

SYNOPSIS

03/06/2020

Review of “Serial interval of novel coronavirus (COVID-19) infections”

Article citation: Nishiura H, Linton NM, Akhmetzhanov AR. Serial interval of novel coronavirus (COVID-19) infections. *Int J Infect Dis.* 2020 Mar 4 [Epub ahead of print]. Available from:

[https://www.ijidonline.com/article/S1201-9712\(20\)30119-3/fulltext](https://www.ijidonline.com/article/S1201-9712(20)30119-3/fulltext)

One-Minute Summary

- Using data from 28 pairs of index and secondary cases, the authors estimate a serial interval, the time from illness onset in an index case to illness onset in the secondary case, of COVID-19.
- The **median serial interval was estimated at four days** (95% Credible Interval [CrI], 3.1-4.9).
- When limited to 18 pairs of cases for whom reporting data was more certain, the median serial interval was estimated at 4.6 days (95% CrI: 3.5-5.9).
- The authors report the **median serial interval is close to or shorter than preliminary estimates of the median incubation period (cited as five days)**, suggesting that transmission may occur before illness onset.

Additional Information

- Serial intervals help to understand transmissibility and turnover of case generations.
- The authors considered dates of illness onset extracted from an academic article as “certain” (n=18).
- It is possible that available data during the early stage of an epidemic may exclude pairs with longer serial intervals.

PHO Reviewer’s Comments

- The confidence interval for the median serial interval estimated using the higher quality data overlaps with estimated incubation periods reported elsewhere.
- The sources used for illness onset dates ranged in quality. These included media reports, as well as epidemiological investigations summarized in peer-reviewed journals.

Citation

Ontario Agency for Health Protection and Promotion (Public Health Ontario). Review of "Serial interval of novel coronavirus (COVID-19) infections". Toronto, ON: Queen’s Printer for Ontario; 2020.

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