COVID-19 Variants of Concern – What You Need to Know

Saskatchewan has detected COVID-19 variants of concern. Variants of concern are present in Canada and there is evidence of community transmission in all provinces at this time.

The best personal protection against variants of concern are the same measures that are already in place to protect against COVID-19. Following these public health measures at all times and in all locations will reduce the risk of transmission.

What are COVID-19 variants of concern?

The genetic sequence of a virus changes by chance when it multiplies, creating variants. The changes or mutations in the genetic sequence result in physical changes in the protein structures of the virus that can make the virus stronger, weaker, or have no effect at all. SARS-CoV-2, the virus that causes COVID-19, has changed over time during the pandemic so that there are now many variants circulating around world.

COVID-19 variants of concern have mutations that have made the virus more infectious, may evade the immune system, or may be more likely to cause severe disease. How the virus is spread from person to person and the symptoms it causes have not changed. Older individuals and those with underlying health conditions continue to be those at greatest risk of severe illness and death from COVID-19.

Evidence indicates that the variants of concern are more transmissible, meaning that it takes less potential exposure time to catch a COVID-19 variant and that a person develops symptoms faster.

What is the best means of preventing transmission of COVID-19 variants of concern?

The best preventative measures against the variants of concern remain the same but individuals should be extra vigilant because the variants of concern are more transmissible:

- Wear a mask and physically distance whenever you are outside your household
- Wash your hands frequently
- Clean and disinfect frequently-touched surfaces often
- Stay home with even the most mild symptoms and make arrangements to get a COVID-19 test
- Avoid non-essential travel
- Abide by the public health orders and guidelines at home and in all settings outside of your home including schools, workplaces and other public settings.
Should I be double-masking?

Based on the current evidence, abiding by the current masking protocol should continue to prevent the transmission of variants of concern.

- If wearing a non-medical mask, three layers is the best option. Two layers should be tightly woven material fabric, such as cotton or linen with the third, middle layer made of a filter-type fabric, such as non-woven polypropylene fabric.


Will the vaccines work against the variants of concern?

Globally, public health officials are monitoring the effectiveness of the vaccines against the variants of concern and we are seeing manufacturers review their products to confirm that they will be effective.

Vaccination programs may be modified to ensure the most effective vaccines are used if we see certain variants become predominant and vaccine supplies permit. Overall, increased vaccination for COVID-19 will reduce transmission, including that of the variants of concern.

Why does it take so long to find out if a confirmed COVID-19 case is also a case of one of the variants?

PCR tests, the gold standard in COVID-19 testing, detects the virus, including the new variants. Variants of concern are identified by genome sequencing of the laboratory specimen.

As of March 10, all positive COVID-19 cases will have a SNP (single nucleotide polymorphism) test performed at the Roy Romanow Provincial Laboratory (RRPL) to screen for a mutation which is common to all three variants of concern. SNP tests will be done on all positive tests, with results within 24 hours of a positive sample identified by or received at the testing laboratory.

A positive result on a SNP test will be considered presumptively positive for a variant of concern while whole genome sequencing is completed to determine the variant type. All positive SNP results will be reported on the patient record available at MySaskHealthRecord.

The RRPL is completing whole genome sequencing on 190 samples per week and sending 120 specimens per week to the National Microbiology Laboratory in Winnipeg on select confirmed cases. In addition to the SNP confirmatory testing, Saskatchewan is prioritizing sequencing on confirmed cases with a history of international travel, links to outbreaks, where the individual has received a COVID-19 vaccine, severe illness in persons younger than 50 years (e.g. those who are admitted to ICU) and a proportion of random samples.

It can take one to two weeks to receive results from whole genome sequencing.
Does the time it takes to get the whole genome sequencing results increase the risk for variants cases to spread in the community?

Once a positive test result is received, all confirmed COVID-19 cases are required to isolate for at least 10 days and 48 hours after their symptoms resolve. At this time, this is the requirement for all confirmed COVID-19 cases.

All close contacts of a COVID case are also required to isolate for 14 days from their last exposure. This is required to prevent ongoing transmission because the virus can spread before individuals are aware that they are infected.

The Government of Saskatchewan will keep the public informed about whether variants of concern have been identified in Saskatchewan. Public service announcements will be issued if there is a risk of transmission to the public from any COVID19 case.

What are the implications for pandemic planning and health care system response?

Modelling data suggests that if a variant is more transmissible and becomes the predominate strain circulating, it will result in more cases. Additional cases may result in additional in-hospital admissions and deaths.

Saskatchewan public health officials are examining current surveillance, modelling and case investigation protocols in order to respond to variants of concern within the pandemic response plan. Public health orders and health system capacity decisions will be based on the most likely scenarios for Saskatchewan.

Do the variants of concern require any new precautions for health care workers?

Based on what is known about the current variants of concern and the precautions that are in place, there is no evidence that health care workers need to take any new precautions. Continuing to practice the safe use of PPE including proper donning and doffing, is the best way to keep safe. Follow all continuous masking policies in facilities; maintain physical distancing of at least six feet or two metres where possible, and do not share any food or drink, even in break rooms.

For more information, please visit: saskatchewan.ca/COVID19.