Sexually Transmitted Disease Surveillance 2021

CDC Centers for Disease Control and Prevention
CDC 24/7: Saving Lives, Protecting People™

Sexually Transmitted Disease Surveillance 2021

Infections continue to forge ahead, compromising the nation's health

More than 2.5 million cases of chlamydia, gonorrhea, and syphilis were reported in 2021

Chlamydia	Gonorrhea	Syphilis	Congenital Syphilis
1,644,416 cases	710,151 cases	176,713 cases	2,855 cases

Sexually Transmitted Disease Surveillance, 2021 provides the most current and complete data for nationally notifiable sexually transmitted infections (STIs). In 2021, chlamydia, gonorrhea, and syphilis continued to increase in the United States. Disruptions in STI-related prevention and care services due to the COVID-19 pandemic likely continued in 2021, but the impact was most acute in 2020. While the pandemic exposed shortcomings within public health, the nation's response offers lessons learned that could help reverse rising STI trends.

Table of Contents

Announcement

Dear Partners in Prevention,

Today, during STI Awareness Week, CDC released Sexually Transmitted Disease (STD) Surveillance, 2021. The annual report shows infections continued to forge ahead, compromising the nation's health. In fact, in 2021, more than 2.5 million cases of chlamydia, gonorrhea, and syphilis were reported.

The report indicates that in the United States in 2021:

- 1.6 million chlamydial infections were reported. This 4.1 percent increase from 2020 signals a return to pre-pandemic levels.
- More than 700,000 gonorrhea cases were reported, reflecting a 28 percent increase since 2017.
- Reported cases of syphilis (all stages) have increased 74 percent since 2017, totaling more than 176,000 cases in 2021.
- Congenital syphilis continues to surge, increasing 203 percent in the past five years. In 2021, 38 jurisdictions, including 37 states and the District of Columbia, reported an increase in congenital syphilis cases.

The report also highlights concerning trends among racial and ethnic minority groups and gay, bisexual, and other men who have sex with men, emphasizing a need for enhanced care for those most affected by these infections.

STIs are common but some groups are more affected than others

Racial/ethnic and sexual minority groups remain disproportionately affected by STIs. Data show Black or African American people accounted for nearly a third of chlamydia, gonorrhea, and syphilis cases, yet make up just 12 percent of the U.S. population. Gay and bisexual men were severely impacted by gonorrhea and syphilis in 2021. According to recent data from the STD Surveillance Network (SSuN), nearly one-third of all reported cases of gonorrhea were among gay and bisexual men. They also accounted for almost half of all male primary and secondary (P&S) syphilis cases. Congenital syphilis rates increased for most racial and ethnic groups, but the highest rate was among infants born to American Indian and Alaska Native people in 2021.

While tried-and-true prevention strategies are key, social inequities often leads to health inequities and, ultimately, manifest as health disparities. We must work collaboratively to address social, cultural, and economic conditions to make it easier for people to stay healthy.

The nation's prevention efforts struggle to keep pace with the growing syphilis epidemic

Since historic lows in 2000-2001, the resurgence of syphilis in the U.S. remains a significant source of concern. Cases of P&S syphilis—the most infectious stages of the disease— have increased a staggering 781 percent since 2001. Congenital syphilis, the most tragic outcome of the overall syphilis epidemic, has increased 464 percent since 2001. In 2021 alone, there were 220 congenital syphilis-related stillbirths and infant deaths and over 2,800 cases reported.

Although the syphilis epidemic is impacting all states across the country, there are some geographic areas that are disproportionately affected. For example, in 2021, California, Texas, Arizona, Florida, and

Louisiana, represented 58 percent of all reported cases of congenital syphilis. Furthermore, the broader syphilis epidemic was concentrated within states, as just 100 counties accounted for 60 percent of all reported P&S syphilis cases in 2021. While this report is useful for drawing attention to the national epidemic, this geographical clustering highlights the importance of jurisdictions concurrently looking at their data to ensure their messages are tailored to the populations and areas most affected locally.

Syphilis may be thriving, but the infection is completely preventable and treatable. Sexually active people, healthcare providers, and CDC all have a role to play in reducing U.S. syphilis rates. Timely screening, diagnosis, and treatment can save lives, but if left untreated, the infection can cause serious health problems and increase the risk of getting an HIV infection.

Reversing the STI epidemic is possible with a holistic approach

We have experienced unprecedented public health challenges in the past several years. The COVID-19 pandemic exposed shortcomings within the public health infrastructure. And, although this 2021 data predates the 2022 mpox outbreak, we can view this report in the context of what we learned through mpox. Each of these public health emergencies monopolized STD program resources and threatened the health of those already disproportionately affected by STIs. At times, it's been difficult to even see a path forward, much less navigate it. But we can pick up the pieces in our quest to reverse STI trends by moving forward with a new approach that employs holistic, coordinated care to address concurrent epidemics and health disparities.

A critical first step in using this approach includes connecting people to the STI testing and treatment services they need. In recent years, we've seen the field quickly pivot to offer innovative solutions for meeting people where they are, including pharmacy and retail health clinic partnerships and STD express clinic visits. And, in recent months, we've seen historic progress toward new STI prevention innovations. We can and must continue to build on this momentum. While CDC is bringing its resources to bear through initiatives like the new Sexually Transmitted Infections Impact Research Consortium (STIIRC) and ongoing efforts to build and strengthen the Disease Intervention Specialists Workforce, the agency can't do it alone.

Through collaboration and a whole-of-nation, whole-person approach, I am hopeful that we can improve our nation's health and well-being.

Best regards,

Leandro Mena, MD, MPH, FIDSA
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 STDs, 2021

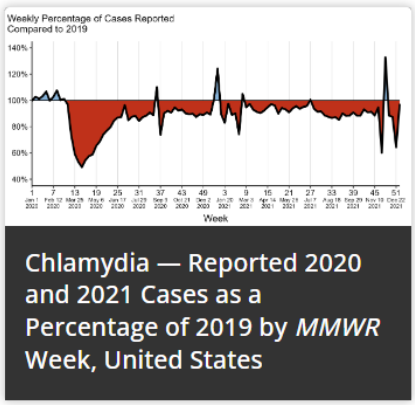
As noted in the 2021 National Academies of Sciences Engineering and Medicine report, *Sexually Transmitted Infections: Adopting a Sexual Health Paradigm*, surveillance is key to understanding the magnitude of sexually transmitted infections in the United States and in subpopulations that are most affected.[1] The *2021 STD Surveillance Report* provides trends in STDs to describe current epidemiology of nationally notifiable STDs and inform prevention and control strategies. This overview summarizes national surveillance data for 2021 on the three notifiable diseases for which there are federally funded control programs: chlamydia, gonorrhea, and syphilis, including congenital syphilis.

Because STDs 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 STD-related prevention and care activities related to the US response to the COVID-19 pandemic had a pronounced impact on trends in STD surveillance data collected during 2020. It is likely that some of the disruptions persisted in 2021; therefore, trends presented in *Sexually Transmitted Disease Surveillance, 2021* should be interpreted cautiously. For more information, please see *Impact of COVID-19 on STDs*.

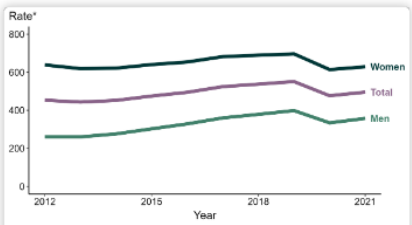
Chlamydia

In 2021, a total of 1,644,416 cases of *Chlamydia trachomatis* infection were reported to the CDC, making it the most common notifiable sexually transmitted infection in the United States for that year. This case count corresponds to a rate of 495.5 cases per 100,000 population, an increase of 3.9% compared with the rate in 2020. During 2020–2021, rates of reported chlamydia increased among both males and females, in all regions of the United States, among most age groups, and among all race/Hispanic ethnicity groups. Rates of reported chlamydia are highest among adolescents and young adults. In 2021, almost two-thirds (58%) of all reported chlamydia cases were among persons aged 15–24 years.

The increases in rates of reported chlamydia during 2020 to 2021 follow a substantial decrease in rates during 2019 to 2020. The decrease in rates of reported chlamydia in 2020 were unlikely due to a reduction in new infections. 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 it is likely that preventive health care visits where STD screening usually happens, such as annual reproductive health visits for young women, decreased. During the initial shelter-in-place orders in March and April of 2020, the number of chlamydia cases decreased substantially when compared to the number of cases reported at the corresponding time in 2019 and the deficit persisted throughout the year. Although the rate of reported chlamydia increased during 2020 to 2021, the rate is still lower than the rate in 2019 suggesting that COVD-19 related challenges related to chlamydia screening may have persisted during 2021.



Chlamydia — Reported 2020 and 2021 Cases as a Percentage of 2019 by *MMWR* Week, United States



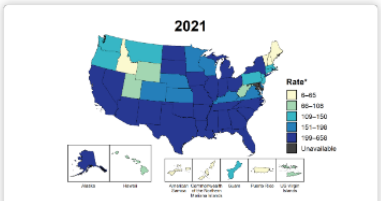
Chlamydia — Rates of Reported Cases by Sex, United States, 2012–2021

Gonorrhea

In 2021, a total of 710,151 cases of gonorrhea were reported to the CDC, making it the second most common notifiable sexually transmitted infection in the United States for that year. Rates of reported gonorrhea have increased 118% since their historic low in 2009. During 2020 to 2021, the overall rate of reported gonorrhea increased 4.6%. During 2020 to 2021, rates increased among both males and females, in three regions of the United States (West, Northeast, and South), among most age groups, and among most racial/Hispanic ethnicity groups.

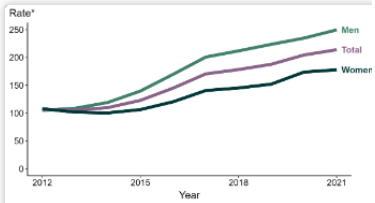
During the initial shelter-in-place orders in March and April of 2020, the weekly number of cases of reported gonorrhea was lower compared to counts during the comparable time in 2019; however, later in 2020, the number of reported gonorrhea cases increased. Reasons for the increase are unclear but may have resulted from increased service utilization as health care clinics re-opened or increased transmission later in the year. During 2019 to 2020, the rate of reported gonorrhea increased in 35 states and two US territories. This trend continued during 2020 to 2021, with increases in rates of reported gonorrhea in 27 states, the District of Columbia, and three US territories.

During 2020 to 2021, rates of reported gonorrhea increased among both men (6.3%) and women (2.4%). 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. 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 about a third of gonorrhea cases occurred among MSM in 2021.



Gonorrhea — Rates of Reported Cases by State, United States and Territories, 2012–2021

Click for animated version

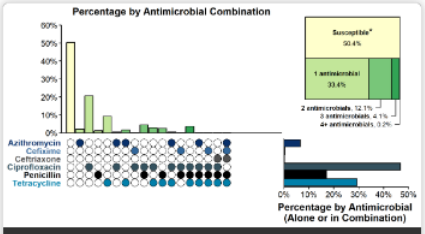


Gonorrhea — Rates of Reported Cases by Sex, United States, 2012–2021

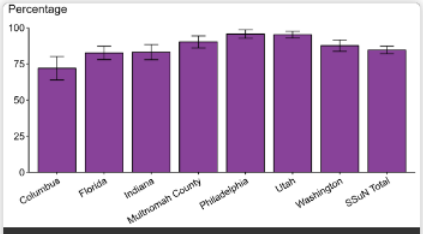
Antibiotic Resistant Gonorrhea

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 2021; however, almost all circulating strains in the United States remain susceptible to ceftriaxone, the primary recommended treatment for uncomplicated gonorrhea. In 2021, only 0.1% of isolates displayed elevated ceftriaxone MICs. Continued monitoring of susceptibility patterns to antibiotics is critical to inform gonorrhea treatment guidelines.

In December of 2020, CDC released updated gonorrhea treatment guidelines, recommending a single 500 mg intramuscular dose of ceftriaxone for uncomplicated gonorrhea.[2] Despite continued disruptions in access to health care related to COVID-19 and the change in treatment recommendations, most reported gonorrhea cases in jurisdictions participating in the sentinel surveillance system, SSuN in 2021, 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.



Resistance or Elevated Minimum Inhibitory Concentration (MIC) Patterns of *Neisseria gonorrhoeae* Isolates to Antimicrobials, Gonococcal Isolate Surveillance Project (GISP), 2021



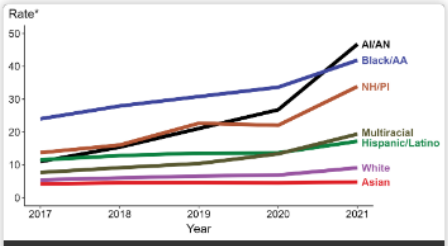
Gonorrhea — Estimated Proportion of Cases Treated with Recommended Regimen by Jurisdiction, STD Surveillance Network (SSuN), 2021

Syphilis

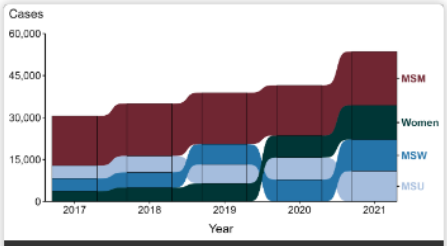
In 2021, 176,713 cases of syphilis (all stages and congenital syphilis) were reported, including 53,767 cases of primary and secondary (P&S) syphilis, the most infectious stages of the disease. Since reaching a historic low in 2000 and 2001, the rate of P&S syphilis has increased almost every year, increasing 28.6% during 2020 to 2021. Rates increased among both males and females, in all regions of the United States, and in all age groups. Rates of P&S syphilis increased in all 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 2021.

MSM are disproportionately impacted by syphilis, accounting for almost half (46.5%) of all male P&S syphilis cases in 2021; and in areas with complete information on sex of sex partners for male cases, rates of P&S syphilis among MSM increased in 27 states and the District of Columbia during 2020 to 2021. Although rates of P&S syphilis are lower among women, rates have increased substantially in recent

years, increasing 55.3% during 2020–2021 and 217.4% during 2017–2021, highlighting the sustained increase in the heterosexual syphilis epidemic in the United States.



Primary and Secondary Syphilis — Rates of Reported Cases by Race/Hispanic Ethnicity, United States, 2017–2021

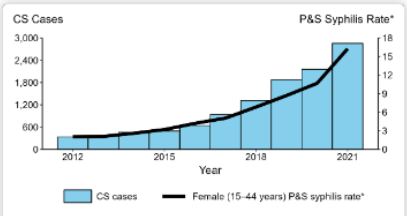


Primary and Secondary Syphilis — Reported Cases by Sex and Sex of Sex Partners, United States, 2017–2021

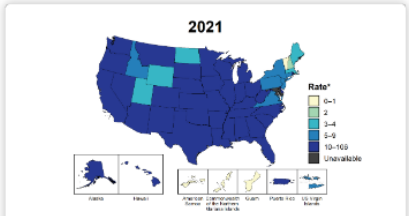
Congenital Syphilis

The 2013 rate of congenital syphilis (9.2 cases per 100,000 live births) marked the first increase in congenital syphilis since 2008. Since 2013, the rate of congenital syphilis has increased each year. In 2021, 2,855 cases of congenital syphilis were reported, including 220 congenital syphilis-related stillbirths and infant deaths. Although the majority of congenital syphilis cases were reported from a few states, in 2021, almost all jurisdictions (46 states and the District of Columbia) reported at least one case of congenital syphilis; 37 states and the District of Columbia had increases in congenital syphilis during 2020 to 2021.

The national congenital syphilis rate of 77.9 cases per 100,000 live births in 2021 represents a 30.5% increase relative to 2020 and 219.3% increase relative to 2017. These increases mirror increases in syphilis among reproductive aged women. During 2020 to 2021 the rate of P&S syphilis increased 52.3% among women aged 15–44 years and rates increased in 45 states. Further, in 2012, there were only three states that had over 100 cases of P&S syphilis among women aged 15–44 years; in 2021, 29 states reported over 100 cases.



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, 2012–2021



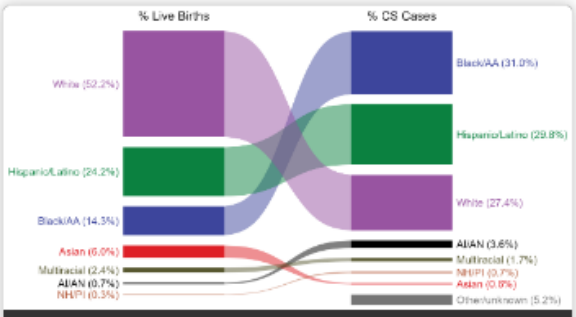
Primary and Secondary Syphilis — Rates of Reported Cases Among Women Aged 15–44 Years by State, United States and Territories, 2012–2021

Click for animated version

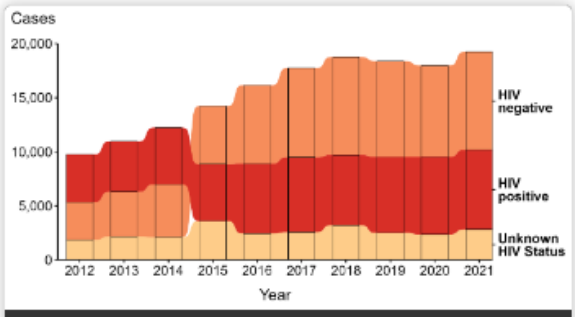
Disparities in STDs

As in past years, there were significant disparities in rates of reported STDs. In 2021, half (50.5%) of reported cases of STDs were among adolescents and young adults aged 15–24 years. Disparities continue to persist in rates of reported STDs among some racial minority or Hispanic ethnicity groups when compared with rates among non-Hispanic White persons. In 2021, 31% 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 approximately 12% of the US population.[3] Although American Indian or Alaska Native persons contributed only 0.7% of all live births in the US, they made up 3.6% of all congenital syphilis cases. MSM are disproportionally impacted by STDs, including gonorrhea and P&S syphilis; further, almost 40% of MSM reported with P&S syphilis had been diagnosed with HIV.

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 STDs, 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 STD rates 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 ultimate goal of minimizing the health impact of STDs on individuals and populations.



Congenital Syphilis — Total Live Births and Reported Cases by Race/Hispanic Ethnicity of Mother, United States, 2021



Primary and Secondary Syphilis — Reported Cases Among Men Who Have Sex with Men by HIV Status, United States, 2012–2021

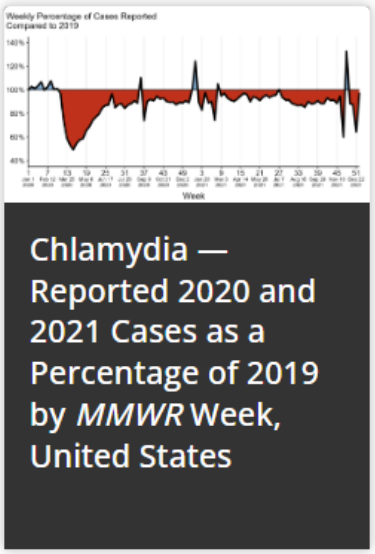
References

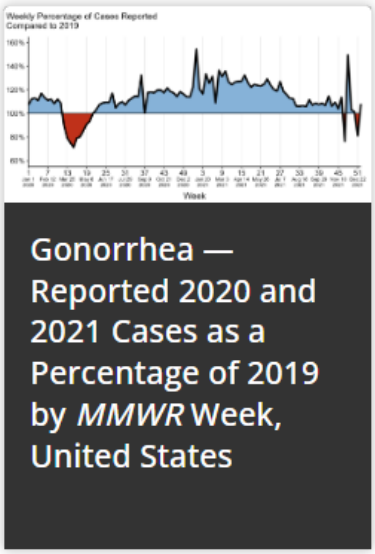
1. National Academies of Sciences, Engineering, and Medicine 2021. Sexually Transmitted Infections: Adopting a Sexual Health Paradigm. Washington, DC: The National Academies Press. https://doi.org/10.17226/25955

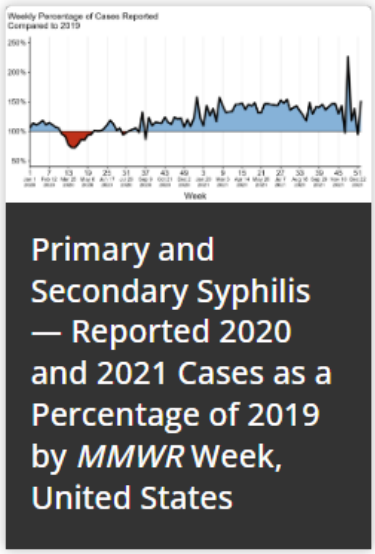
2. St. Cyr S, Barbee L, Workowski KA, et al. Update to CDC's Treatment Guidelines for Gonococcal Infection, 2020. MMWR Morb Mortal Wkly Rep 2020;69:1911–1916. DOI: http://dx.doi.org/10.15585/mmwr.mm6950a6
3. US Department of Health and Human Services. Office of Minority Health. Profile: Black/African Americans. Available at: https://minorityhealth.hhs.gov/omh/browse.aspx?lvl=3&lvlid=61

Impact of COVID-19

During 2020, the COVID-19 pandemic led to disruptions in STD-related prevention and care activities, including reduced screening during the initial shelter-in-place orders. STD program resources, including STD case investigations, were also redirected to COVID-19 activities. Because STDs 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. The impact of these disruptions likely continued in 2021 and, as a result, STD surveillance data collected during 2020 and 2021 and presented in *Sexually Transmitted Disease Surveillance, 2021* should be interpreted cautiously.







The impact of the COVID-19 pandemic on STD surveillance data was most acute in March and April 2020, when the number of reported STDs rapidly fell during initial shelter-in-place orders. Although case counts for gonorrhea and primary and secondary (P&S) syphilis dropped below 2019 levels during March and April 2020, cases of both STDs surged the rest of the year. By the end of 2020, reported cases of gonorrhea increased 10% and reported cases of P&S syphilis increased 7% from 2019 to 2020. The trend continues as reported cases of gonorrhea increased 15% and reported cases of P&S syphilis increased 38% from 2019 to 2021.

Increased case counts seen in late-2020 and in 2021 may reflect an increase 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 STD 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 STDs to spread in sexual networks. Although the number of chlamydia cases increased 4% from 2020 to 2021, the number of chlamydial infections diagnosed and reported in 2021 was still 9% lower than the number reported in 2019 (1,644,416 cases in 2021 vs 1,808,703 in 2019). This decrease is likely due to changes in STD screening, not a reduction in new infections. Most people with chlamydia usually have no signs or symptoms and most 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.

Concerningly, rates of P&S syphilis increased 24% among reproductive-aged women from 2019 to 2020, resulting in increases in congenital syphilis. In 2020, there were 2,148 congenital syphilis cases, an increase of 15% since 2019. During 2020 to 2021, rates of P&S syphilis increased 52% among reproductive-aged women and the number of congenital syphilis cases increased 32%. Increases in congenital syphilis, including increases in congenital syphilis-related deaths, are a stark reminder of the need to prevent the worst outcomes related to STDs.
Sexually Transmitted Disease Surveillance, 2021 underscores that STDs continue to persist as a significant public health concern. The new report reflects the realities of a strained public health infrastructure, while simultaneously providing the most current data on reported cases of STDs in the United States. However, the picture remains very unclear. The COVID-19 pandemic significantly affected trends in STDs– resulting in likely underreporting of infections and possibly increased STD 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 STDs. What is clear, however, is the state of STDs did not improve in the United States. Prevention and control efforts remain as important as ever.

Sources

This page summarizes a number of publications and communications throughout the pandemic. You can find more information in the following resources:

1. 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/
2. 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/
3. Dear Colleague Letters from CDC's Division of STD Prevention
    - Providing effective care and prevention when facility-based services and in-person patient-clinician contact is limited: https://www.cdc.gov/std/dstdp/DCL-STDTreatment-COVID19-04062020.pdf
    - Update: STD treatment options: https://www.cdc.gov/std/dstdp/dcl-clarification-may2020.pdf
    - Shortage of STI Diagnostic Test Kits and Laboratory Supplies: https://www.cdc.gov/std/general/DCL-Diagnostic-Test-Shortage.pdf

Additional COVID-19 information is available here:

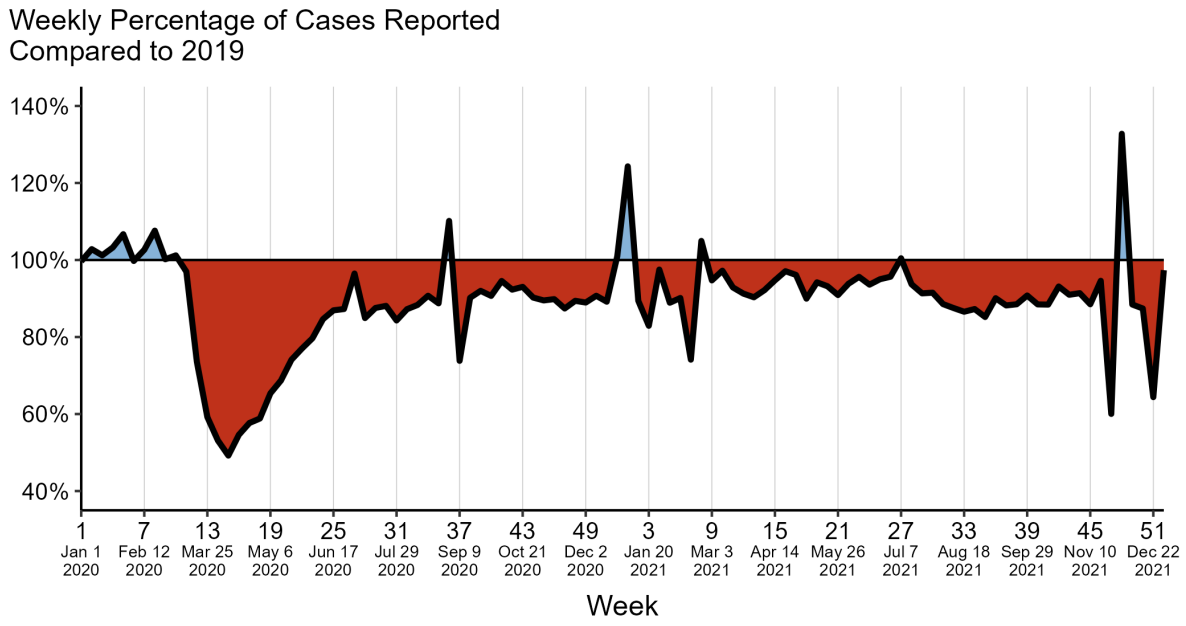
- COVID-19: https://www.cdc.gov/coronavirus/2019-ncov/index.html

COVID Data Tracker: https://covid.cdc.gov/covid-data-tracker/#datatracker-home

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. Trends presented in Sexually Transmitted Disease Surveillance, 2021 should be interpreted cautiously. For more information, see Impact of COVID-19 on STDs.

Chlamydia — Reported 2020 and 2021 Cases as a Percentage of 2019 by *MMWR* Week, United States



NOTE: The *MMWR* week is the week of the epidemiologic year for which the case is assigned by the reporting local or state health department. For the weeks displayed, the midpoint of the date range (i.e., the Wednesday of the week) is provided for reference.

Adapted from Pagaoa et al., *Sexually Transmitted Diseases*, 2021

Summary

To quantify the COVID-19 pandemic's potential impact on reported STDs, the number of 2020 and 2021 cases reported for a given *MMWR* week was compared to the number of cases reported in the same week in 2019. The comparison is expressed in terms of the percentage of 2019 cases that were reported. Percentages lower than 100% denote when 2020 or 2021 cases were less than 2019 cases, while percentages higher than 100% indicate when 2020 or 2021 cases were higher than 2019 cases.

In 2020, during *MMWR* weeks 1–11 (December 29, 2019–March 14, 2020), the 2020 cumulative total of reported chlamydia cases (386,187 cases) was higher than the 2019 cumulative total for the same number of weeks (378,482 cases). In week 12 (week of March 15–21, 2020; the first full week of the emergency declaration for the COVID-19 pandemic), the weekly number of 2020 chlamydia cases was 73.6% compared to the cases reported by the same *MMWR* week in 2019.

Following week 12 of 2020, the deficit of 2020 cases compared to 2019 cases increased, reaching the lowest relative number of cases reported at week 15 (49.2%; week of April 5–11, 2020). The highest relative number of cases in 2020 after week 12 was in week 36 (110.2%; week of August 30–September 5, 2020). The final number of reported cases of chlamydia for 2020 (1,579,885 cases) was 87.3% of the 2019 total (1,808,703 cases).

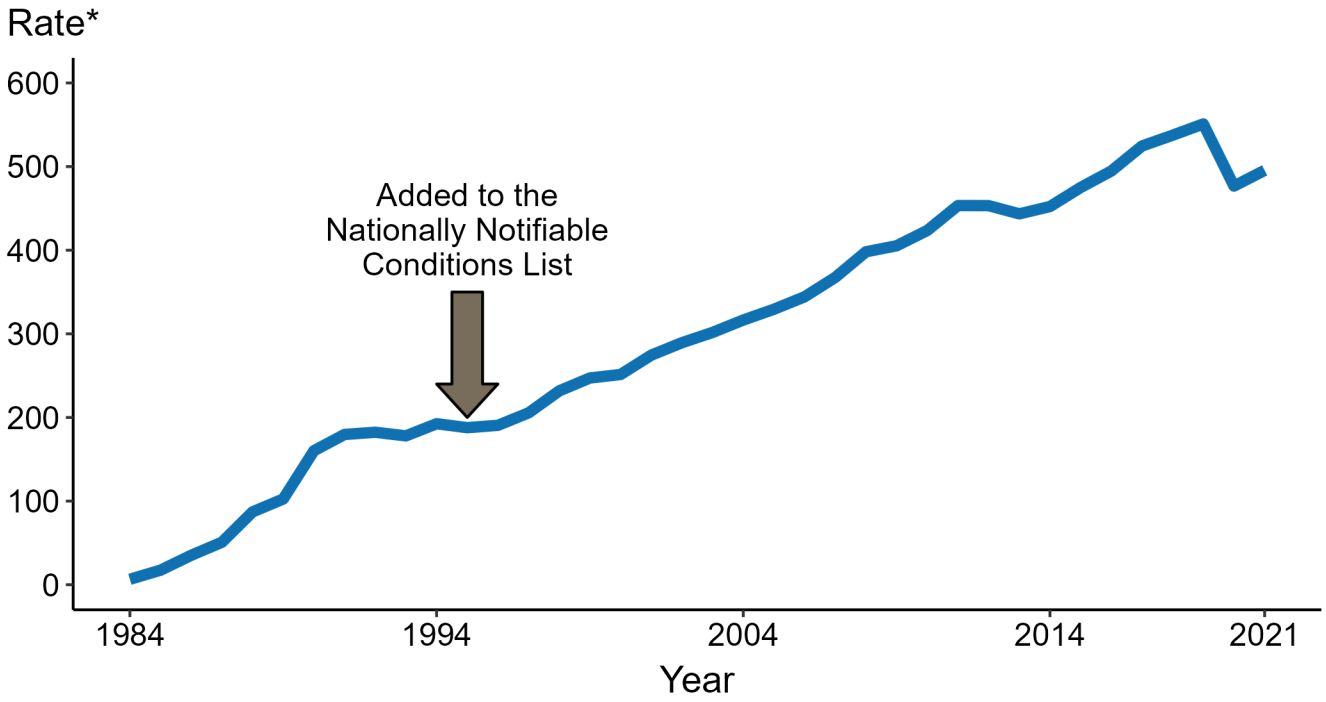
In 2021, the deficit of cases compared to 2019 reached the lowest relative number of cases reported at week 47 (60.0%; week of November 21–27, 2021), while the highest relative number of cases was in week 48 (132.8%; week of November 28–December 4, 2021). The final number of reported cases of chlamydia for 2021 (1,644,416 cases) was 90.9% of the 2019 total (1,808,703 cases).

The COVID-19 pandemic has introduced uncertainty and difficulty in interpreting STD data collected during 2020 and 2021. See Impact of COVID-19 on STDs (https://www.cdc.gov/std/statistics/2021/impact.htm) for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2021/technical-notes.htm) for information on chlamydia case reporting.

Data points are available at https://www.cdc.gov/std/statistics/2021/data.zip.

Chlamydia — Rates of Reported Cases by Year, United States, 1984–2021



* 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.

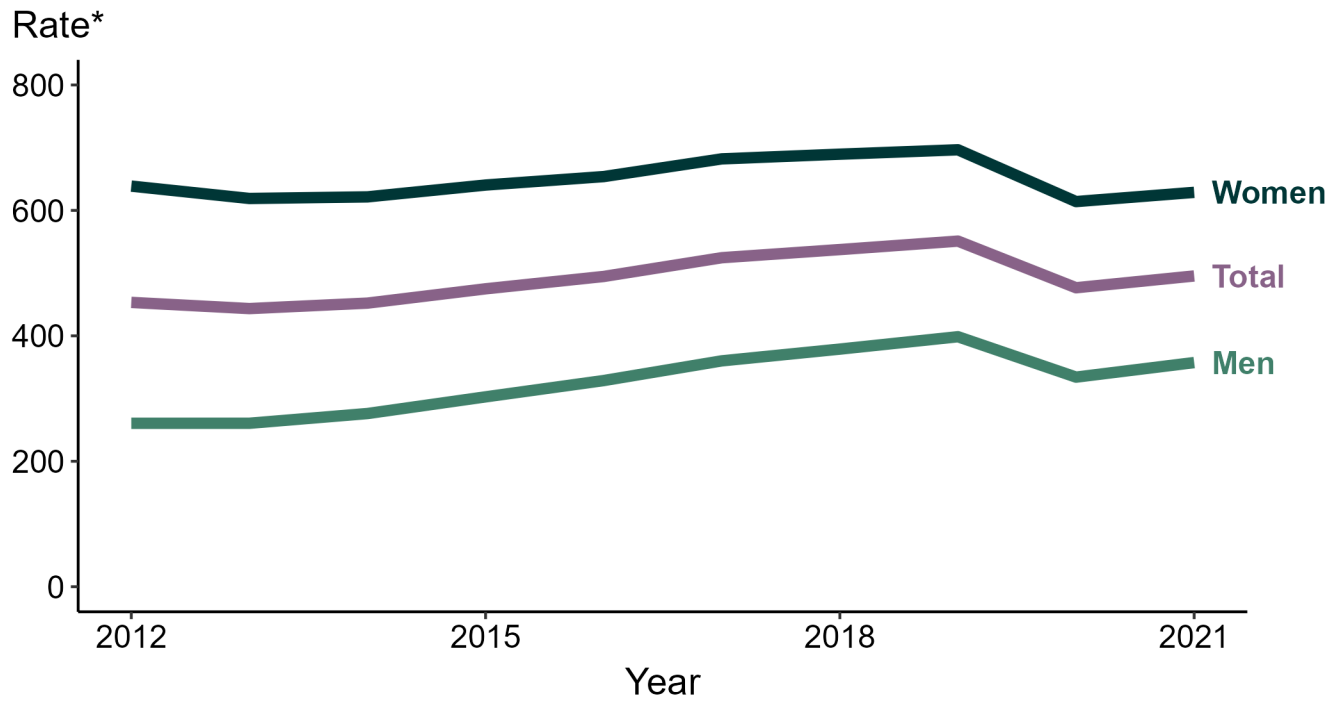
In 2021, a total of 1,644,416 cases of chlamydia were reported in the United States. During 2020 to 2021, the rate of reported chlamydia increased 3.9% (from 476.7 to 495.5 per 100,000).

The COVID-19 pandemic has introduced uncertainty and difficulty in interpreting STD data collected during 2020 and 2021. See Impact of COVID-19 on STDs (https://www.cdc.gov/std/statistics/2021/impact.htm) for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2021/technical-notes.htm) for information on chlamydia case reporting.

Data points are available at https://www.cdc.gov/std/statistics/2021/data.zip.

Chlamydia — Rates of Reported Cases by Sex, United States, 2012–2021



* Per 100,000

Summary

During 2020 to 2021, the chlamydia rate among men increased 6.9% (from 334.2 to 357.4 per 100,000) and the rate among women increased 2.4% (from 614.1 to 628.8 per 100,000).

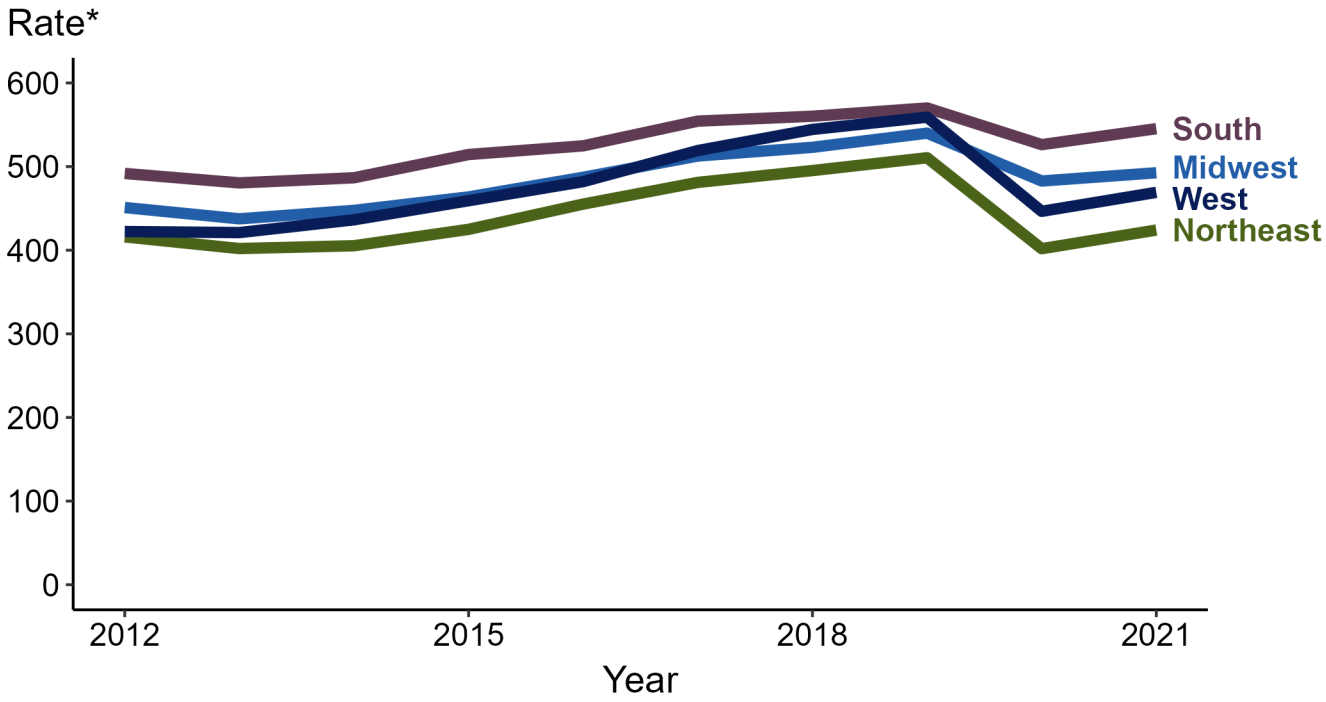
Over the last five years, the chlamydia rate among men decreased 0.7% (from 360.1 to 357.4 per 100,000) and the rate among women decreased 7.8% (from 682.1 to 628.8 per 100,000). Over the last 10 years, the chlamydia rate among men increased 37.1% (from 260.6 to 357.4 per 100,000) and the rate among women decreased 1.6% (from 638.7 to 628.8 per 100,000).

The COVID-19 pandemic has introduced uncertainty and difficulty in interpreting STD data collected during 2020 and 2021. See Impact of COVID-19 on STDs (https://www.cdc.gov/std/statistics/2021/impact.htm) for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2021/technical-notes.htm) for information on chlamydia case reporting.

Data points are available at https://www.cdc.gov/std/statistics/2021/data.zip.

Chlamydia — Rates of Reported Cases by Region, United States, 2012–2021



* Per 100,000

Summary

In 2021, the South had the highest rate of reported chlamydia (545.3 cases per 100,000; 3.6% increase from 2020), followed by the Midwest (492.6 cases per 100,000; 2.0% increase from 2020), the West (469.2 cases per 100,000; 5.1% increase from 2020), and the Northeast (424.1 cases per 100,000; 5.6% increase from 2020).

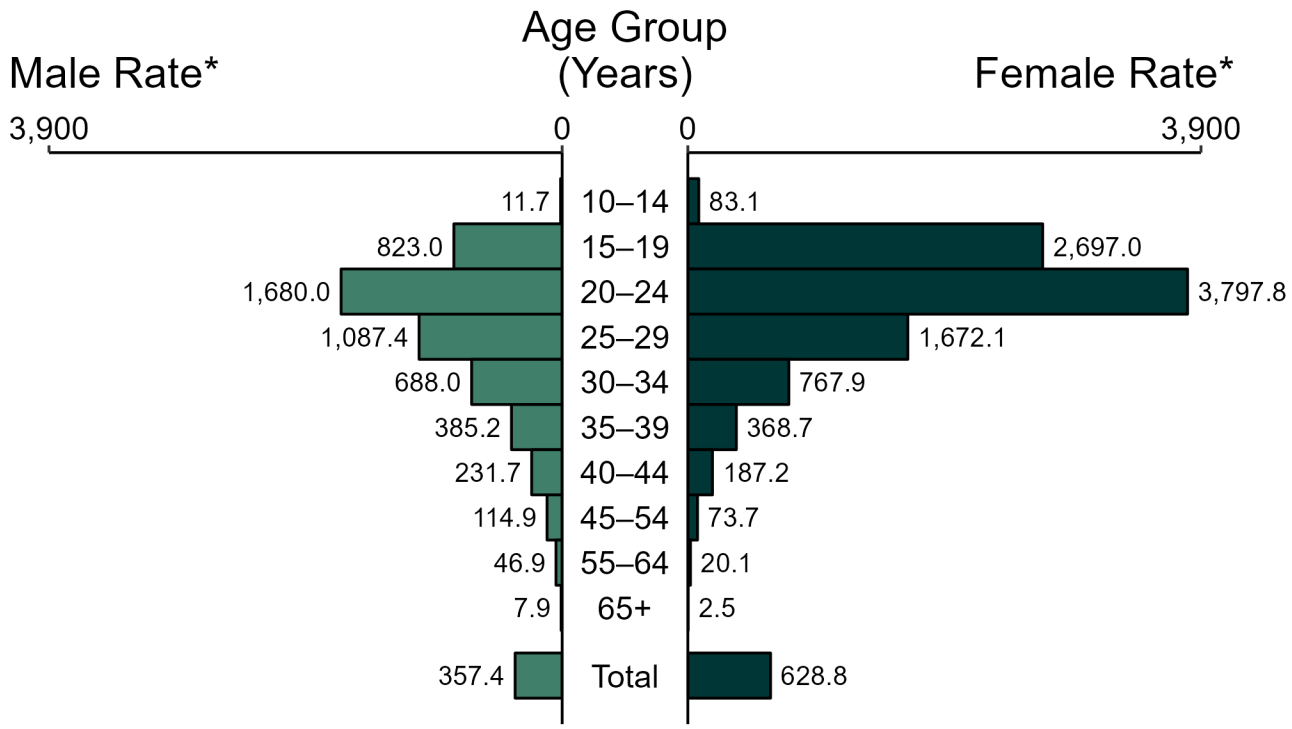
There were no increases in the rate of reported cases of chlamydia in any region during 2017 to 2021. The West had the greatest 10-year increase in rates of reported cases of chlamydia (422.3 to 469.2 per 100,000; 11.1% increase from 2012).

The COVID-19 pandemic has introduced uncertainty and difficulty in interpreting STD data collected during 2020 and 2021. See Impact of COVID-19 on STDs (https://www.cdc.gov/std/statistics/2021/impact.htm) for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2021/technical-notes.htm) for information on chlamydia case reporting.

Data points are available at https://www.cdc.gov/std/statistics/2021/data.zip.

Chlamydia — Rates of Reported Cases by Age Group and Sex, United States, 2021



* Per 100,000

NOTE: Total includes all ages.

Summary

In 2021, the rate of reported chlamydia was higher among women (628.8 per 100,000) compared to men (357.4 per 100,000).

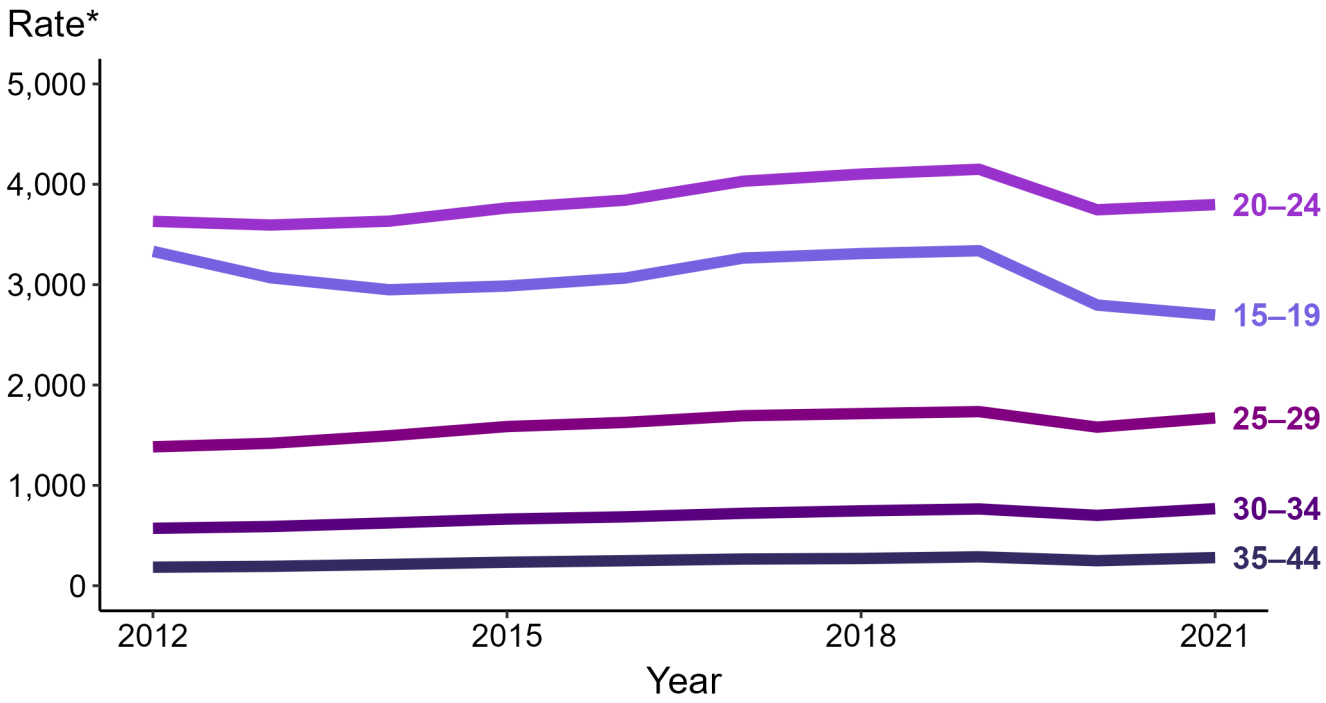
Among women, those aged 20 to 24 years had the highest rate of reported cases of chlamydia (3,797.8 per 100,000), followed by women aged 15 to 19 years (2,697.0 per 100,000) and women aged 25 to 29 years (1,672.1 per 100,000). Among men, those aged 20 to 24 years also had the highest rate of reported cases of chlamydia (1,680.0 per 100,000), followed by men aged 25 to 29 years (1,087.4 per 100,000) and men aged 15 to 19 years (823.0 per 100,000).

The COVID-19 pandemic has introduced uncertainty and difficulty in interpreting STD data collected during 2020 and 2021. See Impact of COVID-19 on STDs (https://www.cdc.gov/std/statistics/2021/impact.htm) for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2021/technical-notes.htm) for information on chlamydia case reporting.

Data points are available at https://www.cdc.gov/std/statistics/2021/data.zip.

Chlamydia — Rates of Reported Cases Among Women Aged 15–44 Years by Age Group, United States, 2012–2021



* Per 100,000

Summary

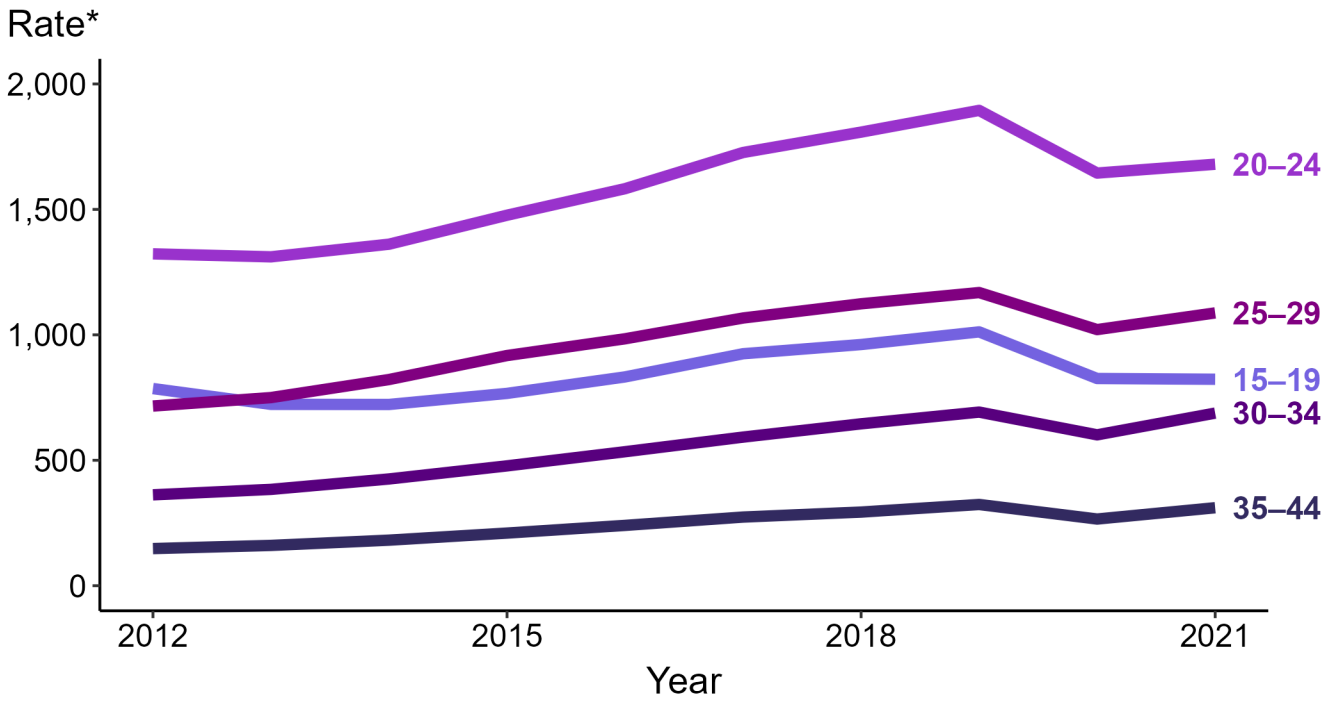
Among women aged 15 to 44 years in 2021, those aged 20 to 24 years had the highest rate of reported cases of chlamydia (3,797.8 cases per 100,000; 1.4% increase from 2020), followed by those aged 15 to 19 years (2,697.0 cases per 100,000; 3.6% decrease from 2020), those aged 25 to 29 years (1,672.1 cases per 100,000; 5.8% increase from 2020), those aged 30 to 34 years (767.9 cases per 100,000; 9.6% increase from 2020), and those aged 35 to 44 years (280.1 cases per 100,000; 12.4% increase from 2020).

The COVID-19 pandemic has introduced uncertainty and difficulty in interpreting STD data collected during 2020 and 2021. See Impact of COVID-19 on STDs (https://www.cdc.gov/std/statistics/2021/impact.htm) for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2021/technical-notes.htm) for information on chlamydia case reporting.

Data points are available at https://www.cdc.gov/std/statistics/2021/data.zip.

Chlamydia — Rates of Reported Cases Among Men Aged 15–44 Years by Age Group, United States, 2012–2021



* Per 100,000

Summary

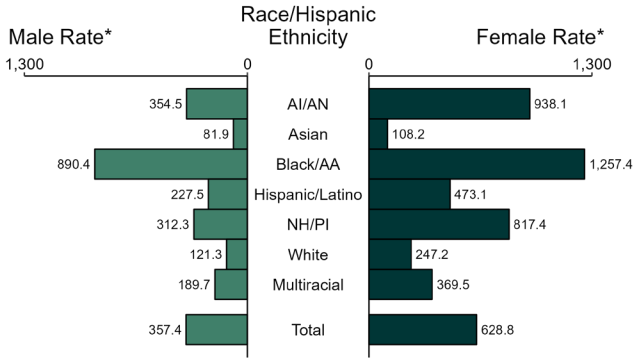
Among men aged 15 to 44 years in 2021, those aged 20 to 24 years had the highest rate of reported cases of chlamydia (1,680.0 cases per 100,000; 2.1% increase from 2020), followed by those aged 25 to 29 years (1,087.4 cases per 100,000; 6.5% increase from 2020), those aged 15 to 19 years (823.0 cases per 100,000; 0.4% decrease from 2020), those aged 30 to 34 years (688.0 cases per 100,000; 14.4% increase from 2020), and those aged 35 to 44 years (310.8 cases per 100,000; 16.9% increase from 2020).

The COVID-19 pandemic has introduced uncertainty and difficulty in interpreting STD data collected during 2020 and 2021. See Impact of COVID-19 on STDs (https://www.cdc.gov/std/statistics/2021/impact.htm) for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2021/technical-notes.htm) for information on chlamydia case reporting.

Data points are available at https://www.cdc.gov/std/statistics/2021/data.zip.

Chlamydia — Rates of Reported Cases by Race/Hispanic Ethnicity and Sex, United States, 2021



* 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 2021, the rate of reported chlamydia was higher among women (628.8 per 100,000) compared to men (357.4 per 100,000).

Among women, non-Hispanic Black or African American women had the highest rate of reported cases of chlamydia (1,257.4 per 100,000), followed by non-Hispanic American Indian or Alaska Native women (938.1 per 100,000) and non-Hispanic Native Hawaiian or other Pacific Islander women (817.4 per 100,000). Among men, non-Hispanic Black or African American men also had the highest rate of reported cases of chlamydia (890.4 per 100,000), followed by non-Hispanic American Indian or Alaska Native men (354.5 per 100,000) and non-Hispanic Native Hawaiian or other Pacific Islander men (312.3 per 100,000).

Using non-Hispanic White persons as the referent category, the greatest racial disparity in rates of reported chlamydia was observed among non-Hispanic Black or African American men, with a rate ratio of 7.3 times that of non-Hispanic White men. Among women, the greatest disparity was observed among non-Hispanic Black or African American women as well, with a rate 5.1 times that of non-Hispanic White women.

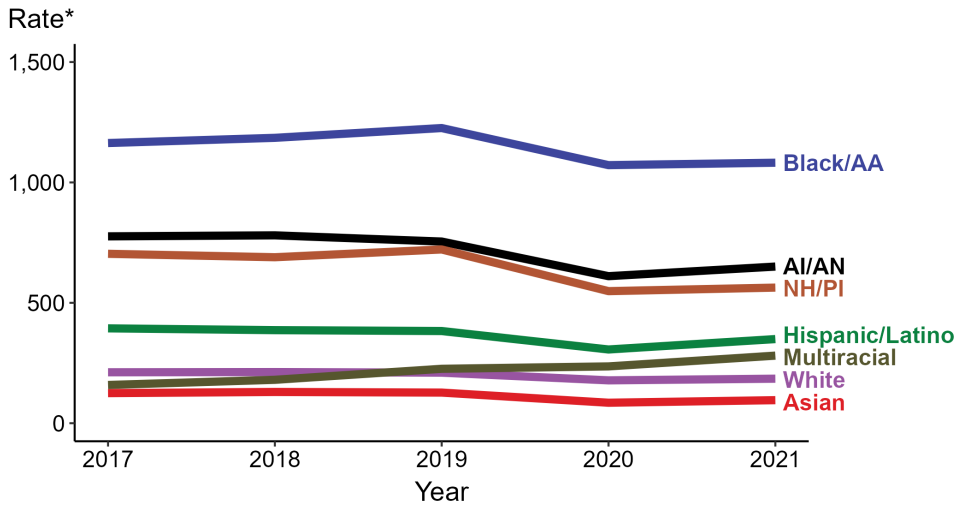
For this figure, race/Hispanic ethnicity is categorized first by reported Hispanic ethnicity, then by reported race. Therefore, cases categorized as Hispanic/Latino can be of any race(s); cases categorized into a race group include both non-Hispanic persons and persons of unknown Hispanic ethnicity. Not all US jurisdictions reported cases in Office of Management and Budget compliant race categories in 2021. This may minimally under- or overestimate rates for Asian, Native Hawaiian or other Pacific Islander, or multiracial individuals. No population data exist for unknown or other race; therefore, rates are not calculated. For completeness, data in this figure include cases reported from all jurisdictions.

The COVID-19 pandemic has introduced uncertainty and difficulty in interpreting STD data collected during 2020 and 2021. See Impact of COVID-19 on STDs (https://www.cdc.gov/std/statistics/2021/impact.htm) for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2021/technical-notes.htm) for information on chlamydia case reporting and reporting of race/Hispanic ethnicity for STD cases.

Data points are available at https://www.cdc.gov/std/statistics/2021/data.zip.

Chlamydia — Rates of Reported Cases by Race/Hispanic Ethnicity, United States, 2017–2021



* 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 2021, the highest rate of reported chlamydia cases per 100,000 persons was among non-Hispanic Black or African American persons (1,081.9), followed by non-Hispanic American Indian or Alaska Native persons (650.6).

During 2020 to 2021, the greatest increase in rate of reported chlamydia cases per 100,000 persons was among non-Hispanic persons of multiple races (235.9 to 280.7; 19.0% increase). Non-Hispanic persons of multiple races also had the greatest five-year increase in rate of reported chlamydia (158.8 to 280.7; 76.8% increase from 2017).

There were no decreases in the rate of reported chlamydia cases per 100,000 persons among any race/ethnicity group during 2020 to 2021. Non-Hispanic Asian persons had the greatest five-year decrease in rate of reported chlamydia (125.0 to 95.7; 23.4% decrease from 2017).

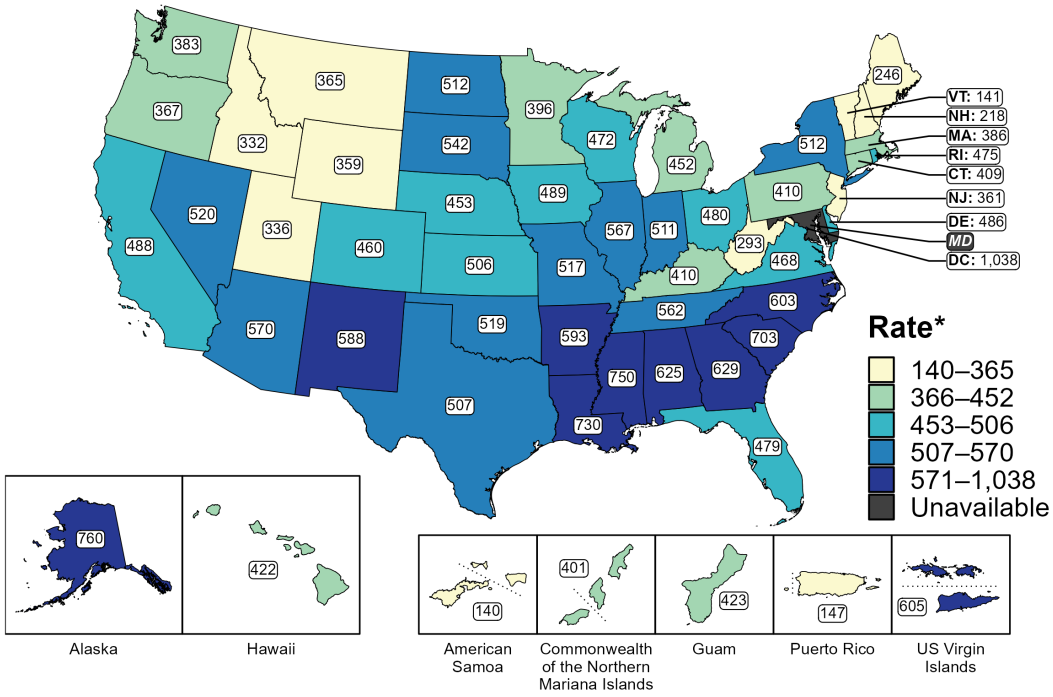
For this figure, race/Hispanic ethnicity is categorized first by reported Hispanic ethnicity, then by reported race. Therefore, cases categorized as Hispanic/Latino can be of any race(s); cases categorized into a race group include both non-Hispanic persons and persons of unknown Hispanic ethnicity. Not all US jurisdictions reported cases in Office of Management and Budget compliant race categories during 2017 to 2021. This may minimally under- or overestimate rates for Asian, Native Hawaiian or other Pacific Islander, or multiracial individuals. No population data exist for unknown or other race; therefore, rates are not calculated. For completeness, data in this figure include cases reported from all jurisdictions.

The COVID-19 pandemic has introduced uncertainty and difficulty in interpreting STD data collected during 2020 and 2021. See Impact of COVID-19 on STDs (https://www.cdc.gov/std/statistics/2021/impact.htm) for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2021/technical-notes.htm) for information on chlamydia case reporting and reporting of race/Hispanic ethnicity for STD cases.

Data points are available at https://www.cdc.gov/std/statistics/2021/data.zip.

Chlamydia — Rates of Reported Cases by State, United States and Territories, 2021



* Per 100,000

Summary

In 2021, rates of reported chlamydia ranged by state from 141 cases per 100,000 population in Vermont to 760 cases per 100,000 population in Alaska. The rate of reported chlamydia in the District of Columbia was 1,038 per 100,000 population. Due to a network security incident in December 2021, the Maryland Department of Health could not finalize their 2021 STD case notification data. 2021 data from Maryland have been suppressed for this figure; however, they are included in national and regional case counts and rates displayed in other figures.

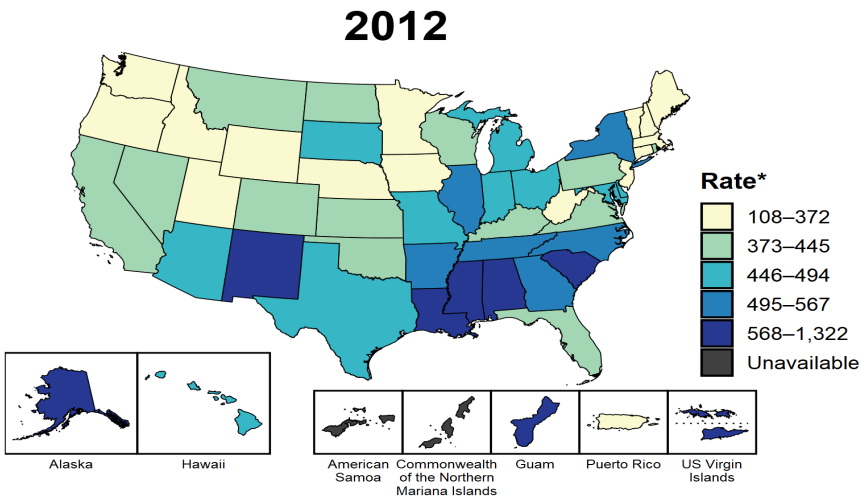
Among US territories, rates of reported chlamydia ranged from 140 cases per 100,000 population in American Samoa to 605 cases per 100,000 population in the US Virgin Islands.

The COVID-19 pandemic has introduced uncertainty and difficulty in interpreting STD data collected during 2020 and 2021. See Impact of COVID-19 on STDs (https://www.cdc.gov/std/statistics/2021/impact.htm) for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2021/technical-notes.htm) for information on chlamydia case reporting and on interpreting reported rates in US territories.

Data points are available at https://www.cdc.gov/std/statistics/2021/data.zip.

Chlamydia — Rates of Reported Cases by State, United States and Territories, 2012–2021



* 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 2012, 12 states, the District of Columbia (DC), and two US territories (27.8% of areas with available data) had a rate of reported chlamydia greater than or equal to 495 cases per 100,000 population. This increased to 21 states, DC, and one US territory (41.8% of areas with available data) in 2021. During 2020 to 2021, rates of reported chlamydia increased in 33 states, DC, and three territories.

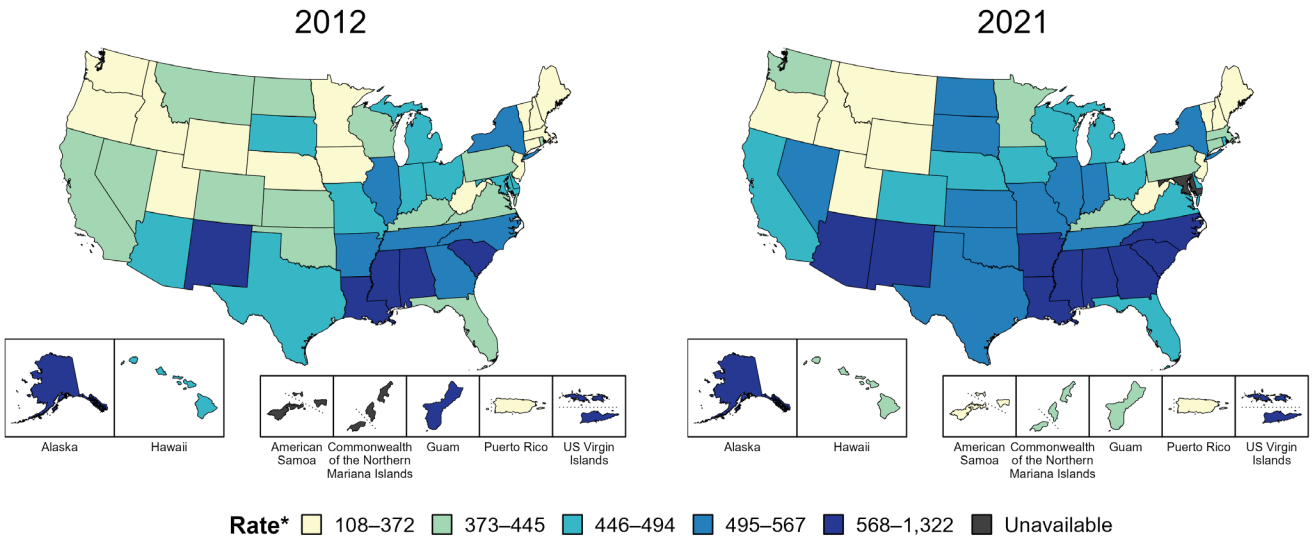
American Samoa and the Commonwealth of the Northern Mariana Islands began reporting data on chlamydia cases to CDC in 2018; data are not available for those areas prior to that year. In addition, data on reported chlamydia cases in 2018 are not available for the US Virgin Islands. Due to a network security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

The COVID-19 pandemic has introduced uncertainty and difficulty in interpreting STD data collected during 2020 and 2021. See Impact of COVID-19 on STDs (https://www.cdc.gov/std/statistics/2021/impact.htm) for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2021/technical-notes.htm) for information on chlamydia case reporting and on interpreting reported rates in US territories.

Data points are available at https://www.cdc.gov/std/statistics/2021/data.zip.

Chlamydia — Rates of Reported Cases by State, United States and Territories, 2012 and 2021



* Per 100,000

Summary

In 2012, 12 states, the District of Columbia (DC), and two US territories (27.8% of areas with available data) had a rate of reported chlamydia greater than or equal to 495 cases per 100,000 population. This increased to 21 states, DC, and one US territory (41.8% of areas with available data) in 2021.

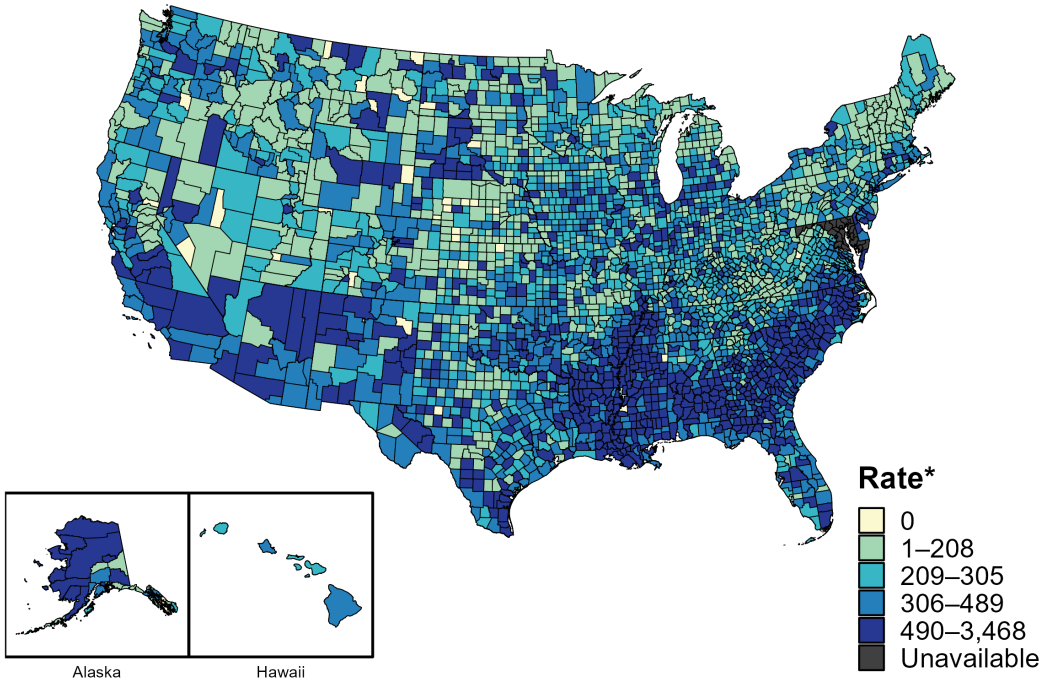
American Samoa and the Commonwealth of the Northern Mariana Islands began reporting data on chlamydia cases to CDC in 2018; data are not available for those areas prior to that year. Due to a network security incident in December 2021, the Maryland Department of Health could not finalize their 2021 STD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

The COVID-19 pandemic has introduced uncertainty and difficulty in interpreting STD data collected during 2020 and 2021. See Impact of COVID-19 on STDs (https://www.cdc.gov/std/statistics/2021/impact.htm) for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2021/technical-notes.htm) for information on chlamydia case reporting and on interpreting reported rates in US territories.

Data points are available at https://www.cdc.gov/std/statistics/2021/data.zip.

Chlamydia — Rates of Reported Cases by County, United States, 2021



* Per 100,000

Summary

In 2021, 99% of counties and county equivalents with available data in the United States reported at least one case of chlamydia. Out of 3,119 counties and county equivalents with available data, 94 (3%) reported over half of all cases of chlamydia.

