

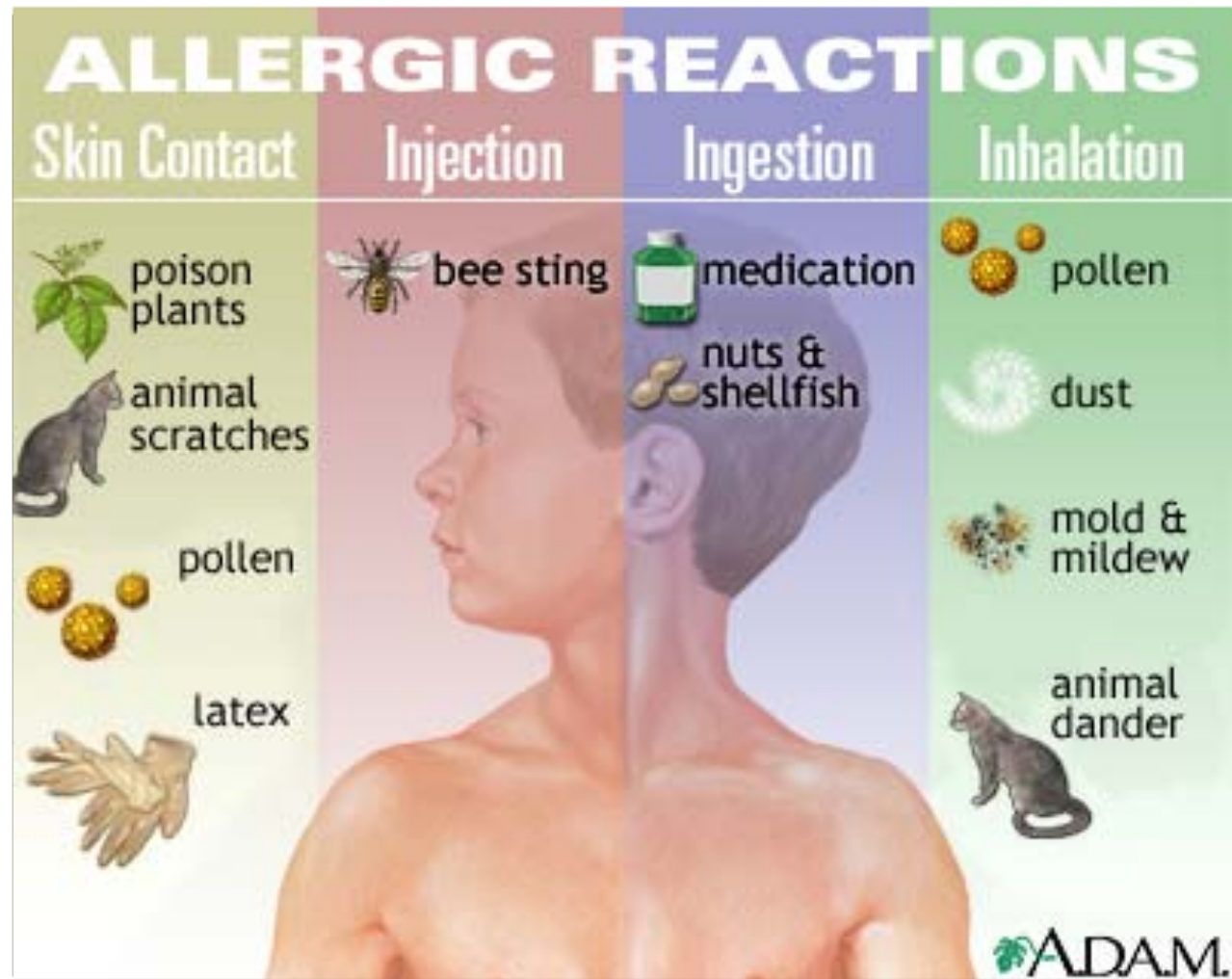


Allergic Reaction and Anaphylaxis

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Causes of Allergic Reactions & Anaphylaxis



Antigen
Allergen







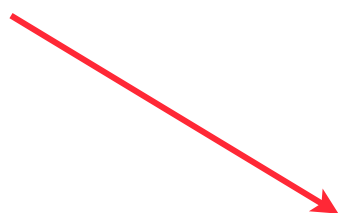




What's the Difference?

