



COVID-19

COVID-19 Vaccines for People who are Moderately or Severely Immunocompromised

Updated May 24, 2022

What You Need to Know

- If you are [moderately or severely immunocompromised](#) (have a weakened immune system), you are at increased risk of severe COVID-19 illness and death. Additionally, your immune response to COVID-19 vaccination may not be as strong as in people who are not immunocompromised.
- As with vaccines for other diseases, you are protected best when you stay up to date with your COVID-19 vaccines as described below.
- Use [CDC's COVID-19 booster tool](#) to learn if and when you can get boosters to stay up to date with your COVID-19 vaccines.
- You may also be eligible for Evusheld, a medicine given by your healthcare provider to help prevent you from getting COVID-19.
- You can self-attest to your moderately or severely immunocompromised status. This means that you do not need any documentation of your status in order to receive COVID-19 vaccine doses wherever they are offered.

Children Ages 5–11 Years Who Are Moderately or Severely Immunocompromised

Children ages 5 through 11 years who are moderately or severely immunocompromised **should receive a total of 4 doses** of Pfizer-BioNTech COVID-19 vaccine to stay up to date. The 4 doses include a primary series of 3 doses, plus 1 booster (4th dose), given on the schedule shown below.

PRIMARY SERIES COVID-19 VACCINE

Pfizer-BioNTech

Age Group:

5–11 years

Number of Doses to Complete Primary Series and Timing:

3 doses

- 2nd dose given 3 weeks (21 days) after 1st dose
- 3rd dose given at least 4 weeks (28 days) after 2nd dose

Boosters and Timing:

1st booster

- Given at least 3 months after 3rd dose

2nd booster:

- CDC does not recommend 2nd boosters for anyone in this age group at this time

Pre-teens, Teens and Adults Who Are Moderately or Severely Immunocompromised

People ages 12 years and older who are moderately or severely immunocompromised **should receive a total of 5 doses** of mRNA COVID-19 vaccine to stay up to date. The 5 doses include a primary series of 3 doses of Pfizer-BioNTech or Moderna COVID-19 vaccine, plus 2 boosters of Pfizer-BioNTech or Moderna COVID-19 vaccine, given on the schedule shown below. Note only Pfizer-BioNTech COVID-19 vaccine is available for teens ages 12–17 years.

PRIMARY SERIES COVID-19 VACCINE

Pfizer-BioNTech

Age Group:

12+ years

Number of Doses to Complete Primary Series and Timing:

3 doses

- 2nd dose given 3 weeks (21 days) after 1st dose
- 3rd dose given at least 4 weeks (28 days) after 2nd dose

Boosters and Timing:

1st booster

- Given at least 3 months after 3rd dose*

2nd booster

- Given at least 4 months after 4th dose*

* For the 1st booster, an mRNA vaccine booster is preferred for people ages 18 years and older, but you may consider J&J/Janssen COVID-19 vaccine [in some situations](#). However, J&J/Janssen COVID-19 vaccine cannot be used as a 2nd booster dose.

PRIMARY SERIES COVID-19 VACCINE

Moderna

Age Group:

18+ years

Number of Doses to Complete Primary Series and Timing:

3 doses

- 2nd dose given 4 weeks (28 days) after 1st dose
- 3rd dose given at least 4 weeks (28 days) after 2nd dose

Boosters and Timing:

1st booster

- Given at least 3 months after 3rd dose*

2nd booster

- Given at least 4 months after 4th dose*

* For the 1st booster, an mRNA vaccine booster is preferred for people ages 18 years and older, but you may consider J&J/Janssen COVID-19 vaccine [in some situations](#). However, J&J/Janssen COVID-19 vaccine cannot be used as a 2nd booster dose.

People Who Are Moderately or Severely Immunocompromised and Have Received a Johnson & Johnson/Janssen Vaccine

People ages 18 years and older who are moderately or severely immunocompromised and received the 1-dose Johnson & Johnson's Janssen COVID-19 vaccine should get a 2nd dose of either mRNA COVID-19 vaccine (Pfizer-BioNTech or Moderna), plus 2 mRNA COVID-19 vaccine boosters to stay up to date—for **a total of 4 doses**—based on the schedule shown below.

