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Laboratory Bulletin

DATE:	27 January 2023
TO:	All Healthcare Providers
FROM:	Alberta Precision Laboratories (APL) Microbiology and Public Health Laboratory (ProvLab)
RE:	**Update on SARS-CoV-2 Variant Surveillance**

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Key Message

- SARS-CoV-2 variant screening assays will be discontinued for samples received at ProvLab on February 2, 2023.
- Genome sequencing will continue to be carried out on a subset of positive samples to maintain the surveillance of SARS-CoV-2 in Alberta.

Background

- SARS-CoV-2 variant screening polymerase chain reaction (PCR) assays were implemented in Alberta in early 2021 to supplement the ongoing surveillance already being done with genome sequencing.
- Due to the nature of the variant screening assays, they cannot be implemented in a timely fashion, resulting in skewed surveillance results when new lineages emerge and begin to spread widely (this is occurring currently as BQ.1 and related lineages are predominant in Alberta but the screening assays are unable to distinguish these from BA.5).
- The rate at which new sublineages and recombinant lineages are emerging makes it extremely challenging to continue to design and implement new variant screening tests.
- Variant screening and lineage determination for the currently circulating variants do not play a role in patient management and are meant only for surveillance purposes; discontinuing the screening assays will not impact patient care.
- Genome sequencing provides a full picture of each SARS-CoV-2 strain infecting individuals rather than just a few mutations, allowing full genetic characterization and precise lineage determination.
- No other province in Canada is using variant screening – only genome sequencing is being used.
- Genome sequencing by itself will provide an accurate picture of variant circulation in Alberta and continue to have the ability to detect new emerging variants.

Action Required

- No action is required as variant screening has been occurring automatically for all COVID-19 cases.
- Be aware that during this transition of testing, there may be cancelled variant screening assay reports sent to ordering physicians and in the patient's chart. This is due to the time it will take to modify existing IT pathways originally created to facilitate variant screening. While the variant screening assay will be cancelled, the specimen may undergo genome sequencing, the results of which will not be reported to the ordering clinician.

Inquiries and Feedback

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