- Allergic Reaction
- Anaphylaxis

- 
- Localized Response
 - Not life threatening

- 
- Multisystem response
 - Resp, cardio, skin, GI
 - Can be life threatening

S/S: Allergic Reaction

- Tingling, pruritus
- Flushed skin, urticaria
- Swelling, angioedema



















Upper Respiratory

- Nasal congestion, rhinorrhea, sneezing
- Laryngeal edema
 - sore throat
 - muffled or hoarse voice, “tight throat”
 - difficulty swallowing, drooling
 - stridor

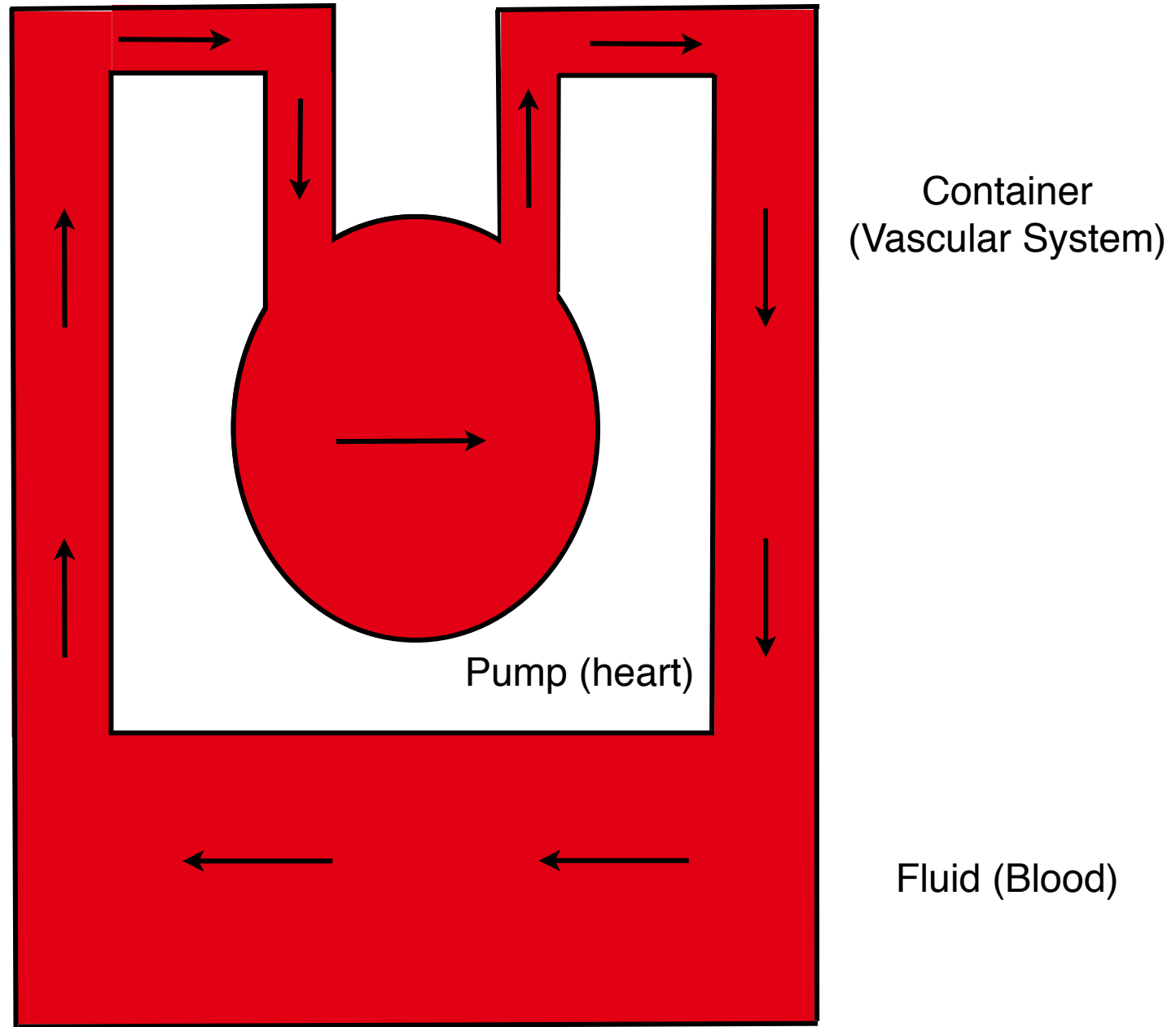
Lower Respiratory

- Tachypnea
- Bronchospasm
 - wheezing, chest tightness
- Cough

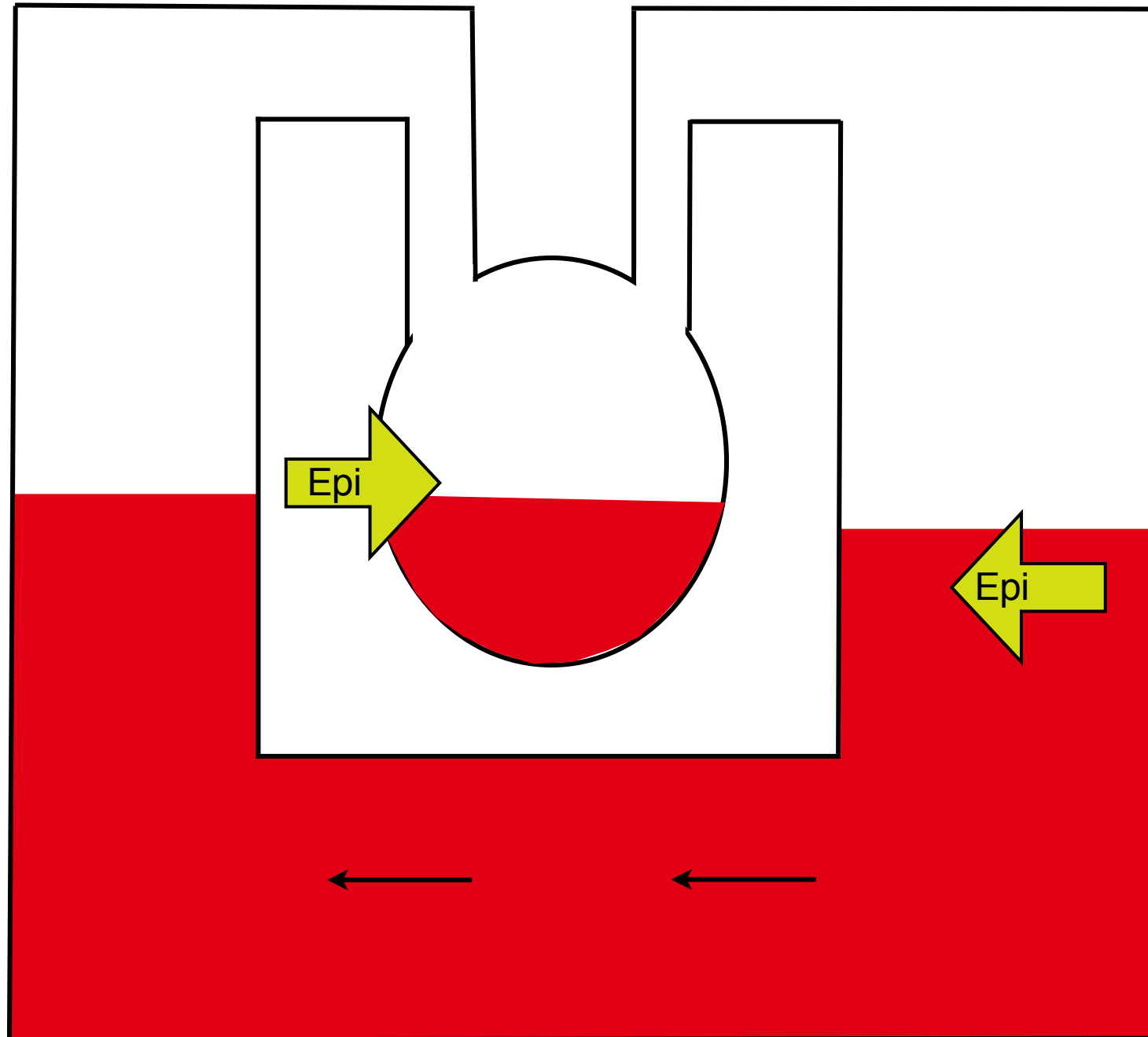
Cardiovascular

- Fluid volume shift = distributive shock
 - weakness, dizziness, near-syncope, syncope
 - tachycardia, hypotension

