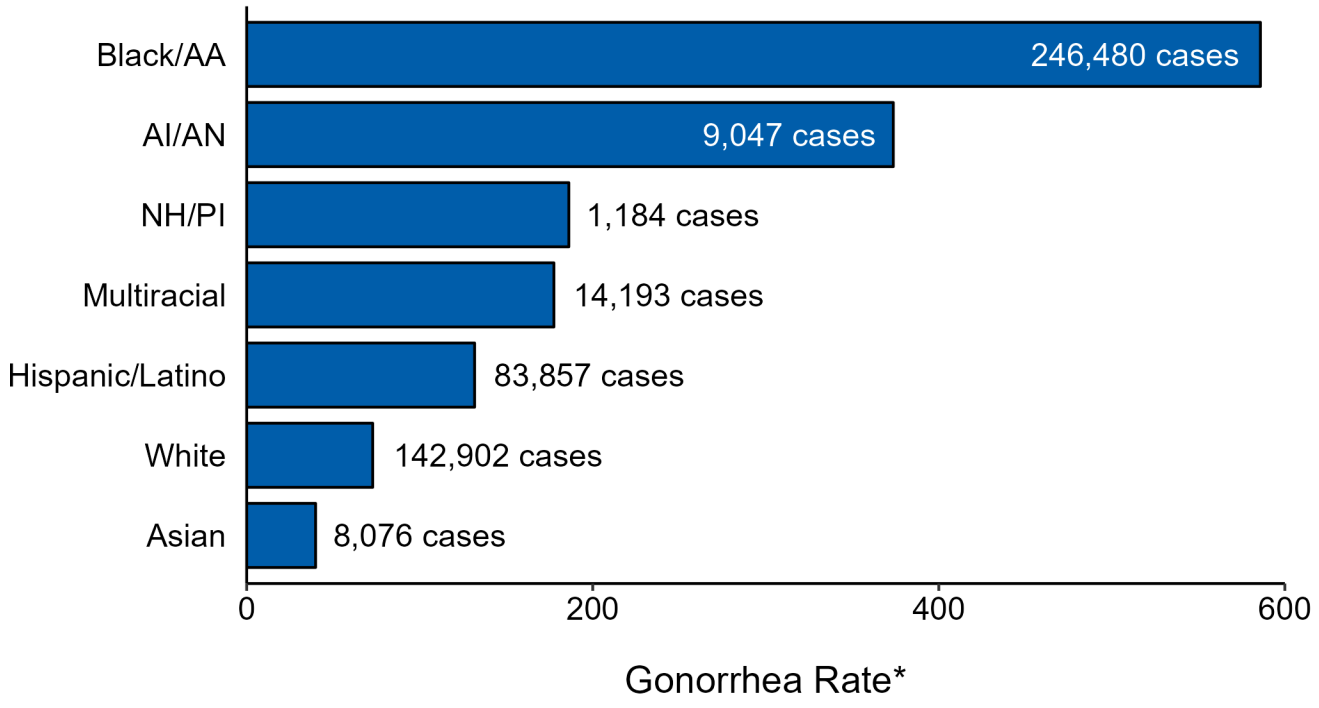
During 2021 to 2022, the greatest decrease in rate of reported gonorrhea cases per 100,000 persons was among non-Hispanic Black or African American persons (652.9 to 585.9; 10.3% decrease). There were no decreases in the rate of reported gonorrhea among any race or Hispanic ethnicity group during 2018 to 2022.

This report includes data from years that coincide with the COVID-19 pandemic, which introduced uncertainty and difficulty in interpreting STI surveillance data. See Impact of COVID-19 on STIs for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2022/technical-notes.htm) for information on gonorrhea case reporting, race/Hispanic ethnicity categorization, and reporting of race/Hispanic ethnicity for STI cases. Table A1 (https://www.cdc.gov/std/statistics/2022/tables/a1.htm) provides information on unknown, missing, or invalid values of select variables.

Data for all figures are available at https://www.cdc.gov/std/statistics/2022/data.zip. The file “GC - Rates by Race Hispanic Ethnicity (US 2018-2022).xlsx” contains the data for the figure presented on this slide.

Gonorrhea — Case Counts and Rates of Reported Cases by Race/Hispanic Ethnicity, United States, 2022



* Per 100,000 population

NOTE: In 2022, a total of 142,317 gonorrhea cases (22%) had missing, unknown, or other race and were not reported to be of Hispanic ethnicity. These cases are not shown in this plot.

ACRONYMS: AI/AN = American Indian or Alaska Native; Black/AA = Black or African American; NH/PI = Native Hawaiian or other Pacific Islander

Summary

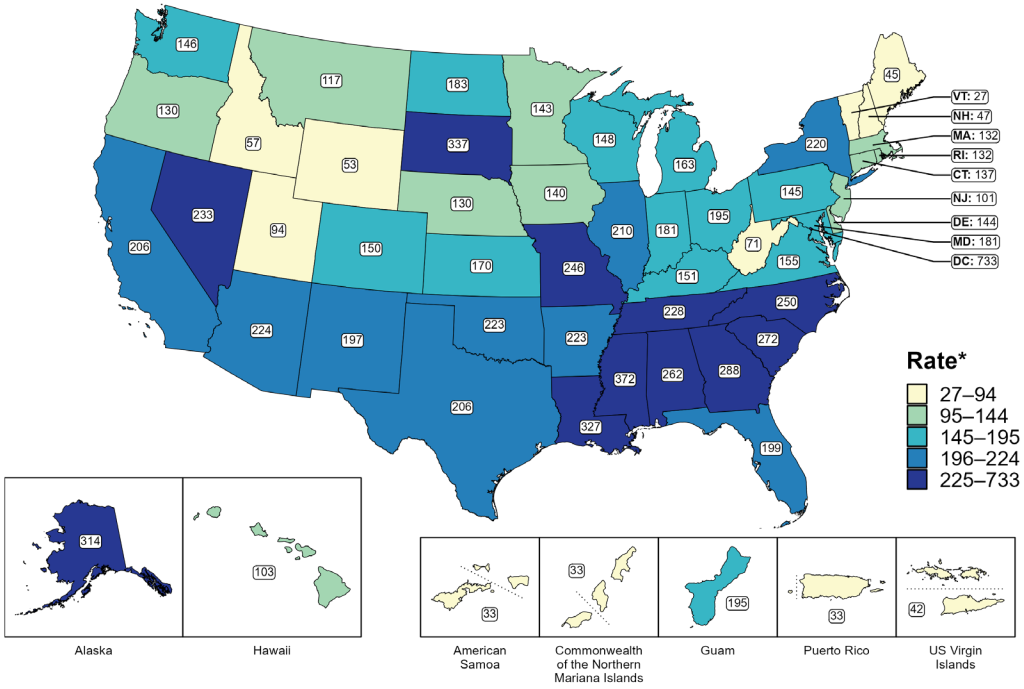
In 2022, rates of gonorrhea were highest among non-Hispanic Black or African American persons (585.9 per 100,000), followed by non-Hispanic American Indian or Alaska Native persons (373.7 per 100,000) and non-Hispanic Native Hawaiian or other Pacific Islander persons (186.2 per 100,000). The greatest number of reported gonorrhea cases was among non-Hispanic Black or African American persons (246,480 cases), followed by non-Hispanic White persons (142,902 cases) and Hispanic or Latino persons of any race(s) (83,857 cases).

This report includes data from years that coincide with the COVID-19 pandemic, which introduced uncertainty and difficulty in interpreting STI surveillance data. See Impact of COVID-19 on STIs for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2022/technical-notes.htm) for information on gonorrhea case reporting and reporting of race/Hispanic ethnicity for STI cases.

Data for all figures are available at https://www.cdc.gov/std/statistics/2022/data.zip. The file “GC - Cases and Rates by Race Hispanic Ethnicity (US 2022).xlsx” contains the data for the figure presented on this slide.

Gonorrhea — Rates of Reported Cases by Jurisdiction, United States and Territories, 2022



* Per 100,000

Summary

In 2022, rates of reported gonorrhea ranged by state from 27 cases per 100,000 population in Vermont to 372 cases per 100,000 population in Mississippi. The rate of reported gonorrhea in the District of Columbia was 733 per 100,000 population.

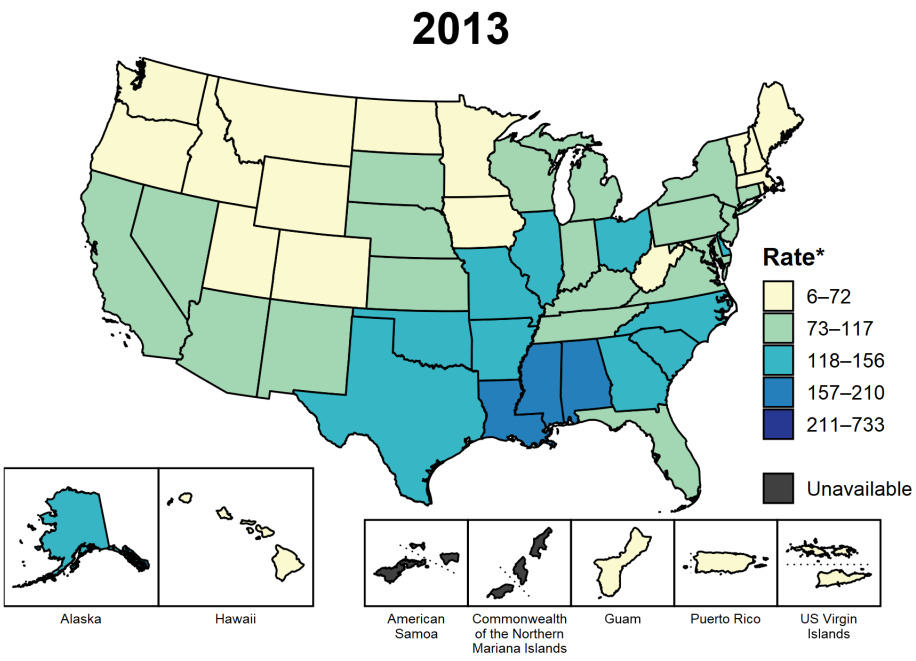
Among US territories, rates of reported gonorrhea ranged from 33 cases per 100,000 population in American Samoa, the Commonwealth of the Northern Mariana Islands, and Puerto Rico to 195 cases per 100,000 population in Guam.

This report includes data from years that coincide with the COVID-19 pandemic, which introduced uncertainty and difficulty in interpreting STI surveillance data. See Impact of COVID-19 on STIs for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2022/technical-notes.htm) for information on gonorrhea case reporting and on interpreting reported rates in US territories.

Data for all figures are available at https://www.cdc.gov/std/statistics/2022/data.zip. The file “GC - Rates by Jurisdiction (US and Terr 2022).xlsx” contains the data for the figure presented on this slide.

Gonorrhea — Rates of Reported Cases by Jurisdiction, United States and Territories, 2013–2022



* Per 100,000

Summary

This slide contains an animated figure that will play when the slide is in presentation mode. A static version of the figure that displays maps from the first and last years of the range is available as a separate slide.

In 2013, three states and the District of Columbia (DC; 7.4% of areas with available data) had a rate of reported gonorrhea greater than or equal to 157 cases per 100,000 population. This increased to 26 states, DC, and one US territory (50.0% of areas with available data) in 2022. During 2021 to 2022, rates of reported gonorrhea increased in eight states, DC, and three territories.

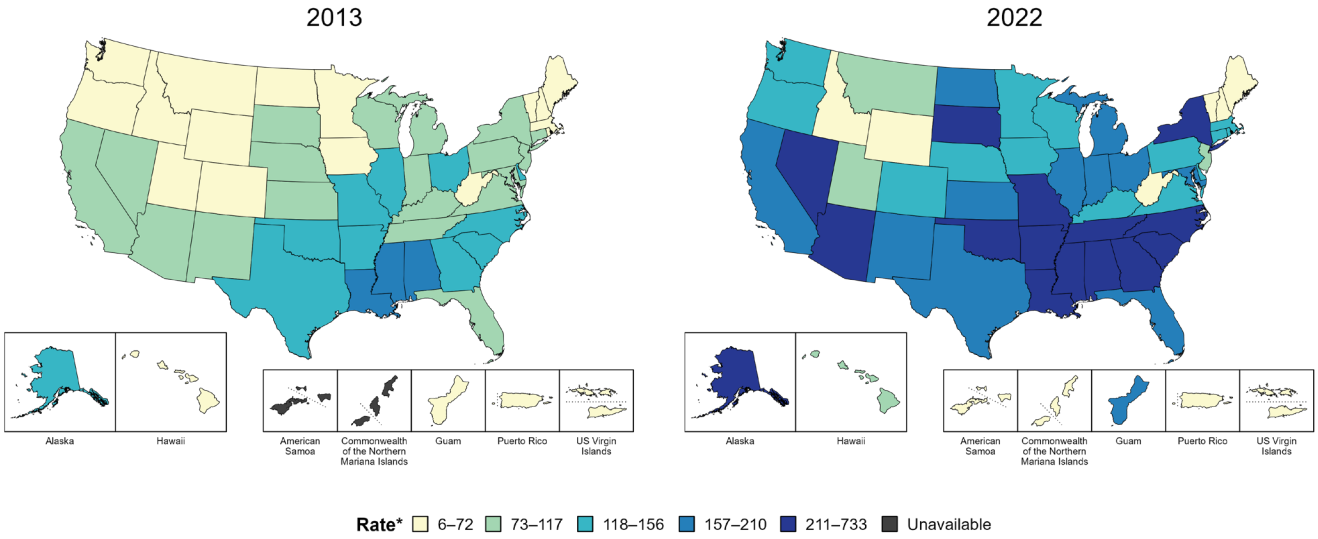
American Samoa and the Commonwealth of the Northern Mariana Islands began reporting data on gonorrhea cases to CDC in 2018; data are not available for those areas prior to that year. In addition, data on reported gonorrhea cases in 2018 are not available for the US Virgin Islands. Due to a network security incident in December 2021, the Maryland Department of Health could not finalize their 2021 STI case notification data. Data for 2021 from Maryland have been suppressed for this figure; however, they are included in national and regional case counts and rates displayed in other figures.

This report includes data from years that coincide with the COVID-19 pandemic, which introduced uncertainty and difficulty in interpreting STI surveillance data. See Impact of COVID-19 on STIs for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2022/technical-notes.htm) for information on gonorrhea case reporting and on interpreting reported rates in US territories.

Data for all figures are available at https://www.cdc.gov/std/statistics/2022/data.zip. The file “GC - Rates by Jurisdiction (US and Terr 2013-2022).xlsx” contains the data for the figure presented on this slide.

Gonorrhea — Rates of Reported Cases by Jurisdiction, United States and Territories, 2013 and 2022



* Per 100,000

Summary

In 2013, three states and the District of Columbia (DC; 7.4% of areas with available data) had a rate of reported gonorrhea greater than or equal to 157 cases per 100,000 population. This increased to 26 states, DC, and one US territory (50.0% of areas with available data) in 2022.

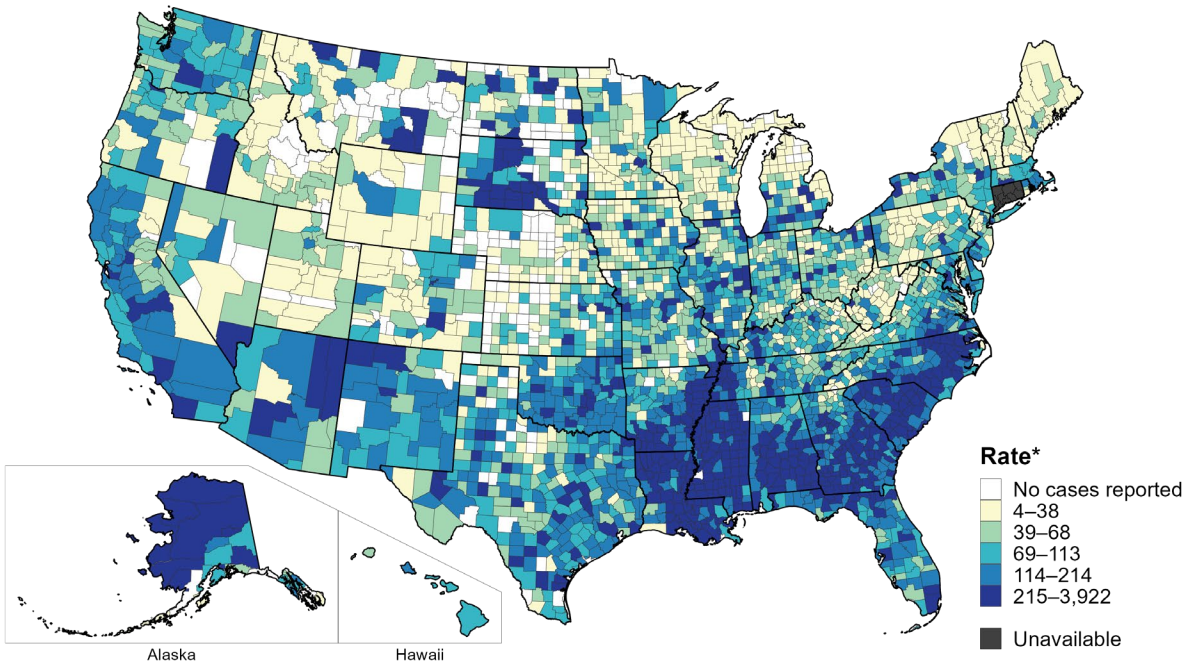
American Samoa and the Commonwealth of the Northern Mariana Islands began reporting data on gonorrhea cases to CDC in 2018; data are not available for those areas prior to that year.

This report includes data from years that coincide with the COVID-19 pandemic, which introduced uncertainty and difficulty in interpreting STI surveillance data. See Impact of COVID-19 on STIs for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2022/technical-notes.htm) for information on gonorrhea case reporting and on interpreting reported rates in US territories.

Data for all figures are available at https://www.cdc.gov/std/statistics/2022/data.zip. The file “GC - Rates by Jurisdiction (US and Terr 2013 and 2022).xlsx” contains the data for the figure presented on this slide.

Gonorrhea — Rates of Reported Cases by County, United States, 2022



* Per 100,000

Summary

In 2022, 93% of counties and county equivalents with available data in the United States reported at least one case of gonorrhea. Out of 3,135 counties and county equivalents with available data, 66 (2%) reported half of all cases of gonorrhea.

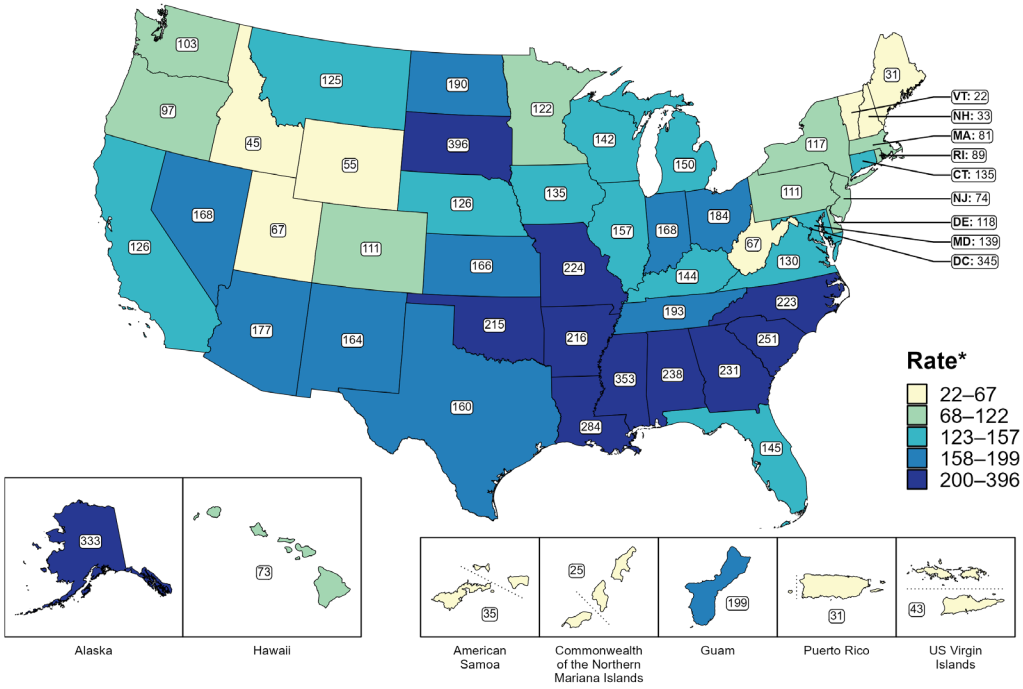
In 2022, Connecticut adopted nine planning regions as county-equivalent geographic units; as STI case notification data were not available in the new county-equivalent units for 2022, data for Connecticut have been suppressed for this figure.

This report includes data from years that coincide with the COVID-19 pandemic, which introduced uncertainty and difficulty in interpreting STI surveillance data. See Impact of COVID-19 on STIs for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2022/technical-notes.htm) for information on gonorrhea case reporting.

Data for all figures are available at https://www.cdc.gov/std/statistics/2022/data.zip. The file “GC - Rates by County (US 2022).xlsx” contains the data for the figure presented on this slide.

Gonorrhea — Rates of Reported Cases Among Women by Jurisdiction, United States and Territories, 2022



* Per 100,000

Summary

In 2022, rates of reported gonorrhea among women ranged by state from 22 cases per 100,000 women in Vermont to 396 cases per 100,000 women in South Dakota. The rate of reported gonorrhea in the District of Columbia was 345 per 100,000 women.

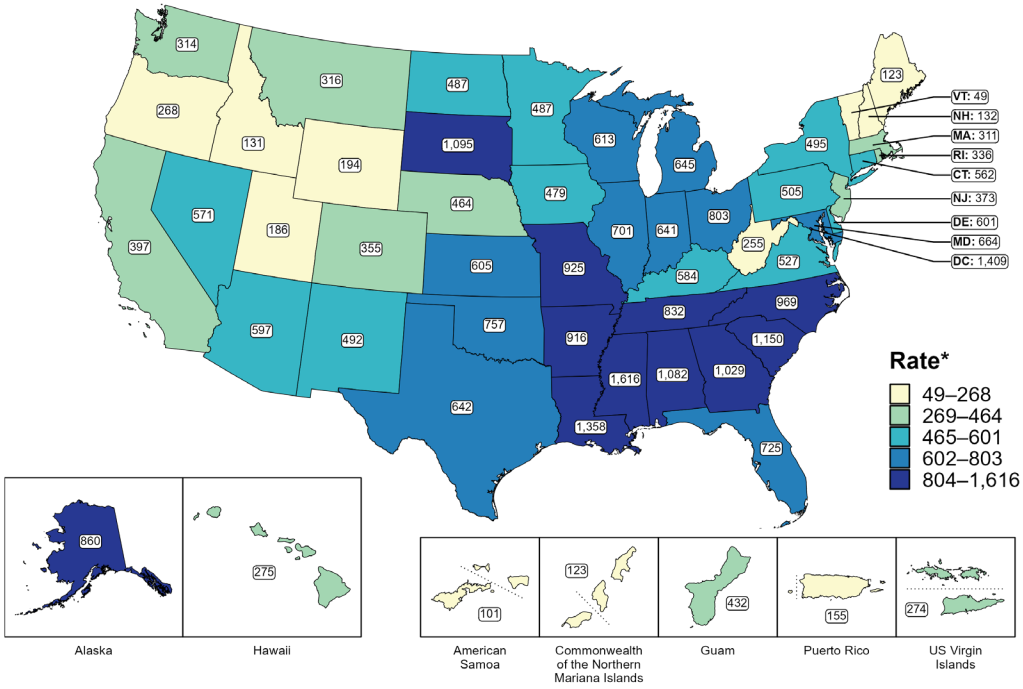
Among US territories, rates of reported gonorrhea ranged from 25 cases per 100,000 women in the Commonwealth of the Northern Mariana Islands to 199 cases per 100,000 women in Guam.

This report includes data from years that coincide with the COVID-19 pandemic, which introduced uncertainty and difficulty in interpreting STI surveillance data. See Impact of COVID-19 on STIs for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2022/technical-notes.htm) for information on gonorrhea case reporting and on interpreting reported rates in US territories. Table A1 (https://www.cdc.gov/std/statistics/2022/tables/a1.htm) provides information on unknown, missing, or invalid values of select variables.

Data for all figures are available at https://www.cdc.gov/std/statistics/2022/data.zip. The file “GC - Rates Women by Jurisdiction (US and Terr 2022).xlsx” contains the data for the figure presented on this slide.

Gonorrhea — Rates of Reported Cases Among Women Aged 15–24 Years by Jurisdiction, United States and Territories, 2022



* Per 100,000

Summary

In 2022, rates of reported gonorrhea among women aged 15 to 24 years ranged by state from 49 cases per 100,000 women aged 15 to 24 years in Vermont to 1,616 cases per 100,000 women aged 15 to 24 years in Mississippi. The rate of reported gonorrhea in the District of Columbia was 1,409 per 100,000 women aged 15 to 24 years.

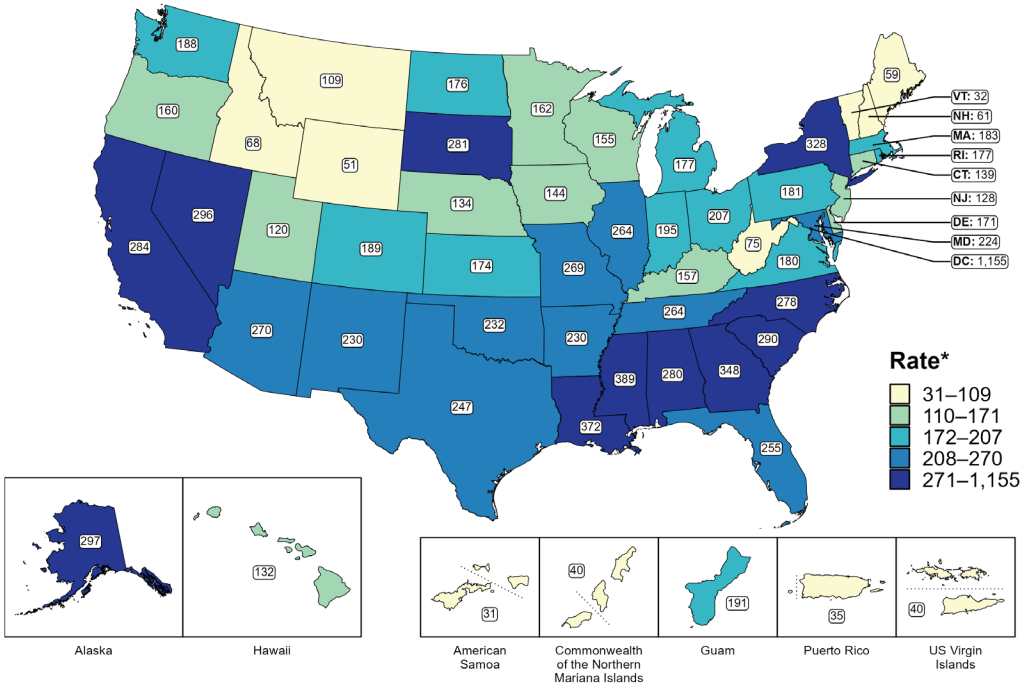
Among US territories, rates of reported gonorrhea ranged from 101 cases per 100,000 women aged 15 to 24 years in American Samoa to 432 cases per 100,000 women aged 15 to 24 years in Guam.

This report includes data from years that coincide with the COVID-19 pandemic, which introduced uncertainty and difficulty in interpreting STI surveillance data. See Impact of COVID-19 on STIs for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2022/technical-notes.htm) for information on gonorrhea case reporting and on interpreting reported rates in US territories. Table A1 (https://www.cdc.gov/std/statistics/2022/tables/a1.htm) provides information on unknown, missing, or invalid values of select variables.

Data for all figures are available at https://www.cdc.gov/std/statistics/2022/data.zip. The file “GC - Rates Women 15-24 Years by Jurisdiction (US and Terr 2022).xlsx” contains the data for the figure presented on this slide.

Gonorrhea — Rates of Reported Cases Among Men by State, United States and Territories, 2022



* Per 100,000

Summary

In 2022, rates of reported gonorrhea among men ranged by state from 32 cases per 100,000 men in Vermont to 389 cases per 100,000 men in Mississippi. The rate of reported gonorrhea in the District of Columbia was 1,155 per 100,000 men.

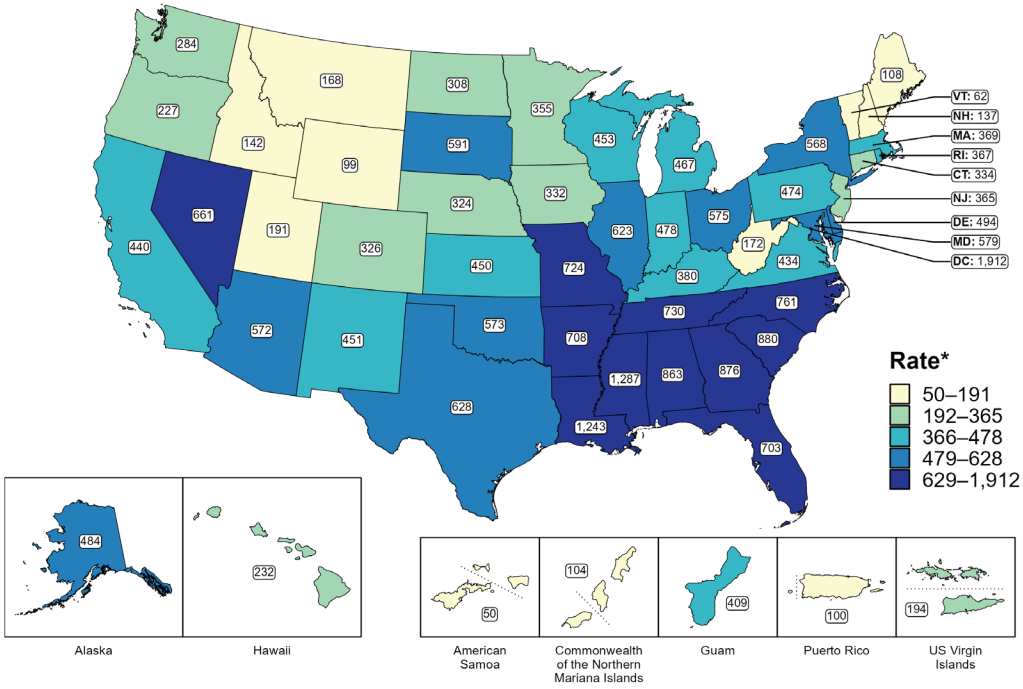
Among US territories, rates of reported gonorrhea ranged from 31 cases per 100,000 men in American Samoa to 191 cases per 100,000 men in Guam.

This report includes data from years that coincide with the COVID-19 pandemic, which introduced uncertainty and difficulty in interpreting STI surveillance data. See Impact of COVID-19 on STIs for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2022/technical-notes.htm) for information on gonorrhea case reporting and on interpreting reported rates in US territories. Table A1 (https://www.cdc.gov/std/statistics/2022/tables/a1.htm) provides information on unknown, missing, or invalid values of select variables.

Data for all figures are available at https://www.cdc.gov/std/statistics/2022/data.zip. The file “GC - Rates Men by Jurisdiction (US and Terr 2022).xlsx” contains the data for the figure presented on this slide.

Gonorrhea — Rates of Reported Cases Among Men Aged 15–24 Years by Jurisdiction, United States and Territories, 2022



* Per 100,000

Summary

In 2022, rates of reported gonorrhea among men aged 15 to 24 years ranged by state from 62 cases per 100,000 men aged 15 to 24 years in Vermont to 1,287 cases per 100,000 men aged 15 to 24 years in Mississippi. The rate of reported gonorrhea in the District of Columbia was 1,912 per 100,000 men aged 15 to 24 years.

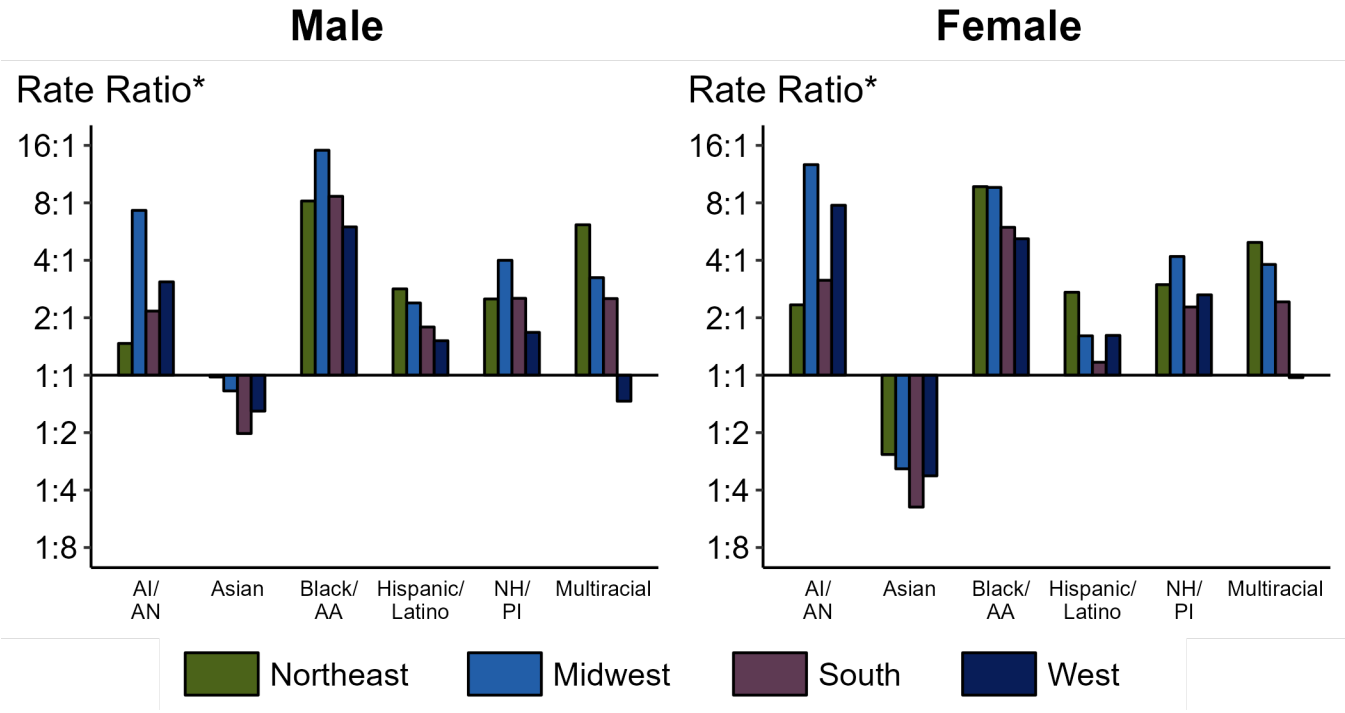
Among US territories, rates of reported gonorrhea ranged from 50 cases per 100,000 men aged 15 to 24 years in American Samoa to 409 cases per 100,000 men aged 15 to 24 years in Guam.

This report includes data from years that coincide with the COVID-19 pandemic, which introduced uncertainty and difficulty in interpreting STI surveillance data. See Impact of COVID-19 on STIs for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2022/technical-notes.htm) for information on gonorrhea case reporting and on interpreting reported rates in US territories. Table A1 (https://www.cdc.gov/std/statistics/2022/tables/a1.htm) provides information on unknown, missing, or invalid values of select variables.

Data for all figures are available at https://www.cdc.gov/std/statistics/2022/data.zip. The file “GC - Rates Men 15-24 Years by Jurisdiction (US and Terr 2022).xlsx” contains the data for the figure presented on this slide.

Gonorrhea — Ratios of Rates of Reported Cases by Sex, Race/Hispanic Ethnicity, and Region, United States, 2022



* For the rate ratios, non-Hispanic White persons are the referent population. Y-axis is log scale.

ACRONYMS: AI/AN = American Indian or Alaska Native; Black/AA = Black or African American; NH/PI = Native Hawaiian or other Pacific Islander

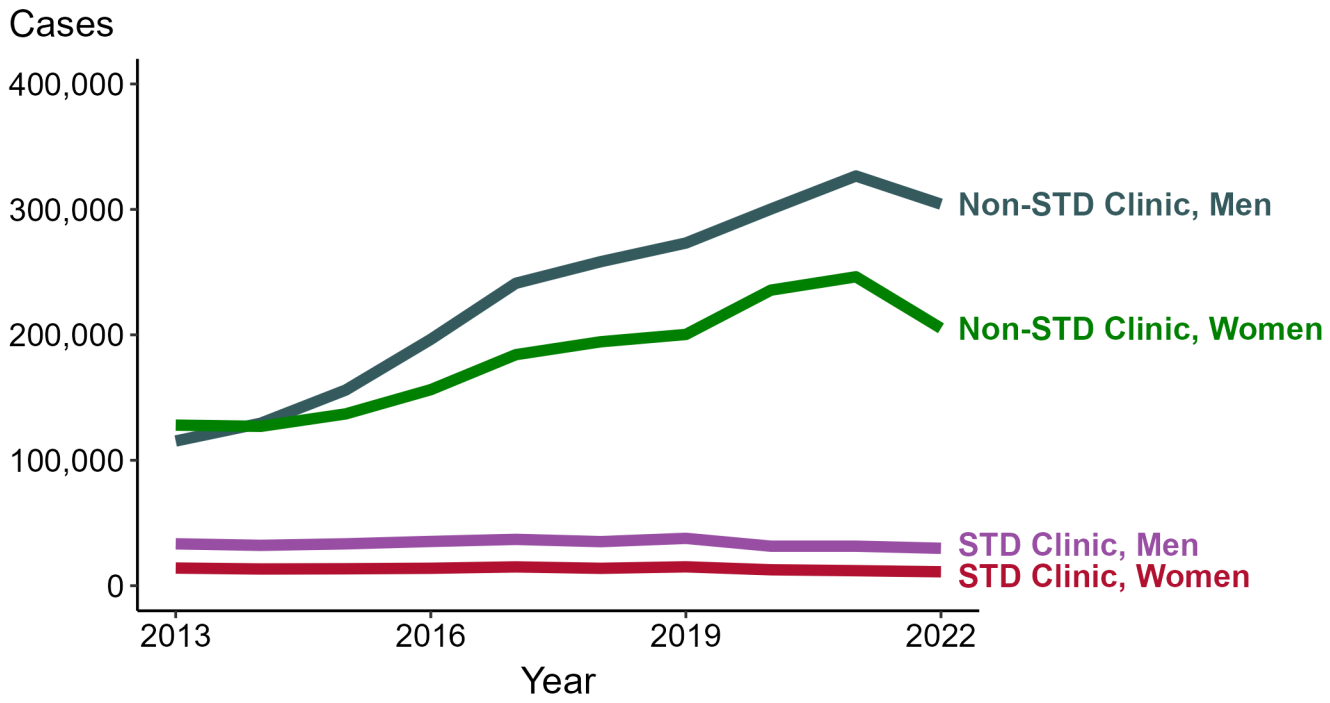
Summary

Among men and women, rate ratios of rates of reported gonorrhea by race/Hispanic ethnicity (using non-Hispanic White persons as the referent population) varied by region in 2022. Among men, the greatest rate ratio was in the Midwest where the rate of gonorrhea among non-Hispanic Black men was 15.1 times the rate among non-Hispanic White men. Among women, the greatest rate ratio was in the Midwest where the rate of gonorrhea among non-Hispanic American Indian or Alaska Native women was 12.7 times the rate among non-Hispanic White women.

This report includes data from years that coincide with the COVID-19 pandemic, which introduced uncertainty and difficulty in interpreting STI surveillance data. See Impact of COVID-19 on STIs for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2022/technical-notes.htm) for information on gonorrhea case reporting and reporting of race/Hispanic ethnicity for STI cases. Table A1 (https://www.cdc.gov/std/statistics/2022/tables/a1.htm) provides information on unknown, missing, or invalid values of select variables.

Gonorrhea — Reported Cases by Reporting Source and Sex, United States, 2013–2022



NOTE: During 2013 to 2022, the proportion of all cases with unknown reporting source was 13.9%, from a low of 12.5% (n = 41,579) in 2013 to a high of 14.8% (n = 96,035) in 2022.

Summary

During 2021 to 2022, the number of gonorrhea cases reported from STD clinics decreased 5.3% among men (31,512 to 29,849 cases) and decreased 7.4% among women (11,990 to 11,104 cases), while the number of cases reported from non-STD clinics decreased 6.9% among men (326,647 to 304,166 cases) and decreased 16.7% among women (246,270 to 205,253 cases).

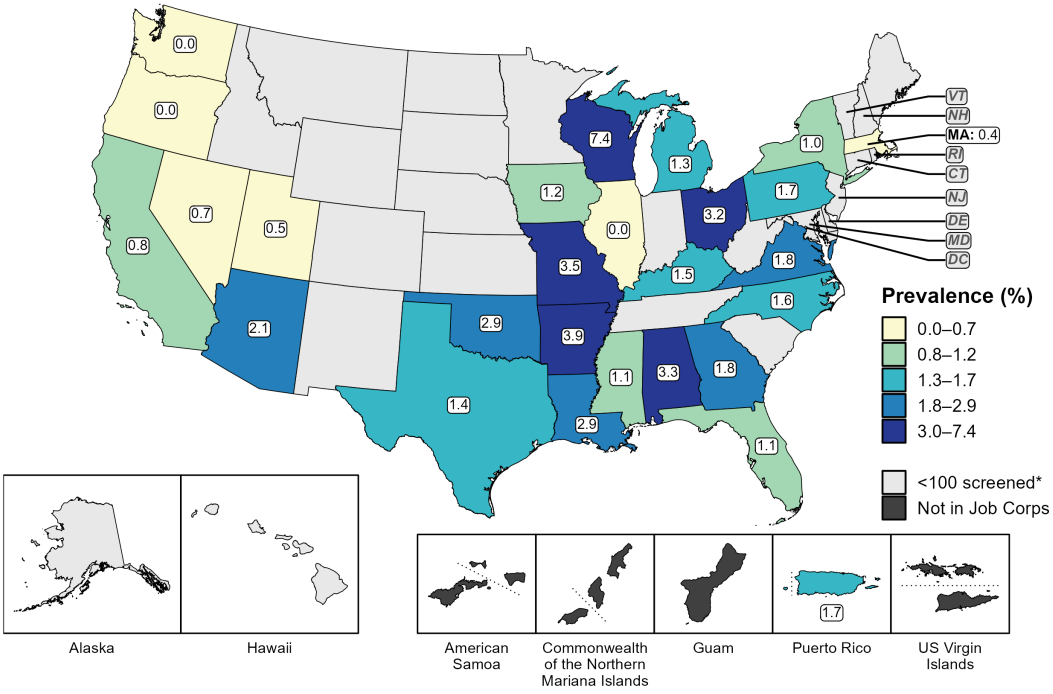
During a ten-year period (2013 to 2022), the number of gonorrhea cases reported from STD clinics decreased 10.7% among men (33,408 to 29,849 cases) and decreased 21.1% among women (14,076 to 11,104 cases), while the number of cases reported from non-STD clinics increased 163.7% among men (115,359 to 304,166 cases) and increased 60.3% among women (128,016 to 205,253 cases).

This report includes data from years that coincide with the COVID-19 pandemic, which introduced uncertainty and difficulty in interpreting STI surveillance data. See Impact of COVID-19 on STIs for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2022/technical-notes.htm) for information on gonorrhea case reporting. Table A1 (https://www.cdc.gov/std/statistics/2022/tables/a1.htm) provides information on unknown, missing, or invalid values of select variables.

Data for all figures are available at https://www.cdc.gov/std/statistics/2022/data.zip. The file “GC - Cases by Reporting Source and Sex (US 2013-2022).xlsx” contains the data for the figure presented on this slide.

Gonorrhea — Prevalence Among Women Aged 16–24 Years Entering Job Corps by State of Residence, United States and Territories, 2022



* Fewer than 100 women who resided in these states/areas and entered Job Corps were screened for gonorrhea in 2022.

Summary

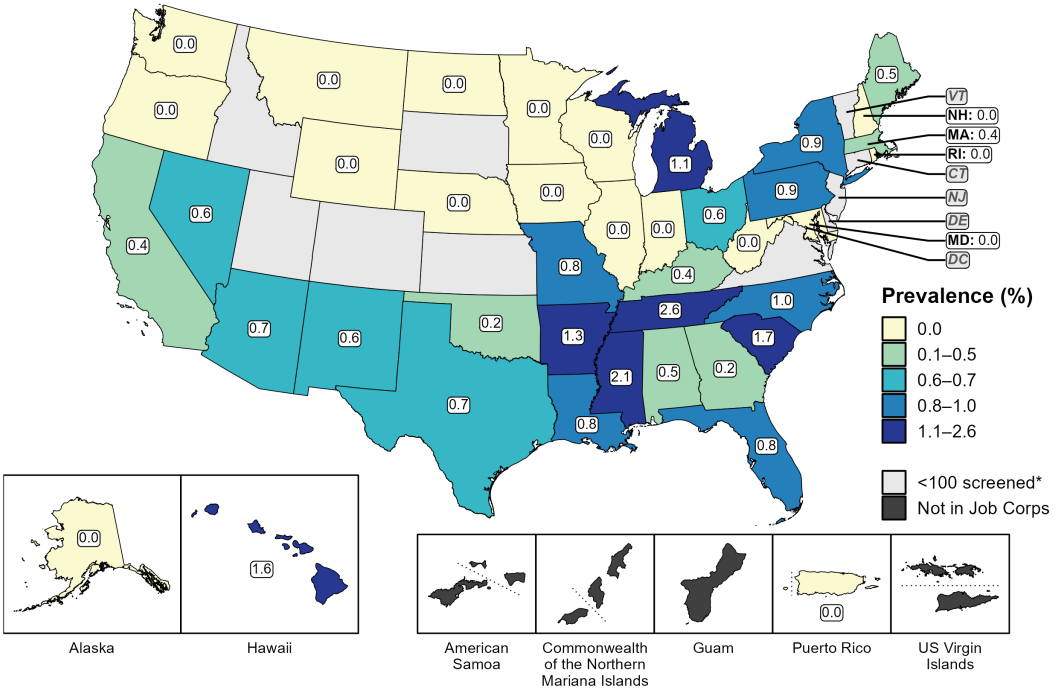
In 2022, 26 states and one US territory screened at least 100 women entering Job Corps for gonorrhea. The median state-specific gonorrhea prevalence among this population in the 26 states was 1.4%, ranging from 0.0% in Illinois, Oregon, and Washington to 7.4% in Wisconsin. The prevalence in Puerto Rico was 1.7%.

This report includes data from years that coincide with the COVID-19 pandemic, which introduced uncertainty and difficulty in interpreting STI surveillance data. See Impact of COVID-19 on STIs for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2022/technical-notes.htm) for information on Jobs Corps methodology.

Data for all figures are available at https://www.cdc.gov/std/statistics/2022/data.zip. The file “GC - Prevalence Women 16-24 Years Entering Job Corps (US and Terr 2022).xlsx” contains the data for the figure presented on this slide.

Gonorrhea — Prevalence Among Men Aged 16–24 Years Entering Job Corps by State of Residence, United States and Territories, 2022



* Fewer than 100 men who resided in these states/areas and entered Job Corps were screened for gonorrhea in 2022.

Summary

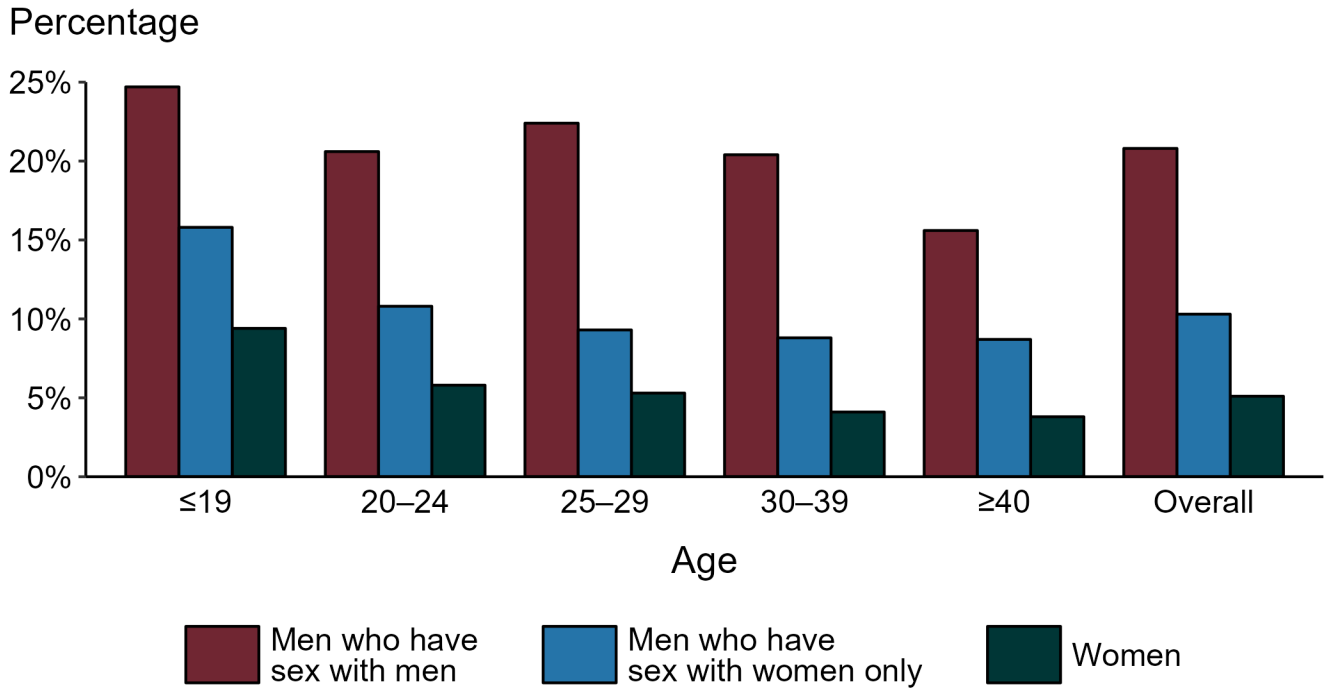
In 2022, 40 states and one US territory screened at least 100 men entering Job Corps for gonorrhea. The median state-specific gonorrhea prevalence among this population in the 40 states was 0.4%, ranging from 0.0% in Alaska, Illinois, Indiana, Iowa, Maryland, Minnesota, Montana, Nebraska, New Hampshire, North Dakota, Oregon, Rhode Island, Washington, West Virginia, Wisconsin, and Wyoming to 2.6% in Tennessee. The prevalence in Puerto Rico was 0.0%.

This report includes data from years that coincide with the COVID-19 pandemic, which introduced uncertainty and difficulty in interpreting STI surveillance data. See Impact of COVID-19 on STIs for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2022/technical-notes.htm) for information on Jobs Corps methodology.

Data for all figures are available at https://www.cdc.gov/std/statistics/2022/data.zip. The file “GC - Prevalence Men 16-24 Years Entering Job Corps (US and Terr 2022).xlsx” contains the data for the figure presented on this slide.

Gonorrhea — Proportion of STD Clinic Patients Testing Positive by Age Group, Sex, and Sex of Sex Partners, STD Surveillance Network (SSuN), 2022



NOTE: Results are based on 49,726 unique patients in 10 participating jurisdictions (Baltimore City, California [excluding San Francisco], Columbus, Florida, Indiana, Multnomah County, New York City, Philadelphia, San Francisco, and Washington) with known sex of sex partners attending SSuN STD clinics who were tested ≥1 times for gonorrhea in 2022.

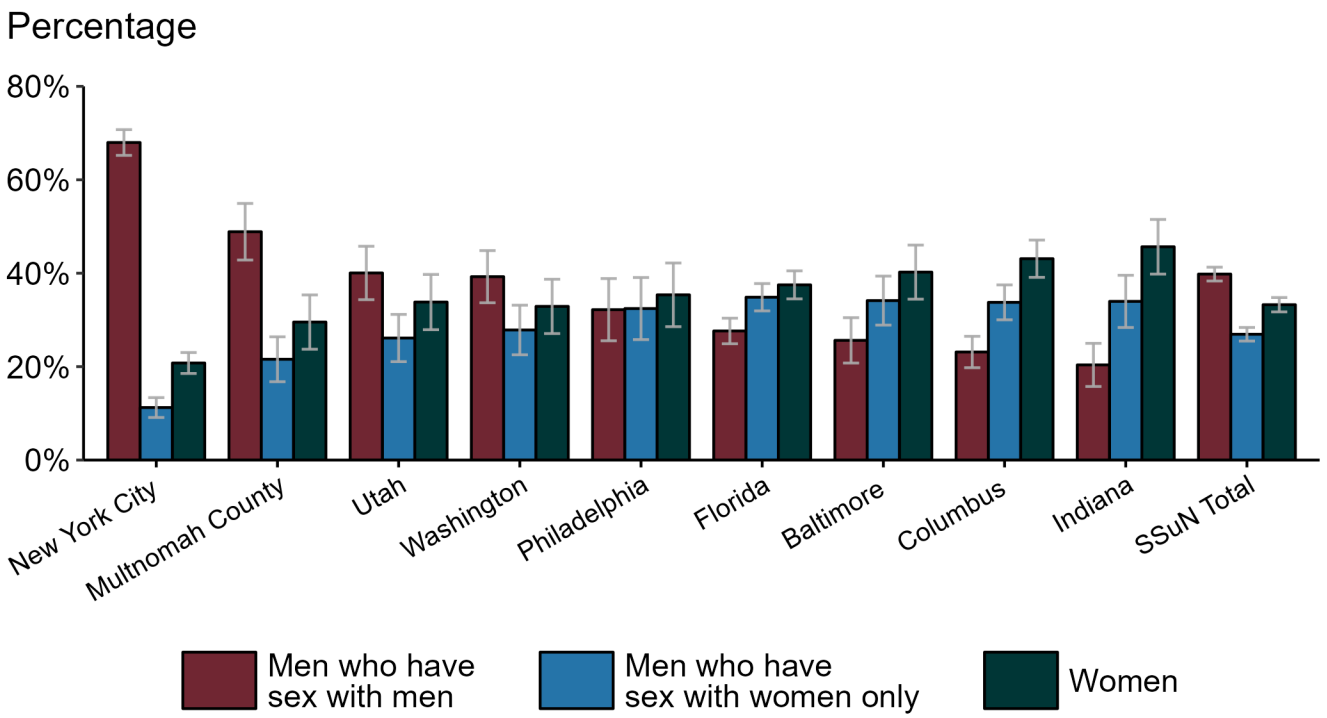
Summary

Among patients accessing care in participating STD clinics in the STD Surveillance Network (SSuN) who were tested for gonorrhea in 2022, 20.8% of gay, bisexual, and other men who have sex with men (MSM), 10.3% of men who have sex with women only (MSW), and 5.1% of women were positive. The proportion of STD clinic patients who tested positive for gonorrhea varied by sex and sex of sex partners, as well as by age group. MSM were noted to have higher proportions of testing positive in all age groups when compared to women and MSW. Of note, adolescent patients represent a relatively small subgroup of the clinic population and changes in the number of events in the numerator or a small denominator may lead to substantial fluctuations from year to year. Hence, data should be interpreted with caution.

This report includes data from years that coincide with the COVID-19 pandemic, which introduced uncertainty and difficulty in interpreting STI surveillance data. See Impact of COVID-19 on STIs for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2022/technical-notes.htm) for information on SSuN methodology.

Gonorrhea — Estimated Proportion of Cases by Sex and Sex of Sex Partners and Jurisdiction, STD Surveillance Network (SSuN), 2022



NOTE: Estimate based on weighted analysis of data on sex of sex partners obtained from interviews (n=4,992) conducted among a random sample of gonorrhea cases reported to participating SSuN jurisdictions during January to December 2022. Includes nine SSuN sites reporting completed case investigations in 2022 for at least 2% of all reported cases.

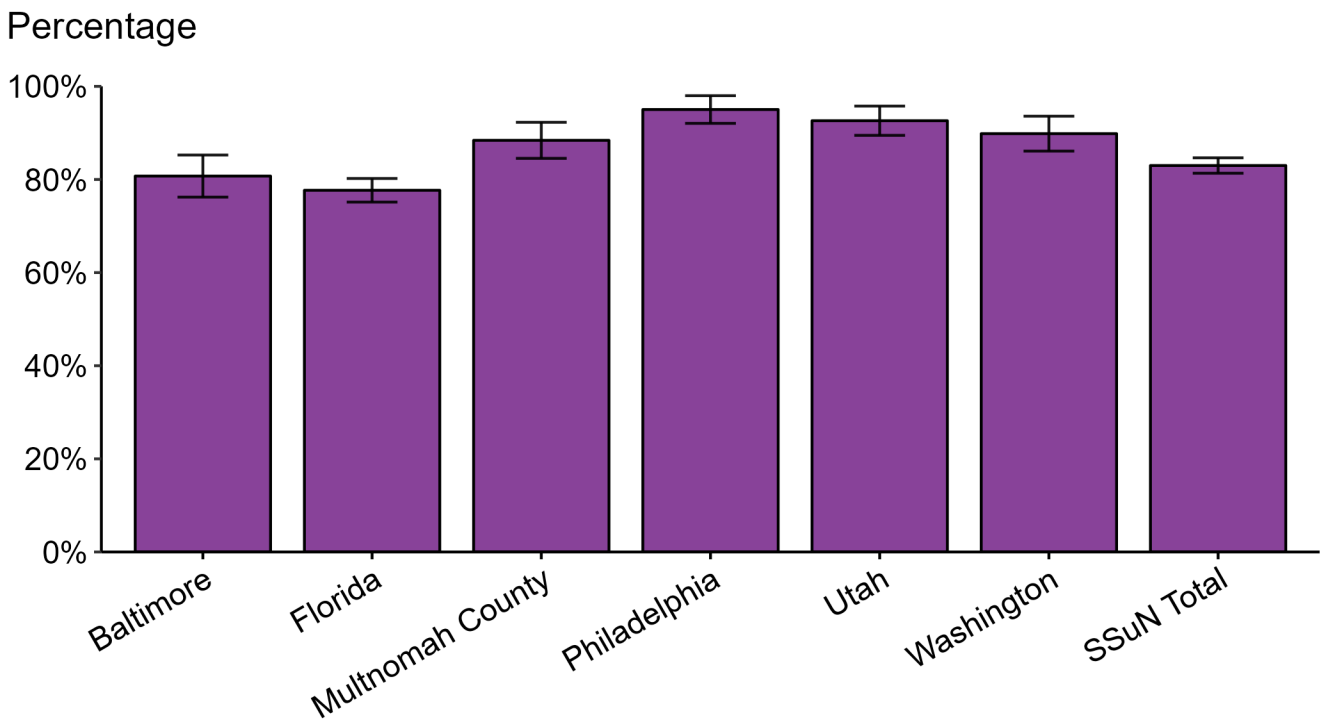
Summary

In 2022, New York City had the highest proportion of gonorrhea cases reported among gay, bisexual, and other men who have sex with men (MSM) among SSuN jurisdictions meeting the inclusion threshold, Indiana had the highest proportion of gonorrhea cases reported among women, and Florida had the highest proportion of gonorrhea cases reported among men who have sex with women only. Overall, the proportion of gonorrhea estimated to be attributed to MSM was 39.8% in 2022.

This report includes data from years that coincide with the COVID-19 pandemic, which introduced uncertainty and difficulty in interpreting STI surveillance data. See Impact of COVID-19 on STIs for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2022/technical-notes.htm) for information on SSuN methodology.

Gonorrhea — Estimated Proportion of Cases Treated with Recommended Regimen by Jurisdiction, STD Surveillance Network (SSuN), 2022



NOTE: Includes SSuN jurisdictions with treatment and dosage data ascertained for at least 80% of sampled, investigated cases. In 2022, the recommended treatment for uncomplicated gonorrhea was ceftriaxone 500 mg, intramuscular.

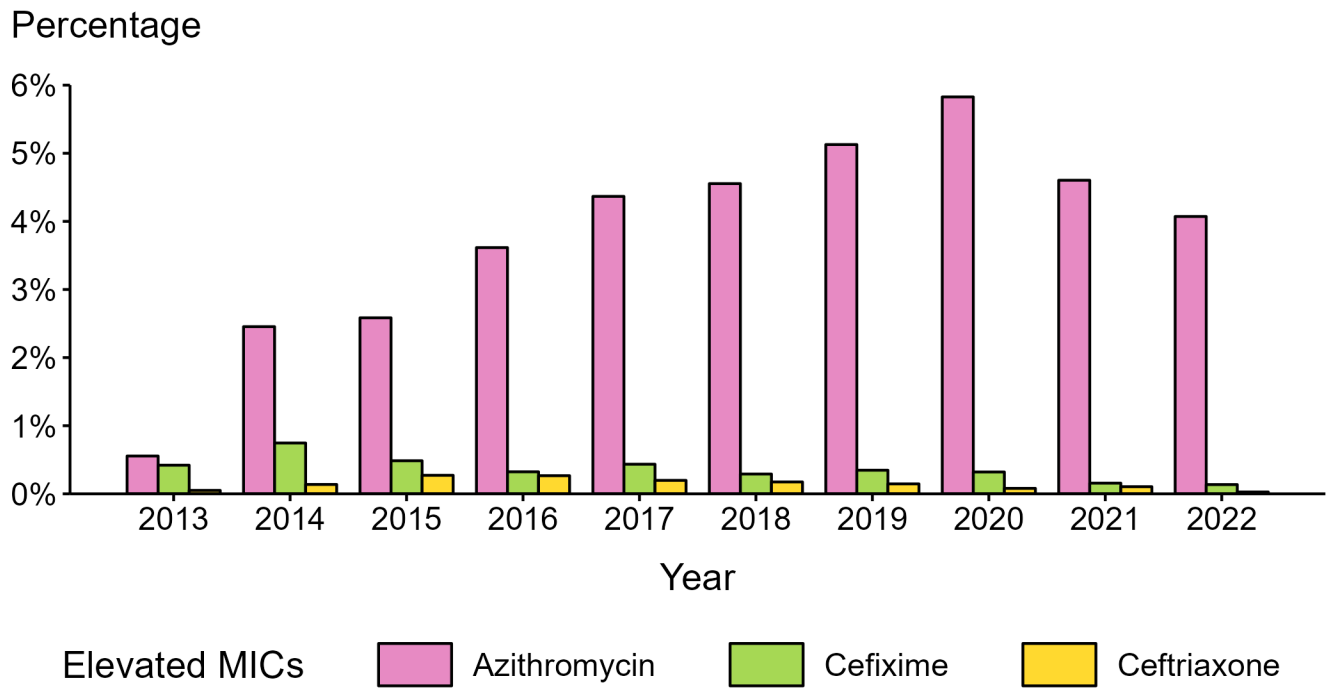
Summary

In 2022, Philadelphia reported the highest estimated proportion of gonorrhea cases treated with the recommended regimen and Florida reported the lowest proportion of cases treated with the recommended regimen among jurisdictions participating in SSuN that met the inclusion criteria. Overall, the proportion of cases treated with the recommended regimen was 83.0% in 2022.

This report includes data from years that coincide with the COVID-19 pandemic, which introduced uncertainty and difficulty in interpreting STI surveillance data. See Impact of COVID-19 on STIs for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2022/technical-notes.htm) for information on SSuN methodology.

Neisseria gonorrhoeae — Percentage of Isolates with Elevated Minimum Inhibitory Concentrations (MICs) to Azithromycin, Cefixime, and Ceftriaxone, Gonococcal Isolate Surveillance Project (GISP), 2013–2022



NOTE: Elevated MICs = Azithromycin: ≥ 2.0 µg/mL; Cefixime: ≥ 0.25 µg/mL; Ceftriaxone: ≥ 0.125 µg/mL

Summary

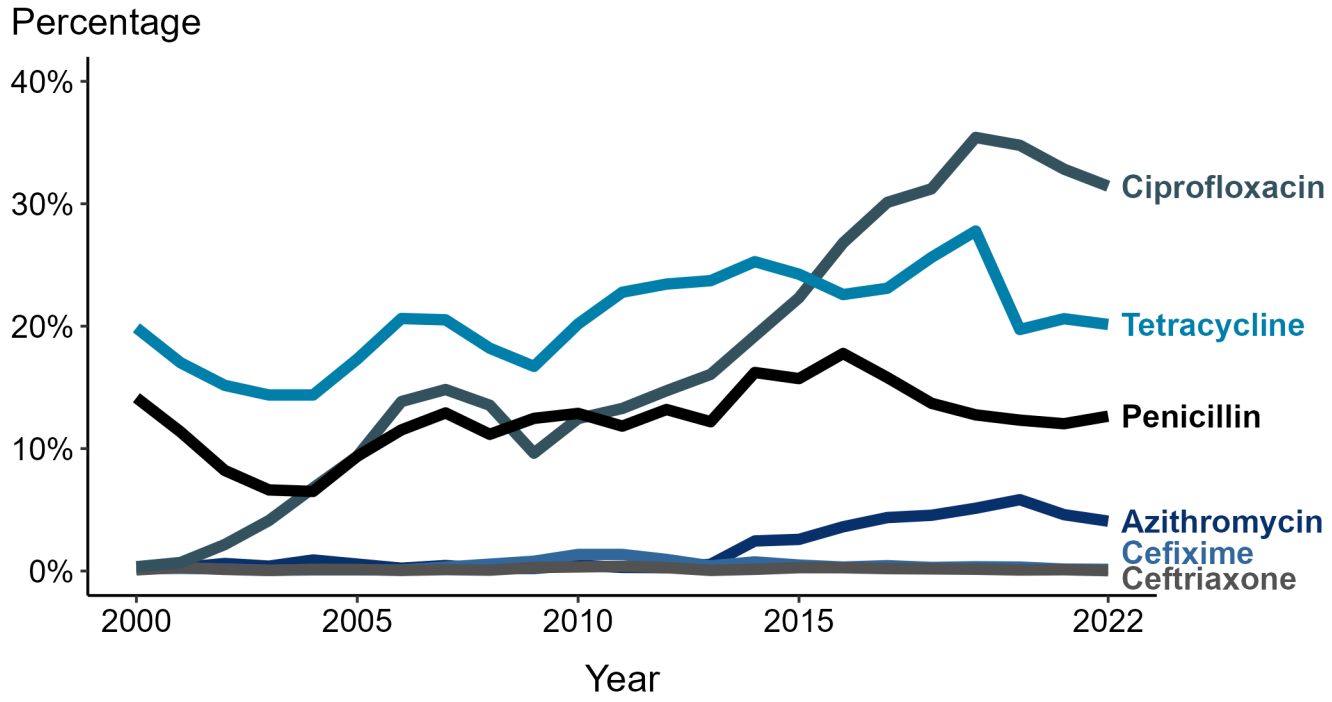
During 2013 to 2022, the percentage of *Neisseria gonorrhoeae* isolates collected in STD clinics participating in GISP that exhibited elevated ceftriaxone minimum inhibitory concentrations (MICs), defined as ≥ 0.125 µg/mL, ranged from <0.1% in 2022 to 0.3% in 2015. The percentage decreased over the period, from 0.1% in 2013 to <0.1% in 2022. The percentage of isolates with elevated cefixime MICs (≥ 0.25 µg/mL) ranged from 0.1% in 2022 to 0.7% in 2014, decreasing over the period from 0.4% in 2013 to 0.1% in 2022. In addition, the percentage of isolates with elevated azithromycin MICs (≥ 2.0 µg/mL) ranged from 0.6% in 2013 to 5.8% in 2020. Over the period, the percentage increased from 0.6% in 2013 to 4.1% in 2022.

This report includes data from years that coincide with the COVID-19 pandemic, which introduced uncertainty and difficulty in interpreting STI surveillance data. See Impact of COVID-19 on STIs for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2022/technical-notes.htm) for information on GISP methodology.

Data for all figures are available at https://www.cdc.gov/std/statistics/2022/data.zip. The file “NG - Percentage of Isolates with Elevated MICs (GISP 2013-2022) .xlsx” contains the data for the figure presented on this slide.

Neisseria gonorrhoeae — Prevalence of Tetracycline, Penicillin, or Ciprofloxacin Resistance* or Elevated Cefixime, Ceftriaxone, or Azithromycin Minimum Inhibitory Concentrations (MICs)†, by Year — Gonococcal Isolate Surveillance Project (GISP), 2000–2022



* Resistance: Ciprofloxacin: MIC ≥ 1.0 µg/mL; Penicillin: MIC ≥ 2.0 µg/mL or Beta-lactamase positive; Tetracycline: MIC ≥ 2.0 µg/mL

† Elevated MICs: Azithromycin: MIC ≥ 1.0 µg/mL (2000–2004); ≥ 2.0 µg/mL (2005–2022); Ceftriaxone: MIC ≥ 0.125 µg/mL; Cefixime: MIC ≥ 0.25 µg/mL

NOTE: Cefixime susceptibility was not tested in 2007 and 2008.

Summary

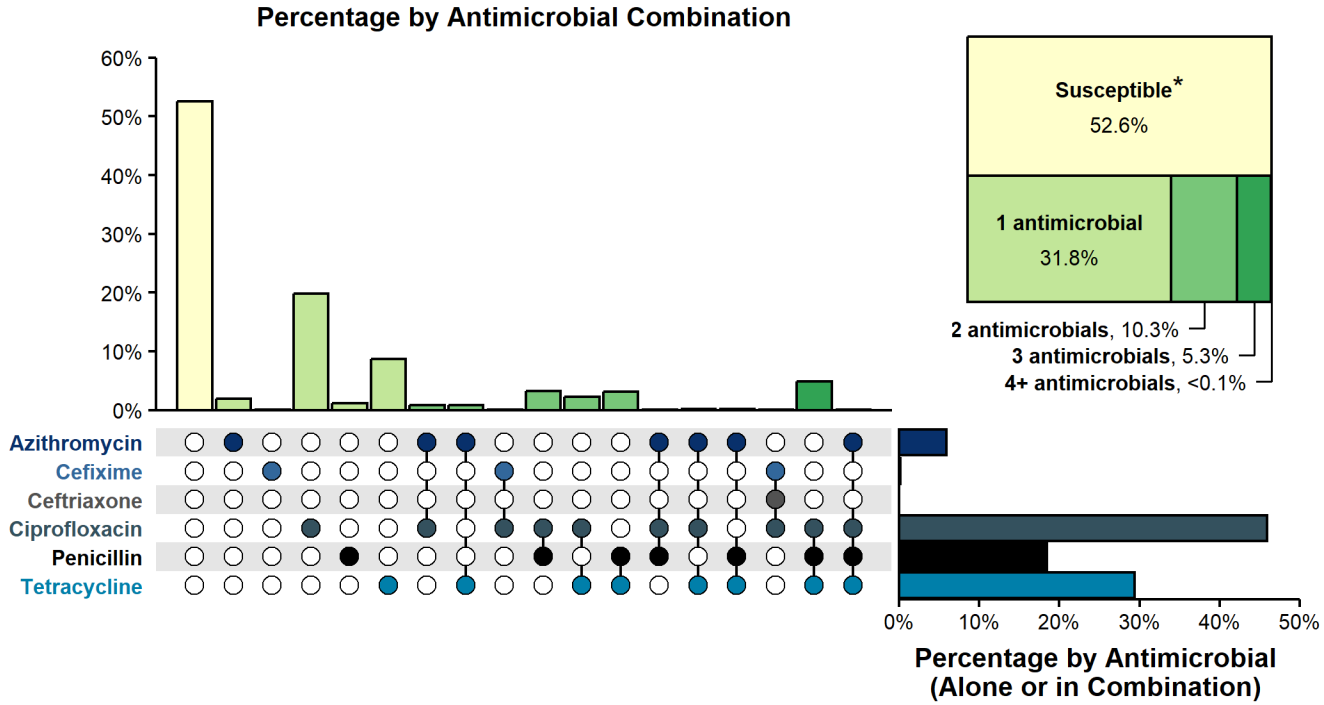
In 2022, 31.4% of *Neisseria gonorrhoeae* isolates collected in STD clinics participating in GISP were resistant to ciprofloxacin, 20.1% to tetracycline, and 12.6% to penicillin.

