



## Medical Order for Diphenhydramine (H1 antihistamine) as an Adjuvant Therapy During Anaphylactic Reactions

**Purpose:** To be prepared for the possibility of adverse reactions to the vaccination for COVID-19. Even with careful screenings unforeseen reactions may occur. Reactions can vary from mild to life-threatening. Staff need to be prepared to administer diphenhydramine as an adjuvant therapy if an anaphylactic reaction occurs or when non-life-threatening vaccines reactions occur such as hives or itching.

**Policy:** Under this Standing Orders, nurses employed by the Vermont Department of Health and other health professionals vaccinating under the direction of the Department may administer diphenhydramine to adults and children weighing 20lbs and up as an adjuvant therapy during an anaphylactic or other serious reaction to a vaccine. The first and most important therapy in anaphylaxis is epinephrine.

### Procedure

A person using this Order must:

1. Be familiar with the Vermont Department of Health's:
  - a. Vermont Department of Health's [Emergency Care and Adverse Event Protocol](#);
  - b. Vermont Department of Health's [Medical Order for Epinephrine](#); and
  - c. Preventing and Managing Adverse Reactions from [CDC's General Best Practice Guidelines for Immunization: Best Practices Guidance of the Advisory Committee on Immunization Practices \(ACIP\)](#)
  - d. [Immunization Action Coalition Medical Management of Vaccine Reactions in Children and Teens & in Adults in a Community Setting](#).
2. Review the diphenhydramine package insert information and dosage instructions.
3. In the case of on anaphylactic reaction occurs, following a vaccination:
  - Call 911 or otherwise ensure that Emergency Medical Services are dispatched;
  - Administer epinephrine per the Standing Order for Administering Epinephrine to Children and Adults;
  - Monitor vital signs (pulse, respirations, and blood pressure) every 5 minutes until EMS arrive;
4. Do not use diphenhydramine to relieve upper or lower airway obstructions or shock.
5. Adults and children should be given appropriate dosage of diphenhydramine as outlined on the brand package instructions and as outlined below. **Single dose maximum for children younger than age 12 years is 40 mg, for children age 12 years and older and adults, 100 mg is maximum dosage.**<sup>1</sup>



- a. **Adults** receive between 50-100mg diphenhydramine in pill form PO. Exact dosage will vary by brand of diphenhydramine purchased.
- b. **Children and Infants** dose is based on weight, 1mg of diphenhydramine/kg of weight. May be given in pill form or in liquid form.

	<b>Weight Range (lb)</b>	<b>Weight Range (kg)</b>	<b>Diphenhydramine dose calculations based on 1 mg/kg</b>
<b>Infants and Children</b>	20-32 lb	9-14.5 kg	10–15 mg/dose
	33-39 lb	15 -17.5 kg	15-20 mg/dose
	40-56 lb	18 -25.5 kg	20-25 mg/dose
	57-99 lb	26 – 45 kg	25-50 mg/dose
<b>Teens &amp; Adults</b>	100+ lb	46+ kg	50 mg/dose

- Give only one dose of diphenhydramine.

6. Document incident and submit in writing to the person’s supervisor.

This medical order shall remain in effect until rescinded or until December 31, 2023.

A handwritten signature in blue ink, appearing to read "Mark A. Levine", is written over a horizontal line.

Mark A. Levine, MD  
Vermont Department of Health

2/15/2022

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Date

Resources:

1. AAP. *Red Book: 2018–2021*, 31st ed. (p. 66).