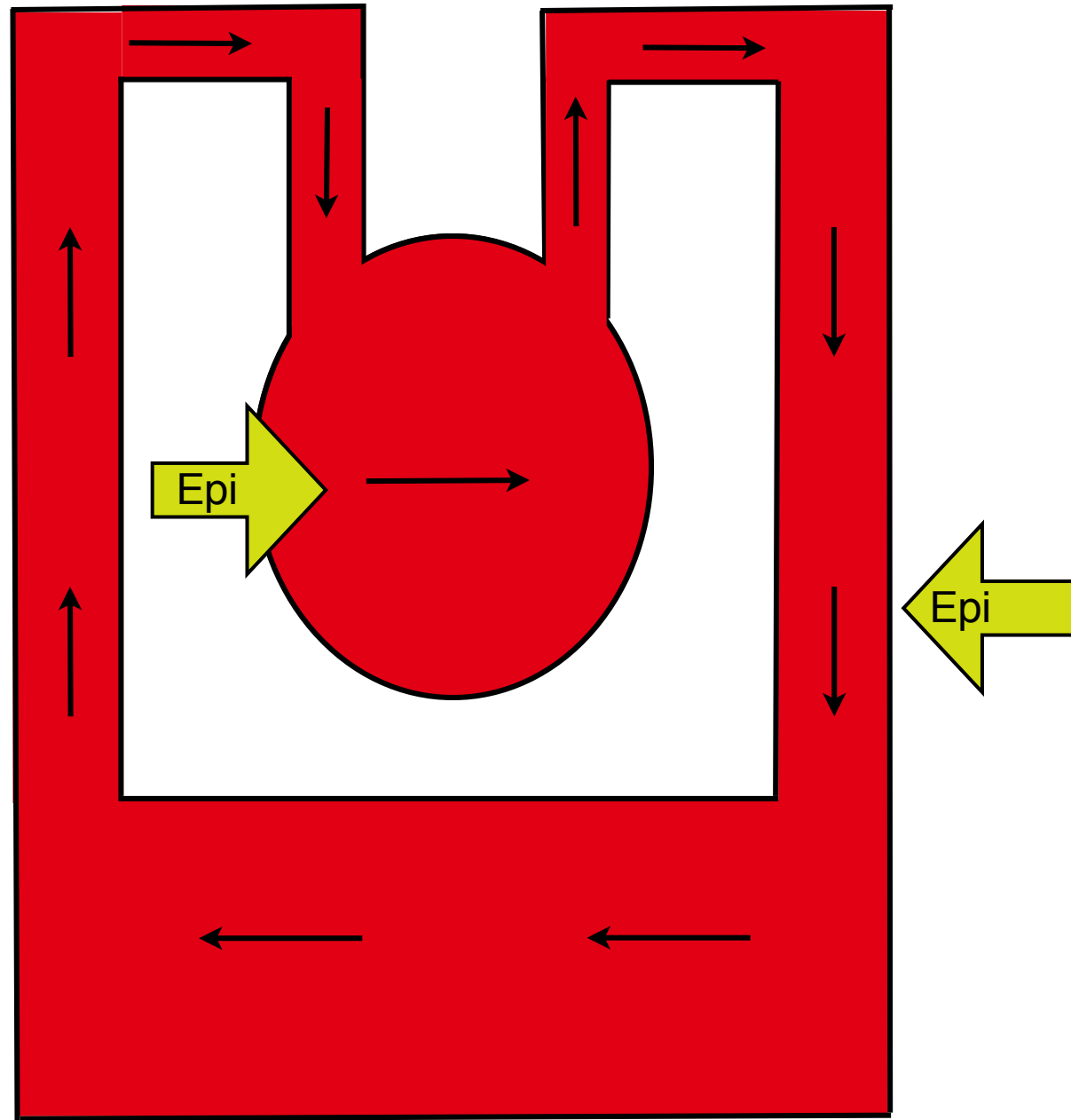
Distributive Shock



Distributive Shock



Distributive Shock



Cutaneous

- Urticaria
- Flushing
- Pruritis
- Cyanosis

Gastrointestinal

- Cramping, abdominal pain
- Nausea, vomiting
- Diarrhea

Central Nervous System

- S/S of hypoperfusion and developing hypoxia
 - headache
 - apprehension, anxiety
 - confusion

Anaphylaxis If:

