

## VDH Table of COVID-19 Test Types

	PCR Test	Antigen Test	Antibody Test
<b>Other names</b>	<i>Molecular or Nucleic Acid Amplification (NAA) test</i>	<i>Rapid test</i>	<i>Serology test</i>
<b>Why is this test used?</b>	PCR tests look for genes of the virus to determine if the virus is present at the time of the test.	Antigen tests look for proteins of the virus to determine if the virus is present at the time of the test.	Antibody tests look for antibodies produced by the immune system to determine if there was a past infection.
<b>How is this test performed?</b>	Usually, a nasal or throat swab is collected by a healthcare provider. Sometimes saliva is collected. Usually the swab is sent to a lab for processing. Molecular “at-home” tests are available.	Nasal or throat swab is collected by a healthcare provider or by the person being tested. Sometimes the swab is sent to a lab and sometimes the test is run while you wait. Multiple “at-home” antigen tests are available.	A blood sample is collected by a healthcare provider and usually sent to a lab for processing.
<b>What does a positive result mean?</b>	The virus is present and the person is diagnosed with COVID-19.	The virus is present and the person is diagnosed with COVID-19.	The person was likely infected with COVID-19 in the past and their immune system has developed antibodies against the virus.
<b>What does a negative result mean?</b>	Viral genes were not detected and the person was probably not infected at the time they were tested. It doesn't mean they won't get sick - it only means that they didn't have a COVID-19 infection at the time of testing.	Viral proteins were not detected at the time the person was tested.	Antibodies were not found in the blood at the time the person was tested and the person likely was not exposed to or infected with COVID-19 in the past. It is possible that the person was exposed if the test was done before they had time to develop antibodies.

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<b>When is this test helpful?</b>	To determine who has an active infection and identify who may be contagious to others. Considered the gold standard for diagnostic testing.	Can be used to quickly determine an active infection. Less expensive than PCR.	To identify people who have been infected in the past. Can also help determine who can donate plasma to treat others with COVID-19 antibodies.
<b>What are the limitations of this test? ?</b>	<p>Does not help determine who had a past infection.</p> <p>Does not help determine if an exposed person will develop an active infection in the two weeks after exposure.</p> <p>In some people, the virus can be found by PCR in the nose and throat for several weeks or longer past the time they are contagious. This is why the CDC does not recommend retesting within 3 months of a positive viral test result.</p>	<p>May need confirmatory testing. For more information on the interpretation and follow up of antigen tests, click <a href="#">here</a>.</p> <p>Antigen tests are less sensitive than PCR tests, meaning there may be false negative results. False positive test results are also possible.</p>	<p>It may be negative if it is used too close to the beginning of an infection, which is why it should not be used to detect active infection.</p> <p>Some antibody tests will only detect antibodies from COVID-19 infection, but not from COVID-19 vaccination.</p> <p>Some antibody tests may cross-react with other types of coronaviruses, leading to false positive test results.</p> <p>For more information on the interpretation of antibody tests, see <a href="#">here</a>.</p>
<b>Where are these tests performed locally?</b>	To find COVID-19 testing sites in your area, see: <a href="http://www.vdh.virginia.gov/coronavirus/covid-19-testing/covid-19-testing-sites/">www.vdh.virginia.gov/coronavirus/covid-19-testing/covid-19-testing-sites/</a>		

Adapted from Texas Department of State Health Services [www.dshs.state.tx.us/coronavirus/docs/COVID19-PCRvsSerologyTesting.pdf](http://www.dshs.state.tx.us/coronavirus/docs/COVID19-PCRvsSerologyTesting.pdf)