

Standing Order for Administration of Vaccines and Management of Vaccine Reactions School Year 2023-2024

### **Authority:**

School nurses who choose to practice under the NM DOH standing order for vaccine administration signed by the NM Public Health Regional Health Officers (RHOs) shall have competency in vaccine administration and practice within the NM Nurse Practice Act.

Vaccine administration competency may be maintained by the school nurse through collaborative practice with other healthcare professionals such as a public health nurse or a healthcare professional in another setting (e.g., primary-care clinic) or by structured training such as that offered through the NM Child Health Immunization Learning Initiative (CHILI) training online or in person at: <a href="https://nmhealth.org/about/phd/idb/imp/resources">https://nmhealth.org/about/phd/idb/imp/resources</a>, training during a NM DOH sponsored School Health Update, and/or through the Centers for Disease Prevention and Control.

School Nurses administering immunizations in the school setting under RHO standing orders should follow the same protocols as public health nurses administering immunizations in public health clinics. <a href="Mailto:NMDOH Immunization Protocol with Procedures">NMDOH Immunization Protocol with Procedures</a> and Standing Orders for Nurses

Any questions concerning protocols or standing orders for vaccine administration by the school nurse in the school setting should be directed to the Regional School Health Advocate or RHO.

### **Provider Standing Order:**

School nurses and licensed practical nurses practicing in New Mexico schools, who are under the statutory oversight of the Regional Health Officer (RHO) of the NM Department of Health (NMDOH) and who have demonstrated competency in vaccine administration may administer and/or supervise other healthcare professionals with competency in the administration of indicated vaccines to students and to school personnel.

Such vaccines must be administered in accordance with the NM Nurse Practice Act, manufacturer's package insert, as well as NMDOH immunization protocols for vaccine storage and handling, immunization contraindications, injection parameters, documentation, and adverse reaction reporting. The NMDOH Immunization Protocol with Procedures and Standing Orders for Nurses is available on the DOH website. Immunization clinics held in the school setting require two CPR-trained individuals in attendance and an emergency medication kit that contains, at a minimum, epinephrine.

Standing Order for Administration of Vaccines and Management of Vaccine Reactions School Year 2023-2024

When adverse reactions do occur, they can range from minor (e.g., soreness, itching) to serious (e.g., anaphylaxis). Be prepared. Vaccinators should know how to recognize allergic reactions, including anaphylaxis. Have a plan and supplies ready to provide appropriate medical care if an event occurs.

REACTION	SIGNS AND SYMPTOMS	MANAGEMENT
Injection Site	Soreness, redness, itching, or swelling	Apply a wet cloth to the injection site. Consider giving medication to reduce pain (e.g., Tylenol) or itching (e.g., Benadryl) if 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 fear and syncope (fainting)	Anxiety before injection	Have patient sit or lie down for the vaccination.
	Paleness, sweating, coldness of the hands and feet, nausea, light-headedness, dizziness, weakness, or visual disturbances	Have patient lie flat. Loosen any tight clothing and maintain open airway.  Apply cool, damp cloth to patient's face and neck. Keep patient under close observation until full recovery.
	Fall, without loss of consciousness	Check the patient for injury before trying to move the patient. Place patient flat on back with feet elevated.
	Loss of consciousness	Check the patient for injury before trying to move the patient. Place patient flat on back with feet elevated. Call 911 if patient does not recover promptly.
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. Gastrointestinal symptoms such as nausea, vomiting, diarrhea, cramping abdominal pain. Cardiovascular symptoms such as collapse, dizziness, tachycardia, hypotension.	See next page for details on treating anaphylaxis.

Adapted from: Medical Management of Vaccine Reactions in Children and Teens in a Community Setting (immunize.org)

## Emergency medical protocol for managing anaphylaxis in children and adolescents

- 1. If itching and swelling are limited to the injection site, observe patient closely for the development of generalized symptoms.
- 2. If symptoms are generalized, alert the lead clinical healthcare professional on-site and call 911. A healthcare professional should assess the airway, breathing, circulation, and level of consciousness of the patient. Monitor vital signs at 5-minute intervals.
- 3. Drug dosing information: The most important therapy in anaphylaxis is epinephrine. There are NO absolute contraindications to epinephrine in the setting of anaphylaxis.
  - a. First-line treatment: Epinephrine is the first-line treatment for anaphylaxis. Use epinephrine in a 1 mg/mL aqueous solution (1:1000 concentration). See the following tables to determine correct dose to be used based on child's weight. If using an autoinjector, 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. If using another epinephrine formulation, 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.

