



STATE OF NORTH CAROLINA
DEPARTMENT OF HEALTH AND HUMAN SERVICES

ROY COOPER
GOVERNOR

MANDY COHEN, MD, MPH
SECRETARY

ELIZABETH C. TILSON, MD, MPH
STATE HEALTH DIRECTOR
CHIEF MEDICAL OFFICER

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MEMORANDUM

FROM: Elizabeth Cuervo Tilson, MD, MPH
State Health Director and Chief Medical Officer

E. Tilson

SUBJECT: Reports of Myocarditis Occurring After COVID-19 Vaccination

In recent weeks, there have been rare reports of myocarditis occurring after COVID-19 vaccination **with Moderna or Pfizer vaccines** in the United States and Europe. CDC is aware of these reports and has been closely monitoring myocarditis/pericarditis in multiple safety systems, including the Vaccine Adverse Event Reporting System (VAERS) and the Vaccine Safety Datalink (VSD). To date, there has not been a safety signal identified in either VAERS or VSD. Rates of myocarditis reports in the window following COVID-19 vaccination have not differed from expected baseline rates. CDC will continue to evaluate reports of myocarditis/pericarditis occurring after COVID-19 vaccination and will share more information as it becomes available.

CDC's Advisory Committee on Immunization Practices' COVID-19 Vaccine Safety Technical (VaST) work group has reviewed post-authorization COVID-19 vaccine safety data on a weekly basis since the start of the United States' vaccination program. VaST concluded that there are relatively few reports of myocarditis to date and that these cases appear to be mild, and follow-up of cases is ongoing.

Myocarditis is the inflammation of the heart muscle and pericarditis is the inflammation of the lining outside the heart. In both cases, the body's immune system is causing inflammation in response to an infection or some other trigger. While myocarditis can be serious, it is frequently mild and self-limited. Symptoms can include abnormal heart rhythms, shortness of breath, or chest pain. Both myocarditis and pericarditis have been reported as complications in patients with COVID-19.

While these reports are being further investigated, health care providers should do the following:

- Consider a diagnosis of myocarditis or pericarditis in any evaluation of chest pain following COVID-19 or COVID-19 vaccination.
- Inquire about recent COVID-19 or COVID-19 vaccination in any patient presenting with symptoms consistent with myocarditis or pericarditis.

- Clinical features of myocarditis and pericarditis include chest pain or pressure, shortness of breath, electrocardiogram (EKG) changes and elevated cardiac biomarkers.
- Elicit a detailed history including vaccination status and potential exposures to COVID-19. Patients should be tested for COVID-19 infection using a molecular (PCR) test.
- Report cases of myocarditis or pericarditis within two weeks of any COVID-19 vaccination to the U.S. Vaccine Adverse Events Reporting System (VAERS): <https://vaers.hhs.gov/reportevent.html>.
 - It is recommended that the evaluating (not administering) provider report the incident to VAERS so appropriate clinical details can be reported accurately.

The CDC continues to recommend COVID-19 vaccination for people 12 years and older.

For More Information:

- See the CDC's [COVID-19 VaST Work Group Technical Report – May 17, 2021](#)