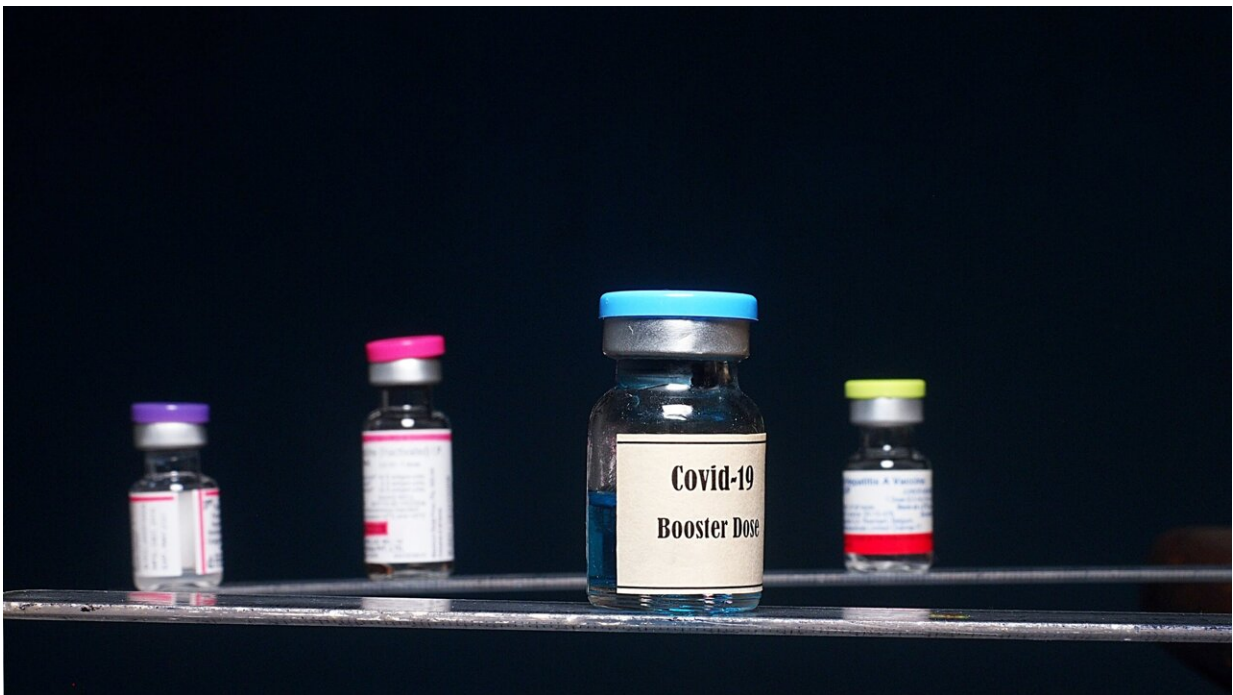


Already got COVID? Vaccines, boosters up to 68% effective against hospitalization from reinfection, CDC study shows

April 14 2022, by Adrianna Rodriguez



Credit: Unsplash/CC0 Public Domain

Immunity from a bout of COVID-19 may provide some protection against the virus, but a new study suggests it may not be enough to keep you out of the hospital.

The Centers for Disease Control and Prevention partnered with Epic Research, which shares data to advance medicine and [public health](#), to determine how effective vaccines and boosters are against hospitalization from reinfection.

Researchers looked at [electronic health records](#) from over 50,000 patients during both the delta and omicron waves who tested positive for COVID-19 more than three months after a previous infection.

"People had good immunity from (the original strain of the virus) after getting COVID the first time, but after going through the delta period and now the omicron period, we wanted to see what the [public health](#) impact would be," said study author Dr. Jackie Gerhart, a physician and vice president of clinical informatics at Epic Research.

During the delta wave, they found a two-dose mRNA vaccine series was about 47% effective against hospitalization due to reinfection and a [booster](#) dose was more than 57% effective, according to the study published Tuesday in the *Morbidity and Mortality Weekly Report*.

More recently during the omicron wave, the two-dose series was about 34% effective and the booster dose nearly 68% effective.

The takeaway is clear, Gerhart said.

"If you've been previously infected with COVID, you can get improved immunity through a vaccine and booster," she said. "We have the tools that can help decrease your likelihood of getting reinfected and hospitalized."

The findings suggest a booster isn't as effective against delta compared to omicron, but study authors say that may be due to the timing of the study. Data was collected during the delta wave shortly after boosters

were authorized and people may not have had time to develop the intended level of protection.

Any information from the omicron wave is especially important now, health experts say, as its cousin BA.2 was responsible for more than 85% of new coronavirus cases last week, CDC data shows.

The BA.2 variant may be a bit more transmissible but appears to mostly behave the same way as the original omicron variant, said Dr. Lyssette Cardona, department chair for [infectious diseases](#) at Cleveland Clinic Florida, Martin Health.

"Since the beginning of the pandemic, the vaccines have remained effective in preventing serious illness regardless of the strain," she said. "We hope that will be the same even with the different strain of [omicron](#)."

Cases have nationally increased by about 20% from what they were two weeks ago, with about 30 states reporting upticks, according to a USA TODAY analysis of Johns Hopkins University data. The country is averaging about 3,600 COVID deaths per week.

Most of the states experiencing the biggest increases are in the northeastern part of the country. Philadelphia announced Monday it will reinstate mask mandates next week as a result of the rising cases, the first city to do so this spring.

"The next month is going to be really critical to watch," said Jodie Guest, professor and vice chair of the department of epidemiology at Emory University's Rollins School of Public Health.

With a reported total of more than 80 million COVID-19 cases since the pandemic started, more Americans are bound to get reinfected with the

virus. Now more than ever, [health experts](#) say, it's important to stay updated on COVID-19 vaccines and boosters to reduce the risk of hospitalization.

"We expect reinfections to happen," Cardona said. "Anyone eligible should still be vaccinated whether they had prior infection or not. ... Get your highest protection during this time."

(c)2022 USA Today

Distributed by Tribune Content Agency, LLC.

Citation: Already got COVID? Vaccines, boosters up to 68% effective against hospitalization from reinfection, CDC study shows (2022, April 14) retrieved 26 April 2024 from <https://medicalxpress.com/news/2022-04-covid-vaccines-boosters-effective-hospitalization.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.