

ALLERGIC REACTION/ANAPHYLAXIS

ALL PROVIDERS/EMT

- ❑ Focused history and physical exam.
- ❑ Continuous cardiac, ETCO₂, and pulse oximetry monitoring, when available.
- ❑ **Treatment Plan**
 - Safely and rapidly eliminate the source of exposure, as able.
 - Maintain airway.
 - Apply cold pack to bite or sting site.
 - Monitor closely for hypotension.
- ❑ **Key Considerations**
 - If the patient has any respiratory distress and is conscious, allow them to achieve a position of comfort, including leaving a child in their parent's lap.
 - Determine if anaphylaxis is present:
 - **Non-anaphylactic Allergic Reaction:** Symptoms involving only one organ system (i.e. itching, rash, or localized angioedema that does not involve the airway or is not associated with vomiting)
 - **Anaphylaxis:** More severe and is characterized by an acute onset involving:
 - Hypotension after exposure to a likely allergen OR
 - Two or more of the following occurring rapidly after exposure to a likely allergen:
 - ❖ Skin and/or mucosal involvement (urticaria, itching, face/lips/tongue swelling)
 - ❖ Respiratory compromise (dyspnea, wheezing, stridor, hypoxemia)
 - ❖ Persistent gastrointestinal symptoms, particularly in infants/young children (vomiting, abdominal pain)
 - **Do not delay administration of epinephrine.** Give IM epinephrine as soon as the diagnosis of anaphylaxis has been established.

ADULT

PEDIATRIC (<15 years of Age)

NOTE: Pediatric weight based dosing should not exceed Adult dosing.

EMT

- ❑ Give or assist patient with **Epipen (0.3 cc)** IM for respiratory distress and/or shock from anaphylaxis
- ❑ **OR** administer epinephrine (1:1000) 0.3 cc IM, as per AEMT guideline below.
- ❑ Assist patient with own Albuterol inhaler according to the prescription on the inhaler
- ❑ O₂ as needed to maintain SaO₂ above 90%.

EMT

- ❑ Give or assist patient with **Epipen Jr. (0.15 cc)** IM for respiratory distress and/or shock from anaphylaxis. If >25kg then give Adult dose.
- ❑ **OR** administer epinephrine (1:1000) 0.3 cc IM, as per AEMT guideline below. If >25kg then give Adult dose.
- ❑ Assist patient with own Albuterol inhaler according to the prescription on the inhaler
- ❑ O₂ as needed to maintain SaO₂ above 90%.

AEMT

- ❑ Advanced airway, vascular access and fluid therapy per ***IV-IO Access and Fluid Therapy Guideline***
- ❑ **Epinephrine (1:1000) 0.3 cc** IM for patient with more than mild symptoms
 - If symptoms persist, may repeat every 10 minutes until symptoms improve.
- ❑ **Diphenhydramine (Benadryl) 50 mg** IV/IO/IM for moderate to severe allergic reaction

- ❑ If significant WHEEZING is present:
 - **Albuterol 2.5 mg every 10 minutes** via nebulization for bronchospasm/wheezing until symptoms subside
- ❑ If STRIDOR is present:
 - **Epinephrine (1:1000) 2mL** mixed with 3mL of NS via nebulizer every 10 minutes until symptoms improve.

AEMT

- ❑ Advanced airway, vascular access and fluid therapy per ***IV-IO Access and Fluid Therapy Guideline***
- ❑ **Epinephrine (1:1000) 0.15 cc** per dose IM for patient with more than mild symptoms
 - If symptoms persist, may repeat every 10 minutes until symptoms improve.
- ❑ **Diphenhydramine (Benadryl) 1 mg/kg to max of 50mg/single dose** IV/IO/IM for moderate to severe allergic reaction

- ❑ If significant WHEEZING is present:
 - **Albuterol 2.5 mg every 10 minutes** via nebulization until symptoms subside. Start with **1.25 mg if patient is <1 yr in age.**
- ❑ If STRIDOR is present:
 - **Epinephrine (1:1000) 2mL** mixed with 3mL of NS via nebulizer every 10 minutes until symptoms improve.

PARAMEDIC

- ❑ **Epinephrine (1:10,000) 1mg** IV/IO for severe hypotension
May repeat every 5 min if shock persists

- ① **Epinephrine (1:1000) 2–10 mcg/min** IV/IO infusion for hypoperfusion. Titrate to maintain a SBP >100 mmHg.

PARAMEDIC

- ❑ **Epinephrine (1:10,000) 0.01 mg/kg or 0.1ml/kg** IV/IO for severe hypotension.
May repeat every 5 min if shock persists

- ① **Epinephrine (1:1000) 0.1–2 mcg/kg/min** IV/IO infusion for hypoperfusion. Titrate to maintain a SBP >70 + (age in years x 2) mmHg.