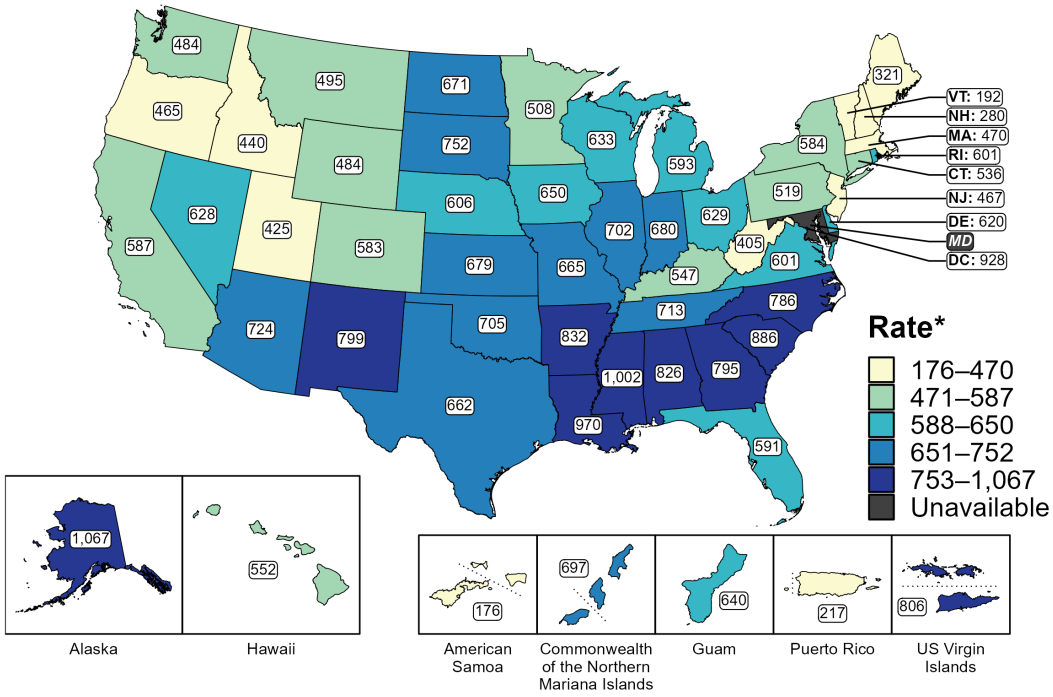
Due to a network security incident in December 2021, the Maryland Department of Health could not finalize their 2021 STD case notification data. 2021 data from Maryland have been suppressed for this figure; however, they are included in national and regional case counts and rates displayed in other figures.

The COVID-19 pandemic has introduced uncertainty and difficulty in interpreting STD data collected during 2020 and 2021. See Impact of COVID-19 on STDs (https://www.cdc.gov/std/statistics/2021/impact.htm) for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2021/technical-notes.htm) for information on chlamydia case reporting.

Data points are available at https://www.cdc.gov/std/statistics/2021/data.zip.

Chlamydia — Rates of Reported Cases Among Women by State, United States and Territories, 2021



* Per 100,000

Summary

In 2021, rates of reported chlamydia among women ranged by state from 192 cases per 100,000 women in Vermont to 1,067 cases per 100,000 women in Alaska. The rate of reported chlamydia in the District of Columbia was 928 per 100,000 women. Due to a network security incident in December 2021, the Maryland Department of Health could not finalize their 2021 STD case notification data. 2021 data from Maryland have been suppressed for this figure; however, they are included in national and regional case counts and rates displayed in other figures.

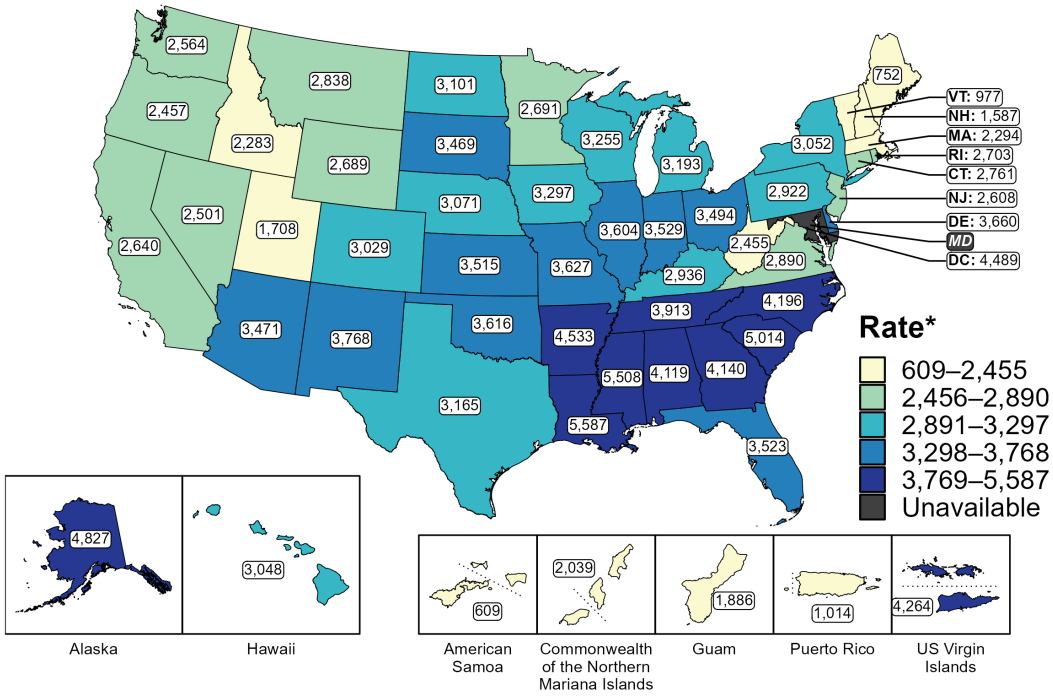
Among US territories, rates of reported chlamydia ranged from 176 cases per 100,000 women in American Samoa to 806 cases per 100,000 women in the US Virgin Islands.

The COVID-19 pandemic has introduced uncertainty and difficulty in interpreting STD data collected during 2020 and 2021. See Impact of COVID-19 on STDs (https://www.cdc.gov/std/statistics/2021/impact.htm) for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2021/technical-notes.htm) for information on chlamydia case reporting and on interpreting reported rates in US territories.

Data points are available at https://www.cdc.gov/std/statistics/2021/data.zip.

Chlamydia — Rates of Reported Cases Among Women Aged 15–24 Years by State, United States and Territories, 2021



* Per 100,000

Summary

In 2021, rates of reported chlamydia among women aged 15 to 24 years ranged by state from 752 cases per 100,000 women aged 15 to 24 years in Maine to 5,587 cases per 100,000 women aged 15 to 24 years in Louisiana. The rate of reported chlamydia in the District of Columbia was 4,489 per 100,000 women aged 15 to 24 years. Due to a network security incident in December 2021, the Maryland Department of Health could not finalize their 2021 STD case notification data. 2021 data from Maryland have been suppressed for this figure; however, they are included in national and regional case counts and rates displayed in other figures.

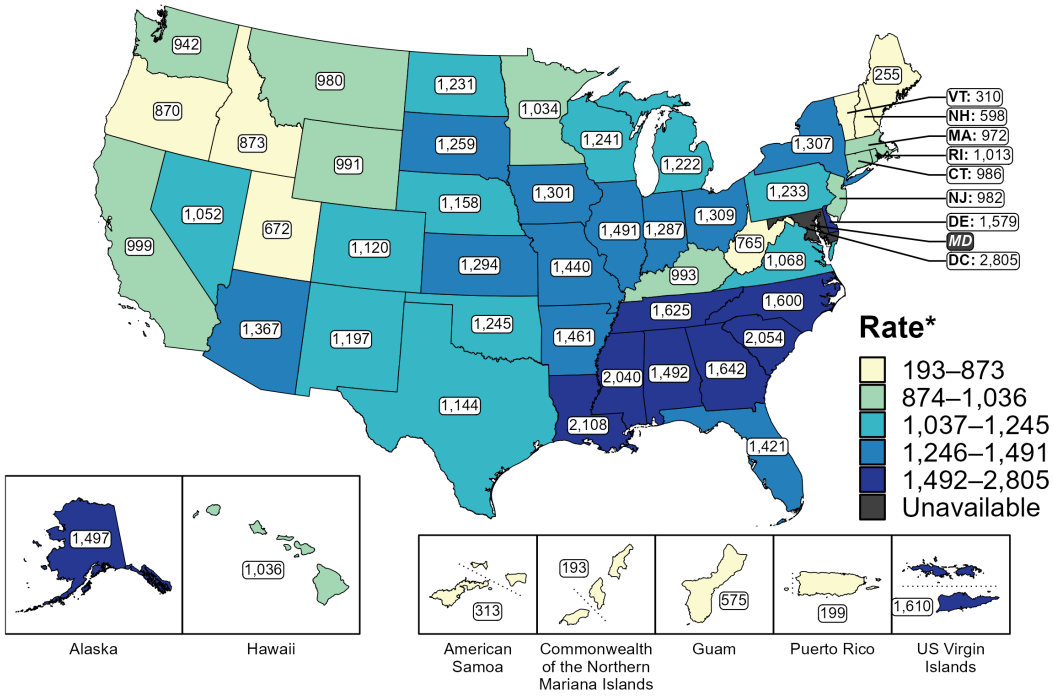
Among US territories, rates of reported chlamydia ranged from 609 cases per 100,000 women aged 15 to 24 years in American Samoa to 4,264 cases per 100,000 women aged 15 to 24 years in the US Virgin Islands.

The COVID-19 pandemic has introduced uncertainty and difficulty in interpreting STD data collected during 2020 and 2021. See Impact of COVID-19 on STDs (https://www.cdc.gov/std/statistics/2021/impact.htm) for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2021/technical-notes.htm) for information on chlamydia case reporting and on interpreting reported rates in US territories.

Data points are available at https://www.cdc.gov/std/statistics/2021/data.zip.

Chlamydia — Rates of Reported Cases Among Men Aged 15–24 Years by State, United States and Territories, 2021



* Per 100,000

Summary

In 2021, rates of reported chlamydia among men aged 15 to 24 years ranged by state from 255 cases per 100,000 men aged 15 to 24 years in Maine to 2,108 cases per 100,000 men aged 15 to 24 years in Louisiana. The rate of reported chlamydia in the District of Columbia was 2,805 per 100,000 men aged 15 to 24 years. Due to a network security incident in December 2021, the Maryland Department of Health could not finalize their 2021 STD case notification data. 2021 data from Maryland have been suppressed for this figure; however, they are included in national and regional case counts and rates displayed in other figures.

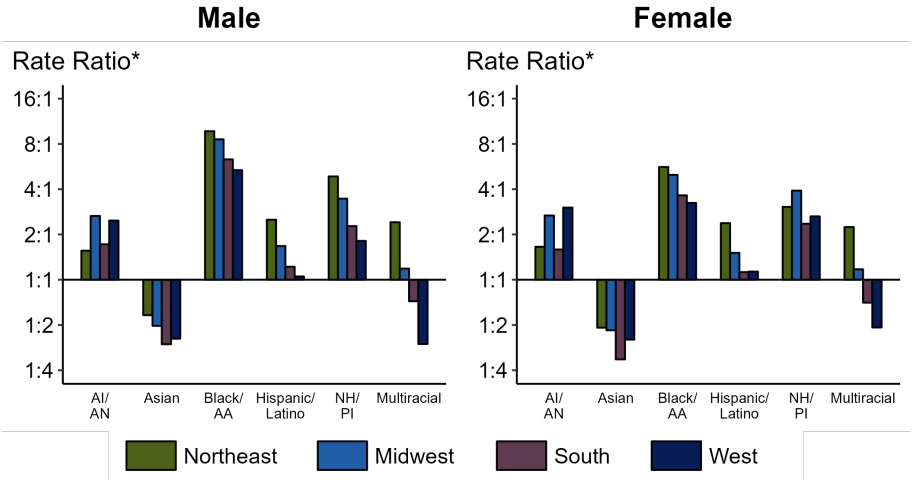
Among US territories, rates of reported chlamydia ranged from 193 cases per 100,000 men aged 15 to 24 years in the Commonwealth of the Northern Mariana Islands to 1,610 cases per 100,000 men aged 15 to 24 years in the US Virgin Islands.

The COVID-19 pandemic has introduced uncertainty and difficulty in interpreting STD data collected during 2020 and 2021. See Impact of COVID-19 on STDs (https://www.cdc.gov/std/statistics/2021/impact.htm) for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2021/technical-notes.htm) for information on chlamydia case reporting and on interpreting reported rates in US territories.

Data points are available at https://www.cdc.gov/std/statistics/2021/data.zip.

Chlamydia — Ratios of Rates of Reported Cases Among Persons Aged 15–24 Years by Sex, Race/Hispanic Ethnicity, and Region, United States, 2021



* 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 2021. 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 9.7 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 5.6 times the rate among non-Hispanic White women.

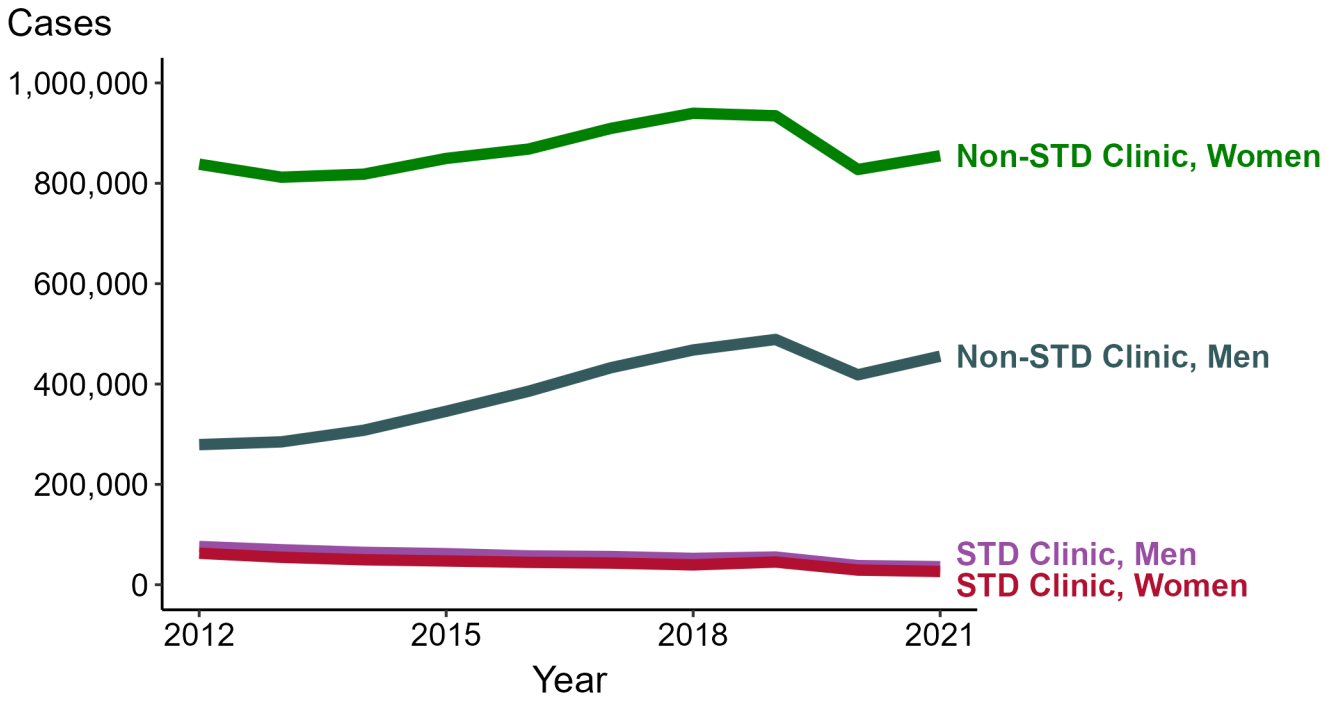
For this figure, race/Hispanic ethnicity is categorized first by reported Hispanic ethnicity, then by reported race. Therefore, cases categorized as Hispanic/Latino can be of any race(s); cases categorized into a race group include both non-Hispanic persons and persons of unknown Hispanic ethnicity. Not all US jurisdictions reported cases in Office of Management and Budget compliant race categories in 2021. This may minimally under- or overestimate rates for Asian, Native Hawaiian or other Pacific Islander, or multiracial individuals. No population data exist for unknown or other race; therefore, rates and rate ratios are not calculated. For completeness, data in this figure include cases reported from all jurisdictions.

The COVID-19 pandemic has introduced uncertainty and difficulty in interpreting STD data collected during 2020 and 2021. See Impact of COVID-19 on STDs (https://www.cdc.gov/std/statistics/2021/impact.htm) for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2021/technical-notes.htm) for information on chlamydia case reporting and reporting of race/Hispanic ethnicity for STD cases.

Data points are available at https://www.cdc.gov/std/statistics/2021/data.zip.

Chlamydia — Reported Cases by Reporting Source and Sex, United States, 2012–2021



NOTE: During 2012 to 2021, the proportion of all male cases with unknown reporting source was 14.7%, from a low of 11.6% in 2012 to a high of 16.7% in 2020.

Summary

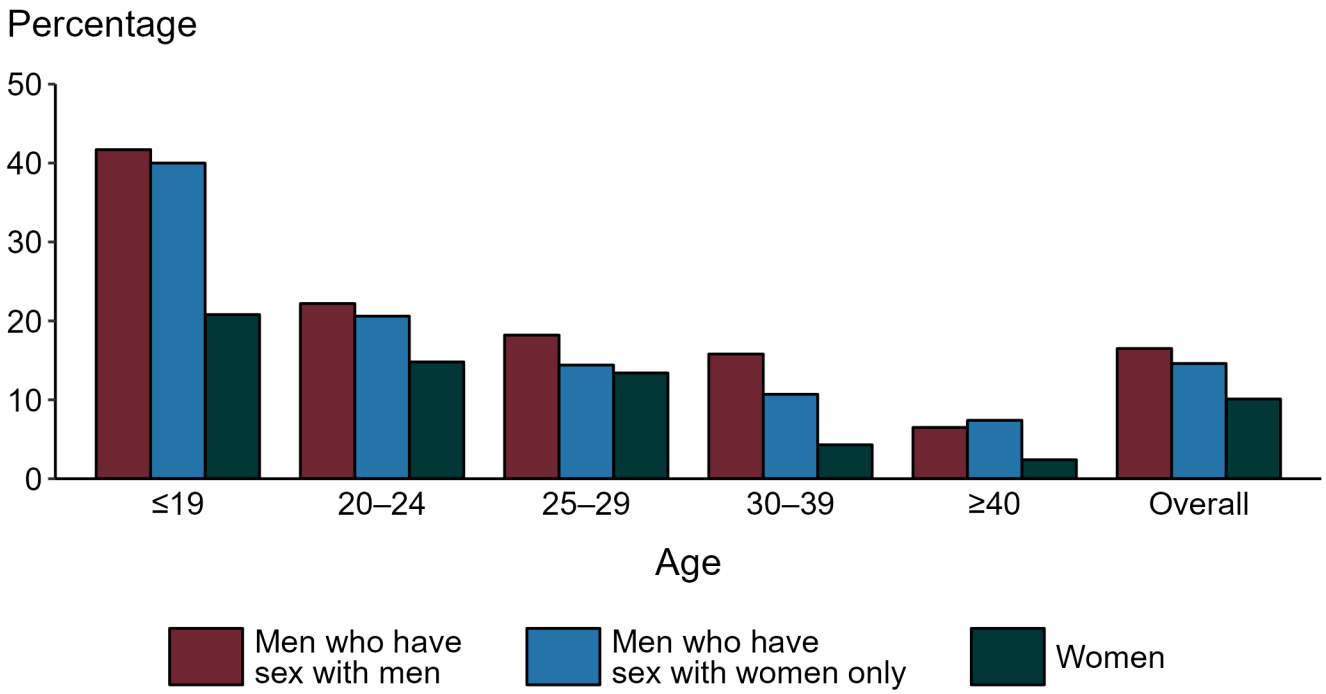
During 2012 to 2021, the number of chlamydia cases reported from STD clinics decreased 52.8% among men (76,126 to 35,913 cases) and decreased 57.9% among women (62,748 to 26,395 cases), while the number of cases reported from non-STD clinics increased 63.1% among men (279,193 to 455,459 cases) and increased 2.0% among women (838,099 to 854,917 cases).

The COVID-19 pandemic has introduced uncertainty and difficulty in interpreting STD data collected during 2020 and 2021. See Impact of COVID-19 on STDs (https://www.cdc.gov/std/statistics/2021/impact.htm) for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2021/technical-notes.htm) for information on chlamydia case reporting.

Data points are available at https://www.cdc.gov/std/statistics/2021/data.zip.

Chlamydia — Proportion of STD Clinic Patients Testing Positive by Age Group, Sex, and Sex of Sex Partners, STD Surveillance Network (SSuN), 2021



NOTE: Results are based on 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 2021 (n=47,010).

Summary

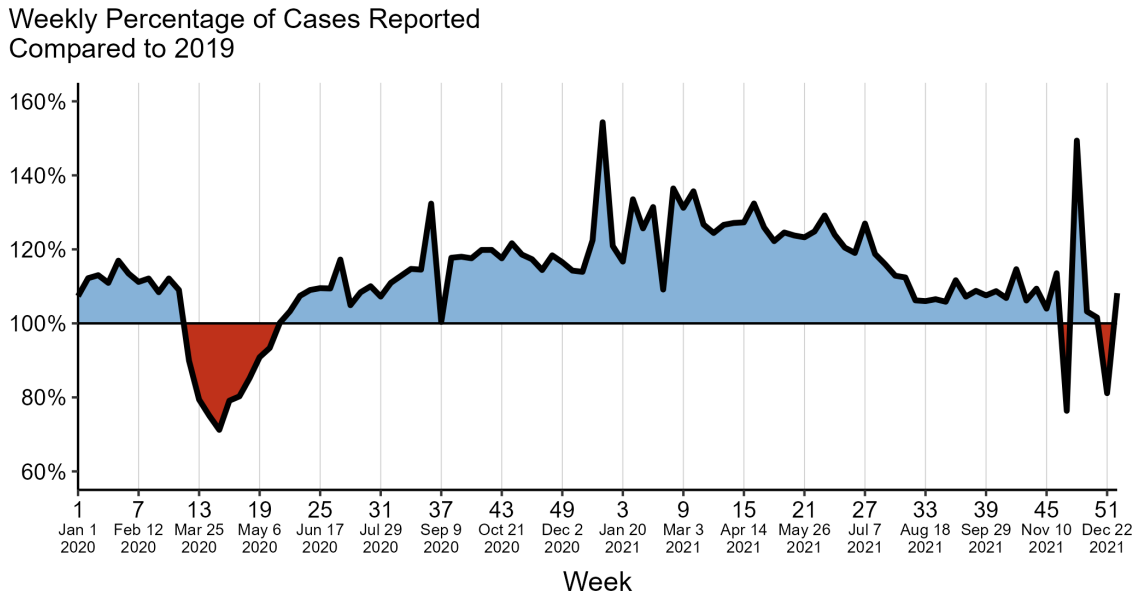
Among patients accessing care in participating STD clinics in the STD Surveillance Network (SSuN) who were tested for chlamydia in 2021 and had known sexual orientation or sex of sex partners, 6.5% of gay, bisexual and other men who have sex with men (MSM), 14.6% of men who have sex with women only (MSW), and 10.1% 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 MSM aged 19 years and younger (41.7%) and MSW aged 19 years and younger (40.0%).

The COVID-19 pandemic has introduced uncertainty and difficulty in interpreting STD data collected during 2020 and 2021. See Impact of COVID-19 on STDs (https://www.cdc.gov/std/statistics/2021/impact.htm) for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2021/technical-notes.htm) for information on SSuN methodology.

Data points are available at https://www.cdc.gov/std/statistics/2021/data.zip.

Gonorrhea — Reported 2020 and 2021 Cases as a Percentage of 2019 by *MMWR* Week, United States



NOTE: The *MMWR* week is the week of the epidemiologic year for which the case is assigned by the reporting local or state health department. For the weeks displayed, the midpoint of the date range (i.e., the Wednesday of the week) is provided for reference.

Adapted from Pagaoa et al., *Sexually Transmitted Diseases*, 2021

Summary

To quantify the COVID-19 pandemic's potential impact on reported STDs, the number of 2020 and 2021 cases reported for a given *MMWR* week was compared to the number of cases reported in the same week in 2019. The comparison is expressed in terms of the percentage of 2019 cases that were reported. Percentages lower than 100% denote when 2020 or 2021 cases were less than 2019 cases, while percentages higher than 100% indicate when 2020 or 2021 cases were higher than 2019 cases.

In 2020, during *MMWR* weeks 1–11 (December 29, 2019–March 14, 2020), the 2020 cumulative total of reported gonorrhea cases (135,769 cases) was higher than the 2019 cumulative total for the same number of weeks (121,625 cases). In week 12 (week of March 15–21, 2020; the first full week of the emergency declaration for the COVID-19 pandemic), the weekly number of 2020 gonorrhea cases was 89.9% compared to the cases reported by the same *MMWR* week in 2019.

Following week 12 of 2020, the deficit of 2020 cases compared to 2019 cases increased, reaching the lowest relative number of cases reported at week 15 (71.2%; week of April 5–11, 2020). The highest relative number of cases in 2020 after week 12 was in week 36 (132.4%; week of August 30–September 5, 2020). The final number of reported cases of gonorrhea for 2020 (677,769 cases) was 110.0% of the 2019 total (616,392 cases).

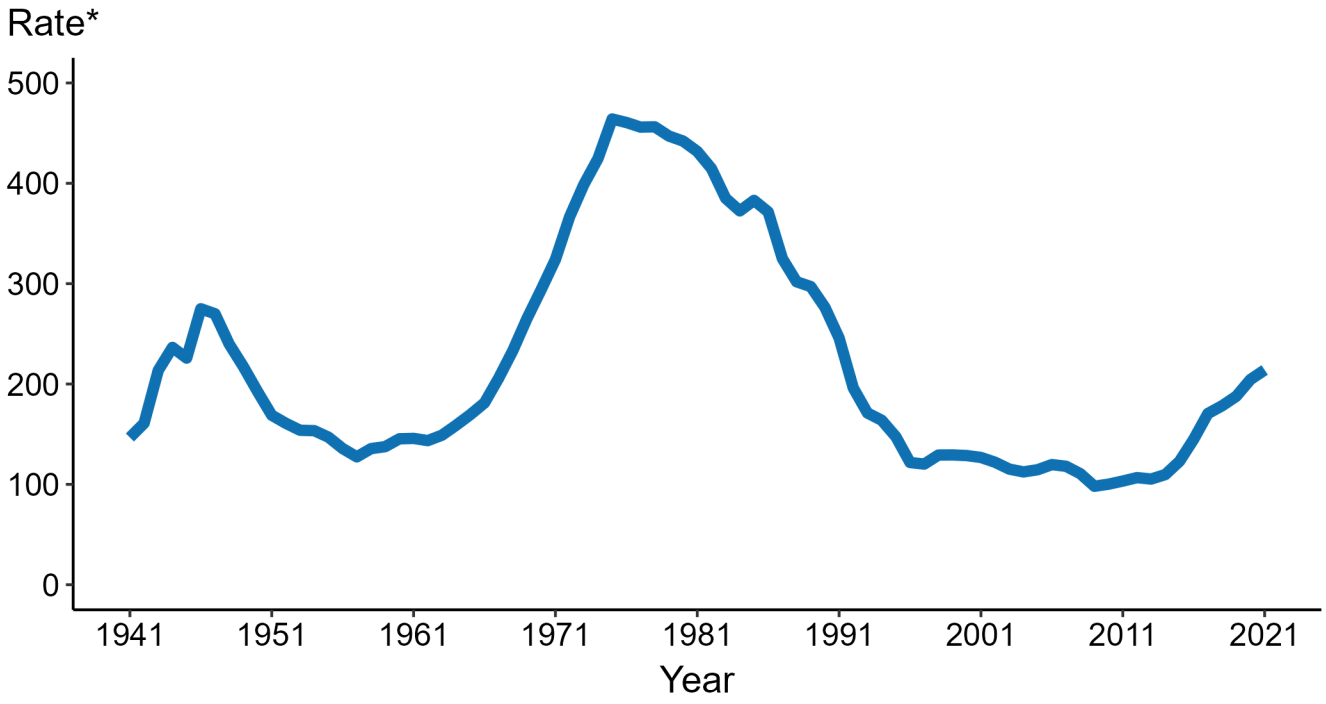
In 2021, the deficit of cases compared to 2019 reached the lowest relative number of cases reported at week 47 (76.4%; week of November 21–27, 2021), while the highest relative number of cases was in week 1 (154.3%; week of January 3–09, 2021). The final number of reported cases of gonorrhea for 2021 (710,151 cases) was 115.2% of the 2019 total (616,392 cases).

The COVID-19 pandemic has introduced uncertainty and difficulty in interpreting STD data collected during 2020 and 2021. See Impact of COVID-19 on STDs (https://www.cdc.gov/std/statistics/2021/impact.htm) for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2021/technical-notes.htm) for information on gonorrhea case reporting.

Data points are available at https://www.cdc.gov/std/statistics/2021/data.zip.

Gonorrhea — Rates of Reported Cases by Year, United States, 1941–2021



* 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.

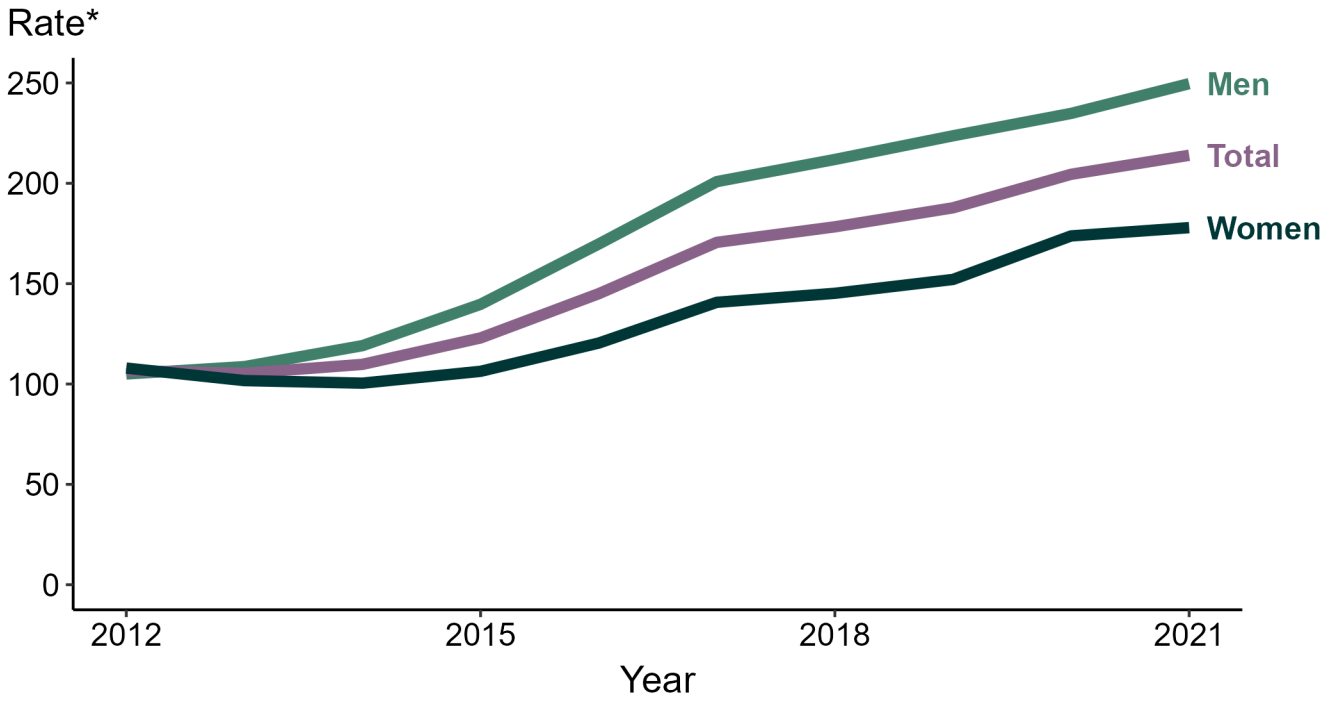
In 2021, a total of 710,151 cases of gonorrhea were reported in the United States. During 2020 to 2021, the rate of reported gonorrhea increased 4.6% (from 204.5 to 214.0 per 100,000).

The COVID-19 pandemic has introduced uncertainty and difficulty in interpreting STD data collected during 2020 and 2021. See Impact of COVID-19 on STDs (https://www.cdc.gov/std/statistics/2021/impact.htm) for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2021/technical-notes.htm) for information on gonorrhea case reporting.

Data points are available at https://www.cdc.gov/std/statistics/2021/data.zip.

Gonorrhea — Rates of Reported Cases by Sex, United States, 2012–2021



* Per 100,000

Summary

During 2020 to 2021, the gonorrhea rate among men increased 6.3% (from 234.8 to 249.7 per 100,000) and the rate among women increased 2.4% (from 173.8 to 177.9 per 100,000).

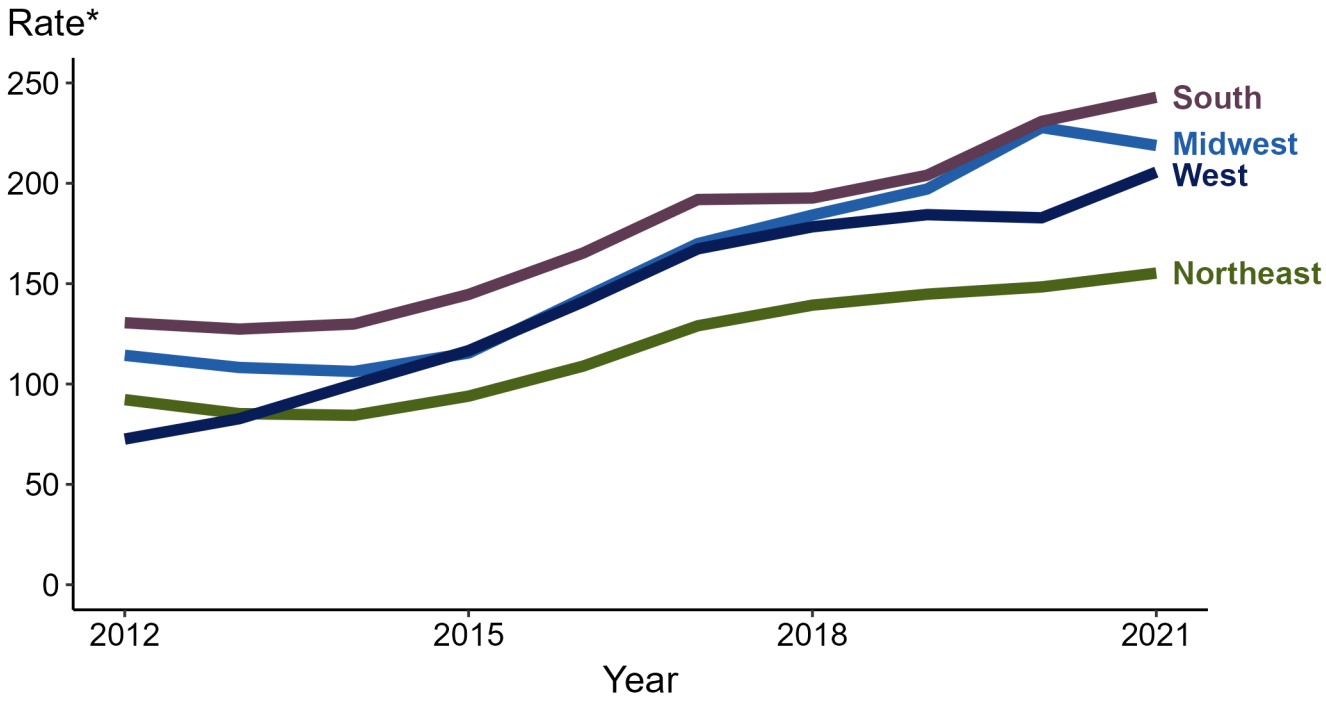
Over the last five years, the gonorrhea rate among women increased 26.4% (from 140.7 to 177.9 per 100,000) and the rate among men increased 24.4% (from 200.8 to 249.7 per 100,000). Over the last 10 years, the gonorrhea rate among men increased 137.8% (from 105.0 to 249.7 per 100,000) and the rate among women increased 64.9% (from 107.9 to 177.9 per 100,000).

The COVID-19 pandemic has introduced uncertainty and difficulty in interpreting STD data collected during 2020 and 2021. See Impact of COVID-19 on STDs (https://www.cdc.gov/std/statistics/2021/impact.htm) for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2021/technical-notes.htm) for information on gonorrhea case reporting.

Data points are available at https://www.cdc.gov/std/statistics/2021/data.zip.

Gonorrhea — Rates of Reported Cases by Region, United States, 2012–2021



* Per 100,000

Summary

In 2021, the South had the highest rate of reported gonorrhea (242.9 cases per 100,000; 5.2% increase from 2020), followed by the Midwest (218.9 cases per 100,000; 3.9% decrease from 2020), the West (205.6 cases per 100,000; 12.5% increase from 2020), and the Northeast (155.3 cases per 100,000; 4.6% increase from 2020).

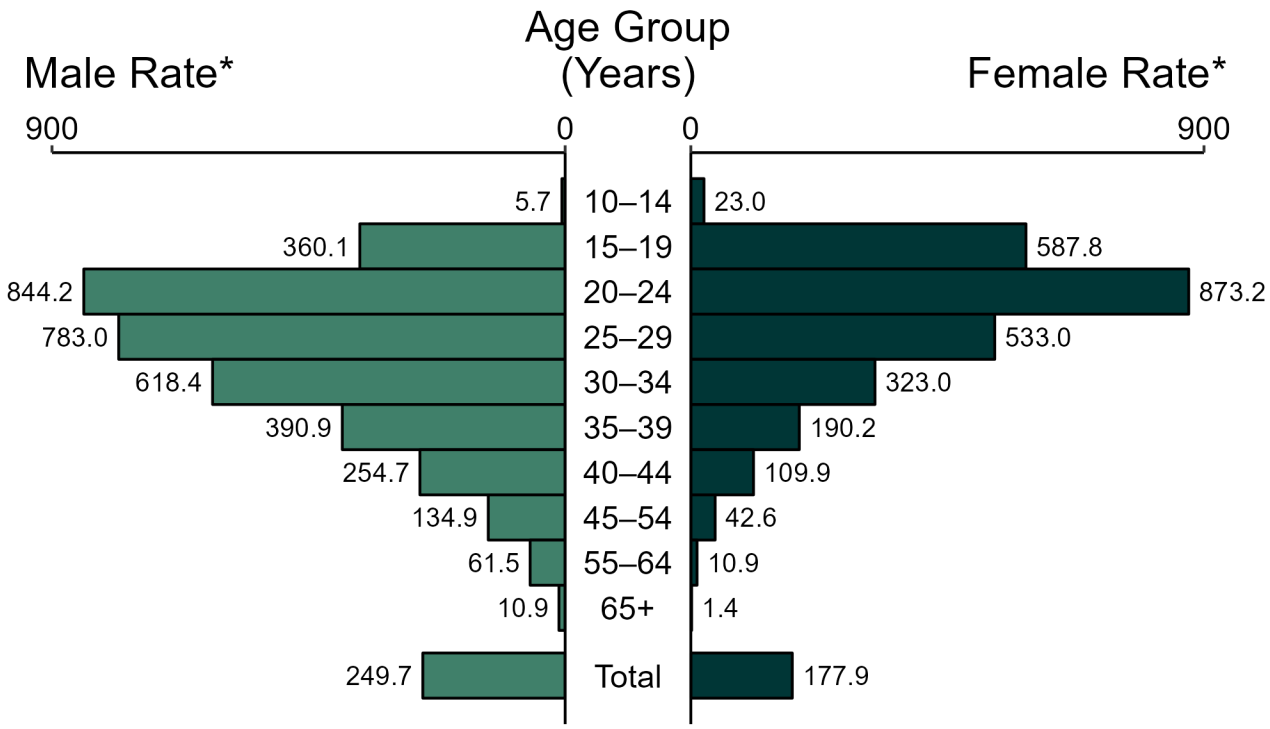
The Midwest had the greatest five-year increase in rates of reported cases of gonorrhea (170.0 to 218.9 per 100,000; 28.8% increase from 2017). The West had the greatest 10-year increase in rates of reported cases of gonorrhea (72.6 to 205.6 per 100,000; 183.2% increase from 2012).

The COVID-19 pandemic has introduced uncertainty and difficulty in interpreting STD data collected during 2020 and 2021. See Impact of COVID-19 on STDs (https://www.cdc.gov/std/statistics/2021/impact.htm) for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2021/technical-notes.htm) for information on gonorrhea case reporting.

Data points are available at https://www.cdc.gov/std/statistics/2021/data.zip.

Gonorrhea — Rates of Reported Cases by Age Group and Sex, United States, 2021



* Per 100,000

NOTE: Total includes all ages.

Summary

In 2021, the rate of reported gonorrhea was higher among men (249.7 per 100,000) compared to women (177.9 per 100,000).

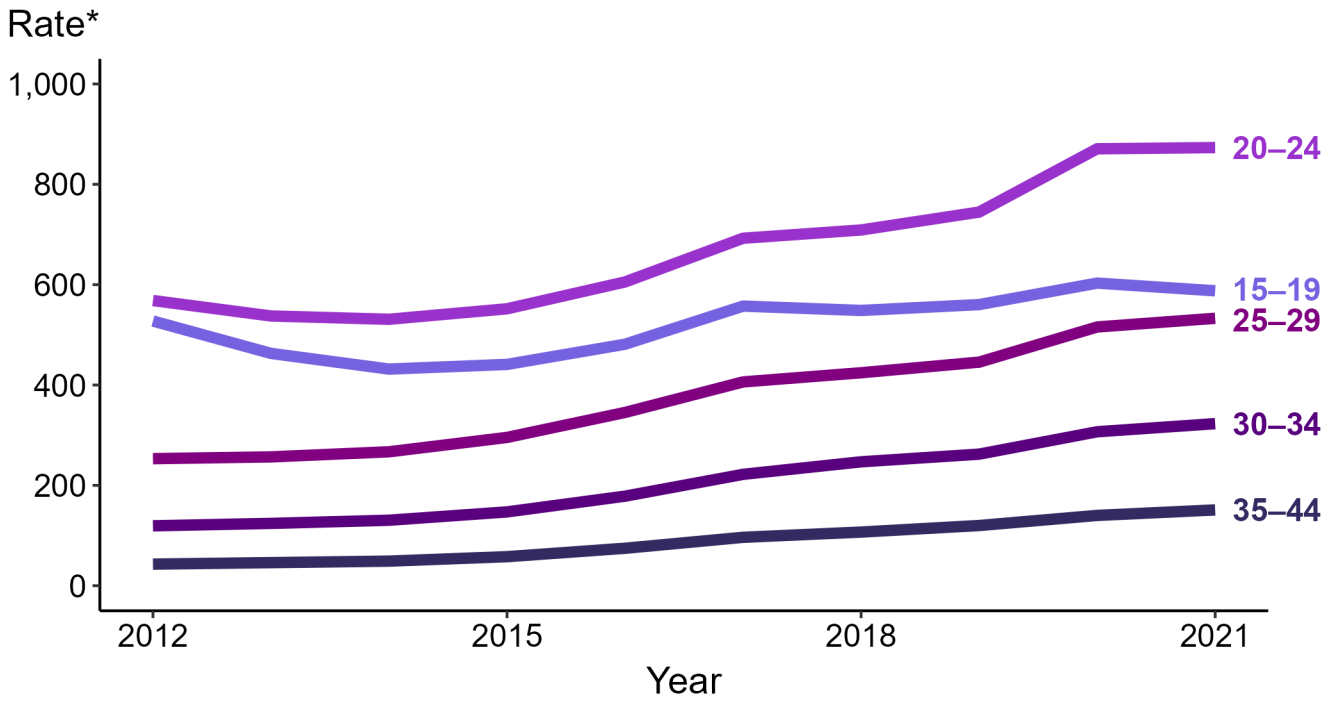
Among men, those aged 20 to 24 years had the highest rate of reported cases of gonorrhea (844.2 per 100,000), followed by men aged 25 to 29 years (783.0 per 100,000) and men aged 30 to 34 years (618.4 per 100,000). Among women, those aged 20 to 24 years also had the highest rate of reported cases of gonorrhea (873.2 per 100,000), followed by women aged 15 to 19 years (587.8 per 100,000) and women aged 25 to 29 years (533.0 per 100,000).

The COVID-19 pandemic has introduced uncertainty and difficulty in interpreting STD data collected during 2020 and 2021. See Impact of COVID-19 on STDs (https://www.cdc.gov/std/statistics/2021/impact.htm) for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2021/technical-notes.htm) for information on gonorrhea case reporting.

Data points are available at https://www.cdc.gov/std/statistics/2021/data.zip.

Gonorrhea — Rates of Reported Cases Among Women Aged 15–44 Years by Age Group, United States, 2012–2021



* Per 100,000

Summary

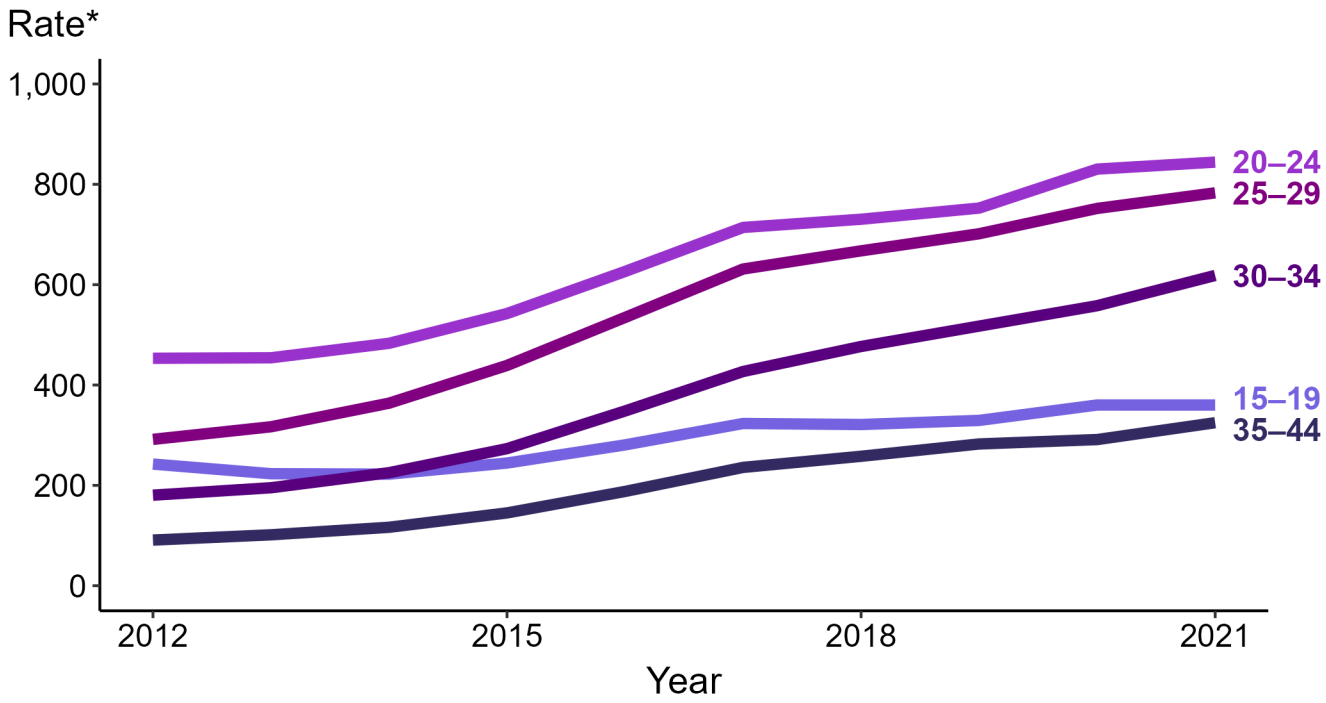
Among women aged 15 to 44 years in 2021, those aged 20 to 24 years had the highest rate of reported cases of gonorrhea (873.2 cases per 100,000; 0.3% increase from 2020), followed by those aged 15 to 19 years (587.8 cases per 100,000; 2.5% decrease from 2020), those aged 25 to 29 years (533.0 cases per 100,000; 3.4% increase from 2020), those aged 30 to 34 years (323.0 cases per 100,000; 5.3% increase from 2020), and those aged 35 to 44 years (151.0 cases per 100,000; 7.8% increase from 2020).

The COVID-19 pandemic has introduced uncertainty and difficulty in interpreting STD data collected during 2020 and 2021. See Impact of COVID-19 on STDs (https://www.cdc.gov/std/statistics/2021/impact.htm) for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2021/technical-notes.htm) for information on gonorrhea case reporting.

Data points are available at https://www.cdc.gov/std/statistics/2021/data.zip.

Gonorrhea — Rates of Reported Cases Among Men Aged 15–44 Years by Age Group, United States, 2012–2021



* Per 100,000

Summary

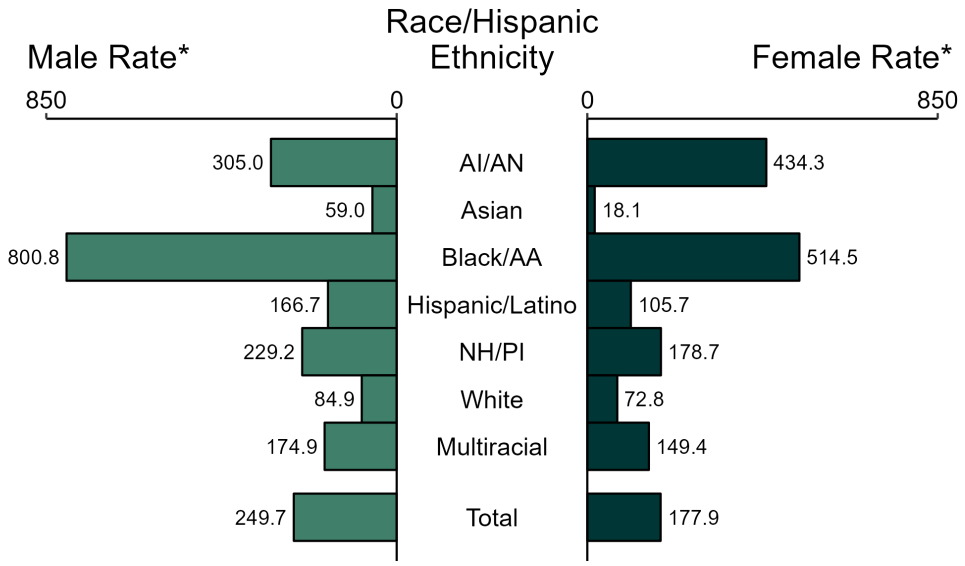
Among men aged 15 to 44 years in 2021, those aged 20 to 24 years had the highest rate of reported cases of gonorrhea (844.2 cases per 100,000; 1.7% increase from 2020), followed by those aged 25 to 29 years (783.0 cases per 100,000; 4.1% increase from 2020), those aged 30 to 34 years (618.4 cases per 100,000; 10.8% increase from 2020), those aged 15 to 19 years (360.1 cases per 100,000; no change from 2020), and those aged 35 to 44 years (324.9 cases per 100,000; 11.5% increase from 2020).

The COVID-19 pandemic has introduced uncertainty and difficulty in interpreting STD data collected during 2020 and 2021. See Impact of COVID-19 on STDs (https://www.cdc.gov/std/statistics/2021/impact.htm) for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2021/technical-notes.htm) for information on gonorrhea case reporting.

Data points are available at https://www.cdc.gov/std/statistics/2021/data.zip.

Gonorrhea — Rate of Reported Cases by Race/Hispanic Ethnicity and Sex, United States, 2021



* 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 2021, the rate of reported gonorrhea was higher among men (249.7 per 100,000) compared to women (177.9 per 100,000).

Among men, non-Hispanic Black or African American men had the highest rate of reported cases of gonorrhea (800.8 per 100,000), followed by non-Hispanic American Indian or Alaska Native men (305.0 per 100,000) and non-Hispanic Native Hawaiian or other Pacific Islander men (229.2 per 100,000). Among women, non-Hispanic Black or African American women also had the highest rate of reported cases of gonorrhea (514.5 per 100,000), followed by non-Hispanic American Indian or Alaska Native women (434.3 per 100,000) and non-Hispanic Native Hawaiian or other Pacific Islander women (178.7 per 100,000).

Using non-Hispanic White persons as the referent category, the greatest racial disparity in rates of reported gonorrhea was observed among non-Hispanic Black or African American men, with a rate ratio of 9.4 times that of non-Hispanic White men. Among women, the greatest disparity was observed among non-Hispanic Black or African American women as well, with a rate 7.1 times that of non-Hispanic White women.

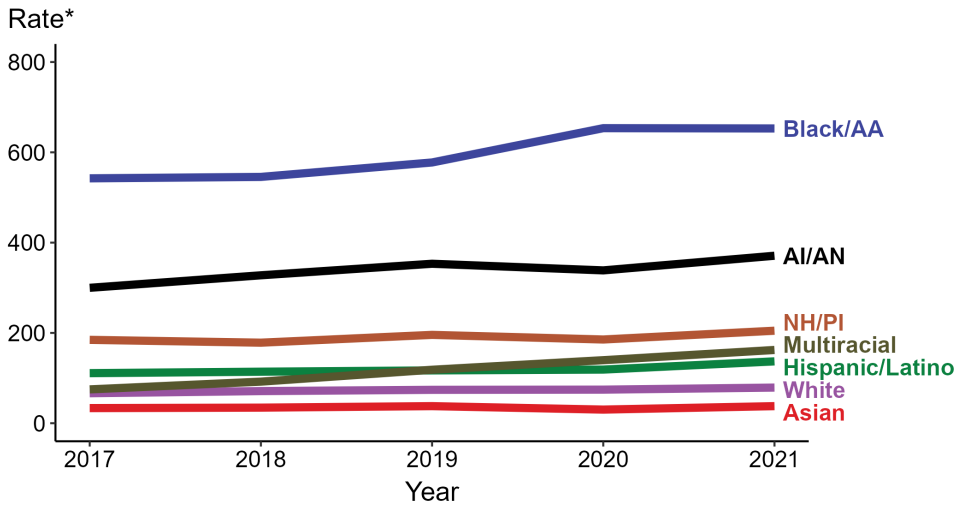
For this figure, race/Hispanic ethnicity is categorized first by reported Hispanic ethnicity, then by reported race. Therefore, cases categorized as Hispanic/Latino can be of any race(s); cases categorized into a race group include both non-Hispanic persons and persons of unknown Hispanic ethnicity. Not all US jurisdictions reported cases in Office of Management and Budget compliant race categories in 2021. This may minimally under- or overestimate rates for Asian, Native Hawaiian or other Pacific Islander, or multiracial individuals. No population data exist for unknown or other race; therefore, rates are not calculated. For completeness, data in this figure include cases reported from all jurisdictions.

The COVID-19 pandemic has introduced uncertainty and difficulty in interpreting STD data collected during 2020 and 2021. See Impact of COVID-19 on STDs (https://www.cdc.gov/std/statistics/2021/impact.htm) for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2021/technical-notes.htm) for information on gonorrhea case reporting and reporting of race/Hispanic ethnicity for STD cases.

Data points are available at https://www.cdc.gov/std/statistics/2021/data.zip.

Gonorrhea — Rates of Reported Cases by Race/Hispanic Ethnicity, United States, 2017–2021



* 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 2021, the highest rate of reported gonorrhea cases per 100,000 persons was among non-Hispanic Black or African American persons (652.9), followed by non-Hispanic American Indian or Alaska Native persons (370.9).

During 2020 to 2021, the greatest increase in rate of reported gonorrhea cases per 100,000 persons was among non-Hispanic Asian persons (30.2 to 37.8; 25.2% increase). Non-Hispanic persons of multiple races had the greatest five-year increase in rate of reported gonorrhea (74.9 to 162.2; 116.6% increase from 2017).

There were no substantial (1.0% or greater) decreases in the rate of reported gonorrhea cases per 100,000 persons among any race/ethnicity group during 2020 to 2021. There were also no decreases in the rate of reported gonorrhea among any race/ethnicity group during 2017 to 2021.

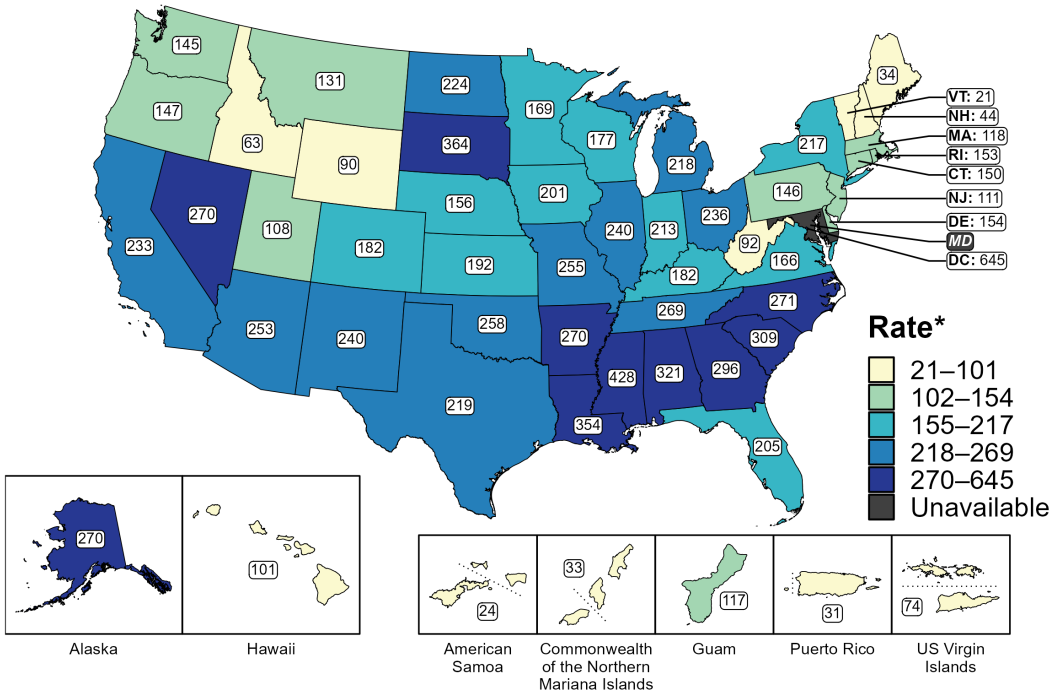
For this figure, race/Hispanic ethnicity is categorized first by reported Hispanic ethnicity, then by reported race. Therefore, cases categorized as Hispanic/Latino can be of any race(s); cases categorized into a race group include both non-Hispanic persons and persons of unknown Hispanic ethnicity. Not all US jurisdictions reported cases in Office of Management and Budget compliant race categories during 2017 to 2021. This may minimally under- or overestimate rates for Asian, Native Hawaiian or other Pacific Islander, or multiracial individuals. No population data exist for unknown or other race; therefore, rates are not calculated. For completeness, data in this figure include cases reported from all jurisdictions.

The COVID-19 pandemic has introduced uncertainty and difficulty in interpreting STD data collected during 2020 and 2021. See Impact of COVID-19 on STDs (https://www.cdc.gov/std/statistics/2021/impact.htm) for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2021/technical-notes.htm) for information on gonorrhea case reporting and reporting of race/Hispanic ethnicity for STD cases.

Data points are available at https://www.cdc.gov/std/statistics/2021/data.zip.

Gonorrhea — Rates of Reported Cases by State, United States and Territories, 2021



* Per 100,000

Summary

In 2021, rates of reported gonorrhea ranged by state from 21 cases per 100,000 population in Vermont to 428 cases per 100,000 population in Mississippi. The rate of reported gonorrhea in the District of Columbia was 645 per 100,000 population. Due to a network security incident in December 2021, the Maryland Department of Health could not finalize their 2021 STD case notification data. 2021 data from Maryland have been suppressed for this figure; however, they are included in national and regional case counts and rates displayed in other figures.

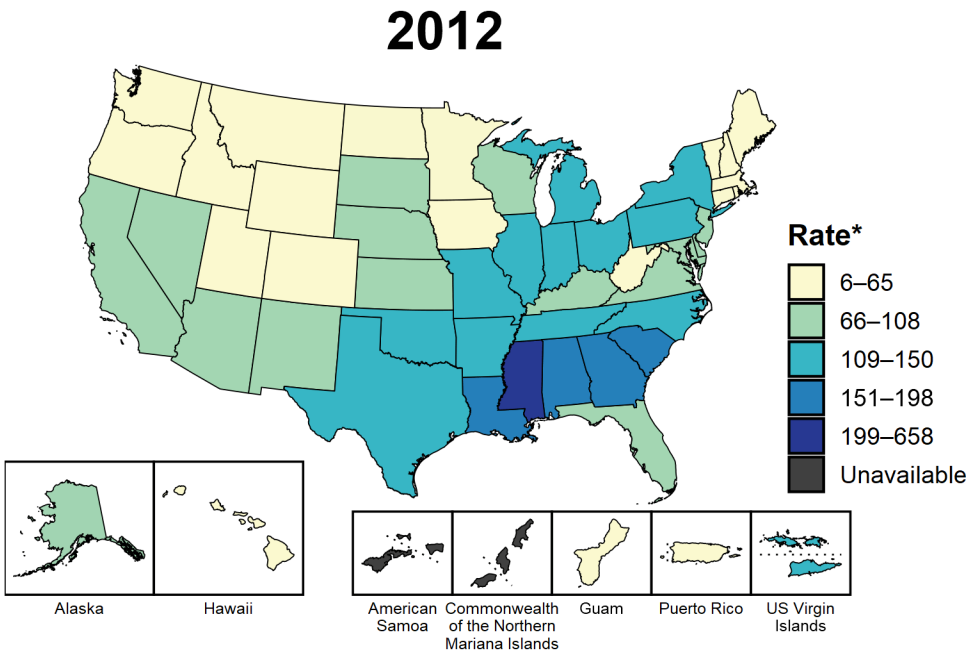
Among US territories, rates of reported gonorrhea ranged from 24 cases per 100,000 population in American Samoa to 117 cases per 100,000 population in Guam.

The COVID-19 pandemic has introduced uncertainty and difficulty in interpreting STD data collected during 2020 and 2021. See Impact of COVID-19 on STDs (https://www.cdc.gov/std/statistics/2021/impact.htm) for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2021/technical-notes.htm) for information on gonorrhea case reporting and on interpreting reported rates in US territories.

Data points are available at https://www.cdc.gov/std/statistics/2021/data.zip.

Gonorrhea — Rates of Reported Cases by State, United States and Territories, 2012–2021



* 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 2012, five states and the District of Columbia (DC; 11.1% of areas with available data) had a rate of reported gonorrhea greater than or equal to 151 cases per 100,000 population. This increased to 34 states and DC (63.6% of areas with available data) in 2021. During 2020 to 2021, rates of reported gonorrhea increased in 27 states, DC, and three territories.

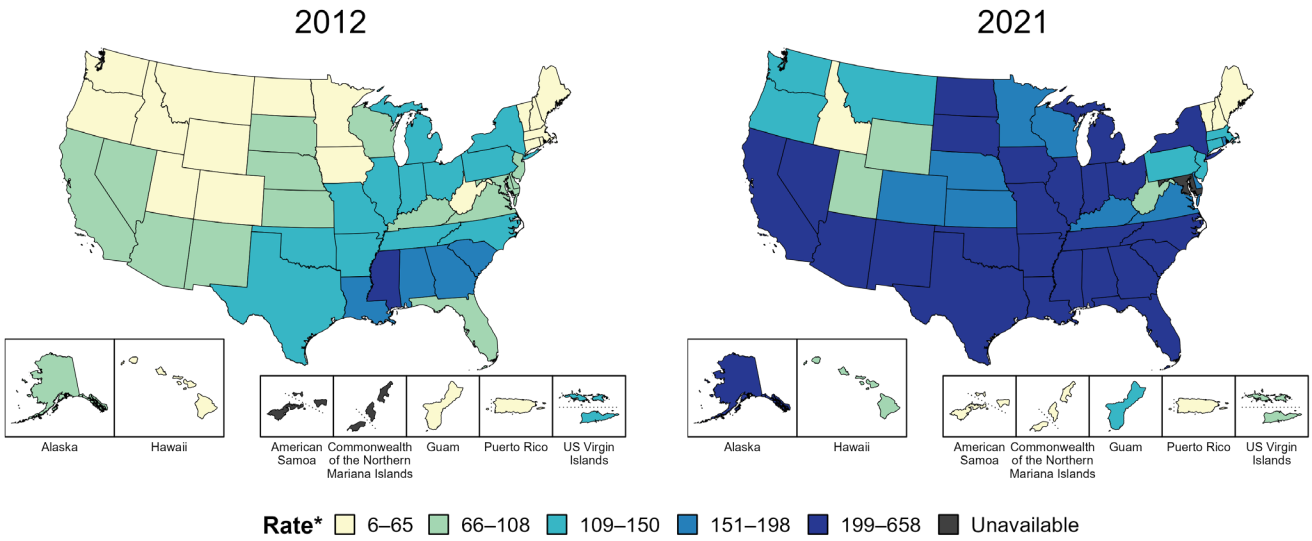
American Samoa and the Commonwealth of the Northern Mariana Islands began reporting data on gonorrhea cases to CDC in 2018; data are not available for those areas prior to that year. In addition, data on reported gonorrhea cases in 2018 are not available for the US Virgin Islands. Due to a network security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

The COVID-19 pandemic has introduced uncertainty and difficulty in interpreting STD data collected during 2020 and 2021. See Impact of COVID-19 on STDs (https://www.cdc.gov/std/statistics/2021/impact.htm) for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2021/technical-notes.htm) for information on gonorrhea case reporting and on interpreting reported rates in US territories.

Data points are available at https://www.cdc.gov/std/statistics/2021/data.zip.

Gonorrhea — Rates of Reported Cases by State, United States and Territories, 2012 and 2021



* Per 100,000

Summary

In 2012, five states and the District of Columbia (DC; 11.1% of areas with available data) had a rate of reported gonorrhea greater than or equal to 151 cases per 100,000 population. This increased to 34 states and DC (63.6% of areas with available data) in 2021.

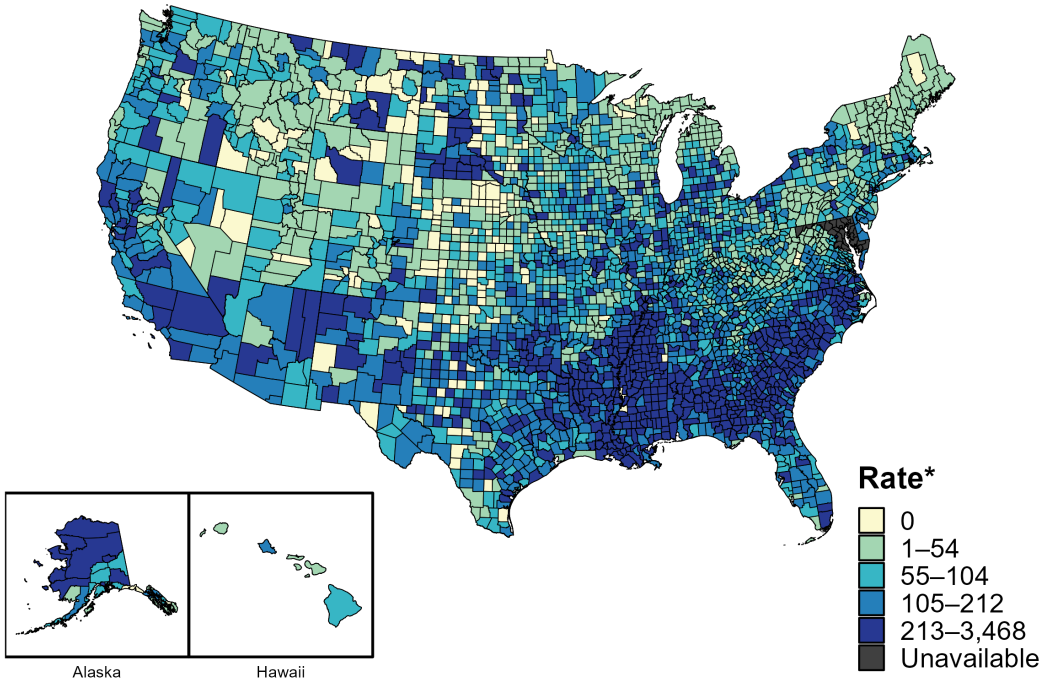
American Samoa and the Commonwealth of the Northern Mariana Islands began reporting data on gonorrhea cases to CDC in 2018; data are not available for those areas prior to that year. Due to a network security incident in December 2021, the Maryland Department of Health could not finalize their 2021 STD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

The COVID-19 pandemic has introduced uncertainty and difficulty in interpreting STD data collected during 2020 and 2021. See Impact of COVID-19 on STDs (https://www.cdc.gov/std/statistics/2021/impact.htm) for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2021/technical-notes.htm) for information on gonorrhea case reporting and on interpreting reported rates in US territories.

Data points are available at https://www.cdc.gov/std/statistics/2021/data.zip.

Gonorrhea — Rates of Reported Cases by County, United States, 2021



* Per 100,000

Summary

In 2021, 94% of counties and county equivalents with available data in the United States reported at least one case of gonorrhea. Out of 3,119 counties and county equivalents with available data, 70 (2%) reported over half of all cases of gonorrhea.

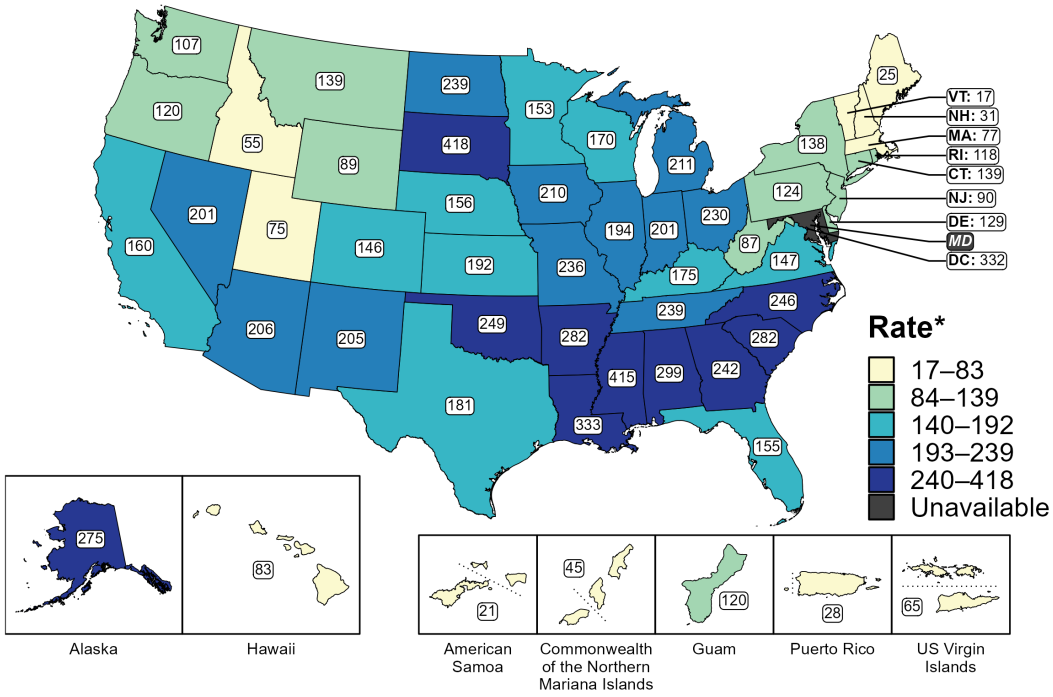
Due to a network security incident in December 2021, the Maryland Department of Health could not finalize their 2021 STD case notification data. 2021 data from Maryland have been suppressed for this figure; however, they are included in national and regional case counts and rates displayed in other figures.