This report includes data from years that coincide with the COVID-19 pandemic, which introduced uncertainty and difficulty in interpreting STI surveillance data. See Impact of COVID-19 on STIs for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2022/technical-notes.htm) for information on GISP methodology.

Data for all figures are available at https://www.cdc.gov/std/statistics/2022/data.zip. The file “NG - Prevalence of Resistance or Elevated MICs to Specific Antimicrobials by Year (GISP 2000-2022).xlsx” contains the data for the figure presented on this slide

Resistance or Elevated Minimum Inhibitory Concentration (MIC) Patterns of *Neisseria gonorrhoeae* Isolates to Antimicrobials, Gonococcal Isolate Surveillance Project (GISP), 2022



* Susceptible category includes isolates with penicillin (or Beta-lactamase negative), tetracycline, and ciprofloxacin MIC values that are not considered resistant (i.e., susceptible and intermediate resistant) based on Clinical & Laboratory Standards Institute criteria and isolates with ceftriaxone, cefixime, and azithromycin MIC values that are not considered elevated based on GISP "alert" values.

NOTE: Elevated MIC = Ceftriaxone: MIC ≥ 0.125 µg/mL; Cefixime: MIC ≥ 0.25 µg/mL; Azithromycin: MIC ≥ 2.0 µg/mL. Resistance = Tetracycline: MIC ≥ 2.0 µg/mL; Ciprofloxacin: MIC ≥ 1.0 µg/mL; Penicillin: MIC ≥ 2.0 µg/mL or Beta-lactamase positive. In the figure, a filled circle reflects resistance or elevated MIC to a specific antimicrobial; only antimicrobial combinations with non-zero percentages are shown.

Summary

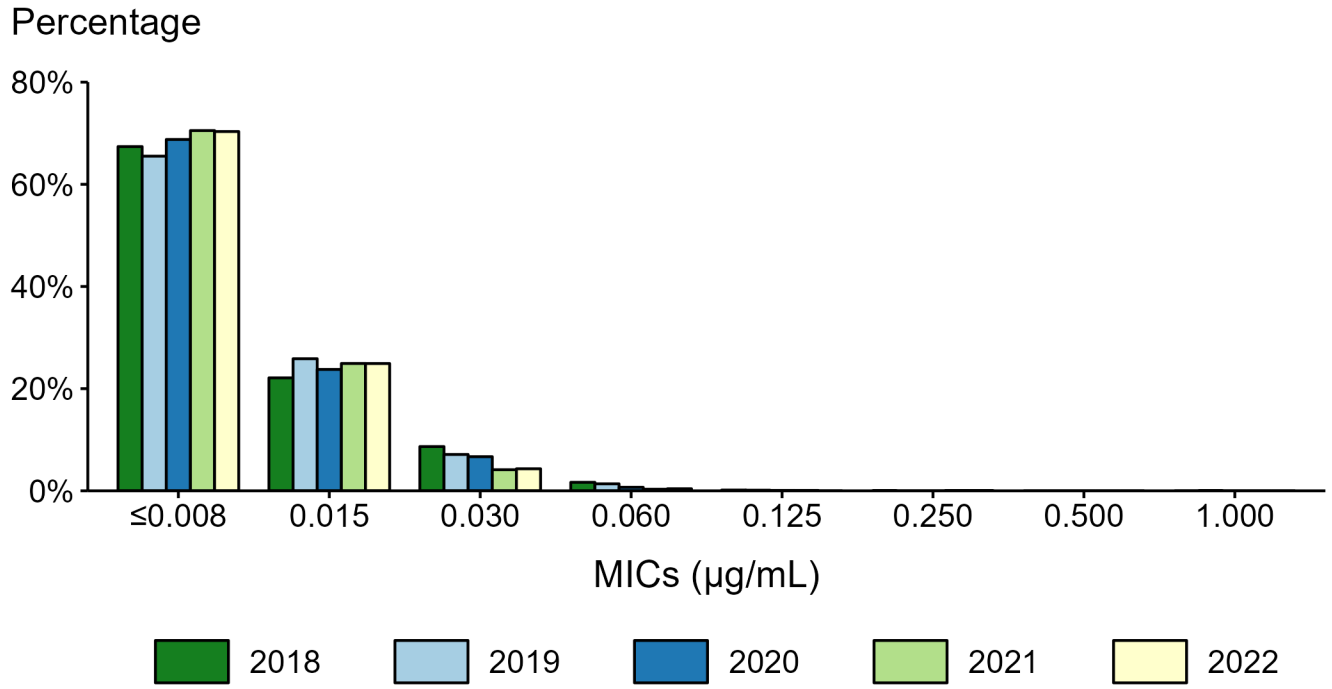
In 2022, 52.6% of *Neisseria gonorrhoeae* isolates collected through GISP were susceptible to the six antimicrobials tested. Almost half (45.4%) were resistant to at least one of three antimicrobials (tetracycline, penicillin, or ciprofloxacin). An additional 2.0% of isolates were susceptible to those antimicrobials, but had elevated minimum inhibitory concentrations (MICs) to ceftriaxone, cefixime, or azithromycin. Overall, 10.3% of isolates demonstrated resistance or elevated MICs to two antimicrobials tested; 5.3% demonstrated resistance or elevated MICs to three antimicrobials tested; and <0.1% (one isolate) demonstrated resistance to four or more antimicrobials tested.

This report includes data from years that coincide with the COVID-19 pandemic, which introduced uncertainty and difficulty in interpreting STI surveillance data. See Impact of COVID-19 on STIs for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2022/technical-notes.htm) for information on GISP methodology.

Data for all figures are available at https://www.cdc.gov/std/statistics/2022/data.zip. The file “NG - Resistance or Elevated MIC Patterns of NG Isolates to Antimicrobials (GISP 2022).xlsx” contains the data for the figure presented on this slide.

Neisseria gonorrhoeae — Distribution of Ceftriaxone Minimum Inhibitory Concentrations (MICs) by Year, Gonococcal Isolate Surveillance Project (GISP), 2018–2022



Summary

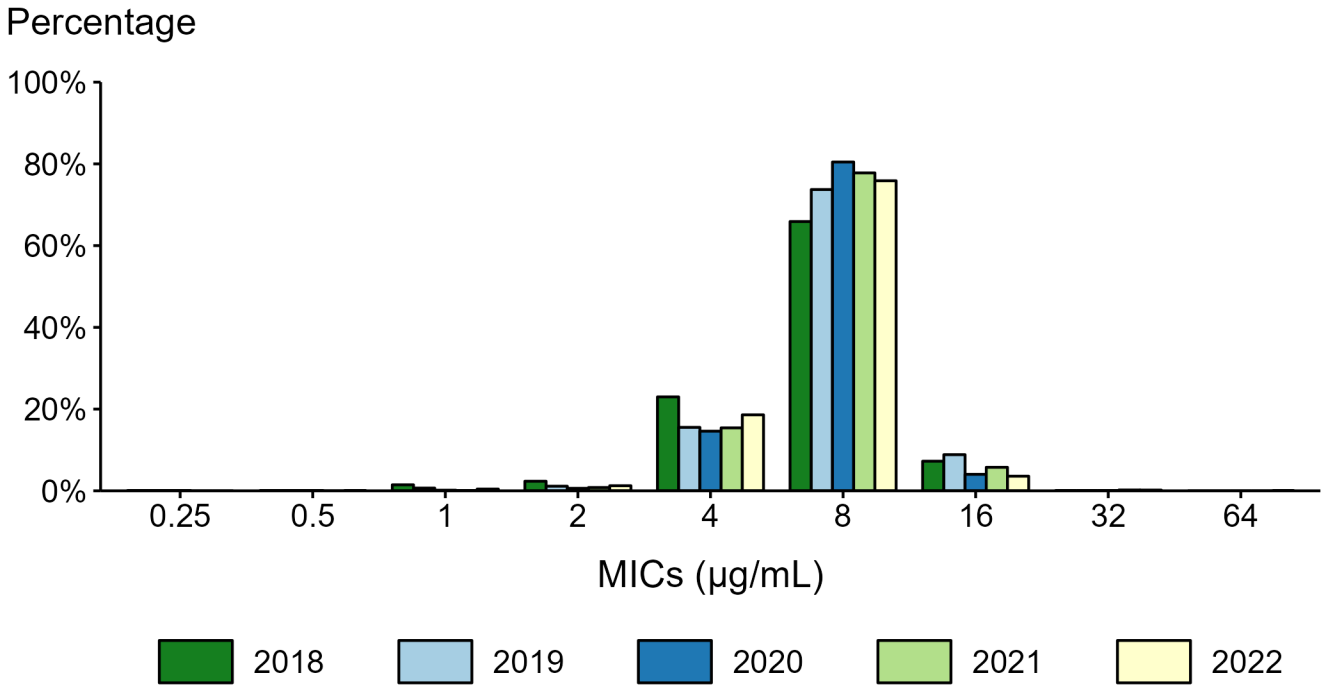
During 2018 to 2022, 65.5–70.5% of all tested *Neisseria gonorrhoeae* isolates collected in STD clinics participating in GISP had a ceftriaxone minimum inhibitory concentration value ≤0.008 µg/mL, and 99.8–99.9+% had a minimum inhibitory concentration value <0.125 µg/mL.

This report includes data from years that coincide with the COVID-19 pandemic, which introduced uncertainty and difficulty in interpreting STI surveillance data. See Impact of COVID-19 on STIs for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2022/technical-notes.htm) for information on GISP methodology.

Data for all figures are available at https://www.cdc.gov/std/statistics/2022/data.zip. The file "NG - Distribution of Ceftriaxone MICs by Year (GISP 2018-2022).xlsx" contains the data for the figure presented on this slide.

Neisseria gonorrhoeae — Distribution of Gentamicin Minimum Inhibitory Concentrations (MICs) by Year, Gonococcal Isolate Surveillance Project (GISP), 2018–2022



NOTE: Beginning in 2018, the antibiotic susceptibility testing range for gentamicin was expanded from MICs of 1 µg/mL–32 µg/mL in previous years to 0.25 µg/mL–64 µg/mL.

Summary

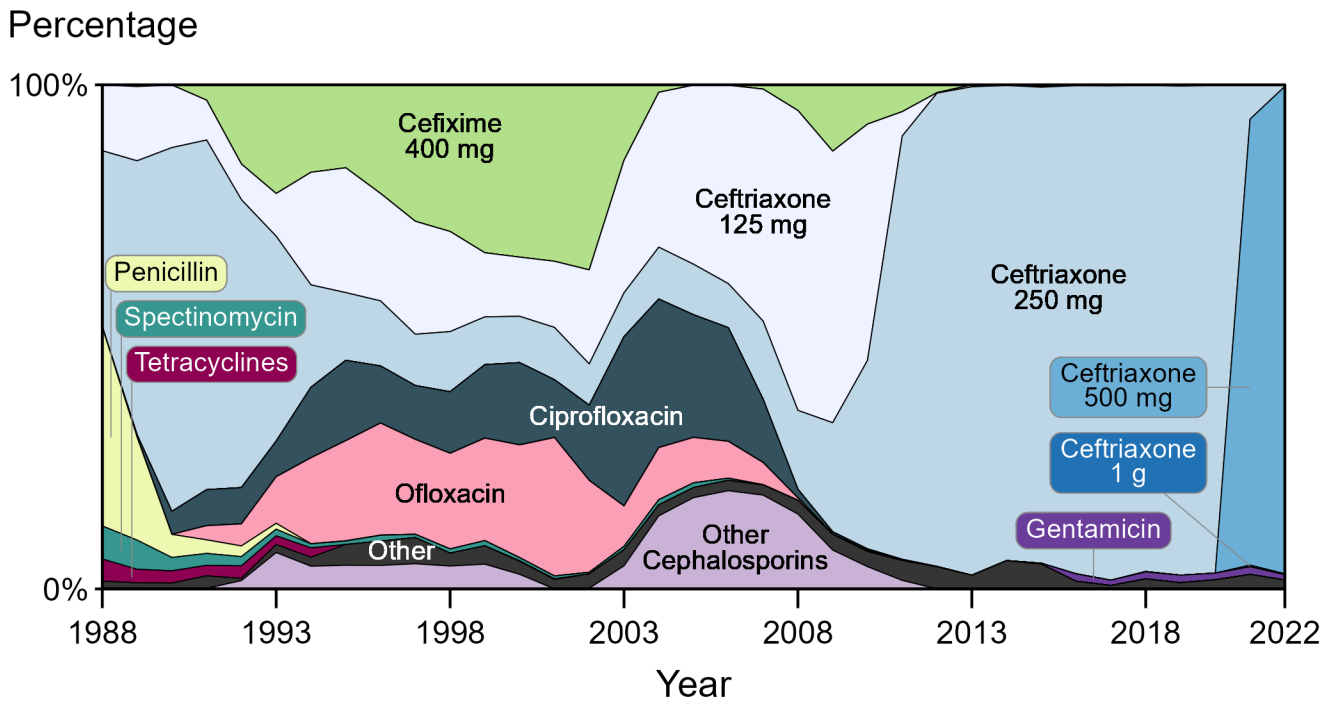
During 2018 to 2022, 65.9–80.5% of all tested *Neisseria gonorrhoeae* isolates collected in STD clinics participating in GISP had a gentamicin minimum inhibitory concentration value of 8 µg/mL. In 2022, 0.2% of all tested *Neisseria gonorrhoeae* isolates had a gentamicin minimum inhibitory concentration above 16 µg/mL.

This report includes data from years that coincide with the COVID-19 pandemic, which introduced uncertainty and difficulty in interpreting STI surveillance data. See Impact of COVID-19 on STIs for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2022/technical-notes.htm) for information on GISP methodology.

Data for all figures are available at https://www.cdc.gov/std/statistics/2022/data.zip. The file "NG - Distribution of Gentamicin MICs by Year (GISP 2018-2022).xlsx" contains the data for the figure presented on this slide.

Distribution of Primary Antimicrobial Drugs Used to Treat Gonorrhea Among Participants, Gonococcal Isolate Surveillance Project (GISP), 1988–2022



NOTE: In 2022, Cefixime 800 mg (0.1%) and Ceftriaxone 1 g (0.2%) each represented less than one percent of primary antimicrobial drugs used to treat gonorrhea among GISP participants and may not be visible in this figure.

Summary

In 2022, 97.0% of GISP participants were treated with ceftriaxone, 96.7% with 500 mg and 0.2% with 250 mg and 1 g, respectively. Participants treated with gentamicin 240 mg increased from 0.2% in 2015 to a maximum of 1.5% in 2016, 2019, and 2021, with 1.0% of patients treated with gentamicin in 2022. (Note that percentages in text may not sum as expected due to rounding.)

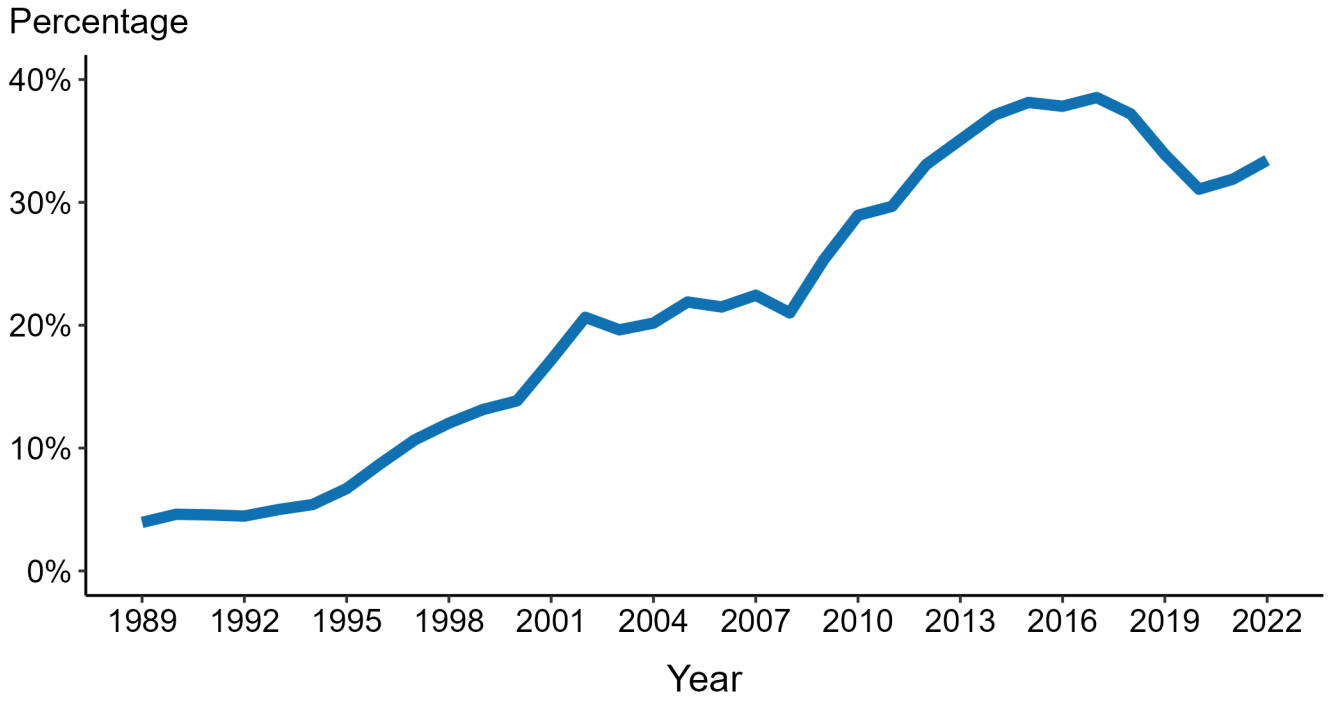
Results for 2022 are based on data obtained from participants in all participating GISP jurisdictions except for Pittsburgh due to missing data.

This report includes data from years that coincide with the COVID-19 pandemic, which introduced uncertainty and difficulty in interpreting STI surveillance data. See Impact of COVID-19 on STIs for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2022/technical-notes.htm) for information on GISP methodology.

Data for all figures are available at https://www.cdc.gov/std/statistics/2022/data.zip. The file “GC - Distribution of Primary Antimicrobial Drugs Used to Treat GC (GISP, 1988-2022).xlsx” contains the data for the figure presented on this slide.

Neisseria gonorrhoeae — Percentage of Urethral Isolates Obtained from MSM Attending STD Clinics, Gonococcal Isolate Surveillance Project (GISP), 1989–2022



ACRONYMS: MSM = Gay, bisexual, and other men who have sex with men

Summary

Overall, the proportion of *Neisseria gonorrhoeae* isolates collected in selected STD clinics participating in GISP that were from gay, bisexual and other men who have sex with men increased steadily from 3.9% in 1989 to a high of 38.5% in 2017. In 2022, this proportion was 33.4%.

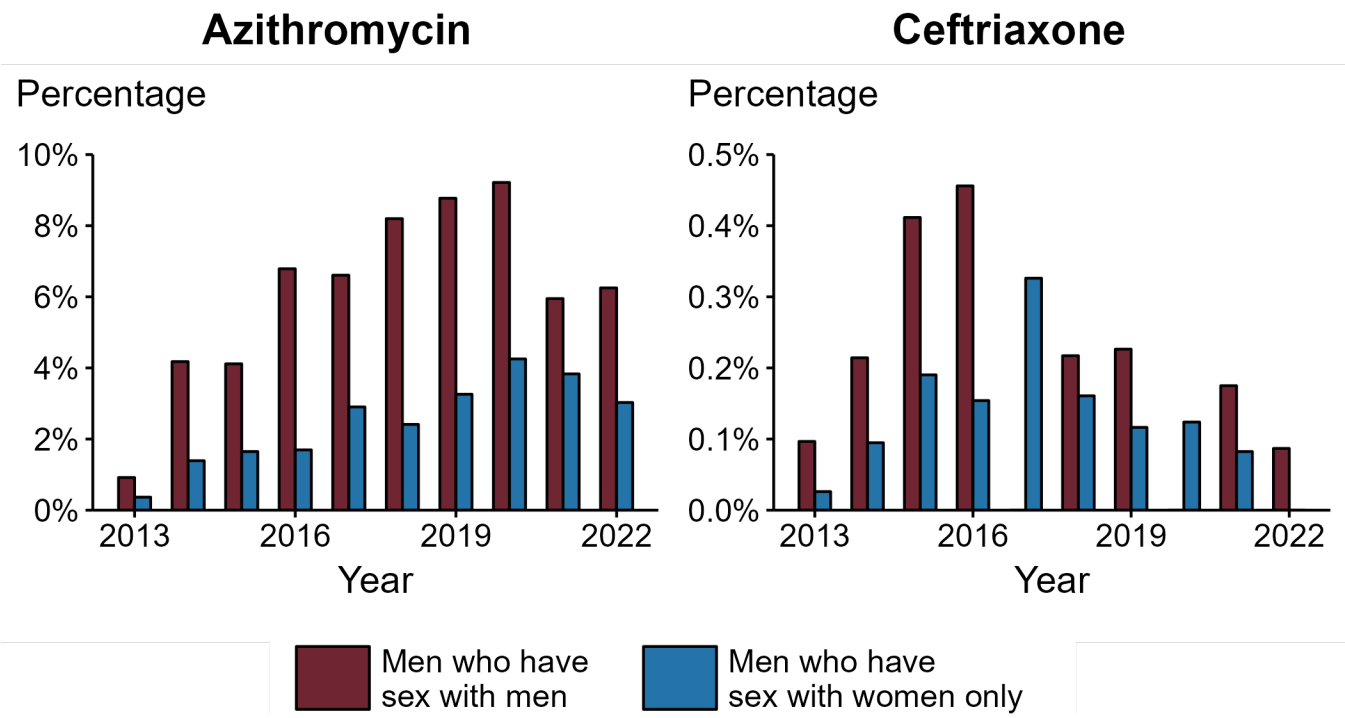
Results for 2022 are based on data obtained from participants in all participating GISP jurisdictions except for Pittsburgh due to missing data.

This report includes data from years that coincide with the COVID-19 pandemic, which introduced uncertainty and difficulty in interpreting STI surveillance data. See Impact of COVID-19 on STIs for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2022/technical-notes.htm) for information on GISP methodology.

Data for all figures are available at https://www.cdc.gov/std/statistics/2022/data.zip. The file “NG - Percentage of Urethral Isolates from MSM Attending STD Clinics (GISP, 1989-2022).xlsx” contains the data for the figure presented on this slide.

Neisseria gonorrhoeae — Percentage of Urethral Isolates with Elevated Minimum Inhibitory Concentrations (MICs) to Azithromycin* and Ceftriaxone† by Sex and Sex of Sex Partners, Gonococcal Isolate Surveillance Project (GISP), 2013–2022



* Elevated Azithromycin MIC: ≥ 2.0 µg/mL

† Elevated Ceftriaxone MIC: ≥ 0.125 µg/mL

Summary

In 2022, the proportion of *Neisseria gonorrhoeae* isolates collected in GISP with elevated azithromycin minimum inhibitory concentrations (MICs) (≥ 2.0 µg/mL) was higher in isolates from gay, bisexual and other men who have sex with men (MSM) than from men who have sex with women only (MSW). For azithromycin, 6.2% of isolates from MSM had elevated MICs compared to 3.0% in MSW. For ceftriaxone, the proportion of isolates with elevated ceftriaxone MICs (≥ 0.125 µg/mL) was higher at 0.1% in MSM compared to 0.0% in MSW.

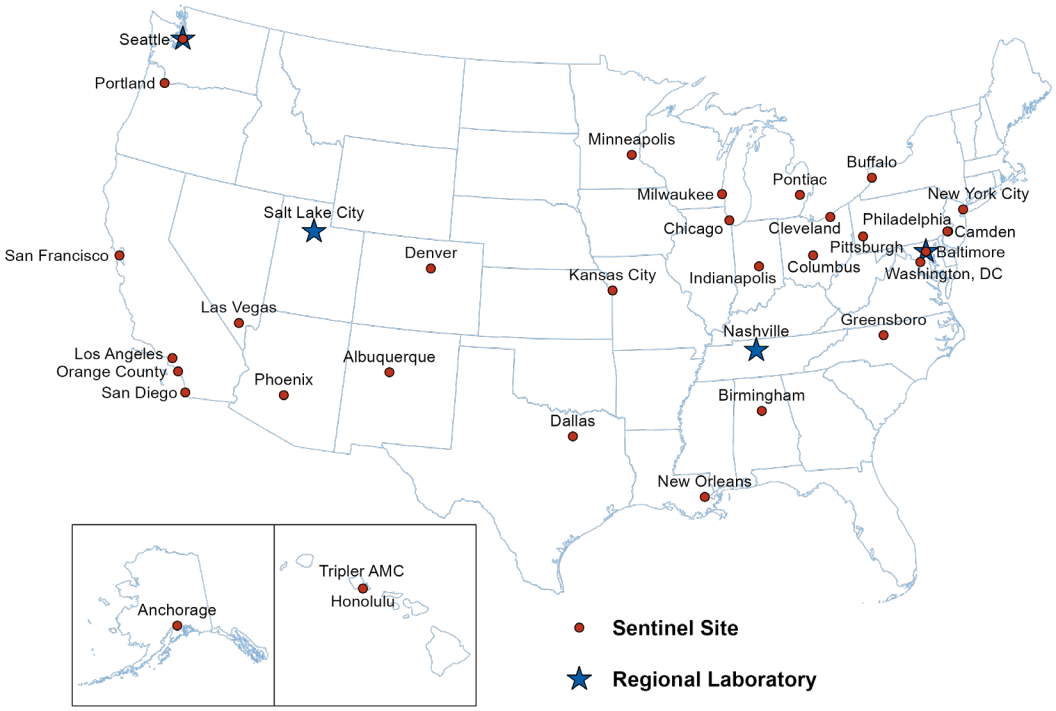
Results for 2022 are based on data obtained from participants in all participating GISP jurisdictions except for Pittsburgh due to missing data.

This report includes data from years that coincide with the COVID-19 pandemic, which introduced uncertainty and difficulty in interpreting STI surveillance data. See Impact of COVID-19 on STIs for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2022/technical-notes.htm) for information on GISP methodology.

Data for all figures are available at https://www.cdc.gov/std/statistics/2022/data.zip. The file “NG - Percentage of Urethral Isolates with Elevated MICs to AZM and CRO by Sex and Sex of Sex Partners (GISP 2013-2022).xlsx” contains the data for the figure presented on this slide.

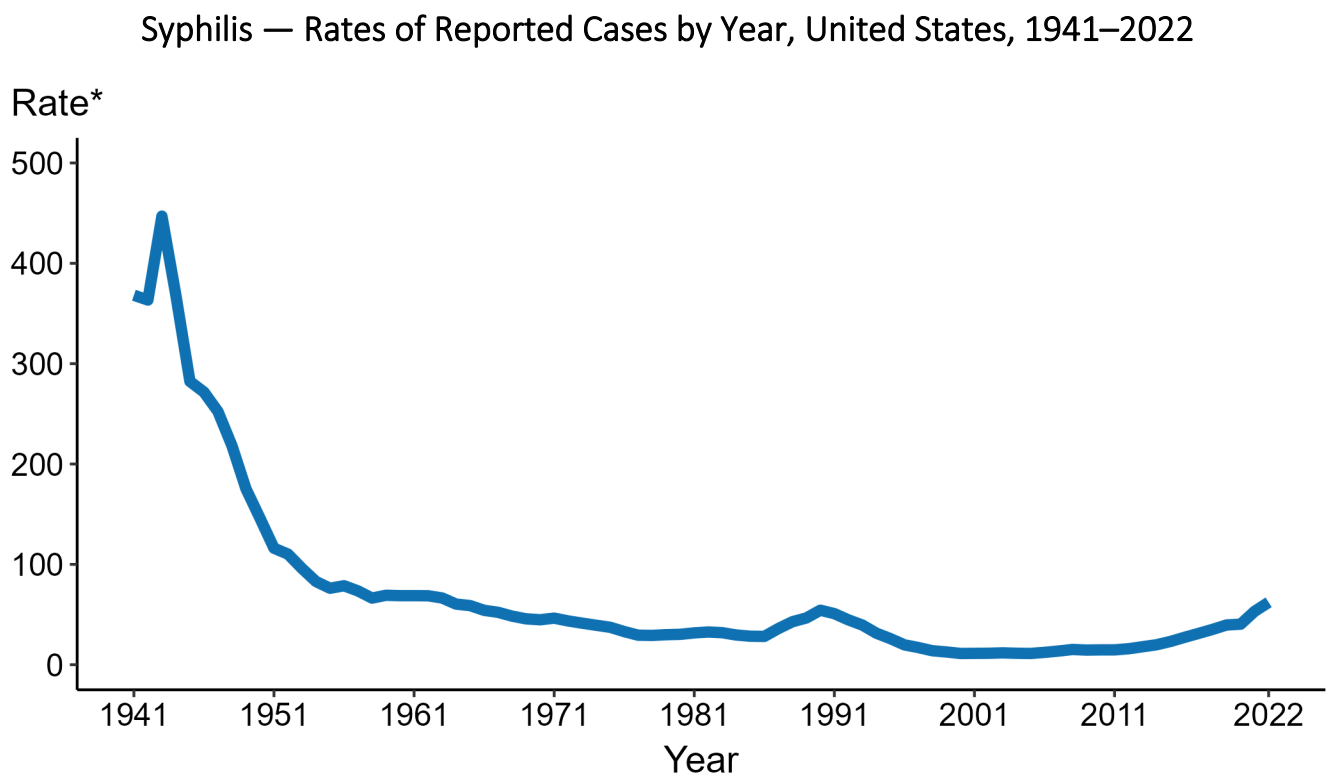
Location of Participating Sentinel Sites and Regional Laboratories, Gonococcal Isolate Surveillance Project (GISP), 2022



NOTE: Baltimore and Seattle are both sentinel sites and regional laboratories.

Summary

See Technical Notes (https://www.cdc.gov/std/statistics/2022/technical-notes.htm) for information on GISP methodology.



* Per 100,000

NOTE: Total syphilis includes all stages of syphilis and congenital syphilis

Summary

Data collection for syphilis began in 1941, and syphilis was made a nationally notifiable condition in 1944. Rates of total syphilis include syphilis of all stages, including congenital syphilis. Steep declines in case rates in the 1940s and 1950s likely reflect expanded use of penicillin to treat infection. During 2011 to 2022, rates of total syphilis increased every year.

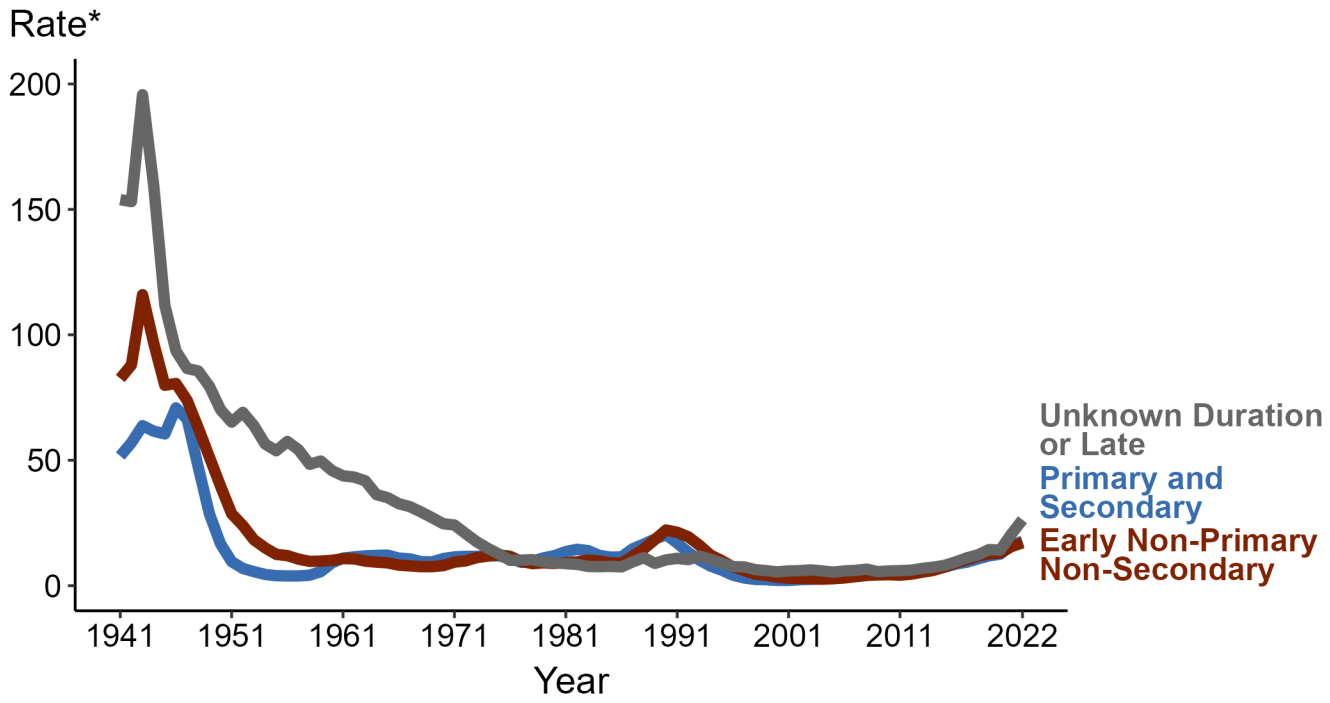
In 2022, a total of 207,255 cases of syphilis were reported in the United States. During 2021 to 2022, the rate of reported total syphilis increased 16.9% (from 53.2 to 62.2 per 100,000).

This report includes data from years that coincide with the COVID-19 pandemic, which introduced uncertainty and difficulty in interpreting STI surveillance data. See Impact of COVID-19 on STIs for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2022/technical-notes.htm) for information on syphilis case reporting and changes in the syphilis case definition over time.

Data for all figures are available at https://www.cdc.gov/std/statistics/2022/data.zip. The file “Syphilis - Rates by Year (US 1941-2022).xlsx” contains the data for the figure presented on this slide.

Syphilis — Rates of Reported Cases by Stage of Infection, United States, 1941–2022



* Per 100,000

Summary

Data collection for syphilis began in 1941, and syphilis was made a nationally notifiable condition in 1944. Steep declines in case rates in the 1940s and 1950s likely reflect expanded use of penicillin to treat infection. During 2011 to 2022, rates of total syphilis increased every year.

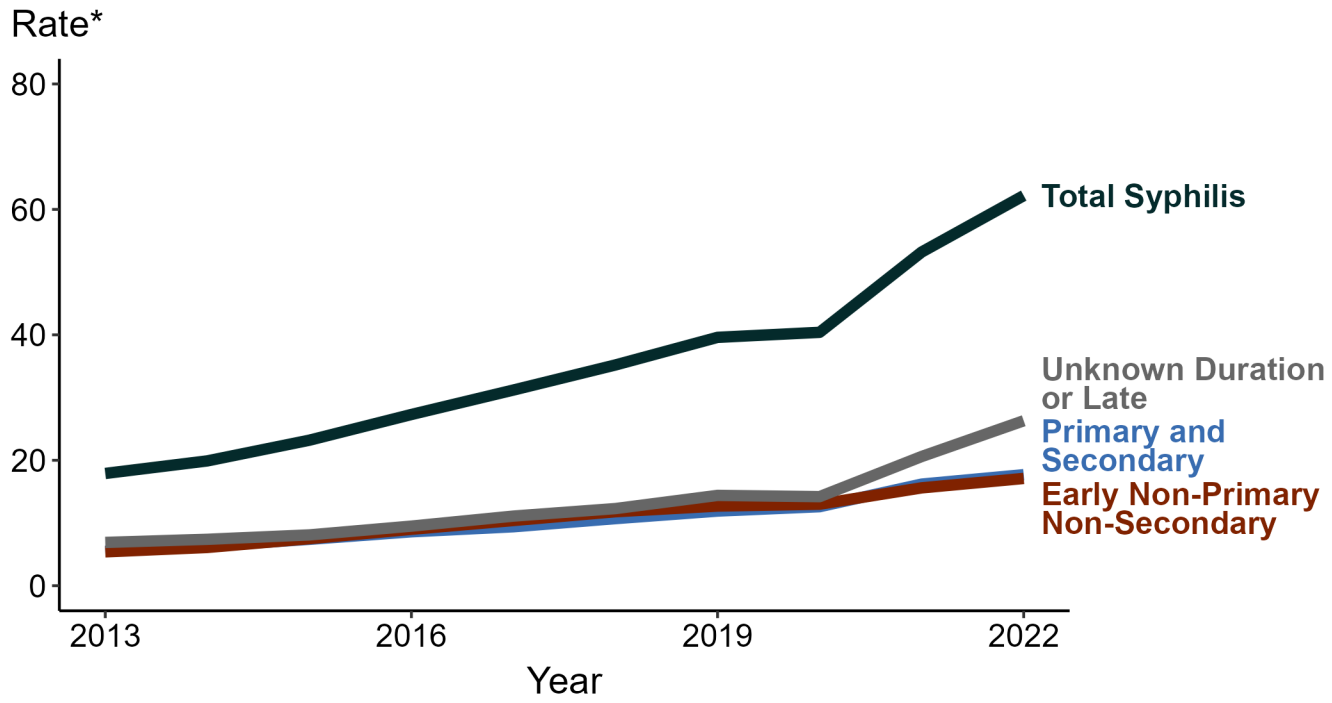
In 2022, 59,016 cases of primary and secondary (P&S) syphilis, 56,913 cases of early non-primary non-secondary (ENPNS) syphilis, and 87,571 cases of unknown duration or late syphilis were reported in the United States. During 2021 to 2022, the rate of P&S syphilis increased 9.3% (from 16.2 to 17.7 per 100,000), the rate of ENPNS syphilis increased 9.6% (from 15.6 to 17.1 per 100,000), and the rate of unknown duration or late syphilis increased 27.7% (from 20.6 to 26.3 per 100,000).

This report includes data from years that coincide with the COVID-19 pandemic, which introduced uncertainty and difficulty in interpreting STI surveillance data. See Impact of COVID-19 on STIs for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2022/technical-notes.htm) for information on syphilis case reporting and changes in the syphilis case definition over time.

Data for all figures are available at https://www.cdc.gov/std/statistics/2022/data.zip. The file “Syphilis - Rates by Stage of Infection (US 1941-2022).xlsx” contains the data for the figure presented on this slide.

Syphilis — Rates of Reported Cases by Stage of Infection, United States, 2013–2022



* Per 100,000

NOTE: Includes all stages of syphilis and congenital syphilis

Summary

In 2022, 207,255 total cases of syphilis, 59,016 cases of primary and secondary (P&S) syphilis, 56,913 cases of early non-primary non-secondary (ENPNS) syphilis, and 87,571 cases of unknown duration or late syphilis were reported in the United States.

During 2021 to 2022, the total rate of syphilis increased 16.9% (from 53.2 to 62.2 per 100,000), the rate of P&S syphilis increased 9.3% (from 16.2 to 17.7 per 100,000), the rate of ENPNS syphilis increased 9.6% (from 15.6 to 17.1 per 100,000), and the rate of unknown duration or late syphilis increased 27.7% (from 20.6 to 26.3 per 100,000).

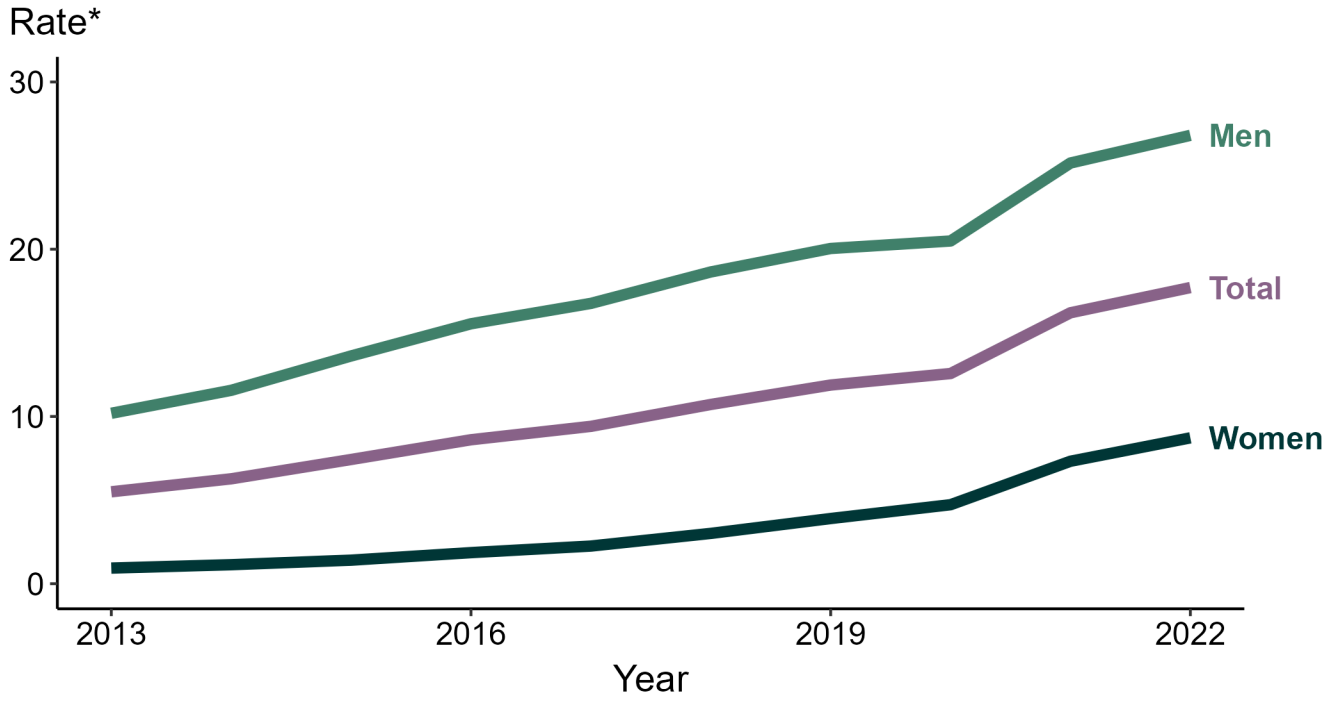
During 2018 to 2022, the total rate of syphilis increased 76.7% (from 35.2 to 62.2 per 100,000), the rate of P&S syphilis increased 65.4% (from 10.7 to 17.7 per 100,000), the rate of ENPNS syphilis increased 44.9% (from 11.8 to 17.1 per 100,000), and the rate of unknown duration or late syphilis increased 113.8% (from 12.3 to 26.3 per 100,000).

This report includes data from years that coincide with the COVID-19 pandemic, which introduced uncertainty and difficulty in interpreting STI surveillance data. See Impact of COVID-19 on STIs for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2022/technical-notes.htm) for information on syphilis case reporting and changes in the syphilis case definition over time.

Data for all figures are available at https://www.cdc.gov/std/statistics/2022/data.zip. The file “Syphilis - Rates by Stage of Infection (US 2013-2022).xlsx” contains the data for the figure presented on this slide.

Primary and Secondary Syphilis — Rates of Reported Cases by Sex, United States, 2013–2022



* Per 100,000

Summary

During 2021 to 2022, the rate of reported primary and secondary syphilis among women increased 19.2% (from 7.3 to 8.7 per 100,000) and the rate among men increased 6.3% (from 25.2 to 26.8 per 100,000).

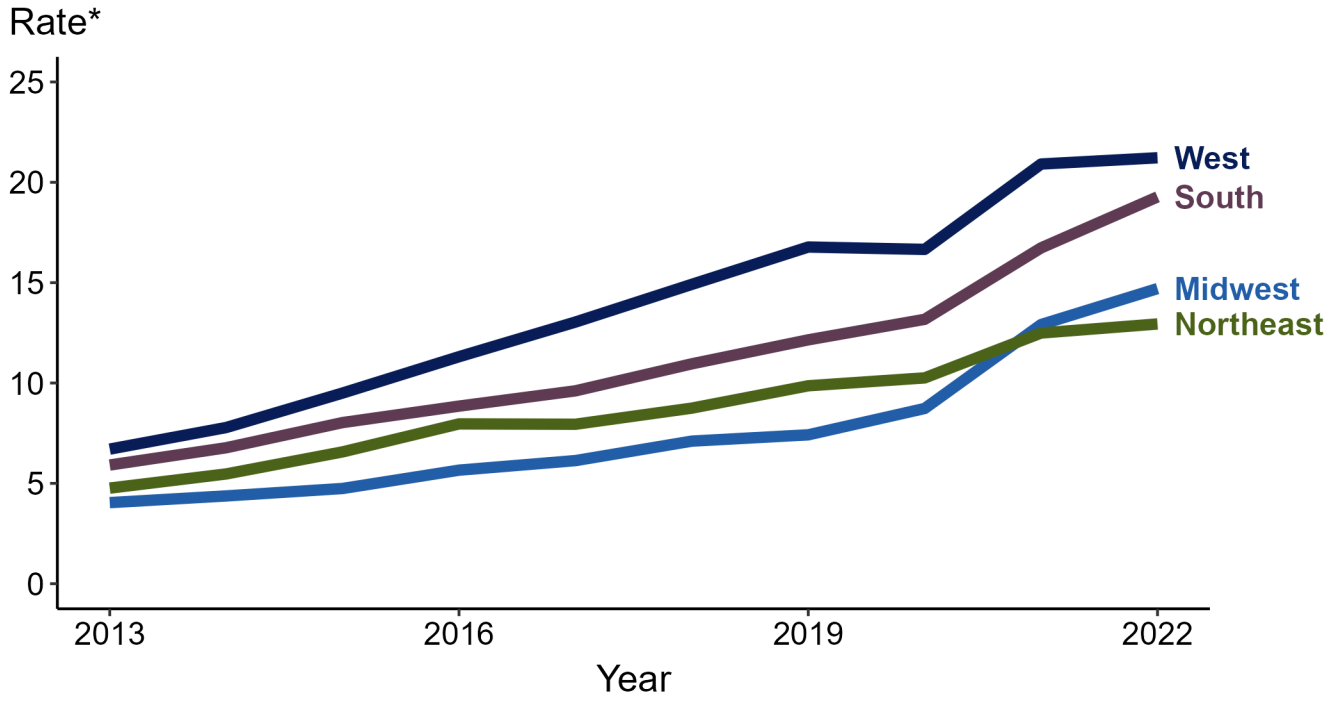
Over the last five years, the rate of reported primary and secondary syphilis among women increased 190.0% (from 3.0 to 8.7 per 100,000) and the rate among men increased 44.1% (from 18.6 to 26.8 per 100,000). Over the last 10 years, the rate among women increased 866.7% (from 0.9 to 8.7 per 100,000) and the rate among men increased 162.7% (from 10.2 to 26.8 per 100,000).

This report includes data from years that coincide with the COVID-19 pandemic, which introduced uncertainty and difficulty in interpreting STI surveillance data. See Impact of COVID-19 on STIs for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2022/technical-notes.htm) for information on syphilis case reporting. Table A1 (https://www.cdc.gov/std/statistics/2022/tables/a1.htm) provides information on unknown, missing, or invalid values of select variables.

Data for all figures are available at https://www.cdc.gov/std/statistics/2022/data.zip. The file “PS Syphilis - Rates by Sex (US 2013-2022).xlsx” contains the data for the figure presented on this slide.

Primary and Secondary Syphilis — Rates of Reported Cases by Region, United States, 2013–2022



* Per 100,000

Summary

In 2022, the West had the highest rate of reported primary and secondary (P&S) syphilis (21.2 cases per 100,000; 1.4% increase from 2021), followed by the South (19.3 cases per 100,000; 15.6% increase from 2021), the Midwest (14.7 cases per 100,000; 14.0% increase from 2021), and the Northeast (12.9 cases per 100,000; 3.2% increase from 2021).

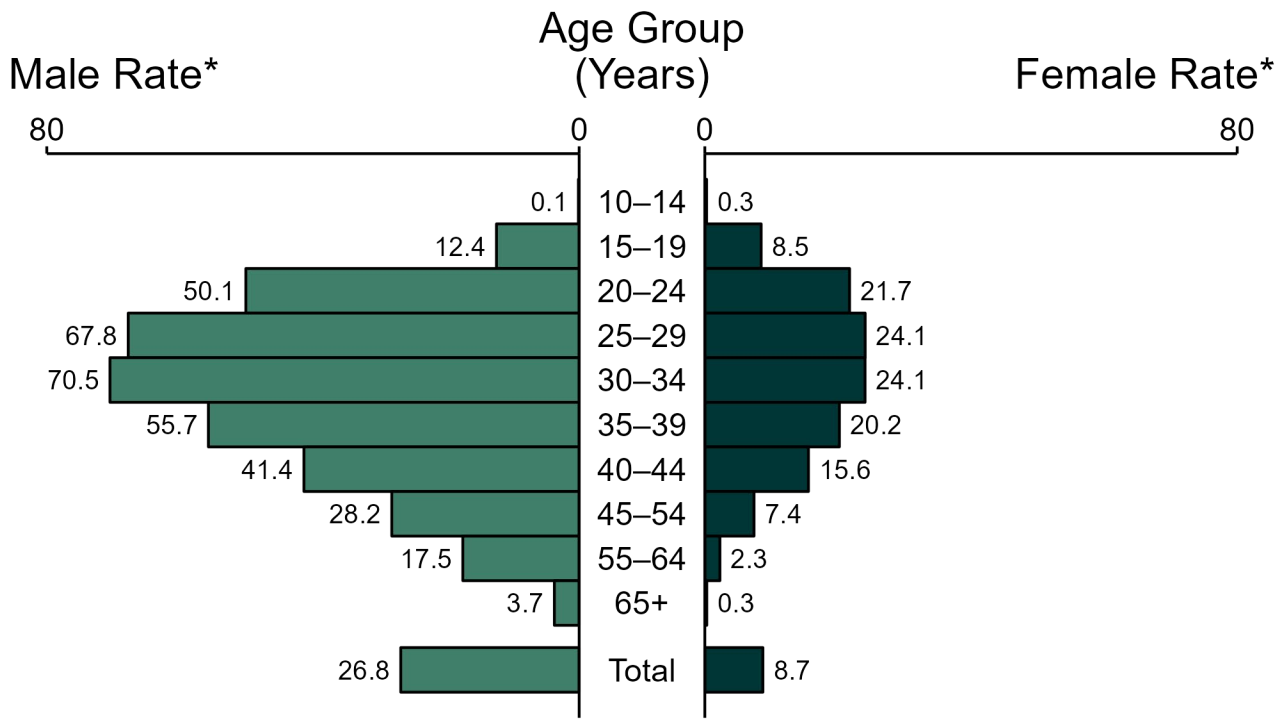
The Midwest had the greatest five-year increase in rates of reported cases of P&S syphilis (7.1 to 14.7 per 100,000; 107.0% increase from 2018). The Midwest also had the greatest 10-year increase in rates of reported cases of P&S syphilis (4.0 to 14.7 per 100,000; 267.5% increase from 2013).

This report includes data from years that coincide with the COVID-19 pandemic, which introduced uncertainty and difficulty in interpreting STI surveillance data. See Impact of COVID-19 on STIs for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2022/technical-notes.htm) for information on syphilis case reporting.

Data for all figures are available at https://www.cdc.gov/std/statistics/2022/data.zip. The file “PS Syphilis - Rates by Region (US 2013-2022).xlsx” contains the data for the figure presented on this slide.

Primary and Secondary Syphilis — Rates of Reported Cases by Age Group and Sex, United States, 2022



* Per 100,000

NOTE: Total includes cases of all ages, including those with unknown age.

Summary

In 2022, the rate of reported primary and secondary (P&S) syphilis was higher among men (26.8 per 100,000) compared to women (8.7 per 100,000).

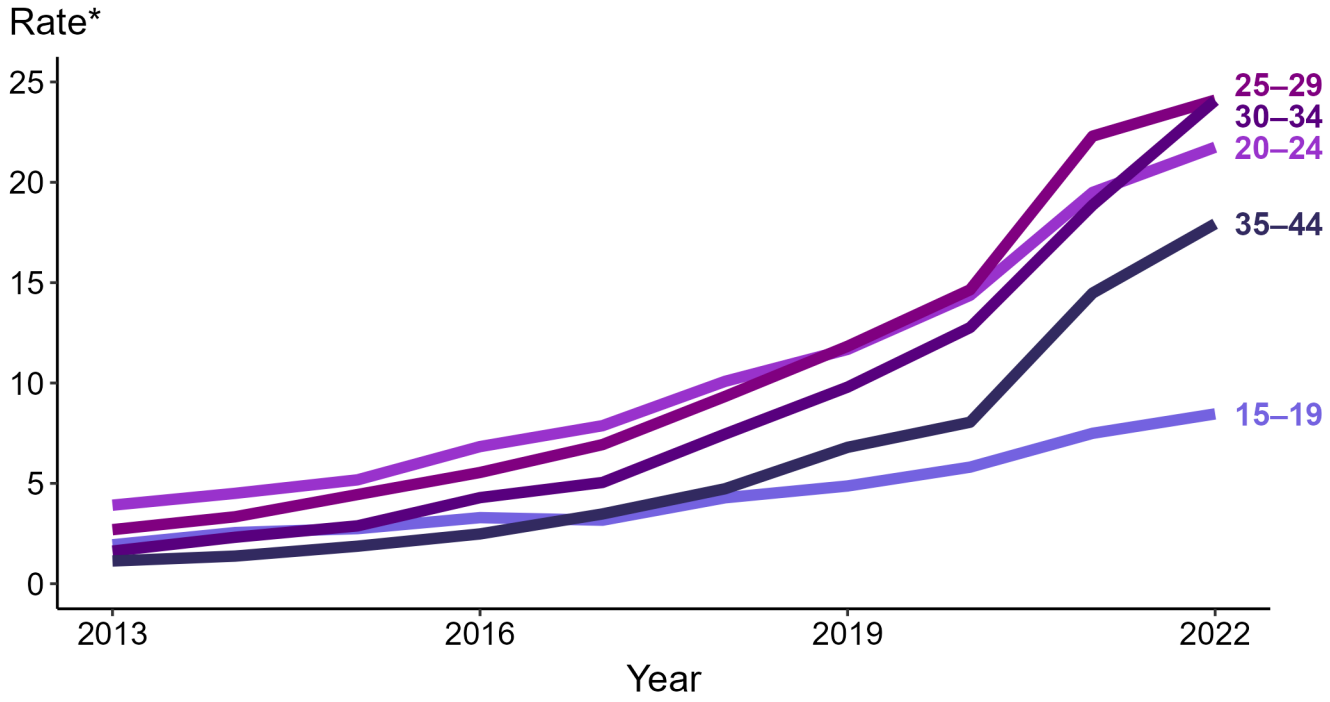
Among men, those aged 30 to 34 years had the highest rate of reported cases of P&S syphilis (70.5 per 100,000), followed by men aged 25 to 29 years (67.8 per 100,000) and men aged 35 to 39 years (55.7 per 100,000). Among women, those aged 25 to 29 years and 30 to 34 years had the highest rate of reported cases of P&S syphilis (24.1 per 100,000), followed by women aged 20 to 24 years (21.7 per 100,000) and women aged 35 to 39 years (20.2 per 100,000).

This report includes data from years that coincide with the COVID-19 pandemic, which introduced uncertainty and difficulty in interpreting STI surveillance data. See Impact of COVID-19 on STIs for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2022/technical-notes.htm) for information on syphilis case reporting. Table A1 (https://www.cdc.gov/std/statistics/2022/tables/a1.htm) provides information on unknown, missing, or invalid values of select variables.

Data for all figures are available at https://www.cdc.gov/std/statistics/2022/data.zip. The file “PS Syphilis - Rates by Age Group and Sex (US 2022).xlsx” contains the data for the figure presented on this slide.

Primary and Secondary Syphilis — Rates of Reported Cases Among Women Aged 15–44 Years by Age Group, United States, 2013–2022



* Per 100,000

Summary

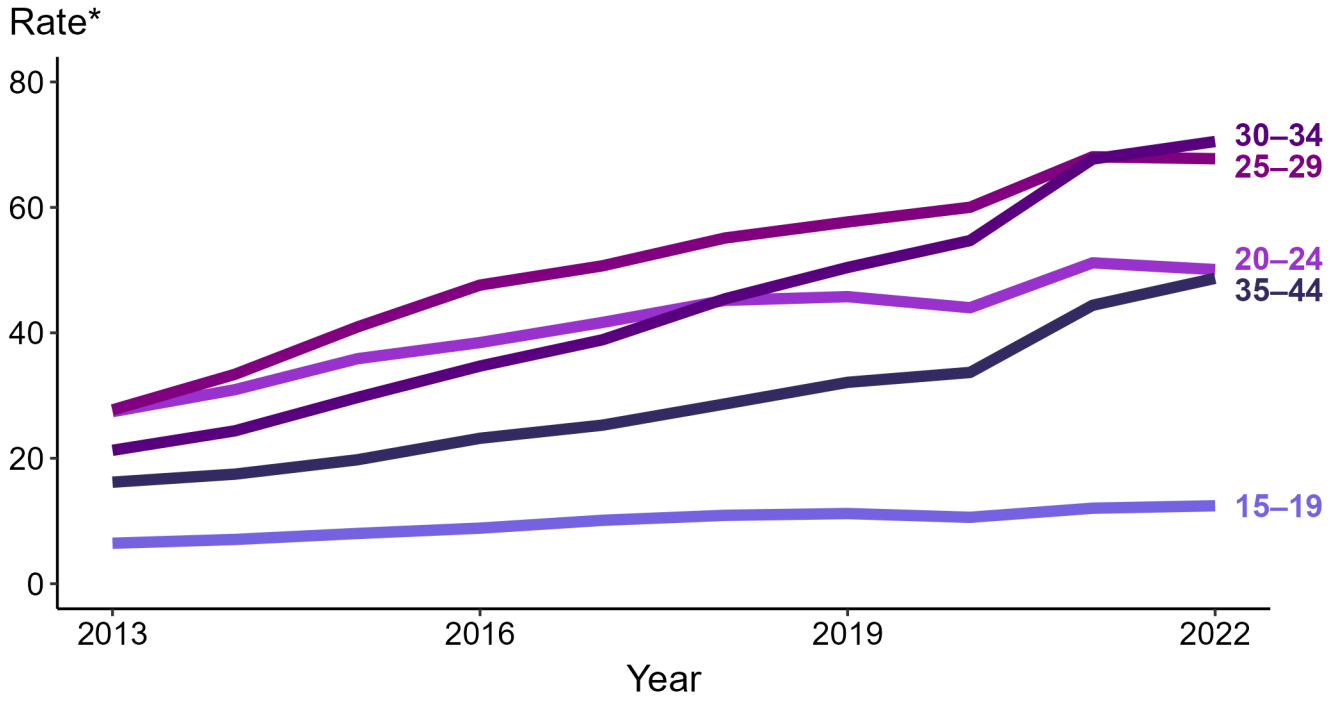
Among women aged 15 to 44 years in 2022, those aged 25 to 29 years and 30 to 34 years had the highest rate of reported cases of primary and secondary syphilis (24.1 cases per 100,000; 8.1% increase for those aged 25 to 29 and 27.5% increase for those aged 30 to 34 from 2021), followed by those aged 20 to 24 years (21.7 cases per 100,000; 11.3% increase from 2021), those aged 35 to 44 years (17.9 cases per 100,000; 23.4% increase from 2021), and those aged 15 to 19 years (8.5 cases per 100,000; 13.3% increase from 2021).

This report includes data from years that coincide with the COVID-19 pandemic, which introduced uncertainty and difficulty in interpreting STI surveillance data. See Impact of COVID-19 on STIs for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2022/technical-notes.htm) for information on syphilis case reporting. Table A1 (https://www.cdc.gov/std/statistics/2022/tables/a1.htm) provides information on unknown, missing, or invalid values of select variables.

Data for all figures are available at https://www.cdc.gov/std/statistics/2022/data.zip. The file “PS Syphilis - Rates Women 15-44 Years by Age Group (US 2013-2022).xlsx” contains the data for the figure presented on this slide.

Primary and Secondary Syphilis — Rates of Reported Cases Among Men Aged 15–44 Years by Age Group, United States, 2013–2022



* Per 100,000

Summary

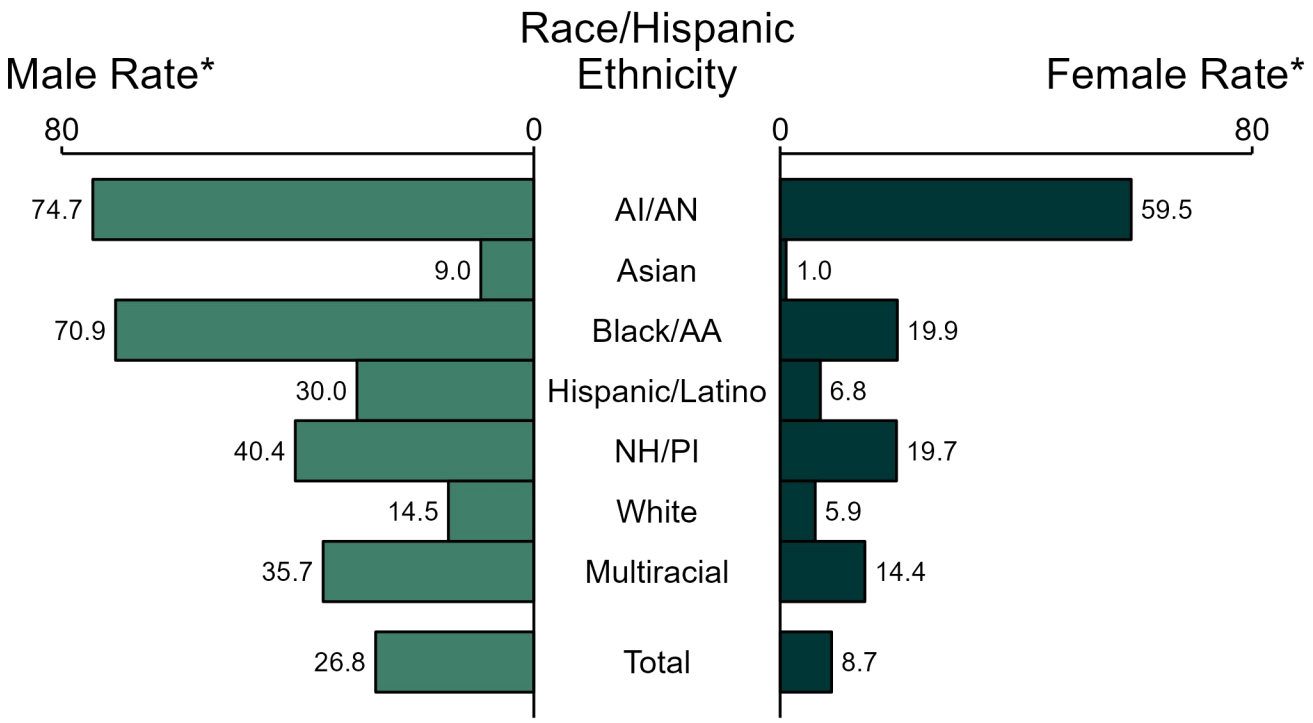
Among men aged 15 to 44 years in 2022, those aged 30 to 34 years had the highest rate of reported cases of primary and secondary syphilis (70.5 cases per 100,000; 4.1% increase from 2021), followed by those aged 25 to 29 years (67.8 cases per 100,000; <1.0% change from 2021), those aged 20 to 24 years (50.1 cases per 100,000; 2.1% decrease from 2021), those aged 35 to 44 years (48.7 cases per 100,000; 9.7% increase from 2021), and those aged 15 to 19 years (12.4 cases per 100,000; 3.3% increase from 2021).

This report includes data from years that coincide with the COVID-19 pandemic, which introduced uncertainty and difficulty in interpreting STI surveillance data. See Impact of COVID-19 on STIs for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2022/technical-notes.htm) for information on syphilis case reporting. Table A1 (https://www.cdc.gov/std/statistics/2022/tables/a1.htm) provides information on unknown, missing, or invalid values of select variables.

Data for all figures are available at https://www.cdc.gov/std/statistics/2022/data.zip. The file “PS Syphilis - Rates Men 15-44 Years by Age Group (US 2013-2022).xlsx” contains the data for the figure presented on this slide.

Primary and Secondary Syphilis — Rates of Reported Cases by Race/Hispanic Ethnicity and Sex, United States, 2022



* Per 100,000

ACRONYMS: AI/AN = American Indian or Alaska Native; Black/AA = Black or African American; NH/PI = Native Hawaiian or other Pacific Islander

NOTE: Total includes all cases including those with unknown race/Hispanic ethnicity.

Summary

In 2022, the rate of reported primary and secondary syphilis was higher among men (26.8 per 100,000) compared to women (8.7 per 100,000).

Among men, non-Hispanic American Indian or Alaska Native men had the highest rate of reported cases of primary and secondary syphilis (74.7 per 100,000), followed by non-Hispanic Black or African American men (70.9 per 100,000) and non-Hispanic Native Hawaiian or other Pacific Islander men (40.4 per 100,000). Among women, non-Hispanic American Indian or Alaska Native women also had the highest rate of reported cases of primary and secondary syphilis (59.5 per 100,000), followed by non-Hispanic Black or African American women (19.9 per 100,000) and non-Hispanic Native Hawaiian or other Pacific Islander women (19.7 per 100,000).

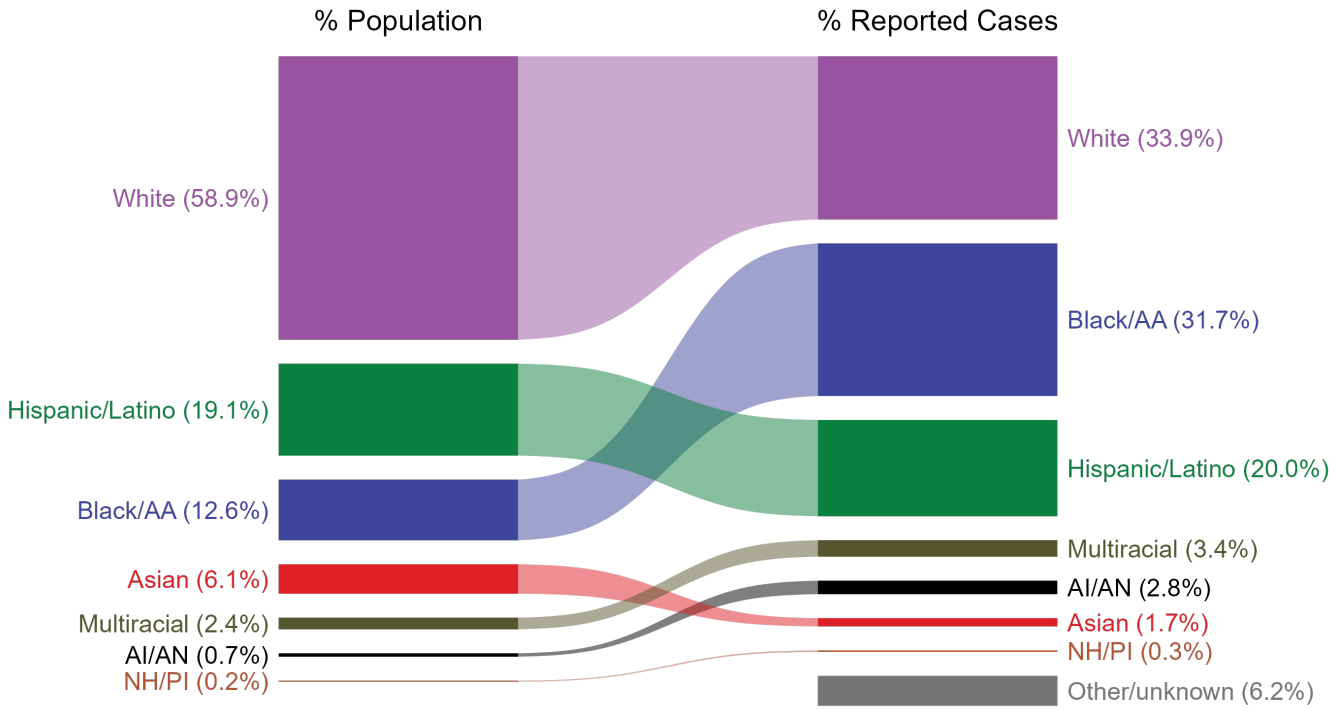
Using non-Hispanic White persons as the referent category, the greatest relative racial disparity in rates of reported primary and secondary syphilis across both sexes was observed among non-Hispanic American Indian or Alaska Native women, with a rate ratio of 10.0 times that of non-Hispanic White women. Among men, the greatest relative disparity was observed among non-Hispanic American Indian or Alaska Native men as well, with a rate 5.2 times that of non-Hispanic White men.

This report includes data from years that coincide with the COVID-19 pandemic, which introduced uncertainty and difficulty in interpreting STI surveillance data. See Impact of COVID-19 on STIs for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2022/technical-notes.htm) for information on syphilis case reporting, race/Hispanic ethnicity categorization, and reporting of race/Hispanic ethnicity for STI cases. Table A1 (https://www.cdc.gov/std/statistics/2022/tables/a1.htm) provides information on unknown, missing, or invalid values of select variables.

Data for all figures are available at https://www.cdc.gov/std/statistics/2022/data.zip. The file “PS Syphilis - Rates by Race Hispanic Ethnicity and Sex (US 2022).xlsx” contains the data for the figure presented on this slide.

Primary and Secondary Syphilis — Total Population and Reported Cases by Race/Hispanic Ethnicity, United States, 2022



* Per 100,000

NOTE: In 2022, a total of 3,686 primary and secondary (P&S) syphilis cases (6.2%) had missing, unknown, or other race and were not reported to be of Hispanic ethnicity. These cases are included in the "other/unknown" category.

