

UPDATE FROM THE MEDICAL ADVISORY TEAM ON COVID-19 ANTIBODY TESTS

Advertisements and news stories about blood tests to detect past COVID-19 infection are becoming more common. Blood tests for COVID-19 are different than the tests done with nose or throat swabs. Swab tests can help determine who is at risk for developing symptoms of COVID-19 or spreading the disease by detecting the virus in the person’s respiratory system. Blood tests, however, tests for past viral infections by testing *not for the virus itself*, but for the antibodies a person’s body produced to fight the virus. And, importantly, **not all antibody tests are reliable**.

The table below shows some of the differences between the two types of tests:

	Viral Test (Nose/Throat Swab)	Antibody Test (Blood Test)	Comments
What does it test for?	Do I have a COVID-19 infection now?	Did I have a COVID-19 infection in the past?	Generally, only the swab test is useful in diagnosing and then isolating COVID-19 patients.
When does it turn positive?	2-7 days after initial infection, sometimes before symptoms	5-14 days after symptoms start; tests are more reliable when performed 2 or more weeks after symptoms start	Remember a negative viral test is only good for the day you had the test performed. You could become infected right after testing.
How accurate is it?	Highly accurate	Accuracy varies and is better when performed in a lab and on people who are likely to have had COVID-19 in the past	More research and confirmation is needed for antibody blood tests. In some studies, up to 25% of people with negative antibody test results may have had COVID-19. In low-prevalence populations, a positive result may be incorrect 50% of the time.
Where does the actual test itself get run?	In a reference lab or hospital lab	In a reference lab or hospital lab No antibody tests have been authorized for use at home	The Medical Advisory Team recommends New Mexico focus on the use of reference and hospital labs for antibody testing due to much higher reliability of results. Antibody testing performed outside of a reference or hospital lab is less reliable.
Who uses the test and the results?	Healthcare providers, public, epidemiologists	Epidemiologists, Healthcare providers	More research is needed to determine the usefulness of antibody blood tests for patient care.
For what is the test mainly used?	Diagnosing COVID-19 infection and isolating people who are positive and their contacts	Determining the amount of disease in the State or in high-risk populations, determining past infection in a sick patient	It is not yet known if having antibodies protects people from the virus. Until more is known, antibody test results are not useful for return-to-work screening or changing social distancing habits.
What do I do differently if my test is positive?	Isolate for 14 days or until released by Department of Health	Nothing	With our present level of research and data, the results of the antibody blood test do not change the way a tested person should interact with other people or move about.

Frequently Asked Questions and Answers

If my antibody test is positive, does that mean I have had a COVID-19 infection?

It is possible but keep in mind that false-positive results are not infrequent, particularly when used on people who did not have symptoms of COVID-19. Additional scientific data are needed to determine the probability that you had a COVID-19 infection.

If my antibody test is negative, does that mean I have NOT had a COVID-19 infection?

The answer is probably no, although additional scientific data is needed to determine of probability of prior infection. We do know that there is wide variation in the quality of antibody testing, and that at least some of these tests may miss prior infection.

If my antibody test is positive, does that mean I am protected from another COVID-19 infection?

We don't yet know enough about the ability of antibodies to protect people from infection. Until more research is done you should not assume you are immune if you have a positive antibody test.

If my antibody test is positive, and let's say future research shows that I am protected, how long will those antibodies protect me from another COVID-19 infection?

The answer is, "we don't know." Other viral respiratory infections like influenza do create a short-term immunity that lasts the rest of the flu season, but then decreases. This is why flu vaccine is required for health care workers and recommended for the public every year.

I'm just really curious about whether I was infected with COVID-19. Is it OK to just get the test?

There is nothing to prevent you from requesting a test or purchasing a test on you own, but the Medical Advisory Team does NOT recommend it. For those who choose to have a test, it is important to understand that these tests are not yet able to determine if you are actually immune to a second infection or if you can transmit the disease. Social distancing, hand sanitizing, and wearing face covering are still the best ways to prevent the spread of COVID-19.

So, if these tests aren't for me right now, what will they be used for?

Once they are perfected and their accuracy verified, antibody tests for COVID-19 will be used by the New Mexico Department of Health to gather information as part of investigations of outbreaks in nursing homes and other high-risk environments, and by doctors to help understand the condition of the patients they are treating.

The development of vaccines against viruses also requires information about the specific antibodies, but vaccines against epidemic and pandemic diseases are generally provided safely without the use of antibody testing.