

# Allergic Reaction / Anaphylaxis

## History

- Onset and location
- Insect sting or bite
- Food allergy / exposure
- Medication allergy / exposure
- New clothing, soap, detergent
- Past history of reactions
- Past medical history
- Medication history

## Signs and Symptoms

- Itching or hives
- Coughing / wheezing or respiratory distress
- Chest or throat constriction
- Difficulty swallowing
- Hypotension or shock
- Edema
- N/V

## Differential

- Urticaria (rash only)
- Anaphylaxis (systemic effect)
- Shock (vascular effect)
- Angioedema (drug induced)
- Aspiration / Airway obstruction
- Vasovagal event
- Asthma or COPD
- CHF

Assess Symptom Severity / Suspected Exposure to Allergen

**MILD**  
Skin Only

	Diphenhydramine 25 - 50 mg PO
	IV Procedure <i>if indicated</i>
A	Diphenhydramine 25 - 50 mg PO / IV / IM / IO
	Pepcid 20 mg

B	Monitor and Reassess Monitor for Worsening Signs and Symptoms
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**MODERATE**  
2 + Body Systems

	Epinephrine 1:1000 IM 0.3 - 0.5 mg <i>if available</i>
	Diphenhydramine 25 - 50 mg PO <i>See Pearls</i>
B	Albuterol Nebulizer 2.5 - 5 mg Repeat as needed x 3 <i>if indicated</i>
A	Epinephrine 1:1000 0.3 - 0.5 mg IM Repeat every 5 minutes if no improvement

A	Diphenhydramine 25 - 50 mg IV / IM / IO <i>if not given PO (See Pearls)</i>
	IV / IO Procedure
	Albuterol Nebulizer 2.5 - 5 mg +/- Ipratropium 0.5 mg Repeat as needed x 3 <i>if indicated</i>
	Pepcid 20mg
	Normal Saline Bolus 500 mL IV / IO Repeat as needed Maximum 2 Liters
P	No improvement with IM Epinephrine Epinephrine IV / IO <i>See Pearls for dosing regimen</i>
	Methylprednisolone 125 mg IV / IO

**SEVERE**  
2 + Body Systems + hypotension  
Or Isolated Hypotension

	Epinephrine 1:1000 IM 0.3 - 0.5 mg <i>if available</i>
B	Albuterol 2.5 - 5 mg Nebulizer Repeat as needed x 3 <i>if indicated</i>
	Airway Protocol(s) AR 1 - 4 <i>if indicated</i>
	Hypotension / Shock Protocol AM 5 <i>if indicated</i>

Notify Destination or Contact Medical Control

Adult Medical Protocol Section

# Allergic Reaction / Anaphylaxis

Pepcid 20mg added.

## Pearls

- **Recommended Exam: Mental Status, Skin, Heart, Lungs, Abdominal**
- **Anaphylaxis is an acute and potentially lethal multisystem allergic reaction.**
- **Epinephrine administration:**
  - **Drug of choice and the FIRST drug that should be administered in acute anaphylaxis (Moderate / Severe Symptoms.) IM Epinephrine should be administered in priority before or during attempts at IV or IO access.**
  - **Diphenhydramine and steroids have no proven utility in Moderate / Severe anaphylaxis and may be given only After Epinephrine. Diphenhydramine and steroids should NOT delay repeated Epinephrine administration.**
  - **In Moderate and Severe anaphylaxis Diphenhydramine may decrease mental status. Oral Diphenhydramine should NOT be given to a patient with decreased mental status and / or a hypotensive patient as this may cause nausea and / or vomiting.**
- **Anaphylaxis unresponsive to repeat doses of IM epinephrine may require IV epinephrine administration by IV push or epinephrine infusion. Contact Medical Control for appropriate dosing.**
- **Symptom Severity Classification:**
  - **Mild symptoms:**
    - **Flushing, hives, itching, erythema with normal blood pressure and perfusion.**
  - **Moderate symptoms:**
    - **Flushing, hives, itching, erythema plus respiratory (wheezing, dyspnea, hypoxia) or gastrointestinal symptoms (nausea, vomiting, abdominal pain) with normal blood pressure and perfusion.**
  - **Severe symptoms:**
    - **Flushing, hives, itching, erythema plus respiratory (wheezing, dyspnea, hypoxia) or gastrointestinal symptoms (nausea, vomiting, abdominal pain) with hypotension/poor perfusion or isolated hypotension.**
- **Allergic reactions may occur with only respiratory and gastrointestinal symptoms and have no rash / skin involvement.**
- **Angioedema** is seen in moderate to severe reactions and is swelling involving the face, lips or airway structures. This can also be seen in patients taking blood pressure medications like Prinivil / Zestril (lisinopril)-typically end in **-il**.
- **Hereditary Angioedema** involves swelling of the face, lips, airway structures, extremities, and may cause moderate to severe abdominal pain. Some patients are prescribed specific medications to aid in reversal of swelling. **Paramedic may assist or administer this medication per patient / package instructions.**
- **12 lead ECG and cardiac monitoring should NOT delay administration of epinephrine.**
- **EMR / EMT may administer Epinephrine IM and may administer from EMS supply.** Agency Medical Director may require contact of medical control prior to EMR / EMT administering any medication.
- **EMR / EMT may administer Epinephrine IM via AutoInjector or manual draw-up** per Agency Medical Director.
- **EMR may administer diphenhydramine by oral route only and may administer from EMS supply.** Agency Medical Director may require contact of medical control prior to EMT / EMR administering any medication.
- **EMT may administer Albuterol if patient already prescribed and may administer from EMS supply.** Agency Medical Director may require contact of medical control prior to EMT / EMR administering any medication.
- **The shorter the onset from exposure to symptoms the more severe the reaction.**