



COVID-19

COVID-19 Vaccines for Moderately to Severely Immunocompromised People

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What You Need to Know

- People with moderately to severely compromised immune systems are especially vulnerable to COVID-19, and may not build the same level of immunity to 2-dose vaccine series compared to people who are not immunocompromised.
- CDC recommends that people with moderately to severely compromised immune systems receive an additional dose of mRNA COVID-19 vaccine at least 28 days after a second dose of [Pfizer-BioNTech COVID-19 vaccine](#) or [Moderna COVID-19 Vaccine](#).
- This additional dose is intended to improve immunocompromised people's response to their initial vaccine series

Data on Decreased Immune Response Among Immunocompromised People

People who are moderately to severely immunocompromised make up about 3% of the adult population and are especially vulnerable to COVID-19 because they are more at risk of serious, prolonged illness.

[Studies](#) have found that some immunocompromised people don't always build the same level of immunity after vaccination the way non-immunocompromised people do and may benefit from an additional dose to ensure adequate protection against COVID-19. [Smaller studies](#)  found fully vaccinated immunocompromised people made up a large proportion of hospitalized "[breakthrough cases](#)," suggesting immunocompromised people are more likely to transmit the virus to household contacts.

Who Needs an Additional Dose of COVID-19 Vaccine?

Currently, CDC is recommending that moderately to severely immunocompromised people receive an additional dose. This includes people who have

- Been receiving active cancer treatment for tumors or cancers of the blood
- Received an organ transplant and are taking medicine to suppress the immune system
- Received a stem cell transplant within the last 2 years or are taking medicine to suppress the immune system
- Moderate or severe primary immunodeficiency (such as DiGeorge syndrome, Wiskott-Aldrich syndrome)
- Advanced or untreated HIV infection
- Active treatment with high-dose corticosteroids or other drugs that may suppress your immune response

People should talk to their healthcare provider about their medical condition, and whether getting an additional dose is appropriate for them.

Find a COVID-19 Vaccine

Find a COVID-19 Vaccine: Search [vaccines.gov](https://www.vaccines.gov), text your ZIP code to 438829, or call 1-800-232-0233 to find locations near you.

- Check your local pharmacy's website to see if vaccination walk-ins or appointments are available.
- Contact your state or local health department for more information

Vaccination Card and an Additional Dose

At your first vaccination appointment, you should have received a vaccination card that tells you which COVID-19 vaccine you received, the date you received it, and where you received it. Bring this vaccination card to your [additional dose vaccination appointment](#).

Frequently Asked Questions

How long after getting my initial COVID-19 vaccines can I get an additional dose?

CDC recommends the additional dose of an mRNA COVID-19 vaccine be administered at least 28 days after a second dose of [Pfizer-BioNTech COVID-19 vaccine](#) or [Moderna COVID-19 vaccine](#).

Can you mix and match the vaccines?

For people who received either Pfizer-BioNTech or Moderna's COVID-19 vaccine series, a third dose of the same mRNA vaccine should be used. A person should not receive more than three mRNA vaccine doses. If the mRNA vaccine product given for the first two doses is not available or is unknown, either mRNA COVID-19 vaccine product may be administered.

What should immunocompromised people who received Johnson & Johnson's Janssen (J&J/Janssen) vaccine do?

The FDA's recent emergency use authorization amendment only applies to mRNA COVID-19 vaccines, as does CDC's recommendation.

Emerging data have demonstrated that immunocompromised people who have low or no protection following two doses of mRNA COVID-19 vaccines may have an improved response after an additional dose of the same vaccine. There is not enough data at this time to determine whether immunocompromised people who received [J&J/Janssen COVID-19 vaccine](#) also have an improved antibody response following an additional dose of the same vaccine.

What are the benefits of people receiving an additional vaccine dose?

An additional dose may prevent serious and possibly life-threatening COVID-19 in people who may not have responded to their initial vaccine series. In ongoing clinical trials, the mRNA COVID-19 vaccines (Pfizer-BioNTech or Moderna) have been shown to prevent COVID-19 following the two-dose series. Limited information suggests that immunocompromised people who have low or no protection after two doses of mRNA vaccines may have an improved response after an additional dose of the same vaccine.

What are the risks of vaccinating individuals with an additional dose?

There is limited information about the risks of receiving an additional dose of vaccine, and the safety, efficacy, and benefit of additional doses of COVID-19 vaccine in immunocompromised people continues to be evaluated. So far, reactions reported after the third mRNA dose were similar to that of the two-dose series: fatigue and pain at injection site were the most commonly reported side effects, and overall, most symptoms were mild to moderate.

As with the two-dose series, [serious side effects are rare](#), but may occur.

What is the difference between an additional dose and a booster shot?

An additional dose is administered to people with moderately to severely compromised immune systems. This additional dose of an mRNA COVID-19 vaccine is intended to improve immunocompromised people's response to their initial vaccine series. A [booster shot](#) is administered when a person has completed their vaccine series, and protection against the virus has decreased over time.

If I am immunocompromised do I need an additional dose and a booster shot?

At this time, CDC does not have a recommendation for immunocompromised people to receive both a booster shot and an additional dose. The current recommendation is for immunocompromised people to receive an additional dose 28-days after completing an mRNA COVID-19 vaccine series.



For Healthcare and Public Health

- [Talking with Patients Who Are Immunocompromised](#)
- [Use of COVID-19 Vaccines Currently Authorized in the United States](#)

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