

## COVID-19 updates for week of Feb. 21

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Across Canada, as of Feb. 20, there were 3,241,869 cases of COVID-19 reported since the pandemic began, with 36,041 deaths, and 128,298 active cases. Hospitalizations as of Feb. 20 accounted for 6,690 cases, while 817 people were in the Intensive Care Unit. As of Feb. 20, Ontario reported 1,966 new cases, but that number is likely higher due to restricted testing. Seventeen deaths were reported, while 1,056 patients were hospitalized, 324 of those are in the ICU. In Hastings Prince Edward County, there were 92 new high-risk cases reported as of Feb. 18, and 364 active high-risk cases. There were nine outbreaks in high-risk settings like LTC homes, and a total of 37 deaths reported throughout the region. There are 23 people hospitalized with two in the ICU. Health Canada approves Novavax COVID-19 vaccine On Feb. 17, Health Canada approved the Novavax COVID-19 vaccine called Nuvaxovid in Canada for use in adults aged 18 years and older. They recommend that it be administered as a two-dose vaccine and that each dose be at least 21 days apart. The first Nuvaxovid delivery is expected in March, arriving from India, according to Canada's chief public health officer, Dr. Theresa Tam. According to trial data, the vaccine is more than 90 per cent effective at preventing severe illness and death, however these trials occurred when the COVID-19 Alpha variant was dominant, so the vaccine's performance against later variants including Omicron, still needs to be submitted to Health Canada when available. Nuvaxovid's most common potential side effects are similar to the side effects that may be experienced by recipients of other COVID-19 vaccines; soreness at the injection spot, chills, fatigue, muscle and joint aches, nausea and headaches. Nuvaxovid is the first protein subunit COVID-19 vaccine approved in Canada. They use nanoparticles of a lab-grown spike protein that mimics the natural spike protein on the surface of the novel coronavirus which helps the virus attach to cells and cause infection. When the particles administered into the body with a compound that enhances an immune response, called an adjuvant, the body recognizes and fights off the virus. This adjuvant is necessary because protein subunit vaccines don't provoke as strong an immune response as whole virus vaccines, and in the case of Nuvaxovid, it uses a propriety adjuvant called Matrix-M. COVID-19 BA.2 variant raising concerns A subvariant of the Omicron variant of COVID-19, called BA.2, spreads faster, may cause more serious infections and current vaccines may be less effective at fighting it, according to lab experiments at the University of Tokyo in Japan. While BA.2 appears to elude vaccine protection, a third booster shot seems to restore a decent level of protection, making illness after infection 74 per cent less likely. It is also resistant to some treatments like the monoclonal antibody treatment sotrovimab, which has been used to fight the original Omicron variant. Experts say that BA.2's mutations are very high from the original COVID-19 virus that emerged in Wuhan back in late 2019. It is also substantially different from the original Omicron variant and previous variants of the COVID-19 virus. This 'stealth Omicron' as it has been called, doesn't show up on PCR tests the way Omicron does and labs have to take an extra step to sequence the virus to find BA.2. The World Health Organization estimates that BA.2 is 30 per cent more contagious than Omicron, has been detected in 74 countries around the world, and has become the dominant strain in 10 of these nations so far. While this is alarming news, it should be noted that these findings have not been peer reviewed and consequently may change with said review. Researchers also note one positive with regard to BA.2; people who've been already infected with Omicron have antibodies that protect them against BA.2, precluding serious infections.