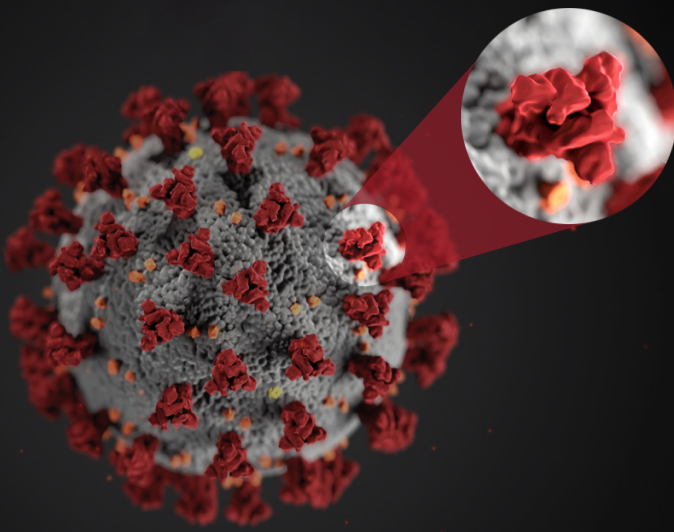
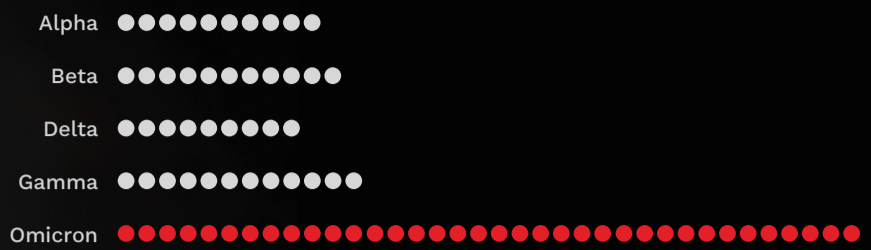


Original SARS-CoV-2 VS. Omicron variant

Since its emergence in 2019, the SARS-CoV-2 virus has spread through billions of people, allowing it to evolve to be fitter. Variants that perform better will quickly outcompete other strains to become the dominant strain.



Number of spike protein mutations in variants



36

The number of mutations in the **spike protein** Omicron harbours compared to the original strain¹.

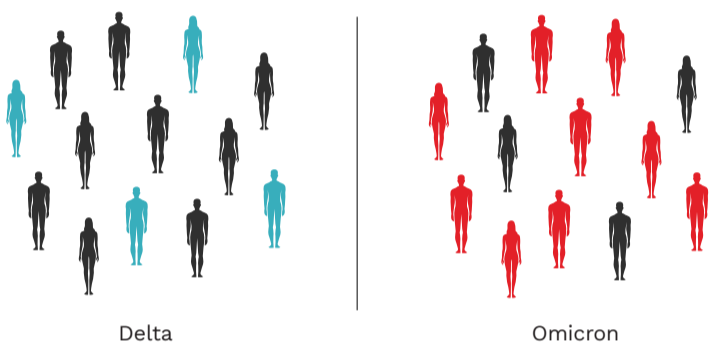
The substantial number of new mutations in Omicron's genetic makeup has enabled it to **behave and look very differently** from the original strain of SARS-CoV-2 as well as the other variants of concern. Some of these mutations are linked to more efficient cell entry, immune evasion, and increased infectivity.



Omicron is up to

3X

more transmissible than the Delta strain².



Self-isolation of individuals who have caught the virus as well as any close contacts is the best way to reduce transmission.

Common Symptoms of Omicron



Congestion



Runny nose



Sore throat



Fatigue



Headache

Other COVID symptoms are less common in Omicron cases, but may still occur, such as cough, loss of taste and smell, nausea, vomiting and diarrhea, muscle and body aches, fever or chills, difficulty breathing, and shortness of breath³. Even in the absence of symptoms, individuals can **still transmit the virus**.

What about disease severity?



Insofar, infection with Omicron has been reported to be generally **less severe** compared to the original strain. However, some people may still be hospitalized and even die⁴.

Vaccines to the rescue!

Vaccines remain the best public health measure to protect people from COVID-19, slow transmission, and reduce the likelihood of new variants emerging. A third (booster) dose of vaccine is **90% effective** at keeping people out of hospital (when measured 14-days or more after the third dose)⁵.

Antibodies generated from prior exposure have a hard time detecting Omicron as it **'looks' quite different**. However, antibodies are not our only line of defence. **T cells** are a form of immunity that have shown to reduce the severity of disease.



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COVID-19
IMMUNITY
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GRUPE DE TRAVAIL
SUR L'IMMUNITÉ
FACE À LA COVID-19

Information in this article was accurate at the time of original publication. Because information about COVID-19 changes rapidly, we encourage you to visit the websites of the Public Health Agency of Canada (PHAC), Health Canada, the World Health Organization (WHO), and your provincial/territorial and local governments for the latest information.