The COVID-19 pandemic has introduced uncertainty and difficulty in interpreting STD data collected during 2020 and 2021. See Impact of COVID-19 on STDs (https://www.cdc.gov/std/statistics/2021/impact.htm) for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2021/technical-notes.htm) for information on gonorrhea case reporting.

Data points are available at https://www.cdc.gov/std/statistics/2021/data.zip.

Gonorrhea — Rates of Reported Cases Among Women by State, United States and Territories, 2021



* Per 100,000

Summary

In 2021, rates of reported gonorrhea among women ranged by state from 17 cases per 100,000 women in Vermont to 418 cases per 100,000 women in South Dakota. The rate of reported gonorrhea in the District of Columbia was 332 per 100,000 women. Due to a network security incident in December 2021, the Maryland Department of Health could not finalize their 2021 STD case notification data. 2021 data from Maryland have been suppressed for this figure; however, they are included in national and regional case counts and rates displayed in other figures.

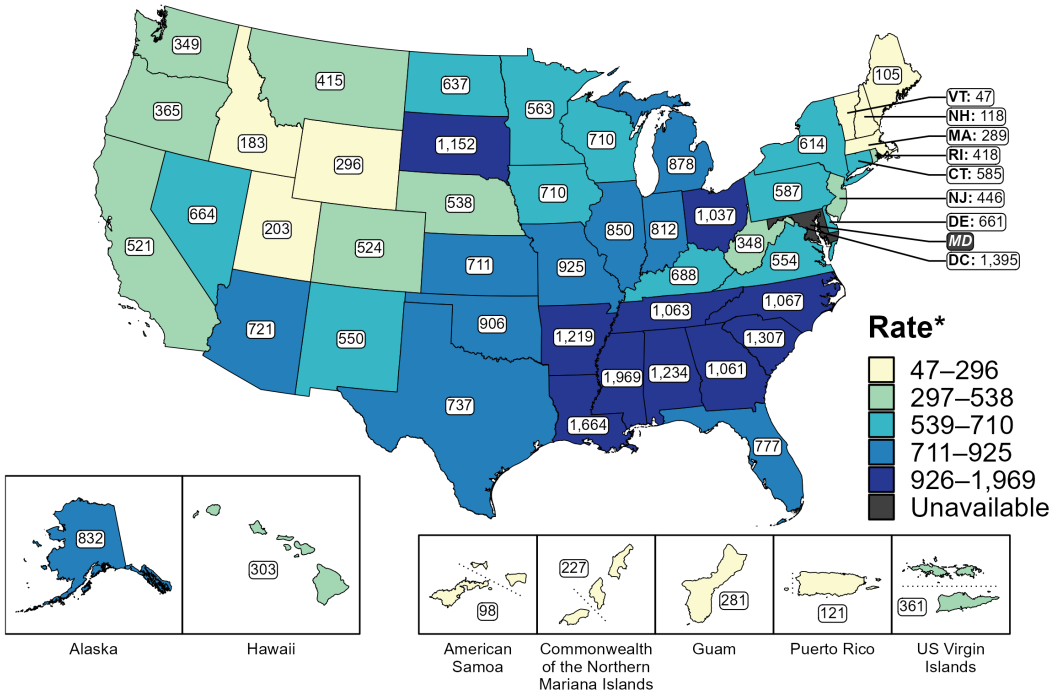
Among US territories, rates of reported gonorrhea ranged from 21 cases per 100,000 women in American Samoa to 120 cases per 100,000 women in Guam.

The COVID-19 pandemic has introduced uncertainty and difficulty in interpreting STD data collected during 2020 and 2021. See Impact of COVID-19 on STDs (https://www.cdc.gov/std/statistics/2021/impact.htm) for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2021/technical-notes.htm) for information on gonorrhea case reporting and on interpreting reported rates in US territories.

Data points are available at https://www.cdc.gov/std/statistics/2021/data.zip.

Gonorrhea — Rates of Reported Cases Among Women Aged 15–24 Years by State, United States and Territories, 2021



* Per 100,000

Summary

In 2021, rates of reported gonorrhea among women aged 15 to 24 years ranged by state from 47 cases per 100,000 women aged 15 to 24 years in Vermont to 1,969 cases per 100,000 women aged 15 to 24 years in Mississippi. The rate of reported gonorrhea in the District of Columbia was 1,395 per 100,000 women aged 15 to 24 years. Due to a network security incident in December 2021, the Maryland Department of Health could not finalize their 2021 STD case notification data. 2021 data from Maryland have been suppressed for this figure; however, they are included in national and regional case counts and rates displayed in other figures.

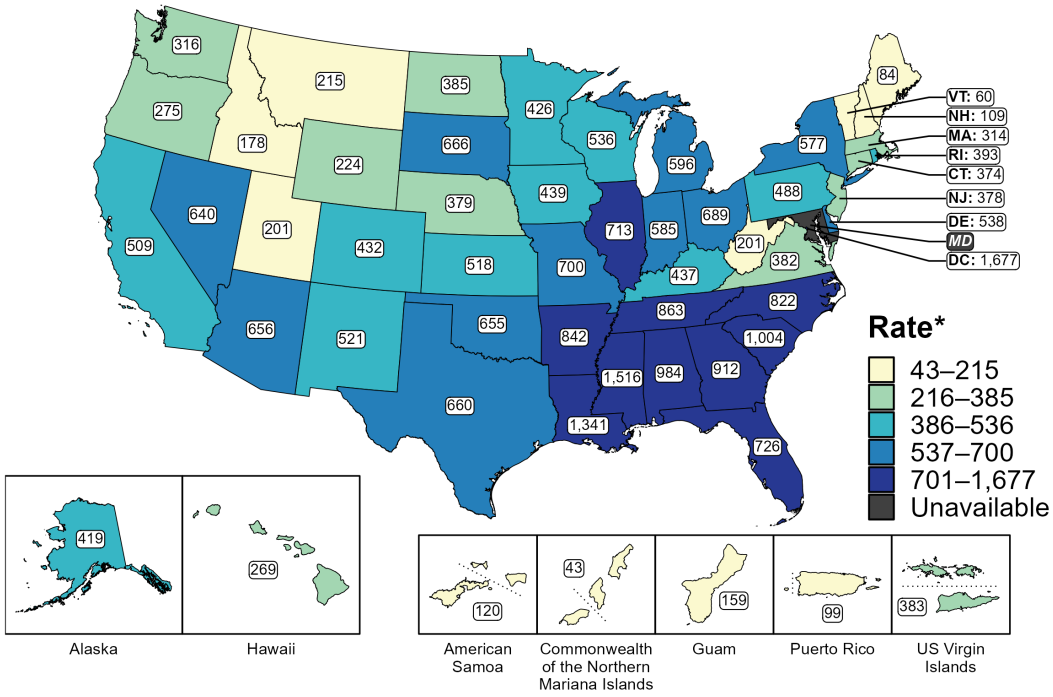
Among US territories, rates of reported gonorrhea ranged from 98 cases per 100,000 women aged 15 to 24 years in American Samoa to 361 cases per 100,000 women aged 15 to 24 years in the US Virgin Islands.

The COVID-19 pandemic has introduced uncertainty and difficulty in interpreting STD data collected during 2020 and 2021. See Impact of COVID-19 on STDs (https://www.cdc.gov/std/statistics/2021/impact.htm) for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2021/technical-notes.htm) for information on gonorrhea case reporting and on interpreting reported rates in US territories.

Data points are available at https://www.cdc.gov/std/statistics/2021/data.zip.

Gonorrhea — Rates of Reported Cases Among Men Aged 15–24 Years by State, United States and Territories, 2021



* Per 100,000

Summary

In 2021, rates of reported gonorrhea among men aged 15 to 24 years ranged by state from 60 cases per 100,000 men aged 15 to 24 years in Vermont to 1,516 cases per 100,000 men aged 15 to 24 years in Mississippi. The rate of reported gonorrhea in the District of Columbia was 1,677 per 100,000 men aged 15 to 24 years. Due to a network security incident in December 2021, the Maryland Department of Health could not finalize their 2021 STD case notification data. 2021 data from Maryland have been suppressed for this figure; however, they are included in national and regional case counts and rates displayed in other figures.

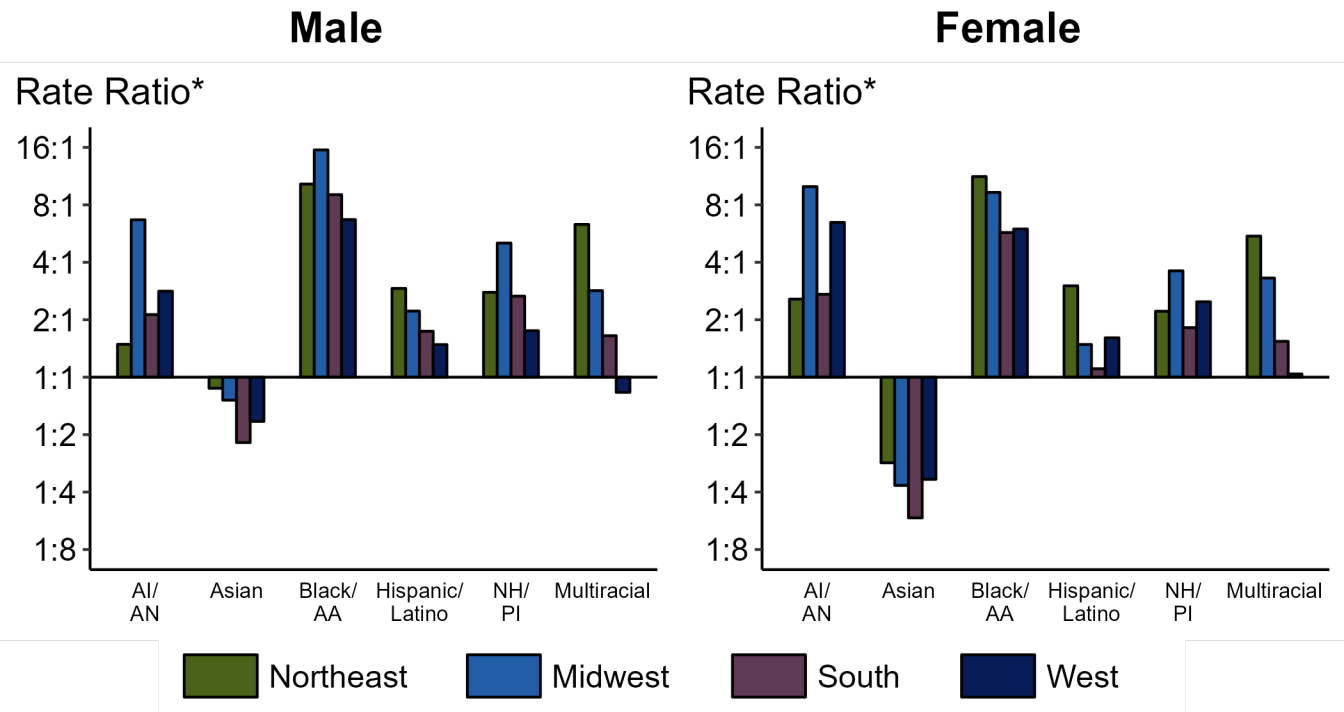
Among US territories, rates of reported gonorrhea ranged from 43 cases per 100,000 men aged 15 to 24 years in the Commonwealth of the Northern Mariana Islands to 383 cases per 100,000 men aged 15 to 24 years in the US Virgin Islands.

The COVID-19 pandemic has introduced uncertainty and difficulty in interpreting STD data collected during 2020 and 2021. See Impact of COVID-19 on STDs (https://www.cdc.gov/std/statistics/2021/impact.htm) for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2021/technical-notes.htm) for information on gonorrhea case reporting and on interpreting reported rates in US territories.

Data points are available at https://www.cdc.gov/std/statistics/2021/data.zip.

Gonorrhea — Ratios of Rates of Reported Cases by Sex, Race/Hispanic Ethnicity, and Region, United States, 2021



* 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 2021. Among men, the greatest rate ratio was in the Midwest where the rate of gonorrhea among non-Hispanic Black men was 15.5 times the rate among non-Hispanic White men. Among women, the greatest rate ratio was in the Northeast where the rate of gonorrhea among non-Hispanic Black women was 11.3 times the rate among non-Hispanic White women.

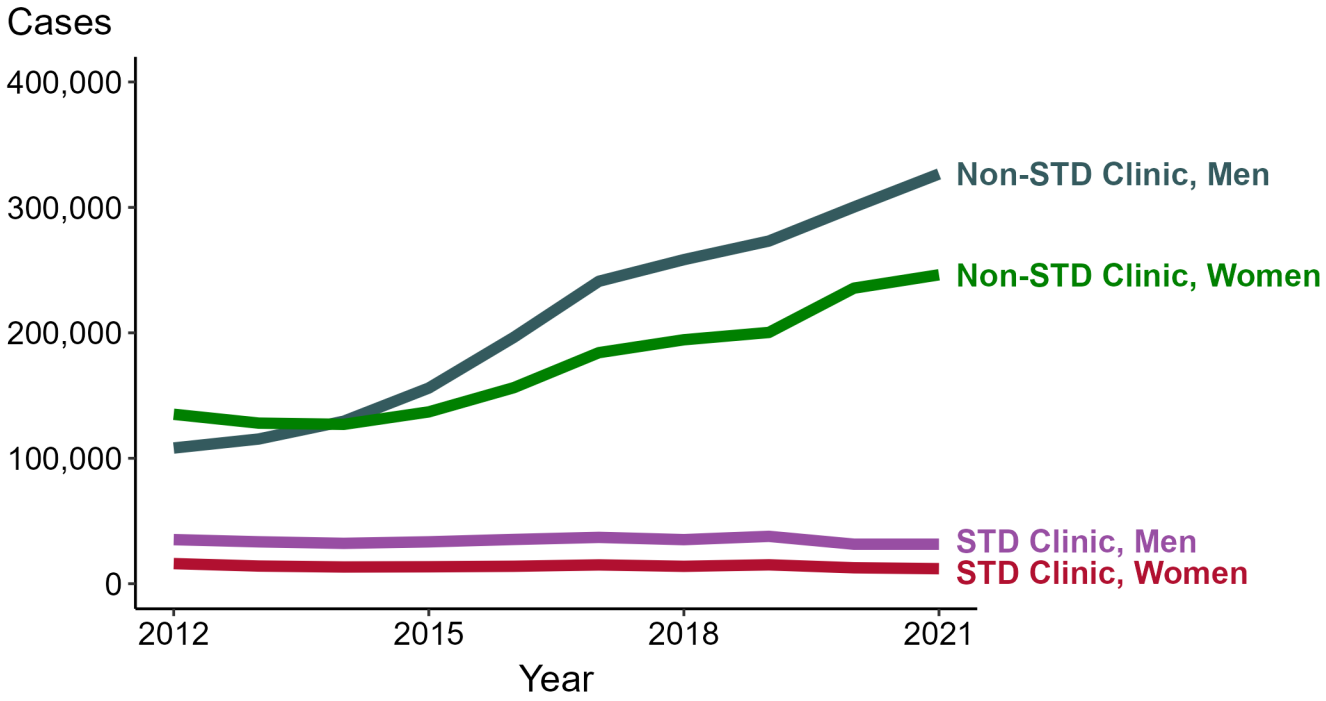
For this figure, race/Hispanic ethnicity is categorized first by reported Hispanic ethnicity, then by reported race. Therefore, cases categorized as Hispanic/Latino can be of any race(s); cases categorized into a race group include both non-Hispanic persons and persons of unknown Hispanic ethnicity. Not all US jurisdictions reported cases in Office of Management and Budget compliant race categories in 2021. This may minimally under- or overestimate rates for Asian, Native Hawaiian or other Pacific Islander, or multiracial individuals. No population data exist for unknown or other race; therefore, rates and rate ratios are not calculated. For completeness, data in this figure include cases reported from all jurisdictions.

The COVID-19 pandemic has introduced uncertainty and difficulty in interpreting STD data collected during 2020 and 2021. See Impact of COVID-19 on STDs (https://www.cdc.gov/std/statistics/2021/impact.htm) for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2021/technical-notes.htm) for information on gonorrhea case reporting and reporting of race/Hispanic ethnicity for STD cases.

Data points are available at https://www.cdc.gov/std/statistics/2021/data.zip.

Gonorrhea — Reported Cases by Reporting Source and Sex, United States, 2012–2021



NOTE: During 2012 to 2021, the proportion of all male cases with unknown reporting source was 13.6%, from a low of 11.9% in 2012 to a high of 14.4% in 2019.

Summary

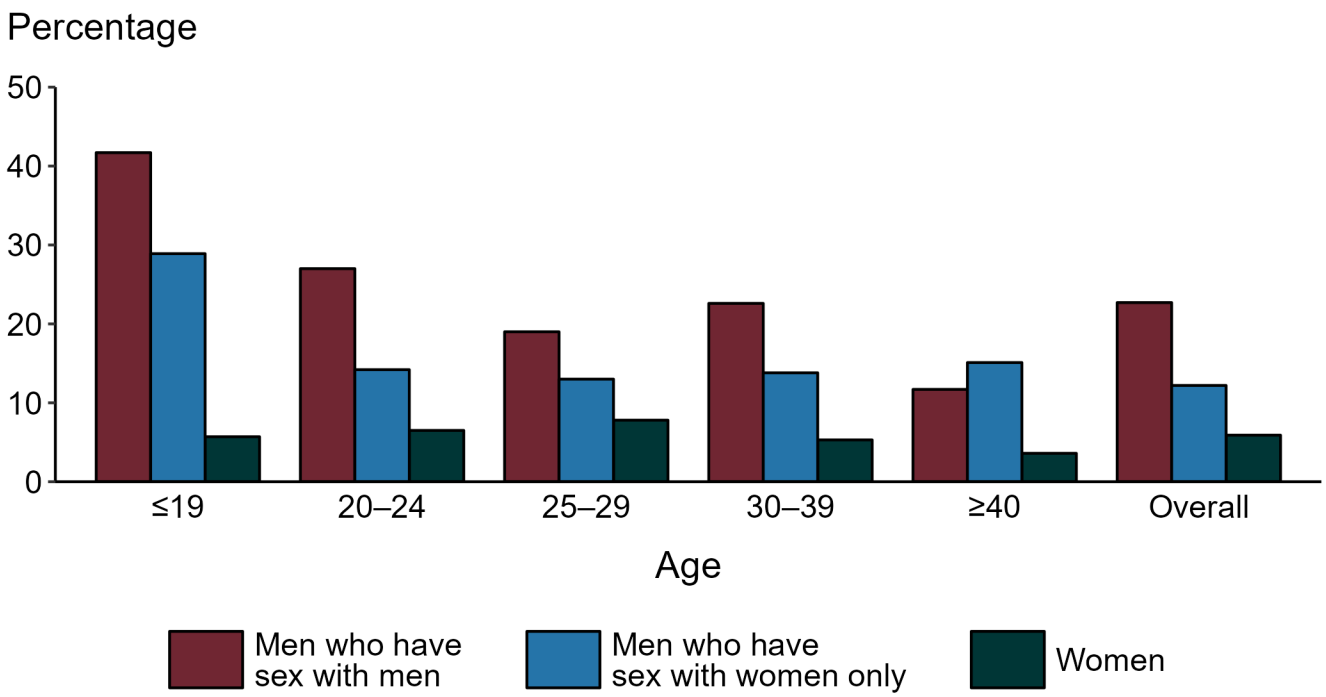
During 2012 to 2021, the number of gonorrhea cases reported from STD clinics decreased 10.3% among men (35,150 to 31,512 cases) and decreased 25.2% among women (16,035 to 11,990 cases), while the number of cases reported from non-STD clinics increased 202.0% among men (108,175 to 326,647 cases) and increased 82.3% among women (135,078 to 246,270 cases).

The COVID-19 pandemic has introduced uncertainty and difficulty in interpreting STD data collected during 2020 and 2021. See Impact of COVID-19 on STDs (https://www.cdc.gov/std/statistics/2021/impact.htm) for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2021/technical-notes.htm) for information on gonorrhea case reporting.

Data points are available at https://www.cdc.gov/std/statistics/2021/data.zip.

Gonorrhea — Proportion of STD Clinic Patients Testing Positive by Age Group, Sex, and Sex of Sex Partners, STD Surveillance Network (SSuN), 2021



NOTE: Results are based on data obtained from 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 2021 (n=47,139).

Summary

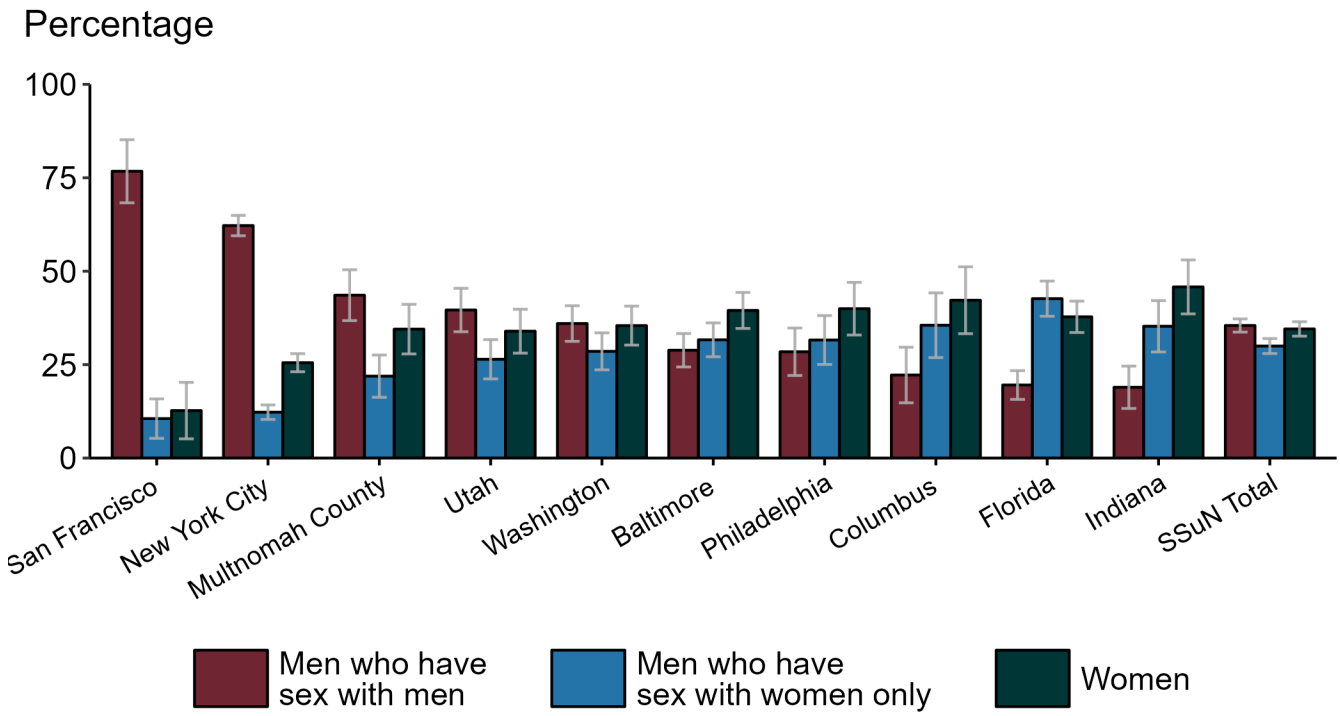
Among patients accessing care in participating STD clinics in the STD Surveillance Network (SSuN) who were tested for gonorrhea in 2021, 22.7% of gay, bisexual, and other men who have sex with men (MSM), 12.2% of men who have sex with women only (MSW), and 5.9% of women were positive. The proportion 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.

The COVID-19 pandemic has introduced uncertainty and difficulty in interpreting STD data collected during 2020 and 2021. See Impact of COVID-19 on STDs (https://www.cdc.gov/std/statistics/2021/impact.htm) for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2021/technical-notes.htm) for information on SSuN methodology.

Data points are available at https://www.cdc.gov/std/statistics/2021/data.zip.

Gonorrhea — Estimated Proportion of Cases by Sex and Sex of Sex Partners and Jurisdiction, STD Surveillance Network (SSuN), 2021



NOTE: Estimate based on weighted analysis of data on sex of sex partners obtained from interviews (n=5,312) conducted among a random sample of gonorrhea cases reported to participating SSuN jurisdictions during January to December 2021. Includes ten SSuN sites reporting completed case investigations in 2021 for at least 2% of all reported cases.

Summary

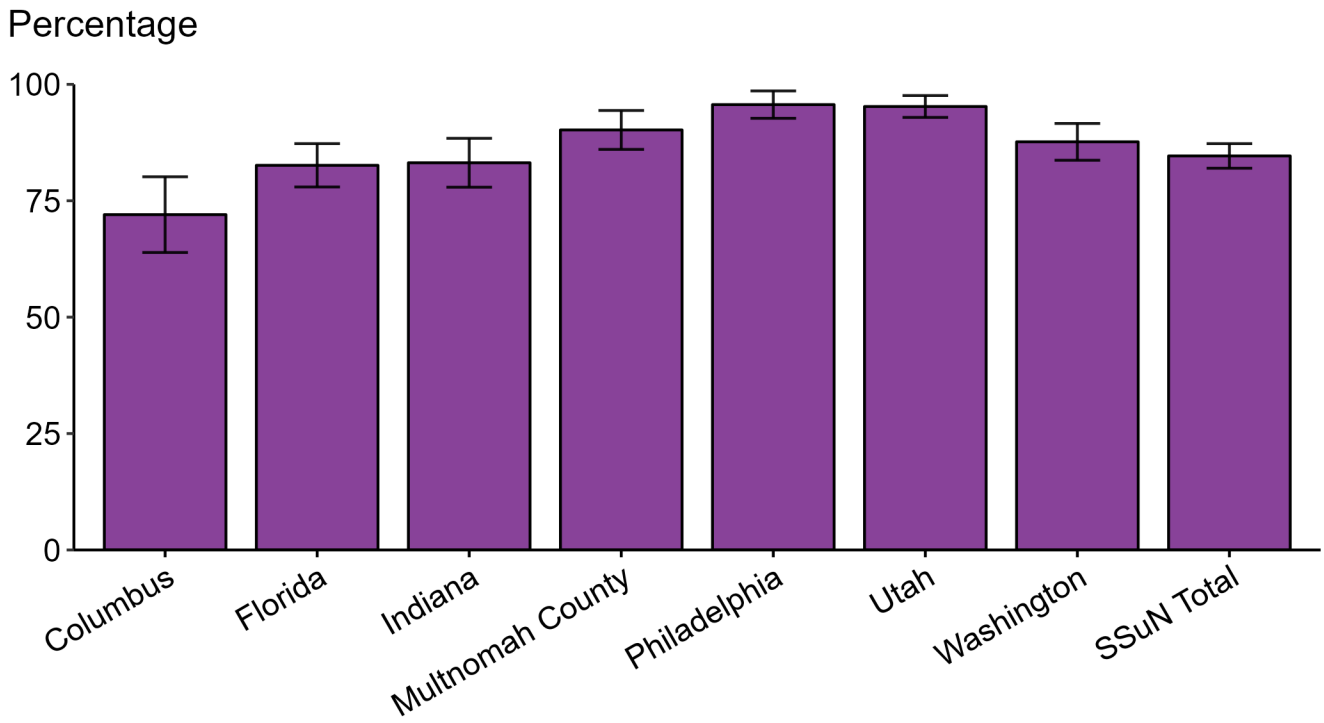
In 2021, San Francisco had the highest proportion of gonorrhea cases reported among gay, bisexual, and other men who have sex with men (MSM) among participating SSuN jurisdictions, Indiana had the highest proportion of gonorrhea cases reported among women, and Florida had the highest proportion of gonorrhea cases reported among men who have sex with women only. Overall, the proportion of gonorrhea estimated to be attributed to MSM was 35.5% in 2021.

The COVID-19 pandemic has introduced uncertainty and difficulty in interpreting STD data collected during 2020 and 2021. See Impact of COVID-19 on STDs (https://www.cdc.gov/std/statistics/2021/impact.htm) for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2021/technical-notes.htm) for information on SSuN methodology.

Data points are available at https://www.cdc.gov/std/statistics/2021/data.zip.

Gonorrhea — Estimated Proportion of Cases Treated with Recommended Regimen by Jurisdiction, STD Surveillance Network (SSuN), 2021



NOTE: Includes SSuN jurisdictions with treatment and dosage data ascertained for at least 80% of sampled, investigated cases. In 2021, the recommended treatment for uncomplicated gonorrhea was ceftriaxone 500 mg, intramuscular.

Summary

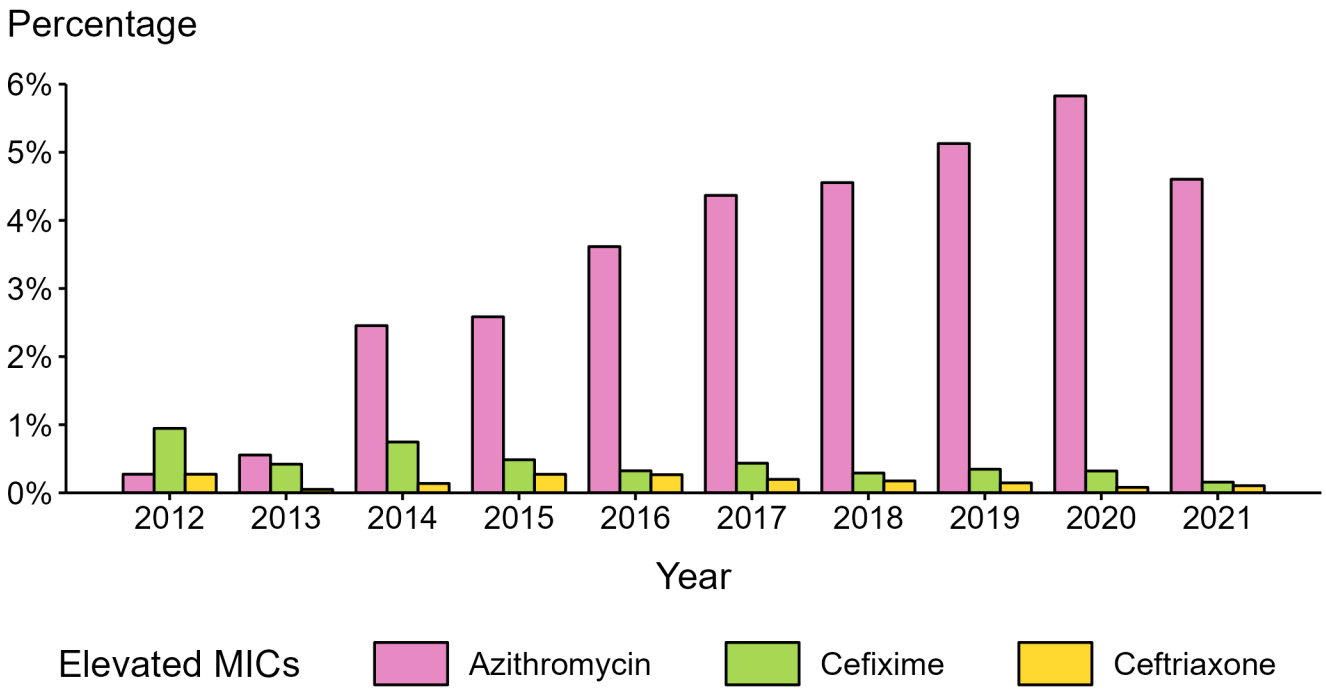
In 2021, Philadelphia reported the highest estimated proportion of gonorrhea cases treated with the recommended regimen and Columbus reported the lowest proportion of cases treated with the recommended regimen among selected jurisdictions participating in SSuN. Overall, the proportion of cases treated with the recommended regimen was 84.6% in 2021.

The COVID-19 pandemic has introduced uncertainty and difficulty in interpreting STD data collected during 2020 and 2021. See Impact of COVID-19 on STDs (https://www.cdc.gov/std/statistics/2021/impact.htm) for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2021/technical-notes.htm) for information on SSuN methodology.

Data points are available at https://www.cdc.gov/std/statistics/2021/data.zip.

Neisseria gonorrhoeae — Percentage of Isolates with Elevated Minimum Inhibitory Concentrations (MICs) to Azithromycin, Cefixime, and Ceftriaxone, Gonococcal Isolate Surveillance Project (GISP), 2012–2021



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

Summary

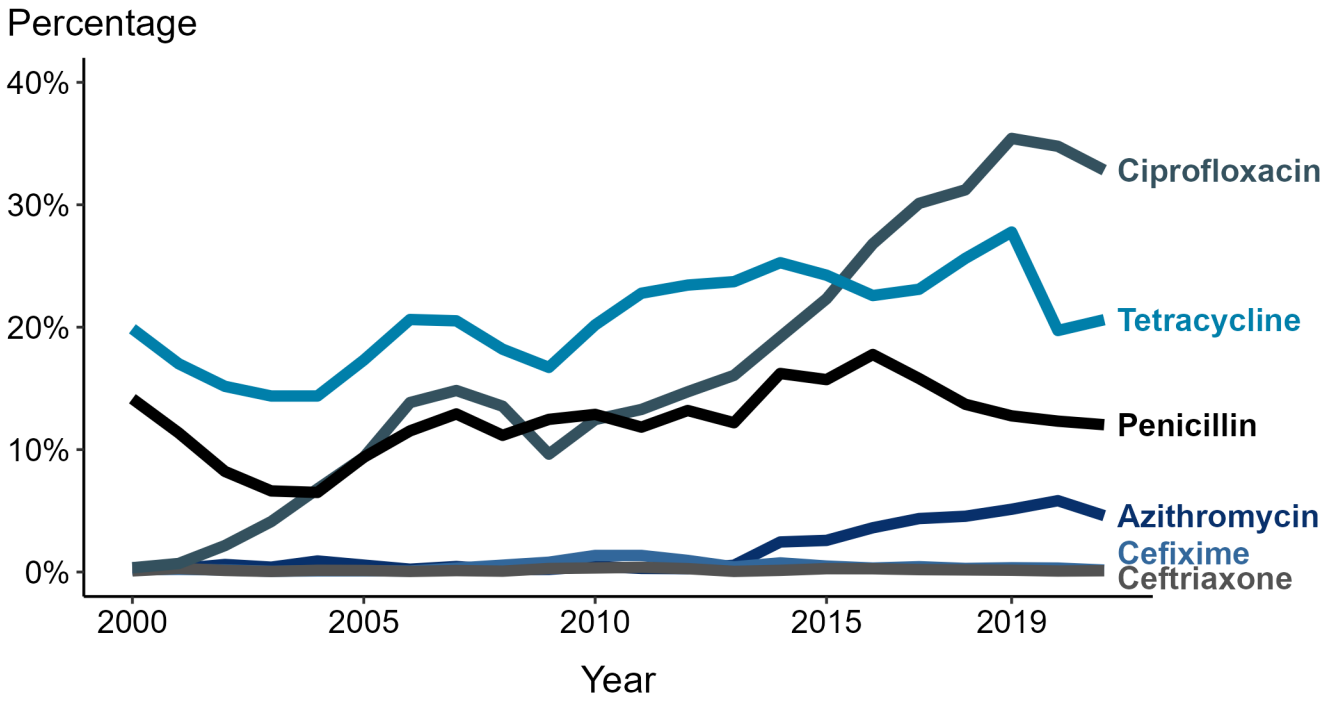
During 2012–2021, the percentage of *Neisseria gonorrhoeae* isolates collected in STD clinics participating in GISP that exhibited elevated ceftriaxone minimum inhibitory concentrations (MICs), defined as ≥ 0.125 µg/mL, fluctuated between 0.1% and 0.3%. In 2021, 0.1% of isolates had elevated ceftriaxone MICs. The percentage of isolates with elevated cefixime MICs (≥ 0.25 µg/mL) declined from 1.4% in 2011 to 0.2% in 2021. During 2012–2014, the percentage of isolates with elevated azithromycin MICs (≥ 2 µg/mL) ranged from 0.3% to 2.5% with a sharp increase during 2013–2014 (0.6% to 2.5%); the percentage continuously increased to a peak of 5.8% in 2020 and is 4.6% in 2021.

The COVID-19 pandemic has introduced uncertainty and difficulty in interpreting STD data collected during 2020 and 2021. See Impact of COVID-19 on STDs (https://www.cdc.gov/std/statistics/2021/impact.htm) for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2021/technical-notes.htm) for information on GISP methodology.

Data points are available at https://www.cdc.gov/std/statistics/2021/data.zip.

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), 2000–2021



* 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 29 (2000–2004); ≥ 2.0 µg/mL (2005–2020); Ceftriaxone: MIC ≥ 0.125 µg/mL; Cefixime: MIC ≥ 0.25 µg/mL

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

Summary

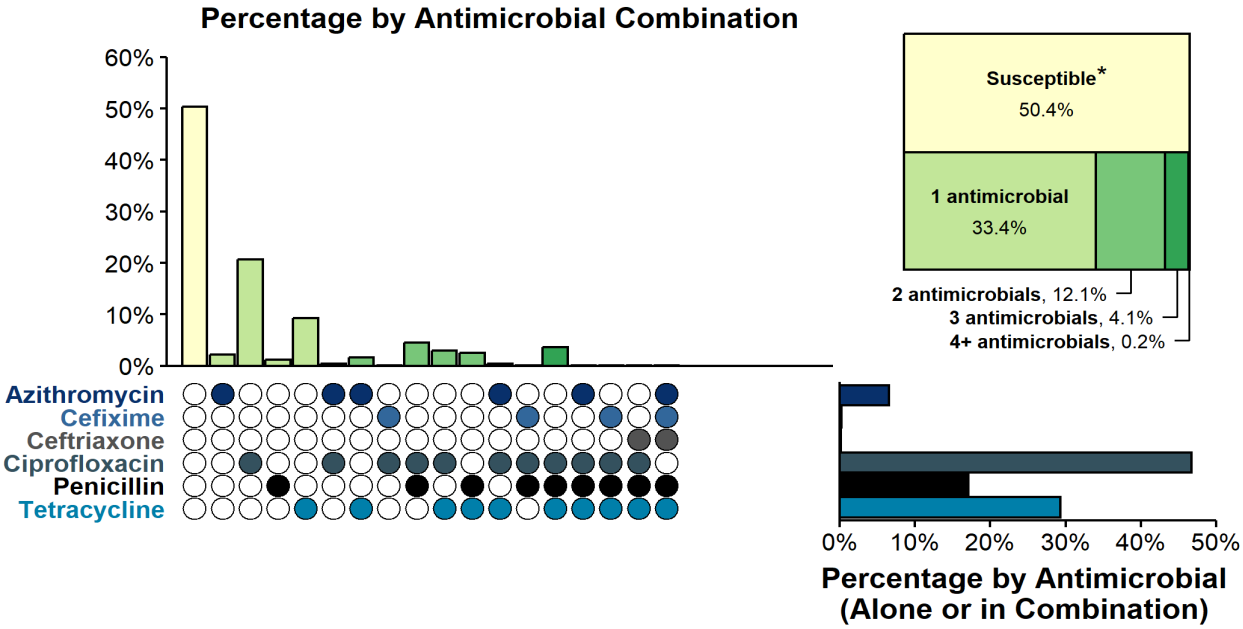
In 2021, 32.8% of *Neisseria gonorrhoeae* isolates collected in STD clinics participating in GISP were resistant to ciprofloxacin, 20.6% to tetracycline, and 12.0% to penicillin.

The COVID-19 pandemic has introduced uncertainty and difficulty in interpreting STD data collected during 2020 and 2021. See Impact of COVID-19 on STDs (https://www.cdc.gov/std/statistics/2021/impact.htm) for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2021/technical-notes.htm) for information on GISP methodology.

Data points are available at https://www.cdc.gov/std/statistics/2021/data.zip.

Resistance or Elevated Minimum Inhibitory Concentration (MIC) Patterns of *Neisseria gonorrhoeae* Isolates to Antimicrobials, Gonococcal Isolate Surveillance Project (GISP), 2021



* 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

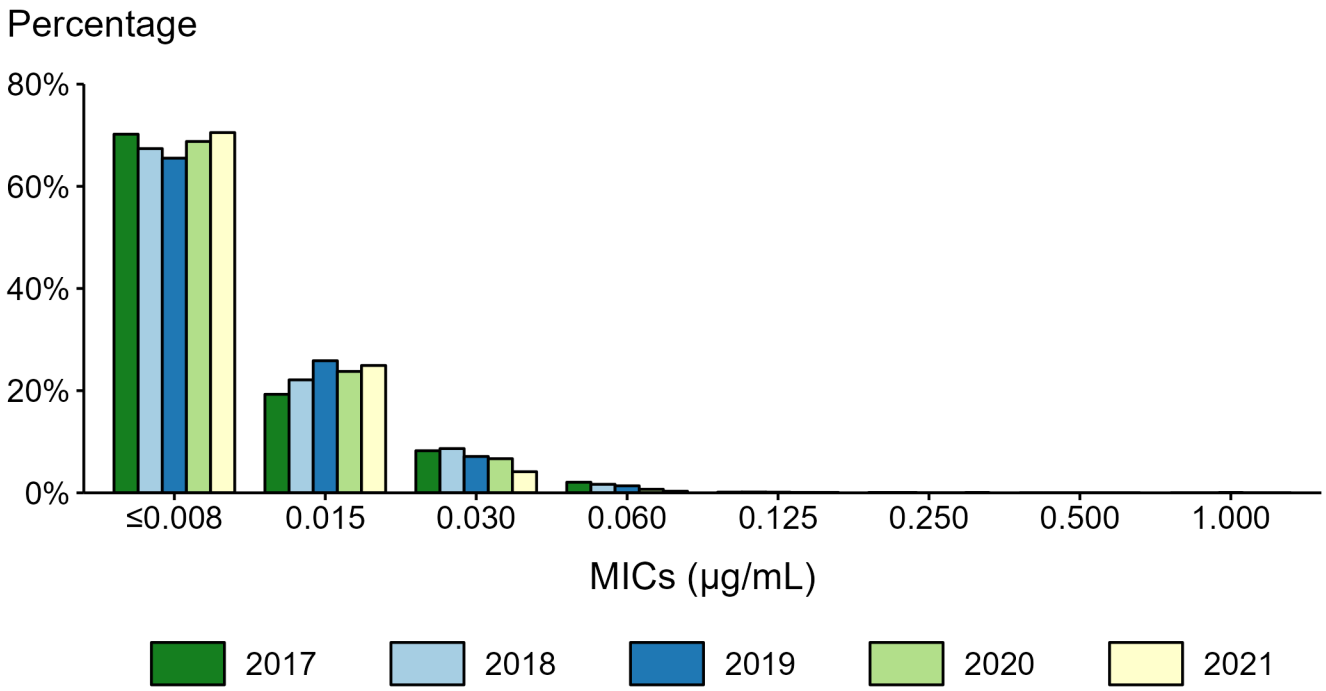
In 2021, 50.4% of *Neisseria gonorrhoeae* isolates collected through GISP were susceptible to the six antimicrobials tested. Less than half (47%) were resistant to at least one of three antimicrobials (tetracycline, penicillin, or ciprofloxacin). An additional 2.2% of isolates were susceptible to those antimicrobials, but had elevated minimum inhibitory concentrations (MICs) to ceftriaxone, cefixime, or azithromycin. Overall, 12.1% of isolates demonstrated resistance or elevated MICs to two antimicrobials tested; 4.1% demonstrated resistance or elevated MICs to three antimicrobials tested. One isolate with an elevated azithromycin MIC also had an elevated ceftriaxone MIC.

The COVID-19 pandemic has introduced uncertainty and difficulty in interpreting STD data collected during 2020 and 2021. See Impact of COVID-19 on STDs (https://www.cdc.gov/std/statistics/2021/impact.htm) for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2021/technical-notes.htm) for information on GISP methodology.

Data points are available at https://www.cdc.gov/std/statistics/2021/data.zip.

Neisseria gonorrhoeae — Distribution of Ceftriaxone Minimum Inhibitory Concentrations (MICs) by Year, Gonococcal Isolate Surveillance Project (GISP), 2017–2021



Summary

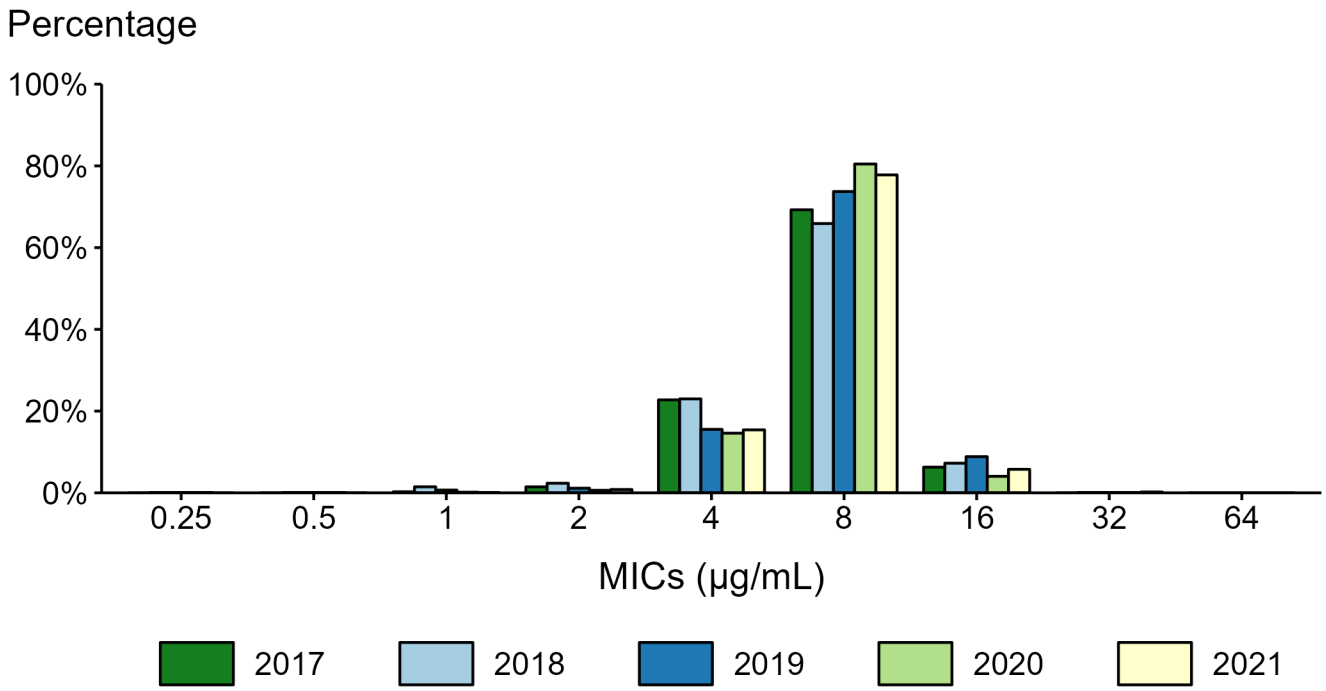
During 2017 to 2021, 65.5–70.5% of all tested *Neisseria gonorrhoeae* isolates collected in STD clinics participating in GISP had a ceftriaxone minimum inhibitory concentration value ≤0.008 µg/mL and 99.8–99.9% had a minimum inhibitory concentration value <0.125 µg/mL.

The COVID-19 pandemic has introduced uncertainty and difficulty in interpreting STD data collected during 2020 and 2021. See Impact of COVID-19 on STDs (https://www.cdc.gov/std/statistics/2021/impact.htm) for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2021/technical-notes.htm) for information on GISP methodology.

Data points are available at https://www.cdc.gov/std/statistics/2021/data.zip.

Neisseria gonorrhoeae — Distribution of Gentamicin Minimum Inhibitory Concentrations (MICs) by Year, Gonococcal Isolate Surveillance Project (GISP), 2017–2021



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

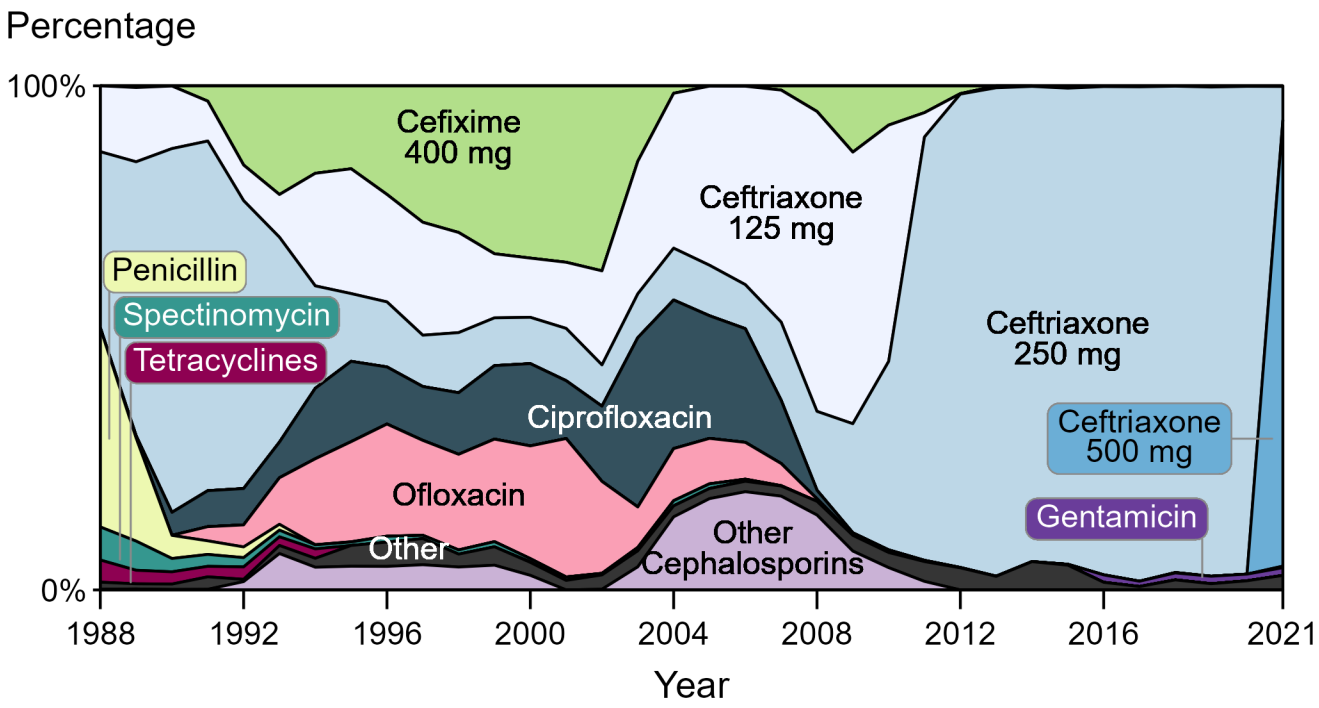
During 2017 to 2021, 65.9–80.5% of all tested *Neisseria gonorrhoeae* isolates collected in STD clinics participating in GISP had a gentamicin minimum inhibitory concentration value of 8 µg/mL. In 2021, 0.2% of all tested *Neisseria gonorrhoeae* isolates had a gentamicin minimum inhibitory concentration above 16 µg/mL.

The COVID-19 pandemic has introduced uncertainty and difficulty in interpreting STD data collected during 2020 and 2021. See Impact of COVID-19 on STDs (https://www.cdc.gov/std/statistics/2021/impact.htm) for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2021/technical-notes.htm) for information on GISP methodology.

Data points are available at https://www.cdc.gov/std/statistics/2021/data.zip.

Distribution of Primary Antimicrobial Drugs Used to Treat Gonorrhea Among Participants, Gonococcal Isolate Surveillance Project (GISP), 1988–2021



NOTE: In 2021, Cefixime 800 mg (0.1%) and Ceftriaxone 1 g (0.3%) 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

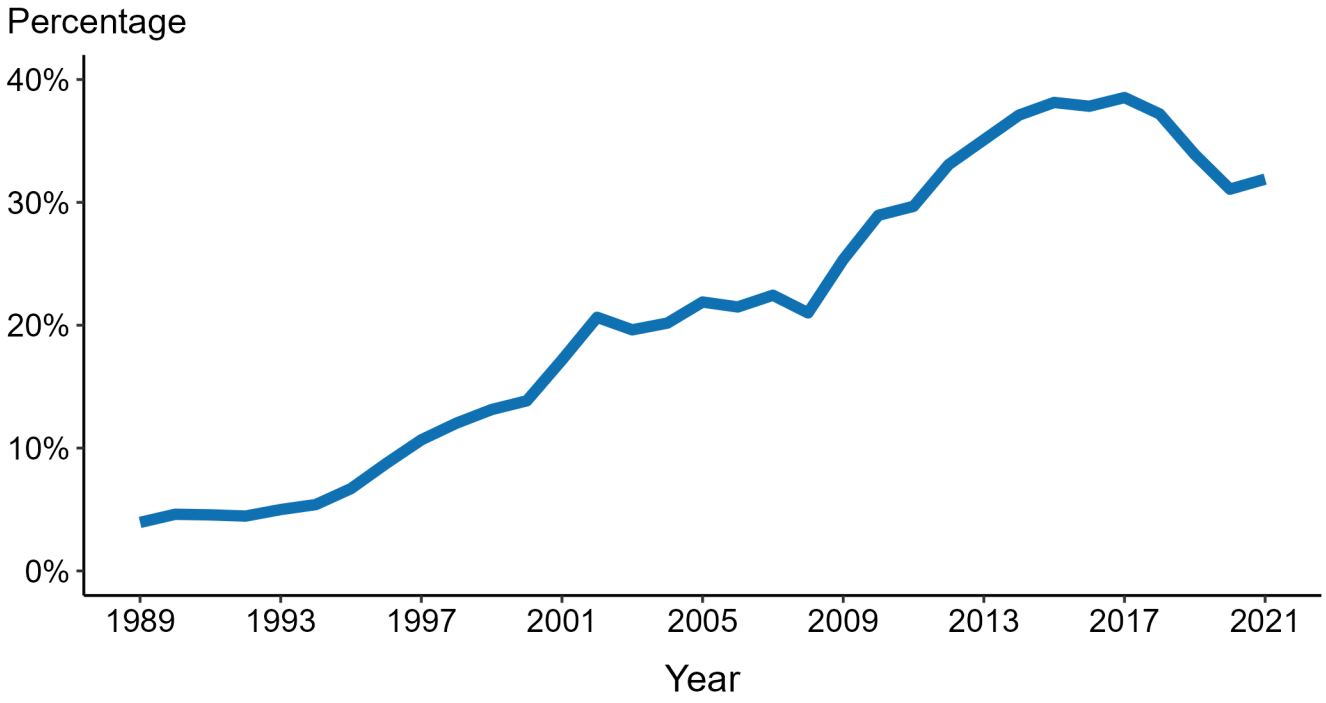
In 2021, 6.7% of GISP participants were treated with ceftriaxone 250 mg and 88.5% were treated with ceftriaxone 500 mg. Participants treated with gentamicin 240 mg increased from 0.2% in 2015 to 1.5% in 2021.

The COVID-19 pandemic has introduced uncertainty and difficulty in interpreting STD data collected during 2020 and 2021. See Impact of COVID-19 on STDs (https://www.cdc.gov/std/statistics/2021/impact.htm) for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2021/technical-notes.htm) for information on GISP methodology.

Data points are available at https://www.cdc.gov/std/statistics/2021/data.zip.

Neisseria gonorrhoeae — Percentage of Urethral Isolates Obtained from MSM Attending STD Clinics, Gonococcal Isolate Surveillance Project (GISP), 1989–2021



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

Summary

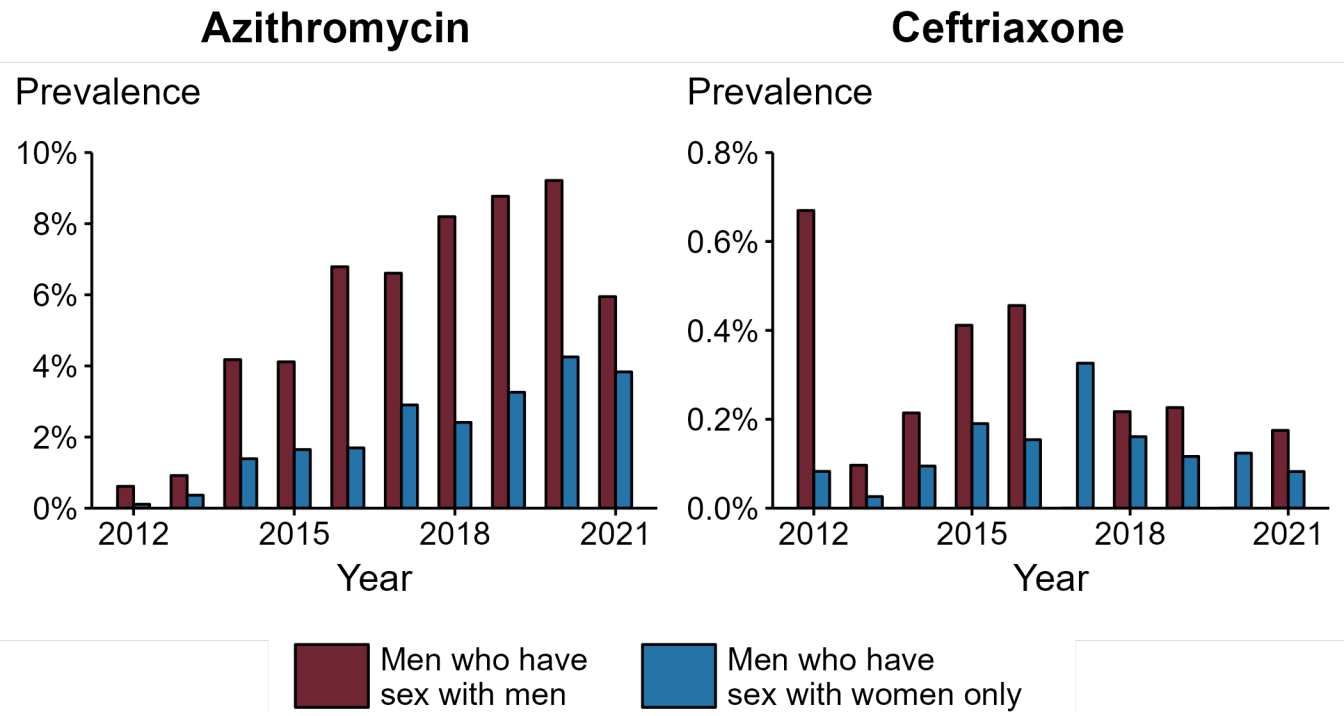
Overall, the proportion of *Neisseria gonorrhoeae* isolates collected in selected STD clinics participating in GISP that were from gay, bisexual and other men who have sex with men increased steadily from 3.9% in 1989 to a high of 38.5% in 2017. In 2021, this proportion was 31.9%.

The COVID-19 pandemic has introduced uncertainty and difficulty in interpreting STD data collected during 2020 and 2021. See Impact of COVID-19 on STDs (https://www.cdc.gov/std/statistics/2021/impact.htm) for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2021/technical-notes.htm) for information on GISP methodology.

Data points are available at https://www.cdc.gov/std/statistics/2021/data.zip.

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), 2012–2021



* Elevated Azithromycin MIC: ≥ 2.0 µg/mL

† Elevated Ceftriaxone MIC: ≥ 0.125 µg/mL

Summary

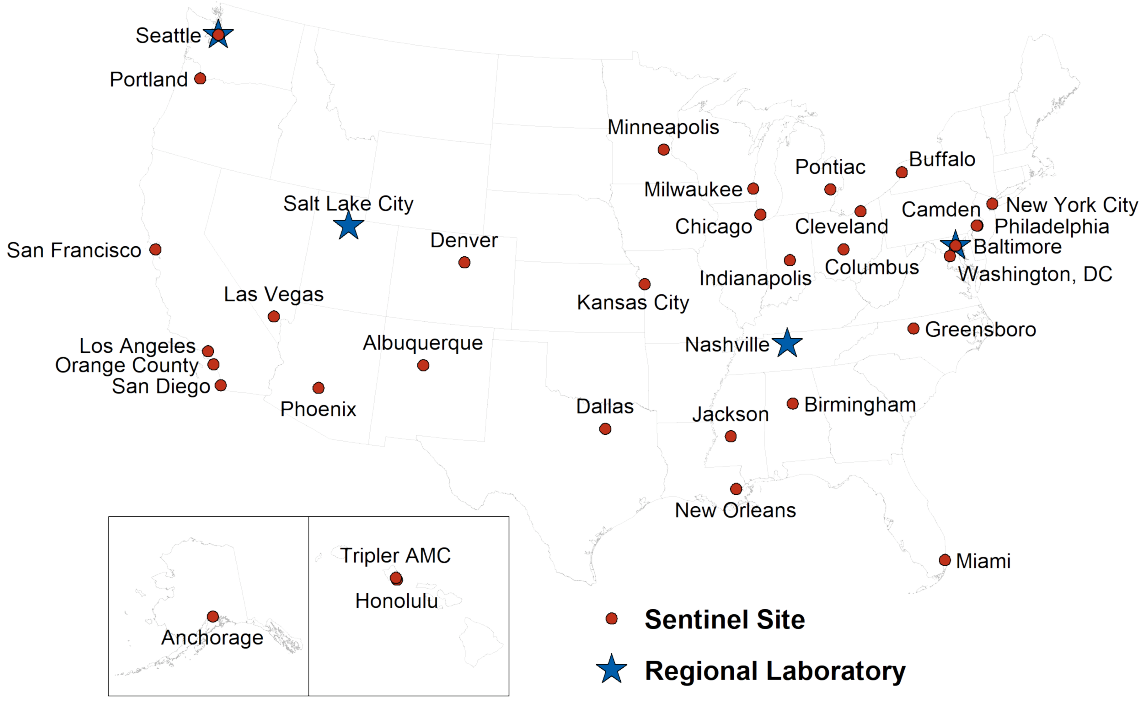
In 2021, the proportion of *Neisseria gonorrhoeae* isolates collected in GISP with elevated azithromycin minimum inhibitory concentrations (MICs) (≥ 2.0 µg/mL) was higher in isolates from gay, bisexual and other men who have sex with men (MSM) than from men who have sex with women only (MSW). For azithromycin, 6.0% of isolates from MSM had elevated MICs compared to 3.8% in men who have sex with women only. For ceftriaxone, the proportion of isolates with elevated ceftriaxone MICs (≥ 0.125 µg/mL) was higher at 0.2% in MSM compared to 0.1% in MSW.

The COVID-19 pandemic has introduced uncertainty and difficulty in interpreting STD data collected during 2020 and 2021. See Impact of COVID-19 on STDs (https://www.cdc.gov/std/statistics/2021/impact.htm) for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2021/technical-notes.htm) for information on GISP methodology.

Data points are available at https://www.cdc.gov/std/statistics/2021/data.zip.

Location of Participating Sentinel Sites and Regional Laboratories, Gonococcal Isolate Surveillance Project (GISP), 2021

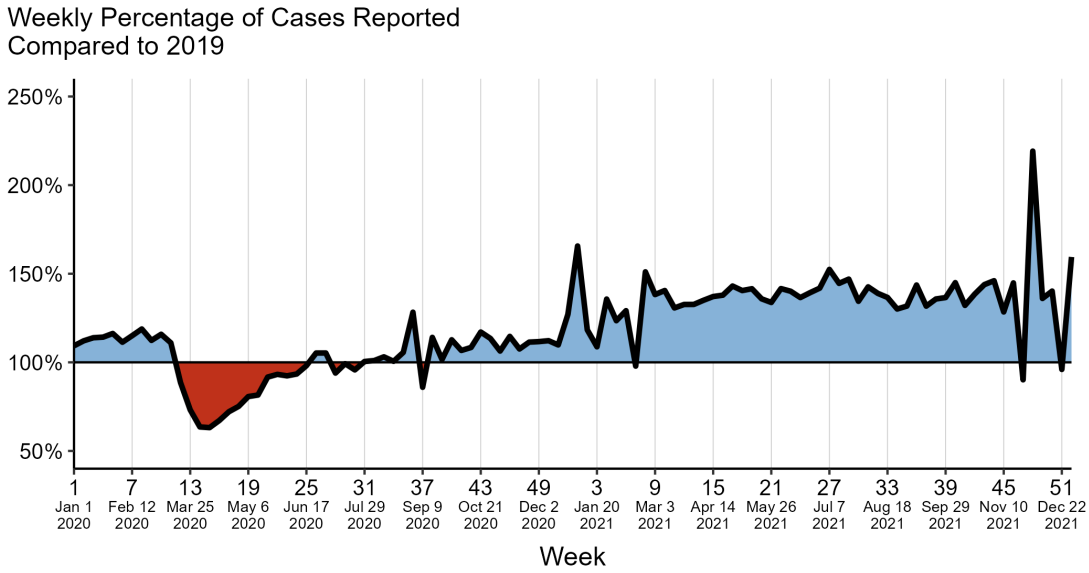


NOTE: Baltimore and Seattle are both sentinel sites and regional laboratories.

Summary

See Technical Notes (https://www.cdc.gov/std/statistics/2021/technical-notes.htm) for information on GISP methodology.

Syphilis (All Stages) — Reported 2020 and 2021 Cases as a Percentage of 2019 by *MMWR* Week, United States



NOTE: The *MMWR* week is the week of the epidemiologic year for which the case is assigned by the reporting local or state health department. For the weeks displayed, the midpoint of the date range (i.e., the Wednesday of the week) is provided for reference.

Adapted from Pagaoa et al., *Sexually Transmitted Diseases*, 2021

Summary

To quantify the COVID-19 pandemic's potential impact on reported STDs, the number of 2020 and 2021 cases reported for a given *MMWR* week was compared to the number of cases reported in the same week in 2019. The comparison is expressed in terms of the percentage of 2019 cases that were reported. Percentages lower than 100% denote when 2020 or 2021 cases were less than 2019 cases, while percentages higher than 100% indicate when 2020 or 2021 cases were higher than 2019 cases.

In 2020, during *MMWR* weeks 1–11 (December 29, 2019–March 14, 2020), the 2020 cumulative total of reported syphilis (all stages) cases (30,620 cases) was higher than the 2019 cumulative total for the same number of weeks (26,924 cases). In week 12 (week of March 15–21, 2020; the first full week of the emergency declaration for the COVID-19 pandemic), the weekly number of 2020 syphilis (all stages) cases was 88.6% compared to the cases reported by the same *MMWR* week in 2019.

Following week 12 of 2020, the deficit of 2020 cases compared to 2019 cases increased, reaching the lowest relative number of cases reported at week 15 (63.2%; week of April 5–11, 2020). The highest relative number of cases in 2020 after week 12 was in week 36 (128.3%; week of August 30–September 5, 2020). The final number of reported cases of syphilis (all stages) for 2020 (131,797 cases) was 103.0% of the 2019 total (127,943 cases).

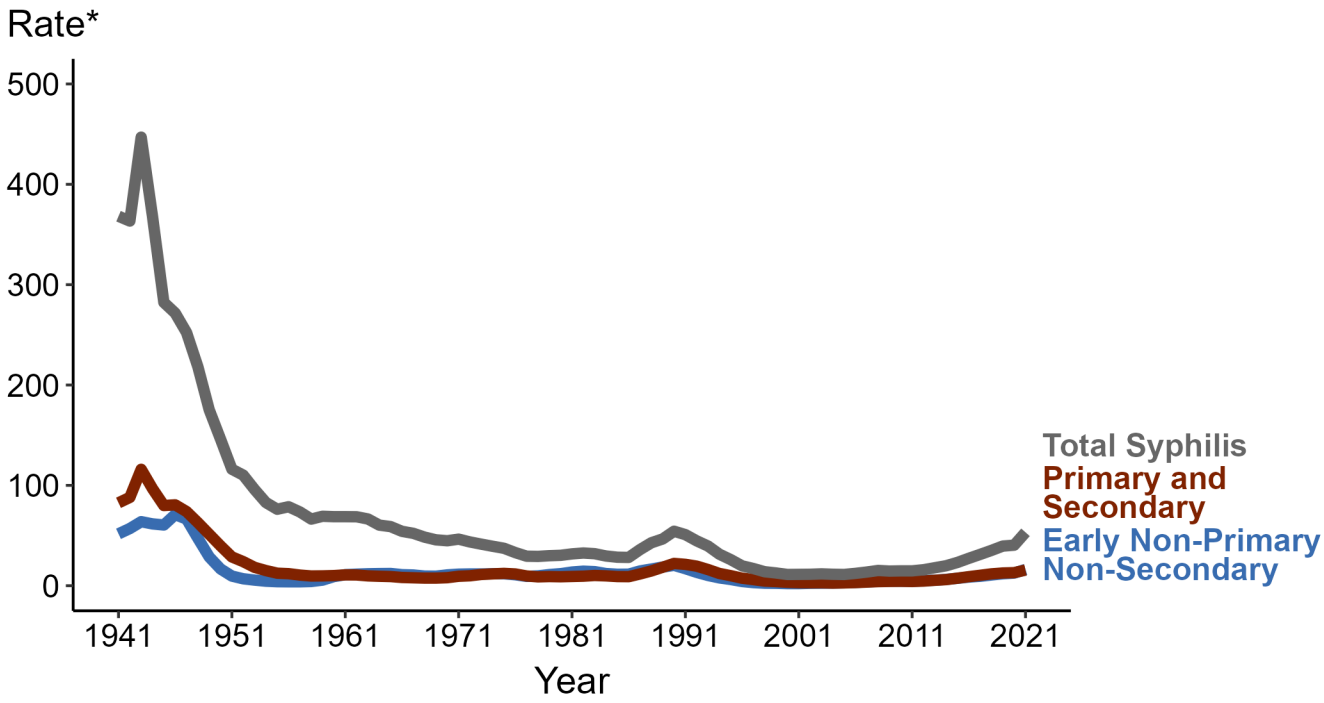
In 2021, the deficit of cases compared to 2019 reached the lowest relative number of cases reported at week 47 (90.1%; week of November 21–27, 2021), while the highest relative number of cases was in week 48 (219.2%; week of November 28–December 4, 2021). The final number of reported cases of syphilis (all stages) for 2021 (173,858 cases) was 135.9% of the 2019 total (127,943 cases).

