St. Elizabeth HEALTHCARE Laboratory Services

Preferred Lab Partners

COVID-19 Serology FAQ

What is the difference between molecular testing and serologic testing for COVID-19?
Molecular (PCR) testing is used to detect SARS-CoV-2 in respiratory specimens of patients suspected of having COVID-19, i.e., active infection. Serology (antibody) testing is used to detect antibodies against SARS-CoV-2 present in serum or plasma and is not recommended for the diagnosis of COVID-19 in an acutely ill patient.

How long does it take for someone to develop antibodies to SARS-CoV-2?
It typically takes one to two weeks after someone becomes sick with COVID-19 for their body to make antibodies; some people may take longer.

What types of antibodies are there?
There are different isotypes of antibodies, including IgM, IgA, and IgG. IgG appears later in the convalescent period than IgM or IgA and is the best marker to indicate exposure to SARS-CoV-2.

What does a positive IgG result mean?
A positive result indicates that an individual has been exposed to the virus. There is not enough data yet to determine whether or not the presence of IgG will predict the depth or length of protective immunity. Furthermore, individuals with a positive IgG may still remain sick and shed virus through respiratory secretions and/or stool.

What does a negative IgG result mean?
A negative result indicates that an individual has not developed detectable antibodies at the time of testing. This could be due to testing too early in the course of COVID-19, the absence of exposure to the virus, or the lack of an adequate immune response, which can be due to conditions or treatments that suppress immune function.

How accurate are the test results?
Broadly speaking, few studies or manufacturers have done broad false positivity rate checks. Cross-reactivity with common coronaviruses is a legitimate concern, particularly for the rapid point-of-care kits that have been distributed without FDA review. As more data becomes available, we will know more about the accuracy of the results.

Should I send an ill patient with COVID symptoms for IgG testing?
No. Serology is not helpful for diagnosis of acute infection. Furthermore, the patient could potentially expose healthcare workers to infection.

How should test results be used?
As of 4/28, CDC has issued no guidelines regarding use of IgG results to inform disposition following isolation or to inform return-to-work decisions. At the present time, the utility of serologic test results is primarily epidemiologic, helping public health officials better understand disease prevalence.

Can I be a convalescent plasma donor if I am IgG positive, but never had a PCR test?
Hoxworth Blood Center will accept antibody tests as qualifying for donors greater than 28 days from symptom resolution who never had a positive PCR result. Complete Hoxworth questionnaire at https://hoxworth.org/donors/eligibility/deferrals-restrictions/covid19plasma.html and indicate that St. Elizabeth referred you.