

Signs and Symptoms of Anaphylactic Reaction: Sudden or gradual onset of generalized itching, erythema (redness), or urticaria (hives); angioedema (swelling of the lips, face, or throat); severe bronchospasm (wheezing); shortness of breath; shock; abdominal cramping; or cardiovascular collapse.

Treatment

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 health officer. This should be done by a second person (ideally the clinic organizer), while the primary responder (medical station lead) assesses the airway, breathing, circulation, and level of consciousness of the patient, and administers any medication to manage an anaphylactic reaction.
3. **Drug Dosing Information**
 - a. First line of treatment:
 - i. Administer Epinephrine Autoinjector (.15 mg) contents via IM injection to patients 33-66 lbs. **OR** Administer Epinephrine Autoinjector (.3 mg) contents via IM injection to patients >66 lbs.
 - ii. If patient under 33 lbs., administer liquid epinephrine .05mL to .1mL (based on dosage chart below)
 - b. Second line of treatment:
 - i. Administer diphenhydramine (Benadryl) orally if needed. See dosage chart below.
4. **Patient Monitoring**
 - a. Monitor the patient closely until EMS arrives.
 - b. Perform cardiopulmonary resuscitation (CPR), if necessary, and maintain airway.
 - c. Keep patient in supine position (flat on back) unless he or she is having breathing difficulty.
 - i. If breathing is difficult, patient's head may be elevated, provided blood pressure is adequate to prevent loss of consciousness.
 - ii. If blood pressure is low (systolic BP \leq 90 mm Hg and/or diastolic BP \leq 60 mm Hg), elevate legs.
 - d. Monitor blood pressure and pulse every 5 minutes.
 - e. **If EMS has not arrived and symptoms are still present, repeat dose of epinephrine based on dosage chart every 5–15 mins, or as needed, for up to 3 doses, depending on patient's response, to control symptoms and sustain or increase blood pressure.**
 - i. If autoinjector has been administered to patient and EMS has been activated, consider preparing subsequent epinephrine dose for prompt, timely administration if the dose is required.
5. Record 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. Complete an incident report, VAERS report, and notify the patient's primary care provider

Recommended Doses of Epinephrine

First-Line Treatment: Epinephrine				Epinephrine Dose		
Recommended dose is 0.01 mg/kg body weight up to 0.5 mg maximum dose. May be repeated every 5–15 minutes for a total of 3 doses.	Age group	Range of weight (lb)	Range of weight (kg)*	1 mg/mL injectable (1:1000 dilution); intramuscular Minimum dose: 0.05 mL	Epinephrine auto-injector, 0.15 mg or 0.3 mg	
	Infants and children	1–6 months	9–19 lb	4–8.5 kg	0.05 mL (or mg)	off label
		7–36 months	20–32 lb	9–14.5 kg	0.1 mL (or mg)	off label
		37–59 months	33–39 lb	15–17.5 kg	0.15 mL (or mg)	0.15 mg/dose
		5–7 years	40–56 lb	18–25.5 kg	0.2–0.25 mL (or mg)	0.15 mg/dose
	Teens	8–10 years	57–76 lb	26–34.5 kg	0.25–0.3 mL (or mg)	0.15 mg or 0.3 mg/dose
		11–12 years	77–99 lb	35–45 kg	0.35–0.4 mL (or mg)	0.3 mg/dose
		13 years & older	100+ lb	46+ kg	0.5 mL (or mg) – max. dose	0.3 mg/dose

NOTE: If body weight is known, then dosing by weight is preferred. If weight is not known or not readily available, dosing by age is appropriate. * Rounded weight at the 50th percentile for each age range

Recommended Doses of Diphenhydramine

Optional Treatment: Diphenhydramine				Diphenhydramine Dose		
<p>▶ commonly known as Benadryl</p> <p>Recommended dose is 1–2 mg/kg body weight every 4–6 hrs</p>	Age group	Range of weight (lb)	Range of weight (kg)*	Liquid: 12.5 mg/5 mL Tablets: 25 mg or 50 mg Injectable: 50 mg/mL (IV or IM)		
	Infants and children	7–36 months	20–32 lb	9–14.5 kg	10–15 mg/dose	
		37–59 months	33–39 lb	15–17.5 kg	15–20 mg/dose	
		5–7 years	40–56 lb	18–25.5 kg	20–25 mg/dose	
		8–12 years	57–99 lb	26–45 kg	25–50 mg/dose†	
	Teens	13 years & older	100+ lb	46+ kg	50 mg/dose (up to 50 mg or 100 mg† single dose)	

NOTE: If body weight is known, then dosing by weight is preferred. If weight is not known or not readily available, dosing by age is appropriate. * Rounded weight at the 50th percentile for each age range

† According to AAP's *Red Book*, for children age ≥12 years, the diphenhydramine maximum single dose is 100 mg.

These standing orders for the medical management of vaccine reactions in children and adult patients shall remain in effect for Spokane Regional Health District routine and emergency response vaccination clinics until rescinded.

Health Officer RB Whit Effective date: August 8, 2017