Pediatric Allergic Reaction/Anaphylaxis

### History
- Onset and location
- Insect sting or bite
- Food allergy / exposure
- Medication allergy / exposure
- New clothing, soap or detergent
- Past history of reactions
- Past medical history
- Medication history

### Signs and Symptoms
- Itching or hives
- Coughing, wheezing or respiratory distress
- Chest or throat restriction
- Difficulty swallowing
- Hypotension or shock
- Edema
- Nausea or vomiting
- Feeling of impending doom

### Differential
- Urticaria (rash only)
- Anaphylaxis (systemic effect)
- Shock (vascular effect)
- Angioedema (drug induced)
- Aspiration or airway obstruction
- Vasovagal event
- Asthma or COPD
- CHF

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#### Assess symptom severity

**Systemic**
- Administer weight appropriate Epinephrine auto injector or assist patient with their prescribed auto injector
  - **E**
    - Epinephrine 1:1,000 IM
      - Use Pediatape and refer to dosing guide
    - Establish IV/IO
    - Cardiac monitor
    - EtCO₂ monitoring
  - **P**
    - Albuterol nebulizer 5mg
      - Repeat as needed to Max of 3 doses
        - *if indicated*
    - Normal Saline bolus
      - Use Pediatape and refer to dosing guide
    - If hypotensive or no improvement,
      - Epinephrine 1:10,000 slow IV/IO
        - Use Pediatape and refer to dosing guide

**Localized**
- Consider IV/IO
  - Cardiac monitor
  - **E**
    - Consider Diphenhydramine IM/IV/IO
      - Refer to weight-based dosing guide

- Monitor and reassess
- Monitor for worsening signs and symptoms

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**Airway Procedure if indicated**

**Notify receiving facility.**
**Contact Base Hospital for medical direction, as needed.**
Pearls

• Anaphylaxis is an acute and potentially lethal multisystem allergic reaction.
• Epinephrine is the drug of choice and the first drug that should be administered in acute anaphylaxis reactions with moderate or severe symptoms. IM Epinephrine should be administered as priority before or during attempts at IV or IO access.
• Anaphylaxis unresponsive to repeat doses of IM Epinephrine may require IV Epinephrine administration. Contact the Base Hospital for refractory anaphylaxis.
• Allergic reactions may occur with only respiratory and gastrointestinal symptoms and have no rash or skin involvement.
• All patients with respiratory symptoms must have continuous pulse oximetry and EtCO₂ measurement.
• The shorter the onset of symptoms from contact with an allergen, generally the more severe the reaction.