ACRONYMS: AI/AN = American Indian or Alaska Native; Black/AA = Black or African American; NH/PI = Native Hawaiian or other Pacific Islander

Summary

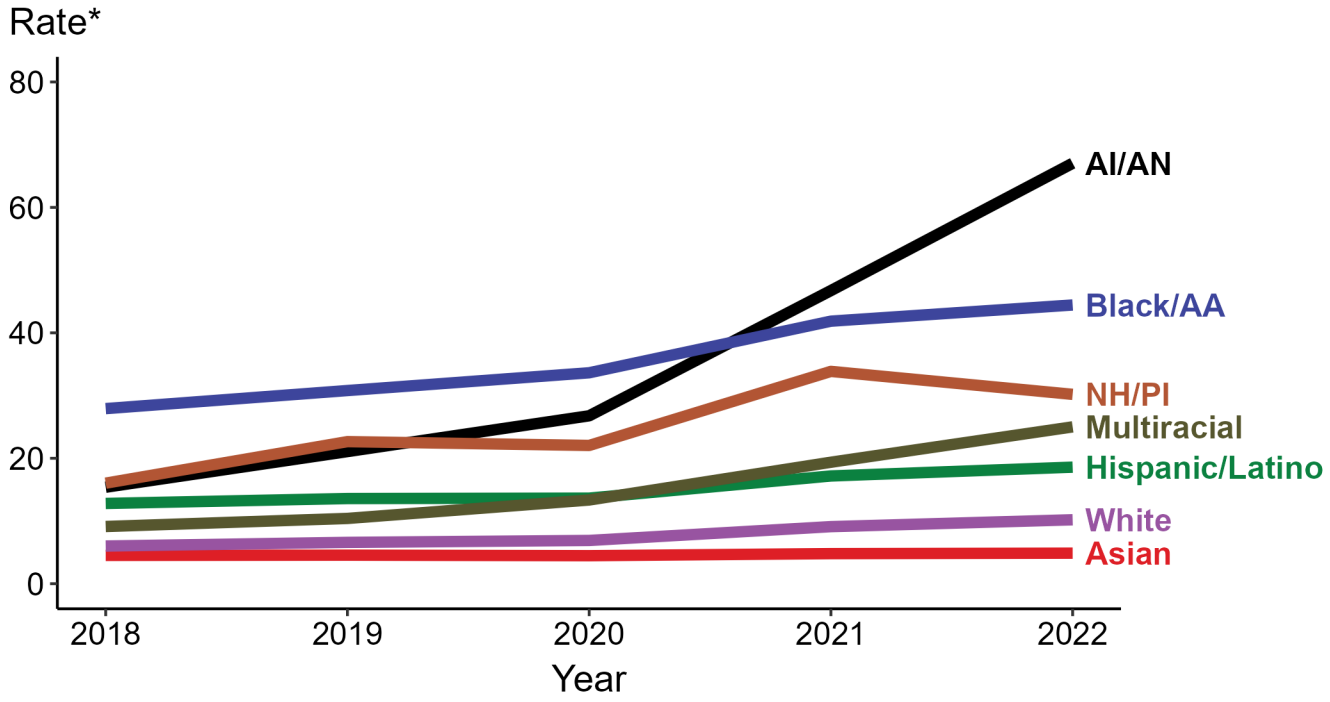
The percentages of primary and secondary (P&S) syphilis cases by race/Hispanic ethnicity were disproportionate to the percentages among the total population of the United States in 2022. The greatest absolute disparity was observed among non-Hispanic Black or African American persons, who represented 31.7% of reported P&S syphilis cases (n = 18,696; 33.8% of P&S syphilis cases with reported race or Hispanic ethnicity) despite being 12.6% of the US population, or 19.1% more cases than would be expected based on their proportion of the population. The greatest relative disparity was among non-Hispanic American Indian or Alaska Native persons, who represented 2.8% of reported P&S syphilis cases (n = 1,623; 2.9% of P&S syphilis cases with reported race or Hispanic ethnicity) despite being 0.7% of the US population, or a burden 4.0 times what would be expected based on their proportion of the population. Additionally, non-Hispanic Native Hawaiian or other Pacific Islander persons, non-Hispanic persons of multiple races, and Hispanic or Latino persons of any race(s) were also overrepresented among P&S syphilis cases relative to their proportion of the population.

This report includes data from years that coincide with the COVID-19 pandemic, which introduced uncertainty and difficulty in interpreting STI surveillance data. See Impact of COVID-19 on STIs for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2022/technical-notes.htm) for information on syphilis case reporting, race/Hispanic ethnicity categorization, and reporting of race/Hispanic ethnicity for STI cases.

Data for all figures are available at https://www.cdc.gov/std/statistics/2022/data.zip. The file “PS Syphilis - Population and Cases by Race Hispanic Ethnicity (US 2022).xlsx” contains the data for the figure presented on this slide.

Primary and Secondary Syphilis — Rates of Reported Cases by Race/Hispanic Ethnicity, United States, 2018–2022



* Per 100,000

ACRONYMS: AI/AN = American Indian or Alaska Native; Black/AA = Black or African American; NH/PI = Native Hawaiian or other Pacific Islander

Summary

In 2022, the highest rate of reported primary and secondary syphilis cases per 100,000 persons was among non-Hispanic American Indian or Alaska Native persons (67.0), followed by non-Hispanic Black or African American persons (44.4).

During 2021 to 2022, the greatest increase in rate of reported primary and secondary syphilis cases per 100,000 persons was among non-Hispanic American Indian or Alaska Native persons (46.7 to 67.0; 43.5% increase). Non-Hispanic American Indian or Alaska Native persons also had the greatest five-year increase in rate of reported primary and secondary syphilis (15.4 to 67.0; 335.1% increase from 2018).

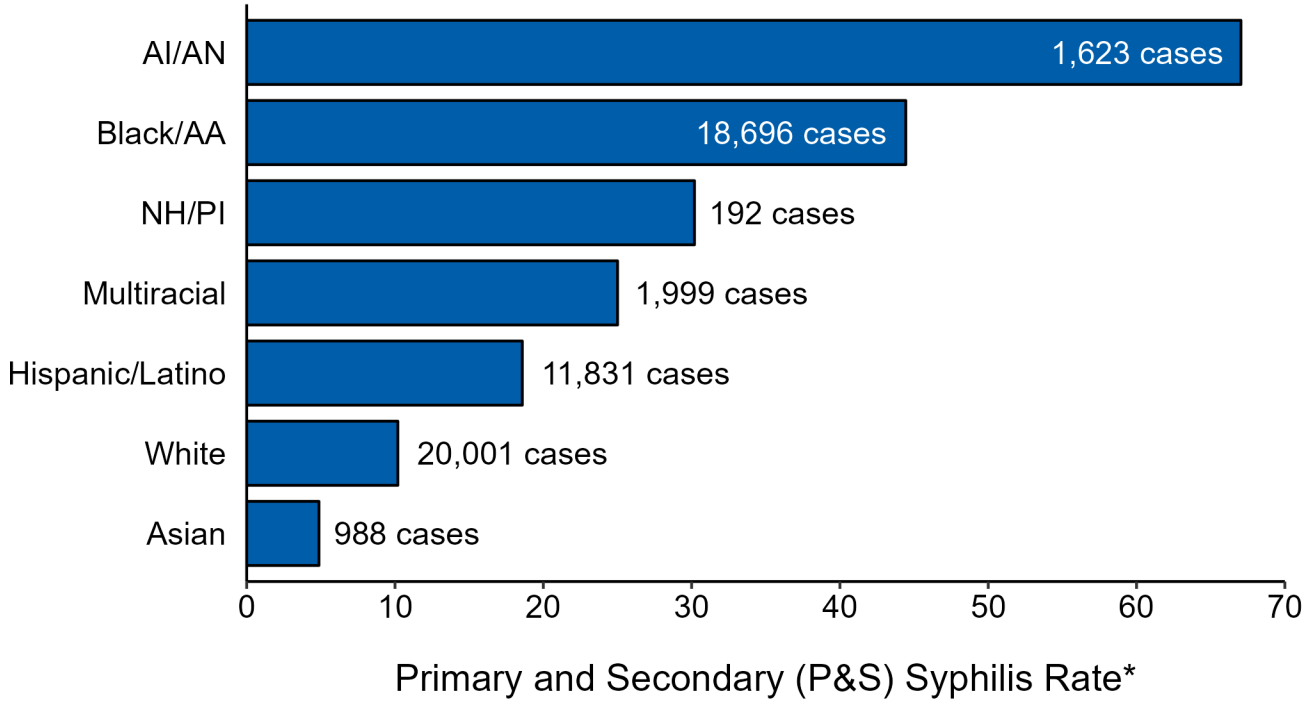
During 2021 to 2022, the only decrease in rate of reported primary and secondary syphilis cases per 100,000 persons was among non-Hispanic Native Hawaiian or other Pacific Islander persons (33.9 to 30.2; 10.9% decrease). There were no decreases in the rate of reported primary and secondary syphilis among any race or Hispanic ethnicity group during 2018 to 2022.

This report includes data from years that coincide with the COVID-19 pandemic, which introduced uncertainty and difficulty in interpreting STI surveillance data. See Impact of COVID-19 on STIs for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2022/technical-notes.htm) for information on syphilis case reporting, race/Hispanic ethnicity categorization, and reporting of race/Hispanic ethnicity for STI cases. Table A1 (https://www.cdc.gov/std/statistics/2022/tables/a1.htm) provides information on unknown, missing, or invalid values of select variables.

Data for all figures are available at https://www.cdc.gov/std/statistics/2022/data.zip. The file “PS Syphilis - Rates by Race Hispanic Ethnicity (US 2018-2022).xlsx” contains the data for the figure presented on this slide.

Primary and Secondary Syphilis — Case Counts and Rates of Reported Cases by Race/Hispanic Ethnicity, United States, 2022



* Per 100,000 population

NOTE: In 2022, a total of 3,686 P&S syphilis cases (6.2%) had missing, unknown, or other race and were not reported to be of Hispanic ethnicity. These cases are not shown in this plot.

ACRONYMS: AI/AN = American Indian or Alaska Native; Black/AA = Black or African American; NH/PI = Native Hawaiian or other Pacific Islander

Summary

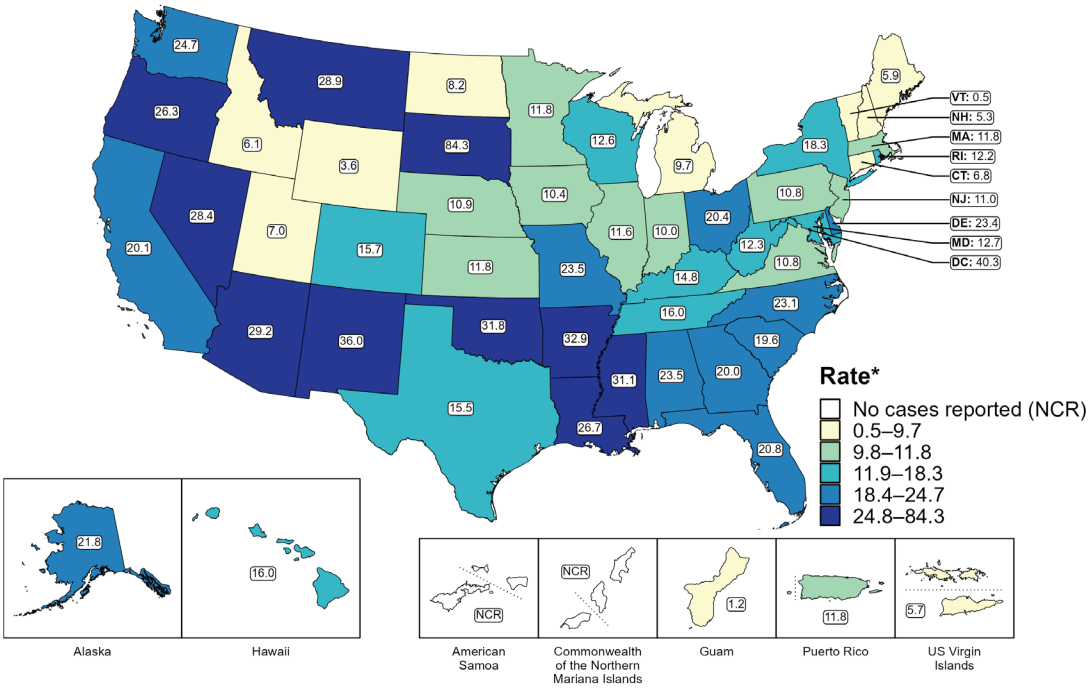
In 2022, rates of primary and secondary (P&S) syphilis were highest among non-Hispanic American Indian or Alaska Native persons (67.0 per 100,000), followed by non-Hispanic Black or African American persons (44.4 per 100,000) and non-Hispanic Native Hawaiian or other Pacific Islander persons (30.2 per 100,000). The greatest number of reported P&S syphilis cases was among non-Hispanic White persons (20,001 cases), followed by non-Hispanic Black or African American persons (18,696 cases) and Hispanic or Latino persons of any race(s) (11,831 cases).

This report includes data from years that coincide with the COVID-19 pandemic, which introduced uncertainty and difficulty in interpreting STI surveillance data. See Impact of COVID-19 on STIs for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2022/technical-notes.htm) for information on syphilis case reporting and reporting of race/Hispanic ethnicity for STI cases.

Data for all figures are available at https://www.cdc.gov/std/statistics/2022/data.zip. The file “PS Syphilis - Cases and Rates by Race Hispanic Ethnicity (US 2022).xlsx” contains the data for the figure presented on this slide.

Primary and Secondary Syphilis — Rates of Reported Cases by Jurisdiction, United States and Territories, 2022



* Per 100,000

Summary

In 2022, rates of reported primary and secondary (P&S) syphilis ranged by state from 0.5 cases per 100,000 population in Vermont to 84.3 cases per 100,000 population in South Dakota. The rate of reported P&S syphilis in the District of Columbia was 40.3 per 100,000 population.

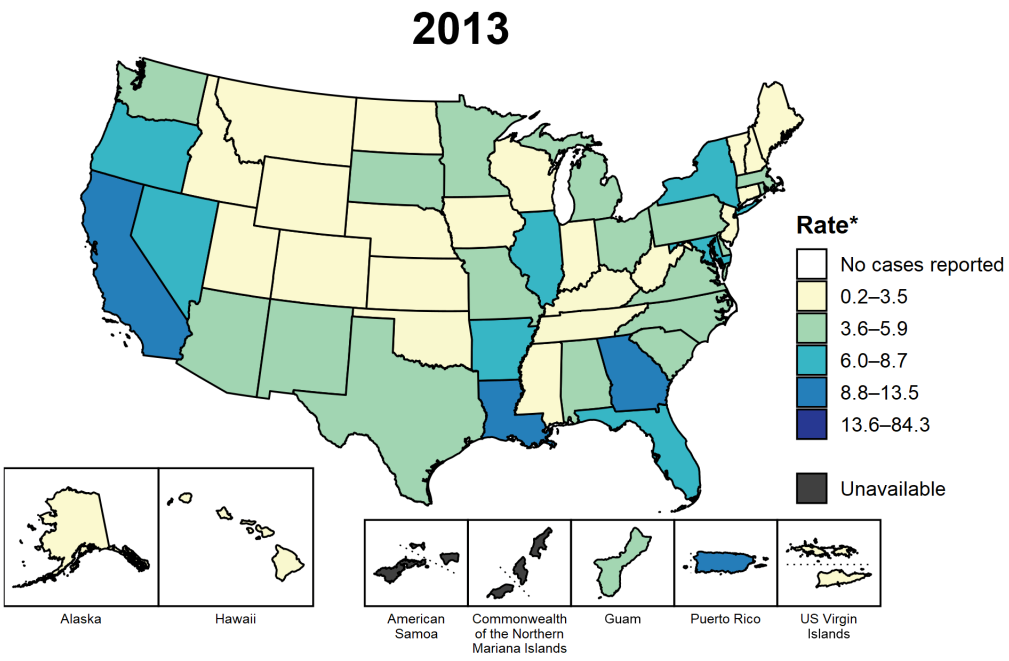
Among US territories reporting any cases, rates of reported P&S syphilis ranged from 1.2 cases per 100,000 population in Guam to 11.8 cases per 100,000 population in Puerto Rico. No cases of P&S syphilis were reported in American Samoa and the Commonwealth of the Northern Mariana Islands.

This report includes data from years that coincide with the COVID-19 pandemic, which introduced uncertainty and difficulty in interpreting STI surveillance data. See Impact of COVID-19 on STIs for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2022/technical-notes.htm) for information on syphilis case reporting and on interpreting reported rates in US territories.

Data for all figures are available at https://www.cdc.gov/std/statistics/2022/data.zip. The file “PS Syphilis - Rates by Jurisdiction (US and Terr 2022).xlsx” contains the data for the figure presented on this slide.

Primary and Secondary Syphilis — Rates of Reported Cases by Jurisdiction, United States and Territories, 2013–2022



* Per 100,000

Summary

This slide contains an animated figure that will play when the slide is in presentation mode. A static version of the figure that displays maps from the first and last years of the range is available as a separate slide.

In 2013, three states, the District of Columbia (DC), and one US territory (9.3% of areas with available data) had a rate of reported primary and secondary syphilis greater than or equal to 8.8 cases per 100,000 population. This increased to 42 states, DC, and one US territory (78.6% of areas with available data) in 2022. During 2021 to 2022, rates of reported primary and secondary syphilis increased in 37 states, DC, and two territories.

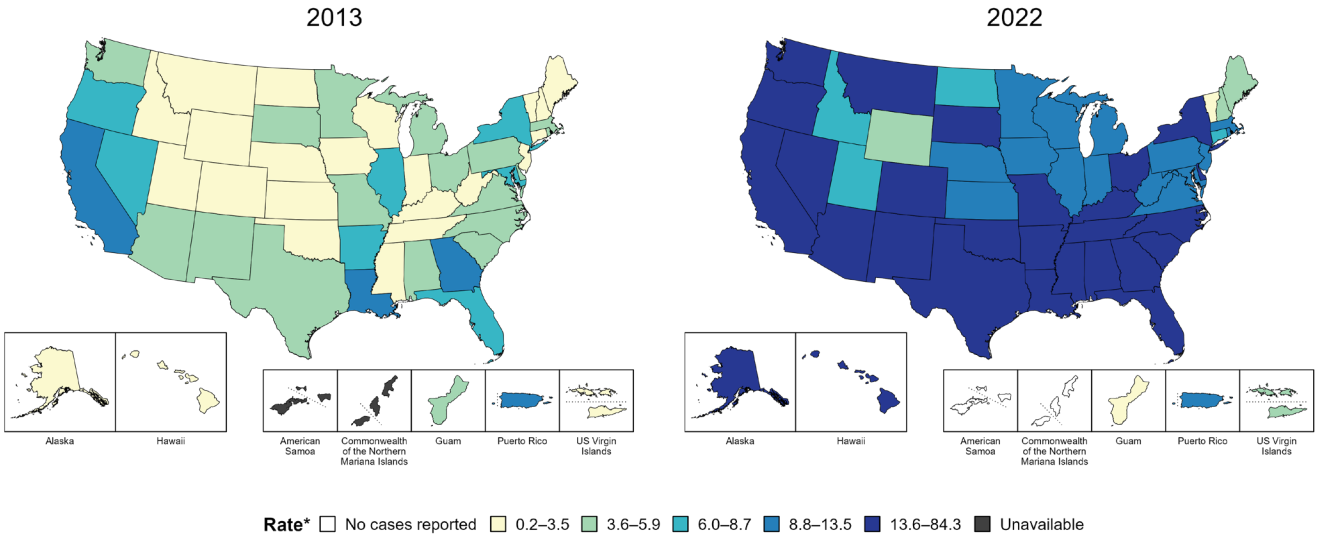
American Samoa and the Commonwealth of the Northern Mariana Islands began reporting data on primary and secondary syphilis cases to CDC in 2018; data are not available for those areas prior to that year. In addition, data on reported primary and secondary syphilis cases in 2018 are not available for the US Virgin Islands. Due to a network security incident in December 2021, the Maryland Department of Health could not finalize their 2021 STI case notification data. Data for 2021 from Maryland have been suppressed for this figure; however, they are included in national and regional case counts and rates displayed in other figures.

This report includes data from years that coincide with the COVID-19 pandemic, which introduced uncertainty and difficulty in interpreting STI surveillance data. See Impact of COVID-19 on STIs for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2022/technical-notes.htm) for information on syphilis case reporting and on interpreting reported rates in US territories.

Data for all figures are available at https://www.cdc.gov/std/statistics/2022/data.zip. The file “PS Syphilis - Rates by Jurisdiction (US and Terr 2013-2022).xlsx” contains the data for the figure presented on this slide.

Primary and Secondary Syphilis — Rates of Reported Cases by Jurisdiction, United States and Territories, 2013 and 2022



* Per 100,000

Summary

In 2013, three states, the District of Columbia (DC), and one US territory (9.3% of areas with available data) had a rate of reported primary and secondary syphilis greater than or equal to 8.8 cases per 100,000 population. This increased to 42 states, DC, and one US territory (78.6% of areas with available data) in 2022.

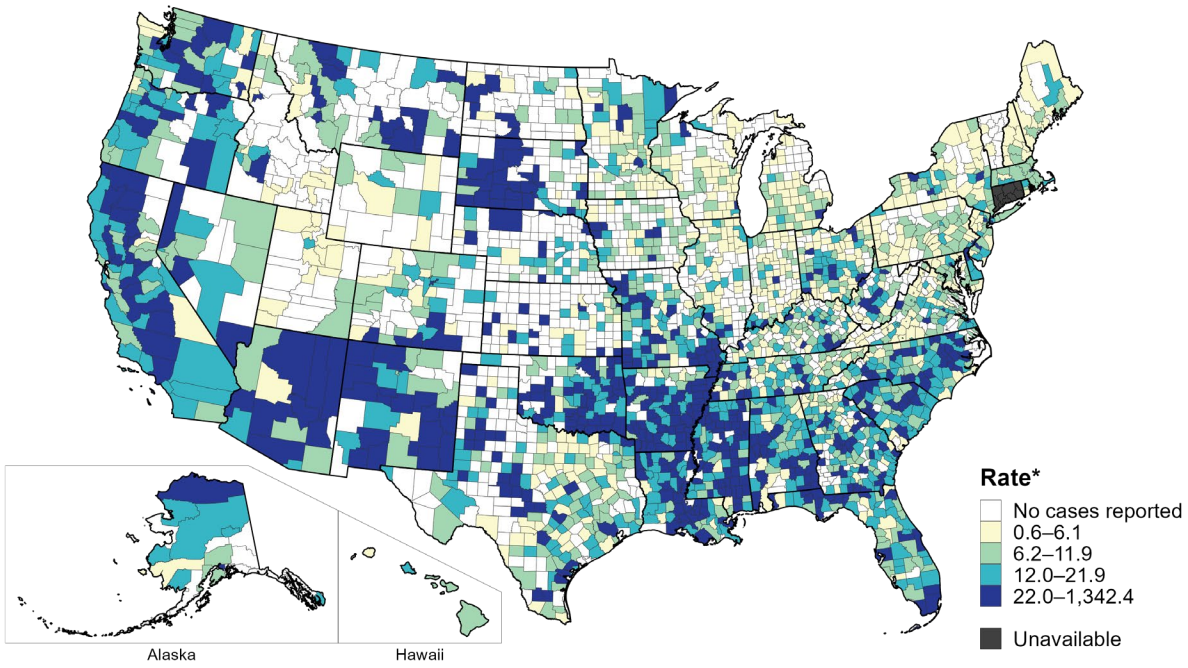
American Samoa and the Commonwealth of the Northern Mariana Islands began reporting data on primary and secondary syphilis cases to CDC in 2018; data are not available for those areas prior to that year.

This report includes data from years that coincide with the COVID-19 pandemic, which introduced uncertainty and difficulty in interpreting STI surveillance data. See Impact of COVID-19 on STIs for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2022/technical-notes.htm) for information on syphilis case reporting and on interpreting reported rates in US territories.

Data for all figures are available at https://www.cdc.gov/std/statistics/2022/data.zip. The file “PS Syphilis - Rates by Jurisdiction (US and Terr 2013 and 2022).xlsx” contains the data for the figure presented on this slide.

Primary and Secondary Syphilis — Rates of Reported Cases by County, United States, 2022



* Per 100,000

Summary

In 2022, 70% of counties and county equivalents with available data in the United States reported at least one case of primary and secondary syphilis. Out of 3,135 counties and county equivalents with available data, 70 (2%) reported half of all cases of primary and secondary syphilis.

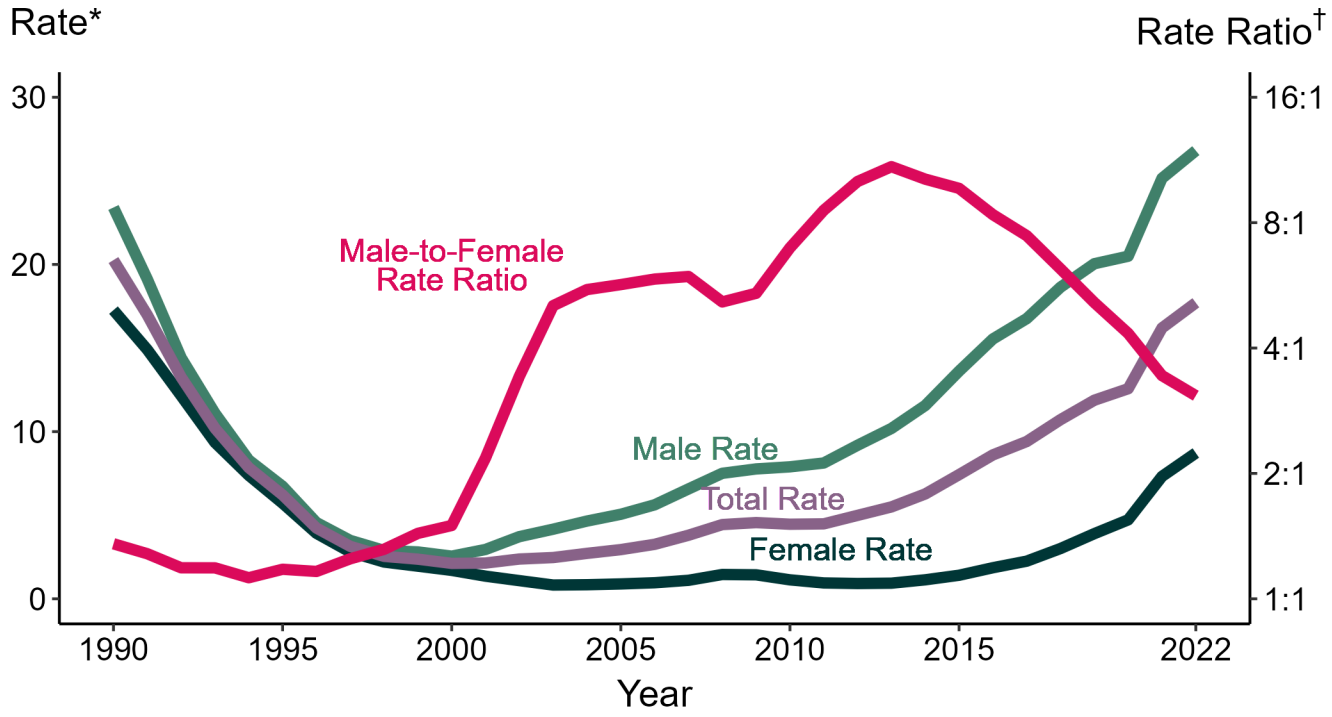
In 2022, Connecticut adopted nine planning regions as county-equivalent geographic units; as STI case notification data were not available in the new county-equivalent units for 2022, data for Connecticut have been suppressed for this figure.

This report includes data from years that coincide with the COVID-19 pandemic, which introduced uncertainty and difficulty in interpreting STI surveillance data. See Impact of COVID-19 on STIs for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2022/technical-notes.htm) for information on syphilis case reporting. Table A1 (https://www.cdc.gov/std/statistics/2022/tables/a1.htm) provides information on unknown, missing, or invalid values of select variables.

Data for all figures are available at https://www.cdc.gov/std/statistics/2022/data.zip. The file “PS Syphilis - Rates by County (US 2013-2022).xlsx” contains the data for the figure presented on this slide.

Primary and Secondary Syphilis — Rates of Reported Cases by Sex and Male-to-Female Rate Ratios, United States, 1990–2022



* Per 100,000

† Log scale

Summary

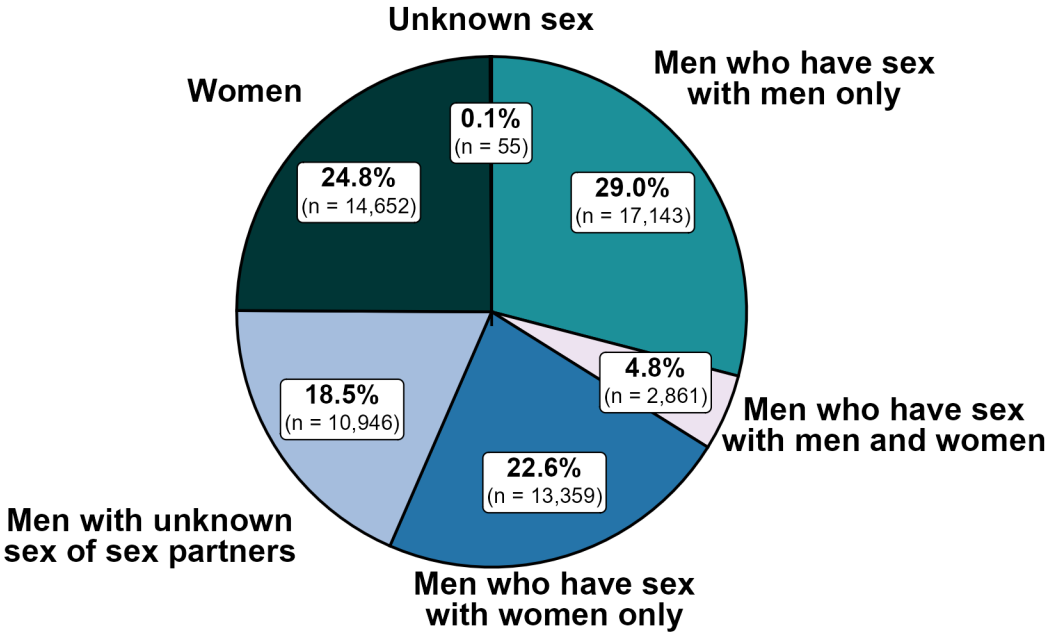
Although the male-to-female rate ratio for primary and secondary syphilis increased from 1990 to 2013, the rate ratio has declined in recent years due to the increasing rate of syphilis among women. During 2018 to 2022, the rate of primary and secondary syphilis among women nearly tripled (3.0 per 100,000 in 2018 to 8.7 per 100,000 in 2022).

This report includes data from years that coincide with the COVID-19 pandemic, which introduced uncertainty and difficulty in interpreting STI surveillance data. See Impact of COVID-19 on STIs for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2022/technical-notes.htm) for information on syphilis case reporting.

Data for all figures are available at https://www.cdc.gov/std/statistics/2022/data.zip. The file “PS Syphilis - Rates by Sex and Male-to-Female Rate Ratios (US 1990-2022).xlsx” contains the data for the figure presented on this slide.

Primary and Secondary Syphilis — Distribution of Cases by Sex and Sex of Sex Partners, United States, 2022



Summary

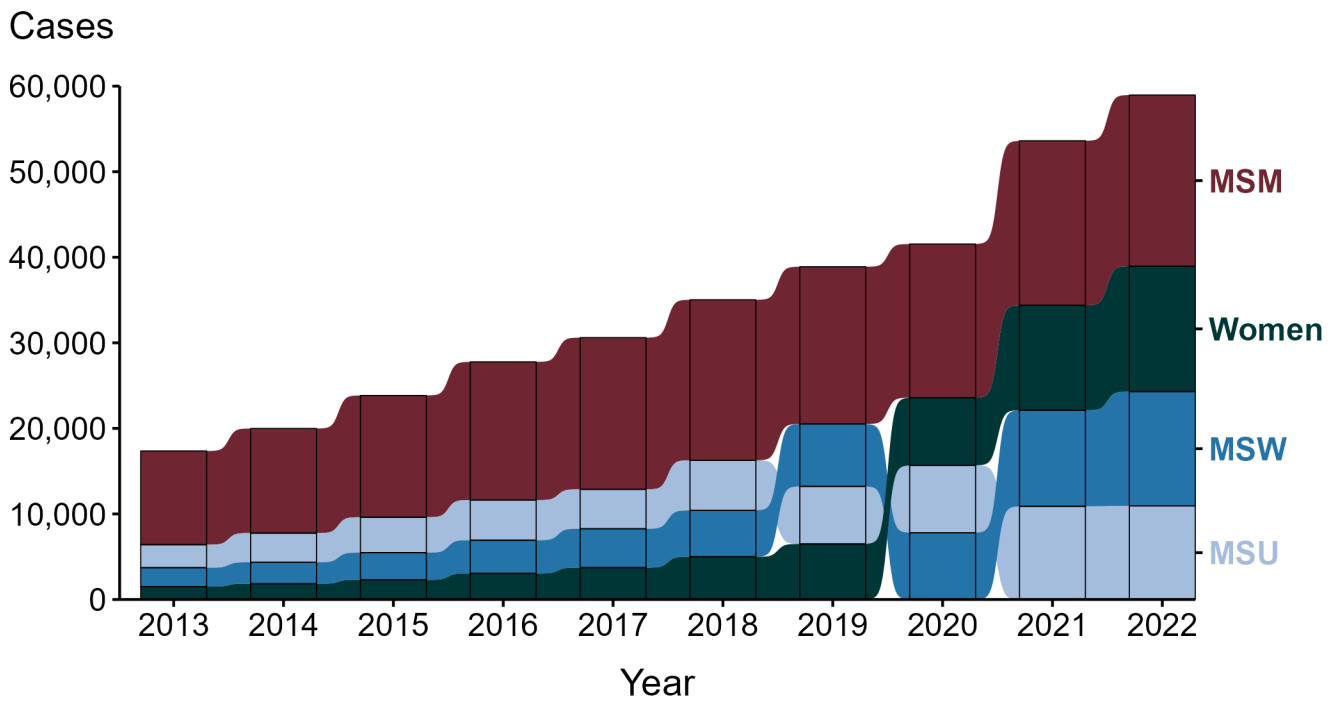
Of 59,016 reported primary and secondary syphilis cases in 2022, 29.0% were among men who have sex with men only. Men who have sex with men only combined with men who have sex with both men and women accounted for 33.9% of all primary and secondary syphilis cases, 45.1% of all male primary and secondary syphilis cases, and 60.0% of male primary and secondary syphilis cases with information on sex of sex partners. (Note that percentages in figure and text may not sum as expected due to rounding.)

This report includes data from years that coincide with the COVID-19 pandemic, which introduced uncertainty and difficulty in interpreting STI surveillance data. See Impact of COVID-19 on STIs for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2022/technical-notes.htm) for information on syphilis case reporting.

Data for all figures are available at https://www.cdc.gov/std/statistics/2022/data.zip. The file “PS Syphilis - Distribution by Sex and Sex of Sex Partners (US 2022).xlsx” contains the data for the figure presented on this slide.

Primary and Secondary Syphilis — Reported Cases by Sex and Sex of Sex Partners, United States, 2013–2022



ACRONYMS: MSM = Men who have sex with men; MSU = Men with unknown sex of sex partners; MSW = Men who have sex with women only

Summary

During the period from 2013 to 2022, a plurality (47.7%) of primary and secondary syphilis cases were among men who have sex with men (MSM; 165,642 cases).

During 2021 to 2022, the number of cases among MSM increased 4.0% (19,229 in 2021 to 20,004 in 2022), while the number of cases did not change substantially (<1.0% change) among men with unknown sex of sex partners (MSU; 10,892 in 2021 to 10,946 in 2022), increased 19.0% among men who have sex with women only (MSW; 11,228 in 2021 to 13,359 in 2022), and increased 19.5% among women (12,265 in 2021 to 14,652 in 2022).

During the five-year period from 2018 to 2022, the number of cases among MSM increased 6.6% (18,760 in 2018 to 20,004 in 2022), while the number of cases increased 86.9% among MSU (5,858 in 2018 to 10,946 in 2022), 146.7% among MSW (5,416 in 2018 to 13,359 in 2022), and 193.3% among women (4,995 in 2018 to 14,652 in 2022).

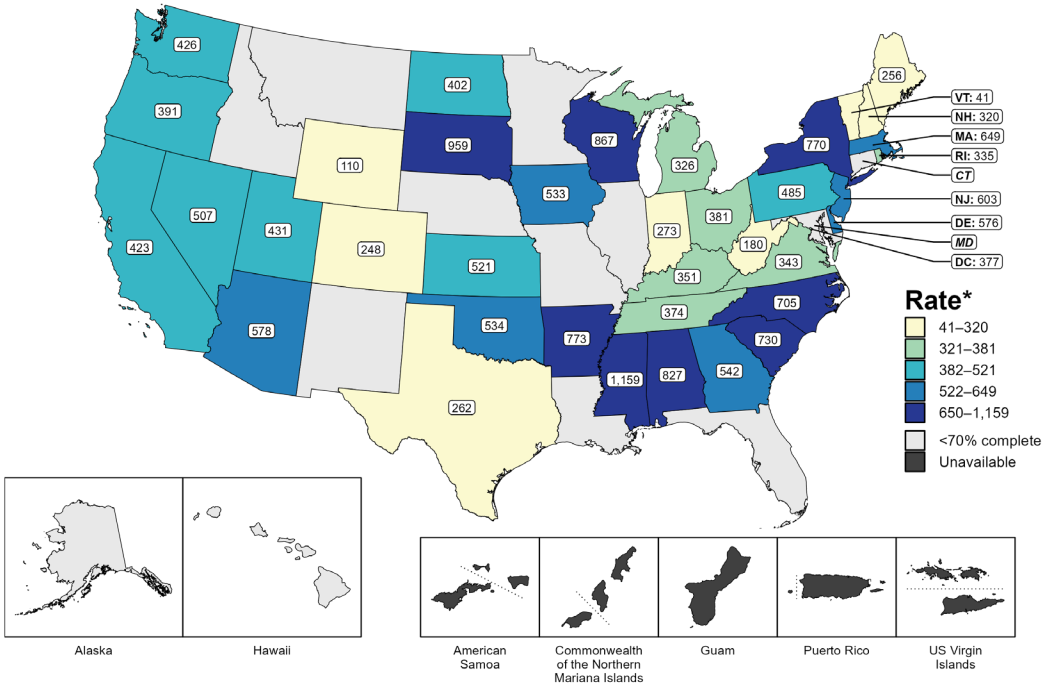
During the 10-year period from 2013 to 2022, the number of cases among MSM increased 82.6% (10,954 in 2013 to 20,004 in 2022), while the number of cases increased 307.4% among MSU (2,687 in 2013 to 10,946 in 2022), 501.8% among MSW (2,220 in 2013 to 13,359 in 2022), and 876.8% among women (1,500 in 2013 to 14,652 in 2022).

This report includes data from years that coincide with the COVID-19 pandemic, which introduced uncertainty and difficulty in interpreting STI surveillance data. See Impact of COVID-19 on STIs for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2022/technical-notes.htm) for information on syphilis case reporting. Table A1 (https://www.cdc.gov/std/statistics/2022/tables/a1.htm) provides information on unknown, missing, or invalid values of select variables.

Data for all figures are available at https://www.cdc.gov/std/statistics/2022/data.zip. The file “PS Syphilis - Cases by Sex and Sex of Sex Partners (US 2013-2022).xlsx” contains the data for the figure presented on this slide.

Primary and Secondary Syphilis — Estimated Rates of Reported Cases Among MSM by State, 37 States and the District of Columbia, 2022



* Per 100,000

NOTE: Figure displays rates for states reporting ≥70% completeness of sex of sex partners data for male primary and secondary syphilis cases in 2022. Population estimates for MSM in US territories are unavailable.

ACRONYMS: MSM = Men who have sex with men; MSW = Men who have sex with women only

Summary

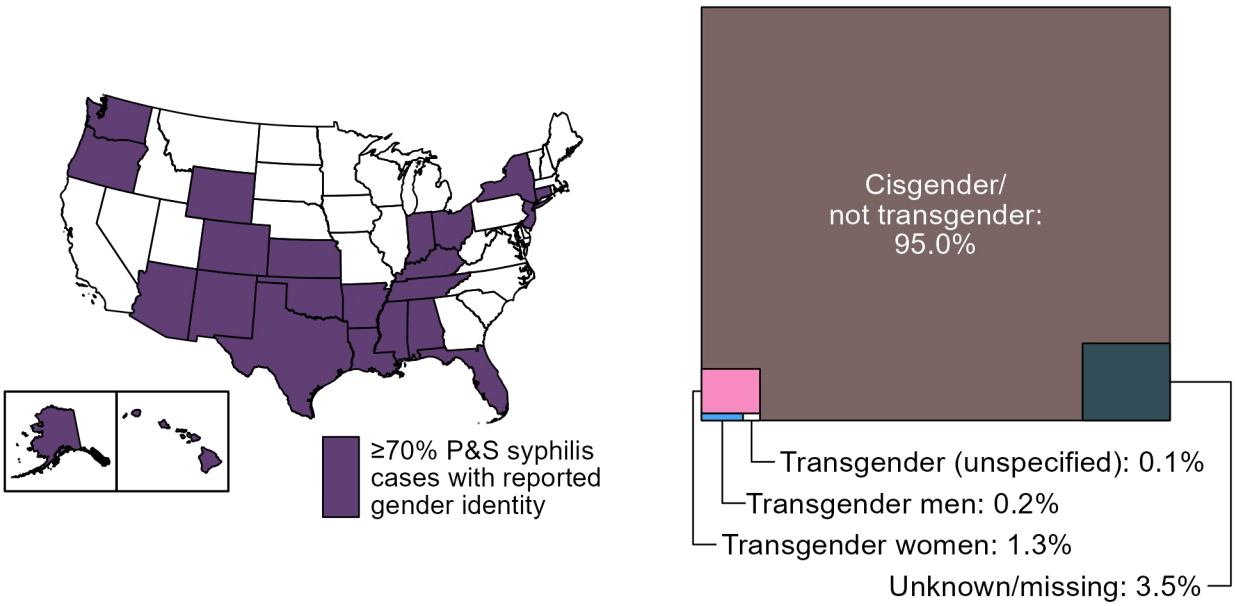
In 2022, 37 states and the District of Columbia (DC) provided data to classify at least 70% of male primary and secondary syphilis cases as men who have sex with men (MSM) or men who have sex with women only. Among the states, estimated rates of primary and secondary syphilis cases in MSM ranged from 41 per 100,000 in Vermont to 1,159 per 100,000 in Mississippi. The estimated rate in DC was 377 per 100,000.

This report includes data from years that coincide with the COVID-19 pandemic, which introduced uncertainty and difficulty in interpreting STI surveillance data. See Impact of COVID-19 on STIs for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2022/technical-notes.htm) for information on syphilis case reporting and information on estimating MSM population sizes for rate denominators. Table A1 (https://www.cdc.gov/std/statistics/2022/tables/a1.htm) provides information on unknown, missing, or invalid values of select variables.

Data for all figures are available at https://www.cdc.gov/std/statistics/2022/data.zip. The file “PS Syphilis - Rates MSM by Jurisdiction (US 2022).xlsx” contains the data for the figure presented on this slide.

Primary and Secondary Syphilis — Distribution of Cases by Gender Identity, 23 States* and the District of Columbia, 2022



* States reporting gender identity for ≥70% reported primary and secondary syphilis cases in 2022; in 2022, 31 states and the District of Columbia reported on gender identity for primary and secondary syphilis cases

ACRONYMS: P&S syphilis = Primary and secondary syphilis

Summary

Starting in 2018, jurisdictions were able to provide gender identity for reported cases of primary and secondary syphilis; however, not all jurisdictions have been able to report complete data. To minimize bias due to missing data, this figure displays data from states with ≥70% complete information on gender identity for primary and secondary syphilis cases. As reporting of gender identity improves, case counts and distribution of cases by gender identity will become more representative of the US.

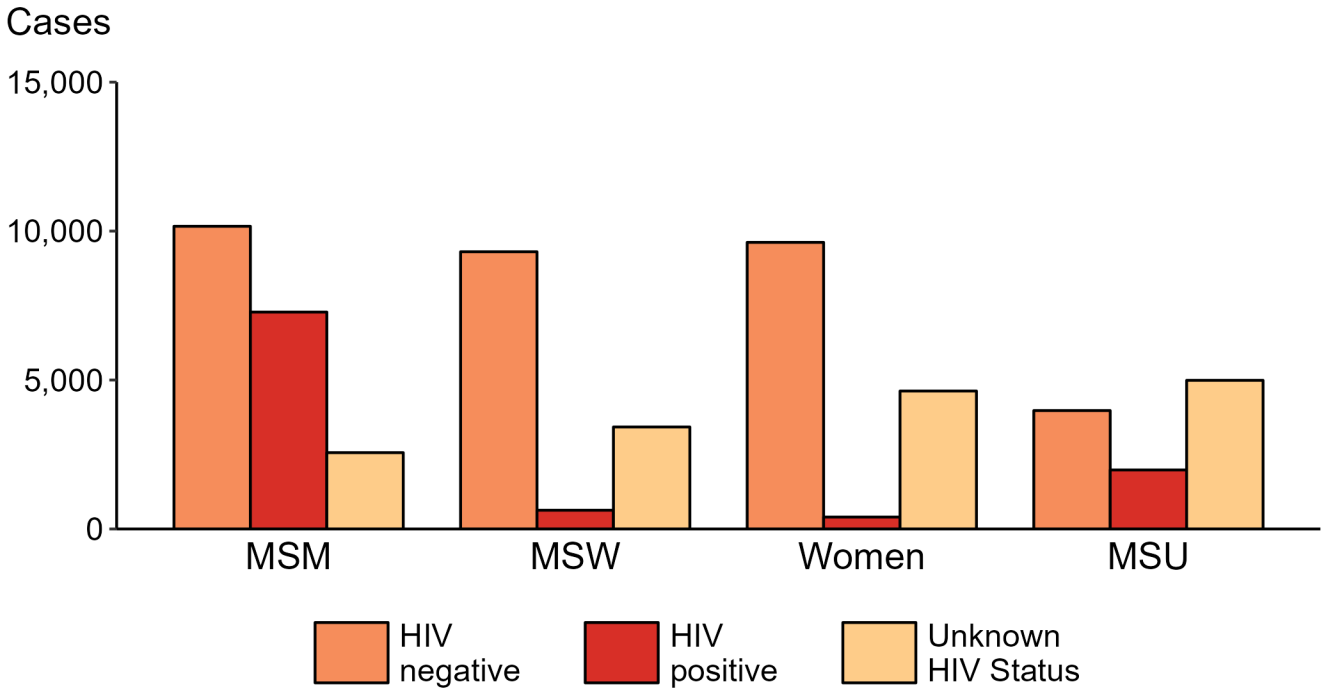
In 2022, 23 states and the District of Columbia reported gender identity for ≥70% of reported primary and secondary syphilis cases. In those areas, 32,530 total cases were reported, of which 95.0% were reported with cisgender (i.e., not transgender) identity, 3.5% were reported with missing or unknown gender identity, and 1.6% were reported with transgender identity, specifically as transgender women (1.3%), transgender men (0.2%), and unspecified transgender identity (0.1%).

This report includes data from years that coincide with the COVID-19 pandemic, which introduced uncertainty and difficulty in interpreting STI surveillance data. See Impact of COVID-19 on STIs for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2022/technical-notes.htm) for information on syphilis case reporting and collection of gender identity.

Data for all figures are available at https://www.cdc.gov/std/statistics/2022/data.zip. The file “PS Syphilis - Distribution by Gender Identity in Reporting Jurisdictions (US 2022).xlsx” contains the data for the figure presented on this slide.

Primary and Secondary Syphilis — Reported Cases by Sex, Sex of Sex Partners, and HIV Status, United States, 2022



ACRONYMS: MSM = Men who have sex with men; MSW = Men who have sex with women only; MSU = Men with unknown sex of sex partners

Summary

Among primary and secondary syphilis cases with reported HIV status, 41.7% of cases among men who have sex with men were HIV positive, compared with 33.3% of cases among men with unknown sex of sex partners, 6.3% of cases among men who have sex with women only, and 4.0% of cases among women.

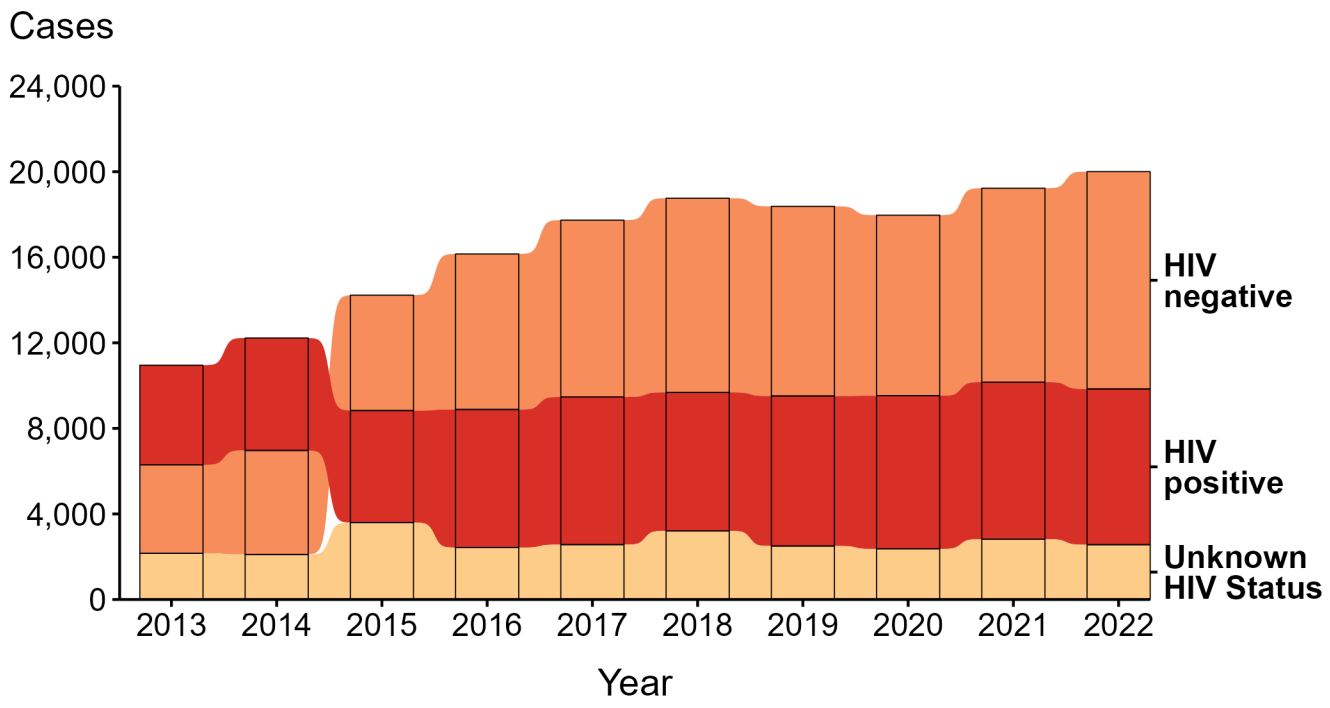
For this figure, HIV status is categorized as reported by jurisdictions. Jurisdictions determine HIV status using multiple sources, including self-report, match with HIV registry, and available test results. Cases reported with a missing or unknown status are categorized as having an unknown HIV status.

This report includes data from years that coincide with the COVID-19 pandemic, which introduced uncertainty and difficulty in interpreting STI surveillance data. See Impact of COVID-19 on STIs for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2022/technical-notes.htm) for information on syphilis case reporting. Table A1 (https://www.cdc.gov/std/statistics/2022/tables/a1.htm) provides information on unknown, missing, or invalid values of select variables.

Data for all figures are available at https://www.cdc.gov/std/statistics/2022/data.zip. The file “PS Syphilis - Cases by Sex Sex of Sex Partners and HIV Status (US 2013-2022).xlsx” contains the data for the figure presented on this slide.

Primary and Secondary Syphilis — Reported Cases Among Men Who Have Sex with Men by HIV Status, United States, 2013–2022



Summary

During 2013 to 2022, a plurality (45.6%) of primary and secondary syphilis cases among men who have sex with men (MSM) were among persons reported as HIV negative.

During 2021 to 2022, the number of cases among MSM who were reported as HIV negative increased 12.1% (from 9,068 in 2021 to 10,161 in 2022), the number who were reported as HIV positive did not change substantially (<1.0% change) (from 7,345 in 2021 to 7,281 in 2022), and the number who were reported with unknown HIV status decreased 9.0% (from 2,816 in 2021 to 2,562 in 2022).

During 2013 to 2022, the number of cases among MSM who were reported as HIV negative increased 145.6% (from 4,137 in 2013 to 10,161 in 2022), the number who were reported as HIV positive increased 56.3% (from 4,659 in 2013 to 7,281 in 2022), and the number who were reported with unknown HIV status increased 18.7% (from 2,158 in 2013 to 2,562 in 2022).

Since 2015, the number of primary and secondary syphilis cases among MSM who are HIV negative has surpassed the number of cases among those who are HIV positive.

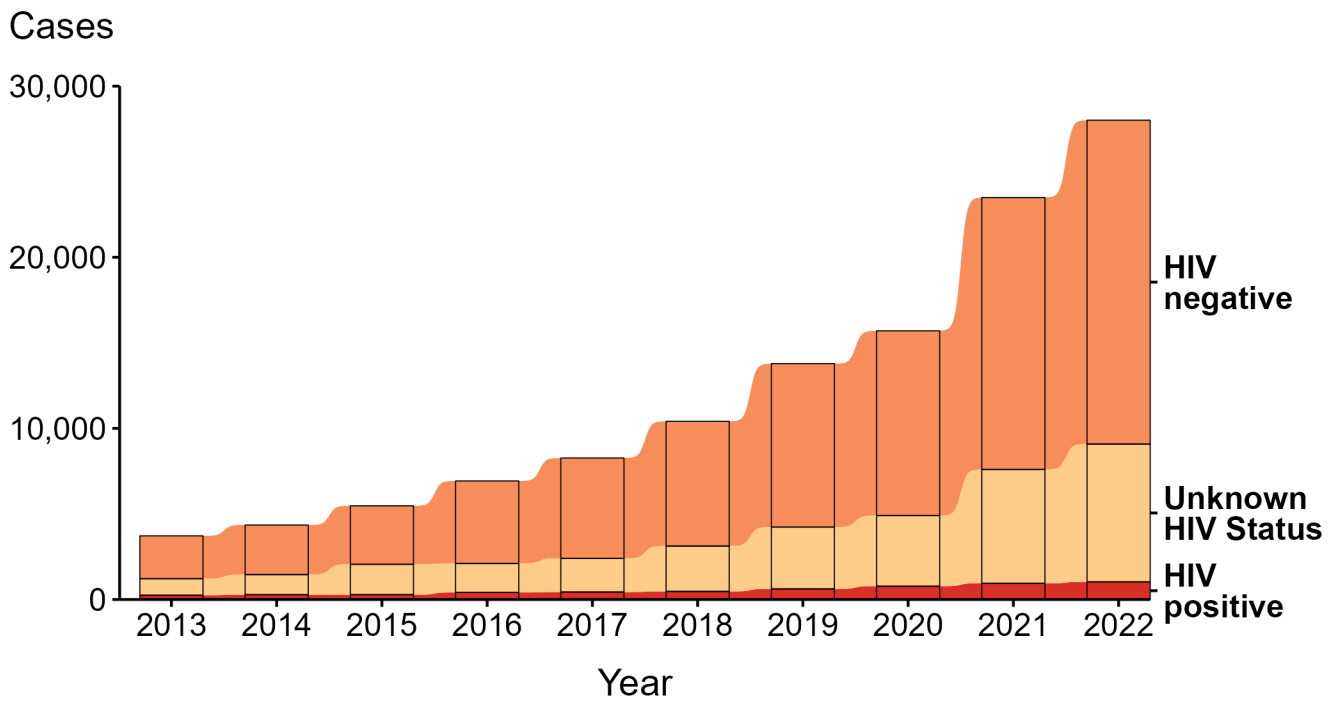
For this figure, HIV status is categorized as reported by jurisdictions. Jurisdictions determine HIV status using multiple sources, including self-report, match with HIV registry, and available test results. Cases reported with a missing or unknown status are categorized as having an unknown HIV status.

This report includes data from years that coincide with the COVID-19 pandemic, which introduced uncertainty and difficulty in interpreting STI surveillance data. See Impact of COVID-19 on STIs for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2022/technical-notes.htm) for information on syphilis case reporting. Table A1 (https://www.cdc.gov/std/statistics/2022/tables/a1.htm) provides information on unknown, missing, or invalid values of select variables.

Data for all figures are available at https://www.cdc.gov/std/statistics/2022/data.zip. The file “PS Syphilis - Cases MSM by HIV Status (US 2013-2022).xlsx” contains the data for the figure presented on this slide.

Primary and Secondary Syphilis — Reported Cases Among Women and Men Who Have Sex with Women Only by HIV Status, United States, 2013–2022



Summary

During 2013 to 2022, the majority (68.2%) of primary and secondary syphilis cases among women and men who have sex with women only (MSW) were among persons reported as HIV negative.

During 2021 to 2022, the number of cases among women and MSW who were reported as HIV negative increased 19.1% (from 15,897 in 2021 to 18,927 in 2022), the number who were reported with unknown HIV status increased 21.2% (from 6,648 in 2021 to 8,055 in 2022), and the number who were reported as HIV positive increased 8.5% (from 948 in 2021 to 1,029 in 2022).

During 2013 to 2022, the number of cases among women and MSW who were reported as HIV negative increased 656.2% (from 2,503 in 2013 to 18,927 in 2022), the number who were reported with unknown HIV status increased 733.0% (from 967 in 2013 to 8,055 in 2022), and the number who were reported as HIV positive increased 311.6% (from 250 in 2013 to 1,029 in 2022).

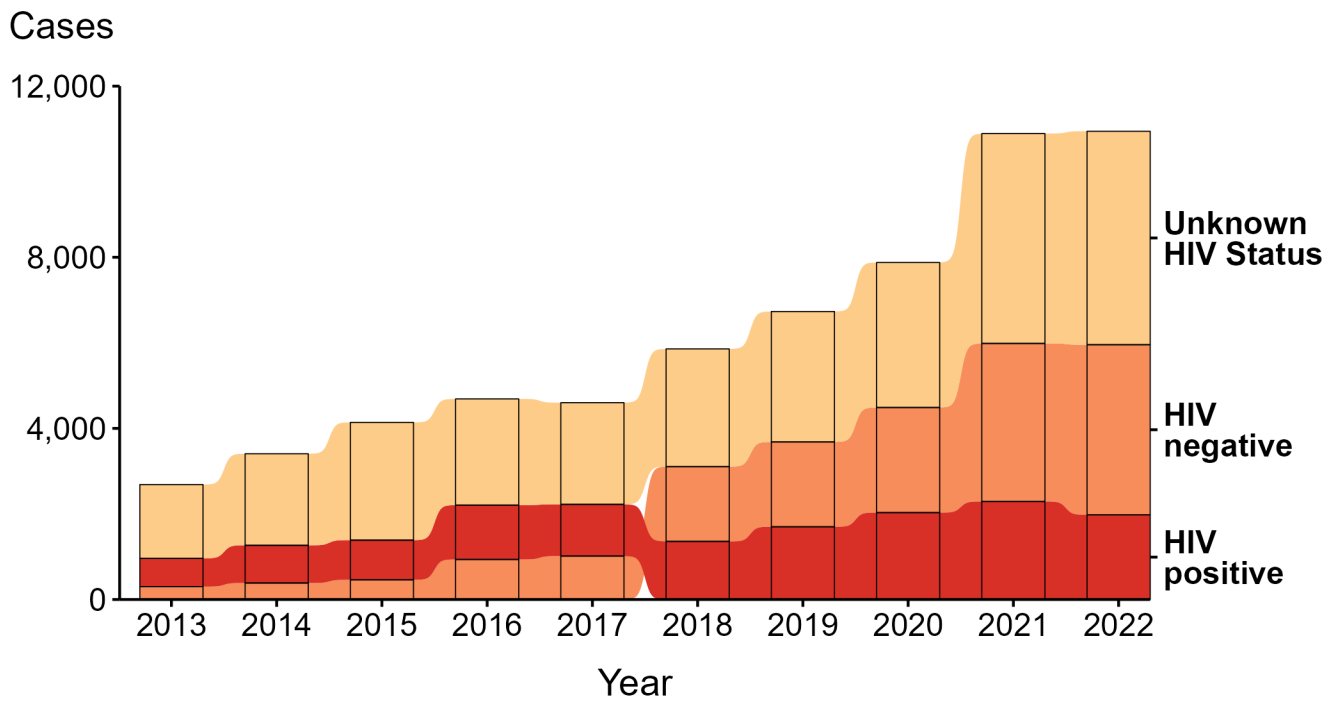
For this figure, HIV status is categorized as reported by jurisdictions. Jurisdictions determine HIV status using multiple sources, including self-report, match with HIV registry, and available test results. Cases reported with a missing or unknown status are categorized as having an unknown HIV status.

This report includes data from years that coincide with the COVID-19 pandemic, which introduced uncertainty and difficulty in interpreting STI surveillance data. See Impact of COVID-19 on STIs for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2022/technical-notes.htm) for information on syphilis case reporting. Table A1 (https://www.cdc.gov/std/statistics/2022/tables/a1.htm) provides information on unknown, missing, or invalid values of select variables.

Data for all figures are available at https://www.cdc.gov/std/statistics/2022/data.zip. The file “PS Syphilis - Cases Women and MSW by HIV Status (US 2013-2022).xlsx” contains the data for the figure presented on this slide.

Primary and Secondary Syphilis — Reported Cases Among Men with Unknown Sex of Sex Partners by HIV Status, United States, 2013–2022



Summary

During 2013 to 2022, a plurality (49.4%) of primary and secondary syphilis cases among men with unknown sex of sex partners (MSU) were among persons reported with unknown HIV status.

During 2021 to 2022, the number of cases among MSU who were reported with unknown HIV status increased 1.7% (from 4,906 in 2021 to 4,990 in 2022), the number who were reported as HIV negative increased 7.5% (from 3,696 in 2021 to 3,975 in 2022), and the number who were reported as HIV positive decreased 13.5% (from 2,290 in 2021 to 1,981 in 2022).

During 2013 to 2022, the number of cases among MSU who were reported with unknown HIV status increased 189.4% (from 1,724 in 2013 to 4,990 in 2022), the number who were reported as HIV negative increased 1,216.2% (from 302 in 2013 to 3,975 in 2022), and the number who were reported as HIV positive increased 199.7% (from 661 in 2013 to 1,981 in 2022).

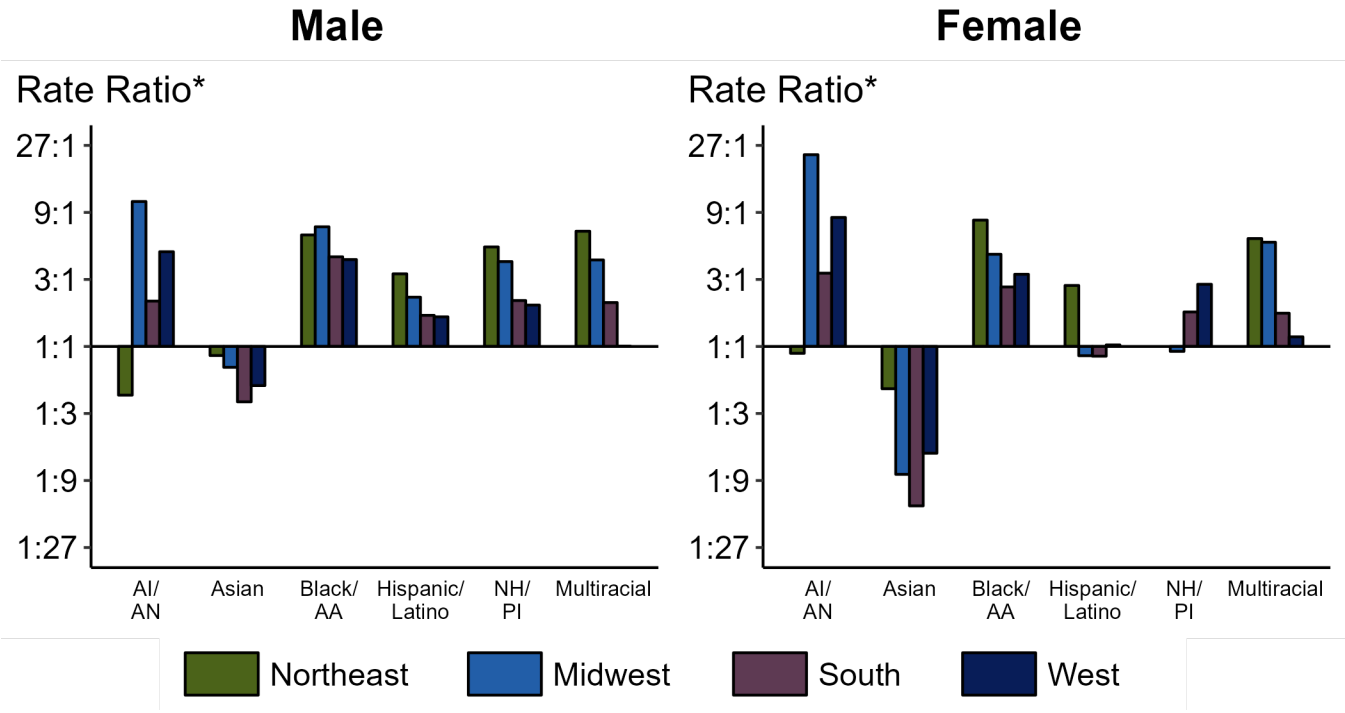
For this figure, HIV status is categorized as reported by jurisdictions. Jurisdictions determine HIV status using multiple sources, including self-report, match with HIV registry, and available test results. Cases reported with a missing or unknown status are categorized as having an unknown HIV status.

This report includes data from years that coincide with the COVID-19 pandemic, which introduced uncertainty and difficulty in interpreting STI surveillance data. See Impact of COVID-19 on STIs for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2022/technical-notes.htm) for information on syphilis case reporting. Table A1 (https://www.cdc.gov/std/statistics/2022/tables/a1.htm) provides information on unknown, missing, or invalid values of select variables.

Data for all figures are available at https://www.cdc.gov/std/statistics/2022/data.zip. The file “PS Syphilis - Cases MSU by HIV Status (US 2013-2022).xlsx” contains the data for the figure presented on this slide.

Primary and Secondary Syphilis — Ratios of Rates of Reported Cases by Sex, Race/Hispanic Ethnicity, and Region, United States, 2022



* For the rate ratios, non-Hispanic White persons are the referent population. Y-axis is log scale.

ACRONYMS: AI/AN = American Indian or Alaska Native; Black/AA = Black or African American; NH/PI = Native Hawaiian or other Pacific Islander

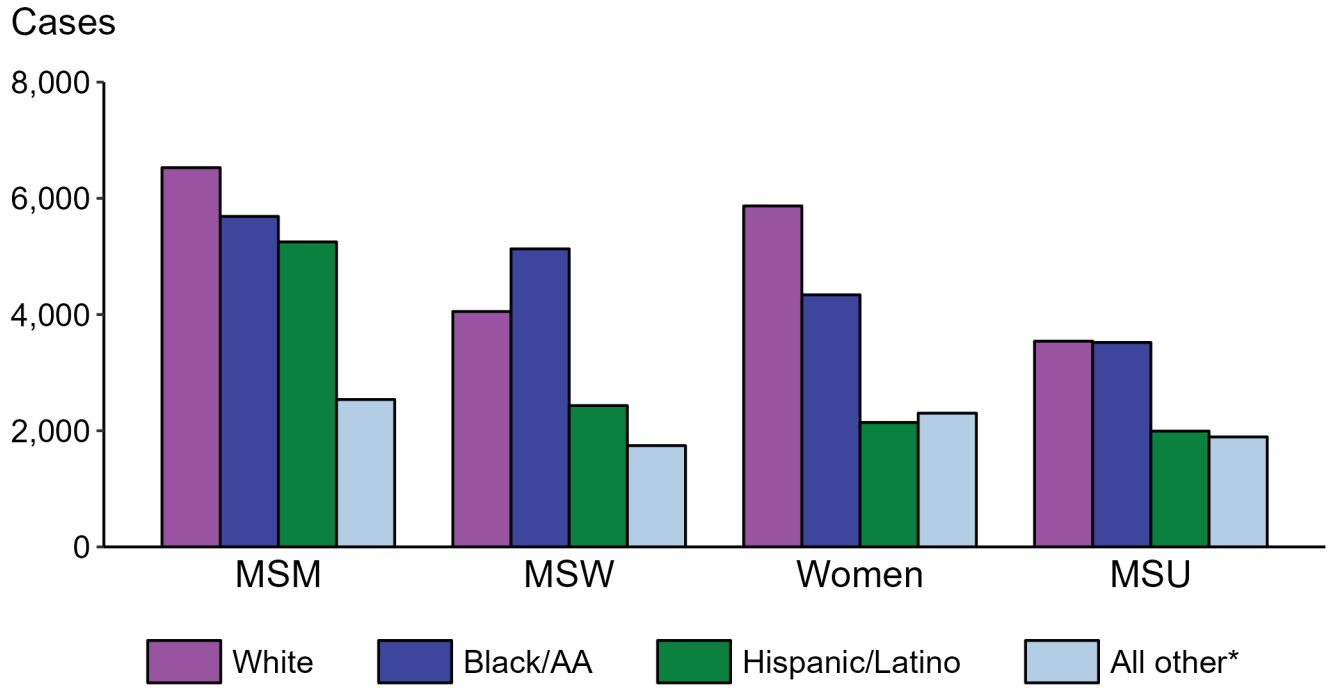
Summary

Among men and women, rate ratios of rates of reported primary and secondary syphilis by race/Hispanic ethnicity (using non-Hispanic White persons as the referent population) varied by region in 2022. Among men, the greatest rate ratio was in the Midwest where the rate of reported primary and secondary syphilis among non-Hispanic American Indian or Alaska Native men was 10.8 times the rate among non-Hispanic White men. Among women, the greatest rate ratio was in the Midwest where the rate of reported primary and secondary syphilis among non-Hispanic American Indian or Alaska Native women was 23.2 times the rate among non-Hispanic White women.

This report includes data from years that coincide with the COVID-19 pandemic, which introduced uncertainty and difficulty in interpreting STI surveillance data. See Impact of COVID-19 on STIs for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2022/technical-notes.htm) for information on syphilis case reporting, race/Hispanic ethnicity categorization, and reporting of race/Hispanic ethnicity for STI cases. Table A1 (https://www.cdc.gov/std/statistics/2022/tables/a1.htm) provides information on unknown, missing, or invalid values of select variables.

Primary and Secondary Syphilis — Reported Cases by Sex, Sex of Sex Partners, and Race/Hispanic Ethnicity, United States, 2022



* Includes persons with unknown race who were not reported with Hispanic ethnicity.

ACRONYMS: MSM = Men who have sex with men; MSW = Men who have sex with women only; MSU = Men with unknown sex of sex partners

Summary

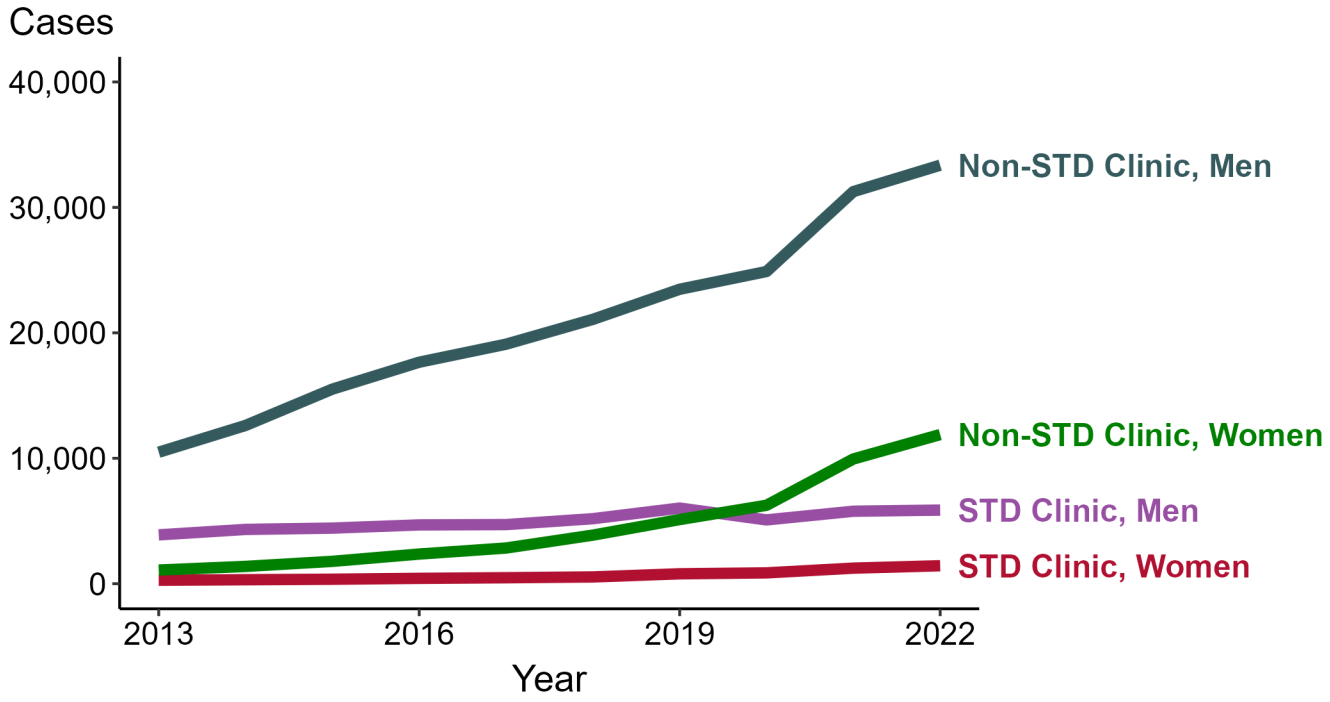
Within each of the four race/Hispanic ethnicity groups displayed, men who have sex with men (MSM) accounted for the highest proportion of primary and secondary (P&S) syphilis cases. Of P&S syphilis cases among MSM, 32.6% were non-Hispanic White, 28.4% were non-Hispanic Black or African American, 26.2% were Hispanic or Latino, and 12.7% were another known or unknown race and not reported to be Hispanic or Latino.

