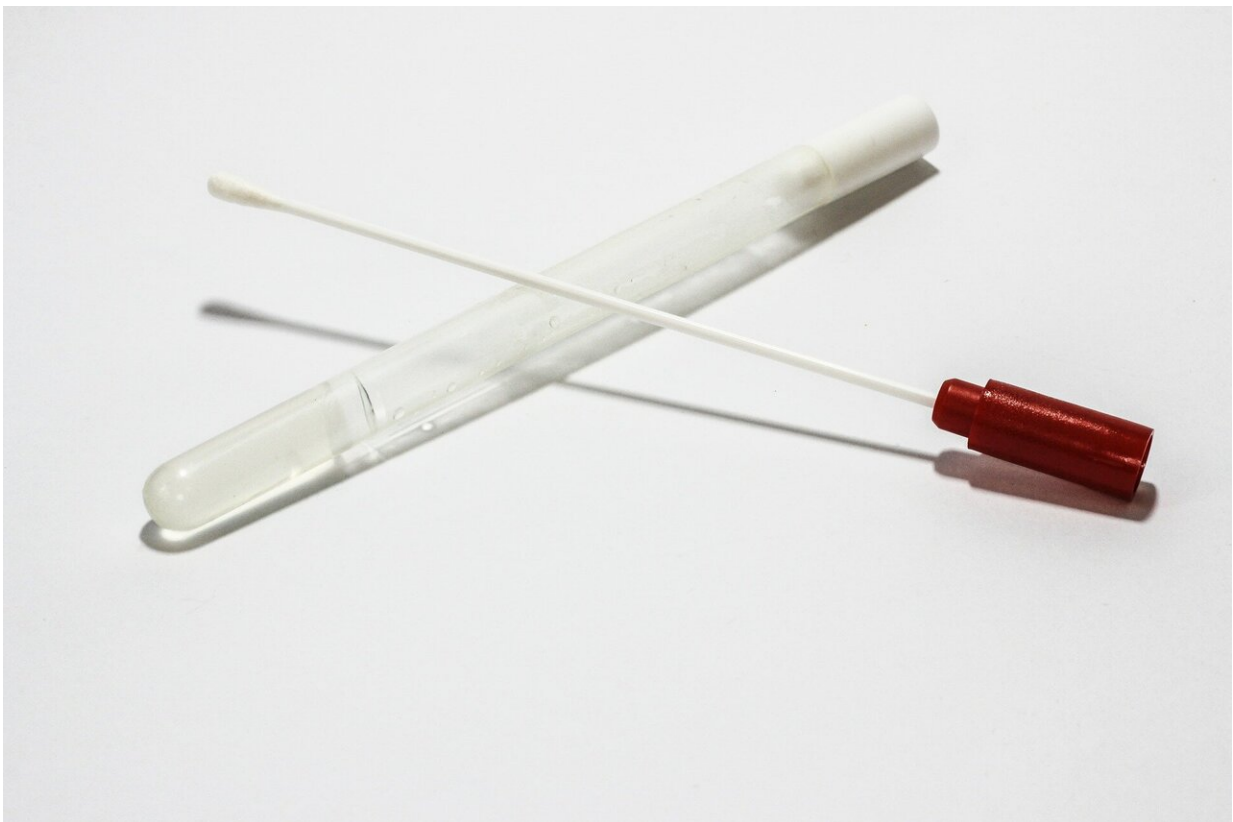


# At-home COVID-19 tests could be a passport to normalcy, but they can also give us false confidence

January 28 2022, by Jason Laughlin and Sarah Gantz

---



Credit: Pixabay/CC0 Public Domain

The coming weeks should bring a new phase in the pandemic, as policy shifts and a supply of up to a billion free, government-issued rapid test

kits for home use promise to make diagnosing COVID-19 at home cheaper and easier.

