

What to tell patients about myocarditis after COVID-19 vaccination

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As the country continues to push for more people to get vaccinated against COVID-19, some remain concerned over rare cases of heart inflammation—myocarditis and pericarditis—linked to the Pfizer-BioNTech and Moderna mRNA vaccines. While some parents may be thinking twice about teen vaccination, medical experts reassure that the risk of myocarditis and pericarditis are far lower than the risks of serious illness or death from contracting COVID-19.

Since April, there have been more than 1,000 reports to the Vaccine Adverse Event Reporting System (VAERS) of cases of myocarditis and pericarditis occurring after mRNA COVID-19 vaccination in the U.S. with more than 300 cases confirmed. Myocarditis is inflammation of the heart muscle and pericarditis is inflammation of the lining outside the heart. In both cases, according to the Centers for Disease Control and Prevention (CDC), the body's immune system is causing inflammation in response to an infection or other trigger.

“As physicians, nurses, pharmacists, public health and health care professionals, and, for many of us, parents, we understand the significant interest many Americans have in the safety of the COVID-19 vaccines, especially for younger people,” the nation's leading doctors, nurses, pharmacists and public health leaders, including the AMA, said in a joint release.

Here is what physicians should share with patients about incidents of myocarditis and pericarditis after Pfizer or Moderna mRNA vaccination.

These are rare cases

Confirmed cases have occurred mostly in male adolescents and young adults aged 16 years or older. But given the hundreds of millions of vaccine doses administered, says the CDC, reports of myocarditis and pericarditis are rare.

“The CDC’s Advisory Committee on Immunization Practices, or ACIP, met to discuss this issue last week,” AMA Chief Health and Science Officer Mira Irons, MD, said during an episode of “AMA COVID-19 Update” on vaccination challenges and masking guidance. “While the CDC did determine the mRNA COVID-19 vaccines can, in rare instances, be linked to myocarditis or pericarditis, the majority of patients have recovered.”

“This is an extremely rare side effect, and only an exceedingly small number of people will experience it after vaccination,” the joint release says. “Importantly, for the young people who do, most cases are mild, and individuals recover often on their own or with minimal treatment.

“In addition, we know that myocarditis and pericarditis are much more common *if you get COVID-19*,” the release adds, emphasizing that “the risks to the heart from COVID-19 infection can be more severe.”

Read this *JAMA Cardiology* study, “Myocarditis Following Immunization With mRNA COVID-19 Vaccines in Members of the US Military.”

Symptoms appear after second dose

Severity of myocarditis and pericarditis cases can vary, but “reports have increased since April, mostly in young males 16 and older, several days after vaccination, and more often after the second vaccine dose. Symptoms include chest pain, shortness of breath and palpitations,” Sandra Fryhofer, MD, an Atlanta general internist who serves as the AMA’s liaison to the CDC’s Advisory Committee on Immunization Practices, said during an episode of “AMA COVID-19 Update” about COVID-19 vaccines and variants. Dr. Fryhofer also is a member of ACIP’s COVID-19 Vaccine Work Group.



Sandra Fryhofer, MD

While these cases are rare, “ACIP agreed that a warning about the potential risks should be added to the FDA's official fact sheets on the vaccine so that people would not ignore symptoms,” explained Dr. Irons.

If a parent or their child has any of these symptoms within a week after COVID-19 vaccination, it is important to seek medical care. For instances of myocarditis and pericarditis after mRNA COVID-19 vaccination, most who received medical care have responded well to medications and rest.

Vaccination far outweighs risk

“The benefits of COVID-19 vaccination far outweigh the risks of heart inflammation in young people,” said Dr. Irons, adding that “it's important to remember that the risk for COVID is far higher.”

“Teens and young adults account for the largest proportion of new cases in the United States,” she said. “And we know that COVID infection itself can affect the heart, so myocarditis after COVID vaccination is still a rare event and the vast majority have recovered.”

COVID-19 vaccines “will help protect you and your family and keep your community safe. We strongly encourage everyone age 12 and older who are eligible to receive the vaccine under Emergency Use Authorization to get vaccinated, as the benefits of vaccination far outweigh any harm,” the joint release said. “Especially with the troubling Delta variant increasingly circulating, and more readily impacting younger people, the risks of being unvaccinated are far greater than any rare side effects from the vaccines.”

Discover what to tell your patients when they ask which COVID-19 vaccine to get.

Submit cases to VAERS

For physicians who have “a patient with myocarditis ... or anything else unusual after COVID vaccination, please send a report to VAERS ... so they can check it out,” urged Dr. Fryhofer. “Without this reporting, CDC can't know the scope of a potential issue, investigate it and provide communication.”

“If you do report a case and CDC asks for medical records, send them ASAP—it’s not a HIPAA violation,” she said, adding that “anyone can submit a report to VAERS—it’s not just limited to health care” professionals.

The AMA has developed frequently-asked-questions documents on COVID-19 vaccination covering safety, allocation and distribution, administration and more. There are two FAQs, one designed to answer patients’ questions, and another to address physicians’ COVID-19 vaccine questions.

Learn more from the CDC about myocarditis and pericarditis following mRNA COVID-19 vaccination.