

COVID-19-related nationwide lockdown did not reduce the reported diagnoses of *Chlamydia trachomatis* and *Neisseria gonorrhoeae* in Finland

There has been interest in exploring the impact of COVID-19-related lockdowns on sexual and reproductive health, with studies reporting a decrease in the self-reported number of new sexual partners and frequency of intercourse.^{1 2} The importance of information on the incidence of STIs has also been highlighted.^{3 4}

In Finland, national lockdown in response to the COVID-19 pandemic began on 16 March 2020. The first wave did not cause a healthcare surge and the rate of new cases started to decrease in May. Restrictions were loosened in early June. Our aim was to explore cross-sectionally the influence of social restrictions on the number of laboratory-confirmed *Chlamydia trachomatis* (CT) and *Neisseria gonorrhoeae* (NG) diagnoses among people aged ≥ 15 during the period of January–August 2020. Diagnoses reported in 2015–2019 were used as reference. Data were retrieved from the national open-access Infectious Disease Register. All diagnostic laboratories in Finland are mandated to submit new infection diagnoses to the register, and thus coverage is excellent.⁵

Monthly incidence of CT and NG diagnoses with 95% CI was calculated by Poisson exact method. Incidence rate ratios (IRR) were used to compare incidences. Data were stratified by age (15–29 and ≥ 30 years).

A total of 7264 CT and 220 NG diagnoses were reported since the start of lockdown in March. In January and February, the number of diagnoses was higher compared with the reference years (figure 1). In March, the number was similar to the reference years, with IRR of 0.9 (CI 0.9 to 1.0) for CT and 1.2 (CI 0.8 to 2.0) for NG. In July, the IRR for CT was 1.2 (CI 1.1 to 1.3) compared with the reference years and 1.2 (CI 1.1 to 1.3) compared with June 2020. The increase was seen in both age groups (figure 1).

These data indicate that social restrictions seemed to have no influence on

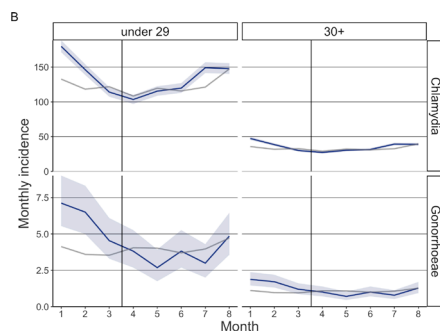



Figure 1 Monthly incidence of laboratory-confirmed *Chlamydia trachomatis* and *Neisseria gonorrhoeae* infections grouped by age in Finland. The blue line represents 2020 with 95% CI, and the grey line is monthly average from years 2015–2019. The black vertical line indicates the start of lockdown in March 2020.

the number of CT and NG diagnoses in Finland. Since social gatherings and travelling were prohibited, we had anticipated a decline, and also based on the previous observation that 50% of NG infections in Finland are acquired abroad.⁶ Surprisingly, the numbers remained unchanged during the March–June lockdown. Our nationwide results are in line with previous studies from Italy.^{7 8} In Spain, lockdown measures appeared to reduce STI incidence; however, restrictions in Finland were not as strict.⁹ An increase in CT diagnoses was seen in July (after nightlife reopened), but this could be due to seasonal variation. When interpreting these results, it must be noted that follow-up was short and the impact of measures such as border restrictions could potentially emerge later. In conclusion, social restrictions did not reduce nationwide STIs. Stable resources are needed to diagnose and manage STIs during the pandemic.

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