

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 $\mu\text{g}/\text{min}$, titrate up to 15 $\mu\text{g}/\text{min}$
- 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 $\mu\text{g}/\text{min}$)



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