Medical Xpress

COVID-19 tests: Different types and when to use them

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There are various types of COVID-19 tests that people may choose from to find out if they are infected with the virus.

Dr. Matthew Binnicker and the team at Mayo Clinic Laboratories help break down the different types of COVID-19 tests and when to use them.

Test at the health care provider's office or testing site:

POLYMERASE CHAIN REACTION (PCR) TEST NASAL SWAB

What is it?

This test looks for the virus' RNA in a patient's sample. A sample is collected by inserting a nasopharyngeal swab into a person's nostril and taking cells from the back of the nose. Some lab tests allow for patients to spit into a tube to get a saliva sample.

When should you take this test?

Make an appointment with your health care provider if you have been exposed or if you are experiencing symptoms.

When can you expect results and how accurate will they be?

Depending on the lab your provider uses, you can expect to receive your results within 24-72 hours. The PCR test is the gold standard when it comes to COVID-19 testing.

At-home types of tests:

AT-HOME NASAL SWAB WITH LAB-BASED PCR TEST

What is it?

This is a similar type of test used at the health care provider's office, but you collect the nasal swab yourself and mail it to a laboratory to be analyzed.

When should you use this test?

Use this test after exposure or when you begin experiencing symptoms.

When can you expect results and how accurate will they be?

At-home tests can typically take anywhere between two to four days for results. Since these tests are PCR tests performed in a laboratory, these results have higher accuracy than at-home antigen tests.

SALIVA PCR TEST

What is it?

This is a similar type of test used at the health care provider's office, but you collect the saliva sample yourself and mail it off to a laboratory to be analyzed. Similar to swab tests, saliva is a specimen that can be collected for [polymerase chain reaction](link) testing. Saliva is typically easier — and more comfortable — to collect from a patient, compared to a nasopharyngeal swab.

When should you use this test?

Use this test after an exposure or when you begin experiencing systems.

When can you expect results and how accurate will they be? At-home mail away tests can typically take anywhere between two to four days for results. Since these tests are PCR tests performed in a laboratory, these results have a higher accuracy than at-home antigen tests.

RAPID AT-HOME ANTIGEN TESTS

What is it?

The rapid at-home antigen tests detect certain viral proteins in the nasal sample.

When should you take this test?

Timing is key with this test, so try to take it on the day of the event because that's going to give you the best information of whether you have high amounts of the virus in your system at that time.

How does this test produce results?

Using a nasal swab, antigen tests can produce results in 15 minutes.

When can you expect results and how accurate will they be?

These tests are available for purchase where at-home tests are sold. These tests are faster and less expensive than PCR tests, but there is an increased chance of false-negative results. If an at-home antigen test is negative, continue to wear a mask in public settings, around those who are unvaccinated and/or high-risk.

If an at-home test is positive, you should have a lab-based PCR test performed that day or the following day to ensure the case is tracked by

public health officials and to connect you with a [health care provider](#) who will determine if treatment is necessary.

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