

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

Many people wonder if vaccination is still necessary after having COVID-19. The answer is yes. While infection does provide some protection, vaccination strengthens and extends that protection. Because the virus continues to change, updated vaccines are designed to match newer variants and provide the best defense available. Staying up to date lowers your risk of severe illness, hospitalization, and long-term complications. And since no one can predict who will develop mild symptoms and who may become seriously ill, vaccination remains the safest and most reliable way to protect yourself and those around you.

COVID-19 is still causing serious illness^{1,2,3}

- During the 2024-25 respiratory season, COVID-19 caused an estimated 370,000-530,000 hospitalizations (*that's like filling every seat in the FargoDome for a concert 15 to 21 times*) and 42,000-61,000 deaths in the U.S. (*that's roughly the same as losing the entire population of a city the size of Grand Forks or Bismarck in less than a year*).
- Those at higher risk of severe outcomes from COVID-19 infection are:
 - Children under 2 years of age
 - Older adults (50 years of age or older)
 - People with certain pre-existing health conditions. For a full list of risk factors, visit <https://www.cdc.gov/covid/risk-factors/index.html>.

¹ MacNeil A. Current Epidemiology of COVID-19. Presented at ACIP on June 25, 2025. Access slides at: <https://www.cdc.gov/acip/downloads/slides-2025-06-25-26/02-MacNeil-COVID-508.pdf>

² Loo SL, et al. Scenario Projections of COVID-19 Burden in the US, 2024-2025. JAMA Netw Open. 2025;8(9):e2532469.

³ CDC. Preliminary Estimates of COVID-19 Burden for 2024-2025. Accessed September 26, 2025. Available at: <https://www.cdc.gov/covid/php/surveillance/burden-estimates.html>

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Most hospitalizations occur in people who are not fully up to date on their COVID-19 vaccination.⁴

- Among adults 65 years and older hospitalized with COVID-19 during the 2024–25 respiratory season, 65% had no record of receiving the updated 2024–25 COVID-19 vaccine before their hospitalization.
- Among vaccine-eligible children and teens hospitalized with COVID-19 during the 2024–25 respiratory season, 89% had not received the most recently recommended COVID-19 vaccine.
- Researchers estimate that COVID-19 vaccination of everyone eligible in the U.S. during the 2024–25 season could have prevented 10-20% of hospitalizations and deaths, compared with no vaccination.⁵

Vaccination remains the most effective way to reduce the risk of severe illness and protect yourself and your community from COVID-19.

COVID-19 infection does not provide durable protection and carries ongoing health risks⁶

- Immunity after infection fades within a few months, and new variants like Omicron and its subvariants are associated with higher rates of reinfection.
- One study found that people who had COVID-19 had three times greater risk of potentially preventable hospitalization within a month of infection, and still had a 40% higher risk of hospitalization one year later compared to similar people who never had COVID-19.⁷
- Another study showed that people with more than one infection were three times more likely to be hospitalized and twice as likely to die within six months compared with those infected only once.⁸

⁴ MacNeil A. Current Epidemiology of COVID-19. Presented at ACIP on June 25, 2025. Access slides at: <https://www.cdc.gov/acip/downloads/slides-2025-06-25-26/02-MacNeil-COVID-508.pdf>

⁵ Loo SL, et al. Scenario Projections of COVID-19 Burden in the US, 2024-2025. *JAMA Netw Open*. 2025;8(9):e2532469

⁶ Chemaitelly H, et al. Differential protection against SARS-CoV-2 reinfection pre- and post-Omicron. *Nature*. 2025;639:1024-1031.

⁷ Govier, et al. Risk of Potentially Preventable Hospitalizations After SARS-CoV-2 Infection. *JAMA Netw Open*. 2024;7(4):e245786.

⁸ Bowe B, Kie Y, Al-Aly Z. Acute and postacute sequelae associated with SARS-CoV-2 reinfection. *Nature Medicine*. 2022;28:2398-2405.

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Vaccination after infection gives stronger protection^{9,10}

- Hybrid immunity can be defined as individuals who have received at least one dose of a COVID-19 vaccine and have had at least one SARS-CoV-2 infection, either before or after vaccination.
 - Provides more robust and longer-lasting protection against COVID-19 than immunity from natural infection alone.
 - See table below for a comparison of natural versus hybrid immunity.

	Natural Immunity (Infection Only)	Hybrid Immunity (Infection + Vaccine)
Magnitude of Response	Variable; can vary widely, depending on severity of illness, specific variant that caused the infection, and person's age and health status.	Robust; generates higher level of antibodies.
Breadth of Protection	Offers protection primarily against the variant that caused the infection, with less effective defense against new variants.	Broad; provides a more comprehensive defense that is more effective against a wide range of variants.
Durability	Wanes faster, particularly against reinfection with new variants like Omicron.	Longer-lasting; wanes more slowly over time than either natural infection or vaccination alone.
Protection Against Severe Disease	Robust and durable, especially against the same variant, but overall, less effective than hybrid immunity.	Highest level of protection against severe illness, hospitalization, and death.
Risk of Acquisition	Poses a risk of severe illness, long-term complications (long COVID), or death.	Safe; uses vaccines to provide a controlled immune response without the risks of severe infection.

