

DATE:	2021 July 12
TO:	All Health Care Providers
FROM:	Alberta Precision Laboratories (APL) – Public Health Laboratory
RE:	Serology Testing for COVID-19

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Key Message

- Beginning **July 2, 2020**, serology for COVID-19 has been available primarily for serosurveys and research use.
- Serology should **NOT** be used for diagnosis of acute COVID-19 infection.
- There are no data or recommendations at present to support post-immunization serology testing. Vaccine doses should be administered as per public health recommendations (<https://www.alberta.ca/covid19-vaccine.aspx>).
- Diagnostic testing for acute COVID-19 continues to be done by polymerase chain reaction (PCR) of nasopharyngeal or throat swabs.

Clinical Indications for Serology

- All serology requests **must be approved by the Virologist-on-call (VOC)**. *Please consult the VOC **PRIOR** to ordering the serology for your patient, so your patient does not inadvertently undergo phlebotomy in case the test is not approved.*
- There are a few situations in which COVID-19 serology may help with patient management. These may include:
 - [Multisystem inflammatory syndrome](#)
 - Pernio-like acral lesions or Chilblains (COVID-toes)
 - Vasculitis in young children
 - Unusual neurologic or thromboembolic events
- Testing for COVID-19 antibodies post vaccination is not indicated at present given lack of guidance on interpretation and further actions on any results obtained.
- Serology testing should also not be used as evidence to inform whether vaccine doses have been effective or if they are needed. At this time, individuals who have been previously infected with COVID-19 are still recommended to receive 2 doses of vaccine for maximal protection.
- Public health recommendations regarding COVID-19 immunization can be found at <https://www.alberta.ca/covid19-vaccine.aspx>.
- Frequently asked questions about COVID-19 can be found here: [COVID-19 FAQ](#).
- A news release from Alberta Health about other serology studies can be [found here](#).

COVID-19 serology test method

- COVID-19 serology testing (SARS-CoV-2 IgG assay, Abbott Laboratories) will be implemented July 2, 2020.
- Detection of IgG antibodies was very high at ≥21 days post-symptom onset.
- Use of serology for clinical use prior to 21 days post-symptom onset is **not recommended**.



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- No cross-reactivity to other respiratory viruses was detected in our evaluation of the assay.

Questions/Concerns

- Dr. Jamil Kanji, Medical Microbiologist, Interim APL Public Health Programme Leader for COVID-19 Serology, Jamil.kanji@ahs.ca

Approved by

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