Understanding Your Variant of Concern (VOC) Test Result

How are my results reported?

Provincial labs are now reporting both COVID-19 test results and, if applicable, the detection of Variants of Concern (VOCs). Your COVID-19 test results include:

1. Your initial COVID-19 test result that reports if you have tested positive or negative for the virus.
2. If your initial COVID-19 test result is positive, your result will also include a VOC screen, that reports whether your infection is likely to be one of the VOCs.

Variants are viruses that have changed or mutated over time. A variant of the virus that causes COVID-19 becomes a VOC when its changes have a clinical or public health significance that might impact spread, severity of the disease, disease treatment, vaccine effectiveness, or diagnostic testing. For this reason, we assess which variant may be present.

Different variants have different characteristics, and they are named using letters and numbers indicating the specific gene mutation. Currently, most COVID-19 infections in Ontario and Quebec involve a VOC strain.

What does my initial COVID-19 test result mean?

If your result is “Not Detected” or “Negative”:

- You tested negative for COVID-19.
- If you have no known exposure to COVID-19 and you have not recently travelled outside of Canada, you can end self-isolation when symptoms have improved for at least 24 hours without fever-reducing medications.
- If you have a known exposure to COVID-19 or you have recently travelled outside of Canada, you can end self-isolation 14 days from your last exposure to the close contact or your return to Canada, as long as your symptoms have improved for at least 24 hours without fever-reducing medications.
- If this is a re-test following a positive test (i.e., you have tested positive within the preceding 10 days), Ottawa Public Health will advise when you can end self-isolation.
- If symptoms included vomiting or diarrhea, these symptoms must be resolved for 48 hours prior to returning to school, childcare, or work.
- If you develop new symptoms or have ongoing symptoms, re-testing is recommended.

If your result is “Not performed” or “Invalid sample”:

- A problem occurred during the analysis of your test and no results are available.
- Please return to be tested again as soon as possible – no appointment is necessary.

If your result is “Indeterminate”:

- Your test result is in the range where it is difficult to confirm or rule out COVID-19 and must be interpreted in consideration of symptoms and known exposures to COVID-19.
- You must remain in isolation until a staff member at a testing centre or Ottawa Public Health contacts you to explain the next steps.

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If your result is “Detected” or “Positive”:
- You tested positive for COVID-19 and your specimen will be further tested to determine the VOC strain of the virus.
- You must remain in isolation until a staff member at the testing centre or Ottawa Public Health contacts you to explain the next steps.
- Your household contacts must isolate themselves for 14 days after their last contact with you and get tested:
  - As soon as possible, and if negative, again on day 10 or later after their last contact with you.
  - If not tested right away, test on day 7 or later after their last contact with you.
  - Immediately if they develop symptoms (even if they have previously tested negative).
- If your household contacts cannot break contact with you (e.g. a young child), then they must self-isolate for 14 days beginning 10 days AFTER your symptom onset.
- Please contact all other people you were in contact with during the 48 hours before you developed symptoms OR 48 hours before you were tested if you do not have symptoms, up until the time you began to self-isolate.
  - They must now isolate for 14 days from their last contact with you.
  - They are advised to get tested immediately if they become symptomatic. If they remain asymptomatic, they should be tested at least 7 days after the last contact with you.

What does the VOC screening section mean?
If your COVID-19 test result is “Detected” or “Positive”, then the VOC screening test should be reported within the next 24 to 48 hours.

If your “VOC SG” Record is “Detected” then the follow results apply:

| If your report is “Detected” for COVID-19 or SARS-CoV-2 and “Not Detected” in any other fields | You tested positive for the original COVID-19 strain and no VOC was detected |
| If your report is “Detected” for N501Y and “Not Detected” for E484K | You likely tested positive for the B.1.1.7 variant (first detected in the United Kingdom) |
| If your report is “Detected” for N501Y and “Detected” for E484K | You likely tested positive for either the B.1.351 variant (first detected in South Africa) or P.1 variant (first detected in Brazil) as these VOCs carry both mutations |
| If your report is “Detected” for E484K and “Not Detected” for any other records | You tested negative for known VOCs (the B.1.1.7, B.1.351 and P.1 variants); you may have a different variant that is not known to be a VOC |
| If your report is “Not Detected” for N501Y and E484K | You tested negative for known VOCs (the B.1.1.7, B.1.351 and P.1 variants) |
| If your report is “Unable to complete” or “INVALID” | The VOC test was incomplete |

Real examples of the above results can be found on pages 4-6 of this document.
Note that testing negative for VOCs does not mean that you have tested negative for COVID-19. Your VOC screen results may state that “COVID-19 was not detected,” which means that it was not detected during the VOC screen phase only.

I tested positive for a VOC. What does that mean?

We are tracking VOCs due to the public health risk. Close monitoring will tell us, at a population level, if VOCs impact the number of people infected and the severity of those infections. This will help officials determine whether different strategies are required to control COVID-19.

There is uncertainty about the significance of a VOC infection and its impact on an individual’s health. Whether you test positive for a VOC or the original COVID-19 strain, your actions and response should remain the same:

- You must self-isolate immediately to protect those around you.
- Your contacts should continue to self-isolate and be tested, as outlined above.
- If your symptoms worsen, please contact your primary care provider, see a doctor at a COVID-19 Care Clinic, or present to the Emergency Department nearest you. If you have severe shortness of breath, have passed out, have chest pain, or any other symptom that prevents you from safely getting to care, please dial 9-1-1 for emergency services.
- Follow Ottawa Public Health’s guidance and continue to be COVIDWise to help keep COVID-19 under control.

For more information

Example VOC test results

Ontario Laboratories Information System

Part 1: Initial COVID-19 test result
The patient has tested positive for COVID-19.

Part 2: VOC screen
The report is “Detected” for E484K and “Not Detected” for any other records.

The patient has tested negative for known VOCs (the B.1.1.7, B.1.351 and P.1 variants); they may have a different variant that is not known to be a VOC.
Part 1: Initial COVID-19 test result
The patient has tested positive for COVID-19.

Part 2: VOC screen
The report is "Detected" for N501Y and "Not Detected" for E484K.
The patient has likely tested positive for the B.1.1.7 variant (first detected in the United Kingdom).
Part 1: Initial COVID-19 test result
The patient has tested positive for COVID-19.

Part 2: VOC screen
The report is “Detected” for N501Y and “Not Detected” for E484K.

The patient has likely tested positive for the B.1.1.7 variant (first detected in the United Kingdom).