Know the risks: Long COVID^{11,12,13,14,15}

- COVID-19 can cause lasting health problems, often called long COVID.
- Symptoms range from brain fog and fatigue to serious limits on daily life.

⁹ Mikolajczyk R, et al. Likelihood of Post-COVID Condition in people with hybrid immunity; data from the German National Cohort (NAKO). Journal of Infection. 2024;89(2):106206.

¹⁰ Feldstein LR, et al. Effectiveness of mRNA COVID-19 Vaccines and Hybrid Immunity in Preventing SARS-CoV-2 Infection and Symptomatic COVID-19 Among Adults in the United States. J Infect Dis. 2025;231(4):e743-753.

¹¹ Mikolajczyk R, et al. Likelihood of Post-COVID Condition in people with hybrid immunity; data from the German National Cohort (NAKO). Journal of Infection. 2024;89(2):106206.

¹² KFF. Long COVID Rates Appear to be Stabilizing, Affecting About 1 in 10 Adults Who Have Had COVID. Published April 4, 2024. Accessed September 18, 2025. Available at: <https://www.kff.org/covid-19/long-covid-rates-appear-to-be-stabilizing-affecting-about-1-in-10-adults-who-have-had-covid>

¹³ Beusekom MV. COVID reinfection may raise risk of persistent symptoms by 35%. CIDRAP. Published August 18, 2025. Accessed September 18, 2025. Available at: <https://www.cidrap.umn.edu/covid-19/covid-reinfection-may-raise-risk-persistent-symptoms-35>

¹⁴ CDC. Long COVID Basic. Updated July 24, 2025. Accessed September 19, 2025. Available at: <https://www.cdc.gov/long-covid/about/index.html>

¹⁵ Hou Y, Gu T, Ni Z, Shi X, Ranney M, Mukherjee B. Global Prevalence of Long COVID, Its Subtypes, and Risk Factors: An Updated Systematic Review and Metal-analysis. OFID. 12(9).

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- Although rates are lower than in 2022, about 1 in 10 adults with prior infection still report long COVID.
- In early 2024, an estimated 17 million U.S. adults were affected; nearly 80% reported daily limitations, and 1 in 4 reported serious limitations.
- Symptoms from long COVID can last a long time: about one-third had symptoms after a year, and nearly half still had symptoms after two years.
- Reinfection raises the risk of developing long COVID by about 35%.

Vaccination lowers the chance of developing long COVID and may reduce symptom severity if it occurs.

COVID-19 and heart health^{16,17}

- COVID-19 can also increase the risk of cardiovascular problems, including heart attack, stroke, and heart failure.
 - Studies have also found increased heart-related problems in children after COVID-19, even in those who were previously healthy.

Recent research shows that people who were vaccinated before infection had a significantly lower risk of these complications compared to those who were unvaccinated. This is another way vaccination helps protect your long-term health.

COVID-19 vaccines are safe^{18,19}

- Hundreds of millions of people in the United States have safely received COVID-19 vaccinations.
- COVID-19 vaccines used in the response to the pandemic underwent the most intensive safety monitoring in U.S. history. Safety monitoring used established systems.
- A recent review of over 600 scientific articles, including randomized controlled trials and observational studies found **no new safety concerns** for COVID vaccines in populations like pregnant persons, children, and immunocompromised adults.

¹⁶ Zhang B, et al. Cardiovascular post-acute sequelae of SARS-CoV-2 in children and adolescents: cohort study using electronic health records. 2025;16(3445).

¹⁷ Meister T, et al. Dynamic effects of COVID-19 vaccination on major acute cardiovascular events and mortality following SARS-CoV-2 infection in a target trial emulation study. Nature. 2025;15(27530).

¹⁸ CDC. COVID-19 Vaccine Safety Reporting Systems. Updated January 31, 2025. Accessed September 19, 2025. Available at: <https://www.cdc.gov/vaccine-safety-systems/monitoring/covid-19.html>

¹⁹ Vaccine Integrity Project. From Data to Decisions: The Evidence Base for 2025 Fall/Winter Immunizations. Presented August 19, 2025. Accessed September 19, 2025. Available at: https://www.cidrap.umn.edu/sites/default/files/From%20Data%20to%20Decisions_Aug%2019%20Slides_Vaccine%20Integrity%20Project.pdf

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These vaccines continue to be closely monitored, and no new safety concerns have been found.

Timing after infection²⁰

- You can receive a COVID-19 vaccine once you have recovered and completed your isolation period.
- Reinfection is uncommon in the 90 days after illness, so vaccination may be deferred during this window if preferred.

Even if you've already had COVID-19, staying up to date on vaccination provides stronger and longer-lasting protection than natural infection alone. Vaccination not only reduces your risk of severe illness and hospitalization but may also lower your risk of long COVID. Protect yourself, your loved ones, and your community. Make vaccination part of your plan to stay healthy this year.

²⁰ CDC. Getting Your COVID-19 Vaccine. Updated June 11, 2025. Accessed September 19, 2025. Available at: [Getting Your COVID-19 Vaccine | COVID-19 | CDC](#)

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