

Antibody Testing for COVID-19

It's possible to catch SARS-CoV-2, the new coronavirus, and not know it. That's because not everyone infected with the virus has symptoms. But there's a fast blood test that may tell you if you've ever been infected. It's called an antibody test. Experts hope it can give health officials a better idea of how widespread this new coronavirus is.

What Is an Antibody Test?

You may hear it called a serology test. It looks for certain things called antibodies in your blood. Your body makes these when it fights an infection, like COVID-19. The same thing happens when you get a vaccine, like a flu shot. That's how you develop immunity to a virus.

The antibody test isn't checking for the virus itself. Instead, it looks to see whether your immune system -- your body's defense against illness -- has responded to the infection.

How Does It Work?

You'll have to give some blood, like through a finger prick. Doctors test for two kinds of antibodies to SARS-CoV-2. They look for:

- IgM antibodies, which develop early in an infection, and
- IgG antibodies, which are more likely to show up later after you've recovered

It takes your body about 4 weeks to develop IgM antibodies. But scientists aren't sure how long it'll take for this to happen with SARS-CoV-2. More tests are needed to find out.

Keep in mind that current antibody tests can't tell you if you're immune to COVID-19. That's because we don't know how long these antibodies might protect you against the coronavirus. And these tests shouldn't be used to diagnose the virus.

How Do They Help?

Antibody tests can show how common COVID-19 is. Once scientists know who has had the virus, they can find out how sick it makes most people. And they can study what happens if people who've had it are exposed to it again. When paired with other scientific information, this can help researchers understand who might be immune to the virus.

The hope is that people with antibodies to COVID-19 can safely get back to work, and normal life, quicker.

These tests may also help with an experimental treatment for COVID-19 called convalescent plasma. Plasma is the liquid part of your blood.

Researchers are studying how antibodies in plasma donated by people who've recovered from COVID-19 might help those who are ill with the virus. One theory is that this plasma may help sick people get better faster. But more research is needed.

Who Should Get One?

If you've tested positive for COVID-19 and have fully recovered, you can probably get your antibodies tested now. You can volunteer to donate plasma through the National COVID-19 Convalescent Plasma Project. Or ask your local blood donation center for information.

Some labs are working with state and federal governments to make sure health care workers can get tested soon.

How Can You Get One?

You can't do these tests at home. And they aren't widely available yet. But you can ask your doctor or local hospital if there's a way you can get your antibodies checked.

The National Institutes of Health (NIH) wants to study blood from 10,000 healthy people who haven't tested positive for COVID-19. They want to see how many people might have had the virus without knowing it. If you want to take part, email the NIH at clinicalstudiesunit@nih.gov.

The CDC, along with other private and public labs, is working to develop more tests for the public. Right now, the FDA has given emergency authorization to only one antibody test. But the agency gave the OK for more than 70 companies to sell their tests. That means these tests aren't FDA-approved, but the manufacturers promise to follow certain rules when making them.

Are They Accurate?

If you test positive for SARS-CoV-2 antibodies, that usually means you've had COVID-19. But you may get a negative result if you've only had the virus a short time. And it's possible to get exposed and not develop antibodies. You may also get a "false positive." That means you have antibodies but had a different kind of coronavirus.

Some companies have made false claims about how well their antibody tests work. But the FDA says it will crack down on any manufacturer who sells a bad test.

WebMD Medical Reference | Reviewed by Brunilda Nazario, MD on April 14, 2020

Sources \(\sigma \) SOURCES:

FDA: "Coronavirus (COVID-19) Update: Serological Tests," "FAQs on Diagnostic Testing for SARS-CoV-2," "Coronavirus Disease 2019 (COVID-19) Frequently Asked Questions."

CDC: "Influenza (Flu): Key Facts About Flu Vaccines," "Serology Test for COVID-19."

Johns Hopkins Bloomberg School of Public Health, Center for Health Security: "Serology-based tests for COVID-19."

National Institute of Allergy and Infectious Diseases: "NIH Begins Study to Quantify Undetected Cases of Coronavirus Infection."

National COVID-19 Convalescent Plasma Project: "Donate Plasma."

Mayo Clinic: "Mayo Clinic Laboratories launches serology testing in support of COVID-19 response."

Lab Tests Online: "Laboratories Working to Expand COVID-19 Testing."

© 2020 WebMD, LLC. All rights reserved.