Epinephrine dose may be repeated every 5–15 minutes up to three times 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) for relief of itching or hives. Administer diphenhydramine orally, standard dose of 1–2 mg/kg every 4–6 hours. See dosing chart on page 3.
- 4. Monitor the patient closely every 5 minutes. 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.
- 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 https://www.vaers.hhs.gov/reportevent.html.
- 8. Send Adverse event form to your Regional School Health Advocate in the event of a severe allergic reaction Adverse Event Form Fillable Form

Standing Order for Administration of Vaccines and Management of Vaccine Reactions School Year 2023-2024

Approximate dosages based on weight and age are provided in the following charts. Please confirm that you are administering the correct dose.

# Recommended dose of epinephrine is 0.01 mg/kg body weight up to 0.5 mg maximum dose. May be repeated at 5–15-minute intervals up to 3 times while waiting for EMS to arrive.

First-Line Treatment: Epinephrine			ie	Epinephrine Dose	
	Age group	Range of weight (lb)	Range of weight (kg)*	1 mg/mL aqueous solution (1:1000 concentration); intramuscular. Minimum dose: 0.05 mL	Epinephrine autoinjector (0.1 mg, 0.15 mg, 0.3 mg)
	1-6 months	9-19 lb	4-8.5 kg	0.05 mL (or mg)	off label
Infants	7-36 months	20-32 lb	9-14.5 kg	0.1 mL (or mg)	0.1 mg <sup>†</sup>
and	37-59 months	33-39 lb	15-17.5 kg	0.15 mL (or mg)	0.15 mg/dose
children	5-7 years	40-56 lb	18-25.5 kg	0.2-0.25 mL (or mg)	0.15 mg/dose
	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
Teens	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.

## Recommended dose of diphenhydramine (commonly known as Benadryl) is 1-2 mg/kg body weight every 4-6 hrs†

<b>Optional Treatment: Diphenhydramine</b>		ramine	Diphenhydramine dose calculations based on 1 mg/kg $^\dagger$	
	Age group	Range of weight (lb)	Range of weight (kg)*	Liquid: 12.5 mg/5 mL Capsules or tablets: 25 mg or 50 mg
	7-36 months	20-32 lb	9-14.5 kg	10-15 mg/dose <sup>†</sup>
Infants	37-59 months	33-39 lb	15-17.5 kg	15-20 mg/dose <sup>†</sup>
and children	5-7 years	40-56 lb	18-25.5 kg	20-25 mg/dose <sup>†</sup>
	8-12 years	57-99 lb	26-45 kg	25-50 mg/dose <sup>†</sup>
Teens	13 years & older	100+ lb	46+ kg	50 mg/dose (up to 50 mg or 100 mg single dose) <sup>†</sup>

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.

Adapted from: Medical Management of Vaccine Reactions in Children and Teens in a Community Setting (immunize.org)

<sup>\*</sup> Rounded weight at the 50th percentile for each age range

<sup>†0.1</sup> mg autoinjector is approved for use in 7.5 to 14 kg infants and children

<sup>\*</sup> Rounded weight at the 50th percentile for each age range

<sup>†</sup> AAP. Red Book: 2021–2024, 32nd ed. (p. 66). Diphenhydramine maximum single dose for children younger than age 12 years is 40 mg, for children aged 12 years and older, 100 mg.

# This NMDOH standing order shall remain in effect until rescinded or until 7/1/24.

Licensed Prescriber	NPI	Signature	Date
Christine Ross NE Region RHO	1891715470	Christine Ross, MD	9/12/23
Christopher Novak SE Region RHO (acting)	1508834110	OR	9/11/23
Christopher Novak SW Region RHO (acting)	1508834110	OR	9/11/23
Savanna Bustos Metro Region (acting)	1447516612	3	9/12/23
Savanna Bustos NW Region RHO	1447516612		9/12/23