

Standing Order

Pediatrics: Medical Management of Vaccine Reactions

REACTION	SIGNS AND SYMPTOMS	MANAGEMENT
Localized	Soreness, redness, itching, or swelling at the injection site	Apply a cold compress to the injection site. If patient is alert enough to swallow water, and does not have a medical condition such as kidney or liver disease: <ul style="list-style-type: none"> If patient is reporting itching: Administer orally standard dose of 1–2 mg/kg diphenhydramine immediately (MAX 40mg diphenhydramine). See attachment A. If patient is reporting pain: Administer Acetaminophen. See attachment A.
	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, presyncope, 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 and maintain open airway. Apply cool, damp cloth to patient's face and neck. Keep them under close observation until full recovery.
	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.
	Loss of consciousness	Check to determine if injury is present before attempting to move the patient. Confirm pulse is regular and patient is breathing. Consider ammonia inhalants capsule and consider placing patient flat on back with feet elevated. Call 911 if patient does not recover within 60 seconds.
Anaphylaxis	<p>Skin and mucosal symptoms such as generalized hives, itching, or flushing; swelling of lips, face, throat, or eyes.</p> <p>Respiratory symptoms such as nasal congestion, change in voice, sensation of throat closing, stridor, shortness of breath, wheeze, or cough.</p> <p>Gastrointestinal symptoms such as nausea, vomiting, diarrhea, cramping abdominal pain. Cardiovascular symptoms</p>	See the emergency medical protocol on the next page for detailed steps to follow in treating anaphylaxis.

	such as collapse, dizziness, tachycardia, hypotension.	
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Emergency medical protocol for management of anaphylactic reactions in PEDIATRICS

1. If itching and swelling are confined to the injection site where the vaccination was given, observe patient closely for the development of generalized symptoms.
2. If symptoms are generalized, activate the emergency medical system (EMS; e.g., call 911) and notify the patient's physician. This should be done by a second person, while the primary healthcare professional assesses the airway, breathing, circulation, and level of consciousness of the patient. Vital signs should be monitored continuously.
3. **Drug dosing information:** The first-line and most important therapy in anaphylaxis is epinephrine. There are NO absolute contraindications to epinephrine in the setting of anaphylaxis.
 - a. Use epinephrine in a 1.0 mg/mL aqueous solution (1:1000 dilution). See **ATTACHMENT A** to determine correct dose to be used based on child's weight.
 - i. If using an autoinjector or pre-filled syringe, administer a dose of 0.1 mg, 0.15 mg, or 0.3 mg IM (as appropriate for the patient's weight) into the anterolateral thigh.
 - ii. If using another epinephrine format, the recommended dose is 0.01 mg/kg per dose, up to a maximum single dose of 0.5 mg. Administer IM, preferably in the anterolateral thigh.
 - iii. Epinephrine dose may be repeated every 5–15 minutes (or sooner as needed) while waiting for EMS to arrive.
 - b. Optional treatment: H1 antihistamines relieve itching and urticaria (hives). These medications DO NOT relieve upper or lower airway obstruction, hypotension, or shock. Consider giving diphenhydramine (e.g., Benadryl) or hydroxyzine (e.g., Atarax, Vistaril) for relief of itching or hives. Administer diphenhydramine orally, **ONLY if patient is alert enough to swallow water**, standard dose of 1–2 mg/kg. Maximum single dose is 40 mg for children age
4. 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.
5. 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 other relevant clinical information.
6. Notify the patient's primary care physician.
7. Report the incident to the Vaccine Adverse Event Reporting System (VAERS) at www.vaers.hhs.gov.

This standard procedure shall remain in effect for all patients of **MemorialCare Medical Foundation** effective **May 15, 2021** until rescinded or revised.

Medical Director: Janya Dansky MD Date: 05/15/2021

