

Why You Should Still Wear A Mask And Avoid Crowds After Getting The COVID-19 Vaccine

[Joanne Silberner](#) January 12, 2021 4:00 PM ET



Staff and residents of the Ararat Nursing Facility in the Mission Hills neighborhood of Los Angeles got COVID-19 shots on Jan. 7. Coronavirus cases, hospitalizations and deaths have been surging throughout Los Angeles County.

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It may seem counterintuitive, but health officials say that even after you get vaccinated against COVID-19, you still need to practice the usual pandemic precautions, at least for a while. That means steering clear of crowds, continuing to wear a good mask in public, maintaining 6 feet or

more of distance from people outside your household and frequently washing your hands. We talked to infectious disease specialists to get a better understanding of why.

Why do I have to continue with precautions after I've been vaccinated?

In the short run, it will take some time for the vaccine's effectiveness to build up. (Effectiveness is [defined as not getting sick with COVID-19](#). If 100 vaccinated people are exposed to a virus and 50 of them subsequently develop symptoms, that vaccine is 50% effective.)

With the Pfizer-BioNTech vaccine, a study published in [The New England Journal of Medicine](#) in December found that protection doesn't start until 12 days after the first shot and that it reaches 52% effectiveness a few weeks later. A week after the second vaccination, the effectiveness rate hits 95%. In its [application for authorization](#), Moderna reported a protection rate of 51% two weeks after the first immunization and 94% two weeks after the second dose.

"That's not 100%," notes Dr. Paul Offit, an infectious disease specialist and director of the Vaccine Education Center at Children's Hospital of Philadelphia, as well as a member of the Food and Drug Administration's vaccine advisory board. "That means one out of every 20 people who get this vaccine could still get moderate to severe infection."

So, reason No. 1 to continue with precautions is to protect yourself.

Can I spread the virus to others even if I'm fully vaccinated?

This is an important question, but scientists studying the shots'

effectiveness don't have an answer yet. And for public health experts, that lack of knowledge means you should act like the answer is yes.

Here's why: Before approving the Moderna and Pfizer vaccines, the FDA asked the vaccine manufacturers only whether their products protect people from COVID-19 symptoms. They didn't ask if the vaccines stop people who've been vaccinated from nevertheless spreading the virus to others. The emergency authorizations by the FDA that have allowed distribution of the two new vaccines cite only their ability to keep you — the person vaccinated — from becoming severely sick with COVID-19.

In the words of the [Centers for Disease Control and Prevention](#), "Experts need to understand more about the protection that COVID-19 vaccines provide before deciding to change recommendations on steps everyone should take to slow the spread of the virus that causes COVID-19."

The data to answer the question of whether vaccinated people can still spread the virus are just now being collected.

How can you spread a virus if you've been vaccinated?

All the COVID-19 vaccines and vaccine candidates under consideration for use in the U.S. rely on bits of genetic material or virus protein — not anything that could grow into an active SARS-CoV-2 virus, the virus that causes the disease COVID-19.

The concern instead with the COVID-19 vaccine is about whether you might still have an asymptomatic infection despite immunization — without symptoms, but able to shed virus.

Here's how that might work: Let's say you've been vaccinated and you encounter SARS-CoV-2. You're much less likely to develop symptoms — that's clear. But your immune system may not fight off the virus completely — it might allow some viruses to survive and reproduce and get expelled from your nose or mouth in a breath, cough or sneeze. Remember: No one can be sure yet if this actually happens or if it happens often enough that you'd be emitting enough active virus to sicken someone else.

Why didn't the FDA demand information on infectivity before authorizing the first two vaccines?

In a word, time. Dr. [Larry Corey](#) is a virologist at the Fred Hutchinson Cancer Research Center in Seattle and helps lead the [COVID-19 Prevention Network](#), a federally funded consortium of vaccine experts who've been testing vaccines. "We wanted to get an answer quickly," Corey says, and to do so required as simple an experimental protocol as possible. "You can't hang a lot of bells and whistles on a trial," he says.

Even though the pre-authorization studies of the Pfizer and Moderna vaccines were as streamlined as possible, they still required quite a lot of work. Each of the 75,000 volunteers had to come into a clinic; get a test for the coronavirus; get either a vaccine or a placebo shot (without knowing which they'd received); return for a second shot; and come back to the clinic for testing anytime in the interim if they showed any symptoms of having caught the virus.

