

Why should I get vaccinated if I have already had COVID?

On average, 400 Americans die from COVID-19 every day, and the virus still represents the third leading cause of death in our country. In July 2022, among people six months and older, unvaccinated people had a five times greater risk of dying from COVID-19 compared to people vaccinated with at least a primary series. COVID-19 vaccines remain our first line of defense against serious illness and death from the virus, and they have even been shown to benefit those with a history of prior infection.

It is unclear how long protection lasts following COVID-19

For some individuals, infection with the virus that causes COVID-19 will create long-lasting immunity. However, it is still unclear how long individuals are protected following an infection and how circulating variants may impact that protection. Additionally, the level of protection from infection is variable from person-to-person, and this leaves some individuals susceptible to reinfection.

Many individuals were infected with either the original strain of the virus or the Alpha, Beta or Delta variants. The Omicron variant is now the dominant strain circulating in the United States. The risk of re-infection is higher with Omicron than the risk of reinfection from previous

North Dakota Department of Health and Human Services

600 East Boulevard Avenue, Dept 325

Bismarck N.D. 58505

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variants.¹ Additionally, studies have shown that individuals who were infected by earlier variants are far more vulnerable to Omicron due to the variant's ability to evade immunity.^{2,3}

Getting vaccinated following a COVID-19 infection can reduce your risk of reinfection.

Hybrid immunity (immunity in individuals who have had one or more doses of a COVID-19 vaccine and who have experienced at least one SARS-CoV-2 infection before or after vaccination) has been shown to provide strong and prolonged protection from reinfection. Research has shown that vaccination after recovery from COVID-19 is associated with substantial benefit, potentially reducing the risk of reinfection by half.⁴ People who already had COVID-19 and do not get vaccinated after their recovery have been shown to be more likely to get COVID-19 again compared to those who get vaccinated after their recovery.⁵

Prevention of a rei-infection may provide protection from additional health risks

Emerging evidence suggests that for people who have already had a first infection with the virus that causes COVID-19, prevention of a second infection may protect them from additional health risks. A recent study that looked at more than five million Veterans Affairs (VA) patients found that reinfection dramatically increased the risk of serious health issues, even among those with mild symptoms. In particular, researchers found that re-infection was associated with a three times greater risk of hospitalization and a two times greater risk of death, compared to those who had only been infected once. Reinfection was also associated with an increased likelihood of health problems in the six months following an infection, including health issues of the lungs, kidneys, and digestive system.⁶

Vaccination prior to a SARS-CoV-2 infection may also reduce the risk of subsequent long-COVID. The impact of vaccination in people with existing long-COVID symptoms is still debatable, with some data showing changes in symptoms while others did not. However,

¹ Eythorsson, E, et al. Rate of SARS-CoV-2 Reinfection During an Omicron Wave in Iceland. *JAMA*. 2022;5(8):e2225320. DOI: 10.1001/jamanetworkopen.2022.24320

² Altarawneh, HN, et al. Protective Effect of Previous SARS-CoV-2 Infection against Omicron BA.4 and BA.5 Subvariants. *NEJM*. Published Oct. 5, 2022. DOI: 10.1056/NEJMc2209306

³ Pulliam, JRC, et al. Increased risk of SARS-CoV-2 reinfection associated with emergence of Omicron in South Africa. *Science*. 2022;376(6593). DOI: 10.1126/science.an4947

⁴ Lewis N, Chambers LC, Chu HT, et al. Effectiveness Associated With Vaccination After COVID-19 Recovery in Preventing Reinfection. *JAMA Netw Open*. 2022;5(7):e2223917. doi:10.1001/jamanetworkopen.2022.23917

⁵ Cavanaugh AM, Spicer KB, Thoroughman D, Glick C, Winter K. Reduced Risk of Reinfection with SARS-CoV-2 After COVID-19 Vaccination — Kentucky, May–June 2021. *MMWR Morbidity and Mortality Weekly Report*. 2021;70(32).

⁶ Al-Aly, Z, Bowe, B, Xie, Y. Outcomes of SARS-CoV-2 Reinfection. *Research Square – preprint*. Available at: <https://www.researchsquare.com/article/rs-1749502/v1>

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current evidence supports that COVID-19 vaccines can be used as preventive strategy for decreasing the risk of long-COVID.⁷

Vaccination can occur as soon as you have recovered from COVID-19

You can receive COVID-19 vaccine as soon as you have recovered from COVID-19 and completed your isolation period. However, the CDC has noted that current evidence suggests reinfection is uncommon in the 90 days after infection, and thus, persons with documented acute infection in the preceding 90 days may defer vaccination until the end of this period, if desired.

Why should I get a COVID-19 vaccine?

You should get a COVID-19 vaccine, even if you have already had COVID-19. The CDC recommends that you stay up-to-date with COVID-19 vaccines, as they are very effective at preventing severe disease, hospitalization, and death from the virus. Getting vaccinated may also provide protection from certain health risks, like long-COVID, if you become infected following vaccination. Lastly, COVID-19 vaccination not only protects you, but may also prevent the spread of the disease to your friends, loved ones, and those in your community.

⁷ Notarte, KI, et al. Impact of COVID-19 vaccination on the risk of developing long-COVID and on existing long-COVID symptoms: A systematic review. 2022;53:101624.

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