STI Surveillance Data Analysis Report (2021–2023)

Author: Kiara Boone, MPH — Public Health Data Analyst ¦ Epidemiology Focus

Objective

Analyze national STI trends (2021–2023) for Chlamydia, Gonorrhea, and Primary & Secondary Syphilis using CDC NCHHSTP AtlasPlus data.

Methods

Data Source: CDC NCHHSTP AtlasPlus (2021–2023)
Software: R 4.4.3 (ggplot2, tidyverse)
Procedure: Cleaned raw dataset, computed mean rates per 100,000 population, compared by sex and overall trends.
Outputs: Two visualizations — overall trend and sex-specific trend facets.

Key Findings

• Chlamydia: Gradual increase in both sexes; female rates remain significantly higher.
• Gonorrhea: Higher in males; overall decline since 2021.
• Syphilis: Post-COVID surge (2022) followed by decline (2023), suggesting effective intervention response.

Figures

Figure 1. Overall STI Rate Trends (2021–2023)

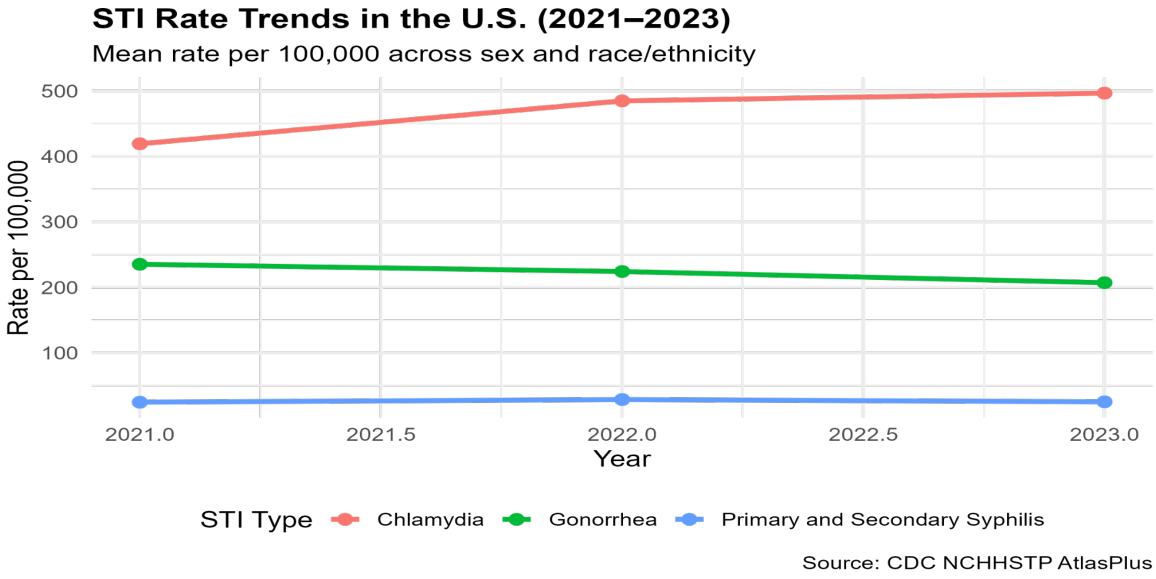
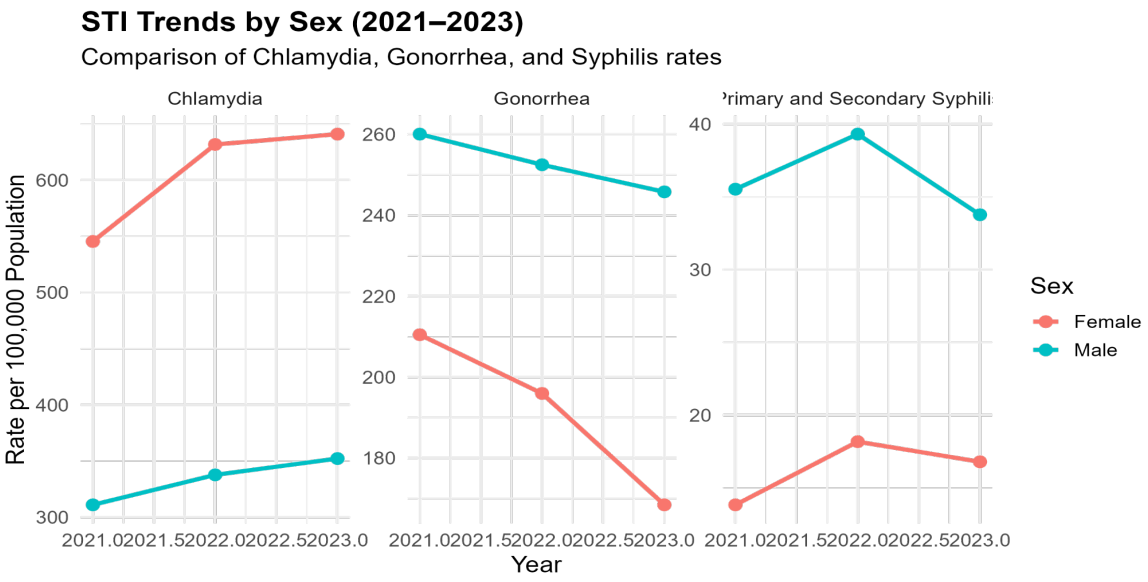


Figure 2. STI Trends by Sex (2021–2023)



Conclusion

Overall STI rates show a mixed pattern — chlamydia increasing, gonorrhea declining, and syphilis fluctuating. Findings support continued surveillance and targeted prevention efforts.

Citation

Source: CDC NCHHSTP AtlasPlus (2021–2023), Sexually Transmitted Infections Surveillance Dataset.

Created using R 4.4.3 and ggplot2 for the Public Health Data Portfolio by Kiara Boone.