

ALLERGIC REACTION / ANAPHYLAXIS

UPDATED 4/2025

ALL PROVIDERS / EMT

- ☐ Focused history and physical exam.
- ☐ Cardiac monitor, ETCO₂, and pulse oximetry monitoring.
- ☐ **Treatment Plan**
 - Eliminate the source of exposure, if possible. May require moving the patient to another location.
 - Maintain airway.
 - Apply a cold pack to bite or sting site as necessary.
 - Monitor closely for hypotension.
- ☐ Key Considerations
 - If the patient has any respiratory distress and is conscious, treat and transport them in a position of comfort, including leaving the child in the 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 and 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)
 - Pediatric lowest acceptable systolic blood pressures are:
 - Birth to 1 month = 60mmHg
 - 1 month to 1 year = 70mmHg
 - 1 year to 10 years = 70mmHg + (age x 2)
 - Over 10 years = 90mmHg

☐ **Do not delay administering epinephrine.**

- Give IM epinephrine as soon as the diagnosis of anaphylaxis has been established.

ADULT

PEDIATRIC

Pediatric weight-based dosing should not exceed
Adult dosing

EMT

- ☐ **Epinephrine Autoinjector**
 - **Epi-Pen - 0.3 mg IM**
- ☐ **Epinephrine - 1mg/mL (1:1000) - 0.5mg IM**
- ☐ May repeat epinephrine dose every 5 minutes as needed
- ☐ If WHEEZING is present: Assist patient albuterol inhaler if wheezing is present (2 puffs). May repeat in 10 minutes
- ☐ O₂ as needed to maintain SpO₂ above 90%.

EMT

- ☐ **Epinephrine Autoinjector**
 - **Epi-Pen "Jr." - 0.15mg IM**
 - If >25kg, use adult autoinjector (0.3mg) IM
- ☐ **Epinephrine - 1 mg/mL (1:1000) 0.01mg/kg IM (Max dose 0.3mg)**
 - If > 25 kg, then give 0.3mg IM
- ☐ May repeat epinephrine dose every 5 minutes, as needed
- ☐ If WHEEZING is present: Assist patient with own albuterol inhaler (2 puffs). May repeat in 10 minutes.
- ☐ O₂ as needed to maintain SpO₂ above 90%.

AEMT

- ☐ Advanced airway, vascular access and fluid therapy
- ☐ **Diphenhydramine - 50 mg IV/IO/IM** for urticaria/itching
- ☐ If **WHEEZING** is present:
 - **Albuterol 2.5 mg** nebulized every 10 minutes until symptoms improve.
- ☐ If **STRIDOR** is present:
 - **Epinephrine (1 mg/mL; 1:1000) 2mg** mixed with 3 mL of NS nebulized every 10 minutes until symptoms improve

PARAMEDIC

- ☐ **Epinephrine Drip - 2-10mcg IV/IO** infusion. Titrate to maintain a SBP >90 mmHg or MAP of 65
- ☐ **Push Dose Epinephrine – 2-10mcg** as needed to maintain SBP >90mmHg or MAP of 65
- ☐ **Norepinephrine - 1mcg/kg/min IV/IO** infusion. Titrate up to 30mcg/min to maintain SBP >90mmHg or MAP of 65

AEMT

- ☐ Advanced airway, vascular access and fluid therapy
- ☐ **Diphenhydramine 1 mg/kg IV/IO/IM** for urticaria/itching (Max 50mg)
- ☐ If **WHEEZING** is present:
 - **Albuterol 2.5 mg** nebulized every 10 minutes until symptoms improve.
- ☐ If **STRIDOR** is present:
 - **Epinephrine (1mg/mL, 1:1000) 2mg** mixed with 3 mL of NS nebulized every 10 minutes until symptoms improve.

PARAMEDIC

- ☐ **Epinephrine Drip– 0.1-0.5mcg/kg/min IV/IO** infusion. Titrate to maintain an appropriate SBP for age.
- ☐ **Push Dose Epinephrine - 1mcg/kg/min** as needed to maintain an appropriate SBP for age.
- ☐ **Norepinephrine - 0.05-0.1mcg/kg/min IV/IO** infusion. Titrate to maintain an appropriate SBP for age.

