Pediatric Anaphylaxis / Allergic Reaction

(a) Evaluate for non-anaphylactic allergic reaction versus anaphylaxis
(b) Consider other specific protocols. e.g. airway management, breathing difficulty, shock

Routine Medical Care

Determine Severity of Reaction

Non-Anaphylactic Allergic Reaction

Diphenhydramine
1 mg/kg IV/IO/IM (max 50mg)

Treat stridor as indicated in the **Upper Airway Obstruction** protocol.
Treat wheezing and chest tightness as indicated in the **Lower Airway Obstruction** protocol.

Anaphylaxis

IM Epinephrine 1 mg/ml (1:1000)
(Thigh is preferred site)
If < 25kg, 0.15 mg IM
If > 25kg, 0.3 mg IM
May repeat x 1 after 5 min

Diphenhydramine
1-2 mg/kg IV/IO/IM (max 50mg)

Crystalloid Fluid 20 mL/kg bolus IV/IO if hypotensive. Repeat x 1 prn

Methylprednisolone[1] 2mg/kg (max 125mg) IV/IO/IM

Medical Control for further orders
Consider **Epinephrine** infusion 0.01-0.5 mcg/kg/min if signs of anaphylaxis persist

Non-anaphylactic allergic reaction: symptoms involve only one organ system, generally considered a mild or moderate reaction

Anaphylaxis: more severe reaction that meets one of the following criteria:

A. Two or more body systems affected rapidly after exposure
- Skin involvement (rash, generalized itching)
- Mucosa involvement (angioedema, throat tightening sensation)
- Respiratory compromise (dyspnea, wheezing, stridor)
- Persistent GI involvement (vomiting, diarrhea, abdominal pain)
- Altered mental status, syncope, incontinence

or

B. Hypotension (for age) or respiratory compromise after known allergen exposure *(having two systems involved is not required)*

- **The mainstay of treatment for anaphylaxis is epinephrine.** Consider immediate IM epinephrine prior to IV/IO access in critically ill patients. Administration to the thigh is the fastest IM site. Use either the vastus lateralis or the rectus femoris.
- If patient has their own epinephrine via auto-injector you may assist them with using it.
- A dystonic reaction (to phenothiazines) is an adverse reaction **NOT** an allergic reaction. Patients may receive **Diphenhydramine** 1-2 mg/kg IV/IM.
- Reassess frequently for signs of deterioration, including impending airway obstruction

[1] Corticosteroids are not indicated as initial treatment for anaphylaxis in the place of epinephrine; they can be given as adjunctive therapy after the administration of epinephrine but should be considered optional.