## Standing Order for Medical Management of Vaccine Reactions Adults

**Purpose:** Administering any medication, including vaccines, has the potential to cause an adverse reaction. When adverse reactions do occur, they can vary from minor to the rare and serious. This document describes steps to take if an adverse reaction occurs following immunization.

**Policy:** Vaccine providers must be prepared to manage a medical emergency related to the administration of vaccines by having a written emergency medical protocol available, as well as equipment and medications. Under these standing orders, eligible healthcare professionals working within their scope of practice may take steps as described below.

## **Procedure:**

- 1. Assess signs and symptoms to determine reaction and actions.
  - Localized Reactions
    - Soreness, redness, itching, or swelling at the injection site
      - Apply a cold compress to the injection site
      - Recommend OTC analgesic pain reliever prn as needed
      - Recommend OTC antipruritic medication as needed
    - Slight Bleeding
      - Apply pressure and an adhesive compress over the injection site
    - Continuous bleeding
      - Place thick layer of gauze pads over site and maintain direct and firm pressure
      - Raise the bleeding injection site (e.g. arm) above the level of the patient's heart
- Psychological fright, pre-syncope, and syncope (fainting)
  - Fright before injection is given
    - Have patient sit or lie down for the vaccination
  - Patient feels "faint" (e.g., light-headed, dizzy, weak, nauseated, or has visual disturbance).
    - Have patient lie flat
    - Loosen any tight clothing
    - Maintain open airway
    - Apply cool, damp cloth to patient's face and neck
    - Keep them under close observation until full recovery
  - Presentation: Fall. without loss of consciousness
    - Examine the patient to determine if injury is present before attempting to move the patient
    - Place patient flat on back with feet elevated
  - Presentation: Loss of consciousness.
    - Check to determine if injury is present before attempting to move the patient
    - Place patient flat on back with feet elevated

- Call rapid response/ EMS 911 if patient does not recover immediately
- Reaction: IgE-mediated event or Anaphylaxis
  - Skin and mucosal symptoms such as generalized hives, itching, or flushing; swelling of lips, face, throat, or eyes.
  - Respiratory symptoms such as nasal congestion, change in voice, sensation of throat closing, stridor, shortness of breath, wheeze, or cough
  - Cardiovascular symptoms such as collapse, dizziness, tachycardia, hypotension
  - Gastrointestinal symptoms such as nausea, vomiting, diarrhea, cramping abdominal pain
    - If itching and swelling are confined to the injection site where the vaccination was given, observe patient closely for the development of generalized symptoms
    - If symptoms are generalized, the primary healthcare professional assesses the airway, breathing, circulation, and level of consciousness of the patient
    - A second person activates the emergency response system for your clinic setting (e.g., rapid response team, EMS via 911) and notifies the clinic provider
    - Vital signs should be monitored continuously
- 2. Drug dosing information: The first-line and most important therapy in anaphylaxis is epinephrine and there is no known equivalent substitute. There are NO absolute contraindications to epinephrine in the setting of anaphylaxis
  - Administer epinephrine in a 1.0 mg/mL aqueous solution (1:1000 dilution)
  - Administer a 0.3 mg dose IM using a premeasured or prefilled syringe or an auto-injector in the mid-outer thigh
  - If using another epinephrine formulation, the recommended dose is 0.01 mg/kg, ranging for adults from 0.3 mg to maximum dose of 0.5 mg.
  - Epinephrine dose may be repeated once in as little as 5 minutes, IF there is no response or an inadequate response while waiting for rapid response/EMS to arrive. Seek a verbal order from a credentialed provider for any additional doses. More than 2 doses of epinephrine are not covered under these standing orders.
  - Optional treatment: One dose of oral H1 antihistamines may be administered to relieve itching and urticaria (hives). These medications **DO NOT** relieve upper or lower airway obstruction, hypotension, or shock. First-line therapy is epinephrine. Administer **only** if the airway and/or swallow are not affected. Administer diphenhydramine (Benadryl) 50 mgs orally one time
- 3. Monitor the patient closely until EMS arrives. Perform cardiopulmonary resuscitation (CPR), if necessary, and maintain airway. Keep patient in recumbent position (flat on back) unless he or she is having breathing difficulty. If breathing is difficult, patient's head may be elevated, provided blood pressure is adequate to prevent loss of consciousness. If blood pressure is low, elevate legs. Monitor blood pressure and pulse every 5 minutes

- 4. Record the patient's reaction (e.g., hives, anaphylaxis) to the vaccine, all vital signs, medications administered to the patient, including the time, dosage, response, and the name of the medical personnel who administered the medication, and any other relevant clinical information. Notify the patient's primary care physician and complete a patient safety report.
- Adverse events occurring after administration of any vaccine should be reported to the Vaccine Adverse Event Reporting System (VAERS). Reports can be submitted to VAERS online at <a href="https://vaers.hhs.gov">https://vaers.hhs.gov</a>. Information about VAERS is also available by telephone at (800) 822-7967.

6. This policy and procedure shall remain until res	ain in effect for all patients of the scinded and/or upon a change in the
Medical Director, whichever is earlier.	
Medical Director's Signature	Date

Adapted from Immunization Action Coalition, Saint Paul, Minnesota. www.immunize.org • www.vaccineinformation.org www.immunize.org/catg.d/p3082.pdf • Item #P3082 (7/19).