

## **SARS-CoV-2 Serology Testing**

*Version June 22<sup>nd</sup>, 2020*

An FDA emergency use-authorized SARS-CoV-2 serology test is now available in-house at Lurie Children's and orderable in Epic. This test is called "**COVID-19 (SARS-COV-2) TOTAL ANTIBODY, PLASMA OR SERUM.**" The test is available 7 days per week; turn-around-time is within 24 hours and as little as a few hours depending on testing volume. This is total antibody that does not differentiate between IgM and IgG but when used according to the indications below is thought to predominantly represent IgG. Additional details about this test has been distributed from the laboratory as a safety spotlight.

Per the CDC, serology testing should NOT be used to diagnose acute infection. Please continue to send SARS-CoV-2 PCR as previously recommended for acute infection. Further, because there are no data yet to suggest that seropositivity indicates protective immunity, serology testing should NOT be used to determine immune status and/or guide decisions about work, school, or day care attendance, or exposure to high-risk groups.

Per the CDC, indications for serology testing are as follows:

- Antibody tests can support the clinical assessment of COVID-19 illness for people who are being tested 9 to 14 days after illness onset, in addition to recommended virus detection methods such as PCR. This will maximize sensitivity as the sensitivity of nucleic acid detection is decreasing and serologic testing is increasing during this time period.
- Antibody testing can help establish a clinical picture when patients have late complications of COVID-19 illness, such as multisystem inflammatory syndrome in children.

Information about test indications can be found here: <https://www.cdc.gov/coronavirus/2019-ncov/lab/resources/antibody-tests-professional.html>

False negatives are known to occur if tested too early in the course of illness, particularly less than 9-14 days since onset of symptoms. False positives can occur related to cross-reactivity with antibodies against other endemic coronaviruses.

If ordering as an outpatient, order as you would any other lab test. **Ordering serology testing should NOT be ordered through the HCID RFS mechanism.** If sending outpatients to our lab for COVID-19 serology testing, please wait until symptoms improve and it has been at least 14 days from symptom onset and at least 3 days from last fever. This will minimize the likelihood of SARS-CoV-2 transmission. If patient has symptoms of COVID-19 and within this 14-day time frame, referral for drive thru SARS-CoV-2 PCR testing is recommended.