

	COUNTY OF SACRAMENTO EMERGENCY MEDICAL SERVICES AGENCY	Document #	9002.18
	<u>PROGRAM DOCUMENT:</u> Pediatric Allergic Reaction / Anaphylaxis	Initial Date:	04/25/95
		Last Approval Date:	03/11/21
		Effective Date:	11/1/23
		Next Review Date:	03/01/25

Signature on File

EMS Medical Director

Signature on File

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

Definitions:

- A. **Allergic Reaction:** A local response to an antigen involving skin (rash, hives, edema, nasal congestion, watery eyes, etc.) with normal vital signs.
- B. **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.
- C. **High Risk Allergic Reaction:** Allergic reaction with a history of anaphylaxis, or significant exposure with worsening symptoms. High-risk allergic reactions should be monitored closely for deterioration, and treated as Anaphylaxis for any worsening symptoms.

Notes:

- A. 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.

Protocol:

BLS
<p>ALLERGIC REACTION:</p> <ol style="list-style-type: none">1. Supplemental O₂ as necessary to maintain SpO₂ ≥ 94%. Use lowest concentration and flow rate of O₂ as possible. Consider Noninvasive Ventilation.2. Airway adjuncts as needed.3. Remove sting/injection mechanism. <p>ANAPHYLAXIS:</p> <ol style="list-style-type: none">1. Administer Epinephrine auto-injector if needed:<ul style="list-style-type: none">• 15-30kg Epinephrine Auto Injector 0.15 mg IM. No repeat. Record time of injection• > 30kg Epinephrine Auto Injector 0.3 mg IM. No repeat. Record time of injection.2. Transport and begin therapy simultaneously.
ALS
<p>ALLERGIC REACTION:</p> <ol style="list-style-type: none">1. Consider Diphenhydramine:<ul style="list-style-type: none">• 1 mg/kg Per Oral (PO), IV/IO/IM to a maximum of 50 mg.2. Consider vascular access.3. Cardiac monitoring4. Reassess <p>ANAPHYLAXIS:</p> <ol style="list-style-type: none">1. Epinephrine: 0.01 mg/kg of 1:1,000, Intramuscular (IM) to a maximum of 0.3 mg.<ul style="list-style-type: none">• 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 symptoms2. Establish vascular access. If hypotensive, give 20 ml/kg bolus of NS, reassess after each bolus. Monitor and reassess.3. Cardiac Monitoring4. Diphenhydramine: 1 mg/kg IV, IO or IM, to a maximum of 50 mg.5. 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. <p>If no signs of improvement and patient in extremis (stridor, persistent hypotension, etc.) administer:</p> <ol style="list-style-type: none">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)