COVID-19 Antibody (Serology) Testing Summary for Clinicians

As opposed to the PCR tests and rapid antigen tests that are respectively used for diagnosing or screening for COVID-19 infection by detecting parts of the actual COVID-19 virus, serology testing looks for antibodies to the COVID-19 virus.

Serology is not currently recommended to assess for immunity to COVID-19 following either vaccination or infection (CDC, PHO-L, Health Canada), it is not yet known how the level of antibodies correlates with level of immunity. Neither should serology be used to diagnose an acute infection, reinfection, or determine the infectivity of a patient with COVID-19 (PHO-L).

It is recommend that previously infected individuals become fully vaccinated against COVID-19 to provide better protection against reinfection (CDC).

The clinical indications of ordering COVID-19 serology are currently quite limited. It may be considered in patients suspected to have multisystem inflammatory syndrome in children (MIS-C) or adults (MIS-A) with a negative, indeterminate, or inconclusive PCR test result or who were not tested (PHO-L).

If you think that the test is clinically indicated for a condition other than MIS-C or MIS-A, contact PHO-L to discuss with a microbiologist ($\frac{416-235-6556}{1-877-604-4567}$), otherwise the test will likely be rejected. At their own expense, patients can request serology through a private lab for non-clinically indicated testing.

References and Resources:

CDC: Interim Guidelines for COVID-19 Antibody Testing in Clinical and Public Health Settings https://www.cdc.gov/coronavirus/2019-ncov/lab/resources/antibody-tests-guidelines.html

CDC: Test for Past Infection (Patient Information)

https://www.cdc.gov/coronavirus/2019-ncov/testing/serology-overview.html

Health Canada Information on Serologic (Antibody) Testing:

https://www.canada.ca/en/health-canada/services/drugs-health-products/covid19-industry/medical-devices/testing/serological/information-for-patients.html

Public Health Ontario Laboratory website:

https://www.publichealthontario.ca/en/laboratory-services/test-information-index/covid-19-serology