

# Reporting of sexually transmitted infections during the COVID-19 pandemic

Social distancing guidelines and resource reallocation during the COVID-19 pandemic have led to significant disruption of sexual health clinics within the USA.<sup>1</sup> Little is known about how this disruption has impacted STI reporting. To understand this, we analysed the number of reported cases of STIs within the USA during the COVID-19 pandemic.

The US Centers for Disease Control and Prevention (CDC) reports cases of selected infectious diseases as provisional data made available throughout the year by MMWR week, an approximation of calendar week used for reporting.<sup>2</sup> For the first 40 weeks of 2019 and 2020, we compiled weekly counts and year-to-date counts of provisional cases of chlamydia, gonorrhoea and primary and

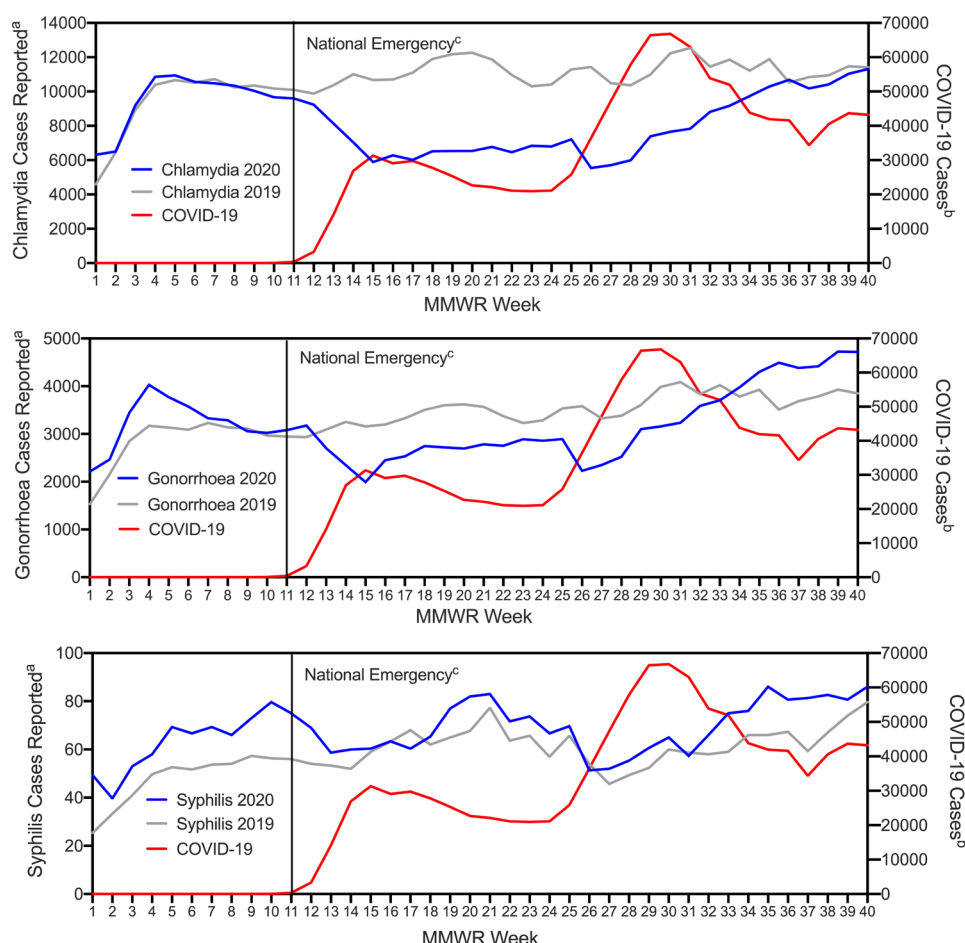
secondary (P&S) syphilis. Reporting was also examined relative to national cases of COVID-19 (see figure 1).<sup>3</sup>

