

COVID reinfections are now common. Will getting a booster even help?

July 25 2022, by Dennis Thompson



Everyone in the United States knows someone—often multiple

someones—who have been reinfected with COVID-19.

Despite vaccines, boosters and natural immunity, the highly infectious [Omicron](#) variant appears capable of getting around whatever protection you might have gained against SARS-CoV-2.

Even President Joe Biden—famously vaccinated and fully boosted—[announced](#) July 21 that he'd contracted COVID-19 and was suffering from a [runny nose](#), fatigue and occasional dry cough.

The latest Omicron subvariant—[BA.5](#)—is causing [reinfections](#) to occur more often in prior COVID patients, according to [surveillance data](#) from the gene sequencing company Helix.

The share of new COVID-19 cases that are reinfections nearly doubled in recent months, rising from 3.6% during May's BA.2 wave to 6.4% as BA.5 became the dominant strain in July, according to [Helix's data as cited by CNN](#).

And now BA.5 has become America's dominant strain, accounting for 80% of new infections, according to the U.S. Centers for Disease Control and Prevention.

"BA.5 is actually the most immune-evasive SARS-CoV-2 subvariant that we've seen up until this point, which is pretty scary," said John Bowen, a researcher in the department of biochemistry at the University of Washington School of Medicine, in Seattle.

The COVID-19 virus mutates more often than first thought, and its mutations have proven more infectious than earlier strains, said Dr. William Schaffner, medical director of the Bethesda, Md.-based National Foundation for Infectious Diseases.

"We did think that once you had gotten infected, you would have fairly long-term protection—not complete, but fairly long term," Schaffner said. "This is clearly not the case with Omicron. Omicron has the capacity to be extraordinarily contagious. And in that context, it can infect people who are previously vaccinated and previously recovered from natural infection."

Vaccinations, boosters and previous infections can still help prevent more severe cases of COVID-19, but they don't provide such strong protection against initial infection and mild illness, Schaffner said.

"In order for real serious disease to take place, the virus has to leave the [respiratory tract](#), travel through the bloodstream to other [organ systems](#), and during that travel through the bloodstream is when the antibodies that we create from the vaccine can glom onto the virus and prevent it from localizing throughout the body," he said.

"But the virus attaching to the back of the throat, to the nose, to the bronchial tubes, that's a very easy thing to do," Schaffner continued. "It turns out that's a much harder thing to prevent than the transport of the virus through the bloodstream."

Bowen led a study recently published online in the journal [Science](#) that came to one reassuring conclusion—all existing vaccines provide pretty good protection against the Omicron variants.

"Even despite how immune evasive this thing is, vaccines actually do still do a pretty good job of neutralizing the virus, and we know neutralization is correlated with protection," Bowen said of the BA.5 variant. "So we think people are going to be pretty decently protected."

Another piece of mixed news comes from Helix, which found that the average time between COVID-19 infections has increased in recent

months.

Even though reinfections are more common, a person on average had 270 days between COVID infections in July, compared with 230 days between infections in April.

"This indicates that the vast majority of reinfections are still occurring in people that were originally infected before the Omicron wave," Helix wrote in a report. "However, the rate of reinfection (or how often people are getting reinfected) is rising faster than before, likely because of waning protection from vaccines and previous infections."

Folks need to get used to the idea of COVID becoming an illness you will likely acquire from time to time, just like influenza, said Schaffner and Dr. Aaron Glatt, chief of [infectious diseases](#) at Mount Sinai South Nassau in Oceanside, N.Y.

"There's an excellent chance that this will become a chronic viral infection that maybe or maybe not you'll have to get an annual [booster](#) for, we don't know that yet," Glatt said. "And it will constantly mutate and have variants that may or may not be of different severity, a different communicability, and different potential illness causes."

As with the flu, annual COVID vaccine boosters will help protect you against serious illness, but won't be able to prevent a mild infection, Schaffner and Glatt said.

People with a high risk of severe COVID should make sure they are fully boosted, the experts agreed.

"You should get the current [booster](#) if you are somebody that is high risk for [severe disease](#)," said Dr. Amesh Adalja, a senior scholar at Johns Hopkins Health Security Center in Baltimore. "While the current booster

vaccinations do not do well against protecting against infection, they are important for protection against severe disease. So, if you have risks for severe disease, you will benefit from a booster now."

But you don't necessarily need to run out and get it before the latest COVID vaccines are released this fall, Glatt said.

"If you have no really high risk factors and you got one booster, you don't fall into the highest risk groups of people, either by age or by weight or by underlying medical problems, it is reasonable to wait, especially if you've had COVID," Glatt said.

"The people that have been vaccinated and boosted with one booster and have had COVID, I tell them, it essentially looks like you've had two boosters," he continued. "COVID can count as a booster. Certainly if you've had COVID recently, then I would say wait to get a better booster that may be coming along."

Further, researchers are working on [nasal vaccines](#) that might nip COVID in the bud, by preventing it from infecting the nasal tract, Bowen noted.

"The idea is that if you can block the virus at its source, which is by eliciting mucosal immunity, then potentially that's going to be able to naturally stop severe disease like current vaccines, but also infections," Bowen said. "So maybe the virus won't even be able to get into our body, but that's something that's going to require a little bit more time and also funding and a company to back it up."

In the meantime, the experts agreed that some communities might require masking if COVID cases start clogging hospitals, but that for the most part such measures will be unnecessary.

"It was always going to be the case that this virus continued to mutate in order to reinfect us, just like its other family members do," Adalja said.

"I do not think that any restrictive measures make sense in an era when we have vaccines that protect us against severe disease, rapid tests to diagnose [infection](#), antivirals that are lifesaving, and [monoclonal antibodies](#)," he added.

"There will always be a baseline number of hospitalizations and deaths but what we won't see is our hospitals going into crisis in the way that they once did," Adalja said.

More information: The U.S. Centers for Disease Control and Prevention has more about [COVID](#).

Copyright © 2022 [HealthDay](#). All rights reserved.

Citation: COVID reinfections are now common. Will getting a booster even help? (2022, July 25) retrieved 27 April 2024 from <https://medicalxpress.com/news/2022-07-covid-reinfections-common-booster.html>

<p>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.</p>
--