Vaccines are the most effective way to prevent serious illness and death, but variants such as omicron have made breakthrough cases more commonplace, and testing has become an essential companion to vaccination in a COVID-cautious person's toolbox.

Although rapid antigen test results can be done at home and produce results quickly, the gold standard for accuracy remains the PCR lab test—though it can take days. Experts say the value of rapid testing varies, depending on circumstances. Some who already feel sick may want to confirm whether they have COVID-19, while others may use the tests to protect themselves or a loved one from potential exposure to the virus. Many are optimistic that the tests will be a passport back to normalcy, adding a new level of confidence that it's safe to travel and see family or attend a wedding.

But misunderstanding the usefulness of rapid tests could give people false confidence, possibly leading them to unwittingly transmit the virus.

"The general population that uses the test would like a simple, direct, straightforward, easy answer," said William Schaffner, professor of infectious diseases at the Vanderbilt University Medical Center.

"Unfortunately, life is more complicated than that."

## **Antigen vs. PCR tests**

The kits the government provides are rapid antigen tests. Samples are collected with nasal swabs and the instructions included are straightforward. They deliver results in less than a half-hour.

Studies have shown antigen tests have a sensitivity of 80% to 90%,

which means that if one shows you have COVID-19, that's very likely accurate. They are more likely than PCR tests to produce a false negative result—meaning that you get a negative test result but actually have the virus. Antigen tests were designed to confirm the presence of COVID-19 in highly infectious people, but people recently exposed might not have enough viral particles in their nose for the test to detect, causing a false negative—though they might still be contagious.

People may use a negative rapid test result to justify social activities and ignore a recent exposure or symptoms that should keep them at home, said Ryan McCormick, a primary-care doctor at Virtua Health in Marlton.

"The binary thinking we're all prone to—positive or negative—it can definitely be problematic," he said. "With testing, it's important to not think they are 100% accurate."

Omicron appears to show up in the upper airways and saliva a couple of days before it can be detected in the nasal passages, which could partly explain why nasal-swab rapid tests have not been quite as effective in detecting it.

Doctors debate whether swabbing the back of the throat might better detect omicron, but, McCormick said, "That would be hard to do at home because it stimulates a gag reflex."

## **Don't rely too much on negative test results**

Tests are useful only as part of a fuller strategy to prevent the spread of the virus.

"The problem is when people use them and they don't react accordingly," said Karen Coffey, an assistant professor of epidemiology and [public](#)

[health](#) and medicine at the University of Maryland School of Medicine. "It's that behavioral component that really has an impact."

European countries had ready access to rapid COVID-19 tests before Americans, but even countries that tested aggressively, such as Germany, weren't spared from an omicron surge. People have to make good decisions with the data the tests provide.

"With sufficient supply and appropriate frequency of testing, we can actually make a big dent in how many people end up getting infected by this simply by people knowing their status and being able to isolate during that time," said David Walt, a professor of bioinspired engineering at Harvard Medical School. "The problem, of course, is if people say, 'I'm infected, but I'll wear a mask and go to the grocery store,' it's not going to work."

If you have such symptoms as sore throat, fever, or cough, have been around a COVID-19 patient, or you've been in a high-risk environment, hanging out in bars with unmasked friends—and you test positive—you need to take it seriously.

"If they test and they get a positive, they have COVID. No ifs, ands, or buts," Walt said. "You don't have to retest. You don't have to go out and get a PCR test. You have COVID."

All those risk factors plus a negative test result, though, should be followed by two days of isolation and another home test. If that test, too, is negative, you can have more confidence you're COVID-free. Until you put yourself at risk again.

If a person is fully vaccinated and boosted, has no symptoms, wears masks, limits indoor contacts, and has had no known exposure to the virus, a single negative test result can offer added assurance before

meeting up with friends or family, or attending an event.

"If you're vaccinated, you're boosted, you're being careful," Schaffner said, "then you do the rapid test and you're negative, you're in pretty good shape."

