

	<b>COUNTY OF SACRAMENTO</b> EMERGENCY MEDICAL SERVICES AGENCY	Document #	8001.20
	<u>PROGRAM DOCUMENT:</u> <b>Allergic Reaction / Anaphylaxis</b>	Initial Date:	10/26/1994
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 EMS Medical Director

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**Purpose:**

- A. To establish a treatment standard for 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

**Definition:**

- 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.

**Notes:**

- A. **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.
- B. 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><b>ALLERGIC REACTION:</b></p> <ol style="list-style-type: none"> <li>1. Assess C-A-B</li> <li>2. Remove the sting/injection mechanism.</li> <li>3. Position of comfort, reduce anxiety.</li> <li>4. SPO2 with Supplemental O<sub>2</sub> as necessary to maintain SpO<sub>2</sub> ≥ 94%.</li> <li>5. Suction as needed.</li> <li>6. Airway adjuncts as needed.</li> </ol> <p><b>ANAPHYLAXIS:</b></p> <ol style="list-style-type: none"> <li>1. Administer Epinephrine by auto-injector if needed:             <ol style="list-style-type: none"> <li>a. Epinephrine auto-injector 0.3 mg IM for patients ≥ 30 kg. Do not repeat. Record the time of injection.</li> <li>b. Epinephrine auto-injector 0.15 mg IM for patients ≤ 30 kg. Do not repeat. Record the time of injection.</li> </ol> </li> </ol>

2. Transport and begin therapy simultaneously.

**ALS**

**ALLERGIC REACTION:**

1. Consider Diphenhydramine 50mg – PO/IM/IV.
2. Consider vascular access.
3. Cardiac monitoring
4. Reassess

**ANAPHYLAXIS:**

1. Epinephrine: 1:1,000
  - a. 0.3 mg IM (Max dose 0.9 mg).
  - b. May repeat in 15 minutes up to three (3) doses if symptoms persist.
2. Establish large-bore vascular access with normal saline (NS); titrate to systolic B/P  $\geq$  90 mmHg.
3. Diphenhydramine: 50 mg IV/IO/IM.
4. Cardiac and SpO<sub>2</sub> monitoring.
5. Albuterol: 5 mg (6 ml unit dose) HHN for wheezing. Reassess after the first treatment. It may be repeated as needed for respiratory distress.
6. Consider CPAP.
7. If no signs of improvement and the patient is in extremis (stridor, persistent hypotension, etc.):
  - a. Epinephrine: 0.01 mg/ml (10mcg/ml)-0.5-2 ml every 2-5 minutes (5-20mcg) IV/IO for stridor and hypotension. Titrate to a minimal systolic B/P  $>$  90 mmHg OR a total of 0.5 mg. is given.
8. Inadequate response to Epinephrine and the patient is on Beta Blockers:
  - a. Glucagon 1 mg IV/IO given over one (1) minute. May give IM if no vascular access or delay is anticipated.

**Cross Reference:** PD# 8020 – Respiratory Distress: Airway Management  
PD# 8026 – Respiratory Distress