



Health Update

Use of mRNA COVID-19 Vaccines After Reports of Myocarditis

July 12, 2021

The following information is issued on behalf of the SFPDH COVID Task Force

Situation

CDC's Advisory Committee on Vaccination Practices (ACIP) met on June 23, 2021 to review reports of myocarditis and pericarditis ("myocarditis" here, as shorthand) among recipients of the mRNA vaccines (Pfizer-BioNTech and Moderna).

Cases of myocarditis following mRNA vaccination were quite rare, but still exceeded the expected frequency in the population, particularly after receiving the second mRNA vaccine dose. Reporting rates among second doses of mRNA vaccines were:

- A. 40.6 cases/million doses (males aged 12-29 years)
- B. 2.4 cases/million doses (males aged \geq 30 years)
- C. 4.2 cases/million doses (females aged 12-29 years)
- D. 1.0 cases/million doses (females aged \geq 30 years)

ACIP calculated the benefits of immunization with mRNA vaccines in these populations (based on COVID-19 risks during late May 2021) and concluded that the benefits far outweigh the risks. For example, in group A above, per million second doses administered, immunization would prevent 11,000 COVID-19 cases, 560 hospitalizations, 138 ICU admissions, and 6 deaths due to COVID-19, against approximately 40 cases of myocarditis. See [MMWR](#).

Nearly all cases of myocarditis reviewed by ACIP had symptom onset within 7 days of vaccination and were hospitalized. The acute clinical course was generally mild however -- 95% had been discharged at the time of review, none had died, and many patients experienced resolution of symptoms with conservative treatment such as NSAIDs.

Guidance

Based on ACIP's risk-benefit assessment, and while ACIP continues to monitor additional cases and follow up, COVID-19 vaccination is recommended for all persons aged \geq 12 years.



- Persons with a history of myocarditis unrelated to COVID-19 vaccination may receive any FDA-authorized COVID-19 vaccine after the episode has completely resolved.
- Persons who developed myocarditis after the first dose of an mRNA vaccine are recommended to defer receiving the second dose until additional safety data become available. See this [CDC guidance](#) which also lists conditions under which a second dose could be contemplated.

Vaccine recipients should be counseled to seek medical attention right away if they experience chest pain, shortness of breath, or palpitations. Among cases reviewed, myocarditis occurred more often after the second mRNA vaccine dose than the first, and typically within days of receiving the dose. Myocarditis should be considered especially in adolescents or young adults presenting with these symptoms, as coronary events are less likely in this population. See [CDC recommendations](#).

FDA has updated its Fact Sheets ([Pfizer](#); [Moderna](#)) to inform patients and providers about the benefits and the risks, particularly for males aged 12-29 years.

Additional Info -- Funding to Support Becoming a COVID-19 Vaccination Provider

Physicians for a Healthy California (a charitable arm of the California Medical Association) is offering grant funding and vaccine administration resources to support COVID-19 vaccination at physician practices. Eligible providers can receive up to \$10,000 per practice location. Reimbursements may retroactively cover related expenses incurred since November 2020. The application cycle runs from July 12 through August 13, 2021.

<https://www.phcdocs.org/Programs/CalVaxGrant>

SFDPH does not administer the grant program but can assist with the required myCAvax application; SF providers can contact dph.doc.outpatient@sfdph.org for help.