Anaphylaxis

Definition:

1. Acute onset illness with ≥2 of the following manifestations:
   - Skin: rash, urticaria, pruritus, swollen lips or tongue
   - Respiratory: hypoxemia, wheeze, or stridor
   - Cardiovascular: hypotension or tachycardia
   - Abdomen: nausea, diarrhea, or abdominal pain

OR

2. Acute onset of hypotension after exposure to known allergen

Start

1. Establish team leader and call for HELP.
2. Check pulse and vital signs.
   - If pulseless, initiate Advanced Cardiovascular Life Support.
3. Assess airway for stridor, tongue swelling, or hoarseness; call anesthesia and surgical airway team for help and consider immediate intubation.
4. Give intramuscular epinephrine, repeat if ineffective in 5 minutes. See epinephrine dosing box.
5. Obtain intravenous (IV) or intraosseous access.
6. Give 2 L crystalloid bolus.
7. Perform focused physical exam.
   - Lung fields
   - Full skin exam
   - IV infusions? Stop immediately.
8. Perform focused history.
   - AMPLE: allergies, medications, past medical history, last meal, recent events
   - Consider sending senior member for electronic chart review

Refractory Anaphylaxis

- Give 0.5-1 mL 1:10 000 epinephrine slow IV push (cardiac epinephrine). Repeat if no response after 3 minutes
- Consider starting epinephrine drip; start at 2 µg/min, titrate up to 15 µg/min
- Continue aggressive fluid resuscitation with 0.9% NaCl
- Consider glucagon if on beta-blockers (1-5 mg slow IV push over 5 minutes, followed by IV infusion of 5-15 µg/min)

Epinephrine Dosing

1. Inject EpiPen in anterolateral thigh
2. If no EpiPen:
   - Draw 0.3 mL of 1:1000 epinephrine into a 1-mL syringe
   - Give into anterolateral thigh with a 1.0- to 1.5-inch needle

Secondary Medications

- Hydrocortisone, 100 mg IV
- Diphenhydramine, 25-50 mg IV
- Albuterol for wheezing
- Ranitidine, 50 mg IV