



Centers for Disease Control and Prevention
CDC 24/7: Saving Lives, Protecting People™

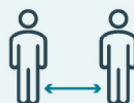


COVID-19

ACT NOW!



WEAR A MASK



STAY 6 FEET APART



AVOID CROWDS

Information about the Pfizer-BioNTech COVID-19 Vaccine

Updated Jan. 25, 2021

[Print](#)

General information

Name: BNT162b2

Manufacturer: Pfizer, Inc., and BioNTech

Type of vaccine: mRNA

Learn more about [how COVID-19 vaccines work](#) and get a better [understanding of COVID-19 mRNA vaccines](#).

Number of shots: 2 shots, 21 days apart

How given: Shot in the muscle of the upper arm

Does not contain:

- Eggs
- Preservatives
- Latex

For a full list of ingredients, see [Pfizer's COVID-19 Vaccine Fact Sheet for Recipients and Caregivers \[200 KB, 6 pages\]](#) [↗](#)

Who should get vaccinated

- The Pfizer-BioNTech vaccine is recommended for people aged 16 years and older. Learn more about [how CDC is making COVID-19 vaccine recommendations](#) and [who should be vaccinated first when supplies are limited](#).

Who should not get vaccinated

If you have had a severe allergic reaction (anaphylaxis) or an immediate allergic reaction—even if it was not severe—to any ingredient in an mRNA COVID-19 vaccine, you should not get an mRNA COVID-19 vaccine.*

If you have had a severe allergic reaction (anaphylaxis) or an immediate allergic reaction—even if it was not severe—after getting the first dose of the vaccine, you should not get another dose of an mRNA COVID-19

- vaccine.*

An immediate allergic reaction means a reaction within 4 hours of getting vaccinated, including symptoms such as hives, swelling, or wheezing (respiratory distress).

- This includes allergic reactions to polyethylene glycol (PEG) and polysorbate. Polysorbate is not an ingredient in either mRNA COVID-19 vaccine but is closely related to PEG, which is in the vaccines. People who are allergic to
- PEG or polysorbate should not get an mRNA COVID-19 vaccine.

Learn more about [COVID-19 vaccines and allergic reactions](#).

*If you have had an immediate allergic reaction—even if the reaction was not severe—to a vaccine or injectable therapy for another disease, ask your doctor if you should get a COVID-19 vaccine. Your doctor will help you decide if it is safe for you to get vaccinated.

Side effects

Most common side effects

In the arm where you got the shot:	Throughout the rest of your body:
<ul style="list-style-type: none">• Pain• Swelling• Redness	<ul style="list-style-type: none">• Chills• Tiredness• Headache

These side effects usually start within a day or two of getting the vaccine. They might feel like flu symptoms and might even affect your ability to do daily activities, but they should go away in a few days. [Get tips on what to expect after getting vaccinated](#).

Summary of safety data

- In [clinical trials](#), reactogenicity symptoms (side effects that happen within 7 days of getting vaccinated) were common but were mostly mild to moderate.
- Side effects (such as fever, chills, tiredness, and headache) throughout the body were more common after the second dose of the vaccine.
- Most side effects were mild to moderate. However, a small number of people had severe side effects—defined as side effects affecting a person's ability to do daily activities.
- Although few people in the clinical trials went to the hospital or died, data suggest that people who got the Pfizer-BioNTech vaccine were less likely to have these more serious outcomes compared to people who got the saline placebo.

CDC will continue to provide updates as we learn more about the safety of the Pfizer-BioNTech vaccine in real-world conditions. [Learn more about vaccine safety monitoring after a vaccine is authorized or approved for use.](#)

[Learn more about safety and reactogenicity data from the clinical trials.](#)

Information on how well the vaccine works

- Based on [evidence from clinical trials](#), the Pfizer-BioNTech vaccine was 95% effective at preventing laboratory-confirmed COVID-19 illness in people without evidence of previous infection.
- CDC will continue to provide updates as we learn more about how well the Pfizer-BioNTech vaccine works in real-world conditions.

Demographic information from clinical trials

Phase 2 and 3 clinical trials for the Pfizer-BioNTech vaccine included people from the following racial and ethnic categories:

- 81.9% White
- 26.2% Hispanic/Latino
- 9.8% African American
- 4.4% Asian
- <3% other races/ethnicities

Age and sex breakdown:

- 50.6% male
- 49.4% female
- 21.4% 65 years and older

The most frequent underlying medical conditions were obesity (35.1%), diabetes (8.4%), and pulmonary disease (7.8%).

[Learn more about demographic information for people who participated in the trials. \[1.13 MB, 53 pages\]](#) [↗](#)

More Information

[What to Expect After Getting a COVID-19 Vaccine](#)

[Learn more about how federal partners are ensuring the safety of COVID-19 vaccines](#)

[Learn more about the benefits of getting a COVID-19 vaccine](#)

[MMWR: Allergic Reactions Including Anaphylaxis After Receipt of the First Dose of Pfizer-BioNTech COVID-19 Vaccine — United States, December 14–23, 2020](#)

Last Updated Jan. 25, 2021

Content source: [National Center for Immunization and Respiratory Diseases \(NCIRD\), Division of Viral Diseases](#)

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