

**NM Medical Advisory Team (MAT) Assessment April 30, 2020**

**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:

	<b>Viral Test (Nose/Throat Swab)</b>	<b>Antibody Test (Blood Test)</b>	<b>Comments</b>
<b>What does it test for?</b>	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.
<b>When does it turn positive?</b>	2-7 days after initial infection, sometimes before symptoms	5-14 days after symptoms start	Remember a negative test is only good for the day you had the test performed. You could become infected right after testing.
<b>How accurate is it?</b>	Highly accurate	Uncertain	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.
<b>Where does the actual test itself get run?</b>	In a reference lab or hospital lab	Reference lab, hospital lab, clinician office, 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 at home or in a clinician’s office are less reliable and not recommended at this time.
<b>Who uses the test and the results?</b>	Healthcare providers, public, epidemiologists	Epidemiologists, Healthcare providers	More research is needed to determine the usefulness of antibody blood tests for patient care.
<b>For what is the test mainly used?</b>	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	At present, antibody blood tests are not useful for return-to-work screening.
<b>What do I do differently if my test is positive?</b>	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?** The answer is probably yes, although additional scientific data is needed to determine the probability that you have 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?** The answer is, “we don’t know.” Usually antibodies in the blood provide immunity and prevent another infection. But there are some diseases, like mumps, where we routinely see the repeat infection even with positive antibody tests. More research is needed on this question.

**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 kit, but the Medical Advisory Team does NOT recommend it. For those who choose to purchase test kits for home use using a finger prick for blood, or who want to be tested by their doctor, 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.

Plus, in the rush to expand testing, the U.S. Food & Drug Administration (FDA) has relaxed validation requirements for these tests, which means some of the tests may not even be accurate. The main concern is that people who have a positive antibody test will believe they can relax social distancing and, in the process, potentially become infected again and infect others.

**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.