



Allergic Reactions after COVID-19 Vaccination

Updated July 20, 2022

If You Are Having a Severe Allergic Reaction to a COVID-19 Vaccine

Severe allergic reactions to vaccines are rare but can happen. If you get a COVID-19 vaccine and you think you might be having a severe allergic reaction after leaving the vaccination provider site, seek immediate medical care by calling 911.

A severe allergic reaction can cause:

- difficulty breathing or wheezing,
- a drop in blood pressure,
- swelling of the tongue or throat, or
- a generalized rash or hives, which may include mucus membranes.

If You Had a Severe Allergic Reaction to a COVID-19 Vaccine

- The Pfizer-BioNTech and Moderna COVID-19 vaccines are messenger RNA vaccines, also called mRNA vaccines.
- Johnson & Johnson's/Janssen(J&J/Janssen) COVID-19 vaccine is a viral vector vaccine.
- Novavax COVID-19 vaccine is a protein subunit vaccine.
- If you had a severe allergic reaction after receiving a particular type of COVID-19 vaccine (either mRNA, protein subunit, or viral vector), you should not get another dose of that type of vaccine.

CDC recommends that people getting a booster get an mRNA COVID-19 vaccine (Pfizer-BioNTech or Moderna). However, if you had a severe allergic reaction after a dose of an mRNA COVID-19 vaccine or if you have had a severe allergic reaction to any ingredient in an mRNA COVID-19 vaccine, you may be able to get the J&J/Janssen COVID-19 vaccine.

Learn about getting a different type of COVID-19 vaccine after an allergic reaction.

If You Have Had an Immediate Allergic Reaction to Other Vaccines or Injectables

If you have had an immediate allergic reaction (a reaction that started within 4 hours) to any vaccine other than a COVID-19 vaccine or any injectable therapy, you may still be able to get a COVID-19 vaccine. However, your doctor may refer you to an allergy and immunology specialist for additional care or advice.

If You Had a Non-severe Allergic Reaction to a COVID-19 Vaccine

If you had an immediate allergic reaction (a reaction that started within 4 hours of getting vaccinated) to a COVID-19 vaccine, but the reaction was not considered severe by a medical professional, you likely can **receive another dose of the same vaccine under certain conditions**. Your doctor may refer you to an allergy and immunology specialist for additional care or advice.

If You Had a Rash on the Arm where You Got a COVID-19 Shot

If you had a red, itchy, swollen, or painful rash where you got a COVID-19 shot, **you should still get another shot** at the scheduled date and time. This applies to second, additional, or booster shots. Your vaccination provider may recommend that you get your next COVID-19 vaccine in the opposite arm, if possible.

These rashes can start a few days to more than a week after your shot and are sometimes quite large. These rashes are also known as "COVID arm." Tell your vaccination provider that you experienced a rash or "COVID arm" after your shot. Your vaccination provider may recommend that you get your next COVID-19 vaccine in the opposite arm if possible.

If the rash is itchy, you can take an antihistamine. If it is painful, you can take a pain medication like acetaminophen or a non-steroidal anti-inflammatory drug (NSAID).

Safeguards Are in Place

- Everyone who gets a COVID-19 vaccine should be monitored on site for at least 15 minutes after vaccination.
- You should be monitored for 30 minutes if:
 - You have had a severe allergic reaction called anaphylaxis due to any cause.
 - You have had any type of immediate (within 4 hours) allergic reaction to a non-COVID-19 vaccine or injectable therapy.
 - You had a severe allergic reaction to one type of COVID-19 vaccine (for example, an mRNA vaccine) and are now receiving another type of COVID-19 vaccine (for example, a viral vector). This vaccination should only be done in a health clinic, medical facility, or doctor's office.
 - You had an immediate (within 4 hours) allergic reaction that was not severe from a previous dose of that type of COVID-19 vaccine. This vaccination should only be done in a health clinic, medical facility, or doctor's office.

Vaccination providers should have appropriate personnel, medications, and equipment—such as epinephrine, antihistamines, blood pressure monitor, and timing devices to check your pulse—at all COVID-19 vaccination provider sites.

If you experience a severe allergic reaction after getting a COVID-19 vaccine, vaccination providers can provide care rapidly and call for emergency medical services. You should continue to be monitored in a medical facility for at least several hours.

CDC Is Monitoring Reports of Severe Allergic Reactions

If someone has a severe allergic reaction after getting vaccinated, their vaccination provider will send a report to the Vaccine Adverse Event Reporting System (VAERS). VAERS is a national system that collects reports from healthcare professionals, vaccine manufacturers, and the public about adverse events that happen after vaccination. Reports of adverse events that are unexpected, appear to happen more often than expected, or have unusual patterns are followed up with specific studies.

Learn more about how CDC and federal partners are monitoring the safety of COVID-19 vaccines in the United States, including reports of selected adverse events after COVID-19 vaccination.

Related Pages

- Information about COVID-19 Vaccines for People with Allergies
- > Possible Side Effects
- > Ensuring the Safety of COVID-19 Vaccines



For Healthcare Professionals

- Interim Considerations: Preparing for the Potential Management of Anaphylaxis at COVID-19 Vaccination Sites
- Interim Clinical Considerations for Use of mRNA COVID-19 Vaccines Currently Authorized in the United States
- COVID-19 Clinical Resources

More Information

Research

Allergic Reactions Including Anaphylaxis After Receipt of the First Dose of Pfizer-BioNTech COVID-19 Vaccine — United States, December 14–23, 2020

Allergic Reactions Including Anaphylaxis After Receipt of the First Dose of Moderna COVID-19 Vaccine — United States, December 21, 2020–January 10, 2021

More Information

Vaccine Adverse Event Reporting System (VAERS) ☐

COVID-19 Vaccine Safety Publications

Last Updated July 20, 2022