Adding in even more coronavirus tests along the way to see if the vaccinated volunteers had picked up or were transmitting the virus would have delayed the initial results considerably, Corey says. And in

the midst of the pandemic, speed was of the essence.

So how will we get an answer to whether vaccinated people can infect others?

Researchers are checking now on the folks vaccinated in the Pfizer and Moderna trials for antibodies showing that they've been infected. It's not a perfect measure, Corey notes, because the antibody tests aren't always accurate and antibodies can be transient. Moderna officials have hinted that their vaccine prevents some shedding, but they haven't been specific on how much. Some people who volunteered for the vaccine studies will be checked for evidence of the virus itself.

If someone *is* found to be shedding the virus, then researchers will check to see if that virus is capable of reproducing itself and, if it is, whether there's enough to infect other people. That raises another unknown: It's not yet clear what an infectious dose would be.

Nailing down the answers to all these questions is a laborious process. And no one is saying yet how soon the results of these sorts of studies of the Pfizer or Moderna vaccines will be available.

There are other ways to get at the answer. The COVID-19 Prevention Network has proposed an experimental study that would involve vaccinating more than 20,000 college students with Moderna's vaccine, checking them multiple times per week for virus shedding and doing contact tracing when infections occurred. The trial, which would cost several hundred million dollars, has so far been turned down by federal funders.

There are other candidate COVID-19 vaccines in the pipeline, and tests will need to be done on them as well. Volunteers in an experimental trial

of the AstraZeneca vaccine tested themselves for the virus. The [results](#) so far, posted Dec. 8 in *The Lancet*, suggest that the candidate vaccine may partly, but not totally, protect against viral shedding. In a [commentary](#) posted the same day in *The Lancet*, researchers from Johns Hopkins University said that the observation provides some hope that the vaccine stops some asymptomatic shedding but that the evidence gathered so far is too slight to be considered conclusive.

Maybe one of the vaccines that are in the pipeline would be a better idea?

If your turn for vaccination comes, there's no reason to wait. While vaccines currently being tested are different in design from the Pfizer and Moderna products, scientists say there's no biological reason to think those vaccines will be more or less protective against shedding.

Now that I'm vaccinated, can I take my mask off in a crowded room if everyone else has also been vaccinated?

You might think you're home free in that case, but not yet. Remember that the Pfizer and Moderna vaccines are not 100% effective, and many in the research community still advise caution. Once most people are protected and there's less virus circulating in the air — and less circulating in the community — the advice and restrictions on this may ease up a bit. One vision of the new normal, whether that's later in 2021 or even 2022, is an eventual relaxation of the recommendations, with occasional renewals when the virus flares up in a community.

What about the new variant from the U.K.? Will that make a difference in terms of spreading the virus after vaccination?

The [newly identified variant](#), B.1.1.7, hasn't been around long enough to

say for certain that the new vaccines are effective against it, but scientists aren't too worried about that — [lab studies](#) suggest the vaccines will be protective against this strain.

However, infectious disease specialists are concerned that any strain that is more contagious — which B.1.1.7 clearly is — might quickly increase the number of COVID-19 cases in the world.

"It appears that the people infected with this new variant, at least in the U.K., have an increased amount of virus," says Dr. [David Heymann](#) of the London School of Hygiene & Tropical Medicine. "The hypothesis is they could spread it more easily from their nasal passages. Whether there is actually an increased risk of transmitting the virus is currently being studied."

If the new variant increases the risk of shedding or just provides more chances for it to happen, increased masking and distancing, crowd avoidance and hand-washing will help stop the spread.

So what's the bottom line?

With cases and deaths [surging](#) throughout the U.S., the people who are treating COVID-19 patients really want you to continue to wear a mask, keep your distance and wash your hands, even if you've been vaccinated, until the research on shedding has yielded some answers. Dr. [Carlos del Rio](#) of Emory University says he knows taking precautions can be taxing, but he urges us all to hang on and keep it up.

"It's not like you'll need to wear a mask for the rest of your life," he says. "You need to wear your mask until we have the data, and we're trying to get the answers as fast as we can."

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