	COUNTY OF SACRAMENTO EMERGENCY MEDICAL SERVICES AGENCY	Document #	8001.18
	PROGRAM DOCUMENT:	Initial Date:	10/26/94
	Allergic Reaction / Anaphylaxis	Last Approval Date:	06/11/20
		Effective Date:	07/01/21
		Next Review Date:	06/01/22

Signature on File	Signature on File
EMS Medical Director	EMS Administrator

# Purpose:

A. To serve as treatment standard for treating 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**

### **ALLERGIC REACTION:**

- 1. Supplemental O2 as necessary to maintain SpO2 ≥ 94%. Use lowest concentration and flow rate of O2 as possible.
- 2. Airway adjuncts as needed.
- 3. Remove sting/injection mechanism.

## **ANAPHYLAXIS:**

- 1. Administer Epinephrine auto-injector if needed:
  - 30Kg Epinephrine auto-injector 0.3 mg IM. No repeat. Record time of injection.
  - 5-30Kg Epinephrine auto-injector 0.15 mg IM. No repeat. Record time of injection.
- 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
  - 0.3 mg IM (Max dose 0.9 mg).
  - May repeat in 15 minutes up to three (3) doses if symptoms persist.
- 2. Establish large bore venous access with normal saline (NS); titrate to systolic B/P to > 90 mmHG
- 3. Diphenhydramine: 50 mg IV/IO/IM.
- 4. Cardiac and SpO2 monitoring.
- 5. Albuterol: 5 mg (6 ml unit dose) HHN for wheezing. Reassess after first treatment. May be repeated as needed for respiratory distress.
- 6. Consider CPAP.
- 7. If no signs of improvement and patient in extremis (stridor, persistent hypotension, etc.):
  - 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.

NOTE: Epinephrine should be used cautiously in patients > 35 years old, or with a history of CAD or HTN.

- 8. Inadequate response to Epinephrine and patient is on Beta Blockers:
  - Glucagon 1 mg IV/IO give over one (1) minute. May give IM if no vascular access or delay is anticipated.