

## LABSTRACT – MAY 2021

# COVID-19 IgG Serology Testing at Public Health Ontario Laboratory

## Audience

Healthcare providers, public health units, specimen collection centres, and laboratories involved in submission of specimens for COVID-19 testing.

## Overview

Serology testing for novel coronavirus 2019 (COVID-19) currently offers **very limited clinical value for individual patients**.

The limited utility of COVID-19 serology as a clinical diagnostic tool is due to the high risk for false positive and false negative results at this time, the uncertainty of serology as a marker of immunity, and if so, how much it correlates with immunity and for how long.

However, there are a few rare and severe clinical presentations that are caused by SARS-CoV-2, the causative agent of COVID-19 that may warrant COVID-19 serology as an adjunctive tool necessary to guide clinical management.

Public Health Ontario's (PHO) Laboratory performs testing for COVID-19 IgG antibodies on individuals with a severe clinical presentation where a serology result could be used as an adjunctive tool to guide clinical management and decision making.

COVID-19 serology may be considered for clinical use as an adjunct to COVID-19 PCR testing only in:

- Pediatric patients suspected to have multisystem inflammatory syndrome in children (MIS-C) with a negative, indeterminate, or inconclusive PCR test result or who were not tested (effective August 6, 2020)
- Adult patients suspected to have multisystem inflammatory syndrome (MIS-A) with a negative, indeterminate, or inconclusive PCR test result or who were not tested (effective May 17, 2021)

Other clinical scenarios of severe illness with negative PCR tests where serology results may be helpful for action and decision making may be considered and require consultation and approval by a PHO microbiologist prior to collection. The microbiologist can be contacted through the PHO Laboratory Customer Service Centre.

COVID-19 Serology should **NOT** be used for:

- The diagnosis of acute infection. If the patient is symptomatic, a respiratory specimen should be tested by [COVID-19 PCR Testing](#), the gold standard for the diagnosis of current COVID-19 infection.
- Determining the infectivity of a patient.
- Determining immune status of the patient (i.e., protection against future infection).
- Determining COVID-19 vaccination status or serological response to vaccination.

For detailed and most up-to-date information on COVID-19 serology testing at PHO Laboratory, including testing indications, specimen collection, submission guidance, and testing algorithm, please refer to the PHO Laboratory [COVID-19 Serology Test Information Sheet](#). COVID-19 serology must be ordered using the [COVID-19 Serology Test Requisition](#). Tests ordered on OHIP or non-PHO requisitions will not be accepted for specimen collection or submission.

## For further information

- Contact the PHO Customer Service Centre at 416-235-6556 or 1-877-604-4567 (toll-free), or by email at [customerservicecentre@oahpp.ca](mailto:customerservicecentre@oahpp.ca)
- For PHO Laboratory specimen collection information and previous Lababstracts, refer to [publichealthontario.ca/about-laboratory-services](https://publichealthontario.ca/about-laboratory-services)
- PHO Laboratory's Test Information Sheets are available at [publichealthontario.ca/test-information-index](https://publichealthontario.ca/test-information-index)
- The current version of the PHO Laboratory dedicated COVID-19 Serology Test Requisition and COVID-19 PCR Test Requisition are available at [publichealthontario.ca/Requisitions](https://publichealthontario.ca/Requisitions)
- To subscribe to future Lababstracts, [register on our website](#)
- To register for Autofax and receive laboratory reports by fax directly from our laboratory information system as soon as they are released, contact the PHO Laboratory Customer Service Centre.