



Guidelines for Management of Potential Anaphylactic Reactions at COVID-19 Vaccination Sites

Preparation

- Ideally, the mRNA COVID-19 vaccines should be offered at locations where emergency management of anaphylactic reactions can be performed.
- The following equipment should be available at all vaccination sites.
 - Epinephrine pre-filled syringe or auto-injector.
 - Antihistamine (H₁ receptor blockers)
 - Blood pressure cuff
 - Stethoscope
 - Timing device to assess pulse/heart rate
- If feasible, the following equipment may be included but not required.
 - Pulse oximeter
 - Oxygen
 - Bronchodilator (e.g., albuterol)
 - Antihistamine (H₂ receptor blockers)
 - Intravenous fluids
 - Intubation kit
 - Adult-sized pocket mask with one-way valve (CPR mask)
- Observation area with an area set aside to manage vaccine recipients who develop anaphylactic reactions.

Screening (See Figure 1)

- Screening questionnaire
 - Identify individuals with history of any allergic reactions
 - Identify individuals with history of reaction to vaccines or injectable therapy
 - Identify individuals with allergic reactions of any severity to a previous dose of mRNA COVID-19 vaccine
- Defer vaccination and refer to an allergist for the following. If unable to be evaluated an allergist, the vaccine should not be given.
 - History of allergic reaction of any severity, including anaphylaxis, due to any component of an mRNA COVID-19 vaccine
 - History of immediate allergic reaction of any severity, including anaphylaxis, due to other vaccine or injectable therapy
 - History of immediate allergic reaction of any severity, including anaphylaxis, due to a previous dose of mRNA COVID-19 vaccine
- Observation period
 - 15 minutes
 - No reported allergies
 - Any reported allergy to medications, food, or environmental allergens **without anaphylaxis**

- Prior reaction to vaccines **without anaphylaxis**
- 30 minutes
 - History of immediate allergic reaction of any severity to a vaccine or injectable therapy that **does not** contain PEG or polysorbate
 - History of anaphylaxis due to any other causes, such as food, pet, insects, venom, environmental, and latex

Recognition of Anaphylaxis

- Symptoms
 - Respiratory: sensation of throat closing, stridor, cough, wheezing, dyspnea
 - Gastrointestinal: nausea, vomiting, diarrhea, abdominal pain
 - Cardiovascular: dizziness, syncope, tachycardia, hypotension
 - Skin/mucosal: generalized hives, itching, swelling of lips, face, throat
- Symptoms onset: typically, 15-30 minutes after vaccination but can take up to several hours

Management

- Assess airway, breathing, circulation, and mentation.
- Call EMS immediately.
- Place patient in supine position with feet elevated, unless airway obstruction is present, or the patient is vomiting.
- Administer epinephrine immediately to mid-lateral thigh using a premeasured or prefilled syringe, or auto-injector to mid-lateral thigh.
- The epinephrine dose may be repeated every 5-15 minutes as needed to control symptoms until EMS arrives.
- Antihistamines and bronchodilators may be given for symptomatic relief after the patient already had received epinephrine for anaphylaxis.

Adapted from https://www.cdc.gov/vaccines/covid-19/clinical-considerations/managing-anaphylaxis.html?CDC_AA_refVal=https%3A%2F%2Fwww.cdc.gov%2Fvaccines%2F covid-19%2Finfo-by-product%2Fpfizer%2Fanaphylaxis-management.html

Figure 1. Allergy Assessment Algorithm

