



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 or IO Access Protocol UP 6 <i>if indicated</i>
A	Diphenhydramine 25 - 50 mg PO / IV / IM / IO
	Pepcid 20mg

B Monitor and Reassess
Monitor for Worsening
Signs and Symptoms

MODERATE
2 + Body Systems

	Epinephrine 1:1000 IM 0.3 - 0.5 mg Repeat every 5 minutes if no improvement
	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
	Diphenhydramine 25 - 50 mg IV / IM / IO <i>if not given PO (See Pearls)</i>

SEVERE
2 + Body Systems + hypotension
Or Isolated Hypotension

	Epinephrine 1:1000 IM 0.3 - 0.5 mg Repeat every 5 minutes if no improvement
B	Albuterol 2.5 - 5 mg Nebulizer 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
	Airway Protocol(s) AR 1 - 4 <i>if indicated</i>
	Hypotension/ Shock Protocol AM 5 <i>if indicated</i>

	IV or IO Access Protocol UP 6
A	Albuterol Nebulizer 2.5 - 5 mg +/- Ipratropium 0.5 mg (DuoNeb) 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 See Pearls for dosing regimen
A	Methylprednisolone 125 mg IV / IO
	Notify Destination or Contact Medical Control



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 and 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 steroid administration:**
Diphenhydramine/ steroids have no proven benefit in Moderate/ Severe anaphylaxis.
Diphenhydramine/ steroids should **NOT** delay initial or repeat Epinephrine administration.
In Moderate and Severe anaphylaxis, Diphenhydramine may decrease mental status.
Diphenhydramine should **NOT** be given to a patient with decreased mental status and/ or a hypotensive patient as this may cause nausea, vomiting, and/ or worsening mental status.
- **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.
- **Patients with moderate and severe reactions should receive a 12 lead ECG and should be continually monitored, but this should NOT delay administration of epinephrine.**
- **EMR/ EMT:**
The use of Epinephrine IM is limited to the treatment of anaphylaxis and may be given only by autoinjector, unless manual draw-up is approved by the Agency Medical Director and the NC office of EMS.
Administration of diphenhydramine is limited to the oral route only.
- **EMT administration of beta-agonist is limited to only patients currently prescribed the medication, unless approved by the Agency Medical Director and the NC office of EMS.**
- Agency Medical Director may require contact of medical control prior to EMT/ EMR administering any medication(s).
- The shorter the onset from exposure to symptoms the more severe the reaction.