The COVID-19 pandemic has introduced uncertainty and difficulty in interpreting STD data collected during 2020 and 2021. See Impact of COVID-19 on STDs (https://www.cdc.gov/std/statistics/2021/impact.htm) for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2021/technical-notes.htm) for information on syphilis case reporting.

Data points are available at https://www.cdc.gov/std/statistics/2021/data.zip.

Syphilis — Rates of Reported Cases by Stage of Infection, United States, 1941–2021



* Per 100,000

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.

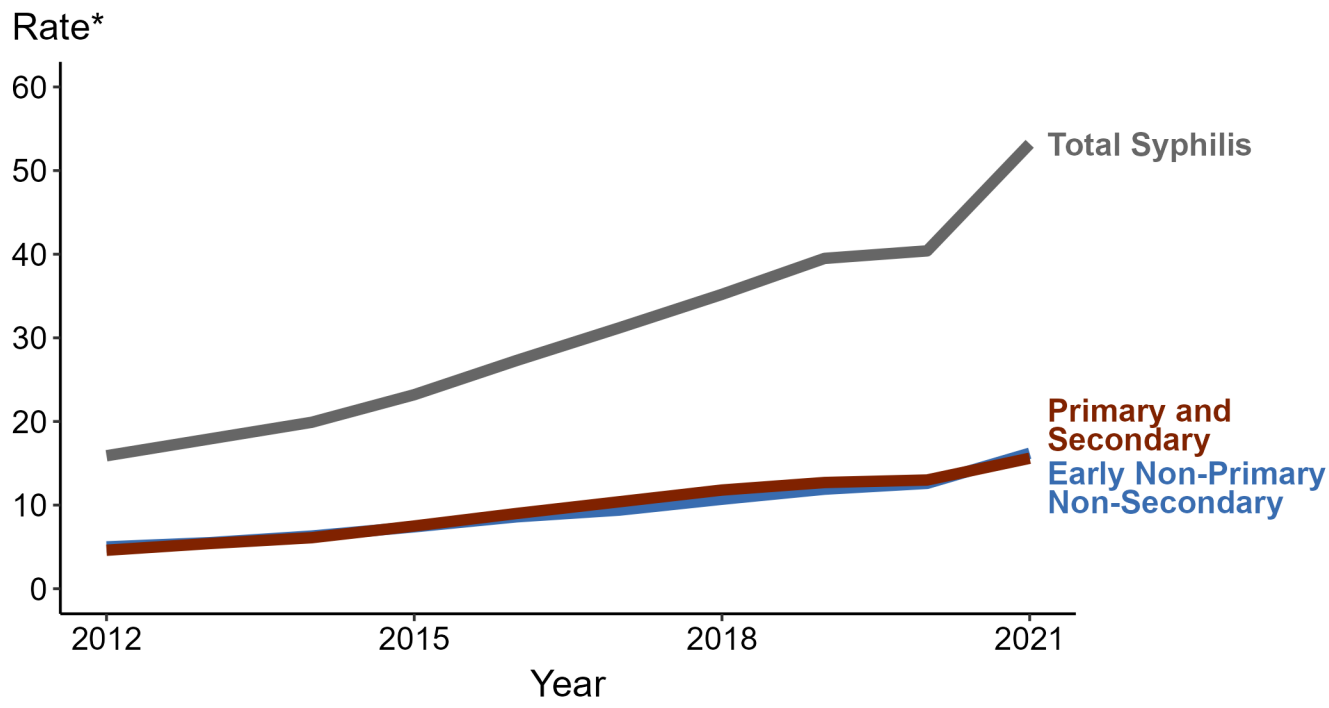
In 2021, a total of 176,713 cases of syphilis were reported in the United States. During 2020 to 2021, the rate of reported total syphilis increased 31.7% (from 40.4 to 53.2 per 100,000).

The COVID-19 pandemic has introduced uncertainty and difficulty in interpreting STD data collected during 2020 and 2021. See Impact of COVID-19 on STDs (https://www.cdc.gov/std/statistics/2021/impact.htm) for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2021/technical-notes.htm) for information on syphilis case reporting.

Data points are available at https://www.cdc.gov/std/statistics/2021/data.zip.

Syphilis — Rates of Reported Cases by Stage of Infection, United States, 2012–2021



* Per 100,000

Summary

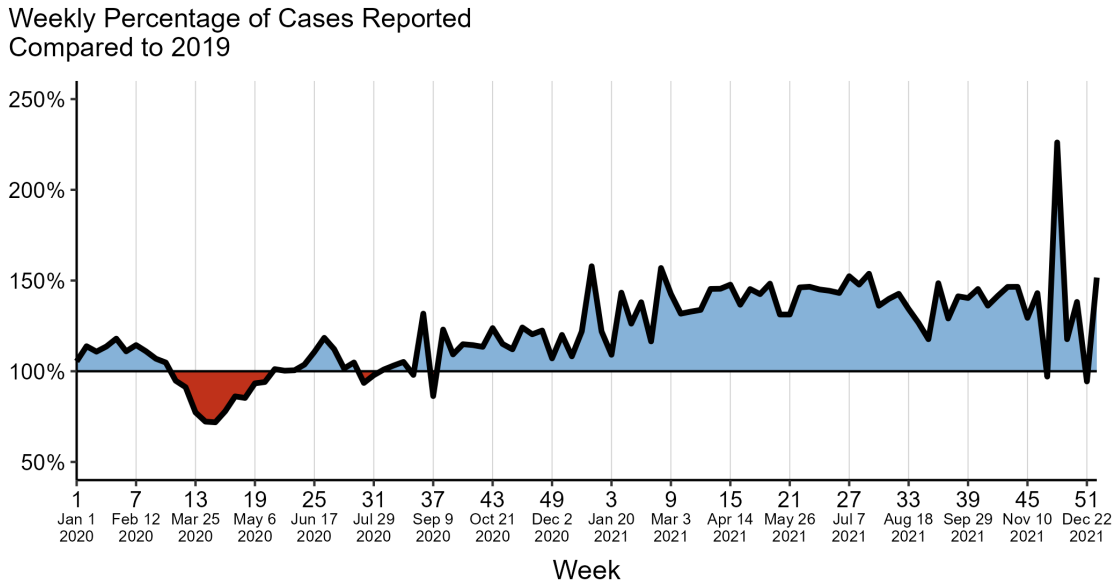
In 2021, 176,713 total cases of syphilis, 51,830 cases of early non-primary non-secondary syphilis, and 53,767 cases of primary and secondary syphilis were reported in the United States. During 2020 to 2021, the total rate of syphilis increased 31.7% (40.4 to 53.2 per 100,000), the rate of early non-primary non-secondary syphilis increased 20.0% (13.0 to 15.6 per 100,000), and the rate of primary and secondary syphilis increased 28.6% (12.6 to 16.2 per 100,000).

The COVID-19 pandemic has introduced uncertainty and difficulty in interpreting STD data collected during 2020 and 2021. See Impact of COVID-19 on STDs (https://www.cdc.gov/std/statistics/2021/impact.htm) for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2021/technical-notes.htm) for information on syphilis case reporting.

Data points are available at https://www.cdc.gov/std/statistics/2021/data.zip.

Primary and Secondary Syphilis — Reported 2020 and 2021 Cases as a Percentage of 2019 by *MMWR* Week, United States



NOTE: The *MMWR* week is the week of the epidemiologic year for which the case is assigned by the reporting local or state health department. For the weeks displayed, the midpoint of the date range (i.e., the Wednesday of the week) is provided for reference.

Adapted from Pagaoa et al., *Sexually Transmitted Diseases*, 2021

Summary

To quantify the COVID-19 pandemic's potential impact on reported STDs, the number of 2020 and 2021 cases reported for a given *MMWR* week was compared to the number of cases reported in the same week in 2019. The comparison is expressed in terms of the percentage of 2019 cases that were reported. Percentages lower than 100% denote when 2020 or 2021 cases were less than 2019 cases, while percentages higher than 100% indicate when 2020 or 2021 cases were higher than 2019 cases.

In 2020, during *MMWR* weeks 1–11 (December 29, 2019–March 14, 2020), the 2020 cumulative total of reported primary and secondary syphilis cases (8,848 cases) was higher than the 2019 cumulative total for the same number of weeks (8,074 cases). In week 12 (week of March 15–21, 2020; the first full week of the emergency declaration for the COVID-19 pandemic), the weekly number of 2020 primary and secondary syphilis cases was 91.2% compared to the cases reported by the same *MMWR* week in 2019.

Following week 12 of 2020, the deficit of 2020 cases compared to 2019 cases increased, reaching the lowest relative number of cases reported at week 15 (71.9%; week of April 5–11, 2020). The highest relative number of cases in 2020 after week 12 was in week 36 (131.8%; week of August 30–September 5, 2020). The final number of reported cases of primary and secondary syphilis for 2020 (41,655 cases) was 106.8% of the 2019 total (38,992 cases).

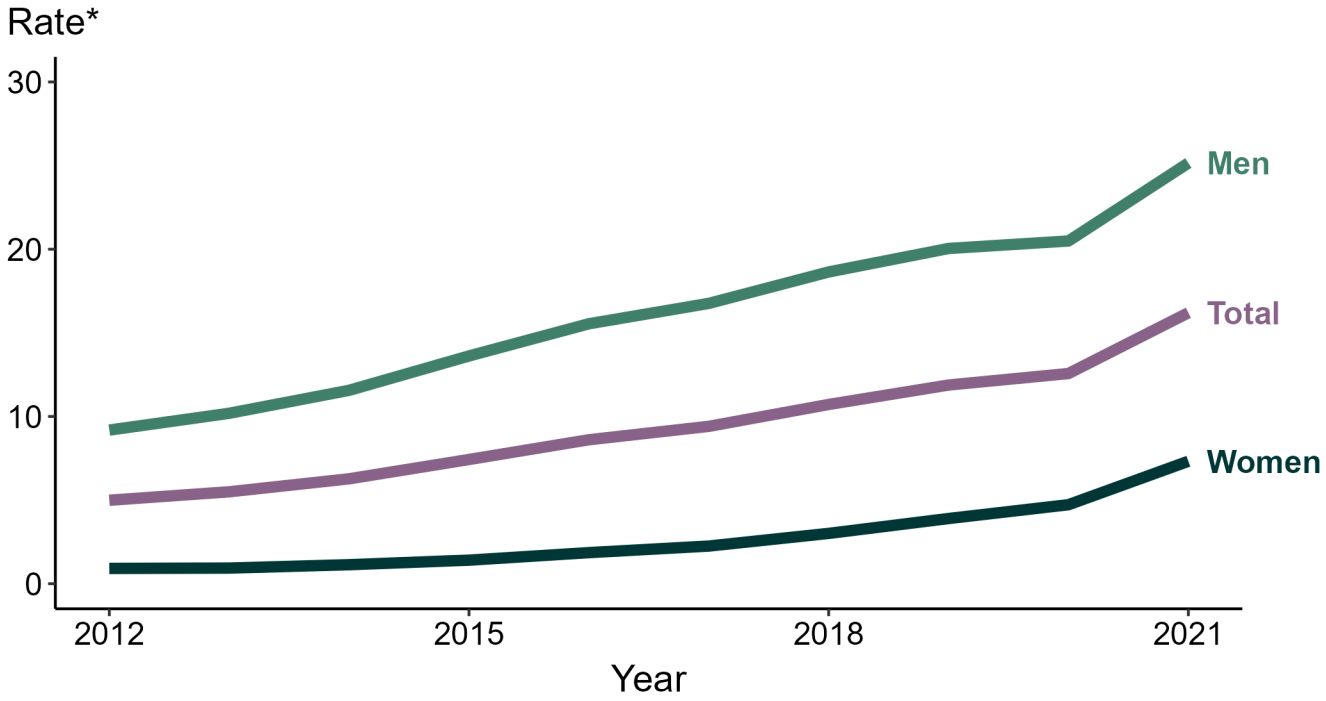
In 2021, the deficit of cases compared to 2019 reached the lowest relative number of cases reported at week 51 (94.4%; week of December 19–25, 2021), while the highest relative number of cases was in week 48 (226.1%; week of November 28–December 4, 2021). The final number of reported cases of primary and secondary syphilis for 2021 (53,767 cases) was 137.9% of the 2019 total (38,992 cases).

The COVID-19 pandemic has introduced uncertainty and difficulty in interpreting STD data collected during 2020 and 2021. See Impact of COVID-19 on STDs (https://www.cdc.gov/std/statistics/2021/impact.htm) for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2021/technical-notes.htm) for information on syphilis case reporting.

Data points are available at https://www.cdc.gov/std/statistics/2021/data.zip.

Primary and Secondary Syphilis — Rates of Reported Cases by Sex, United States, 2012–2021



* Per 100,000

Summary

During 2020 to 2021, the primary and secondary syphilis rate among women increased 55.3% (from 4.7 to 7.3 per 100,000) and the rate among men increased 22.9% (from 20.5 to 25.2 per 100,000).

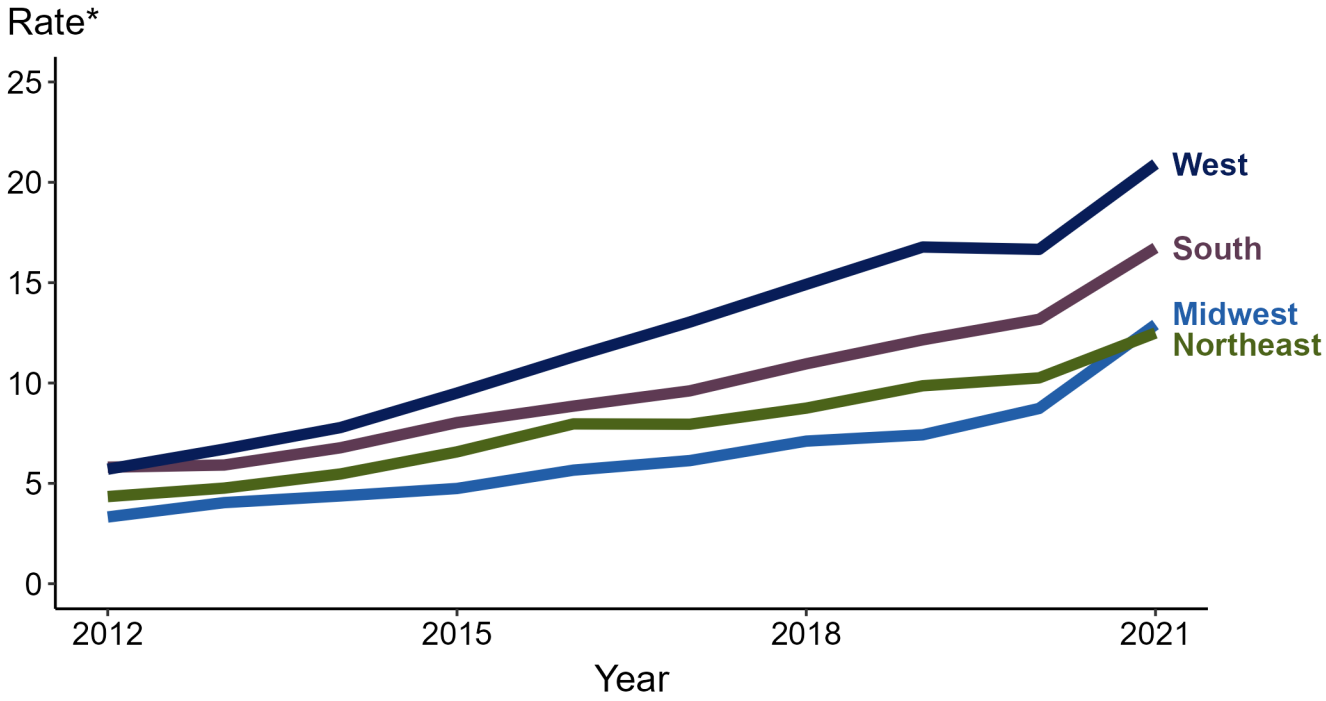
Over the last five years, the primary and secondary syphilis rate among women increased 217.4% (from 2.3 to 7.3 per 100,000) and the rate among men increased 50.0% (from 16.8 to 25.2 per 100,000). Over the last 10 years, the primary and secondary syphilis rate among women increased 711.1% (from 0.9 to 7.3 per 100,000) and the rate among men increased 173.9% (from 9.2 to 25.2 per 100,000).

The COVID-19 pandemic has introduced uncertainty and difficulty in interpreting STD data collected during 2020 and 2021. See Impact of COVID-19 on STDs (https://www.cdc.gov/std/statistics/2021/impact.htm) for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2021/technical-notes.htm) for information on syphilis case reporting.

Data points are available at https://www.cdc.gov/std/statistics/2021/data.zip.

Primary and Secondary Syphilis — Rates of Reported Cases by Region, United States, 2012–2021



* Per 100,000

Summary

In 2021, the West had the highest rate of reported primary and secondary syphilis (20.9 cases per 100,000; 25.1% increase from 2020), followed by the South (16.7 cases per 100,000; 26.5% increase from 2020), the Midwest (12.9 cases per 100,000; 48.3% increase from 2020), and the Northeast (12.5 cases per 100,000; 21.4% increase from 2020).

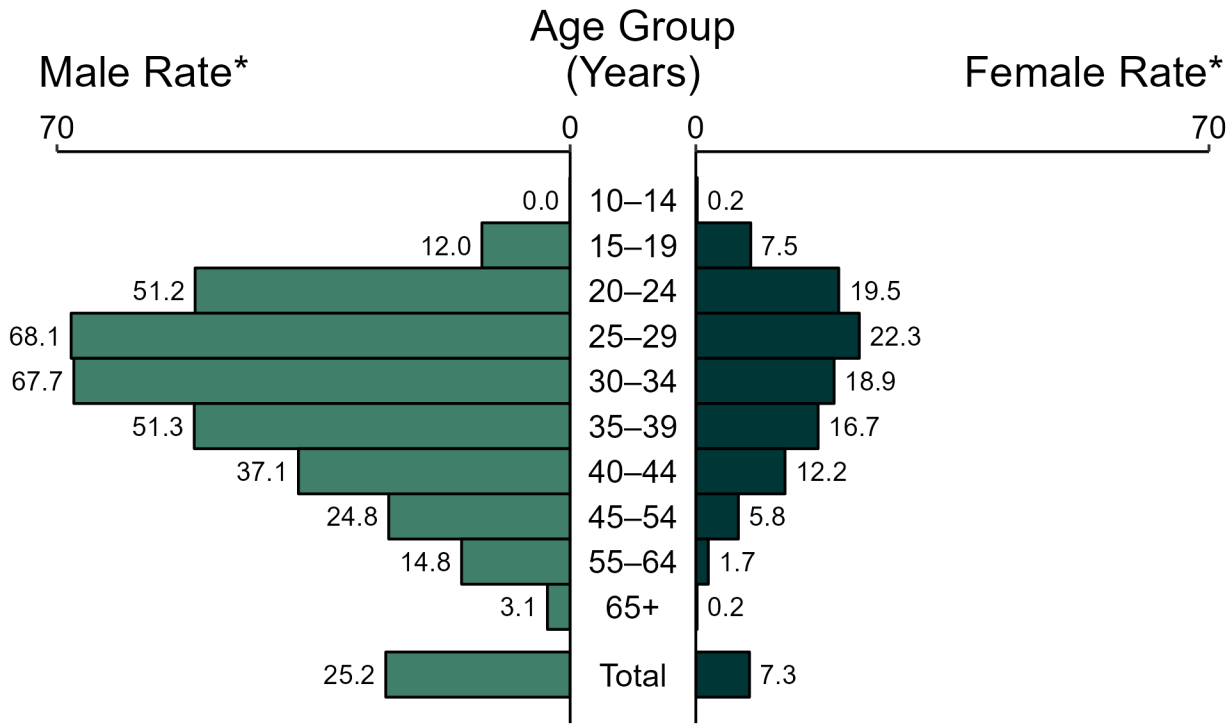
The Midwest had the greatest five-year increase in rates of reported cases of primary and secondary syphilis (6.1 to 12.9 per 100,000; 111.5% increase from 2017). The Midwest also had the greatest 10-year increase in rates of reported cases of primary and secondary syphilis (3.3 to 12.9 per 100,000; 290.9% increase from 2012).

The COVID-19 pandemic has introduced uncertainty and difficulty in interpreting STD data collected during 2020 and 2021. See Impact of COVID-19 on STDs (https://www.cdc.gov/std/statistics/2021/impact.htm) for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2021/technical-notes.htm) for information on syphilis case reporting.

Data points are available at https://www.cdc.gov/std/statistics/2021/data.zip.

Primary and Secondary Syphilis — Rates of Reported Cases by Age Group and Sex, United States, 2021



* Per 100,000

NOTE: Total includes all ages.

Summary

In 2021, the rate of reported primary and secondary syphilis was higher among men (25.2 per 100,000) compared to women (7.3 per 100,000).

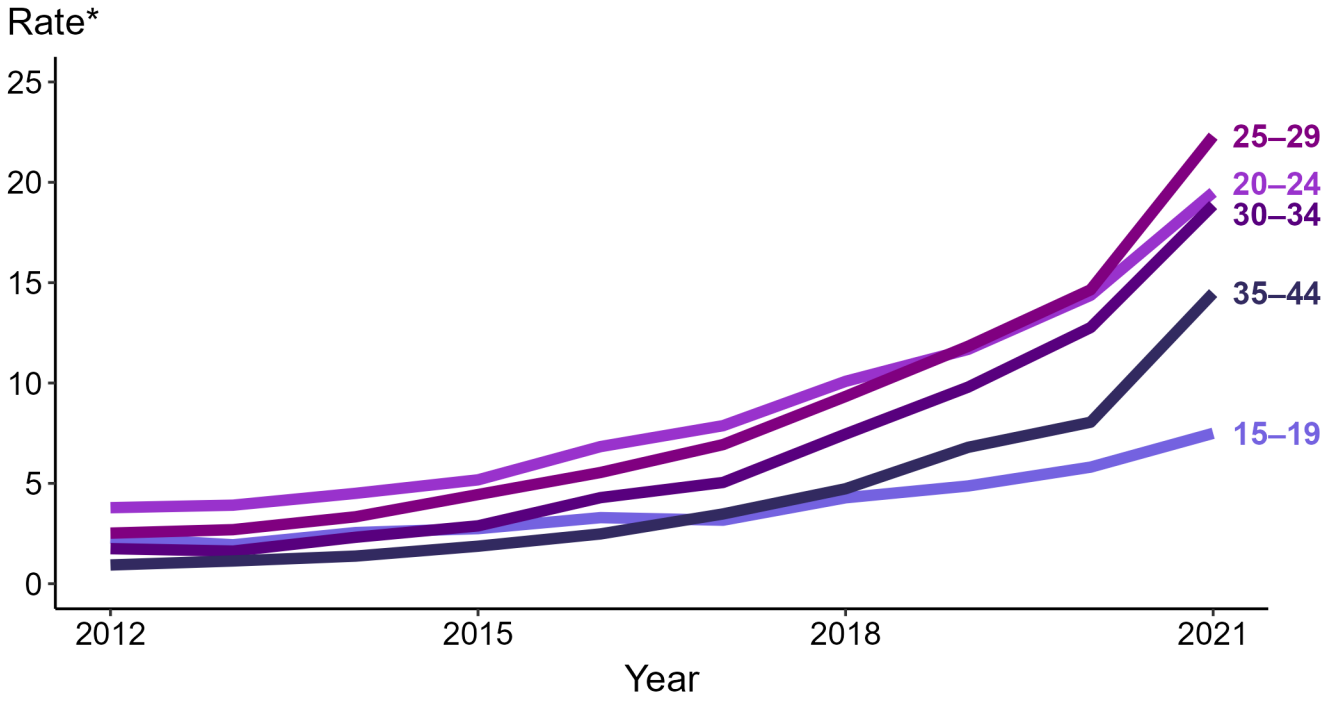
Among men, those aged 25 to 29 years had the highest rate of reported cases of primary and secondary syphilis (68.1 per 100,000), followed by men aged 30 to 34 years (67.7 per 100,000) and men aged 35 to 39 years (51.3 per 100,000). Among women, those aged 25 to 29 years also had the highest rate of reported cases of primary and secondary syphilis (22.3 per 100,000), followed by women aged 20 to 24 years (19.5 per 100,000) and women aged 30 to 34 years (18.9 per 100,000).

The COVID-19 pandemic has introduced uncertainty and difficulty in interpreting STD data collected during 2020 and 2021. See Impact of COVID-19 on STDs (https://www.cdc.gov/std/statistics/2021/impact.htm) for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2021/technical-notes.htm) for information on syphilis case reporting.

Data points are available at https://www.cdc.gov/std/statistics/2021/data.zip.

Primary and Secondary Syphilis — Rates of Reported Cases Among Women Aged 15–44 Years by Age Group, United States, 2012–2021



* Per 100,000

Summary

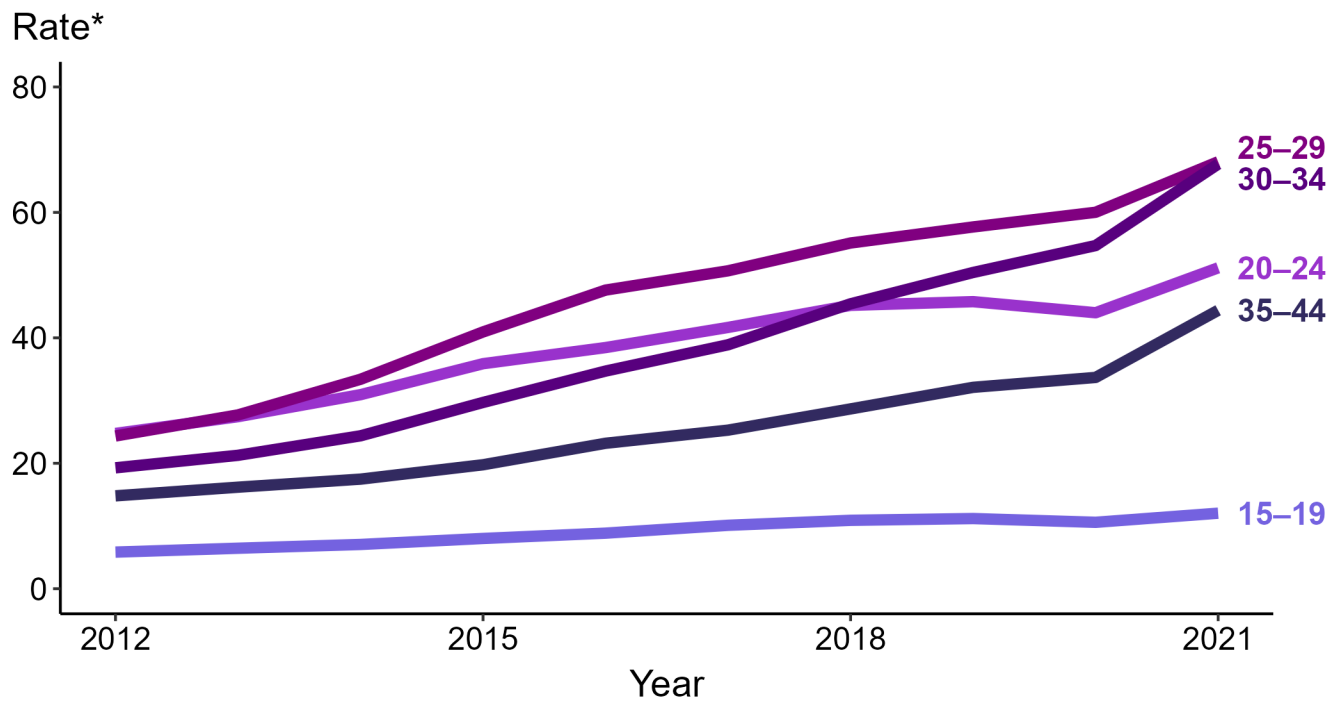
Among women aged 15 to 44 years in 2021, those aged 25 to 29 years had the highest rate of reported cases of primary and secondary syphilis (22.3 cases per 100,000; 52.7% increase from 2020), followed by those aged 20 to 24 years (19.5 cases per 100,000; 35.4% increase from 2020), those aged 30 to 34 years (18.9 cases per 100,000; 47.7% increase from 2020), those aged 35 to 44 years (14.5 cases per 100,000; 81.2% increase from 2020), and those aged 15 to 19 years (7.5 cases per 100,000; 29.3% increase from 2020).

The COVID-19 pandemic has introduced uncertainty and difficulty in interpreting STD data collected during 2020 and 2021. See Impact of COVID-19 on STDs (https://www.cdc.gov/std/statistics/2021/impact.htm) for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2021/technical-notes.htm) for information on syphilis case reporting.

Data points are available at https://www.cdc.gov/std/statistics/2021/data.zip.

Primary and Secondary Syphilis — Rates of Reported Cases Among Men Aged 15–44 Years by Age Group, United States, 2012–2021



* Per 100,000

Summary

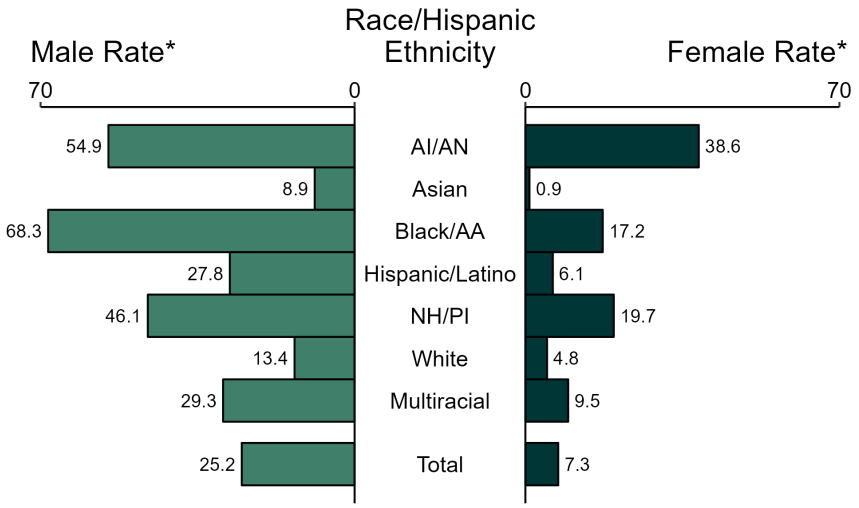
Among men aged 15 to 44 years in 2021, those aged 25 to 29 years had the highest rate of reported cases of primary and secondary syphilis (68.1 cases per 100,000; 13.5% increase from 2020), followed by those aged 30 to 34 years (67.7 cases per 100,000; 23.8% increase from 2020), those aged 20 to 24 years (51.2 cases per 100,000; 16.4% increase from 2020), those aged 35 to 44 years (44.4 cases per 100,000; 31.8% increase from 2020), and those aged 15 to 19 years (12.0 cases per 100,000; 13.2% increase from 2020).

The COVID-19 pandemic has introduced uncertainty and difficulty in interpreting STD data collected during 2020 and 2021. See Impact of COVID-19 on STDs (https://www.cdc.gov/std/statistics/2021/impact.htm) for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2021/technical-notes.htm) for information on syphilis case reporting.

Data points are available at https://www.cdc.gov/std/statistics/2021/data.zip.

Primary and Secondary Syphilis — Rates of Reported Cases by Race/Hispanic Ethnicity and Sex, United States, 2021



* 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 2021, the rate of reported primary and secondary syphilis was higher among men (25.2 per 100,000) compared to women (7.3 per 100,000).

Among men, non-Hispanic Black or African American men had the highest rate of reported cases of primary and secondary syphilis (68.3 per 100,000), followed by non-Hispanic American Indian or Alaska Native men (54.9 per 100,000) and non-Hispanic Native Hawaiian or other Pacific Islander men (46.1 per 100,000). Among women, non-Hispanic American Indian or Alaska Native women had the highest rate of reported cases of primary and secondary syphilis (38.6 per 100,000), followed by non-Hispanic Native Hawaiian or other Pacific Islander women (19.7 per 100,000) and non-Hispanic Black or African American women (17.2 per 100,000).

Using non-Hispanic White persons as the referent category, the greatest racial disparity in rates of reported primary and secondary syphilis was observed among non-Hispanic American Indian or Alaska Native women, with a rate ratio of 8.0 times that of non-Hispanic White women. Among men, the greatest disparity was observed among non-Hispanic Black or African American men, with a rate 5.1 times that of non-Hispanic White men.

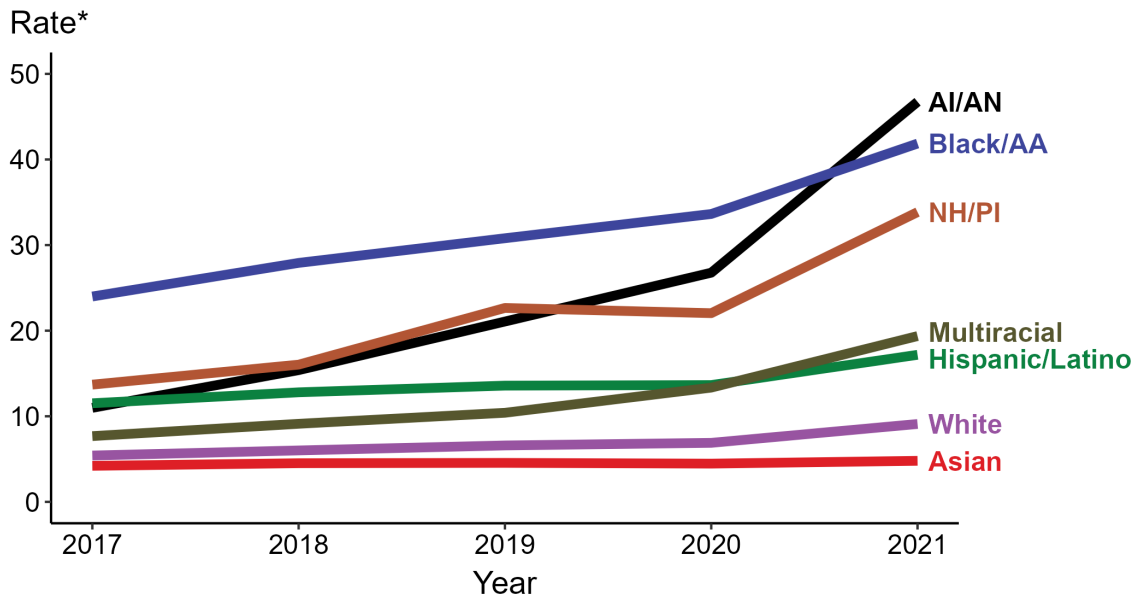
For this figure, race/Hispanic ethnicity is categorized first by reported Hispanic ethnicity, then by reported race. Therefore, cases categorized as Hispanic/Latino can be of any race(s); cases categorized into a race group include both non-Hispanic persons and persons of unknown Hispanic ethnicity. Not all US jurisdictions reported cases in Office of Management and Budget compliant race categories in 2021. This may minimally under- or overestimate rates for Asian, Native Hawaiian or other Pacific Islander, or multiracial individuals. No population data exist for unknown or other race; therefore, rates are not calculated. For completeness, data in this figure include cases reported from all jurisdictions.

The COVID-19 pandemic has introduced uncertainty and difficulty in interpreting STD data collected during 2020 and 2021. See Impact of COVID-19 on STDs (https://www.cdc.gov/std/statistics/2021/impact.htm) for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2021/technical-notes.htm) for information on syphilis case reporting and reporting of race/Hispanic ethnicity for STD cases.

Data points are available at https://www.cdc.gov/std/statistics/2021/data.zip.

Primary and Secondary Syphilis — Rates of Reported Cases by Race/Hispanic Ethnicity, United States, 2017–2021



* 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 2021, the highest rate of reported primary and secondary syphilis cases per 100,000 persons was among non-Hispanic American Indian or Alaska Native persons (46.7), followed by non-Hispanic Black or African American persons (41.9).

During 2020 to 2021, 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 (26.8 to 46.7; 74.3% increase). Non-Hispanic American Indian or Alaska Native persons also had the greatest five-year increase in rate of reported primary and secondary syphilis (11.0 to 46.7; 324.5% increase from 2017).

There were no decreases in the rate of reported primary and secondary syphilis cases per 100,000 persons among any race/ethnicity group during 2020 to 2021. There were also no decreases in the rate of reported primary and secondary syphilis among any race/ethnicity group during 2017 to 2021.

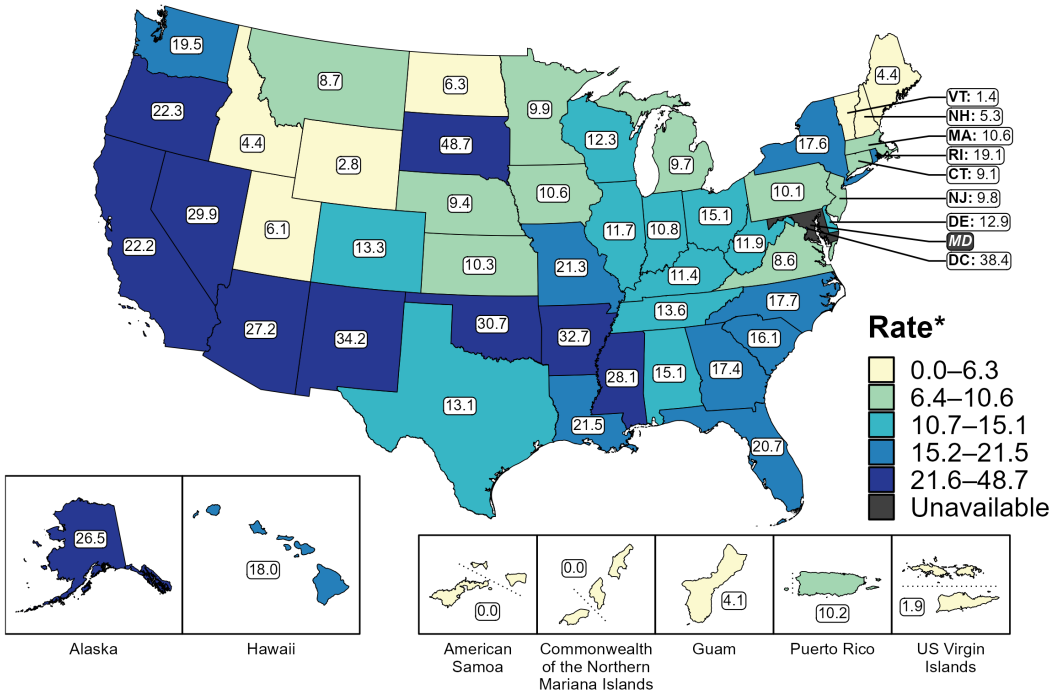
For this figure, race/Hispanic ethnicity is categorized first by reported Hispanic ethnicity, then by reported race. Therefore, cases categorized as Hispanic/Latino can be of any race(s); cases categorized into a race group include both non-Hispanic persons and persons of unknown Hispanic ethnicity. Not all US jurisdictions reported cases in Office of Management and Budget compliant race categories during 2017 to 2021. This may minimally under- or overestimate rates for Asian, Native Hawaiian or other Pacific Islander, or multiracial individuals. No population data exist for unknown or other race; therefore, rates are not calculated. For completeness, data in this figure include cases reported from all jurisdictions.

The COVID-19 pandemic has introduced uncertainty and difficulty in interpreting STD data collected during 2020 and 2021. See Impact of COVID-19 on STDs (https://www.cdc.gov/std/statistics/2021/impact.htm) for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2021/technical-notes.htm) for information on syphilis case reporting and reporting of race/Hispanic ethnicity for STD cases.

Data points are available at https://www.cdc.gov/std/statistics/2021/data.zip.

Primary and Secondary Syphilis — Rates of Reported Cases by State, United States and Territories, 2021



* Per 100,000

Summary

In 2021, rates of reported primary and secondary syphilis ranged by state from 1.4 cases per 100,000 population in Vermont to 48.7 cases per 100,000 population in South Dakota. The rate of reported primary and secondary syphilis in the District of Columbia was 38.4 per 100,000 population. Due to a network security incident in December 2021, the Maryland Department of Health could not finalize their 2021 STD case notification data. 2021 data from Maryland have been suppressed for this figure; however, they are included in national and regional case counts and rates displayed in other figures.

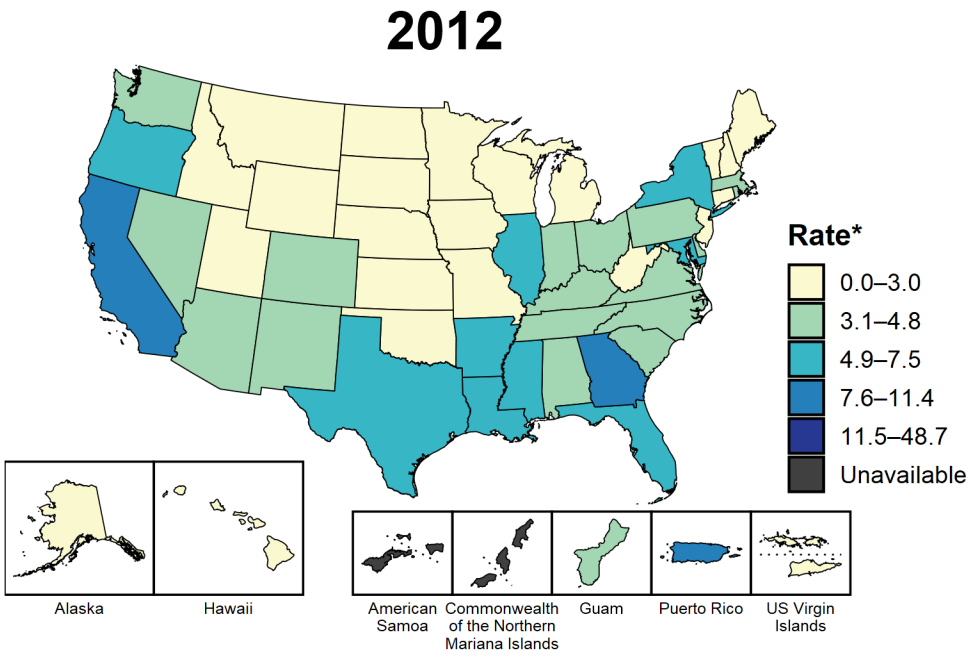
Among US territories, rates of reported primary and secondary syphilis ranged from 0.0 cases per 100,000 population in American Samoa and the Commonwealth of the Northern Mariana Islands to 10.2 cases per 100,000 population in Puerto Rico.

The COVID-19 pandemic has introduced uncertainty and difficulty in interpreting STD data collected during 2020 and 2021. See Impact of COVID-19 on STDs (https://www.cdc.gov/std/statistics/2021/impact.htm) for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2021/technical-notes.htm) for information on syphilis case reporting and on interpreting reported rates in US territories.

Data points are available at https://www.cdc.gov/std/statistics/2021/data.zip.

Primary and Secondary Syphilis — Rates of Reported Cases by State, United States and Territories, 2012–2021



* 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 2012, two states, the District of Columbia (DC), and one US territory (7.4% of areas with available data) had a rate of reported primary and secondary syphilis greater than or equal to 8 cases per 100,000 population. This increased to 42 states, DC, and one US territory (80.0% of areas with available data) in 2021. During 2020 to 2021, rates of reported primary and secondary syphilis increased in 48 states, DC, and two territories.

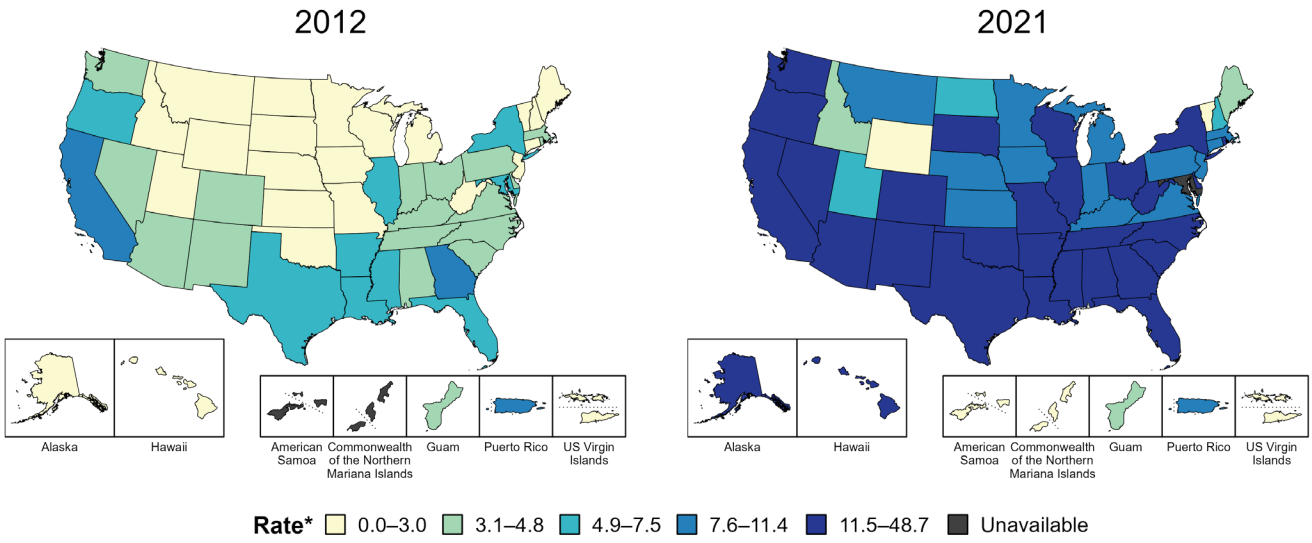
American Samoa and the Commonwealth of the Northern Mariana Islands began reporting data on primary and secondary syphilis cases to CDC in 2018; data are not available for those areas prior to that year. In addition, data on reported primary and secondary syphilis cases in 2018 are not available for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

The COVID-19 pandemic has introduced uncertainty and difficulty in interpreting STD data collected during 2020 and 2021. See Impact of COVID-19 on STDs (https://www.cdc.gov/std/statistics/2021/impact.htm) for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2021/technical-notes.htm) for information on syphilis case reporting and on interpreting reported rates in US territories.

Data points are available at https://www.cdc.gov/std/statistics/2021/data.zip.

Primary and Secondary Syphilis — Rates of Reported Cases by State, United States and Territories, 2012 and 2021



* Per 100,000

Summary

In 2012, two states, the District of Columbia (DC), and one US territory (7.4% of areas with available data) had a rate of reported primary and secondary syphilis greater than or equal to 7.6 cases per 100,000 population. This increased to 42 states, DC, and one US territory (80.0% of areas with available data) in 2021.

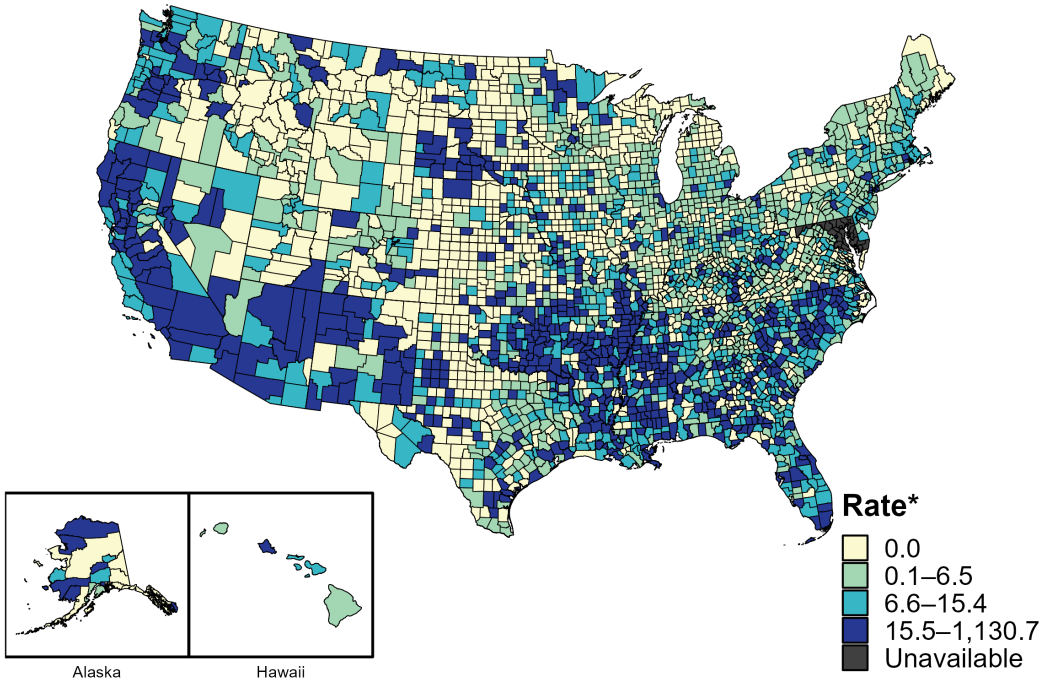
American Samoa and the Commonwealth of the Northern Mariana Islands began reporting data on primary and secondary syphilis cases to CDC in 2018; data are not available for those areas prior to that year. Due to a network security incident in December 2021, the Maryland Department of Health could not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

The COVID-19 pandemic has introduced uncertainty and difficulty in interpreting STD data collected during 2020 and 2021. See Impact of COVID-19 on STDs (https://www.cdc.gov/std/statistics/2021/impact.htm) for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2021/technical-notes.htm) for information on syphilis case reporting and on interpreting reported rates in US territories.

Data points are available at https://www.cdc.gov/std/statistics/2021/data.zip.

Primary and Secondary Syphilis — Rates of Reported Cases by County, United States, 2021



* Per 100,000

Summary

In 2021, 65% of counties and county equivalents with available data in the United States reported at least one case of primary and secondary syphilis. Out of 3,119 counties and county equivalents with available data, 57 (2%) reported over half of all cases of primary and secondary syphilis.

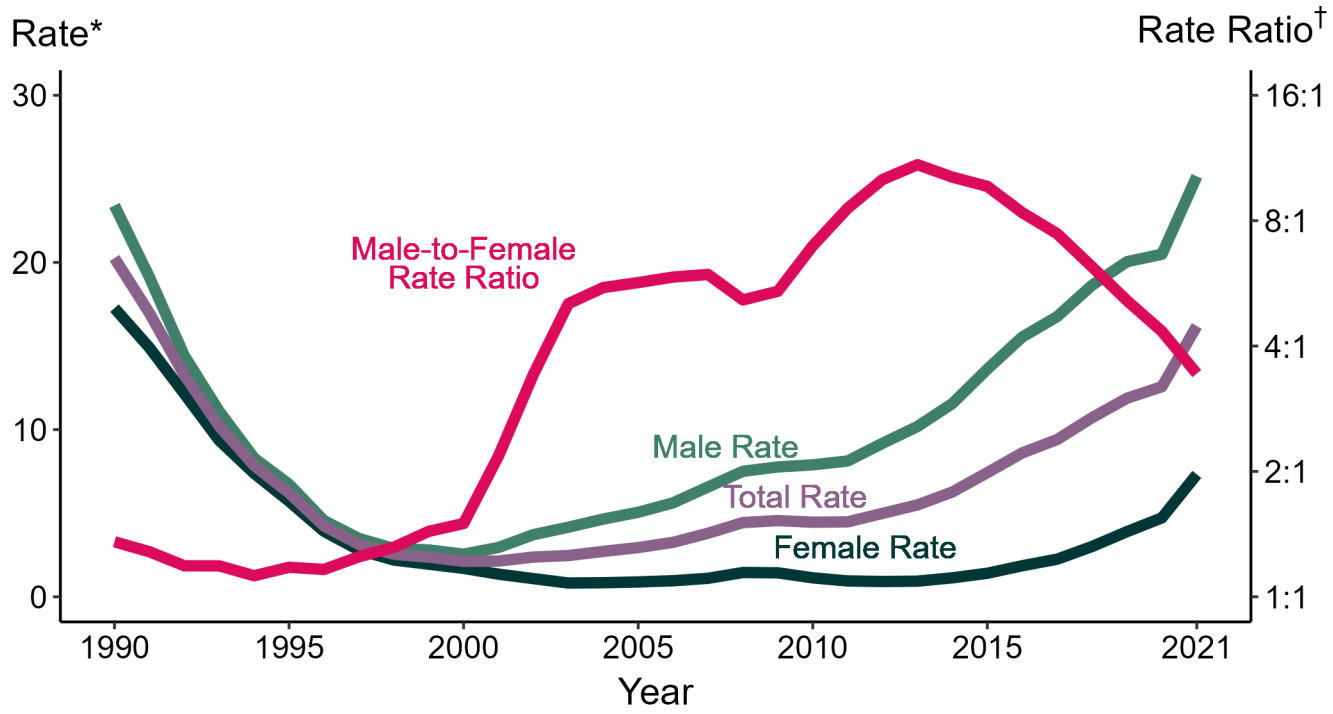
Due to a network security incident in December 2021, the Maryland Department of Health could not finalize their 2021 STD case notification data. 2021 data from Maryland have been suppressed for this figure; however, they are included in national and regional case counts and rates displayed in other figures.

The COVID-19 pandemic has introduced uncertainty and difficulty in interpreting STD data collected during 2020 and 2021. See Impact of COVID-19 on STDs (https://www.cdc.gov/std/statistics/2021/impact.htm) for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2021/technical-notes.htm) for information on syphilis case reporting.

Data points are available at https://www.cdc.gov/std/statistics/2021/data.zip.

Primary and Secondary Syphilis — Rates of Reported Cases by Sex and Male-to-Female Rate Ratios, United States, 1990–2021



* Per 100,000

† Log scale

Summary

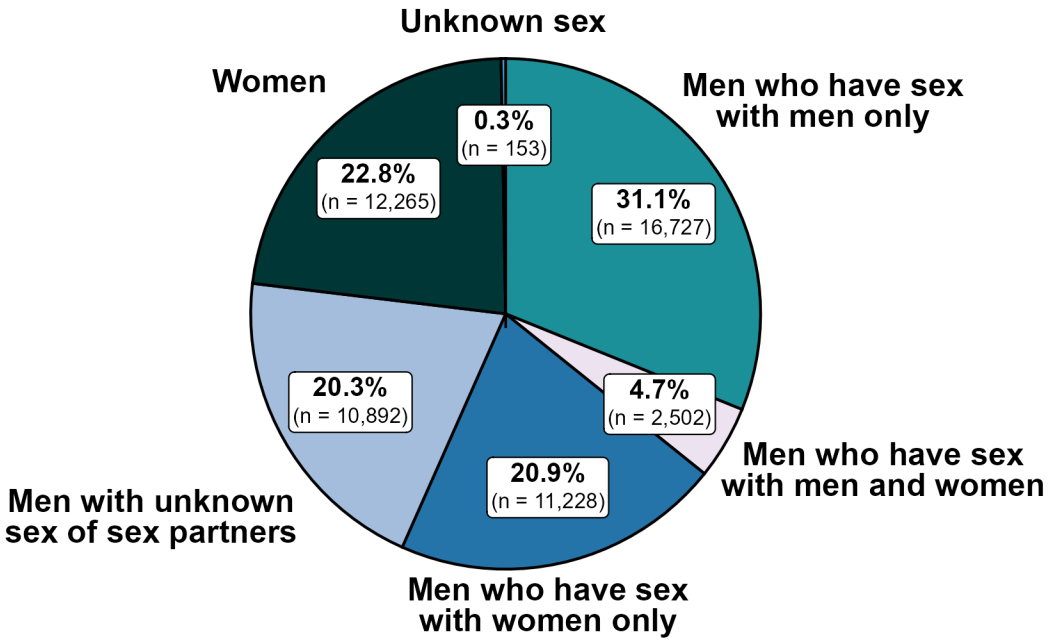
Although the male-to-female rate ratio for primary and secondary syphilis increased from 1990 to 2013, the rate ratio is now declining due to the increasing rate of syphilis among women. During 2017 to 2021, the rate of primary and secondary syphilis among women more than doubled (2.3 per 100,000 in 2017 to 7.3 per 100,000 in 2021).

The COVID-19 pandemic has introduced uncertainty and difficulty in interpreting STD data collected during 2020 and 2021. See Impact of COVID-19 on STDs (https://www.cdc.gov/std/statistics/2021/impact.htm) for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2021/technical-notes.htm) for information on syphilis case reporting.

Data points are available at https://www.cdc.gov/std/statistics/2021/data.zip.

Primary and Secondary Syphilis — Distribution of Cases by Sex and Sex of Sex Partners, United States, 2021



Summary

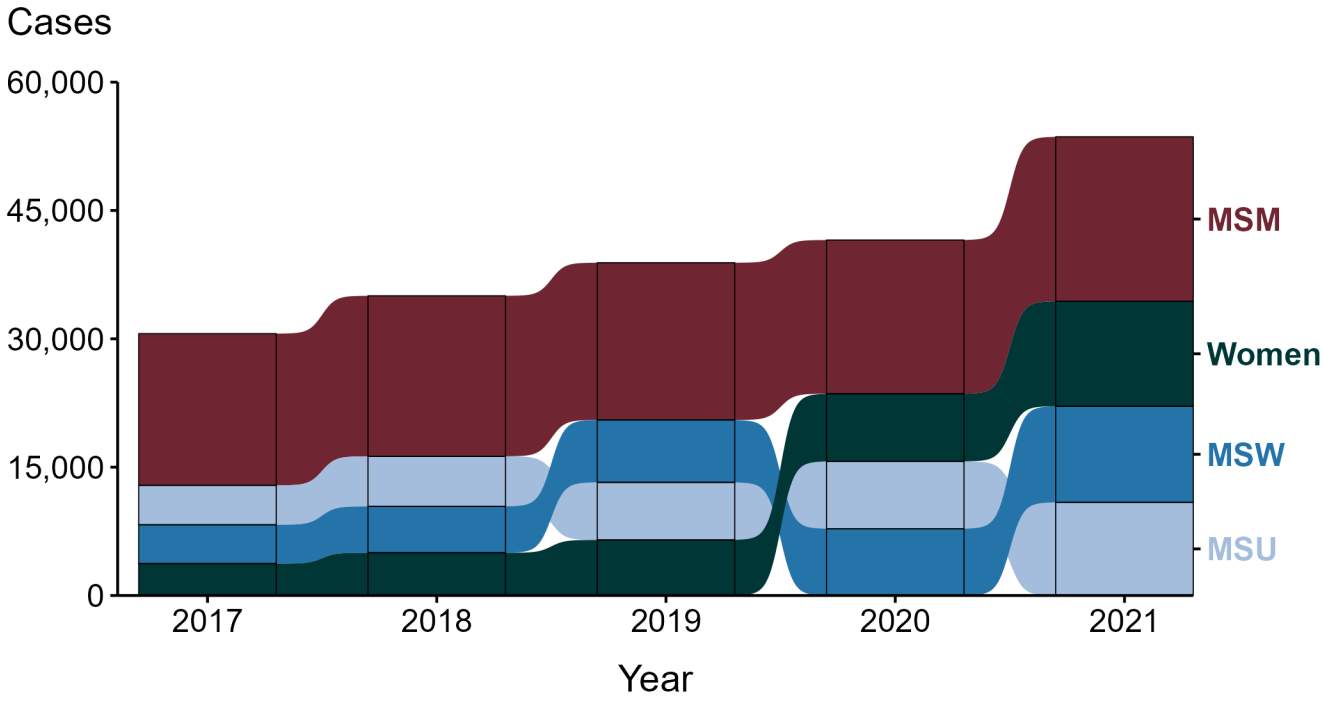
Of 53,767 reported primary and secondary syphilis cases in 2021, 31.1% were among men who have sex with men only. Men who have sex with men only combined with men who have sex with both men and women accounted for 35.8% of all primary and secondary syphilis cases, 46.5% of all male primary and secondary syphilis cases, and 63.1% of male primary and secondary syphilis cases with information on sex of sex partners.

The COVID-19 pandemic has introduced uncertainty and difficulty in interpreting STD data collected during 2020 and 2021. See Impact of COVID-19 on STDs (https://www.cdc.gov/std/statistics/2021/impact.htm) for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2021/technical-notes.htm) for information on syphilis case reporting.

Data points are available at https://www.cdc.gov/std/statistics/2021/data.zip.

Primary and Secondary Syphilis — Reported Cases by Sex and Sex of Sex Partners, United States, 2017–2021



ACRONYMS: MSM = Gay, bisexual, and other men who have sex with men; MSU = Men with unknown sex of sex partners; MSW = Men who have sex with women only

NOTE: Over the five year period, 0.2% of cases were missing sex and were not included.

Summary

During 2017 to 2021, a plurality (46.1%) of primary and secondary syphilis cases were among gay, bisexual, and other men who have sex with men (MSM; 92,074 cases).

During 2020 to 2021, the number of cases among MSM increased 7.0% (17,968 in 2020 to 19,229 in 2021), while the number of cases increased 43.9% among men who have sex with women only (MSW; 7,801 in 2020 to 11,228 in 2021), 38.3% among men with unknown sex of sex partners (MSU; 7,877 in 2020 to 10,892 in 2021), and 55.2% among women (7,901 in 2020 to 12,265 in 2021).

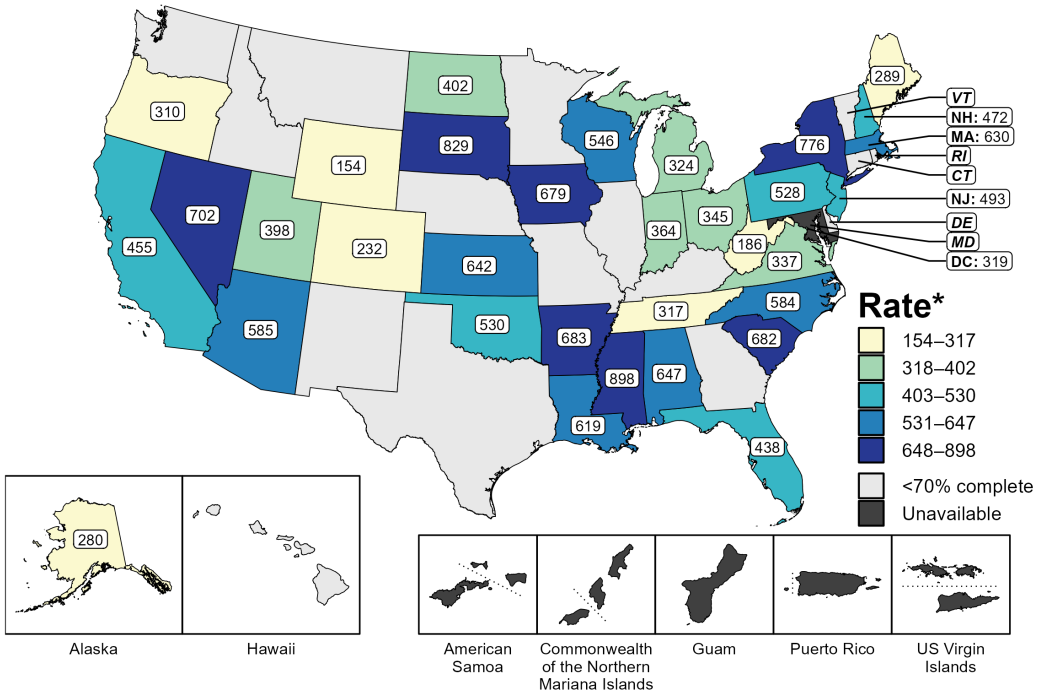
During 2017 to 2021, the number of cases among MSM increased 8.4% (17,736 in 2017 to 19,229 in 2021), while the number of cases increased 146.9% among MSW (4,548 in 2017 to 11,228 in 2021), 136.7% among MSU (4,601 in 2017 to 10,892 in 2021), and 229.5% among women (3,722 in 2017 to 12,265 in 2021).

The COVID-19 pandemic has introduced uncertainty and difficulty in interpreting STD data collected during 2020 and 2021. See Impact of COVID-19 on STDs (https://www.cdc.gov/std/statistics/2021/impact.htm) for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2021/technical-notes.htm) for information on syphilis case reporting.

Data points are available at https://www.cdc.gov/std/statistics/2021/data.zip.

Primary and Secondary Syphilis — Estimated Rates of Reported Cases Among MSM by State, 33 States and the District of Columbia, 2021



* 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 2021. Population estimates for MSM in US territories are unavailable.

ACRONYMS: MSM = Gay, bisexual, and other men who have sex with men; MSW = Men who have sex with women only

Summary

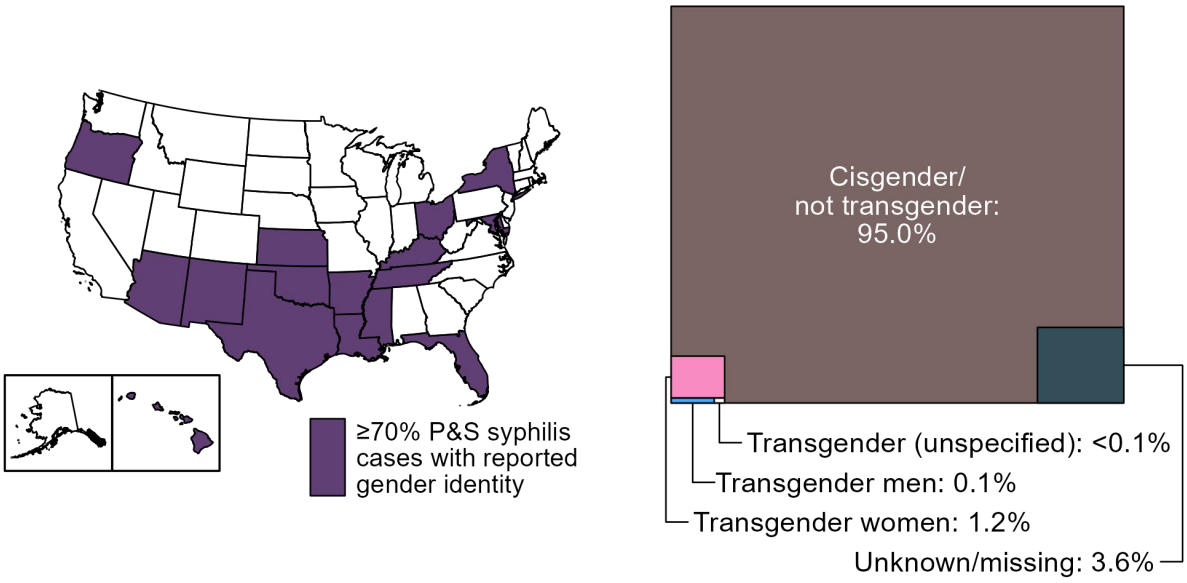
In 2021, 33 states and the District of Columbia (DC) provided data to classify at least 70% of male primary and secondary syphilis cases as men who have sex with men (MSM) or men who have sex with women only. Among the states, estimated rates of primary and secondary syphilis cases in MSM ranged from 154 per 100,000 in Wyoming to 898 per 100,000 in Mississippi. The estimated rate in DC was 319 per 100,000. Due to a network security incident in December 2021, the Maryland Department of Health could not finalize their 2021 STD case notification data. 2021 data from Maryland have been suppressed for this figure; however, they are included in national and regional case counts and rates displayed in other figures.

The COVID-19 pandemic has introduced uncertainty and difficulty in interpreting STD data collected during 2020 and 2021. See Impact of COVID-19 on STDs (https://www.cdc.gov/std/statistics/2021/impact.htm) for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2021/technical-notes.htm) for information on syphilis case reporting and information on estimating MSM population sizes for rate denominators.

Data points are available at https://www.cdc.gov/std/statistics/2021/data.zip.

Primary and Secondary Syphilis — Distribution of Cases by Gender Identity, 16 States* and the District of Columbia, 2021



* States reporting gender identity for ≥70% reported primary and secondary syphilis cases in 2021; in 2021, 26 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.

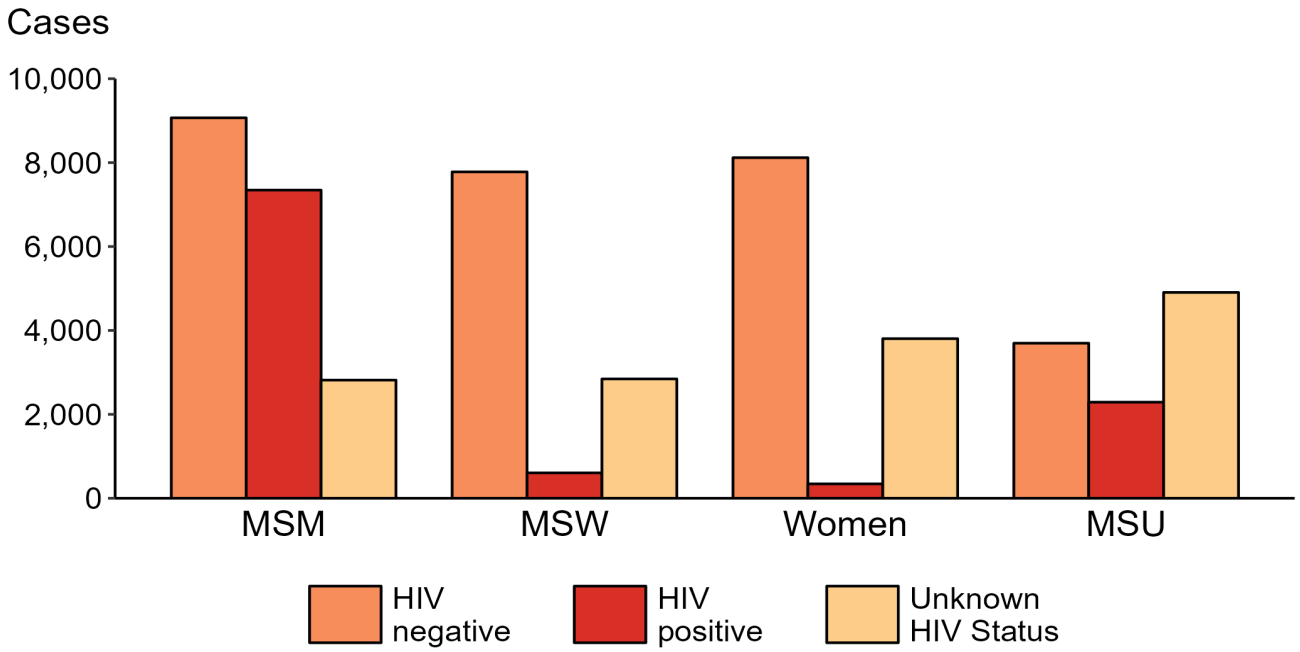
In 2021, 16 states and the District of Columbia reported gender identity for ≥70% of reported primary and secondary syphilis cases. In those areas, 24,349 total cases were reported, of which 95.0% were reported with cisgender (i.e., not transgender) identity, 3.6% were reported with missing or unknown gender identity, and 1.4% were reported with transgender identity, specifically as transgender women (1.2%), transgender men (0.1%), and unspecified transgender identity (<0.1%).