The COVID-19 outbreak was declared a national emergency in the USA near the end of week 11 of 2020. During weeks 1–11 of 2020, the mean weekly count of chlamydia cases was 9884, decreased to 7892 (–20.2%) in weeks 12–40. This effect was less pronounced for gonorrhoea at 3230 cases in weeks 12–40 (3330 in weeks 1–11, –3.0%) and an opposing trend was found for P&S syphilis at 70 cases in weeks 12–40 (66 in weeks 1–11, +5.5%). At week 40 of 2020, the cumulative year-to-date case count of chlamydia was 957 982, decreased from 1 171 015 (–18.2%) cases reported at week 40 in 2019. A smaller decrease was observed for P&S syphilis cases at 21 968 in 2020 (23 597 in 2019, –6.9%). No significant pattern was found for gonorrhoea (394 321 in 2019; 392 038 in 2020). Other trends in decreased year-to-date cases reported were found for nearly all nationally notifiable diseases with

comparable reporting from 2019 to 2020, with 42 of 44 diseases showing a decrease (37 exceeding 20% reduction).<sup>2</sup>



It is not known whether this decrease in reported cases of chlamydia, and to a lesser extent gonorrhoea and P&S syphilis, represents reduced transmission or, more likely, a decrease in testing and/or reporting of cases. The greater relative decrease of chlamydia raises the possibility that asymptomatic infections, which are often diagnosed through established screening programmes, are particularly susceptible to healthcare disruptions. Recent data from STI centres in Italy support this hypothesis.<sup>4</sup>

STI transmission has been increasing in the USA in recent years, with the CDC reporting an all-time high in nationwide prevalence of chlamydia, gonorrhoea and syphilis prior to the pandemic.<sup>5</sup> Undetected STI transmission during the COVID-19 pandemic will only lead to further increases. Research has shown that patient self-collection and mailing



**Figure 1** Reporting of chlamydia, gonorrhoea and syphilis during the COVID-19 pandemic. <sup>a</sup>Moving 3-week average of provisional case counts of chlamydia, gonorrhoea and syphilis as reported by the Centers for Disease Control and Prevention (CDC) during MMWR weeks 1–40 of 2020 and 2019. <sup>b</sup>Moving 7-day average of COVID-19 cases as reported by the Center for Systems Science and Engineering (CSSE) at Johns Hopkins University (JHU) calculated for week-end dates of 2020 MMWR weeks. <sup>c</sup>The COVID-19 pandemic was declared a national emergency in the USA on 13 March 2020. MMWR week 11 ended on 14 March 2020. MMWR, Morbidity and Mortality Weekly Report.

of specimens for gonorrhoea and chlamydia testing is feasible and preferred by patients.<sup>6</sup> The broad implementation of this approach for STI screening may have mitigated COVID-19-related disruptions. Among asymptomatic persons with STIs, the lack of a physical examination has not been shown to have negative consequences.<sup>7,8</sup> Despite their limitations, these findings highlight the critical need for transformative strategies in STI control. Many such strategies are available but are awaiting broader implementation.

Matthew A Crane <sup>1</sup>, Aleksandra Popovic,<sup>1</sup>  
Andrew I Stolbach,<sup>2</sup> Khalil G Ghanem <sup>3</sup>

<sup>1</sup>Johns Hopkins University School of Medicine, Baltimore, Maryland, USA

<sup>2</sup>Department of Emergency Medicine, Johns Hopkins University School of Medicine, Baltimore, Maryland, USA

<sup>3</sup>Division of Infectious Diseases, Johns Hopkins University School of Medicine, Baltimore, Maryland, USA

**Correspondence to** Matthew A Crane, Johns Hopkins University School of Medicine, Baltimore, MD 21205-2196, USA; mcrane9@jhmi.edu

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#### ORCID iDs

Matthew A Crane <http://orcid.org/0000-0002-0529-8948>

Khalil G Ghanem <http://orcid.org/0000-0002-0033-302X>

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