Centers for Disease Control and Prevention

Sexually Transmitted Disease Surveillance 2021

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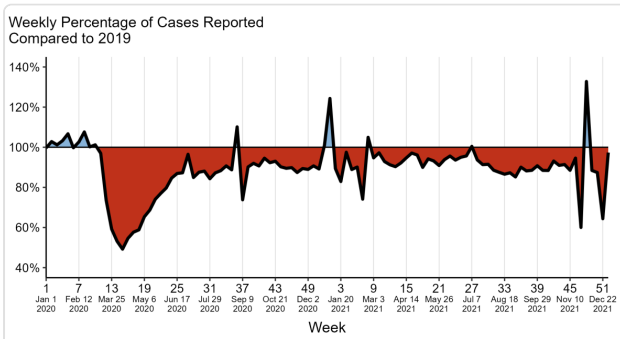
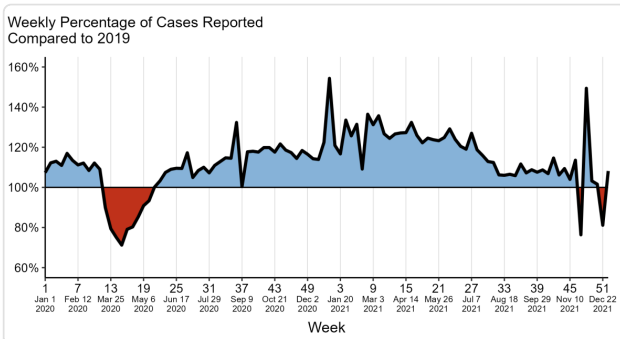
Impact of COVID-19 on STDs

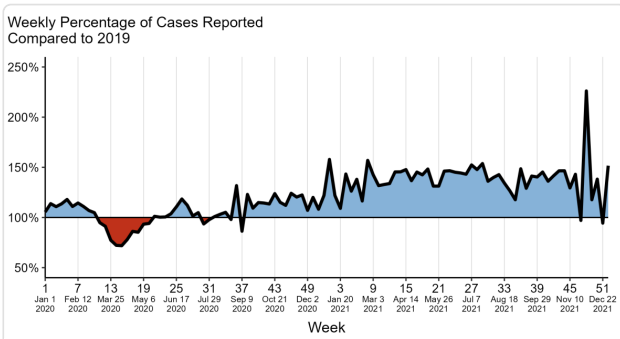
During 2020, the COVID-19 pandemic led to disruptions in STD-related prevention and care activities, including reduced screening during the initial shelter-in-place orders. STD program resources, including STD case investigations, were also redirected to COVID-19 activities. Because STDs often do not 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.



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



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



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

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 numerous publications and communications throughout the pandemic. You can find more information in the following resources:

- *Impact of COVID-19 on STDs.* 2020 STD Surveillance Report.
- Pagaoa et al. Trends in Nationally Notifiable Sexually Transmitted Disease Case Reports During the US COVID-19 Pandemic, January to December 2020. *Sex Transm Dis*. 2021 Oct; 48(10): 798–804.
    - Press release: https://www.cdc.gov/nchhstp/newsroom/2021/2020-std-trend-report.html
    - Full text: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8459909/
- Wright et al. Impact of the COVID-19 Pandemic on Centers for Disease Control and Prevention-Funded STD Programs. *Sex Transm Dis*. 2021 Oct 12.
    - Summary of key findings: https://www.cdc.gov/std/program/327850-A_FS_COVID19_STD_Impact_508_FINAL.pdf
    - Abstract: https://pubmed.ncbi.nlm.nih.gov/34654769/
- 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/DCL-STDTreatment-COVID19-04062020.pdf
    - Update: STD Treatment options: https://www.cdc.gov/std/dstdp/dcl/dcl-clarification-may2020.pdf
    - Shortage of STI Diagnostic Test Kits and Laboratory Supplies: https://www.cdc.gov/std/dstdp/dcl/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

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