The COVID-19 pandemic has introduced uncertainty and difficulty in interpreting STD data collected during 2020 and 2021. See Impact of COVID-19 on STDs (https://www.cdc.gov/std/statistics/2021/impact.htm) for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2021/technical-notes.htm) for information on syphilis case reporting and collection of gender identity.

Data points are available at https://www.cdc.gov/std/statistics/2021/data.zip.

Primary and Secondary Syphilis — Reported Cases by Sex, Sex of Sex Partners, and HIV Status, United States, 2021



NOTE: Of all reported cases of primary and secondary syphilis, 0.3% were cases with unknown sex.

ACRONYMS: MSM = Gay, bisexual, and other 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, 44.8% of cases among gay, bisexual, and other men who have sex with men were HIV positive, compared with 38.3% of cases among men with unknown sex of sex partners, 7.2% of cases among men who have sex with women only, and 4.1% of cases among women.

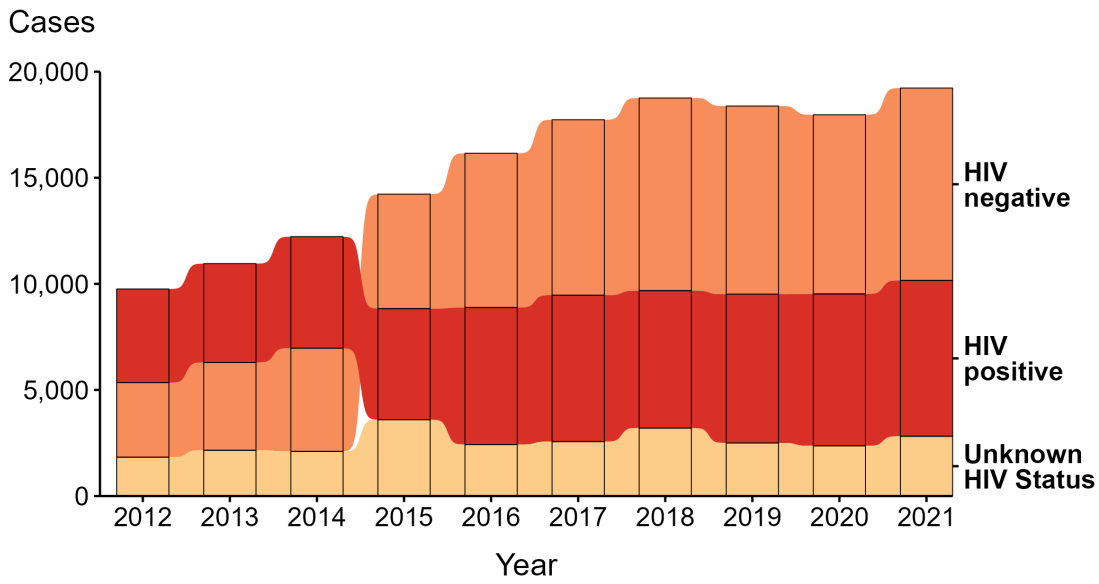
For this figure, HIV status is categorized as reported by jurisdictions. Jurisdictions determine HIV status using multiple sources, including self-report, match with HIV registry, and available test results. Cases reported with a missing or unknown status are categorized as having an unknown HIV status.

The COVID-19 pandemic has introduced uncertainty and difficulty in interpreting STD data collected during 2020 and 2021. See Impact of COVID-19 on STDs (https://www.cdc.gov/std/statistics/2021/impact.htm) for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2021/technical-notes.htm) for information on syphilis case reporting.

Data points are available at https://www.cdc.gov/std/statistics/2021/data.zip.

Primary and Secondary Syphilis — Reported Cases Among Men Who Have Sex with Men by HIV Status, United States, 2012–2021



Summary

During 2012 to 2021, a plurality (44.3%) of primary and secondary syphilis cases among gay, bisexual, and other men who have sex with men (MSM) were among persons reported as HIV negative.

During 2020 to 2021, the number of cases among MSM who were reported as HIV negative increased 7.4% (from 8,441 in 2020 to 9,068 in 2021), the number who were reported as HIV positive increased 2.6% (from 7,161 in 2020 to 7,345 in 2021), and the number who were reported with unknown HIV status increased 19.0% (from 2,366 in 2020 to 2,816 in 2021).

During 2012 to 2021, the number of cases among MSM who were reported as HIV negative increased 158.3% (from 3,510 in 2012 to 9,068 in 2021), the number who were reported as HIV positive increased 66.3% (from 4,416 in 2012 to 7,345 in 2021), and the number who were reported with unknown HIV status increased 53.6% (from 1,833 in 2012 to 2,816 in 2021).

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.

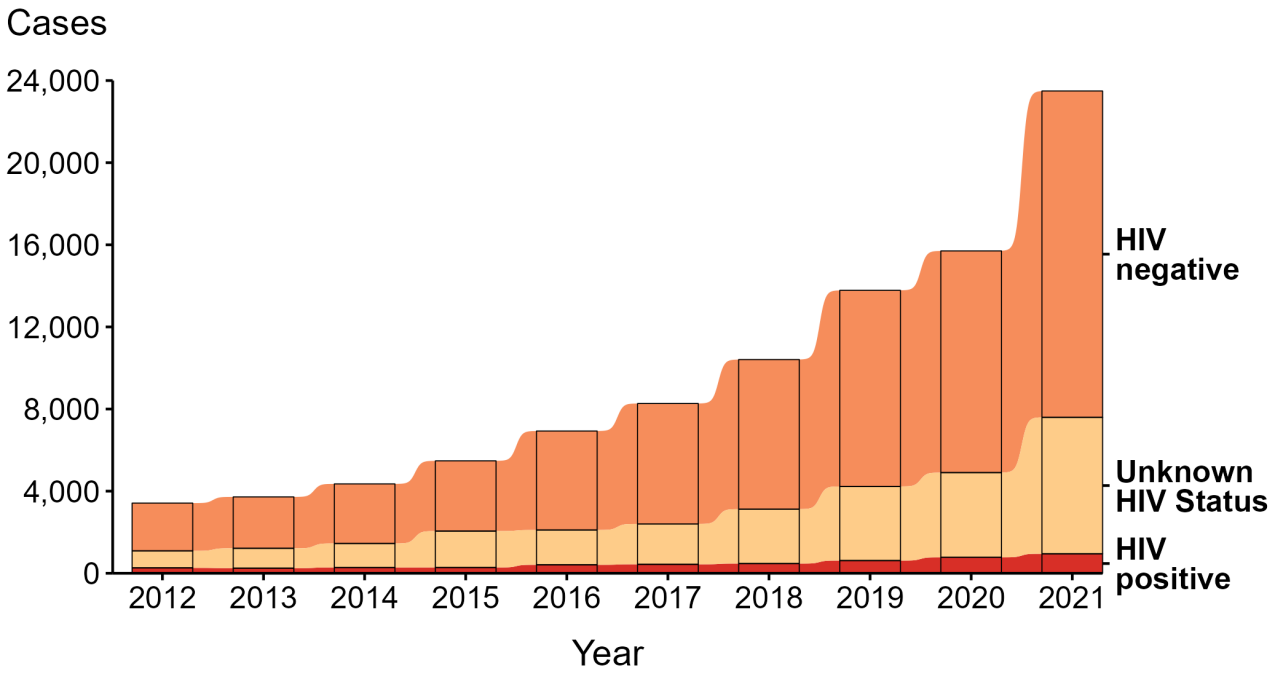
For this figure, HIV status is categorized as reported by jurisdictions. Jurisdictions determine HIV status using multiple sources, including self-report, match with HIV registry, and available test results. Cases reported with a missing or unknown status are categorized as having an unknown HIV status.

The COVID-19 pandemic has introduced uncertainty and difficulty in interpreting STD data collected during 2020 and 2021. See Impact of COVID-19 on STDs (https://www.cdc.gov/std/statistics/2021/impact.htm) for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2021/technical-notes.htm) for information on syphilis case reporting.

Data points are available at https://www.cdc.gov/std/statistics/2021/data.zip.

Primary and Secondary Syphilis — Reported Cases Among Women and Men Who Have Sex with Women Only by HIV Status, United States, 2012–2021



Summary

During 2012 to 2021, the majority (68.4%) of primary and secondary syphilis cases among women and men who have sex with women only were among persons reported as HIV negative.

During 2020 to 2021, the number of cases among women and men who have sex with women only who were reported as HIV negative increased 47.2% (from 10,799 in 2020 to 15,897 in 2021), the number who were reported with unknown HIV status increased 61.1% (from 4,126 in 2020 to 6,648 in 2021), and the number who were reported as HIV positive increased 22.0% (from 777 in 2020 to 948 in 2021).

During 2012 to 2021, the number of cases among women and men who have sex with women only who were reported as HIV negative increased 583.4% (from 2,326 in 2012 to 15,897 in 2021), the number who were reported with unknown HIV status increased 701.9% (from 829 in 2012 to 6,648 in 2021), and the number who were reported as HIV positive increased 260.5% (from 263 in 2012 to 948 in 2021).

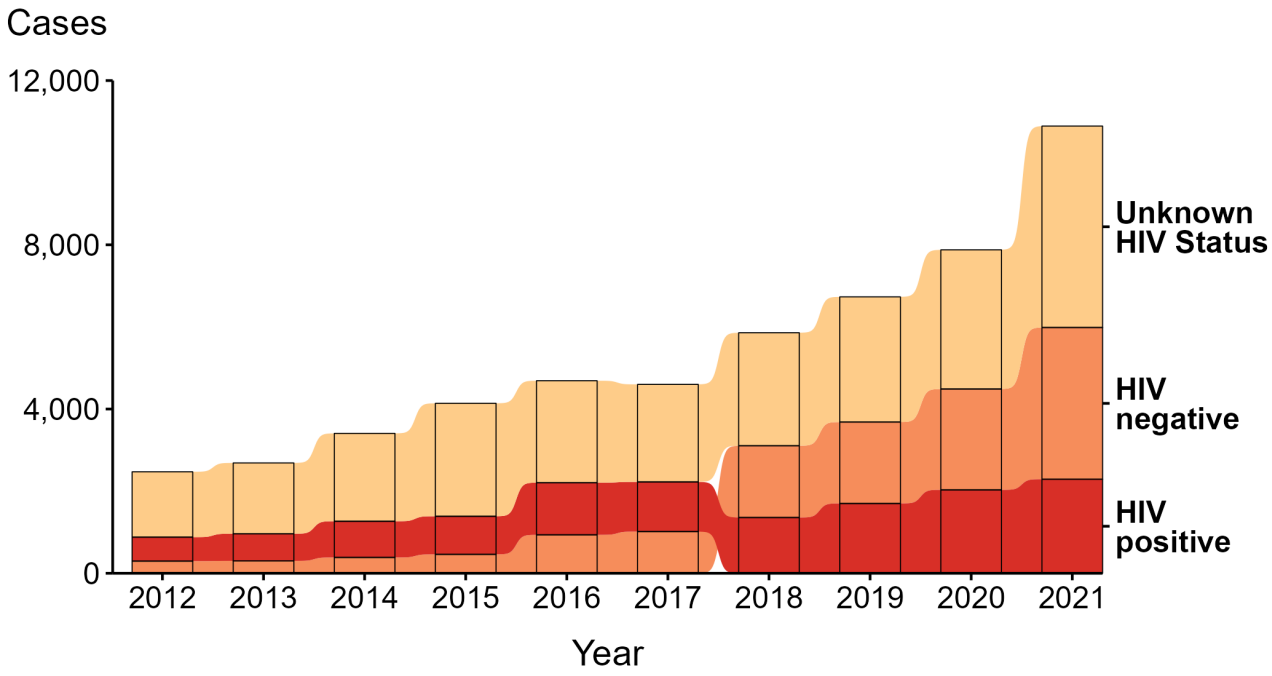
For this figure, HIV status is categorized as reported by jurisdictions. Jurisdictions determine HIV status using multiple sources, including self-report, match with HIV registry, and available test results. Cases reported with a missing or unknown status are categorized as having an unknown HIV status.

The COVID-19 pandemic has introduced uncertainty and difficulty in interpreting STD data collected during 2020 and 2021. See Impact of COVID-19 on STDs (https://www.cdc.gov/std/statistics/2021/impact.htm) for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2021/technical-notes.htm) for information on syphilis case reporting.

Data points are available at https://www.cdc.gov/std/statistics/2021/data.zip.

Primary and Secondary Syphilis — Reported Cases Among Men with Unknown Sex of Sex Partners by HIV Status, United States, 2012–2021



Summary

During 2012 to 2021, the majority (50.9%) of primary and secondary syphilis cases among men with unknown sex of sex partners were among persons reported with unknown HIV status.

During 2020 to 2021, the number of cases among men with unknown sex of sex partners who were reported with unknown HIV status increased 44.8% (from 3,389 in 2020 to 4,906 in 2021), the number who were reported as HIV negative increased 50.4% (from 2,457 in 2020 to 3,696 in 2021), and the number who were reported as HIV positive increased 12.8% (from 2,031 in 2020 to 2,290 in 2021).

During 2012 to 2021, the number of cases among men with unknown sex of sex partners who were reported with unknown HIV status increased 208.4% (from 1,591 in 2012 to 4,906 in 2021), the number who were reported as HIV negative increased 1,148.6% (from 296 in 2012 to 3,696 in 2021), and the number who were reported as HIV positive increased 292.1% (from 584 in 2012 to 2,290 in 2021).

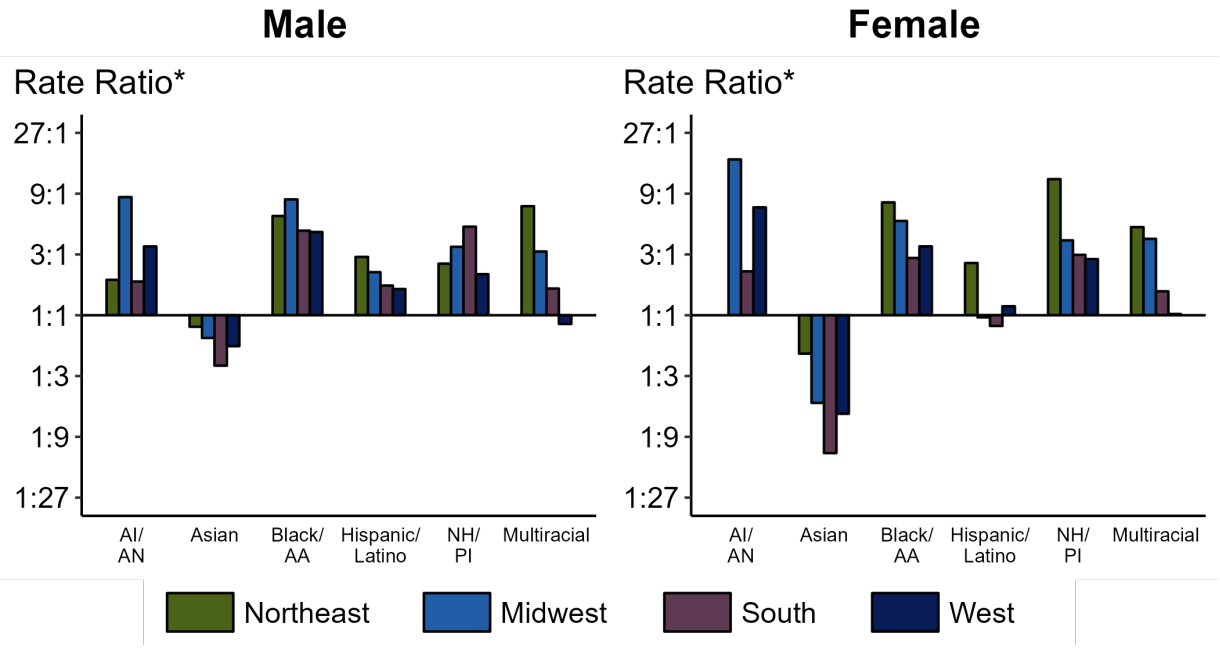
For this figure, HIV status is categorized as reported by jurisdictions. Jurisdictions determine HIV status using multiple sources, including self-report, match with HIV registry, and available test results. Cases reported with a missing or unknown status are categorized as having an unknown HIV status.

The COVID-19 pandemic has introduced uncertainty and difficulty in interpreting STD data collected during 2020 and 2021. See Impact of COVID-19 on STDs (https://www.cdc.gov/std/statistics/2021/impact.htm) for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2021/technical-notes.htm) for information on syphilis case reporting.

Data points are available at https://www.cdc.gov/std/statistics/2021/data.zip.

Primary and Secondary Syphilis — Ratios of Rates of Reported Cases by Sex, Race/Hispanic Ethnicity, and Region, United States, 2021



* 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 2021. 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 8.5 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 16.7 times the rate among non-Hispanic White women.

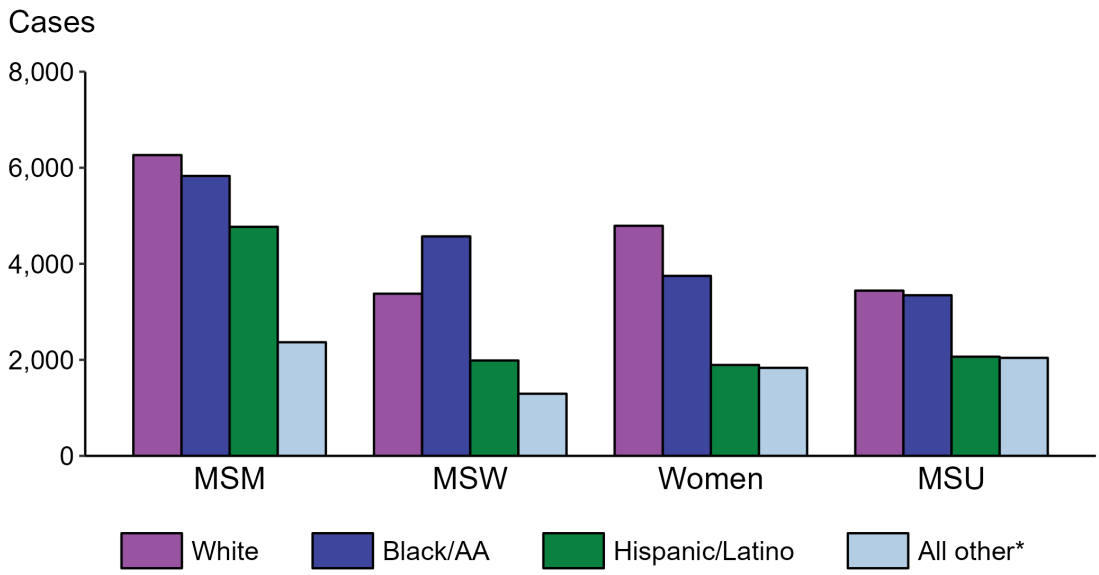
For this figure, race/Hispanic ethnicity is categorized first by reported Hispanic ethnicity, then by reported race. Therefore, cases categorized as Hispanic/Latino can be of any race(s); cases categorized into a race group include both non-Hispanic persons and persons of unknown Hispanic ethnicity. Not all US jurisdictions reported cases in Office of Management and Budget compliant race categories in 2021. This may minimally under- or overestimate rates for Asian, Native Hawaiian or other Pacific Islander, or multiracial individuals. No population data exist for unknown or other race; therefore, rates and rate ratios are not calculated. For completeness, data in this figure include cases reported from all jurisdictions.

The COVID-19 pandemic has introduced uncertainty and difficulty in interpreting STD data collected during 2020 and 2021. See Impact of COVID-19 on STDs (https://www.cdc.gov/std/statistics/2021/impact.htm) for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2021/technical-notes.htm) for information on syphilis case reporting and reporting of race/Hispanic ethnicity for STD cases.

Data points are available at https://www.cdc.gov/std/statistics/2021/data.zip.

Primary and Secondary Syphilis — Reported Cases by Sex, Sex of Sex Partners, and Race/Hispanic Ethnicity, United States, 2021



* Includes persons with unknown race and Hispanic ethnicity

NOTE: Of all reported cases of primary and secondary syphilis, 0.3% were cases with unknown sex.

ACRONYMS: MSM = Gay, bisexual, and other men who have sex with men; MSW = Men who have sex with women only; MSU = Men with unknown sex of sex partners

Summary

Across the four race and Hispanic ethnicity groups displayed, gay, bisexual, and other 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, 30.3% were non-Hispanic Black or African American, 24.8% were Hispanic or Latino, and 12.3% were another known or unknown race and not reported to be Hispanic or Latino.

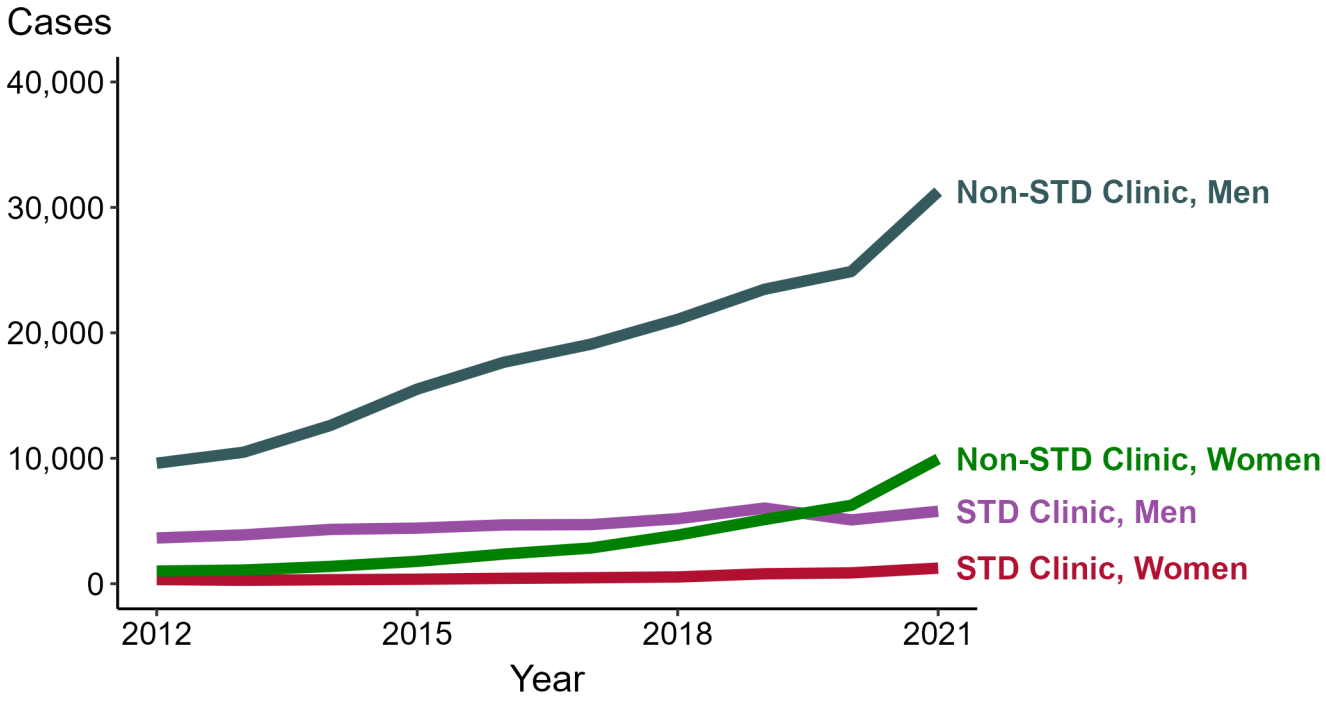
For this figure, race/Hispanic ethnicity is categorized first by reported Hispanic ethnicity, then by reported race. Therefore, cases categorized as Hispanic/Latino can be of any race(s); cases categorized into a race group include both non-Hispanic persons and persons of unknown Hispanic ethnicity. Not all US jurisdictions reported cases in Office of Management and Budget compliant race categories in 2021. This may minimally under- or overestimate rates for Asian, Native Hawaiian or other Pacific Islander, or multiracial individuals. For completeness, data in this figure include cases reported from all jurisdictions.

The COVID-19 pandemic has introduced uncertainty and difficulty in interpreting STD data collected during 2020 and 2021. See Impact of COVID-19 on STDs (https://www.cdc.gov/std/statistics/2021/impact.htm) for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2021/technical-notes.htm) for information on syphilis case reporting and reporting of race/Hispanic ethnicity for STD cases.

Data points are available at https://www.cdc.gov/std/statistics/2021/data.zip.

Primary and Secondary Syphilis — Reported Cases by Reporting Source and Sex, United States, 2012–2021



NOTE: During 2012 to 2021, the proportion of all male cases with unknown reporting source was 9.7%, from a low of 6.7% in 2014 to a high of 12.4% in 2018.

Summary

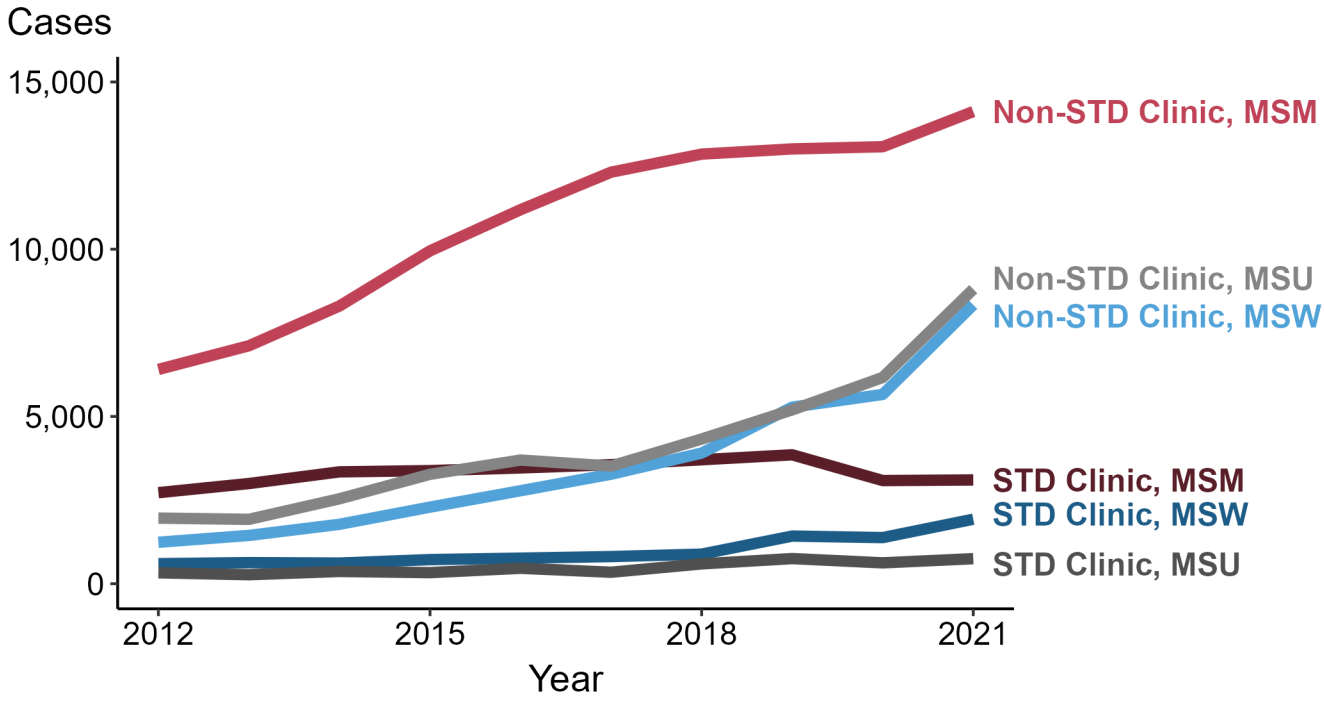
During 2012 to 2021, the number of primary and secondary syphilis cases reported from STD clinics increased 58.4% among men (3,647 to 5,778 cases) and increased 273.8% among women (332 to 1,241 cases), while the number of cases reported from non-STD clinics increased 225.4% among men (9,606 to 31,258 cases) and increased 887.4% among women (1,007 to 9,943 cases).

The COVID-19 pandemic has introduced uncertainty and difficulty in interpreting STD data collected during 2020 and 2021. See Impact of COVID-19 on STDs (https://www.cdc.gov/std/statistics/2021/impact.htm) for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2021/technical-notes.htm) for information on syphilis case reporting.

Data points are available at https://www.cdc.gov/std/statistics/2021/data.zip.

Primary and Secondary Syphilis — Reported Cases among Men by Reporting Source and Sex of Sex Partners, United States, 2012–2021



NOTE: During 2012 to 2021, the proportion of all male cases with unknown reporting source was 9.8%, from a low of 6.6% in 2012 to a high of 12.6% in 2018.

ACRONYMS: MSM = Gay, bisexual, and other men who have sex with men; MSW = Men who have sex with women only; MSU = Men with unknown sex of sex partners

Summary

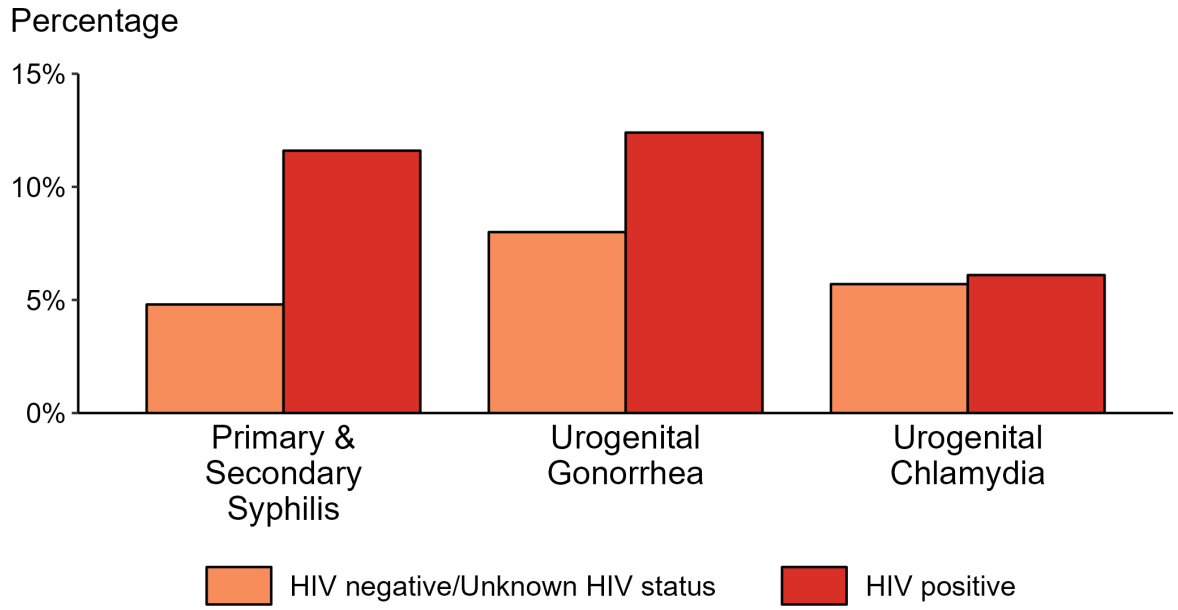
During 2012 to 2021, the number of primary and secondary syphilis cases reported from STD clinics increased 14.0% among gay, bisexual, and other men who have sex with men (MSM; 2,722 to 3,102 cases), 221.9% among men who have sex with women only (MSW; 599 to 1,928 cases), and 129.4% among men with unknown sex of sex partners (MSU; 326 to 748 cases). Concurrently, the number of cases reported from non-STD clinics increased 120.3% among MSM (6,406 to 14,115 cases), 572.9% among MSW (1,239 to 8,337 cases), and 349.1% among MSU (1,961 to 8,806 cases).

The COVID-19 pandemic has introduced uncertainty and difficulty in interpreting STD data collected during 2020 and 2021. See Impact of COVID-19 on STDs (https://www.cdc.gov/std/statistics/2021/impact.htm) for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2021/technical-notes.htm) for information on syphilis case reporting.

Data points are available at https://www.cdc.gov/std/statistics/2021/data.zip.

Proportion of MSM with Primary and Secondary Syphilis, Urogenital Gonorrhea, or Urogenital Chlamydia by HIV Status, STD Surveillance Network (SSuN), 2021



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, 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 (11.6% versus 4.8%). 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 (12.4% versus 8.0%); however, the proportion testing positive for urogenital chlamydia was similar (6.1% among HIV-positive MSM and 5.7% among MSM not known to be HIV positive).

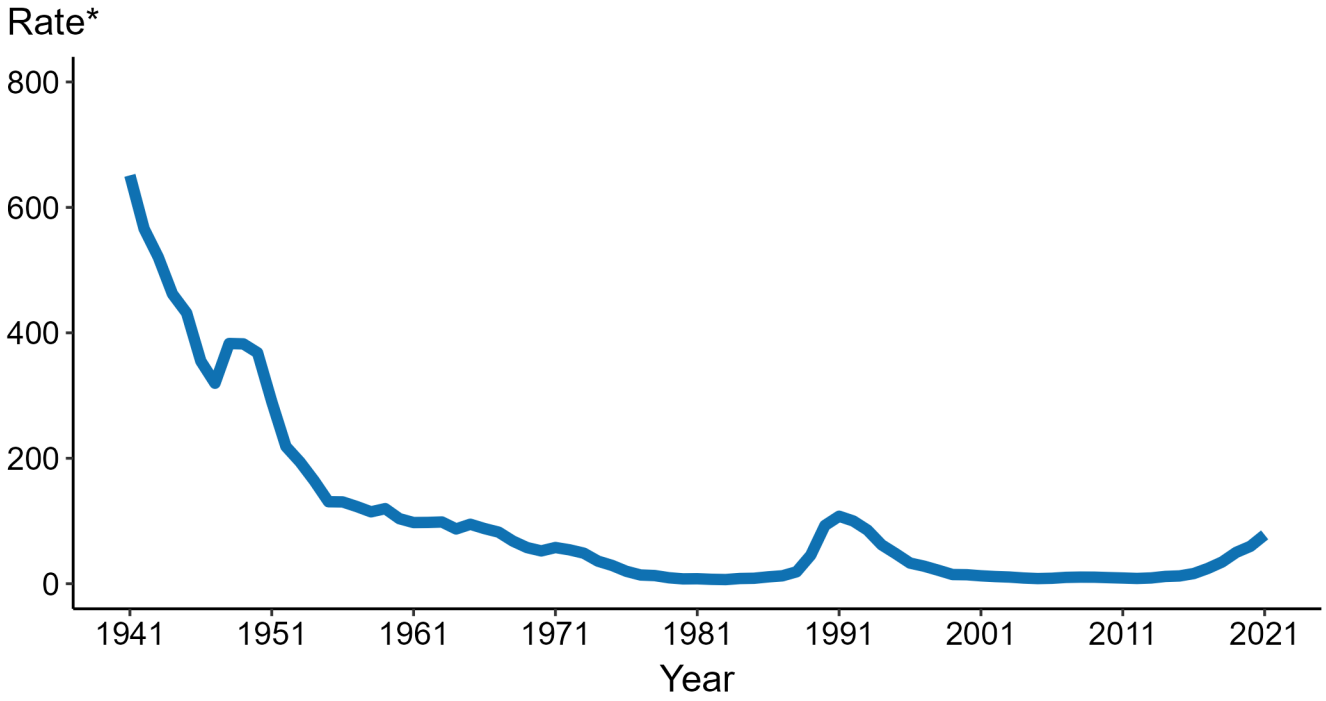
For this figure, HIV status is categorized using documented in the clinic records (based on self-report or most recent HIV test result) or matched information documented in the jurisdiction's HIV registry.

The COVID-19 pandemic has introduced uncertainty and difficulty in interpreting STD data collected during 2020 and 2021. See Impact of COVID-19 on STDs (https://www.cdc.gov/std/statistics/2021/impact.htm) for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2021/technical-notes.htm) for information on SSuN methodology.

Data points are available at https://www.cdc.gov/std/statistics/2021/data.zip.

Congenital Syphilis — Rates of Reported Cases by Year of Birth, United States, 1941–2021



* 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 2021, there were a total of 2,855 cases of congenital syphilis reported for a rate of 77.9 per 100,000 live births.

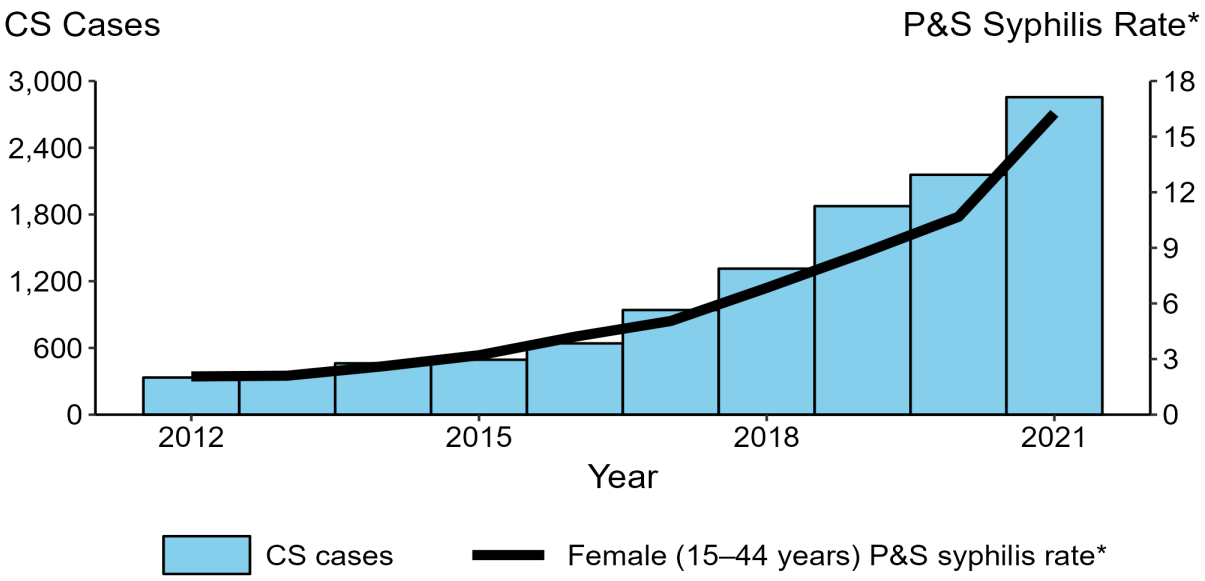
During 2020 to 2021, the rate of reported congenital syphilis increased 30.5% (from 59.7 to 77.9 per 100,000 live births).

The COVID-19 pandemic has introduced uncertainty and difficulty in interpreting STD data collected during 2020 and 2021. See Impact of COVID-19 on STDs (https://www.cdc.gov/std/statistics/2021/impact.htm) for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2021/technical-notes.htm) for information on syphilis case reporting, including changes in case definitions.

Data points are available at https://www.cdc.gov/std/statistics/2021/data.zip.

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, 2012–2021



* Per 100,000

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

Summary

In 2021, there were a total of 2,855 cases of congenital syphilis reported for a rate of 77.9 per 100,000 live births.

During 2020 to 2021, the number of cases of congenital syphilis increased 32.4% (2,157 to 2,855 cases), concurrent with a 52.3% increase (10.7 to 16.3 per 100,000) in the rate of primary and secondary syphilis among women aged 15 to 44 years.

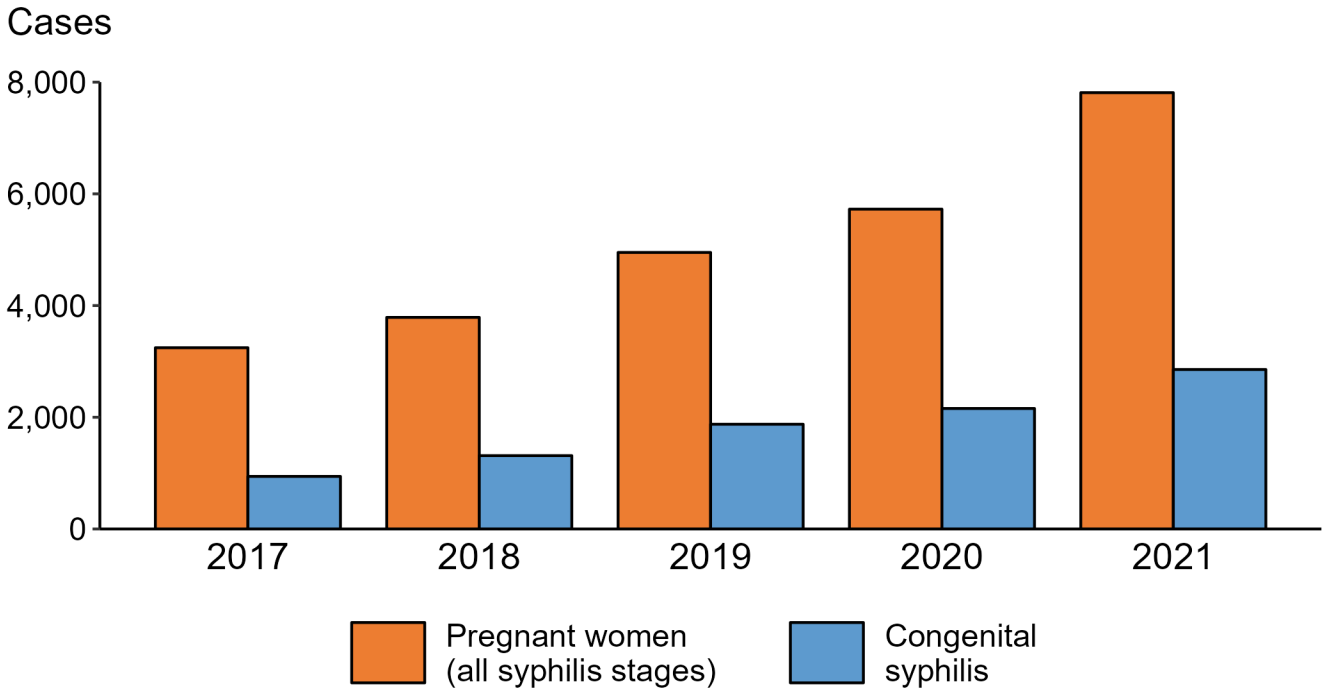
During 2012 to 2021, the number of cases of congenital syphilis increased 754.8% (334 to 2,855 cases), concurrent with a 676.2% increase (2.1 to 16.3 per 100,000) in the rate of primary and secondary syphilis among women aged 15 to 44 years.

The COVID-19 pandemic has introduced uncertainty and difficulty in interpreting STD data collected during 2020 and 2021. See Impact of COVID-19 on STDs (https://www.cdc.gov/std/statistics/2021/impact.htm) for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2021/technical-notes.htm) for information on syphilis case reporting.

Data points are available at https://www.cdc.gov/std/statistics/2021/data.zip.

Syphilis— Reported Cases of Syphilis (All Stages) among Pregnant Women and Reported Cases of Congenital Syphilis by Year of Birth, United States, 2017–2021



NOTE: The percent of cases missing information on pregnancy status decreased from 14.0% in 2017 to 9.3% in 2021.

Summary

In 2021, there were a total of 2,855 cases of congenital syphilis reported for a rate of 77.9 per 100,000 live births.

During 2020 to 2021, the number of women reported with syphilis (all stages) who were pregnant increased 36.4% (from 5,726 in 2020 to 7,812 in 2021). During the same time period, the number of reported cases of congenital syphilis increased 32.4% (from 2,157 in 2020 to 2,855 in 2021).

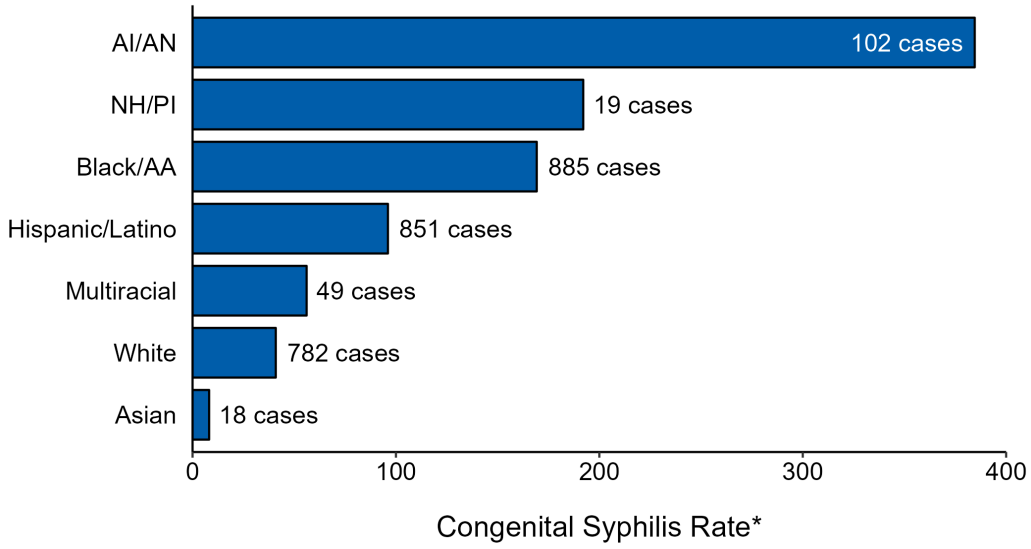
During 2017 to 2021, the number of women reported with syphilis (all stages) who were pregnant increased 140.7% (from 3,245 in 2017 to 7,812 in 2021). During the same time period, the number of reported cases of congenital syphilis increased 203.4% (from 941 in 2017 to 2,855 in 2021).

The COVID-19 pandemic has introduced uncertainty and difficulty in interpreting STD data collected during 2020 and 2021. See Impact of COVID-19 on STDs (https://www.cdc.gov/std/statistics/2021/impact.htm) for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2021/technical-notes.htm) for information on syphilis case reporting.

Data points are available at https://www.cdc.gov/std/statistics/2021/data.zip.

Congenital Syphilis — Case Counts and Rates of Reported Cases by Race/Hispanic Ethnicity of Mother, United States, 2021



* Per 100,000 live births

NOTE: In 2021, a total of 149 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 2021, there were a total of 2,855 cases of congenital syphilis reported for a rate of 77.9 per 100,000 live births.

In 2021, rates of congenital syphilis were highest among mothers who were non-Hispanic American Indian or Alaska Native (384.5 per 100,000 live births), followed by mothers who were non-Hispanic Native Hawaiian or other Pacific Islander (192.1 per 100,000 live births) and mothers who were non-Hispanic Black or African American (169.2 per 100,000 live births). The greatest number of reported cases was among mothers who were non-Hispanic Black or African American (885 cases), followed by mothers who were Hispanic or Latino and of any race(s) (851 cases) and mothers who were non-Hispanic White (782 cases).

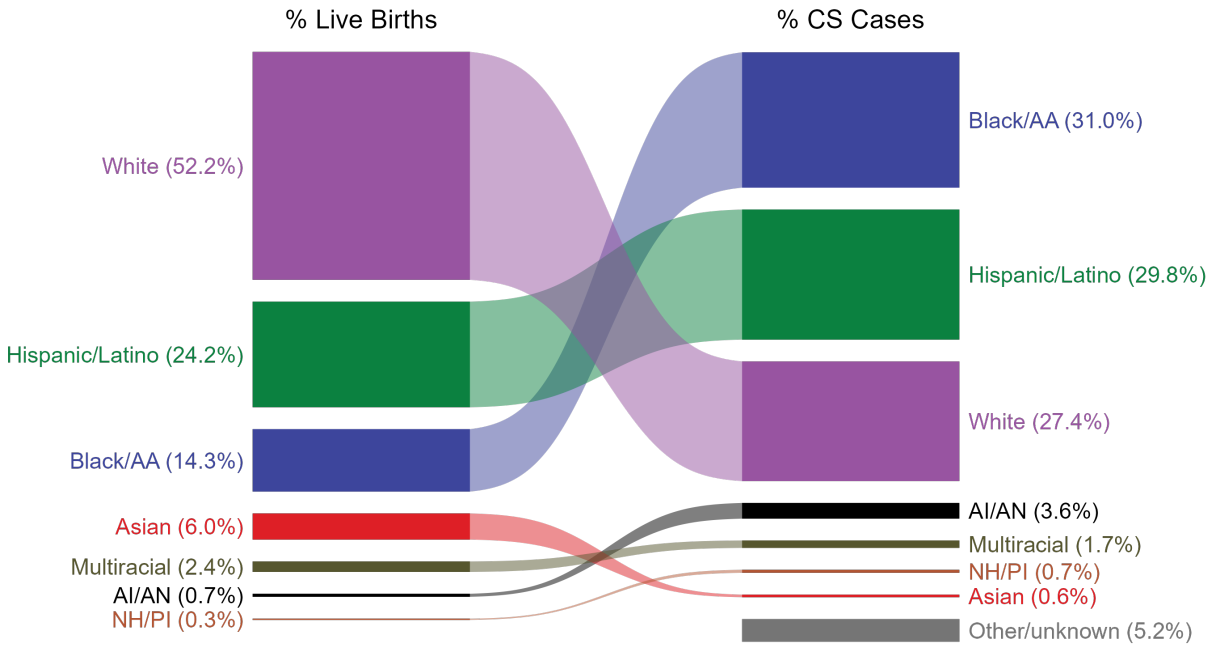
For this figure, race/Hispanic ethnicity is categorized first by reported Hispanic ethnicity of the mother, then by reported race of the mother. Therefore, cases categorized as Hispanic/Latino can be of any race(s); cases categorized into a race group include both non-Hispanic persons and persons of unknown Hispanic ethnicity. Not all US jurisdictions reported cases in Office of Management and Budget compliant race categories in 2021. This may minimally under- or overestimate rates for Asian, Native Hawaiian or other Pacific Islander, or multiracial individuals. No population data exist for unknown or other race; therefore, rates are not calculated. For completeness, data in this figure include cases reported from all jurisdictions.

The COVID-19 pandemic has introduced uncertainty and difficulty in interpreting STD data collected during 2020 and 2021. See Impact of COVID-19 on STDs (https://www.cdc.gov/std/statistics/2021/impact.htm) for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2021/technical-notes.htm) for information on syphilis case reporting and reporting of race/Hispanic ethnicity for STD cases.

Data points are available at https://www.cdc.gov/std/statistics/2021/data.zip.

Congenital Syphilis — Reported Cases by Race/Hispanic Ethnicity of Mother, United States, 2021



NOTE: In 2021, a total of 149 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 2021, there were a total of 2,855 cases of congenital syphilis reported for a rate of 77.9 per 100,000 live births.

The percentages of congenital syphilis cases by race and Hispanic ethnicity of mother were disproportionate to the percentages among live births in 2021. The greatest disparity was observed among non-Hispanic Black or African American mothers, who represented 31.0% of congenital syphilis cases (n = 885) despite accounting for 14.3% of live births. Additionally, mothers who were Hispanic or Latino of any race(s), non-Hispanic American Indian or Alaska Native, and non-Hispanic Native Hawaiian or other Pacific Islander were overrepresented among congenital syphilis cases relative to their proportion of live births.

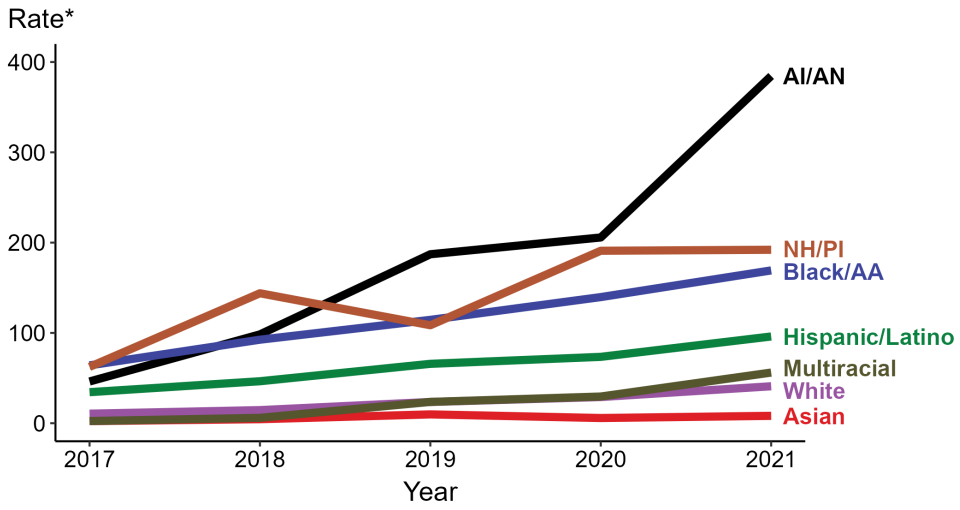
For this figure, race/Hispanic ethnicity is categorized first by reported Hispanic ethnicity of the mother, then by reported race of the mother. Therefore, cases categorized as Hispanic/Latino can be of any race(s); cases categorized into a race group include both non-Hispanic persons and persons of unknown Hispanic ethnicity. Not all US jurisdictions reported cases in Office of Management and Budget compliant race categories in 2021. This may minimally under- or overestimate rates for Asian, Native Hawaiian or other Pacific Islander, or multiracial individuals. No population data exist for unknown or other race; therefore, rates are not calculated. For completeness, data in this figure include cases reported from all jurisdictions.

The COVID-19 pandemic has introduced uncertainty and difficulty in interpreting STD data collected during 2020 and 2021. See Impact of COVID-19 on STDs (https://www.cdc.gov/std/statistics/2021/impact.htm) for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2021/technical-notes.htm) for information on syphilis case reporting and reporting of race/Hispanic ethnicity for STD cases.

Data points are available at https://www.cdc.gov/std/statistics/2021/data.zip.

Congenital Syphilis — Rates of Reported Cases by Year of Birth, Race/Hispanic Ethnicity of Mother, United States, 2017–2021



* 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 2021, there were a total of 2,855 cases of congenital syphilis reported for a rate of 77.9 per 100,000 live births.

In 2021, 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 (384.5), followed by mothers who were non-Hispanic Native Hawaiian or other Pacific Islander (192.1).

During 2020 to 2021, the greatest increase in rate of reported cases of congenital syphilis per 100,000 live births was among mothers who were non-Hispanic and of multiple races (29.6 to 56.1; 89.5% increase). Mothers who were non-Hispanic and of multiple races also had the greatest five-year increase in rate of congenital syphilis (2.4 to 56.1; 2,237.5% increase from 2017).

There were no decreases in the rate of reported cases of congenital syphilis per 100,000 live births among any race/ethnicity group during 2020 to 2021. There were also no decreases in the rate of congenital syphilis among any race/ethnicity group during 2017 to 2021.

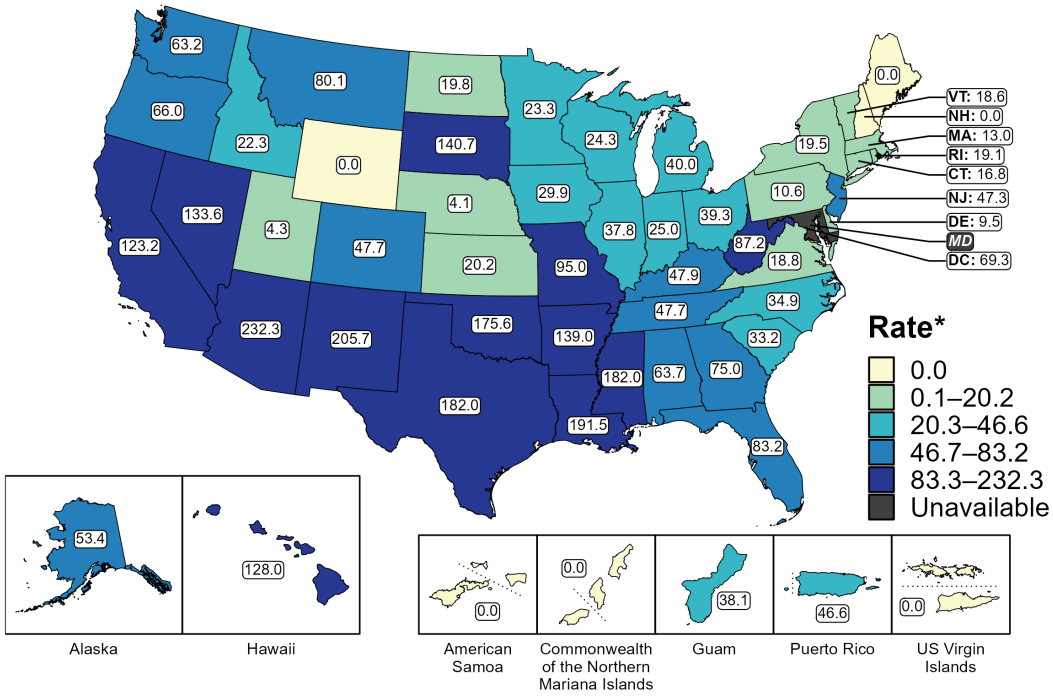
For this figure, race/Hispanic ethnicity is categorized first by reported Hispanic ethnicity of the mother, then by reported race of the mother. Therefore, cases categorized as Hispanic/Latino can be of any race(s); cases categorized into a race group include both non-Hispanic persons and persons of unknown Hispanic ethnicity. Not all US jurisdictions reported cases in Office of Management and Budget compliant race categories during 2017 to 2021. This may minimally under- or overestimate rates for Asian, Native Hawaiian or other Pacific Islander, or multiracial individuals. No population data exist for unknown or other race; therefore, rates are not calculated. For completeness, data in this figure include cases reported from all jurisdictions.

The COVID-19 pandemic has introduced uncertainty and difficulty in interpreting STD data collected during 2020 and 2021. See Impact of COVID-19 on STDs (https://www.cdc.gov/std/statistics/2021/impact.htm) for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2021/technical-notes.htm) for information on syphilis case reporting and reporting of race/Hispanic ethnicity for STD cases.

Data points are available at https://www.cdc.gov/std/statistics/2021/data.zip.

Congenital Syphilis — Rates of Reported Cases by State, United States and Territories, 2021



* Per 100,000 live births

Summary

In 2021, there were a total of 2,855 cases of congenital syphilis reported among states and the District of Columbia (DC) for a rate of 77.9 per 100,000 live births. Rates of reported congenital syphilis among states reporting any cases ranged from 4.1 cases per 100,000 live births in Nebraska to 232.3 cases per 100,000 live births in Arizona. No cases of congenital syphilis were reported in Maine, New Hampshire, or Wyoming. The rate of reported congenital syphilis in DC was 69.3 per 100,000 live births. Due to a network security incident in December 2021, the Maryland Department of Health could not finalize their 2021 STD case notification data. 2021 data from Maryland have been suppressed for this figure; however, they are included in national and regional case counts and rates displayed in other figures.

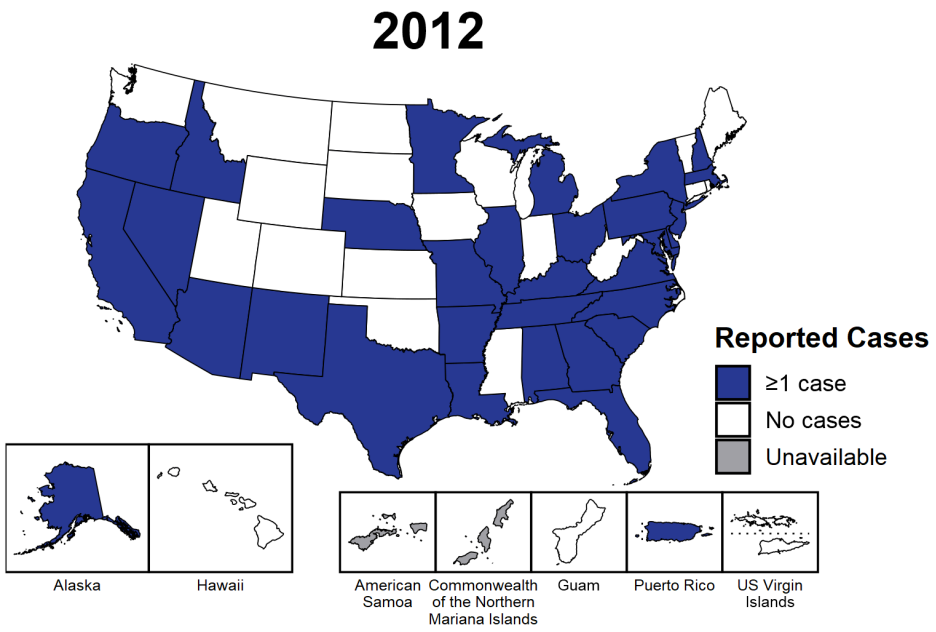
Including data from US territories, there were a total of 2,865 cases of congenital syphilis reported for a rate of 77.7 per 100,000 live births in 2021. Among US territories reporting any cases, rates of reported congenital syphilis ranged from 38.1 cases per 100,000 live births in Guam to 46.6 cases per 100,000 live births in Puerto Rico. No cases of congenital syphilis were reported in American Samoa, the Commonwealth of the Northern Mariana Islands, or the US Virgin Islands.

The COVID-19 pandemic has introduced uncertainty and difficulty in interpreting STD data collected during 2020 and 2021. See Impact of COVID-19 on STDs (https://www.cdc.gov/std/statistics/2021/impact.htm) for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2021/technical-notes.htm) for information on syphilis case reporting and on interpreting reported rates in US territories.

Data points are available at https://www.cdc.gov/std/statistics/2021/data.zip.

Congenital Syphilis — Reported Cases by Year of Birth and State, United States and Territories, 2012–2021



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 2021, there were a total of 2,855 cases of congenital syphilis reported among states and the District of Columbia (DC) for a rate of 77.9 per 100,000 live births. Including data from US territories, there were a total of 2,865 cases of congenital syphilis reported for a rate of 77.7 per 100,000 live births.

In 2012, 31 states and one US territory (59.3% of areas with available data) reported one or more cases of congenital syphilis. This increased to 46 states, DC, and two US territories (89.1% of areas with available data) in 2021.

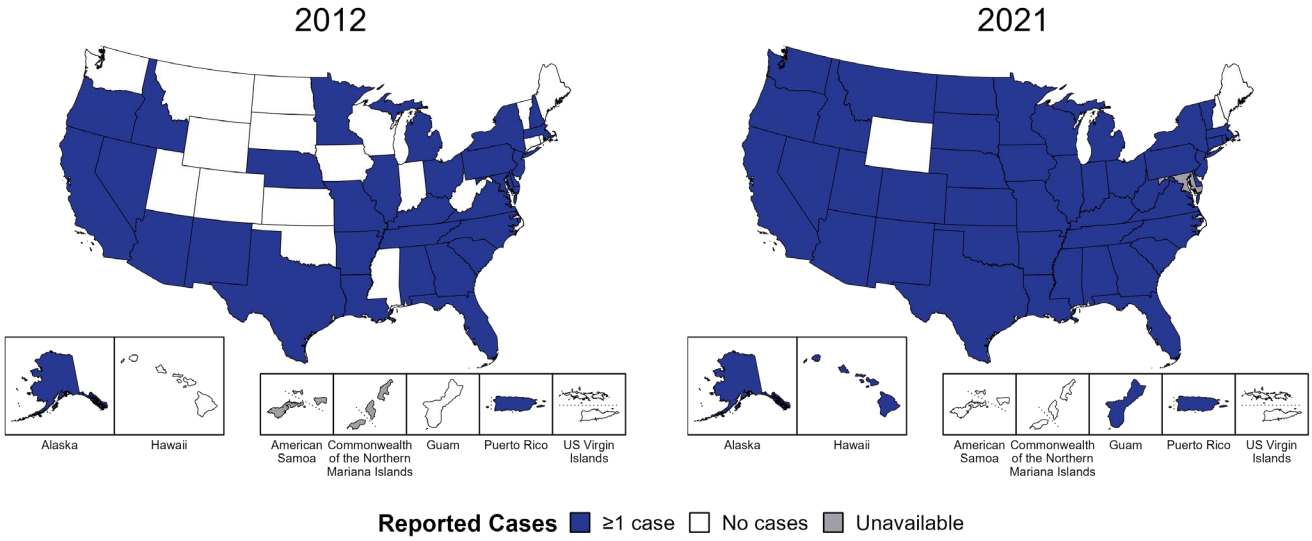
American Samoa and the Commonwealth of the Northern Mariana Islands began reporting data on congenital syphilis cases to CDC in 2018; data are not available for those areas prior to that year. In addition, data on reported congenital syphilis cases in 2018 are not available for the US Virgin Islands.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

The COVID-19 pandemic has introduced uncertainty and difficulty in interpreting STD data collected during 2020 and 2021. See Impact of COVID-19 on STDs (https://www.cdc.gov/std/statistics/2021/impact.htm) for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2021/technical-notes.htm) for information on syphilis case reporting and on interpreting reported rates in US territories.

Data points are available at https://www.cdc.gov/std/statistics/2021/data.zip.

Congenital Syphilis — Reported Cases by Year of Birth and State, United States and Territories, 2012 and 2021



Summary

In 2021, there were a total of 2,855 cases of congenital syphilis reported among states and the District of Columbia (DC) for a rate of 77.9 per 100,000 live births. Including data from US territories, there were a total of 2,865 cases of congenital syphilis reported for a rate of 77.7 per 100,000 live births.

In 2012, 31 states and one US territory (59.3% of areas with available data) reported one or more cases of congenital syphilis. This increased to 46 states, DC, and two US territories (89.1% of areas with available data) in 2021.

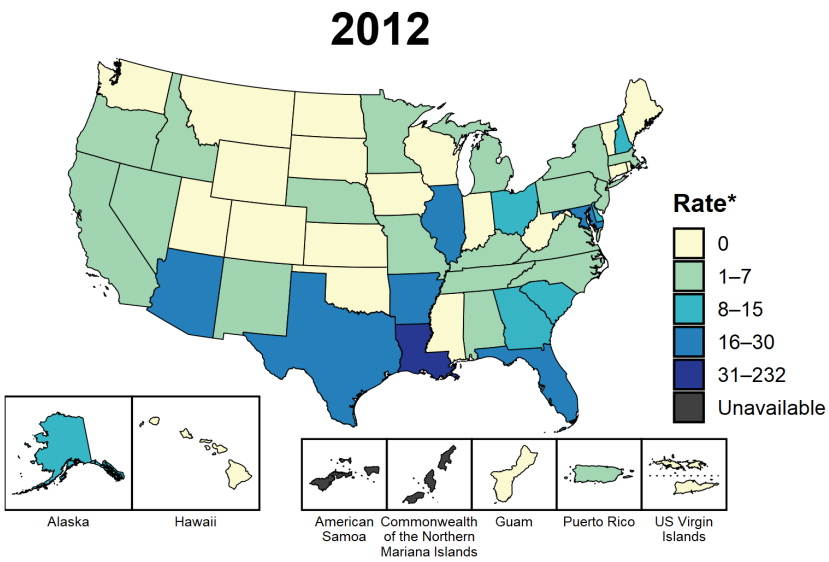
American Samoa and the Commonwealth of the Northern Mariana Islands began reporting data on congenital syphilis cases to CDC in 2018; data are not available for those areas prior to that year. Due to a network security incident in December 2021, the Maryland Department of Health could not finalize their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

The COVID-19 pandemic has introduced uncertainty and difficulty in interpreting STD data collected during 2020 and 2021. See Impact of COVID-19 on STDs (https://www.cdc.gov/std/statistics/2021/impact.htm) for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2021/technical-notes.htm) for information on syphilis case reporting and on interpreting reported rates in US territories.

Data points are available at https://www.cdc.gov/std/statistics/2021/data.zip.

Congenital Syphilis — Rates of Reported Cases by Year of Birth and State, United States and Territories, 2012–2021



* 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 2021, there were a total of 2,855 cases of congenital syphilis reported among states and the District of Columbia (DC) for a rate of 77.9 per 100,000 live births. Including data from US territories, there were a total of 2,865 cases of congenital syphilis reported for a rate of 77.7 per 100,000 live births.

In 2012, seven states (13.0% of areas with available data) had a rate of reported congenital syphilis greater than or equal to 16 cases per 100,000 live births. This increased to 41 states, DC, and two US territories (80.0% of areas with available data) in 2021. During 2020 to 2021, rates of reported congenital syphilis among live births increased in 37 states, DC, and two territories.

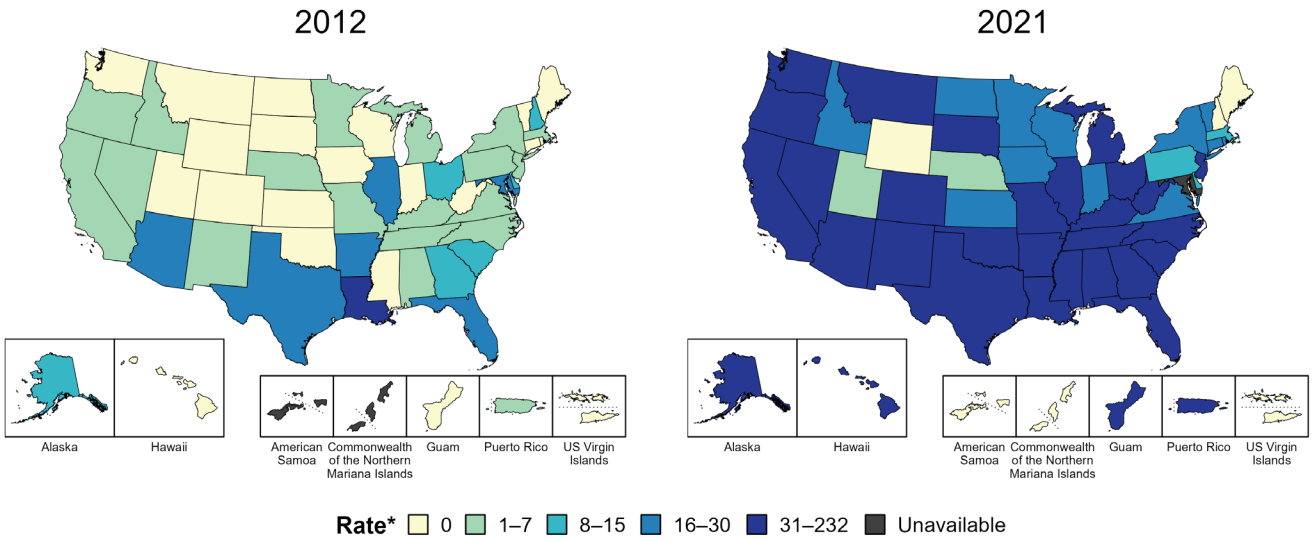
American Samoa and the Commonwealth of the Northern Mariana Islands began reporting data on congenital syphilis cases to CDC in 2018; data are not available for those areas prior to that year. In addition, data on reported congenital syphilis cases in 2018 are not available for the US Virgin Islands.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

The COVID-19 pandemic has introduced uncertainty and difficulty in interpreting STD data collected during 2020 and 2021. See Impact of COVID-19 on STDs (https://www.cdc.gov/std/statistics/2021/impact.htm) for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2021/technical-notes.htm) for information on syphilis case reporting and on interpreting reported rates in US territories.

Data points are available at https://www.cdc.gov/std/statistics/2021/data.zip.