This report includes data from years that coincide with the COVID-19 pandemic, which introduced uncertainty and difficulty in interpreting STI surveillance data. See Impact of COVID-19 on STIs for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2022/technical-notes.htm) for information on syphilis case reporting, race/Hispanic ethnicity categorization, and reporting of race/Hispanic ethnicity for STI cases. Table A1 (https://www.cdc.gov/std/statistics/2022/tables/a1.htm) provides information on unknown, missing, or invalid values of select variables.

Data for all figures are available at https://www.cdc.gov/std/statistics/2022/data.zip. The file “PS Syphilis - Cases by Sex Sex of Sex Partners and Race Hispanic Ethnicity (US 2022) .xlsx” contains the data for the figure presented on this slide.

Primary and Secondary Syphilis — Reported Cases by Reporting Source and Sex, United States, 2013–2022



NOTE: During 2013 to 2022, the proportion of all cases with unknown reporting source was 10.1%, from a low of 6.8% (n = 1,350) in 2014 to a high of 12.5% (n = 4,386) in 2018.

Summary

During 2021 to 2022, the number of primary and secondary (P&S) syphilis cases reported from STD clinics increased 1.6% among men (5,778 to 5,869 cases) and increased 15.4% among women (1,241 to 1,432 cases), while the number of cases reported from non-STD clinics increased 6.7% among men (31,258 to 33,365 cases) and increased 19.6% among women (9,943 to 11,891 cases).

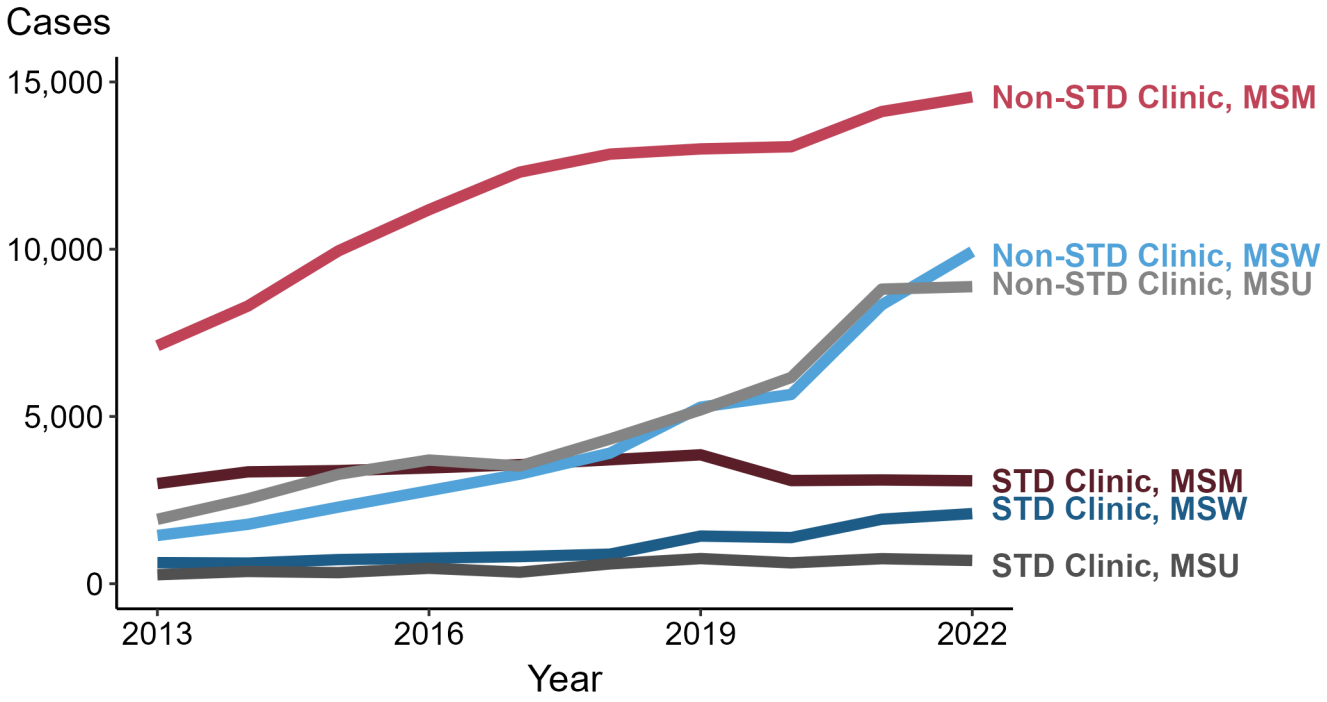
During a ten-year period (2013 to 2022), the number of P&S syphilis cases reported from STD clinics increased 50.7% among men (3,894 to 5,869 cases) and increased 415.1% among women (278 to 1,432 cases), while the number of cases reported from non-STD clinics increased 218.3% among men (10,482 to 33,365 cases) and increased 991.9% among women (1,089 to 11,891 cases).

This report includes data from years that coincide with the COVID-19 pandemic, which introduced uncertainty and difficulty in interpreting STI surveillance data. See Impact of COVID-19 on STIs for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2022/technical-notes.htm) for information on syphilis case reporting. Table A1 (https://www.cdc.gov/std/statistics/2022/tables/a1.htm) provides information on unknown, missing, or invalid values of select variables.

Data for all figures are available at https://www.cdc.gov/std/statistics/2022/data.zip. The file “PS Syphilis - Cases by Reporting Source and Sex (US 2013-2022).xlsx” contains the data for the figure presented on this slide.

Primary and Secondary Syphilis — Reported Cases among Men by Reporting Source and Sex of Sex Partners, United States, 2013–2022



NOTE: During 2013 to 2022, the proportion of all male cases with unknown reporting source was 10.2%, from a low of 6.6% (n = 1,201) in 2014 to a high of 12.6% (n = 3,777) in 2018.

ACRONYMS: MSM = Men who have sex with men; MSW = Men who have sex with women only; MSU = Men with unknown sex of sex partners

Summary

During 2021 to 2022, the number of primary and secondary (P&S) syphilis cases reported from STD clinics did not change substantially (<1.0% change) among men who have sex with men (MSM; 3,102 to 3,077 cases), increased 8.7% among men who have sex with women only (MSW; 1,928 to 2,096 cases), and decreased 7.0% among men with unknown sex of sex partners (MSU; 748 to 696 cases). Concurrently, the number of cases reported from non-STD clinics increased 3.1% among MSM (14,115 to 14,555 cases), increased 19.1% among MSW (8,337 to 9,929 cases), and did not change substantially (<1.0% change) among MSU (8,806 to 8,881 cases).

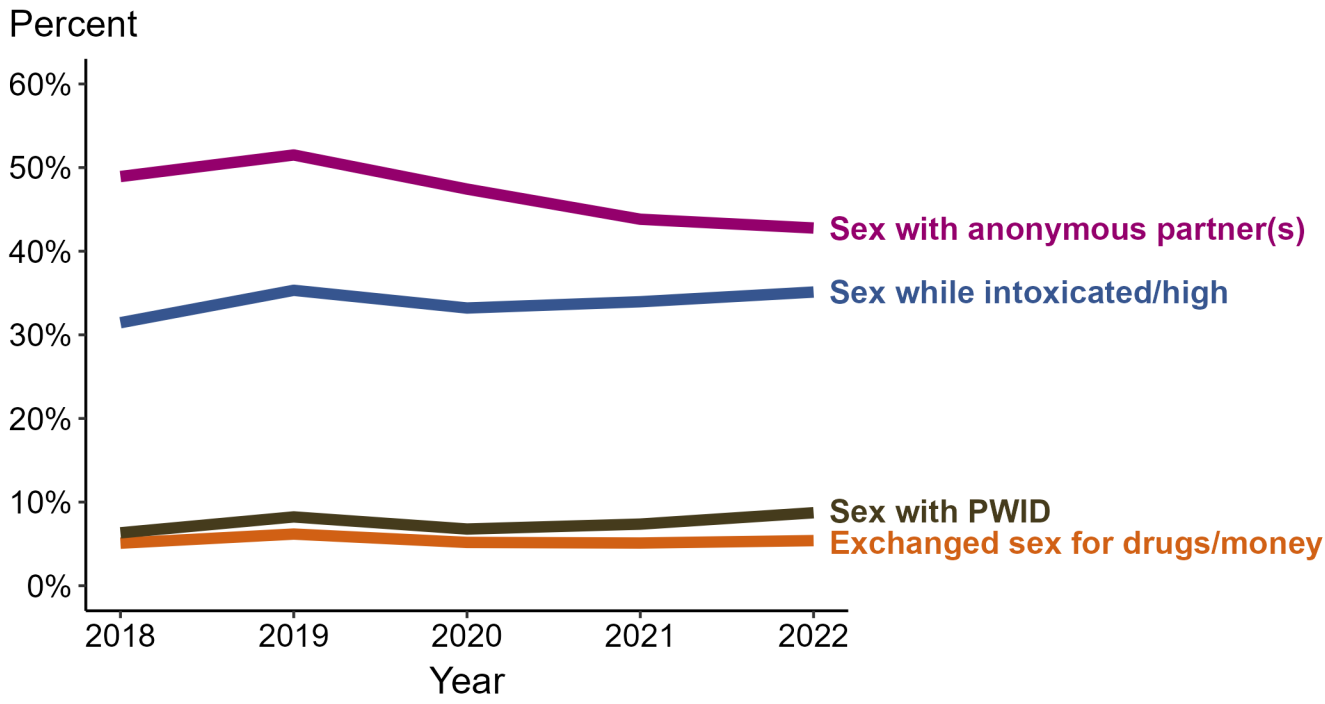
During a ten-year period (2013 to 2022), the number of P&S syphilis cases reported from STD clinics increased 2.7% among MSM (2,995 to 3,077 cases), 232.7% among MSW (630 to 2,096 cases), and 158.7% among MSU (269 to 696 cases). Over the same period, the number of cases reported from non-STD clinics increased 104.6% among MSM (7,114 to 14,555 cases), 588.1% among MSW (1,443 to 9,929 cases), and 361.4% among MSU (1,925 to 8,881 cases).

This report includes data from years that coincide with the COVID-19 pandemic, which introduced uncertainty and difficulty in interpreting STI surveillance data. See Impact of COVID-19 on STIs for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2022/technical-notes.htm) for information on syphilis case reporting. Table A1 (https://www.cdc.gov/std/statistics/2022/tables/a1.htm) provides information on unknown, missing, or invalid values of select variables.

Data for all figures are available at https://www.cdc.gov/std/statistics/2022/data.zip. The file “PS Syphilis - Cases Men by Reporting Source and Sex of Sex Partners (US 2013-2022).xlsx” contains the data for the figure presented on this slide.

Primary and Secondary Syphilis — Percentage of Cases Reporting Selected Sexual Behaviors*, United States, 2018–2022



* Proportion reporting sex with PWID, sex with anonymous partners, sex while intoxicated/high on drugs, or exchanging drugs or money for sex within the last 12 months calculated among cases with known data (cases with missing or unknown responses were excluded from the denominator).

ACRONYMS: PWID = Person who injects drugs

Summary

In 2022, 42.8% of primary and secondary (P&S) syphilis cases reported sex with an anonymous partner, 35.1% reported sex while intoxicated and/or high on drugs, 8.7% reported sex with a person who injects drugs, and 5.4% reported exchanging sex for drugs or money.

During 2018 to 2022, the proportion of P&S syphilis cases that reported sex with a person who injects drugs increased (6.3% to 8.7%), the proportion of P&S syphilis cases that reported sex while intoxicated and/or high on drugs increased (31.4% to 35.1%), the proportion of P&S syphilis cases that reported exchanging sex for drugs or money remained stable (5.1% to 5.4%), and the proportion of P&S syphilis cases that reported sex with an anonymous partner decreased (48.9% to 42.8%).

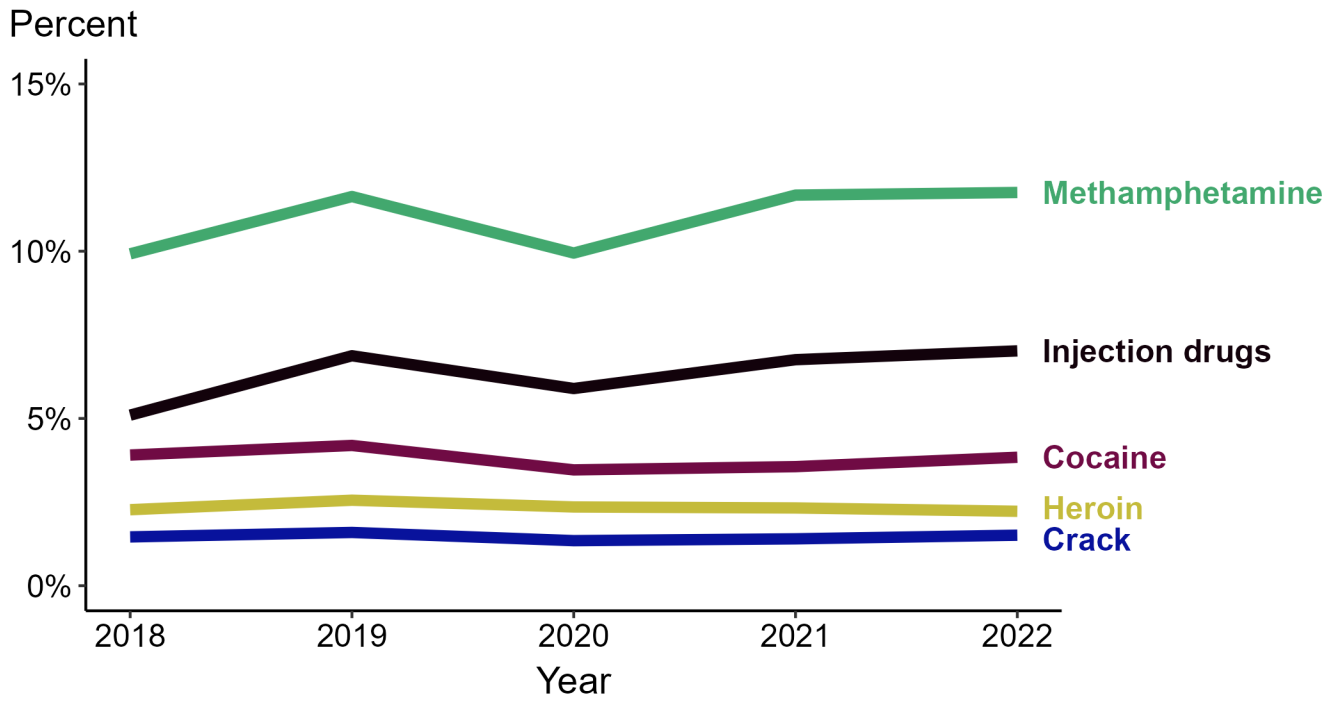
This report includes data from years that coincide with the COVID-19 pandemic, which introduced uncertainty and difficulty in interpreting STI surveillance data. See Impact of COVID-19 on STIs for more information.

This figure presents trends in the proportion of cases reporting selected behavior or behaviors. Although rounded percentages are presented in the text for ease of interpretation, ranks are based on unrounded data points. See Syphilis Surveillance Supplemental Slides, 2018–2022 for more trends in surveillance data on selected behaviors reported among P&S syphilis cases in the US. Data points for all figures as

well as the Syphilis Supplement Technical Notes about data sources, data collection and reporting practices, proportion with missing or unknown responses, and case definitions are available at [syphilis website].

Data for all figures are available at https://www.cdc.gov/std/statistics/2022/data.zip. The file “PS Syphilis - Cases Reporting Selected Sex Behaviors (US 2018-2022).xlsx” contains the data for the figure presented on this slide.

Primary and Secondary Syphilis — Percentage of Cases Reporting Selected Substance Use Behaviors*, United States, 2018–2022



* Proportion reporting injection drug use, methamphetamine use, heroin use, crack use, or cocaine use within the last 12 months calculated among cases with known data (cases with missing or unknown responses were excluded from the denominator).

Summary

In 2022, 11.8% of primary and secondary (P&S) syphilis cases reported methamphetamine use, 7.0% reported injection drug use, 3.8% reported cocaine use, 2.2% reported heroin use, and 1.5% reported crack use.

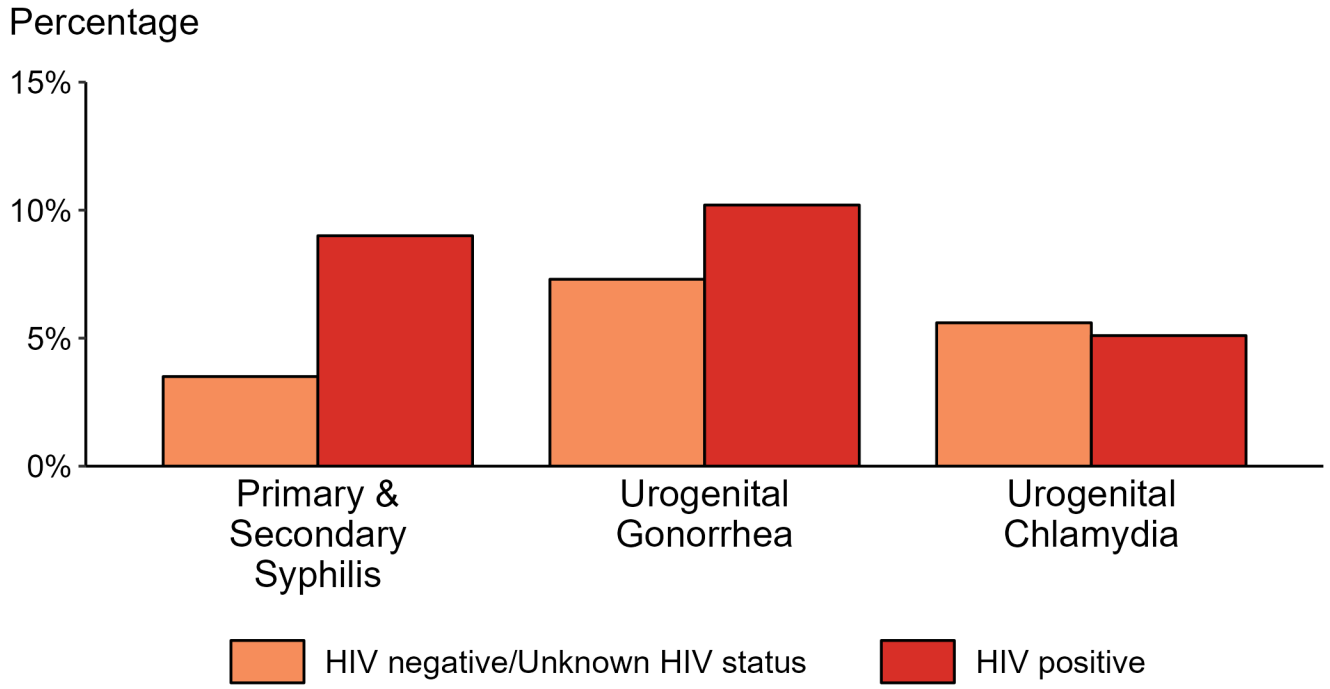
During 2018 to 2022, the proportion of P&S syphilis cases that reported injection drug use increased (5.1% to 7.0%), the proportion of P&S syphilis cases that reported methamphetamine use increased (9.9% to 11.8%), the proportion of P&S syphilis cases that reported crack use remained stable (1.5% in both years), the proportion of P&S syphilis cases that reported cocaine use remained stable (3.9% to 3.8%), and the proportion of P&S syphilis cases that reported heroin use remained stable (2.3% to 2.2%).

This report includes data from years that coincide with the COVID-19 pandemic, which introduced uncertainty and difficulty in interpreting STI surveillance data. See Impact of COVID-19 on STIs for more information.

This figure presents trends in the proportion of cases reporting selected behavior or behaviors See Syphilis Surveillance Supplemental Slides, 2018–2022 for more trends in surveillance data on selected behaviors reported among P&S syphilis cases in the US. Data points for all figures as well as the Syphilis Supplement Technical Notes about data sources, data collection and reporting practices, proportion with missing or unknown responses, and case definitions are available at [syphilis website].

Data for all figures are available at https://www.cdc.gov/std/statistics/2022/data.zip. The file “PS Syphilis - Cases Reporting Substance Use (US 2018-2022).xlsx” contains the data for the figure presented on this slide.

Proportion of MSM with Primary and Secondary Syphilis, Urogenital Gonorrhea, or Urogenital Chlamydia by HIV Status, STD Surveillance Network (SSuN), 2022



NOTE: Results are based on data obtained from patients attending a participating STD clinic in 10 jurisdictions (Baltimore City, California [excluding San Francisco], Columbus, Florida, Indiana, Multnomah County, New York City, Philadelphia, San Francisco, and Washington).

ACRONYMS: MSM = Gay, bisexual, and other men who have sex with men

Summary

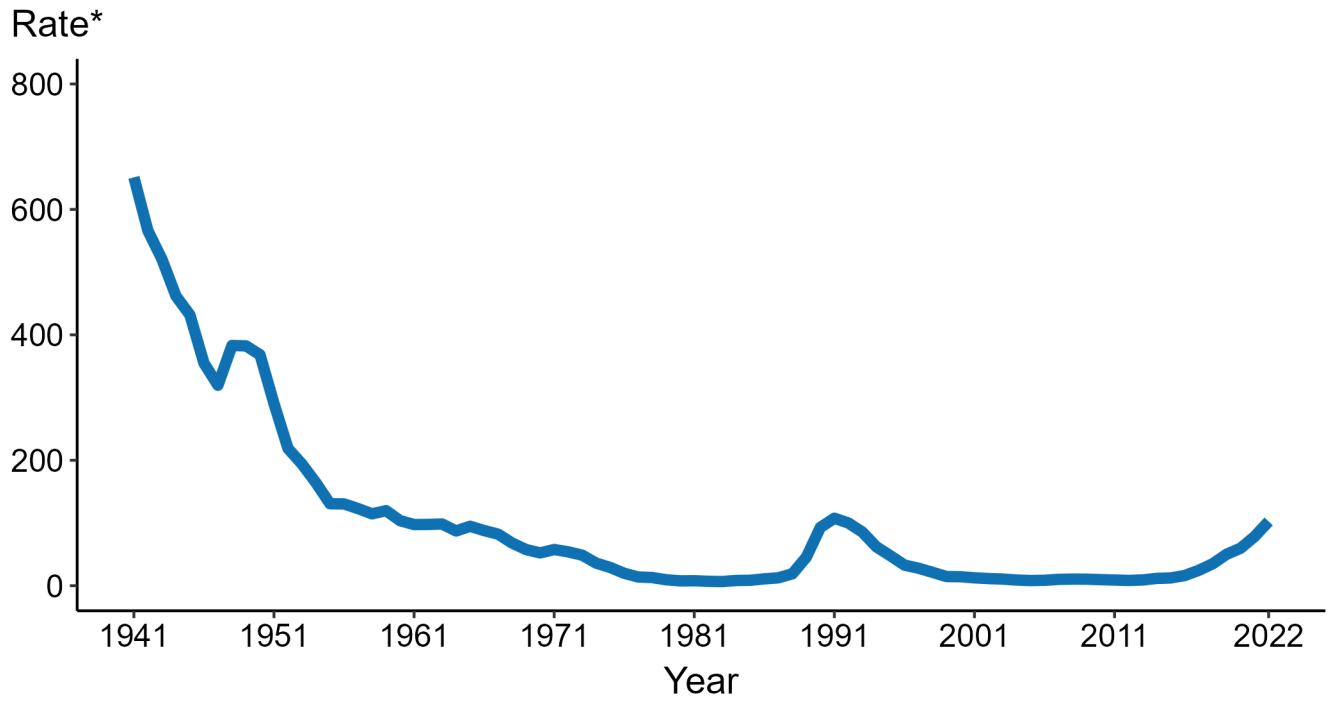
Among gay, bisexual, and other men who have sex with men (MSM) attending participating STD clinics in the STD Surveillance Network in 2022, the portion diagnosed with primary and secondary syphilis was higher for those that were HIV positive compared with those not known to be HIV positive (9.0% versus 3.5%). The pattern was similar for urogenital gonorrhea, with the proportion of testing positive higher among HIV-positive MSM compared with MSM not known to be HIV positive (10.2% versus 7.3%); however, the proportion testing positive for urogenital chlamydia was similar (5.1% among HIV-positive MSM and 5.6% among MSM not known to be HIV positive).

For this figure, HIV status is categorized using documented in the clinic records (based on self-report or most recent HIV test result) or matched information documented in the jurisdiction's HIV registry.

This report includes data from years that coincide with the COVID-19 pandemic, which introduced uncertainty and difficulty in interpreting STI surveillance data. See Impact of COVID-19 on STIs for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2022/technical-notes.htm) for information on SSuN methodology.

Congenital Syphilis — Rates of Reported Cases by Year of Birth, United States, 1941–2022



* Per 100,000 live births

Summary

Data collection for congenital syphilis began in 1941, and congenital syphilis was made a nationally notifiable condition in 1944. There was a significant change in the congenital syphilis case definition in the 1990s and rates before versus after the case definition change should be interpreted with caution.

In 2022, there were a total of 3,755 cases of congenital syphilis reported for a rate of 102.5 per 100,000 live births.

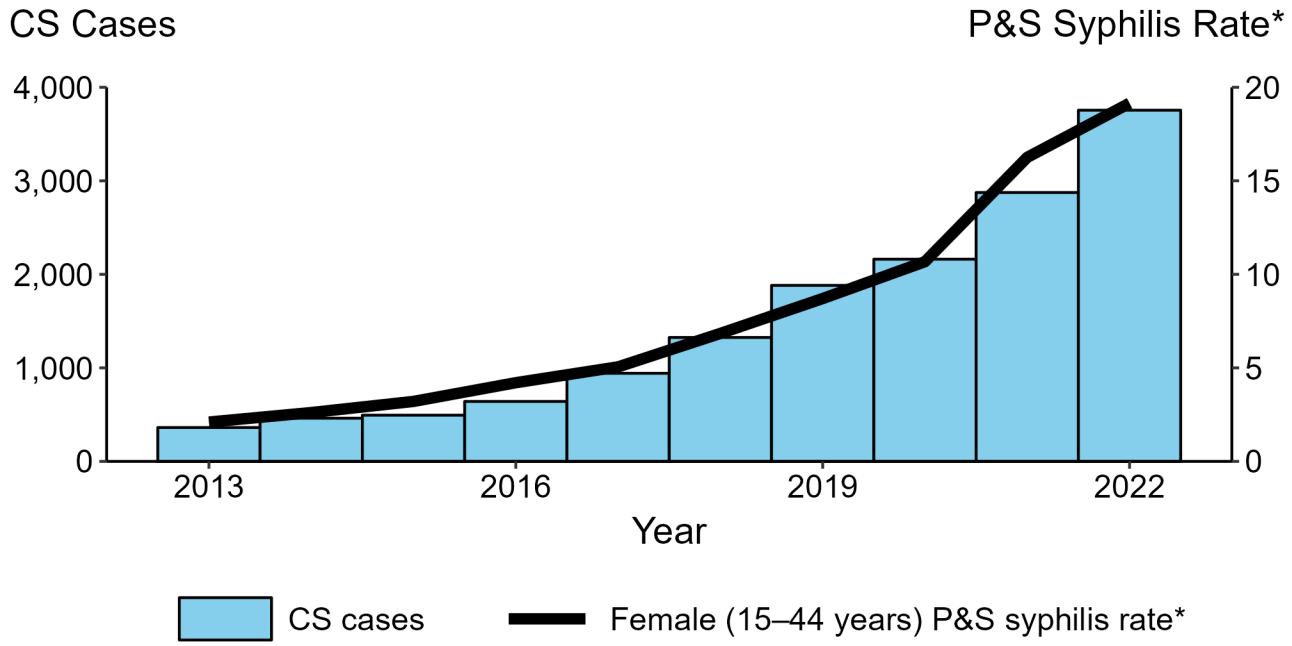
During 2021 to 2022, the rate of reported congenital syphilis increased 30.6% (from 78.5 to 102.5 per 100,000 live births).

This report includes data from years that coincide with the COVID-19 pandemic, which introduced uncertainty and difficulty in interpreting STI surveillance data. See Impact of COVID-19 on STIs for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2022/technical-notes.htm) for information on syphilis case reporting, including changes in case definitions.

Data for all figures are available at https://www.cdc.gov/std/statistics/2022/data.zip. The file “CS - Rates by Year of Birth (US 1941-2022).xlsx” contains the data for the figure presented on this slide.

Congenital Syphilis — Reported Cases by Year of Birth and Rates of Reported Cases of Primary and Secondary Syphilis Among Women Aged 15–44 Years, United States, 2013–2022



* Per 100,000

ACRONYMS: CS = Congenital syphilis; P&S Syphilis = Primary and secondary syphilis

Summary

In 2022, there were a total of 3,755 cases of congenital syphilis reported for a rate of 102.5 per 100,000 live births.

During 2021 to 2022, the number of cases of congenital syphilis increased 30.6% (2,875 to 3,755 cases), concurrent with a 17.2% increase (16.3 to 19.1 per 100,000) in the rate of primary and secondary syphilis among women aged 15 to 44 years.

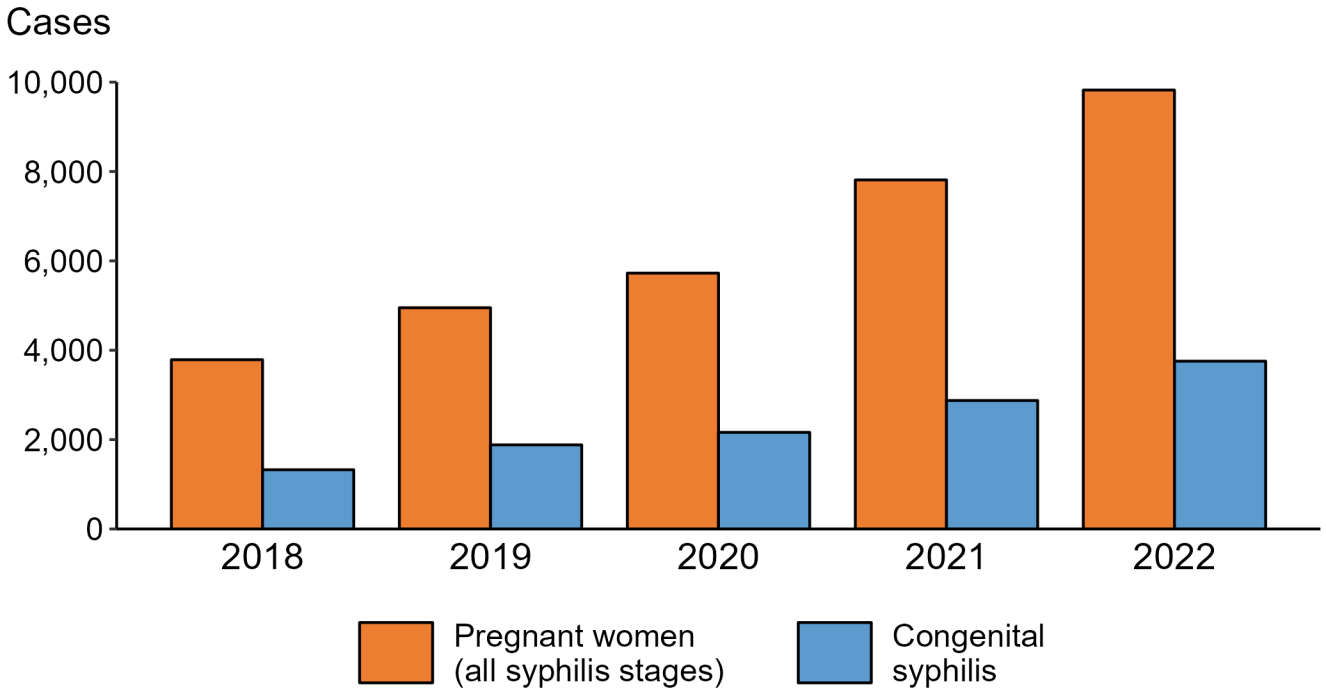
During 2013 to 2022, the number of cases of congenital syphilis increased 937.3% (362 to 3,755 cases), concurrent with a 809.5% increase (2.1 to 19.1 per 100,000) in the rate of primary and secondary syphilis among women aged 15 to 44 years.

This report includes data from years that coincide with the COVID-19 pandemic, which introduced uncertainty and difficulty in interpreting STI surveillance data. See Impact of COVID-19 on STIs for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2022/technical-notes.htm) for information on syphilis case reporting.

Data for all figures are available at https://www.cdc.gov/std/statistics/2022/data.zip. The file “CS - Cases by Year of Birth and PS Syphilis Rates Women 15-44 (US 2013-2022).xlsx” contains the data for the figure presented on this slide.

Syphilis— Reported Cases of Syphilis (All Stages) among Pregnant Women and Reported Cases of Congenital Syphilis by Year of Birth, United States, 2018–2022



Summary

In 2022, there were a total of 3,755 cases of congenital syphilis reported for a rate of 102.5 per 100,000 live births.

During 2021 to 2022, the number of women reported with syphilis (all stages) who were pregnant increased 25.7% (from 7,812 in 2021 to 9,823 in 2022). During the same time period, the number of reported cases of congenital syphilis increased 30.6% (from 2,875 in 2021 to 3,755 in 2022).

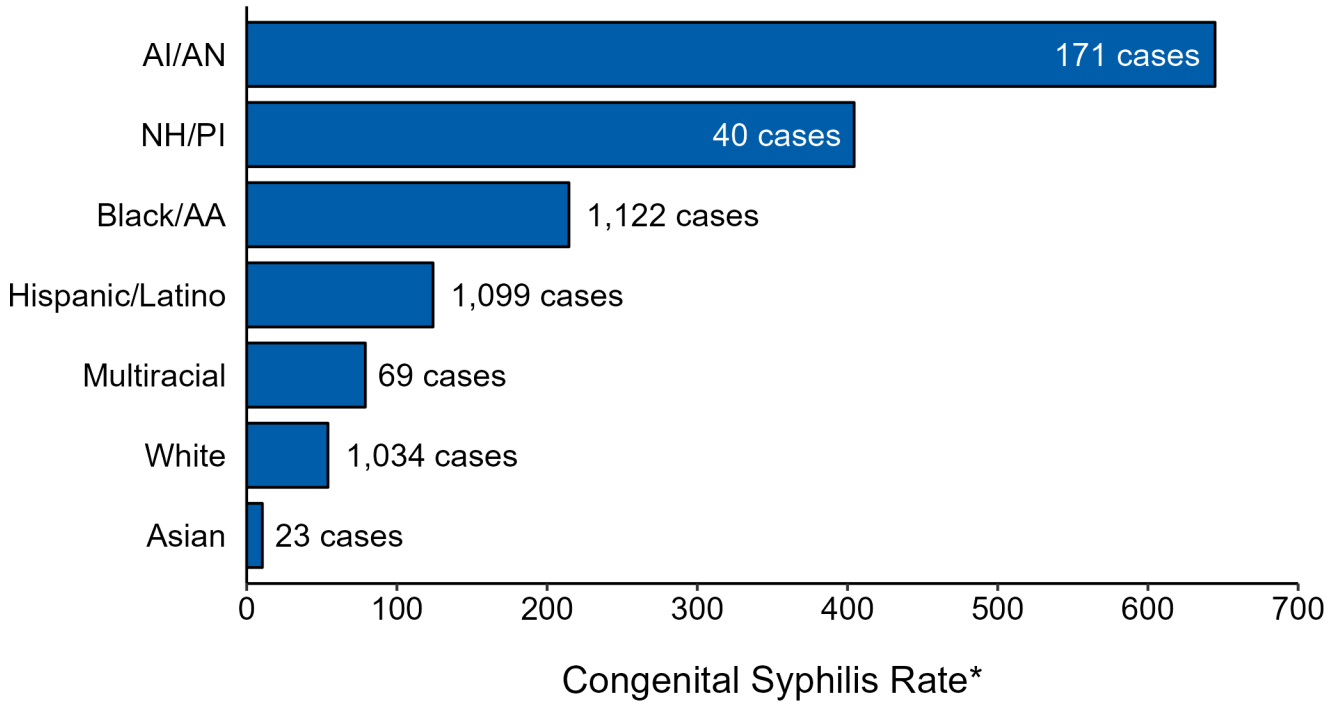
During 2018 to 2022, the number of women reported with syphilis (all stages) who were pregnant increased 159.3% (from 3,788 in 2018 to 9,823 in 2022). During the same time period, the number of reported cases of congenital syphilis increased 183.4% (from 1,325 in 2018 to 3,755 in 2022).

This report includes data from years that coincide with the COVID-19 pandemic, which introduced uncertainty and difficulty in interpreting STI surveillance data. See Impact of COVID-19 on STIs for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2022/technical-notes.htm) for information on syphilis case reporting.

Data for all figures are available at https://www.cdc.gov/std/statistics/2022/data.zip. The file “CS and Syphilis - Cases Pregnant Women and CS Cases by Year of Birth (US 2018-2022).xlsx” contains the data for the figure presented on this slide.

Congenital Syphilis — Case Counts and Rates of Reported Cases by Race/Hispanic Ethnicity of Mother, United States, 2022



* Per 100,000 live births

NOTE: In 2022, a total of 197 congenital syphilis cases (5.2%) had missing, unknown, or other race and were not reported to be of Hispanic ethnicity.

ACRONYMS: AI/AN = American Indian or Alaska Native; Black/AA = Black or African American; NH/PI = Native Hawaiian or other Pacific Islander

Summary

In 2022, there were a total of 3,755 cases of congenital syphilis reported for a rate of 102.5 per 100,000 live births.

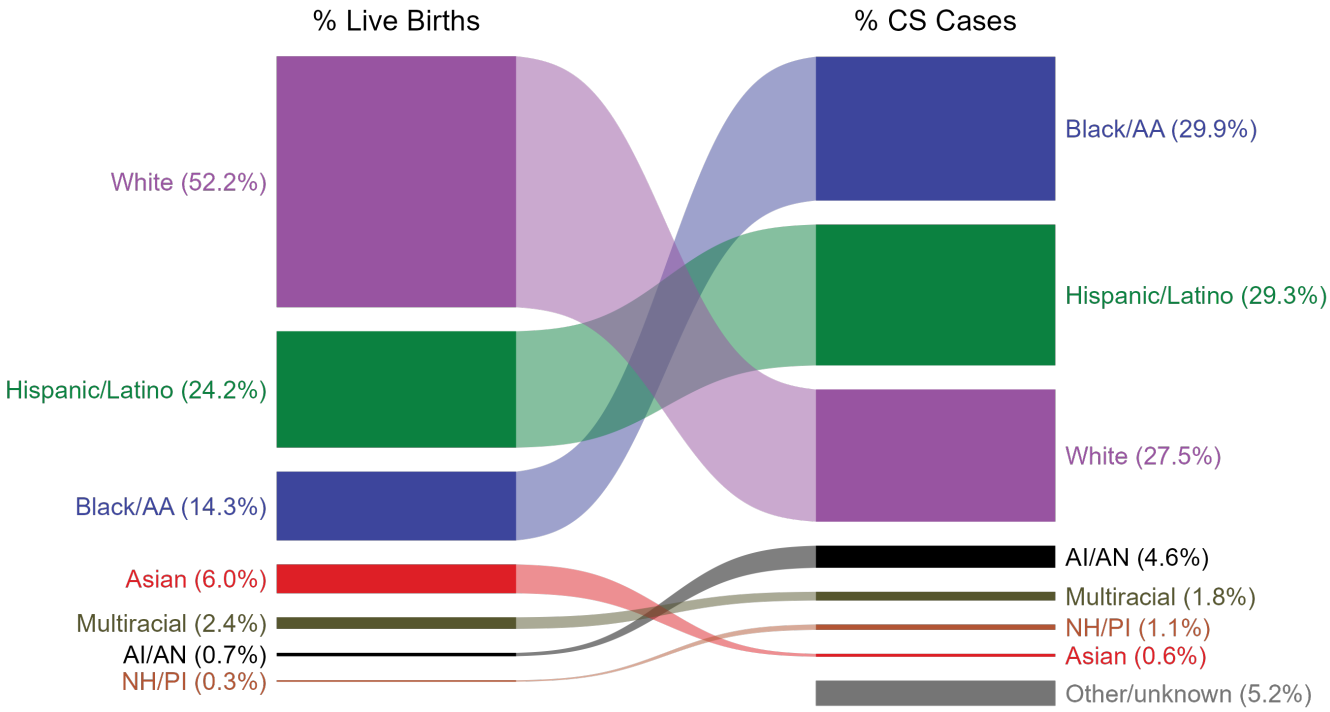
In 2022, rates of congenital syphilis were highest among mothers who were non-Hispanic American Indian or Alaska Native (644.7 per 100,000 live births), followed by mothers who were non-Hispanic Native Hawaiian or other Pacific Islander (404.4 per 100,000 live births) and mothers who were non-Hispanic Black or African American (214.5 per 100,000 live births). The greatest number of reported cases was among mothers who were non-Hispanic Black or African American (1,122 cases), followed by mothers who were Hispanic or Latino and of any race(s) (1,099 cases) and mothers who were non-Hispanic White (1,034 cases).

This report includes data from years that coincide with the COVID-19 pandemic, which introduced uncertainty and difficulty in interpreting STI surveillance data. See Impact of COVID-19 on STIs for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2022/technical-notes.htm) for information on syphilis case reporting, race/Hispanic ethnicity categorization, and reporting of race/Hispanic ethnicity for STI cases.

Data for all figures are available at https://www.cdc.gov/std/statistics/2022/data.zip. The file “CS - Counts and Rates by Race Hispanic Ethnicity of Mother (US 2022).xlsx” contains the data for the figure presented on this slide.

Congenital Syphilis — Total Live Births and Reported Cases by Race/Hispanic Ethnicity of Mother, United States, 2022



NOTE: In 2022, a total of 197 congenital syphilis cases (5.2%) had missing, unknown, or other race and were not reported to be of Hispanic ethnicity. These cases are included in the "other/unknown" category.

ACRONYMS: AI/AN = American Indian or Alaska Native; Black/AA = Black or African American; NH/PI = Native Hawaiian or other Pacific Islander

Summary

In 2022, there were a total of 3,755 cases of congenital syphilis reported for a rate of 102.5 per 100,000 live births.

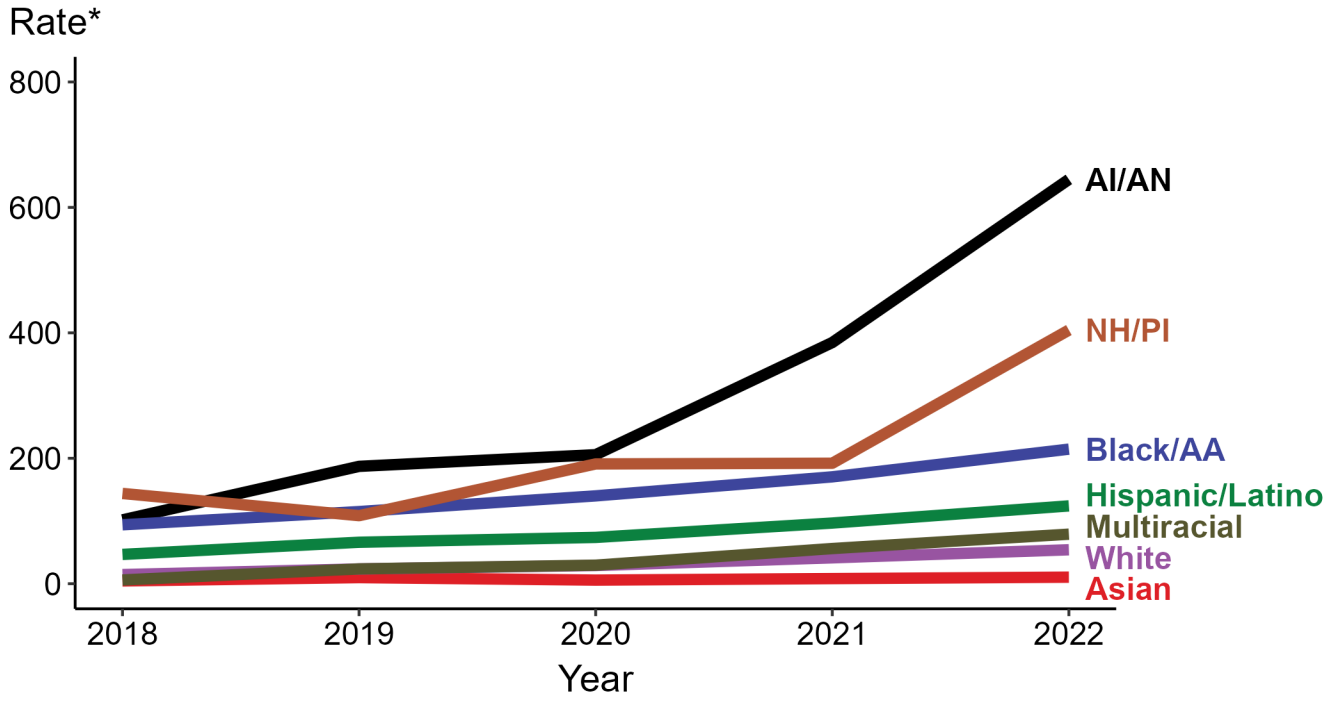
The percentages of congenital syphilis cases by race/Hispanic ethnicity of mother were disproportionate to the percentages among live births in the United States in 2022. The greatest absolute disparity was observed among non-Hispanic Black or African American mothers, who represented 29.9% of reported congenital syphilis cases (n = 1,122; 29.9% of congenital syphilis cases with reported race or Hispanic ethnicity of mother) despite being 14.3% of the live births, or 15.6% more cases than would be expected based on their proportion of live births. The greatest relative disparity was among non-Hispanic American Indian or Alaska Native mothers, who represented 4.6% of reported congenital syphilis cases (n = 171; 4.6% of congenital syphilis cases with reported race or Hispanic ethnicity of mother) despite being 0.7% of live births, or a burden 6.6 times what would be expected based on their proportion of live births. Additionally, Hispanic or Latino mothers of any race(s) and non-Hispanic Native Hawaiian or other Pacific Islander mothers were also overrepresented among congenital syphilis cases relative to their proportion of live births.

This report includes data from years that coincide with the COVID-19 pandemic, which introduced uncertainty and difficulty in interpreting STI surveillance data. See Impact of COVID-19 on STIs for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2022/technical-notes.htm) for information on syphilis case reporting, race/Hispanic ethnicity categorization, and reporting of race/Hispanic ethnicity for STI cases.

Data for all figures are available at https://www.cdc.gov/std/statistics/2022/data.zip. The file “CS - Live Births and Cases by Race Hispanic Ethnicity of Mother (US 2022).xlsx” contains the data for the figure presented on this slide.

Congenital Syphilis — Rates of Reported Cases by Year of Birth, Race/Hispanic Ethnicity of Mother, United States, 2018–2022



* Per 100,000 live births

ACRONYMS: AI/AN = American Indian or Alaska Native; Black/AA = Black or African American; NH/PI = Native Hawaiian or other Pacific Islander

Summary

In 2022, there were a total of 3,755 cases of congenital syphilis reported for a rate of 102.5 per 100,000 live births.

In 2022, the highest rate of reported cases of congenital syphilis per 100,000 live births was among mothers who were non-Hispanic American Indian or Alaska Native (644.7), followed by mothers who were non-Hispanic Native Hawaiian or other Pacific Islander (404.4).

During 2021 to 2022, the greatest increase in rate of reported cases of congenital syphilis per 100,000 live births was among mothers who were non-Hispanic Native Hawaiian or other Pacific Islander (192.1 to 404.4; 110.5% increase). Mothers who were non-Hispanic and of multiple races had the greatest five-year increase in rate of congenital syphilis (5.9 to 79.0; 1,239.0% increase from 2018).

There were no decreases in the rate of reported cases of congenital syphilis per 100,000 live births among any race or Hispanic ethnicity group during 2021 to 2022. There were also no decreases in the rate of congenital syphilis among any race or Hispanic ethnicity group during 2018 to 2022.

This report includes data from years that coincide with the COVID-19 pandemic, which introduced uncertainty and difficulty in interpreting STI surveillance data. See Impact of COVID-19 on STIs for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2022/technical-notes.htm) for information on syphilis case reporting, race/Hispanic ethnicity categorization, and reporting of race/Hispanic ethnicity for STI cases.

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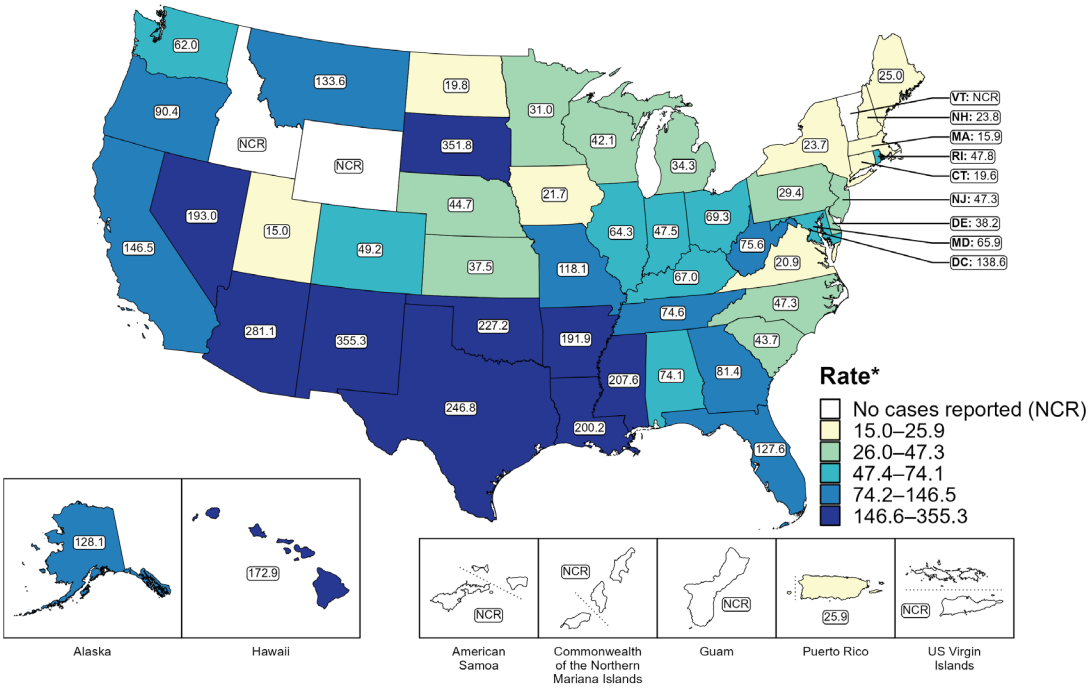
Congenital Syphilis — Rates of Reported Cases by Jurisdiction, United States and Territories, 2022



* Per 100,000 live births

Summary

In 2022, there were a total of 3,755 cases of congenital syphilis reported among states and the District of Columbia (DC) for a rate of 102.5 per 100,000 live births. Rates of reported congenital syphilis among states reporting any cases ranged from 15.0 cases per 100,000 live births in Utah to 355.3 cases per 100,000 live births in New Mexico. No cases of congenital syphilis were reported in Idaho, Vermont, or Wyoming. The rate of reported congenital syphilis in DC was 138.6 per 100,000 live births.

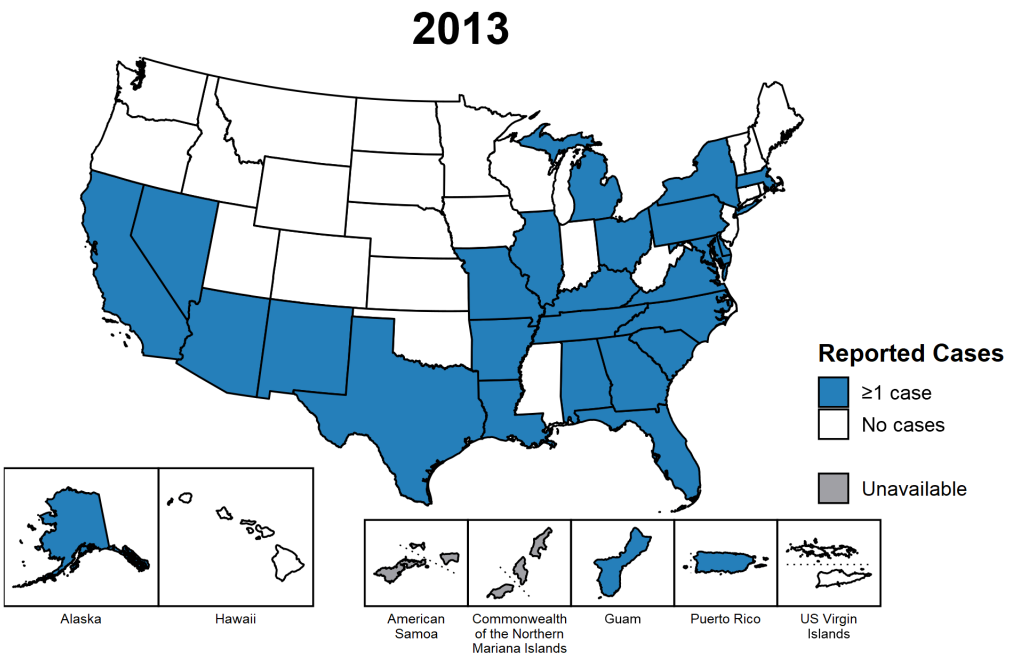
Including data from US territories, there were a total of 3,761 cases of congenital syphilis reported for a rate of 102.0 per 100,000 live births in 2022. Among US territories, only Puerto Rico reported any congenital syphilis cases, with a rate of 25.9 reported cases per 100,000 live births. No cases of congenital syphilis were reported in American Samoa, Guam, the Commonwealth of the Northern Mariana Islands, or the US Virgin Islands.

This report includes data from years that coincide with the COVID-19 pandemic, which introduced uncertainty and difficulty in interpreting STI surveillance data. See Impact of COVID-19 on STIs for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2022/technical-notes.htm) for information on syphilis case reporting and on interpreting reported rates in US territories.

Data for all figures are available at https://www.cdc.gov/std/statistics/2022/data.zip. The file “CS - Rates by Jurisdiction (US and Terr 2022).xlsx” contains the data for the figure presented on this slide.

Congenital Syphilis — Reported Cases by Year of Birth and Jurisdiction, United States and Territories, 2013–2022



Summary

This slide contains an animated figure that will play when the slide is in presentation mode. A static version of the figure that displays maps from the first and last years of the range is available as a separate slide.

In 2022, there were a total of 3,755 cases of congenital syphilis reported among states and the District of Columbia (DC) for a rate of 102.5 per 100,000 live births. Including data from US territories, there were a total of 3,761 cases of congenital syphilis reported for a rate of 102.0 per 100,000 live births.

In 2013, 25 states, DC, and two US territories (51.9% of areas with available data) reported one or more cases of congenital syphilis. This increased to 47 states, DC, and one US territory (87.5% of areas with available data) in 2022.

American Samoa and the Commonwealth of the Northern Mariana Islands began reporting data on congenital syphilis cases to CDC in 2018; data are not available for those areas prior to that year. In addition, data on reported congenital syphilis cases in 2018 are not available for the US Virgin Islands. Due to a network security incident in December 2021, the Maryland Department of Health could not finalize their 2021 STI case notification data. Data for 2021 from Maryland have been suppressed for this figure; however, they are included in national and regional case counts and rates displayed in other figures.

This report includes data from years that coincide with the COVID-19 pandemic, which introduced uncertainty and difficulty in interpreting STI surveillance data. See Impact of COVID-19 on STIs for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2022/technical-notes.htm) for information on syphilis case reporting and on interpreting reported rates in US territories.

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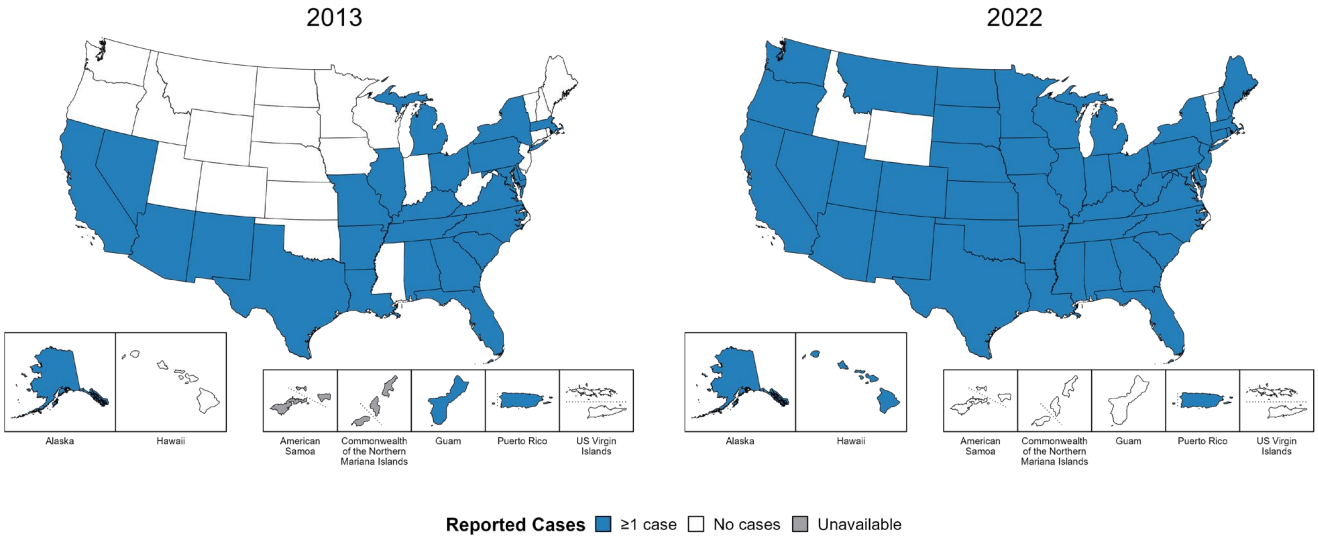
Congenital Syphilis — Reported Cases by Year of Birth and Jurisdiction, United States and Territories, 2013 and 2022



Summary

In 2022, there were a total of 3,755 cases of congenital syphilis reported among states and the District of Columbia (DC) for a rate of 102.5 per 100,000 live births. Including data from US territories, there were a total of 3,761 cases of congenital syphilis reported for a rate of 102.0 per 100,000 live births.

In 2013, 25 states, DC, and two US territories (51.9% of areas with available data) reported one or more cases of congenital syphilis. This increased to 47 states, DC, and one US territory (87.5% of areas with available data) in 2022.

American Samoa and the Commonwealth of the Northern Mariana Islands began reporting data on congenital syphilis cases to CDC in 2018; data are not available for those areas prior to that year.

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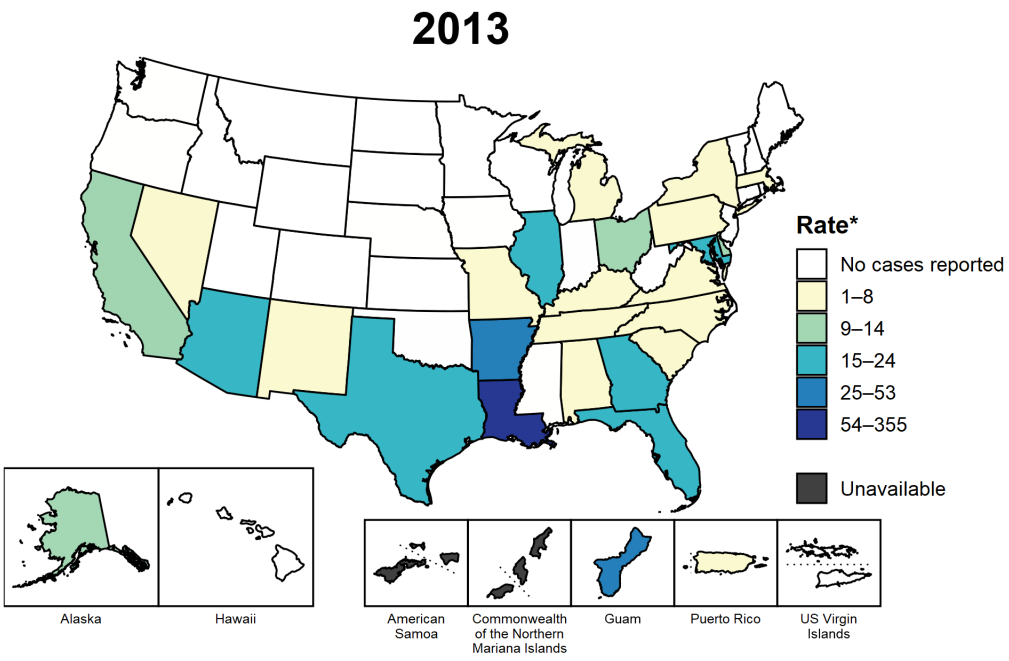
See Technical Notes (https://www.cdc.gov/std/statistics/2022/technical-notes.htm) for information on syphilis case reporting and on interpreting reported rates in US territories.

Data for all figures are available at https://www.cdc.gov/std/statistics/2022/data.zip. The file “CS - Cases by Year of Birth and Jurisdiction (US and Terr, 2013 and 2022).xlsx” contains the data for the figure presented on this slide.

Congenital Syphilis — Rates of Reported Cases by Year of Birth and Jurisdiction, United States and Territories, 2013–2022



* Per 100,000 live births

Summary

This slide contains an animated figure that will play when the slide is in presentation mode. A static version of the figure that displays maps from the first and last years of the range is available as a separate slide.

In 2022, there were a total of 3,755 cases of congenital syphilis reported among states and the District of Columbia (DC) for a rate of 102.5 per 100,000 live births. Including data from US territories, there were a total of 3,761 cases of congenital syphilis reported for a rate of 102.0 per 100,000 live births.

In 2013, two states and one US territory (5.6% of areas with available data) had a rate of reported congenital syphilis greater than or equal to 25 cases per 100,000 live births. This increased to 39 states, DC, and one US territory (73.2% of areas with available data) in 2022. During 2021 to 2022, rates of reported congenital syphilis among live births increased in 39 states and DC.

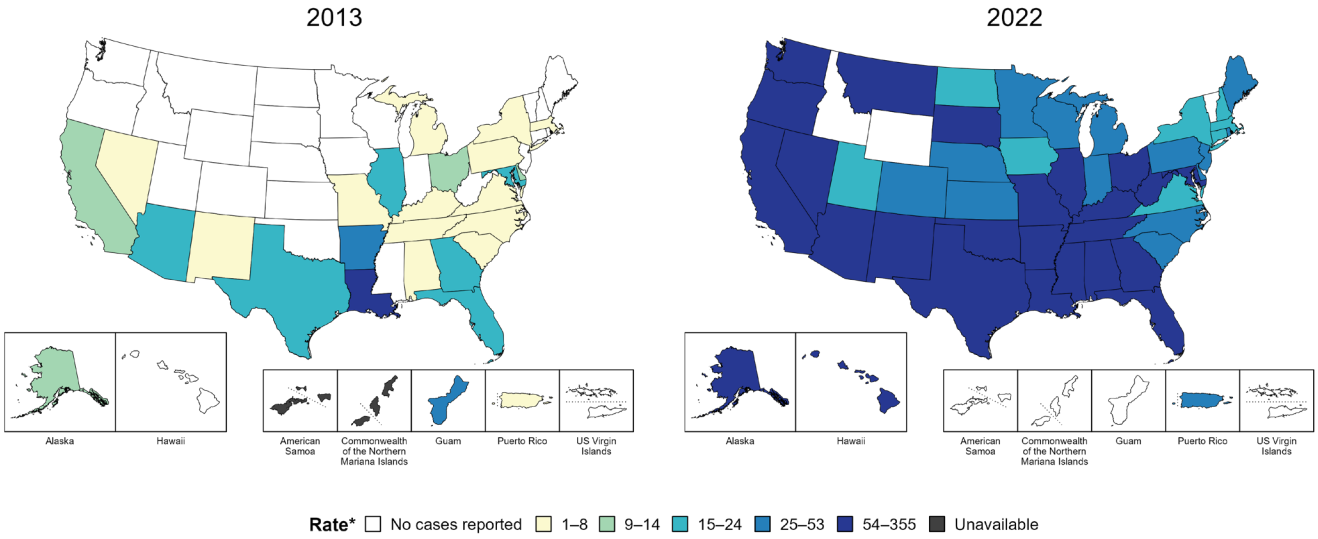
American Samoa and the Commonwealth of the Northern Mariana Islands began reporting data on congenital syphilis cases to CDC in 2018; data are not available for those areas prior to that year. In addition, data on reported congenital syphilis cases in 2018 are not available for the US Virgin Islands. Due to a network security incident in December 2021, the Maryland Department of Health could not finalize their 2021 STI case notification data. Data for 2021 from Maryland have been suppressed for this figure; however, they are included in national and regional case counts and rates displayed in other figures.

This report includes data from years that coincide with the COVID-19 pandemic, which introduced uncertainty and difficulty in interpreting STI surveillance data. See Impact of COVID-19 on STIs for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2022/technical-notes.htm) for information on syphilis case reporting and on interpreting reported rates in US territories.

Data for all figures are available at https://www.cdc.gov/std/statistics/2022/data.zip. The file “CS - Rates by Year of Birth and Jurisdiction (US and Terr, 2013-2022).xlsx” contains the data for the figure presented on this slide.

Congenital Syphilis — Rates of Reported Cases by Year of Birth and Jurisdiction, United States and Territories, 2013 and 2022



* Per 100,000 live births

Summary

In 2022, there were a total of 3,755 cases of congenital syphilis reported among states and the District of Columbia (DC) for a rate of 102.5 per 100,000 live births. Including data from US territories, there were a total of 3,761 cases of congenital syphilis reported for a rate of 102.0 per 100,000 live births.

In 2013, two states and one US territory (5.6% of areas with available data) had a rate of reported congenital syphilis greater than or equal to 25 cases per 100,000 live births. This increased to 39 states, DC, and one US territory (73.2% of areas with available data) in 2022.

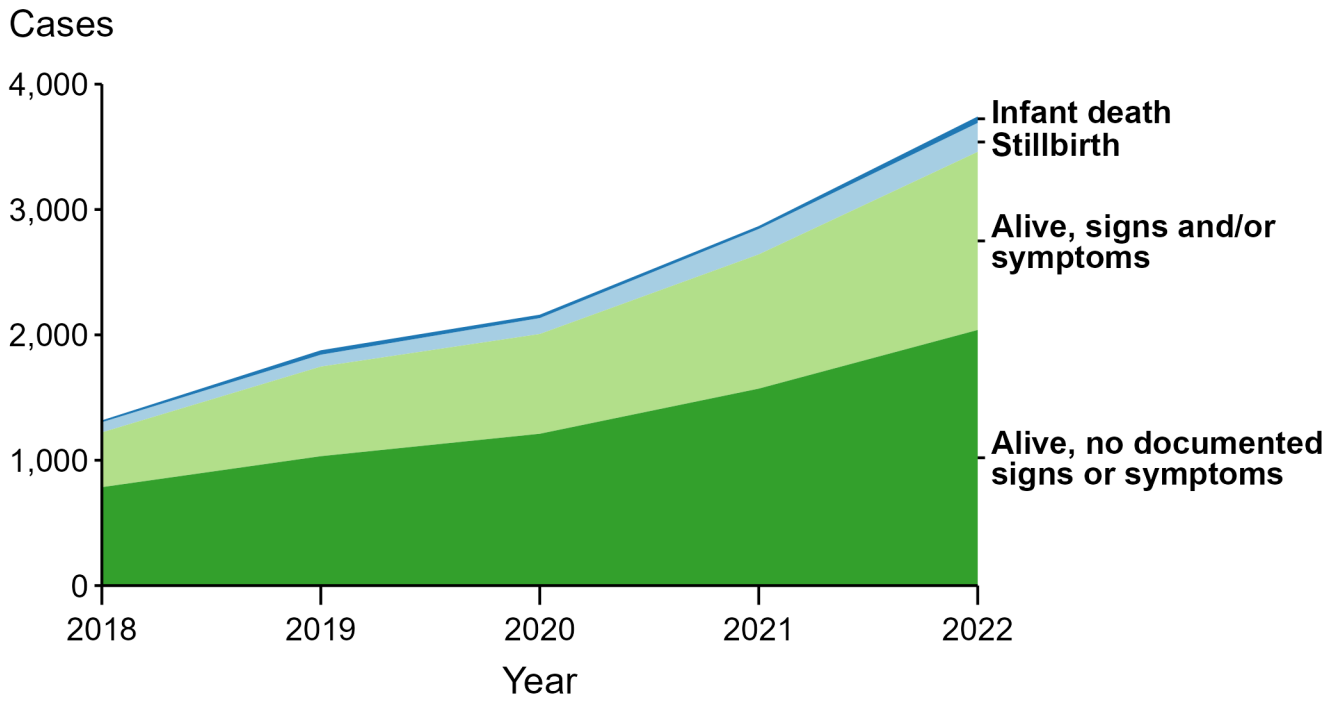
American Samoa and the Commonwealth of the Northern Mariana Islands began reporting data on congenital syphilis cases to CDC in 2018; data are not available for those areas prior to that year.

This report includes data from years that coincide with the COVID-19 pandemic, which introduced uncertainty and difficulty in interpreting STI surveillance data. See Impact of COVID-19 on STIs for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2022/technical-notes.htm) for information on syphilis case reporting and on interpreting reported rates in US territories.

Data for all figures are available at https://www.cdc.gov/std/statistics/2022/data.zip. The file “CS - Rates by Year of Birth and Jurisdiction (US and Terr 2013 and 2022).xlsx” contains the data for the figure presented on this slide.

Congenital Syphilis — Reported Cases by Vital Status and Clinical Signs and Symptoms* of Infection, United States, 2018–2022



* Infants with signs and/or symptoms of congenital syphilis have documentation of at least one of the following: long bone changes consistent with congenital syphilis, snuffles, condylomata lata, syphilitic skin rash, pseudoparalysis, hepatosplenomegaly, edema, jaundice due to syphilitic hepatitis, reactive CSF-VDRL, elevated CSF WBC or protein values, or evidence of direct detection of *T. pallidum*.

NOTE: Of the 11,999 congenital syphilis cases reported during 2018 to 2022, 33 (0.3%) did not have sufficient information to be categorized.

Summary

In 2022, there were a total of 3,755 cases of congenital syphilis reported for a rate of 102.5 per 100,000 live births.

In 2022, 51 congenital syphilis cases (1.4%) were infant deaths, 231 cases (6.2%) were stillbirths, 1,421 cases (37.8%) were born alive with congenital syphilis-related signs or symptoms, 2,039 cases (54.3%) were born alive with no documented congenital syphilis-related signs or symptoms, and 13 cases (0.3%) were missing information on vital status.

