



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



COVID-19


Myocarditis and Pericarditis Following mRNA COVID-19 Vaccination

Updated June 23, 2021

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What You Need to Know

- More than 177 million people have received at least one dose of COVID-19 vaccine in the United States, and CDC continues to monitor the safety of COVID-19 vaccines for any health problems that happen after vaccination.
- Since April 2021, there have been more than a thousand reports to the Vaccine Adverse Event Reporting System (VAERS) of cases of inflammation of the heart—called myocarditis and pericarditis—happening after mRNA COVID-19 vaccination (i.e., Pfizer-BioNTech, Moderna) in the United States.
- These reports are rare, given the hundreds of millions of vaccine doses administered, and have been reported after mRNA COVID-19 vaccination, particularly in adolescents and young adults. [View the latest information.](#)
- CDC and its partners are actively monitoring these reports, by reviewing data and medical records, to learn more about what happened and to understand any relationship to COVID-19 vaccination.
- Most patients who received care responded well to treatment and rest and quickly felt better.
- Confirmed cases have occurred:
 - Mostly in male adolescents and young adults age 16 years or older
 - More often after getting the second dose than after the first dose of one of these two mRNA COVID-19 vaccines
 - Typically within several days after COVID-19 vaccination
- Patients can usually return to their normal daily activities after their symptoms improve. They should speak with their doctor about return to exercise or sports.
- CDC continues to recommend [COVID-19 vaccination](#) for everyone 12 years of age and older, given the risk of COVID-19 illness and related, possibly severe complications.
- Getting vaccinated is the best way to help protect yourself and your family from COVID-19.
- More information will be shared as it becomes available.

Myocarditis is inflammation of the heart muscle, and **pericarditis** is inflammation of the outer lining of the heart. In both cases, the body's immune system causes inflammation in response to an infection or some other trigger. Learn more about [myocarditis and pericarditis](#) .

Should I Still Get Myself or My Child Vaccinated?

Yes. **CDC continues to recommend COVID-19 vaccination for everyone 12 years of age and older**, given the risk of COVID-19 illness and related, possibly severe complications, such as long-term health problems, hospitalization, and even death. If you or your child has already gotten the first dose of the Pfizer-BioNTech or Moderna vaccine, it's important to get the [second dose](#) unless a vaccination provider or your doctor tells you [not to get it](#).

The known and potential benefits of COVID-19 vaccination outweigh the known and potential risks, including the possible risk of myocarditis or pericarditis. Also, most patients with myocarditis and pericarditis who received care responded well to treatment and rest and quickly felt better.


If you have concerns about COVID-19 vaccination, talk with your or your child's doctor, nurse, or clinic.

What Myocarditis/Pericarditis Symptoms Should I Be on the Lookout for after mRNA COVID-19 Vaccination?

Be on the lookout for any of the following symptoms:

- Chest pain
- Shortness of breath
- Feelings of having a fast-beating, fluttering, or pounding heart

Seek medical care if you think you or your child have any of these symptoms within a week after COVID-19 vaccination.

If you have any health problems after vaccination, report them to the [Vaccine Adverse Event Reporting System](#)  (VAERS).

Last Updated June 23, 2021

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