Congenital Syphilis — Rates of Reported Cases by Year of Birth and State, United States and Territories, 2012 and 2021



* Per 100,000 live births

Summary

In 2021, there were a total of 2,855 cases of congenital syphilis reported among states and the District of Columbia (DC) for a rate of 77.9 per 100,000 live births. Including data from US territories, there were a total of 2,865 cases of congenital syphilis reported for a rate of 77.7 per 100,000 live births.

In 2012, seven states (13.0% of areas with available data) had a rate of reported congenital syphilis greater than or equal to 16 cases per 100,000 live births. This increased to 41 states, DC, and two US territories (80.0% of areas with available data) in 2021.

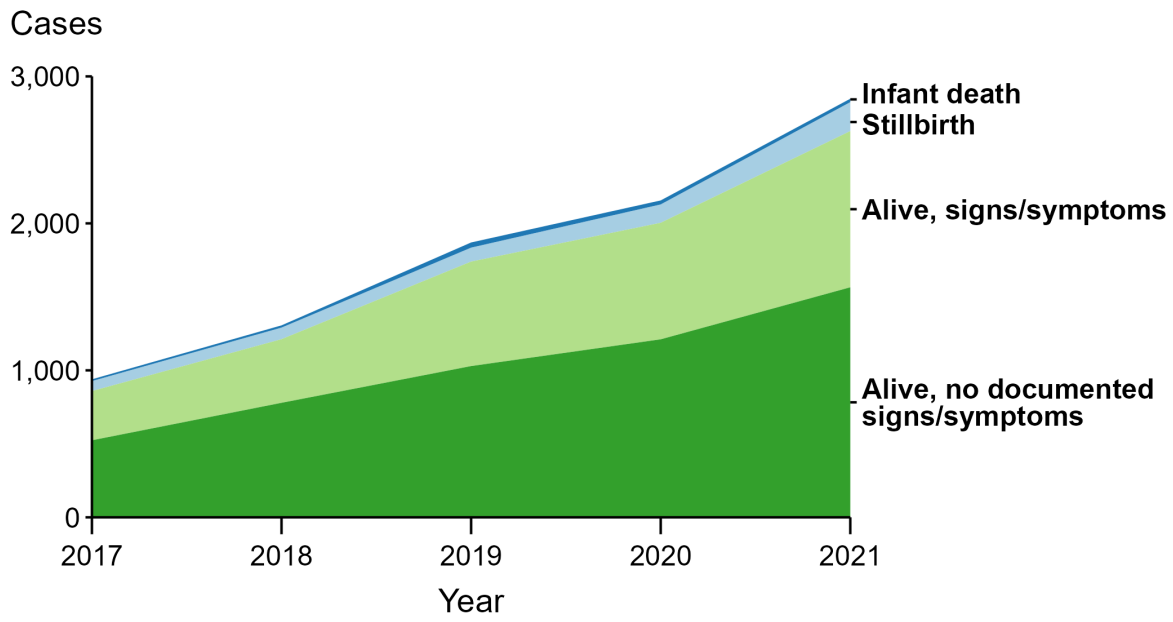
American Samoa and the Commonwealth of the Northern Mariana Islands began reporting data on congenital syphilis cases to CDC in 2018; data are not available for those areas prior to that year. Due to a network security incident in December 2021, the Maryland Department of Health could not finalize their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

The COVID-19 pandemic has introduced uncertainty and difficulty in interpreting STD data collected during 2020 and 2021. See Impact of COVID-19 on STDs (https://www.cdc.gov/std/statistics/2021/impact.htm) for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2021/technical-notes.htm) for information on syphilis case reporting and on interpreting reported rates in US territories.

Data points are available at https://www.cdc.gov/std/statistics/2021/data.zip.

Congenital Syphilis — Reported Cases by Vital Status and Clinical Signs and Symptoms* of Infection, United States, 2017–2021



* Infants with signs/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 9,141 congenital syphilis cases reported during 2017 to 2021, 22 (0.2%) did not have sufficient information to be categorized.

Summary

In 2021, there were a total of 2,855 cases of congenital syphilis reported for a rate of 77.9 per 100,000 live births.

In 2021, 23 congenital syphilis cases (0.8%) were infant deaths, 197 cases (6.9%) were stillbirths, 1,063 cases (37.2%) were born alive with congenital syphilis-related signs or symptoms, 1,565 cases (54.8%) were born alive with no documented congenital syphilis-related signs or symptoms, and 7 cases (0.2%) were missing information on vital status.

In 2021, there were 220 congenital syphilis-related deaths (197 stillbirths and 23 infant deaths), an increase of 44.7% from 2020 (152 in 2020 to 220 in 2021) and an increase of 175.0% from 2017 (80 in 2017 to 220 in 2021).

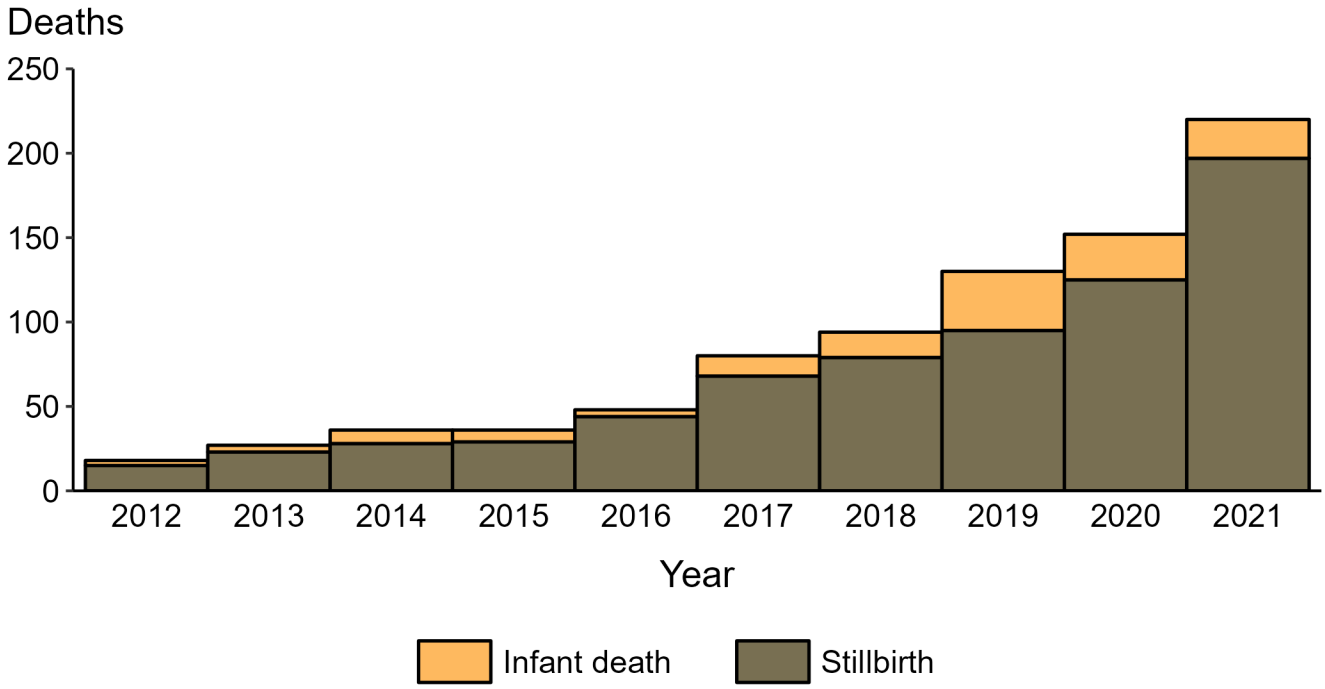
The number of infants reported with congenital syphilis who were born alive with congenital syphilis-related signs and symptoms increased 34.0% from 2020 to 2021 (793 in 2020 to 1,063 in 2021) and increased 217.3% from 2017 to 2021 (335 in 2017 to 1,063 in 2021).

The COVID-19 pandemic has introduced uncertainty and difficulty in interpreting STD data collected during 2020 and 2021. See Impact of COVID-19 on STDs (https://www.cdc.gov/std/statistics/2021/impact.htm) for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2021/technical-notes.htm) for information on syphilis case reporting.

Data points are available at https://www.cdc.gov/std/statistics/2021/data.zip.

Congenital Syphilis — Reported Stillbirths and Infant Deaths, United States, 2012–2021



Summary

In 2021, there were a total of 2,855 cases of congenital syphilis reported for a rate of 77.9 per 100,000 live births.

In 2021, 197 congenital syphilis-related stillbirths were reported, an increase of 57.6% since 2020 and an increase of 1,213.3% since 2012.

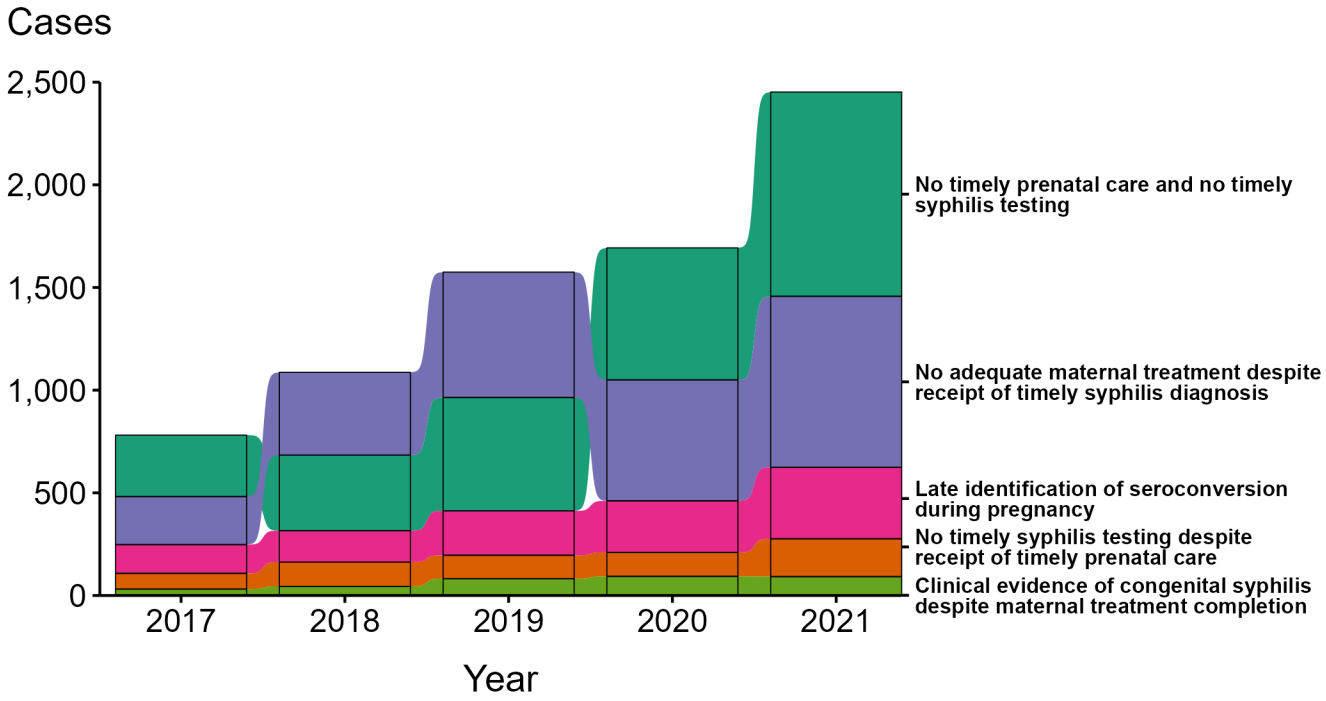
In 2021, 23 congenital syphilis-related infant deaths were reported, a decrease of 14.8% since 2020 and an increase of 666.7% since 2012.

The COVID-19 pandemic has introduced uncertainty and difficulty in interpreting STD data collected during 2020 and 2021. See Impact of COVID-19 on STDs (https://www.cdc.gov/std/statistics/2021/impact.htm) for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2021/technical-notes.htm) for information on syphilis case reporting.

Data points are available at https://www.cdc.gov/std/statistics/2021/data.zip.

Congenital Syphilis — Missed Prevention Opportunities among Mothers Delivering Infants with Congenital Syphilis, United States, 2017–2021



NOTE: Of the 9,141 congenital syphilis cases reported during 2017 to 2021, 1,553 (17.0%) were not able to have the primary missed prevention opportunity identified due to insufficient information provided to CDC related to maternal prenatal care, testing, or treatment.

Summary

In 2021, there were a total of 2,855 cases of congenital syphilis reported for a rate of 77.9 per 100,000 live births.

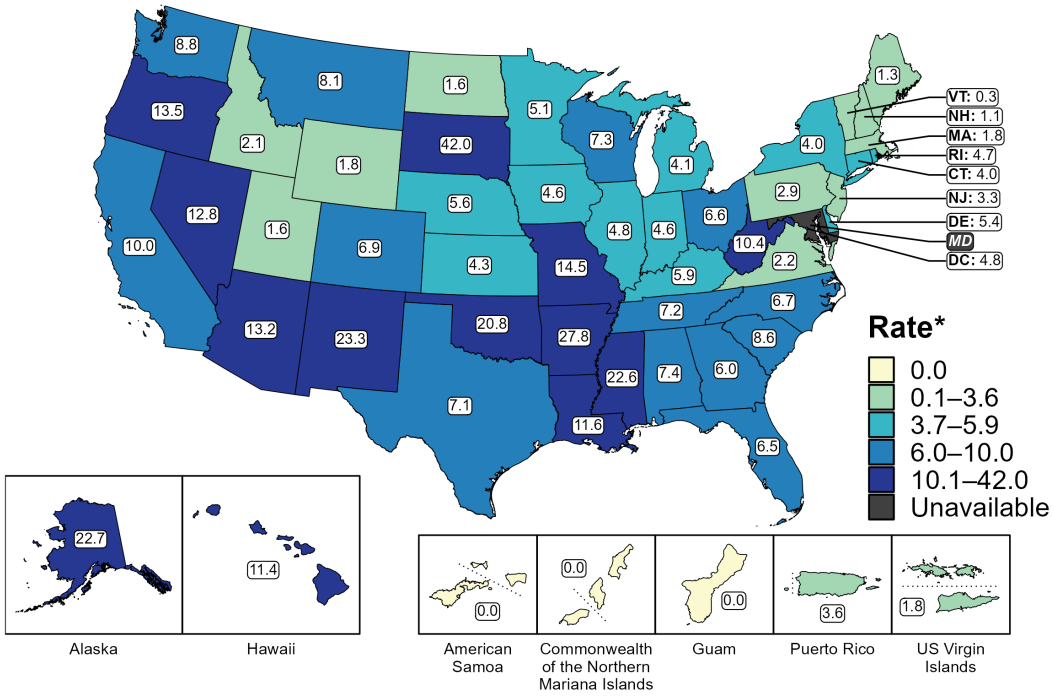
During 2017 to 2021, the majority of missed prevention opportunities among mothers of infants with congenital syphilis were those with no timely prenatal care or syphilis testing (n = 2,857; 38%) and timely syphilis testing but no adequate maternal treatment (n = 2,670; 35%). In 2021, the most common missed congenital syphilis prevention opportunity was mothers who had no timely prenatal care or syphilis testing (n = 995; 41%), followed by those who had timely syphilis testing but no adequate maternal treatment (n = 833; 34%).

The COVID-19 pandemic has introduced uncertainty and difficulty in interpreting STD data collected during 2020 and 2021. See Impact of COVID-19 on STDs (https://www.cdc.gov/std/statistics/2021/impact.htm) for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2021/technical-notes.htm) for information on syphilis case reporting.

Data points are available at https://www.cdc.gov/std/statistics/2021/data.zip.

Primary and Secondary Syphilis — Rates of Reported Cases Among Women by State, United States and Territories, 2021



* Per 100,000

Summary

In 2021, rates of reported primary and secondary syphilis among women ranged by state from 0.3 cases per 100,000 women in Vermont to 42.0 cases per 100,000 women in South Dakota. The rate of reported primary and secondary syphilis in the District of Columbia was 4.8 per 100,000 women. Due to a network security incident in December 2021, the Maryland Department of Health could not finalize their 2021 STD case notification data. 2021 data from Maryland have been suppressed for this figure; however, they are included in national and regional case counts and rates displayed in other figures.

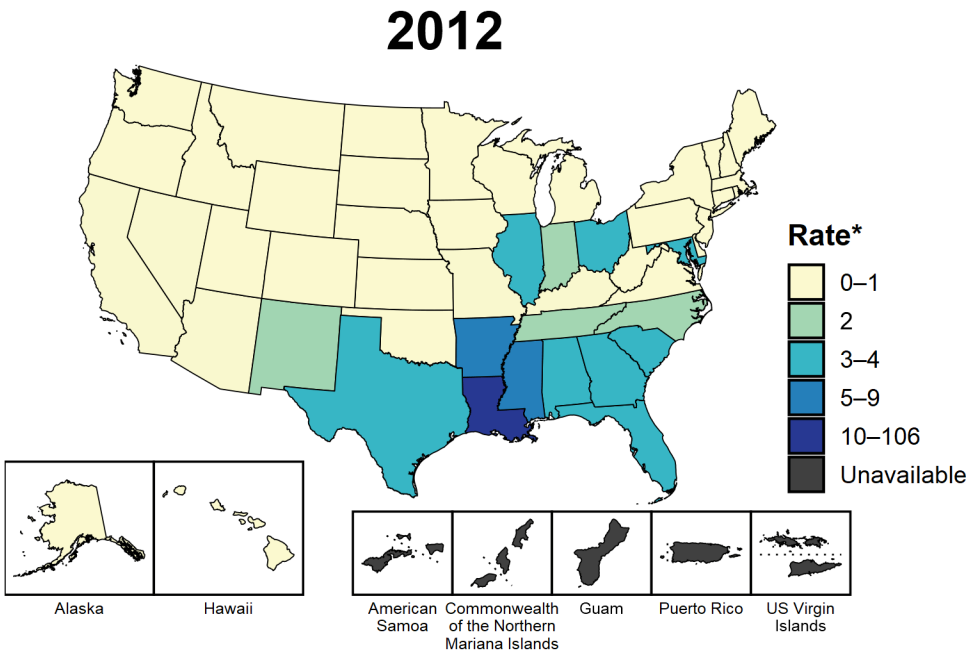
Among US territories reporting any cases, rates of reported primary and secondary syphilis ranged from 1.8 cases per 100,000 women in the US Virgin Islands to 3.6 cases per 100,000 women in Puerto Rico. No cases of primary and secondary syphilis were reported in American Samoa, Guam, or the Commonwealth of the Northern Mariana Islands.

The COVID-19 pandemic has introduced uncertainty and difficulty in interpreting STD data collected during 2020 and 2021. See Impact of COVID-19 on STDs (https://www.cdc.gov/std/statistics/2021/impact.htm) for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2021/technical-notes.htm) for information on syphilis case reporting and on interpreting reported rates in US territories.

Data points are available at https://www.cdc.gov/std/statistics/2021/data.zip.

Primary and Secondary Syphilis — Rates of Reported Cases Among Women Aged 15–44 Years by State, United States and Territories, 2012–2021



* 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 2012, three states (5.9% of areas with available data) had a rate of reported primary and secondary syphilis greater than or equal to 5 cases per 100,000 women aged 15 to 44 years. This increased to 42 states, the District of Columbia (DC), and two US territories (81.8% of areas with available data) in 2021. During 2020 to 2021, rates of reported primary and secondary syphilis among women aged 15 to 44 years increased in 44 states and two territories.

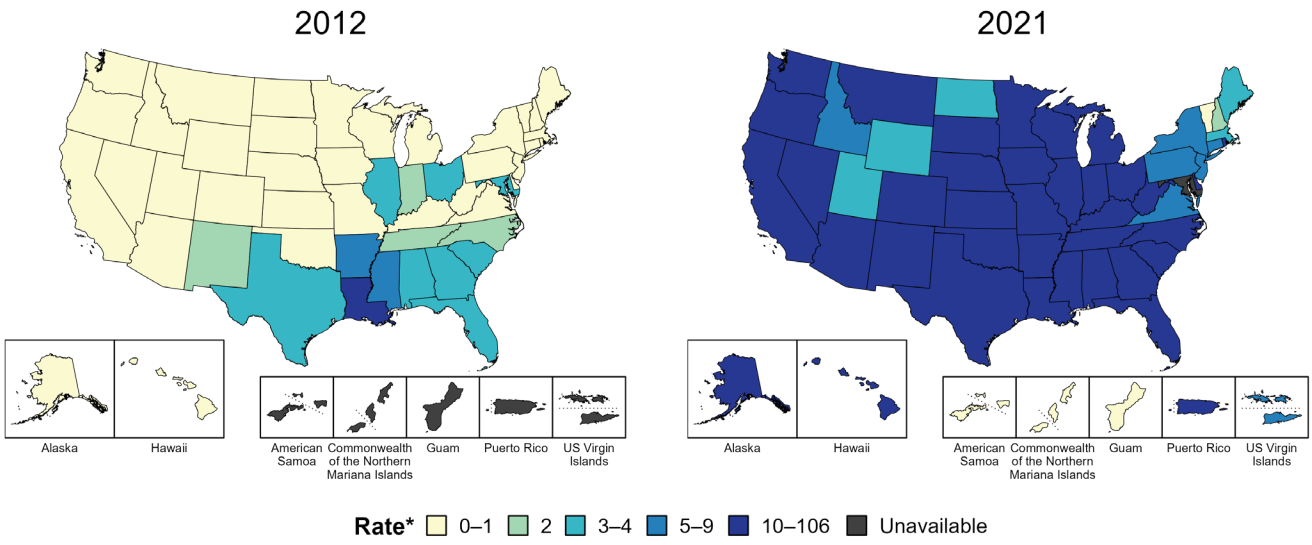
American Samoa and the Commonwealth of the Northern Mariana Islands began reporting data on primary and secondary syphilis cases to CDC in 2018; data are not available for those areas prior to that year. In addition, data on reported primary and secondary syphilis cases in 2018 are not available for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

The COVID-19 pandemic has introduced uncertainty and difficulty in interpreting STD data collected during 2020 and 2021. See Impact of COVID-19 on STDs (https://www.cdc.gov/std/statistics/2021/impact.htm) for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2021/technical-notes.htm) for information on syphilis case reporting and on interpreting reported rates in US territories.

Data points are available at https://www.cdc.gov/std/statistics/2021/data.zip.

Primary and Secondary Syphilis — Rates of Reported Cases Among Women Aged 15–44 Years by Year of Birth and State, United States and Territories, 2012 and 2021



* Per 100,000

Summary

In 2012, three states (5.9% of areas with available data) had a rate of reported primary and secondary syphilis greater than or equal to 5 cases per 100,000 women aged 15 to 44 years. This increased to 42 states, the District of Columbia, and two US territories (81.8% of areas with available data) in 2021.

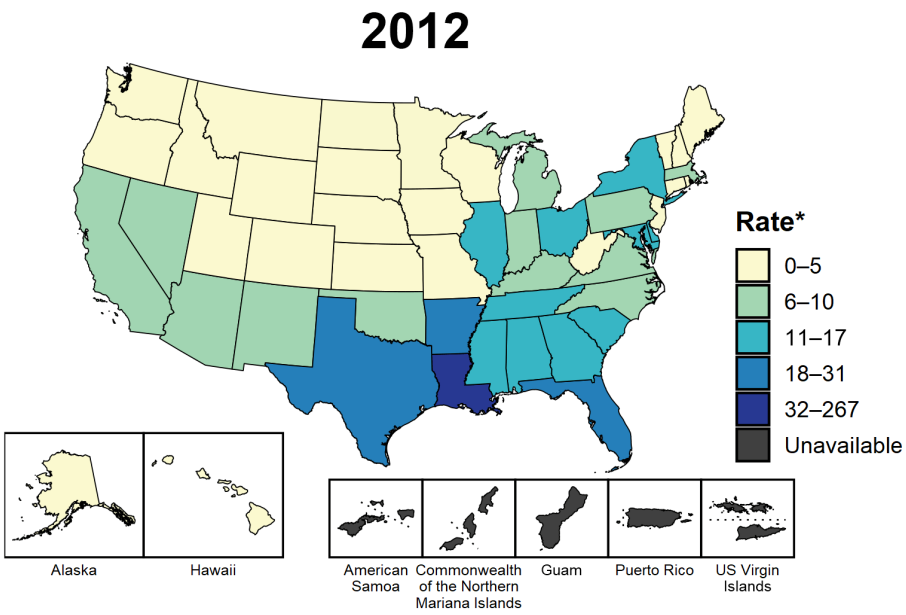
American Samoa and the Commonwealth of the Northern Mariana Islands began reporting data on primary and secondary syphilis cases to CDC in 2018; data are not available for those areas prior to that year. Additionally, population estimates by age and sex were not available in all territories in both years.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

The COVID-19 pandemic has introduced uncertainty and difficulty in interpreting STD data collected during 2020 and 2021. See Impact of COVID-19 on STDs (https://www.cdc.gov/std/statistics/2021/impact.htm) for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2021/technical-notes.htm) for information on syphilis case reporting and on interpreting reported rates in US territories.

Data points are available at https://www.cdc.gov/std/statistics/2021/data.zip.

Syphilis (All Stages) — Rates of Reported Cases Among Women Aged 15–44 Years by State, United States and Territories, 2012–2021



* 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 2012, four states and the District of Columbia (DC; 9.8% of areas with available data) had a rate of reported syphilis (all stages) greater than or equal to 18 cases per 100,000 women aged 15 to 44 years. This increased to 43 states, DC, and one US territory (88.2% of areas with available data) in 2021. During 2020 to 2021, rates of reported syphilis (all stages) among women aged 15 to 44 years increased in 46 states and one territory.

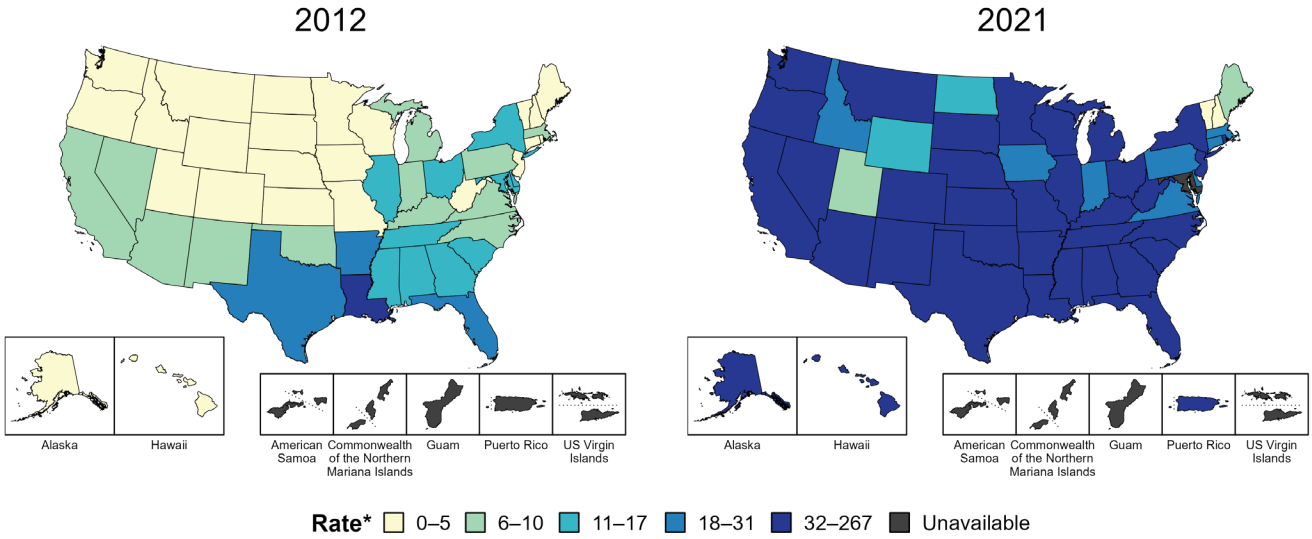
Data on reported cases of syphilis other than primary and secondary syphilis are not available by age and sex for American Samoa, the Commonwealth of the Northern Mariana Islands, Guam, and the US Virgin Islands. Additionally, population estimates by age and sex were not available in all territories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

The COVID-19 pandemic has introduced uncertainty and difficulty in interpreting STD data collected during 2020 and 2021. See Impact of COVID-19 on STDs (https://www.cdc.gov/std/statistics/2021/impact.htm) for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2021/technical-notes.htm) for information on syphilis case reporting and on interpreting reported rates in US territories.

Data points are available at https://www.cdc.gov/std/statistics/2021/data.zip.

Syphilis (All Stages) — Rates of Reported Cases Among Women Aged 15–44 Years by State, United States and Territories, 2012 and 2021



* Per 100,000

Summary

In 2012, four states and the District of Columbia (DC; 9.8% of areas with available data) had a rate of reported syphilis (all stages) greater than or equal to 18 cases per 100,000 women aged 15 to 44 years. This increased to 43 states, DC, and one US territory (88.2% of areas with available data) in 2021.

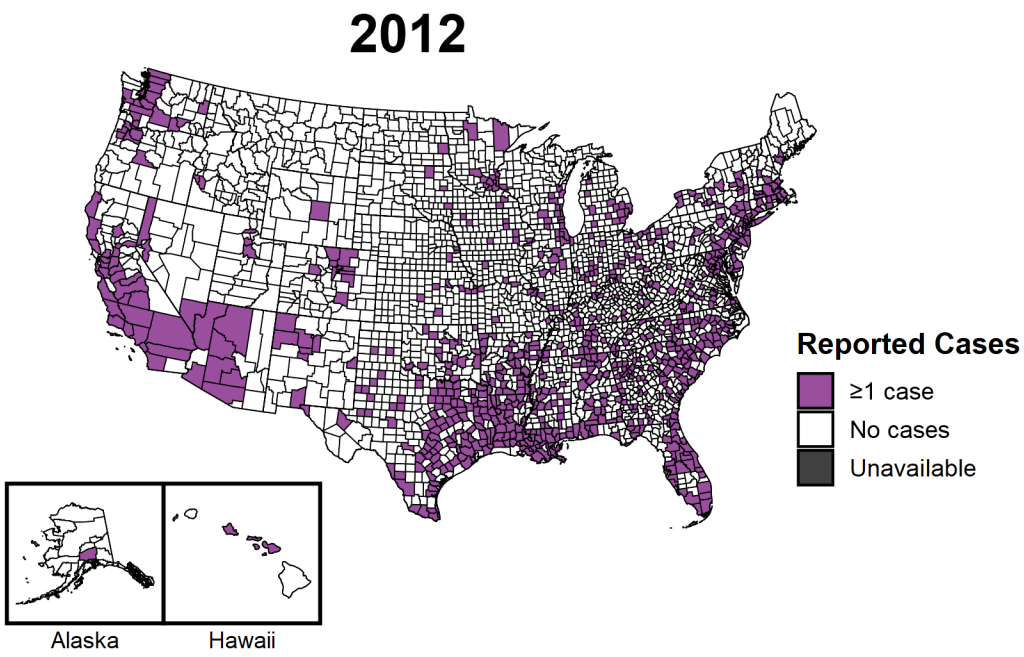
Data on reported cases of syphilis other than primary and secondary syphilis are not available by age and sex for American Samoa, the Commonwealth of the Northern Mariana Islands, Guam, and the US Virgin Islands. Additionally, population estimates by age and sex were not available in all territories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

The COVID-19 pandemic has introduced uncertainty and difficulty in interpreting STD data collected during 2020 and 2021. See Impact of COVID-19 on STDs (https://www.cdc.gov/std/statistics/2021/impact.htm) for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2021/technical-notes.htm) for information on syphilis case reporting and on interpreting reported rates in US territories.

Data points are available at https://www.cdc.gov/std/statistics/2021/data.zip.

Syphilis (All Stages) — Rates of Reported Cases Among Women Aged 15–44 Years by County, United States, 2012–2021



Summary

In 2012, 1,621 (51.6%) 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 2,510 (80.5%) of counties with available data in 2021. During 2020 to 2021, the number of counties increased from 2,340 (74.5% of counties with available data) in 2020 to 2,510 (80.5% of counties with available data) in 2021.

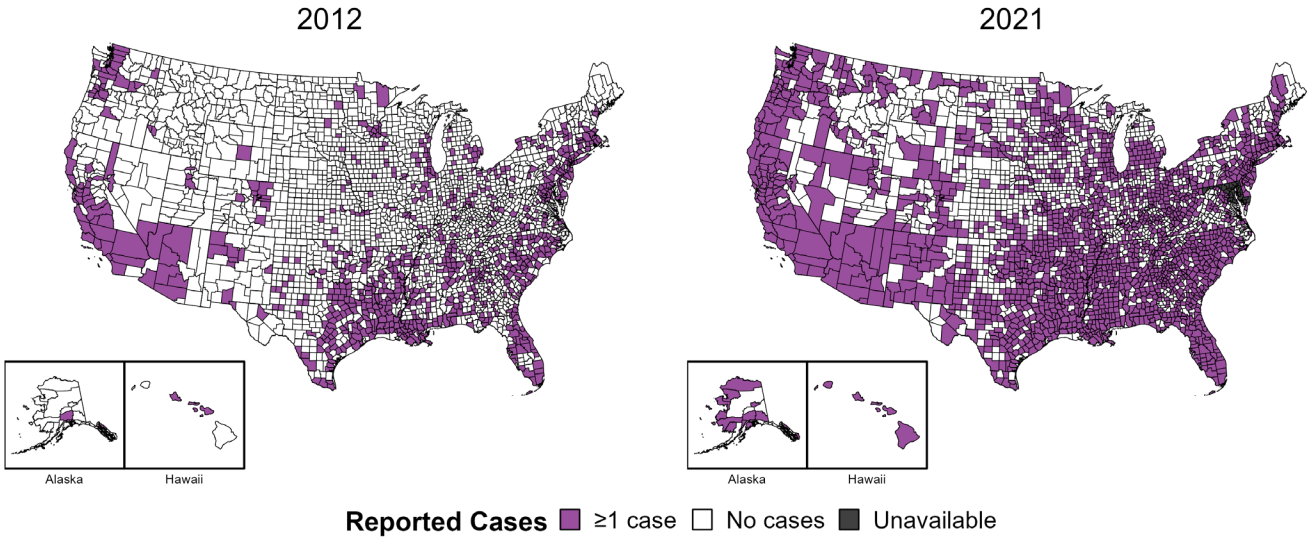
Due to a network security incident in December 2021, the Maryland Department of Health could not finalize their 2021 STD case notification data. 2021 data from Maryland have been suppressed for this figure; however, they are included in national and regional case counts and rates displayed in other figures.

The COVID-19 pandemic has introduced uncertainty and difficulty in interpreting STD data collected during 2020 and 2021. See Impact of COVID-19 on STDs (https://www.cdc.gov/std/statistics/2021/impact.htm) for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2021/technical-notes.htm) for information on syphilis case reporting.

Data points are available at https://www.cdc.gov/std/statistics/2021/data.zip.

Syphilis (All Stages) — Rates of Reported Cases Among Women Aged 15–44 Years by County, United States, 2012 and 2021



Summary

In 2012, 827 (26.3%) 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 1,925 (61.7%) of counties with available data in 2021.

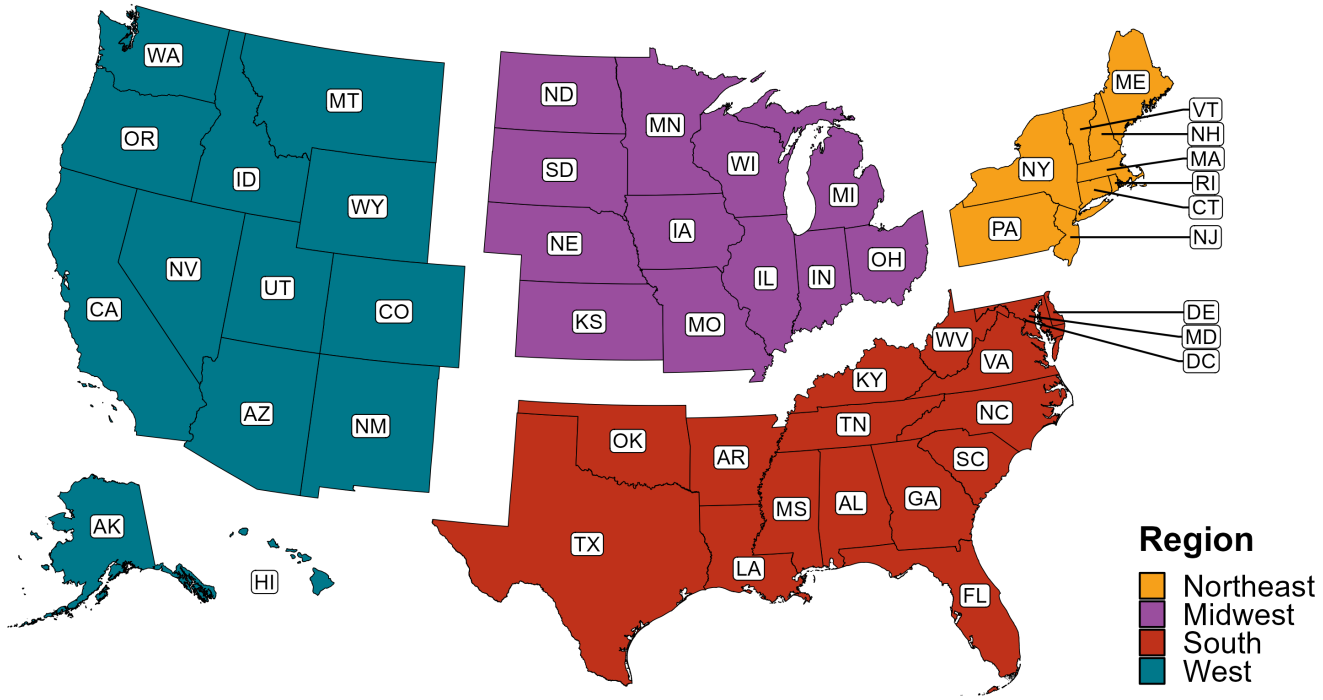
Due to a network security incident in December 2021, the Maryland Department of Health could not finalize their 2021 STD case notification data. 2021 data from Maryland have been suppressed for this figure; however, they are included in national and regional case counts and rates displayed in other figures.

The COVID-19 pandemic has introduced uncertainty and difficulty in interpreting STD data collected during 2020 and 2021. See Impact of COVID-19 on STDs (https://www.cdc.gov/std/statistics/2021/impact.htm) for more information.

See Technical Notes (https://www.cdc.gov/std/statistics/2021/technical-notes.htm) for information on syphilis case reporting.

Data points are available at https://www.cdc.gov/std/statistics/2021/data.zip.

Reference Map of US Census Regions



Tables – Sexually Transmitted Disease Surveillance, 2021

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.

Trends presented in *Sexually Transmitted Disease Surveillance, 2021* should be interpreted cautiously. For more information, see Impact of COVID-19 on STDs.

State Rankings are available in Table 2, Table 7, Table 13, and Table 20.

Table 1. Sexually Transmitted Diseases – Reported Cases and Rates of Reported Cases*, United States, 1941-2021

Year†	Syphilis										Chlamydia		Gonorrhea		Chancroid¶	
	Total Syphilis‡		Primary and Secondary		Early Non-P&S		Unk. 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

Year†	Syphilis										Chlamydia		Gonorrhea		Chancroid¶	
	Total Syphilis‡		Primary and Secondary		Early Non-P&S		Unk. Duration or Late§		Congenital							
	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate‖	Cases	Rate	Cases	Rate	Cases	Rate
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
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

Year†	Syphilis										Chlamydia		Gonorrhea		Chancroid¶	
	Total Syphilis‡		Primary and Secondary		Early Non-P&S		Unk. Duration or Late§		Congenital							
	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate‖	Cases	Rate	Cases	Rate	Cases	Rate
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
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

Year†	Syphilis										Chlamydia		Gonorrhea		Chancroid¶	
	Total Syphilis‡		Primary and Secondary		Early Non-P&S		Unk. Duration or Late§		Congenital							
	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate‖	Cases	Rate	Cases	Rate	Cases	Rate
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
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	101,590	31.2	30,644	9.4	34,013	10.4	35,992	11.1	941	24.4	1,708,569	524.6	555,608	170.6	7	0.0
2018	115,052	35.2	35,063	10.7	38,539	11.8	40,137	12.3	1,313	34.6	1,758,668	537.5	583,405	178.3	3	0.0

Year†	Syphilis										Chlamydia		Gonorrhea		Chancroid¶	
	Total Syphilis‡		Primary and Secondary		Early Non-P&S		Unk. Duration or Late§		Congenital							
	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate‖	Cases	Rate	Cases	Rate	Cases	Rate
2019	129,818	39.5	38,992	11.9	41,655	12.7	47,296	14.4	1,875	50.0	1,808,703	551.0	616,392	187.8	8	0.0
2020	133,954	40.4	41,655	12.6	43,145	13.0	46,997	14.2	2,157	59.7	1,579,885	476.7	677,769	204.5	0	0.0
2021	176,713	53.2	53,767	16.2	51,830	15.6	68,261	20.6	2,855	77.9	1,644,416	495.5	710,151	214.0	3	0.0

* Per 100,000

† 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.

§ The case classification of 'Unknown duration or late syphilis' went into effect in January of 2018. Prior to 2018, cases in this category include cases classified as late latent syphilis, latent syphilis of unknown duration, late syphilis with clinical manifestations, and neurosyphilis.

‖ Rates include all cases of congenitally acquired syphilis per 100,000 live births. As of 1995, cases of congenital syphilis are obtained in hardcopy and electronic format on the basis of case reporting form CDC 73.126.

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

NR = No report.

NOTE: Adjustments to the number of cases reported from state health departments were made for hardcopy forms and for electronic data submissions through December 13, 2021. The number of cases and the rates shown here supersede those published in previous reports. Cases and rates shown in this table exclude US territories. Case definitions have changed over time. See Technical Notes for more information. The COVID-19 pandemic has introduced uncertainty and difficulty in interpreting STD data collected during 2020 and 2021. See Impact of COVID-19 on STDs for more information.

Table 2. Chlamydia — Reported Cases and Rates of Reported Cases by State, Ranked by Rates, United States, 2021

Rank*	State	Cases	Rate per 100,000 Population
1	Alaska	5,571	760.4
2	Mississippi	22,126	750.0
3	Louisiana	33,759	730.1
4	South Carolina	36,477	702.7
5	Georgia	67,941	629.1
6	Alabama	31,507	625.2
7	North Carolina	63,660	603.3
8	Arkansas	17,936	592.8
9	New Mexico	12,441	588.0
10	Arizona	41,498	570.3
11	Illinois	71,836	566.9
12	Tennessee	39,227	562.4
13	South Dakota	4,853	542.0
14	Nevada	16,348	520.0
15	Oklahoma	20,709	519.5
16	Missouri	31,915	517.4
17	New York	101,657	512.5
18	North Dakota	3,964	511.5
19	Indiana	34,755	510.7
20	Texas	149,636	506.8
21	Kansas	14,851	506.1
	US TOTAL†	**1,644,416**	**495.5**
22	Iowa	15,620	489.2
23	California	191,542	488.2
24	Delaware	4,880	486.4
25	Ohio	56,520	479.8
26	Florida	104,400	479.3
27	Rhode Island	5,199	474.5
28	Wisconsin	27,847	472.3
29	Virginia	40,409	467.6
30	Colorado	26,747	460.2
31	Nebraska	8,897	453.1
32	Michigan	45,473	452.4
33	Hawaii	6,078	421.6
34	Kentucky	18,500	410.3
35	Pennsylvania	53,124	409.8
36	Connecticut	14,750	409.1
37	Minnesota	22,573	395.5
38	Massachusetts	26,950	385.8
39	Washington	29,632	382.9
40	Oregon	15,596	367.3
41	Montana	4,029	364.9
42	New Jersey	33,425	360.7
43	Wyoming	2,078	359.0

Rank*	State	Cases	Rate per 100,000 Population
44	Utah	11,221	336.2
45	Idaho	6,320	332.5
46	West Virginia	5,226	293.1
47	Maine	3,372	245.7
48	New Hampshire	3,027	217.9
49	Vermont	910	141.0
	Maryland	NR	—

* 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 6,952 cases and a rate of 1,037.5, but excludes territories.

NR = No report.

NOTE: The COVID-19 pandemic has introduced uncertainty and difficulty in interpreting STD data collected during 2020 and 2021. See Impact of COVID-19 on STDs for more information. Due to a network security incident in December 2021, the Maryland Department of Health could not finalize their 2021 STD case notification data. Although 2021 data from Maryland are included in the national case count and rate displayed in this table, state-specific data have been suppressed.

Table 3. Chlamydia — Reported Cases and Rates of Reported Cases by State/Territory and Region in Alphabetical Order, United States, 2017–2021

State/Territory	**Cases**					**Rates per 100,000 Population**				
	2017	**2018**	**2019**	**2020**	**2021**	**2017**	**2018**	**2019**	**2020**	**2021**
Alabama	29,935	28,437	31,228	27,075	31,507	614.1	581.8	636.9	538.9	625.2
Alaska	5,934	6,159	6,254	5,090	5,571	802.1	835.2	854.9	694.0	760.4
Arizona	39,598	40,807	43,058	37,289	41,498	564.4	569.0	591.6	521.4	570.3
Arkansas	17,320	17,663	17,196	16,053	17,936	576.5	586.1	569.8	533.1	592.8
California	218,785	231,415	236,719	178,679	191,542	553.4	585.0	599.1	451.9	488.2
Colorado	26,995	29,124	29,821	26,137	26,747	481.4	511.3	517.8	452.7	460.2
Connecticut	17,750	16,732	15,290	12,716	14,750	494.7	468.3	428.9	352.6	409.1
Delaware	5,392	6,038	5,864	4,855	4,880	560.5	624.3	602.2	490.4	486.4
District of Columbia	9,107	9,014	9,327	6,413	6,952	1,312.3	1,283.2	1,321.6	930.0	1,037.5
Florida	100,018	104,758	110,794	100,030	104,400	476.6	491.8	515.9	464.4	479.3
Georgia	65,104	65,936	67,720	62,582	67,941	624.2	626.8	637.8	584.2	629.1
Hawaii	6,850	7,735	8,093	7,005	6,078	479.8	544.5	571.6	481.4	421.6
Idaho	6,200	6,572	6,863	6,273	6,320	361.1	374.6	384.0	341.1	332.5
Illinois	75,518	77,325	81,012	68,716	71,836	589.9	606.9	639.3	536.3	566.9
Indiana	34,278	34,926	35,430	33,372	34,755	514.2	521.9	526.3	491.8	510.7
Iowa	13,893	14,682	16,044	15,097	15,620	441.6	465.2	508.5	473.2	489.2
Kansas	13,554	14,231	15,286	14,620	14,851	465.3	488.8	524.7	497.6	506.1
Kentucky	19,320	19,440	20,911	18,750	18,500	433.7	435.1	468.1	416.1	410.3
Louisiana	34,756	36,293	36,131	32,997	33,759	742.0	778.8	777.2	708.4	730.1
Maine	4,555	4,345	3,989	3,466	3,372	341.0	324.6	296.8	254.4	245.7
Maryland	33,416	35,482	37,779	32,398	NR	552.1	587.2	624.9	524.5	—
Massachusetts	29,315	30,460	31,622	24,901	26,950	427.3	441.3	458.8	354.2	385.8
Michigan	50,595	50,592	50,104	44,769	45,473	507.9	506.1	501.7	444.3	452.4
Minnesota	23,539	23,569	24,470	22,114	22,573	422.1	420.0	433.9	387.5	395.5
Mississippi	21,149	22,086	25,303	23,919	22,126	708.7	739.5	850.2	807.7	750.0

State/Territory	Cases					Rates per 100,000 Population				
	2017	2018	2019	2020	2021	2017	2018	2019	2020	2021
Missouri	32,683	34,728	34,416	31,815	31,915	534.6	566.9	560.8	516.9	517.4
Montana	4,560	4,917	4,753	4,133	4,029	434.1	462.9	444.7	381.2	364.9
Nebraska	8,595	8,026	9,291	8,844	8,897	447.6	416.0	480.3	450.9	453.1
Nevada	16,260	17,508	17,827	14,739	16,348	542.4	577.0	578.8	474.7	520.0
New Hampshire	4,412	3,734	3,577	2,931	3,027	328.6	275.3	263.1	212.8	217.9
New Jersey	35,239	36,514	37,591	31,649	33,425	391.3	409.9	423.2	340.7	360.7
New Mexico	13,560	14,000	14,283	12,084	12,441	649.4	668.1	681.2	570.7	588.0
New York	116,814	119,571	124,622	97,722	101,657	588.5	611.9	640.6	483.7	512.5
North Carolina	62,876	66,553	70,257	64,640	63,660	612.0	640.9	669.9	619.2	603.3
North Dakota	3,278	3,525	3,880	3,562	3,964	433.9	463.8	509.1	457.2	511.5
Ohio	61,389	63,220	65,393	59,520	56,520	526.6	540.8	559.4	504.4	479.8
Oklahoma	21,752	21,974	23,518	21,208	20,709	553.4	557.3	594.3	535.6	519.5
Oregon	18,634	19,224	19,279	15,858	15,596	449.8	458.7	457.1	374.3	367.3
Pennsylvania	56,447	59,340	61,694	52,272	53,124	440.8	463.3	481.9	402.0	409.8
Rhode Island	5,282	5,487	5,718	4,714	5,199	498.5	519.0	539.8	429.6	474.5
South Carolina	32,235	33,910	35,950	34,118	36,477	641.6	667.0	698.2	666.6	702.7
South Dakota	4,437	4,432	4,547	4,044	4,853	510.2	502.4	514.0	456.1	542.0
Tennessee	35,087	38,212	41,089	37,907	39,227	522.4	564.4	601.7	548.5	562.4
Texas	151,533	146,510	129,075	135,124	149,636	535.4	510.5	445.1	463.6	506.8
Utah	10,135	10,541	11,075	10,466	11,221	326.7	333.5	345.5	319.9	336.2
Vermont	1,858	1,712	1,718	1,117	910	297.9	273.4	275.3	173.7	141.0
Virginia	42,374	42,965	48,169	40,965	40,409	500.3	504.4	564.3	474.6	467.6
Washington	32,231	34,449	37,795	31,181	29,632	435.2	457.2	496.3	404.7	382.9
West Virginia	4,140	3,599	5,609	5,431	5,226	228.0	199.3	313.0	302.8	293.1
Wisconsin	27,740	28,027	29,080	26,564	27,847	478.6	482.1	499.4	450.7	472.3
Wyoming	2,142	2,169	2,189	1,961	2,078	369.7	375.4	378.2	339.9	359.0
US TOTAL	**1,708,569**	**1,758,668**	**1,808,703**	**1,579,885**	**1,644,416**	**524.6**	**537.5**	**551.0**	**476.7**	**495.5**
Northeast	271,672	277,895	285,821	231,488	242,414	481.1	495.3	510.6	401.8	424.1

State/Territory	Cases					Rates per 100,000 Population				
	2017	2018	2019	2020	2021	2017	2018	2019	2020	2021
Midwest	349,499	357,283	368,953	333,037	339,104	512.6	523.0	540.0	482.8	492.6
South	685,514	698,870	715,920	664,465	693,797	554.4	560.2	570.1	526.2	545.3
West	401,884	424,620	438,009	350,895	369,101	519.2	544.4	559.1	446.5	469.2
American Samoa	NR	55	81	119	65	—	108.2	167.2	251.1	140.2
Commonwealth of the Northern Mariana Islands	NR	246	249	180	207	—	473.1	478.4	347.1	400.7
Guam	1,107	944	1,234	827	714	661.5	562.7	733.9	490.8	423.0
Puerto Rico	5,961	5,942	4,817	3,995	4,793	177.8	180.4	150.8	121.6	146.9
Virgin Islands	458	NR	537	463	640	427.0	—	503.4	435.6	604.5
TERRITORIES TOTAL	**7,526**	**7,187**	**6,918**	**5,584**	**6,419**	**207.5**	**201.6**	**193.8**	**152.6**	**176.5**
TOTAL	**1,716,095**	**1,765,855**	**1,815,621**	**1,585,469**	**1,650,835**	**521.1**	**533.9**	**547.2**	**473.1**	**492.0**

NR = No report.

NOTE: See Technical Notes for more information on interpreting case counts and rates in US territories. The COVID-19 pandemic has introduced uncertainty and difficulty in interpreting STD data collected during 2020 and 2021. See Impact of COVID-19 on STDs for more information. Due to a network security incident in December 2021, the Maryland Department of Health could not finalize their 2021 STD 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 3A. Chlamydia Among Men — Reported Cases and Rates of Reported Cases by State/Territory and Region in Alphabetical Order, United States, 2017–2021

State/Territory	Cases					Rates per 100,000 Population				
	2017	2018	2019	2020	2021	2017	2018	2019	2020	2021
Alabama	8,837	8,807	9,882	8,906	9,894	374.5	372.5	417.0	364.6	404.2
Alaska	1,993	2,189	2,240	1,713	1,854	515.3	569.2	587.3	445.6	482.6
Arizona	13,055	13,972	15,316	13,067	15,089	374.3	391.9	423.4	365.9	415.3
Arkansas	4,866	5,147	5,041	4,602	5,179	329.7	347.7	340.2	309.6	346.8
California	83,273	88,787	92,707	68,763	75,556	423.8	451.5	471.9	347.8	385.2
Colorado	9,744	10,650	11,073	9,560	10,029	345.2	371.4	381.7	326.9	340.6
Connecticut	5,618	5,829	5,054	4,303	4,870	320.7	334.3	290.6	243.1	275.2
Delaware	1,830	2,031	2,004	1,548	1,666	393.1	434.0	425.7	321.6	341.9
District of Columbia	4,279	4,135	4,192	3,155	3,680	1,299.8	1,240.6	1,252.4	960.0	1,154.0
Florida	33,811	36,219	39,850	35,556	38,907	329.6	347.9	379.6	335.7	363.3
Georgia	20,837	21,691	22,662	20,927	23,905	410.5	424.0	439.1	399.8	453.6
Hawaii	2,426	2,911	3,047	2,432	2,105	338.8	409.4	430.3	331.8	290.2
Idaho	1,990	2,102	2,297	2,124	2,173	231.3	239.1	256.4	229.1	226.7
Illinois	26,089	27,555	29,561	24,559	26,802	414.6	440.1	474.8	387.7	427.8
Indiana	10,673	11,131	11,518	10,632	11,407	324.7	337.3	346.9	315.8	337.7
Iowa	4,631	4,889	5,485	4,968	5,278	296.0	311.2	349.1	310.8	329.6
Kansas	4,082	4,437	4,911	4,671	4,914	281.1	305.9	338.3	317.3	334.2
Kentucky	6,194	6,249	6,878	6,021	5,967	282.3	283.9	312.5	269.6	267.1
Louisiana	10,212	11,068	11,598	10,441	10,873	446.0	486.6	511.6	457.1	480.0
Maine	1,596	1,491	1,394	1,186	1,140	243.8	227.5	211.8	176.5	168.5
Maryland	11,449	12,539	13,514	11,427	NR	390.2	428.1	461.4	379.6	—
Massachusetts	10,517	11,231	12,166	9,011	10,033	315.8	335.2	363.6	262.4	294.0
Michigan	16,420	16,844	17,129	14,886	15,405	334.8	342.2	348.3	298.1	309.3
Minnesota	8,183	8,527	8,875	7,830	8,101	294.7	305.1	315.9	273.8	283.2
Mississippi	6,363	6,723	7,873	7,494	6,843	440.1	464.4	545.9	519.5	476.8

State/Territory	Cases					Rates per 100,000 Population				
	2017	2018	2019	2020	2021	2017	2018	2019	2020	2021
Missouri	10,982	11,941	11,926	10,899	11,138	365.8	397.0	395.9	358.8	365.8
Montana	1,528	1,710	1,640	1,409	1,330	288.9	319.7	304.8	256.6	237.8
Nebraska	2,927	2,789	3,058	2,897	2,956	305.5	289.5	316.4	294.0	299.6
Nevada	5,741	6,381	6,595	5,555	6,532	381.8	419.4	426.9	355.0	412.3
New Hampshire	1,494	1,259	1,298	1,024	1,050	224.7	187.3	192.6	149.1	151.5
New Jersey	11,362	11,817	12,869	10,457	11,458	258.4	271.5	296.5	228.8	251.2
New Mexico	4,229	4,313	4,378	3,702	3,940	408.9	415.8	422.0	351.3	374.3
New York	46,349	49,175	52,593	39,145	42,388	480.9	518.3	556.7	396.5	437.2
North Carolina	19,295	21,103	23,204	20,897	21,231	385.8	417.8	455.0	409.3	411.8
North Dakota	1,151	1,222	1,425	1,211	1,436	297.2	313.9	365.4	302.0	360.4
Ohio	19,257	20,546	21,750	19,576	18,967	337.1	358.5	379.5	336.3	326.3
Oklahoma	6,569	6,692	7,428	6,637	6,593	337.3	342.6	378.9	336.6	332.3
Oregon	6,412	6,638	7,017	5,481	5,665	312.3	319.5	335.6	259.4	267.6
Pennsylvania	20,184	21,350	22,496	18,630	19,029	321.8	340.3	358.5	290.4	297.3
Rhode Island	1,825	1,903	2,023	1,630	1,842	354.4	370.0	392.3	303.1	343.0
South Carolina	9,807	10,976	12,053	11,560	12,605	402.3	445.6	483.4	464.0	499.5
South Dakota	1,343	1,424	1,347	1,253	1,539	306.0	319.6	301.5	278.3	338.4
Tennessee	11,736	13,057	14,120	12,931	13,872	358.2	395.3	423.7	381.4	405.6
Texas	45,170	45,450	42,314	43,290	50,355	321.2	318.7	293.8	297.5	341.7
Utah	3,516	3,733	4,116	3,858	4,215	225.1	234.5	254.9	233.0	249.4
Vermont	611	527	565	388	285	198.2	170.4	183.3	121.3	88.8
Virginia	14,311	14,924	17,184	14,110	14,135	343.5	356.1	409.1	330.2	330.5
Washington	11,713	13,006	14,375	11,527	10,987	316.3	345.0	377.1	297.1	281.8
West Virginia	1,365	1,224	1,849	1,707	1,605	151.9	136.9	208.3	190.8	180.5
Wisconsin	9,058	9,386	9,682	8,492	9,192	314.2	324.5	334.2	287.6	311.2
Wyoming	741	747	765	628	700	250.8	253.6	259.6	212.4	236.3
US TOTAL	**577,644**	**610,447**	**644,337**	**548,676**	**587,473**	**360.1**	**378.9**	**398.6**	**334.2**	**357.4**
Northeast	99,556	104,582	110,458	85,774	92,095	361.6	382.2	404.6	303.3	328.1
Midwest	114,796	120,691	126,667	111,874	117,135	341.1	357.8	375.4	326.4	342.4

State/Territory	Cases					Rates per 100,000 Population				
	2017	2018	2019	2020	2021	2017	2018	2019	2020	2021
South	216,931	228,035	241,646	221,209	238,068	357.9	373.0	392.7	355.6	380.0
West	146,361	157,139	165,566	129,819	140,175	379.2	404.0	423.6	329.3	355.2
American Samoa	NR	2	0	36	24	—	7.9	0.0	152.3	103.9
Commonwealth of the Northern Mariana Islands	NR	57	48	36	38	—	206.2	173.6	130.8	138.7
Guam	354	274	360	195	190	411.2	317.4	416.0	224.8	218.6
Puerto Rico	1,255	1,240	1,118	883	1,068	78.8	79.4	73.8	56.7	69.1
Virgin Islands	140	NR	191	138	193	273.2	—	375.5	272.5	383.1
TERRITORIES TOTAL	**1,749**	**1,573**	**1,717**	**1,288**	**1,513**	**101.1**	**92.4**	**100.7**	**73.8**	**87.3**
TOTAL	**579,393**	**612,020**	**646,054**	**549,964**	**588,986**	**357.3**	**375.9**	**395.5**	**331.4**	**354.6**

NR = No report.

NOTE: Cases reported with unknown sex are not included in this table. See Technical Notes for more information on interpreting case counts and rates in US territories. The COVID-19 pandemic has introduced uncertainty and difficulty in interpreting STD data collected during 2020 and 2021. See Impact of COVID-19 on STDs for more information. Due to a network security incident in December 2021, the Maryland Department of Health could not finalize their 2021 STD 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 3B. Chlamydia Among Women — Reported Cases and Rates of Reported Cases by State/Territory and Region in Alphabetical Order, United States, 2017–2021

State/Territory	Cases					Rates per 100,000 Population				
	2017	2018	2019	2020	2021	2017	2018	2019	2020	2021
Alabama	20,993	19,537	21,260	18,087	21,413	834.7	774.1	839.1	700.5	826.2
Alaska	3,941	3,965	4,011	3,377	3,717	1,116.4	1,123.7	1,145.6	967.8	1,066.7
Arizona	26,453	26,717	27,716	24,196	26,368	749.8	740.8	757.0	675.9	723.9
Arkansas	12,453	12,513	12,146	11,447	12,749	814.9	815.9	790.7	750.7	831.8
California	135,040	142,006	143,319	109,322	115,219	679.0	713.8	721.4	553.1	587.2
Colorado	17,251	18,474	18,748	16,577	16,718	619.5	653.3	656.1	581.8	583.0
Connecticut	11,487	10,751	10,168	8,366	9,833	625.5	587.7	556.9	455.8	535.6
Delaware	3,562	3,992	3,842	3,289	3,197	717.5	799.6	763.9	646.7	619.5
District of Columbia	4,754	4,812	5,026	3,228	3,258	1,303.3	1,303.5	1,354.6	894.4	927.8
Florida	66,173	68,509	70,892	64,429	65,441	616.8	629.2	645.6	588.6	591.1
Georgia	44,080	43,903	43,914	41,210	43,985	823.3	812.4	804.7	752.3	795.4
Hawaii	4,424	4,811	5,032	4,325	3,950	621.8	678.1	710.9	598.8	551.5
Idaho	4,198	4,452	4,566	4,146	4,144	490.1	508.7	512.4	454.7	439.8
Illinois	49,336	49,746	51,168	43,958	44,964	757.9	767.7	793.9	678.6	701.9
Indiana	23,595	23,768	23,896	22,711	23,310	698.1	700.8	700.4	664.4	679.9
Iowa	9,261	9,793	10,559	10,129	10,341	585.8	617.7	666.6	636.4	649.7
Kansas	9,472	9,794	10,375	9,949	9,937	648.2	670.3	709.8	678.7	678.7
Kentucky	13,035	13,055	13,918	12,647	12,445	576.8	575.9	614.0	556.5	546.9
Louisiana	24,544	25,225	24,524	22,554	22,882	1,024.9	1,057.6	1,029.7	950.2	970.0
Maine	2,959	2,854	2,595	2,280	2,232	434.3	417.8	378.2	330.2	320.8
Maryland	21,957	22,912	24,264	20,876	NR	704.2	735.8	778.5	659.2	—
Massachusetts	18,716	19,096	19,368	15,671	16,780	530.3	537.7	546.0	435.9	469.7
Michigan	34,120	33,687	32,955	29,882	30,067	674.5	663.9	650.2	587.8	593.0
Minnesota	15,338	15,021	15,565	14,232	14,449	547.8	533.3	550.0	500.0	507.5
Mississippi	14,740	15,325	17,381	16,376	15,184	958.2	995.9	1,133.2	1,078.3	1,002.5

State/Territory	Cases					Rates per 100,000 Population				
	2017	2018	2019	2020	2021	2017	2018	2019	2020	2021
Missouri	21,701	22,787	22,490	20,916	20,777	697.5	730.6	719.7	671.0	665.2
Montana	3,030	3,206	3,110	2,724	2,699	581.0	607.8	586.0	509.0	495.2
Nebraska	5,660	5,233	6,222	5,925	5,922	588.4	541.8	642.8	607.0	606.2
Nevada	10,473	11,057	11,205	9,163	9,795	700.9	730.9	729.8	595.0	627.9
New Hampshire	2,917	2,474	2,278	1,894	1,951	430.4	361.6	332.1	274.3	280.4
New Jersey	23,811	24,688	24,627	21,060	21,964	516.6	541.8	542.3	446.4	466.8
New Mexico	9,328	9,683	9,895	8,377	8,494	885.1	915.1	934.0	787.5	798.9
New York	70,379	70,348	72,012	58,577	59,242	689.2	699.7	719.7	567.1	584.2
North Carolina	43,580	45,450	47,053	43,742	42,429	826.6	852.3	873.3	820.1	786.5
North Dakota	2,127	2,303	2,448	2,351	2,528	577.8	621.2	658.0	621.9	671.4
Ohio	42,132	42,674	43,643	39,944	37,551	708.6	716.2	732.4	668.2	629.2
Oklahoma	15,183	15,282	16,088	14,570	14,116	765.5	767.9	805.9	733.0	705.0
Oregon	12,203	12,567	12,235	10,341	9,901	583.9	594.7	575.2	486.8	465.0
Pennsylvania	36,201	37,938	39,132	33,596	34,045	554.0	580.8	599.5	510.1	518.6
Rhode Island	3,454	3,584	3,695	3,084	3,357	634.2	660.1	679.6	551.1	600.9
South Carolina	22,343	22,822	23,789	22,349	23,637	863.8	870.8	895.8	850.7	886.3
South Dakota	3,094	3,008	3,198	2,791	3,314	718.4	688.8	730.3	639.4	752.3
Tennessee	23,348	25,151	26,965	24,972	25,348	678.7	725.4	771.1	709.4	713.0
Texas	105,995	100,417	86,192	90,792	97,940	744.2	695.3	590.6	622.1	662.1
Utah	6,606	6,808	6,955	6,606	7,003	428.9	433.9	437.1	408.9	425.0
Vermont	1,242	1,171	1,149	727	624	393.8	369.3	364.0	224.9	192.2
Virginia	27,606	27,849	30,950	26,704	26,226	641.5	643.6	713.9	612.7	600.8
Washington	20,515	21,432	23,378	19,532	18,587	554.1	569.1	614.7	510.7	484.0
West Virginia	2,775	2,374	3,758	3,723	3,621	302.5	260.5	415.5	414.0	405.1
Wisconsin	18,667	18,617	19,372	18,011	18,623	640.9	637.3	662.2	612.3	633.0
Wyoming	1,399	1,422	1,423	1,326	1,369	492.8	502.1	501.0	471.6	484.4
US TOTAL	**1,127,651**	**1,145,063**	**1,160,470**	**1,027,061**	**1,053,246**	**682.1**	**689.6**	**696.6**	**614.1**	**628.8**
Northeast	171,166	172,904	175,024	145,255	150,028	591.4	601.4	610.3	495.3	515.7
Midwest	234,503	236,431	241,891	220,799	221,783	679.3	683.7	699.4	636.1	640.3

State/Territory	Cases					Rates per 100,000 Population				
	2017	2018	2019	2020	2021	2017	2018	2019	2020	2021
South	467,121	469,128	471,962	440,995	453,471	741.0	737.5	736.9	688.5	702.2
West	254,861	266,600	271,593	220,012	227,964	656.7	681.9	691.7	561.8	581.5
American Samoa	NR	53	81	83	41	—	208.5	333.8	349.3	176.2
Commonwealth of the Northern Mariana Islands	NR	189	201	144	169	—	776.0	823.7	591.8	696.5
Guam	753	670	874	632	524	926.6	822.7	1,070.9	773.0	639.9
Puerto Rico	4,702	4,697	3,697	3,108	3,725	267.2	271.1	220.3	179.8	216.7
Virgin Islands	318	NR	346	325	447	567.6	—	620.0	583.9	805.6
TERRITORIES TOTAL	**5,773**	**5,609**	**5,199**	**4,292**	**4,906**	**304.4**	**301.0**	**278.9**	**224.3**	**257.7**
TOTAL	**1,133,424**	**1,150,672**	**1,165,669**	**1,031,353**	**1,058,152**	**677.9**	**685.3**	**692.0**	**609.7**	**624.6**

NR = No report.

NOTE: Cases reported with unknown sex are not included in this table. See Technical Notes for more information on interpreting case counts and rates in US territories. The COVID-19 pandemic has introduced uncertainty and difficulty in interpreting STD data collected during 2020 and 2021. See Impact of COVID-19 on STDs for more information. Due to a network security incident in December 2021, the Maryland Department of Health could not finalize their 2021 STD 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 — Reported Cases and Rates of Reported Cases by Age Group and Sex, United States, 2017–2021

Year	Age Group	Cases				Rates per 100,000 Population*		
		Total	Male	Female	Unknown Sex	Total	Male	Female
2017	0-4	514	188	323	3	2.6	1.8	3.3
	5-9	167	9	158	0	0.8	0.1	1.6
	10-14	10,726	1,252	9,454	20	51.6	11.8	92.9
	15-19	437,904	99,864	337,290	750	2,072.3	924.6	3,264.8
	20-24	631,207	195,971	434,050	1,186	2,853.7	1,726.7	4,030.4
	25-29	321,857	127,007	194,267	583	1,377.2	1,067.1	1,694.0
	30-34	144,451	65,690	78,502	259	657.4	592.4	721.3
	35-39	74,202	36,427	37,621	154	349.5	343.1	354.4
	40-44	36,332	19,310	16,940	82	185.0	198.0	171.3
	45-54	36,229	22,431	13,713	85	85.5	107.3	63.9
	55-64	11,356	7,490	3,840	26	27.0	37.0	17.7
	65+	2,178	1,461	698	19	4.3	6.5	2.5
	Unknown Age	1,446	544	795	107			
	TOTAL	**1,708,569**	**577,644**	**1,127,651**	**3,274**	**524.6**	**360.1**	**682.1**
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

Year	Age Group	Cases				Rates per 100,000 Population*		
		Total	Male	Female	Unknown Sex	Total	Male	Female
	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			
	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**

* 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. The COVID-19 pandemic has introduced uncertainty and difficulty in interpreting STD data collected during 2020 and 2021. See Impact of COVID-19 on STDs for more information.