False positives—you test positive but really don't have COVID—are rare but possible, Walt said. If you doubt a positive test result, take another test immediately. Two consecutive false positives are extremely unlikely, he said.

## **COVID-19 test costs**

At \$10 to \$15 a test, routine antigen tests quickly become expensive. Every household is eligible for one four-pack of tests, which can be ordered online from the federal government for free, with no shipping charge, through [COVIDtest.gov](https://www.covidtest.gov). The first orders are expected to be delivered by early February.

With demand for at-home tests outstripping supply since the holiday season, people should take advantage of the free tests, doctors said.

"It's important to not stockpile them, but going forward they are such a valuable tool in getting the pandemic under control and resuming life as usual," McCormick said. "Take the government up on the offer if you don't have any."

Aside from the government's supply of free tests, [insurance companies](#) are required to cover the cost of up to eight at-home rapid tests per member per month. People may be able to use their insurance to pay for tests up front, or they can file a claim with their insurer for reimbursement—so don't throw out that receipt.

State-run Medicaid and Children's Health Insurance Plan programs are also required to cover COVID-19 testing without cost-sharing.

While the tests are widely covered by [private health insurance](#), Medicare, Medicaid, and a federal fund for the uninsured, the rules on payment can be confusing.

Insurance companies cover up to \$12 per test. If the ones you buy cost more than that, you will end up paying the difference out-of-pocket.

PCR tests should be free—regardless of whether they're done at a hospital or test site. Private health plans are required to cover PCR tests when ordered by a medical provider or when an individual is symptomatic. As of Jan. 15, insurers must also cover PCR tests taken at home and sent to a lab for analysis without a doctor's note.

Health plans do not have to cover the tests when required by schools or employers, though, and people have encountered problems with being billed a copay or for the full cost of the test.

For instance, an insurer could deny covering a test for a person without symptoms or COVID-19 exposure, said Sabrina Corlette, codirector of the Center on Health Insurance Reforms at Georgetown University.

"But in practice, I think that is hard for many carriers to do—with these large testing sites it is burdensome to try to go through each person's claim and figure out the purpose for the test."

As for at-home tests, those done entirely at home must be covered by insurance without cost-sharing and without a doctor's note. But if you must send in a sample collected at home to a lab, insurers can require a doctor's note, she said.

"Clear as mud, right?" Corlette said.

To make matters even more confusing, prices for tests can vary widely. In an April 2021 analysis of prices from 93 hospitals, Kaiser Family Foundation found that prices for a PCR test ranged from \$20 to \$1,419, with a median cost of \$148.

## **COVID-19 tests part of the 'new normal'**

The new accessibility to tests is likely coming too late to make a big difference during the omicron surge, Coffey said, which should be subsiding in many parts of the country by the time tests arrive. Having them available will continue to be valuable, though.

"I would like to say that this is the last wave that we will get," she said, "but I think that is unlikely."

Before the pandemic, using the equivalent of a Q-Tip and some chemicals to diagnose a virus at home was unheard of. Now, it's likely the technology will be adapted to hamper the spread of an array of other illnesses. If someone in your home has a fever, it's likely you'll soon have a test available to tell you whether it's the flu.

"You'll be able to rule out that you have flu," Walt said, "you'll be able to rule out that you have COVID, you'll be able to rule out that you have RSV."

The government shipping a ration of tests to homes is a cumbersome distribution system, experts said, and ideally tests will become more widely available and easy to pick up.

"I think it's a good starting place, and maybe it'll make people more comfortable with using these tests and encouraging them to buy their

own," Coffey said. "It's not going to support the entire nation through the entire pandemic."

©2022 The Philadelphia Inquirer, LLC.

Distributed by Tribune Content Agency, LLC.

Citation: At-home COVID-19 tests could be a passport to normalcy, but they can also give us false confidence (2022, January 28) retrieved 21 July 2024 from <https://medicalxpress.com/news/2022-01-at-home-covid-passport-normalcy-false.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.