

# What doctors want patients to know about COVID-19 testing

JUN 16, 2023



**Sara Berg, MS**

News Editor

With mask requirements gone, most people back at work in offices and the expiration of the federally declared public health emergency, many people wonder whether new symptoms are allergies, COVID-19, just the common cold or another respiratory illness. Yet knowing the ins and outs of COVID-19 has been difficult to navigate, especially when new guidance to follow leaves even the most diligent person feeling lost. As the U.S. continues to [search for a new normal, questions linger about COVID-19](#) and what role testing continues to play.

The AMA's What Doctors Want Patients to Know™ series provides physicians with a platform to share what they want patients to understand about today's health care headlines, especially throughout the COVID-19 pandemic.

In this installment, AMA member Emily Volk, MD, president of the College of American Pathologists, discusses what patients need to know about [COVID-19 testing](#) as the country tries to obtain a “new normal” with the expiration of the public health emergency.

Dr. Volk is also an associate professor of pathology at the University of Louisville School of Medicine, and vice president of pathology and clinical laboratories for the University of Louisville Health System.

## At-home tests require care

Dr. Volk frequently gets asked about when the at-home test is a better choice than a hospital laboratory or reference laboratory polymerase chain reaction (PCR) test, which

detects the presence of the SARS-CoV-2 virus.

A COVID-19 “at-home test is an antigen-based test. It is not as sensitive or specific, meaning it doesn’t work quite as well as the PCR test done in a laboratory,” Dr. Volk explained. “However, its convenience factor makes up for a lot of its deficiencies.”

“The fact that you can actually test yourself and get a reasonably accurate result within about 20 minutes can be very, very powerful,” she said. “It’s very important, though, if you use those tests at home, that you treat them with the respect that they deserve.”

“When you’re doing a [COVID-19 test](#) at home, make sure you are actually reading the instructions, paying full attention, taking away any distractions—the doorbell ringing, your phone beeping and so on—and give this your full attention,” Dr. Volk said.

## There’s an at-home test for flu and SARS-CoV-2

In February, the Food and Drug Administration (FDA) authorized the [first over-the-counter at-home combination test for the flu and SARS-CoV-2](#) from Lucira Health, a California biotech company. The at-home test can detect and differentiate between Influenza A and B, and SARS-CoV-2. It is authorized for anyone 14 or older for self-collection, or adults can use it for children 2 years or older.

“The nice thing is you get more information from the one test, so you can rule in or rule out if you have either one of these highly contagious illnesses,” Dr. Volk said. “This test works the same way as most at-home COVID tests by mixing a nasal swab sample in a vial or on a card with what we call reagent material. It takes about half an hour to show whether you have tested positive or negative for either virus.”

“Even though this procedure may sound simple, be very careful to read all the instructions before you manipulate anything in the package and double and triple check the results,” Dr. Volk said. “Even someone like me, who is a well-trained physician specializing in laboratory medicine and pathology, I still will read the instructions before taking any kind of home test.”

“These tests aren’t cheap, and you don’t want to waste the test. By handling the test with respect, you really go a long way to help get the results you can rely on,” she said. “If you are symptomatic for either COVID or the flu—and we know that many of the symptoms for each illness overlap quite a bit—and you receive a negative result it is possible you are dealing with a false negative. In that instance call your doctor or get a laboratory test to confirm the diagnosis.”

## **Testing helps sort out symptoms**

“It is important to use these tests in a way that will be impactful,” said Dr. Volk. For example, “testing yourself after you’ve been in a high-risk situation can be useful.”

“Although the tests are more accurate for patients who are symptomatic, it can be helpful to try to sort out the difference between—do I have seasonal allergies, do I have a common cold or do I have COVID-19?” she said. “That at-home test can be helpful in that situation.”

## **Take a test before large gatherings**

“There are a lot of different situations where people are testing these days,” said Dr. Volk. “Certainly, if you’re symptomatic and you think you’ve had a possible exposure, you should be testing.”

Also, “we are seeing businesses and events testing folks with the rapid test, in addition to asking for proof of vaccination and booster, to keep group situations even more safe than they would otherwise be,” she said. “Testing can be used to mitigate the risk of being in a crowded, indoor gathering as long as everyone is willing to submit to testing and follow the results of the test—not ignore them.”

## **There is a COVID-19 breath test**

This year, the FDA also granted emergency use authorization for a COVID-19 breath test that can detect COVID-19 in three minutes, but more still needs to be known.

This breath test “is a new tool that we’re just getting familiar with,” said Dr. Volk. “I have not seen this test yet rolled out in hospitals, but I do understand it is present in some doctors’ offices.

It will be interesting to see if the cost of this test makes sense relative to the cost of performing just the rapid-antigen test in the traditional way,” she added.

## **If vaccinated, you still need a test**

Being vaccinated and boosted against SARS-CoV-2 lowers a person’s risk of developing severe COVID-19, but there is still a risk for a [breakthrough infection](#).

“Having an exposure to COVID-19 and then developing symptoms—even if you’re vaccinated and boosted—doesn’t give you a pass from getting tested. You still should be tested,” said Dr. Volk. “If we know we’re positive for COVID-19, even if we’re vaccinated, we need to make sure and do our best to protect the vulnerable by staying away from them while we’re positive with COVID-19 and while we recover.

“It’s important to be vaccinated, but it is not a panacea. It doesn’t cure it all for COVID-19, but it does prevent people from dying from the disease,” she added.

