



ORANGE COUNTY EMERGENCY MEDICAL SERVICES  
BASE HOSPITAL TREATMENT GUIDELINES

#: BH-P-060  
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Org. Date: 04/01/2013  
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ALLERGIC REACTION/ANAPHYLAXIS – PEDIATRIC

BASE GUIDELINES

Determine ALS Standing Order treatments/procedures rendered prior to base hospital contact. Use ALS standing order as guidelines for treatments/procedures not initiated prior to base hospital/CCERC contact.

**Allergic Reaction: facial/cervical angioedema, respiratory distress or wheezing:**

1. Use ALS standing order as guidelines for treatments/procedures not initiated prior to base hospital contact.

**Anaphylaxis: hypotension, severe wheezing, respiratory distress, airway obstruction:**

1. For absent palpable pulse and lack of response to fluid boluses, consider repeat dose:
  - ▶ **Epinephrine 0.01mg/kg IV/IO (0.1 mg/1 mL concentration)**
    - Maximum single dose is 0.3mg (3mL)
  - OR
  - ▶ **Epinephrine 0.01 mg/kg IM (1 mg/1 mL concentration)**
    - Maximum single dose is 0.5mg (0.5mL)
  - ▶ **Normal Saline, infuse 20 mL/kg IV or IO, repeat 20 ml/kg boluses to maintain adequate perfusion.**
2. For impending airway obstruction:
  - ▶ **Epinephrine 0.01 mg/kg IV/IO (0.1 mg/1 mL concentration)**
    - Maximum single dose is 0.3 mg (3 mL)
  - OR
  - ▶ **Epinephrine 0.01mg/kg IM (1 mg/1 mL concentration)**
    - Maximum single dose is of 0.5 mg (0.5 mL)
3. If cardiac arrest occurs, treat using cardiac arrest (pediatric) Base Hospital Treatment Guidelines /Standing Orders (BH-P- 40/SO-P-40).

ALS STANDING ORDER

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 is 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 0.5mg) 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®) 1 mg/kg IM/IV/IO once (limit one-time dose to maximum of 50 mg or 1 mL of the 50 mg/mL solution).**
- ALS escort to the 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 (1 mg/1mL 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 6.0 mL (5 mg) concentration as tolerated.**
- ▶ **Diphenhydramine (Benadryl®) 1 mg/kg IM/IV/IO one time (limit one-time dose to maximum of 50 mg or 1 mL of the 50 mg/mL solution).**
- ALS escort to nearest appropriate ERC.

Approved:

*Carl Schults, MD*

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BASE GUIDELINES

ALS STANDING ORDER

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 is 0.5mg (0.5mL).
- 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.**
- ▶ **Oxygen by mask (high flow), blow by technique, or nasal cannula (for nasal cannula provide 6 L/min flow rate as tolerated).**
- 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:
  - ▶ **Epinephrine 0.01 mg/kg IV/IO (0.1 mg/1 mL concentration).**  
Maximum single dose is 0.3 mg (3 mL).
  - OR**
  - ▶ **Epinephrine 0.01 mg/kg IM lateral thigh (1 mg/1 mL concentration).**  
Maximum single dose is 0.5mg (0.5mL)
  - ▶ **Diphenhydramine (Benadryl®) 1 mg/kg IM/IV/IO one time (limit one-time dose to maximum of 50 mg or 1 mL of the 50 mg/mL solution).**
- Contact a CCERC/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 CCERC or Base Hospital for further evaluation even when symptoms resolving.

Approved:

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