Anaphylaxis

For anaphylaxis; includes systemic reactions that involves two or more symptoms

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

Signs and Symptoms
- Itching or hives
- Coughing, wheezing or respiratory distress
- Chest or throat restriction
- Difficulty swallowing
- Hypotension or shock
- Edema
- Nausea or vomiting
- Feeling of impending doom

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

Adult Medical Treatment Protocols

E	Assist patient or administer Epinephrine Auto-Injector *if available*
	Epinephrine Auto-Injector
P	**Epinephrine 1:1,000 IM**
	Establish IV/IO
	Cardiac monitor
	EtCO$_2$ monitoring
	Diphenhydramine
	Albuterol or Albuterol MDI with spacer *or* **Levalbuterol**
	If systolic BP < 90 **Normal Saline bolus 500ml IV/IO** *Maximum 2L*
	If hypotensive or no improvement, **Epinephrine 1:1,000 IM**
	If hypotensive or no improvement, **Epinephrine 1:10,000 IV**
	Consider, 12-Lead ECG

Airway Procedure
if indicated

Notify receiving facility. Consider Base Hospital for medical direction

Adult Medical Treatment Protocols

Pearls

- Anaphylaxis is an acute and potentially lethal multisystem allergic reaction.
- Epinephrine is the drug of choice and the first drug that should be administered in acute anaphylactic reactions. IM Epinephrine should be administered as priority before or during attempts at IV or IO access.
- Anaphylaxis that is unresponsive to initial treatment of IM Epinephrine may require IV Epinephrine administration.
- Fluid bolus for patients demonstrating signs and symptoms of shock.
- Allergic reactions may occur with only respiratory and gastrointestinal symptoms and have no rash or 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 ACE-inhibitor blood pressure medications such as Prinivil, Zesteril, or Lisinopril; medications typically ending in -il.
- Adult patients who receive Epinephrine should receive a 12-Lead ECG at some point during their care, but this should NOT delay the administration of Epinephrine.
- All patients with respiratory symptoms must have continuous $EtCO_2$ measurement.

SAN MATEO COUNTY HEALTH
EMERGENCY
MEDICAL SERVICES

Treatment Protocol   A03

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