

<b>DATE:</b>	2021 December 10
<b>TO:</b>	All Health Care Providers
<b>FROM:</b>	Alberta Precision Laboratories (APL) – Public Health Laboratory
<b>RE:</b>	<b>SARS-CoV-2 Variant of Concern Update</b>

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## Key Message

- All COVID-19 positive samples tested by APL, DynaLIFE, and the border testing programs are currently being tested for SARS-CoV-2 variants of concern.
- Omicron (lineage B.1.1.529), the recently announced variant of concern, is detected by the APL – Public Health Laboratory variant testing and SARS-CoV-2 genomic surveillance program.
- Starting December 10, 2021, variant of concern results will be reported using the Greek alphabet nomenclature used by the World Health Organization (WHO) as per the below table.

## Interpretation of COVID-19 Variant Nucleic Acid Test results

Result	Interpretation
<b>Negative</b>	<ul style="list-style-type: none"> <li>• No variant of concern is detected.</li> <li>• <b>This patient still has COVID-19.</b></li> </ul>
<b>Positive</b>	<ul style="list-style-type: none"> <li>• A variant of concern is detected. The lineage will be reported under Lineage or Lineage Confirmation as Alpha, Beta, Gamma, Delta, or Omicron.</li> <li>• “See Lineage Conf” indicates that the lineage result is pending and will be reported later.</li> <li>• Lineage Confirmation may also be reported as Wild-type (occurs infrequently if sequencing indicates it is not a variant of concern) or Unresolved (if sequencing is unsuccessful).</li> </ul>
<b>Unresolved</b>	<ul style="list-style-type: none"> <li>• The viral load is too low to perform variant testing.</li> <li>• The strain could potentially still be a variant of concern and should not be treated as a negative result.</li> <li>• <b>This patient still has COVID-19.</b></li> </ul>

## Background

- The APL – Public Health Laboratory has been using screening PCR tests to detect SARS-CoV-2 variants of concern since February 2021 and whole genome sequencing to determine lineages since the beginning of the pandemic.



- Currently, the five variants of concern recognized by the WHO and Public Health Agency of Canada are Alpha (also known as B.1.1.7), Beta (B.1.351), Gamma (P.1), Delta (B.1.617.2 and AY lineages), and Omicron (B.1.1.529).
- As with all variant testing, Omicron positive results are reported to Public Health, the ordering physician, and downstream reporting applications (e.g., Netcare, Connect Care).
- To align with the WHO nomenclature (<https://www.who.int/en/activities/tracking-SARS-CoV-2-variants/>), the APL – Public Health Laboratory will now report variants of concern using their Greek alphabet designations instead of the lineage names (e.g., Delta instead of B.1.617.2). Lineages will not be retrospectively updated in the patient's chart.
- As the virus evolves, changes in the lineages reported will reflect the current taxonomic classification system.
- The APL – Public Health Laboratory will continue to perform whole genome sequencing for the surveillance of SARS-CoV-2 lineages and variants of concern.

### **Actions required**

- Refer to the above table to understand how variants of concern are reported.
- Clinicians do not need to request variant of concern testing. The laboratory is testing all COVID-19 positive samples for all variants of concern.
- Continue following Public Health and Infection Prevention and Control guidelines as they pertain to COVID-19 and variants of concern.

### **Inquiries and feedback may be directed to**

- Dr. Nathan Zelyas, Medical Microbiologist, APL – Public Health Laboratory, [nathan.zelyas@aplabs.ca](mailto:nathan.zelyas@aplabs.ca)

### **Approved By**

- Dr. Graham Tipples, Medical Scientific Director, APL – Public Health Laboratory