



COVID-19

COVID-19 Vaccines for Moderately or Severely Immunocompromised People

Updated Dec. 14, 2021

CDC expands COVID-19 booster recommendations to 16- and 17-year-olds. Learn more about [booster shots](#).

DEFINITION

Immunocompromised

Having a weakened immune system can make you more likely to get severely ill from COVID-19. Many conditions and treatments can cause a person to be immunocompromised or have a weakened immune system. [Primary immunodeficiency](#) is caused by genetic defects that can be inherited. Prolonged use of corticosteroids or other immune weakening medicines can lead to [secondary or acquired immunodeficiency](#).

Primary Series Shots

People who are immunocompromised are especially vulnerable to COVID-19. Everyone, including immunocompromised people, should receive a COVID-19 vaccine primary series if they are 5 years and older as soon as possible.

Additional Primary Shot and Booster Shot for Some Immunocompromised People

After completing the primary series, **some** moderately or severely immunocompromised people should get an additional primary shot.

Everyone 16 years and older, including immunocompromised people, should get a booster shot. If you are eligible for an additional primary shot, you should get this dose first before you get a booster shot.

Eligible For	IF YOU RECEIVED Pfizer-BioNTech	IF YOU RECEIVED Moderna	IF YOU RECEIVED Johnson & Johnson's Janssen
Additional Primary Shot	People age 12+ who are moderately or severely immunocompromised should get an additional primary shot of Pfizer-BioNTech COVID-19 vaccine	People age 18+ who are moderately or severely immunocompromised should get an additional primary shot of Moderna COVID-19 vaccine Given 28 days after	No additional primary shot is recommended at this time

Given 28 days after 2nd shot

Booster Shot

- Teens **ages 16–17** can get a Pfizer-BioNTech COVID-19 vaccine booster shot
- People **age 18+** should get a [booster shot](#) of any of the COVID-19 vaccines authorized in the United States

People **age 18+** should get a [booster shot](#) of any of the COVID-19 vaccines authorized in the United States

Given 6 months after additional primary shot

People **age 18+** should get a [booster shot](#) of any of the COVID-19 vaccines authorized in the United States

Given 2 months after 1st shot

Given 6 months after additional primary shot

Who Is Moderately or Severely Immunocompromised?

People are considered to be moderately or severely immunocompromised if they 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 primary shot is appropriate for them.

Scheduling Your Additional Primary Shot

If you need help scheduling your additional primary shot, contact the location that set up your previous appointment. If you need to get your additional primary dose in a location different from where you received your previous shot, there are several ways you can [find a vaccine provider](#).

What to Expect during and after Your Additional Primary Shot Appointment

- Bring your [CDC COVID-19 Vaccination Record card](#) to your additional primary shot appointment so your provider can fill in the information about your additional primary dose. If you did not receive a card at your first appointment, contact the vaccination site where you got your first shot or your [state health department](#) to find out how you can get a card.
- You may experience [side effects](#) after getting a COVID-19 vaccine. These are normal signs that your body is building protection against COVID-19.
- Use [v-safe](#) to tell CDC about any side effects. If you [enter your additional primary shot](#) in your v-safe account, the system will send you daily health check-ins.

Frequently Asked Questions



Can you mix and match the vaccines for your additional primary shot?

No, the vaccine used for the additional primary shot should be same as the vaccine used for the primary vaccine series. 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 are the benefits of an additional primary shot for people who are immunocompromised who received an mRNA COVID-19 primary vaccine series?



An additional primary shot may prevent serious and possibly life-threatening COVID-19 in people who may not have responded to their two-dose mRNA COVID-19 vaccine primary series. 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 shots of mRNA vaccines may have an improved immune (antibody) response after an additional primary dose of the same vaccine.

What are the risks of vaccinating individuals with an additional primary shot?



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

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

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



An additional primary dose is administered to people with moderately or severely compromised immune systems. The additional primary dose of an mRNA COVID-19 vaccine is intended to improve immunocompromised people's response to their vaccine primary series. A [booster shot](#) is administered when a person has completed their vaccine primary series to enhance or restore protection against COVID-19 which may have decreased over time.



For Healthcare and Public Health

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