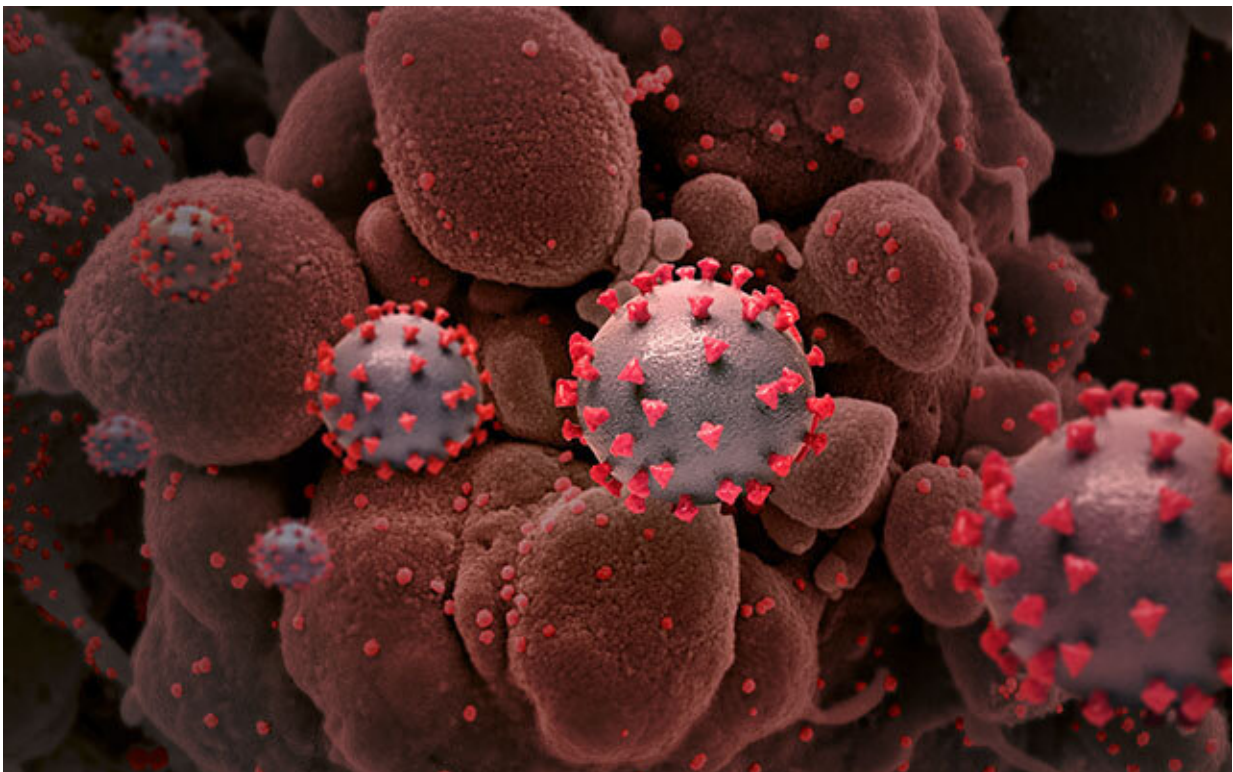


Hospital health care workers in Quebec were at high risk of SARS-CoV-2 infection in first wave of the pandemic

December 13 2021



Creative rendition of SARS-CoV-2 particles (not to scale). Credit: National Institute of Allergy and Infectious Diseases, NIH

Hospital health care workers in Quebec had high rates of antibodies (seroprevalence) against SARS-CoV-2 after the first wave of the

COVID-19 pandemic, especially in hospitals with outbreaks, found a study published in *CMAJ* (*Canadian Medical Association Journal*).

In Quebec, 25% of all COVID-19 cases were among health care workers during the first phase of the pandemic.

"The number of COVID-19 cases reported in health care workers underestimated the number of those infected with SARS-CoV-2 during that period, given limited testing leading to undiagnosed asymptomatic or paucisymptomatic infections," writes Dr. Nicholas Brousseau, Institut national de santé publique du Québec and Centre de recherche du CHU de Québec-Université Laval, with coauthors. "Seroprevalence studies are an important tool to determine the proportion of people infected with SARS-CoV-2, both in the [general population](#) and among health care workers."

This study looked at seroprevalence in more than 2000 health care workers in Quebec, including physicians, nurses, nursing assistants, orderlies and cleaners, between July and September 2020 after the first wave of the COVID-19 pandemic. The authors found a seroprevalence of 18%–32% in 4 Montréal hospitals with outbreaks. Seroprevalence was 5%–7% in 4 other Montréal hospitals without such outbreaks and only 2%–4% in 2 hospitals from less-affected regions in the province.

Health care workers among in-patient COVID-19 units and non-COVID-19 units had higher seroprevalence for SARS-CoV-2 than those in the [intensive care unit](#) or [emergency department](#), perhaps because of the latter units' strict infection prevention and control protocols.

"These findings highlight the elevated risk of infection for health care workers in hospitals, particularly for those working in outbreak settings. Interestingly, the 4 Montréal hospitals with higher seroprevalence were older hospitals, a factor that has been associated with larger outbreaks,"

write the authors.

The data underscore the need for rapid and wide vaccination of [health care workers](#).

"The high risk of SARS-CoV-2 infection in [hospital](#) workers supports the prioritization of this group for SARS-CoV-2 vaccination in Canada and efforts made to achieve a very high vaccine uptake in this population," the authors conclude.

More information: Nicholas Brousseau et al, SARS-CoV-2 seroprevalence in health care workers from 10 hospitals in Quebec, Canada: a cross-sectional study, *Canadian Medical Association Journal* (2021). [DOI: 10.1503/cmaj.202783](https://doi.org/10.1503/cmaj.202783)

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