

# Coronavirus Disease (COVID-19)

This document answers frequently asked questions about antibody or serology tests for SARS-CoV-2 which is the virus that causes COVID-19. It is important to note that this information will change and evolve so be sure to check resources such as the [FDA page](#) on testing for SARS-CoV-2 for frequent updates.

## 1. What is the difference between a serology test and a viral test?

Serology tests do not diagnose active COVID-19 infection but can give information about past infection. They are blood tests that check for proteins (antibodies) that develop in the body when the body responds to infection. On the other hand, viral tests detect the presence of the virus by testing for the virus's RNA by a technique known as a polymerase chain reaction (PCR) or sometimes by testing for the virus's proteins (antigen testing). These viral tests can diagnose active infections through a sample usually from a nose or throat swab.

## 2. How long does it take an infected person to develop antibodies?

It typically takes one to three weeks after the start of COVID-19 symptoms for their body to make antibodies, some people may take even longer. Depending on when someone was infected and the timing of the test, the serology test may not find antibodies in someone with a current COVID-19 infection.

## 3. Can a serology test be used to tell me if I have COVID-19 right now?

No. Serology tests cannot determine if you currently have COVID-19; this test measures antibodies that indicate the body has responded to the virus without being able to note whether there is an active infection. In the early days of an infection when the body is still building its immune response antibodies may not be detected which can result in false negative serology test results. Similarly, positive serology tests may occur if the person had been infected with COVID-19 in the past and are not currently infected with the virus. Serology tests, therefore, shouldn't be used to diagnose COVID-19.

## 4. Are serology tests ever helpful with making a diagnosis of COVID-19?

There are times when it may be useful to use a serology test in addition to a viral test. If someone develops late complications that may be associated with COVID-19, such as multisystem inflammatory syndrome in children (MIS-C), a positive serology test can help make the diagnosis. If someone has had symptoms of COVID-19 for a couple weeks, serologic testing may be helpful in addition to a viral test to make the diagnosis.

## 5. What are the other reasons for doing serology tests for COVID-19?

These tests are used to gain a better understanding of how the immune response against the virus causing COVID-19 develops over time and how many people may have been infected or how far the pandemic has progressed. In the long run, serology testing and clinical follow-up may also help us to better understand whether a person who has recovered from infection is at lower risk of re-infection if they get exposed to the virus again. But they can not tell us this information now. Serology tests can also help us to understand more about people who may have had the infection but never had symptoms since these individuals would also have developed antibodies.

Another reason to use a serology test for COVID-19 is to find people who have developed antibodies and may qualify to donate blood that can be used to make a treatment for patients with severe COVID-19 disease.

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## 6. Does it matter what serology tests are used?

The Food and Drug Administration (FDA) has now reviewed the performance of several serology tests and has authorized their use under an [Emergency Use Authorization](#) (EUA). It is recommended that only tests with EUAs be used for patients. In addition, many serology tests that were once allowed by the FDA to be on the market have now lost that approval and should not be used for patient care.

## 7. If I have a positive serology test can I stop wearing a cloth face covering or stop practicing physical distancing?

No. Since we have no conclusive information that indicates that having antibodies to COVID-19 offers any immunity or prevents a person from becoming re-infected, persons with a positive antibody test result must continue to protect themselves and others from COVID-19. There is also the possibility of false positive serology test results, so it is important that everyone continue to practice personal protection such as physical distancing, wearing a cloth face covering when around others, and frequent handwashing, even if they have a positive serology test result.