In 2022, there were 282 congenital syphilis-related deaths (231 stillbirths and 51 infant deaths), an increase of 24.8% from 2021 (226 in 2021 to 282 in 2022) and an increase of 193.8% from 2018 (96 in 2018 to 282 in 2022).

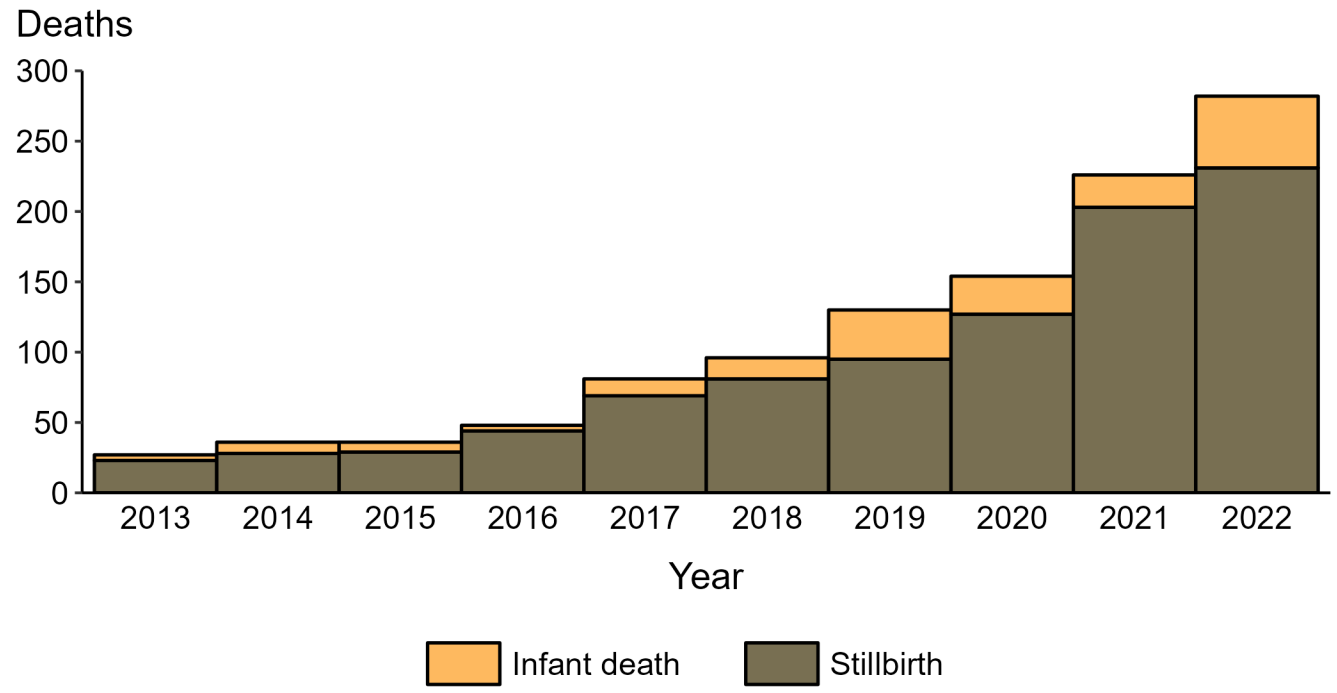
The number of infants reported with congenital syphilis who were born alive with congenital syphilis-related signs and symptoms increased 32.7% from 2021 to 2022 (1,071 in 2021 to 1,421 in 2022) and increased 225.2% from 2018 to 2022 (437 in 2018 to 1,421 in 2022).

This report includes data from years that coincide with the COVID-19 pandemic, which introduced uncertainty and difficulty in interpreting STI surveillance data. See Impact of COVID-19 on STIs for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2022/technical-notes.htm) for information on syphilis case reporting.

Data for all figures are available at https://www.cdc.gov/std/statistics/2022/data.zip. The file “CS - Cases by Vital Status and Clinical Signs and Symptoms (US 2018-2022).xlsx” contains the data for the figure presented on this slide.

Congenital Syphilis — Reported Stillbirths and Infant Deaths, United States, 2013–2022



Summary

In 2022, there were a total of 3,755 cases of congenital syphilis reported for a rate of 102.5 per 100,000 live births.

In 2022, 231 congenital syphilis-related stillbirths were reported, an increase of 13.8% since 2021 and an increase of 904.3% since 2013.

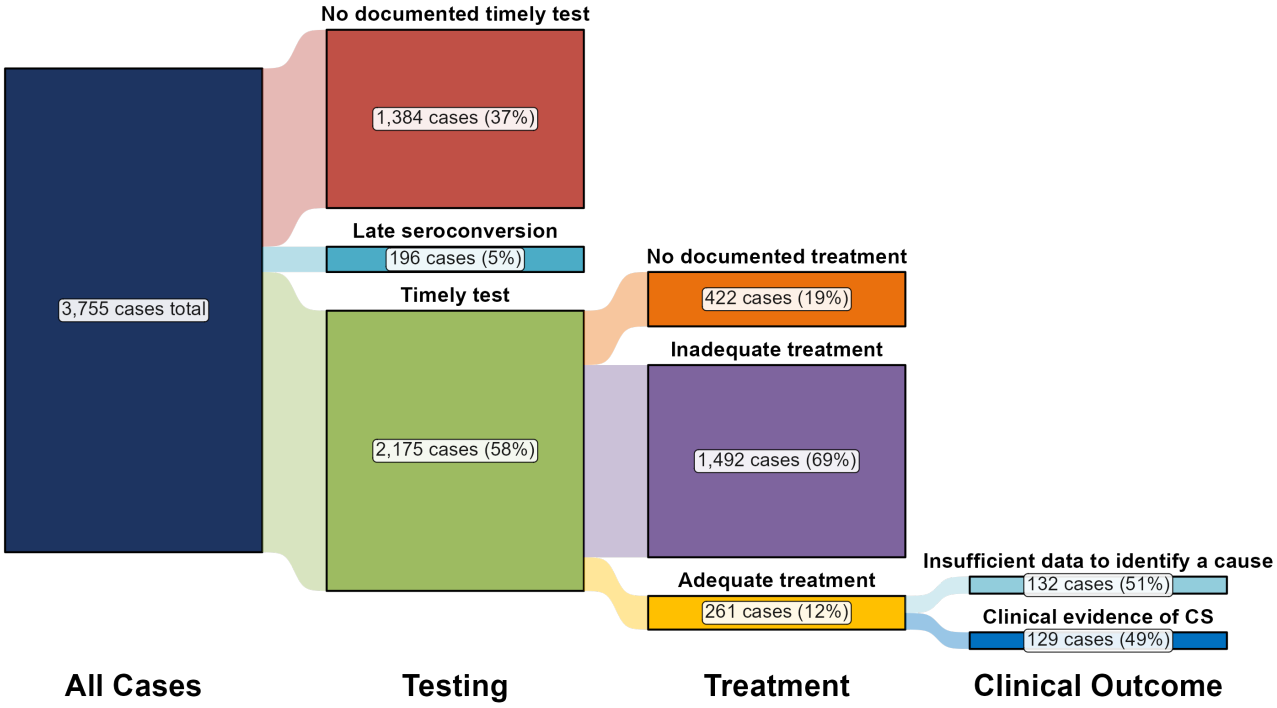
In 2022, 51 congenital syphilis-related infant deaths were reported, an increase of 121.7% since 2021 and an increase of 1,175.0% since 2013.

This report includes data from years that coincide with the COVID-19 pandemic, which introduced uncertainty and difficulty in interpreting STI surveillance data. See Impact of COVID-19 on STIs for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2022/technical-notes.htm) for information on syphilis case reporting.

Data for all figures are available at https://www.cdc.gov/std/statistics/2022/data.zip. The file “CS - Reported Stillbirths and Infant Deaths (US 2013-2022).xlsx” contains the data for the figure presented on this slide.

Congenital Syphilis — Distribution of Receipt of Testing and Treatment by Pregnant Persons with a Congenital Syphilis Outcome, United States, 2022



Summary

In 2022, there were a total of 3,755 cases of congenital syphilis reported for a rate of 102.5 per 100,000 live births.

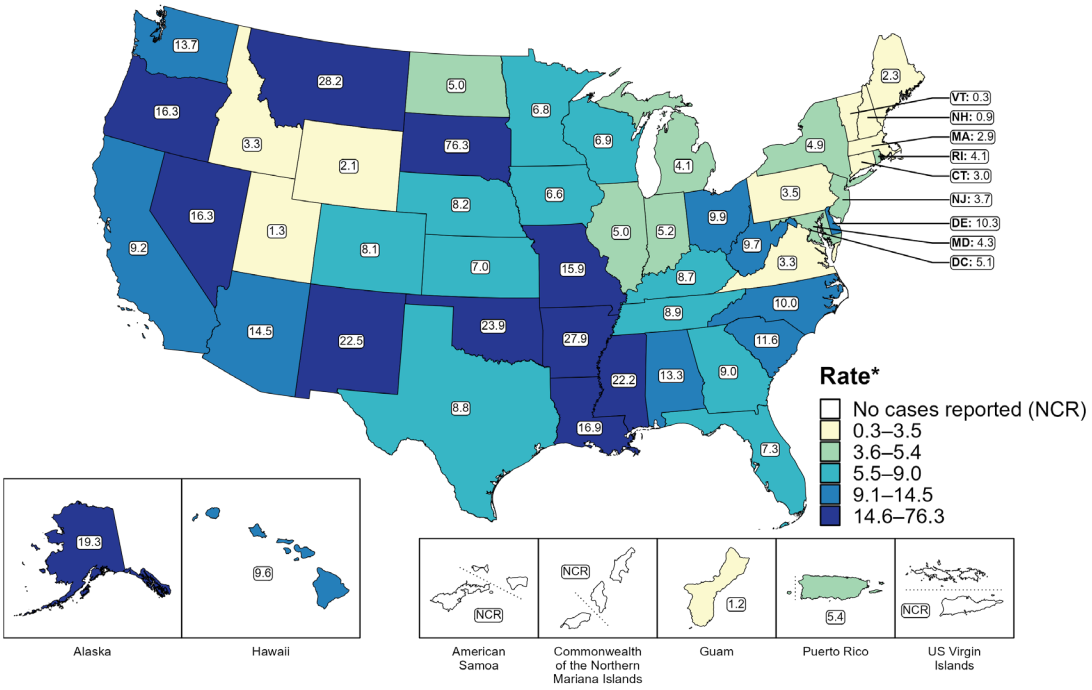
In 2022, the most common missed prevention opportunity among birthing parents of infants with congenital syphilis was inadequate treatment (n = 1,492; 39.7%), followed by no documented timely test (n = 1,319; 35.1%).

This report includes data from years that coincide with the COVID-19 pandemic, which introduced uncertainty and difficulty in interpreting STI surveillance data. See Impact of COVID-19 on STIs for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2022/technical-notes.htm) for information on syphilis case reporting and methodology for missed prevention opportunity categorization.

Data for all figures are available at https://www.cdc.gov/std/statistics/2022/data.zip. The file “CS - Receipt of Testing and Treatment by Pregnant Person with CS Outcome (US 2022).xlsx” contains the data for the figure presented on this slide.

Primary and Secondary Syphilis — Rates of Reported Cases Among Women by State, United States and Territories, 2022



* Per 100,000

Summary

In 2022, rates of reported primary and secondary (P&S) syphilis among women ranged by state from 0.3 cases per 100,000 women in Vermont to 76.3 cases per 100,000 women in South Dakota. The rate of reported P&S syphilis in the District of Columbia was 5.1 per 100,000 women.

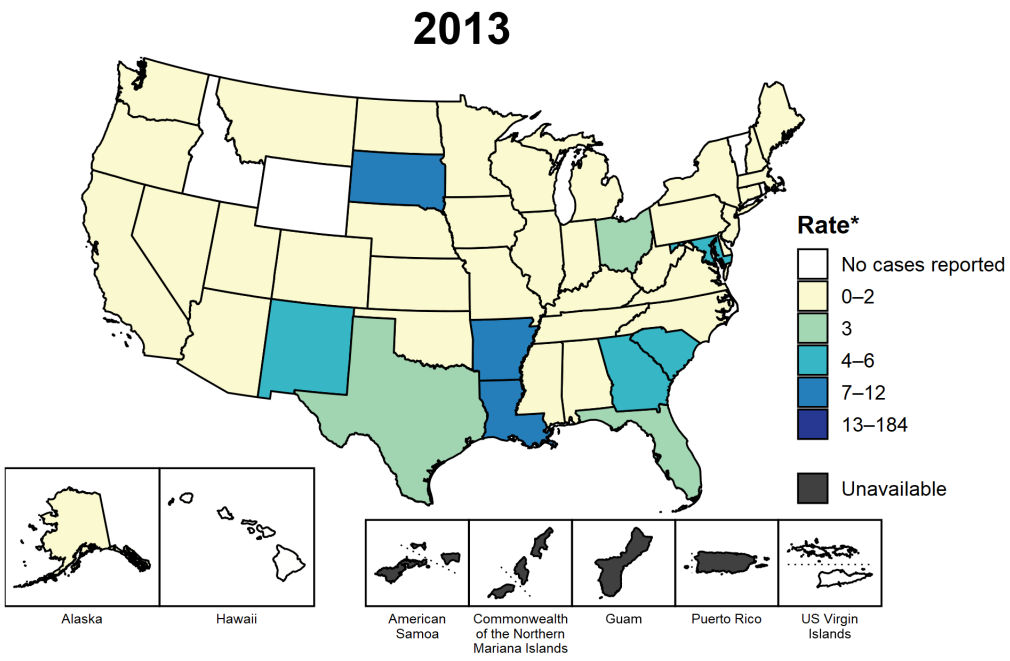
Among US territories reporting any cases, rates of reported P&S syphilis ranged from 1.2 cases per 100,000 women in Guam to 5.4 cases per 100,000 women in Puerto Rico. No cases of P&S syphilis were reported in American Samoa, the Commonwealth of the Northern Mariana Islands, or the US Virgin Islands.

This report includes data from years that coincide with the COVID-19 pandemic, which introduced uncertainty and difficulty in interpreting STI surveillance data. See Impact of COVID-19 on STIs for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2022/technical-notes.htm) for information on syphilis case reporting and on interpreting reported rates in US territories. Table A1 (https://www.cdc.gov/std/statistics/2022/tables/a1.htm) provides information on unknown, missing, or invalid values of select variables.

Data for all figures are available at https://www.cdc.gov/std/statistics/2022/data.zip. The file “PS Syphilis - Rates Women by Jurisdiction (US and Terr 2022).xlsx” contains the data for the figure presented on this slide.

Primary and Secondary Syphilis — Rates of Reported Cases Among Women Aged 15–44 Years by Jurisdiction, United States and Territories, 2013–2022



* Per 100,000

Summary

This slide contains an animated figure that will play when the slide is in presentation mode. A static version of the figure that displays maps from the first and last years of the range is available as a separate slide.

In 2013, three states and the District of Columbia (DC; 7.7% of areas with available data) had a rate of reported primary and secondary syphilis greater than or equal to 7 cases per 100,000 women aged 15 to 44 years. This increased to 43 states, DC, and one US territory (80.4% of areas with available data) in 2022. During 2021 to 2022, rates of reported primary and secondary syphilis among women aged 15 to 44 years increased in 35 states and two territories.

American Samoa and the Commonwealth of the Northern Mariana Islands began reporting data on primary and secondary syphilis cases to CDC in 2018; data are not available for those areas prior to that year. In addition, data on reported primary and secondary syphilis cases in 2018 are not available for the US Virgin Islands. Furthermore, population estimates by age and sex were not available for all territories for all years. Due to a network security incident in December 2021, the Maryland Department of Health could not finalize their 2021 STI case notification data. Data for 2021 from Maryland have been suppressed for this figure; however, they are included in national and regional case counts and rates displayed in other figures.

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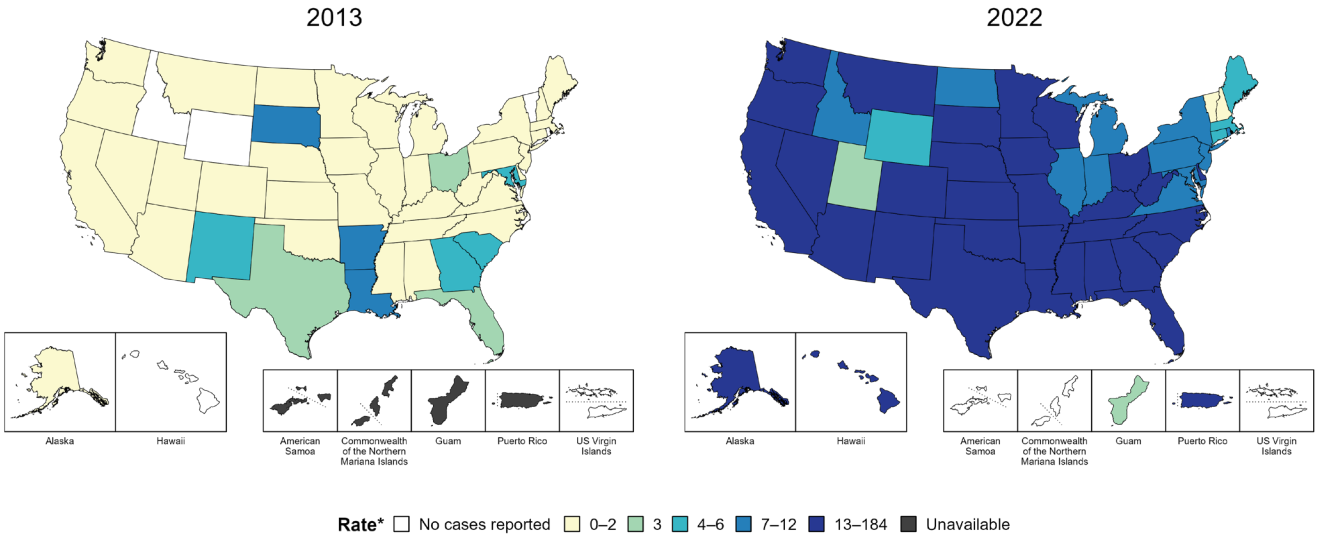
Primary and Secondary Syphilis — Rates of Reported Cases Among Women Aged 15–44 Years by Jurisdiction, United States and Territories, 2013 and 2022



* Per 100,000

Summary

In 2013, three states and the District of Columbia (DC; 7.7% of areas with available data) had a rate of reported primary and secondary syphilis greater than or equal to 7 cases per 100,000 women aged 15 to 44 years. This increased to 43 states, DC, and one US territory (80.4% of areas with available data) in 2022.

American Samoa and the Commonwealth of the Northern Mariana Islands began reporting data on primary and secondary syphilis cases to CDC in 2018; data are not available for those areas prior to that year. Additionally, population estimates by age and sex were not available for all territories for both years.

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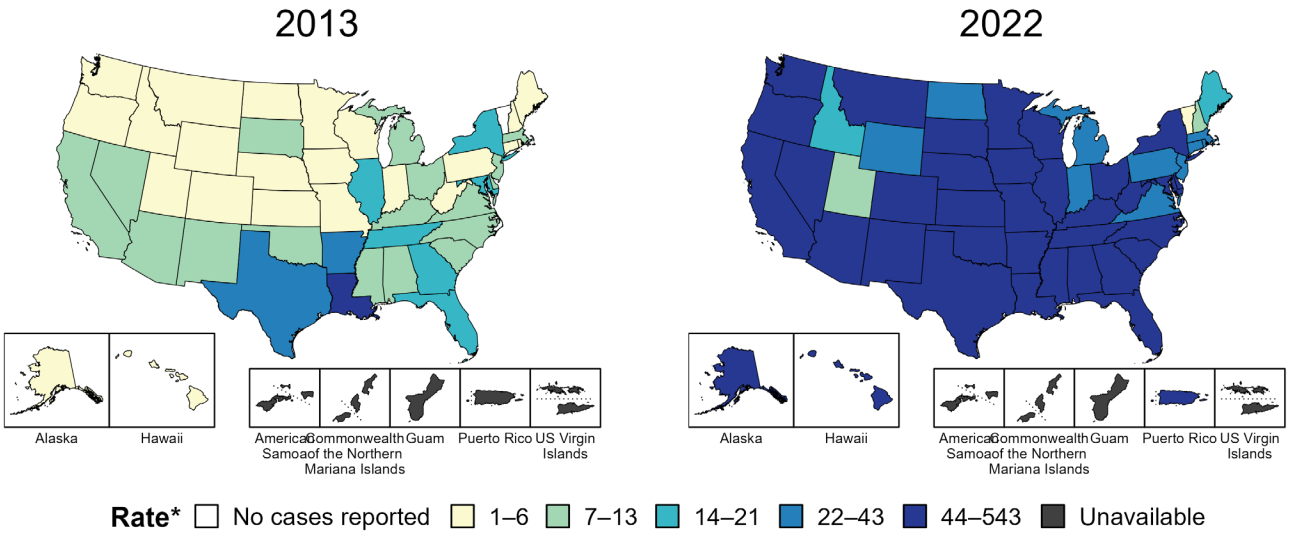
Syphilis (All Stages) — Rates of Reported Cases Among Women Aged 15–44 Years by Jurisdiction, United States and Territories, 2013 and 2022



* Per 100,000

Summary

In 2013, three states and the District of Columbia (DC; 7.8% of areas with available data) had a rate of reported syphilis (all stages) greater than or equal to 22 cases per 100,000 women aged 15 to 44 years. This increased to 45 states, DC, and one US territory (90.4% of areas with available data) in 2022.

Data on reported cases of syphilis other than primary and secondary syphilis are not available by age and sex for American Samoa, the Commonwealth of the Northern Mariana Islands, Guam, and the US Virgin Islands. Additionally, population estimates by age and sex were not available for all territories for both years.

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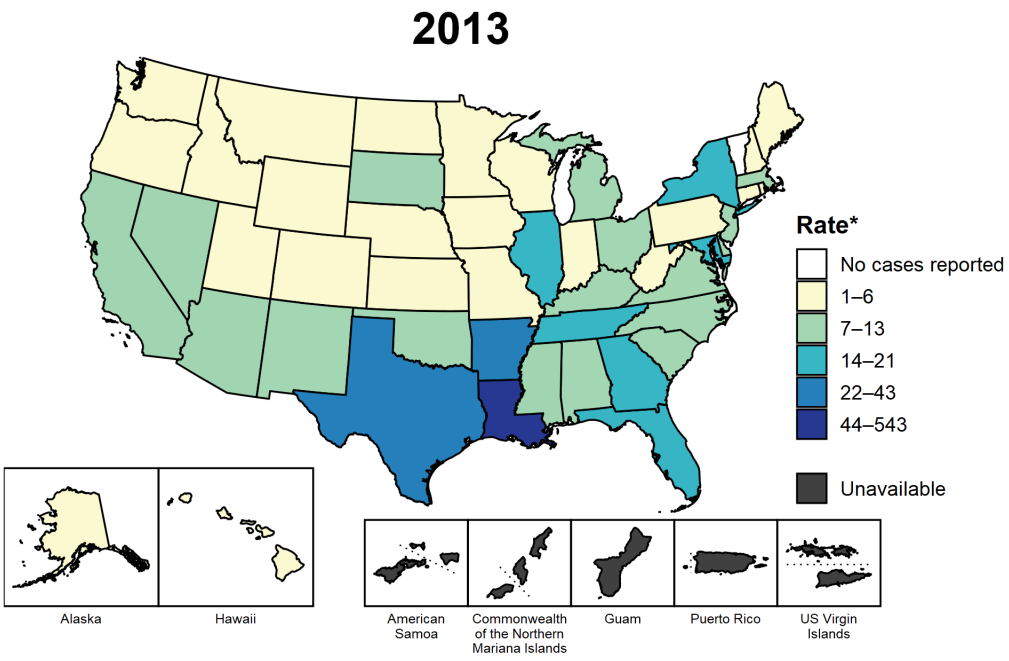
Syphilis (All Stages) — Rates of Reported Cases Among Women Aged 15–44 Years by Jurisdiction, United States and Territories, 2013–2022



* Per 100,000

Summary

This slide contains an animated figure that will play when the slide is in presentation mode. A static version of the figure that displays maps from the first and last years of the range is available as a separate slide.

In 2013, three states and the District of Columbia (DC; 7.8% of areas with available data) had a rate of reported syphilis (all stages) greater than or equal to 22 cases per 100,000 women aged 15 to 44 years. This increased to 45 states, DC, and one US territory (90.4% of areas with available data) in 2022. During 2021 to 2022, rates of reported syphilis (all stages) among women aged 15 to 44 years increased in 46 states, DC, and one territory.

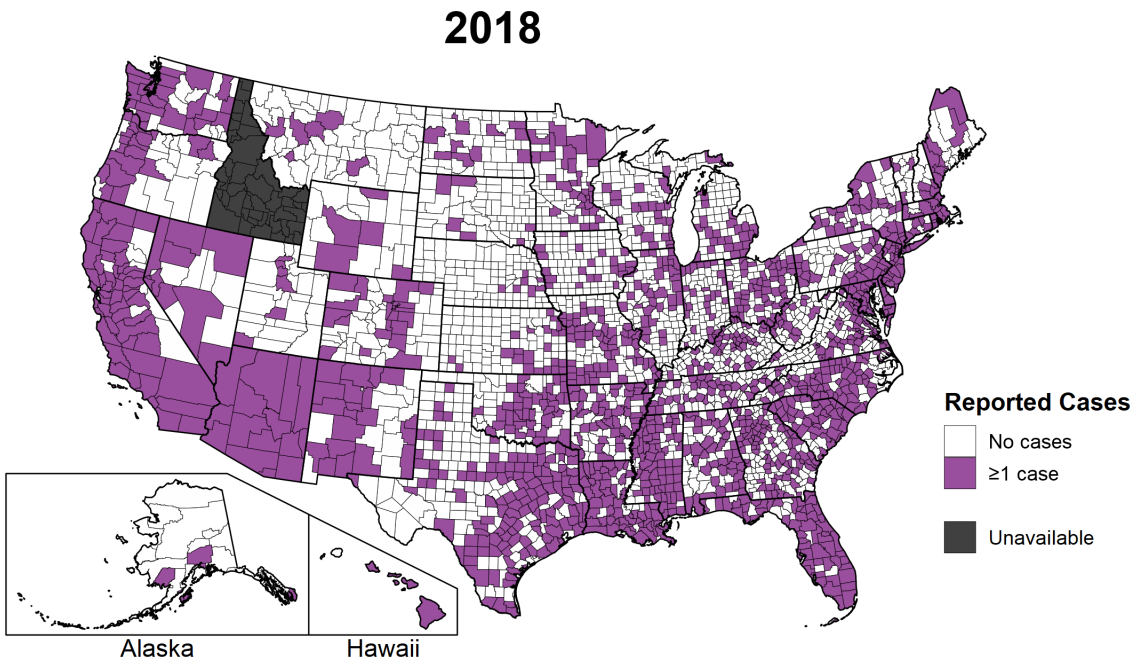
Data on reported cases of syphilis other than primary and secondary syphilis are not available by age and sex for American Samoa, the Commonwealth of the Northern Mariana Islands, Guam, and the US Virgin Islands. Additionally, population estimates by age and sex were not available for all territories for all years. Due to a network security incident in December 2021, the Maryland Department of Health could not finalize their 2021 STI case notification data. Data for 2021 from Maryland have been suppressed for this figure; however, they are included in national and regional case counts and rates displayed in other figures.

This report includes data from years that coincide with the COVID-19 pandemic, which introduced uncertainty and difficulty in interpreting STI surveillance data. See Impact of COVID-19 on STIs for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2022/technical-notes.htm) for information on syphilis case reporting and on interpreting reported rates in US territories.

Data for all figures are available at https://www.cdc.gov/std/statistics/2022/data.zip. The file “Syphilis - Rates Women 15-44 Years by Jurisdiction (US and Terr 2013-2022).xlsx” contains the data for the figure presented on this slide.

Syphilis (All Stages) — Reported Cases Among Women Aged 15–44 Years by County, United States, 2018–2022



Summary

In 2018, 1,395 (45.0%) of US counties with available data reported at least one case of syphilis (all stages) among women of reproductive age (15–44 years), increasing to 2,115 (68.4%) of counties with available data in 2022. During 2021 to 2022, the number of counties increased from 1,908 (62.0% of counties with available data) in 2021 to 2,115 (68.4% of counties with available data) in 2022.

Due to a network security incident in December 2021, the Maryland Department of Health could not finalize their 2021 STI case notification data. Data for 2021 from Maryland have been suppressed for this figure; however, they are included in national and regional case counts and rates displayed in other figures. In 2022, Connecticut adopted nine planning regions as county-equivalent geographic units; as STI case notification data were not available in the new county-equivalent units for 2022, data for Connecticut have been suppressed for this figure. Per current re-release guidelines for stratified, county-level STI case notification data, data for Idaho have been suppressed in this figure.

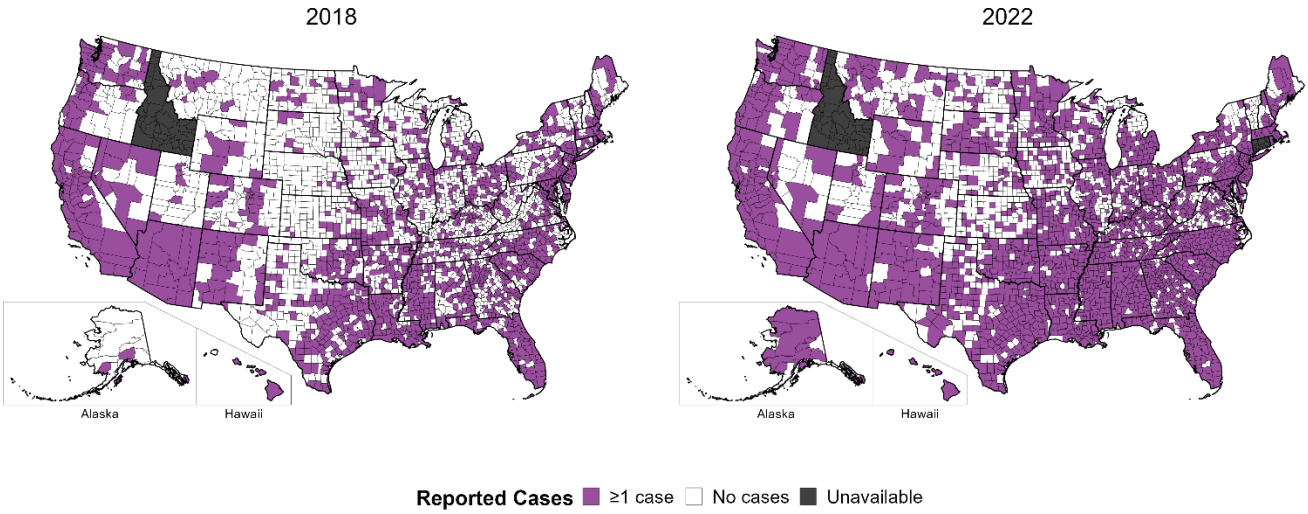
Note that boundaries for counties and county-equivalent areas change over time and may differ between years depicted in this figure.

This report includes data from years that coincide with the COVID-19 pandemic, which introduced uncertainty and difficulty in interpreting STI surveillance data. See Impact of COVID-19 on STIs for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2022/technical-notes.htm) for information on syphilis case reporting. Table A1 (https://www.cdc.gov/std/statistics/2022/tables/a1.htm) provides information on unknown, missing, or invalid values of select variables.

Data for all figures are available at https://www.cdc.gov/std/statistics/2022/data.zip. The file “Syphilis - Cases Women 15-44 Years by County (US 2018-2022).xlsx” contains the data for the figure presented on this slide.

Syphilis (All Stages) — Reported Cases Among Women Aged 15–44 Years by County, United States, 2018 and 2022



Summary

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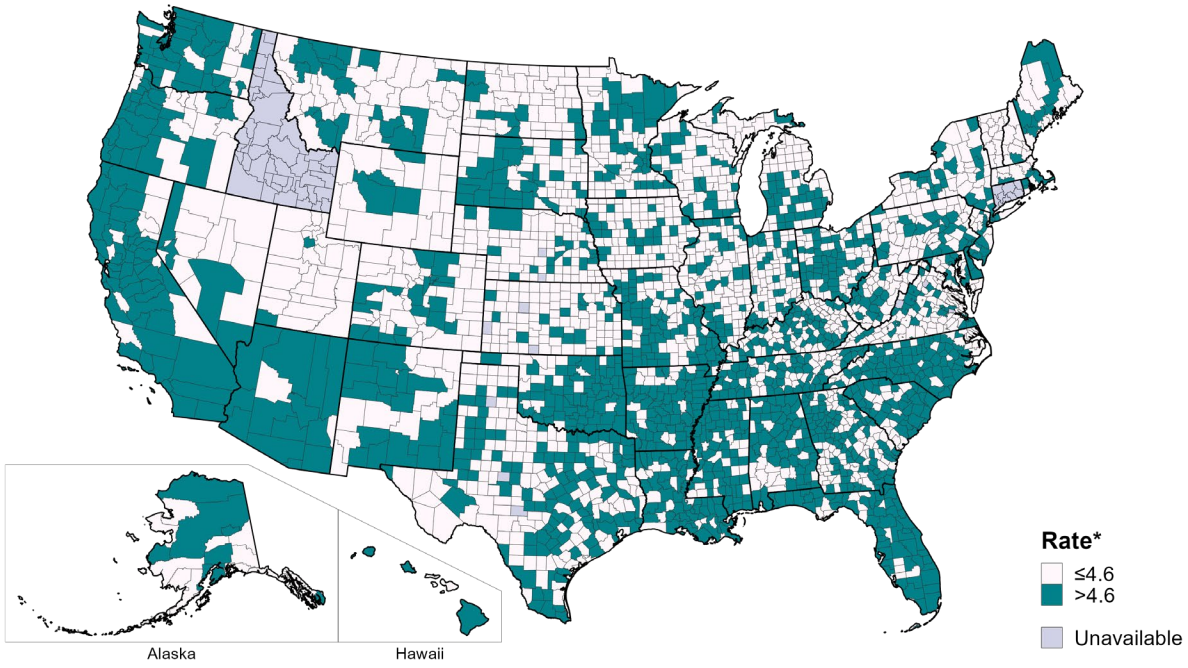
Note that boundaries for counties and county-equivalent areas change over time and may differ between years depicted in this figure.

This report includes data from years that coincide with the COVID-19 pandemic, which introduced uncertainty and difficulty in interpreting STI surveillance data. See Impact of COVID-19 on STIs for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2022/technical-notes.htm) for information on syphilis case reporting. Table A1 (https://www.cdc.gov/std/statistics/2022/tables/a1.htm) provides information on unknown, missing, or invalid values of select variables.

Data for all figures are available at https://www.cdc.gov/std/statistics/2022/data.zip. The file “Syphilis - Cases Women 15-44 Years by County (US 2018 and 2022).xlsx” contains the data for the figure presented on this slide.

Primary and Secondary Syphilis — Reported Cases Among Women Aged 15–44 Years by County, United States, 2022



* Per 100,000

NOTE: The target for the Healthy People 2030 goal to reduce the rate of syphilis in females in 4.6 per 100,000

Summary

One goal of Healthy People 2030 is to reduce the rate of syphilis in women to 4.6 per 100,000. In 2022, 1,403 counties (45.6% of counties with available data) had a rate of primary and secondary syphilis among 15-44 year old women greater than 4.6 per 100,000. During the same year, 76.1% of the US population resided in these counties.

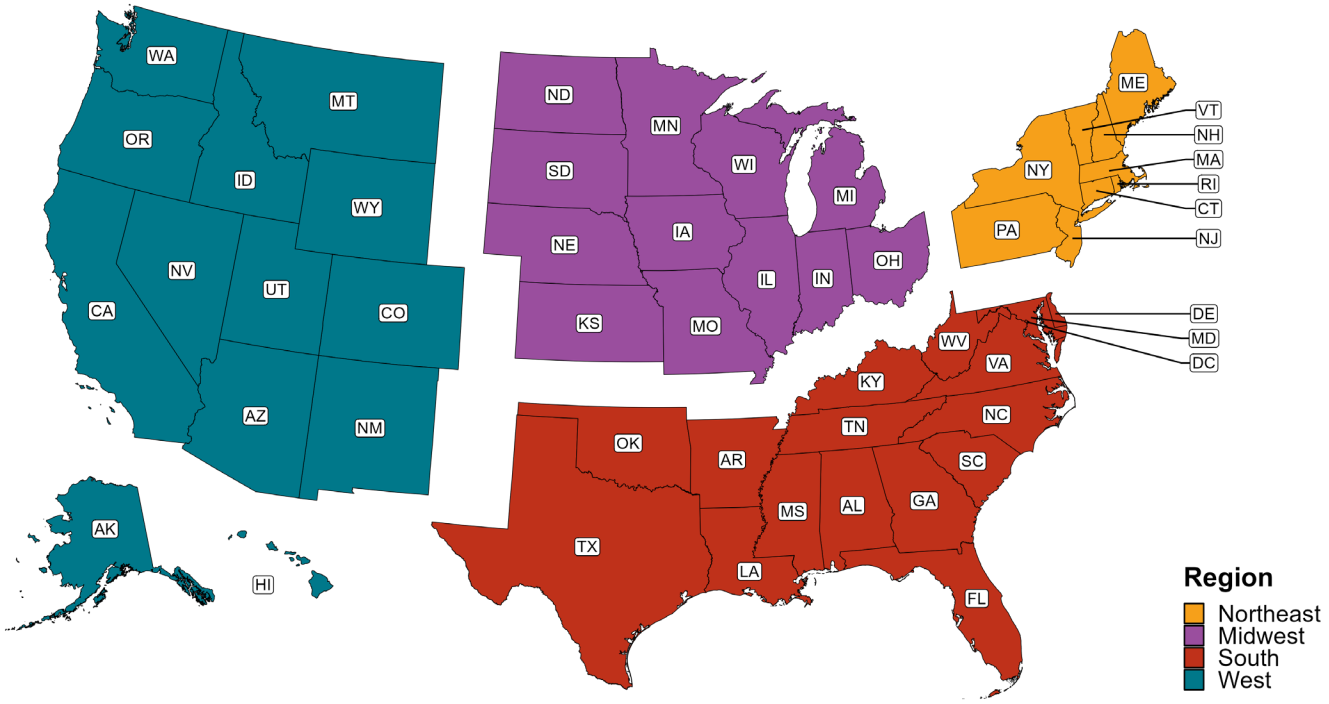
In 2022, Connecticut adopted nine planning regions as county-equivalent geographic units; as STI case notification data were not available in the new county-equivalent units for 2022, data for Connecticut have been suppressed for this figure. Per current re-release guidelines for stratified, county-level STI case notification data, data for Idaho have been suppressed in this figure.

This report includes data from years that coincide with the COVID-19 pandemic, which introduced uncertainty and difficulty in interpreting STI surveillance data. See Impact of COVID-19 on STIs for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2022/technical-notes.htm) for information on syphilis case reporting. Table A1 (https://www.cdc.gov/std/statistics/2022/tables/a1.htm) provides information on unknown, missing, or invalid values of select variables.

Data for all figures are available at https://www.cdc.gov/std/statistics/2022/data.zip. The file “PS Syphilis - Rates Women 15-44 Years by County (US 2022).xlsx” contains the data for the figure presented on this slide.

Reference Map of US Census Regions



Tables – Sexually Transmitted Infections Surveillance, 2022

The tables in this report highlight current trends for nationally notifiable STIs, including chlamydia, gonorrhea, and syphilis, and supersede those in earlier publications of these data. STI data collected during the COVID-19 pandemic and presented in *Sexually Transmitted Infections Surveillance, 2022* should be interpreted cautiously. For more information, see Impact of COVID-19 on STIs.

Table 1. Sexually Transmitted Infections — Reported Cases and Rates of Reported Cases*, United States, 1941–2022

Year†	Syphilis										Chlamydia		Gonorrhea		Chancroid¶	
	Total Syphilis‡		Primary and Secondary		Early Non-Primary Non-Secondary		Unknown Duration or Late§		Congenital							
	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate‖	Cases	Rate	Cases	Rate	Cases	Rate
1941	485,560	368.2	68,231	51.7	109,018	82.6	202,984	153.9	17,600	651.1	NR	—	193,468	146.7	3,384	2.5
1942	479,601	363.4	75,312	57.0	116,245	88.0	202,064	153.1	16,918	566.0	NR	—	212,403	160.9	5,477	4.1
1943	575,593	447.0	82,204	63.8	149,390	116.0	251,958	195.7	16,164	520.7	NR	—	275,070	213.6	8,354	6.4
1944	467,755	367.9	78,443	61.6	123,038	96.7	202,848	159.6	13,578	462.0	NR	—	300,676	236.5	7,878	6.1
1945	359,114	282.3	77,007	60.5	101,719	79.9	142,187	111.8	12,339	431.7	NR	—	287,181	225.8	5,515	4.3
1946	363,647	271.7	94,957	70.9	107,924	80.6	125,248	93.6	12,106	354.9	NR	—	368,020	275.0	7,091	5.2
1947	355,592	252.3	93,545	66.4	104,124	73.9	122,089	86.6	12,200	319.6	NR	—	380,666	270.0	9,515	6.7
1948	314,313	218.2	68,174	47.3	90,598	62.9	123,312	85.6	13,931	383.0	NR	—	345,501	239.8	7,661	5.3
1949	256,463	175.3	41,942	28.7	75,045	51.3	116,397	79.5	13,952	382.4	NR	—	317,950	217.3	6,707	4.6
1950	217,558	146.0	23,939	16.7	59,256	39.7	113,569	70.2	13,377	368.3	NR	—	286,746	192.5	4,977	3.3
1951	174,924	116.1	14,485	9.6	43,316	28.7	98,311	65.2	11,094	290.4	NR	—	254,470	168.9	4,233	2.8
1952	167,762	110.2	10,449	6.9	36,454	24.0	105,238	69.1	8,553	218.8	NR	—	244,957	160.8	3,738	2.5
1953	148,573	95.9	8,637	5.6	28,295	18.3	98,870	63.8	7,675	193.9	NR	—	238,340	153.9	3,338	2.2
1954	130,697	82.9	7,147	4.5	23,861	15.1	89,123	56.5	6,676	164.0	NR	—	242,050	153.5	3,003	1.9
1955	122,392	76.2	6,454	4.0	20,054	12.5	86,526	53.8	5,354	130.7	NR	—	236,197	147.0	2,649	1.7
1956	130,201	78.7	6,392	3.9	19,783	12.0	95,097	57.5	5,491	130.4	NR	—	224,346	135.7	2,135	1.3
1957	123,758	73.5	6,576	3.9	17,796	10.6	91,309	54.2	5,288	123.0	NR	—	214,496	127.4	1,637	1.0
1958	113,884	66.4	7,176	4.2	16,556	9.7	83,027	48.4	4,866	114.6	NR	—	232,386	135.6	1,595	0.9
1959	120,824	69.2	9,799	5.6	17,025	9.8	86,740	49.7	5,130	119.7	NR	—	240,254	137.6	1,537	0.9
1960	122,538	68.8	16,145	9.1	18,017	10.1	81,798	45.9	4,416	103.7	NR	—	258,933	145.4	1,680	0.9
1961	124,658	68.8	19,851	11.0	19,486	10.8	79,304	43.8	4,163	97.5	NR	—	264,158	145.8	1,438	0.8
1962	126,245	68.7	21,067	11.5	19,585	10.7	79,533	43.3	4,070	97.7	NR	—	263,714	143.6	1,344	0.7

Year†	Syphilis										Chlamydia		Gonorrhea		Chancroid¶	
	Total Syphilis‡		Primary and Secondary		Early Non-Primary Non-Secondary		Unknown Duration or Late§		Congenital							
	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate‖	Cases	Rate	Cases	Rate	Cases	Rate
1963	124,137	66.5	22,251	11.9	18,235	9.8	78,076	41.8	4,031	98.4	NR	—	278,289	149.0	1,220	0.7
1964	114,325	60.4	22,969	12.1	17,781	9.4	68,629	36.3	3,516	87.3	NR	—	300,666	158.9	1,247	0.7
1965	112,842	58.9	23,338	12.2	17,458	9.1	67,317	35.1	3,564	94.8	NR	—	324,925	169.5	982	0.5
1966	105,159	54.2	21,414	11.0	15,950	8.2	63,541	32.7	3,170	87.9	NR	—	351,738	181.2	838	0.4
1967	102,581	52.2	21,053	10.7	15,554	7.9	61,975	31.5	2,894	82.2	NR	—	404,836	205.9	784	0.4
1968	96,271	48.4	19,019	9.6	15,150	7.6	58,564	29.4	2,381	68.0	NR	—	464,543	233.4	845	0.4
1969	92,162	45.7	19,130	9.5	15,402	7.6	54,587	27.1	2,074	57.6	NR	—	534,872	265.4	1,104	0.5
1970	91,382	44.8	21,982	10.8	16,311	8.0	50,348	24.7	1,953	52.3	NR	—	600,072	294.2	1,416	0.7
1971	95,997	46.4	23,783	11.5	19,417	9.4	49,993	24.2	2,052	57.7	NR	—	670,268	324.1	1,320	0.6
1972	91,149	43.6	24,429	11.7	20,784	9.9	43,456	20.8	1,758	54.0	NR	—	767,215	366.6	1,414	0.7
1973	87,469	41.4	24,825	11.7	23,584	11.2	37,054	17.5	1,527	48.7	NR	—	842,621	398.7	1,165	0.6
1974	83,771	39.3	25,385	11.9	25,124	11.8	31,854	14.9	1,138	36.0	NR	—	906,121	424.7	945	0.4
1975	80,356	37.3	25,561	11.9	26,569	12.3	27,096	12.6	916	29.1	NR	—	999,937	464.1	700	0.3
1976	71,761	33.0	23,731	10.9	25,363	11.7	21,905	10.1	626	19.8	NR	—	1,001,994	460.6	628	0.3
1977	64,621	29.4	20,399	9.3	21,329	9.7	22,313	10.2	463	13.9	NR	—	1,002,219	456.0	455	0.2
1978	64,875	29.2	21,656	9.8	19,628	8.8	23,038	10.4	434	13.0	NR	—	1,013,436	456.3	521	0.2
1979	67,049	29.9	24,874	11.1	20,459	9.1	21,301	9.5	332	9.5	NR	—	1,004,058	447.1	840	0.4
1980	68,832	30.3	27,204	12.0	20,297	8.9	20,979	9.2	277	7.7	NR	—	1,004,029	442.1	788	0.3
1981	72,799	31.7	31,266	13.6	21,033	9.2	20,168	8.8	287	7.9	NR	—	990,864	431.8	850	0.4
1982	75,579	32.6	33,613	14.5	21,894	9.5	19,779	8.5	259	7.0	NR	—	960,633	414.7	1,392	0.6
1983	74,637	31.9	32,698	14.0	23,738	10.2	17,896	7.7	239	6.6	NR	—	900,435	385.1	847	0.4
1984	69,872	29.6	28,607	12.1	23,131	9.8	17,829	7.6	305	8.3	7,594	6.5	878,556	372.5	665	0.3
1985	67,563	28.4	27,131	11.4	21,689	9.1	18,414	7.7	329	8.7	25,848	17.4	911,419	383.0	2,067	0.9
1986	67,779	28.2	27,667	11.5	21,656	9.0	18,046	7.5	410	10.9	58,001	35.2	892,229	371.5	3,045	1.3
1987	87,286	36.0	35,585	14.7	28,233	11.7	22,988	9.5	480	12.6	91,913	50.8	787,532	325.0	4,986	2.1

Year†	Syphilis										Chlamydia		Gonorrhea		Chancroid¶	
	Total Syphilis‡		Primary and Secondary		Early Non-Primary Non-Secondary		Unknown Duration or Late§		Congenital							
	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate‖	Cases	Rate	Cases	Rate	Cases	Rate
1988	104,546	42.8	40,474	16.6	35,968	14.7	27,363	11.2	741	19.0	157,854	87.1	738,160	301.9	4,891	2.0
1989	115,089	46.6	45,826	18.6	45,394	18.4	22,032	8.9	1,837	45.5	200,904	102.5	733,294	297.1	4,697	1.9
1990	135,590	54.3	50,578	20.3	55,397	22.2	25,750	10.3	3,865	92.9	323,663	160.2	690,042	276.4	4,212	1.7
1991	128,719	50.9	42,950	17.0	53,855	21.3	27,490	10.9	4,424	107.6	381,228	179.7	621,918	245.8	3,476	1.4
1992	114,730	44.7	34,009	13.3	49,929	19.5	26,725	10.4	4,067	100.0	409,694	182.3	502,858	196.0	1,906	0.7
1993	102,612	39.5	26,527	10.2	41,919	16.1	30,746	11.8	3,420	85.5	405,332	178.0	444,649	171.1	1,292	0.5
1994	82,713	31.4	20,641	7.8	32,017	12.2	27,603	10.5	2,452	62.0	451,785	192.5	419,602	163.9	782	0.3
1995	69,359	26.0	16,543	6.2	26,657	10.0	24,296	9.1	1,863	47.8	478,577	187.8	392,651	147.5	607	0.2
1996	53,240	19.8	11,405	4.2	20,187	7.5	20,366	7.6	1,282	32.9	492,631	190.6	328,169	121.8	386	0.1
1997	46,716	17.1	8,556	3.1	16,631	6.1	20,447	7.5	1,082	27.9	537,904	205.5	327,665	120.2	246	0.1
1998	38,289	13.9	7,007	2.5	12,696	4.6	17,743	6.4	843	21.4	614,250	231.8	356,492	129.2	189	0.1
1999	35,386	12.7	6,617	2.4	11,534	4.1	16,655	6.0	580	14.6	662,647	247.2	360,813	129.3	110	0.0
2000	31,618	11.2	5,979	2.1	9,465	3.4	15,594	5.5	580	14.3	709,452	251.4	363,136	128.7	78	0.0
2001	32,286	11.3	6,103	2.1	8,701	3.0	16,976	5.9	506	12.6	783,242	274.5	361,705	126.8	38	0.0
2002	32,919	11.4	6,862	2.4	8,429	2.9	17,168	6.0	460	11.4	834,555	289.4	351,852	122.0	48	0.0
2003	34,289	11.8	7,177	2.5	8,361	2.9	18,319	6.3	432	10.6	877,478	301.7	335,104	115.2	54	0.0
2004	33,423	11.4	7,980	2.7	7,768	2.6	17,300	5.9	375	9.1	929,462	316.5	330,132	112.4	30	0.0
2005	33,288	11.2	8,724	2.9	8,176	2.8	16,049	5.4	339	8.2	976,445	329.4	339,593	114.6	17	0.0
2006	36,958	12.3	9,756	3.3	9,186	3.1	17,644	5.9	372	8.7	1,030,911	344.3	358,366	119.7	19	0.0
2007	40,925	13.6	11,466	3.8	10,768	3.6	18,256	6.1	435	10.1	1,108,374	367.5	355,991	118.0	23	0.0
2008	46,292	15.2	13,500	4.4	12,401	4.1	19,945	6.6	446	10.5	1,210,523	398.1	336,742	110.7	25	0.0
2009	44,832	14.6	13,997	4.6	13,066	4.3	17,338	5.6	431	10.4	1,244,180	405.3	301,174	98.1	28	0.0
2010	45,844	14.8	13,774	4.5	13,604	4.4	18,079	5.9	387	9.7	1,307,893	423.6	309,341	100.2	24	0.0
2011	46,040	14.8	13,970	4.5	13,136	4.2	18,576	6.0	358	9.1	1,412,791	453.4	321,849	103.3	8	0.0
2012	49,915	15.9	15,667	5.0	14,503	4.6	19,411	6.2	334	8.4	1,422,976	453.3	334,826	106.7	15	0.0

Year†	Syphilis										Chlamydia		Gonorrhea		Chancroid¶	
	Total Syphilis‡		Primary and Secondary		Early Non-Primary Non-Secondary		Unknown Duration or Late§		Congenital							
	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate‖	Cases	Rate	Cases	Rate	Cases	Rate
2013	56,485	17.9	17,375	5.5	16,929	5.4	21,819	6.9	362	9.2	1,401,906	443.5	333,004	105.3	10	0.0
2014	63,454	19.9	19,999	6.3	19,452	6.1	23,541	7.4	462	11.6	1,441,789	452.2	350,062	109.8	6	0.0
2015	74,709	23.2	23,872	7.4	24,173	7.5	26,170	8.1	494	12.4	1,526,658	475.0	395,216	123.0	11	0.0
2016	88,055	27.3	27,814	8.6	28,924	9.0	30,676	9.5	641	16.2	1,598,354	494.7	468,514	145.0	7	0.0
2017	101,591	31.2	30,644	9.4	34,013	10.4	35,992	11.1	942	24.4	1,708,569	524.6	555,608	170.6	7	0.0
2018	115,064	35.2	35,063	10.7	38,539	11.8	40,137	12.3	1,325	34.9	1,758,668	537.5	583,405	178.3	3	0.0
2019	129,825	39.6	38,992	11.9	41,655	12.7	47,296	14.4	1,882	50.2	1,808,703	551.0	616,392	187.8	8	0.0
2020	133,959	40.4	41,655	12.6	43,145	13.0	46,997	14.2	2,162	59.8	1,579,885	476.7	677,769	204.5	0	0.0
2021	176,733	53.2	53,767	16.2	51,830	15.6	68,261	20.6	2,875	78.5	1,644,416	495.5	710,151	214.0	3	0.0
2022	207,255	62.2	59,016	17.7	56,913	17.1	87,571	26.3	3,755	102.5	1,649,716	495.0	648,056	194.4	1	0.0

* Per 100,000 population

† For 1941–1946, data were reported for the federal fiscal year ending June 30 of the year indicated. From 1947 to the present, data were reported for the calendar year ending December 31. For 1941–1958, data for Alaska and Hawaii were not included.

‡ Includes stage of syphilis not stated.

§ In 2018, a revised syphilis case definition went into effect with new case classifications. Prior to 2018, cases identified as 'Early Non-Primary Non-Secondary Syphilis' were classified as 'Early Latent Syphilis.' Prior to 2018, cases in the 'Unknown duration or late syphilis' category include cases classified as late latent syphilis, latent syphilis of unknown duration, late syphilis with clinical manifestations, and neurosyphilis.

‖ Per 100,000 live births

¶ Although nationally notifiable, chancroid is not a reportable condition in all jurisdictions

NR = No report.

NOTE: The number of cases and the rates shown here supersede those published in previous STI surveillance reports. Cases and rates shown in this table exclude US territories. Case definitions have changed over time. See Technical Notes for more information. This report includes data from years that coincide with the COVID-19 pandemic, which introduced uncertainty and difficulty in interpreting case data. See Impact of COVID-19 on STIs for more information.

Table 2. Chlamydia — Reported Cases and Rates of Reported Cases by State, Ranked by Rates, United States, 2022

Rank*	State	Cases	Rate per 100,000 Population
1	Louisiana	36,200	788.6
2	Mississippi	22,968	781.2
3	Alaska	5,338	727.7
4	South Carolina	35,525	672.5
5	Georgia	72,662	665.8
6	Alabama	31,060	612.1
7	North Carolina	64,525	603.1
8	Arkansas	17,918	588.3
9	Illinois	71,564	568.8
10	South Dakota	5,160	567.1
11	Arizona	40,796	554.4
12	Tennessee	37,942	538.1
13	New Mexico	11,172	528.6
14	New York	103,673	526.9
15	Missouri	32,346	523.6
16	Texas	155,483	517.8
17	Nevada	16,189	509.4
18	Delaware	5,177	508.3
19	Maryland	31,234	506.7
20	Oklahoma	20,190	502.3
21	Indiana	33,834	495.2
	US TOTAL†	1,649,716	495.0
22	California	192,647	493.6
23	Nebraska	9,627	489.2
24	Florida	106,873	480.4
25	Rhode Island	5,199	475.3
26	North Dakota	3,704	475.3
27	Kansas	13,935	474.4
28	Virginia	40,789	469.7
29	Ohio	54,459	463.2
30	Iowa	14,634	457.2
31	Colorado	26,646	456.3
32	Wisconsin	25,676	435.7
33	Michigan	42,977	428.3
34	Pennsylvania	54,645	421.3
35	Kentucky	18,358	406.8

Rank*	State	Cases	Rate per 100,000 Population
36	Massachusetts	28,373	406.4
37	Minnesota	22,072	386.1
38	Hawaii	5,530	384.0
39	Oregon	15,504	365.6
40	Washington	28,431	365.2
41	Montana	4,089	364.2
42	New Jersey	33,147	357.9
43	Connecticut	12,738	351.3
44	Utah	11,108	328.6
45	Wyoming	1,793	308.4
46	Idaho	5,976	308.2
47	West Virginia	4,450	250.7
48	Maine	3,128	225.8
49	New Hampshire	2,830	202.8
50	Vermont	1,281	198.0

* States were ranked by rate, then by case count, then in alphabetical order, with rates shown rounded to the nearest tenth.
† Total includes cases reported by the District of Columbia with 8,141 cases and a rate of 1,211.8, but excludes territories.
NOTE: See Technical Notes for more information on chlamydia case reporting. This report includes data from years that coincide with the COVID-19 pandemic, which introduced uncertainty and difficulty in interpreting case data. See Impact of COVID-19 on STIs for more information.

Table 3. Chlamydia — Reported Cases and Rates of Reported Cases by State/Territory and Region in Alphabetical Order, United States, 2018–2022

State/Territory	Cases					Rates per 100,000 Population				
	2018	2019	2020	2021	2022	2018	2019	2020	2021	2022
Alabama	28,437	31,228	27,075	31,507	31,060	581.8	636.9	538.9	625.2	612.1
Alaska	6,159	6,254	5,090	5,571	5,338	835.2	854.9	694.0	760.4	727.7
Arizona	40,807	43,058	37,289	41,498	40,796	569.0	591.6	521.4	570.3	554.4
Arkansas	17,663	17,196	16,053	17,936	17,918	586.1	569.8	533.1	592.8	588.3
California	231,415	236,719	178,679	191,542	192,647	585.0	599.1	451.9	488.2	493.6
Colorado	29,124	29,821	26,137	26,747	26,646	511.3	517.8	452.7	460.2	456.3
Connecticut	16,732	15,290	12,716	14,750	12,738	468.3	428.9	352.6	409.1	351.3
Delaware	6,038	5,864	4,855	4,880	5,177	624.3	602.2	490.4	486.4	508.3
District of Columbia	9,014	9,327	6,413	6,952	8,141	1,283.2	1,321.6	930.0	1,037.5	1,211.8
Florida	104,758	110,794	100,030	104,400	106,873	491.8	515.9	464.4	479.3	480.4
Georgia	65,936	67,720	62,582	67,941	72,662	626.8	637.8	584.2	629.1	665.8
Hawaii	7,735	8,093	7,005	6,078	5,530	544.5	571.6	481.4	421.6	384.0
Idaho	6,572	6,863	6,273	6,320	5,976	374.6	384.0	341.1	332.5	308.2
Illinois	77,325	81,012	68,716	71,836	71,564	606.9	639.3	536.3	566.9	568.8
Indiana	34,926	35,430	33,372	34,755	33,834	521.9	526.3	491.8	510.7	495.2
Iowa	14,682	16,044	15,097	15,620	14,634	465.2	508.5	473.2	489.2	457.2
Kansas	14,231	15,286	14,620	14,851	13,935	488.8	524.7	497.6	506.1	474.4
Kentucky	19,440	20,911	18,750	18,500	18,358	435.1	468.1	416.1	410.3	406.8
Louisiana	36,293	36,131	32,997	33,759	36,200	778.8	777.2	708.4	730.1	788.6
Maine	4,345	3,989	3,466	3,372	3,128	324.6	296.8	254.4	245.7	225.8
Maryland	35,482	37,779	32,398	NR	31,234	587.2	624.9	524.5	—	506.7
Massachusetts	30,460	31,622	24,901	26,950	28,373	441.3	458.8	354.2	385.8	406.4
Michigan	50,592	50,104	44,769	45,473	42,977	506.1	501.7	444.3	452.4	428.3
Minnesota	23,569	24,470	22,114	22,573	22,072	420.0	433.9	387.5	395.5	386.1
Mississippi	22,086	25,303	23,919	22,126	22,968	739.5	850.2	807.7	750.0	781.2
Missouri	34,728	34,416	31,815	31,915	32,346	566.9	560.8	516.9	517.4	523.6

State/Territory	Cases					Rates per 100,000 Population				
	2018	2019	2020	2021	2022	2018	2019	2020	2021	2022
Montana	4,917	4,753	4,133	4,029	4,089	462.9	444.7	381.2	364.9	364.2
Nebraska	8,026	9,291	8,844	8,897	9,627	416.0	480.3	450.9	453.1	489.2
Nevada	17,508	17,827	14,739	16,348	16,189	577.0	578.8	474.7	520.0	509.4
New Hampshire	3,734	3,577	2,931	3,027	2,830	275.3	263.1	212.8	217.9	202.8
New Jersey	36,514	37,591	31,649	33,425	33,147	409.9	423.2	340.7	360.7	357.9
New Mexico	14,000	14,283	12,084	12,441	11,172	668.1	681.2	570.7	588.0	528.6
New York	119,571	124,622	97,722	101,657	103,673	611.9	640.6	483.7	512.5	526.9
North Carolina	66,553	70,257	64,640	63,660	64,525	640.9	669.9	619.2	603.3	603.1
North Dakota	3,525	3,880	3,562	3,964	3,704	463.8	509.1	457.2	511.5	475.3
Ohio	63,220	65,393	59,520	56,520	54,459	540.8	559.4	504.4	479.8	463.2
Oklahoma	21,974	23,518	21,208	20,709	20,190	557.3	594.3	535.6	519.5	502.3
Oregon	19,224	19,279	15,858	15,596	15,504	458.7	457.1	374.3	367.3	365.6
Pennsylvania	59,340	61,694	52,272	53,124	54,645	463.3	481.9	402.0	409.8	421.3
Rhode Island	5,487	5,718	4,714	5,199	5,199	519.0	539.8	429.6	474.5	475.3
South Carolina	33,910	35,950	34,118	36,477	35,525	667.0	698.2	666.6	702.7	672.5
South Dakota	4,432	4,547	4,044	4,853	5,160	502.4	514.0	456.1	542.0	567.1
Tennessee	38,212	41,089	37,907	39,227	37,942	564.4	601.7	548.5	562.4	538.1
Texas	146,510	129,075	135,124	149,636	155,483	510.5	445.1	463.6	506.8	517.8
Utah	10,541	11,075	10,466	11,221	11,108	333.5	345.5	319.9	336.2	328.6
Vermont	1,712	1,718	1,117	910	1,281	273.4	275.3	173.7	141.0	198.0
Virginia	42,965	48,169	40,965	40,409	40,789	504.4	564.3	474.6	467.6	469.7
Washington	34,449	37,795	31,181	29,632	28,431	457.2	496.3	404.7	382.9	365.2
West Virginia	3,599	5,609	5,431	5,226	4,450	199.3	313.0	302.8	293.1	250.7
Wisconsin	28,027	29,080	26,564	27,847	25,676	482.1	499.4	450.7	472.3	435.7
Wyoming	2,169	2,189	1,961	2,078	1,793	375.4	378.2	339.9	359.0	308.4
US TOTAL	1,758,668	1,808,703	1,579,885	1,644,416	1,649,716	537.5	551.0	476.7	495.5	495.0
Northeast	277,895	285,821	231,488	242,414	245,014	495.3	510.6	401.8	424.1	429.5
Midwest	357,283	368,953	333,037	339,104	329,988	523.0	540.0	482.8	492.6	479.7
South	698,870	715,920	664,465	693,797	709,495	560.2	570.1	526.2	545.3	551.2
West	424,620	438,009	350,895	369,101	365,219	544.4	559.1	446.5	469.2	463.8
American Samoa	55	81	119	65	203	108.2	167.2	251.1	140.2	446.7

State/Territory	Cases					Rates per 100,000 Population				
	2018	2019	2020	2021	2022	2018	2019	2020	2021	2022
Commonwealth of the Northern Mariana Islands	246	249	180	207	222	473.1	478.4	347.1	400.7	431.3
Guam	944	1,234	827	714	726	562.7	733.9	490.8	423.0	429.4
Puerto Rico	5,942	4,817	3,995	4,793	4,633	180.4	150.8	121.6	146.9	143.8
US Virgin Islands	NR	537	463	640	626	—	503.4	435.6	604.5	593.9
TERRITORIES TOTAL	7,187	6,918	5,584	6,419	6,410	201.6	193.8	152.6	176.5	178.4
TOTAL	1,765,855	1,815,621	1,585,469	1,650,835	1,656,126	533.9	547.2	473.1	492.0	491.6

NR = No report.

NOTE: See Technical Notes for more information on chlamydia case reporting and on interpreting case counts and rates in US territories. This report includes data from years that coincide with the COVID-19 pandemic, which introduced uncertainty and difficulty in interpreting case data. See Impact of COVID-19 on STIs for more information. Due to a network security incident in December 2021, the Maryland Department of Health could not finalize their 2021 STI case notification data. Although 2021 data from Maryland are included in national and regional case counts and rates displayed in this table, state-specific data have been suppressed.

Table 4. Chlamydia Among Men — Reported Cases and Rates of Reported Cases by State/Territory and Region in Alphabetical Order, United States, 2018–2022

State/Territory	Cases					Rates per 100,000 Population				
	2018	2019	2020	2021	2022	2018	2019	2020	2021	2022
Alabama	8,807	9,882	8,906	9,894	9,645	372.5	417.0	364.6	404.2	390.9
Alaska	2,189	2,240	1,713	1,854	1,853	569.2	587.3	445.6	482.6	480.1
Arizona	13,972	15,316	13,067	15,089	15,021	391.9	423.4	365.9	415.3	408.3
Arkansas	5,147	5,041	4,602	5,179	5,350	347.7	340.2	309.6	346.8	355.4
California	88,787	92,707	68,763	75,556	77,396	451.5	471.9	347.8	385.2	396.2
Colorado	10,650	11,073	9,560	10,029	10,103	371.4	381.7	326.9	340.6	340.8
Connecticut	5,829	5,054	4,303	4,870	4,393	334.3	290.6	243.1	275.2	247.3
Delaware	2,031	2,004	1,548	1,666	1,729	434.0	425.7	321.6	341.9	349.6
District of Columbia	4,135	4,192	3,155	3,680	4,310	1,240.6	1,252.4	960.0	1,154.0	1,348.2
Florida	36,219	39,850	35,556	38,907	40,762	347.9	379.6	335.7	363.3	372.4
Georgia	21,691	22,662	20,927	23,905	25,726	424.0	439.1	399.8	453.6	482.6
Hawaii	2,911	3,047	2,432	2,105	1,902	409.4	430.3	331.8	290.2	262.4
Idaho	2,102	2,297	2,124	2,173	2,093	239.1	256.4	229.1	226.7	214.2
Illinois	27,555	29,561	24,559	26,802	27,071	440.1	474.8	387.7	427.8	434.6
Indiana	11,131	11,518	10,632	11,407	11,259	337.3	346.9	315.8	337.7	331.6
Iowa	4,889	5,485	4,968	5,278	4,998	311.2	349.1	310.8	329.6	311.1
Kansas	4,437	4,911	4,671	4,914	4,611	305.9	338.3	317.3	334.2	312.5
Kentucky	6,249	6,878	6,021	5,967	6,065	283.9	312.5	269.6	267.1	270.7
Louisiana	11,068	11,598	10,441	10,873	12,052	486.6	511.6	457.1	480.0	536.3
Maine	1,491	1,394	1,186	1,140	1,126	227.5	211.8	176.5	168.5	164.8
Maryland	12,539	13,514	11,427	NR	11,273	428.1	461.4	379.6	—	375.5
Massachusetts	11,231	12,166	9,011	10,033	10,943	335.2	363.6	262.4	294.0	320.2
Michigan	16,844	17,129	14,886	15,405	15,005	342.2	348.3	298.1	309.3	301.2
Minnesota	8,527	8,875	7,830	8,101	8,175	305.1	315.9	273.8	283.2	284.7
Mississippi	6,723	7,873	7,494	6,843	7,267	464.4	545.9	519.5	476.8	508.6
Missouri	11,941	11,926	10,899	11,138	11,436	397.0	395.9	358.8	365.8	374.4
Montana	1,710	1,640	1,409	1,330	1,394	319.7	304.8	256.6	237.8	244.6
Nebraska	2,789	3,058	2,897	2,956	3,259	289.5	316.4	294.0	299.6	329.0

State/Territory	Cases					Rates per 100,000 Population				
	2018	2019	2020	2021	2022	2018	2019	2020	2021	2022
Nevada	6,381	6,595	5,555	6,532	6,395	419.4	426.9	355.0	412.3	398.7
New Hampshire	1,259	1,298	1,024	1,050	995	187.3	192.6	149.1	151.5	142.6
New Jersey	11,817	12,869	10,457	11,458	11,840	271.5	296.5	228.8	251.2	259.4
New Mexico	4,313	4,378	3,702	3,940	3,611	415.8	422.0	351.3	374.3	342.9
New York	49,175	52,593	39,145	42,388	44,614	518.3	556.7	396.5	437.2	463.5
North Carolina	21,103	23,204	20,897	21,231	21,905	417.8	455.0	409.3	411.8	418.0
North Dakota	1,222	1,425	1,211	1,436	1,351	313.9	365.4	302.0	360.4	337.4
Ohio	20,546	21,750	19,576	18,967	18,239	358.5	379.5	336.3	326.3	313.9
Oklahoma	6,692	7,428	6,637	6,593	6,476	342.6	378.9	336.6	332.3	323.1
Oregon	6,638	7,017	5,481	5,665	5,887	319.5	335.6	259.4	267.6	278.1
Pennsylvania	21,350	22,496	18,630	19,029	20,443	340.3	358.5	290.4	297.3	319.2
Rhode Island	1,903	2,023	1,630	1,842	1,843	370.0	392.3	303.1	343.0	343.2
South Carolina	10,976	12,053	11,560	12,605	11,787	445.6	483.4	464.0	499.5	458.3
South Dakota	1,424	1,347	1,253	1,539	1,640	319.6	301.5	278.3	338.4	354.4
Tennessee	13,057	14,120	12,931	13,872	13,390	395.3	423.7	381.4	405.6	386.7
Texas	45,450	42,314	43,290	50,355	53,915	318.7	293.8	297.5	341.7	359.0
Utah	3,733	4,116	3,858	4,215	4,095	234.5	254.9	233.0	249.4	238.5
Vermont	527	565	388	285	419	170.4	183.3	121.3	88.8	130.1
Virginia	14,924	17,184	14,110	14,135	14,559	356.1	409.1	330.2	330.5	338.7
Washington	13,006	14,375	11,527	10,987	10,841	345.0	377.1	297.1	281.8	276.0
West Virginia	1,224	1,849	1,707	1,605	1,447	136.9	208.3	190.8	180.5	163.3
Wisconsin	9,386	9,682	8,492	9,192	8,683	324.5	334.2	287.6	311.2	293.8
Wyoming	747	765	628	700	613	253.6	259.6	212.4	236.3	205.7
US TOTAL	610,447	644,337	548,676	587,473	601,205	378.9	398.6	334.2	357.4	363.7
Northeast	104,582	110,458	85,774	92,095	96,616	382.2	404.6	303.3	328.1	344.7
Midwest	120,691	126,667	111,874	117,135	115,727	357.8	375.4	326.4	342.4	338.0
South	228,035	241,646	221,209	238,068	247,658	373.0	392.7	355.6	380.0	390.2
West	157,139	165,566	129,819	140,175	141,204	404.0	423.6	329.3	355.2	357.0
American Samoa	2	0	36	24	104	7.9	0.0	152.3	103.9	459.9
Commonwealth of the Northern Mariana Islands	57	48	36	38	47	206.2	173.6	130.8	138.7	172.3
Guam	274	360	195	190	201	317.4	416.0	224.8	218.6	230.8

State/Territory	Cases					Rates per 100,000 Population				
	2018	2019	2020	2021	2022	2018	2019	2020	2021	2022
Puerto Rico	1,240	1,118	883	1,068	1,128	79.4	73.8	56.7	69.1	74.1
US Virgin Islands	NR	191	138	193	166	—	375.5	272.5	383.1	331.3
TERRITORIES TOTAL	1,573	1,717	1,288	1,513	1,646	92.4	100.7	73.8	87.3	96.3
TOTAL	612,020	646,054	549,964	588,986	602,851	375.9	395.5	331.4	354.6	361.0

NR = No report.

