

	<b>COUNTY OF SACRAMENTO</b> EMERGENCY MEDICAL SERVICES AGENCY	<b>Document #</b>	9002.19
	<b>PROGRAM DOCUMENT:</b>	<b>Initial Date:</b>	04/25/95
	<b>Pediatric</b> <b>Allergic Reaction / Anaphylaxis</b>	<b>Last Approval Date:</b>	03/08/23
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 EMS Medical Director

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 EMS Administrator

**Purpose:**

- A. To establish treatment standards 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

**Policy:**

- A. Anaphylaxis is a suspected allergic reaction that involves two or more body systems (i.e., skin, respiratory, GI). Remember that allergic reactions may deteriorate into anaphylaxis-reassess often and be prepared to treat for anaphylaxis.

**Protocol:**

BLS
<p><b>ALLERGIC REACTION:</b></p> <ol style="list-style-type: none"> <li>1. 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. Consider non-invasive ventilation.</li> <li>2. Airway adjuncts as needed.</li> <li>3. Remove the stinger/injection mechanism.</li> </ol> <p><b>ANAPHYLAXIS:</b></p> <ol style="list-style-type: none"> <li>1. Administer Epinephrine auto-injector if needed:           <ul style="list-style-type: none"> <li>• 15-30kg Epinephrine Auto-Injector 0.15 mg IM. No repeat. Record the time of injection.</li> <li>• &gt; 30kg Epinephrine Auto-Injector 0.3 mg IM. No repeat. Record the time of injection.</li> </ul> </li> <li>2. Transport and begin therapy simultaneously.</li> </ol>
ALS
<p><b>ALLERGIC REACTION:</b></p> <ol style="list-style-type: none"> <li>1. Consider <b>Diphenhydramine:</b> <ul style="list-style-type: none"> <li>• 1 mg/kg Per Oral (PO), IV/IO/IM to a maximum of 50 mg.</li> </ul> </li> <li>2. Consider vascular access.</li> <li>3. Cardiac monitoring</li> <li>4. Reassess</li> </ol> <p><b>ANAPHYLAXIS:</b></p> <ol style="list-style-type: none"> <li>1. <b>Epinephrine:</b> 0.01 mg/kg of 1:1,000, Intramuscular (IM) to a maximum of 0.3 mg.</li> </ol>

- Repeat every 15 min. to a maximum of three (3) doses until a minimal Systolic Blood Pressure (SBP) for the patient's age is reached or improvement of symptoms.
2. Establish vascular access. If hypotensive, give 20 ml/kg bolus of NS and reassess after each bolus. Monitor and reassess.
  3. Cardiac Monitoring
  4. **Diphenhydramine:** 1 mg/kg IV, IO or IM, to a maximum of 50 mg.
  5. **Albuterol:** 2.5 mg (3 ml unit dose) Handheld Nebulizer (HHN) for wheezing. Reassess after the first treatment may be repeated as needed based on reassessment.

If there are no signs of improvement and the patient is in extremis (stridor, persistent hypotension, etc.), administer:

1. **Epinephrine:** 0.01 mg/ml (10mcg/ml) – 0.5-2 ml every (5-20 mcg) IV/IO every 2-5 minutes for stridor and hypotension. Titrate to a minimal systolic blood pressure (SBP) for patient's age, improvement of symptoms, or a total of 0.3 mg is given.  
NOTE: Monitor SBP while administering/titrating.

**Cross Reference:** PD# 8837 – Pediatric Airway Management  
PD# 8829 – Noninvasive Ventilation (NIV)