

# PEDIATRIC ALLERGIC REACTION ANAPHYLACTIC SHOCK

HPI	Signs & Symptoms	Differential Diagnosis
<ul style="list-style-type: none"> <li>Onset and location</li> <li>Insect sting/bite</li> <li>Food allergy/exposure</li> <li>New clothing, soap, detergent</li> <li>PMH of reactions</li> <li>Medication allergy</li> </ul>	<ul style="list-style-type: none"> <li>Itching, hives</li> <li>Coughing, wheezing</li> <li>Respiratory distress</li> <li>Difficulty swallowing</li> <li>Vomiting, diarrhea</li> <li>Hypotension</li> <li>Edema</li> </ul>	<ul style="list-style-type: none"> <li>Urticaria (rash only)</li> <li>Anaphylaxis</li> <li>Angioedema</li> <li>Aspiration/obstruction</li> <li>Asthma/COPD Heart</li> <li>Failure</li> </ul>

	EMR	EMT	PM
1. Provide <a href="#">Pediatric Routine Medical Care</a> - treat life threatening problems with airway, breathing, circulation and disability.	•	•	•
2. Obtain ECG, monitor Capnography.		•	•

## UNSTABLE/ ANAPHYLAXIS: Altered Mental Status, MAP<65, Capillary refill >2 sec.

3. Secure airway		•
4. <b>EPINEPHRINE</b> 1 mg/mL: 0.01mg/kg IM in anterolateral thigh, max single dose 0.3mg, may repeat 5 min., no max. or <b>EpiPen</b> <15kg contact <b>OLMC</b> 15-29kg: 0.15mg >30kg: 0.3mg		•
5. <b>DIPHENHYDRAMINE</b> : 1 mg/kg IVP/IO slowly over 2 min., max 50 mg or : 1 mg/kg IM, max 50 mg	•	•
6. <b>NORMAL SALINE</b> : 20 mL/kg, titrate to MAP ≥ 65, max. 60mL/kg		•
7. <b>DuoNeb</b> : <b>ALBUTEROL</b> : 2.5 mg / <b>IPRATROPIUM BROMIDE</b> : 0.5 mg, may repeat x1	•	•
8. <b>ALBUTEROL</b> : 2.5 mg NEB, may repeat 5 min., no max. dosage	•	•
9. If condition continues to deteriorate and MAP <65 despite <b>NORMAL SALINE</b> contact <b>OLMC</b> : <b>PUSH DOSE EPINEPHRINE</b> : 1 mcg/kg IVP/IO, max. single dose 50 mcg, repeat 5 min., max. total 100mcg, titrate to MAP 65		•

## STABLE: GCS 15, MAP >65, SBP >80, skin warm/dry

### WITH AIRWAY INVOLVEMENT:

3. <b>EPINEPHRINE</b> 1 mg/mL: 0.01mg/kg IM in anterolateral thigh, max single dose 0.3mg, may repeat 5 min., no max. or <b>EpiPen</b> <15kg contact <b>OLMC</b> 15-29kg: 0.15mg >30kg: 0.3mg		•
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6. <b>ALBUTEROL</b> : 2.5 mg NEB, may repeat 5 min., no max.	•	•

**STABLE:** GCS 15, MAP >65, SBP >80, skin warm/dry

**WITHOUT AIRWAY INVOLVEMENT:**

3.	Apply cold pack to site.	•	•	•
4.	<b>DIPHENHYDRAMINE:</b> 1 mg/kg IVP/IO over 2 min., max 25 mg			•
	or : 1 mg/kg IM, max 25 mg	•	•	

**NOTE:**

1. DuoNeb **ALBUTEROL/IPRATROPIUM BROMIDE & ALBUTEROL NEB** treatment may be administered in-line for those patients requiring CPAP or intubation.

**PEARLS:**

1. Patients with asthma, atopic dermatitis (eczema), prior anaphylactic history, and those who delay treatment can be at greater risk for a fatal reaction.
2. Gastrointestinal symptoms occur most commonly in food-induced anaphylaxis, and oral pruritus is often the first symptom observed.
3. New onset hoarseness or underpowered voice indicates vocal cord edema and should prompt concern for airway compromise

**Use Calculator for dosing**