NOTE: See Technical Notes for more information on chlamydia case reporting and on interpreting case counts and rates in US territories. This report includes data from years that coincide with the COVID-19 pandemic, which introduced uncertainty and difficulty in interpreting case data. See Impact of COVID-19 on STIs for more information. Due to a network security incident in December 2021, the Maryland Department of Health could not finalize their 2021 STI case notification data. Although 2021 data from Maryland are included in national and regional case counts and rates displayed in this table, state-specific data have been suppressed.

Table 5. Chlamydia Among Women — Reported Cases and Rates of Reported Cases by State/Territory and Region in Alphabetical Order, United States, 2018–2022

State/Territory	Cases					Rates per 100,000 Population				
	2018	2019	2020	2021	2022	2018	2019	2020	2021	2022
Alabama	19,537	21,260	18,087	21,413	20,846	774.1	839.1	700.5	826.2	799.6
Alaska	3,965	4,011	3,377	3,717	3,485	1,123.7	1,145.6	967.8	1,066.7	1,002.5
Arizona	26,717	27,716	24,196	26,368	25,680	740.8	757.0	675.9	723.9	697.8
Arkansas	12,513	12,146	11,447	12,749	12,558	815.9	790.7	750.7	831.8	815.4
California	142,006	143,319	109,322	115,219	114,254	713.8	721.4	553.1	587.2	586.1
Colorado	18,474	18,748	16,577	16,718	16,538	653.3	656.1	581.8	583.0	575.2
Connecticut	10,751	10,168	8,366	9,833	8,341	587.7	556.9	455.8	535.6	450.9
Delaware	3,992	3,842	3,289	3,197	3,440	799.6	763.9	646.7	619.5	656.6
District of Columbia	4,812	5,026	3,228	3,258	3,762	1,303.5	1,354.6	894.4	927.8	1,068.4
Florida	68,509	70,892	64,429	65,441	66,021	629.2	645.6	588.6	591.1	584.3
Georgia	43,903	43,914	41,210	43,985	46,923	812.4	804.7	752.3	795.4	840.6
Hawaii	4,811	5,032	4,325	3,950	3,626	678.1	710.9	598.8	551.5	506.8
Idaho	4,452	4,566	4,146	4,144	3,881	508.7	512.4	454.7	439.8	403.5
Illinois	49,746	51,168	43,958	44,964	44,443	767.7	793.9	678.6	701.9	699.5
Indiana	23,768	23,896	22,711	23,310	22,533	700.8	700.4	664.4	679.9	655.5
Iowa	9,793	10,559	10,129	10,341	9,636	617.7	666.6	636.4	649.7	604.6
Kansas	9,794	10,375	9,949	9,937	9,323	670.3	709.8	678.7	678.7	637.8
Kentucky	13,055	13,918	12,647	12,445	12,226	575.9	614.0	556.5	546.9	538.2
Louisiana	25,225	24,524	22,554	22,882	24,148	1,057.6	1,029.7	950.2	970.0	1,030.7
Maine	2,854	2,595	2,280	2,232	2,001	417.8	378.2	330.2	320.8	285.0
Maryland	22,912	24,264	20,876	NR	19,859	735.8	778.5	659.2	—	627.9
Massachusetts	19,096	19,368	15,671	16,780	17,358	537.7	546.0	435.9	469.7	487.0
Michigan	33,687	32,955	29,882	30,067	27,966	663.9	650.2	587.8	593.0	553.6
Minnesota	15,021	15,565	14,232	14,449	13,893	533.3	550.0	500.0	507.5	488.2
Mississippi	15,325	17,381	16,376	15,184	15,589	995.9	1,133.2	1,078.3	1,002.5	1,031.5
Missouri	22,787	22,490	20,916	20,777	20,910	730.6	719.7	671.0	665.2	669.5

State/Territory	Cases					Rates per 100,000 Population				
	2018	2019	2020	2021	2022	2018	2019	2020	2021	2022
Montana	3,206	3,110	2,724	2,699	2,694	607.8	586.0	509.0	495.2	487.1
Nebraska	5,233	6,222	5,925	5,922	6,347	541.8	642.8	607.0	606.2	649.5
Nevada	11,057	11,205	9,163	9,795	9,781	730.9	729.8	595.0	627.9	621.4
New Hampshire	2,474	2,278	1,894	1,951	1,814	361.6	332.1	274.3	280.4	260.1
New Jersey	24,688	24,627	21,060	21,964	21,300	541.8	542.3	446.4	466.8	453.5
New Mexico	9,683	9,895	8,377	8,494	7,551	915.1	934.0	787.5	798.9	712.2
New York	70,348	72,012	58,577	59,242	59,059	699.7	719.7	567.1	584.2	587.6
North Carolina	45,450	47,053	43,742	42,429	42,619	852.3	873.3	820.1	786.5	780.7
North Dakota	2,303	2,448	2,351	2,528	2,353	621.2	658.0	621.9	671.4	621.2
Ohio	42,674	43,643	39,944	37,551	36,220	716.2	732.4	668.2	629.2	609.1
Oklahoma	15,282	16,088	14,570	14,116	13,714	767.9	805.9	733.0	705.0	680.5
Oregon	12,567	12,235	10,341	9,901	9,589	594.7	575.2	486.8	465.0	451.7
Pennsylvania	37,938	39,132	33,596	34,045	34,177	580.8	599.5	510.1	518.6	520.5
Rhode Island	3,584	3,695	3,084	3,357	3,356	660.1	679.6	551.1	600.9	602.8
South Carolina	22,822	23,789	22,349	23,637	23,587	870.8	895.8	850.7	886.3	870.2
South Dakota	3,008	3,198	2,791	3,314	3,518	688.8	730.3	639.4	752.3	786.8
Tennessee	25,151	26,965	24,972	25,348	24,545	725.4	771.1	709.4	713.0	683.9
Texas	100,417	86,192	90,792	97,940	99,446	695.3	590.6	622.1	662.1	662.5
Utah	6,808	6,955	6,606	7,003	7,009	433.9	437.1	408.9	425.0	421.2
Vermont	1,171	1,149	727	624	860	369.3	364.0	224.9	192.2	264.6
Virginia	27,849	30,950	26,704	26,226	26,205	643.6	713.9	612.7	600.8	597.7
Washington	21,432	23,378	19,532	18,587	17,484	569.1	614.7	510.7	484.0	453.3
West Virginia	2,374	3,758	3,723	3,621	3,002	260.5	415.5	414.0	405.1	337.7
Wisconsin	18,617	19,372	18,011	18,623	16,927	637.3	662.2	612.3	633.0	576.3
Wyoming	1,422	1,423	1,326	1,369	1,176	502.1	501.0	471.6	484.4	414.9
US TOTAL	1,145,063	1,160,470	1,027,061	1,053,246	1,043,573	689.6	696.6	614.1	628.8	621.2
Northeast	172,904	175,024	145,255	150,028	148,266	601.4	610.3	495.3	515.7	511.1
Midwest	236,431	241,891	220,799	221,783	214,069	683.7	699.4	636.1	640.3	619.5
South	469,128	471,962	440,995	453,471	458,490	737.5	736.9	688.5	702.2	702.7
West	266,600	271,593	220,012	227,964	222,748	681.9	691.7	561.8	581.5	568.4
American Samoa	53	81	83	41	99	208.5	333.8	349.3	176.2	433.6

State/Territory	Cases					Rates per 100,000 Population				
	2018	2019	2020	2021	2022	2018	2019	2020	2021	2022
Commonwealth of the Northern Mariana Islands	189	201	144	169	175	776.0	823.7	591.8	696.5	723.2
Guam	670	874	632	524	525	822.7	1,070.9	773.0	639.9	640.2
Puerto Rico	4,697	3,697	3,108	3,725	3,505	271.1	220.3	179.8	216.7	206.3
US Virgin Islands	NR	346	325	447	460	—	620.0	583.9	805.6	831.8
TERRITORIES TOTAL	5,609	5,199	4,292	4,906	4,764	301.0	278.9	224.3	257.7	252.9
TOTAL	1,150,672	1,165,669	1,031,353	1,058,152	1,048,337	685.3	692.0	609.7	624.6	617.1

NR = No report.

NOTE: See Technical Notes for more information on chlamydia case reporting and on interpreting case counts and rates in US territories. This report includes data from years that coincide with the COVID-19 pandemic, which introduced uncertainty and difficulty in interpreting case data. See Impact of COVID-19 on STIs for more information. Due to a network security incident in December 2021, the Maryland Department of Health could not finalize their 2021 STI case notification data. Although 2021 data from Maryland are included in national and regional case counts and rates displayed in this table, state-specific data have been suppressed.

Table 6. Chlamydia — Reported Cases and Rates of Reported Cases by Age Group and Sex, United States, 2018–2022

Year	Age Group	Cases				Rates per 100,000 Population*		
		Total	Male	Female	Unknown Sex	Total	Male	Female
2018	0-4	496	186	300	10	2.5	1.8	3.1
	5-9	144	19	125	0	0.7	0.2	1.3
	10-14	10,905	1,438	9,450	17	52.2	13.5	92.5
	15-19	446,008	103,582	341,635	791	2,114.1	961.3	3,309.7
	20-24	641,269	202,528	437,732	1,009	2,931.7	1,808.0	4,101.7
	25-29	333,561	135,059	197,966	536	1,415.7	1,123.7	1,715.0
	30-34	154,132	72,222	81,645	265	696.3	645.3	746.0
	35-39	78,094	39,320	38,635	139	362.2	364.4	358.6
	40-44	38,657	21,111	17,462	84	196.1	215.5	176.1
	45-54	38,323	24,067	14,173	83	92.1	117.2	67.2
	55-64	12,536	8,474	4,029	33	29.7	41.5	18.4
	65+	2,331	1,676	640	15	4.4	7.2	2.2
	Unknown Age	2,212	765	1,271	176			
	TOTAL	1,758,668	610,447	1,145,063	3,158	537.5	378.9	689.6
2019	0-4	523	201	320	2	2.7	2.0	3.3
	5-9	182	32	146	4	0.9	0.3	1.5
	10-14	11,561	1,432	10,094	35	55.6	13.5	99.2
	15-19	453,927	108,724	344,130	1,073	2,156.0	1,011.8	3,338.2
	20-24	649,450	209,635	438,567	1,248	3,002.1	1,894.6	4,149.9
	25-29	340,542	140,281	199,581	680	1,448.6	1,168.6	1,734.8
	30-34	163,671	78,579	84,726	366	729.7	692.0	764.9
	35-39	84,687	43,605	40,897	185	389.6	400.6	376.8
	40-44	43,005	23,715	19,185	105	215.9	239.4	191.6
	45-54	40,480	25,150	15,256	74	99.0	124.7	73.7
	55-64	13,984	9,567	4,378	39	32.9	46.7	19.9
	65+	2,783	2,036	736	11	5.1	8.5	2.5
	Unknown Age	3,908	1,380	2,454	74			

Year	Age Group	Cases				Rates per 100,000 Population*		
		Total	Male	Female	Unknown Sex	Total	Male	Female
	TOTAL	1,808,703	644,337	1,160,470	3,896	551.0	398.6	696.6
2020	0-4	559	216	328	15	2.9	2.2	3.5
	5-9	197	39	155	3	1.0	0.4	1.6
	10-14	9,922	1,201	8,692	29	45.6	10.8	81.9
	15-19	386,550	90,944	294,624	982	1,794.0	825.9	2,796.4
	20-24	575,556	180,060	394,149	1,347	2,680.9	1,644.8	3,746.2
	25-29	297,451	118,636	178,085	730	1,299.3	1,020.9	1,579.8
	30-34	148,819	69,456	79,015	348	652.0	601.4	700.9
	35-39	73,333	37,085	36,068	180	330.2	330.7	328.0
	40-44	37,115	20,139	16,875	101	180.5	195.3	164.6
	45-54	32,381	19,930	12,352	99	78.6	96.8	59.9
	55-64	11,600	7,941	3,629	30	26.9	37.6	16.5
	65+	2,174	1,549	602	23	4.0	6.4	2.0
	Unknown Age	4,228	1,480	2,487	261			
	TOTAL	1,579,885	548,676	1,027,061	4,148	476.7	334.2	614.1
2021	0-4	463	178	280	5	2.5	1.8	3.0
	5-9	163	19	141	3	0.8	0.2	1.4
	10-14	10,012	1,288	8,692	32	46.7	11.7	83.1
	15-19	375,884	90,720	284,306	858	1,743.1	823.0	2,697.0
	20-24	586,315	184,350	400,702	1,263	2,724.0	1,680.0	3,797.8
	25-29	308,559	123,735	184,151	673	1,378.0	1,087.4	1,672.1
	30-34	168,421	80,320	87,753	348	729.0	688.0	767.9
	35-39	84,257	43,388	40,684	185	377.8	385.2	368.7
	40-44	44,313	24,546	19,674	93	210.0	231.7	187.2
	45-54	38,435	23,338	15,012	85	94.5	114.9	73.7
	55-64	14,249	9,838	4,387	24	33.3	46.9	20.1
	65+	2,780	1,998	768	14	5.0	7.9	2.5
	Unknown Age	10,565	3,755	6,696	114			
	TOTAL	1,644,416	587,473	1,053,246	3,697	495.5	357.4	628.8
2022	0-4	529	198	315	16	2.9	2.1	3.5
	5-9	167	42	125	0	0.8	0.4	1.3

Year	Age Group	Cases				Rates per 100,000 Population*		
		Total	Male	Female	Unknown Sex	Total	Male	Female
	10-14	10,442	1,478	8,923	41	50.0	13.8	87.6
	15-19	376,345	95,187	279,919	1,239	1,739.5	858.9	2,652.3
	20-24	576,253	182,289	392,214	1,750	2,537.9	1,571.2	3,532.3
	25-29	305,857	122,749	182,244	864	1,378.2	1,081.2	1,681.2
	30-34	175,859	84,562	90,859	438	754.5	714.4	792.1
	35-39	90,159	47,220	42,700	239	404.9	417.8	389.4
	40-44	48,692	27,048	21,532	112	227.2	250.0	202.9
	45-54	41,920	25,286	16,532	102	103.7	124.7	82.0
	55-64	16,204	11,285	4,878	41	38.5	54.6	22.8
	65+	3,572	2,584	974	14	6.2	10.0	3.1
	Unknown Age	3,717	1,277	2,358	82			
	TOTAL	1,649,716	601,205	1,043,573	4,938	495.0	363.7	621.2

* No population data are available for unknown sex and age; therefore, rates are not calculated.

NOTE: Cases in the 0–4 age group may include cases due to perinatal transmission. See Technical Notes for more information on chlamydia case reporting. This report includes data from years that coincide with the COVID-19 pandemic, which introduced uncertainty and difficulty in interpreting case data. See Impact of COVID-19 on STIs for more information.

Table 7. Chlamydia — Reported Cases by Race/Hispanic Ethnicity, Age Group, and Sex, United States, 2022

Age Group	American Indian/ Alaska Native			Asian			Black/ African American			Hispanic/Latino		
	Total*	Male	Female	Total*	Male	Female	Total*	Male	Female	Total*	Male	Female
0-4	10	3	4	6	2	3	115	50	63	64	24	40
5-9	1	0	1	0	0	0	51	11	40	36	6	30
10-14	129	13	116	27	1	26	4,110	714	3,392	1,339	150	1,182
15-19	3,531	728	2,800	2,452	463	1,984	123,644	37,979	85,533	46,924	9,822	36,962
20-24	5,219	1,303	3,912	6,302	1,890	4,399	160,679	58,252	102,235	80,131	21,680	58,251
25-29	3,260	969	2,290	4,422	2,107	2,311	86,553	37,143	49,311	47,230	17,423	29,701
30-34	2,345	751	1,593	3,101	1,828	1,265	48,644	24,892	23,691	27,318	12,515	14,747
35-39	1,447	471	976	1,760	1,060	694	21,790	12,605	9,165	14,462	7,363	7,074
40-44	750	266	484	934	576	358	10,434	6,619	3,804	7,997	4,331	3,652
45-54	485	194	290	1,008	687	320	8,032	5,377	2,647	6,528	3,874	2,638
55-64	131	62	67	313	177	136	3,074	2,082	988	1,827	1,242	579
65+	26	16	10	61	31	30	654	471	182	250	177	73
Unknown Age	14	5	9	17	2	15	604	263	340	170	49	117
TOTAL	17,348	4,781	12,552	20,403	8,824	11,541	468,384	186,458	281,391	234,276	78,656	155,046

Age Group	Multiracial			Native Hawaiian/ Pacific Islander			White			Other/Unknown		
	Total*	Male	Female	Total*	Male	Female	Total*	Male	Female	Total*	Male	Female
0-4	3	0	3	3	1	2	94	36	57	234	82	143
5-9	1	1	0	0	0	0	24	4	20	54	20	34
10-14	153	22	131	11	3	8	1,723	127	1,590	2,950	448	2,478
15-19	6,312	1,295	5,013	595	123	471	76,667	13,894	62,625	116,220	30,883	84,531
20-24	10,334	2,586	7,735	1,267	317	948	128,903	35,321	93,364	183,418	60,940	121,370
25-29	5,239	1,958	3,272	751	219	532	63,026	23,925	39,012	95,376	39,005	55,815
30-34	3,060	1,550	1,505	481	191	289	37,887	17,707	20,140	53,023	25,128	27,629
35-39	1,533	933	596	237	99	138	21,357	10,842	10,474	27,573	13,847	13,583
40-44	819	526	292	130	77	53	12,529	6,926	5,586	15,099	7,727	7,303
45-54	686	483	203	101	54	47	11,405	7,299	4,096	13,675	7,318	6,291

Age Group	Multiracial			Native Hawaiian/ Pacific Islander			White			Other/Unknown		
	Total*	Male	Female	Total*	Male	Female	Total*	Male	Female	Total*	Male	Female
55-64	249	209	40	20	12	8	5,389	4,313	1,068	5,201	3,188	1,992
65+	38	31	7	3	3	0	1,313	1,073	238	1,227	782	434
Unknown Age	0	0	0	5	2	2	1,405	410	993	1,502	546	882
TOTAL	28,427	9,594	18,797	3,604	1,101	2,498	361,722	121,877	239,263	515,552	189,914	322,485

* Total includes cases reported with unknown sex.

NOTE: These tables should be used only for race/Hispanic ethnicity comparisons. See Table 6 for age-specific cases and rates and Tables 3, 4, and 5 for total and sex-specific cases and rates. Cases in the 0–4 age group may include cases due to perinatal transmission. See Technical Notes for more information on chlamydia case reporting and on collection of race and Hispanic ethnicity for STI case data. This report includes data from years that coincide with the COVID-19 pandemic, which introduced uncertainty and difficulty in interpreting case data. See Impact of COVID-19 on STIs for more information.

Table 8. Chlamydia — Rates of Reported Cases* by Race/Hispanic Ethnicity, Age Group, and Sex, United States, 2022

Age Group	American Indian/ Alaska Native			Asian			Black/ African American			Hispanic/Latino		
	Total†	Male	Female	Total†	Male	Female	Total†	Male	Female	Total†	Male	Female
0-4	7.6	4.5	6.2	0.6	0.4	0.6	4.3	3.7	4.8	1.3	1.0	1.7
5-9	0.6	0.0	1.3	0.0	0.0	0.0	1.9	0.8	2.9	0.7	0.2	1.2
10-14	75.8	15.0	138.8	2.4	0.2	4.8	142.3	48.7	238.9	24.7	5.4	44.6
15-19	2,000.1	811.2	3,225.8	211.6	79.0	346.6	4,219.6	2,558.0	5,917.1	861.3	352.1	1,390.1
20-24	2,798.8	1,374.6	4,266.7	481.6	286.7	677.5	5,083.8	3,657.1	6,521.2	1,498.1	792.3	2,229.7
25-29	1,796.4	1,048.0	2,572.7	298.7	284.6	312.3	2,711.9	2,306.3	3,118.9	965.7	692.7	1,250.4
30-34	1,241.1	780.8	1,717.3	179.2	215.5	143.4	1,443.7	1,487.2	1,397.2	567.1	498.2	639.7
35-39	885.5	573.6	1,200.5	102.4	127.2	78.4	754.6	895.9	619.0	313.9	303.2	324.5
40-44	500.3	354.7	645.9	59.0	76.7	43.1	380.3	503.0	266.4	179.3	186.3	171.1
45-54	174.9	141.1	207.5	35.4	51.0	21.4	159.3	225.1	99.8	85.1	98.7	70.4
55-64	44.7	44.2	43.9	13.9	16.9	11.3	61.5	89.7	36.9	32.3	44.0	20.4
65+	7.5	10.3	5.3	2.1	2.5	1.9	12.0	21.2	5.6	4.7	7.6	2.5
Unknown age												
TOTAL	716.6	399.3	1,025.8	100.6	90.3	109.8	1,113.3	921.9	1,288.2	368.0	243.7	494.0

Age Group	Multiracial			Native Hawaiian/ Pacific Islander			White		
	Total†	Male	Female	Total†	Male	Female	Total†	Male	Female
0-4	0.3	0.0	0.6	7.1	4.6	9.9	1.1	0.8	1.3
5-9	0.1	0.2	0.0	0.0	0.0	0.0	0.2	0.1	0.4
10-14	16.0	4.5	28.0	25.4	13.6	37.6	16.8	2.4	31.8
15-19	742.4	299.1	1,201.4	1,346.3	546.7	2,170.8	695.2	244.8	1,170.4
20-24	1,352.9	667.9	2,053.5	2,816.3	1,367.1	4,348.4	1,083.9	578.2	1,614.2
25-29	820.8	607.4	1,035.7	1,615.9	921.4	2,342.7	535.7	395.6	682.5
30-34	581.4	602.1	559.7	898.4	691.9	1,114.2	300.2	275.7	324.8
35-39	373.1	475.5	277.7	454.6	368.8	545.8	171.9	171.3	171.7
40-44	229.6	310.9	155.7	276.3	317.6	232.4	103.6	112.5	94.2
45-54	124.0	184.2	69.7	132.1	138.7	125.2	47.6	59.9	34.8
55-64	54.5	96.5	16.6	29.5	35.7	23.4	19.0	30.6	7.5
65+	7.4	13.4	2.5	4.1	8.9	0.0	3.0	5.4	1.0
Unknown age									
TOTAL	355.6	241.6	467.3	566.7	342.4	794.7	184.3	125.0	242.4

* Per 100,000 population

† Total includes cases reported with unknown sex.

NOTE: These tables should be used only for race/Hispanic ethnicity comparisons. See Table 6 for age-specific cases and rates and Tables 3, 4, and 5 for total and sex-specific cases and rates. Cases in the 0–4 age group may include cases due to perinatal transmission. No population data exist for unknown sex, unknown age, or unknown race; therefore rates are not calculated. See Technical Notes for more information on chlamydia case reporting and on collection of race and Hispanic ethnicity for STI case data. This report includes data from years that coincide with the COVID-19 pandemic, which introduced uncertainty and difficulty in interpreting case data. See Impact of COVID-19 on STIs for more information.

Table 9. Chlamydia — Reported Cases and Rates of Reported Cases Among Men Aged 15-24 Years by Age, United States, 2018–2022

Ages	Cases					Rates per 100,000 Population				
	2018	2019	2020	2021	2022	2018	2019	2020	2021	2022
15	4,088	4,459	3,729	3,646	4,423	193.6	209.4	169.8	163.6	196.3
16	10,573	11,240	9,275	9,260	10,520	501.9	531.1	419.2	420.1	475.0
17	19,972	20,956	17,206	17,286	18,532	922.3	992.0	788.1	780.5	843.3
18	30,184	31,552	26,208	25,737	26,943	1,365.9	1,452.4	1,195.2	1,173.5	1,215.8
19	38,765	40,517	34,526	34,791	34,769	1,777.2	1,829.4	1,550.7	1,594.6	1,580.0
20	43,337	45,850	39,465	39,371	38,694	1,981.9	2,100.2	1,789.8	1,774.2	1,713.1
21	43,800	45,646	39,587	40,614	39,743	1,996.7	2,087.1	1,811.7	1,830.4	1,652.1
22	41,619	43,437	36,821	37,966	38,117	1,875.1	1,978.6	1,696.0	1,739.9	1,598.5
23	38,096	38,735	33,885	35,014	34,439	1,673.6	1,743.4	1,555.4	1,609.0	1,499.1
24	35,676	35,967	30,302	31,385	31,296	1,534.2	1,579.3	1,372.8	1,441.6	1,387.4
Total	306,110	318,359	271,004	275,070	277,476	1,392.9	1,459.7	1,234.2	1,250.5	1,223.2

NOTE: See Technical Notes for more information on chlamydia case reporting. This report includes data from years that coincide with the COVID-19 pandemic, which introduced uncertainty and difficulty in interpreting case data. See Impact of COVID-19 on STIs for more information.

Table 10. Chlamydia — Reported Cases and Rates of Reported Cases Among Women Aged 15-24 Years by Age, United States, 2018–2022

Ages	Cases					Rates per 100,000 Population				
	2018	2019	2020	2021	2022	2018	2019	2020	2021	2022
15	19,518	20,352	17,168	15,886	17,347	961.7	994.8	818.5	746.7	809.3
16	40,001	40,135	33,901	32,012	32,809	1,976.3	1,973.0	1,600.8	1,520.1	1,554.1
17	66,329	65,210	55,136	53,315	52,059	3,194.3	3,212.5	2,640.1	2,516.6	2,486.8
18	101,783	102,336	87,113	84,428	82,503	4,824.0	4,911.9	4,149.5	4,021.3	3,909.1
19	114,004	116,097	101,306	98,665	95,201	5,474.9	5,487.5	4,749.6	4,720.2	4,543.9
20	110,939	111,609	99,860	98,541	94,027	5,315.2	5,349.0	4,728.3	4,631.5	4,314.5
21	102,127	103,394	93,215	95,075	91,942	4,865.7	4,944.2	4,441.8	4,466.6	3,966.2
22	86,274	86,633	78,669	80,655	80,128	4,078.8	4,118.6	3,767.3	3,846.4	3,516.1
23	73,729	73,497	66,368	68,341	68,113	3,409.6	3,467.0	3,160.2	3,262.2	3,115.3
24	64,663	63,434	56,037	58,090	58,004	2,928.1	2,927.2	2,640.1	2,762.6	2,709.1
Total	779,367	782,697	688,773	685,008	672,133	3,712.3	3,749.1	3,270.9	3,247.6	3,103.5

NOTE: See Technical Notes for more information on chlamydia case reporting. This report includes data from years that coincide with the COVID-19 pandemic, which introduced uncertainty and difficulty in interpreting case data. See Impact of COVID-19 on STIs for more information.

Table 11. Gonorrhea — Reported Cases and Rates of Reported Cases by State, Ranked by Rates, United States, 2022

Rank*	State	Cases	Rate per 100,000 Population
1	Mississippi	10,933	371.9
2	South Dakota	3,067	337.1
3	Louisiana	15,015	327.1
4	Alaska	2,304	314.1
5	Georgia	31,450	288.2
6	South Carolina	14,352	271.7
7	Alabama	13,279	261.7
8	North Carolina	26,715	249.7
9	Missouri	15,209	246.2
10	Nevada	7,392	232.6
11	Tennessee	16,069	227.9
12	Arizona	16,490	224.1
13	Oklahoma	8,974	223.2
14	Arkansas	6,792	223.0
15	New York	43,362	220.4
16	Illinois	26,442	210.2
17	Texas	61,999	206.5
18	California	80,257	205.6
19	Florida	44,333	199.3
20	New Mexico	4,157	196.7
21	Ohio	22,969	195.4
	US TOTAL†	648,056	194.4
22	North Dakota	1,426	183.0
23	Indiana	12,396	181.4
24	Maryland	11,164	181.1
25	Kansas	4,997	170.1
26	Michigan	16,378	163.2
27	Virginia	13,437	154.7
28	Kentucky	6,820	151.1
29	Colorado	8,784	150.4
30	Wisconsin	8,740	148.3
31	Washington	11,400	146.4
32	Pennsylvania	18,851	145.3
33	Delaware	1,464	143.8
34	Minnesota	8,152	142.6
35	Iowa	4,466	139.5
36	Connecticut	4,979	137.3
37	Rhode Island	1,444	132.0
38	Massachusetts	9,206	131.9
39	Nebraska	2,560	130.1

Rank*	State	Cases	Rate per 100,000 Population
40	Oregon	5,494	129.6
41	Montana	1,311	116.8
42	Hawaii	1,478	102.6
43	New Jersey	9,330	100.7
44	Utah	3,171	93.8
45	West Virginia	1,258	70.9
46	Idaho	1,098	56.6
47	Wyoming	310	53.3
48	New Hampshire	662	47.4
49	Maine	621	44.8
50	Vermont	174	26.9

* States were ranked by rate, then case count, then in alphabetical order, with rates shown rounded to the nearest tenth.

† Total includes cases reported by the District of Columbia with 4,925 cases and a rate of 733.1, but excludes territories.

NOTE: See Technical Notes for more information on gonorrhea case reporting. This report includes data from years that coincide with the COVID-19 pandemic, which introduced uncertainty and difficulty in interpreting case data. See Impact of COVID-19 on STIs for more information.

Table 12. Gonorrhea — Reported Cases and Rates of Reported Cases by State/Territory and Region in Alphabetical Order, United States, 2018–2022

State/Territory	Cases					Rates per 100,000 Population				
	2018	2019	2020	2021	2022	2018	2019	2020	2021	2022
Alabama	12,742	14,492	14,426	16,191	13,279	260.7	295.6	287.1	321.3	261.7
Alaska	2,247	2,213	1,982	1,977	2,304	304.7	302.5	270.3	269.8	314.1
Arizona	12,870	15,180	16,342	18,426	16,490	179.5	208.6	228.5	253.2	224.1
Arkansas	7,300	6,907	7,857	8,176	6,792	242.2	228.9	260.9	270.2	223.0
California	79,192	80,301	78,444	91,461	80,257	200.2	203.2	198.4	233.1	205.6
Colorado	8,894	9,572	9,686	10,596	8,784	156.2	166.2	167.8	182.3	150.4
Connecticut	4,959	4,418	4,604	5,405	4,979	138.8	123.9	127.7	149.9	137.3
Delaware	1,691	1,617	1,503	1,541	1,464	174.8	166.1	151.8	153.6	143.8
District of Columbia	4,240	4,382	3,879	4,322	4,925	603.6	620.9	562.5	645.0	733.1
Florida	32,644	36,804	40,788	44,738	44,333	153.3	171.4	189.4	205.4	199.3
Georgia	20,867	21,257	23,463	31,996	31,450	198.4	200.2	219.0	296.3	288.2
Hawaii	1,495	1,494	1,484	1,457	1,478	105.2	105.5	102.0	101.1	102.6
Idaho	1,134	1,491	1,480	1,197	1,098	64.6	83.4	80.5	63.0	56.6
Illinois	25,422	29,272	31,055	30,454	26,442	199.5	231.0	242.4	240.3	210.2
Indiana	12,193	11,926	14,111	14,483	12,396	182.2	177.1	208.0	212.8	181.4
Iowa	4,839	5,309	6,919	6,403	4,466	153.3	168.3	216.9	200.5	139.5
Kansas	5,256	4,948	5,626	5,646	4,997	180.5	169.8	191.5	192.4	170.1
Kentucky	7,470	7,379	8,393	8,221	6,820	167.2	165.2	186.3	182.3	151.1
Louisiana	12,043	12,800	15,483	16,390	15,015	258.4	275.3	332.4	354.5	327.1
Maine	710	547	520	462	621	53.0	40.7	38.2	33.7	44.8
Maryland	10,305	11,598	12,052	NR	11,164	170.5	191.8	195.1	—	181.1
Massachusetts	8,076	7,396	7,494	8,240	9,206	117.0	107.3	106.6	118.0	131.9
Michigan	16,688	18,150	23,412	21,954	16,378	166.9	181.7	232.3	218.4	163.2
Minnesota	7,542	8,013	10,320	9,660	8,152	134.4	142.1	180.8	169.3	142.6
Mississippi	9,749	12,068	13,773	12,617	10,933	326.4	405.5	465.1	427.7	371.9
Missouri	15,090	15,585	16,855	15,714	15,209	246.3	253.9	273.8	254.8	246.2
Montana	1,181	1,595	1,698	1,448	1,311	111.2	149.2	156.6	131.1	116.8
Nebraska	2,696	2,967	3,434	3,063	2,560	139.7	153.4	175.1	156.0	130.1
Nevada	6,475	6,519	6,364	8,488	7,392	213.4	211.6	205.0	270.0	232.6
New Hampshire	594	410	461	613	662	43.8	30.2	33.5	44.1	47.4
New Jersey	9,067	9,622	10,060	10,259	9,330	101.8	108.3	108.3	110.7	100.7
New Mexico	5,268	4,886	4,608	5,080	4,157	251.4	233.0	217.6	240.1	196.7
New York	37,262	40,901	42,517	43,048	43,362	190.7	210.2	210.5	217.0	220.4
North Carolina	23,725	26,377	28,258	28,612	26,715	228.5	251.5	270.7	271.2	249.7
North Dakota	1,369	1,447	1,660	1,735	1,426	180.1	189.9	213.1	223.9	183.0
Ohio	25,146	26,065	30,977	27,838	22,969	215.1	223.0	262.5	236.3	195.4
Oklahoma	8,998	10,491	11,204	10,273	8,974	228.2	265.1	283.0	257.7	223.2
Oregon	5,913	6,130	6,412	6,221	5,494	141.1	145.3	151.3	146.5	129.6
Pennsylvania	15,887	16,059	18,280	18,912	18,851	124.0	125.4	140.6	145.9	145.3

State/Territory	Cases					Rates per 100,000 Population				
	2018	2019	2020	2021	2022	2018	2019	2020	2021	2022
Rhode Island	1,336	1,516	1,399	1,681	1,444	126.4	143.1	127.5	153.4	132.0
South Carolina	13,801	14,160	16,705	16,052	14,352	271.5	275.0	326.4	309.2	271.7
South Dakota	1,689	2,170	2,424	3,258	3,067	191.4	245.3	273.4	363.9	337.1
Tennessee	14,627	16,026	18,458	18,768	16,069	216.1	234.7	267.1	269.1	227.9
Texas	47,231	44,230	58,246	64,623	61,999	164.6	152.5	199.8	218.9	206.5
Utah	2,895	2,886	3,112	3,621	3,171	91.6	90.0	95.1	108.5	93.8
Vermont	268	175	139	136	174	42.8	28.0	21.6	21.1	26.9
Virginia	11,776	13,840	15,217	14,323	13,437	138.3	162.1	176.3	165.7	154.7
Washington	11,207	11,736	11,667	11,231	11,400	148.7	154.1	151.4	145.1	146.4
West Virginia	1,143	1,771	1,780	1,639	1,258	63.3	98.8	99.2	91.9	70.9
Wisconsin	7,882	8,846	10,346	10,455	8,740	135.6	151.9	175.5	177.3	148.3
Wyoming	311	448	392	523	310	53.8	77.4	68.0	90.4	53.3
US TOTAL	583,405	616,392	677,769	710,151	648,056	178.3	187.8	204.5	214.0	194.4
Northeast	78,159	81,044	85,474	88,756	88,629	139.3	144.8	148.4	155.3	155.4
Midwest	125,812	134,698	157,139	150,663	126,802	184.2	197.1	227.8	218.9	184.3
South	240,352	256,199	291,485	309,006	288,979	192.7	204.0	230.8	242.9	224.5
West	139,082	144,451	143,671	161,726	143,646	178.3	184.4	182.8	205.6	182.4
American Samoa	13	9	24	11	15	25.6	18.6	50.6	23.7	33.0
Commonwealth of the Northern Mariana Islands	34	21	3	17	17	65.4	40.3	5.8	32.9	33.0
Guam	261	305	208	198	329	155.6	181.4	123.5	117.3	194.6
Puerto Rico	557	499	390	1,012	1,070	16.9	15.6	11.9	31.0	33.2
US Virgin Islands	NR	47	67	78	44	—	44.1	63.0	73.7	41.7
TERRITORIES TOTAL	865	881	692	1,316	1,475	24.3	24.7	18.9	36.2	41.0
TOTAL	584,270	617,273	678,461	711,467	649,531	176.7	186.0	202.5	212.0	192.8

NR = No report.

NOTE: See Technical Notes for more information on gonorrhea case reporting and on interpreting case counts and rates in US territories. This report includes data from years that coincide with the COVID-19 pandemic, which introduced uncertainty and difficulty in interpreting case data. See Impact of COVID-19 on STIs for more information. Due to a network security incident in December 2021, the Maryland Department of Health could not finalize their 2021 STI case notification data. Although 2021 data from Maryland are included in national and regional case counts and rates displayed in this table, state-specific data have been suppressed.

Table 13. Gonorrhea Among Men — Reported Cases and Rates of Reported Cases by State/Territory and Region in Alphabetical Order, United States, 2018–2022

State/Territory	Cases					Rates per 100,000 Population				
	2018	2019	2020	2021	2022	2018	2019	2020	2021	2022
Alabama	6,560	7,577	7,625	8,344	6,901	277.5	319.8	312.2	340.8	279.7
Alaska	1,189	1,081	1,006	1,018	1,145	309.2	283.4	261.7	265.0	296.7
Arizona	7,509	8,942	9,524	10,905	9,936	210.6	247.2	266.7	300.1	270.1
Arkansas	3,511	3,359	3,832	3,855	3,470	237.2	226.7	257.8	258.2	230.5
California	52,553	52,676	49,809	59,702	55,421	267.3	268.1	251.9	304.3	283.7
Colorado	5,305	5,682	5,754	6,396	5,605	185.0	195.8	196.8	217.2	189.1
Connecticut	3,003	2,483	2,664	2,807	2,474	172.3	142.7	150.5	158.6	139.3
Delaware	958	871	814	870	844	204.7	185.0	169.1	178.5	170.7
District of Columbia	2,989	3,055	2,754	3,142	3,693	896.8	912.7	838.0	985.2	1,155.2
Florida	19,704	23,267	24,696	27,572	27,880	189.2	221.7	233.2	257.4	254.7
Georgia	12,075	12,585	13,684	18,619	18,564	236.1	243.9	261.5	353.3	348.3
Hawaii	959	946	877	849	957	134.9	133.6	119.6	117.0	132.1
Idaho	622	841	761	676	668	70.8	93.9	82.1	70.5	68.4
Illinois	15,351	17,351	17,901	17,998	16,448	245.2	278.7	282.6	287.3	264.1
Indiana	6,101	6,124	7,100	7,572	6,625	184.9	184.4	210.9	224.2	195.1
Iowa	2,363	2,592	3,450	3,068	2,321	150.4	165.0	215.8	191.6	144.5
Kansas	2,641	2,483	2,823	2,829	2,567	182.1	171.0	191.8	192.4	174.0
Kentucky	3,762	3,843	4,217	4,212	3,523	170.9	174.6	188.8	188.6	157.2
Louisiana	6,139	6,711	8,169	8,541	8,361	269.9	296.0	357.6	377.1	372.0
Maine	459	344	307	287	400	70.0	52.3	45.7	42.4	58.5
Maryland	6,074	7,029	7,272	NR	6,712	207.4	240.0	241.6	—	223.6
Massachusetts	5,578	5,135	4,843	5,449	6,256	166.5	153.5	141.0	159.7	183.0
Michigan	8,700	9,491	11,998	11,245	8,800	176.8	193.0	240.3	225.8	176.6
Minnesota	4,187	4,311	5,472	5,290	4,663	149.8	153.4	191.3	184.9	162.4
Mississippi	4,846	5,831	7,048	6,283	5,551	334.7	404.3	488.6	437.7	388.5
Missouri	8,287	8,553	8,892	8,329	8,215	275.5	283.9	292.7	273.6	268.9
Montana	543	748	811	689	620	101.5	139.0	147.7	123.2	108.8
Nebraska	1,393	1,462	1,729	1,534	1,328	144.6	151.3	175.5	155.5	134.1
Nevada	3,985	4,082	3,812	5,343	4,744	261.9	264.2	243.6	337.3	295.8
New Hampshire	410	275	320	397	429	61.0	40.8	46.6	57.3	61.5
New Jersey	5,617	5,923	5,803	6,021	5,864	129.1	136.5	126.9	132.0	128.5
New Mexico	2,925	2,704	2,555	2,892	2,418	282.0	260.6	242.4	274.7	229.6
New York	27,025	29,548	27,910	29,073	31,591	284.8	312.7	282.7	299.9	328.2
North Carolina	12,245	13,947	14,918	15,316	14,565	242.4	273.5	292.2	297.0	278.0
North Dakota	661	717	799	834	706	169.8	183.8	199.2	209.3	176.3
Ohio	13,000	13,679	15,830	14,124	12,010	226.8	238.7	271.9	243.0	206.7
Oklahoma	4,442	5,280	5,734	5,283	4,646	227.4	269.3	290.8	266.2	231.8
Oregon	3,663	3,824	3,794	3,647	3,392	176.3	182.9	179.6	172.3	160.2
Pennsylvania	9,821	9,686	10,645	10,779	11,570	156.5	154.4	165.9	168.4	180.6

State/Territory	Cases					Rates per 100,000 Population				
	2018	2019	2020	2021	2022	2018	2019	2020	2021	2022
Rhode Island	879	953	861	1,022	951	170.9	184.8	160.1	190.3	177.1
South Carolina	6,744	7,257	8,715	8,402	7,458	273.8	291.1	349.8	332.9	290.0
South Dakota	715	946	1,145	1,417	1,298	160.5	211.7	254.3	311.5	280.5
Tennessee	7,946	8,438	9,848	10,282	9,141	240.6	253.2	290.5	300.6	264.0
Texas	27,117	25,770	32,985	37,265	37,158	190.2	178.9	226.7	252.9	247.4
Utah	1,953	1,872	1,924	2,390	2,053	122.7	115.9	116.2	141.4	119.6
Vermont	126	110	73	82	103	40.7	35.7	22.8	25.6	32.0
Virginia	6,525	7,790	8,354	7,841	7,738	155.7	185.5	195.5	183.3	180.0
Washington	7,279	7,547	7,178	7,053	7,374	193.1	198.0	185.0	180.9	187.7
West Virginia	601	933	914	860	666	67.2	105.1	102.2	96.7	75.1
Wisconsin	4,208	4,694	5,392	5,440	4,572	145.5	162.0	182.6	184.2	154.7
Wyoming	153	238	210	270	153	51.9	80.8	71.0	91.2	51.4
US TOTAL	341,401	361,586	385,551	410,388	390,548	211.9	223.7	234.8	249.7	236.3
Northeast	52,918	54,457	53,426	55,917	59,638	193.4	199.4	188.9	199.2	212.8
Midwest	67,607	72,403	82,531	79,680	69,553	200.4	214.6	240.8	232.9	203.2
South	132,238	143,543	161,579	172,961	166,871	216.3	233.3	259.7	276.1	262.9
West	88,638	91,183	88,015	101,830	94,486	227.9	233.3	223.2	258.1	238.9
American Samoa	9	7	13	6	7	35.4	28.9	55.0	26.0	31.0
Commonwealth of the Northern Mariana Islands	18	8	1	6	11	65.1	28.9	3.6	21.9	40.3
Guam	118	157	100	100	166	136.7	181.4	115.3	115.1	190.6
Puerto Rico	318	298	261	537	537	20.4	19.7	16.8	34.8	35.3
US Virgin Islands	NR	23	40	42	20	—	45.2	79.0	83.4	39.9
TERRITORIES TOTAL	463	493	415	691	741	27.2	28.9	23.8	39.9	43.3
TOTAL	341,864	362,079	385,966	411,079	391,289	210.0	221.6	232.6	247.5	234.3

NR = No report.

NOTE: See Technical Notes for more information on gonorrhea case reporting and on interpreting case counts and rates in US territories. This report includes data from years that coincide with the COVID-19 pandemic, which introduced uncertainty and difficulty in interpreting case data. See Impact of COVID-19 on STIs for more information. Due to a network security incident in December 2021, the Maryland Department of Health could not finalize their 2021 STI case notification data. Although 2021 data from Maryland are included in national and regional case counts and rates displayed in this table, state-specific data have been suppressed.

Table 14. Gonorrhea Among Women— Reported Cases and Rates of Reported Cases by State/Territory and Region in Alphabetical Order, United States, 2018–2022

State/Territory	Cases					Rates per 100,000 Population				
	2018	2019	2020	2021	2022	2018	2019	2020	2021	2022
Alabama	6,134	6,878	6,765	7,749	6,213	243.1	271.5	262.0	299.0	238.3
Alaska	1,057	1,131	976	959	1,159	299.5	323.0	279.7	275.2	333.4
Arizona	5,332	6,229	6,803	7,505	6,522	147.9	170.1	190.0	206.0	177.2
Arkansas	3,788	3,546	4,021	4,318	3,320	247.0	230.8	263.7	281.7	215.6
California	26,425	27,291	28,288	31,301	24,506	132.8	137.4	143.1	159.5	125.7
Colorado	3,589	3,890	3,932	4,200	3,179	126.9	136.1	138.0	146.5	110.6
Connecticut	1,938	1,932	1,915	2,558	2,501	105.9	105.8	104.3	139.3	135.2
Delaware	728	745	687	667	616	145.8	148.1	135.1	129.3	117.6
District of Columbia	1,211	1,283	1,106	1,167	1,216	328.1	345.8	306.5	332.3	345.3
Florida	12,936	13,525	16,083	17,148	16,415	118.8	123.2	146.9	154.9	145.3
Georgia	8,718	8,375	9,641	13,362	12,880	161.3	153.5	176.0	241.6	230.7
Hawaii	531	539	602	597	521	74.8	76.1	83.4	83.4	72.8
Idaho	509	650	718	519	430	58.2	72.9	78.7	55.1	44.7
Illinois	10,064	11,825	13,101	12,418	9,966	155.3	183.5	202.3	193.8	156.9
Indiana	6,083	5,794	7,000	6,896	5,764	179.4	169.8	204.8	201.1	167.7
Iowa	2,476	2,716	3,469	3,335	2,145	156.2	171.5	217.9	209.5	134.6
Kansas	2,615	2,465	2,803	2,817	2,428	179.0	168.6	191.2	192.4	166.1
Kentucky	3,643	3,489	4,136	3,981	3,279	160.7	153.9	182.0	175.0	144.3
Louisiana	5,904	6,088	7,314	7,845	6,654	247.5	255.6	308.2	332.6	284.0
Maine	250	203	213	175	221	36.6	29.6	30.8	25.2	31.5
Maryland	4,227	4,568	4,735	NR	4,405	135.8	146.6	149.5	—	139.3
Massachusetts	2,431	2,217	2,579	2,753	2,904	68.4	62.5	71.7	77.1	81.5
Michigan	7,981	8,657	11,413	10,706	7,577	157.3	170.8	224.5	211.2	150.0
Minnesota	3,345	3,678	4,833	4,347	3,470	118.8	130.0	169.8	152.7	121.9
Mississippi	4,888	6,220	6,698	6,280	5,329	317.7	405.5	441.0	414.6	352.6
Missouri	6,803	7,032	7,963	7,385	6,994	218.1	225.0	255.5	236.4	223.9
Montana	638	847	887	759	690	121.0	159.6	165.7	139.3	124.8
Nebraska	1,302	1,503	1,694	1,527	1,231	134.8	155.3	173.5	156.3	126.0
Nevada	2,477	2,432	2,546	3,135	2,637	163.7	158.4	165.3	201.0	167.5
New Hampshire	184	135	140	215	233	26.9	19.7	20.3	30.9	33.4
New Jersey	3,446	3,680	4,226	4,238	3,463	75.6	81.0	89.6	90.1	73.7
New Mexico	2,343	2,179	2,050	2,183	1,739	221.4	205.7	192.7	205.3	164.0
New York	10,202	11,341	14,607	13,958	11,768	101.5	113.3	141.4	137.6	117.1
North Carolina	11,480	12,430	13,340	13,296	12,150	215.3	230.7	250.1	246.5	222.6
North Dakota	708	730	861	901	720	191.0	196.2	227.8	239.3	190.1
Ohio	12,146	12,386	15,147	13,714	10,959	203.8	207.9	253.4	229.8	184.3
Oklahoma	4,556	5,211	5,470	4,990	4,328	228.9	261.0	275.2	249.2	214.8
Oregon	2,244	2,288	2,612	2,557	2,063	106.2	107.6	123.0	120.1	97.2
Pennsylvania	6,050	6,359	7,625	8,122	7,270	92.6	97.4	115.8	123.7	110.7

State/Territory	Cases					Rates per 100,000 Population				
	2018	2019	2020	2021	2022	2018	2019	2020	2021	2022
Rhode Island	457	563	538	659	493	84.2	103.6	96.1	118.0	88.6
South Carolina	7,016	6,847	7,878	7,534	6,810	267.7	257.8	299.9	282.5	251.2
South Dakota	974	1,224	1,279	1,841	1,769	223.0	279.5	293.0	417.9	395.7
Tennessee	6,681	7,588	8,609	8,483	6,921	192.7	217.0	244.6	238.6	192.8
Texas	19,982	18,177	24,879	26,832	23,971	138.4	124.6	170.5	181.4	159.7
Utah	942	1,014	1,188	1,230	1,117	60.0	63.7	73.5	74.6	67.1
Vermont	140	65	66	54	71	44.2	20.6	20.4	16.6	21.8
Virginia	5,208	6,019	6,810	6,430	5,685	120.4	138.8	156.2	147.3	129.7
Washington	3,922	4,183	4,457	4,123	3,954	104.2	110.0	116.5	107.4	102.5
West Virginia	542	836	866	779	592	59.5	92.4	96.3	87.2	66.6
Wisconsin	3,670	4,146	4,915	4,997	4,161	125.6	141.7	167.1	169.8	141.7
Wyoming	158	210	182	252	157	55.8	73.9	64.7	89.2	55.4
US TOTAL	241,074	253,359	290,666	298,015	255,566	145.2	152.1	173.8	177.9	152.1
Northeast	25,098	26,495	31,909	32,732	28,924	87.3	92.4	108.8	112.5	99.7
Midwest	58,167	62,156	74,478	70,884	57,184	168.2	179.7	214.6	204.7	165.5
South	107,642	111,825	129,038	135,079	120,784	169.2	174.6	201.5	209.2	185.1
West	50,167	52,883	55,241	59,320	48,674	128.3	134.7	141.1	151.3	124.2
American Samoa	4	2	11	5	8	15.7	8.2	46.3	21.5	35.0
Commonwealth of the Northern Mariana Islands	16	13	2	11	6	65.7	53.3	8.2	45.3	24.8
Guam	143	148	108	98	163	175.6	181.3	132.1	119.7	198.8
Puerto Rico	238	201	129	475	532	13.7	12.0	7.5	27.6	31.3
US Virgin Islands	NR	24	27	36	24	—	43.0	48.5	64.9	43.4
TERRITORIES TOTAL	401	388	277	625	733	21.5	20.8	14.5	32.8	38.9
TOTAL	241,475	253,747	290,943	298,640	256,299	143.8	150.6	172.0	176.3	150.9

NR = No report.

NOTE: See Technical Notes for more information on gonorrhea case reporting and on interpreting case counts and rates in US territories. This report includes data from years that coincide with the COVID-19 pandemic, which introduced uncertainty and difficulty in interpreting case data. See Impact of COVID-19 on STIs for more information. Due to a network security incident in December 2021, the Maryland Department of Health could not finalize their 2021 STI case notification data. Although 2021 data from Maryland are included in national and regional case counts and rates displayed in this table, state-specific data have been suppressed.

Table 15. Gonorrhea — Reported Cases and Rates of Reported Cases by Age Group and Sex, United States, 2018–2022

Year	Age Group	Cases				Rates per 100,000 Population*		
		Total	Male	Female	Unknown Sex	Total	Male	Female
2018	0-4	224	77	142	5	1.1	0.8	1.5
	5-9	111	13	98	0	0.5	0.1	1.0
	10-14	2,683	509	2,168	6	12.8	4.8	21.2
	15-19	91,373	34,614	56,628	131	433.1	321.2	548.6
	20-24	157,708	81,813	75,663	232	721.0	730.4	709.0
	25-29	129,385	80,216	48,991	178	549.1	667.4	424.4
	30-34	80,507	53,362	27,026	119	363.7	476.8	246.9
	35-39	48,399	33,556	14,769	74	224.4	311.0	137.1
	40-44	26,953	19,552	7,353	48	136.7	199.6	74.1
	45-54	31,270	25,092	6,132	46	75.1	122.2	29.1
	55-64	12,091	10,399	1,675	17	28.6	51.0	7.7
	65+	2,332	2,036	283	13	4.4	8.7	1.0
	Unknown Age	369	162	146	61			
	TOTAL	583,405	341,401	241,074	930	178.3	211.9	145.2
2019	0-4	218	72	137	9	1.1	0.7	1.4
	5-9	106	20	84	2	0.5	0.2	0.9
	10-14	2,646	522	2,113	11	12.7	4.9	20.8
	15-19	93,379	35,402	57,758	219	443.5	329.5	560.3
	20-24	162,298	83,278	78,700	320	750.2	752.6	744.7
	25-29	135,711	84,207	51,260	244	577.3	701.5	445.6
	30-34	87,990	58,749	29,045	196	392.3	517.4	262.2
	35-39	53,587	36,866	16,614	107	246.5	338.7	153.1
	40-44	30,362	21,871	8,417	74	152.4	220.8	84.0
	45-54	33,316	26,356	6,884	76	81.5	130.7	33.3
	55-64	13,630	11,683	1,916	31	32.1	57.0	8.7
	65+	2,703	2,350	336	17	5.0	9.8	1.1
	Unknown Age	446	210	95	141			
	TOTAL	616,392	361,586	253,359	1,447	187.8	223.7	152.1
2020	0-4	294	90	188	16	1.5	0.9	2.0
	5-9	107	13	91	3	0.5	0.1	0.9
	10-14	2,958	582	2,368	8	13.6	5.2	22.3
	15-19	103,391	39,656	63,542	193	479.8	360.1	603.1
	20-24	182,880	90,894	91,618	368	851.9	830.3	870.8
	25-29	145,825	87,378	58,127	320	637.0	751.9	515.7
	30-34	99,228	64,453	34,590	185	434.8	558.1	306.8
	35-39	58,623	38,898	19,604	121	263.9	346.9	178.3
	40-44	34,060	23,807	10,164	89	165.6	230.8	99.1
	45-54	32,900	25,152	7,663	85	79.8	122.2	37.2
	55-64	13,771	11,678	2,063	30	31.9	55.3	9.4

Year	Age Group	Cases				Rates per 100,000 Population*		
		Total	Male	Female	Unknown Sex	Total	Male	Female
	65+	2,831	2,470	343	18	5.2	10.1	1.2
	Unknown Age	901	480	305	116			
	TOTAL	677,769	385,551	290,666	1,552	204.5	234.8	173.8
2021	0-4	240	76	157	7	1.3	0.8	1.7
	5-9	83	17	66	0	0.4	0.2	0.7
	10-14	3,044	629	2,409	6	14.2	5.7	23.0
	15-19	101,918	39,696	61,961	261	472.6	360.1	587.8
	20-24	185,219	92,638	92,130	451	860.5	844.2	873.2
	25-29	148,135	89,098	58,701	336	661.5	783.0	533.0
	30-34	109,390	72,191	36,911	288	473.5	618.4	323.0
	35-39	65,169	44,028	20,992	149	292.2	390.9	190.2
	40-44	38,613	26,984	11,553	76	183.0	254.7	109.9
	45-54	36,148	27,393	8,684	71	88.8	134.9	42.6
	55-64	15,295	12,884	2,381	30	35.7	61.5	10.9
	65+	3,189	2,746	431	12	5.7	10.9	1.4
	Unknown Age	3,708	2,008	1,639	61			
	TOTAL	710,151	410,388	298,015	1,748	214.0	249.7	177.9
2022	0-4	240	97	134	9	1.3	1.0	1.5
	5-9	76	15	61	0	0.4	0.1	0.6
	10-14	2,882	627	2,241	14	13.8	5.9	22.0
	15-19	94,918	39,106	55,477	335	438.7	352.9	525.7
	20-24	165,751	85,780	79,408	563	730.0	739.4	715.1
	25-29	128,268	80,453	47,470	345	578.0	708.7	437.9
	30-34	103,073	71,251	31,553	269	442.2	601.9	275.1
	35-39	61,580	43,373	18,067	140	276.5	383.8	164.8
	40-44	37,304	26,835	10,390	79	174.1	248.1	97.9
	45-54	34,590	26,639	7,856	95	85.6	131.4	39.0
	55-64	15,371	13,111	2,229	31	36.5	63.4	10.4
	65+	3,433	2,966	455	12	5.9	11.4	1.4
	Unknown Age	570	295	225	50			
	TOTAL	648,056	390,548	255,566	1,942	194.4	236.3	152.1

* No population data are available for unknown sex and age; therefore, rates are not calculated.

NOTE: Cases in the 0–4 age group may include cases due to perinatal transmission. See Technical Notes for more information on gonorrhea case reporting. This report includes data from years that coincide with the COVID-19 pandemic, which introduced uncertainty and difficulty in interpreting case data. See Impact of COVID-19 on STIs for more information.

Table 16. Gonorrhea — Reported Cases by Race/Hispanic Ethnicity, Age Group, and Sex, United States, 2022

Age Group	American Indian/ Alaska Native			Asian			Black/ African American			Hispanic/Latino		
	Total*	Male	Female	Total*	Male	Female	Total*	Male	Female	Total*	Male	Female
0-4	7	1	5	1	0	1	61	22	38	26	9	17
5-9	2	0	2	0	0	0	19	1	18	17	7	10
10-14	42	11	31	15	0	15	1,455	349	1,106	290	57	231
15-19	993	304	686	454	189	263	45,850	20,387	25,398	9,612	3,782	5,775
20-24	1,804	681	1,119	1,520	996	520	71,339	38,077	33,146	20,244	11,059	9,093
25-29	1,752	695	1,056	1,900	1,547	351	49,724	31,239	18,429	18,055	12,325	5,683
30-34	1,837	775	1,057	1,710	1,472	234	35,541	25,247	10,251	14,919	11,107	3,772
35-39	1,220	501	719	1,018	861	153	18,226	13,713	4,495	8,972	6,834	2,116
40-44	722	348	374	587	508	78	10,067	7,763	2,293	5,403	4,168	1,224
45-54	499	254	245	645	544	101	8,930	7,455	1,463	4,621	3,687	916
55-64	140	95	45	173	151	22	4,196	3,773	418	1,419	1,246	170
65+	26	24	2	47	39	8	883	796	84	236	197	39
Unknown Age	3	2	1	6	5	1	189	111	77	43	21	22
TOTAL	9,047	3,691	5,342	8,076	6,312	1,747	246,480	148,933	97,216	83,857	54,499	29,068

Age Group	Multiracial			Native Hawaiian/ Pacific Islander			White			Other/Unknown		
	Total*	Male	Female	Total*	Male	Female	Total*	Male	Female	Total*	Male	Female
0-4	1	1	0	2	1	1	49	22	27	93	41	45
5-9	1	0	1	0	0	0	19	4	15	18	3	15
10-14	48	8	40	3	1	2	364	38	321	665	163	495
15-19	1,885	577	1,305	131	43	88	13,182	3,648	9,499	22,811	10,176	12,463
20-24	3,558	1,487	2,061	291	131	160	28,749	12,389	16,277	38,246	20,960	17,032
25-29	2,893	1,674	1,200	271	157	112	26,514	15,161	11,297	27,159	17,655	9,342
30-34	2,415	1,652	755	201	130	71	25,523	16,231	9,241	20,927	14,637	6,172
35-39	1,498	1,085	407	110	71	38	18,094	11,544	6,521	12,442	8,764	3,618
40-44	840	621	218	72	49	23	11,794	7,836	3,940	7,819	5,542	2,240
45-54	729	601	125	72	54	18	11,512	8,462	3,024	7,582	5,582	1,964
55-64	276	250	26	23	17	6	5,712	4,849	855	3,432	2,730	687
65+	48	46	2	4	3	1	1,347	1,172	173	842	689	146
Unknown Age	1	0	1	4	1	3	43	22	21	281	133	99
TOTAL	14,193	8,002	6,141	1,184	658	523	142,902	81,378	61,211	142,317	87,075	54,318

* Total includes cases reported with unknown sex.

NOTE: These tables should be used only for race/Hispanic ethnicity comparisons. See Table 15 for age-specific cases and rates and Tables 12, 13, and 14 for total and sex-specific cases and rates. Cases in the 0–4 age group may include cases due to perinatal transmission. See Technical Notes for more information on chlamydia case reporting and on collection of race and Hispanic ethnicity for STI case data. This report includes data from years that coincide with the COVID-19 pandemic, which introduced uncertainty and difficulty in interpreting case data. See Impact of COVID-19 on STIs for more information.

Table 17. Gonorrhea — Rates of Reported Cases* by Race/Hispanic Ethnicity, Age Group, and Sex, United States, 2022

Age Group	American Indian/ Alaska Native			Asian			Black/ African American			Hispanic/Latino		
	Total†	Male	Female	Total†	Male	Female	Total†	Male	Female	Total†	Male	Female
0-4	5.3	1.5	7.7	0.1	0.0	0.2	2.3	1.6	2.9	0.5	0.4	0.7
5-9	1.3	0.0	2.6	0.0	0.0	0.0	0.7	0.1	1.3	0.3	0.3	0.4
10-14	24.7	12.7	37.1	1.3	0.0	2.7	50.4	23.8	77.9	5.3	2.1	8.7
15-19	562.5	338.8	790.3	39.2	32.2	45.9	1,564.7	1,373.1	1,757.0	176.4	135.6	217.2
20-24	967.4	718.4	1,220.5	116.2	151.1	80.1	2,257.2	2,390.5	2,114.3	378.5	404.1	348.1
25-29	965.4	751.7	1,186.3	128.3	208.9	47.4	1,558.0	1,939.7	1,165.6	369.2	490.0	239.3
30-34	972.2	805.7	1,139.5	98.8	173.5	26.5	1,054.8	1,508.4	604.6	309.7	442.2	163.6
35-39	746.6	610.2	884.4	59.2	103.3	17.3	631.2	974.6	303.6	194.7	281.4	97.1
40-44	481.6	464.1	499.1	37.1	67.6	9.4	366.9	589.9	160.6	121.2	179.3	57.3
45-54	180.0	184.8	175.3	22.7	40.4	6.7	177.2	312.0	55.2	60.2	94.0	24.4
55-64	47.8	67.7	29.5	7.7	14.4	1.8	84.0	162.5	15.6	25.1	44.1	6.0
65+	7.5	15.4	1.1	1.6	3.2	0.5	16.2	35.8	2.6	4.5	8.4	1.3
Unknown age												
TOTAL	373.7	308.3	436.6	39.8	64.6	16.6	585.9	736.3	445.0	131.7	168.8	92.6

Age Group	Multiracial			Native Hawaiian/ Pacific Islander			White		
	Total†	Male	Female	Total†	Male	Female	Total†	Male	Female
0-4	0.1	0.2	0.0	4.8	4.6	4.9	0.6	0.5	0.6
5-9	0.1	0.0	0.2	0.0	0.0	0.0	0.2	0.1	0.3
10-14	5.0	1.6	8.5	6.9	4.5	9.4	3.5	0.7	6.4
15-19	221.7	133.3	312.7	296.4	191.1	405.6	119.5	64.3	177.5
20-24	465.8	384.1	547.2	646.8	565.0	733.9	241.7	202.8	281.4
25-29	453.2	519.3	379.8	583.1	660.6	493.2	225.4	250.7	197.6
30-34	458.9	641.8	280.8	375.4	470.9	273.7	202.2	252.8	149.0
35-39	364.6	553.0	189.6	211.0	264.5	150.3	145.6	182.4	106.9
40-44	235.4	367.0	116.2	153.0	202.1	100.8	97.6	127.3	66.4
45-54	131.7	229.2	42.9	94.2	138.7	47.9	48.0	69.5	25.7
55-64	60.4	115.5	10.8	33.9	50.6	17.5	20.1	34.4	6.0
65+	9.4	19.8	0.7	5.5	8.9	2.6	3.1	5.9	0.7
Unknown age									
TOTAL	177.5	201.5	152.7	186.2	204.6	166.4	72.8	83.4	62.0

* Per 100,000 population

† Total includes cases reported with unknown sex.

NOTE: These tables should be used only for race/Hispanic ethnicity comparisons. See Table 15 for age-specific cases and rates and Tables 12, 13, and 14 for total and sex-specific cases and rates. Cases in the 0–4 age group may include cases due to perinatal transmission. No population data exist for unknown sex, unknown age, or unknown race; therefore rates are not calculated. See Technical Notes for more information on gonorrhea case reporting and on collection of race and Hispanic ethnicity for STI case data. This report includes data from years that coincide with the COVID-19 pandemic, which introduced uncertainty and difficulty in interpreting case data. See Impact of COVID-19 on STIs for more information.

Table 18. Gonorrhea — Reported Cases and Rates of Reported Cases Among Men Aged 15-24 Years by Age, United States, 2018–2022

Ages	Cases					Rates per 100,000 Population				
	2018	2019	2020	2021	2022	2018	2019	2020	2021	2022
15	1,333	1,376	1,707	1,589	1,791	63.1	64.6	77.7	71.3	79.5
16	3,189	3,282	3,722	3,751	3,863	151.4	155.1	168.2	170.2	174.4
17	6,185	6,051	7,002	6,945	6,948	285.6	286.4	320.7	313.6	316.2
18	10,356	10,778	11,711	11,780	11,640	468.6	496.1	534.1	537.1	525.3
19	13,551	13,915	15,514	15,631	14,864	621.2	628.3	696.8	716.4	675.5
20	15,280	15,610	17,707	17,671	16,449	698.8	715.0	803.0	796.3	728.3
21	16,089	16,483	18,315	19,111	17,767	733.4	753.7	838.2	861.3	738.6
22	16,421	16,973	18,651	18,477	17,611	739.8	773.2	859.1	846.8	738.5
23	16,968	17,042	18,296	18,867	17,022	745.4	767.1	839.8	867.0	740.9
24	17,055	17,170	17,925	18,512	16,931	733.4	753.9	812.1	850.3	750.6
Total	116,427	118,680	130,550	132,334	124,886	529.8	544.1	594.5	601.6	550.5

NOTE: See Technical Notes for more information on gonorrhea case reporting. This report includes data from years that coincide with the COVID-19 pandemic, which introduced uncertainty and difficulty in interpreting case data. See Impact of COVID-19 on STIs for more information.

Table 19. Gonorrhea — Reported Cases and Rates of Reported Cases Among Women Aged 15-24 Years by Age, United States, 2018–2022

Ages	Cases					Rates per 100,000 Population				
	2018	2019	2020	2021	2022	2018	2019	2020	2021	2022
15	3,750	3,821	4,126	3,817	3,854	184.8	186.8	196.7	179.4	179.8
16	6,921	6,938	7,364	7,150	6,639	341.9	341.1	347.7	339.5	314.5
17	11,047	10,961	11,952	11,578	10,319	532.0	540.0	572.3	546.5	492.9
18	16,679	17,134	18,637	18,124	16,356	790.5	822.4	887.7	863.2	775.0
19	18,231	18,904	21,463	21,292	18,309	875.5	893.5	1,006.3	1,018.6	873.9
20	17,477	18,407	21,462	21,054	18,041	837.3	882.2	1,016.2	989.6	827.8
21	16,556	17,693	20,397	20,416	17,884	788.8	846.1	971.9	959.1	771.5
22	14,912	15,344	18,572	18,704	16,262	705.0	729.5	889.4	892.0	713.6
23	13,670	13,989	16,459	17,109	14,385	632.2	659.9	783.7	816.7	657.9
24	13,048	13,267	14,728	14,847	12,836	590.8	612.2	693.9	706.1	599.5
Total	132,291	136,458	155,160	154,091	134,885	630.1	653.6	736.8	730.6	622.8

NOTE: See Technical Notes for more information on gonorrhea case reporting. This report includes data from years that coincide with the COVID-19 pandemic, which introduced uncertainty and difficulty in interpreting case data. See Impact of COVID-19 on STIs for more information.

