Centers for Disease Control and Prevention

COVID-19

COVID-19 Vaccine Boosters

Updated Apr. 1, 2022

What You Need to Know

- As with vaccines for other diseases, people are best protected against infection with the virus that causes COVID-19 when they stay up to date with vaccinations.
- COVID-19 vaccines continue to protect people from getting seriously ill, being hospitalized, and even dying—especially people who have received a booster.
- CDC recommends everyone ages 12 years and older receive a COVID-19 vaccine booster after completing their primary COVID-19 vaccination series. Some people can receive two boosters.
- People who are moderately or severely immunocompromised have specific COVID-19 vaccine recommendations, including recommendations for a booster. Learn more about COVID-19 vaccine recommendations for people who are moderately or severely immunocompromised.

Choosing Your COVID-19 Booster

Three COVID-19 vaccines are authorized or approved for use in the United States to prevent COVID-19. Pfizer-BioNTech or Moderna (COVID-19 mRNA vaccines) are preferred. You may get Johnson & Johnson's Janssen COVID-19 vaccine in some situations.

Who Can Get a Booster

PRIMARY SERIES COVID-19 VACCINE

Pfizer-BioNTech

Who should get one booster:

Everyone 12 years and older

Who can get a second booster:

Adults 50 years and older

When to get your booster:

At least 5 months after completing your primary COVID-19 vaccination series

If eligible for a second booster, at least 4 months after your first booster

Which booster should you get?

- Adults 18 years and older should get an mRNA COVID-19 vaccine (Pfizer-BioNTech or Moderna) for the first booster in most* situations
- The second booster must be an mRNA COVID-19 vaccine
- Teens 12–17 years old may only get a Pfizer-BioNTech COVID-19 vaccine booster

PRIMARY SERIES COVID-19 VACCINE

Moderna

Who should get one booster:
Adults 18 years and older

Who can get a second booster:

Adults 50 years and older

When to get your booster:

At least 5 months after completing your primary COVID-19 vaccination series

If eligible for a second booster, at least 4 months after your first booster

Which booster should you get?

For the first booster, an mRNA COVID-19 vaccine (Pfizer-BioNTech or Moderna) is preferred in most* situations

The second booster must be an mRNA COVID-19 vaccine

PRIMARY SERIES COVID-19 VACCINE

Johnson & Johnson's Janssen*

Who should get a booster:

Adults 18 years and older

Who can get a second booster:

Anyone who received a J&J/Janssen COVID-19 vaccine for both their primary dose and booster

Adults 50 years and older who first received a J&J/Janssen COVID-19 vaccine, regardless of what type of booster they received

When to get a booster:

At least 2 months after receiving your J&J/Janssen COVID-19 vaccination

If eligible for a second booster, at least 4 months after your first booster

Which booster should you get?

At least 2 months after receiving your J&J/Janssen COVID-19 vaccination

If eligible for a second booster, at least 4 months after your first booster

*Although mRNA vaccines are preferred for the first booster, J&J/Janssen COVID-19 vaccine may be considered in some situations.

Scheduling Your Booster

If you need help scheduling your booster, contact the location that set up your previous appointment. If you need to get your booster in a location different from where you received your previous vaccination, there are several ways you can find a vaccine provider.

> **Find a COVID-19 vaccine or booster:** Search vaccines.gov, text your ZIP code to 438829, or call 1-800-232-0233 to find locations near you.

What to Expect during and after Your Booster Shot Appointment

- Bring your CDC COVID-19 Vaccination Record card to your booster appointment so your provider can fill in the information about your booster dose. If you did not receive a card at your first appointment, contact the vaccination site where you got your first dose 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.
- If you have enrolled in **v-safe**, enter your booster dose in your **v-safe** account, the system will send you daily health check-ins. You will be able to tell CDC about any side effects.
- A person is considered "boosted" and up to date right after getting their first booster. Getting a second booster is not necessary to be considered up to date at this time.

If You Were Vaccinated Outside of the United States

If you completed a Pfizer-BioNTech, Moderna, or J&J/Janssen COVID-19 vaccine primary series outside of the United States, you should follow the guidance above for boosters.

