


## Decrease in the incidence of chlamydia infection during the COVID-19 pandemic in South Korea

To identify the impact of the COVID-19 pandemic on chlamydia infection in South Korea, we assessed the incidence rate ratio (IRR) for three different periods (epidemiological weeks 4–19, 20–33 and 34–46) using the weekly number of chlamydia infections between January 2018 and December 2020 from Korean national surveillance (figure 1).<sup>1</sup>

During the early pandemic period, overall incidence was similar to the previous 2 years (2018/2019); however, overall reduction was estimated to be 15%–30%, with a larger impact in males in the latter pandemic period.

The IRR decreased during period 2 in young adult males inside the Seoul Capital Area, possibly affected by COVID-19 outbreak from a nightclub in Seoul. The IRR largely decreased in males and females inside the Seoul Capital Area during period 3, likely caused by the ban on adult entertainment sector inside the Seoul Capital Area (from 18 August 2020 to 12 October 2020).<sup>2</sup>

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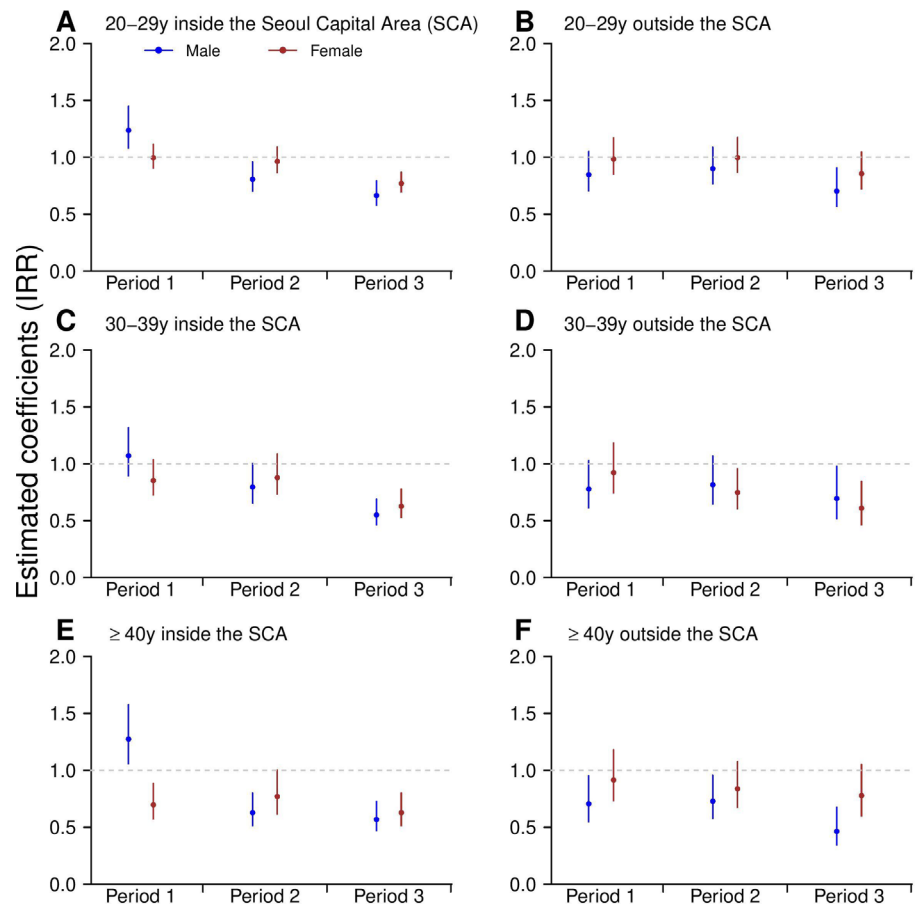
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**Figure 1** The 2018/2019–2020 incidence rate ratios (IRR) for chlamydia infections in different genders, age groups and regions in South Korea. Error bars represent the 95% CIs of the estimated coefficients for each period. Bars coloured blue and brown represent male and female, respectively. Estimated coefficients of the 2018/2019–2020 IRRs of chlamydia infections in (A) individuals aged 20–29 years inside the Seoul Capital Area, (B) individuals aged 20–29 years outside the Seoul Capital Area, (C) individuals aged 30–39 years inside the Seoul Capital Area, (D) individuals aged 30–39 years outside the Seoul Capital Area, (E) ≥40-year-old individuals inside the Seoul Capital Area, and (F) ≥40-year-old individuals outside the Seoul Capital Area. The study period includes period 1 (epidemiological weeks 4–19), period 2 (epidemiological weeks 20–33) and period 3 (epidemiological weeks 34–46).

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### REFERENCES

- 1 Korea Centers for Disease Control and Prevention Agency. Infectious disease portal Osong, South Korea: Korea centers for disease control and prevention agency, 2021. Available: <http://www.kdca.go.kr/npt/> [Accessed cited 2021 8 March].
- 2 Korean Ministry of Health and Welfare. COVID-19 update (20 August 2020) Sejong, South Korea, 2020. Available: [http://ncov.mohw.go.kr/tcmBoardView.do?brdId=&brdGubun=&dataGubun=&ncvContSeq=359101&contSeq=359101&board\\_id=&gubun=ALL](http://ncov.mohw.go.kr/tcmBoardView.do?brdId=&brdGubun=&dataGubun=&ncvContSeq=359101&contSeq=359101&board_id=&gubun=ALL) [Accessed cited 2021 10 March].