Table 20. Total Syphilis* — Reported Cases and Rates of Reported Cases by State/Territory and Region in Alphabetical Order, United States, 2018–2022

State/Territory	Cases					Rates per 100,000 Population				
	2018	2019	2020	2021	2022	2018	2019	2020	2021	2022
Alabama	1,285	1,634	1,518	2,173	3,088	26.3	33.3	30.2	43.1	60.9
Alaska	113	242	361	447	424	15.3	33.1	49.2	61.0	57.8
Arizona	3,251	4,025	4,461	6,331	7,496	45.3	55.3	62.4	87.0	101.9
Arkansas	964	1,106	1,243	2,403	2,817	32.0	36.6	41.3	79.4	92.5
California	25,253	28,811	26,414	31,280	33,346	63.8	72.9	66.8	79.7	85.4
Colorado	1,085	1,434	1,785	2,303	3,100	19.0	24.9	30.9	39.6	53.1
Connecticut	264	482	536	889	760	7.4	13.5	14.9	24.7	21.0
Delaware	129	216	222	295	435	13.3	22.2	22.4	29.4	42.7
District of Columbia	764	1,085	988	870	1,275	108.8	153.7	143.3	129.8	189.8
Florida	10,701	12,121	12,416	16,439	18,838	50.2	56.4	57.6	75.5	84.7
Georgia	4,937	5,685	5,595	6,711	7,361	46.9	53.5	52.2	62.1	67.5
Hawaii	210	252	397	643	606	14.8	17.8	27.3	44.6	42.1
Idaho	134	149	184	270	351	7.6	8.3	10.0	14.2	18.1
Illinois	4,472	4,511	4,568	5,124	5,734	35.1	35.6	35.7	40.4	45.6
Indiana	985	993	1,349	1,980	2,129	14.7	14.7	19.9	29.1	31.2
Iowa	286	359	501	763	886	9.1	11.4	15.7	23.9	27.7
Kansas	495	565	539	803	958	17.0	19.4	18.3	27.4	32.6
Kentucky	881	1,096	1,143	1,559	2,032	19.7	24.5	25.4	34.6	45.0
Louisiana	2,744	2,744	2,497	3,480	4,453	58.9	59.0	53.6	75.3	97.0
Maine	147	136	81	135	154	11.0	10.1	5.9	9.8	11.1
Maryland	2,536	2,779	2,683	NR	2,798	42.0	46.0	43.4	—	45.4
Massachusetts	1,305	1,844	1,658	2,051	2,444	18.9	26.8	23.6	29.4	35.0
Michigan	1,692	1,905	2,059	2,671	2,824	16.9	19.1	20.4	26.6	28.1
Minnesota	918	1,127	1,098	1,465	1,839	16.4	20.0	19.2	25.7	32.2
Mississippi	1,454	2,006	2,131	2,605	3,260	48.7	67.4	72.0	88.3	110.9
Missouri	1,914	2,188	2,332	3,780	4,176	31.2	35.7	37.9	61.3	67.6
Montana	104	140	101	225	629	9.8	13.1	9.3	20.4	56.0
Nebraska	219	291	269	476	653	11.4	15.0	13.7	24.2	33.2
Nevada	2,000	2,356	2,218	3,065	3,610	65.9	76.5	71.4	97.5	113.6
New Hampshire	137	135	120	145	175	10.1	9.9	8.7	10.4	12.5
New Jersey	1,777	2,085	2,386	3,389	3,615	19.9	23.5	25.7	36.6	39.0
New Mexico	812	1,294	1,496	2,069	2,469	38.8	61.7	70.6	97.8	116.8
New York	10,183	10,500	10,613	13,106	13,685	52.1	54.0	52.5	66.1	69.5
North Carolina	2,989	3,369	3,714	5,030	6,587	28.8	32.1	35.6	47.7	61.6
North Dakota	84	97	91	106	128	11.1	12.7	11.7	13.7	16.4
Ohio	1,909	2,005	2,457	3,958	5,300	16.3	17.2	20.8	33.6	45.1
Oklahoma	1,137	1,749	1,888	3,003	3,501	28.8	44.2	47.7	75.3	87.1
Oregon	1,032	1,245	1,320	2,010	2,393	24.6	29.5	31.2	47.3	56.4
Pennsylvania	2,414	2,764	2,898	3,816	4,486	18.8	21.6	22.3	29.4	34.6

State/Territory	Cases					Rates per 100,000 Population				
	2018	2019	2020	2021	2022	2018	2019	2020	2021	2022
Rhode Island	284	423	315	567	516	26.9	39.9	28.7	51.8	47.2
South Carolina	1,152	1,306	1,681	2,079	2,473	22.7	25.4	32.8	40.1	46.8
South Dakota	74	86	128	924	1,947	8.4	9.7	14.4	103.2	214.0
Tennessee	1,726	2,226	2,463	3,181	3,874	25.5	32.6	35.6	45.6	54.9
Texas	12,974	12,659	15,362	21,480	26,985	45.2	43.7	52.7	72.7	89.9
Utah	423	431	351	531	673	13.4	13.4	10.7	15.9	19.9
Vermont	29	24	23	16	5	4.6	3.8	3.6	2.5	0.8
Virginia	2,039	2,071	1,953	2,205	2,962	23.9	24.3	22.6	25.5	34.1
Washington	1,911	2,186	2,079	3,366	4,410	25.4	28.7	27.0	43.5	56.6
West Virginia	185	277	407	536	610	10.2	15.5	22.7	30.1	34.4
Wisconsin	509	569	835	1,615	1,919	8.8	9.8	14.2	27.4	32.6
Wyoming	42	42	32	43	66	7.3	7.3	5.5	7.4	11.4
US TOTAL	115,064	129,825	133,959	176,733	207,255	35.2	39.6	40.4	53.2	62.2
Northeast	16,540	18,393	18,630	24,114	25,840	29.5	32.9	32.3	42.2	45.3
Midwest	13,557	14,696	16,226	23,665	28,493	19.8	21.5	23.5	34.4	41.4
South	48,597	54,129	57,904	76,371	93,349	39.0	43.1	45.9	60.0	72.5
West	36,370	42,607	41,199	52,583	59,573	46.6	54.4	52.4	66.8	75.7
American Samoa	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Commonwealth of the Northern Mariana Islands	2	2	2	2	4	3.8	3.8	3.9	3.9	7.8
Guam	30	31	21	22	19	17.9	18.4	12.5	13.0	11.2
Puerto Rico	1,089	949	829	1,132	1,424	33.1	29.7	25.2	34.7	44.2
US Virgin Islands	NR	45	40	42	33	—	42.2	37.6	39.7	31.3
TERRITORIES TOTAL	1,121	1,027	892	1,198	1,480	31.4	28.8	24.4	32.9	41.2
TOTAL	116,185	130,852	134,851	177,931	208,735	35.1	39.4	40.2	53.0	62.0

* Includes cases of congenital syphilis

NR = No report.

NOTE: See Technical Notes for more information on syphilis case reporting and on interpreting case counts and rates in US territories. This report includes data from years that coincide with the COVID-19 pandemic, which introduced uncertainty and difficulty in interpreting case data. See Impact of COVID-19 on STIs for more information. Due to a network security incident in December 2021, the Maryland Department of Health could not finalize their 2021 STI case notification data. Although 2021 data from Maryland are included in national and regional case counts and rates displayed in this table, state-specific data have been suppressed.

Table 21. Primary and Secondary Syphilis — Reported Cases and Rates of Reported Cases by State, Ranked by Rates, United States, 2022

Rank*	State	Cases	Rate per 100,000 Population
1	South Dakota	767	84.3
2	New Mexico	761	36.0
3	Arkansas	1,001	32.9
4	Oklahoma	1,278	31.8
5	Mississippi	913	31.1
6	Arizona	2,151	29.2
7	Montana	325	28.9
8	Nevada	902	28.4
9	Louisiana	1,225	26.7
10	Oregon	1,117	26.3
11	Washington	1,920	24.7
12	Missouri	1,454	23.5
13	Alabama	1,190	23.5
14	Delaware	238	23.4
15	North Carolina	2,473	23.1
16	Alaska	160	21.8
17	Florida	4,618	20.8
18	Ohio	2,402	20.4
19	California	7,849	20.1
20	Georgia	2,182	20.0
21	South Carolina	1,033	19.6
22	New York	3,603	18.3
	US TOTAL†	59,016	17.7
23	Hawaii	231	16.0
24	Tennessee	1,126	16.0
25	Colorado	918	15.7
26	Texas	4,655	15.5
27	Kentucky	670	14.8
28	Maryland	781	12.7
29	Wisconsin	742	12.6
30	West Virginia	218	12.3
31	Rhode Island	133	12.2
32	Kansas	347	11.8
33	Minnesota	675	11.8
34	Massachusetts	824	11.8
35	Illinois	1,457	11.6
36	New Jersey	1,018	11.0
37	Nebraska	215	10.9
38	Virginia	936	10.8
39	Pennsylvania	1,397	10.8

Rank*	State	Cases	Rate per 100,000 Population
40	Iowa	334	10.4
41	Indiana	686	10.0
42	Michigan	972	9.7
43	North Dakota	64	8.2
44	Utah	238	7.0
45	Connecticut	248	6.8
46	Idaho	118	6.1
47	Maine	82	5.9
48	New Hampshire	74	5.3
49	Wyoming	21	3.6
50	Vermont	3	0.5

* States were ranked by rate, then case count, then in alphabetical order, with rates shown rounded to the nearest tenth.

† Total includes cases reported by the District of Columbia with 271 cases and a rate of 40.3, but excludes territories.

NOTE: See Technical Notes for more information on syphilis case reporting. This report includes data from years that coincide with the COVID-19 pandemic, which introduced uncertainty and difficulty in interpreting case data. See Impact of COVID-19 on STIs for more information.

Table 22. Primary and Secondary Syphilis — Reported Cases and Rates of Reported Cases by State/Territory and Region in Alphabetical Order, United States, 2018–2022

State/Territory	Cases					Rates per 100,000 Population				
	2018	2019	2020	2021	2022	2018	2019	2020	2021	2022
Alabama	477	618	529	761	1,190	9.8	12.6	10.5	15.1	23.5
Alaska	55	129	176	194	160	7.5	17.6	24.0	26.5	21.8
Arizona	1,047	1,290	1,454	1,982	2,151	14.6	17.7	20.3	27.2	29.2
Arkansas	288	404	502	990	1,001	9.6	13.4	16.7	32.7	32.9
California	7,607	8,266	7,688	8,724	7,849	19.2	20.9	19.4	22.2	20.1
Colorado	337	486	640	772	918	5.9	8.4	11.1	13.3	15.7
Connecticut	91	210	280	329	248	2.5	5.9	7.8	9.1	6.8
Delaware	30	94	97	129	238	3.1	9.7	9.8	12.9	23.4
District of Columbia	279	308	247	257	271	39.7	43.6	35.8	38.4	40.3
Florida	2,880	3,189	3,520	4,498	4,618	13.5	14.8	16.3	20.7	20.8
Georgia	1,607	1,750	1,757	1,884	2,182	15.3	16.5	16.4	17.4	20.0
Hawaii	92	120	182	259	231	6.5	8.5	12.5	18.0	16.0
Idaho	46	47	66	84	118	2.6	2.6	3.6	4.4	6.1
Illinois	1,408	1,374	1,467	1,486	1,457	11.1	10.8	11.4	11.7	11.6
Indiana	367	336	527	734	686	5.5	5.0	7.8	10.8	10.0
Iowa	86	132	194	339	334	2.7	4.2	6.1	10.6	10.4
Kansas	152	190	150	301	347	5.2	6.5	5.1	10.3	11.8
Kentucky	366	438	445	513	670	8.2	9.8	9.9	11.4	14.8
Louisiana	669	700	704	995	1,225	14.4	15.1	15.1	21.5	26.7
Maine	74	55	38	61	82	5.5	4.1	2.8	4.4	5.9
Maryland	737	868	873	NR	781	12.2	14.4	14.1	—	12.7
Massachusetts	552	610	615	741	824	8.0	8.9	8.7	10.6	11.8
Michigan	649	678	787	972	972	6.5	6.8	7.8	9.7	9.7
Minnesota	292	385	417	565	675	5.2	6.8	7.3	9.9	11.8
Mississippi	464	690	741	829	913	15.5	23.2	25.0	28.1	31.1
Missouri	806	817	829	1,316	1,454	13.2	13.3	13.5	21.3	23.5
Montana	45	67	45	96	325	4.2	6.3	4.2	8.7	28.9
Nebraska	119	136	104	185	215	6.2	7.0	5.3	9.4	10.9
Nevada	682	808	767	939	902	22.5	26.2	24.7	29.9	28.4
New Hampshire	64	47	51	73	74	4.7	3.5	3.7	5.3	5.3
New Jersey	570	631	764	908	1,018	6.4	7.1	8.2	9.8	11.0
New Mexico	304	511	467	724	761	14.5	24.4	22.1	34.2	36.0
New York	2,654	2,865	3,022	3,500	3,603	13.6	14.7	15.0	17.6	18.3
North Carolina	1,098	1,122	1,322	1,870	2,473	10.6	10.7	12.7	17.7	23.1
North Dakota	41	45	32	49	64	5.4	5.9	4.1	6.3	8.2
Ohio	740	749	1,084	1,783	2,402	6.3	6.4	9.2	15.1	20.4
Oklahoma	531	791	941	1,225	1,278	13.5	20.0	23.8	30.7	31.8
Oregon	424	454	628	949	1,117	10.1	10.8	14.8	22.3	26.3
Pennsylvania	797	991	1,046	1,310	1,397	6.2	7.7	8.0	10.1	10.8

State/Territory	Cases					Rates per 100,000 Population				
	2018	2019	2020	2021	2022	2018	2019	2020	2021	2022
Rhode Island	96	101	89	209	133	9.1	9.5	8.1	19.1	12.2
South Carolina	384	516	652	836	1,033	7.6	10.0	12.7	16.1	19.6
South Dakota	41	48	66	436	767	4.6	5.4	7.4	48.7	84.3
Tennessee	553	676	767	952	1,126	8.2	9.9	11.1	13.6	16.0
Texas	2,538	2,357	2,708	3,865	4,655	8.8	8.1	9.3	13.1	15.5
Utah	169	138	131	205	238	5.3	4.3	4.0	6.1	7.0
Vermont	11	11	3	9	3	1.8	1.8	0.5	1.4	0.5
Virginia	702	659	701	745	936	8.2	7.7	8.1	8.6	10.8
Washington	802	816	836	1,506	1,920	10.6	10.7	10.8	19.5	24.7
West Virginia	65	79	127	212	218	3.6	4.4	7.1	11.9	12.3
Wisconsin	152	179	366	723	742	2.6	3.1	6.2	12.3	12.6
Wyoming	23	11	11	16	21	4.0	1.9	1.9	2.8	3.6
US TOTAL	35,063	38,992	41,655	53,767	59,016	10.7	11.9	12.6	16.2	17.7
Northeast	4,909	5,521	5,908	7,140	7,382	8.7	9.9	10.3	12.5	12.9
Midwest	4,853	5,069	6,023	8,889	10,115	7.1	7.4	8.7	12.9	14.7
South	13,668	15,259	16,633	21,288	24,808	11.0	12.2	13.2	16.7	19.3
West	11,633	13,143	13,091	16,450	16,711	14.9	16.8	16.7	20.9	21.2
American Samoa	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Commonwealth of the Northern Mariana Islands	1	1	2	0	0	1.9	1.9	3.9	0.0	0.0
Guam	18	5	5	7	2	10.7	3.0	3.0	4.1	1.2
Puerto Rico	365	329	276	332	380	11.1	10.3	8.4	10.2	11.8
US Virgin Islands	NR	NR	4	2	6	—	—	3.8	1.9	5.7
TERRITORIES TOTAL	384	335	287	341	388	10.8	9.7	7.8	9.4	10.8
TOTAL	35,447	39,327	41,942	54,108	59,404	10.7	11.9	12.5	16.1	17.6

NR = No report.

NOTE: See Technical Notes for more information on syphilis case reporting and on interpreting case counts and rates in US territories. This report includes data from years that coincide with the COVID-19 pandemic, which introduced uncertainty and difficulty in interpreting case data. See Impact of COVID-19 on STIs for more information. Due to a network security incident in December 2021, the Maryland Department of Health could not finalize their 2021 STI case notification data. Although 2021 data from Maryland are included in national and regional case counts and rates displayed in this table, state-specific data have been suppressed.

Table 23. Primary and Secondary Syphilis Among Men — Reported Cases and Rates of Reported Cases by State/Territory and Region in Alphabetical Order, United States, 2018–2022

State/Territory	Cases					Rates per 100,000 Population				
	2018	2019	2020	2021	2022	2018	2019	2020	2021	2022
Alabama	389	492	413	568	842	16.5	20.8	16.9	23.2	34.1
Alaska	51	79	111	115	93	13.3	20.7	28.9	29.9	24.1
Arizona	870	1,050	1,140	1,500	1,619	24.4	29.0	31.9	41.3	44.0
Arkansas	220	283	296	564	572	14.9	19.1	19.9	37.8	38.0
California	6,349	6,735	6,119	6,678	6,049	32.3	34.3	30.9	34.0	31.0
Colorado	312	424	541	574	686	10.9	14.6	18.5	19.5	23.1
Connecticut	84	189	250	246	193	4.8	10.9	14.1	13.9	10.9
Delaware	23	77	81	99	183	4.9	16.4	16.8	20.3	37.0
District of Columbia	264	283	224	240	253	79.2	84.6	68.2	75.3	79.1
Florida	2,524	2,729	3,000	3,773	3,793	24.2	26.0	28.3	35.2	34.7
Georgia	1,421	1,555	1,500	1,550	1,678	27.8	30.1	28.7	29.4	31.5
Hawaii	85	95	127	171	162	12.0	13.4	17.3	23.6	22.4
Idaho	41	38	45	64	86	4.7	4.2	4.9	6.7	8.8
Illinois	1,287	1,213	1,252	1,180	1,138	20.6	19.5	19.8	18.8	18.3
Indiana	341	282	438	578	507	10.3	8.5	13.0	17.1	14.9
Iowa	75	97	170	266	229	4.8	6.2	10.6	16.6	14.3
Kansas	128	157	124	238	245	8.8	10.8	8.4	16.2	16.6
Kentucky	296	337	333	378	473	13.4	15.3	14.9	16.9	21.1
Louisiana	503	537	527	722	830	22.1	23.7	23.1	31.9	36.9
Maine	67	49	37	52	66	10.2	7.4	5.5	7.7	9.7
Maryland	656	747	733	NR	644	22.4	25.5	24.3	—	21.5
Massachusetts	499	547	545	666	709	14.9	16.3	15.9	19.5	20.7
Michigan	580	583	674	765	766	11.8	11.9	13.5	15.4	15.4
Minnesota	248	311	332	419	481	8.9	11.1	11.6	14.6	16.8
Mississippi	312	432	445	486	577	21.6	30.0	30.8	33.9	40.4
Missouri	645	639	576	864	956	21.4	21.2	19.0	28.4	31.3
Montana	35	47	37	52	169	6.5	8.7	6.7	9.3	29.7
Nebraska	105	114	86	130	134	10.9	11.8	8.7	13.2	13.5
Nevada	563	649	617	740	645	37.0	42.0	39.4	46.7	40.2
New Hampshire	61	43	45	65	68	9.1	6.4	6.6	9.4	9.7
New Jersey	511	557	643	752	845	11.7	12.8	14.1	16.5	18.5
New Mexico	258	376	326	476	522	24.9	36.2	30.9	45.2	49.6
New York	2,483	2,634	2,754	3,094	3,112	26.2	27.9	27.9	31.9	32.3
North Carolina	937	936	1,115	1,510	1,929	18.6	18.4	21.8	29.3	36.8
North Dakota	31	31	21	43	45	8.0	7.9	5.2	10.8	11.2
Ohio	648	635	882	1,391	1,816	11.3	11.1	15.2	23.9	31.3
Oklahoma	387	547	602	808	797	19.8	27.9	30.5	40.7	39.8
Oregon	332	349	475	661	771	16.0	16.7	22.5	31.2	36.4
Pennsylvania	698	857	911	1,117	1,166	11.1	13.7	14.2	17.5	18.2

State/Territory	Cases					Rates per 100,000 Population				
	2018	2019	2020	2021	2022	2018	2019	2020	2021	2022
Rhode Island	84	94	78	183	110	16.3	18.2	14.5	34.1	20.5
South Carolina	317	408	451	599	716	12.9	16.4	18.1	23.7	27.8
South Dakota	30	33	39	251	426	6.7	7.4	8.7	55.2	92.1
Tennessee	486	571	626	697	808	14.7	17.1	18.5	20.4	23.3
Texas	2,114	1,917	2,122	2,818	3,324	14.8	13.3	14.6	19.1	22.1
Utah	159	126	119	179	216	10.0	7.8	7.2	10.6	12.6
Vermont	9	10	3	8	2	2.9	3.2	0.9	2.5	0.6
Virginia	617	579	603	631	787	14.7	13.8	14.1	14.8	18.3
Washington	701	698	672	1,160	1,385	18.6	18.3	17.3	29.8	35.3
West Virginia	46	59	82	119	132	5.1	6.6	9.2	13.4	14.9
Wisconsin	134	162	294	508	539	4.6	5.6	10.0	17.2	18.2
Wyoming	18	10	10	11	15	6.1	3.4	3.4	3.7	5.0
US TOTAL	30,034	32,402	33,646	41,349	44,309	18.6	20.0	20.5	25.2	26.8
Northeast	4,496	4,980	5,266	6,183	6,271	16.4	18.2	18.6	22.0	22.4
Midwest	4,252	4,257	4,888	6,633	7,282	12.6	12.6	14.3	19.4	21.3
South	11,512	12,489	13,153	16,152	18,338	18.8	20.3	21.1	25.8	28.9
West	9,774	10,676	10,339	12,381	12,418	25.1	27.3	26.2	31.4	31.4
American Samoa	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Commonwealth of the Northern Mariana Islands	1	1	2	0	0	3.6	3.6	7.3	0.0	0.0
Guam	18	5	4	7	1	20.9	5.8	4.6	8.1	1.1
Puerto Rico	311	277	220	270	289	19.9	18.3	14.1	17.5	19.0
US Virgin Islands	NR	NR	3	1	6	—	—	5.9	2.0	12.0
TERRITORIES TOTAL	330	283	229	278	296	19.4	17.1	13.1	16.0	17.3
TOTAL	30,364	32,685	33,875	41,627	44,605	18.6	20.0	20.4	25.1	26.7

NR = No report.

NOTE: See Technical Notes for more information on syphilis case reporting and on interpreting case counts and rates in US territories. This report includes data from years that coincide with the COVID-19 pandemic, which introduced uncertainty and difficulty in interpreting case data. See Impact of COVID-19 on STIs for more information. Due to a network security incident in December 2021, the Maryland Department of Health could not finalize their 2021 STI case notification data. Although 2021 data from Maryland are included in national and regional case counts and rates displayed in this table, state-specific data have been suppressed.

Table 24. Primary and Secondary Syphilis Among Women — Reported Cases and Rates of Reported Cases by State/Territory and Region in Alphabetical Order, United States, 2018–2022

State/Territory	Cases					Rates per 100,000 Population				
	2018	2019	2020	2021	2022	2018	2019	2020	2021	2022
Alabama	88	126	116	193	348	3.5	5.0	4.5	7.4	13.3
Alaska	4	50	65	79	67	1.1	14.3	18.6	22.7	19.3
Arizona	177	240	314	482	532	4.9	6.6	8.8	13.2	14.5
Arkansas	68	121	206	426	429	4.4	7.9	13.5	27.8	27.9
California	1,255	1,494	1,520	1,962	1,784	6.3	7.5	7.7	10.0	9.2
Colorado	25	62	99	198	232	0.9	2.2	3.5	6.9	8.1
Connecticut	5	20	30	74	55	0.3	1.1	1.6	4.0	3.0
Delaware	7	17	14	28	54	1.4	3.4	2.8	5.4	10.3
District of Columbia	12	21	23	17	18	3.3	5.7	6.4	4.8	5.1
Florida	356	460	520	725	825	3.3	4.2	4.8	6.5	7.3
Georgia	184	195	257	334	504	3.4	3.6	4.7	6.0	9.0
Hawaii	7	23	47	82	69	1.0	3.2	6.5	11.4	9.6
Idaho	5	9	21	20	32	0.6	1.0	2.3	2.1	3.3
Illinois	120	161	215	306	319	1.9	2.5	3.3	4.8	5.0
Indiana	26	54	88	156	178	0.8	1.6	2.6	4.6	5.2
Iowa	11	35	24	73	105	0.7	2.2	1.5	4.6	6.6
Kansas	24	33	26	63	102	1.6	2.3	1.8	4.3	7.0
Kentucky	70	101	112	135	197	3.1	4.5	4.9	5.9	8.7
Louisiana	166	163	177	273	395	7.0	6.8	7.5	11.6	16.9
Maine	7	6	1	9	16	1.0	0.9	0.1	1.3	2.3
Maryland	81	121	140	NR	135	2.6	3.9	4.4	—	4.3
Massachusetts	41	59	62	65	104	1.2	1.7	1.7	1.8	2.9
Michigan	69	95	113	207	206	1.4	1.9	2.2	4.1	4.1
Minnesota	44	70	85	144	193	1.6	2.5	3.0	5.1	6.8
Mississippi	152	258	296	343	336	9.9	16.8	19.5	22.6	22.2
Missouri	161	178	253	452	498	5.2	5.7	8.1	14.5	15.9
Montana	10	20	8	44	156	1.9	3.8	1.5	8.1	28.2
Nebraska	14	22	18	55	80	1.4	2.3	1.8	5.6	8.2
Nevada	119	159	150	199	257	7.9	10.4	9.7	12.8	16.3
New Hampshire	3	4	6	8	6	0.4	0.6	0.9	1.1	0.9
New Jersey	58	73	116	156	173	1.3	1.6	2.5	3.3	3.7
New Mexico	46	135	141	248	239	4.3	12.7	13.3	23.3	22.5
New York	171	231	268	406	491	1.7	2.3	2.6	4.0	4.9
North Carolina	160	186	207	360	544	3.0	3.5	3.9	6.7	10.0
North Dakota	10	14	11	6	19	2.7	3.8	2.9	1.6	5.0
Ohio	92	114	202	392	586	1.5	1.9	3.4	6.6	9.9
Oklahoma	144	244	338	417	481	7.2	12.2	17.0	20.8	23.9
Oregon	92	105	152	287	345	4.4	4.9	7.2	13.5	16.3
Pennsylvania	99	133	134	192	231	1.5	2.0	2.0	2.9	3.5

State/Territory	Cases					Rates per 100,000 Population				
	2018	2019	2020	2021	2022	2018	2019	2020	2021	2022
Rhode Island	12	7	11	26	23	2.2	1.3	2.0	4.7	4.1
South Carolina	67	104	197	230	315	2.6	3.9	7.5	8.6	11.6
South Dakota	11	15	27	185	341	2.5	3.4	6.2	42.0	76.3
Tennessee	67	105	141	255	318	1.9	3.0	4.0	7.2	8.9
Texas	424	416	583	1,045	1,324	2.9	2.9	4.0	7.1	8.8
Utah	10	12	12	26	22	0.6	0.8	0.7	1.6	1.3
Vermont	2	1	0	1	1	0.6	0.3	0.0	0.3	0.3
Virginia	77	66	78	94	144	1.8	1.5	1.8	2.2	3.3
Washington	100	117	159	338	529	2.7	3.1	4.2	8.8	13.7
West Virginia	19	20	45	93	86	2.1	2.2	5.0	10.4	9.7
Wisconsin	18	17	72	214	202	0.6	0.6	2.4	7.3	6.9
Wyoming	5	1	1	5	6	1.8	0.4	0.4	1.8	2.1
US TOTAL	4,995	6,493	7,901	12,265	14,652	3.0	3.9	4.7	7.3	8.7
Northeast	398	534	628	937	1,100	1.4	1.9	2.1	3.2	3.8
Midwest	600	808	1,134	2,253	2,829	1.7	2.3	3.3	6.5	8.2
South	2,142	2,724	3,450	5,105	6,453	3.4	4.3	5.4	7.9	9.9
West	1,855	2,427	2,689	3,970	4,270	4.7	6.2	6.9	10.1	10.9
American Samoa	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Commonwealth of the Northern Mariana Islands	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Guam	0	0	1	0	1	0.0	0.0	1.2	0.0	1.2
Puerto Rico	52	52	56	62	91	3.0	3.1	3.2	3.6	5.4
US Virgin Islands	NR	NR	1	1	0	—	—	1.8	1.8	0.0
TERRITORIES TOTAL	52	52	58	63	92	2.8	2.9	3.0	3.3	4.9
TOTAL	5,047	6,545	7,959	12,328	14,744	3.0	3.9	4.7	7.3	8.7

NR = No report.

NOTE: See Technical Notes for more information on syphilis case reporting and on interpreting case counts and rates in US territories. This report includes data from years that coincide with the COVID-19 pandemic, which introduced uncertainty and difficulty in interpreting case data. See Impact of COVID-19 on STIs for more information. Due to a network security incident in December 2021, the Maryland Department of Health could not finalize their 2021 STI case notification data. Although 2021 data from Maryland are included in national and regional case counts and rates displayed in this table, state-specific data have been suppressed.

Table 25. Primary and Secondary Syphilis — Reported Cases and Rates of Reported Cases by Age Group and Sex, 2018–2022

Year	Age Group	Cases				Rates per 100,000 Population*		
		Total	Male	Female	Unknown Sex	Total	Male	Female
2018	0-4	2	1	1	0	0.0	0.0	0.0
	5-9	0	0	0	0	0.0	0.0	0.0
	10-14	20	9	11	0	0.1	0.1	0.1
	15-19	1,618	1,175	442	1	7.7	10.9	4.3
	20-24	6,140	5,061	1,076	3	28.1	45.2	10.1
	25-29	7,712	6,625	1,077	10	32.7	55.1	9.3
	30-34	5,907	5,084	816	7	26.7	45.4	7.5
	35-39	4,200	3,574	621	5	19.5	33.1	5.8
	40-44	2,690	2,328	358	4	13.6	23.8	3.6
	45-54	4,398	3,973	423	2	10.6	19.3	2.0
	55-64	1,929	1,782	145	2	4.6	8.7	0.7
	65+	437	412	25	0	0.8	1.8	0.1
	Unknown Age	10	10	0	0			
	TOTAL	35,063	30,034	4,995	34	10.7	18.6	3.0
2019	0-4	5	4	1	0	0.0	0.0	0.0
	5-9	2	1	1	0	0.0	0.0	0.0
	10-14	22	9	13	0	0.1	0.1	0.1
	15-19	1,708	1,202	502	4	8.1	11.2	4.9
	20-24	6,325	5,064	1,234	27	29.2	45.8	11.7
	25-29	8,308	6,924	1,361	23	35.3	57.7	11.8
	30-34	6,829	5,725	1,085	19	30.4	50.4	9.8
	35-39	4,837	3,987	839	11	22.3	36.6	7.7
	40-44	3,276	2,689	579	8	16.4	27.1	5.8
	45-54	4,749	4,099	646	4	11.6	20.3	3.1
	55-64	2,412	2,210	201	1	5.7	10.8	0.9
	65+	515	485	30	0	1.0	2.0	0.1
	Unknown Age	4	3	1	0			
	TOTAL	38,992	32,402	6,493	97	11.9	20.0	3.9
2020	0-4	1	1	0	0	0.0	0.0	0.0
	5-9	2	2	0	0	0.0	0.0	0.0
	10-14	24	8	16	0	0.1	0.1	0.2
	15-19	1,782	1,166	612	4	8.3	10.6	5.8
	20-24	6,351	4,817	1,512	22	29.6	44.0	14.4
	25-29	8,659	6,975	1,651	33	37.8	60.0	14.6
	30-34	7,779	6,319	1,439	21	34.1	54.7	12.8
	35-39	5,284	4,289	983	12	23.8	38.2	8.9
	40-44	3,693	2,963	727	3	18.0	28.7	7.1
	45-54	4,936	4,227	702	7	12.0	20.5	3.4
	55-64	2,544	2,333	208	3	5.9	11.1	0.9

Year	Age Group	Cases				Rates per 100,000 Population*		
		Total	Male	Female	Unknown Sex	Total	Male	Female
	65+	548	505	40	3	1.0	2.1	0.1
	Unknown Age	52	41	11	0			
	TOTAL	41,655	33,646	7,901	108	12.6	20.5	4.7
2021	0-4	6	4	2	0	0.0	0.0	0.0
	5-9	2	0	2	0	0.0	0.0	0.0
	10-14	24	4	20	0	0.1	0.0	0.2
	15-19	2,122	1,327	790	5	9.8	12.0	7.5
	20-24	7,695	5,614	2,057	24	35.8	51.2	19.5
	25-29	10,235	7,746	2,456	33	45.7	68.1	22.3
	30-34	10,090	7,904	2,156	30	43.7	67.7	18.9
	35-39	7,640	5,776	1,841	23	34.3	51.3	16.7
	40-44	5,223	3,927	1,279	17	24.7	37.1	12.2
	45-54	6,226	5,028	1,183	15	15.3	24.8	5.8
	55-64	3,483	3,105	372	6	8.1	14.8	1.7
	65+	835	782	53	0	1.5	3.1	0.2
	Unknown Age	186	132	54	0			
	TOTAL	53,767	41,349	12,265	153	16.2	25.2	7.3
2022	0-4	6	3	2	1	0.0	0.0	0.0
	5-9	6	3	3	0	0.0	0.0	0.0
	10-14	39	12	27	0	0.2	0.1	0.3
	15-19	2,274	1,377	893	4	10.5	12.4	8.5
	20-24	8,235	5,811	2,415	9	36.3	50.1	21.7
	25-29	10,317	7,693	2,612	12	46.5	67.8	24.1
	30-34	11,116	8,346	2,762	8	47.7	70.5	24.1
	35-39	8,524	6,297	2,217	10	38.3	55.7	20.2
	40-44	6,130	4,474	1,652	4	28.6	41.4	15.6
	45-54	7,203	5,710	1,489	4	17.8	28.2	7.4
	55-64	4,102	3,614	485	3	9.7	17.5	2.3
	65+	1,058	965	93	0	1.8	3.7	0.3
	Unknown Age	6	4	2	0			
	TOTAL	59,016	44,309	14,652	55	17.7	26.8	8.7

* No population data are available for unknown sex and age; therefore, rates are not calculated.

NOTE: See Technical Notes for more information on syphilis case reporting. This report includes data from years that coincide with the COVID-19 pandemic, which introduced uncertainty and difficulty in interpreting case data. See Impact of COVID-19 on STIs for more information.

Table 26. Primary and Secondary Syphilis — Reported Cases by Race/Hispanic Ethnicity, Age Group, and Sex, United States, 2022

Age Group	American Indian/ Alaska Native			Asian			Black/ African American			Hispanic/Latino		
	Total*	Male	Female	Total*	Male	Female	Total*	Male	Female	Total*	Male	Female
0-4	0	0	0	0	0	0	4	2	1	1	1	0
5-9	1	0	1	0	0	0	3	1	2	2	2	0
10-14	2	1	1	0	0	0	14	2	12	14	6	8
15-19	81	34	47	24	20	4	966	576	390	520	371	148
20-24	201	103	98	130	112	18	3,164	2,225	936	1,899	1,491	406
25-29	276	158	118	209	194	15	3,530	2,664	860	2,385	1,936	445
30-34	360	207	153	199	172	25	3,750	2,961	787	2,258	1,879	377
35-39	304	158	146	147	127	20	2,387	1,886	498	1,691	1,402	287
40-44	172	92	80	110	97	12	1,572	1,241	329	1,185	961	223
45-54	159	90	69	118	111	7	1,837	1,501	336	1,238	1,048	189
55-64	52	39	13	42	38	4	1,171	1,020	149	525	474	51
65+	15	13	2	9	7	2	298	259	39	111	104	7
Unknown Age	0	0	0	0	0	0	0	0	0	2	1	1
TOTAL	1,623	895	728	988	878	107	18,696	14,338	4,339	11,831	9,676	2,142

Age Group	Multiracial			Native Hawaiian/ Pacific Islander			White			Other/Unknown		
	Total*	Male	Female	Total*	Male	Female	Total*	Male	Female	Total*	Male	Female
0-4	0	0	0	0	0	0	1	0	1	0	0	0
5-9	0	0	0	0	0	0	0	0	0	0	0	0
10-14	1	0	1	0	0	0	7	3	4	1	0	1
15-19	103	56	47	3	1	2	438	235	201	139	84	54
20-24	276	175	101	31	19	12	2,014	1,296	715	520	390	129
25-29	362	230	131	39	30	9	2,870	1,954	915	646	527	119
30-34	386	268	117	39	32	7	3,453	2,303	1,149	671	524	147
35-39	303	227	75	29	17	12	3,097	2,054	1,041	566	426	138
40-44	197	146	51	20	13	7	2,469	1,638	831	405	286	119
45-54	240	202	38	23	13	10	3,139	2,389	749	449	356	91
55-64	104	88	16	6	4	2	1,994	1,763	230	208	188	20
65+	27	26	1	1	1	0	516	483	33	81	72	9
Unknown Age	0	0	0	1	0	1	3	3	0	0	0	0
TOTAL	1,999	1,418	578	192	130	62	20,001	14,121	5,869	3,686	2,853	827

* Total includes cases reported with unknown sex.

NOTE: See Technical Notes for more information on syphilis case reporting and on collection of race and Hispanic ethnicity data for STI cases. This report includes data from years that coincide with the COVID-19 pandemic, which introduced uncertainty and difficulty in interpreting case data. See Impact of COVID-19 on STIs for more information.

Table 27. Primary and Secondary Syphilis — Rates of Reported Cases* by Race/Hispanic Ethnicity, Age Group, and Sex, United States, 2022

Age Group	American Indian/ Alaska Native			Asian			Black/ African American			Hispanic/Latino		
	Total†	Male	Female	Total†	Male	Female	Total†	Male	Female	Total†	Male	Female
0-4	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.1	0.1	0.0	0.0	0.0
5-9	0.6	0.0	1.3	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.1	0.0
10-14	1.2	1.2	1.2	0.0	0.0	0.0	0.5	0.1	0.8	0.3	0.2	0.3
15-19	45.9	37.9	54.1	2.1	3.4	0.7	33.0	38.8	27.0	9.5	13.3	5.6
20-24	107.8	108.7	106.9	9.9	17.0	2.8	100.1	139.7	59.7	35.5	54.5	15.5
25-29	152.1	170.9	132.6	14.1	26.2	2.0	110.6	165.4	54.4	48.8	77.0	18.7
30-34	190.5	215.2	164.9	11.5	20.3	2.8	111.3	176.9	46.4	46.9	74.8	16.4
35-39	186.0	192.4	179.6	8.6	15.2	2.3	82.7	134.0	33.6	36.7	57.7	13.2
40-44	114.7	122.7	106.8	7.0	12.9	1.4	57.3	94.3	23.0	26.6	41.3	10.4
45-54	57.4	65.5	49.4	4.1	8.2	0.5	36.4	62.8	12.7	16.1	26.7	5.0
55-64	17.8	27.8	8.5	1.9	3.6	0.3	23.4	43.9	5.6	9.3	16.8	1.8
65+	4.3	8.4	1.1	0.3	0.6	0.1	5.5	11.6	1.2	2.1	4.5	0.2
Unknown age												
TOTAL	67.0	74.7	59.5	4.9	9.0	1.0	44.4	70.9	19.9	18.6	30.0	6.8

Age Group	Multiracial			Native Hawaiian/ Pacific Islander			White		
	Total†	Male	Female	Total†	Male	Female	Total†	Male	Female
0-4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5-9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10-14	0.1	0.0	0.2	0.0	0.0	0.0	0.1	0.1	0.1
15-19	12.1	12.9	11.3	6.8	4.4	9.2	4.0	4.1	3.8
20-24	36.1	45.2	26.8	68.9	81.9	55.0	16.9	21.2	12.4
25-29	56.7	71.3	41.5	83.9	126.2	39.6	24.4	32.3	16.0
30-34	73.3	104.1	43.5	72.8	115.9	27.0	27.4	35.9	18.5
35-39	73.7	115.7	34.9	55.6	63.3	47.5	24.9	32.5	17.1
40-44	55.2	86.3	27.2	42.5	53.6	30.7	20.4	26.6	14.0
45-54	43.4	77.0	13.1	30.1	33.4	26.6	13.1	19.6	6.4
55-64	22.8	40.6	6.7	8.8	11.9	5.8	7.0	12.5	1.6
65+	5.3	11.2	0.4	1.4	3.0	0.0	1.2	2.4	0.1
Unknown age									
TOTAL	25.0	35.7	14.4	30.2	40.4	19.7	10.2	14.5	5.9

* Per 100,000 population

† Total includes cases reported with unknown sex.

NOTE: See Technical Notes for more information on syphilis case reporting and on collection of race and Hispanic ethnicity data for STI cases. This report includes data from years that coincide with the COVID-19 pandemic, which introduced uncertainty and difficulty in interpreting case data. See Impact of COVID-19 on STIs for more information.

Table 28. Primary and Secondary Syphilis — Reported Cases and Rates of Reported Cases Among Men Who Have Sex with Men by State in Alphabetical Order, United States, 2018–2022

State/Territory	Cases					Rates per 100,000 Population				
	2018	2019	2020	2021	2022	2018	2019	2020	2021	2022
Alabama	ND	ND	173	280	358	—	—	399.7	646.9	827.1
Alaska	42	28	20	23	ND	510.8	340.5	243.2	279.7	—
Arizona	555	612	653	666	658	487.3	537.4	573.4	584.8	577.8
Arkansas	121	114	81	137	155	603.2	568.3	403.8	682.9	772.6
California	3,855	3,902	3,355	3,401	3,157	516.1	522.4	449.2	455.3	422.7
Colorado	213	279	321	271	290	182.1	238.5	274.4	231.6	247.9
Connecticut	55	ND	132	ND	ND	171.7	—	412.0	—	—
Delaware	ND	ND	ND	ND	80	—	—	—	—	576.2
District of Columbia	ND	ND	147	156	184	—	—	300.8	319.3	376.6
Florida	1,478	1,411	1,531	1,886	ND	342.9	327.4	355.2	437.6	—
Georgia	ND	ND	ND	ND	805	—	—	—	—	541.7
Hawaii	ND	56	ND	ND	ND	—	277.8	—	—	—
Idaho	24	ND	ND	ND	ND	132.9	—	—	—	—
Illinois	962	ND	ND	ND	ND	419.6	—	—	—	—
Indiana	253	167	231	268	201	343.4	226.7	313.5	363.7	272.8
Iowa	59	68	87	116	91	345.5	398.2	509.5	679.3	532.9
Kansas	85	82	65	138	112	395.1	381.2	302.2	641.5	520.7
Kentucky	160	130	114	ND	178	315.8	256.6	225.0	—	351.4
Louisiana	327	294	278	320	ND	632.3	568.5	537.5	618.7	—
Maine	ND	ND	22	35	31	—	—	182.0	289.5	256.4
Maryland	411	447	420	ND	ND	484.8	527.3	495.4	—	—
Massachusetts	355	415	405	472	486	473.9	554.0	540.7	630.1	648.8
Michigan	403	357	395	381	383	343.0	303.9	336.2	324.3	326.0
Minnesota	173	ND	ND	ND	ND	215.3	—	—	—	—
Mississippi	164	185	175	155	200	950.0	1,071.7	1,013.7	897.9	1,158.5
Missouri	342	321	ND	ND	ND	453.5	425.6	—	—	—
Montana	25	20	ND	ND	ND	250.2	200.1	—	—	—
Nebraska	ND	ND	ND	ND	ND	—	—	—	—	—
Nevada	328	381	361	360	260	639.6	742.9	703.9	701.9	507.0
New Hampshire	45	22	27	53	36	400.6	195.9	240.4	471.8	320.5
New Jersey	337	365	371	413	505	402.1	435.6	442.7	492.8	602.6
New Mexico	153	144	ND	ND	ND	527.6	496.6	—	—	—
New York	1,515	1,767	2,008	2,132	2,116	551.5	643.2	730.9	776.1	770.2
North Carolina	618	577	661	747	903	482.8	450.7	516.4	583.6	705.4
North Dakota	9	10	9	17	17	212.7	236.4	212.7	401.8	401.8
Ohio	426	401	418	546	603	268.8	253.1	263.8	344.6	380.6
Oklahoma	196	238	186	234	236	443.8	538.9	421.1	529.8	534.3
Oregon	204	181	207	255	322	248.0	220.0	251.6	310.0	391.5
Pennsylvania	506	552	593	634	582	421.4	459.8	493.9	528.1	484.7

State/Territory	Cases					Rates per 100,000 Population				
	2018	2019	2020	2021	2022	2018	2019	2020	2021	2022
Rhode Island	60	68	ND	ND	55	365.9	414.6	—	—	335.4
South Carolina	203	205	207	266	285	520.1	525.3	530.4	681.6	730.2
South Dakota	15	17	8	32	37	388.7	440.5	207.3	829.2	958.8
Tennessee	336	333	378	286	337	372.9	369.6	419.5	317.4	374.0
Texas	ND	992	994	ND	1,341	—	193.9	194.3	—	262.1
Utah	122	105	87	134	145	362.4	311.9	258.4	398.0	430.7
Vermont	ND	ND	ND	ND	2	—	—	—	—	40.6
Virginia	428	377	398	418	426	345.0	303.9	320.8	336.9	343.4
Washington	515	485	ND	ND	597	367.6	346.2	—	—	426.2
West Virginia	23	25	28	27	26	158.8	172.7	193.4	186.5	179.6
Wisconsin	ND	ND	208	315	500	—	—	360.8	546.5	867.4
Wyoming	10	ND	3	7	5	220.1	—	66.0	154.0	110.0

* Cases are not displayed if the variable used to identify sex of sex partners is complete for <70% of male cases.

ND = Not displayed.

NOTE: Rates per 100,000 population are calculated based on population estimates of MSM adapted from Grey et al, JMIR Public Health Surveill, 2016. See Technical Notes for more information on syphilis case reporting. This report includes data from years that coincide with the COVID-19 pandemic, which introduced uncertainty and difficulty in interpreting case data. See Impact of COVID-19 on STIs for more information. Due to a network security incident in December 2021, the Maryland Department of Health could not finalize their 2021 STI case notification data; 2021 data from Maryland have been suppressed in this table.

Table 29. Early Non-Primary Non-Secondary Syphilis — Reported Cases and Rates of Reported Cases by State/Territory and Region in Alphabetical Order, United States and Territories, 2018–2022

State/Territory	Cases					Rates per 100,000 Population				
	2018	2019	2020	2021	2022	2018	2019	2020	2021	2022
Alabama	447	540	479	676	881	9.1	11.0	9.5	13.4	17.4
Alaska	41	78	130	132	116	5.6	10.7	17.7	18.0	15.8
Arizona	898	1,179	1,249	1,476	1,581	12.5	16.2	17.5	20.3	21.5
Arkansas	364	267	234	527	454	12.1	8.8	7.8	17.4	14.9
California	7,708	8,284	7,673	8,504	8,859	19.5	21.0	19.4	21.7	22.7
Colorado	362	453	519	519	606	6.4	7.9	9.0	8.9	10.4
Connecticut	77	159	207	284	275	2.2	4.5	5.7	7.9	7.6
Delaware	36	65	70	89	55	3.7	6.7	7.1	8.9	5.4
District of Columbia	336	414	369	233	494	47.8	58.7	53.5	34.8	73.5
Florida	3,939	4,142	4,423	5,731	6,035	18.5	19.3	20.5	26.3	27.1
Georgia	1,517	1,733	1,719	1,804	1,814	14.4	16.3	16.0	16.7	16.6
Hawaii	87	95	90	105	106	6.1	6.7	6.2	7.3	7.4
Idaho	33	40	36	61	65	1.9	2.2	2.0	3.2	3.4
Illinois	1,464	1,345	1,227	1,167	1,265	11.5	10.6	9.6	9.2	10.1
Indiana	359	326	471	624	612	5.4	4.8	6.9	9.2	9.0
Iowa	85	100	163	216	293	2.7	3.2	5.1	6.8	9.2
Kansas	291	282	234	239	271	10.0	9.7	8.0	8.1	9.2
Kentucky	294	395	352	576	667	6.6	8.8	7.8	12.8	14.8
Louisiana	576	576	614	798	884	12.4	12.4	13.2	17.3	19.3
Maine	43	53	28	40	30	3.2	3.9	2.1	2.9	2.2
Maryland	857	991	891	NR	734	14.2	16.4	14.4	—	11.9
Massachusetts	620	625	548	626	780	9.0	9.1	7.8	9.0	11.2
Michigan	407	558	566	732	749	4.1	5.6	5.6	7.3	7.5
Minnesota	286	367	368	415	535	5.1	6.5	6.4	7.3	9.4
Mississippi	937	1,222	1,275	592	429	31.4	41.1	43.1	20.1	14.6
Missouri	546	647	556	787	781	8.9	10.5	9.0	12.8	12.6
Montana	25	25	21	22	84	2.4	2.3	1.9	2.0	7.5
Nebraska	37	46	50	78	98	1.9	2.4	2.5	4.0	5.0
Nevada	512	522	496	723	829	16.9	16.9	16.0	23.0	26.1
New Hampshire	41	49	32	39	33	3.0	3.6	2.3	2.8	2.4
New Jersey	788	827	790	1,134	1,167	8.8	9.3	8.5	12.2	12.6
New Mexico	161	203	243	215	267	7.7	9.7	11.5	10.2	12.6
New York	4,097	4,376	4,770	5,524	5,672	21.0	22.5	23.6	27.8	28.8
North Carolina	797	989	1,105	1,331	1,711	7.7	9.4	10.6	12.6	16.0
North Dakota	13	10	12	22	22	1.7	1.3	1.5	2.8	2.8
Ohio	481	519	555	874	1,083	4.1	4.4	4.7	7.4	9.2
Oklahoma	342	339	380	568	608	8.7	8.6	9.6	14.2	15.1
Oregon	299	357	304	478	523	7.1	8.5	7.2	11.3	12.3

State/Territory	Cases					Rates per 100,000 Population				
	2018	2019	2020	2021	2022	2018	2019	2020	2021	2022
Pennsylvania	1,192	1,138	1,166	1,478	1,661	9.3	8.9	9.0	11.4	12.8
Rhode Island	71	109	97	119	107	6.7	10.3	8.8	10.9	9.8
South Carolina	732	681	796	972	995	14.4	13.2	15.6	18.7	18.8
South Dakota	9	8	38	353	730	1.0	0.9	4.3	39.4	80.2
Tennessee	472	639	686	839	888	7.0	9.4	9.9	12.0	12.6
Texas	4,245	4,065	5,411	7,283	8,534	14.8	14.0	18.6	24.7	28.4
Utah	101	120	81	131	181	3.2	3.7	2.5	3.9	5.4
Vermont	18	11	11	4	2	2.9	1.8	1.7	0.6	0.3
Virginia	668	679	646	642	790	7.8	8.0	7.5	7.4	9.1
Washington	599	721	617	866	1,044	7.9	9.5	8.0	11.2	13.4
West Virginia	55	83	111	99	103	3.0	4.6	6.2	5.6	5.8
Wisconsin	163	193	230	375	401	2.8	3.3	3.9	6.4	6.8
Wyoming	11	10	6	10	9	1.9	1.7	1.0	1.7	1.5
US TOTAL	38,539	41,655	43,145	51,830	56,913	11.8	12.7	13.0	15.6	17.1
Northeast	6,947	7,347	7,649	9,248	9,727	12.4	13.1	13.3	16.2	17.1
Midwest	4,141	4,401	4,470	5,882	6,840	6.1	6.4	6.5	8.5	9.9
South	16,614	17,820	19,561	23,458	26,076	13.3	14.2	15.5	18.4	20.3
West	10,837	12,087	11,465	13,242	14,270	13.9	15.4	14.6	16.8	18.1
American Samoa	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Commonwealth of the Northern Mariana Islands	0	0	0	0	3	0.0	0.0	0.0	0.0	5.8
Guam	3	5	0	5	2	1.8	3.0	0.0	3.0	1.2
Puerto Rico	577	458	332	400	524	17.5	14.3	10.1	12.3	16.3
US Virgin Islands	NR	NR	9	12	8	—	—	8.5	11.3	7.6
TERRITORIES TOTAL	580	463	341	417	537	16.3	13.4	9.3	11.5	14.9
TOTAL	39,119	42,118	43,486	52,247	57,450	11.8	12.7	13.0	15.6	17.1

NR = No report.

NOTE: See Technical Notes for more information on syphilis case reporting and on interpreting case counts and rates in US territories. This report includes data from years that coincide with the COVID-19 pandemic, which introduced uncertainty and difficulty in interpreting case data. See Impact of COVID-19 on STIs for more information. Due to a network security incident in December 2021, the Maryland Department of Health could not finalize their 2021 STI case notification data. Although 2021 data from Maryland are included in national and regional case counts and rates displayed in this table, state-specific data have been suppressed.

Table 30. Unknown Duration or Late Syphilis — Reported Cases and Rates of Reported Cases by State/Territory and Region in Alphabetical Order, United States, 2018–2022

State/Territory	Cases					Rates per 100,000 Population				
	2018	2019	2020	2021	2022	2018	2019	2020	2021	2022
Alabama	354	461	489	699	974	7.2	9.4	9.7	13.9	19.2
Alaska	16	35	47	116	136	2.2	4.8	6.4	15.8	18.5
Arizona	1,243	1,444	1,637	2,691	3,545	17.3	19.8	22.9	37.0	48.2
Arkansas	287	414	484	836	1,293	9.5	13.7	16.1	27.6	42.5
California	9,609	11,817	10,572	13,530	16,022	24.3	29.9	26.7	34.5	41.1
Colorado	378	485	604	982	1,545	6.6	8.4	10.5	16.9	26.5
Connecticut	94	110	47	269	230	2.6	3.1	1.3	7.5	6.3
Delaware	63	55	53	76	138	6.5	5.6	5.4	7.6	13.6
District of Columbia	148	362	369	374	498	21.1	51.3	53.5	55.8	74.1
Florida	3,773	4,645	4,319	6,029	7,909	17.7	21.6	20.1	27.7	35.6
Georgia	1,773	2,144	2,038	2,930	3,264	16.9	20.2	19.0	27.1	29.9
Hawaii	27	34	113	259	242	1.9	2.4	7.8	18.0	16.8
Idaho	54	61	80	120	168	3.1	3.4	4.3	6.3	8.7
Illinois	1,570	1,760	1,845	2,421	2,927	12.3	13.9	14.4	19.1	23.3
Indiana	258	318	343	602	793	3.9	4.7	5.1	8.8	11.6
Iowa	112	126	143	197	251	3.5	4.0	4.5	6.2	7.8
Kansas	44	84	147	256	327	1.5	2.9	5.0	8.7	11.1
Kentucky	212	254	333	445	660	4.7	5.7	7.4	9.9	14.6
Louisiana	1,456	1,400	1,116	1,577	2,229	31.2	30.1	24.0	34.1	48.6
Maine	30	28	15	34	39	2.2	2.1	1.1	2.5	2.8
Maryland	913	888	888	NR	1,238	15.1	14.7	14.4	—	20.1
Massachusetts	133	600	485	675	829	1.9	8.7	6.9	9.7	11.9
Michigan	622	652	677	925	1,067	6.2	6.5	6.7	9.2	10.6
Minnesota	330	354	306	470	609	5.9	6.3	5.4	8.2	10.7
Mississippi	50	91	78	1,120	1,845	1.7	3.1	2.6	38.0	62.8
Missouri	544	706	916	1,611	1,859	8.9	11.5	14.9	26.1	30.1
Montana	34	47	33	98	205	3.2	4.4	3.0	8.9	18.3
Nebraska	63	109	113	207	329	3.3	5.6	5.8	10.5	16.7
Nevada	775	985	909	1,358	1,814	25.5	32.0	29.3	43.2	57.1
New Hampshire	31	37	37	33	65	2.3	2.7	2.7	2.4	4.7
New Jersey	406	612	807	1,299	1,382	4.6	6.9	8.7	14.0	14.9
New Mexico	337	552	744	1,086	1,365	16.1	26.3	35.1	51.3	64.6
New York	3,404	3,232	2,791	4,040	4,360	17.4	16.6	13.8	20.4	22.2
North Carolina	1,075	1,231	1,256	1,786	2,346	10.4	11.7	12.0	16.9	21.9
North Dakota	30	42	44	33	40	3.9	5.5	5.6	4.3	5.1
Ohio	667	718	785	1,250	1,725	5.7	6.1	6.7	10.6	14.7
Oklahoma	253	577	515	1,125	1,505	6.4	14.6	13.0	28.2	37.4
Oregon	299	416	369	556	716	7.1	9.9	8.7	13.1	16.9
Pennsylvania	416	622	671	1,014	1,389	3.2	4.9	5.2	7.8	10.7

State/Territory	Cases					Rates per 100,000 Population				
	2018	2019	2020	2021	2022	2018	2019	2020	2021	2022
Rhode Island	117	213	128	237	271	11.1	20.1	11.7	21.6	24.8
South Carolina	27	92	214	252	420	0.5	1.8	4.2	4.9	8.0
South Dakota	23	28	20	119	410	2.6	3.2	2.3	13.3	45.1
Tennessee	688	898	979	1,350	1,799	10.2	13.1	14.2	19.4	25.5
Texas	5,819	5,707	6,678	9,648	12,874	20.3	19.7	22.9	32.7	42.9
Utah	152	169	138	193	247	4.8	5.3	4.2	5.8	7.3
Vermont	0	2	9	2	0	0.0	0.3	1.4	0.3	0.0
Virginia	659	722	591	800	1,216	7.7	8.5	6.8	9.3	14.0
Washington	504	632	616	941	1,394	6.7	8.3	8.0	12.2	17.9
West Virginia	64	109	160	210	276	3.5	6.1	8.9	11.8	15.5
Wisconsin	193	195	232	502	750	3.3	3.3	3.9	8.5	12.7
Wyoming	8	21	14	17	36	1.4	3.6	2.4	2.9	6.2
US TOTAL	40,137	47,296	46,997	68,261	87,571	12.3	14.4	14.2	20.6	26.3
Northeast	4,631	5,456	4,990	7,603	8,565	8.3	9.7	8.7	13.3	15.0
Midwest	4,456	5,092	5,571	8,593	11,087	6.5	7.5	8.1	12.5	16.1
South	17,614	20,050	20,560	30,118	40,484	14.1	16.0	16.3	23.7	31.5
West	13,436	16,698	15,876	21,947	27,435	17.2	21.3	20.2	27.9	34.8
American Samoa	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Commonwealth of the Northern Mariana Islands	1	1	0	2	1	1.9	1.9	0.0	3.9	1.9
Guam	9	21	16	9	15	5.4	12.5	9.5	5.3	8.9
Puerto Rico	138	155	216	391	515	4.2	4.9	6.6	12.0	16.0
US Virgin Islands	NR	NR	27	28	19	—	—	25.4	26.4	18.0
TERRITORIES TOTAL	148	177	259	430	550	4.2	5.1	7.1	11.8	15.3
TOTAL	40,285	47,473	47,256	68,691	88,121	12.2	14.3	14.1	20.5	26.2

NR = No report.

NOTE: See Technical Notes for more information on syphilis case reporting and on interpreting case counts and rates in US territories. This report includes data from years that coincide with the COVID-19 pandemic, which introduced uncertainty and difficulty in interpreting case data. See Impact of COVID-19 on STIs for more information. Due to a network security incident in December 2021, the Maryland Department of Health could not finalize their 2021 STI case notification data. Although 2021 data from Maryland are included in national and regional case counts and rates displayed in this table, state-specific data have been suppressed.

Table 31. Congenital Syphilis — Reported Cases and Rates of Reported Cases by State, Ranked by Rates, United States, 2022

Rank*	State†	Cases	Rate per 100,000 Live Births
1	New Mexico	76	355.3
2	South Dakota	40	351.8
3	Arizona	219	281.1
4	Texas	922	246.8
5	Oklahoma	110	227.2
6	Mississippi	73	207.6
7	Louisiana	115	200.2
8	Nevada	65	193.0
9	Arkansas	69	191.9
10	Hawaii	27	172.9
11	California	616	146.5
12	Montana	15	133.6
13	Alaska	12	128.1
14	Florida	276	127.6
15	Missouri	82	118.1
	US TOTAL‡	3,755	102.5
16	Oregon	37	90.4
17	Georgia	101	81.4
18	West Virginia	13	75.6
19	Tennessee	61	74.6
20	Alabama	43	74.1
21	Ohio	90	69.3
22	Kentucky	35	67.0
23	Maryland	45	65.9
24	Illinois	85	64.3
25	Washington	52	62.0
26	Colorado	31	49.2
27	Rhode Island	5	47.8
28	Indiana	38	47.5
29	North Carolina	57	47.3
30	New Jersey	48	47.3
31	Nebraska	11	44.7
32	South Carolina	25	43.7
33	Wisconsin	26	42.1
34	Delaware	4	38.2
35	Kansas	13	37.5
36	Michigan	36	34.3
37	Minnesota	20	31.0
38	Pennsylvania	39	29.4
39	Maine	3	25.0

Rank*	State†	Cases	Rate per 100,000 Live Births
40	New Hampshire	3	23.8
41	New York	50	23.7
42	Iowa	8	21.7
43	Virginia	20	20.9
44	North Dakota	2	19.8
45	Connecticut	7	19.6
46	Massachusetts	11	15.9
47	Utah	7	15.0
	Idaho	0	0.0
	Vermont	0	0.0
	Wyoming	0	0.0

* States were ranked by rate; then case count, then in alphabetical order, with rates shown rounded to the nearest tenth.

† Mother's state of residence was used to assign case.

‡Total includes cases reported by the District of Columbia with 12 cases and a rate of 138.6, but excludes territories.

NOTE: See Technical Notes for more information on syphilis case reporting. This report includes data from years that coincide with the COVID-19 pandemic, which introduced uncertainty and difficulty in interpreting case data. See Impact of COVID-19 on STIs for more information.

Table 32. Congenital Syphilis — Reported Cases and Rates of Reported Cases by Year of Birth, by State/Territory* and Region in Alphabetical Order, United States, 2018–2022

State/Territory	Cases					Rate per 100,000 Live Births				
	2018	2019	2020	2021	2022	2018	2019	2020	2021	2022
Alabama	7	15	21	37	43	12.1	25.6	36.4	63.7	74.1
Alaska	1	0	8	5	12	9.9	0.0	84.5	53.4	128.1
Arizona	63	112	121	182	219	78.0	141.1	157.3	233.6	281.1
Arkansas	25	21	23	50	69	67.5	57.4	65.2	139.0	191.9
California	329	444	481	522	616	72.3	99.4	114.5	124.1	146.5
Colorado	8	10	22	30	31	12.7	15.9	35.8	47.7	49.2
Connecticut	2	3	2	7	7	5.8	8.8	6.0	19.6	19.6
Delaware	0	2	2	1	4	0.0	18.9	19.2	9.5	38.2
District of Columbia	1	1	3	6	12	10.9	11.0	33.8	69.3	138.6
Florida	109	145	154	181	276	49.2	65.9	73.4	83.7	127.6
Georgia	40	58	81	93	101	31.7	45.9	66.1	75.0	81.4
Hawaii	4	3	12	20	27	23.6	17.9	76.0	128.0	172.9
Idaho	1	1	2	5	0	4.7	4.5	9.3	22.3	0.0
Illinois	30	32	29	50	85	20.7	22.8	21.8	37.8	64.3
Indiana	1	13	8	20	38	1.2	16.1	10.2	25.0	47.5
Iowa	3	1	1	11	8	7.9	2.7	2.8	29.9	21.7
Kansas	8	9	8	7	13	22.1	25.4	23.3	20.2	37.5
Kentucky	9	9	13	25	35	16.7	17.0	25.2	47.9	67.0
Louisiana	43	68	63	110	115	72.1	115.4	109.9	191.5	200.2
Maine	0	0	0	0	3	0.0	0.0	0.0	0.0	25.0
Maryland	29	32	31	NR	45	40.8	45.6	45.2	—	65.9
Massachusetts	0	9	10	9	11	0.0	13.0	15.1	13.0	15.9
Michigan	14	17	29	42	36	12.7	15.8	27.9	40.0	34.3
Minnesota	10	21	7	15	20	14.8	31.8	11.0	23.3	31.0
Mississippi	3	3	37	64	73	8.1	8.2	104.3	182.0	207.6
Missouri	18	18	31	66	82	24.6	25.0	44.7	95.0	118.1
Montana	0	1	2	9	15	0.0	9.0	18.5	80.1	133.6
Nebraska	0	0	2	6	11	0.0	0.0	8.2	24.4	44.7
Nevada	31	41	46	45	65	86.9	116.9	136.7	133.6	193.0
New Hampshire	1	2	0	0	3	8.3	16.9	0.0	0.0	23.8
New Jersey	13	15	25	48	48	12.8	15.1	25.5	47.3	47.3
New Mexico	10	28	42	44	76	43.4	122.0	191.8	205.7	355.3
New York	28	27	30	42	50	12.4	12.2	14.3	19.9	23.7
North Carolina	19	27	31	43	57	16.0	22.7	26.6	35.7	47.3
North Dakota	0	0	3	2	2	0.0	0.0	29.8	19.8	19.8
Ohio	21	19	33	51	90	15.5	14.1	25.5	39.3	69.3
Oklahoma	11	42	52	85	110	22.1	85.5	109.2	175.6	227.2
Oregon	10	18	19	27	37	23.7	43.0	47.7	66.0	90.4
Pennsylvania	9	13	15	14	39	6.6	9.7	11.5	10.6	29.4

State/Territory	Cases					Rate per 100,000 Live Births				
	2018	2019	2020	2021	2022	2018	2019	2020	2021	2022
Rhode Island	0	0	1	2	5	0.0	0.0	9.9	19.1	47.8
South Carolina	9	17	19	19	25	15.9	29.8	34.1	33.2	43.7
South Dakota	1	2	4	16	40	8.4	17.5	36.5	140.7	351.8
Tennessee	13	13	31	40	61	16.1	16.2	39.4	48.9	74.6
Texas	372	530	565	684	922	98.3	140.4	153.5	183.1	246.8
Utah	1	4	1	2	7	2.1	8.5	2.2	4.3	15.0
Vermont	0	0	0	1	0	0.0	0.0	0.0	18.6	0.0
Virginia	10	11	15	18	20	10.0	11.3	15.8	18.8	20.9
Washington	6	17	10	53	52	7.0	20.0	12.0	63.2	62.0
West Virginia	1	6	9	15	13	5.5	33.1	52.0	87.2	75.6
Wisconsin	1	2	7	15	26	1.6	3.2	11.6	24.3	42.1
Wyoming	0	0	1	0	0	0.0	0.0	16.3	0.0	0.0
US TOTAL	1,325	1,882	2,162	2,875	3,755	34.9	50.2	59.8	78.5	102.5
Northeast	53	69	83	123	166	8.7	11.5	14.4	20.8	28.1
Midwest	107	134	162	301	451	13.4	17.1	21.5	39.6	59.3
South	701	1,000	1,150	1,507	1,981	47.1	67.6	80.1	103.1	135.6
West	464	679	767	944	1,157	51.6	76.6	90.6	110.7	135.6
American Samoa	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Commonwealth of the Northern Mariana Islands	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Guam	0	0	0	1	0	0.0	0.0	0.0	38.1	0.0
Puerto Rico	9	7	5	9	5	42.0	34.4	26.4	46.6	25.9
US Virgin Islands	NR	0	0	0	0	—	0.0	0.0	0.0	0.0
TERRITORIES TOTAL	9	7	5	10	5	34.5	26.8	20.7	41.5	20.7
TOTAL	1,334	1,889	2,167	2,885	3,760	34.9	50.1	59.6	78.2	101.9

* Mother's state/territory of residence was used to assign case.

NOTE: See Technical Notes for more information on syphilis case reporting and on interpreting case counts and rates in US territories. This report includes data from years that coincide with the COVID-19 pandemic, which introduced uncertainty and difficulty in interpreting case data. See Impact of COVID-19 on STIs for more information. Due to a network security incident in December 2021, the Maryland Department of Health could not finalize their 2021 STI case notification data. Although 2021 data from Maryland are included in national and regional case counts and rates displayed in this table, state-specific data have been suppressed.

NR = No report.

Table 33. Congenital Syphilis — Reported Cases and Rates of Reported Cases* by Year of Birth and Race/Hispanic Ethnicity of Mother, United States, 2018–2022

Year of Birth	American Indian/ Alaska Native		Asian		Black/ African American		Hispanic/Latino	
	Cases	Rates	Cases	Rates	Cases	Rates	Cases	Rates
2018	30	101.8	11	4.5	523	93.9	414	46.7
2019	54	187.1	24	9.8	636	115.0	586	66.1
2020	56	205.7	13	5.8	749	140.1	640	73.8
2021	102	384.5	18	8.2	891	170.4	857	96.7
2022	171	644.7	23	10.4	1122	214.5	1099	124.1

Year of Birth	Multiracial		Native Hawaiian/ Pacific Islander		White		Other/Unknown	
	Cases	Rates	Cases	Rates	Cases	Rates	Cases	Rates
2018	5	5.9	14	143.9	288	14.6	40	
2019	20	23.6	11	108.5	457	23.6	94	
2020	25	29.6	19	191.0	541	29.0	119	
2021	49	56.1	19	192.1	789	41.3	150	
2022	69	79.0	40	404.4	1034	54.1	197	

* Per 100,000 live births.

NOTE: See Technical Notes for more information. This report includes data from years that coincide with the COVID-19 pandemic, which introduced uncertainty and difficulty in interpreting case data. See Impact of COVID-19 on STIs for more information.

Table 34. Syphilis — Reported Cases and Rates of Syphilis (All Stages) Among Women Aged 15-44 Years and Reported Cases and Rates of Congenital Syphilis by State/Territory and Region in Alphabetical Order, United States, 2022

State/Territory	All Stages Among Women Aged 15-44 Years		Congenital	
	Cases	Rate per 100,000 Population	Cases	Rate per 100,000 Live Births
Alabama	887	89.5	43	74.1
Alaska	170	117.9	12	128.1
Arizona	2,186	152.9	219	281.1
Arkansas	1,110	188.3	69	191.9
California	8,027	101.1	616	146.5
Colorado	836	69.0	31	49.2
Connecticut	189	27.1	7	19.6
Delaware	97	51.4	4	38.2
District of Columbia	137	76.2	12	138.6
Florida	3,316	82.1	276	127.6
Georgia	1,574	69.9	101	81.4
Hawaii	185	70.6	27	172.9
Idaho	81	21.1	0	0.0
Illinois	1,247	50.4	85	64.3
Indiana	574	43.0	38	47.5
Iowa	275	45.2	8	21.7
Kansas	261	45.7	13	37.5
Kentucky	632	73.8	35	67.0
Louisiana	1,442	157.8	115	200.2
Maine	35	14.4	3	25.0
Maryland	527	43.6	45	65.9
Massachusetts	386	27.4	11	15.9
Michigan	648	34.2	36	34.3
Minnesota	504	45.8	20	31.0
Mississippi	1,235	212.5	73	207.6
Missouri	1,387	116.0	82	118.1
Montana	281	133.9	15	133.6
Nebraska	217	56.7	11	44.7
Nevada	936	149.9	65	193.0
New Hampshire	17	6.7	3	23.8
New Jersey	727	41.5	48	47.3
New Mexico	869	213.5	76	355.3
New York	1,796	46.3	50	23.7
North Carolina	1,340	63.5	57	47.3
North Dakota	41	26.6	2	19.8
Ohio	1,265	56.6	90	69.3
Oklahoma	1,314	164.3	110	227.2

State/Territory	All Stages Among Women Aged 15-44 Years		Congenital	
	Cases	Rate per 100,000 Population	Cases	Rate per 100,000 Live Births
Oregon	635	76.1	37	90.4
Pennsylvania	889	36.4	39	29.4
Rhode Island	93	43.1	5	47.8
South Carolina	668	65.8	25	43.7
South Dakota	915	543.2	40	351.8
Tennessee	974	70.2	61	74.6
Texas	7,690	122.2	922	246.8
Utah	87	11.7	7	15.0
Vermont	1	0.8	0	0.0
Virginia	521	30.3	20	20.9
Washington	1,121	71.7	52	62.0
West Virginia	234	74.7	13	75.6
Wisconsin	518	46.7	26	42.1
Wyoming	25	22.9	0	0.0
US TOTAL	51,122	78.0	3,755	102.5
Northeast	4,133	37.5	166	28.1
Midwest	7,852	59.4	451	59.3
South	23,698	93.2	1,981	135.6
West	15,439	97.3	1,157	135.6
American Samoa	NR	—	0	0.0
Commonwealth of the Northern Mariana Islands	NR	—	0	0.0
Guam	NR	—	0	0.0
Puerto Rico	353	57.5	5	25.9
US Virgin Islands	NR	—	0	0.0
TERRITORIES TOTAL	353	57.5	5	20.7
TOTAL	51,475	77.8	3,760	101.9

* Mother's state/territory of residence was used to assign case.

NR = No report.

NOTE: See Technical Notes for more information on syphilis case reporting and on interpreting case counts and rates in US territories. This report includes data from years that coincide with the COVID-19 pandemic, which introduced uncertainty and difficulty in interpreting case data. See Impact of COVID-19 on STIs for more information.