Table 5A. Chlamydia — Reported Cases by Race/Hispanic Ethnicity, Age Group, and Sex, United States, 2021

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	2	0	2	3	1	1	99	42	56	54	14	40
5-9	5	0	5	2	0	2	36	4	32	46	5	41
10-14	116	11	105	31	1	30	3,604	631	2,969	1,222	119	1,099
15-19	3,222	646	2,573	2,361	425	1,934	114,892	33,909	80,894	45,185	9,138	35,963
20-24	4,672	1,152	3,518	6,077	1,732	4,334	159,021	57,274	101,616	75,596	20,285	55,195
25-29	3,223	897	2,325	4,143	1,965	2,175	87,967	38,103	49,788	44,364	16,161	28,131
30-34	2,210	675	1,531	2,785	1,572	1,210	46,323	23,978	22,305	24,498	11,180	13,271
35-39	1,300	417	883	1,459	866	590	19,669	11,410	8,242	13,168	6,637	6,502
40-44	629	237	390	836	493	343	9,195	5,878	3,314	7,103	3,922	3,151
45-54	446	196	250	815	511	303	7,286	5,037	2,243	5,688	3,376	2,298
55-64	90	44	46	245	137	108	2,786	1,916	868	1,558	1,102	453
65+	17	11	6	48	32	16	503	373	130	200	138	62
Unknown Age	19	3	16	38	10	28	1,467	600	863	212	70	142
TOTAL	**15,951**	**4,289**	**11,650**	**18,843**	**7,745**	**11,074**	**452,848**	**179,155**	**273,320**	**218,894**	**72,147**	**146,348**

Age Group	Multiracial			Native Hawaiian/ Pacific Islander			White			Other/Unknown		
	Total*	Male	Female	Total*	Male	Female	Total*	Male	Female	Total*	Male	Female
0-4	4	2	2	2	0	2	88	37	50	211	82	127
5-9	0	0	0	0	0	0	27	6	21	47	4	40
10-14	164	13	151	13	3	10	1,850	110	1,737	3,012	400	2,591
15-19	5,095	934	4,157	643	105	538	78,794	13,820	64,882	125,692	31,743	93,365
20-24	7,891	2,045	5,840	1,268	293	971	133,108	35,926	97,043	198,682	65,643	132,185
25-29	4,067	1,529	2,534	729	207	521	63,198	23,642	39,501	100,868	41,231	59,176
30-34	2,189	1,158	1,026	429	177	250	36,456	16,669	19,745	53,531	24,911	28,415
35-39	1,128	691	437	208	74	134	19,776	9,861	9,887	27,549	13,432	14,009
40-44	597	390	203	114	59	55	10,924	5,987	4,925	14,915	7,580	7,293
45-54	520	382	138	100	57	42	10,291	6,702	3,583	13,289	7,077	6,155
55-64	177	151	26	16	10	6	4,519	3,646	865	4,858	2,832	2,015
65+	29	25	4	4	4	0	957	792	165	1,022	623	385
Unknown Age	5	2	3	1	0	1	4,001	1,344	2,654	4,822	1,726	2,989
TOTAL	**21,866**	**7,322**	**14,521**	**3,527**	**989**	**2,530**	**363,989**	**118,542**	**245,058**	**548,498**	**197,284**	**348,745**

* Total includes cases reported with unknown sex.

NOTE: These tables should be used only for race/Hispanic ethnicity comparisons. See Table 4 for age-specific cases and rates and Tables 3, 3A, and 3B for total and sex-specific cases and rates. Cases in the 0–4 age group may include cases due to perinatal transmission. The COVID-19 pandemic has introduced uncertainty and difficulty in interpreting STD data collected during 2020 and 2021. See Impact of COVID-19 on STDs for more information.

Table 5B. Chlamydia — Rates of Reported Cases* by Race/Hispanic Ethnicity, Age Group, and Sex, United States, 2021

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	1.4	0.0	2.9	0.3	0.2	0.2	3.8	3.1	4.3	1.1	0.6	1.7
5-9	3.0	0.0	6.2	0.2	0.0	0.4	1.3	0.3	2.3	0.9	0.2	1.6
10-14	64.6	12.1	118.9	2.8	0.2	5.5	121.7	41.9	203.9	21.9	4.2	40.4
15-19	1,785.7	704.3	2,900.5	208.5	74.7	343.2	3,929.4	2,288.8	5,608.3	846.1	335.1	1,376.1
20-24	2,587.1	1,260.7	3,943.5	499.6	283.5	715.9	5,261.2	3,752.9	6,790.6	1,523.5	800.7	2,272.9
25-29	1,700.4	932.8	2,490.0	284.0	270.6	296.7	2,687.3	2,314.9	3,059.4	913.0	649.8	1,185.8
30-34	1,181.0	712.0	1,658.2	164.6	191.1	139.3	1,413.4	1,482.3	1,343.9	518.4	453.5	587.0
35-39	790.9	507.0	1,075.1	86.8	107.2	67.6	686.4	821.4	558.2	285.6	274.4	296.6
40-44	417.3	316.6	513.8	55.1	69.1	42.6	339.5	454.8	234.0	162.0	172.7	149.1
45-54	157.6	140.6	174.1	29.5	39.3	20.8	143.7	210.0	83.9	75.6	88.1	62.2
55-64	29.8	30.6	29.2	11.1	13.4	9.1	55.0	81.4	32.0	28.2	40.1	16.3
65+	5.2	7.4	3.3	1.8	2.7	1.1	9.5	17.2	4.2	4.0	6.2	2.2
Unknown age												
TOTAL	**650.6**	**354.5**	**938.1**	**95.7**	**81.9**	**108.2**	**1,081.9**	**890.4**	**1,257.4**	**349.4**	**227.5**	**473.1**

Age Group	Multiracial			Native Hawaiian/ Pacific Islander			White		
	Total†	Male	Female	Total†	Male	Female	Total†	Male	Female
0-4	0.4	0.4	0.4	4.6	0.0	9.5	1.0	0.8	1.1
5-9	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.1	0.4
10-14	17.1	2.7	32.2	29.8	13.5	46.7	17.4	2.0	33.7
15-19	621.1	224.4	1,028.5	1,487.3	476.4	2,538.5	708.3	241.8	1,199.7
20-24	1,111.1	569.8	1,662.3	2,969.9	1,326.2	4,713.4	1,168.7	616.2	1,745.6
25-29	657.0	493.6	819.3	1,539.9	857.9	2,244.6	529.1	388.2	674.7
30-34	441.0	483.2	399.7	798.3	637.8	962.2	287.7	260.2	315.2
35-39	282.3	364.0	208.4	400.9	277.3	531.7	157.9	155.3	160.1
40-44	173.9	240.7	112.0	251.8	254.2	249.3	91.4	98.8	83.5
45-54	96.6	150.0	48.7	132.9	149.2	113.3	42.1	54.3	29.6
55-64	39.0	70.2	10.9	23.8	30.1	17.7	15.5	25.2	5.9
65+	6.1	11.6	1.5	5.9	12.6	0.0	2.3	4.1	0.7
Unknown age									
TOTAL	**280.7**	**189.7**	**369.5**	**563.2**	**312.3**	**817.4**	**184.9**	**121.3**	**247.2**

* Per 100,000.

† Total includes cases reported with unknown sex.

NOTE: These tables should be used only for race/Hispanic ethnicity comparisons. See Table 4 for age-specific cases and rates and Tables 3, 3A, and 3B 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. The COVID-19 pandemic has introduced uncertainty and difficulty in interpreting STD data collected during 2020 and 2021. See Impact of COVID-19 on STDs for more information.

Table 6A. Chlamydia — Reported Cases and Rates of Reported Cases Among Men Aged 15–24 Years by Age, United States, 2017–2021

Table 6A. Chlamydia — Reported Cases and Rates of Reported Cases Among Men Aged 15-24 Years by Age, United States, 2017-2021										
Ages	**Cases**					**Rates per 100,000 Population**				
	2017	**2018**	**2019**	**2020**	**2021**	**2017**	**2018**	**2019**	**2020**	**2021**
15	4,144	4,088	4,459	3,729	3,646	197.4	193.6	209.4	169.8	163.6
16	10,782	10,573	11,240	9,275	9,260	500.1	501.9	531.1	419.2	420.1
17	19,665	19,972	20,956	17,206	17,286	894.7	922.3	992.0	788.1	780.5
18	28,502	30,184	31,552	26,208	25,737	1,313.8	1,365.9	1,452.4	1,195.2	1,173.5
19	36,771	38,765	40,517	34,526	34,791	1,688.0	1,777.2	1,829.4	1,550.7	1,594.6
20	41,038	43,337	45,850	39,465	39,371	1,876.1	1,981.9	2,100.2	1,789.8	1,774.2
21	42,212	43,800	45,646	39,587	40,614	1,906.6	1,996.7	2,087.1	1,811.7	1,830.4
22	40,515	41,619	43,437	36,821	37,966	1,784.7	1,875.1	1,978.6	1,696.0	1,739.9
23	37,373	38,096	38,735	33,885	35,014	1,611.7	1,673.6	1,743.4	1,555.4	1,609.0
24	34,833	35,676	35,967	30,302	31,385	1,476.7	1,534.2	1,579.3	1,372.8	1,441.6
Total	**295,835**	**306,110**	**318,359**	**271,004**	**275,070**	**1,335.6**	**1,392.9**	**1,459.7**	**1,234.2**	**1,250.5**

NOTE: Cases reported with unknown sex are not included in this table. The COVID-19 pandemic has introduced uncertainty and difficulty in interpreting STD data collected during 2020 and 2021. See Impact of COVID-19 on STDs for more information.

Table 6B. Chlamydia — Reported Cases and Rates of Reported Cases Among Women Aged 15–24 Years by Age, United States, 2017–2021

Ages	Cases					Rates per 100,000 Population				
	2017	2018	2019	2020	2021	2017	2018	2019	2020	2021
15	20,247	19,518	20,352	17,168	15,886	1,004.4	961.7	994.8	818.5	746.7
16	40,681	40,001	40,135	33,901	32,012	1,968.3	1,976.3	1,973.0	1,600.8	1,520.1
17	65,496	66,329	65,210	55,136	53,315	3,120.8	3,194.3	3,212.5	2,640.1	2,516.6
18	98,907	101,783	102,336	87,113	84,428	4,774.1	4,824.0	4,911.9	4,149.5	4,021.3
19	111,959	114,004	116,097	101,306	98,665	5,387.4	5,474.9	5,487.5	4,749.6	4,720.2
20	107,397	110,939	111,609	99,860	98,541	5,140.2	5,315.2	5,349.0	4,728.3	4,631.5
21	100,160	102,127	103,394	93,215	95,075	4,759.7	4,865.7	4,944.2	4,441.8	4,466.6
22	86,678	86,274	86,633	78,669	80,655	4,030.4	4,078.8	4,118.6	3,767.3	3,846.4
23	75,046	73,729	73,497	66,368	68,341	3,416.6	3,409.6	3,467.0	3,160.2	3,262.2
24	64,769	64,663	63,434	56,037	58,090	2,906.1	2,928.1	2,927.2	2,640.1	2,762.6
Total	**771,340**	**779,367**	**782,697**	**688,773**	**685,008**	**3,655.5**	**3,712.3**	**3,749.1**	**3,270.9**	**3,247.6**

NOTE: Cases reported with unknown sex are not included in this table. The COVID-19 pandemic has introduced uncertainty and difficulty in interpreting STD data collected during 2020 and 2021. See Impact of COVID-19 on STDs for more information.

Table 7. Gonorrhea — Reported Cases and Rates of Reported Cases by State, Ranked by Rates, United States, 2021

Rank*	State	Cases	Rate per 100,000 Population
1	Mississippi	12,617	427.7
2	South Dakota	3,258	363.9
3	Louisiana	16,390	354.5
4	Alabama	16,191	321.3
5	South Carolina	16,052	309.2
6	Georgia	31,996	296.3
7	North Carolina	28,612	271.2
8	Arkansas	8,176	270.2
9	Nevada	8,488	270.0
10	Alaska	1,977	269.8
11	Tennessee	18,768	269.1
12	Oklahoma	10,273	257.7
13	Missouri	15,714	254.8
14	Arizona	18,426	253.2
15	Illinois	30,454	240.3
16	New Mexico	5,080	240.1
17	Ohio	27,838	236.3
18	California	91,461	233.1
19	North Dakota	1,735	223.9
20	Texas	64,623	218.9
21	Michigan	21,954	218.4
22	New York	43,048	217.0
	US TOTAL†	**710,151**	**214.0**
23	Indiana	14,483	212.8
24	Florida	44,738	205.4
25	Iowa	6,403	200.5
26	Kansas	5,646	192.4
27	Colorado	10,596	182.3
28	Kentucky	8,221	182.3
29	Wisconsin	10,455	177.3
30	Minnesota	9,660	169.3
31	Virginia	14,323	165.7
32	Nebraska	3,063	156.0
33	Delaware	1,541	153.6
34	Rhode Island	1,681	153.4
35	Connecticut	5,405	149.9
36	Oregon	6,221	146.5

Rank*	State	Cases	Rate per 100,000 Population
37	Pennsylvania	18,912	145.9
38	Washington	11,231	145.1
39	Montana	1,448	131.1
40	Massachusetts	8,240	118.0
41	New Jersey	10,259	110.7
42	Utah	3,621	108.5
43	Hawaii	1,457	101.1
44	West Virginia	1,639	91.9
45	Wyoming	523	90.4
46	Idaho	1,197	63.0
47	New Hampshire	613	44.1
48	Maine	462	33.7
49	Vermont	136	21.1
	Maryland	NR	—

* 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 4,322 cases and a rate of 645.0, but excludes territories.

NR = No report.

NOTE: The COVID-19 pandemic has introduced uncertainty and difficulty in interpreting STD data collected during 2020 and 2021. See Impact of COVID-19 on STDs for more information. Due to a network security incident in December 2021, the Maryland Department of Health could not finalize their 2021 STD case notification data. Although 2021 data from Maryland are included in the national case count and rate displayed in this table, state-specific data have been suppressed.

Table 8. Gonorrhea — Reported Cases and Rates of Reported Cases by State/Territory and Region in Alphabetical Order, United States, 2017–2021

State/Territory	Cases					Rates per 100,000 Population				
	2017	2018	2019	2020	2021	2017	2018	2019	2020	2021
Alabama	11,948	12,742	14,492	14,426	16,191	245.1	260.7	295.6	287.1	321.3
Alaska	2,189	2,247	2,213	1,982	1,977	295.9	304.7	302.5	270.3	269.8
Arizona	12,502	12,870	15,180	16,342	18,426	178.2	179.5	208.6	228.5	253.2
Arkansas	6,710	7,300	6,907	7,857	8,176	223.3	242.2	228.9	260.9	270.2
California	75,348	79,192	80,301	78,444	91,461	190.6	200.2	203.2	198.4	233.1
Colorado	8,478	8,894	9,572	9,686	10,596	151.2	156.2	166.2	167.8	182.3
Connecticut	3,913	4,959	4,418	4,604	5,405	109.1	138.8	123.9	127.7	149.9
Delaware	1,784	1,691	1,617	1,503	1,541	185.5	174.8	166.1	151.8	153.6
District of Columbia	4,563	4,240	4,382	3,879	4,322	657.5	603.6	620.9	562.5	645.0
Florida	31,683	32,644	36,804	40,788	44,738	151.0	153.3	171.4	189.4	205.4
Georgia	22,667	20,867	21,257	23,463	31,996	217.3	198.4	200.2	219.0	296.3
Hawaii	1,358	1,495	1,494	1,484	1,457	95.1	105.2	105.5	102.0	101.1
Idaho	987	1,134	1,491	1,480	1,197	57.5	64.6	83.4	80.5	63.0
Illinois	23,859	25,422	29,272	31,055	30,454	186.4	199.5	231.0	242.4	240.3
Indiana	11,835	12,193	11,926	14,111	14,483	177.5	182.2	177.1	208.0	212.8
Iowa	3,758	4,839	5,309	6,919	6,403	119.5	153.3	168.3	216.9	200.5
Kansas	4,545	5,256	4,948	5,626	5,646	156.0	180.5	169.8	191.5	192.4
Kentucky	7,417	7,470	7,379	8,393	8,221	166.5	167.2	165.2	186.3	182.3
Louisiana	12,017	12,043	12,800	15,483	16,390	256.5	258.4	275.3	332.4	354.5
Maine	620	710	547	520	462	46.4	53.0	40.7	38.2	33.7
Maryland	10,978	10,305	11,598	12,052	NR	181.4	170.5	191.8	195.1	—
Massachusetts	7,737	8,076	7,396	7,494	8,240	112.8	117.0	107.3	106.6	118.0
Michigan	15,742	16,688	18,150	23,412	21,954	158.0	166.9	181.7	232.3	218.4
Minnesota	6,519	7,542	8,013	10,320	9,660	116.9	134.4	142.1	180.8	169.3

State/Territory	Cases					Rates per 100,000 Population				
	2017	2018	2019	2020	2021	2017	2018	2019	2020	2021
Mississippi	9,258	9,749	12,068	13,773	12,617	310.2	326.4	405.5	465.1	427.7
Missouri	13,086	15,090	15,585	16,855	15,714	214.0	246.3	253.9	273.8	254.8
Montana	782	1,181	1,595	1,698	1,448	74.4	111.2	149.2	156.6	131.1
Nebraska	2,653	2,696	2,967	3,434	3,063	138.2	139.7	153.4	175.1	156.0
Nevada	5,520	6,475	6,519	6,364	8,488	184.1	213.4	211.6	205.0	270.0
New Hampshire	513	594	410	461	613	38.2	43.8	30.2	33.5	44.1
New Jersey	9,439	9,067	9,622	10,060	10,259	104.8	101.8	108.3	108.3	110.7
New Mexico	4,489	5,268	4,886	4,608	5,080	215.0	251.4	233.0	217.6	240.1
New York	34,099	37,262	40,901	42,517	43,048	171.8	190.7	210.2	210.5	217.0
North Carolina	22,871	23,725	26,377	28,258	28,612	222.6	228.5	251.5	270.7	271.2
North Dakota	966	1,369	1,447	1,660	1,735	127.9	180.1	189.9	213.1	223.9
Ohio	23,967	25,146	26,065	30,977	27,838	205.6	215.1	223.0	262.5	236.3
Oklahoma	9,081	8,998	10,491	11,204	10,273	231.0	228.2	265.1	283.0	257.7
Oregon	5,022	5,913	6,130	6,412	6,221	121.2	141.1	145.3	151.3	146.5
Pennsylvania	15,244	15,887	16,059	18,280	18,912	119.0	124.0	125.4	140.6	145.9
Rhode Island	1,087	1,336	1,516	1,399	1,681	102.6	126.4	143.1	127.5	153.4
South Carolina	12,623	13,801	14,160	16,705	16,052	251.2	271.5	275.0	326.4	309.2
South Dakota	1,290	1,689	2,170	2,424	3,258	148.3	191.4	245.3	273.4	363.9
Tennessee	12,426	14,627	16,026	18,458	18,768	185.0	216.1	234.7	267.1	269.1
Texas	47,409	47,231	44,230	58,246	64,623	167.5	164.6	152.5	199.8	218.9
Utah	2,543	2,895	2,886	3,112	3,621	82.0	91.6	90.0	95.1	108.5
Vermont	203	268	175	139	136	32.5	42.8	28.0	21.6	21.1
Virginia	12,596	11,776	13,840	15,217	14,323	148.7	138.3	162.1	176.3	165.7
Washington	9,915	11,207	11,736	11,667	11,231	133.9	148.7	154.1	151.4	145.1
West Virginia	1,296	1,143	1,771	1,780	1,639	71.4	63.3	98.8	99.2	91.9
Wisconsin	7,661	7,882	8,846	10,346	10,455	132.2	135.6	151.9	175.5	177.3
Wyoming	412	311	448	392	523	71.1	53.8	77.4	68.0	90.4
US TOTAL	**555,608**	**583,405**	**616,392**	**677,769**	**710,151**	**170.6**	**178.3**	**187.8**	**204.5**	**214.0**
Northeast	72,855	78,159	81,044	85,474	88,756	129.0	139.3	144.8	148.4	155.3

State/Territory	Cases					Rates per 100,000 Population				
	2017	2018	2019	2020	2021	2017	2018	2019	2020	2021
Midwest	115,881	125,812	134,698	157,139	150,663	170.0	184.2	197.1	227.8	218.9
South	237,327	240,352	256,199	291,485	309,006	191.9	192.7	204.0	230.8	242.9
West	129,545	139,082	144,451	143,671	161,726	167.3	178.3	184.4	182.8	205.6
American Samoa	NR	13	9	24	11	—	25.6	18.6	50.6	23.7
Commonwealth of the Northern Mariana Islands	NR	34	21	3	17	—	65.4	40.3	5.8	32.9
Guam	202	261	305	208	198	120.7	155.6	181.4	123.5	117.3
Puerto Rico	588	557	499	390	1,012	17.5	16.9	15.6	11.9	31.0
Virgin Islands	15	NR	47	67	78	14.0	—	44.1	63.0	73.7
TERRITORIES TOTAL	**805**	**865**	**881**	**692**	**1,316**	**22.2**	**24.3**	**24.7**	**18.9**	**36.2**
TOTAL	**556,413**	**584,270**	**617,273**	**678,461**	**711,467**	**168.9**	**176.7**	**186.0**	**202.5**	**212.0**

NR = No report.

NOTE: See Technical Notes for more information on interpreting case counts and rates in US territories. The COVID-19 pandemic has introduced uncertainty and difficulty in interpreting STD data collected during 2020 and 2021. See Impact of COVID-19 on STDs for more information. Due to a network security incident in December 2021, the Maryland Department of Health could not finalize their 2021 STD 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 8A. Gonorrhea Among Men — Reported Cases and Rates of Reported Cases by State/Territory and Region in Alphabetical Order, United States, 2017–2021

State/Territory	Cases					Rates per 100,000 Population				
	2017	2018	2019	2020	2021	2017	2018	2019	2020	2021
Alabama	6,214	6,560	7,577	7,625	8,344	263.3	277.5	319.8	312.2	340.8
Alaska	1,099	1,189	1,081	1,006	1,018	284.1	309.2	283.4	261.7	265.0
Arizona	7,256	7,509	8,942	9,524	10,905	208.0	210.6	247.2	266.7	300.1
Arkansas	3,184	3,511	3,359	3,832	3,855	215.7	237.2	226.7	257.8	258.2
California	50,577	52,553	52,676	49,809	59,702	257.4	267.3	268.1	251.9	304.3
Colorado	5,013	5,305	5,682	5,754	6,396	177.6	185.0	195.8	196.8	217.2
Connecticut	2,246	3,003	2,483	2,664	2,807	128.2	172.3	142.7	150.5	158.6
Delaware	1,027	958	871	814	870	220.6	204.7	185.0	169.1	178.5
District of Columbia	3,254	2,989	3,055	2,754	3,142	988.5	896.8	912.7	838.0	985.2
Florida	18,904	19,704	23,267	24,696	27,572	184.3	189.2	221.7	233.2	257.4
Georgia	12,741	12,075	12,585	13,684	18,619	251.0	236.1	243.9	261.5	353.3
Hawaii	882	959	946	877	849	123.2	134.9	133.6	119.6	117.0
Idaho	629	622	841	761	676	73.1	70.8	93.9	82.1	70.5
Illinois	14,057	15,351	17,351	17,901	17,998	223.4	245.2	278.7	282.6	287.3
Indiana	5,899	6,101	6,124	7,100	7,572	179.5	184.9	184.4	210.9	224.2
Iowa	1,870	2,363	2,592	3,450	3,068	119.5	150.4	165.0	215.8	191.6
Kansas	2,276	2,641	2,483	2,823	2,829	156.8	182.1	171.0	191.8	192.4
Kentucky	3,906	3,762	3,843	4,217	4,212	178.0	170.9	174.6	188.8	188.6
Louisiana	6,039	6,139	6,711	8,169	8,541	263.8	269.9	296.0	357.6	377.1
Maine	392	459	344	307	287	59.9	70.0	52.3	45.7	42.4
Maryland	6,346	6,074	7,029	7,272	NR	216.3	207.4	240.0	241.6	—
Massachusetts	5,206	5,578	5,135	4,843	5,449	156.3	166.5	153.5	141.0	159.7
Michigan	8,121	8,700	9,491	11,998	11,245	165.6	176.8	193.0	240.3	225.8
Minnesota	3,568	4,187	4,311	5,472	5,290	128.5	149.8	153.4	191.3	184.9

State/Territory	Cases					Rates per 100,000 Population				
	2017	2018	2019	2020	2021	2017	2018	2019	2020	2021
Mississippi	4,681	4,846	5,831	7,048	6,283	323.7	334.7	404.3	488.6	437.7
Missouri	7,088	8,287	8,553	8,892	8,329	236.1	275.5	283.9	292.7	273.6
Montana	355	543	748	811	689	67.1	101.5	139.0	147.7	123.2
Nebraska	1,366	1,393	1,462	1,729	1,534	142.6	144.6	151.3	175.5	155.5
Nevada	3,539	3,985	4,082	3,812	5,343	235.3	261.9	264.2	243.6	337.3
New Hampshire	334	410	275	320	397	50.2	61.0	40.8	46.6	57.3
New Jersey	5,699	5,617	5,923	5,803	6,021	129.6	129.1	136.5	126.9	132.0
New Mexico	2,412	2,925	2,704	2,555	2,892	233.2	282.0	260.6	242.4	274.7
New York	24,383	27,025	29,548	27,910	29,073	253.0	284.8	312.7	282.7	299.9
North Carolina	11,857	12,245	13,947	14,918	15,316	237.1	242.4	273.5	292.2	297.0
North Dakota	438	661	717	799	834	113.1	169.8	183.8	199.2	209.3
Ohio	12,231	13,000	13,679	15,830	14,124	214.1	226.8	238.7	271.9	243.0
Oklahoma	4,360	4,442	5,280	5,734	5,283	223.9	227.4	269.3	290.8	266.2
Oregon	3,095	3,663	3,824	3,794	3,647	150.8	176.3	182.9	179.6	172.3
Pennsylvania	9,285	9,821	9,686	10,645	10,779	148.1	156.5	154.4	165.9	168.4
Rhode Island	729	879	953	861	1,022	141.6	170.9	184.8	160.1	190.3
South Carolina	6,122	6,744	7,257	8,715	8,402	251.1	273.8	291.1	349.8	332.9
South Dakota	568	715	946	1,145	1,417	129.4	160.5	211.7	254.3	311.5
Tennessee	6,758	7,946	8,438	9,848	10,282	206.3	240.6	253.2	290.5	300.6
Texas	26,344	27,117	25,770	32,985	37,265	187.3	190.2	178.9	226.7	252.9
Utah	1,672	1,953	1,872	1,924	2,390	107.1	122.7	115.9	116.2	141.4
Vermont	116	126	110	73	82	37.6	40.7	35.7	22.8	25.6
Virginia	6,779	6,525	7,790	8,354	7,841	162.7	155.7	185.5	195.5	183.3
Washington	6,425	7,279	7,547	7,178	7,053	173.5	193.1	198.0	185.0	180.9
West Virginia	678	601	933	914	860	75.4	67.2	105.1	102.2	96.7
Wisconsin	3,961	4,208	4,694	5,392	5,440	137.4	145.5	162.0	182.6	184.2
Wyoming	188	153	238	210	270	63.6	51.9	80.8	71.0	91.2
US TOTAL	**322,169**	**341,401**	**361,586**	**385,551**	**410,388**	**200.8**	**211.9**	**223.7**	**234.8**	**249.7**
Northeast	48,390	52,918	54,457	53,426	55,917	175.8	193.4	199.4	188.9	199.2

State/Territory	Cases					Rates per 100,000 Population				
	2017	2018	2019	2020	2021	2017	2018	2019	2020	2021
Midwest	61,443	67,607	72,403	82,531	79,680	182.5	200.4	214.6	240.8	232.9
South	129,194	132,238	143,543	161,579	172,961	213.1	216.3	233.3	259.7	276.1
West	83,142	88,638	91,183	88,015	101,830	215.4	227.9	233.3	223.2	258.1
American Samoa	NR	9	7	13	6	—	35.4	28.9	55.0	26.0
Commonwealth of the Northern Mariana Islands	NR	18	8	1	6	—	65.1	28.9	3.6	21.9
Guam	105	118	157	100	100	122.0	136.7	181.4	115.3	115.1
Puerto Rico	356	318	298	261	537	22.4	20.4	19.7	16.8	34.8
Virgin Islands	10	NR	23	40	42	19.5	—	45.2	79.0	83.4
TERRITORIES TOTAL	**471**	**463**	**493**	**415**	**691**	**27.2**	**27.2**	**28.9**	**23.8**	**39.9**
TOTAL	**322,640**	**341,864**	**362,079**	**385,966**	**411,079**	**199.0**	**210.0**	**221.6**	**232.6**	**247.5**

NR = No report.

NOTE: Cases reported with unknown sex are not included in this table. See Technical Notes for more information on interpreting case counts and rates in US territories. The COVID-19 pandemic has introduced uncertainty and difficulty in interpreting STD data collected during 2020 and 2021. See Impact of COVID-19 on STDs for more information. Due to a network security incident in December 2021, the Maryland Department of Health could not finalize their 2021 STD 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 8B. Gonorrhea Among Women — Reported Cases and Rates of Reported Cases by State/Territory and Region in Alphabetical Order, United States, 2017–2021

State/Territory	Cases					Rates per 100,000 Population				
	2017	2018	2019	2020	2021	2017	2018	2019	2020	2021
Alabama	5,693	6,134	6,878	6,765	7,749	226.4	243.1	271.5	262.0	299.0
Alaska	1,090	1,057	1,131	976	959	308.8	299.5	323.0	279.7	275.2
Arizona	5,219	5,332	6,229	6,803	7,505	147.9	147.9	170.1	190.0	206.0
Arkansas	3,525	3,788	3,546	4,021	4,318	230.7	247.0	230.8	263.7	281.7
California	24,599	26,425	27,291	28,288	31,301	123.7	132.8	137.4	143.1	159.5
Colorado	3,465	3,589	3,890	3,932	4,200	124.4	126.9	136.1	138.0	146.5
Connecticut	1,660	1,938	1,932	1,915	2,558	90.4	105.9	105.8	104.3	139.3
Delaware	757	728	745	687	667	152.5	145.8	148.1	135.1	129.3
District of Columbia	1,287	1,211	1,283	1,106	1,167	352.8	328.1	345.8	306.5	332.3
Florida	12,769	12,936	13,525	16,083	17,148	119.0	118.8	123.2	146.9	154.9
Georgia	9,873	8,718	8,375	9,641	13,362	184.4	161.3	153.5	176.0	241.6
Hawaii	476	531	539	602	597	66.9	74.8	76.1	83.4	83.4
Idaho	357	509	650	718	519	41.7	58.2	72.9	78.7	55.1
Illinois	9,750	10,064	11,825	13,101	12,418	149.8	155.3	183.5	202.3	193.8
Indiana	5,931	6,083	5,794	7,000	6,896	175.5	179.4	169.8	204.8	201.1
Iowa	1,887	2,476	2,716	3,469	3,335	119.4	156.2	171.5	217.9	209.5
Kansas	2,269	2,615	2,465	2,803	2,817	155.3	179.0	168.6	191.2	192.4
Kentucky	3,478	3,643	3,489	4,136	3,981	153.9	160.7	153.9	182.0	175.0
Louisiana	5,978	5,904	6,088	7,314	7,845	249.6	247.5	255.6	308.2	332.6
Maine	225	250	203	213	175	33.0	36.6	29.6	30.8	25.2
Maryland	4,629	4,227	4,568	4,735	NR	148.5	135.8	146.6	149.5	—
Massachusetts	2,495	2,431	2,217	2,579	2,753	70.7	68.4	62.5	71.7	77.1
Michigan	7,604	7,981	8,657	11,413	10,706	150.3	157.3	170.8	224.5	211.2
Minnesota	2,939	3,345	3,678	4,833	4,347	105.0	118.8	130.0	169.8	152.7

State/Territory	Cases					Rates per 100,000 Population				
	2017	2018	2019	2020	2021	2017	2018	2019	2020	2021
Mississippi	4,563	4,888	6,220	6,698	6,280	296.6	317.7	405.5	441.0	414.6
Missouri	5,997	6,803	7,032	7,963	7,385	192.7	218.1	225.0	255.5	236.4
Montana	427	638	847	887	759	81.9	121.0	159.6	165.7	139.3
Nebraska	1,285	1,302	1,503	1,694	1,527	133.6	134.8	155.3	173.5	156.3
Nevada	1,972	2,477	2,432	2,546	3,135	132.0	163.7	158.4	165.3	201.0
New Hampshire	179	184	135	140	215	26.4	26.9	19.7	20.3	30.9
New Jersey	3,731	3,446	3,680	4,226	4,238	80.9	75.6	81.0	89.6	90.1
New Mexico	2,073	2,343	2,179	2,050	2,183	196.7	221.4	205.7	192.7	205.3
New York	9,649	10,202	11,341	14,607	13,958	94.5	101.5	113.3	141.4	137.6
North Carolina	11,013	11,480	12,430	13,340	13,296	208.9	215.3	230.7	250.1	246.5
North Dakota	528	708	730	861	901	143.4	191.0	196.2	227.8	239.3
Ohio	11,736	12,146	12,386	15,147	13,714	197.4	203.8	207.9	253.4	229.8
Oklahoma	4,721	4,556	5,211	5,470	4,990	238.0	228.9	261.0	275.2	249.2
Oregon	1,920	2,244	2,288	2,612	2,557	91.9	106.2	107.6	123.0	120.1
Pennsylvania	5,947	6,050	6,359	7,625	8,122	91.0	92.6	97.4	115.8	123.7
Rhode Island	357	457	563	538	659	65.5	84.2	103.6	96.1	118.0
South Carolina	6,470	7,016	6,847	7,878	7,534	250.1	267.7	257.8	299.9	282.5
South Dakota	722	974	1,224	1,279	1,841	167.6	223.0	279.5	293.0	417.9
Tennessee	5,667	6,681	7,588	8,609	8,483	164.7	192.7	217.0	244.6	238.6
Texas	20,963	19,982	18,177	24,879	26,832	147.2	138.4	124.6	170.5	181.4
Utah	865	942	1,014	1,188	1,230	56.2	60.0	63.7	73.5	74.6
Vermont	87	140	65	66	54	27.6	44.2	20.6	20.4	16.6
Virginia	5,734	5,208	6,019	6,810	6,430	133.2	120.4	138.8	156.2	147.3
Washington	3,488	3,922	4,183	4,457	4,123	94.2	104.2	110.0	116.5	107.4
West Virginia	618	542	836	866	779	67.4	59.5	92.4	96.3	87.2
Wisconsin	3,696	3,670	4,146	4,915	4,997	126.9	125.6	141.7	167.1	169.8
Wyoming	224	158	210	182	252	78.9	55.8	73.9	64.7	89.2
US TOTAL	**232,587**	**241,074**	**253,359**	**290,666**	**298,015**	**140.7**	**145.2**	**152.1**	**173.8**	**177.9**
Northeast	24,330	25,098	26,495	31,909	32,732	84.1	87.3	92.4	108.8	112.5

State/Territory	Cases					Rates per 100,000 Population				
	2017	2018	2019	2020	2021	2017	2018	2019	2020	2021
Midwest	54,344	58,167	62,156	74,478	70,884	157.4	168.2	179.7	214.6	204.7
South	107,738	107,642	111,825	129,038	135,079	170.9	169.2	174.6	201.5	209.2
West	46,175	50,167	52,883	55,241	59,320	119.0	128.3	134.7	141.1	151.3
American Samoa	NR	4	2	11	5	—	15.7	8.2	46.3	21.5
Commonwealth of the Northern Mariana Islands	NR	16	13	2	11	—	65.7	53.3	8.2	45.3
Guam	97	143	148	108	98	119.4	175.6	181.3	132.1	119.7
Puerto Rico	230	238	201	129	475	13.1	13.7	12.0	7.5	27.6
Virgin Islands	5	NR	24	27	36	8.9	—	43.0	48.5	64.9
TERRITORIES TOTAL	**332**	**401**	**388**	**277**	**625**	**17.5**	**21.5**	**20.8**	**14.5**	**32.8**
TOTAL	**232,919**	**241,475**	**253,747**	**290,943**	**298,640**	**139.3**	**143.8**	**150.6**	**172.0**	**176.3**

NR = No report.

NOTE: Cases reported with unknown sex are not included in this table. See Technical Notes for more information on interpreting case counts and rates in US territories. The COVID-19 pandemic has introduced uncertainty and difficulty in interpreting STD data collected during 2020 and 2021. See Impact of COVID-19 on STDs for more information. Due to a network security incident in December 2021, the Maryland Department of Health could not finalize their 2021 STD 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 9. Gonorrhea — Reported Cases and Rates of Reported Cases by Age Group and Sex, United States, 2017–2021

Year	Age Group	Cases				Rates per 100,000 Population*		
		Total	Male	Female	Unknown Sex	Total	Male	Female
2017	0-4	203	56	144	3	1.0	0.5	1.5
	5-9	110	19	90	1	0.5	0.2	0.9
	10-14	2,725	507	2,212	6	13.1	4.8	21.7
	15-19	92,608	34,918	57,573	117	438.2	323.3	557.3
	20-24	155,862	81,036	74,578	248	704.7	714.0	692.5
	25-29	121,880	75,123	46,577	180	521.5	631.2	406.1
	30-34	71,603	47,342	24,157	104	325.9	426.9	222.0
	35-39	43,792	30,277	13,448	67	206.3	285.2	126.7
	40-44	24,108	17,753	6,331	24	122.7	182.0	64.0
	45-54	29,428	23,803	5,580	45	69.4	113.9	26.0
	55-64	10,867	9,311	1,538	18	25.9	46.0	7.1
	65+	2,063	1,818	233	12	4.1	8.1	0.8
	Unknown Age	359	206	126	27			
	TOTAL	**555,608**	**322,169**	**232,587**	**852**	**170.6**	**200.8**	**140.7**
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

Year	Age Group	Cases				Rates per 100,000 Population*		
		Total	Male	Female	Unknown Sex	Total	Male	Female
	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
	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**

* 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. The COVID-19 pandemic has introduced uncertainty and difficulty in interpreting STD data collected during 2020 and 2021. See Impact of COVID-19 on STDs for more information.

Table 10A. Gonorrhea — Reported Cases by Race/Hispanic Ethnicity, Age Group, and Sex, United States, 2021

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	4	2	2	0	0	0	73	17	51	29	7	22
5-9	2	1	1	0	0	0	20	3	17	12	1	11
10-14	46	5	41	13	3	10	1,453	344	1,109	277	42	234
15-19	1,025	300	724	458	197	261	47,062	19,757	27,263	10,048	3,658	6,354
20-24	1,841	700	1,137	1,477	881	591	80,365	41,751	38,528	21,018	10,837	10,124
25-29	1,887	745	1,140	1,788	1,401	382	59,524	36,665	22,790	19,252	12,359	6,856
30-34	1,793	780	1,012	1,471	1,239	228	39,053	27,032	11,972	14,813	10,539	4,225
35-39	1,265	544	721	915	752	160	19,360	14,238	5,095	9,043	6,622	2,396
40-44	631	277	352	539	452	86	10,732	8,269	2,453	5,269	3,994	1,261
45-54	455	237	218	569	483	85	9,518	7,892	1,615	4,445	3,474	962
55-64	112	78	34	179	143	36	4,416	3,919	493	1,360	1,155	201
65+	25	18	7	32	22	10	880	799	80	187	155	31
Unknown Age	9	4	5	4	3	1	826	453	371	60	39	20
TOTAL	**9,095**	**3,691**	**5,394**	**7,445**	**5,576**	**1,850**	**273,282**	**161,139**	**111,837**	**85,813**	**52,882**	**32,697**

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	1	0	1	54	19	35	79	31	46
5-9	1	0	1	0	0	0	26	8	18	22	4	18
10-14	51	6	45	2	0	2	455	48	406	747	181	562
15-19	1,764	481	1,282	136	49	87	15,033	3,939	11,072	26,392	11,315	14,918
20-24	3,312	1,361	1,946	308	143	163	32,062	13,009	18,991	44,836	23,956	20,650
25-29	2,761	1,505	1,255	281	154	127	30,335	16,306	13,977	32,307	19,963	12,174
30-34	2,027	1,360	662	224	151	72	26,975	15,909	11,005	23,034	15,181	7,735

Age Group	Multiracial			Native Hawaiian/ Pacific Islander			White			Other/Unknown		
	Total*	Male	Female	Total*	Male	Female	Total*	Male	Female	Total*	Male	Female
35-39	1,175	833	342	133	83	50	18,963	11,356	7,575	14,315	9,600	4,653
40-44	656	475	181	99	68	31	12,038	7,590	4,434	8,649	5,859	2,755
45-54	628	495	132	78	61	16	11,845	8,613	3,219	8,610	6,138	2,437
55-64	216	193	23	18	14	4	5,392	4,567	820	3,602	2,815	770
65+	43	42	1	3	3	0	1,148	1,007	140	871	700	162
Unknown Age	5	2	3	0	0	0	1,034	539	492	1,770	968	747
TOTAL	**12,639**	**6,753**	**5,873**	**1,283**	**726**	**553**	**155,360**	**82,910**	**72,184**	**165,234**	**96,711**	**67,627**

* Total includes cases reported with unknown sex.

NOTE: These tables should be used only for race/Hispanic ethnicity comparisons. See Table 9 for age-specific cases and rates and Tables 8, 8A, and 8B for total and sex-specific cases and rates. Cases in the 0–4 age group may include cases due to perinatal transmission. The COVID-19 pandemic has introduced uncertainty and difficulty in interpreting STD data collected during 2020 and 2021. See Impact of COVID-19 on STDs for more information.

Table 10B. Gonorrhea — Rates of Reported Cases* by Race/Hispanic Ethnicity, Age Group, and Sex, United States, 2021

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	2.8	2.7	2.9	0.0	0.0	0.0	2.8	1.3	3.9	0.6	0.3	0.9
5-9	1.2	1.2	1.2	0.0	0.0	0.0	0.7	0.2	1.2	0.2	0.0	0.4
10-14	25.6	5.5	46.4	1.2	0.5	1.8	49.1	22.8	76.2	5.0	1.5	8.6
15-19	568.1	327.1	816.1	40.4	34.6	46.3	1,609.6	1,333.6	1,890.1	188.2	134.1	243.1
20-24	1,019.5	766.0	1,274.5	121.4	144.2	97.6	2,658.9	2,735.8	2,574.7	423.6	427.7	416.9
25-29	995.6	774.7	1,220.9	122.5	193.0	52.1	1,818.4	2,227.5	1,400.4	396.2	497.0	289.0
30-34	958.1	822.7	1,096.1	87.0	150.6	26.2	1,191.6	1,671.1	721.3	313.4	427.5	186.9
35-39	769.6	661.4	877.8	54.4	93.1	18.3	675.6	1,025.0	345.0	196.1	273.7	109.3
40-44	418.6	370.1	463.8	35.5	63.4	10.7	396.2	639.8	173.2	120.2	175.9	59.7
45-54	160.8	170.1	151.8	20.6	37.1	5.8	187.7	329.1	60.4	59.1	90.6	26.0
55-64	37.1	54.2	21.6	8.1	14.0	3.0	87.2	166.6	18.2	24.6	42.0	7.2
65+	7.6	12.2	3.9	1.2	1.9	0.7	16.7	36.8	2.6	3.7	6.9	1.1
Unknown age												
TOTAL	**370.9**	**305.0**	**434.3**	**37.8**	**59.0**	**18.1**	**652.9**	**800.8**	**514.5**	**137.0**	**166.7**	**105.7**

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	2.3	0.0	4.8	0.6	0.4	0.8
5-9	0.1	0.0	0.2	0.0	0.0	0.0	0.3	0.2	0.4
10-14	5.3	1.2	9.6	4.6	0.0	9.3	4.3	0.9	7.9
15-19	215.0	115.6	317.2	314.6	222.3	410.5	135.1	68.9	204.7
20-24	466.3	379.2	553.9	721.4	647.2	791.2	281.5	223.1	341.6
25-29	446.0	485.9	405.8	593.6	638.2	547.2	254.0	267.7	238.7
30-34	408.3	567.4	257.9	416.9	544.1	277.1	212.9	248.3	175.7
35-39	294.0	438.7	163.1	256.3	311.0	198.4	151.4	178.9	122.6

Age Group	Multiracial			Native Hawaiian/ Pacific Islander			White		
	Total†	Male	Female	Total†	Male	Female	Total†	Male	Female
40-44	191.1	293.2	99.9	218.7	293.0	140.5	100.7	125.3	75.2
45-54	116.7	194.4	46.5	103.6	159.7	43.2	48.5	69.8	26.6
55-64	47.5	89.7	9.6	26.8	42.1	11.8	18.5	31.6	5.6
65+	9.0	19.5	0.4	4.4	9.4	0.0	2.7	5.2	0.6
Unknown age									
TOTAL	**162.2**	**174.9**	**149.4**	**204.9**	**229.2**	**178.7**	**78.9**	**84.9**	**72.8**

* Per 100,000

† Total includes cases reported with unknown sex.

NOTE: These tables should be used only for race/Hispanic ethnicity comparisons. See Table 9 for age-specific cases and rates and Tables 8, 8A, and 8B 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. The COVID-19 pandemic has introduced uncertainty and difficulty in interpreting STD data collected during 2020 and 2021. See Impact of COVID-19 on STDs for more information.

Table 11A. Gonorrhea — Reported Cases and Rates of Reported Cases Among Men Aged 15–24 Years by Age, United States, 2017–2021

Ages	Cases					Rates per 100,000 Population				
	2017	2018	2019	2020	2021	2017	2018	2019	2020	2021
15	1,335	1,333	1,376	1,707	1,589	63.6	63.1	64.6	77.7	71.3
16	3,374	3,189	3,282	3,722	3,751	156.5	151.4	155.1	168.2	170.2
17	6,301	6,185	6,051	7,002	6,945	286.7	285.6	286.4	320.7	313.6
18	10,482	10,356	10,778	11,711	11,780	483.2	468.6	496.1	534.1	537.1
19	13,426	13,551	13,915	15,514	15,631	616.3	621.2	628.3	696.8	716.4
20	15,085	15,280	15,610	17,707	17,671	689.6	698.8	715.0	803.0	796.3
21	15,985	16,089	16,483	18,315	19,111	722.0	733.4	753.7	838.2	861.3
22	16,484	16,421	16,973	18,651	18,477	726.1	739.8	773.2	859.1	846.8
23	16,663	16,968	17,042	18,296	18,867	718.6	745.4	767.1	839.8	867.0
24	16,819	17,055	17,170	17,925	18,512	713.0	733.4	753.9	812.1	850.3
Total	**115,954**	**116,427**	**118,680**	**130,550**	**132,334**	**523.5**	**529.8**	**544.1**	**594.5**	**601.6**

NOTE: Cases reported with unknown sex are not included in this table. The COVID-19 pandemic has introduced uncertainty and difficulty in interpreting STD data collected during 2020 and 2021. See Impact of COVID-19 on STDs for more information.

Table 11B. Gonorrhea — Reported Cases and Rates of Reported Cases Among Women Aged 15–24 Years by Age, United States, 2017–2021

Ages	Cases					Rates per 100,000 Population				
	2017	2018	2019	2020	2021	2017	2018	2019	2020	2021
15	3,976	3,750	3,821	4,126	3,817	197.2	184.8	186.8	196.7	179.4
16	7,600	6,921	6,938	7,364	7,150	367.7	341.9	341.1	347.7	339.5
17	11,479	11,047	10,961	11,952	11,578	547.0	532.0	540.0	572.3	546.5
18	16,429	16,679	17,134	18,637	18,124	793.0	790.5	822.4	887.7	863.2
19	18,089	18,231	18,904	21,463	21,292	870.4	875.5	893.5	1,006.3	1,018.6
20	16,950	17,477	18,407	21,462	21,054	811.3	837.3	882.2	1,016.2	989.6
21	15,968	16,556	17,693	20,397	20,416	758.8	788.8	846.1	971.9	959.1
22	14,933	14,912	15,344	18,572	18,704	694.4	705.0	729.5	889.4	892.0
23	14,046	13,670	13,989	16,459	17,109	639.5	632.2	659.9	783.7	816.7
24	12,681	13,048	13,267	14,728	14,847	569.0	590.8	612.2	693.9	706.1
Total	**132,151**	**132,291**	**136,458**	**155,160**	**154,091**	**626.3**	**630.1**	**653.6**	**736.8**	**730.6**

NOTE: Cases reported with unknown sex are not included in this table. The COVID-19 pandemic has introduced uncertainty and difficulty in interpreting STD data collected during 2020 and 2021. See Impact of COVID-19 on STDs for more information.

Table 12. Total Syphilis* — Reported Cases and Rates of Reported Cases by State/Territory and Region in Alphabetical Order, United States, 2017–2021

State/Territory	Cases					Rates per 100,000 Population				
	2017	2018	2019	2020	2021	2017	2018	2019	2020	2021
Alabama	1,202	1,285	1,634	1,518	2,173	24.7	26.3	33.3	30.2	43.1
Alaska	28	113	242	361	447	3.8	15.3	33.1	49.2	61.0
Arizona	2,424	3,249	4,022	4,461	6,330	34.5	45.3	55.3	62.4	87.0
Arkansas	726	964	1,106	1,243	2,403	24.2	32.0	36.6	41.3	79.4
California	21,804	25,253	28,811	26,414	31,276	55.1	63.8	72.9	66.8	79.7
Colorado	817	1,085	1,434	1,785	2,303	14.6	19.0	24.9	30.9	39.6
Connecticut	283	264	482	536	888	7.9	7.4	13.5	14.9	24.6
Delaware	194	129	216	222	295	20.2	13.3	22.2	22.4	29.4
District of Columbia	845	764	1,085	988	870	121.8	108.8	153.7	143.3	129.8
Florida	8,957	10,701	12,121	12,416	16,438	42.7	50.2	56.4	57.6	75.5
Georgia	4,310	4,928	5,683	5,595	6,711	41.3	46.8	53.5	52.2	62.1
Hawaii	165	210	252	397	643	11.6	14.8	17.8	27.3	44.6
Idaho	151	134	149	184	270	8.8	7.6	8.3	10.0	14.2
Illinois	3,838	4,472	4,511	4,568	5,124	30.0	35.1	35.6	35.7	40.4
Indiana	788	985	993	1,349	1,980	11.8	14.7	14.7	19.9	29.1
Iowa	290	286	359	501	763	9.2	9.1	11.4	15.7	23.9
Kansas	339	495	565	539	803	11.6	17.0	19.4	18.3	27.4
Kentucky	722	881	1,096	1,143	1,559	16.2	19.7	24.5	25.4	34.6
Louisiana	2,854	2,744	2,744	2,497	3,480	60.9	58.9	59.0	53.6	75.3
Maine	132	147	136	81	135	9.9	11.0	10.1	5.9	9.8
Maryland	2,059	2,536	2,779	2,683	NR	34.0	42.0	46.0	43.4	—
Massachusetts	1,474	1,305	1,844	1,658	2,051	21.5	18.9	26.8	23.6	29.4
Michigan	1,267	1,692	1,905	2,059	2,671	12.7	16.9	19.1	20.4	26.6
Minnesota	934	918	1,127	1,098	1,465	16.7	16.4	20.0	19.2	25.7
Mississippi	937	1,454	2,006	2,131	2,605	31.4	48.7	67.4	72.0	88.3

State/Territory	Cases					Rates per 100,000 Population				
	2017	2018	2019	2020	2021	2017	2018	2019	2020	2021
Missouri	1,337	1,914	2,188	2,333	3,780	21.9	31.2	35.7	37.9	61.3
Montana	85	104	140	101	225	8.1	9.8	13.1	9.3	20.4
Nebraska	118	219	291	268	471	6.1	11.4	15.0	13.7	24.0
Nevada	1,684	2,000	2,356	2,218	3,065	56.2	65.9	76.5	71.4	97.5
New Hampshire	109	137	135	120	145	8.1	10.1	9.9	8.7	10.4
New Jersey	1,867	1,777	2,085	2,385	3,389	20.7	19.9	23.5	25.7	36.6
New Mexico	510	812	1,294	1,496	2,069	24.4	38.8	61.7	70.6	97.8
New York	9,877	10,183	10,500	10,613	13,105	49.8	52.1	54.0	52.5	66.1
North Carolina	2,949	2,989	3,369	3,714	5,029	28.7	28.8	32.1	35.6	47.7
North Dakota	78	84	97	91	106	10.3	11.1	12.7	11.7	13.7
Ohio	1,900	1,909	2,005	2,457	3,958	16.3	16.3	17.2	20.8	33.6
Oklahoma	953	1,137	1,749	1,888	3,003	24.2	28.8	44.2	47.7	75.3
Oregon	848	1,032	1,245	1,320	2,010	20.5	24.6	29.5	31.2	47.3
Pennsylvania	2,235	2,414	2,764	2,898	3,816	17.5	18.8	21.6	22.3	29.4
Rhode Island	221	284	423	315	567	20.9	26.9	39.9	28.7	51.8
South Carolina	1,096	1,152	1,306	1,681	2,079	21.8	22.7	25.4	32.8	40.1
South Dakota	75	74	86	128	924	8.6	8.4	9.7	14.4	103.2
Tennessee	1,453	1,726	2,226	2,463	3,180	21.6	25.5	32.6	35.6	45.6
Texas	12,127	12,973	12,657	15,358	21,476	42.8	45.2	43.7	52.7	72.7
Utah	299	423	431	351	531	9.6	13.4	13.4	10.7	15.9
Vermont	26	29	24	23	16	4.2	4.6	3.8	3.6	2.5
Virginia	1,758	2,039	2,071	1,953	2,205	20.8	23.9	24.3	22.6	25.5
Washington	1,751	1,911	2,186	2,079	3,366	23.6	25.4	28.7	27.0	43.5
West Virginia	124	185	277	407	536	6.8	10.2	15.5	22.7	30.1
Wisconsin	551	509	569	835	1,615	9.5	8.8	9.8	14.2	27.4
Wyoming	19	42	42	32	43	3.3	7.3	7.3	5.5	7.4
US TOTAL	**101,590**	**115,052**	**129,818**	**133,954**	**176,713**	**31.2**	**35.2**	**39.5**	**40.4**	**53.2**
Northeast	16,224	16,540	18,393	18,629	24,112	28.7	29.5	32.9	32.3	42.2
Midwest	11,515	13,557	14,696	16,226	23,660	16.9	19.8	21.5	23.5	34.4

State/Territory	Cases					Rates per 100,000 Population				
	2017	2018	2019	2020	2021	2017	2018	2019	2020	2021
South	43,266	48,587	54,125	57,900	76,363	35.0	38.9	43.1	45.9	60.0
West	30,585	36,368	42,604	41,199	52,578	39.5	46.6	54.4	52.4	66.8
American Samoa	NR	0	0	0	0	—	0.0	0.0	0.0	0.0
Commonwealth of the Northern Mariana Islands	NR	2	2	2	2	—	3.8	3.8	3.9	3.9
Guam	21	30	31	21	22	12.5	17.9	18.4	12.5	13.0
Puerto Rico	1,055	1,089	949	829	1,132	31.5	33.1	29.7	25.2	34.7
Virgin Islands	0	NR	45	40	42	0.0	—	42.2	37.6	39.7
TERRITORIES TOTAL	**1,076**	**1,121**	**1,027**	**892**	**1,198**	**29.7**	**31.4**	**28.8**	**24.4**	**32.9**
TOTAL	**102,666**	**116,173**	**130,845**	**134,846**	**177,911**	**31.2**	**35.1**	**39.4**	**40.2**	**53.0**

* See Technical Notes for definition and more information on interpreting case counts and rates in US territories.
NR = No report.

NOTE: The COVID-19 pandemic has introduced uncertainty and difficulty in interpreting STD data collected during 2020 and 2021. See Impact of COVID-19 on STDs for more information. Due to a network security incident in December 2021, the Maryland Department of Health could not finalize their 2021 STD 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. Primary and Secondary Syphilis — Reported Cases and Rates of Reported Cases by State, Ranked by Rates, United States, 2021

Rank*	State	Cases	Rate per 100,000 Population
1	South Dakota	436	48.7
2	New Mexico	724	34.2
3	Arkansas	990	32.7
4	Oklahoma	1,225	30.7
5	Nevada	939	29.9
6	Mississippi	829	28.1
7	Arizona	1,982	27.2
8	Alaska	194	26.5
9	Oregon	949	22.3
10	California	8,724	22.2
11	Louisiana	995	21.5
12	Missouri	1,316	21.3
13	Florida	4,498	20.7
14	Washington	1,506	19.5
15	Rhode Island	209	19.1
16	Hawaii	259	18.0
17	North Carolina	1,870	17.7
18	New York	3,500	17.6
19	Georgia	1,884	17.4
	US TOTAL†	**53,767**	**16.2**
20	South Carolina	836	16.1
21	Ohio	1,783	15.1
22	Alabama	761	15.1
23	Tennessee	952	13.6
24	Colorado	772	13.3
25	Texas	3,865	13.1
26	Delaware	129	12.9
27	Wisconsin	723	12.3
28	West Virginia	212	11.9
29	Illinois	1,486	11.7
30	Kentucky	513	11.4
31	Indiana	734	10.8
32	Iowa	339	10.6
33	Massachusetts	741	10.6
34	Kansas	301	10.3
35	Pennsylvania	1,310	10.1
36	Minnesota	565	9.9
37	New Jersey	908	9.8

Rank*	State	Cases	Rate per 100,000 Population
38	Michigan	972	9.7
39	Nebraska	185	9.4
40	Connecticut	329	9.1
41	Montana	96	8.7
42	Virginia	745	8.6
43	North Dakota	49	6.3
44	Utah	205	6.1
45	New Hampshire	73	5.3
46	Maine	61	4.4
47	Idaho	84	4.4
48	Wyoming	16	2.8
49	Vermont	9	1.4
	Maryland	NR	—

* 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 257 cases and a rate of 38.4, but excludes territories.

NR = No report.

NOTE: The COVID-19 pandemic has introduced uncertainty and difficulty in interpreting STD data collected during 2020 and 2021. See Impact of COVID-19 on STDs for more information. Due to a network security incident in December 2021, the Maryland Department of Health could not finalize their 2021 STD case notification data. Although 2021 data from Maryland are included in the national case count and rate displayed in this table, state-specific data have been suppressed.

Table 14. Primary and Secondary Syphilis — Reported Cases and Rates of Reported Cases by State/Territory and Region in Alphabetical Order, United States, 2017–2021

State/Territory	Cases					Rates per 100,000 Population				
	2017	2018	2019	2020	2021	2017	2018	2019	2020	2021
Alabama	424	477	618	529	761	8.7	9.8	12.6	10.5	15.1
Alaska	13	55	129	176	194	1.8	7.5	17.6	24.0	26.5
Arizona	943	1,047	1,290	1,454	1,982	13.4	14.6	17.7	20.3	27.2
Arkansas	234	288	404	502	990	7.8	9.6	13.4	16.7	32.7
California	6,708	7,607	8,266	7,688	8,724	17.0	19.2	20.9	19.4	22.2
Colorado	292	337	486	640	772	5.2	5.9	8.4	11.1	13.3
Connecticut	110	91	210	280	329	3.1	2.5	5.9	7.8	9.1
Delaware	57	30	94	97	129	5.9	3.1	9.7	9.8	12.9
District of Columbia	274	279	308	247	257	39.5	39.7	43.6	35.8	38.4
Florida	2,390	2,880	3,189	3,520	4,498	11.4	13.5	14.8	16.3	20.7
Georgia	1,489	1,607	1,750	1,757	1,884	14.3	15.3	16.5	16.4	17.4
Hawaii	94	92	120	182	259	6.6	6.5	8.5	12.5	18.0
Idaho	64	46	47	66	84	3.7	2.6	2.6	3.6	4.4
Illinois	1,225	1,408	1,374	1,467	1,486	9.6	11.1	10.8	11.4	11.7
Indiana	319	367	336	527	734	4.8	5.5	5.0	7.8	10.8
Iowa	101	86	132	194	339	3.2	2.7	4.2	6.1	10.6
Kansas	133	152	190	150	301	4.6	5.2	6.5	5.1	10.3
Kentucky	262	366	438	445	513	5.9	8.2	9.8	9.9	11.4
Louisiana	679	669	700	704	995	14.5	14.4	15.1	15.1	21.5
Maine	65	74	55	38	61	4.9	5.5	4.1	2.8	4.4
Maryland	573	737	868	873	NR	9.5	12.2	14.4	14.1	—
Massachusetts	538	552	610	615	741	7.8	8.0	8.9	8.7	10.6
Michigan	480	649	678	787	972	4.8	6.5	6.8	7.8	9.7
Minnesota	292	292	385	417	565	5.2	5.2	6.8	7.3	9.9
Mississippi	310	464	690	741	829	10.4	15.5	23.2	25.0	28.1

State/Territory	Cases					Rates per 100,000 Population				
	2017	2018	2019	2020	2021	2017	2018	2019	2020	2021
Missouri	507	806	817	829	1,316	8.3	13.2	13.3	13.5	21.3
Montana	48	45	67	45	96	4.6	4.2	6.3	4.2	8.7
Nebraska	43	119	136	104	185	2.2	6.2	7.0	5.3	9.4
Nevada	587	682	808	767	939	19.6	22.5	26.2	24.7	29.9
New Hampshire	43	64	47	51	73	3.2	4.7	3.5	3.7	5.3
New Jersey	499	570	631	764	908	5.5	6.4	7.1	8.2	9.8
New Mexico	193	304	511	467	724	9.2	14.5	24.4	22.1	34.2
New York	2,355	2,654	2,865	3,022	3,500	11.9	13.6	14.7	15.0	17.6
North Carolina	1,138	1,098	1,122	1,322	1,870	11.1	10.6	10.7	12.7	17.7
North Dakota	44	41	45	32	49	5.8	5.4	5.9	4.1	6.3
Ohio	832	740	749	1,084	1,783	7.1	6.3	6.4	9.2	15.1
Oklahoma	373	531	791	941	1,225	9.5	13.5	20.0	23.8	30.7
Oregon	352	424	454	628	949	8.5	10.1	10.8	14.8	22.3
Pennsylvania	793	797	991	1,046	1,310	6.2	6.2	7.7	8.0	10.1
Rhode Island	71	96	101	89	209	6.7	9.1	9.5	8.1	19.1
South Carolina	361	384	516	652	836	7.2	7.6	10.0	12.7	16.1
South Dakota	33	41	48	66	436	3.8	4.6	5.4	7.4	48.7
Tennessee	488	553	676	767	952	7.3	8.2	9.9	11.1	13.6
Texas	2,233	2,538	2,357	2,708	3,865	7.9	8.8	8.1	9.3	13.1
Utah	117	169	138	131	205	3.8	5.3	4.3	4.0	6.1
Vermont	13	11	11	3	9	2.1	1.8	1.8	0.5	1.4
Virginia	536	702	659	701	745	6.3	8.2	7.7	8.1	8.6
Washington	677	802	816	836	1,506	9.1	10.6	10.7	10.8	19.5
West Virginia	62	65	79	127	212	3.4	3.6	4.4	7.1	11.9
Wisconsin	173	152	179	366	723	3.0	2.6	3.1	6.2	12.3
Wyoming	4	23	11	11	16	0.7	4.0	1.9	1.9	2.8
US TOTAL	**30,644**	**35,063**	**38,992**	**41,655**	**53,767**	**9.4**	**10.7**	**11.9**	**12.6**	**16.2**
Northeast	4,487	4,909	5,521	5,908	7,140	7.9	8.7	9.9	10.3	12.5
Midwest	4,182	4,853	5,069	6,023	8,889	6.1	7.1	7.4	8.7	12.9

State/Territory	Cases					Rates per 100,000 Population				
	2017	2018	2019	2020	2021	2017	2018	2019	2020	2021
South	11,883	13,668	15,259	16,633	21,288	9.6	11.0	12.2	13.2	16.7
West	10,092	11,633	13,143	13,091	16,450	13.0	14.9	16.8	16.7	20.9
American Samoa	NR	0	0	0	0	—	0.0	0.0	0.0	0.0
Commonwealth of the Northern Mariana Islands	NR	1	1	2	0	—	1.9	1.9	3.9	0.0
Guam	13	18	5	5	7	7.8	10.7	3.0	3.0	4.1
Puerto Rico	411	365	329	276	332	12.3	11.1	10.3	8.4	10.2
Virgin Islands	0	NR	NR	4	2	0.0	—	—	3.8	1.9
TERRITORIES TOTAL	**424**	**384**	**335**	**287**	**341**	**11.7**	**10.8**	**9.7**	**7.8**	**9.4**
TOTAL	**31,068**	**35,447**	**39,327**	**41,942**	**54,108**	**9.4**	**10.7**	**11.9**	**12.5**	**16.1**

NR = No report.

NOTE: See Technical Notes for more information on interpreting case counts and rates in US territories. The COVID-19 pandemic has introduced uncertainty and difficulty in interpreting STD data collected during 2020 and 2021. See Impact of COVID-19 on STDs for more information. Due to a network security incident in December 2021, the Maryland Department of Health could not finalize their 2021 STD 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 14A. Primary and Secondary Syphilis Among Men — Reported Cases and Rates of Reported Cases by State/Territory and Region in Alphabetical Order, United States, 2017–2021

State/Territory	Cases					Rates per 100,000 Population				
	2017	2018	2019	2020	2021	2017	2018	2019	2020	2021
Alabama	354	389	492	413	568	15.0	16.5	20.8	16.9	23.2
Alaska	12	51	79	111	115	3.1	13.3	20.7	28.9	29.9
Arizona	785	870	1,050	1,140	1,500	22.5	24.4	29.0	31.9	41.3
Arkansas	170	220	283	296	564	11.5	14.9	19.1	19.9	37.8
California	5,804	6,349	6,735	6,119	6,678	29.5	32.3	34.3	30.9	34.0
Colorado	274	312	424	541	574	9.7	10.9	14.6	18.5	19.5
Connecticut	97	84	189	250	246	5.5	4.8	10.9	14.1	13.9
Delaware	51	23	77	81	99	11.0	4.9	16.4	16.8	20.3
District of Columbia	264	264	283	224	240	80.2	79.2	84.6	68.2	75.3
Florida	2,069	2,524	2,729	3,000	3,773	20.2	24.2	26.0	28.3	35.2
Georgia	1,350	1,421	1,555	1,500	1,550	26.6	27.8	30.1	28.7	29.4
Hawaii	88	85	95	127	171	12.3	12.0	13.4	17.3	23.6
Idaho	49	41	38	45	64	5.7	4.7	4.2	4.9	6.7
Illinois	1,140	1,287	1,213	1,252	1,180	18.1	20.6	19.5	19.8	18.8
Indiana	292	341	282	438	578	8.9	10.3	8.5	13.0	17.1
Iowa	92	75	97	170	266	5.9	4.8	6.2	10.6	16.6
Kansas	117	128	157	124	238	8.1	8.8	10.8	8.4	16.2
Kentucky	221	296	337	333	378	10.1	13.4	15.3	14.9	16.9
Louisiana	493	503	537	527	722	21.5	22.1	23.7	23.1	31.9
Maine	54	67	49	37	52	8.3	10.2	7.4	5.5	7.7
Maryland	526	656	747	733	NR	17.9	22.4	25.5	24.3	—
Massachusetts	512	499	547	545	666	15.4	14.9	16.3	15.9	19.5
Michigan	446	580	583	674	765	9.1	11.8	11.9	13.5	15.4
Minnesota	252	248	311	332	419	9.1	8.9	11.1	11.6	14.6
Mississippi	222	312	432	445	486	15.4	21.6	30.0	30.8	33.9

State/Territory	Cases					Rates per 100,000 Population				
	2017	2018	2019	2020	2021	2017	2018	2019	2020	2021
Missouri	414	645	639	576	864	13.8	21.4	21.2	19.0	28.4
Montana	39	35	47	37	52	7.4	6.5	8.7	6.7	9.3
Nebraska	36	105	114	86	130	3.8	10.9	11.8	8.7	13.2
Nevada	512	563	649	617	740	34.0	37.0	42.0	39.4	46.7
New Hampshire	39	61	43	45	65	5.9	9.1	6.4	6.6	9.4
New Jersey	465	511	557	643	752	10.6	11.7	12.8	14.1	16.5
New Mexico	174	258	376	326	476	16.8	24.9	36.2	30.9	45.2
New York	2,214	2,483	2,634	2,754	3,094	23.0	26.2	27.9	27.9	31.9
North Carolina	1,011	937	936	1,115	1,510	20.2	18.6	18.4	21.8	29.3
North Dakota	39	31	31	21	43	10.1	8.0	7.9	5.2	10.8
Ohio	720	648	635	882	1,391	12.6	11.3	11.1	15.2	23.9
Oklahoma	306	387	547	602	808	15.7	19.8	27.9	30.5	40.7
Oregon	298	332	349	475	661	14.5	16.0	16.7	22.5	31.2
Pennsylvania	717	698	857	911	1,117	11.4	11.1	13.7	14.2	17.5
Rhode Island	64	84	94	78	183	12.4	16.3	18.2	14.5	34.1
South Carolina	305	317	408	451	599	12.5	12.9	16.4	18.1	23.7
South Dakota	29	30	33	39	251	6.6	6.7	7.4	8.7	55.2
Tennessee	441	486	571	626	697	13.5	14.7	17.1	18.5	20.4
Texas	1,920	2,114	1,917	2,122	2,818	13.7	14.8	13.3	14.6	19.1
Utah	113	159	126	119	179	7.2	10.0	7.8	7.2	10.6
Vermont	12	9	10	3	8	3.9	2.9	3.2	0.9	2.5
Virginia	471	617	579	603	631	11.3	14.7	13.8	14.1	14.8
Washington	606	701	698	672	1,160	16.4	18.6	18.3	17.3	29.8
West Virginia	41	46	59	82	119	4.6	5.1	6.6	9.2	13.4
Wisconsin	161	134	162	294	508	5.6	4.6	5.6	10.0	17.2
Wyoming	4	18	10	10	11	1.4	6.1	3.4	3.4	3.7
US TOTAL	**26,885**	**30,034**	**32,402**	**33,646**	**41,349**	**16.8**	**18.6**	**20.0**	**20.5**	**25.2**
Northeast	4,174	4,496	4,980	5,266	6,183	15.2	16.4	18.2	18.6	22.0
Midwest	3,738	4,252	4,257	4,888	6,633	11.1	12.6	12.6	14.3	19.4

State/Territory	Cases					Rates per 100,000 Population				
	2017	2018	2019	2020	2021	2017	2018	2019	2020	2021
South	10,215	11,512	12,489	13,153	16,152	16.9	18.8	20.3	21.1	25.8
West	8,758	9,774	10,676	10,339	12,381	22.7	25.1	27.3	26.2	31.4
American Samoa	NR	0	0	0	0	—	0.0	0.0	0.0	0.0
Commonwealth of the Northern Mariana Islands	NR	1	1	2	0	—	3.6	3.6	7.3	0.0
Guam	11	18	5	4	7	12.8	20.9	5.8	4.6	8.1
Puerto Rico	345	311	277	220	270	21.7	19.9	18.3	14.1	17.5
Virgin Islands	0	NR	NR	3	1	0.0	—	—	5.9	2.0
TERRITORIES TOTAL	**356**	**330**	**283**	**229**	**278**	**20.6**	**19.4**	**17.1**	**13.1**	**16.0**
TOTAL	**27,241**	**30,364**	**32,685**	**33,875**	**41,627**	**16.8**	**18.6**	**20.0**	**20.4**	**25.1**

NR = No report.

