



Introduction

- The COVID-19 pandemic has not only affected the lives of many individuals globally but STI prevalence rates as well.²
- Cases of STIs decreased by 51% which is substantial compared to previous years.³
- The decline in cases for the most common STI, chlamydia, may be due to the changes in screening and not a drop in cases nationally. This will help expand more accessibility to resources such as clinics/centers and testing sites, and even at-home tests.²

Objective

- To analyze how the COVID-19 pandemic has affected the prevalence rates of STI among young adults in San Diego County between 2017-2021.
- To emphasize the importance of risk management in order to identify and inform vulnerable populations.

Methods

- Surveillance data on chlamydia, gonorrhea, and syphilis by year were analyzed from the San Diego County Health and Human Services Agency (HHS).
- Data was compiled using the “STD Monthly Reports” from February of each year from 2017-2021.
- Descriptive statistical analysis was used to compare the prevalence using the variables: age, sex, and race/ethnicity.

Results



Figure 1. 2017-2021 STI Timeline for Chlamydia, Gonorrhea, and Early Syphilis.

- Rates of gonorrhea and syphilis remained somewhat stable, while chlamydia rates declined. Due to this, we focused our conclusion and policy implications on chlamydia
- Annual prevalence percentages 2017-2021
 - Chlamydia:
 - 18.81% decrease (female age 18-25)
 - 220.47% increase (male rectal)
 - Gonorrhea:
 - 60.03% increase (female age 18-25)
 - 70.71% increase male rectal)
 - Early Syphilis (all subtypes):
 - 11.02% increase

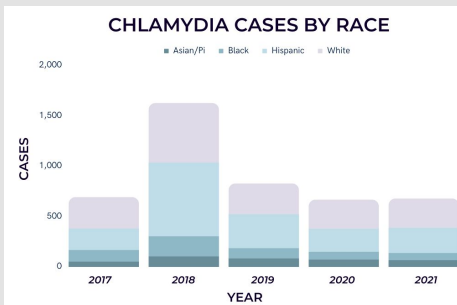


Figure 2. 2017-2021 Chlamydia cases by year and race.

Results

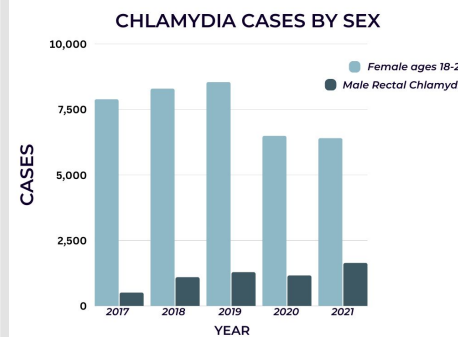


Figure 3. 2017-2021 Chlamydia cases by year and sex.

- Male rectal chlamydia rates more than doubled from 2017- 2018, and then remained relatively stable from 2018-2020. Cases spiked in 2021.
- Chlamydia rates in females (18-25) increased until 2019, and then decreased consistently.
- Chlamydia rates across races followed the same pattern as the female 18-25 chlamydia rates, with Hispanic and White ethnicity/race rates seeing the most change.

Reported STI rates declined during COVID-19 which may be due to decreased testing rather than a decrease in cases

References

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2. Pagaoa, M., et al. (2021). Trends in Nationally Notifiable Sexually Transmitted Disease Case Reports During the US COVID-19 Pandemic, January to December 2020. Sexually Transmitted Diseases, 48(10), 798-804. doi: 10.1097/OLQ.0000000000001506
3. Sentís, A., Prats-Urbe, A., López-Corbeto, E, et al. The impact of the COVID-19 pandemic on Sexually Transmitted Infections surveillance data: incidence drop or artefact?. BMC Public Health 21, 1637 (2021). <https://doi.org/10.1186/s12889-021-11630-x>

Conclusion

- Evidence suggests that STI rates decreased during the pandemic. Key factors like access to testing and treatment may provide insight on how to prevent future pandemics from having similar effects on public safety
- Findings indicate changes in rates depended on the STI.
- A study limitation is that there was a small variation due to attrition in the San Diego County’s provided data.
- Further research is needed to explore STI prevalence trends based on zip codes to examine who is most affected during the COVID-19 pandemic.

Policy Implications

- Actions may include increasing the accessibility of testing. This could include longer clinic hours, promotion of home-based testing kits, and the use of virtual services in the greater San Diego area, perhaps extending on college campuses where the demographic consists of young adults.
- May provide understanding how STI testing can effectively be implemented into home-based testing to prepare and ensure effective services for future pandemics

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