

Do you need a COVID-19 booster shot?

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If you got the COVID-19 shots back in early spring, your antibodies are likely waning. But it's not something you need to be worried about, according to a new study from the University of Georgia.

"Overall, [antibody levels](#) are decreasing, but their ability to protect

against infection isn't," said Ted Ross, lead author and the director of UGA's Center for Vaccines and Immunology. "The quality is still there even if the total quantity has gone down."

Published in *Frontiers in Immunology's Vaccines and Molecular Therapeutics*, the study found that vaccination results in a significantly more robust immune response than seen in people who contracted the coronavirus naturally.

Vaccinated participants showed higher levels of neutralizing [antibodies](#), which serve as lookouts for viruses and alert the body's immune system when it's been infected. These individuals' antibodies were also more effective at binding with the virus, which prevents it from latching onto and infecting cells.

Additionally, the study showed that for most people who were infected with the virus, a single shot of the Moderna or Pfizer [vaccine](#) was enough to make them fully immune to the coronavirus. Some may require both shots to be fully protected, though, and there's currently no way to tell who does or doesn't. So, Ross recommends that everyone—even those who've had COVID-19—receive the second shot. "It doesn't hurt you to get the second one," he said.

The research is part of a large-scale, multi-year surveillance program with more than 3,100 participants, ranging from 18 to 90 years old. They give blood and saliva samples each month so the researchers can track their immune response to vaccination or natural infection.

"The takeaway is that even if you have waning antibodies, the quality of those antibodies still protect you against severe disease and hospitalization," said Ross, who is also a professor in UGA's [College of Veterinary Medicine](#). "People were concerned that if you had waning antibody levels, you would become susceptible to the virus again. But

right now that doesn't seem to be the case for most people."

Who needs a COVID-19 booster shot?

The CDC recently recommended booster shots for [older adults](#), those with underlying [medical conditions](#) and people who work or live in high-risk settings if they received the Moderna or Pfizer vaccine series six or more months ago. The agency also encourages a booster for everyone who received the one-shot Johnson & Johnson/Janssen COVID-19 vaccine.

Some health care experts questioned whether booster access should be expanded to all due to the uncertainty surrounding the vaccines' long-term efficacy in staving off disease.

But people who were vaccinated in the spring and don't qualify for a booster shouldn't panic.

"Now I don't know what will happen in another six months or another 12 months, but right now, if you were vaccinated in the spring, you should still have protective antibodies in you," Ross said. "The elderly tend to lose their immunity more quickly. We see that with influenza too. That's why they have to get vaccinated again. Younger people can maintain it longer."

That being said, if you're eligible for a booster, go for it.

"My attitude is that if you're offered one, you should get one. It can't hurt you," Ross said. "And unfortunately, here in the U.S., many of the vaccines are being thrown away because they reached their expiration date. It's unfortunate that we're not shipping them around the world to other people who need them, but if the alternative is throwing them away, I say get a [booster](#) shot."

In addition to getting the COVID-19 vaccine series, social distancing and wearing masks are still one of the most important ways to stop the spread of the disease.

More information: David Forgacs et al, SARS-CoV-2 mRNA Vaccines Elicit Different Responses in Immunologically Naïve and Pre-Immune Humans, *Frontiers in Immunology* (2021). [DOI: 10.3389/fimmu.2021.728021](https://doi.org/10.3389/fimmu.2021.728021)

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