# COVID-19 Omicron Subvariant BA.2

March 2022*

## Background

The COVID-19 Omicron variant was designated a variant of concern by the World Health Organization (WHO) on November 26, 2021, and subsequently designated a variant of concern in Canada on November 28, 2021.[i] In some cases, a variant may further develop additional 'subvariants' which have slight genetic differences but are still similar enough genetically to be considered a part of the same variant. The changes that occur within subvariants may or may not increase the rate of transmissibility of the virus and/or severity of illness. In the case of Omicron, while the specific strain lineage that was first reported in South Africa in November 2021 was B.1.1.529, other subvariants also existed at the time to a lesser extent, but by and large maintained a similar genetic structure to be classified as part of the 'Omicron' variant. These other subvariants include BA.1, BA.1.1, BA.2 and BA.3.[ii]

As of March 2022, the Omicron subvariant BA.2 is gaining in prevalence around the world and has become the dominant strain in some countries including Denmark, India, and South Africa.[iii] Specifically in Denmark, BA.2 was linked to 20% of all COVID-19 infections in December 2021, 45% of infections in January 2022, and rose to more than 90% of all cases by the end of February, quickly surpassing BA.1 as the dominant strain in the country.[iv] The increase of BA.2 in these locations has led researchers to question whether this subvariant could overtake BA.1 globally, and if so, what further toll this may take on countries around the world and their health care systems.

Whether BA.2 transmission will increase and overtake BA.1 in other parts of the world including in Canada remains to be seen. At the time of this writing, just over 2000 cases of COVID-19 caused by BA.2 have been reported across Canada, comprising approximately 27% of all COVID-19 cases (BA.1.1 remains the dominant strain in Canada in March 2022).[v] Based on initial data out of Europe, the BA.2 subvariant is shown to be approximately 30% more transmissible than the BA.1 subvariant, and the severity of illness is believed to be approximately the same as that of BA.1.[vi] As this subvariant is still relatively new, it is unclear if this subvariant will continue to grow in prevalence in North America or if it will induce another spike in hospitalizations during the Omicron wave.

Nurses continue to maintain the public's trust by providing safe, ethical, and evidence-based care throughout this pandemic and during this extremely challenging Omicron wave that takes further toll on the health care system. Nurses are leaders in shaping and stewarding pandemic response and know the importance of practising layers of protection. The layers of protection include becoming vaccinated, correctly wearing a tight-fitting mask, washing hands regularly, practising physical distancing, and maintaining sufficient ventilation. The COVID-19 vaccines approved for use in Canada provide very good protection against all variants of COVID-19, including the Omicron variant and subvariants. The BC Centre for Disease Control (BCCDC) and the Public Health Agency of Canada (PHAC) will continue to monitor COVID-19 across the country. For the most accurate and up-to-date information regarding Omicron and the BA.2 subvariant, it is important to check these resources regularly.

## Key Messages

- The COVID-19 Omicron variant was designated a variant of concern in November 2021 and soon overtook Delta as the dominant strain globally.
- BA.2, a subvariant of Omicron, began spreading more rapidly in some countries around the world in early 2022, notably in Denmark, India, South Africa, the UK and the US.
- Current evidence shows that BA.2 is approximately 30% more transmissible than the BA.1 Omicron subvariant, and that it leads to approximately the same level of severity of disease to that of BA.1.

- In March 2022, BA.2 accounts for approximately 27% of COVID-19 cases across Canada, with subvariants BA.1 and BA.1.1 accounting for approximately 16% and 57%, respectively.
- Nurses continue to be at the forefront of COVID-19 pandemic response by providing safe, ethical, and competent care to British Columbians, even through this extremely challenging Omicron wave.

## Further Reading/Resources

- COVID-19 Omicron Variant
- Understanding the COVID-19 (SARS-CoV-2) Variants
- BCCDC: COVID-19 Variants (Including updates on Omicron)
- WHO: Tracking SARS-CoV-2 Variants
- Pango Network: Updates to Omicron Lineage B.1.1.529
- COV-Lineages: BA.2

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[i] Public Health Agency of Canada. 'SARS-CoV-2 variants: National definitions, classifications and public health actions.' Dec 23, 2021. https://www.canada.ca/en/public-health/services/diseases/2019-novel-coronavirus-infection/health-professionals/testing-diagnosing-case-reporting/sars-cov-2-variants-national-definitions-classifications-public-health-actions.html

[ii] World Health Organization. 'Tracking SARS-CoV-2 variants.' Updated Jan 25, 2022. https://www.who.int/en/activities/tracking-SARS-CoV-2-variants/;

Pango Network. 'Updates to Omicron lineage B.1.1.529.' Sept 12, 2021. https://www.pango.network/updates-to-omicron-lineage-b-1-1-529/

[iii] Nagarkatti, P, and Nagarkatti, M. *The Conversation*. 'What is the new COVID-19 variant BA.2, and will it cause another wave of infections in the US?' Mar 22, 2022. https://theconversation.com/what-is-the-new-covid-19-variant-ba-2-and-will-it-cause-another-wave-of-infections-in-the-us-179619.

[iv] Statens Serum Institut (SSI). 'Now, an Omicron variant, BA.2, accounts for almost half of all Danish Omicron-cases.' Jan 20, 2022. https://en.ssi.dk/news/news/2022/omicron-variant-ba2-accounts-for-almost-half-of-all-danish-omicron-cases;

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[v] Health Canada. 'COVID-19 daily epidemiology update.' Mar 24, 2022. https://health-infobase.canada.ca/covid-19/epidemiological-summary-covid-19-cases.html#submittingLabsSec.;

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[vi] Stein, R. *NPR*. 'More contagious version of omicron spreads in U.S., fueling worries.' Feb 21, 2022. https://www.npr.org/sections/health-shots/2022/02/21/1081810074/omicron-ba2-variant-spread.