



## ALLERGIC REACTION/ANAPHYLAXIS - PEDIATRIC

**ALS STANDING ORDERS:** Allergic reactions may be mild to life threatening (termed anaphylaxis), treat based on the following assessment findings:

Allergic reaction with only rash or urticaria and vital signs stable:

- Pulse oximetry: if room air oxygen saturation less than 95%, manage as allergic reaction "includes hypoxia" as described below.
- Transport to nearest appropriate ERC.

Allergic reaction includes facial/cervical angioedema:

- ▶ *Epinephrine 0.01 mg/kg IM lateral thigh area (1 mg/1 mL concentration) – one time (limit one time dose to maximum of 0.5 mg); HOLD if Epinephrine Auto-injector administered prior to arrival.*
- Pulse oximetry: if room air oxygen saturation less than 95%:
  - ▶ *Oxygen by mask, blow by technique, or nasal cannula (for blow by or nasal cannula provide 6 l/min flow rate as tolerated).*
  - ▶ *Diphenhydramine (Benadryl®) 1mg/kg IM/IV/IO once (limit one time dose to maximum of 50 mg or 1 mL of 50 mg/mL solution).*
- ALS escort to nearest appropriate ERC.

Allergic reaction includes wheezing or hypoxia (pulse oximetry less than 95% saturation):

- ▶ *Oxygen by mask (high flow), blow by technique, or nasal cannula (6 l/min flow rate) as tolerated.*
- ▶ *Epinephrine 0.01 mg/kg IM lateral thigh area (1 mg/1 mL concentration). Maximum dose is 0.5 mg. May repeat in approximately 5 minutes one time. If Epinephrine Auto-injector administered prior to arrival, consider one dose of epinephrine has been provided.*
- ▶ *Albuterol, Continuous nebulization of 6 mL (5 mg) concentration as tolerated.*
- ▶ *Diphenhydramine (Benadryl®) 1mg/kg IM/IV/IO one time (limit one time dose to maximum of 50 mg or 1 mL of 50 mg/mL solution).*
- ALS escort to nearest appropriate ERC.

Allergic reaction includes hypotension, respiratory distress, or impending airway obstruction:

- ▶ *Epinephrine 0.01 mg/kg IM lateral thigh area (1 mg/1mL concentration). Maximum dose 0.5 mg.*
- Establish IV/IO access.
  - ▶ *Infuse normal saline 20 mL/kg IV/IO bolus (maximum 250 mL) and make BH contact. May repeat twice for total of three boluses as a standing order.*
- After initial IM epinephrine given as above, if after approximately 5 minutes there is continued hypotension, respiratory distress, or impending airway obstruction, consider administration of second dose of epinephrine by one of the following routes:

Approved:

*Carl Schultz, MD*

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- ▶ *Epinephrine 0.01 mg/kg IV/IO (1 mg/10 ml concentration), maximum single dose 0.3 mg (3 mL)*  
*OR*  
*Epinephrine 0.01 mg/kg IM lateral thigh (1 mg/1 mL concentration), maximum single dose 0.5 mg (0.5 mL)*

- ▶ *Oxygen by mask, blow by technique, or nasal cannula (for nasal cannula provide 6 l/min flow rate as tolerated).*

- ▶ *Diphenhydramine (Benadryl®) 1mg/kg IM/IV/IO once (limit one time dose to maximum of 50 mg or 1 mL of 50 mg/mL solution).*

→ Contact Base Hospital (CCERC base preferred) and ALS escort as directed to CCERC or ERC.

Patients self-treated with Epi-Pen (epinephrine auto-injector) prior to EMS arrival:

Consider patient having received first epinephrine IM dose and follow above steps.  
ALS escort to ERC or if appropriate, contact Base Hospital (CCERC base preferred) for further evaluation even when symptoms resolving.

Approved:

*Carl Schultz, M.D.*

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