



June 30, 2021

Dear Colleague,

Cases of myocarditis and pericarditis occurring after receipt of the Pfizer-BioNTech and Moderna COVID-19 mRNA vaccines have been identified through the Vaccine Adverse Event Reporting System (VAERS) and other vaccine safety monitoring systems. This letter summarizes those findings and provides updated guidance. The New York City (NYC) Health Department, [Centers for Disease Control and Prevention \(CDC\) and other major medical associations continue to strongly recommend COVID-19 vaccination](#) for everyone age 12 years and older given the greater risk of COVID-19 illness and potential for COVID-19-related complications.

As of June 11, 2021, VAERS had received 484 reports of myocarditis or pericarditis among people 29 years of age and younger who received a COVID-19 mRNA vaccine. Through medical records review and other follow up, the CDC and US Food and Drug Administration (FDA) confirmed 323 reports meet the CDC's working case definition. Among all case reports, the majority (76%) of reports occurred after the second vaccine dose. Most cases occurred in male adolescents and young adults; the median age of all cases was 30 years (range, 12-94 years) after dose one and 24 years (range, 12-87 years) after dose two. Males represented 66% and 79% of all cases after dose one and dose two, respectively. Onset of symptoms typically occurred within one week of vaccination (median, 4 days; range, 0-61 days) after dose one and 3 days (range, 0-98 days) after dose two, with chest pain being the most common presentation. Most cases were mild and responded well to medical treatment and rest. More than 20 million people ages 12 to 24 years have received at least one dose of COVID-19 vaccine in the United States since the vaccines were authorized in December 2020. There has not been a similar pattern of myocarditis or pericarditis reported after receipt of the Johnson & Johnson/Janssen COVID-19 vaccine.

Preliminary findings suggest that rates of myocarditis and pericarditis among mRNA vaccine recipients exceeded expected rates, especially after dose two in younger age groups. Based on data from the [Vaccine Safety Datalink](#), rates of myocarditis and pericarditis after the second dose of mRNA vaccine were 12.6 per million doses administered (4.7 per million in females and 32.0 per million in males). This suggests that myocarditis and pericarditis, although rare, is associated with mRNA vaccination in adolescents and young adults. The FDA has added a warning to the Pfizer-BioNTech and Moderna COVID-19 mRNA vaccine Emergency Use Authorization fact sheets for health care providers and recipients. The relevant revised patient fact sheet must be provided to patients prior to vaccination. The revised fact sheets are available here:

- Pfizer-BioNTech [Provider Fact Sheet](#) and [Recipient and Caregiver Fact Sheet](#)
- Moderna [Provider Fact Sheet](#) and [Recipient and Caregiver Fact Sheet](#)



Providers should consider myocarditis and pericarditis among adolescents and young adults who develop chest pain, dyspnea, or palpitations, and should ask about a history of COVID-19 vaccination. For guidance on clinical evaluation and management of patients with such symptoms, see the CDC's [Clinical Considerations: Myocarditis and Pericarditis After Receipt of mRNA COVID-19 Vaccines Among Adolescents and Young Adults](#). Report all cases of myocarditis or pericarditis after COVID-19 vaccination to [VAERS](#). Information for patients is available on the CDC's [Myocarditis and Pericarditis Following mRNA COVID-19 Vaccination webpage](#). Additional information will be shared as it becomes available.

We urge you to continue having conversations about COVID-19 vaccination with your patients and to offer vaccination at every opportunity. Your recommendation can play a crucial role in vaccination decisions. For resources on communicating with patients about COVID-19 vaccines, visit [nyc.gov/VaccineTalks](#). For the latest information on COVID-19 vaccines, visit [nyc.gov/health/covidvaccineprovider](#).

To help your patients get vaccinated:

- Enroll in the NYC COVID-19 Vaccination Program to receive vaccine in your facility to vaccinate your patients (see "Become a Provider" section [here](#)).
- Complete this [form](#). The NYC Vaccine Hotline will call your patient to set up an appointment.
- Call 877-VAX-4NYC (877-829-4692) and press 2 at the second prompt to schedule your patients at a City-run vaccination site.
- Find out more about vaccines for adolescents, including consent information, [here](#).
- Visit [nyc.gov/vaccinefinder](#) to find vaccination sites and search by location, vaccine brand, and ADA accessibility. Vaccination is widely available at City-run vaccination sites, hospitals, Federally Qualified Health Centers, and chain and independent pharmacies. Many vaccination sites do not require appointments and accept walk-ins. Vaccines are free, regardless of insurance or immigration status.
- As of June 23, 2021, anyone age 12 years and older living in NYC is eligible for in-home vaccination and can sign up [online](#) or by calling 877-VAX-4NYC (877-829-4692).

Thank you for your continued efforts to protect the health of New Yorkers.

Sincerely,

A handwritten signature in black ink that reads "Jane R. Zucker".

Jane R. Zucker, MD, MSc
Assistant Commissioner
Bureau of Immunizations



NYC Health Department Resources

- For information for providers on COVID-19 vaccines, visit nyc.gov/health/covidvaccineprovider
- For information for providers on communicating with patients about COVID-19 vaccines, visit nyc.gov/VaccineTalks
- To receive Health Alerts, sign up at <https://a816-healthpsi.nyc.gov/NYCMED/Account/HANSubscribe>
- To subscribe to receive Dear Colleague Letters, sign up for a *City Health Information* subscription at nyc.gov/health/register
- For general provider information and to register to attend the NYC Health Department's COVID-19 Provider Webinars, visit nyc.gov/health/covidproviders

The NYC Health Department may change recommendations as the situation evolves.