ANTIBODY TESTING: WHAT YOU NEED TO KNOW

NCH is proud to bring one of the few FDA validated processing machines, the Vitro 7600, and a medically supervised process in an effort to get NCH and our community back to work. This significant investment in our healthcare system and our community will allow for antibody testing to rapidly proceed with identifying people exposed to COVID-19.

What is antibody testing:

An immunoglobulin test measures the level of types of antibodies in the blood. A human being’s immune system makes antibodies to protect itself from viruses and bacteria.

Immunoglobulin levels are checked to see if a person has been exposed to an infection, or if he or she is protected from an infection (immune).

What are the different types of tests?

Researchers have developed several serology tests. These tests involve looking for a patient’s immune response to the virus in blood samples. These antibody tests identify whether or not a patient has been exposed or built up antibodies created by the immune system in the process of fighting off disease. Antibody tests provide visibility into a patient’s infection history. There are two tests we will be implementing – testing for total IgG and IgM, and specific IgG.

What’s the difference between IgG and IgM?

IgG (Immunoglobulin G) is the most common antibody. It’s in blood and all body fluids. It’s the most common antibody making up almost 80 percent of all antibodies. It protects against viral and bacterial
infections. IgG can take weeks to form after an infection. IgG shows if you’ve had exposure and/or infection, and may indicate immunity.

**IgM (Immunoglobulin M)** Is found in blood and lymph fluid. It’s the first antibody the body makes when fighting a new infection and is detected sooner than IgG. IgM often indicates recent and/or an active viral processes.

**Why is it important?**

Antibodies help the body fight infections and are specific to a virus, bacteria or other pathogen. These tests can identify those with immunity to the virus. Appropriate antibody testing can enable healthcare workers, first responders and our community to return to work safely.

**Who is eligible for testing?**

Everyone will be eligible for the test. Our goal will be to test our entire community over the next few months. This will enable us to get back to business safely and ensure we are protecting our healthcare employees, patients and community.

**When can NCH start testing?**

This device allows us to determine if someone has antibodies to COVID-19 and will be expanded to include additional antibody testing when the FDA approves them to further clarify immunity to COVID-19. We anticipate testing to begin late May 2020. This machine can test 1,000 a day. Once we go live, we will have the capacity to test 2,000 a day in June.

**More Information about NCH’s Antibody Program:**

IgG has been approved by the FDA and we are waiting on approval of IgM which we anticipate happening soon. To specify, if a patient had been exposed to the virus in the past this machine will allow us to identify that. Currently, there are no large volume testing platforms that are FDA approved, to identify IgM, but
since this is a new virus, this machine has been designed to identify total IgM and IgM and specific IgG and NCH will begin testing in large volumes, quickly. Currently few in the US have the ability today to do high volume testing. With this machine we can easily have testing capabilities. NCH will be leading our region in testing.

The Vitros will also allow us to identify donors with positive COVID-19 antibody serology as prospective donors for our Convalescent Plasma program.

NCH has chosen this equipment based on our emphasis on quality. NCH is also investing in additional laboratory platforms to offer even more expanded diagnostic capabilities. When we start testing, we will be able to do 1,000 tests a day with this initial device and will expand to over 2,000 a day with the additional platforms. We are targeting late May and June for both platforms.