

	<b>COUNTY OF SACRAMENTO</b> EMERGENCY MEDICAL SERVICES AGENCY	Document #	9002.15
	<b>PROGRAM DOCUMENT:</b>  <b>Pediatric</b> <b>Allergic Reaction / Anaphylaxis</b>	Draft Date:	04/25/95
		Effective:	05/01/18
		Revised:	07/24/17
		Review:	09/01/19

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 EMS Medical Director

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 EMS Administrator

**Purpose:**

- A. To serve as treatment standard for EMT's and Paramedics in treating pediatric patients with signs and symptoms of allergic reaction and/or anaphylaxis.

**Authority:**

- A. California Health and Safety Code, Division 2.5
- B. California Code of Regulations, Title 22, Division 9

**Protocol:**

**ALLERGIC REACTION:** A local response to an antigen involving skin (rash, hives, edema, etc.) with normal vital signs. Any involvement of the respiratory system (wheezing, stridor), or oral/facial edema, will be treated as anaphylaxis. Remember that allergic reactions may deteriorate into anaphylaxis-reassess often and be prepared to treat for anaphylaxis

**BLS TREATMENT**

**Supplemental O2** as necessary to maintain SpO2  $\geq$  94%. Use the lowest concentration and flow rate of O2 as possible.  
**Airway** adjuncts as needed.  
**Remove** sting/injection mechanism.  
**Transport.**

**ALS TREATMENT**

**Consider Diphenhydramine:**  
 1 mg/kg Per Oral (PO), Intravenous (IV), Intraosseous (IO), or Intramuscular (IM), to a maximum of 50 mg.

**ANAPHYLAXIS:** A systemic response to an antigen involving two (2) or more organ systems OR any involvement of the upper and/or lower respiratory systems OR any derangement of vital signs.

### **BLS TREATMENT**

**Supplemental O<sub>2</sub>** as necessary to maintain SpO<sub>2</sub> ≥ 94%. Use the lowest concentration and flow rate of O<sub>2</sub> as possible.

**Airway** adjuncts as needed.

**Remove** sting/injection mechanism.

**Assist patient** in the use of patient prescribed medication including auto-injectors.

**Transport** and begin therapy simultaneously.

### **ALS TREATMENT**

**Epinephrine:**

0.01 mg/kg of 1:1,000, Intramuscular (IM) to a maximum of 0.3 mg, repeat every 15 min. to a maximum of three (3) doses, until a minimal Systolic Blood Pressure (SBP), for patient's age, is reached or improvement of symptoms.

**Establish IV or IO** access with saline lock

If needed connect Normal Saline (NS), if hypotensive, give 20 ml/Kg bolus of NS, reassess after each bolus.

**Cardiac Monitoring.**

**Diphenhydramine:**

1 mg/kg IV, IO or IM, to a maximum of 50 mg.

**Albuterol:**

2.5 mg (3 ml unit dose) Hand Held Nebulizer (HHN) for wheezing. Reassess after first treatment, may be repeated as needed based on reassessment.

BASE HOSPITAL ORDER ONLY:

**Epinephrine:**

0.01 mg increments of 1:10,000 slow IV / Intraosseous push, for stridor and hypotension, until a minimal SBP, for patient's age, -or- a total of 0.01 mg/kg is given.

**Cross Reference:** Pediatric Airway Management: PD# 8837