COVID-19 Antibody Testing Information

Some of our families have been asking for antibody testing for their children. As test quality improves and more data comes out regarding antibody testing, the value of antibody testing will increase.

However, at this time there are a lot of unanswered questions about antibody testing:

- 1. How accurate are the results?
- 2. Does a positive antibody test mean you are protected?
- 3. Could reinfection occur even with antibodies?
- 4. Could someone with antibodies still spread COVID-19 to others?

As we cannot provide accurate counsel based on this test, we believe there is low value at this time.

Please read the excerpt from the below article for further information.

Mckenna, Stacy. "What COVID-19 Antibody Tests Can and Cannot Tell Us." *Scientific American*, May 5, 2020, https://www.scientificamerican.com/article/what-covid-19-antibody-tests-can-and-cannot-tell-us/.

Dozens of antibody tests for the novel coronavirus have become available in recent weeks. Because of limitations in testing accuracy and a plethora of unknowns about immunity itself, however, they are less informative about an individual's past exposure or protection against future infection.

In populations with a lower prevalence, tests are more likely to give false positives.

At this stage, experts warn that even the best SARS-CoV-2 antibody tests have little use at the individual level. More than four months after doctors in Wuhan, China, first identified the novel coronavirus that causes COVID-19, scientists are still scrambling to understand how our immune system responds to it. Although research increasingly shows that most people who have been infected probably produce antibodies to the virus, <u>it is not yet clear whether those antibodies prevent reinfection or how long any immunity will last.</u>

"We don't know the natural [course] of the disease. All we can do is [say] that if you have a good [antibody] test, and you trust the result, and you're positive, you did have exposure," says May Chu, a clinical professor of epidemiology at the Colorado School of Public Health. "We do not know if [those antibodies are] protective. And we won't know for months to come—until somebody else who's been infected before gets exposed to the virus again, and we see whether they get sick or not," says Chu, who is also a member of a World Health Organization expert group focused on infection control and prevention for the COVID-19 epidemic.

In fact, on April 24 the WHO released a scientific brief explicitly cautioning against the use of so-called "immunity passports" or "risk-free certificates." There have been a few reports of individuals testing positive for the virus after recovering and testing negative. But they have not been shown to have been reinfected.

While scientists work to get a handle on how the pandemic is playing out in different populations around the world, testing for antibodies against SARS-CoV-2 remains largely in the research domain.