Table 35. Trends in Reported Cases and Rates of Reported Cases for Nationally Notifiable STIs, United States, 2018–2022

Disease	Sex*	Cases					Percent Change	
		2018	2019	2020	2021	2022	5 Year	1 Year
Chlamydia	Men	610,447	644,337	548,676	587,473	601,205	-1.5	2.3
	Women	1,145,063	1,160,470	1,027,061	1,053,246	1,043,573	-8.9	-0.9
	Total	1,758,668	1,808,703	1,579,885	1,644,416	1,649,716	-6.2	0.3
Gonorrhea	Men	341,401	361,586	385,551	410,388	390,548	14.4	-4.8
	Women	241,074	253,359	290,666	298,015	255,566	6.0	-14.2
	Total	583,405	616,392	677,769	710,151	648,056	11.1	-8.7
Primary and Secondary Syphilis	Men	30,034	32,402	33,646	41,349	44,309	47.5	7.2
	Women	4,995	6,493	7,901	12,265	14,652	193.3	19.5
	Total	35,063	38,992	41,655	53,767	59,016	68.3	9.8
Early Non-Primary Non-Secondary Syphilis	Men	32,619	34,427	35,165	40,979	44,143	35.3	7.7
	Women	5,891	7,081	7,809	10,668	12,674	115.1	18.8
	Total	38,539	41,655	43,145	51,830	56,913	47.7	9.8
Unknown Duration or Late Syphilis	Men	28,872	32,411	31,868	44,548	55,094	90.8	23.7
	Women	11,232	14,598	14,959	23,474	32,347	188.0	37.8
	Total	40,137	47,296	46,997	68,261	87,571	118.2	28.3
Congenital Syphilis†	Total	1,325	1,882	2,162	2,875	3,755	183.4	30.6
Total Syphilis‡	Total	115,064	129,825	133,959	176,733	207,255	80.1	17.3
Combined Total of Chlamydia, Gonorrhea, and Total Syphilis	Total	2,457,137	2,554,920	2,391,613	2,531,300	2,505,027	1.9	-1.0

Disease	Sex*	Rates per 100,000 Population					Percent Change	
		2018	2019	2020	2021	2022	5 Year	1 Year
Chlamydia	Men	378.9	398.6	334.2	357.4	363.7	-4.0	1.8
	Women	689.6	696.6	614.1	628.8	621.2	-9.9	-1.2
	Total	537.5	551.0	476.7	495.5	495.0	-7.9	-0.1
Gonorrhea	Men	211.9	223.7	234.8	249.7	236.3	11.5	-5.4
	Women	145.2	152.1	173.8	177.9	152.1	4.8	-14.5
	Total	178.3	187.8	204.5	214.0	194.4	9.0	-9.2
Primary and Secondary Syphilis	Men	18.6	20.0	20.5	25.2	26.8	44.1	6.3
	Women	3.0	3.9	4.7	7.3	8.7	190.0	19.2
	Total	10.7	11.9	12.6	16.2	17.7	65.4	9.3
Early Non-Primary Non-Secondary Syphilis	Men	20.2	21.3	21.4	24.9	26.7	32.2	7.2
	Women	3.5	4.3	4.7	6.4	7.5	114.3	17.2
	Total	11.8	12.7	13.0	15.6	17.1	44.9	9.6
Unknown Duration or Late Syphilis	Men	17.9	20.0	19.4	27.1	33.3	86.0	22.9
	Women	6.8	8.8	8.9	14.0	19.3	183.8	37.9
	Total	12.3	14.4	14.2	20.6	26.3	113.8	27.7
Congenital Syphilis†	Total	34.9	50.2	59.8	78.5	102.5	193.7	30.6
Total Syphilis‡	Total	35.2	39.6	40.4	53.2	62.2	76.7	16.9
Combined Total of Chlamydia, Gonorrhea, and Total Syphilis	Total	751.0	778.4	721.6	762.7	751.6	0.1	-1.5

* Total includes cases reported with unknown sex.
† Sex of infant is not reported. Rates are per 100,000 live births.
‡ Total includes cases of congenital syphilis.
NOTE: This report includes data from years that coincide with the COVID-19 pandemic, which introduced uncertainty and difficulty in interpreting case data. See Impact of COVID-19 on STIs for more information.

Table 36. Reported Cases of STIs by Reporting Source and Sex, United States, 2022

Disease	Non-STD Clinic			STD Clinic			Total		
	Male	Female	Total*	Male	Female	Total*	Male†	Female†	Total‡
Chlamydia	457,559	828,629	1,290,405	36,135	27,930	64,141	601,205	1,043,573	1,649,716
Gonorrhea	304,166	205,253	510,981	29,849	11,104	41,040	390,548	255,566	648,056
Primary Syphilis	14,803	4,131	18,946	2,553	464	3,019	19,521	5,066	24,606
Secondary Syphilis	18,562	7,760	26,345	3,316	968	4,287	24,788	9,586	34,410
Primary and Secondary Syphilis	33,365	11,891	45,291	5,869	1,432	7,306	44,309	14,652	59,016
Early Non-Primary Non-Secondary Syphilis	33,772	10,211	44,046	4,890	1,186	6,085	44,143	12,674	56,913
Syphilis, Unknown Duration or Late	40,824	25,206	66,128	3,850	1,660	5,515	55,094	32,347	87,571

* Total includes cases reported with unknown sex.
† Total includes cases reported with unknown reporting source.
‡ Total includes cases reported with unknown sex and reporting source.
NOTE: This report includes data from years that coincide with the COVID-19 pandemic, which introduced uncertainty and difficulty in interpreting case data. See Impact of COVID-19 on STIs for more information.

Table A1. Selected STIs — Percentage of Unknown*, Missing, or Invalid Values for Selected Variables by State and Nationally Notifiable STI, 2022

State	Primary and Secondary Syphilis				
	Percentage Unknown Race/Hispanic Ethnicity	Percentage Unknown Age	Percentage Unknown Sex	Percentage Unknown Sex of Sex Partners Among Men	Percentage Unknown County
Alabama	0.3	0.0	0.0	15.0	0.0
Alaska	0.6	0.0	0.0	30.1	0.0
Arizona	2.9	0.0	0.0	20.9	0.0
Arkansas	1.1	0.0	0.0	25.7	0.0
California	9.5	0.1	0.2	23.5	0.0
Colorado	0.1	0.0	0.0	26.5	0.0
Connecticut	7.7	0.0	0.0	39.4	100.0
Delaware	10.1	0.0	0.4	25.7	0.0
District of Columbia	3.0	0.0	0.0	9.5	0.0
Florida	8.4	0.0	0.0	32.3	0.0
Georgia	0.0	0.0	0.0	29.9	0.0
Hawaii	13.0	0.0	0.0	34.6	0.4
Idaho	12.7	0.0	0.0	37.2	0.0
Illinois	11.7	0.0	0.0	44.6	0.0
Indiana	1.7	0.0	0.1	26.2	0.0
Iowa	0.6	0.0	0.0	14.8	0.0
Kansas	2.6	0.0	0.0	14.3	0.0
Kentucky	0.1	0.0	0.0	25.4	0.0
Louisiana	0.3	0.0	0.0	32.4	0.0
Maine	1.2	0.0	0.0	13.6	0.0
Maryland	5.4	0.0	0.3	59.3	0.0
Massachusetts	5.3	0.0	1.3	9.2	0.2
Michigan	1.9	0.0	0.0	15.1	0.0
Minnesota	1.5	0.0	0.1	61.3	0.0
Mississippi	0.8	0.0	0.0	6.2	0.0
Missouri	1.4	0.0	0.0	67.2	0.0
Montana	0.0	0.0	0.0	30.2	0.0
Nebraska	0.9	0.0	0.5	36.6	0.0
Nevada	6.7	0.0	0.0	28.5	0.0
New Hampshire	10.8	0.0	0.0	25.0	0.0
New Jersey	1.7	0.0	0.0	9.5	0.0
New Mexico	12.6	0.0	0.0	47.5	0.0
New York	4.7	0.0	0.0	8.0	0.0
North Carolina	0.1	0.0	0.0	20.2	0.0
North Dakota	7.8	0.0	0.0	20.0	0.0
Ohio	0.1	0.0	0.0	23.7	0.0
Oklahoma	0.2	0.0	0.0	22.0	0.0

State	Primary and Secondary Syphilis				
	Percentage Unknown Race/Hispanic Ethnicity	Percentage Unknown Age	Percentage Unknown Sex	Percentage Unknown Sex of Sex Partners Among Men	Percentage Unknown County
Oregon	12.5	0.0	0.1	23.1	0.0
Pennsylvania	2.9	0.0	0.0	21.7	0.0
Rhode Island	3.8	0.0	0.0	27.3	0.0
South Carolina	0.7	0.0	0.2	21.1	0.0
South Dakota	0.3	0.0	0.0	10.8	0.0
Tennessee	0.6	0.0	0.0	17.1	0.0
Texas	5.0	0.0	0.2	29.6	0.0
Utah	1.7	0.0	0.0	12.5	0.0
Vermont	0.0	0.0	0.0	0.0	0.0
Virginia	1.8	0.0	0.5	18.9	0.0
Washington	11.7	0.0	0.3	14.3	0.0
West Virginia	0.9	0.0	0.0	28.8	0.0
Wisconsin	0.7	0.0	0.1	3.5	0.1
Wyoming	76.2	0.0	0.0	20.0	0.0
U.S. Total	4.6	0.0	0.1	24.7	0.4

State	Gonorrhea				Chlamydia			
	Percentage Unknown Race	Percentage Unknown Age	Percentage Unknown Sex	Percentage Unknown County	Percentage Unknown Race	Percentage Unknown Age	Percentage Unknown Sex	Percentage Unknown County
Alabama	24.2	0.0	1.2	0.0	32.5	0.1	1.8	0.0
Alaska	6.2	0.0	0.0	0.0	9.0	0.0	0.0	0.1
Arizona	25.7	0.0	0.2	0.0	37.5	0.0	0.2	0.0
Arkansas	20.3	0.0	0.0	0.0	27.5	0.0	0.1	0.0
California	32.5	0.2	0.4	0.0	54.1	0.1	0.5	0.0
Colorado	9.1	0.0	0.0	0.0	18.9	0.0	0.0	0.0
Connecticut	42.0	0.0	0.1	100.0	71.2	0.0	0.0	100.0
Delaware	27.1	0.0	0.3	0.1	39.7	0.0	0.2	0.0
District of Columbia	37.1	0.0	0.3	0.0	62.4	0.1	0.8	0.0
Florida	23.6	0.0	0.1	0.0	33.8	0.0	0.1	0.0
Georgia	3.9	0.1	0.0	1.1	5.2	0.0	0.0	1.9
Hawaii	47.4	0.0	0.0	0.1	48.4	0.0	0.0	0.2
Idaho	17.3	0.0	0.0	0.0	18.2	0.0	0.0	0.0
Illinois	11.0	0.0	0.1	0.0	13.1	0.0	0.1	0.0
Indiana	16.6	0.0	0.1	0.0	26.6	0.0	0.1	0.0
Iowa	4.0	0.0	0.0	0.0	12.5	0.0	0.0	0.0
Kansas	8.9	0.0	0.0	0.0	11.5	0.0	0.0	0.0
Kentucky	14.7	0.0	0.3	0.0	17.9	0.0	0.4	0.0
Louisiana	2.7	0.0	0.0	0.0	4.0	0.0	0.0	0.1

State	Gonorrhea				Chlamydia			
	Percentage Unknown Race	Percentage Unknown Age	Percentage Unknown Sex	Percentage Unknown County	Percentage Unknown Race	Percentage Unknown Age	Percentage Unknown Sex	Percentage Unknown County
Maine	3.1	0.2	0.0	0.0	28.9	67.7	0.0	0.3
Maryland	40.9	2.0	0.4	0.6	36.9	2.8	0.3	1.0
Massachusetts	37.2	0.0	0.5	0.5	45.6	0.0	0.3	1.1
Michigan	10.1	0.0	0.0	0.0	16.0	0.0	0.0	0.0
Minnesota	13.0	0.0	0.2	0.7	14.8	0.0	0.0	0.5
Mississippi	24.5	0.0	0.5	0.0	31.7	0.0	0.5	0.0
Missouri	9.0	0.0	0.0	0.0	13.4	0.0	0.0	0.0
Montana	0.6	0.0	0.1	0.1	0.8	0.0	0.0	0.2
Nebraska	2.2	0.0	0.0	0.0	3.8	0.0	0.2	0.0
Nevada	31.9	0.0	0.1	0.0	43.0	0.0	0.1	0.0
New Hampshire	21.9	0.0	0.0	0.0	33.6	0.0	0.7	0.0
New Jersey	10.5	0.0	0.0	0.1	16.5	0.0	0.0	0.2
New Mexico	28.9	0.0	0.0	0.0	35.7	0.0	0.1	0.0
New York	20.9	0.0	0.0	0.0	33.6	0.0	0.0	0.0
North Carolina	15.1	0.0	0.0	0.0	19.9	0.0	0.0	0.0
North Dakota	10.0	0.0	0.0	0.0	15.8	0.0	0.0	0.0
Ohio	10.4	0.0	0.0	0.5	15.1	0.0	0.0	0.7
Oklahoma	14.2	0.0	0.0	0.0	18.3	0.0	0.0	0.0
Oregon	19.8	0.0	0.7	0.0	33.5	0.0	0.2	0.0
Pennsylvania	8.2	0.0	0.1	0.0	11.5	0.0	0.0	0.0
Rhode Island	13.9	0.0	0.0	0.0	17.2	0.0	0.0	0.0
South Carolina	26.6	0.0	0.6	0.8	31.5	0.0	0.4	0.7
South Dakota	1.5	0.0	0.0	0.0	3.2	0.0	0.0	0.0
Tennessee	1.6	0.0	0.0	0.0	2.5	0.0	0.0	0.0
Texas	24.1	0.2	1.4	0.0	33.9	0.2	1.4	0.0
Utah	3.4	0.0	0.0	0.0	4.2	0.0	0.0	0.0
Vermont	15.5	0.0	0.0	0.6	19.6	0.0	0.2	11.9
Virginia	27.2	0.3	0.1	0.0	37.5	0.2	0.1	0.0
Washington	16.7	0.0	0.6	0.0	37.1	0.1	0.4	0.0
West Virginia	12.1	0.0	0.0	0.2	11.7	0.0	0.0	0.1
Wisconsin	4.3	0.0	0.1	0.7	5.4	0.0	0.3	0.7
Wyoming	69.4	0.0	0.0	0.0	78.5	0.0	0.2	0.0
U.S. Total	19.2	0.1	0.3	0.9	27.8	0.2	0.3	1.0

*Includes cases reported with unknown, missing, or invalid values

NOTE: This report includes data from years that coincide with the COVID-19 pandemic, which introduced uncertainty and difficulty in interpreting case data. See Impact of COVID-19 on STIs for more information.

Technical Notes

Sexually Transmitted Infections Surveillance, 2022 presents trends in nationally notifiable sexually transmitted infections (STIs) in the United States through 2022. This annual publication is intended as a reference document for policy makers, program managers, health planners, researchers, and others who are concerned with the public health implications of these diseases. The figures and tables in this report supersede those in earlier publications of these data. The surveillance data in this report are based on case notification data provided to the Centers for Disease Control and Prevention (CDC) through the National Notifiable Diseases Surveillance System (NNDSS) and data collected through projects and programs that monitor STIs in various settings, including the STD Surveillance Network (SSuN) and the Gonococcal Isolate Surveillance Project (GISP).

This report provides trends in nationally notifiable STIs for which there are federally funded control programs: chlamydia, gonorrhea, and syphilis, including congenital syphilis. It is important to note that these data reflect only a portion of STIs occurring in the US population. Over 30 pathogens can be sexually transmitted, including common STIs, such as herpes simplex virus, which causes genital herpes, and human papillomavirus, which can lead to genital warts and cervical cancer. Additionally, STIs are often asymptomatic and may not be diagnosed. Published estimates of the burden of STIs in the United States, including estimated prevalence, incidence, and cost, can be found in the April 2021 special issue of the journal *Sexually Transmitted Diseases,* available here: https://journals.lww.com/stdjournal/pages/collectiondetails.aspx?TopicalCollectionId=4.

Disruptions in STI-related prevention and care activities related to the US response to the COVID-19 pandemic had a pronounced impact on trends in STI surveillance data; therefore, trends for STI surveillance data collected during the pandemic and presented in *Sexually Transmitted Infections Surveillance, 2022* should be interpreted cautiously. For more information, please see *Impact of COVID-19 on STIs*.

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Impact of COVID-19 on STIs

The COVID-19 pandemic led to disruptions in STI-related prevention and care activities, including reduced STI screening and redirection of STI program resources to COVID-19 activities. Because STIs often do not show symptoms, and screening is necessary for timely diagnosis and treatment, changes in access to sexual health care, as well as disruptions in public health services, can affect the number of infections diagnosed and reported. Consequently, trends for STI surveillance data collected during the pandemic that are presented in Sexually Transmitted Infections Surveillance, 2022 should be interpreted cautiously.

The impact of the COVID-19 pandemic on STI surveillance data was most acute in March and April 2020, when the number of reported STIs rapidly fell during the initial shelter-in-place orders. Case counts began increasing in late-2020, which may have reflected increases in service utilization as health care clinics re-opened and people sought care when available. Increases in diagnosed and reported cases could also reflect higher disease transmission. For example, due to reduced access to care, those with an STI may have had their infections longer, providing more opportunities to transmit infection to their sexual partners. Additionally, following the initial shelter-in-place orders, sexual behaviors like the frequency of new sex partners may have changed, causing STIs to spread in sexual networks.

In 2022, the total number of STIs reported was higher than the number reported in 2020; however, the number of chlamydia cases reported in 2022 is still lower than the number of cases reported prior to the COVID-19 pandemic. Most people with chlamydia usually have no signs or symptoms and many cases are identified through screening at routine preventive care visits. Therefore, it is likely chlamydia was disproportionately affected by reduced screening during the pandemic, resulting in undiagnosed infections. Additionally, in response to reduced staffing resources, many health departments prioritized the diagnosis and treatment of syphilis and gonorrhea. This likely further reduced the number of chlamydia cases processed and reported.

Sexually Transmitted Infections Surveillance, 2022 underscores that STIs continue to persist as a significant public health concern. The COVID-19 pandemic significantly affected trends in diagnosed and reported STIs – resulting in likely underreporting of infections and possibly increased STI transmission. It's likely that such effects will persist for several more years and we may never know the full impact of the pandemic on STIs. What is clear, however, is that STI prevention and control efforts remain as important as ever.

Additional Information

- *Impact of COVID-19 on STDs.* 2020 STD Surveillance Report. Available at: https://www.cdc.gov/std/statistics/2020/2020-SR-4-10-2023.pdf
- *Impact of COVID-19 on STDs.* 2021 STD Surveillance Report. Available at: TBD
- Pagaoa et al. Trends in Nationally Notifiable Sexually Transmitted Disease Case Reports During the US COVID-19 Pandemic, January to December 2020. *Sex Transm Dis*. 2021 Oct; 48(10): 798–804.
    - Press release: https://www.cdc.gov/nchhstp/newsroom/2021/2020-std-trend-report.html
    - Full text: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8459909/
- Wright et al. Impact of the COVID-19 Pandemic on Centers for Disease Control and Prevention-Funded STD Programs. Sex Transm Dis. 2021 Oct 12.
    - Summary of key findings: https://www.cdc.gov/std/program/327850-A_FS_COVID19_STD_Impact_508_FINAL.pdf
    - Abstract: https://pubmed.ncbi.nlm.nih.gov/34654769/

Current COVID-19 information: https://www.cdc.gov/coronavirus/2019-ncov/index.html

National Notifiable Diseases Surveillance System (NNDSS)

Four STIs are nationally notifiable conditions: chlamydia, gonorrhea, syphilis, and chancroid. STI control programs in state, local, and territorial health departments (also referred to as jurisdictions) collect case reports for these conditions using case definitions developed by the Council of State and Territorial Epidemiologists (CSTE) and CDC. Health departments voluntarily provide STI case notification data to CDC through NNDSS. The Division of STD Prevention in the National Center for HIV, Viral Hepatitis, STD, and TB Prevention uses the data for national surveillance, disseminating data and key findings. HIV, which can be sexually transmitted, is also a nationally notifiable condition; national data for trends in diagnosed HIV are available here: https://www.cdc.gov/hiv/library/reports/hiv-surveillance.html.

National data collection for gonorrhea, syphilis, and chancroid began in 1941 and the three STIs became nationally notifiable in 1944. Data collection for chlamydia began in 1984 and chlamydia was made nationally notifiable in 1995; however, chlamydia was not reportable in all 50 states and the District of Columbia until 2000. For more information on nationally notifiable conditions, please refer to the NNDSS website: https://www.cdc.gov/nndss/index.html.

Reporting Formats

NNDSS STI case notification data presented in this report are compiled from electronic data received through the National Electronic Telecommunications System for Surveillance (NETSS) and via Health level 7 (HL7) messaging using National Electronic Disease Surveillance System (NEDSS) standards. Additionally, select jurisdictions provide congenital syphilis cases via REDCap and a few jurisdictions (e.g., territories) provide data using standardized hard copy reporting forms. STI case notification data sent to CDC through September 14, 2023 are included in this report.

Prior to 2003, the following hard copy forms were used to provide NNDSS STD data to CDC:

FORM CDC 73.998: Monthly Surveillance Report of Early Syphilis. This monthly hard copy reporting form was used during 1984–2002 to report summary data for primary and secondary (P&S) syphilis and early latent syphilis by county and state.

FORM CDC 73.688: Sexually Transmitted Disease Morbidity Report. This quarterly hard copy reporting form was used during 1963–2002 to report summary data for all stages of syphilis, congenital syphilis, gonorrhea, chancroid, chlamydia, and other STDs by sex and source of report (private versus public) for all 50 states, the District of Columbia, 64 selected cities, and territories of the United States. Chlamydia became a nationally notifiable condition in 1995 and the form was modified to support reporting of chlamydia that year. Congenital syphilis was dropped from this aggregate form in 1995 to encourage use of the congenital syphilis case-specific CDC 73.126 form that was introduced in 1983.

FORM CDC 73.2638: Report of Civilian Cases of Primary & Secondary Syphilis, Gonorrhea, and Chlamydia by Reporting Source, Sex, Race/Ethnicity, and Age Group. This annual hard copy form was used during 1981–2002 to report summary data for P&S syphilis, gonorrhea, and chlamydia by age, race, sex, and source of report (private versus public) for all 50 states, seven large cities (Baltimore, Chicago, New York City, Los Angeles, Philadelphia, San Francisco, and the District of Columbia), and territories of the United States. When chlamydia became a nationally notifiable condition in 1995, the form was modified to support reporting of chlamydia.

FORM CDC 73.126: Congenital Syphilis (CS) Case Investigation and Reporting. This case-specific hard copy form was first used in 1983 and was revised in 1990 and in 2013 to align with changes to the congenital syphilis case

definition; minor revisions were also made in 2010. It continues to form the basis of the congenital syphilis REDCap form used by some jurisdictions.

As of December 31, 2003, all 50 states and the District of Columbia converted from summary hard copy reporting to electronic submission of line-listed (i.e., case-specific) data for chlamydia, gonorrhea, syphilis, and chancroid through NETSS. Puerto Rico converted to electronic reporting in 2006 for all STIs, excluding congenital syphilis. American Samoa, Guam, the Commonwealth of the Northern Mariana Islands, and the US Virgin Islands continue to report STI data through summary hard copy forms. In 2022, 14 jurisdictions (Alabama, Alaska, Connecticut, Idaho, Indiana, Kentucky, Michigan, North Carolina, Oregon, Rhode Island, South Carolina, Utah, and Wisconsin) provided STI and congenital syphilis case notification data to CDC via HL7 messaging. In 2022, Maryland provided congenital syphilis case notification to CDC via HL7 messaging. In 2022, 24 states and one US territory provided congenital syphilis data through REDCap.

Reporting Practices

Although most state and local STI programs adhere to the case definitions collaboratively developed by CSTE and CDC for nationally notifiable STIs, differences in policies and systems for collecting surveillance data may exist. Thus, comparisons of case numbers and rates between jurisdictions should be interpreted with caution. However, because case definitions and surveillance activities within a given area remain relatively stable over time, trends over time should be minimally affected by these differences.

In December of 2021, there was a network security incident at the Maryland Department of Health which prevented them from finalizing their 2021 STI case notification data to CDC. As a result, 2021 STI case notification data from Maryland are incomplete. Although 2021 STI case notification data for Maryland are included in national and regional data displayed in tables and figures, 2021 case data from Maryland have been suppressed for tables and figures displaying state-level or county-level data. In 2022, Connecticut adopted nine planning regions as county-equivalent geographic units; as STI case notification data were not available in the new county-equivalent units for 2022, data for Connecticut have been suppressed in figures displaying county and county-equivalent data.

Chlamydia and Gonorrhea Reporting

Trends in rates of reported cases of chlamydia and gonorrhea are influenced by changes in incidence of infection, as well as changes in diagnostic, screening, and reporting practices. As both chlamydial and gonococcal infections can be asymptomatic, the number of infections identified and reported can increase as more people are screened—even when incidence is flat or decreasing. Beginning in 2000, the expanded use of more sensitive diagnostic tests (e.g., nucleic acid amplification tests) likely increased the number of infections identified and reported independently of increases in incidence. Additionally, expanded testing at extragenital (rectal and pharyngeal) anatomic sites likely increased the number of infections identified. Further, the increased use of electronic laboratory reporting over the last decade or so also likely increased the proportion of diagnosed infections reported. Although chlamydia has been a nationally notifiable condition since 1994, it was not until 2000 that all 50 states and the District of Columbia required reporting of chlamydia cases. National chlamydia case rates prior to 2000 reflect incomplete reporting. Consequently, increasing case rates over time may reflect more complete reporting, as well as increases in incidence of infection, screening coverage, and use of more sensitive tests. Likewise, decreases in case rates may suggest decreases in incidence of infection or screening coverage.

Beginning in 2020, the COVID-19 pandemic likely affected multiple aspects of chlamydia and gonorrhea case reporting, including reduced screening and delayed reporting. The impact of these disruptions likely continued in 2022. As a result, chlamydia and gonorrhea surveillance data collected during the COVID-19 pandemic should be interpreted cautiously. For more information, please see Impact of COVID-19 on STIs.

Syphilis Reporting

Case notifications for non-congenital syphilis are displayed in this report by surveillance stage of disease based on current CSTE case definitions. The majority of tables and figures present trends in primary and secondary syphilis, which reflect incident infections; however, trends are also presented for other syphilis stages, along with trends in "syphilis (all stages)" (all stages of non-congenital syphilis) and trends in "total syphilis" (all stages of non-congenital syphilis and congenital syphilis, including syphilitic stillbirths).

The surveillance case definition for syphilis has changed over time. Since 2018, the category of "total syphilis" includes: primary, secondary, early non-primary non-secondary, unknown duration or late, congenital syphilis, and syphilitic stillbirth. However, in previous years, "total syphilis" has included different case classifications. For example, in the 1990 syphilis case definition, "total syphilis" or "all stages of syphilis" included: primary, secondary, latent, early latent, late latent, latent unknown duration, neurosyphilis, syphilitic stillbirth, and congenital syphilis. More information on syphilis case definition changes over time can be found at: https://ndc.services.cdc.gov/conditions/syphilis/.

Congenital Syphilis Reporting

The congenital syphilis case definition has remained largely unchanged since 1989—when jurisdictions moved away from using the clinical Kaufman criteria for reporting congenital syphilis in favor of using a more sensitive definition of congenital syphilis that includes asymptomatic infants born to women with untreated or inadequately treated syphilis. By January 1, 1992, the new, more sensitive congenital syphilis case definition was fully implemented by all reporting areas.

Since 1995, congenital syphilis cases have been reported by the state and city of residence of the mother and by the reported race and Hispanic ethnicity of the mother. Congenital syphilis is usually diagnosed at birth but can be identified years later; therefore, cases are sent to CDC when they are reported to local public health officials and are assigned as morbidity based upon the infant's year of birth. Congenital syphilis data reported after publication of the annual STI surveillance report will appear in subsequent reports. The current and historical congenital syphilis case definitions can be found on CDC's NNDSS case definition website: https://ndc.services.cdc.gov/conditions/congenital-syphilis/.

Missed prevention opportunities among birthing parents of infants with congenital syphilis are identified based on information reported to CDC related to syphilis testing and treatment and clinical findings in infants. To describe the primary missed prevention opportunity, each reported congenital syphilis case is assigned to one of six mutually exclusive categories across a three-step cascade of care (testing, treatment and outcomes). The six categories are: 1) no documented testing or non-timely testing, 2) late identification of seroconversion during pregnancy (identified <30 days prior to delivery), 3) no treatment or nondocumented treatment, 4) inadequate treatment, 5) clinical evidence of congenital syphilis despite adequate maternal treatment, 6) insufficient data to identify a cause. For categorization purpose, congenital syphilis prevention opportunities are considered timely if they occurred ≥30 days before delivery. Adequate maternal treatment is defined as completion of a penicillin- based regimen recommended for the mother's stage of syphilis which was initiated ≥30 days before delivery. For a case of congenital syphilis to be categorized as resulting from no or nondocumented maternal treatment a pregnant person would 1) need to have evidence of a diagnosis of syphilis during pregnancy with syphilis testing performed ≥30 days before delivery and 2) have documentation of no treatment for syphilis, or have no documentation related to treatment. Those with inadequate treatment only received 1 dose when 3 doses were indicated based on maternal staging, received the doses at improper intervals, received the first dose of treatment <30 days before delivery, or were treated with a nonpenicillin–based regimen.

Race/Hispanic Ethnicity

In April 2008, the NETSS record layout for sending STI case notification data was updated to conform to the Office of Management and Budget's (OMB's) current government-wide standard for collection and reporting of race/Hispanic ethnicity data. The OMB standards were first issued in 1997. Cases are able to be reported with information on both

race and Hispanic ethnicity. Categorization of race and Hispanic ethnicity in this report involves a stepwise process whereby case notifications with Hispanic ethnicity are first classified as Hispanic/Latino, regardless of the presence or absence of race data included with the case notification. Case notifications noted to be non-Hispanic or those with missing or unknown Hispanic ethnicity are considered non-Hispanic and categorized based on race. Among these cases without Hispanic ethnicity, case notifications that include more than one race are next categorized as Multiracial with remaining cases grouped into the corresponding single race category noted in the case notification. Since the publication of Sexually Transmitted Disease Surveillance 2012, most race/Hispanic ethnicity data presented in the report are displayed as: American Indian or Alaska Native, Asian, Black or African American, Hispanic or Latino, Native Hawaiian or Other Pacific Islander (NH/PI), White, and Multiracial.

Most reporting jurisdictions report in the current OMB standard race categories, including Multirace; however, in 2022, a small number of jurisdictions reported race in pre-1997 single race categories or reported race using categories based on current OMB standards but were unable to report more than one race per person. For this report, all race/Hispanic ethnicity case notification data reported by jurisdictions are summarized in tables, figures, and interpretative text regardless of local compliance with the 1997 OMB standards. The few cases reported in the legacy 'Asian/Pacific Islander' category from non-OMB compliant jurisdictions are re-coded to 'Unknown' because these cases cannot be properly re-coded into a category currently in OMB standards. Therefore, the rates for Asians, NH/PI, or Multirace persons may be minimally under- or overestimated.

In 2022, 27.8% of chlamydia cases and 19.2% of gonorrhea cases were reported with missing information on race/Hispanic ethnicity. (Table A1) Given the substantial number of these infections diagnosed, case data are primarily based on information received on the laboratory report which may not contain information about race/Hispanic ethnicity. As most P&S syphilis cases are investigated by local public health officials, only a small proportion (4.6%) were reported with missing information on race/Hispanic ethnicity in 2022. Cases missing race and/or Hispanic ethnicity are not included in the calculation of rates by race/Hispanic ethnicity. As a consequence, rate data presented in this report underestimate actual case incidence in these population categories and caution should be used in interpreting specific rate data points.

Of note, case notification data included in this report do not include tribal affiliation and cases that include American Indian or Alaska Native race may not be members or descendants of federally-recognized Tribes or eligible to receive or actively receiving care from an Indian Health Service facility. Additionally, case notification race and Hispanic ethnicity data and the race and ethnicity categorization methodology described above may not accurately reflect how a person identifies. For these reasons and others not described, some case notification data included in this report may be misclassified by race and/or Hispanic ethnicity emphasizing the importance of interpreting these results with caution. Additionally, differences by race and/or Hispanic ethnicity cannot be understood without consideration of long-standing structural contributors that are not adequately captured in case notification data such as systemic racism, challenges with healthcare access, and disparities in social determinants of health.

Sex and Gender Identity

When providing STI case notification data to CDC, jurisdictions indicate the "current sex" (male, female, unknown) of the case-patient. Many of the tables and figures in this report present trends in rates of reported chlamydia, gonorrhea, and syphilis stratified by sex, based on information provided in the "current sex" variable. Some jurisdictions may enter "birth sex" (e.g., sex on original birth certificate) into the "current sex" variable or enter a value for the "current sex" variable that does not align with a person's current gender identity which may under- or overestimate the "male" and "female" groups derived from the "current sex" variable.

Starting in 2018, jurisdictions were also able to provide "gender identity" (cisgender, transgender male-to-female, transgender female-to-male, and transgender unknown) for STI case notifications. As modifications to local and state surveillance systems may be required to collect, store, and transmit gender identity data, not all jurisdictions have begun providing these data to CDC. Additionally, among jurisdictions who have begun sending gender identity data,

data are most complete for cases of P&S syphilis, as investigation of these cases likely include patient and provider follow-up allowing for collection of gender identity. To minimize bias due to missing data, gender identity data presented in this report are limited to data from states with ≥70% complete information on gender identity for P&S syphilis cases. As reporting of gender identity improves, case counts and distribution of cases by gender identity will become more representative of the US.

Sex of Sex Partners

In this report, trends in primary and secondary syphilis case notification data are presented stratified by sex and sex of sex partners. Unless otherwise noted, male cases were categorized as men who have sex with men (MSM) if they reported having sex with any male partner in the last 12 months, including men who also reported sex with female partners in the last 12 months. Male cases were categorized as men who have sex with women only (MSW) if they reported having sex with only female partners in the last 12 months. The remaining male cases were categorized as men with unknown sex of sex partners (MSU). Sexual transmission of bacterial STIs between two women is feasible; however, it is uncommonly reported in STI case notification data. In 2022, less than 0.5% of primary and secondary syphilis cases among women were among women who reported only female sex partners.

Reporting Sources

Before 1996, states classified the source of case reports as either private source (including private physicians, hospitals, and institutions) or public source (primarily STD clinics). As states began reporting morbidity data electronically in 1996, the classification categories for source of case reports expanded to include the following data sources: STD clinics, HIV counseling and testing sites, drug treatment clinics, family planning clinics, prenatal/obstetrics clinics, tuberculosis clinics, private physicians/health maintenance organizations, hospitals (inpatient), emergency rooms, correctional facilities, laboratories, blood banks, the National Job Training Program, school-based clinics, mental health providers, the military, the Indian Health Service, and other unspecified sources. For figures displaying trends in cases by reporting source, case notification data are displayed as STD clinic and non-STD clinic, which includes all other reporting sources, including other unspecified sources.

Geography

To describe regional trends, data are stratified by US census region the Northeast region (Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, and Vermont), the Midwest region (Iowa, Illinois, Indiana, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, Oklahoma, South Dakota, and Wisconsin), the South region (Alabama, Arkansas, Delaware, District of Columbia, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, South Carolina, Virginia, Tennessee, Texas, and West Virginia), and the West region (Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, and Wyoming).

Selected tables and figures include data from five US territories (American Samoa, Guam, the Commonwealth of the Northern Mariana Islands, Puerto Rico, and the US Virgin Islands); however, most of the case notification data presented in the report exclude data from these territories. There are a number of issues affecting STI surveillance data reported to CDC from the US territories, including limited access to STI test kits, resulting in an inability to test or screen for undetermined periods of time, as well as a variety of data collection, entry, and transmission issues. As such, the data likely underestimate the total STI burden in these areas and should be interpreted cautiously.

Population Denominators and Rate Calculations

2000–2022 Rates and Population

The population counts for 2000 through 2022 used to calculate rates displayed in figures and tables in this report were obtained from the County Characteristics Resident Population Estimates and the State Characteristics Population Estimates files available from the US Census Bureau.

Population estimates for American Samoa, Guam, the Commonwealth of the Northern Mariana Islands, and the US Virgin Islands were obtained from the US Census Bureau International Programs Web site at: www.census.gov/programs-surveys/international-programs.html. The population counts for Puerto Rico were obtained from the Puerto Rico Characteristic Population Estimates file available from the US Census Bureau.

1990–1999 Rates and Population

The population counts for 1990 through 1999 incorporated the bridged single-race estimates of the April 1, 2000 US resident population. These files were prepared by the US Census Bureau with support from the National Cancer Institute.

1981–1989 Rates and Population

Rates were calculated by using US Census Bureau population estimates for 1981 through 1989.

1941–1980 Rates and Population

Rates for 1941 through 1980 were based on population estimates from the US Census Bureau and are currently maintained by CDC's Division of STD Prevention.

1941–2022 Congenital Syphilis Rates and Live Births

The congenital syphilis data in Table 1 of this report represent the number of congenital syphilis cases per 100,000 live births for all years during 1941–2021. Previous publications presented congenital syphilis rates per 100,000 population during 1941–1994 and rates for cases diagnosed at younger than 1 year of age per 100,000 live births during 1995–2005. To allow for trends in congenital syphilis rates to be compared for the period of 1941 through 2021, live births now are used as the denominator for congenital syphilis and case counts are no longer limited to those diagnosed within the first year of life. Congenital syphilis morbidity is assigned by year of birth. Rates of congenital syphilis for 1963 through 1988 were calculated by using published live birth data. Congenital syphilis rates for 1989 through 2022 were calculated by using live birth data provided to National Center for Health Statistics (NCHS) through the Vital Statistics Cooperative Program. Rates for 2022 were calculated using live birth data for 2021.

2018–2022 Gay, Bisexual, and Other Men Who Have Sex with Men Rates and Population

For the figure and table showing state-level rates of reported cases of P&S syphilis among men who have sex with men (MSM), population estimates of MSM are based on a method that combines published estimates of the prevalence of same-sex behavior among adult men with housing and population data from the American Community Survey five-year summary file (2014–2018).1 County-specific estimates begin with MSM prevalence estimates that are determined by their urbanicity according to the NCHS urban-rural classification scheme for counties and their US region. Estimates are then multiplied by a modified ratio of each county's percentage of male same-sex households to the total percentage of male same-sex households among all counties at the same level of urbanicity and within the same region. Thus, the final estimate for each county reflects what would be expected based on the county's geography, urban-rural classification, and observed concentration of households with a male head of household and a male partner. State-level estimates are then aggregated from the county-specific estimates.

References

1. Grey JA, Bernstein KT, Sullivan PS, et al. Estimating the population sizes of men who have sex with men in US states and counties using data from the American Community Survey. JMIR Public Health Surveill. 2016;2(1):e14.

Other Sources of Surveillance Data

STD Surveillance Network

In 2005, CDC established the STD Surveillance Network (SSuN) as a collaborative network of state, county and/or city health departments following common protocols to conduct sentinel and enhanced STD surveillance activities. The purpose of SSuN is to improve the capacity of national, state, and local STD programs to detect, monitor, and respond to trends in STDs through enhanced data collection, reporting, analysis, visualization, and interpretation of disease information. More information about SSuN is available here: https://www.cdc.gov/std/ssun/default.htm.

Cycle 4 (2019–2024) of SSuN provides funding to 11 jurisdictions to conduct two core sentinel and enhanced STD surveillance activities. SSuN Cycle 4 sentinel surveillance activities include abstraction of clinical and demographic information on a full census of patients attending participating 16 STD clinics (Strategy A). SSuN Cycle 4 enhanced surveillance activities include provider and patient investigations on a probability sample of all persons diagnosed and reported with gonorrhea and case data for reported adult syphilis cases (Strategy B). All patient records from Strategy A and Strategy B activities are matched to the jurisdiction's HIV surveillance registry. Funded jurisdictions collaborating in SSuN Cycle 4 include Baltimore City (Maryland), California (excluding San Francisco County), City of Columbus (8-County metropolitan statistical area), Florida, Indiana, Multnomah County (Oregon), New York City (New York), Philadelphia City/County (Pennsylvania), San Francisco City/County (California), Utah, and Washington State.

In both core Strategies of SSuN, unique persons (diagnosed and reported with gonorrhea or seeking care in participating clinical facilities) are longitudinally followed using unique, non-name-based coded IDs to provide information on repeat infections and/or care seeking behaviors. The primary unit of analysis for sentinel surveillance activities in clinical facilities is unique persons. These data are merged with multiple clinic visit, laboratory, diagnostic, and treatment observations to provide a comprehensive picture of services and diagnoses received for each individual patient. For enhanced, case-based surveillance activities in SSuN, the primary unit of analysis is a diagnosed and reported episode (case) of gonorrhea or adult syphilis from any provider type or setting within the funded jurisdiction. Case data also included a unique person identifier, which allowed merging with multiple laboratory observations, matching with other health department disease registries, querying provider-based clinical information systems, and unique patient demographic and behavioral data obtained through direct patient interviews. Gonorrhea cases in the probability sample were weighted to reflect study design and to adjust for non-response by demographic category of the patient. Weighted analysis provides estimates of case-level and person-level characteristics representative of all gonorrhea cases diagnosed and reported in the funded jurisdictions.

Gay, bisexual, and other men who have sex with men (MSM) are defined in all SSuN data collection activities as men who: a) reported having sex with another man in the preceding 2–3 months, and/or, b) those who reported that they considered themselves gay/homosexual or bisexual. Men who have sex with women (MSW) are defined as men who reported having sex with women exclusively, or who did not report the sex of their sex partners but reported that they considered themselves to be straight/heterosexual.

Data presented from Strategy A (sentinel surveillance in STD clinics) include data from STD clinics in ten of the 11 participating Cycle 4 jurisdictions (Baltimore City [Maryland], Orange County [California], Columbus [Ohio], Miami, Leon, and Escambia County STD clinics [Florida], Multnomah County [Oregon], New York City [New York], Philadelphia [Pennsylvania], San Francisco [California], and Seattle [Washington]).

Data presented from Strategy B (enhanced surveillance of gonorrhea cases) of SSuN for 2022 include gonorrhea cases sampled, investigated and weighted for analysis from Baltimore City, Columbus (Ohio), Florida, Indiana, Multnomah County (Oregon), New York City, Philadelphia, Utah, and Washington State.

Gonococcal Isolate Surveillance Project

Data on antimicrobial susceptibility in Neisseria gonorrhoeae were collected through the Gonococcal Isolate Surveillance Project (GISP), a sentinel system of selected STD clinics located at an average of 27 GISP sentinel sites and 4 regional laboratories in the United States. More details about GISP are available here: https://www.cdc.gov/std/GISP/.

Data collection issues prevented some data elements from being transmitted from the STD clinic participating in GISP in Pittsburgh to DSTDP in 2022. As a result, Pittsburgh's data are excluded from GISP figures displaying sociodemographic and treatment characteristics.

For 2022, the antimicrobial agents tested by GISP were ceftriaxone, cefixime, azithromycin, ciprofloxacin, penicillin, tetracycline, and gentamicin. Many of the antimicrobial susceptibility criteria used in GISP for 2022 are also recommended by the Clinical and Laboratory Standards Institute (CLSI).1 As of the end of 2022, the CLSI criteria for resistance to ceftriaxone, cefixime, gentamicin, and azithromycin and for susceptibility to gentamicin have not been established for N. gonorrhoeae.

The following criteria are used to display GISP data in this report based on minimum inhibitory concentrations (MICs):

Resistance:
Ciprofloxacin: MIC ≥ 1.0 µg/mL
Penicillin: MIC ≥ 2.0 µg/mL or Beta-lactamase positive
Tetracycline: MIC ≥ 2.0 µg/mL

Elevated MICs:
Azithromycin: MIC ≥ 1.0 µg/mL (2000–2004); ≥ 2.0 µg/mL (2005–2022)
Ceftriaxone: MIC ≥ 0.125 µg/mL
Cefixime: MIC ≥ 0.25 µg/mL

Job Corps

Job Corps (formerly referred to as the National Job Training Program in STD Surveillance Reports) is the largest nationwide residential career training program in the country. The program helps opportunity youth ages 16 through 24, including youth with disabilities, young parents, victims of human trafficking, and youth experiencing homelessness complete their high school education, trains them for meaningful careers, and assists them with obtaining employment in fulfilling careers, including placement into a Registered Apprenticeship or the military. As part of the health and wellness program, Job Corps students are provided a medical examination at enrollment, including chlamydia and gonorrhea screening. De-identified chlamydia and gonorrhea test results are provided to CDC by the US Department of Labor. More information is available at: https://www.dol.gov/agencies/eta/jobcorps.

Chlamydia and gonorrhea prevalence were calculated for males and females entering Job Corps in 2022. To increase the stability of the estimates, chlamydia or gonorrhea prevalence data are presented when valid test results for 100 or more students per year are available for the population subgroup and state. The majority of chlamydia screening tests are conducted by a single national contract laboratory, which provides these data to CDC. Gonorrhea screening tests for male and female students in many training centers are conducted by local laboratories; these data are not available to CDC. To minimize bias from missing test results, test results for students at centers that submit specimens to the national contract laboratory are included only if the number of gonorrhea tests submitted is greater than 90% of the number of chlamydia tests submitted from the same center for the same period. Job Corps prevalence data are published with permission from the US Department of Labor.

References

1. Clinical and Laboratory Standards Institute (CLSI). Performance Standards for Antimicrobial Susceptibility Testing. 31st ed. CLSI supplement M100 Clinical and Laboratory Standards Institute, USA, 2021.

STI Case Definitions in Effect During 2022

Nationally Notifiable STIs

The Council of State and Territorial Epidemiologists (CSTE) recommends that state health departments report cases of selected diseases to CDC's National Notifiable Diseases Surveillance System (NNDSS). Case definitions are periodically revised using CSTE's Position Statements and provide uniform criteria of nationally notifiable conditions for reporting purposes. The surveillance case definitions for nationally notifiable STIs in place during 2022 are listed below. Please see the NNDSS website (https://ndc.services.cdc.gov/) for historical case definitions and for the case definitions in use for the current calendar year.

Chancroid (Effective as of 9/1996)

Clinical description

A sexually transmitted disease characterized by painful genital ulceration and inflammatory inguinal adenopathy. The disease is caused by infection with *Haemophilus ducreyi.*

Laboratory criteria for diagnosis

- Isolation of *H. ducreyi* from a clinical specimen.

Case classification

Probable: a clinically compatible case with both a) no evidence of *Treponema pallidum* infection by darkfield microscopic examination of ulcer exudate or by a serologic test for syphilis performed ≥7 days after onset of ulcers, and b) either a clinical presentation of the ulcer(s) not typical of disease caused by herpes simplex virus (HSV) or a culture negative for HSV.

Confirmed: a clinically compatible case that is laboratory confirmed.

Chlamydia trachomatis Infection (Effective as of 1/2022)

Clinical description

Chlamydia is a sexually transmitted infection that has a variable clinical course based on the serotype causing infection. Serovars D-K of C. trachomatis are the typical cause of chlamydial infections in the United States, and infection with C. trachomatis can result in urethritis, epididymitis, cervicitis, acute salpingitis, or other syndromes when sexually transmitted; however, the infection is often asymptomatic. Perinatal infections may result in inclusion conjunctivitis and pneumonia in newborns. Other syndromes caused by C. trachomatis include LGV and trachoma.

LGV is a specific type of chlamydial infection, caused by the serovars L1, L2, and L3 of C. trachomatis. Symptomatic LGV can be divided into three stages. The primary stage can include a small ulcer or lesion at the site of inoculation (genital, rectal, or oral/oropharyngeal sites). The secondary stage can include a syndrome featuring cervical, inguinal, and/or femoral lymphadenopathy that may rupture or an anorectal syndrome featuring proctocolitis (including mucoid or hemorrhagic rectal discharge, anal pain, constipation, fever, and/or tenesmus). Late stage LGV typically involves sequelae, such as genital elephantiasis, lymph node scarring, chronic colorectal fistulas and strictures, perirectal abscesses, and/or anal fissures. LGV may also be asymptomatic.

Laboratory criteria for diagnosis

- Demonstration of *C. trachomatis* in a clinical specimen by detection of antigen or nucleic acid, OR
- Detection of LGV-specific antigen or nucleic acid in a clinical specimen, OR
- Isolation of *trachomatis* by culture

Case classification

Confirmed: a case that is laboratory confirmed.

Gonorrhea (Effective as of 1/2014)

Clinical description

A sexually transmitted infection commonly manifested by urethritis, cervicitis, proctitis, salpingitis, or pharyngitis. Infection may be asymptomatic.

Laboratory criteria for diagnosis

- Observation of gram-negative intracellular diplococci in a urethral smear obtained from a male or an endocervical smear obtained from a female, OR
- Isolation of typical gram-negative, oxidase-positive diplococci by culture (presumptive *Neisseria gonorrhoeae*) from a clinical specimen, OR
- Demonstration of *N. gonorrhoeae* in a clinical specimen by detection of antigen or nucleic acid.

Case classification

Probable: demonstration of gram-negative intracellular diplococci in a urethral smear obtained from a male or an endocervical smear obtained from a female.

Confirmed: a person with laboratory isolation of typical gram-negative, oxidase-positive diplococci by culture (presumptive *N. gonorrhoeae*) from a clinical specimen, or demonstration of *N. gonorrhoeae* in a clinical specimen by detection of antigen or detection of nucleic acid via nucleic acid amplification (e.g., polymerase chain reaction [PCR]) or hybridization with a nucleic acid probe.

Syphilis (Effective as of 1/2018)

Syphilis is a complex sexually transmitted disease that has a highly variable clinical course. Adherence to the surveillance case definitions will facilitate understanding the epidemiology of syphilis across the US.

Syphilis, primary

Clinical description

A stage of infection with *Treponema pallidum* characterized by one or more ulcerative lesions (e.g., chancre), which might differ considerably in clinical appearance.

Laboratory criteria for diagnosis

Confirmatory:

- Demonstration of *T. pallidum* by darkfield microscopy in a clinical specimen that was not obtained from the oropharynx and is not potentially contaminated by stool, OR
- Demonstration of *T. pallidum* by polymerase chain reaction (PCR) or equivalent direct molecular methods in any clinical specimen.

Supportive:

- A reactive nontreponemal serologic test (Venereal Disease Research Laboratory [VDRL], rapid plasma reagin [RPR], or equivalent serologic methods), OR
- A reactive treponemal serologic test (*T. pallidum* particle agglutination [TP-PA], enzyme immunoassay [EIA], chemiluminescence immunoassay [CIA], or equivalent serologic methods).*

* These treponemal tests supersede older testing technologies, including microhemagglutination assay for antibody to T. pallidum [MHA-TP].

Case classification

Probable: a case that meets the clinical description of primary syphilis and the supportive laboratory criteria.

Confirmed: a case that meets the clinical description of primary syphilis and the supportive confirmatory criteria.

Syphilis, secondary

Clinical description

A stage of infection caused by *T. pallidum* characterized by localized or diffuse mucocutaneous lesions (e.g., rash – such as non-pruritic macular, maculopapular, papular, or pustular lesions), often with generalized lymphadenopathy. Other symptoms can include mucous patches, condyloma lata, and alopecia. The primary ulcerative lesion may still be present. Because of the wide array of symptoms and signs possibly indicating secondary syphilis, serologic tests for syphilis and a physical examination are crucial to determining if a case should be classified as secondary syphilis.

Laboratory criteria for diagnosis

Confirmatory:

- Demonstration of *T. pallidum* by darkfield microscopy in a clinical specimen that was not obtained from the oropharynx and is not potentially contaminated by stool, OR
- Demonstration of *T. pallidum* by polymerase chain reaction (PCR) or equivalent direct molecular methods in any clinical specimen.

Supportive:

- A reactive nontreponemal serologic test (VDRL, RPR, or equivalent serologic methods), AND
- A reactive treponemal serologic test (TP-PA, EIA, CIA, or equivalent serologic methods).

Case classification

Probable: a case that meets the clinical description of secondary syphilis and the supportive laboratory criteria.

Confirmed: a case that meets the clinical description of secondary syphilis and the confirmatory laboratory criteria.

Syphilis, early non-primary non-secondary

Clinical description

A stage of infection caused by *T. pallidum* in which initial infection has occurred within the previous 12 months, but there are no signs or symptoms of primary or secondary syphilis.

Laboratory criteria for diagnosis

Supportive:

- A current nontreponemal test titer demonstrating fourfold or greater increase from the last nontreponemal test titer, unless there is evidence that this increase was not sustained for >2 weeks.

Case classification

Probable: a person with no clinical signs or symptoms of primary or secondary syphilis who has one of the following:

- No prior history of syphilis, AND a current reactive nontreponemal test (e.g., VDRL, RPR, or equivalent serologic methods), AND a current reactive treponemal test (e.g., TP-PA, EIA, CIA, or equivalent serologic methods), OR
- A prior history of syphilis and meets the supportive laboratory criteria.

AND evidence of having acquired the infection within the previous 12 months based on one or more of the following criteria:

- Documented seroconversion or fourfold or greater increase in titer of a nontreponemal test during the previous 12 months, unless there is evidence that this increase was not sustained for >2 weeks
- Documented seroconversion of a treponemal test during the previous 12 months
- A history of symptoms consistent with primary or secondary syphilis during the previous 12 months
- Meets epidemiologic criteria.

Epidemiological criteria:

- A history of sexual exposure to a partner within the previous 12 months who had primary, secondary, or early non-primary non-secondary syphilis (documented independently as duration <12 months).
- Only sexual contact (sexual debut) was within the previous 12 months.

Syphilis, unknown duration or late

Clinical description

A stage of infection caused by *T. pallidum* in which initial infection has occurred >12 months previously or in which there is insufficient evidence to conclude that infection was acquired during the previous 12 months.

Case classification

Probable: a person with no clinical signs or symptoms of primary or secondary syphilis who meets one of the following sets of criteria:

- No prior history of syphilis, and a current reactive nontreponemal test (e.g., VDRL, RPR, or equivalent serologic methods), and a current reactive treponemal test (e.g., TP-PA, EIA, CIA, or equivalent serologic methods), OR
- A prior history of syphilis, and a current nontreponemal test titer demonstrating fourfold or greater increase from the last nontreponemal test titer, unless there is evidence that this increase was not sustained for >2 weeks, OR
- Clinical signs or symptoms and laboratory results that meet the likely or verified criteria for neurologic, ocular, otic, or late clinical manifestations syphilis (see below)

AND who has no evidence of having acquired the disease within the preceding 12 months (see Syphilis, early non-primary non-secondary).

Comments: Although cases of syphilis of unknown duration are grouped together with late syphilis for the purposes of surveillance, the conservative clinical and public health responses to these cases will differ when there is uncertainty about the duration of infection. When faced with uncertainty, clinicians should act conservatively and treat unknown duration syphilis as if it were late infection, with three doses of benzathine penicillin. In contrast, the most conservative approach for STD control programs would be to manage cases of syphilis of unknown duration as early non-primary non-secondary infections and search for partners who may have been recently infected. Because this would not be feasible for most STD control programs, programs should consider prioritizing cases of syphilis of unknown duration with higher nontreponemal titers (e.g., 1:32 or higher) for investigation and partner services. Although nontreponemal titers cannot reliably distinguish between early infection (<12 months duration) and late infection (>12 months duration), nontreponemal titers usually are higher early in the course of syphilis infection.

Syphilis, congenital

Clinical description

A condition caused by infection in utero with *T. pallidum*. A wide spectrum of severity exists, from inapparent infection to severe cases that are clinically apparent at birth. An infant or child (aged less than 2 years) may have signs such as hepatosplenomegaly, rash, condyloma lata, snuffles, jaundice (nonviral hepatitis), pseudoparalysis, anemia, or edema (nephrotic syndrome and/or malnutrition). An older child may have stigmata (e.g., interstitial keratitis, nerve deafness, anterior bowing of shins, frontal bossing, mulberry molars, Hutchinson teeth, saddle nose, rhagades, or Clutton joints).

Laboratory criteria for diagnosis

- Demonstration of *T. pallidum* by darkfield microscopy of lesions, body fluids, or neonatal nasal discharge, OR
- PCR or other equivalent direct molecular methods of lesions, neonatal nasal discharge, placenta, umbilical cord, or autopsy material, OR
- Immunohistochemistry (IHC), or special stains (e.g., silver staining) of specimens from lesions, placenta, umbilical cord, or autopsy material.

Case classification

Probable: a condition affecting an infant whose mother had untreated or inadequately treated* syphilis at delivery, regardless of signs in the infant, OR an infant or child who has a reactive non-treponemal test for syphilis (VDRL, RPR, or equivalent serologic methods) AND any one of the following:

- Any evidence of congenital syphilis on physical examination (see Clinical description).
- Any evidence of congenital syphilis on radiographs of long bones.
- A reactive CSF VDRL test.
- In a non-traumatic lumbar puncture, an elevated CSF leukocyte (white blood cell [WBC]) count or protein (without other cause):
    - Suggested parameters for abnormal CSF WBC and protein values:
        1. During the first 30 days of life, a CSF WBC count of >15 WBC/mm3 or a CSF protein >120 mg/dL is abnormal.
        2. After the first 30 days of life, a CSF WBC count of >5 WBC mm3 or a CSF protein >40 mg/dL, regardless of CSF serology.
    - The treating clinician should be consulted to interpret the CSF values for the specific patient.

* Adequate treatment is defined as completion of a penicillin-based regimen, in accordance with CDC treatment guidelines, appropriate for stage of infection, initiated 30 or more days before delivery.

Confirmed: a case that is laboratory confirmed.

Comments: Congenital and acquired syphilis may be difficult to distinguish when a child is seropositive after infancy. Signs of congenital syphilis may not be obvious, and stigmata may not yet have developed. Abnormal values for CSF VDRL, WBC count, and protein may be found in either congenital or acquired syphilis. Findings on radiographs of long bones may help because radiographic changes in the metaphysis and epiphysis are considered classic signs of congenitally acquired syphilis. While maternal antibodies can complicate interpretation of serologic tests in an infant, reactive tests past 18 months of age are considered to reflect the status of the child. The decision may ultimately be based on maternal history and clinical judgment. In a young child, the possibility of sexual abuse should be considered as a cause of acquired rather than congenital syphilis, depending on the clinical picture. For reporting purposes, congenital syphilis includes cases of congenitally acquired syphilis among infants and children as well as syphilitic stillbirths.

Syphilitic Stillbirth

Clinical case definition

A fetal death that occurs after a 20-week gestation or in which the fetus weighs greater than 500g and the mother had untreated or inadequately treated* syphilis at delivery.

* Adequate treatment is defined as completion of a penicillin-based regimen, in accordance with CDC treatment guidelines, appropriate for stage of infection, initiated 30 or more days before delivery.

Comments: For reporting purposes, congenital syphilis includes cases of congenitally acquired syphilis among infants and children as well as syphilitic stillbirths.

Comments: Additional information to be collected on clinical manifestations of reported syphilis cases

Syphilis is a systemic infection that, if untreated, can cause a variety of clinical manifestations, including:

- Signs and symptoms of primary and secondary syphilis (see above case definitions).
- Latent infections (i.e., those lacking any signs or symptoms).
- Neurologic, ocular, or otic manifestations (neurosyphilis, ocular syphilis, or otosyphilis), which can occur at any stage of syphilis.
- Late clinical manifestations (tertiary syphilis), which generally occur after 15–30 years of untreated infection.

The following provides guidance for reporting neurologic, ocular, otic, and late clinical manifestations of syphilis. Cases should be reported according to stage of infection, as defined above (e.g., primary syphilis; secondary syphilis; early non-primary, non-secondary syphilis; or unknown duration or late syphilis) and the clinical manifestations should be reported in the case report data, as defined below.

Neurologic manifestations:

Neurologic manifestations (neurosyphilis) can occur at any stage of syphilis. If the patient has neurologic manifestations of syphilis, the case should be reported with the appropriate stage of infection (as if neurologic manifestations were not present) and neurologic manifestations should be noted in the case report data.

Clinical description

Infection of the central nervous system with *T. pallidum*, as evidenced by manifestations including syphilitic meningitis, meningovascular syphilis, general paresis, including dementia, and tabes dorsalis.

Classification of neurologic manifestations (neurosyphilis)

Possible: a person with a reactive nontreponemal test (e.g., VDRL, RPR, or equivalent serologic methods) and a reactive treponemal test (e.g., TP-PA, EIA, CIA or equivalent serologic methods) and clinical symptoms or signs that are consistent with neurosyphilis without other known causes for these clinical abnormalities.

Likely: a person with a reactive nontreponemal test (e.g., VDRL, RPR, or equivalent serologic methods) and a reactive treponemal test (e.g., TP-PA, EIA, CIA or equivalent serologic methods) with both of the following:

- Clinical symptoms or signs that are consistent with neurosyphilis without other known causes for these clinical abnormalities, AND
- Elevated CSF protein (>50 mg/dL2) or leukocyte count (>5 WBC/mm3 CSF) in the absence of other known causes of these abnormalities.

Verified: a person with a reactive nontreponemal test (e.g., VDRL, RPR, or equivalent serologic methods) and a reactive treponemal test (e.g., TP-PA, EIA, CIA or equivalent serologic methods) with both of the following:

- Clinical symptoms or signs that are consistent with neurosyphilis without other known causes for these clinical abnormalities, AND

- A reactive VDRL in CSF in the absence of grossly bloody contamination of the CSF.

Ocular manifestations:

Ocular manifestations (ocular syphilis) can occur at any stage of syphilis. If the patient has ocular manifestations of syphilis, the case should be reported with the appropriate stage of infection (as if ocular manifestations were not present) and ocular manifestations should be noted in the case report data.

Clinical description

Infection of any eye structure with *T. pallidum*, as evidenced by manifestations including posterior uveitis, panuveitis, anterior uveitis, optic neuropathy, and retinal vasculitis. Ocular syphilis may lead to decreased visual acuity including permanent blindness.

Classification of ocular manifestations (ocular syphilis)

Possible: a person with a reactive nontreponemal test (e.g., VDRL, RPR, or equivalent serologic methods) and a reactive treponemal test (e.g., TP-PA, EIA, CIA or equivalent serologic methods) and clinical symptoms or signs consistent with ocular syphilis without other known causes for these clinical abnormalities.

Likely: a person with a reactive nontreponemal test (e.g., VDRL, RPR, or equivalent serologic methods) and a reactive treponemal test (e.g., TP-PA, EIA, CIA or equivalent serologic methods) and both of the following:

- Clinical symptoms or signs consistent with ocular syphilis without other known causes for these clinical abnormalities, AND
- Findings on exam by an ophthalmologist that are consistent with ocular syphilis in the absence of other known causes for these abnormalities.

Verified: a person with a reactive nontreponemal test (e.g., VDRL, RPR, or equivalent serologic methods) and a reactive treponemal test (e.g., TP-PA, EIA, CIA or equivalent serologic methods) and both of the following:

- Clinical symptoms or signs consistent with ocular syphilis without other known causes for these clinical abnormalities, AND
- Demonstration of *T. pallidum* in aqueous or vitreous fluid by darkfield microscopy, or by PCR or equivalent direct molecular methods.

Otic manifestations:

Otic manifestations can occur at any stage of syphilis. If the patient has otic manifestations of syphilis, the case should be reported with the appropriate stage of infection (as if otic manifestations were not present) and otic manifestations should be noted in the case report data.

Clinical description

Infection of the cochleovestibular system with *T. pallidum*, as evidenced by manifestations including sensorineural hearing loss, tinnitus, and vertigo.

Classification of otic manifestations (otosyphilis)

Possible: a person with a reactive nontreponemal test (e.g., VDRL, RPR, or equivalent serologic methods) and a reactive treponemal test (e.g., TP-PA, EIA, CIA or equivalent serologic methods) and clinical symptoms or signs consistent with otosyphilis without other known causes for these clinical abnormalities.

Likely: a person with a reactive nontreponemal test (e.g., VDRL, RPR, or equivalent serologic methods) and a reactive treponemal test (e.g., TP-PA, EIA, CIA or equivalent serologic methods) and both of the following:

- Clinical symptoms or signs consistent with otosyphilis without other known causes for these clinical abnormalities, AND

- Findings on exam by an otolaryngologist that are consistent with otosyphilis in the absence of other known causes for these abnormalities.

Verified: a person with a reactive nontreponemal test (e.g., VDRL, RPR, or equivalent serologic methods) and a reactive treponemal test (e.g., TP-PA, EIA, CIA or equivalent serologic methods) and both of the following:

- Clinical symptoms or signs consistent with otosyphilis without other known causes for these clinical abnormalities, AND
- Demonstration of *T. pallidum* in inner ear fluid by darkfield microscopy, or by PCR or equivalent direct molecular detection methods.

Late clinical manifestations:

Late clinical manifestations of syphilis usually develop only after a period of 15–30 years of untreated infection. Therefore, if the patient has late clinical manifestations of syphilis, the case should be reported with the appropriate stage of infection (for the vast majority of cases, unknown duration or late syphilis) and late clinical manifestations should be noted in the case report data.

Clinical description

Late clinical manifestations of syphilis (tertiary syphilis) may include inflammatory lesions of the cardiovascular system (e.g., aortitis, coronary vessel disease), skin (e.g., gummatous lesions), bone (e.g., osteitis), or other tissue. Rarely, other structures (e.g., the upper and lower respiratory tracts, mouth, eye, abdominal organs, reproductive organs, lymph nodes, and skeletal muscle) may be involved. In addition, certain neurologic manifestations (e.g., general paresis and tabes dorsalis) are also late clinical manifestations of syphilis.

Classification of late clinical manifestations of syphilis (tertiary syphilis)

Likely: a person with a reactive nontreponemal test (e.g., VDRL, RPR, or equivalent serologic methods) and a reactive treponemal test (e.g., TP-PA, EIA, CIA or equivalent serologic methods) with either of the following:

- Characteristic abnormalities or lesions of the cardiovascular system (e.g., aortitis, coronary vessel disease), skin (e.g., gummatous lesions), bone (e.g., osteitis), or other tissue, in the absence of other known causes of these abnormalities, OR
- Clinical signs and symptoms consistent with late neurologic manifestations of syphilis (e.g., general paresis, including dementia, or tabes dorsalis) in a case that meets the criteria for likely neurologic manifestations of syphilis (see above).

Verified: a person with a reactive nontreponemal test (e.g., VDRL, RPR, or equivalent serologic methods) and a reactive treponemal test (e.g., TP-PA, EIA, CIA or equivalent serologic methods) and either of the following:

- Characteristic abnormalities or lesions of the cardiovascular system (e.g., aortitis, coronary vessel disease), skin (e.g., gummatous lesions), bone (e.g., osteitis), or other tissue in the absence of other known causes of these abnormalities, in combination with either demonstration of *T. pallidum* in late lesions by special stains or equivalent methods, or by PCR or equivalent direct molecular methods, or demonstration of pathologic changes that are consistent with *T. pallidum* infection on histologic examination of late lesions, OR
- Clinical signs and symptoms consistent with late neurologic manifestations of syphilis (e.g., general paresis, including dementia, or tabes dorsalis) in a case that meets the criteria for verified neurologic manifestations of syphilis (see above).

Non-nationally Notifiable STIs

Although the conditions below are not currently nationally notifiable, they may be reportable in some jurisdictions. To provide uniform criteria for those jurisdictions, case definitions are provided by CSTE. Case definitions are periodically revised. The most current surveillance case definitions for non-notifiable STDs are listed below. Please see the NNDSS website (https://wwwn.cdc.gov/nndss/case-definitions.html) for historical case definitions.

Genital Herpes (Herpes Simplex Virus) (Effective as of 9/1996)

Clinical description

A condition characterized by visible, painful genital or anal lesions.

Laboratory criteria for diagnosis

- Isolation of herpes simplex virus from cervix, urethra, or anogenital lesion, OR
- Demonstration of virus by antigen detection technique in clinical specimens from cervix, urethra, or anogenital lesion, OR
- Demonstration of multinucleated giant cells on a Tzanck smear of scrapings from an anogenital lesion.

Case classification

Probable: a clinically compatible case (in which primary and secondary syphilis have been excluded by appropriate serologic tests and darkfield microscopy, when available) with either a diagnosis of genital herpes based on clinical presentation (without laboratory confirmation) or a history of one or more previous episodes of similar genital lesions.

Confirmed: a clinically compatible case that is laboratory confirmed.

Comment

Genital herpes should be reported only once per patient. The first diagnosis for a patient with no previous diagnosis should be reported.

Genital Warts (Effective as of 9/1996)

Clinical description

An infection characterized by the presence of visible, exophytic (raised) growths on the internal or external genitalia, perineum, or perianal region.

Laboratory criteria for diagnosis

- Histopathologic changes characteristic of human papillomavirus infection in specimens obtained by biopsy or exfoliative cytology, OR
- Demonstration of virus by antigen or nucleic acid detection in a lesion biopsy.

Case classification

Probable: a clinically compatible case without histopathologic diagnosis and without microscopic or serologic evidence that the growth is the result of secondary syphilis.

Confirmed: a clinically compatible case that is laboratory confirmed.

Comment

Genital warts should be reported only once per patient. The first diagnosis for a patient with no previous diagnosis should be reported.

Granuloma Inguinale (Effective as of 1/1997)

Clinical description

A slowly progressive ulcerative disease of the skin and lymphatics of the genital and perianal area caused by infection with *Calymmatobacterium granulomatis*. A clinically compatible case would have one or more painless or minimally painful granulomatous lesions in the anogenital area.

Laboratory criteria for diagnosis

- Demonstration of intracytoplasmic Donovan bodies in Wright or Giemsa-stained smears or biopsies of granulation tissue.

Case classification

Confirmed: a clinically compatible case that is laboratory confirmed.

Mucopurulent Cervicitis (Effective as of 9/1996)

Clinical description

Cervical inflammation that is not the result of infection with *N. gonorrhoeae* or *Trichomonas vaginalis*. Cervical inflammation is defined by the presence of one of the following criteria:

- Mucopurulent secretion (from the endocervix) that is yellow or green when viewed on a white, cotton-tipped swab (positive swab test), OR
- Induced endocervical bleeding (bleeding when the first swab is placed in the endocervix).

Laboratory criteria for diagnosis

- No evidence of *N. gonorrhoeae* by culture, Gram stain, or antigen or nucleic acid detection, and no evidence of *T. vaginalis* on wet mount.

Case classification

Confirmed: a clinically compatible case in a female who does not have either gonorrhea or trichomoniasis.

Comment

Mucopurulent cervicitis (MPC) is a clinical diagnosis of exclusion. The syndrome may result from infection with any of several agents (see *C. trachomatis*). If gonorrhea, trichomoniasis, and chlamydia are excluded, a clinically compatible illness should be classified as MPC. An illness in a female that meets the case definition of MPC and *C. trachomatis* infection should be classified as chlamydia.

Nongonococcal Urethritis (Effective as of 9/1996)

Clinical description

Urethral inflammation that is not the result of infection with *N. gonorrhoeae*. Urethral inflammation may be diagnosed by the presence of one of the following criteria:

- A visible abnormal urethral discharge, OR
- A positive leukocyte esterase test from a male aged <60 years who does not have a history of kidney disease or bladder infection, prostate enlargement, urogenital anatomic anomaly, or recent urinary tract instrumentation, OR
- Microscopic evidence of urethritis (≥5 white blood cells per high-power field) on a Gram stain of a urethral smear.

Laboratory criteria for diagnosis

- No evidence of *N. gonorrhoeae* infection by culture, Gram stain, or antigen or nucleic acid detection.

Case classification

Confirmed: a clinically compatible case in a male in whom gonorrhea is not found, either by culture, Gram stain, or antigen or nucleic acid detection.

Comment

Nongonococcal urethritis (NGU) is a clinical diagnosis of exclusion. The syndrome may result from infection with any of several agents (see *C. trachomatis*). If gonorrhea and chlamydia are excluded, a clinically compatible illness should be classified as NGU. An illness in a male that meets the case definition of NGU and *C. trachomatis* infection should be classified as chlamydia.

Pelvic Inflammatory Disease (Effective as of 9/1996)

Clinical case definition

A clinical syndrome resulting from the ascending spread of microorganisms from the vagina and endocervix to the endometrium, fallopian tubes, and/or contiguous structures. In a female who has lower abdominal pain and who has not been diagnosed as having an established cause other than pelvic inflammatory disease (PID) (e.g., ectopic pregnancy, acute appendicitis, and functional pain), all the following clinical criteria must be present:

- Lower abdominal tenderness, AND
- Tenderness with motion of the cervix, AND
- Adnexal tenderness.

In addition to the preceding criteria, at least one of the following findings must also be present:

- Meets the surveillance case definition of C. trachomatis infection or gonorrhea
- Temperature >100.4 F (>38.0 C)
- Leukocytosis >10,000 WBC/mm3
- Purulent material in the peritoneal cavity obtained by culdocentesis or laparoscopy
- Pelvic abscess or inflammatory complex detected by bimanual examination or by sonography
- Patient is a sexual contact of a person known to have gonorrhea, chlamydia, or nongonococcal urethritis.

Case classification

Confirmed: a case that meets the clinical case definition.

Comment

For reporting purposes, a clinician’s report of PID should be counted as a case.