PRIMARY SERIES COVID-19 VACCINE

J&J/Janssen

Age Group:

18+ years

Number of Doses to Complete Primary Series and Timing:

2 doses

- 1st dose: J&J/Janssen
- 2nd dose: either Pfizer-BioNTech or Moderna COVID-19 vaccines given at least 4 weeks (28 days) after 1st dose

Boosters and Timing:

1 booster

- Given at least 2 months after 2nd dose*

2nd booster

- Given at least 4 months after 3rd dose*

* For the 1st booster, an mRNA vaccine booster is preferred for people ages 18 years and older, but you may consider J&J/Janssen COVID-19 vaccine [in some situations](#). However, J&J/Janssen COVID-19 vaccine cannot be used as a 2nd booster dose.

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

Who Is Moderately or Severely Immunocompromised?

People are considered to be [moderately or severely immunocompromised](#) (have a weakened immune system) due to several types of conditions and treatments. Examples include:

- 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 chimeric antigen receptor (CAR)-T-cell therapy (a treatment to help your immune system attach to and kill cancer cells) or received a stem cell transplant (within the last 2 years)
- 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 their immune response

Talk to your healthcare provider about COVID-19 vaccination and your medical condition.

If you are moderately or severely immunocompromised or severely allergic to COVID-19 vaccines, you may be eligible for [Evusheld](#), a medicine given by your healthcare provider to help prevent you from getting COVID-19. Talk to your healthcare provider to find out if this option is right for you.

People Who Were Vaccinated Outside of the United States

People who are moderately or severely immunocompromised and who received COVID-19 vaccines not available in the United States should either complete or restart the recommended COVID-19 vaccine series, including a booster, in the United States. For more information, talk to your healthcare provider, or see the [COVID-19 Interim Clinical Considerations](#).

Frequently Asked Questions

Can you mix the vaccines for your mRNA primary vaccination series?

No, vaccines used for the primary vaccination series should be the same product or brand. However, if the mRNA vaccine product given for the first two doses is not available or is unknown, either Pfizer-BioNTech or Moderna COVID-19 vaccine (mRNA COVID-19 vaccines) may be administered.

What are the benefits of a third primary dose for people who are moderately or severely immunocompromised and received two doses of mRNA COVID-19 vaccine?

A third primary dose 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. People who are moderately or severely immunocompromised who have low or no protection after two doses of mRNA vaccines may have an improved immune response after a third primary dose of the same vaccine.

What are the risks of vaccinating people who are moderately or severely immunocompromised with a third primary dose?

The safety, effectiveness, and benefit of the third primary dose in people who are moderately or severely immunocompromised continues to be evaluated. So far, reactions reported after the third primary dose of an mRNA COVID-19 vaccine are similar to those 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 and temporary.

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

What is the difference between a third primary dose and a booster?

For people who are immunocompromised, the third primary dose is the final dose of the primary series of an mRNA COVID-19 vaccine. Boosters are shots that enhance or restore protection against COVID-19, which may have decreased over time.

When are people who have weakened immune systems considered up to date with their COVID-19 vaccines?

If you are moderately or severely immunocompromised, being up to date means you have received all doses in the primary series—plus 2 boosters.

You are also considered up to date if

- You have completed your primary series but are not yet eligible for a booster
- You have received 1 booster but are not yet eligible for a 2nd booster

Do people who have weakened immune systems need to provide proof of their moderately or severely immunocompromised status to get vaccinated?

People can self-attest to their moderately or severely immunocompromised status. This means that they do not need any documentation of their status in order to receive COVID-19 vaccine doses wherever they are offered.



For Healthcare and Public Health

- [Use of COVID-19 Vaccines Currently Authorized or Approved in the United States](#)

Last Updated May 24, 2022