## **SARS-CoV-2 variant testing is important**

“From a practical perspective, the subvariants and variants have not really affected patient testing,” said Dr. Volk. “The laboratories are doing a really good job making sure that the variants, as they develop, are still detectable with our current testing methodologies.

“There has not been too much of an issue with a change in sensitivity or specificity around the changing variants at this point,” she added, noting “the variant testing is really important from a public health perspective—this is largely done behind the scenes.”

“When you get a test result from your hospital or physician’s office—where you have gotten a PCR test—your test result is not going to tell you if you had a variant or not. That is information, again, that the public health teams are using to track the virus’ evolution,” Dr. Volk explained.

## Testing is part of the new normal

“Tests are a really important tool in our toolbox to keep ourselves and our families and our communities safe from COVID-19,” said Dr. Volk. In Louisville, Kentucky, “we’ve got all kinds of lovely allergens floating around in the air that make my nose run constantly, and occasionally will make me feel tired.

“These are symptoms that you can see if you have COVID-19,” she added. “So, it’s really helpful for me if I’m going to go into a situation where people are not vaccinated, to test myself, to make sure that I’m not missing a very low level or a very mild form of COVID-19 that I might be carrying, even though I’m fully vaccinated and boosted.”

“For those who are not vaccinated—or who may be vaccinated and [immunosuppressed](#) who have other risk factors for whom antivirals may be an appropriate intervention—knowing for sure what’s causing symptoms that mimic a cold or flu ... can make a difference in the therapy that they seek, not to mention the directions they’re going to want to follow about staying away from others,” Dr. Volk said.

## If test is positive, tell your doctor

“It’s a great idea if you come up positive for COVID-19 to let your doctor know,” said Dr. Volk. “It’s a good idea not only from a personal health perspective, so your doctor knows what’s going on with you ... but it’s also important from a public health perspective, so the public health authorities can keep track of how widespread the virus continues to be.”

“If a patient takes an at-home test and it comes up positive, calling your doctor’s office within that same day, or maybe early the next day, depending on how late it is, is a good idea,” she said, noting that your physician can help determine your eligibility for effective

[antiviral treatments](#) such as Paxlovid. “If you’re having symptoms that are more severe that you can’t manage by yourself at home, I would recommend heading to an urgent care center or an emergency room.”

## Pay attention to personal exposure

“Negative test results are important pieces of information, just like positive test results are,” said Dr. Volk. “Just like any other piece of medical information, you’ve got to take it into the whole context of what’s been going on with that person.

“For instance, if I have symptoms and I have been at a nightclub a couple of days before or the night before, and I’m suddenly not feeling great, and I get a negative at-home test, I’m probably going to want to go get a laboratory PCR test to follow that negative test up because my risk of exposure to COVID-19 is high,” she added. “Now, if I have been by myself, I haven’t had any visitors for several weeks and I suddenly start feeling crummy ... and I take the test and it comes up negative, I probably am going to feel a little better that I don’t have COVID-19.”

“Everyone who’s using that at-home test really needs to take into account the personal circumstances about their relative risk,” Dr. Volk said.

## Some may need to test more frequently

“If you’re using the test in a prudent fashion, testing as much as daily may be appropriate for people who are in certain high-risk situations,” Dr. Volk said.

“If you are talking about potentially being around others who are unvaccinated because they can’t be, or they chose not to be, and you have a high risk of carrying COVID because you’re out in the world and so forth, testing daily may be a good option if you have access to those tests,” she added.

## Don’t test to get the result you want

“It’s important to not test to get the result you’re looking for,” Dr. Volk said. That means “if you come up positive with a rapid at-home test and you really want to go to that wedding with your family in the coming weekend, testing yourself until you get a negative probably doesn’t make sense.

“You probably need to follow the information that you got from that first test and stay home from that wedding,” she added. “The intention around the use of testing is actually fairly important.”

“The other thing is if you’ve been diagnosed with COVID-19, it really doesn’t make sense to test every day until you clear the test,” Dr. Volk said, noting that “you should wait about five days to retest before attempting to be around other people.”

## False negatives can happen

“With any variant, someone could show up with a negative test for the first two days of symptoms, potentially, and then turn positive maybe on the third or fourth day,” said Dr. Volk. “That’s always a possibility, depending on how many of the virus particles they are shedding in their upper respiratory tract—their nose or their mouth if they’re doing a saliva test.”

“The advice has been to wait five to seven days of symptoms before testing in some cases. I’m not sure that’s necessarily the thing to follow always,” she said, noting “we’re seeing folks who are coming up positive within a day or two of having symptoms.”

With at-home testing, “if you come up negative and you continue to have symptoms—and you believe that you have been exposed—and you test negative on day one or day two of your illness, testing again may make sense. That is, if you think you really may have the disease and just had a false negative test,” Dr. Volk said. “But remember, a false negative test is far less common than a true negative test.

“And a false positive test is far less common than a true positive test,” she added.

## Get vaccinated and boosted

“With all of the information that we now have about the safety and efficacy of the vaccine, my sincere hope is that those who have not done it yet will reconsider and get that vaccine,” said Dr. Volk. “The other thing is it's really important to get those boosters when it's time to get those [boosters](#).”

“What I’m seeing as a pathologist and a chief medical officer is our hospitalized COVID-19 patients are almost always those who have never been vaccinated,” she said. “It’s tragic to watch folks become so ill that a machine needs to breathe for them. In some cases, they die from this illness, when it really was preventable.”