

COVID-19 Update

June 24: Myocarditis and Pericarditis After Vaccination and Vaccination Opportunities

Today's issue features information from a recent Centers for Disease Control and Prevention (CDC) report on the increase in myocarditis and pericarditis in young adults following mRNA vaccination. It also includes a reminder about vaccination opportunities across NM.

MYOCARDITIS AND PERICARDITIS AFTER VACCINATION AMONG YOUNG ADULTS

In early June, the CDC **presented** data to an advisory committee that identified an increase in myocarditis and pericarditis following mRNA COVID-19 vaccination (Pfizer-BioNTech and Moderna), particularly in adolescents and young adults. A similar pattern has not been observed following the Johnson & Johnson vaccine. Patients generally presented with chest pain, shortness of breath and/or palpitations of varying severity. The majority of these patients responded well to medications and rest.

As a result of the reported cases, the Food & Drug Administration (FDA) announced June 23 that it will include a warning statement about the risks and characteristics of this rare condition to the fact sheets for the Pfizer-BioNTech and Moderna vaccines. The FDA notes that the warning will state "these events have occurred in some recipients following dose 2, onset of symptoms was several days to a week," and based on limited follow-up, "most cases had a resolution of symptoms." The warning would also advise anyone experiencing these symptoms to "seek medical attention" and state that information on long-term sequelae with the condition is limited.

Data presented by the CDC estimated a rate of 12.6 cases per million within three weeks of a second dose of either the Pfizer-BioNTech or Moderna vaccine for individuals ages 12 to 39. As of June 11, there were 484 preliminary reports, 323 of which met CDC working case definitions of myocarditis or pericarditis. Of these, 309 people were hospitalized, and almost 80% were known to have recovered from symptoms. Nine people remained hospitalized, two in the ICU.

Recommendations for clinicians

- CDC continues to recommend **COVID-19 vaccination** for everyone age 12 and older given the greater risk of other serious complications related to COVID-19, such as hospitalization, multisystem inflammatory syndrome in children (MIS-C) or death.
- Report all cases of myocarditis and pericarditis post-COVID-19 vaccination to the Vaccine Adverse Event Reporting System (VAERS).
- Consider myocarditis and pericarditis in adolescents or young adults with acute chest pain, shortness of breath or palpitations. In this younger population, coronary events are less likely to be a source of these symptoms.

- Ask about prior COVID-19 vaccination if you identify these symptoms, as well as relevant other medical history.
- For initial evaluation, consider an ECG, troponin level and inflammatory markers such as C-reactive protein and erythrocyte sedimentation rate. In the setting of normal ECG, troponin and inflammatory markers, myocarditis or pericarditis are unlikely.
- For suspected cases, consider consultation with Cardiology for assistance with cardiac evaluation and management.

For more information

- American Heart Association and the American College of Cardiology.
- National Institutes of Health materials on myocarditis and pericarditis
- Frequently asked questions about VAERS reporting for COVID-19 vaccines
- How to report to VAERS
- Information from the CDC for patients

REMINDER: VACCINATION OPPORTUNITIES

Patients, physicians, staff, volunteers and contractors still have the opportunity to receive the COVID-19 vaccine. Both the Johnson & Johnson and Pfizer-BioNTech COVID-19 vaccines are being offered throughout NM. Visit the **Workforce Vaccination Information** page on Physician Forum or **NMI** (login required) for details about scheduling and hours.

In order to maintain our momentum in controlling the COVID-19 pandemic, please continue to follow public health guidelines, including masking in clinical locations, and encourage your patients to get vaccinated.

Gouy &. Cestin

Gary A. Noskin, MD Senior Vice President, Quality Northwestern Memorial HealthCare Chief Medical Officer Northwestern Memorial Hospital