

Scientific Brief » Post-Exposure Isolation Period for Omicron SARS-CoV-2 Variant

The incubation period for SARS-CoV-2, the virus that causes Covid-19, is 14 days. This is the amount of time after an exposure that it can take for an infection to develop.

While the average incubation period for the Omicron (B.1.1.529) SARS-CoV-2 variant is approximately three days,^{1,2} this is not an appropriate measure to use to determine the post-exposure isolation period. If the average incubation period is used to establish post-exposure isolation time periods, a significant proportion of cases will become infectious after that timeframe.

For public health and occupational health protection, it is necessary to use the range of incubation periods to ensure the timeframe effectively includes the majority of individuals. Research indicates the range of incubation period is approximately from one to 14 days.^{3,4,5}

The U.S. Centers for Disease Control and Prevention (CDC) recently shortened the isolation period for nurses and other workers who have tested positive for Covid-19 from 10 days to seven days and no longer require exposed vaccinated and boosted health care workers to quarantine.⁶ This guidance was updated “to limit the effects of staff shortages caused by Covid-19 on patient care.” In other words, there is no scientific basis from which this guidance was changed. A post-exposure period shorter than 14 days will miss cases, leading to more transmission and endangering nurses, health care workers and their patients.

If a nurse or health care worker is exposed to Covid-19

Exposure to Covid-19 means contact with a suspected or confirmed Covid-19 patient without full personal protective equipment:

- ✓ Respirator at least as protective as an N95
- ✓ Eye protection
- ✓ Isolation gown or coveralls that are at least fluid resistant
- ✓ Medical-grade gloves

Then the nurse or health care worker should be placed on paid precautionary leave for 14 days, irrespective of symptoms.

1 Brandal et al., “Outbreak caused by the SARS-CoV-2 Omicron variant in Norway to December 2021,” *Eurosurveillance*, December 15, 2021, Available at <https://www.eurosurveillance.org/content/10.2807/1560-7917.ES.2021.26.50.2101147>.

2 Jansen et al., “Investigation of a SARS-CoV-2 B.1.1.529 (Omicron) Variant Cluster – Nebraska, November – December 2021,” *MMWR Early Release*, December 31, 2021, Available at <https://www.cdc.gov/mmwr/volumes/70/wr/mm705152e3.htm>.

3 Yan, Lin, Jingyi Dai, et al., “Estimation of incubation period and serial interval of COVID-19: analysis of 178 cases and 131 transmission chains in Hubei province, China,” *Epidem & Infect*, June 19, 2020.

4 Tan, W.Y.T., L.Y. Wong, et al., “Does incubation period of COVID-19 vary with age? A study of epidemiologically linked cases in Singapore,” *Epidem & Infect*, Sept 2, 2020.

5 Elias, C., Sekri, A., Leblanc, P., Cucherat, M., & Vanhems, P. (2021). The incubation period of COVID-19: A meta-analysis. *International Journal of Infectious Diseases*, 104, 708-710. <https://doi.org/https://doi.org/10.1016/j.ijid.2021.01.069>.

6 U.S. Centers for Disease Control and Prevention, “Interim Guidance for Managing Healthcare Personnel with SARS-CoV-2 Infection or Exposure to SARS-CoV-2,” December 23, 2021, <https://www.cdc.gov/coronavirus/2019-ncov/hcp/guidance-risk-assesment-hcp.html>.