

COVID-19 Subvariant EG.5

October 2023

Background

The COVID-19 Omicron variant was first designated a variant of concern in November 2021, and has since led to various subvariants, including [BA.1](#), [BA.2](#), [BA.3](#), [BA.4](#), [BA.5](#), [BA.2.86](#), and [XBB.1.5](#). While many are familiar with the BA lineages and the XBB lineage detected earlier this year, the EG.5 variant, also unofficially referred to as the 'Eris' variant, became more prevalent in BC in July 2023, and surpassed XBB infections in August.ⁱ As of late September 2023, EG.5 including its sublineages (EG.5.1, EG.5.1.1, etc.) is the dominant COVID-19 strain in BC and through much of the world.ⁱⁱ EG.5 was designated a 'variant under monitoring' by the Public Health Agency of Canada on June 22, and later deemed a 'variant of interest' on August 11.ⁱⁱⁱ

In BC, by the end of August 2023, EG.5 and its sublineages accounted for approximately 36% of all sequenced COVID-19 infections, with infections occurring at approximately the same rate across all age groups, from young children to adults over 80 years.^{iv} By early October, it is estimated that EG.5 could account for anywhere between 39-60% of COVID-19 cases across Canada, based on analysis of growth trends from recent weeks and wastewater data.^v

According to the World Health Organization, EG.5 has the fastest growth rate and is more transmissible than other COVID-19 variants in circulation.^{vi} However, further research is required to determine if there are any other effects caused by this variant, such as increased severity of illness or effects on [post-COVID-19 condition](#) (also known as long COVID-19). Preliminary data show that EG.5 may have increased immunity evasion over previous subvariants, however, this information is still under review.^{vii} Using layers of protection including wearing a well-fitting mask, ensuring adequate and up-to-date ventilation, staying home when feeling unwell, washing hands thoroughly and often, practising physical distancing measures, and keeping up to date with routine immunizations including COVID-19 booster doses remain important ways to protect against infection.

EG.5 is genetically descended from Omicron XBB strains, the variant targeted by COVID-19 vaccines during this fall 2023 immunization campaign.^{viii} The Moderna and Pfizer vaccines formulated to offer more robust protection against COVID-19 including XBB variants were approved by Health Canada on September 12 and September 28, respectively,^{ix} and are also expected to provide stronger protection against EG.5.^x A third vaccine produced by manufacturer Novavax is also formulated to offer better protection against current variants, and is currently under review by Health Canada.

Nurses are leaders in public health and remain forefront in COVID-19 response, prevention, and immunization. As such, the public continue to rely on nurses for the most up-to-date information about COVID-19 and protection against all viruses this respiratory season. Especially as we head into respiratory illness season this fall, BC residents are strongly encouraged to continue to administer layers of protection and stay up to date with COVID-19 and routine immunizations. The [BC Centre for Disease Control](#) and the [Public Health Agency of Canada](#) will continue to monitor COVID-19 developments as well as provide pertinent updates regarding public health protection.

Key Messages

- The COVID-19 Omicron subvariant EG.5 became prevalent in BC in summer 2023 and was designated a variant of interest by the Public Health Agency of Canada in August 2023.
- Subvariant EG.5 overtook XBB as the most common COVID-19 variant in BC in August 2023.
- COVID-19 subvariant EG.5 is a genetic descendent of earlier XBB strains.
- COVID-19 vaccines approved for use in Canada continue to be highly effective at providing strong, long-term protection against all variants of COVID-19.
- The COVID-19 vaccines approved by Health Canada for fall 2023 immunizations are targeted to offer more robust protection against XBB strains, which includes EG.5.
- In addition to immunization, it's important to practice layers of protection to prevent against illness, including hand washing, wearing a mask, physical distancing, staying home when unwell, and keeping up to date with all routine immunizations including those for other viruses.
- Nurses continue to be at the forefront of COVID-19 response, providing safe, ethical, and evidence-informed care.

Resources

- WHO: [EG.5 Updated Risk Evaluation](#)
- NNPBC: [Why It's Important to Get Your COVID-19 Vaccine Booster](#)
- BC Centre for Disease Control: [COVID-19 Variants](#)
- Public Health Agency of Canada: [SARS-CoV-2 variants: Variants under Monitoring](#)
- UBC News: [New variants, new vaccines. Here's what you should know about COVID-19 going into fall.](#)

ⁱ BC Centre for Disease Control. [Respiratory Surveillance: Genomic Surveillance](#). Sep 21, 2023.

ⁱⁱ Dyer, O. *BMJ*. [Covid-19: Infections climb globally as EG.5 variant gains ground](#). Aug 16, 2023.;

Abbasi, J. *JAMA*. [What to Know About EG.5, the Latest SARS-CoV-2 "Variant of Interest."](#) Aug 18, 2023.;

World Health Organization. [COVID-19 Epidemiological Update: Edition 159](#). Sep 29, 2023.

Subdhan, A and Edwards, S. *Globe and Mail*. [What to know about the new COVID-19 variant EG.5](#). Aug 10, 2023.

ⁱⁱⁱ Public Health Agency of Canada. [SARS-CoV-2 variants: National definitions, designations, and public health actions](#). Aug 28, 2023.

^{iv} BCCDC. [Respiratory Surveillance: Genomic Surveillance](#). Sep 21, 2023.

^v Health Infobase Canada. [COVID-19 epidemiology update: Testing and variants](#). Oct 4, 2023.;

Health Infobase Canada. [COVID-19: Wastewater monitoring dashboard](#). Oct 3, 2023.

^{vi} WHO. [EG.5 Updated Risk Evaluation](#). Sep 2023.

^{vii} O Dyer. *BMJ*. [Covid-19: Infections climb globally as EG.5 variant gains ground](#). Aug 2023.

^{viii} World Health Organization. [EG.5 Updated Risk Evaluation, 21 September 2023](#). Sep 21, 2023.;

BC Gov News. [Actions protect people, B.C. communities this respiratory illness season](#). Sep 28, 2023.

^{ix} BC Gov News. [Actions protect people, BC communities this respiratory illness season](#). Sep 2023.

^x O Dyer. *BMJ*. [Covid-19: Infections climb globally as EG.5 variant gains ground](#). Aug 2023.