



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 40 mg or 0.8 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 approximately every 5 minutes two times. 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 40 mg or 0.8 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 (0.01 ml of 1 mg/1mL concentration)*

→ Establish IV/IO access.

- ▶ *Normal Saline, infuse 20 ml/kg IV or IO, repeat 20 ml/kg boluses up to two times to maintain adequate perfusion*

→ 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

Reviewed: 5/16; 8/18
Initial Release Date: 01/07/2019
Final Implementation Date: 4/1/2019



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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 40 mg or 0.8 mL of 50 mg/mL solution).*

→ Contact Pediatric Resource Center/Base Hospital 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 Pediatric Resource Center or Base Hospital for further evaluation even when symptoms resolving.

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