**Anaphylaxis Pathway**

### Acute Allergic Reaction and Anaphylaxis (>6 months) – Dell Children's Hospital

- **Clinical concern for anaphylactic reaction?**
  - Yes
    - Remove affecting antigen or medication immediately.
    - Perform ALS/PALS.
  - No

- **History of Severe Anaphylaxis?**
  - Yes
    - Meets Anaphylactic Criteria?
      - Yes
        - EpiPen IM Injection
      - No
        - Serum 8-trypetase within 15 min to 3 hours after presentation, consider treating as anaphylaxis, consider allergy/immunology consult.
  - No

- **2nd EPI IM?**
  - To be Given prior to any adjuncts or if persistent symptoms after 5 mins from 1st EPI.

- **Consider IV access**

- **Upper airway Obstruction?**
  - Yes
    - 1. Upper Airway Obstruction Treatment
    - 2. Consider Steroids
  - No

- **Resolution of Symptoms?**
  - Yes
    - Reevaluate after 5 minutes
  - No
    - Benadryl for itching and hives.

- **Hypotension?**
  - Yes
    - Hypotension Treatment in Anaphylaxis
  - No

- **Bronchospasm?**
  - Yes
    - 1. Inhaled Bronchodilator
    - 2. Consider Steroids
  - No

### Anaphylaxis Diagnosis Criteria

1. **Criteria 1**
   - Acute onset of an illness (minutes to hours) with involvement of the skin, mucosa, or both (eg. generalized hives, pruritus or flushing, swollen lips-tongue-uvula)
   - AND AT LEAST 1 OF THE FOLLOWING
     - Respiratory compromise (dyspnea, wheezing, stridor, hypoxia)
     - Reduced BP or associated symptoms of end-organ dysfunction (hypotonia, syncope, incontinence)

2. **Criteria 2**
   - 2 or more of the following that occur rapidly (minutes to hours) after exposure to a LIKELY allergen
     - Involvement of the skin-mucosa (generalized hives, itch-flush, swollen lips-tongue-uvula)
     - Respiratory compromise (dyspnea, wheezing, stridor, hypoxia)
     - Reduced BP or associated symptoms (hypotonia, syncope, incontinence)
     - Persistent gastrointestinal symptoms (abdominal pain, vomiting)

3. **Criteria 3**
   - Reduced BP after exposure to a patient’s KNOWN allergen

### Epinephrine IM Injection Dosage

- **Outside hospital**
  - Prescribe EpiPEN

- **ED/Inpatient**
  - Weight based dosing using 1mg/mL solution
  - < 25 kg: 0.15mg (EpiPen Jr) IM PRN
  - ≥ 25 kg: 0.3mg (EpiPen) IM PRN

  - (Max 0.3mg if < 13 years, 0.5mg if ≥ 13 years)

### Red Flags

- History of biphasic or severe reactions
- Progression of / or persistent symptoms
- History of severe asthma
- Patient with 1 ICU admission and/or 3 IP admissions per year
- Current asthma flare
- Hypotension during ED stay
- Requires >1 Epinephrine dose
- Requires fluid bolus
- Upper airway obstruction i.e. stridor

### Discharge Criteria

1. Min 4 hour obs after 1st epinephrine given
2. 100% receive plan to receive Epi Pen
3. All patients receive standard hospital discharge instructions and epinephrine auto-injector training (See “DMC Anaphylaxis Discharge Instructions for Families”)
4. Assess risk factors for biphasic or prolonged anaphylaxis (refer to box 3)

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**Anaphylaxis Diagnosis Criteria**

- Yes
  - Criteria
  - No or Resolved
  - Admit to appropriate level
  - Consider Additional EPI IM
  - Use Adjuncts as needed

**Floor Criteria**

- Refer to Box 3

**ICU Criteria**

1. Frequent Airway assessment or management
2. Requires support of ongoing hypotension
3. Requires any Drips
4. Ongoing severe Anaphylaxis Symptoms

- Meets Criteria
- Admit to ICU

- No
  - Meets Criteria
  - Admit to Floor

- Discharge