Otherwise, if you were vaccinated abroad with other COVID-19 vaccines, you can get a booster if you are 12 years or older and you either:

- Received all the recommended doses of a World Health Organization emergency use listing (WHO-EUL) COVID-19 vaccine , not approved or authorized by the U.S. Food and Drug Administration (FDA)
- Or completed a mix and match series composed of any combination of FDA-approved, FDA-authorized, or WHO-EUL COVID-19 vaccines

If you meet the above requirements, you can get a single booster of an mRNA COVID-19 vaccine (Pfizer-BioNTech or Moderna) at least 5 months after getting all recommended doses or completing a mix and match COVID-19 vaccine series.

Frequently Asked Questions

Do boosters use the same ingredients as existing vaccines?

Yes. COVID-19 boosters are the same ingredients (formulation) as the current COVID-19 vaccines. However, in the case of a Moderna COVID-19 vaccine booster, the dose is half of the amount of the vaccine people get for their primary series.

If we need a booster, are the vaccines working?

Yes. COVID-19 vaccines are working well to prevent severe illness, hospitalization, and death. However, public health experts are starting to see reduced protection over time against mild and moderate disease, especially among certain populations.

What are the risks to getting a booster?

Adults and children may have some side effects from a COVID-19 vaccine, including pain, redness or swelling at the injection site, tiredness, headache, muscle pain, chills, fever, and nausea. Serious side effects are rare, but may occur.

Am I still considered “fully vaccinated” if I don’t get a booster?

Yes, the definition of fully vaccinated has not changed and does not include a booster. Everyone is still considered fully vaccinated two weeks after their second dose in a two-dose series, such as the Pfizer-BioNTech and Moderna vaccines, or two weeks after the single-dose J&J/Janssen vaccine. Fully vaccinated, however, is not the same as having the best protection. People are best protected when they stay up to date with COVID-19 vaccinations, which includes getting one booster when eligible.

Does the definition of “up to date” include a booster?

It depends. Everyone ages 12 years and older is considered up to date until the time they are eligible for their first booster — which is 5 months after the second dose for Pfizer-BioNTech and Moderna vaccines, or two months after the J&J/Janssen vaccine. After this time period, they need to get 1 booster to be considered up to date. Getting a second booster is not necessary to be considered up to date at this time.

If I have received a J&J/Janssen COVID-19 vaccine and a J&J/Janssen COVID-19 booster, are additional boosters recommended?

People (except those who are moderately or severely immunocompromised) who first received a J&J/Janssen COVID-19 vaccine and got it again for their booster may also receive a booster of an mRNA COVID-19 vaccine (Pfizer-BioNTech or Moderna). Get the mRNA booster at least 4 months after the most recent J&J/Janssen booster.

Data Supporting Need for a Booster

Studies show after getting vaccinated against COVID-19, protection against the virus and the ability to prevent infection with variants may decrease over time and due to changes in variants.

- Although COVID-19 vaccines remain effective in preventing severe disease, recent data [1 MB, 68 pages] suggest their effectiveness at preventing infection or severe illness wanes over time, especially in people ages 65 years and older.
- The emergence of the Omicron variant further emphasizes the importance of vaccination, boosters, and prevention efforts needed to protect against COVID-19.
- Data from clinical trials showed that an mRNA booster increased the immune response in trial participants who finished a Pfizer-BioNTech or Moderna primary series 6 months earlier or who received a J&J/Janssen single-dose vaccine 2 months earlier. With an increased immune response, people should have improved protection against getting a serious COVID-19 infection.
- One CDC study found that adults who received the J&J/Janssen COVID-19 vaccine as both their primary and booster had lower levels of protection against COVID-19-associated emergency department and urgent care visits during Omicron compared to adults who received an mRNA COVID-19 booster.

Related Pages

- COVID-19 Vaccine Safety and Monitoring
- Understanding How COVID-19 Vaccines Work
- Ensuring COVID-19 Vaccines Work
- Frequently Asked Questions about COVID-19 Vaccination
- COVID-19 Vaccines for Moderately to Severely Immunocompromised People

For Healthcare and Public Health

Considerations for Use of a COVID-19 Vaccine Booster Dose

More Information

ACIP Presentation Slides, December 16, 2021

ACIP Presentation Slides, November 19, 2021

ACIP Presentation Slides, October 21, 2021

ACIP Presentation Slides, September 22–23, 2021

Last Updated Apr. 1, 2022