NOTE: Cases reported with unknown sex are not included in this table. See Technical Notes for more information on interpreting case counts and rates in US territories. The COVID-19 pandemic has introduced uncertainty and difficulty in interpreting STD data collected during 2020 and 2021. See Impact of COVID-19 on STDs for more information. Due to a network security incident in December 2021, the Maryland Department of Health could not finalize their 2021 STD 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 14B. Primary and Secondary Syphilis Among Women — Reported Cases and Rates of Reported Cases by State/Territory and Region in Alphabetical Order, United States, 2017–2021

State/Territory	Cases					Rates per 100,000 Population				
	2017	2018	2019	2020	2021	2017	2018	2019	2020	2021
Alabama	70	88	126	116	193	2.8	3.5	5.0	4.5	7.4
Alaska	1	4	50	65	79	0.3	1.1	14.3	18.6	22.7
Arizona	158	177	240	314	482	4.5	4.9	6.6	8.8	13.2
Arkansas	64	68	121	206	426	4.2	4.4	7.9	13.5	27.8
California	902	1,255	1,494	1,520	1,962	4.5	6.3	7.5	7.7	10.0
Colorado	18	25	62	99	198	0.6	0.9	2.2	3.5	6.9
Connecticut	13	5	20	30	74	0.7	0.3	1.1	1.6	4.0
Delaware	6	7	17	14	28	1.2	1.4	3.4	2.8	5.4
District of Columbia	7	12	21	23	17	1.9	3.3	5.7	6.4	4.8
Florida	321	356	460	520	725	3.0	3.3	4.2	4.8	6.5
Georgia	139	184	195	257	334	2.6	3.4	3.6	4.7	6.0
Hawaii	6	7	23	47	82	0.8	1.0	3.2	6.5	11.4
Idaho	15	5	9	21	20	1.8	0.6	1.0	2.3	2.1
Illinois	85	120	161	215	306	1.3	1.9	2.5	3.3	4.8
Indiana	27	26	54	88	156	0.8	0.8	1.6	2.6	4.6
Iowa	9	11	35	24	73	0.6	0.7	2.2	1.5	4.6
Kansas	16	24	33	26	63	1.1	1.6	2.3	1.8	4.3
Kentucky	41	70	101	112	135	1.8	3.1	4.5	4.9	5.9
Louisiana	186	166	163	177	273	7.8	7.0	6.8	7.5	11.6
Maine	9	7	6	1	9	1.3	1.0	0.9	0.1	1.3
Maryland	47	81	121	140	NR	1.5	2.6	3.9	4.4	—
Massachusetts	26	41	59	62	65	0.7	1.2	1.7	1.7	1.8
Michigan	34	69	95	113	207	0.7	1.4	1.9	2.2	4.1
Minnesota	38	44	70	85	144	1.4	1.6	2.5	3.0	5.1
Mississippi	88	152	258	296	343	5.7	9.9	16.8	19.5	22.6

State/Territory	Cases					Rates per 100,000 Population				
	2017	2018	2019	2020	2021	2017	2018	2019	2020	2021
Missouri	93	161	178	253	452	3.0	5.2	5.7	8.1	14.5
Montana	9	10	20	8	44	1.7	1.9	3.8	1.5	8.1
Nebraska	7	14	22	18	55	0.7	1.4	2.3	1.8	5.6
Nevada	75	119	159	150	199	5.0	7.9	10.4	9.7	12.8
New Hampshire	4	3	4	6	8	0.6	0.4	0.6	0.9	1.1
New Jersey	34	58	73	116	156	0.7	1.3	1.6	2.5	3.3
New Mexico	19	46	135	141	248	1.8	4.3	12.7	13.3	23.3
New York	121	171	231	268	406	1.2	1.7	2.3	2.6	4.0
North Carolina	127	160	186	207	360	2.4	3.0	3.5	3.9	6.7
North Dakota	5	10	14	11	6	1.4	2.7	3.8	2.9	1.6
Ohio	112	92	114	202	392	1.9	1.5	1.9	3.4	6.6
Oklahoma	67	144	244	338	417	3.4	7.2	12.2	17.0	20.8
Oregon	52	92	105	152	287	2.5	4.4	4.9	7.2	13.5
Pennsylvania	76	99	133	134	192	1.2	1.5	2.0	2.0	2.9
Rhode Island	7	12	7	11	26	1.3	2.2	1.3	2.0	4.7
South Carolina	56	67	104	197	230	2.2	2.6	3.9	7.5	8.6
South Dakota	4	11	15	27	185	0.9	2.5	3.4	6.2	42.0
Tennessee	47	67	105	141	255	1.4	1.9	3.0	4.0	7.2
Texas	313	424	416	583	1,045	2.2	2.9	2.9	4.0	7.1
Utah	4	10	12	12	26	0.3	0.6	0.8	0.7	1.6
Vermont	1	2	1	0	1	0.3	0.6	0.3	0.0	0.3
Virginia	60	77	66	78	94	1.4	1.8	1.5	1.8	2.2
Washington	70	100	117	159	338	1.9	2.7	3.1	4.2	8.8
West Virginia	21	19	20	45	93	2.3	2.1	2.2	5.0	10.4
Wisconsin	12	18	17	72	214	0.4	0.6	0.6	2.4	7.3
Wyoming	0	5	1	1	5	0.0	1.8	0.4	0.4	1.8
US TOTAL	**3,722**	**4,995**	**6,493**	**7,901**	**12,265**	**2.3**	**3.0**	**3.9**	**4.7**	**7.3**
Northeast	291	398	534	628	937	1.0	1.4	1.9	2.1	3.2
Midwest	442	600	808	1,134	2,253	1.3	1.7	2.3	3.3	6.5

State/Territory	Cases					Rates per 100,000 Population				
	2017	2018	2019	2020	2021	2017	2018	2019	2020	2021
South	1,660	2,142	2,724	3,450	5,105	2.6	3.4	4.3	5.4	7.9
West	1,329	1,855	2,427	2,689	3,970	3.4	4.7	6.2	6.9	10.1
American Samoa	NR	0	0	0	0	—	0.0	0.0	0.0	0.0
Commonwealth of the Northern Mariana Islands	NR	0	0	0	0	—	0.0	0.0	0.0	0.0
Guam	2	0	0	1	0	2.5	0.0	0.0	1.2	0.0
Puerto Rico	66	52	52	56	62	3.8	3.0	3.1	3.2	3.6
Virgin Islands	0	NR	NR	1	1	0.0	—	—	1.8	1.8
TERRITORIES TOTAL	**68**	**52**	**52**	**58**	**63**	**3.6**	**2.8**	**2.9**	**3.0**	**3.3**
TOTAL	**3,790**	**5,047**	**6,545**	**7,959**	**12,328**	**2.3**	**3.0**	**3.9**	**4.7**	**7.3**

NR = No report.

NOTE: Cases reported with unknown sex are not included in this table. See Technical Notes for more information on interpreting case counts and rates in US territories. The COVID-19 pandemic has introduced uncertainty and difficulty in interpreting STD data collected during 2020 and 2021. See Impact of COVID-19 on STDs for more information. Due to a network security incident in December 2021, the Maryland Department of Health could not finalize their 2021 STD 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. Primary and Secondary Syphilis — Reported Cases and Rates of Reported Cases by Age Group and Sex, 2017–2021

Year	Age Group	Cases				Rates per 100,000 Population*		
		Total	Male	Female	Unknown Sex	Total	Male	Female
2017	0-4	5	0	5	0	0.0	0.0	0.1
	5-9	1	0	1	0	0.0	0.0	0.0
	10-14	20	6	14	0	0.1	0.1	0.1
	15-19	1,421	1,092	327	2	6.7	10.1	3.2
	20-24	5,580	4,728	848	4	25.2	41.7	7.9
	25-29	6,838	6,033	795	10	29.3	50.7	6.9
	30-34	4,870	4,313	549	8	22.2	38.9	5.0
	35-39	3,580	3,145	431	4	16.9	29.6	4.1
	40-44	2,290	2,005	282	3	11.7	20.6	2.9
	45-54	4,091	3,753	334	4	9.7	18.0	1.6
	55-64	1,586	1,468	117	1	3.8	7.2	0.5
	65+	349	329	19	1	0.7	1.5	0.1
	Unknown Age	13	13	0	0			
	TOTAL	**30,644**	**26,885**	**3,722**	**37**	**9.4**	**16.8**	**2.3**
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

Year	Age Group	Cases				Rates per 100,000 Population*		
		Total	Male	Female	Unknown Sex	Total	Male	Female
	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
	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**

* No population data are available for unknown sex and age; therefore, rates are not calculated.

NOTE: The COVID-19 pandemic has introduced uncertainty and difficulty in interpreting STD data collected during 2020 and 2021. See Impact of COVID-19 on STDs for more information.

Table 16A. Primary and Secondary Syphilis — Reported Cases by Race/Hispanic Ethnicity, Age Group, and Sex, United States, 2021

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	3	3	0	0	0	0
5-9	0	0	0	0	0	0	1	0	1	0	0	0
10-14	1	0	1	0	0	0	13	3	10	5	1	4
15-19	38	11	27	33	29	4	957	584	371	458	337	120
20-24	158	87	70	127	114	13	3,146	2,294	846	1,667	1,334	327
25-29	236	138	98	175	161	12	3,721	2,876	838	2,319	1,907	405
30-34	232	145	86	203	185	14	3,466	2,845	614	2,077	1,730	336
35-39	207	111	96	127	105	21	2,155	1,757	392	1,539	1,259	273
40-44	127	76	51	92	77	14	1,437	1,176	260	1,008	796	204
45-54	98	58	40	134	123	9	1,513	1,232	281	1,172	982	182
55-64	34	26	8	42	37	5	891	778	113	434	396	38
65+	15	12	3	11	10	1	219	197	22	80	77	3
Unknown Age	0	0	0	0	0	0	0	0	0	3	2	1
TOTAL	**1,146**	**664**	**480**	**944**	**841**	**93**	**17,522**	**13,745**	**3,748**	**10,762**	**8,821**	**1,893**

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	0	0	0	2	0	2	0	0	0
5-9	0	0	0	0	0	0	1	0	1	0	0	0
10-14	0	0	0	0	0	0	3	0	3	2	0	2
15-19	68	38	29	9	6	3	407	225	181	152	97	55
20-24	213	138	75	32	22	9	1,782	1,177	597	570	448	120
25-29	329	246	83	41	26	15	2,735	1,871	853	679	521	152
30-34	286	222	63	36	25	10	3,154	2,251	899	636	501	134
35-39	208	159	49	26	21	4	2,862	1,972	887	516	392	119
40-44	146	102	44	32	17	14	1,986	1,389	594	395	294	98
45-54	162	140	22	20	16	4	2,687	2,127	557	440	350	88
55-64	79	69	10	15	12	2	1,729	1,569	157	259	218	39
65+	17	17	0	1	1	0	431	412	19	61	56	5
Unknown Age	0	0	0	0	0	0	130	89	41	53	41	12
TOTAL	**1,509**	**1,132**	**375**	**212**	**146**	**61**	**17,909**	**13,082**	**4,791**	**3,763**	**2,918**	**824**

* 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 14, 14A, and 14B for total and sex-specific cases and rates. Primary and secondary syphilis reported among children aged 0–4 may represent the misclassification of congenitally-acquired syphilis. Cases reported as congenitally-acquired syphilis (congenital syphilis) can be found in Table 20. The COVID-19 pandemic has introduced uncertainty and difficulty in interpreting STD data collected during 2020 and 2021. See Impact of COVID-19 on STDs for more information.

Table 16B. Primary and Secondary Syphilis — Rates of Reported Cases* by Race/Hispanic Ethnicity, Age Group, and Sex, United States, 2021

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	0.1	0.2	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	0.1	0.0	0.0	0.0
10-14	0.6	0.0	1.1	0.0	0.0	0.0	0.4	0.2	0.7	0.1	0.0	0.1
15-19	21.1	12.0	30.4	2.9	5.1	0.7	32.7	39.4	25.7	8.6	12.4	4.6
20-24	87.5	95.2	78.5	10.4	18.7	2.1	104.1	150.3	56.5	33.6	52.7	13.5
25-29	124.5	143.5	105.0	12.0	22.2	1.6	113.7	174.7	51.5	47.7	76.7	17.1
30-34	124.0	152.9	93.1	12.0	22.5	1.6	105.8	175.9	37.0	43.9	70.2	14.9
35-39	125.9	135.0	116.9	7.6	13.0	2.4	75.2	126.5	26.5	33.4	52.0	12.5
40-44	84.2	101.5	67.2	6.1	10.8	1.7	53.1	91.0	18.4	23.0	35.1	9.7
45-54	34.6	41.6	27.8	4.9	9.5	0.6	29.8	51.4	10.5	15.6	25.6	4.9
55-64	11.3	18.1	5.1	1.9	3.6	0.4	17.6	33.1	4.2	7.8	14.4	1.4
65+	4.6	8.1	1.7	0.4	0.9	0.1	4.1	9.1	0.7	1.6	3.4	0.1
Unknown age												
TOTAL	**46.7**	**54.9**	**38.6**	**4.8**	**8.9**	**0.9**	**41.9**	**68.3**	**17.2**	**17.2**	**27.8**	**6.1**

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	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
15-19	8.3	9.1	7.2	20.8	27.2	14.2	3.7	3.9	3.3
20-24	30.0	38.4	21.3	75.0	99.6	43.7	15.6	20.2	10.7
25-29	53.1	79.4	26.8	86.6	107.8	64.6	22.9	30.7	14.6
30-34	57.6	92.6	24.5	67.0	90.1	38.5	24.9	35.1	14.4
35-39	52.1	83.7	23.4	50.1	78.7	15.9	22.9	31.1	14.4
40-44	42.5	63.0	24.3	70.7	73.2	63.4	16.6	22.9	10.1
45-54	30.1	55.0	7.8	26.6	41.9	10.8	11.0	17.2	4.6
55-64	17.4	32.1	4.2	22.3	36.1	5.9	5.9	10.9	1.1
65+	3.6	7.9	0.0	1.5	3.1	0.0	1.0	2.1	0.1
Unknown age									
TOTAL	**19.4**	**29.3**	**9.5**	**33.9**	**46.1**	**19.7**	**9.1**	**13.4**	**4.8**

* Per 100,000.

† 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 14, 14A, and 14B for total and sex-specific cases and rates. Primary and secondary syphilis reported among children aged 0–4 may represent the misclassification of congenitally-acquired syphilis. Cases reported as congenitally-acquired syphilis (congenital syphilis) can be found in Table 20. No population data exist for unknown sex, unknown age, or unknown race; therefore rates are not calculated. The COVID-19 pandemic has introduced uncertainty and difficulty in interpreting STD data collected during 2020 and 2021. See Impact of COVID-19 on STDs for more information.

Table 17. Primary and Secondary Syphilis —Reported Cases* and Rates of Reported Cases Among Gay, Bisexual, and Other Men Who Have Sex with Men by State in Alphabetical Order, United States, 2017–2021

State/Territory	Cases					Rates per 100,000 Population				
	2017	2018	2019	2020	2021	2017	2018	2019	2020	2021
Alabama	ND	ND	ND	173	280	—	—	—	399.7	646.9
Alaska	9	42	28	20	23	110.3	510.8	340.5	243.2	279.7
Arizona	539	555	612	653	666	476.1	487.3	537.4	573.4	584.8
Arkansas	94	121	114	81	137	478.7	603.2	568.3	403.8	682.9
California	3,773	3,855	3,902	3,355	3,401	509.9	516.1	522.4	449.2	455.3
Colorado	197	213	279	321	271	170.6	182.1	238.5	274.4	231.6
Connecticut	70	55	ND	132	ND	217.9	171.7	—	412.0	—
Delaware	ND	ND	ND	ND	ND	—	—	—	—	—
District of Columbia	ND	ND	ND	147	156	—	—	—	300.8	319.3
Florida	1,315	1,478	1,411	1,531	1,886	310.8	342.9	327.4	355.2	437.6
Georgia	ND	ND	ND	ND	ND	—	—	—	—	—
Hawaii	66	ND	56	ND	ND	285.9	—	277.8	—	—
Idaho	ND	24	ND	ND	ND	—	132.9	—	—	—
Illinois	794	962	ND	ND	ND	356.5	419.6	—	—	—
Indiana	229	253	167	231	268	309.6	343.4	226.7	313.5	363.7
Iowa	68	59	68	87	116	428.1	345.5	398.2	509.5	679.3
Kansas	78	85	82	65	138	368.6	395.1	381.2	302.2	641.5
Kentucky	145	160	130	114	ND	282.6	315.8	256.6	225.0	—
Louisiana	326	327	294	278	320	619.6	632.3	568.5	537.5	618.7
Maine	ND	ND	ND	22	35	—	—	—	182.0	289.5
Maryland	363	411	447	420	ND	421.7	484.8	527.3	495.4	—
Massachusetts	426	355	415	405	472	593.9	473.9	554.0	540.7	630.1
Michigan	323	403	357	395	381	279.1	343.0	303.9	336.2	324.3
Minnesota	203	173	ND	ND	ND	245.8	215.3	—	—	—
Mississippi	148	164	185	175	155	868.4	950.0	1,071.7	1,013.7	897.9

State/Territory	Cases					Rates per 100,000 Population				
	2017	2018	2019	2020	2021	2017	2018	2019	2020	2021
Missouri	243	342	321	ND	ND	321.3	453.5	425.6	—	—
Montana	ND	25	20	ND	ND	—	250.2	200.1	—	—
Nebraska	ND	ND	ND	ND	ND	—	—	—	—	—
Nevada	359	328	381	361	360	748.6	639.6	742.9	703.9	701.9
New Hampshire	29	45	22	27	53	258.8	400.6	195.9	240.4	471.8
New Jersey	ND	337	365	371	413	—	402.1	435.6	442.7	492.8
New Mexico	121	153	144	ND	ND	417.5	527.6	496.6	—	—
New York	1,351	1,515	1,767	2,008	2,132	492.6	551.5	643.2	730.9	776.1
North Carolina	696	618	577	661	747	552.5	482.8	450.7	516.4	583.6
North Dakota	28	9	10	9	17	646.7	212.7	236.4	212.7	401.8
Ohio	523	426	401	418	546	326.3	268.8	253.1	263.8	344.6
Oklahoma	195	196	238	186	234	442.3	443.8	538.9	421.1	529.8
Oregon	182	204	181	207	255	230.1	248.0	220.0	251.6	310.0
Pennsylvania	502	506	552	593	634	413.5	421.4	459.8	493.9	528.1
Rhode Island	ND	60	68	ND	ND	—	365.9	414.6	—	—
South Carolina	201	203	205	207	266	534.3	520.1	525.3	530.4	681.6
South Dakota	21	15	17	8	32	533.3	388.7	440.5	207.3	829.2
Tennessee	321	336	333	378	286	357.8	372.9	369.6	419.5	317.4
Texas	1,416	ND	992	994	ND	282.1	—	193.9	194.3	—
Utah	90	122	105	87	134	273.2	362.4	311.9	258.4	398.0
Vermont	9	ND	ND	ND	ND	163.3	—	—	—	—
Virginia	316	428	377	398	418	253.6	345.0	303.9	320.8	336.9
Washington	468	515	485	ND	ND	340.6	367.6	346.2	—	—
West Virginia	23	23	25	28	27	149.1	158.8	172.7	193.4	186.5
Wisconsin	ND	ND	ND	208	315	—	—	—	360.8	546.5
Wyoming	3	10	ND	3	7	55.6	220.1	—	66.0	154.0

* 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. The COVID-19 pandemic has introduced uncertainty and difficulty in interpreting STD data collected during 2020 and 2021. See Impact of COVID-19 on STDs for more information. Due to a network security incident in December 2021, the Maryland Department of Health could not finalize their 2021 STD case notification data; 2021 data from Maryland have been suppressed in this table.

Table 18. 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, 2017–2021

State/Territory	Cases					Rates per 100,000 Population				
	2017	2018	2019	2020	2021	2017	2018	2019	2020	2021
Alabama	425	447	540	479	676	8.7	9.1	11.0	9.5	13.4
Alaska	9	41	78	130	132	1.2	5.6	10.7	17.7	18.0
Arizona	620	898	1,179	1,249	1,476	8.8	12.5	16.2	17.5	20.3
Arkansas	328	364	267	234	527	10.9	12.1	8.8	7.8	17.4
California	7,028	7,708	8,284	7,673	8,504	17.8	19.5	21.0	19.4	21.7
Colorado	281	362	453	519	519	5.0	6.4	7.9	9.0	8.9
Connecticut	145	77	159	207	284	4.0	2.2	4.5	5.7	7.9
Delaware	49	36	65	70	89	5.1	3.7	6.7	7.1	8.9
District of Columbia	341	336	414	369	233	49.1	47.8	58.7	53.5	34.8
Florida	3,033	3,939	4,142	4,423	5,731	14.5	18.5	19.3	20.5	26.3
Georgia	1,218	1,517	1,733	1,719	1,804	11.7	14.4	16.3	16.0	16.7
Hawaii	58	87	95	90	105	4.1	6.1	6.7	6.2	7.3
Idaho	41	33	40	36	61	2.4	1.9	2.2	2.0	3.2
Illinois	1,192	1,464	1,345	1,227	1,167	9.3	11.5	10.6	9.6	9.2
Indiana	250	359	326	471	624	3.7	5.4	4.8	6.9	9.2
Iowa	91	85	100	163	216	2.9	2.7	3.2	5.1	6.8
Kansas	202	291	282	234	239	6.9	10.0	9.7	8.0	8.1
Kentucky	236	294	395	352	576	5.3	6.6	8.8	7.8	12.8
Louisiana	623	576	576	614	798	13.3	12.4	12.4	13.2	17.3
Maine	36	43	53	28	40	2.7	3.2	3.9	2.1	2.9
Maryland	683	857	991	891	NR	11.3	14.2	16.4	14.4	—
Massachusetts	549	620	625	548	626	8.0	9.0	9.1	7.8	9.0
Michigan	330	407	558	566	732	3.3	4.1	5.6	5.6	7.3
Minnesota	313	286	367	368	415	5.6	5.1	6.5	6.4	7.3

State/Territory	Cases					Rates per 100,000 Population				
	2017	2018	2019	2020	2021	2017	2018	2019	2020	2021
Mississippi	555	937	1,222	1,275	592	18.6	31.4	41.1	43.1	20.1
Missouri	423	546	647	556	787	6.9	8.9	10.5	9.0	12.8
Montana	23	25	25	21	22	2.2	2.4	2.3	1.9	2.0
Nebraska	26	37	46	50	78	1.4	1.9	2.4	2.5	4.0
Nevada	498	512	522	496	723	16.6	16.9	16.9	16.0	23.0
New Hampshire	37	41	49	32	39	2.8	3.0	3.6	2.3	2.8
New Jersey	865	788	827	790	1,134	9.6	8.8	9.3	8.5	12.2
New Mexico	120	161	203	243	215	5.7	7.7	9.7	11.5	10.2
New York	3,914	4,097	4,376	4,770	5,524	19.7	21.0	22.5	23.6	27.8
North Carolina	771	797	989	1,105	1,331	7.5	7.7	9.4	10.6	12.6
North Dakota	12	13	10	12	22	1.6	1.7	1.3	1.5	2.8
Ohio	454	481	519	555	874	3.9	4.1	4.4	4.7	7.4
Oklahoma	478	342	339	380	568	12.2	8.7	8.6	9.6	14.2
Oregon	205	299	357	304	478	4.9	7.1	8.5	7.2	11.3
Pennsylvania	1,100	1,192	1,138	1,166	1,478	8.6	9.3	8.9	9.0	11.4
Rhode Island	71	71	109	97	119	6.7	6.7	10.3	8.8	10.9
South Carolina	687	732	681	796	972	13.7	14.4	13.2	15.6	18.7
South Dakota	19	9	8	38	353	2.2	1.0	0.9	4.3	39.4
Tennessee	412	472	639	686	839	6.1	7.0	9.4	9.9	12.0
Texas	3,680	4,245	4,065	5,411	7,283	13.0	14.8	14.0	18.6	24.7
Utah	85	101	120	81	131	2.7	3.2	3.7	2.5	3.9
Vermont	13	18	11	11	4	2.1	2.9	1.8	1.7	0.6
Virginia	659	668	679	646	642	7.8	7.8	8.0	7.5	7.4
Washington	588	599	721	617	866	7.9	7.9	9.5	8.0	11.2
West Virginia	34	55	83	111	99	1.9	3.0	4.6	6.2	5.6
Wisconsin	199	163	193	230	375	3.4	2.8	3.3	3.9	6.4
Wyoming	4	11	10	6	10	0.7	1.9	1.7	1.0	1.7
US TOTAL	**34,013**	**38,539**	**41,655**	**43,145**	**51,830**	**10.4**	**11.8**	**12.7**	**13.0**	**15.6**

State/Territory	Cases					Rates per 100,000 Population				
	2017	2018	2019	2020	2021	2017	2018	2019	2020	2021
Northeast	6,730	6,947	7,347	7,649	9,248	11.9	12.4	13.1	13.3	16.2
Midwest	3,511	4,141	4,401	4,470	5,882	5.1	6.1	6.4	6.5	8.5
South	14,212	16,614	17,820	19,561	23,458	11.5	13.3	14.2	15.5	18.4
West	9,560	10,837	12,087	11,465	13,242	12.3	13.9	15.4	14.6	16.8
American Samoa	NR	0	0	0	0	—	0.0	0.0	0.0	0.0
Commonwealth of the Northern Mariana Islands	NR	0	0	0	0	—	0.0	0.0	0.0	0.0
Guam	3	3	5	0	5	1.8	1.8	3.0	0.0	3.0
Puerto Rico	527	577	458	332	400	15.7	17.5	14.3	10.1	12.3
Virgin Islands	0	NR	NR	9	12	0.0	—	—	8.5	11.3
TERRITORIES TOTAL	**530**	**580**	**463**	**341**	**417**	**14.6**	**16.3**	**13.4**	**9.3**	**11.5**
TOTAL	**34,543**	**39,119**	**42,118**	**43,486**	**52,247**	**10.5**	**11.8**	**12.7**	**13.0**	**15.6**

NR = No report.

NOTE: See Technical Notes for more information on interpreting case counts and rates in US territories. The COVID-19 pandemic has introduced uncertainty and difficulty in interpreting STD data collected during 2020 and 2021. See Impact of COVID-19 on STDs for more information. Due to a network security incident in December 2021, the Maryland Department of Health could not finalize their 2021 STD 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 19. Unknown Duration or Late Syphilis* — Reported Cases and Rates of Reported Cases by State/Territory and Region in Alphabetical Order, United States, 2017–2021

State/Territory	Cases					Rates per 100,000 Population				
	2017	2018	2019	2020	2021	2017	2018	2019	2020	2021
Alabama	347	354	461	489	699	7.1	7.2	9.4	9.7	13.9
Alaska	6	16	35	47	116	0.8	2.2	4.8	6.4	15.8
Arizona	829	1,243	1,444	1,637	2,691	11.8	17.3	19.8	22.9	37.0
Arkansas	156	287	414	484	836	5.2	9.5	13.7	16.1	27.6
California	7,787	9,609	11,817	10,572	13,530	19.7	24.3	29.9	26.7	34.5
Colorado	240	378	485	604	982	4.3	6.6	8.4	10.5	16.9
Connecticut	28	94	110	47	269	0.8	2.6	3.1	1.3	7.5
Delaware	88	63	55	53	76	9.1	6.5	5.6	5.4	7.6
District of Columbia	230	148	362	369	374	33.1	21.1	51.3	53.5	55.8
Florida	3,435	3,773	4,645	4,319	6,029	16.4	17.7	21.6	20.1	27.7
Georgia	1,580	1,773	2,144	2,038	2,930	15.1	16.9	20.2	19.0	27.1
Hawaii	10	27	34	113	259	0.7	1.9	2.4	7.8	18.0
Idaho	46	54	61	80	120	2.7	3.1	3.4	4.3	6.3
Illinois	1,399	1,570	1,760	1,845	2,421	10.9	12.3	13.9	14.4	19.1
Indiana	211	258	318	343	602	3.2	3.9	4.7	5.1	8.8
Iowa	96	112	126	143	197	3.1	3.5	4.0	4.5	6.2
Kansas	3	44	84	147	256	0.1	1.5	2.9	5.0	8.7
Kentucky	218	212	254	333	445	4.9	4.7	5.7	7.4	9.9
Louisiana	1,495	1,456	1,400	1,116	1,577	31.9	31.2	30.1	24.0	34.1
Maine	31	30	28	15	34	2.3	2.2	2.1	1.1	2.5
Maryland	783	913	888	888	NR	12.9	15.1	14.7	14.4	—
Massachusetts	387	133	600	485	675	5.6	1.9	8.7	6.9	9.7
Michigan	447	622	652	677	925	4.5	6.2	6.5	6.7	9.2
Minnesota	327	330	354	306	470	5.9	5.9	6.3	5.4	8.2
Mississippi	71	50	91	78	1,120	2.4	1.7	3.1	2.6	38.0

State/Territory	Cases					Rates per 100,000 Population				
	2017	2018	2019	2020	2021	2017	2018	2019	2020	2021
Missouri	397	544	706	916	1,611	6.5	8.9	11.5	14.9	26.1
Montana	13	34	47	33	98	1.2	3.2	4.4	3.0	8.9
Nebraska	48	63	109	113	207	2.5	3.3	5.6	5.8	10.5
Nevada	575	775	985	909	1,358	19.2	25.5	32.0	29.3	43.2
New Hampshire	29	31	37	37	33	2.2	2.3	2.7	2.7	2.4
New Jersey	489	406	612	807	1,299	5.4	4.6	6.9	8.7	14.0
New Mexico	196	337	552	744	1,086	9.4	16.1	26.3	35.1	51.3
New York	3,592	3,404	3,232	2,791	4,040	18.1	17.4	16.6	13.8	20.4
North Carolina	1,015	1,075	1,231	1,256	1,786	9.9	10.4	11.7	12.0	16.9
North Dakota	22	30	42	44	33	2.9	3.9	5.5	5.6	4.3
Ohio	596	667	718	785	1,250	5.1	5.7	6.1	6.7	10.6
Oklahoma	95	253	577	515	1,125	2.4	6.4	14.6	13.0	28.2
Oregon	283	299	416	369	556	6.8	7.1	9.9	8.7	13.1
Pennsylvania	335	416	622	671	1,014	2.6	3.2	4.9	5.2	7.8
Rhode Island	79	117	213	128	237	7.5	11.1	20.1	11.7	21.6
South Carolina	40	27	92	214	252	0.8	0.5	1.8	4.2	4.9
South Dakota	20	23	28	20	119	2.3	2.6	3.2	2.3	13.3
Tennessee	543	688	898	979	1,350	8.1	10.2	13.1	14.2	19.4
Texas	6,035	5,819	5,707	6,678	9,648	21.3	20.3	19.7	22.9	32.7
Utah	97	152	169	138	193	3.1	4.8	5.3	4.2	5.8
Vermont	0	0	2	9	2	0.0	0.0	0.3	1.4	0.3
Virginia	551	659	722	591	800	6.5	7.7	8.5	6.8	9.3
Washington	480	504	632	616	941	6.5	6.7	8.3	8.0	12.2
West Virginia	25	64	109	160	210	1.4	3.5	6.1	8.9	11.8
Wisconsin	176	193	195	232	502	3.0	3.3	3.3	3.9	8.5
Wyoming	11	8	21	14	17	1.9	1.4	3.6	2.4	2.9
US TOTAL	**35,992**	**40,137**	**47,296**	**46,997**	**68,261**	**11.1**	**12.3**	**14.4**	**14.2**	**20.6**
Northeast	4,970	4,631	5,456	4,990	7,603	8.8	8.3	9.7	8.7	13.3
Midwest	3,742	4,456	5,092	5,571	8,593	5.5	6.5	7.5	8.1	12.5

State/Territory	Cases					Rates per 100,000 Population				
	2017	2018	2019	2020	2021	2017	2018	2019	2020	2021
South	16,707	17,614	20,050	20,560	30,118	13.5	14.1	16.0	16.3	23.7
West	10,573	13,436	16,698	15,876	21,947	13.7	17.2	21.3	20.2	27.9
American Samoa	NR	0	0	0	0	—	0.0	0.0	0.0	0.0
Commonwealth of the Northern Mariana Islands	NR	1	1	0	2	—	1.9	1.9	0.0	3.9
Guam	5	9	21	16	9	3.0	5.4	12.5	9.5	5.3
Puerto Rico	110	138	155	216	391	3.3	4.2	4.9	6.6	12.0
Virgin Islands	0	NR	NR	27	28	0.0	—	—	25.4	26.4
TERRITORIES TOTAL	**115**	**148**	**177**	**259**	**430**	**3.2**	**4.2**	**5.1**	**7.1**	**11.8**
TOTAL	**36,107**	**40,285**	**47,473**	**47,256**	**68,691**	**11.0**	**12.2**	**14.3**	**14.1**	**20.5**

* The case classification of 'Unknown duration or late syphilis' went into effect in January 2018. During 2016–2017, cases in this category include cases classified as late latent syphilis and late syphilis with clinical manifestations. See Technical Notes for a detailed explanation of changes to the syphilis case definition.

NR = No report.

NOTE: See Technical Notes for more information on interpreting case counts and rates in US territories. The COVID-19 pandemic has introduced uncertainty and difficulty in interpreting STD data collected during 2020 and 2021. See Impact of COVID-19 on STDs for more information. Due to a network security incident in December 2021, the Maryland Department of Health could not finalize their 2021 STD 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 20. Congenital Syphilis — Reported Cases and Rates of Reported Cases by State, Ranked by Rates, United States, 2021

Rank*	State†	Cases	Rate per 100,000 Live Births
1	Arizona	181	232.3
2	New Mexico	44	205.7
3	Louisiana	110	191.5
4	Mississippi	64	182.0
5	Texas	680	182.0
6	Oklahoma	85	175.6
7	South Dakota	16	140.7
8	Arkansas	50	139.0
9	Nevada	45	133.6
10	Hawaii	20	128.0
11	California	518	123.2
12	Missouri	66	95.0
13	West Virginia	15	87.2
14	Florida	180	83.2
15	Montana	9	80.1
	US TOTAL‡	**2,855**	**77.9**
16	Georgia	93	75.0
17	Oregon	27	66.0
18	Alabama	37	63.7
19	Washington	53	63.2
20	Alaska	5	53.4
21	Kentucky	25	47.9
22	Tennessee	39	47.7
23	Colorado	30	47.7
24	New Jersey	48	47.3
25	Michigan	42	40.0
26	Ohio	51	39.3
27	Illinois	50	37.8
28	North Carolina	42	34.9
29	South Carolina	19	33.2
30	Iowa	11	29.9
31	Indiana	20	25.0
32	Wisconsin	15	24.3
33	Minnesota	15	23.3
34	Idaho	5	22.3
35	Kansas	7	20.2
36	North Dakota	2	19.8
37	New York	41	19.5

Rank*	State†	Cases	Rate per 100,000 Live Births
38	Rhode Island	2	19.1
39	Virginia	18	18.8
40	Vermont	1	18.6
41	Connecticut	6	16.8
42	Massachusetts	9	13.0
43	Pennsylvania	14	10.6
44	Delaware	1	9.5
45	Utah	2	4.3
46	Nebraska	1	4.1
	Maine	0	0.0
	New Hampshire	0	0.0
	Wyoming	0	0.0
	Maryland	NR	—

* 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 6 cases and a rate of 69.3, but excludes territories.

NR = No report.

NOTE: The COVID-19 pandemic has introduced uncertainty and difficulty in interpreting STD data collected during 2020 and 2021. See Impact of COVID-19 on STDs for more information. Due to a network security incident in December 2021, the Maryland Department of Health could not finalize their 2021 STD case notification data. Although 2021 data from Maryland are included in the national case count and rate displayed in this table, state-specific data have been suppressed.

Table 21. Congenital Syphilis — Reported Cases and Rates of Reported Cases by Year of Birth, by State/Territory* and Region in Alphabetical Order, United States, 2017–2021

State/Territory	Cases					Rates per 100,000 Live Births				
	2017	2018	2019	2020	2021	2017	2018	2019	2020	2021
Alabama	6	7	15	21	37	10.2	12.1	25.6	36.4	63.7
Alaska	0	1	0	8	5	0.0	9.9	0.0	84.5	53.4
Arizona	32	61	109	121	181	39.1	75.6	137.3	157.3	232.3
Arkansas	8	25	21	23	50	21.3	67.5	57.4	65.2	139.0
California	281	329	444	481	518	59.6	72.3	99.4	114.5	123.2
Colorado	4	8	10	22	30	6.2	12.7	15.9	35.8	47.7
Connecticut	0	2	3	2	6	0.0	5.8	8.8	6.0	16.8
Delaware	0	0	2	2	1	0.0	0.0	18.9	19.2	9.5
District of Columbia	0	1	1	3	6	0.0	10.9	11.0	33.8	69.3
Florida	99	109	145	154	180	44.3	49.2	65.9	73.4	83.2
Georgia	23	31	56	81	93	17.8	24.6	44.3	66.1	75.0
Hawaii	3	4	3	12	20	17.1	23.6	17.9	76.0	128.0
Idaho	0	1	1	2	5	0.0	4.7	4.5	9.3	22.3
Illinois	22	30	32	29	50	14.7	20.7	22.8	21.8	37.8
Indiana	8	1	13	8	20	9.7	1.2	16.1	10.2	25.0
Iowa	2	3	1	1	11	5.2	7.9	2.7	2.8	29.9
Kansas	1	8	9	8	7	2.7	22.1	25.4	23.3	20.2
Kentucky	6	9	9	13	25	11.0	16.7	17.0	25.2	47.9
Louisiana	57	43	68	63	110	93.4	72.1	115.4	109.9	191.5
Maine	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Maryland	20	29	32	31	NR	27.9	40.8	45.6	45.2	—
Massachusetts	0	0	9	10	9	0.0	0.0	13.0	15.1	13.0
Michigan	10	14	17	29	42	9.0	12.7	15.8	27.9	40.0
Minnesota	2	10	21	7	15	2.9	14.8	31.8	11.0	23.3
Mississippi	1	3	3	37	64	2.7	8.1	8.2	104.3	182.0

State/Territory	Cases					Rates per 100,000 Live Births				
	2017	2018	2019	2020	2021	2017	2018	2019	2020	2021
Missouri	10	18	18	32	66	13.7	24.6	25.0	46.2	95.0
Montana	1	0	1	2	9	8.5	0.0	9.0	18.5	80.1
Nebraska	1	0	0	1	1	3.9	0.0	0.0	4.1	4.1
Nevada	24	31	41	46	45	67.1	86.9	116.9	136.7	133.6
New Hampshire	0	1	2	0	0	0.0	8.3	16.9	0.0	0.0
New Jersey	14	13	15	24	48	13.8	12.8	15.1	24.5	47.3
New Mexico	1	10	28	42	44	4.2	43.4	122.0	191.8	205.7
New York	16	28	27	30	41	7.0	12.4	12.2	14.3	19.5
North Carolina	25	19	27	31	42	20.8	16.0	22.7	26.6	34.9
North Dakota	0	0	0	3	2	0.0	0.0	0.0	29.8	19.8
Ohio	18	21	19	33	51	13.2	15.5	14.1	25.5	39.3
Oklahoma	7	11	42	52	85	13.9	22.1	85.5	109.2	175.6
Oregon	8	10	18	19	27	18.3	23.7	43.0	47.7	66.0
Pennsylvania	7	9	13	15	14	5.1	6.6	9.7	11.5	10.6
Rhode Island	0	0	0	1	2	0.0	0.0	0.0	9.9	19.1
South Carolina	8	9	17	19	19	14.0	15.9	29.8	34.1	33.2
South Dakota	3	1	2	4	16	24.7	8.4	17.5	36.5	140.7
Tennessee	10	13	13	31	39	12.3	16.1	16.2	39.4	47.7
Texas	179	371	528	561	680	46.9	98.0	139.8	152.4	182.0
Utah	0	1	4	1	2	0.0	2.1	8.5	2.2	4.3
Vermont	0	0	0	0	1	0.0	0.0	0.0	0.0	18.6
Virginia	12	10	11	15	18	12.0	10.0	11.3	15.8	18.8
Washington	6	6	17	10	53	6.9	7.0	20.0	12.0	63.2
West Virginia	3	1	6	9	15	16.1	5.5	33.1	52.0	87.2
Wisconsin	3	1	2	7	15	4.6	1.6	3.2	11.6	24.3
Wyoming	0	0	0	1	0	0.0	0.0	0.0	16.3	0.0
US TOTAL	**941**	**1,313**	**1,875**	**2,157**	**2,855**	**24.4**	**34.6**	**50.0**	**59.7**	**77.9**
Northeast	37	53	69	82	121	6.0	8.7	11.5	14.2	20.5
Midwest	80	107	134	162	296	9.9	13.4	17.1	21.5	38.9

State/Territory	Cases					Rates per 100,000 Live Births				
	2017	2018	2019	2020	2021	2017	2018	2019	2020	2021
South	464	691	996	1,146	1,499	30.9	46.5	67.4	79.8	102.6
West	360	462	676	767	939	38.9	51.4	76.2	90.6	110.1
American Samoa	NR	0	0	0	0	—	0.0	0.0	0.0	0.0
Commonwealth of the Northern Mariana Islands	NR	0	0	0	0	—	0.0	0.0	0.0	0.0
Guam	0	0	0	0	1	0.0	0.0	0.0	0.0	38.1
Puerto Rico	7	9	7	5	9	28.8	42.0	34.4	26.4	46.6
Virgin Islands	0	NR	0	0	0	0.0	—	0.0	0.0	0.0
TERRITORIES TOTAL	**7**	**9**	**7**	**5**	**10**	**24.3**	**34.5**	**26.8**	**20.7**	**41.4**
TOTAL	**948**	**1,322**	**1,882**	**2,162**	**2,865**	**24.4**	**34.6**	**49.9**	**59.4**	**77.7**

* Mother's state/territory of residence was used to assign case.

NR = No report.

NOTE: See Technical Notes for more information on interpreting case counts and rates in US territories. The COVID-19 pandemic has introduced uncertainty and difficulty in interpreting STD data collected during 2020 and 2021. See Impact of COVID-19 on STDs for more information. Due to a network security incident in December 2021, the Maryland Department of Health could not finalize their 2021 STD 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 22. Congenital Syphilis — Reported Cases and Rates of Reported Cases* by Year of Birth and Race/Hispanic Ethnicity of Mother, United States, 2017–2021

Year of Birth	American Indian/ Alaska Native		Asian		Black/ African American		Hispanic/Latino	
	Cases	Rates	Cases	Rates	Cases	Rates	Cases	Rates
2017	14	46.2	6	2.4	362	64.1	309	34.4
2018	29	98.4	11	4.5	515	92.5	412	46.5
2019	54	187.1	24	9.8	633	114.5	583	65.8
2020	56	205.7	13	5.8	747	139.7	637	73.5
2021	102	384.5	18	8.2	885	169.2	851	96.1

Year of Birth	Multiracial		Native Hawaiian/ Pacific Islander		White		Other/Unknown	
	Cases	Rates	Cases	Rates	Cases	Rates	Cases	Rates
2017	2	2.4	6	62.4	213	10.6	29	
2018	5	5.9	14	143.9	287	14.5	40	
2019	20	23.6	11	108.5	456	23.5	94	
2020	25	29.6	19	191.0	541	29.0	119	
2021	49	56.1	19	192.1	782	40.9	149	

* Per 100,000 live births.

NOTE: No population data exist for other or unknown race; therefore, rates are not calculated. The COVID-19 pandemic has introduced uncertainty and difficulty in interpreting STD data collected during 2020 and 2021. See Impact of COVID-19 on STDs for more information.

Table 23. Syphilis — Reported Cases and Rates of Total 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, 2021

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	572	58.6	37	63.7
Alaska	185	128.2	5	53.4
Arizona	1,733	123.4	181	232.3
Arkansas	937	160.7	50	139.0
California	7,325	91.9	518	123.2
Colorado	526	43.8	30	47.7
Connecticut	187	27.3	6	16.8
Delaware	47	25.3	1	9.5
District of Columbia	87	48.9	6	69.3
Florida	2,582	65.6	180	83.2
Georgia	1,181	53.2	93	75.0
Hawaii	180	68.2	20	128.0
Idaho	74	20.0	5	22.3
Illinois	1,161	46.6	50	37.8
Indiana	411	30.9	20	25.0
Iowa	182	30.0	11	29.9
Kansas	181	31.8	7	20.2
Kentucky	488	56.8	25	47.9
Louisiana	1,019	111.2	110	191.5
Maine	18	7.5	0	0.0
Maryland	NR	—	NR	—
Massachusetts	263	18.6	9	13.0
Michigan	601	31.7	42	40.0
Minnesota	370	33.6	15	23.3
Mississippi	998	172.4	64	182.0

State/Territory	All Stages Among Women Aged 15-44 Years		Congenital	
	Cases	Rate per 100,000 Population	Cases	Rate per 100,000 Live Births
Missouri	1,147	96.5	66	95.0
Montana	87	42.4	9	80.1
Nebraska	134	35.1	1	4.1
Nevada	517	84.1	45	133.6
New Hampshire	11	4.3	0	0.0
New Jersey	640	36.6	48	47.3
New Mexico	730	180.4	44	205.7
New York	1,532	39.3	41	19.5
North Carolina	919	44.3	42	34.9
North Dakota	25	16.5	2	19.8
Ohio	871	38.9	51	39.3
Oklahoma	1,011	128.5	85	175.6
Oregon	518	62.0	27	66.0
Pennsylvania	653	26.9	14	10.6
Rhode Island	77	35.6	2	19.1
South Carolina	522	52.5	19	33.2
South Dakota	443	267.2	16	140.7
Tennessee	719	52.6	39	47.7
Texas	5,848	95.0	680	182.0
Utah	73	9.9	2	4.3
Vermont	2	1.7	1	18.6
Virginia	320	18.7	18	18.8
Washington	718	46.4	53	63.2
West Virginia	215	68.4	15	87.2
Wisconsin	493	44.5	15	24.3
Wyoming	12	11.1	0	0.0
US TOTAL	**39,992**	**61.5**	**2,855**	**77.9**
Northeast	3,383	30.8	121	20.5
Midwest	6,019	45.5	296	38.9

State/Territory	All Stages Among Women Aged 15-44 Years		Congenital	
	Cases	Rate per 100,000 Population	Cases	Rate per 100,000 Live Births
South	17,912	71.5	1,499	102.6
West	12,678	80.2	939	110.1
American Samoa	NR	—	0	0.0
Guam	NR	—	1	38.1
Northern Mariana Islands	NR	—	0	0.0
Puerto Rico	265	42.3	9	46.6
Virgin Islands	NR	—	0	0.0
TERRITORIES TOTAL	**265**	**42.3**	**10**	**41.4**
TOTAL	**40,257**	**61.3**	**2,865**	**77.7**

* Mother's state/territory of residence was used to assign case.

NR = No report.

NOTE: The COVID-19 pandemic has introduced uncertainty and difficulty in interpreting STD data collected during 2020 and 2021. See Impact of COVID-19 on STDs for more information. Due to a network security incident in December 2021, the Maryland Department of Health could not finalize their 2021 STD 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. Trends in Reported Cases and Rates of Reported Cases for Nationally Notifiable STDs, United States, 2017–2021

Disease	Sex*	Cases					Percent Change	
		2017	2018	2019	2020	2021	5 Year	1 Year
Chlamydia	Men	577,644	610,447	644,337	548,676	587,473	1.7	7.1
	Women	1,127,651	1,145,063	1,160,470	1,027,061	1,053,246	-6.6	2.5
	Total	1,708,569	1,758,668	1,808,703	1,579,885	1,644,416	-3.8	4.1
Gonorrhea	Men	322,169	341,401	361,586	385,551	410,388	27.4	6.4
	Women	232,587	241,074	253,359	290,666	298,015	28.1	2.5
	Total	555,608	583,405	616,392	677,769	710,151	27.8	4.8
Total Syphilis	Total	101,590	115,052	129,818	133,954	176,713	73.9	31.9
Congenital Syphilis†	Total	941	1,313	1,875	2,157	2,855	203.4	32.4
Primary and Secondary Syphilis	Men	26,885	30,034	32,402	33,646	41,349	53.8	22.9
	Women	3,722	4,995	6,493	7,901	12,265	229.5	55.2
	Total	30,644	35,063	38,992	41,655	53,767	75.5	29.1
Early Non-Primary Non-Secondary Syphilis	Men	29,251	32,619	34,427	35,165	40,979	40.1	16.5
	Women	4,684	5,891	7,081	7,809	10,668	127.8	36.6
	Total	34,013	38,539	41,655	43,145	51,830	52.4	20.1
Unknown Duration or Late Syphilis‡	Men	26,178	28,872	32,411	31,868	44,548	70.2	39.8
	Women	9,740	11,232	14,598	14,959	23,474	141.0	56.9
	Total	35,992	40,137	47,296	46,997	68,261	89.7	45.2
Combined Total of Chlamydia, Gonorrhea, and Total Syphilis	Total	2,365,767	2,457,125	2,554,913	2,391,608	2,531,280	7.0	5.8

Disease	Sex*	Rates per 100,000 Population					Percent Change	
		2017	2018	2019	2020	2021	5 Year	1 Year
Chlamydia	Men	360.1	378.9	398.6	334.2	357.4	-0.7	6.9
	Women	682.1	689.6	696.6	614.1	628.8	-7.8	2.4
	Total	524.6	537.5	551.0	476.7	495.5	-5.5	3.9
Gonorrhea	Men	200.8	211.9	223.7	234.8	249.7	24.4	6.3
	Women	140.7	145.2	152.1	173.8	177.9	26.4	2.4
	Total	170.6	178.3	187.8	204.5	214.0	25.4	4.6
Total Syphilis	Total	31.2	35.2	39.5	40.4	53.2	70.5	31.7
Congenital Syphilis†	Total	24.4	34.6	50.0	59.7	77.9	219.3	30.5
Primary and Secondary Syphilis	Men	16.8	18.6	20.0	20.5	25.2	50.0	22.9
	Women	2.3	3.0	3.9	4.7	7.3	217.4	55.3
	Total	9.4	10.7	11.9	12.6	16.2	72.3	28.6
Early Non-Primary Non-Secondary Syphilis	Men	18.2	20.2	21.3	21.4	24.9	36.8	16.4
	Women	2.8	3.5	4.3	4.7	6.4	128.6	36.2
	Total	10.4	11.8	12.7	13.0	15.6	50.0	20.0
Unknown Duration or Late Syphilis‡	Men	16.3	17.9	20.0	19.4	27.1	66.3	39.7
	Women	5.9	6.8	8.8	8.9	14.0	137.3	57.3
	Total	11.1	12.3	14.4	14.2	20.6	85.6	45.1
Combined Total of Chlamydia, Gonorrhea, and Total Syphilis	Total	726.3	751.0	778.4	721.6	762.7	5.0	5.7

* Total includes cases reported with unknown sex.

† Sex of infant is not reported. Rates are per 100,000 live births.

‡ The case classification of 'Unknown duration or late syphilis' went into effect in January 2018. During 2017, cases in this category include cases classified as late latent syphilis and late syphilis with clinical manifestations. See Technical Notes for a detailed explanation of changes to the syphilis case definition.

NOTE: The COVID-19 pandemic has introduced uncertainty and difficulty in interpreting STD data collected during 2020 and 2021. See Impact of COVID-19 on STDs for more information.

Table 25. Reported Cases of STDs by Reporting Source and Sex, United States, 2021

Disease	Non-STD Clinic			STD Clinic			Total		
	Male	Female	Total*	Male	Female	Total*	Male†	Female†	Total‡
Chlamydia	455,459	854,917	1,313,237	35,913	26,395	62,367	587,473	1,053,246	1,644,416
Gonorrhea	326,647	246,270	574,239	31,512	11,990	43,558	410,388	298,015	710,151
Primary Syphilis	13,383	3,514	16,923	2,445	425	2,874	17,759	4,394	22,196
Secondary Syphilis	17,875	6,429	24,380	3,333	816	4,158	23,590	7,871	31,571
Primary and Secondary Syphilis	31,258	9,943	41,303	5,778	1,241	7,032	41,349	12,265	53,767
Early Non-Primary Non-Secondary Syphilis	32,560	8,674	41,358	4,294	1,063	5,372	40,979	10,668	51,830
Syphilis, Unknown Duration or Late	34,034	18,507	52,650	3,092	1,295	4,390	44,548	23,474	68,261

* 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: The COVID-19 pandemic has introduced uncertainty and difficulty in interpreting STD data collected during 2020 and 2021. See Impact of COVID-19 on STDs for more information.

Table A1. Selected STDs — Percentage of Unknown, Missing, or Invalid Values for Selected Variables by State and by Nationally Notifiable STD, 2021

State	Primary and Secondary Syphilis				
	Percentage Unknown Race/Hispanic Ethnicity	Percentage Unknown Age	Percentage Unknown Sex	Percentage Unknown Sex of Sex Partners	Percentage Unknown County
Alabama	0.0	0.0	0.0	17.7	0.0
Alaska	0.5	0.0	0.0	17.5	0.0
Arizona	1.9	0.0	0.0	16.9	0.0
Arkansas	1.0	0.0	0.0	15.9	0.0
California	10.7	0.1	1.0	22.0	0.0
Colorado	0.4	0.0	0.0	13.7	0.0
Connecticut	18.2	0.0	2.7	37.7	0.6
Delaware	37.2	0.0	1.6	62.8	0.0
District of Columbia	7.0	0.0	0.0	14.8	0.0
Florida	7.1	0.0	0.0	21.0	0.0
Georgia	0.2	0.0	0.0	27.2	0.0
Hawaii	10.4	0.0	2.3	30.9	0.0
Idaho	23.8	0.0	0.0	35.7	0.0
Illinois	9.2	0.0	0.0	46.7	0.0
Indiana	1.2	0.0	0.0	18.9	0.0
Iowa	0.3	0.0	0.0	18.0	0.0
Kansas	4.0	0.0	0.0	15.3	0.0
Kentucky	1.2	0.0	0.0	31.8	0.0
Louisiana	0.0	0.0	0.0	16.5	0.0
Maine	0.0	0.0	0.0	18.0	0.0
Maryland	NR	NR	NR	NR	NR
Massachusetts	8.1	0.0	1.3	10.4	0.0
Michigan	0.7	0.0	0.0	11.3	0.0
Minnesota	2.7	0.0	0.4	49.0	0.0
Mississippi	0.1	0.0	0.0	6.9	0.0
Missouri	6.8	0.0	0.0	69.5	0.0
Montana	7.3	0.0	0.0	50.0	0.0
Nebraska	2.7	0.0	0.0	33.0	0.0
Nevada	10.4	19.3	0.0	30.6	0.0
New Hampshire	20.5	0.0	0.0	5.5	0.0
New Jersey	2.5	0.0	0.0	12.6	0.1
New Mexico	21.8	0.0	0.0	55.4	0.0
New York	4.4	0.0	0.0	8.7	0.0
North Carolina	0.1	0.0	0.0	17.8	0.0
North Dakota	16.3	0.0	0.0	22.4	0.0
Ohio	0.7	0.0	0.0	19.5	0.0
Oklahoma	0.7	0.0	0.0	26.9	0.0

State	Primary and Secondary Syphilis				
	Percentage Unknown Race/Hispanic Ethnicity	Percentage Unknown Age	Percentage Unknown Sex	Percentage Unknown Sex of Sex Partners	Percentage Unknown County
Oregon	9.4	0.0	0.1	26.6	0.0
Pennsylvania	2.3	0.0	0.1	11.1	0.0
Rhode Island	5.3	0.0	0.0	31.1	0.5
South Carolina	0.5	0.0	0.8	10.3	0.0
South Dakota	0.0	0.0	0.0	8.9	0.0
Tennessee	0.0	0.0	0.0	18.0	0.0
Texas	3.4	0.0	0.1	33.1	0.0
Utah	2.9	0.0	0.0	11.2	0.0
Vermont	22.2	0.0	0.0	100.0	55.6
Virginia	1.5	0.0	2.7	8.1	0.0
Washington	15.0	0.0	0.5	44.8	0.0
West Virginia	1.9	0.0	0.0	28.3	0.0
Wisconsin	1.4	0.0	0.1	27.9	0.1
Wyoming	62.5	0.0	0.0	31.2	0.0
U.S. Total	**5.3**	**0.3**	**0.3**	**23.5**	**0.0**

State	Gonorrhea				Chlamydia			
	Percentage Unknown Race/Hispanic Ethnicity	Percentage Unknown Age	Percentage Unknown Sex	Percentage Unknown County	Percentage Unknown Race/Hispanic Ethnicity	Percentage Unknown Age	Percentage Unknown Sex	Percentage Unknown County
Alabama	38.0	12.7	0.6	4.8	42.6	12.5	0.6	5.0
Alaska	11.9	0.0	0.0	0.0	19.5	0.0	0.0	0.0
Arizona	25.5	0.0	0.1	0.0	39.4	0.0	0.1	0.0
Arkansas	24.2	0.0	0.0	0.0	31.7	0.0	0.0	0.0
California	32.4	0.2	0.5	0.0	51.6	0.1	0.4	0.0
Colorado	9.9	0.0	0.0	0.0	16.9	0.0	0.0	0.0
Connecticut	47.0	0.0	0.7	0.6	58.4	0.0	0.3	1.1
Delaware	18.2	0.0	0.3	0.0	28.2	0.0	0.3	0.0
District of Columbia	62.7	0.1	0.3	0.0	89.2	0.0	0.2	0.0
Florida	19.0	0.0	0.0	0.0	28.6	0.0	0.0	0.0
Georgia	5.7	0.1	0.0	0.5	6.7	0.1	0.1	0.8
Hawaii	41.5	0.0	0.8	0.3	52.0	0.0	0.4	1.5
Idaho	25.1	0.1	0.2	0.0	23.3	0.0	0.0	0.0
Illinois	11.1	0.0	0.1	0.0	16.3	0.0	0.1	0.0
Indiana	16.9	0.0	0.1	0.0	29.3	0.0	0.1	0.0
Iowa	5.3	0.0	0.0	0.0	14.6	0.0	0.0	0.0
Kansas	10.8	0.0	0.0	0.5	13.1	0.0	0.0	0.0
Kentucky	27.4	0.0	0.3	0.0	32.0	0.0	0.5	0.0
Louisiana	1.3	0.0	0.0	0.1	1.6	0.0	0.0	0.2

State	Gonorrhea				Chlamydia			
	Percentage Unknown Race/Hispanic Ethnicity	Percentage Unknown Age	Percentage Unknown Sex	Percentage Unknown County	Percentage Unknown Race/Hispanic Ethnicity	Percentage Unknown Age	Percentage Unknown Sex	Percentage Unknown County
Maine	2.8	0.2	0.0	0.0	31.7	62.8	0.0	0.0
Maryland	NR	NR	NR	NR	NR	NR	NR	NR
Massachusetts	36.8	0.0	0.5	0.8	44.5	0.0	0.5	1.2
Michigan	12.7	0.0	0.0	0.0	16.9	0.0	0.0	0.0
Minnesota	13.7	0.0	0.2	1.4	15.3	0.0	0.1	1.4
Mississippi	28.7	0.0	0.4	0.0	37.0	0.0	0.4	0.0
Missouri	9.4	0.0	0.0	0.0	15.2	0.0	0.0	0.0
Montana	0.3	0.0	0.0	0.1	0.2	0.2	0.0	0.4
Nebraska	6.6	0.0	0.1	0.0	9.7	0.0	0.2	0.0
Nevada	40.6	14.8	0.1	0.0	49.5	20.2	0.1	0.0
New Hampshire	17.8	0.0	0.2	0.0	32.2	0.0	0.9	0.0
New Jersey	17.1	0.0	0.0	0.2	22.7	0.0	0.0	0.1
New Mexico	28.2	0.0	0.1	0.0	34.6	0.0	0.1	0.0
New York	21.1	0.0	0.0	0.0	36.3	0.0	0.0	0.0
North Carolina	23.5	0.0	0.0	0.0	30.0	0.0	0.0	0.0
North Dakota	11.1	0.0	0.0	0.0	19.3	0.0	0.0	0.0
Ohio	11.5	0.0	0.0	1.2	17.4	0.0	0.0	1.1
Oklahoma	14.8	0.0	0.0	0.0	19.7	0.0	0.0	0.0
Oregon	16.2	0.0	0.3	0.0	30.8	0.0	0.2	0.0
Pennsylvania	8.7	0.0	0.1	0.0	12.2	0.0	0.1	0.0
Rhode Island	5.7	0.0	0.0	0.6	11.2	11.4	0.0	10.5
South Carolina	37.8	0.0	0.7	1.1	44.7	0.0	0.6	1.0
South Dakota	0.6	0.0	0.0	0.0	0.7	0.0	0.0	0.0
Tennessee	0.7	0.0	0.0	0.0	1.0	0.0	0.0	0.0
Texas	28.7	0.2	0.8	0.0	38.8	0.1	0.9	0.0
Utah	3.1	0.0	0.0	0.1	3.6	0.0	0.0	0.1
Vermont	27.9	0.0	0.0	9.6	23.2	0.1	0.1	12.6
Virginia	23.7	0.0	0.4	0.0	39.5	0.0	0.1	0.0
Washington	17.8	0.1	0.5	0.0	42.9	0.1	0.2	0.0
West Virginia	15.1	0.0	0.0	0.0	19.1	0.0	0.0	0.0
Wisconsin	6.8	0.0	0.2	0.9	7.9	0.0	0.1	1.2
Wyoming	66.2	0.0	0.2	0.0	79.7	0.0	0.4	0.0
U.S. Total	**20.7**	**0.5**	**0.2**	**0.3**	**30.0**	**0.6**	**0.2**	**0.3**

NR = No report.

NOTE: The COVID-19 pandemic has introduced uncertainty and difficulty in interpreting STD data collected during 2020 and 2021. See Impact of COVID-19 on STDs for more information. Due to a network security incident in December 2021, the Maryland Department of Health could not finalize their 2021 STD case notification data. Although 2021 data from Maryland are included in national data displayed in this table, state-specific data have been suppressed.

Technical Notes

Sexually Transmitted Disease Surveillance 2021 presents trends in nationally notifiable sexually transmitted diseases (STDs) in the United States through 2021. 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 STDs in various settings, including the STD Surveillance Network (SSuN) and the Gonococcal Isolate Surveillance Project (GISP).

The majority of data included presents trends in diagnoses of three STDs: chlamydia, gonorrhea, and syphilis, including congenital syphilis. It is important to note that these data reflect only a portion of STDs occurring in the US population. Over 30 pathogens can be sexually transmitted, including common STDs, such as herpes simplex virus, which causes genital herpes, and human papillomavirus, which can lead to genital warts and cervical cancer. Additionally, STDs are often asymptomatic and may not be diagnosed. Published estimates of the burden of STDs in the United States, including estimated prevalence, incidence, and cost, can be found in the January 2021 special issue of the journal *Sexually Transmitted Diseases,* available here: https://journals.lww.com/stdjournal/pages/collectiondetails.aspx?TopicalCollectionId=4

Additionally, the STD data presented in this report for the year 2020 should be interpreted with caution. The COVID-19 pandemic impacted trends in diagnosed and reported STDs, as well as in data collected through enhanced and sentinel STD surveillance activities. For more information, see Impact of COVID-19 on STDs.

Acknowledgements

Surveillance and Data Science Branch
Division of STD Prevention
National Center for HIV, Viral Hepatitis, STD, and TB Prevention
Centers for Disease Control and Prevention

Darlene Davis, Marvin Fleming, Jeremy Grey, LaZetta Grier, Alesia Harvey, Robin Hennessy, David Jackson, Irma Kocer, Michelle Johnson Jones, Kristen Kreisel, Kristen Eberly, Neeraja Lakshmipathy, Eloisa Llata, Melissa Pagaoa, Alejandro Perez, Bianca Perri, Tracy Pondo, Jamie Smimble, Sancta St. Cyr, Mark Stenger, Elizabeth Torrone, Elizabeth (Betsy) Wall, Sarah Wondmeneh, Hillard Weinstock, Niketta Womack

Division of STD Prevention
Tranita Anderson, Roxanne Barrow, Sherry Chen, Bruny Christian, Keith Davis, Daniel Johnson, Ellen Kersh, Emily Learner, Jennifer Ludovic, Kerry Mauk, Nikki Mayes, Cau Pham, Tiffani Phelps, Raul Romaguera, Karen Schlanger, Salina Smith, Jo Valentine

National Center for HIV, Viral Hepatitis, STD, and TB Prevention
Rachel Wingard

Publication of this report would not have been possible without the contributions of the state, local and territorial health departments, STD control programs, and public health laboratories that provided STD surveillance data to CDC.

National Notifiable Diseases Surveillance System (NNDSS)

Four STDs are nationally notifiable conditions: chlamydia, gonorrhea, syphilis, and chancroid. STD 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 STD 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 STDs 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 STD 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. STD case notification data sent to CDC through December 13, 2021 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 STDs, excluding congenital syphilis. American Samoa, Guam, Northern Mariana Islands, and the Virgin Islands continue to report STD data through summary hard copy forms. In 2020, nine jurisdictions (Alabama, Connecticut, Idaho, Kentucky, Michigan, North Carolina, Oregon, South Carolina, and Wisconsin) provided STD case notification data to CDC via HL7 messaging. In 2020, 24 states and one US territory provided congenital syphilis data through REDCap.

Reporting Practices

Although most state and local STD programs adhere to the case definitions collaboratively developed by CSTE and CDC for nationally notifiable STDs, 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 STD case notification data to CDC. As a result, 2021 STD case notification data from Maryland are incomplete. Although 2021 STD 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.

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. 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 2021. As a result, chlamydia and gonorrhea surveillance data collected during 2020 and 2021 should be interpreted cautiously. For more information, please see Impact of COVID-19 on STDs.

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 STD 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 mothers of infants with congenital syphilis are identified based on information reported to CDC related to prenatal care, syphilis testing, and treatment. To describe the primary missed prevention opportunity, each reported congenital syphilis case is assigned to one of five mutually exclusive categories, assigned by hierarchy: 1) lack of timely prenatal care with no timely syphilis testing; 2) lack of timely syphilis testing despite timely prenatal care; 3) lack of adequate maternal treatment despite a timely syphilis diagnosis; 4) late identification of seroconversion during pregnancy (identified <30 days before delivery); or 5) clinical evidence of congenital syphilis despite maternal treatment completion. 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 lack of adequate maternal treatment despite a timely syphilis diagnosis, 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) not have received adequate treatment for syphilis. Those who did not receive adequate treatment had no treatment at all, 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 STD 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 reported with information on both race and Hispanic ethnicity. Cases reported as Hispanic are classified as Hispanic, regardless of their race, and include cases with unknown race. Cases reported as non-Hispanic or of unknown Hispanic ethnicity are considered non-Hispanic and categorized based on race. 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 Multirace.

Most reporting jurisdictions report in the current OMB standard race categories, including Multirace; however, in 2021, 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 2021, 30.0% of chlamydia cases and 20.7% 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 (5.3%) were reported with missing information on race/Hispanic ethnicity in 2021. 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.

Sex and Gender Identity

When providing STD 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.

Starting in 2018, jurisdictions were also able to provide "gender identity" (cisgender, transgender male-to-female, transgender female-to-male, and transgender unknown) for STD 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.

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 STD surveillance data reported to CDC from the US territories, including limited access to STD 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 STD burden in these areas and should be interpreted cautiously.

Population Denominators and Rate Calculations

2000–2020 Rates and Population

For those figures and tables presenting race using the 1997 Office of Management and Budget (OMB) standards, non-bridged-race data provided directly by the United States Census Bureau were used to calculate rates. To align with previous reports, the 2019 population estimates were used to calculate 2020 rates. Because of the use of the updated population data, rates for 2000–2019 may be different from those presented in previous STD surveillance reports.

Population estimates for Puerto Rico, American Samoa, Guam, Northern Mariana Islands, and the Virgin Islands were obtained from the US Census Bureau International Programs Web site at: www.census.gov/programs-surveys/international-programs.html

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.

1941–2020 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 1941–2020. 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 2020, 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 2020 were calculated by using live birth data provided to National Center for Health Statistics (NCHS) through the Vital Statistics Cooperative Program. Rates for 2020 were calculated using live birth data for 2019, the most recently available data at time of publication.

2016–2020 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 gay, bisexual, and other 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 5-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 United States 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 eight of the 11 participating Cycle 4 jurisdictions (Baltimore [Maryland], 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 2021 include gonorrhea cases sampled, investigated and weighted for analysis from Baltimore City, Florida, Indiana, Multnomah County (Oregon), New York City, San Francisco County, 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/.
For 2021, 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 2021 are also recommended by the Clinical and Laboratory Standards Institute (CLSI).1 As of the end of 2021, 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 (2005–2020)
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 eligible young people ages 16 through 24 complete their high school education, trains them for meaningful careers, and assists them with obtaining employment. 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

Due to the COVID-19 pandemic, there were no new on-campus enrollments into the Job Corps after mid-March 2020, resulting in a lower number of chlamydia and gonorrhea tests in 2020 compared to earlier years, and though enrollments resumed in 2021, the number of enrollments with valid chlamydia or gonorrhea test results did not meet established criteria for inclusion in this report (i.e., chlamydia or gonorrhea prevalence data are only presented when valid test results for 100 or more students per year are available for the population subgroup and state). For 2021, the number of chlamydia and gonorrhea

tests did not meet these criteria in the majority of states, and hence data from the Job Corps are not included in the Sexually Transmitted Disease Surveillance 2021.

References

1. Clinical and Laboratory Standards Institute (CLSI). *Performance Standards for Antimicrobial Susceptibility Testing.* 31st ed. CLSI supplement M100 Clinical and Laboratory Standards Institute; 2021.

STD Case Definitions in Effect During 2021

Nationally Notifiable STDs

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 STDs in place during 2021 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 1/2010)

Clinical description

Infection with *Chlamydia trachomatis* may result in urethritis, epididymitis, cervicitis, acute salpingitis, or other syndromes when sexually transmitted; however, the infection is often asymptomatic in women. Perinatal infections may result in inclusion conjunctivitis and pneumonia in newborns. Other syndromes caused by *C. trachomatis* include lymphogranuloma venereum (see Lymphogranuloma Venereum) and trachoma.

Laboratory criteria for diagnosis

- Isolation of *C. trachomatis* by culture, OR
- Demonstration of *C. trachomatis* in a clinical specimen by detection of antigen or nucleic acid.

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 STDs

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.

Lymphogranuloma Venereum

Clinical description

Infection with L1, L2, or, L3 serovars of *C. trachomatis* may result in a disease characterized by genital lesions, suppurative regional lymphadenopathy, or hemorrhagic proctitis. The infection is usually sexually transmitted.

Laboratory criteria for diagnosis

- Isolation of *C. trachomatis*, serotype L1, L2, or L3 from clinical specimen, OR
- Demonstration by immunofluorescence of inclusion bodies in leukocytes of an inguinal lymph node (bubo) aspirate, OR
- Positive microimmunofluorescent serologic test for a lymphogranuloma venereum strain of *C. trachomatis*.

Case classification

Probable: a clinically compatible case with one or more tender fluctuant inguinal lymph nodes or characteristic proctogenital lesions with supportive laboratory findings of a single *C. trachomatis* complement fixation titer of >64.

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.