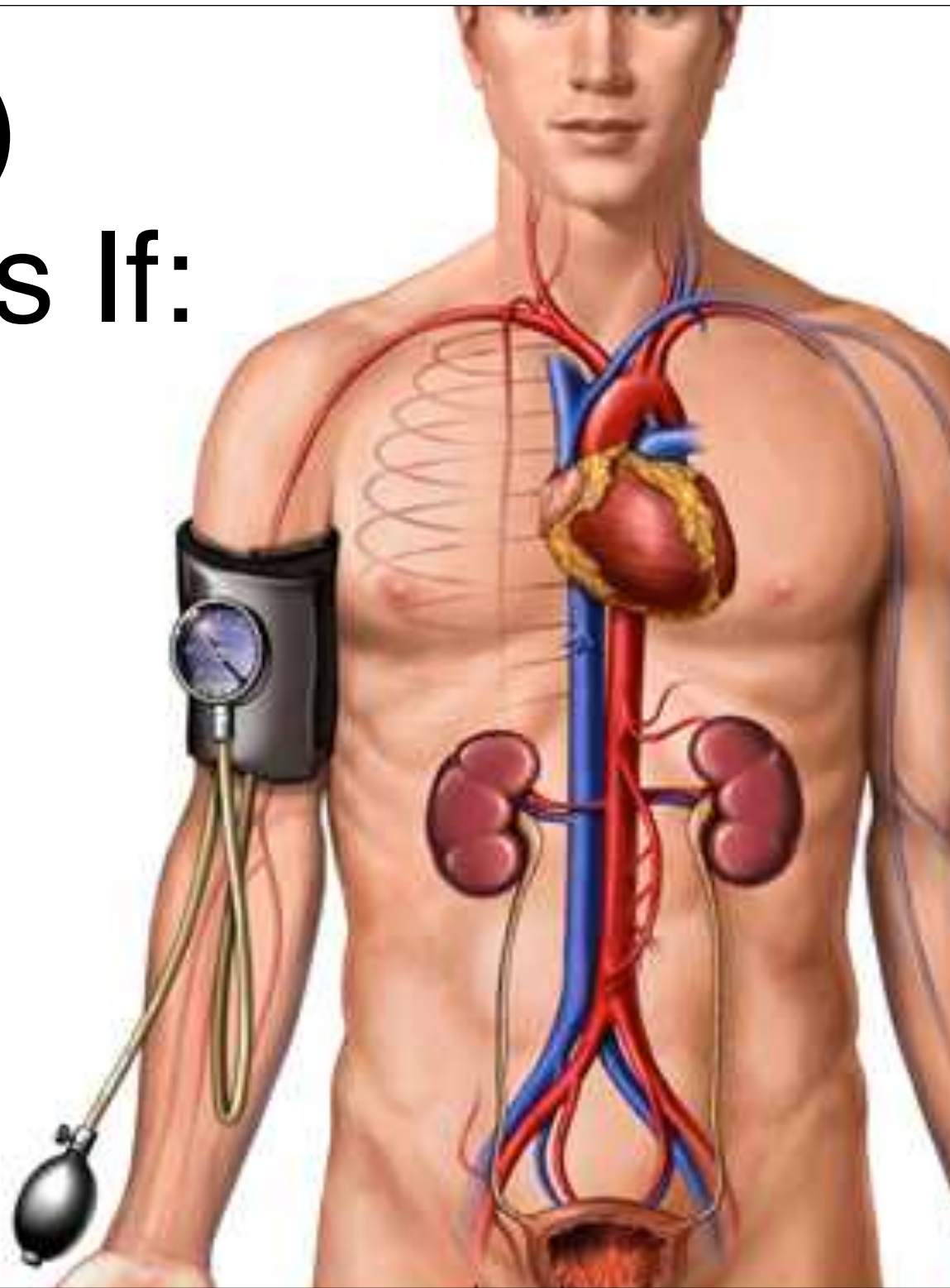
- Involvement of skin/mucosa plus either respiratory difficulty or low blood pressure
- Low blood pressure after exposure to an allergen

Anaphylaxis If:

- Two or more of the following symptoms after a likely contact with an allergen:
 - skin or mucosa involvement
 - respiratory difficulty
 - low blood pressure
 - gastrointestinal symptoms

(Simple) Anaphylaxis If:

- Hypotension
- 2 or more organ systems involved



Treatment: Allergic Rxn

- POC
- Monitor!
 - watch for progression to more than one body system

Treatment: Anaphylaxis

- **Epi via autoinjector**
- ALS
- Open the airway
 - stridor = bad
- Assure adequate oxygenation & ventilation
- Transport



Epi in Anaphylaxis

Problem	Epi's Action	Result
Vasodilation and capillary leaking leading to laryngeal edema	alpha ₁ agonist	vasoconstriction and reduced edema
Bronchostriction	beta ₂ agonist	bronchodilation, improved ventilation
Widespread vasodilation leading to hypotension	alpha ₁ agonist	vasoconstriction, adequate BP